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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.

Contents

List of Figures

List of Tables

Abstract

This report summarizes the Florida Current data collected along 27°N during calendar year 2006 as part of the NOAA-funded Western Boundary Time Series project. This includes the daily Florida Current volume transport values estimated from one-minute voltage data on an out-of-service telephone cable, as well as observations collected on cruises on R/V Walton Smith (i.e. full-water-column conductivity-temperature-depth, CTD, and shipboard and lowered acoustic Doppler current profiler, SADCP and LADCP, profiles). The report also includes dropsonde and expendable bathythermograph (XBT) data collected on small boat cruises. The data presented herein are in final processed and quality controlled form. The report also documents where the electronic files for these data can be obtained.

1 Introduction

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

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

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

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

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

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

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

1.1 Continuous observations

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

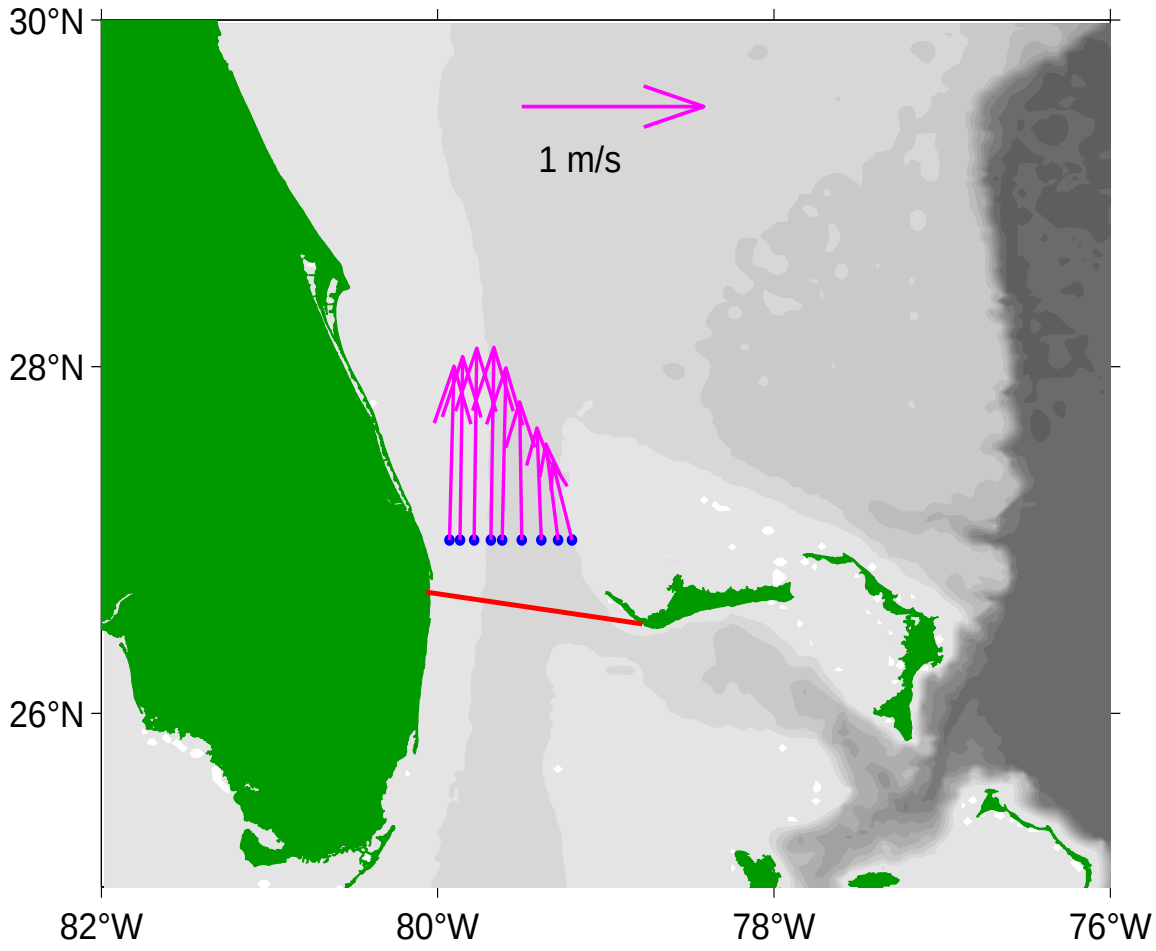

Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities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

1.2 Shipboard measurements

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

2 Cable observations

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

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

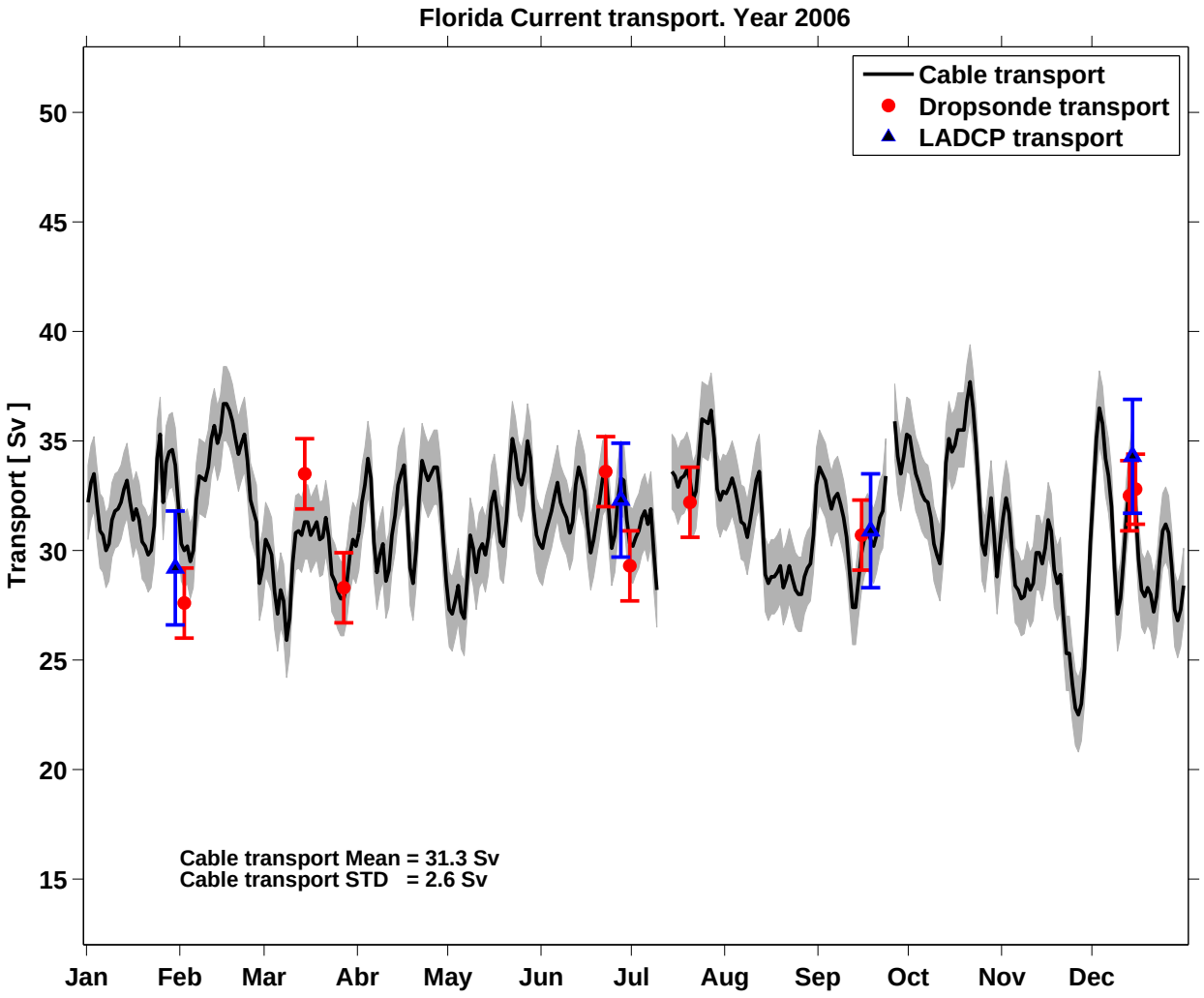

Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates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

3 Dropsonde - XBT cruises

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

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

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

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

Cruise No.	Year	Month	Day	Hour mean	Transport	Transport detided
1	2006	2	2	15	26.8	27.6
2	2006	3	14	15	32.8	33.5
3	2006	3	27	15	28.1	28.3
4	2006	6	22	14	36.4	33.6
5	2006	6	30	14	29.7	29.3
6	2006	7	20	15	35.4	32.2
7	2006	9	15	14	33.0	30.7
8	2006	12	13	16	31.6	32.5
9	2006	12	15	15	31.7	32.8

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

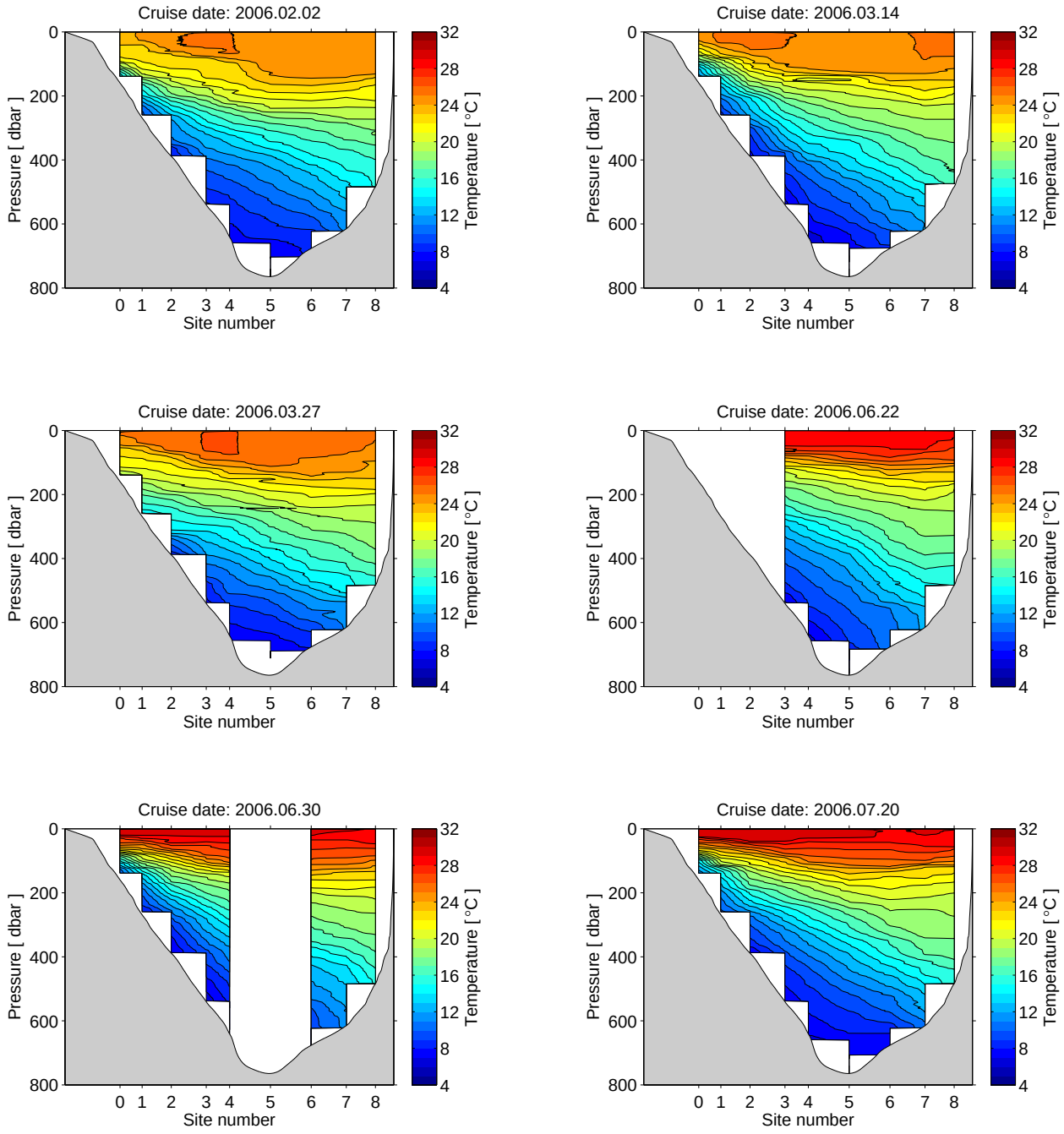

Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

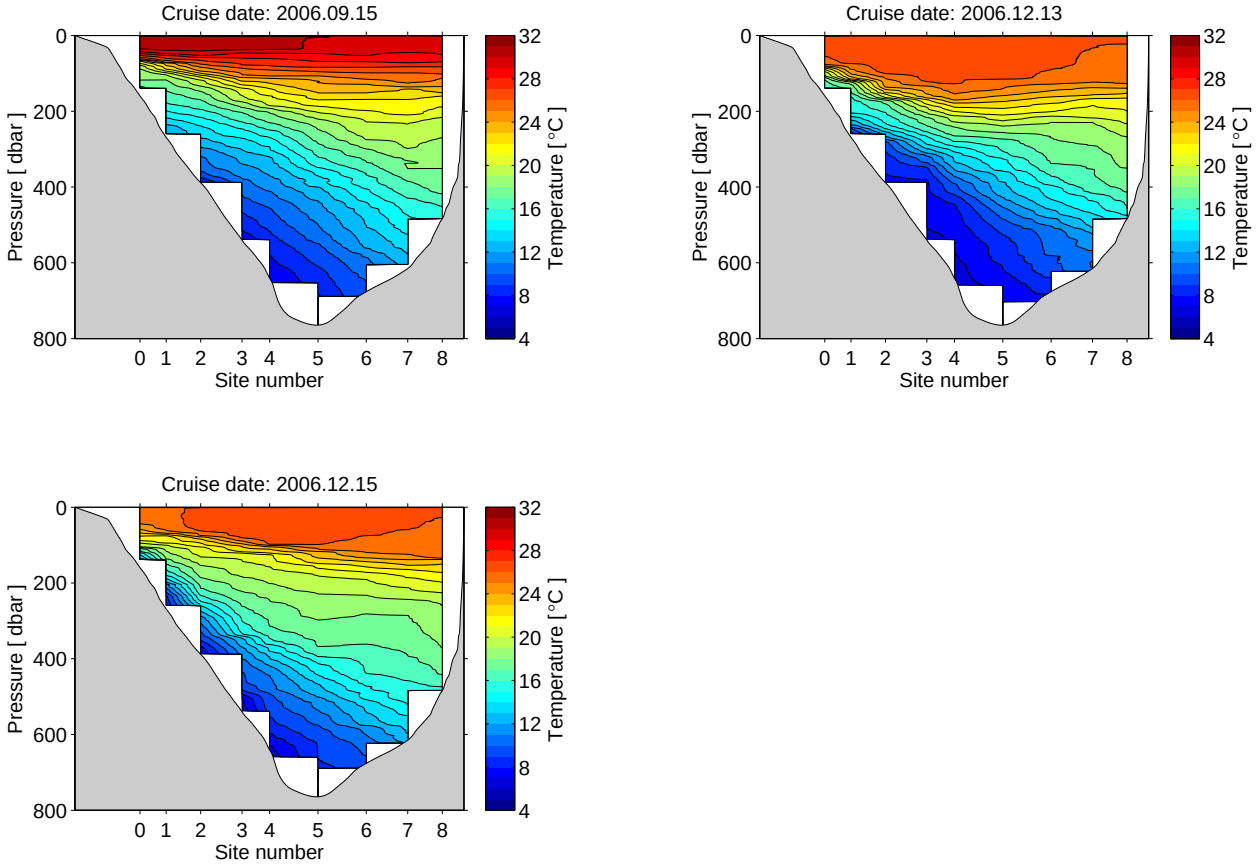

Figure 4: Same as Figure 3 for the data collected on the cruise date indicated.

4 CTD - LADCP - SADCP cruises

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

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

Vertical property sections (temperature, salinity, dissolved oxygen, zonal and meridional velocity) for each cruise are shown in the figures in this section of the report, beginning with Figure 5. Tables listing the data profiles for each station on each cruise are presented in Appendix E. Details of the processing and quality control of the CTD data follow the methods shown in Hooper and Baringer (2015). The LADCP processing incorporates CTD and SADCP data when possible and follows the methods presented in Visbeck (2002) and Thurnherr (2010); the SADCP processing used the methods shown in Firing et al. (2012).

Cruise ID	Year	Month	Day	Hour mean	Transport	Transport detided
ws0604	2006	1	30	13	29.7	29.2
ws0615	2006	6	27	12	31.4	32.3
ws0621	2006	9	18	22	31.3	30.9
ws0625	2006	12	14	2	34.8	34.3

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

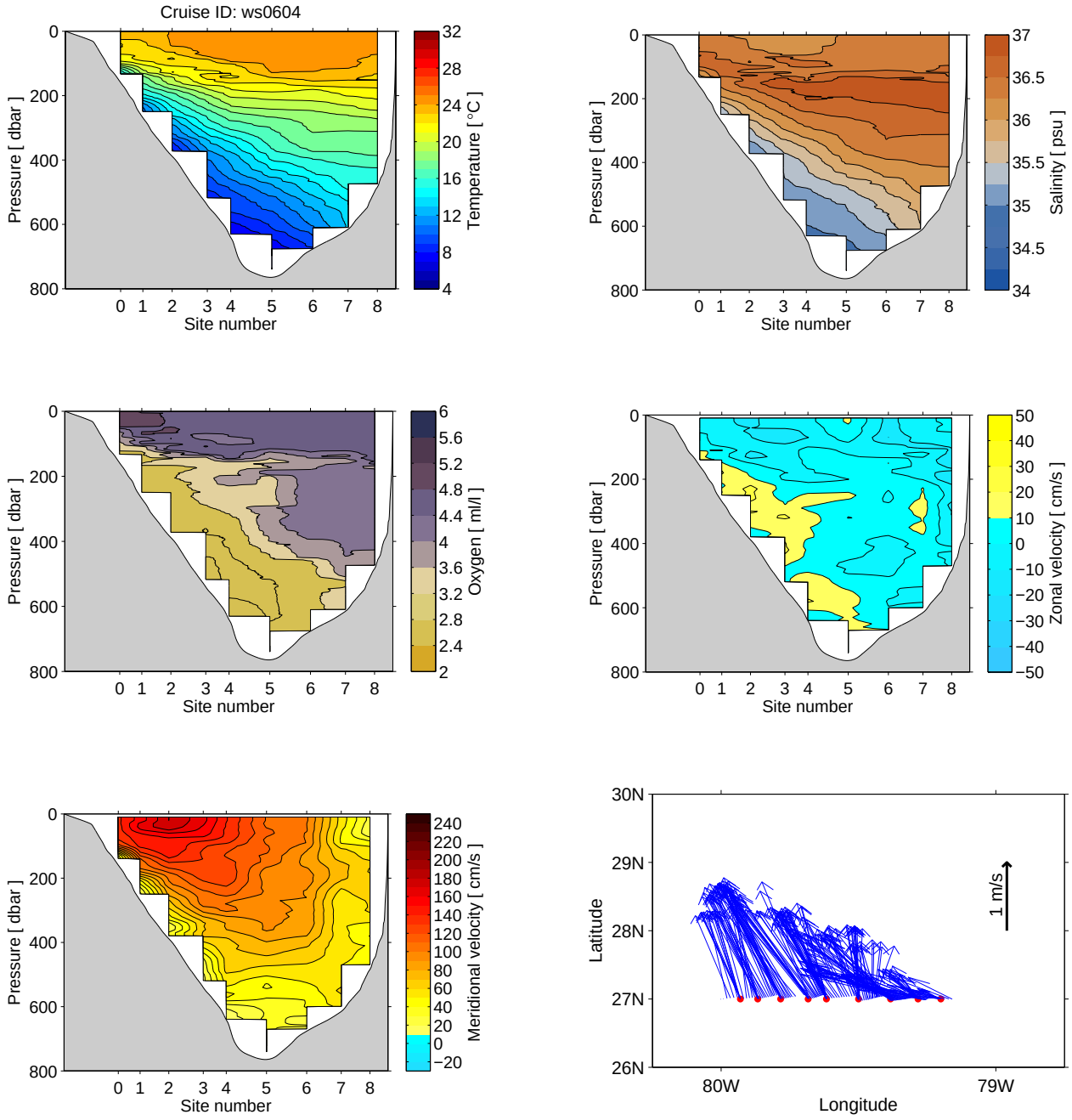

Figure 5: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

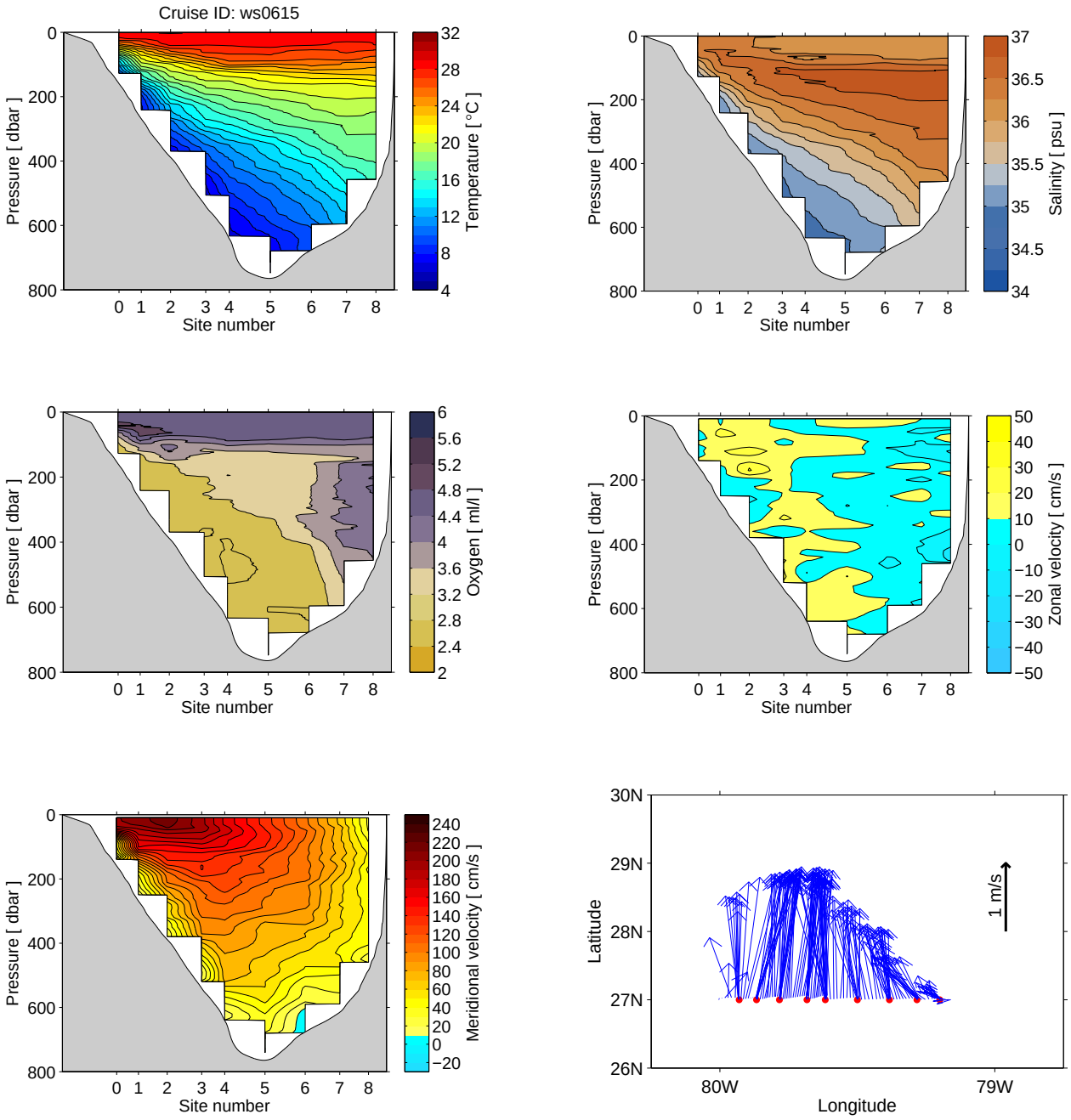

Figure 6: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

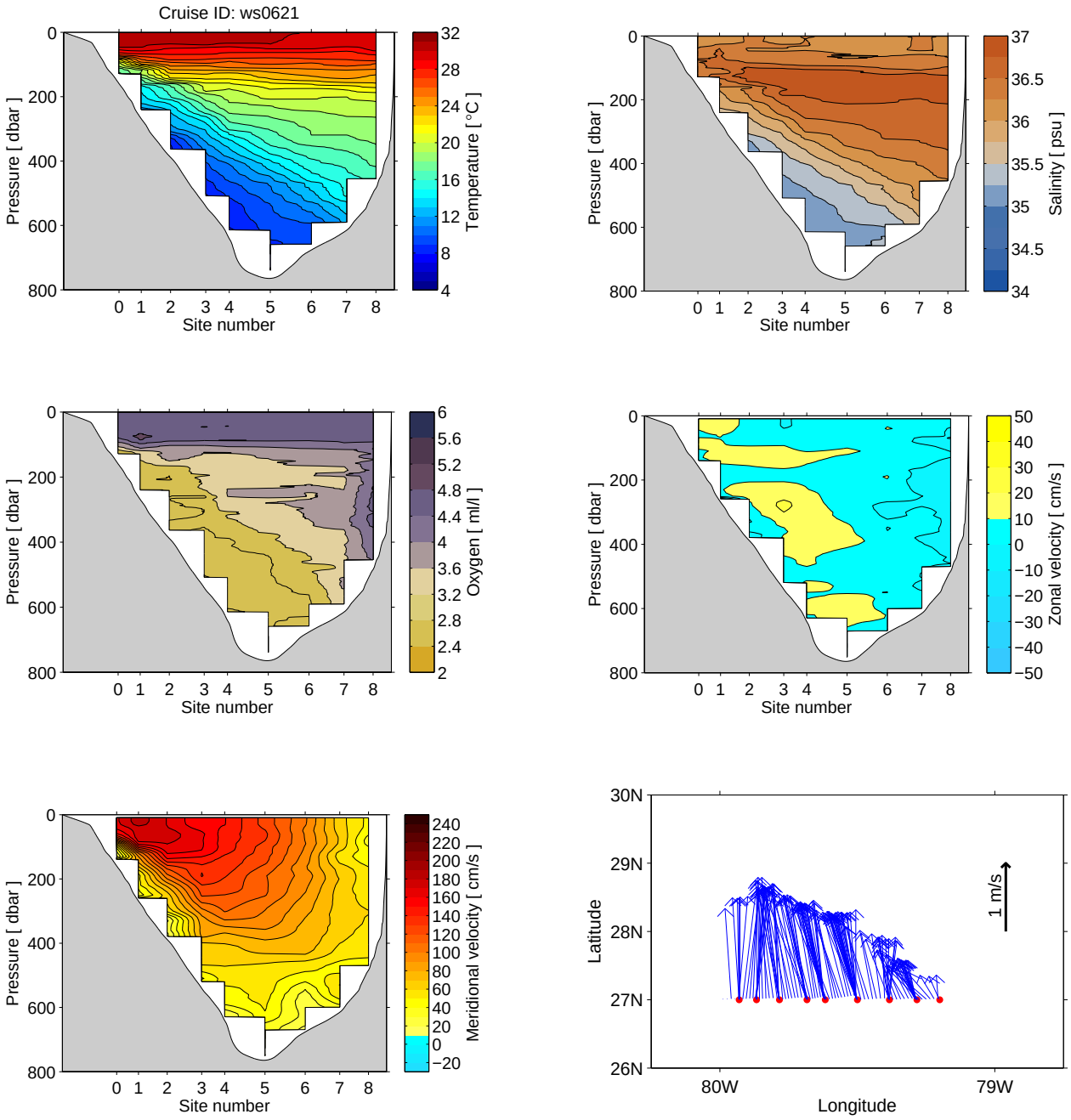

Figure 7: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

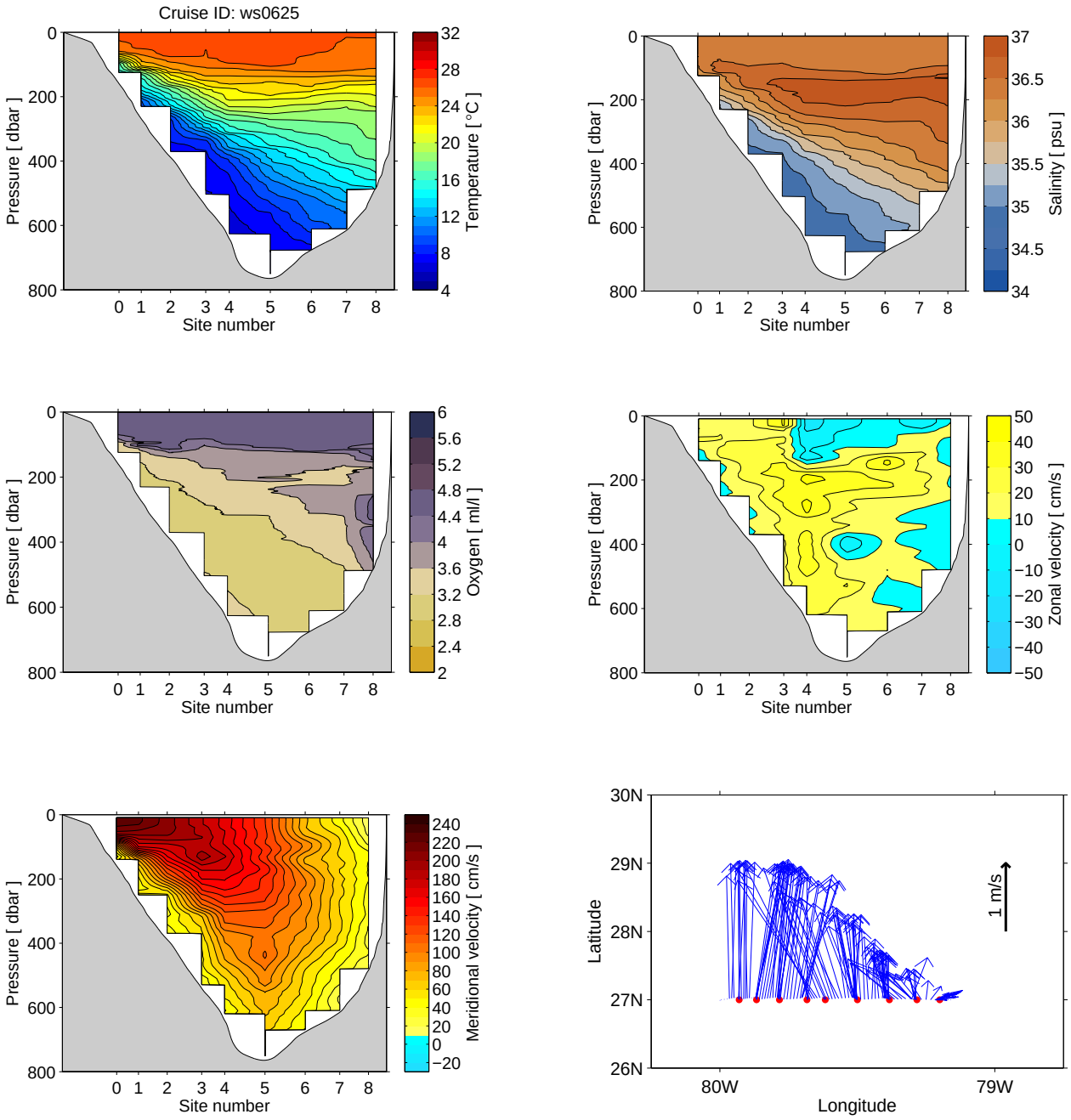

Figure 8: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

5 Issues during the year

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

5.1 Cable observations

In early May 2006, it became apparent that there was a problem with the voltage recording system because the voltages were becoming unrealistically high. Investigation over the next two months discovered that the wire between the cable voltage recording computer and the Earth ground (anode) was failing - i.e. it had water intrusion. During July 10-13, this wire was dug up and replaced with a new armored wire. The voltage data during the period when the wire was failing, estimated to be April 12 through July 10, were corrected using a linear fit comparison to the dropsonde transport sections collected on cruises during March 27, June 22, June 30, and July 20. Cable transports during April 12-July 10 should be considered less accurate than normal, as this linear correction was not perfect. As a result, no cable data are available during July 10-13, while the damaged wire was being replaced. Additionally, the recording computer failed during September 24-25, so no cable transports are available for those days. Cable transports are available for all other days this year.

5.2 Dropsonde - XBT cruises

No problems arose during the year involving the dropsonde system.

Several problems arose during the year involving the XBT systems. During the cruise of June 22, the XBT system failed during three stations and no data were collected. Also, during the cruise in June 30, the XBT system failed in one station and no data were collected.

5.3 CTD - LADCP - SADCP cruises

No serious problems arose during the year involving the CTD/LADCP/SADCP systems. During cruises ws0604 and ws0615, vertical coverage of the SADCP data set only reached 200 to 300 meters depth; typically the 75 kHz SADCP installed on the R/V F.G. Walton Smith can provide full water column coverage across the 27°N section. Despite the reduced SADCP range on these two cruises, however, there were sufficient SADCP data collected to produce final LADCP profiles suitable for scientific analysis. During ws0615, the CTD package was configured with a single, downward-facing LADCP system. All LADCP profiles from this cruise were found to be suitable for scientific analysis.

6 Data availability

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

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

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

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

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

7 Acknowledgements

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 (David Bitterman, Pedro Pena, and Ulises Rivero). 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 (Craig Engler, Pedro Pena, Ulises Rivero, and Andy Stefanick) and in the R/V Walton Smith CTD/LADCP/SADCP cruises (Elizabeth Johns, Nelson Melo, Grant Rawson, Ulises Rivero, Robert Roddy, and Andy Stefanick). 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 and Yeun-Ho Daneshzadeh. The collection and processing of the data in this report was supported by the NOAA Climate Program 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	32.2	30.3	30.5	30.8	27.3	30.1	30.2	32.6	33.8	35.2	31.5	32.7
2	33.1	30.0	30.2	32.2	27.1	30.8	30.6	32.9	33.5	34.3	32.4	35.1
3	33.5	30.2	29.8	33.0	27.7	31.3	30.9	33.3	33.2	33.5	31.7	36.5
4	32.1	29.5	28.1	34.2	28.4	31.8	31.5	32.8	32.5	33.1	29.9	35.8
5	30.9	30.0	27.1	33.3	27.2	32.5	31.8	32.1	31.9	32.6	28.4	34.2
6	30.7	32.3	28.2	30.4	26.9	33.1	31.2	31.3	32.4	32.3	28.2	33.4
7	30.0	33.4	27.7	29.0	28.7	32.2	31.9	31.2	32.6	32.2	27.8	32.0
8	30.3	33.3	25.9	29.8	30.7	31.8	29.9	30.6	32.1	31.5	27.9	29.2
9	31.4	33.2	26.9	30.3	30.1	31.5	28.2	31.4	31.5	30.3	28.7	27.1
10	31.8	33.8	29.4	28.6	29.0	30.8	NaN	32.3	30.6	29.8	28.2	27.8
11	31.9	35.1	30.8	29.1	30.0	31.3	NaN	33.2	29.0	29.4	28.5	29.6
12	32.2	35.7	30.9	30.7	30.3	33.0	NaN	33.6	27.4	30.9	29.9	31.6
13	32.8	34.9	30.7	31.6	29.8	33.8	NaN	31.5	27.4	34.0	29.9	33.0
14	33.2	35.4	31.3	33.0	30.6	33.3	33.6	28.9	28.7	35.1	29.4	34.0
15	32.2	36.7	31.3	33.5	32.2	32.7	33.4	28.5	29.9	34.5	30.1	32.0
16	31.4	36.7	30.7	33.9	32.7	31.1	32.9	28.8	30.6	34.8	31.4	29.6
17	31.9	36.4	31.0	31.9	31.7	29.9	33.3	28.8	30.9	35.5	30.9	28.2
18	31.4	35.9	31.3	29.2	30.4	30.5	33.4	29.0	30.5	35.5	29.1	27.9
19	30.4	35.1	30.5	28.5	30.2	31.4	33.7	29.3	30.2	35.5	28.5	28.3
20	30.2	34.4	30.6	30.0	31.4	32.3	33.2	28.3	30.7	36.8	28.9	28.0
21	29.8	34.9	31.5	32.4	33.5	33.3	32.3	28.7	31.5	37.7	27.0	27.2
22	30.0	35.3	30.6	34.1	35.1	33.6	32.7	29.3	31.8	36.5	25.3	27.9
23	31.1	34.1	28.9	33.6	34.4	31.9	34.3	28.7	33.4	34.8	25.3	29.6
24	34.2	32.3	28.6	33.2	33.3	30.1	36.0	28.2	NaN	32.6	23.9	30.9
25	35.3	31.8	28.1	33.5	33.0	30.7	35.9	28.0	NaN	30.3	22.8	31.2
26	32.2	31.3	27.8	33.8	33.6	32.3	35.8	28.0	35.9	29.8	22.5	30.8
27	34.0	28.5	27.8	33.8	35.0	33.3	36.4	28.8	34.3	31.1	23.0	29.3
28	34.5	29.2	28.5	32.6	34.2	33.2	35.1	29.2	33.5	32.4	24.6	27.3
29	34.6	–	29.8	30.5	31.9	31.4	32.8	29.4	34.3	30.7	27.2	26.8
30	33.9	–	30.5	28.6	30.7	30.3	32.3	30.7	35.3	28.8	30.4	27.3
31	32.1	–	30.2	–	30.3	–	32.7	33.0	–	30.3	–	28.4

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: 2006.02.02								
0	12:10:37	-79.9304	27.0005	12:16:56	-79.9305	27.0041	-2.44	104.72
1	12:36:34	-79.8666	27.0000	12:47:38	-79.8665	27.0058	0.75	95.37
2	13:11:49	-79.7833	27.0001	13:28: 2	-79.7830	27.0080	2.75	89.19
3	13:54:19	-79.6834	27.0003	14:15:56	-79.6832	27.0104	1.49	84.90
4	14:36:36	-79.6167	27.0003	15: 3: 8	-79.6167	27.0106	0.35	70.97
5	15:33:15	-79.5001	27.0002	16: 4:14	-79.5002	27.0102	-0.52	58.96
6	16:34:29	-79.3832	26.9998	17: 2: 2	-79.3835	27.0075	-1.83	51.25
7	17:27:27	-79.2833	26.9996	17:52:38	-79.2839	27.0046	-4.38	36.35
8	18:15:35	-79.1998	26.9990	18:35: 8	-79.2008	27.0020	-8.51	28.89
Cruise date: 2006.03.14								
0	12: 1:46	-79.9307	27.0004	12: 7:56	-79.9307	27.0035	-0.03	92.24
1	12:25:35	-79.8665	26.9999	12:36:44	-79.8666	27.0057	-1.14	92.28
2	12:57:52	-79.7833	27.0015	13:14: 8	-79.7833	27.0102	-1.00	98.01
3	13:37:35	-79.6835	27.0003	13:58:32	-79.6833	27.0115	1.93	97.37
4	14:16:58	-79.6167	26.9999	14:43:25	-79.6165	27.0132	1.41	92.80
5	15: 8:43	-79.5000	27.0001	15:39: 8	-79.5003	27.0123	-1.56	73.79
6	16: 5:33	-79.3834	27.0005	16:32:56	-79.3840	27.0094	-3.23	59.67
7	16:55: 9	-79.2834	27.0004	17:20:31	-79.2846	27.0083	-8.32	57.48
8	17:40:23	-79.1999	26.9999	17:59: 7	-79.2014	27.0053	-13.83	52.75
Cruise date: 2006.03.27								
0	12: 5:43	-79.9304	26.9994	12:11:53	-79.9306	27.0022	-7.22	83.31
1	12:29:51	-79.8664	27.0005	12:40:56	-79.8664	27.0050	-0.40	75.13
2	13: 1:57	-79.7835	27.0006	13:17:32	-79.7840	27.0074	-4.81	79.40
3	13:41:58	-79.6835	27.0003	14: 3:32	-79.6841	27.0091	-4.03	74.61
4	14:22:17	-79.6168	27.0003	14:48: 8	-79.6174	27.0106	-3.41	73.30
5	15:14:57	-79.5002	27.0006	15:45: 8	-79.5007	27.0111	-3.03	64.34
6	16:11:28	-79.3833	26.9998	16:37:26	-79.3837	27.0076	-2.43	55.51
7	17: 1:15	-79.2835	27.0000	17:26:45	-79.2851	27.0076	-11.09	55.69
8	17:46:46	-79.1998	26.9999	18: 5:38	-79.2015	27.0050	-15.52	50.72

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

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2006.06.22								
0	11:26:53	-79.9299	27.0017	11:33:14	-79.9296	27.0062	6.92	130.75
1	11:52: 4	-79.8662	27.0023	12: 2:44	-79.8658	27.0088	7.03	111.48
2	12:23:42	-79.7832	27.0009	12:39:26	-79.7830	27.0102	1.65	109.08
3	13: 3:29	-79.6836	27.0002	13:24:44	-79.6830	27.0127	5.81	107.93
4	13:41:22	-79.6173	27.0009	14: 7: 2	-79.6166	27.0144	4.79	96.63
5	14:31: 6	-79.4999	27.0005	15: 1:29	-79.5000	27.0129	-0.52	74.28
6	16:12:53	-79.3835	27.0002	16:40:14	-79.3839	27.0109	-2.37	72.40
7	17:13: 7	-79.2833	27.0001	17:37:20	-79.2849	27.0087	-11.73	65.34
8	17:58: 0	-79.2000	27.0001	18:16:49	-79.2014	27.0057	-12.77	55.92
Cruise date: 2006.06.30								
0	11:26:54	-79.9297	27.0009	11:33: 4	-79.9296	27.0044	5.13	103.27
1	11:50:46	-79.8667	27.0004	12: 1:43	-79.8664	27.0058	5.12	90.83
2	12:23: 9	-79.7831	27.0008	12:39:14	-79.7828	27.0094	3.12	96.12
3	13: 5: 4	-79.6825	27.0024	13:26:56	-79.6820	27.0136	3.52	93.36
4	13:44:24	-79.6165	27.0005	14:11:44	-79.6159	27.0134	3.89	86.85
5	14:36:22	-79.5002	27.0003	15: 8:25	-79.5002	27.0120	-0.01	66.79
6	15:33:20	-79.3837	27.0003	16: 1:14	-79.3839	27.0090	-0.95	56.98
7	16:22:28	-79.2833	26.9999	16:47:56	-79.2836	27.0055	-2.17	40.68
8	17: 7:48	-79.1994	27.0001	17:27:19	-79.2001	27.0033	-6.10	30.80
Cruise date: 2006.07.20								
0	11:33:23	-79.9295	27.0061	11:39:40	-79.9292	27.0097	8.22	104.75
1	12: 2:59	-79.8666	27.0007	12:14:26	-79.8664	27.0071	3.76	100.34
2	12:40:31	-79.7827	27.0014	12:56:49	-79.7824	27.0110	3.63	107.46
3	13:26:37	-79.6830	27.0008	13:48:50	-79.6826	27.0134	2.90	103.54
4	14:12:39	-79.6166	27.0008	14:47:50	-79.6157	27.0192	3.90	95.72
5	15:18:29	-79.5000	27.0004	15:48:49	-79.5001	27.0144	-0.51	84.64
6	16:18:34	-79.3837	27.0110	16:46: 2	-79.3831	27.0226	3.55	77.96
7	17:12:26	-79.2833	27.0066	17:36:44	-79.2830	27.0140	2.12	55.99
8	17:59:13	-79.2004	27.0039	18:19: 2	-79.2011	27.0077	-5.99	35.00

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

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2006.09.15								
0	11:35:19	-79.9288	27.0028	11:41:34	-79.9285	27.0060	7.81	95.38
1	12: 1:42	-79.8660	27.0018	12:12:44	-79.8659	27.0076	1.45	97.18
2	12:36:35	-79.7827	27.0014	12:52:14	-79.7822	27.0098	5.19	97.61
3	13:19: 8	-79.6833	27.0008	13:41: 2	-79.6828	27.0119	4.26	92.67
4	14: 0:58	-79.6168	27.0003	14:26:13	-79.6162	27.0124	4.27	88.11
5	14:54:39	-79.4998	27.0005	15:25:26	-79.4997	27.0134	0.52	77.25
6	15:54:20	-79.3835	27.0002	16:22:38	-79.3840	27.0110	-2.41	70.56
7	16:49:12	-79.2833	27.0004	17:14:39	-79.2840	27.0083	-4.83	57.34
8	17:36:16	-79.2000	26.9997	17:56: 8	-79.2011	27.0039	-9.37	40.09
Cruise date: 2006.12.13								
0	12:30: 3	-79.9301	27.0031	12:37:56	-79.9301	27.0082	-0.82	119.14
1	13:11:17	-79.8662	27.0012	13:24:50	-79.8662	27.0086	0.06	99.22
2	13:57:48	-79.7831	27.0013	14:16:28	-79.7832	27.0101	-1.82	88.07
3	14:51:32	-79.6819	27.0021	15:16:56	-79.6821	27.0136	-1.65	83.38
4	15:41:57	-79.6169	27.0005	16:14:50	-79.6174	27.0160	-1.97	86.80
5	16:53: 3	-79.4999	27.0011	17:29:56	-79.4995	27.0195	2.06	91.71
6	18: 3:34	-79.3839	27.0008	18:35:44	-79.3832	27.0125	3.71	67.22
7	18:59:31	-79.2836	26.9999	19:29:10	-79.2833	27.0062	2.43	39.61
8	19:50:14	-79.1998	26.9997	20:13: 2	-79.2000	27.0018	-1.21	17.73
Cruise date: 2006.12.15								
0	11:37:14	-79.9294	27.0023	11:44:38	-79.9294	27.0072	-0.61	122.50
1	12:41:35	-79.8662	27.0014	12:54:26	-79.8659	27.0097	3.63	118.76
2	13:15:57	-79.7826	27.0024	13:34:26	-79.7816	27.0165	8.15	139.82
3	14: 0:12	-79.6832	27.0007	14:25:38	-79.6823	27.0169	5.46	116.68
4	14:43:58	-79.6158	27.0009	15:15:37	-79.6153	27.0173	2.65	95.00
5	15:42: 8	-79.5003	27.0022	16:18:27	-79.5006	27.0143	-1.90	61.20
6	16:44:12	-79.3831	27.0004	17:17:56	-79.3848	27.0087	-9.19	45.45
7	17:40: 9	-79.2830	27.0003	18:10:26	-79.2849	27.0047	-10.93	26.99
8	18:30:19	-79.1988	26.9997	18:53:38	-79.2008	27.0041	-14.39	35.36

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

Appendix C:

XBT temperature profiles

Cruise date: 2006.02.02									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	23.07	23.95	24.36	24.57	24.43	23.86	23.94	24.17	23.84
10	23.17	24.37	24.97	25.04	25.02	24.67	24.66	24.68	24.72
20	23.17	24.22	24.98	25.04	25.03	24.70	24.64	24.68	24.71
30	23.17	23.82	24.98	25.05	25.03	24.74	24.65	24.68	24.70
40	23.02	23.05	24.97	25.04	25.03	24.71	24.65	24.67	24.70
50	22.82	22.70	24.34	25.05	25.04	24.73	24.65	24.67	24.70
60	22.40	22.63	24.39	24.71	25.07	24.71	24.67	24.68	24.72
70	22.10	22.61	22.97	24.78	24.93	24.75	24.67	24.66	24.66
80	21.95	22.43	22.53	23.14	24.37	24.72	24.69	24.67	24.65
90	21.20	22.13	22.40	22.35	23.50	24.72	24.61	24.67	24.61
100	19.38	21.85	22.33	22.27	22.56	24.70	24.59	24.68	24.62
110	18.60	21.46	22.18	22.21	22.43	24.65	24.56	24.68	24.61
120	16.43	20.83	21.44	22.18	22.33	24.42	24.54	24.76	24.49
130	14.94	20.14	21.10	22.16	22.29	24.04	24.50	24.60	24.12
140	–	19.24	20.97	22.12	22.26	23.78	24.51	24.08	23.27
150	–	17.68	20.12	21.56	22.18	23.48	23.78	23.34	22.75
160	–	16.59	19.70	21.09	21.89	23.09	23.34	22.93	22.12
170	–	15.57	19.00	20.75	21.56	22.64	22.89	22.33	21.86
180	–	15.00	18.53	19.74	21.29	22.41	22.50	22.14	21.72
190	–	14.51	18.09	19.66	20.88	21.93	22.08	21.65	21.71
200	–	13.77	17.70	18.97	20.59	21.56	21.37	21.28	21.54
210	–	12.62	16.46	18.45	20.15	20.98	21.20	20.88	21.17
220	–	11.82	15.65	17.61	19.76	20.47	20.82	20.52	20.79
230	–	10.92	14.97	17.27	18.72	20.21	20.55	20.22	20.22
240	–	10.33	14.21	16.67	17.83	19.86	19.94	19.85	19.86
250	–	9.87	13.63	15.97	17.29	19.18	19.39	19.54	19.79
260	–	9.78	12.86	15.67	16.81	18.24	18.68	19.38	19.44
270	–	–	12.12	15.31	16.31	17.94	18.10	19.04	19.15
280	–	–	11.72	14.95	16.02	17.24	17.78	18.36	18.78
290	–	–	11.49	14.47	15.63	16.70	17.57	17.86	18.60
300	–	–	11.42	13.80	15.04	16.24	17.08	17.62	18.28
350	–	–	10.07	12.25	13.02	14.74	15.60	16.41	17.17
400	–	–	–	10.76	11.53	12.50	14.54	15.45	15.97
450	–	–	–	9.58	10.17	11.49	12.74	14.58	15.18
500	–	–	–	8.70	9.24	10.54	11.84	13.27	–
550	–	–	–	–	8.66	9.63	10.75	12.37	–
600	–	–	–	–	7.93	8.90	9.48	11.46	–
650	–	–	–	–	7.43	7.92	8.36	–	–
700	–	–	–	–	–	7.03	8.17	–	–
750	–	–	–	–	–	6.63	–	–	–

Table 8: Expendable bathythermograph (XBT) temperature profile data collected during the cruise on the date indicated at the top. Left column indicates the estimated depth in meters from the fall rate. Temperature units are degrees Celsius. NaN indicates missing values due to instrument failure, and dashes indicates depths below bottom for each station.

Cruise date: 2006.03.14									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	24.09	24.62	24.47	24.11	23.88	23.62	23.46	24.22	22.67
10	24.46	25.31	25.33	25.03	24.97	24.82	24.73	25.19	25.19
20	24.24	25.31	25.27	25.02	24.94	24.81	24.70	25.14	25.16
30	23.80	25.27	25.20	25.02	24.89	24.80	24.69	25.12	25.14
40	22.77	24.49	25.19	25.01	24.86	24.80	24.68	25.13	25.14
50	21.99	23.89	25.09	24.99	24.79	24.80	24.68	25.15	25.14
60	21.24	23.32	24.73	24.94	24.73	24.80	24.68	25.10	25.15
70	20.31	22.90	24.02	24.73	24.72	24.80	24.68	25.06	25.13
80	18.24	21.47	23.31	24.67	24.67	24.80	24.69	25.04	24.82
90	17.27	19.58	22.81	24.68	24.59	24.74	24.68	24.93	24.72
100	15.05	18.81	22.06	23.93	24.64	24.69	24.66	24.50	24.49
110	13.62	18.09	21.90	23.86	24.40	24.68	24.66	24.45	24.16
120	12.58	17.06	21.35	23.15	23.76	24.32	24.39	24.46	23.86
130	12.17	16.63	20.39	22.44	22.84	23.76	23.99	24.01	23.39
140	–	15.23	19.92	21.60	21.51	21.74	23.59	23.63	23.38
150	–	14.47	19.52	21.07	20.87	20.87	23.23	23.03	23.13
160	–	13.89	18.52	20.14	20.81	21.25	22.52	22.64	22.72
170	–	13.17	17.74	19.83	20.80	20.69	21.80	22.31	22.09
180	–	12.38	16.80	19.23	20.10	20.35	21.29	22.10	21.58
190	–	12.07	15.87	18.88	19.59	20.04	20.82	21.85	21.04
200	–	11.51	14.64	18.28	19.13	19.81	20.41	21.49	20.84
210	–	10.82	13.85	17.60	18.58	19.61	20.04	21.25	20.35
220	–	10.19	13.49	17.03	18.12	19.46	19.78	20.20	20.18
230	–	9.89	13.22	16.75	17.59	19.03	19.41	20.03	19.79
240	–	9.67	13.08	16.48	17.27	18.68	19.10	19.68	19.55
250	–	8.94	12.76	16.05	17.12	18.32	18.98	19.51	19.30
260	–	8.68	12.33	15.56	16.76	18.13	18.81	19.40	19.19
270	–	–	11.95	15.16	16.32	17.78	18.55	19.06	19.04
280	–	–	11.35	14.67	16.02	17.53	18.32	18.84	18.87
290	–	–	10.79	14.36	15.82	17.08	18.12	18.68	18.77
300	–	–	9.67	13.98	15.54	16.87	17.84	18.57	18.73
350	–	–	8.28	12.18	13.88	14.47	16.56	17.54	17.91
400	–	–	–	9.83	12.17	13.71	15.49	16.81	17.19
450	–	–	–	8.49	10.24	12.38	14.03	15.71	16.71
500	–	–	–	7.59	9.29	10.66	12.75	14.16	–
550	–	–	–	–	8.61	9.81	12.00	12.91	–
600	–	–	–	–	7.65	8.59	10.76	12.03	–
650	–	–	–	–	6.55	7.90	9.51	–	–
700	–	–	–	–	–	7.30	NaN	–	–
750	–	–	–	–	–	6.60	–	–	–

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

Cruise date: 2006.03.27									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	22.29	23.37	24.17	24.10	24.57	24.94	24.43	24.03	24.54
10	25.00	25.19	25.73	26.03	26.10	25.61	25.86	25.72	25.38
20	24.89	25.19	25.73	26.04	26.10	25.60	25.88	25.72	25.20
30	24.42	25.20	25.74	26.04	26.10	25.60	25.87	25.68	25.02
40	24.25	24.99	25.74	26.04	26.09	25.60	25.87	25.65	24.92
50	23.56	23.78	25.63	26.05	26.10	25.61	25.86	25.45	24.77
60	22.42	23.24	25.50	26.04	26.09	25.60	25.85	25.33	24.74
70	22.28	22.75	24.18	25.81	26.11	25.61	25.64	25.02	24.70
80	22.03	22.19	23.15	25.40	25.70	25.61	25.23	24.74	24.66
90	21.77	21.95	22.58	25.12	25.26	25.62	24.73	24.55	24.41
100	21.54	21.68	22.11	24.40	24.54	25.73	24.68	24.52	23.68
110	21.15	21.37	21.77	23.68	24.19	25.11	24.67	24.49	23.82
120	20.48	20.89	21.57	22.55	23.44	24.49	24.30	24.37	23.74
130	19.45	20.38	21.32	21.67	23.18	23.92	24.19	24.05	23.84
140	–	20.03	20.96	21.32	22.56	22.82	24.10	23.41	23.33
150	–	19.92	20.68	20.98	22.09	21.99	23.84	22.95	23.01
160	–	19.14	20.12	20.52	21.07	22.31	22.49	22.61	22.87
170	–	18.40	19.92	20.14	20.67	21.83	22.13	22.46	22.62
180	–	18.10	19.51	20.15	20.18	21.46	21.81	22.02	22.30
190	–	17.56	18.97	19.48	19.62	20.95	21.21	21.61	21.50
200	–	17.01	18.01	18.97	19.17	20.48	21.09	21.21	20.88
210	–	16.60	17.33	18.83	19.03	20.19	20.95	20.77	20.66
220	–	16.12	16.83	18.54	18.81	19.73	20.55	20.53	20.40
230	–	15.90	16.36	18.34	18.53	19.28	20.56	20.09	20.10
240	–	15.43	15.99	17.27	17.79	18.52	20.10	19.91	19.85
250	–	14.61	15.77	16.79	17.66	18.17	19.78	19.82	19.77
260	–	13.57	15.51	16.39	17.12	17.88	19.10	19.78	19.53
270	–	–	15.26	15.83	16.33	17.73	18.81	19.17	19.34
280	–	–	14.97	15.56	15.75	17.53	18.53	19.06	19.21
290	–	–	14.70	15.24	15.53	17.22	18.40	18.81	18.98
300	–	–	14.51	14.71	15.04	17.06	18.21	18.56	18.83
350	–	–	10.26	12.86	13.74	15.94	16.64	17.52	18.30
400	–	–	–	11.54	12.16	14.03	15.84	16.65	17.54
450	–	–	–	10.08	10.94	12.46	14.40	15.04	16.33
500	–	–	–	8.30	10.34	10.88	12.55	14.41	–
550	–	–	–	–	8.87	9.66	11.18	11.37	–
600	–	–	–	–	8.06	8.51	9.76	11.28	–
650	–	–	–	–	7.37	7.75	8.62	–	–
700	–	–	–	–	–	7.09	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

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

Cruise date: 2006.06.22									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	NaN	NaN	NaN	27.86	27.84	27.45	27.73	28.03	27.41
10	NaN	NaN	NaN	28.62	28.62	28.63	28.56	28.49	28.41
20	NaN	NaN	NaN	28.62	28.61	28.61	28.51	28.45	28.27
30	NaN	NaN	NaN	28.62	28.59	28.36	28.46	28.27	27.95
40	NaN	NaN	NaN	28.51	28.42	28.15	28.10	28.18	27.69
50	NaN	NaN	NaN	27.69	27.80	27.92	28.04	28.12	27.28
60	NaN	NaN	NaN	26.88	27.18	27.25	27.98	27.94	26.74
70	NaN	NaN	NaN	26.39	26.23	26.77	27.86	26.94	26.65
80	NaN	NaN	NaN	24.78	24.95	26.43	27.17	26.34	26.58
90	NaN	NaN	NaN	23.54	24.17	25.73	26.60	25.79	26.17
100	NaN	NaN	NaN	22.67	23.51	24.74	25.81	25.30	25.21
110	NaN	NaN	NaN	22.07	22.33	23.23	24.92	24.60	24.03
120	NaN	NaN	NaN	20.62	21.57	22.72	24.26	23.99	23.51
130	NaN	NaN	NaN	19.96	20.95	21.98	23.28	22.98	23.01
140	–	NaN	NaN	19.68	20.33	21.58	23.04	22.61	22.65
150	–	NaN	NaN	19.68	20.19	21.18	22.08	22.41	22.53
160	–	NaN	NaN	18.80	19.42	20.56	21.58	22.10	21.90
170	–	NaN	NaN	18.26	18.89	20.08	21.15	21.46	20.91
180	–	NaN	NaN	17.87	18.32	19.87	20.78	21.08	20.17
190	–	NaN	NaN	17.45	18.11	19.60	20.38	20.96	19.98
200	–	NaN	NaN	17.15	17.87	19.13	19.99	20.75	19.81
210	–	NaN	NaN	16.91	17.74	18.78	19.59	20.39	19.53
220	–	NaN	NaN	16.74	17.49	18.41	19.32	19.96	19.42
230	–	NaN	NaN	16.15	17.23	18.27	18.80	19.63	19.33
240	–	NaN	NaN	15.63	16.89	17.93	18.73	19.21	19.15
250	–	NaN	NaN	15.39	16.67	17.59	18.48	18.96	19.02
260	–	NaN	NaN	15.12	16.27	17.35	18.28	18.86	18.92
270	–	–	NaN	14.37	15.68	16.99	18.14	18.72	18.83
280	–	–	NaN	13.88	14.98	16.75	17.94	18.62	18.72
290	–	–	NaN	13.36	14.53	16.42	17.64	18.53	18.67
300	–	–	NaN	12.85	14.12	15.95	17.61	18.44	18.52
350	–	–	NaN	11.44	12.63	14.35	16.74	17.76	17.71
400	–	–	–	10.36	11.31	12.66	15.73	16.79	16.57
450	–	–	–	9.46	10.21	11.94	14.16	15.63	15.52
500	–	–	–	8.58	9.53	10.81	13.21	14.56	–
550	–	–	–	–	8.97	10.11	11.24	12.97	–
600	–	–	–	–	7.76	9.72	10.67	12.30	–
650	–	–	–	–	6.66	9.12	10.50	–	–
700	–	–	–	–	–	8.28	NaN	–	–
750	–	–	–	–	–	7.23	–	–	–

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

Cruise date: 2006.06.30									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.72	28.93	28.69	28.54	28.84	NaN	28.97	28.77	28.83
10	29.04	29.36	29.37	29.26	29.21	NaN	29.17	28.91	28.82
20	28.99	29.20	29.09	29.25	29.16	NaN	29.04	28.53	28.43
30	26.96	28.05	28.47	28.58	28.79	NaN	28.74	28.13	28.39
40	26.16	26.25	28.48	28.05	28.32	NaN	27.81	27.66	28.46
50	25.22	24.96	27.18	27.29	27.59	NaN	27.44	27.46	27.84
60	23.30	24.09	26.49	26.89	27.16	NaN	27.13	26.99	27.05
70	21.38	22.98	24.88	26.52	26.72	NaN	26.86	26.81	26.59
80	18.67	21.07	23.61	26.18	26.36	NaN	26.52	26.43	26.33
90	16.31	20.05	22.37	25.04	26.09	NaN	26.19	26.12	25.50
100	14.88	19.19	21.40	24.13	25.36	NaN	25.73	25.40	24.90
110	13.07	17.69	20.55	23.02	24.30	NaN	25.09	25.03	24.76
120	11.97	16.88	19.61	21.92	22.89	NaN	24.66	24.71	23.88
130	10.60	15.12	19.05	20.98	22.06	NaN	23.91	23.15	23.12
140	–	14.02	18.38	20.01	20.42	NaN	23.47	22.67	22.80
150	–	13.06	17.78	19.16	19.94	NaN	22.79	22.29	22.42
160	–	12.58	17.19	18.89	19.43	NaN	21.97	22.09	21.99
170	–	11.99	16.47	18.27	18.99	NaN	21.65	21.53	21.51
180	–	11.37	15.70	17.77	18.39	NaN	21.21	21.18	21.10
190	–	10.62	15.20	17.44	18.04	NaN	20.55	20.99	20.77
200	–	10.30	14.57	17.05	17.92	NaN	19.99	20.63	20.35
210	–	9.97	13.81	16.61	17.58	NaN	19.74	20.05	20.04
220	–	9.64	13.03	15.99	17.21	NaN	19.55	19.59	19.97
230	–	9.36	12.46	15.62	16.90	NaN	19.04	19.49	19.64
240	–	8.98	12.02	15.06	16.70	NaN	18.75	19.30	19.44
250	–	8.04	11.46	14.52	16.30	NaN	18.46	19.04	19.27
260	–	7.94	10.94	14.09	15.88	NaN	18.30	18.92	19.13
270	–	–	10.69	13.53	15.61	NaN	18.11	18.75	18.93
280	–	–	9.95	13.08	15.25	NaN	17.90	18.58	18.64
290	–	–	9.64	12.89	14.68	NaN	17.69	18.42	18.59
300	–	–	9.02	12.60	14.25	NaN	17.20	18.16	18.55
350	–	–	7.62	10.97	12.69	NaN	16.05	16.69	17.58
400	–	–	–	9.43	11.27	NaN	13.97	14.99	16.72
450	–	–	–	8.21	9.77	NaN	12.39	13.61	15.70
500	–	–	–	7.18	8.93	NaN	11.59	12.77	–
550	–	–	–	–	8.18	NaN	10.26	12.12	–
600	–	–	–	–	7.74	NaN	9.64	11.35	–
650	–	–	–	–	6.62	NaN	9.47	–	–
700	–	–	–	–	–	NaN	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

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

Cruise date: 2006.07.20									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.11	27.60	27.81	28.80	28.80	28.36	28.52	29.19	29.01
10	29.43	29.54	29.41	29.47	29.45	29.44	28.81	29.09	28.92
20	29.39	29.48	29.46	29.47	29.46	29.42	28.77	29.00	28.87
30	27.56	28.98	29.41	29.47	28.74	28.74	28.63	28.76	28.67
40	26.28	26.69	28.87	28.90	28.02	28.20	28.16	28.62	28.23
50	24.67	25.52	26.94	27.91	27.43	27.57	27.41	28.19	28.20
60	23.24	24.32	25.71	27.23	27.06	27.10	27.17	27.78	27.84
70	21.55	23.11	24.43	26.62	26.53	26.82	26.83	27.61	26.69
80	18.92	22.35	23.09	25.65	26.24	26.51	26.26	26.19	26.35
90	16.86	21.16	22.30	24.02	25.58	26.17	26.15	26.33	25.52
100	14.09	20.06	21.31	23.33	25.12	25.59	25.82	25.94	25.07
110	13.29	19.26	21.04	22.83	24.23	25.17	25.59	24.87	24.16
120	12.64	16.61	19.93	22.23	23.09	24.45	24.63	23.02	22.81
130	11.91	15.22	19.38	21.46	22.47	23.55	23.43	22.33	22.36
140	–	14.48	18.56	20.67	21.47	23.09	22.40	22.29	21.99
150	–	14.10	18.30	19.82	20.86	22.44	21.91	22.18	21.16
160	–	13.49	17.66	19.37	20.36	22.02	21.76	21.95	21.03
170	–	13.02	17.24	18.67	19.58	21.22	21.52	21.26	20.65
180	–	12.78	16.74	18.09	19.12	20.71	21.24	20.74	20.22
190	–	12.02	15.94	17.58	18.80	20.31	20.94	20.35	20.17
200	–	11.55	15.10	17.31	18.42	19.86	20.79	20.23	20.04
210	–	11.20	14.84	16.89	18.02	19.52	20.42	20.17	19.63
220	–	10.87	14.20	16.48	17.55	19.25	20.07	19.78	19.43
230	–	10.59	13.78	15.94	16.90	18.95	19.70	19.59	19.44
240	–	10.44	13.15	15.25	16.21	18.30	19.20	19.31	19.36
250	–	10.05	12.42	14.64	15.79	17.78	19.10	19.07	19.29
260	–	9.59	11.81	14.10	15.49	17.25	18.95	18.70	19.17
270	–	–	11.18	13.76	15.12	16.98	18.64	18.60	19.07
280	–	–	10.64	13.22	14.86	16.73	18.39	18.58	18.88
290	–	–	10.27	12.91	14.41	16.37	18.23	18.56	18.77
300	–	–	9.95	12.38	14.11	16.05	18.10	18.54	18.65
350	–	–	8.71	11.00	12.24	14.44	16.08	17.78	17.94
400	–	–	–	9.56	10.86	12.85	15.00	16.72	17.13
450	–	–	–	8.48	9.61	11.70	13.26	15.21	15.66
500	–	–	–	7.86	8.77	10.40	11.73	13.31	–
550	–	–	–	–	8.20	9.41	10.57	12.62	–
600	–	–	–	–	7.73	8.50	9.28	11.09	–
650	–	–	–	–	6.81	7.89	7.85	–	–
700	–	–	–	–	–	7.19	7.77	–	–
750	–	–	–	–	–	6.55	–	–	–

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

Cruise date: 2006.09.15									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.48	29.13	28.68	28.65	29.02	28.80	28.92	29.18	28.46
10	30.31	30.18	30.25	30.09	30.12	29.96	29.91	29.79	29.38
20	30.30	30.19	30.24	30.10	30.11	29.95	29.89	29.71	29.33
30	30.13	30.17	30.22	30.09	30.12	29.95	29.88	29.61	29.26
40	29.69	29.96	30.04	29.71	29.61	29.94	29.46	29.41	29.15
50	27.30	28.73	29.27	28.67	28.80	28.94	29.10	28.65	29.03
60	25.41	27.03	27.59	27.98	28.11	28.58	28.42	28.17	28.77
70	21.41	25.30	26.79	27.32	27.45	27.91	27.94	28.12	27.97
80	19.67	22.90	25.64	26.66	26.99	27.33	27.10	27.09	27.12
90	18.79	21.72	24.49	25.78	26.13	26.36	26.74	26.71	26.74
100	18.21	19.58	22.95	25.07	25.36	25.53	25.76	25.83	26.10
110	18.14	18.56	21.02	24.25	24.63	24.77	25.42	25.72	25.19
120	17.92	17.90	19.70	23.08	23.27	24.03	24.61	25.25	24.90
130	17.34	17.60	19.33	22.04	22.80	23.94	23.94	24.67	24.46
140	–	17.20	18.33	20.81	22.02	23.67	23.71	23.22	23.27
150	–	16.88	17.84	20.25	21.69	23.03	23.08	22.39	23.08
160	–	16.60	17.36	19.97	20.93	22.35	22.48	22.29	21.99
170	–	16.42	16.98	19.62	20.51	21.97	21.98	21.97	21.83
180	–	15.95	16.65	18.58	20.25	21.43	21.59	21.80	21.47
190	–	15.31	16.28	17.97	19.47	20.88	21.33	21.35	20.94
200	–	14.95	15.73	17.27	18.29	20.23	20.92	21.26	20.74
210	–	14.39	15.25	16.76	17.78	19.52	20.74	20.95	20.62
220	–	13.86	14.81	16.53	17.44	19.03	20.13	20.31	19.86
230	–	13.33	14.33	15.92	17.03	18.45	19.92	20.08	19.60
240	–	12.55	13.95	15.35	16.56	18.15	19.76	19.82	19.46
250	–	12.25	13.67	14.89	15.94	17.91	19.69	19.60	19.32
260	–	11.90	13.62	14.48	15.44	17.57	19.40	19.45	19.18
270	–	–	13.05	14.07	14.96	17.40	19.10	19.28	18.99
280	–	–	12.74	13.57	14.57	17.07	18.62	19.18	18.86
290	–	–	12.42	13.40	14.28	16.83	18.31	19.12	18.73
300	–	–	11.64	13.04	13.98	16.53	17.95	18.95	18.65
350	–	–	10.63	11.61	12.36	14.86	16.51	18.00	18.02
400	–	–	–	10.50	11.31	13.05	15.25	16.73	17.35
450	–	–	–	9.47	10.14	11.80	13.86	15.41	16.04
500	–	–	–	8.32	9.42	10.98	13.02	14.52	–
550	–	–	–	–	8.52	9.95	12.28	13.44	–
600	–	–	–	–	7.77	9.17	10.74	12.51	–
650	–	–	–	–	7.04	8.49	10.01	–	–
700	–	–	–	–	–	7.70	NaN	–	–
750	–	–	–	–	–	7.00	–	–	–

Table 14: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2006.12.13									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	25.41	25.83	25.72	25.81	25.60	25.61	25.78	25.85	25.64
10	26.15	26.36	26.52	26.27	26.17	26.32	26.34	26.03	26.06
20	26.13	26.36	26.50	26.25	26.17	26.30	26.32	26.03	26.03
30	26.13	26.37	26.51	26.25	26.16	26.30	26.33	26.02	25.84
40	26.12	26.35	26.51	26.25	26.16	26.30	26.33	25.93	25.79
50	26.06	26.36	26.50	26.25	26.16	26.30	26.33	25.86	25.74
60	25.90	26.37	26.51	26.25	26.15	26.29	26.32	25.80	25.72
70	25.55	26.37	26.51	26.25	26.15	26.29	26.31	25.79	25.70
80	24.09	25.48	26.50	26.24	26.16	26.29	26.20	25.72	25.63
90	20.96	24.86	26.48	26.23	26.16	26.30	26.00	25.66	25.60
100	19.20	24.09	26.04	26.24	26.16	26.30	25.89	25.58	25.45
110	18.20	22.85	25.13	26.23	26.17	26.29	25.83	25.57	25.33
120	16.80	19.86	24.62	26.11	26.17	25.34	25.52	25.10	25.04
130	16.63	17.89	24.40	25.54	25.74	25.11	24.92	24.56	24.87
140	–	17.18	23.45	24.46	25.51	25.00	24.28	23.83	23.90
150	–	16.91	22.21	24.13	25.16	24.47	23.79	23.61	23.05
160	–	16.04	20.52	23.79	24.64	23.89	23.16	22.77	22.52
170	–	15.76	18.17	21.89	24.04	23.24	22.57	21.67	21.93
180	–	15.47	17.01	21.15	22.75	22.72	21.95	21.42	21.70
190	–	15.36	16.57	19.97	21.95	22.18	21.42	20.87	21.44
200	–	15.16	16.13	19.36	21.07	21.68	21.07	20.35	20.98
210	–	14.20	15.83	18.40	20.33	20.99	20.12	20.16	20.72
220	–	13.26	15.43	17.67	19.36	20.30	19.56	19.74	20.50
230	–	12.35	15.10	17.43	18.87	19.86	18.99	18.99	20.14
240	–	11.15	14.55	16.92	18.10	18.98	18.78	18.74	19.71
250	–	9.52	13.63	16.38	17.78	18.50	18.51	18.65	19.40
260	–	8.55	12.50	15.62	17.40	17.56	18.19	18.57	19.15
270	–	–	11.63	14.79	16.58	17.15	18.00	18.51	18.99
280	–	–	9.89	14.43	15.92	16.54	17.87	18.22	18.91
290	–	–	9.45	13.71	15.22	16.32	17.78	18.02	18.76
300	–	–	9.17	12.82	14.34	16.12	17.46	17.76	18.69
350	–	–	8.14	8.94	12.17	14.57	16.55	17.07	18.02
400	–	–	–	7.81	9.77	12.76	14.65	16.63	17.21
450	–	–	–	7.39	7.92	11.12	13.50	14.66	16.01
500	–	–	–	7.24	7.54	9.54	11.22	13.28	–
550	–	–	–	–	7.07	8.51	10.33	11.45	–
600	–	–	–	–	6.77	8.19	9.81	11.09	–
650	–	–	–	–	6.57	7.53	8.86	–	–
700	–	–	–	–	–	7.28	7.91	–	–
750	–	–	–	–	–	7.13	–	–	–

Table 15: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2006.12.15									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	25.55	25.11	25.76	26.09	25.75	26.11	25.85	25.94	26.18
10	25.95	25.59	26.37	26.43	26.37	26.43	26.43	26.40	26.34
20	25.98	25.66	26.42	26.43	26.36	26.44	26.42	26.41	26.21
30	25.67	25.58	26.44	26.45	26.40	26.43	26.42	26.42	25.88
40	25.13	25.56	26.44	26.48	26.41	26.47	26.43	26.40	25.62
50	24.51	25.45	26.42	26.50	26.40	26.46	26.44	26.29	25.46
60	23.83	25.03	26.14	26.50	26.37	26.46	26.45	25.90	25.29
70	22.82	23.41	25.17	26.43	26.35	26.45	26.29	25.58	25.31
80	21.79	21.52	23.51	26.05	26.33	26.42	25.90	25.39	25.31
90	20.52	21.51	22.52	24.94	26.25	26.24	25.59	25.34	25.31
100	19.52	20.04	21.76	23.52	25.24	25.83	25.43	25.33	25.32
110	16.79	19.30	20.47	22.87	23.11	25.00	25.41	25.25	25.30
120	15.19	18.85	20.41	21.30	22.23	23.41	25.00	25.07	25.31
130	13.45	18.25	20.04	20.11	20.81	23.29	24.28	24.86	25.22
140	–	17.69	19.56	20.00	20.77	22.60	23.35	23.84	23.73
150	–	17.00	19.14	19.78	20.21	21.81	22.40	23.18	23.00
160	–	16.09	18.70	19.46	19.97	21.04	21.88	22.52	22.90
170	–	15.79	18.52	19.26	19.71	20.40	21.08	21.53	22.19
180	–	14.93	18.22	19.09	19.41	20.02	20.55	21.14	21.28
190	–	13.83	17.85	18.76	19.26	19.74	20.05	20.89	21.17
200	–	12.60	17.47	18.36	19.04	19.45	19.82	20.63	20.97
210	–	11.51	17.06	18.33	18.87	19.30	19.60	20.18	20.58
220	–	10.39	16.78	18.10	18.71	19.24	19.42	19.89	20.30
230	–	9.41	16.29	17.78	18.22	18.98	19.05	19.41	19.68
240	–	8.63	15.64	17.57	18.05	18.76	18.90	19.19	19.29
250	–	8.37	14.89	17.24	17.97	18.63	18.65	18.87	19.05
260	–	8.08	14.00	17.04	17.68	18.47	18.36	18.51	18.99
270	–	–	13.31	16.83	17.48	18.38	18.14	18.38	18.87
280	–	–	12.55	16.63	17.39	18.37	18.02	18.22	18.74
290	–	–	11.79	16.17	17.25	18.20	17.87	17.97	18.67
300	–	–	11.15	16.02	17.06	17.93	17.78	17.91	18.59
350	–	–	9.01	12.66	15.93	17.14	17.26	17.48	18.18
400	–	–	–	11.01	12.99	15.46	16.25	16.74	17.68
450	–	–	–	9.86	10.95	13.79	15.65	16.15	16.69
500	–	–	–	7.50	9.80	12.09	14.32	15.61	–
550	–	–	–	–	9.02	10.52	12.77	14.03	–
600	–	–	–	–	7.88	9.56	11.02	12.89	–
650	–	–	–	–	6.60	9.01	10.09	–	–
700	–	–	–	–	–	8.48	NaN	–	–
750	–	–	–	–	–	7.15	–	–	–

Table 16: Same as Table 8 for the cruise on the indicated date.

Appendix D:

LADCP vertical mean velocities

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2006.01.30								
0	21:36:40	-79.9303	27.0061	21:47:27	-79.9310	27.0140	-6.56	100.39
1	20:18:25	-79.8660	27.0029	20:34:48	-79.8662	27.0170	-5.33	98.16
2	18:11:41	-79.7828	27.0067	18:38:24	-79.7841	27.0348	-5.31	94.66
3	15:36:27	-79.6827	27.0084	16: 7:38	-79.6819	27.0417	-4.64	85.17
4	12:55: 0	-79.6172	27.0102	13:29:36	-79.6196	27.0442	-3.10	78.68
5	10:36:49	-79.4999	27.0077	11:20:52	-79.4969	27.0465	-3.88	64.02
6	7:36:53	-79.3837	27.0020	8:20:43	-79.3909	27.0389	-11.01	63.39
7	4:44:37	-79.2836	27.0053	5:14:59	-79.2892	27.0237	-7.18	46.90
8	3:13: 1	-79.2050	27.0061	3:39: 9	-79.2135	27.0189	-17.33	39.69
Cruise date: 2006.06.27								
0	18:56:24	-79.9309	27.0020	19: 7:28	-79.9323	27.0122	-0.04	94.63
1	17:37:10	-79.8667	27.0057	17:55:15	-79.8677	27.0229	1.22	100.55
2	15:39: 1	-79.7829	27.0074	16: 3: 2	-79.7817	27.0312	2.74	100.46
3	13:17: 5	-79.6853	27.0105	13:46:25	-79.6838	27.0388	3.36	99.55
4	10:54:54	-79.6162	27.0062	11:29:42	-79.6134	27.0353	0.23	91.06
5	9: 5:12	-79.5003	27.0039	9:45:28	-79.4946	27.0310	-0.37	71.96
6	7:29:45	-79.3871	27.0048	8: 4:32	-79.3812	27.0270	-4.35	57.77
7	5:55: 1	-79.2829	27.0051	6:26: 9	-79.2784	27.0210	-5.37	48.12
8	4:23:40	-79.1996	27.0056	4:48:22	-79.1960	27.0120	-8.46	29.78
Cruise date: 2006.09.18								
0	3:28: 1	-79.9304	27.0013	3:39:36	-79.9312	27.0116	0.14	93.41
1	2:27:12	-79.8665	27.0010	2:47:41	-79.8682	27.0196	-0.54	96.18
2	1:20: 5	-79.7825	27.0004	1:43:51	-79.7858	27.0196	-2.32	93.08
3	0: 1:50	-79.6833	27.0006	0:30:35	-79.6868	27.0230	0.24	99.73
4	22:12:39	-79.6163	27.0005	22:44:26	-79.6207	27.0232	0.45	86.30
5	19:21: 9	-79.5008	27.0010	19:58:18	-79.5038	27.0219	-2.07	71.65
6	17:59: 1	-79.3839	27.0018	18:33: 5	-79.3878	27.0174	-5.14	59.90
7	16: 9:60	-79.2841	27.0005	16:40:52	-79.2875	27.0100	-8.48	50.60
8	14:38:36	-79.2004	27.0002	15: 2:27	-79.2016	27.0066	-12.82	40.61

Table 17: 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: 2006.12.14								
0	7:57:34	-79.9313	27.0081	8:11: 6	-79.9344	27.0252	2.03	131.59
1	6:48:31	-79.8679	27.0098	7: 5:41	-79.8693	27.0305	4.67	112.22
2	5:34:45	-79.7853	27.0084	5:55: 3	-79.7892	27.0280	7.05	102.98
3	3:54:30	-79.6825	27.0039	4:27:22	-79.6815	27.0345	14.65	104.52
4	2:38:16	-79.6182	27.0037	3:10:38	-79.6245	27.0299	13.22	106.19
5	1: 8:59	-79.5019	27.0037	1:45: 7	-79.5115	27.0269	5.08	96.11
6	21:26:50	-79.3837	27.0027	22: 1:42	-79.3897	27.0151	5.11	65.55
7	19:41:43	-79.2866	27.0013	20:13:42	-79.2974	27.0082	1.20	40.25
8	18: 2:28	-79.2011	26.9983	18:30: 2	-79.2084	26.9973	-2.94	20.72

Table 18: Same as Table 17 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws0604. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	23.66	36.28	4.82	NaN	NaN
10	23.65	36.29	4.86	-14.4	127.9
20	23.42	36.39	4.84	-14.3	127.9
30	22.28	36.28	4.93	-12.4	127.1
40	21.95	36.25	4.84	-15.0	125.5
50	22.07	36.38	4.66	-12.9	125.8
60	22.63	36.73	4.03	-7.1	125.3
70	22.18	36.70	3.85	-7.6	124.0
80	21.47	36.67	3.88	-6.5	120.1
90	21.15	36.64	3.69	-4.6	114.5
100	20.12	36.50	3.42	-4.8	104.5
110	18.21	36.28	3.30	-0.4	80.5
120	16.26	36.05	3.27	3.1	54.2
130	14.91	35.90	3.08	1.9	28.7
140	NaN	NaN	NaN	3.0	19.4

Table 19: 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: ws0604. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	23.42	36.27	4.79	NaN	NaN
10	23.35	36.32	4.86	-17.7	144.4
20	23.24	36.34	4.88	-17.7	144.5
30	23.02	36.36	4.90	-17.7	152.0
40	22.81	36.38	4.87	-17.2	153.4
50	22.48	36.37	4.76	-17.2	148.9
60	22.47	36.44	4.75	-15.8	140.1
70	22.30	36.44	4.82	-14.8	136.0
80	22.44	36.62	4.40	-15.3	136.0
90	22.19	36.66	4.13	-15.7	134.8
100	21.35	36.64	4.43	-8.2	133.0
110	20.54	36.62	3.43	0.5	125.5
120	20.02	36.57	3.27	-5.4	119.4
130	19.43	36.52	3.15	-5.7	110.4
140	17.97	36.36	3.04	-1.2	99.2
150	17.40	36.33	3.09	0.6	95.5
160	17.03	36.29	3.20	3.4	93.6
170	16.55	36.22	3.17	9.6	90.1
180	15.91	36.12	3.15	10.8	79.8
190	15.28	36.02	3.12	8.7	66.7
200	14.67	35.92	3.06	3.4	49.7
210	13.59	35.75	2.99	0.3	35.9
220	12.40	35.57	2.92	-1.4	28.0
230	11.35	35.44	2.88	0.4	18.8
240	10.83	35.37	2.86	-0.2	11.4
250	10.53	35.33	2.84	0.4	7.1

Table 20: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.08	36.20	4.79	NaN	NaN
10	24.11	36.21	4.76	-23.1	170.0
20	24.12	36.24	4.77	-23.1	170.0
30	24.11	36.25	4.77	-22.0	169.5
40	24.09	36.25	4.77	-20.1	167.8
50	23.60	36.32	4.81	-20.9	160.2
60	23.24	36.35	4.83	-20.1	150.1
70	22.81	36.42	4.77	-19.7	142.2
80	22.12	36.27	4.78	-17.9	137.6
90	22.34	36.42	4.73	-16.9	137.7
100	22.78	36.65	4.31	-18.3	139.2
110	21.89	36.46	4.55	-19.2	139.7
120	21.64	36.58	4.43	-22.4	136.4
130	21.37	36.68	3.69	-23.3	133.5
140	20.61	36.55	3.68	-16.5	128.8
150	19.85	36.68	3.32	-9.8	120.7
160	19.47	36.62	3.29	-7.2	115.8
170	18.72	36.47	3.04	-5.8	109.2
180	18.02	36.40	3.03	-1.4	101.8
190	17.19	36.31	3.14	-0.3	94.8
200	16.63	36.23	3.16	1.8	91.8
210	16.20	36.16	3.13	5.2	89.7
220	15.68	36.08	3.06	10.3	87.7
230	15.34	36.03	3.02	13.5	79.9
240	14.81	35.94	2.97	11.9	76.5
250	14.48	35.89	2.95	12.5	73.2
260	14.18	35.85	2.96	12.6	66.2
270	13.08	35.68	2.92	9.5	59.0
280	12.43	35.59	2.87	7.4	55.5
290	12.03	35.52	2.85	7.5	52.0
300	11.45	35.44	2.82	10.3	46.3
350	8.72	35.10	2.86	-0.0	10.7

Table 21: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.79	36.19	4.65	NaN	NaN
10	24.79	36.20	4.69	-10.0	153.5
20	24.79	36.20	4.69	-10.2	153.5
30	24.76	36.19	4.70	-14.2	151.5
40	24.70	36.19	4.70	-18.4	148.9
50	24.55	36.17	4.71	-26.4	147.5
60	24.49	36.25	4.65	-29.4	145.3
70	24.64	36.59	4.20	-27.7	140.7
80	23.87	36.57	4.19	-24.9	133.9
90	22.76	36.47	4.51	-19.9	125.8
100	22.46	36.44	4.71	-16.2	121.5
110	22.19	36.43	4.80	-15.5	119.9
120	22.19	36.51	4.60	-15.1	118.4
130	21.99	36.56	4.58	-16.5	119.1
140	22.29	36.86	3.68	-15.6	119.9
150	21.94	36.89	3.43	-15.0	118.1
160	21.57	36.87	3.43	-14.3	116.6
170	20.49	36.71	3.44	-10.9	118.8
180	19.98	36.71	3.32	-10.0	119.9
190	19.49	36.65	3.40	-11.7	116.8
200	18.81	36.56	3.41	-11.3	113.5
210	18.38	36.50	3.38	-6.4	109.5
220	17.96	36.43	3.31	-3.9	106.7
230	17.67	36.40	3.38	-4.5	104.6
240	17.14	36.32	3.35	-6.7	99.1
250	16.76	36.27	3.28	-6.1	95.8
260	16.30	36.20	3.38	-3.7	94.7
270	15.99	36.14	3.33	-0.6	95.7
280	15.80	36.11	3.28	0.1	94.2
290	15.40	36.05	3.19	4.1	89.1
300	14.93	35.97	3.09	8.7	83.5
350	12.75	35.62	2.85	5.6	59.7
400	10.91	35.34	2.75	10.6	49.0
450	9.91	35.24	2.81	4.8	19.6
500	8.64	35.09	2.89	-3.4	8.2

Table 22: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.50	36.16	4.66	NaN	NaN
10	24.53	36.18	4.69	-12.7	130.9
20	24.54	36.18	4.70	-12.8	130.9
30	24.54	36.18	4.69	-14.1	129.5
40	24.54	36.18	4.67	-14.5	129.4
50	24.53	36.17	4.70	-16.2	127.7
60	24.62	36.22	4.66	-17.4	128.2
70	24.85	36.36	4.46	-20.2	128.2
80	24.78	36.48	4.32	-16.0	125.9
90	24.28	36.66	4.04	-15.0	121.5
100	23.30	36.58	4.08	-9.7	113.5
110	22.52	36.45	4.64	-6.3	111.5
120	22.26	36.44	4.75	-6.5	110.3
130	22.01	36.45	4.67	-6.0	109.1
140	21.76	36.45	4.62	-8.1	111.0
150	22.22	36.75	3.94	-8.3	113.8
160	22.13	36.89	3.46	-9.5	115.0
170	21.36	36.85	3.41	-10.2	116.9
180	21.00	36.82	3.41	-10.4	118.9
190	20.52	36.76	3.43	-13.0	118.8
200	20.24	36.76	3.77	-13.4	118.0
210	19.76	36.71	3.96	-10.1	115.7
220	19.46	36.67	3.93	-7.9	111.9
230	19.02	36.60	3.58	-4.7	108.3
240	18.55	36.52	3.50	-2.0	105.3
250	18.02	36.46	3.40	3.0	103.4
260	17.72	36.41	3.43	6.2	97.5
270	17.28	36.35	3.41	4.5	92.0
280	16.86	36.28	3.40	1.4	89.8
290	16.53	36.23	3.36	-1.6	91.9
300	16.24	36.18	3.34	0.4	92.4
350	13.77	35.78	2.93	0.6	70.8
400	12.20	35.53	2.82	-2.4	57.6
450	11.28	35.39	2.76	-3.0	53.4
500	9.83	35.19	2.74	4.7	48.3
550	9.35	35.12	2.74	6.8	38.2
600	7.68	34.99	2.93	3.7	12.8

Table 23: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.57	36.27	4.61	NaN	NaN
10	24.57	36.28	4.68	1.7	99.2
20	24.57	36.28	4.69	1.7	99.2
30	24.56	36.28	4.70	-0.3	97.7
40	24.30	36.36	4.67	-3.0	99.2
50	24.30	36.36	4.66	-1.8	101.6
60	24.30	36.37	4.65	-2.8	102.7
70	24.28	36.37	4.67	-5.1	100.3
80	24.28	36.37	4.68	-8.6	97.9
90	24.28	36.38	4.67	-11.4	99.1
100	24.28	36.39	4.64	-12.0	100.8
110	24.28	36.43	4.57	-11.5	101.7
120	24.16	36.58	4.26	-10.4	100.8
130	23.88	36.72	3.89	-9.2	97.9
140	23.20	36.88	3.72	-5.8	98.1
150	22.53	36.89	3.54	-5.2	97.5
160	22.03	36.89	3.62	-8.9	92.7
170	21.69	36.86	3.61	-8.9	88.3
180	21.51	36.87	3.94	-8.2	85.4
190	20.81	36.82	4.19	-8.7	84.1
200	20.30	36.74	3.56	-10.1	85.3
210	20.10	36.72	3.46	-8.5	86.6
220	19.72	36.69	3.45	-2.7	87.2
230	19.38	36.66	3.45	-2.0	87.2
240	19.14	36.62	3.47	-0.2	88.7
250	18.61	36.55	3.48	2.8	88.0
260	18.21	36.49	3.48	1.0	84.3
270	17.82	36.43	3.47	-3.2	81.1
280	17.50	36.38	3.41	-5.9	82.3
290	17.41	36.41	3.42	-7.5	83.6
300	17.03	36.34	3.88	-8.4	83.9
350	16.27	36.23	3.87	-9.6	80.9
400	15.04	36.02	3.59	-6.6	69.4
450	13.21	35.72	3.19	-9.7	57.5
500	11.44	35.41	2.82	-8.3	42.1
550	10.23	35.24	2.75	1.2	31.4
600	9.10	35.10	2.74	1.2	23.2
650	7.80	34.97	2.82	4.1	24.2
700	6.92	34.92	3.07	4.7	25.7

Table 24: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.29	36.30	4.70	NaN	NaN
10	24.31	36.32	4.70	-23.7	91.5
20	24.31	36.32	4.71	-23.7	91.5
30	24.32	36.32	4.71	-24.1	90.1
40	24.32	36.32	4.71	-24.0	90.2
50	24.32	36.32	4.70	-25.2	90.8
60	24.32	36.32	4.70	-27.0	89.3
70	24.31	36.34	4.69	-30.0	89.3
80	24.28	36.39	4.63	-26.5	89.6
90	24.28	36.40	4.63	-20.1	89.8
100	24.26	36.42	4.62	-15.7	86.2
110	24.18	36.48	4.55	-12.3	81.2
120	24.06	36.58	4.47	-12.9	78.9
130	23.77	36.71	4.20	-12.1	77.3
140	23.62	36.77	4.03	-4.5	76.5
150	23.14	36.89	3.86	0.0	76.2
160	22.71	36.90	3.74	-2.1	77.9
170	21.99	36.89	3.90	-8.9	80.8
180	21.07	36.83	4.05	-9.1	82.4
190	20.63	36.80	4.32	-4.3	84.3
200	20.38	36.78	4.32	-3.7	83.9
210	20.24	36.77	4.28	-7.2	84.6
220	19.78	36.72	4.28	-8.4	83.5
230	19.48	36.69	4.26	-9.5	81.0
240	19.26	36.67	4.31	-10.5	79.2
250	18.91	36.63	4.34	-11.5	79.3
260	18.67	36.60	4.25	-11.9	80.0
270	18.53	36.59	4.31	-10.9	77.9
280	18.31	36.56	4.30	-7.8	77.3
290	18.20	36.54	4.33	-6.2	77.4
300	18.17	36.54	4.32	-7.3	77.9
350	17.58	36.45	4.29	-3.4	76.7
400	15.82	36.15	3.83	-14.7	62.5
450	14.39	35.89	3.71	-14.4	54.0
500	13.36	35.72	3.08	-10.5	49.9
550	12.02	35.53	3.08	-9.1	33.4
600	11.16	35.41	3.00	-9.7	30.5
650	9.61	35.19	2.87	-3.0	15.3

Table 25: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.22	36.33	4.68	NaN	NaN
10	24.23	36.34	4.71	-10.5	45.6
20	24.22	36.34	4.72	-10.5	45.6
30	24.23	36.34	4.73	-11.5	45.2
40	24.23	36.34	4.73	-11.5	44.4
50	24.23	36.34	4.73	-11.1	41.3
60	24.24	36.34	4.72	-12.1	40.1
70	24.24	36.34	4.72	-14.7	39.0
80	24.24	36.34	4.72	-15.8	38.4
90	24.24	36.35	4.72	-21.3	39.0
100	24.23	36.40	4.67	-23.4	45.3
110	24.12	36.45	4.60	-15.1	51.3
120	23.78	36.53	4.50	-6.2	52.9
130	23.45	36.70	4.07	-9.2	54.7
140	23.17	36.72	4.03	-13.5	56.5
150	23.05	36.85	3.77	-15.0	60.3
160	22.88	36.89	3.98	-14.1	62.6
170	22.46	36.91	4.26	-18.8	63.6
180	21.74	36.89	4.37	-18.1	63.4
190	21.37	36.87	4.36	-14.2	62.7
200	21.06	36.84	4.35	-10.7	61.9
210	20.67	36.81	4.33	-5.2	59.1
220	20.34	36.78	4.30	-0.8	54.0
230	20.04	36.75	4.30	0.5	50.8
240	19.79	36.72	4.28	0.2	47.6
250	19.37	36.68	4.27	0.9	44.7
260	19.01	36.63	4.20	1.2	42.1
270	18.77	36.61	4.25	3.8	40.3
280	18.50	36.58	4.28	4.2	40.3
290	18.26	36.55	4.27	4.4	41.3
300	18.05	36.52	4.25	3.3	42.0
350	17.26	36.40	4.19	2.3	40.9
400	16.51	36.28	4.08	-6.6	43.3
450	15.71	36.15	3.99	-4.7	43.7
500	14.81	35.99	3.77	-6.2	45.4
550	13.69	35.79	3.29	-12.6	52.8
600	13.16	35.74	3.50	-9.5	42.4

Table 26: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0604. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.21	36.33	4.68	NaN	NaN
10	24.21	36.34	4.71	-9.4	16.5
20	24.23	36.34	4.73	-9.4	16.4
30	24.23	36.34	4.73	-9.3	13.8
40	24.23	36.34	4.73	-8.4	12.2
50	24.22	36.34	4.73	-8.8	11.6
60	24.18	36.35	4.71	-12.8	11.7
70	24.04	36.37	4.67	-18.1	18.4
80	23.88	36.38	4.68	-17.9	27.7
90	23.50	36.40	4.69	-17.3	33.4
100	23.67	36.55	4.56	-19.8	39.2
110	23.63	36.56	4.63	-20.7	44.1
120	23.28	36.47	4.71	-23.3	46.5
130	23.03	36.52	4.73	-26.7	46.7
140	22.88	36.57	4.59	-27.5	47.9
150	22.88	36.78	4.54	-24.6	52.2
160	22.59	36.83	4.49	-21.8	53.2
170	22.35	36.89	3.82	-18.7	49.6
180	21.93	36.89	4.17	-22.6	48.9
190	21.67	36.88	4.25	-28.1	51.5
200	21.33	36.86	4.34	-29.0	53.0
210	21.04	36.84	4.33	-23.2	55.1
220	20.58	36.80	4.32	-17.8	55.9
230	20.45	36.79	4.31	-16.4	57.1
240	20.31	36.77	4.32	-14.3	58.9
250	19.75	36.72	4.32	-13.8	58.4
260	19.23	36.66	4.32	-15.4	55.3
270	19.04	36.64	4.25	-19.9	51.9
280	18.94	36.63	4.28	-23.8	51.0
290	18.90	36.63	4.31	-22.1	50.7
300	18.55	36.57	4.32	-20.1	51.6
350	17.51	36.44	4.22	-19.3	36.4
400	16.61	36.30	4.08	-12.8	35.5
450	15.86	36.17	3.96	-11.5	33.9

Table 27: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.81	36.43	4.56	NaN	NaN
10	28.42	36.30	4.57	4.5	188.8
20	27.71	36.37	4.64	4.3	188.3
30	25.85	36.45	4.79	3.2	184.6
40	24.39	36.47	4.82	1.5	176.9
50	21.85	36.43	4.76	-2.2	152.1
60	19.53	36.29	4.10	-5.9	116.0
70	17.68	36.19	3.74	-4.4	79.9
80	15.40	35.91	3.46	1.6	49.4
90	13.83	35.76	3.25	0.1	37.8
100	13.07	35.68	3.14	-3.3	39.5
110	11.37	35.47	3.00	-2.5	33.5
120	10.68	35.39	2.94	-3.4	28.2
130	NaN	NaN	NaN	0.1	11.4
140	NaN	NaN	NaN	6.1	38.2

Table 28: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.80	36.31	4.53	NaN	NaN
10	28.65	36.31	4.55	-0.5	195.6
20	28.44	36.32	4.56	-0.4	195.0
30	26.84	36.41	4.75	0.0	193.0
40	26.00	36.45	4.81	9.9	183.1
50	24.55	36.54	4.95	13.2	176.2
60	22.93	36.52	4.98	14.6	171.3
70	22.23	36.51	4.89	7.0	165.1
80	21.14	36.50	4.58	5.4	159.1
90	20.40	36.49	4.40	5.3	151.8
100	19.47	36.45	3.94	6.5	150.5
110	18.57	36.36	3.64	9.1	138.4
120	17.02	36.16	3.58	8.3	116.4
130	16.01	36.11	3.18	5.4	101.2
140	15.54	36.06	3.08	2.9	88.5
150	14.41	35.87	3.08	2.6	72.5
160	12.91	35.66	3.05	-3.5	58.4
170	11.54	35.49	3.00	-5.3	46.9
180	10.16	35.31	2.92	-3.6	36.1
190	9.41	35.21	2.90	-3.7	28.6
200	8.64	35.10	2.88	-4.7	25.0
210	8.12	35.03	2.86	-5.5	21.7
220	7.98	35.02	2.86	-7.5	17.5
230	7.81	35.00	2.87	-9.6	14.5
240	7.79	35.00	2.88	-9.2	7.0
250	NaN	NaN	NaN	-6.4	0.3

Table 29: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.13	36.44	4.58	NaN	NaN
10	28.78	36.26	4.52	6.5	207.1
20	28.77	36.26	4.52	6.3	206.6
30	28.77	36.26	4.54	5.5	204.2
40	28.20	36.39	4.61	4.3	200.6
50	27.04	36.45	4.74	4.9	185.7
60	25.87	36.43	4.76	5.8	179.0
70	24.59	36.63	4.72	7.7	171.5
80	23.48	36.68	4.07	6.6	164.5
90	22.72	36.75	3.71	5.4	154.1
100	20.86	36.50	4.02	11.3	144.1
110	20.39	36.49	4.11	15.2	141.3
120	20.05	36.48	4.00	12.9	137.8
130	19.40	36.47	3.89	6.1	134.6
140	18.87	36.45	3.78	7.3	130.8
150	18.59	36.46	3.52	13.6	126.2
160	17.50	36.34	3.16	19.6	116.8
170	16.87	36.26	3.11	21.1	107.1
180	16.34	36.19	3.08	14.6	98.4
190	15.86	36.11	3.07	3.8	93.6
200	15.48	36.06	3.06	-5.3	92.1
210	14.74	35.95	3.04	-4.8	90.9
220	14.09	35.84	3.00	-0.7	84.1
230	13.14	35.70	2.92	-0.5	75.0
240	12.98	35.68	2.91	-4.7	68.6
250	12.79	35.65	2.91	-10.3	65.1
260	12.14	35.57	2.93	-13.4	61.1
270	11.53	35.48	2.94	-10.2	50.6
280	10.59	35.35	2.92	-6.5	43.5
290	10.23	35.31	2.90	-8.8	42.5
300	10.01	35.27	2.88	-9.8	44.6
350	8.12	35.05	2.92	4.3	21.8

Table 30: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.74	36.20	4.46	NaN	NaN
10	28.73	36.22	4.51	-4.2	183.3
20	28.73	36.22	4.51	-4.1	183.4
30	28.72	36.22	4.51	-3.9	183.6
40	27.99	36.22	4.63	-0.8	187.2
50	27.12	36.17	4.72	3.4	183.6
60	27.17	36.31	4.61	3.8	176.2
70	26.48	36.33	4.50	0.3	173.0
80	25.63	36.52	4.30	-2.4	167.5
90	24.40	36.60	4.29	-1.0	160.8
100	23.58	36.79	3.77	4.5	153.9
110	22.55	36.77	3.63	5.1	146.4
120	21.74	36.75	3.55	2.5	139.1
130	20.75	36.62	3.56	3.4	136.4
140	20.38	36.66	3.43	3.3	131.3
150	20.02	36.70	3.47	2.4	129.3
160	19.55	36.66	3.49	2.0	130.4
170	19.03	36.59	3.50	2.8	130.5
180	18.64	36.54	3.50	2.4	127.4
190	18.16	36.48	3.39	1.7	121.4
200	17.37	36.33	3.14	2.8	114.8
210	16.88	36.27	3.08	4.3	106.7
220	16.47	36.21	3.15	3.9	104.2
230	15.96	36.13	3.08	1.3	101.8
240	15.72	36.10	3.12	0.2	99.6
250	15.49	36.06	3.21	0.7	98.5
260	15.28	36.03	3.18	2.2	99.5
270	15.03	35.99	3.17	5.8	98.4
280	14.49	35.90	3.04	5.9	98.4
290	14.16	35.85	3.00	4.3	97.1
300	13.59	35.76	2.94	7.2	95.0
350	10.90	35.36	2.82	-3.9	81.9
400	9.56	35.22	2.86	4.8	58.7
450	7.44	34.97	2.95	11.0	31.1
500	6.65	34.94	3.15	12.0	9.3

Table 31: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.68	36.20	4.48	NaN	NaN
10	28.69	36.20	4.51	-1.1	157.8
20	28.69	36.20	4.52	-1.2	157.9
30	28.67	36.20	4.53	-1.3	158.1
40	28.05	36.20	4.63	-3.6	164.0
50	27.54	36.16	4.66	-4.3	166.6
60	27.56	36.27	4.60	0.9	162.4
70	26.90	36.18	4.65	4.8	155.1
80	26.50	36.31	4.52	3.4	151.5
90	25.98	36.50	4.35	2.0	151.4
100	25.37	36.61	4.07	5.2	149.5
110	23.89	36.77	3.77	9.9	141.9
120	22.22	36.84	3.61	7.3	130.9
130	21.42	36.79	3.50	-1.5	124.8
140	20.75	36.70	3.47	-3.9	127.4
150	20.11	36.73	3.48	-4.2	127.3
160	19.78	36.69	3.49	-4.6	122.9
170	19.36	36.64	3.51	-4.5	121.2
180	18.88	36.57	3.53	-5.6	120.5
190	18.43	36.53	3.56	-3.5	117.6
200	18.21	36.50	3.58	-5.4	115.2
210	17.95	36.46	3.57	-8.2	116.9
220	17.65	36.40	3.50	-7.8	116.6
230	17.27	36.35	3.35	-4.5	114.3
240	16.89	36.29	3.36	1.7	111.1
250	16.42	36.21	3.32	3.1	105.1
260	16.03	36.15	3.26	1.8	103.1
270	15.67	36.09	3.18	4.2	102.5
280	15.24	36.02	3.16	8.0	99.5
290	14.78	35.95	3.16	8.4	97.7
300	14.35	35.88	3.14	6.6	94.9
350	12.04	35.52	2.82	0.9	84.1
400	10.83	35.34	2.78	1.2	77.7
450	9.95	35.22	2.73	0.3	67.9
500	8.92	35.09	2.76	-7.1	64.7
550	7.73	34.99	2.92	1.7	39.1
600	6.96	34.94	3.07	1.6	12.1

Table 32: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.51	36.17	4.47	NaN	NaN
10	28.52	36.17	4.51	4.3	125.4
20	28.52	36.18	4.51	4.2	125.5
30	28.53	36.18	4.51	4.0	125.7
40	28.49	36.21	4.51	-1.0	128.7
50	27.80	36.18	4.65	-4.7	131.1
60	27.20	36.28	4.57	-1.3	134.2
70	27.01	36.32	4.52	2.3	135.1
80	26.59	36.36	4.49	4.5	133.9
90	25.72	36.51	4.31	5.4	131.7
100	24.85	36.69	3.94	6.2	130.2
110	23.78	36.86	3.69	6.2	124.0
120	23.08	36.88	3.61	1.2	115.3
130	22.17	36.89	3.55	-4.6	112.0
140	21.71	36.86	3.51	-7.0	110.6
150	21.33	36.83	3.50	-8.9	109.0
160	20.86	36.79	3.48	-7.4	107.6
170	20.61	36.78	3.43	-3.1	109.5
180	19.89	36.70	3.45	3.0	109.7
190	19.50	36.66	3.47	2.0	103.2
200	19.16	36.62	3.51	-1.0	100.7
210	18.79	36.58	3.53	-3.9	100.8
220	18.41	36.52	3.54	-3.5	96.9
230	18.07	36.47	3.53	-4.6	92.0
240	17.83	36.44	3.54	-5.4	91.3
250	17.55	36.40	3.54	-4.5	90.9
260	17.39	36.38	3.54	-6.0	89.8
270	17.08	36.32	3.51	-8.9	89.0
280	16.95	36.31	3.50	-10.7	89.1
290	16.75	36.27	3.49	-8.2	89.5
300	16.33	36.20	3.41	-3.4	87.6
350	13.77	35.78	3.06	0.8	67.3
400	12.85	35.64	2.98	2.6	66.8
450	11.51	35.43	2.85	-2.5	56.8
500	10.47	35.28	2.82	10.3	55.9
550	9.79	35.18	2.80	0.8	48.0
600	8.85	35.08	2.80	4.5	35.6
650	7.65	34.97	2.90	-0.1	25.8
700	7.11	34.94	3.04	-4.4	9.2

Table 33: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.50	36.19	4.53	NaN	NaN
10	28.51	36.19	4.51	2.0	92.7
20	28.51	36.19	4.52	1.8	92.9
30	28.51	36.19	4.53	1.0	93.5
40	28.07	36.20	4.58	-1.5	95.7
50	27.22	36.20	4.64	-5.1	102.1
60	26.65	36.23	4.53	-7.0	101.1
70	26.55	36.25	4.52	-7.2	99.9
80	26.17	36.44	4.37	-3.9	98.1
90	25.77	36.58	4.20	-7.1	94.2
100	25.31	36.66	4.04	-10.5	93.0
110	24.66	36.80	3.87	-7.4	92.5
120	23.80	36.87	3.74	-1.8	93.3
130	22.75	36.88	3.58	-3.0	92.0
140	22.19	36.87	3.52	-3.7	92.3
150	21.70	36.85	3.52	-1.0	94.0
160	21.04	36.81	3.52	0.2	94.2
170	20.68	36.78	3.46	-1.0	93.2
180	20.50	36.77	3.46	-1.4	93.0
190	20.18	36.73	3.46	-3.7	95.2
200	19.83	36.70	3.45	-5.9	95.1
210	19.51	36.66	3.46	-5.4	88.1
220	19.15	36.62	3.50	-2.3	83.0
230	19.04	36.61	3.57	-3.6	83.6
240	18.94	36.60	3.57	-1.8	84.4
250	18.67	36.56	3.57	-0.3	84.8
260	18.50	36.54	3.57	-1.2	83.7
270	18.15	36.49	3.56	-1.0	83.5
280	17.83	36.44	3.59	0.0	84.3
290	17.42	36.38	3.58	-1.9	80.9
300	17.07	36.32	3.54	-2.8	76.7
350	16.16	36.20	3.64	-1.6	65.9
400	14.44	35.90	3.28	-6.7	54.8
450	13.42	35.73	3.06	-10.8	44.0
500	12.32	35.55	2.96	-5.8	32.0
550	11.24	35.39	2.87	-3.7	17.2
600	10.11	35.23	2.80	-1.0	1.5
650	9.61	35.19	2.87	-7.7	-7.6

Table 34: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.34	36.11	4.45	NaN	NaN
10	28.35	36.12	4.51	-0.0	57.3
20	28.34	36.12	4.52	-0.3	57.6
30	27.89	36.16	4.57	-1.4	58.3
40	27.50	36.19	4.63	-11.6	65.3
50	27.10	36.22	4.58	-13.6	63.0
60	27.09	36.22	4.59	-7.8	63.4
70	26.75	36.22	4.58	-5.3	61.9
80	26.33	36.27	4.49	-11.4	61.6
90	25.35	36.49	4.28	-10.7	65.0
100	24.93	36.62	4.02	-11.3	64.5
110	24.49	36.75	3.88	-15.6	65.6
120	23.58	36.87	3.77	-18.1	66.9
130	23.09	36.89	3.68	-10.2	63.8
140	22.30	36.88	3.54	-3.5	61.5
150	21.49	36.84	3.57	3.1	66.0
160	20.90	36.82	4.06	2.8	68.3
170	20.73	36.81	4.09	-0.4	66.9
180	20.66	36.80	4.10	-3.5	64.9
190	20.60	36.80	4.10	-10.1	60.6
200	20.51	36.79	4.09	-13.4	57.1
210	19.87	36.73	4.04	-7.4	54.0
220	19.57	36.70	4.12	-1.4	52.3
230	19.33	36.67	4.18	0.6	52.6
240	19.30	36.67	4.12	2.5	53.0
250	19.27	36.67	4.13	3.2	51.7
260	19.12	36.64	4.09	2.0	51.7
270	18.59	36.57	4.04	-0.6	51.6
280	18.26	36.53	4.01	-2.6	49.3
290	18.08	36.50	3.88	-0.1	51.9
300	18.09	36.52	4.08	-0.6	50.8
350	17.46	36.41	3.86	-0.6	51.0
400	16.66	36.31	4.07	-9.3	41.6
450	15.35	36.09	3.85	-8.0	41.6
500	14.05	35.89	3.67	-0.8	29.3
550	13.38	35.79	3.56	-5.9	21.2

Table 35: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0615. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.04	36.01	4.52	NaN	NaN
10	28.04	36.01	4.54	-2.8	17.7
20	28.08	36.03	4.53	-3.4	17.7
30	28.10	36.14	4.54	-5.6	17.8
40	27.97	36.19	4.56	-12.1	18.1
50	27.43	36.20	4.64	-6.0	19.3
60	26.80	36.20	4.61	4.3	22.1
70	26.30	36.26	4.56	6.9	26.8
80	25.73	36.40	4.36	2.5	28.9
90	25.26	36.46	4.30	-9.5	30.7
100	24.73	36.66	3.99	-18.3	32.8
110	23.84	36.78	3.82	-20.7	36.5
120	23.65	36.78	3.95	-19.6	38.6
130	23.16	36.86	3.73	-17.2	37.4
140	22.51	36.86	3.66	-14.1	36.7
150	22.10	36.86	3.86	-8.5	35.4
160	21.53	36.84	4.01	-6.5	30.4
170	20.90	36.83	4.12	-0.6	27.2
180	20.83	36.82	4.16	2.5	29.2
190	20.66	36.80	4.25	-0.6	32.3
200	20.44	36.78	4.42	-3.4	33.9
210	19.77	36.72	4.36	-4.9	33.5
220	19.45	36.70	4.35	-5.3	32.3
230	19.22	36.68	4.47	-4.8	31.5
240	19.18	36.67	4.43	-6.4	32.0
250	18.93	36.64	4.39	-6.6	33.2
260	18.78	36.62	4.37	-6.8	35.6
270	18.72	36.62	4.35	-5.3	35.8
280	18.59	36.60	4.35	-3.1	36.3
290	18.46	36.59	4.34	-0.9	36.7
300	18.31	36.57	4.36	1.6	37.6
350	17.43	36.43	4.18	-9.6	32.0
400	17.07	36.37	4.13	-17.8	31.8
450	16.34	36.25	4.00	-21.3	11.8

Table 36: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.35	36.04	4.44	NaN	NaN
10	30.37	36.04	4.45	2.0	158.0
20	30.38	36.04	4.45	2.0	158.0
30	30.37	36.05	4.46	1.7	156.8
40	30.25	36.38	4.52	0.7	152.9
50	29.65	36.36	4.55	-1.1	146.5
60	28.57	36.41	4.62	-2.1	138.3
70	27.21	36.47	4.61	0.5	121.4
80	23.98	36.43	4.39	3.3	93.6
90	21.15	36.44	4.06	5.0	59.3
100	19.42	36.39	3.72	1.2	37.8
110	18.42	36.39	3.43	-1.5	22.6
120	17.30	36.40	3.10	-1.6	15.7
130	NaN	NaN	NaN	-1.6	6.8
140	NaN	NaN	NaN	-6.3	40.1

Table 37: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.39	36.01	4.42	NaN	NaN
10	30.39	36.01	4.43	7.7	176.1
20	30.43	36.06	4.44	7.7	176.1
30	30.31	36.33	4.53	7.5	174.0
40	30.12	36.50	4.58	6.8	166.2
50	29.82	36.52	4.63	3.7	164.8
60	28.90	36.52	4.74	0.5	165.5
70	27.85	36.53	4.83	-0.3	167.0
80	26.49	36.60	4.85	0.5	163.7
90	25.58	36.64	4.69	0.6	154.1
100	23.76	36.68	4.27	0.6	135.3
110	20.89	36.35	4.03	1.9	113.0
120	18.97	36.56	3.45	4.6	90.6
130	19.09	36.64	3.26	6.6	80.4
140	17.94	36.40	3.21	5.6	73.8
150	16.72	36.24	3.17	-0.2	68.8
160	16.21	36.25	2.96	-3.7	61.4
170	14.66	36.01	2.95	-5.3	52.1
180	14.15	35.96	2.90	-4.3	41.8
190	13.92	35.93	2.95	-2.7	36.4
200	13.65	35.89	2.89	-1.2	37.6
210	13.50	35.87	2.84	-1.4	36.8
220	13.16	35.82	2.82	-1.5	37.3
230	12.43	35.72	2.81	-0.6	30.2
240	10.90	35.51	2.80	-1.4	28.2
250	NaN	NaN	NaN	-3.4	24.2
260	NaN	NaN	NaN	-42.4	45.2

Table 38: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.18	36.30	4.44	NaN	NaN
10	30.15	36.29	4.45	-4.1	159.4
20	30.10	36.29	4.45	-4.2	159.5
30	30.09	36.29	4.45	-4.4	159.5
40	29.61	36.23	4.55	-6.1	160.4
50	28.98	36.26	4.68	-5.7	163.4
60	28.48	36.31	4.67	-5.7	164.8
70	27.91	36.34	4.66	-5.8	165.3
80	27.38	36.47	4.54	-4.6	163.1
90	26.37	36.57	4.36	-2.3	160.2
100	25.51	36.76	4.04	3.4	158.8
110	24.50	36.82	3.84	6.5	155.4
120	23.83	36.87	3.81	6.6	150.5
130	22.79	36.79	3.82	6.6	145.3
140	22.21	36.77	3.74	5.6	137.5
150	20.59	36.61	3.61	1.8	127.5
160	17.67	36.20	3.53	-1.4	117.7
170	16.90	36.33	2.98	-3.3	109.5
180	16.52	36.28	2.86	-2.0	103.9
190	16.21	36.24	2.81	-1.3	97.2
200	15.99	36.22	2.80	-1.4	90.0
210	14.99	36.04	2.85	1.0	81.7
220	14.13	35.94	2.85	4.0	72.8
230	13.76	35.89	2.81	5.5	66.1
240	13.34	35.83	2.80	5.9	60.5
250	12.96	35.76	2.82	4.6	55.5
260	12.62	35.72	2.80	1.7	52.2
270	12.40	35.69	2.79	-0.8	51.3
280	12.17	35.65	2.79	-1.4	49.3
290	11.92	35.62	2.78	-3.1	47.3
300	11.70	35.58	2.76	-4.6	42.4
350	8.04	35.14	2.85	-6.0	13.7

Table 39: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.24	36.20	4.43	NaN	NaN
10	30.24	36.20	4.44	-10.6	141.0
20	30.13	36.22	4.46	-10.6	141.0
30	30.16	36.26	4.45	-10.6	141.9
40	29.78	36.23	4.51	-9.9	145.3
50	28.92	36.27	4.70	-8.5	149.3
60	28.36	36.33	4.61	-6.9	152.3
70	27.89	36.31	4.67	-5.8	151.4
80	27.28	36.37	4.61	-3.7	151.0
90	26.60	36.50	4.37	-0.7	151.3
100	25.63	36.69	4.14	1.9	151.0
110	24.58	36.86	3.78	3.6	150.0
120	23.88	36.97	3.63	4.4	147.6
130	23.02	36.92	3.59	7.4	140.6
140	22.35	36.94	3.51	9.1	134.7
150	21.73	36.92	3.44	7.8	131.3
160	20.88	36.79	3.40	2.6	129.2
170	20.30	36.74	3.39	-3.2	128.5
180	20.24	36.80	3.46	-5.5	130.0
190	19.14	36.64	3.38	-4.8	130.6
200	18.39	36.57	3.30	-1.3	128.7
210	18.08	36.52	3.25	1.1	124.4
220	17.52	36.45	3.23	2.6	119.4
230	17.18	36.41	3.29	2.0	115.7
240	16.82	36.35	3.19	2.1	113.2
250	16.18	36.25	3.07	4.7	111.3
260	15.26	36.10	2.74	9.1	107.6
270	14.46	35.98	2.99	12.8	102.6
280	14.06	35.92	2.82	13.2	95.9
290	13.63	35.85	2.82	11.8	91.1
300	13.17	35.78	2.80	10.0	86.5
350	11.79	35.57	2.81	-0.4	72.9
400	10.09	35.33	2.70	1.9	59.3
450	9.08	35.20	2.71	-1.3	58.2
500	8.06	35.10	2.80	-5.5	33.1

Table 40: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.47	36.26	4.42	NaN	NaN
10	30.26	36.25	4.44	-8.7	140.6
20	30.21	36.25	4.45	-8.8	140.6
30	30.19	36.25	4.45	-8.8	140.4
40	29.45	36.22	4.62	-9.2	138.7
50	28.70	36.28	4.67	-8.3	136.4
60	28.15	36.32	4.63	-7.1	134.6
70	27.65	36.37	4.57	-5.8	135.6
80	27.06	36.40	4.51	-6.0	135.5
90	26.01	36.48	4.33	-6.4	134.7
100	25.70	36.64	4.12	-4.6	135.7
110	25.01	36.82	3.88	-1.0	134.9
120	23.68	36.94	3.64	4.0	131.8
130	22.53	36.94	3.54	4.0	128.4
140	22.18	36.95	3.47	1.9	126.7
150	21.47	36.90	3.45	-0.0	126.6
160	20.94	36.87	3.42	-2.1	125.8
170	20.24	36.82	3.48	-4.4	124.8
180	19.83	36.78	3.48	-5.2	123.0
190	19.58	36.75	3.53	-4.2	121.2
200	19.29	36.71	3.56	-2.1	119.0
210	19.12	36.69	3.55	-0.9	117.7
220	18.88	36.66	3.55	-0.2	117.1
230	18.78	36.65	3.56	0.2	116.5
240	18.32	36.59	3.61	1.5	113.9
250	18.09	36.56	3.61	3.1	109.7
260	17.63	36.49	3.60	3.7	108.3
270	17.35	36.44	3.57	3.8	106.5
280	16.97	36.38	3.52	4.2	104.6
290	16.56	36.31	3.49	3.6	102.7
300	16.22	36.26	3.43	3.0	100.8
350	13.38	35.79	3.05	8.7	79.0
400	11.47	35.51	2.74	7.1	60.6
450	10.28	35.34	2.70	1.2	55.8
500	9.30	35.21	2.71	-3.1	46.4
550	8.47	35.12	2.75	-0.1	34.9
600	8.11	35.09	2.79	7.6	24.6

Table 41: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.45	36.21	4.42	NaN	NaN
10	30.15	36.19	4.43	-5.2	115.7
20	30.10	36.22	4.45	-5.2	115.7
30	30.04	36.22	4.44	-5.3	115.8
40	29.95	36.22	4.46	-9.6	118.1
50	29.06	36.22	4.72	-9.4	120.7
60	28.16	36.22	4.75	-8.2	122.2
70	27.43	36.23	4.74	-7.9	121.7
80	26.95	36.38	4.52	-8.7	120.2
90	26.61	36.47	4.39	-7.0	118.2
100	25.95	36.60	4.25	-0.1	115.2
110	25.21	36.82	3.94	2.3	114.8
120	24.16	36.87	3.77	0.1	115.0
130	23.70	36.91	3.70	-2.9	113.2
140	23.32	36.93	3.65	-4.8	112.7
150	22.41	36.95	3.54	-4.6	111.3
160	21.84	36.93	3.51	-5.2	108.3
170	21.22	36.90	3.49	-5.8	105.5
180	20.88	36.87	3.49	-6.5	102.5
190	20.50	36.83	3.47	-6.1	100.6
200	20.28	36.81	3.45	-6.1	101.0
210	19.91	36.77	3.53	-6.0	101.4
220	19.28	36.70	3.54	-5.6	101.6
230	18.97	36.66	3.57	-4.2	101.5
240	18.75	36.65	3.71	-4.2	101.6
250	18.34	36.60	3.73	-6.3	100.8
260	18.06	36.54	3.72	-6.2	98.3
270	17.87	36.51	3.57	-5.4	95.2
280	17.50	36.45	3.61	-4.4	93.0
290	17.36	36.43	3.55	-2.9	90.9
300	17.10	36.39	3.53	-1.6	89.7
350	16.04	36.21	3.39	1.7	83.1
400	13.95	35.87	3.08	2.8	67.2
450	11.97	35.57	2.77	-4.3	53.3
500	10.74	35.40	2.78	-2.0	45.0
550	9.92	35.28	2.74	-0.6	45.6
600	9.43	35.22	2.74	5.0	41.1
650	8.76	35.13	2.75	0.9	29.0
700	7.91	35.06	2.83	-0.7	19.2
750	NaN	NaN	NaN	-1.9	11.5

Table 42: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.81	36.21	4.44	NaN	NaN
10	29.81	36.21	4.44	-0.7	91.7
20	29.78	36.22	4.45	-0.6	91.6
30	29.76	36.22	4.45	-0.4	91.1
40	29.72	36.23	4.47	0.5	89.1
50	29.11	36.22	4.65	-1.6	87.9
60	28.38	36.22	4.79	-4.6	89.1
70	27.54	36.27	4.64	-4.8	89.3
80	27.12	36.33	4.59	-6.1	89.7
90	26.46	36.45	4.36	-7.1	90.5
100	25.73	36.48	4.18	-5.6	89.3
110	25.37	36.58	4.08	-4.8	88.6
120	24.70	36.74	3.87	-5.9	87.4
130	24.35	36.80	3.81	-5.6	86.1
140	23.84	36.84	3.80	-6.3	85.0
150	23.24	36.92	3.64	-7.7	83.7
160	22.10	36.91	3.75	-7.5	81.4
170	21.51	36.89	3.49	-5.7	81.7
180	20.43	36.80	3.56	-1.2	84.7
190	20.17	36.78	3.52	0.7	86.2
200	20.02	36.76	3.55	-0.5	84.9
210	19.93	36.75	3.55	-1.1	83.6
220	19.63	36.72	3.58	-1.9	82.4
230	19.42	36.70	3.62	-5.4	81.3
240	19.28	36.69	3.64	-6.9	80.4
250	18.78	36.62	3.58	-6.0	78.7
260	18.70	36.61	3.59	-7.7	77.4
270	18.50	36.58	3.61	-10.7	75.8
280	18.35	36.57	3.63	-13.3	74.7
290	18.30	36.56	3.64	-13.6	74.1
300	18.11	36.53	3.63	-12.9	73.3
350	17.18	36.39	3.56	-10.3	66.7
400	15.86	36.18	3.47	-7.0	66.5
450	14.65	35.97	3.18	-6.0	53.1
500	12.74	35.69	3.11	-3.7	37.0
550	11.32	35.46	2.84	0.1	18.7
600	9.83	35.25	2.74	-2.3	14.0
650	9.83	35.31	3.04	-4.2	13.4

Table 43: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.50	36.27	4.43	NaN	NaN
10	29.35	36.26	4.44	-3.3	53.9
20	29.35	36.26	4.45	-3.3	53.9
30	29.34	36.26	4.45	-3.3	54.0
40	29.34	36.26	4.46	-3.1	54.5
50	28.58	36.24	4.59	-5.4	55.6
60	27.80	36.27	4.59	-8.1	57.1
70	27.50	36.29	4.55	-11.5	58.6
80	27.19	36.32	4.49	-11.6	58.6
90	26.82	36.35	4.43	-9.6	58.1
100	26.54	36.41	4.38	-6.4	55.2
110	25.56	36.53	4.11	-3.7	51.7
120	24.85	36.76	3.86	-2.7	46.2
130	24.54	36.80	3.79	-2.9	45.0
140	24.41	36.82	3.74	-4.6	47.0
150	23.48	36.89	3.67	-6.9	49.6
160	22.55	36.89	3.66	-9.3	53.8
170	21.60	36.86	3.57	-12.7	56.5
180	20.96	36.83	3.53	-13.7	57.0
190	20.41	36.79	3.86	-15.1	57.9
200	20.03	36.74	3.58	-17.6	59.5
210	19.90	36.73	3.54	-16.5	58.3
220	19.75	36.71	3.55	-14.5	57.0
230	19.68	36.71	3.58	-12.0	56.1
240	19.52	36.69	3.61	-10.7	55.5
250	19.33	36.67	3.66	-9.9	55.4
260	19.02	36.64	3.64	-10.4	55.7
270	18.90	36.63	3.68	-10.7	55.9
280	18.72	36.60	3.68	-10.5	56.1
290	18.54	36.58	3.72	-8.6	55.7
300	18.24	36.53	3.64	-7.5	55.3
350	17.45	36.42	3.84	-7.3	56.4
400	16.44	36.26	3.51	-9.5	50.1
450	15.75	36.15	3.53	-5.8	41.4
500	15.22	36.07	3.51	-10.4	41.6
550	13.36	35.80	3.55	-8.2	49.4
600	NaN	NaN	NaN	-8.1	23.9

Table 44: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0621. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.40	36.24	4.44	NaN	NaN
10	29.40	36.24	4.45	-8.1	37.1
20	29.39	36.24	4.45	-8.2	37.1
30	29.39	36.24	4.44	-8.3	37.1
40	29.39	36.24	4.44	-11.0	36.6
50	29.30	36.24	4.46	-11.2	34.3
60	28.80	36.24	4.55	-10.4	31.3
70	28.04	36.26	4.59	-9.8	27.3
80	27.45	36.26	4.55	-11.4	24.9
90	26.88	36.33	4.46	-12.9	25.7
100	25.91	36.53	4.15	-12.3	30.6
110	25.30	36.62	4.12	-10.3	33.8
120	24.54	36.72	4.17	-8.3	34.4
130	24.04	36.79	4.04	-10.1	33.8
140	23.57	36.84	4.17	-14.0	34.4
150	23.30	36.86	4.05	-16.6	36.2
160	22.94	36.89	4.28	-18.3	39.3
170	22.34	36.87	4.27	-19.2	42.4
180	21.43	36.84	4.19	-19.3	43.6
190	20.86	36.81	4.31	-18.5	43.9
200	20.51	36.79	4.32	-17.4	42.6
210	20.27	36.77	4.32	-16.5	42.7
220	19.90	36.74	4.22	-16.0	42.5
230	19.59	36.71	4.42	-13.7	42.2
240	19.38	36.70	4.40	-11.7	43.7
250	19.21	36.68	4.45	-11.4	45.7
260	19.02	36.67	4.45	-12.6	45.5
270	18.86	36.65	4.50	-13.7	46.3
280	18.73	36.64	4.49	-13.4	47.2
290	18.62	36.63	4.56	-12.8	49.0
300	18.44	36.61	4.50	-12.5	50.3
350	17.91	36.53	4.47	-11.9	46.7
400	17.24	36.42	4.28	-15.4	45.1
450	16.30	36.25	4.07	-11.5	36.7

Table 45: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.24	36.30	4.66	NaN	NaN
10	26.24	36.30	4.70	4.5	218.1
20	26.13	36.31	4.73	4.5	218.2
30	25.87	36.33	4.77	2.7	214.3
40	25.84	36.33	4.77	-0.3	207.4
50	25.76	36.34	4.77	2.8	202.2
60	24.89	36.48	4.64	7.3	191.7
70	22.72	36.47	4.39	11.8	166.6
80	20.92	36.38	4.08	10.1	128.1
90	18.73	36.28	3.69	5.5	87.8
100	16.57	36.23	3.27	2.2	62.7
110	16.14	36.16	3.25	-4.1	44.8
120	15.70	36.09	3.25	-5.7	37.7
130	NaN	NaN	NaN	-5.6	25.4
140	NaN	NaN	NaN	-7.5	37.4

Table 46: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.40	36.28	4.69	NaN	NaN
10	26.40	36.28	4.69	7.5	212.4
20	26.40	36.28	4.71	7.5	212.2
30	26.32	36.29	4.73	7.6	210.4
40	26.12	36.30	4.74	7.9	203.3
50	26.07	36.30	4.73	9.1	199.4
60	25.58	36.36	4.74	10.1	193.8
70	25.04	36.45	4.68	10.2	184.4
80	24.48	36.52	4.51	9.6	176.7
90	24.03	36.64	4.63	8.8	169.3
100	23.22	36.57	4.58	10.7	160.4
110	21.59	36.61	3.78	12.4	141.6
120	18.49	36.24	3.57	13.0	113.3
130	16.96	36.13	3.43	10.1	88.1
140	16.05	36.12	3.26	5.7	71.1
150	15.29	36.03	3.21	-1.1	62.2
160	15.02	35.99	3.19	-4.0	54.6
170	14.74	35.95	3.17	-3.1	48.6
180	14.01	35.84	3.15	-1.0	44.6
190	12.86	35.68	3.14	0.1	40.8
200	11.77	35.52	3.14	0.5	37.9
210	10.42	35.32	3.05	-1.4	35.5
220	9.76	35.24	2.98	-1.3	35.1
230	9.38	35.20	3.01	-0.3	31.4
240	NaN	NaN	NaN	-1.0	48.3
250	NaN	NaN	NaN	-0.8	30.4

Table 47: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.48	36.27	4.68	NaN	NaN
10	26.49	36.27	4.69	7.2	195.2
20	26.50	36.27	4.69	7.2	195.2
30	26.50	36.27	4.68	7.1	195.1
40	26.50	36.27	4.69	6.7	194.7
50	26.48	36.27	4.69	6.0	193.6
60	26.48	36.27	4.68	5.7	191.6
70	26.45	36.27	4.67	6.6	187.9
80	25.61	36.37	4.62	11.3	179.9
90	25.14	36.47	4.57	16.6	170.4
100	24.67	36.57	4.55	16.2	165.2
110	24.21	36.57	4.67	15.5	160.2
120	23.64	36.67	4.11	15.7	155.3
130	22.14	36.64	3.93	15.9	150.0
140	21.38	36.65	3.60	15.6	143.6
150	20.62	36.64	3.39	15.7	135.4
160	19.57	36.55	3.27	15.8	126.6
170	17.86	36.27	3.33	15.8	118.2
180	16.99	36.16	3.33	16.9	111.8
190	16.22	36.07	3.30	16.1	103.6
200	15.87	36.09	3.25	12.8	93.7
210	15.00	35.95	3.22	8.4	81.9
220	14.31	35.88	3.15	3.8	69.1
230	13.64	35.78	3.16	0.7	56.5
240	12.57	35.63	3.15	1.4	46.2
250	11.17	35.45	3.12	3.5	38.0
260	9.75	35.23	3.05	4.1	34.9
270	8.92	35.10	2.96	3.1	32.9
280	8.63	35.06	2.93	0.4	31.5
290	8.57	35.05	2.93	-2.0	29.2
300	8.52	35.05	2.93	-3.8	27.0
350	7.82	34.99	3.00	-0.8	27.7

Table 48: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.42	36.28	4.65	NaN	NaN
10	26.41	36.28	4.67	31.4	170.9
20	26.36	36.29	4.67	31.4	170.9
30	26.18	36.32	4.68	31.0	171.0
40	26.09	36.34	4.67	13.2	176.2
50	26.02	36.35	4.67	8.5	176.2
60	25.99	36.37	4.61	7.0	177.1
70	25.97	36.38	4.54	12.6	180.8
80	25.89	36.42	4.51	12.1	178.3
90	25.55	36.55	4.18	8.2	176.1
100	25.42	36.60	4.01	9.4	175.9
110	25.00	36.67	3.89	10.9	178.3
120	24.93	36.68	3.88	9.6	182.9
130	24.36	36.74	3.88	11.6	185.2
140	23.84	36.80	3.75	17.3	181.5
150	22.97	36.84	3.73	22.5	174.2
160	22.32	36.77	3.66	22.6	168.1
170	21.76	36.75	3.61	23.8	162.9
180	20.69	36.67	3.38	26.1	154.0
190	20.33	36.69	3.49	21.2	154.4
200	19.61	36.62	3.36	20.0	150.3
210	18.89	36.52	3.31	20.1	143.4
220	18.44	36.46	3.32	20.1	137.3
230	17.97	36.41	3.26	22.4	131.3
240	17.36	36.32	3.29	27.0	127.7
250	16.51	36.15	3.27	27.9	118.2
260	16.27	36.15	3.28	23.5	112.3
270	15.59	36.04	3.25	20.4	105.1
280	14.37	35.88	3.21	20.4	99.1
290	13.45	35.74	3.16	18.6	90.1
300	12.42	35.61	3.13	15.0	76.9
350	8.21	35.02	3.00	13.2	50.6
400	7.59	34.97	3.03	8.6	41.6
450	7.22	34.94	3.12	7.0	37.2
500	6.85	34.94	3.24	6.9	29.1

Table 49: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.29	36.31	4.62	NaN	NaN
10	26.30	36.31	4.64	-24.9	156.4
20	26.31	36.31	4.64	-24.9	156.4
30	26.31	36.31	4.65	-24.4	155.9
40	26.31	36.31	4.65	-24.0	155.3
50	26.31	36.31	4.64	-19.2	160.0
60	26.32	36.31	4.64	-18.7	160.1
70	26.32	36.31	4.64	-19.9	159.3
80	26.32	36.31	4.65	-19.3	158.6
90	26.26	36.33	4.62	-16.6	158.7
100	25.77	36.46	4.37	-12.0	161.8
110	25.19	36.59	4.07	-11.2	165.1
120	24.55	36.70	3.91	-15.7	167.7
130	24.22	36.73	3.86	-19.6	171.5
140	23.95	36.77	3.81	-7.7	167.4
150	23.50	36.80	3.76	-0.6	165.1
160	23.04	36.85	3.69	5.9	162.6
170	22.62	36.85	3.68	12.4	160.7
180	21.77	36.79	3.63	29.1	158.2
190	21.40	36.78	3.63	32.4	154.2
200	21.35	36.78	3.61	33.5	150.7
210	21.08	36.74	3.58	30.8	149.1
220	20.45	36.69	3.49	28.8	146.8
230	20.11	36.66	3.41	27.7	142.6
240	19.38	36.58	3.34	24.6	136.8
250	18.52	36.47	3.33	24.8	132.7
260	17.65	36.37	3.28	30.1	128.7
270	17.24	36.31	3.27	32.6	125.6
280	16.54	36.19	3.25	32.3	119.9
290	16.05	36.11	3.25	31.9	114.2
300	15.80	36.07	3.24	31.0	111.2
350	12.40	35.59	3.11	17.1	97.6
400	9.01	35.13	3.00	25.1	79.6
450	7.92	34.99	3.02	25.6	70.2
500	7.50	34.96	3.07	20.1	53.7
550	6.94	34.93	3.20	19.2	43.0
600	6.55	34.92	3.33	17.2	30.7

Table 50: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.28	36.31	4.60	NaN	NaN
10	26.30	36.31	4.63	-13.1	120.3
20	26.30	36.31	4.63	-13.1	120.4
30	26.30	36.31	4.64	-12.5	120.6
40	26.30	36.31	4.63	-10.8	121.1
50	26.31	36.31	4.63	-7.1	122.1
60	26.30	36.31	4.63	-5.7	122.8
70	26.30	36.31	4.63	-5.2	122.6
80	26.29	36.31	4.62	-5.5	120.4
90	26.29	36.31	4.62	-3.7	120.4
100	26.20	36.34	4.56	1.1	124.3
110	25.53	36.49	4.37	6.1	127.2
120	24.79	36.66	3.93	4.0	126.0
130	24.60	36.69	3.89	4.9	122.4
140	23.86	36.75	3.80	7.0	124.5
150	23.46	36.78	3.75	9.0	129.3
160	22.81	36.81	3.69	13.9	135.4
170	22.80	36.81	3.68	18.6	137.1
180	22.79	36.82	3.66	23.4	134.8
190	22.29	36.83	3.64	26.0	129.5
200	21.88	36.83	3.60	25.8	127.4
210	20.95	36.78	3.65	21.8	127.2
220	20.48	36.75	3.59	20.5	127.4
230	20.13	36.72	3.59	21.0	127.8
240	19.73	36.67	3.59	18.0	126.6
250	19.18	36.60	3.58	13.1	123.4
260	18.60	36.51	3.52	10.5	121.0
270	18.04	36.43	3.37	10.2	119.8
280	17.21	36.31	3.30	11.0	117.2
290	17.10	36.29	3.27	11.0	112.4
300	16.80	36.25	3.26	9.9	108.6
350	15.10	35.98	3.16	9.1	101.0
400	12.94	35.66	3.07	-17.5	95.3
450	11.14	35.36	2.97	0.7	99.6
500	9.86	35.19	2.89	6.7	86.9
550	8.59	35.07	2.97	14.5	70.7
600	7.58	34.95	3.04	4.7	66.3
650	7.18	34.94	3.15	7.3	56.6
700	6.66	34.92	3.32	3.5	47.2
750	6.62	34.92	3.35	4.5	47.6

Table 51: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.25	36.30	4.65	NaN	NaN
10	26.26	36.30	4.66	-4.5	62.0
20	26.26	36.30	4.66	-4.5	62.0
30	26.26	36.30	4.66	-3.9	61.4
40	26.26	36.30	4.64	-2.7	60.6
50	26.26	36.30	4.63	-1.7	62.4
60	26.17	36.33	4.57	-1.3	66.0
70	26.00	36.35	4.55	-1.9	72.5
80	25.85	36.39	4.62	-2.2	80.3
90	25.82	36.40	4.61	-1.9	86.6
100	25.78	36.40	4.60	0.2	87.3
110	25.72	36.43	4.58	4.9	84.1
120	25.47	36.49	4.54	12.4	77.4
130	24.33	36.72	3.86	23.6	71.2
140	23.92	36.77	3.79	31.9	67.8
150	23.55	36.79	3.75	32.1	68.8
160	23.23	36.84	3.68	26.1	73.4
170	22.84	36.85	3.65	19.1	79.1
180	22.07	36.85	3.59	14.8	83.8
190	21.28	36.79	3.59	14.6	87.4
200	20.97	36.77	3.58	18.4	89.6
210	20.47	36.74	3.58	21.6	91.0
220	20.19	36.72	3.59	22.0	90.8
230	19.51	36.65	3.62	17.4	87.9
240	19.05	36.60	3.65	14.2	85.4
250	18.58	36.54	3.68	11.5	83.8
260	18.43	36.52	3.67	8.2	85.5
270	18.25	36.50	3.66	6.4	86.7
280	17.83	36.43	3.65	5.9	87.2
290	17.81	36.43	3.63	6.9	86.1
300	17.53	36.38	3.62	6.5	84.5
350	16.21	36.18	3.50	3.9	80.7
400	14.49	35.89	3.27	3.2	72.4
450	13.21	35.68	3.14	4.2	58.8
500	11.32	35.39	2.95	-0.1	47.9
550	10.35	35.26	2.93	-6.7	46.4
600	9.47	35.15	2.93	3.0	38.7
650	8.19	35.00	2.98	2.3	31.2

Table 52: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.03	36.35	4.65	NaN	NaN
10	26.02	36.35	4.66	-19.9	33.7
20	25.98	36.35	4.66	-20.0	33.8
30	25.93	36.36	4.66	-16.6	36.0
40	25.88	36.37	4.67	-9.6	40.4
50	25.85	36.37	4.66	-2.4	43.9
60	25.78	36.39	4.65	3.2	46.9
70	25.73	36.41	4.62	4.8	49.1
80	25.62	36.45	4.60	5.6	50.4
90	25.58	36.47	4.55	5.9	50.8
100	25.52	36.49	4.53	6.2	49.9
110	25.42	36.54	4.43	8.8	48.8
120	24.94	36.65	4.20	13.3	48.1
130	24.15	36.75	3.88	10.0	49.2
140	23.79	36.80	3.73	6.9	51.2
150	23.28	36.83	3.70	7.5	54.8
160	22.33	36.85	3.61	7.3	53.4
170	21.73	36.80	3.58	7.9	49.8
180	21.38	36.82	3.59	12.8	49.8
190	20.87	36.77	3.59	15.5	52.0
200	20.42	36.72	3.57	14.2	54.2
210	20.13	36.70	3.57	11.7	52.6
220	19.47	36.64	3.56	11.1	51.7
230	19.21	36.62	3.63	13.0	53.6
240	18.84	36.57	3.64	11.9	54.2
250	18.64	36.55	3.66	9.2	53.7
260	18.53	36.53	3.65	7.7	50.9
270	18.23	36.49	3.65	5.8	49.5
280	18.06	36.47	3.65	2.6	49.3
290	17.73	36.42	3.64	-1.0	49.7
300	17.62	36.40	3.64	-4.2	49.9
350	16.93	36.29	3.55	0.9	52.5
400	16.46	36.21	3.51	-5.6	46.9
450	14.49	35.89	3.27	0.1	34.6
500	12.89	35.63	3.14	5.7	24.1
550	11.16	35.37	2.97	-3.5	13.2
600	10.53	35.30	2.95	-4.0	12.9

Table 53: Same as Table 19 for the cruise ID and the station number indicated.

Cruise ID: ws0625. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.04	36.34	4.66	NaN	NaN
10	26.04	36.35	4.67	-0.3	3.7
20	25.91	36.39	4.65	-0.3	3.7
30	25.80	36.40	4.62	2.0	4.2
40	25.71	36.42	4.62	6.4	5.4
50	25.70	36.43	4.58	5.3	5.7
60	25.68	36.44	4.60	2.3	7.1
70	25.64	36.45	4.60	-1.4	11.3
80	25.61	36.46	4.60	-3.4	14.4
90	25.58	36.48	4.56	-4.7	17.5
100	25.48	36.56	4.35	-5.9	23.5
110	25.18	36.65	4.25	-7.7	28.7
120	24.87	36.79	4.56	-9.7	32.0
130	24.39	36.76	4.56	-8.4	31.5
140	23.76	36.82	4.44	-5.6	30.4
150	22.90	36.84	4.24	-2.0	29.4
160	22.03	36.83	3.79	0.4	29.0
170	21.57	36.83	3.60	1.8	29.6
180	21.47	36.82	3.62	0.5	29.1
190	21.30	36.81	3.63	-0.6	29.4
200	20.96	36.79	3.73	-1.3	30.5
210	20.63	36.77	3.74	-1.5	29.6
220	20.37	36.74	3.75	-0.9	28.4
230	20.07	36.72	3.72	1.6	27.5
240	19.53	36.66	3.69	2.5	26.7
250	18.93	36.61	3.68	2.1	26.2
260	18.82	36.64	4.43	0.5	26.2
270	18.61	36.62	4.50	-2.5	26.1
280	18.52	36.62	4.55	-6.8	26.0
290	18.46	36.61	4.57	-8.6	26.8
300	18.45	36.61	4.57	-8.2	27.2
350	17.62	36.46	4.00	-5.4	19.1
400	16.99	36.37	4.25	-4.3	15.8
450	15.53	36.12	4.04	-8.3	14.1

Table 54: Same as Table 19 for the cruise ID and the station number indicated.


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