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Oceanographic data collected in the Straits of Florida at 27°N during the year 2014, including the estimated Florida Current transport

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including the estimated Florida Current transport**

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Contents

Table of Contents	iv
List of Figures	v
List of Tables	viii
Abstract	ix
1 Introduction	1
1.1 Continuous observations	2
1.2 Shipboard measurements	3
2 Cable observations	3
3 Dropsonde - XBT cruises	5
4 CTD - LADCP - SADCP cruises	8
5 Issues during the year	13
5.1 Cable observations	13
5.2 Dropsonde - XBT cruises	13
5.3 CTD - LADCP - SADCP cruises	13
6 Data availability	14
7 Acknowledgements	15
8 References	16

List of Figures

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.	2
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.	4
3	Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.	6
4	Same as Figure 3 for the data collected on the cruise date indicated.	7
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. . . .	9
6	Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.	10
7	Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.	11
8	Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.	12

List of Tables

1	Nominal locations and depths (m) for the dropsonde/XBT and CTD/LADCP data collected in the Straits of Florida.	1
2	Dropsonde/XBT cruise information: cruise number, cruise date, and transport values estimated with and without the tide signals. NaN indicates insufficient data to estimate transport.	5
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.	8
4	Florida Current daily transport estimated using voltage measurements on a telephone cable. Units are Sverdrups ($1 \text{ Sv} = 10^6 \text{ m}^3 \text{ s}^{-1}$). 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.	18
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. . .	20
6	Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.	21
7	Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.	22
8	Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.	23
9	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.	25
10	Same as Table 9 for the cruise on the indicated date.	26
11	Same as Table 9 for the cruise on the indicated date.	27
12	Same as Table 9 for the cruise on the indicated date.	28
13	Same as Table 9 for the cruise on the indicated date.	29
14	Same as Table 9 for the cruise on the indicated date.	30

15	Same as Table 9 for the cruise on the indicated date.	31
16	Same as Table 9 for the cruise on the indicated date.	32
17	Same as Table 9 for the cruise on the indicated date.	33
18	Same as Table 9 for the cruise on the indicated date.	34
19	Same as Table 9 for the cruise on the indicated date.	35
20	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. . .	37
21	Same as Table 20 for LADCP data collected on the indicated dates.	38
22	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.	40
23	Same as Table 22 for the cruise ID and the station number indicated.	41
24	Same as Table 22 for the cruise ID and the station number indicated.	42
25	Same as Table 22 for the cruise ID and the station number indicated.	43
26	Same as Table 22 for the cruise ID and the station number indicated.	44
27	Same as Table 22 for the cruise ID and the station number indicated.	45
28	Same as Table 22 for the cruise ID and the station number indicated.	46
29	Same as Table 22 for the cruise ID and the station number indicated.	47
30	Same as Table 22 for the cruise ID and the station number indicated.	48
31	Same as Table 22 for the cruise ID and the station number indicated.	49
32	Same as Table 22 for the cruise ID and the station number indicated.	50
33	Same as Table 22 for the cruise ID and the station number indicated.	51
34	Same as Table 22 for the cruise ID and the station number indicated.	52
35	Same as Table 22 for the cruise ID and the station number indicated.	53
36	Same as Table 22 for the cruise ID and the station number indicated.	54

37	Same as Table 22 for the cruise ID and the station number indicated.	55
38	Same as Table 22 for the cruise ID and the station number indicated.	56
39	Same as Table 22 for the cruise ID and the station number indicated.	57
40	Same as Table 22 for the cruise ID and the station number indicated.	58
41	Same as Table 22 for the cruise ID and the station number indicated.	59
42	Same as Table 22 for the cruise ID and the station number indicated.	60
43	Same as Table 22 for the cruise ID and the station number indicated.	61
44	Same as Table 22 for the cruise ID and the station number indicated.	62
45	Same as Table 22 for the cruise ID and the station number indicated.	63
46	Same as Table 22 for the cruise ID and the station number indicated.	64
47	Same as Table 22 for the cruise ID and the station number indicated.	65
48	Same as Table 22 for the cruise ID and the station number indicated.	66
49	Same as Table 22 for the cruise ID and the station number indicated.	67
50	Same as Table 22 for the cruise ID and the station number indicated.	68
51	Same as Table 22 for the cruise ID and the station number indicated.	69
52	Same as Table 22 for the cruise ID and the station number indicated.	70
53	Same as Table 22 for the cruise ID and the station number indicated.	71
54	Same as Table 22 for the cruise ID and the station number indicated.	72
55	Same as Table 22 for the cruise ID and the station number indicated.	73
56	Same as Table 22 for the cruise ID and the station number indicated.	74
57	Same as Table 22 for the cruise ID and the station number indicated.	75

Abstract

This report summarizes the Florida Current data collected along 27°N during calendar year 2014 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 lowered acoustic Doppler current profiler, LADCP, profiles). The report also includes shipboard (i.e. hull-mounted) ADCP data collected on the R/V Walton Smith, and dropsonde and expendable bathythermograph (XBT) data collected on small boat cruises. The data presented herein are in final processed and quality controlled form. The report also documents where the electronic files for these data can be obtained.

1 Introduction

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

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

1. Continuous time series observations made via an unused submarine telephone cable.
2. Ship-based observations made several times per year on either research vessels or small chartered boats.

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

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

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

1.1 Continuous observations

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

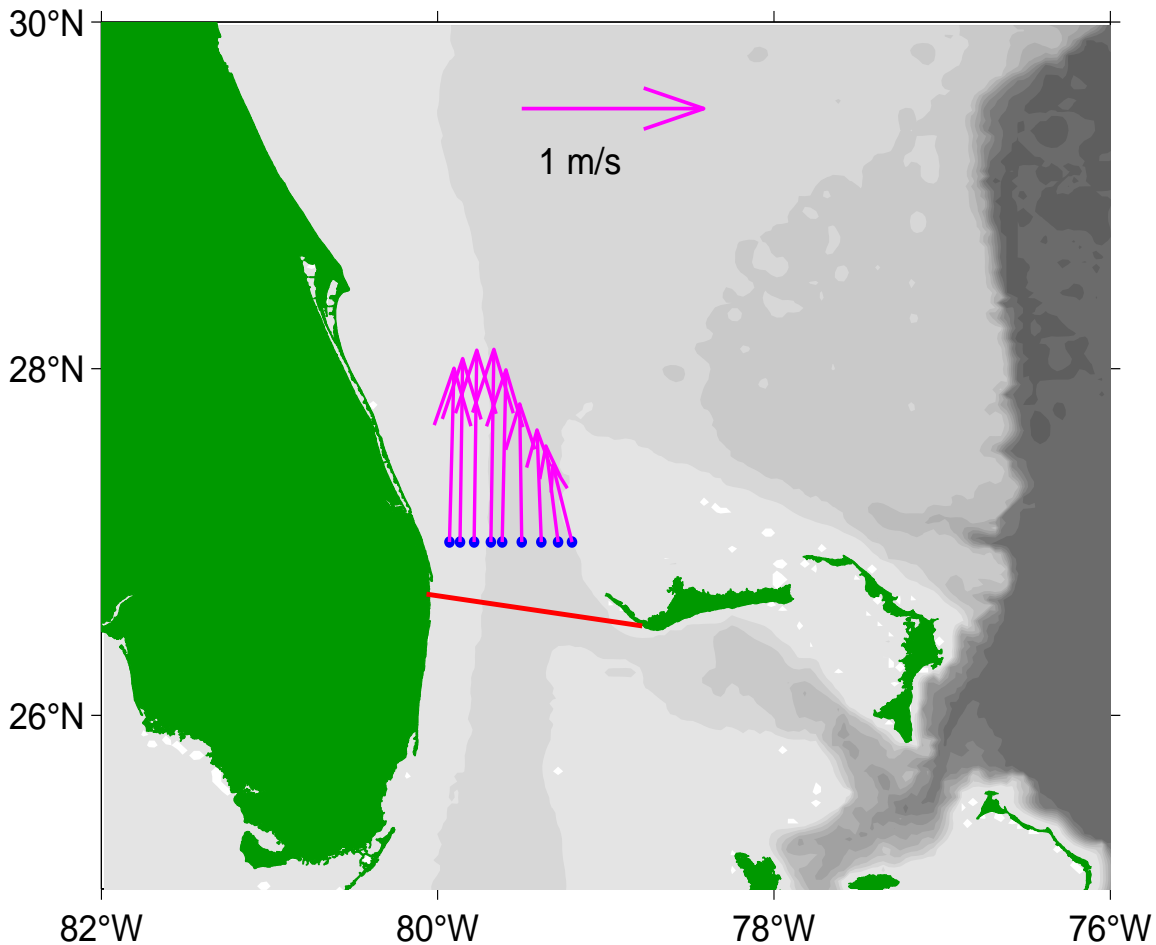


Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities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

1.2 Shipboard measurements

Ship sections collected in the Straits of Florida along 27°N as part of the WBTS project are used to calibrate the cable observations, and they also collect additional data sets that provide information about water properties and the velocity structure. Data are collected at nine stations along 27°N, and the same nine stations have been in use since the mid-1980s (see Figure 1 and Table 1). Two different types of ship sections are collected as part of the WBTS project: CTD/LADCP sections are collected via the R/V Walton Smith, and dropsonde/XBT sections are collected via small chartered boats. For more detail on how the data collected in these sections are used to calculate volume transport, please see Garcia and Meinen (2010).

2 Cable observations

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

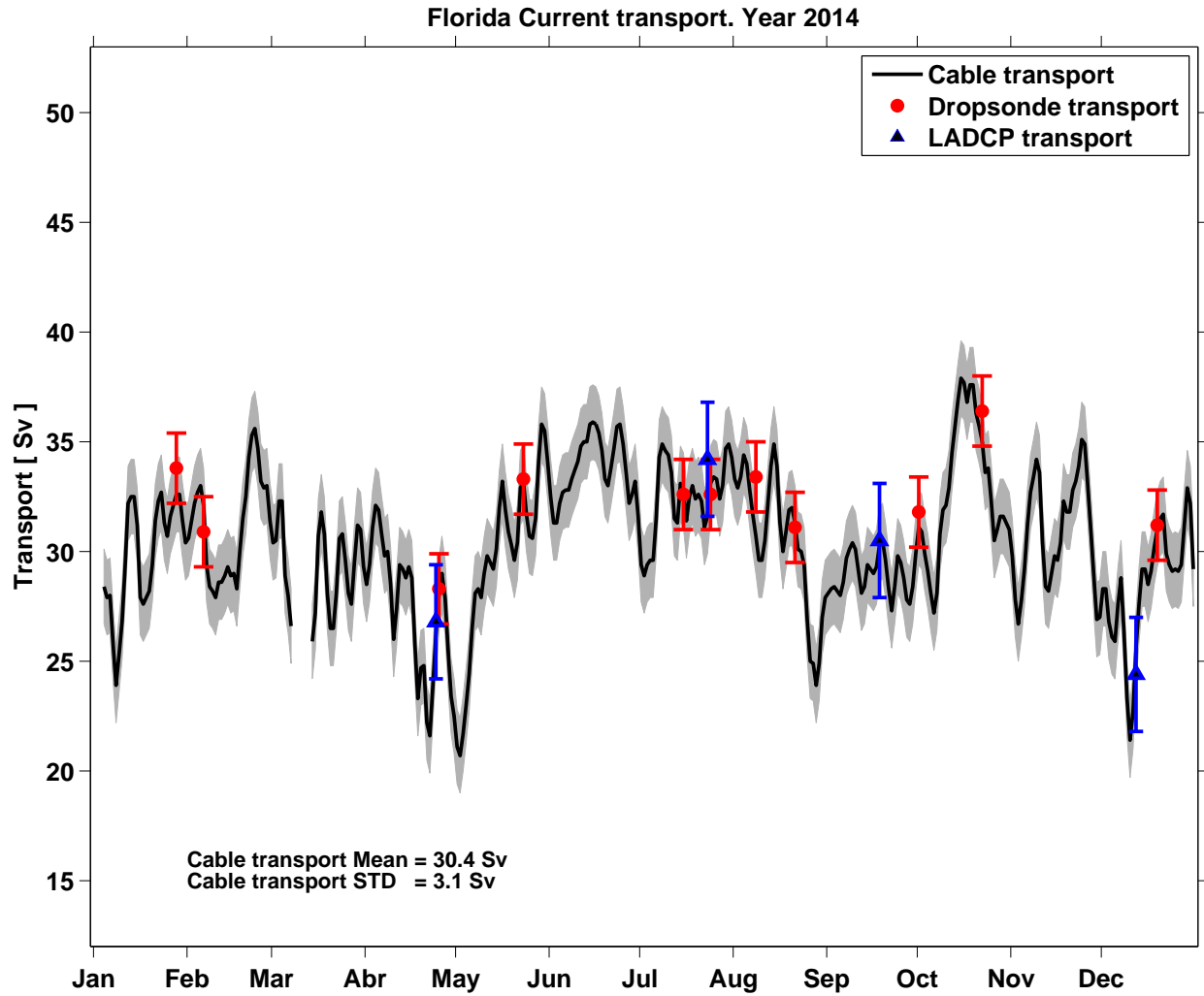


Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates 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	2014	1	28	18	32.1	33.8
2	2014	2	6	15	29.9	30.9
3	2014	4	25	14	28.9	28.3
4	2014	5	23	15	34.7	33.3
5	2014	7	15	16	32.6	32.6
6	2014	7	24	16	35.4	32.6
7	2014	8	8	15	36.4	33.4
8	2014	8	21	15	33.6	31.1
9	2014	10	1	15	33.3	31.8
10	2014	10	22	17	35.8	36.4
11	2014	12	19	16	29.3	31.2

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

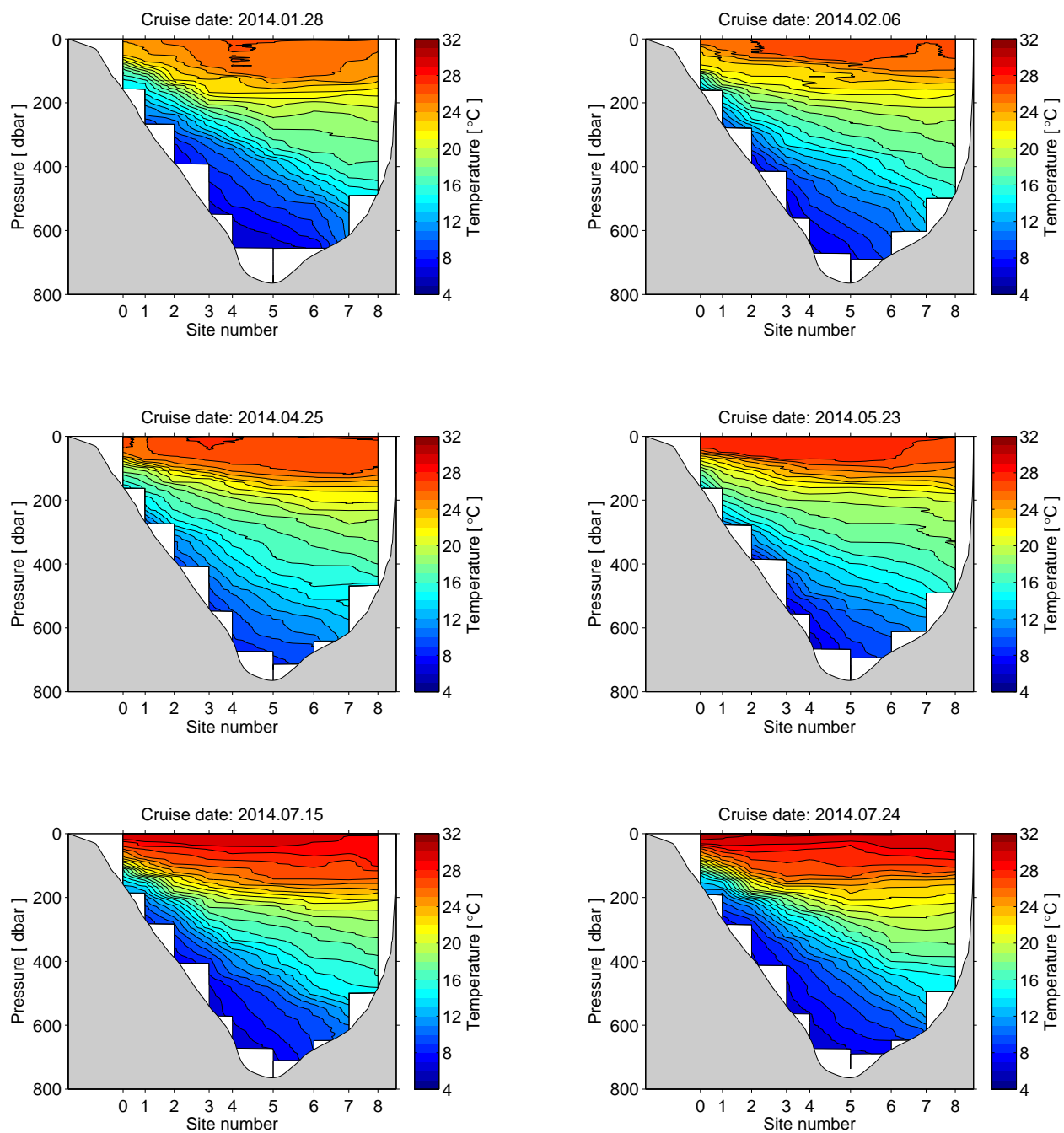


Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

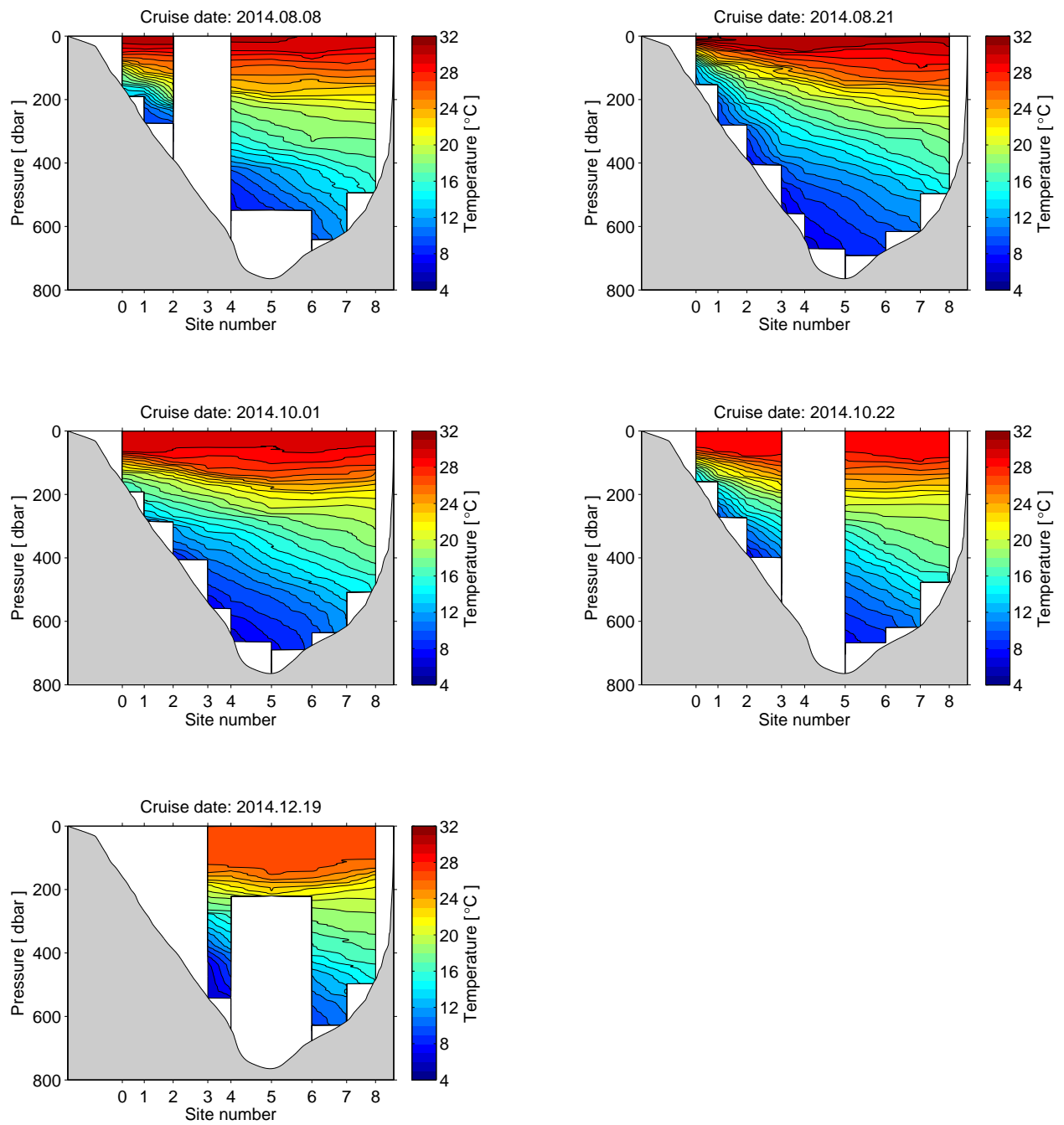


Figure 4: Same as Figure 3 for the data collected on the cruise date indicated.

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 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
ws1403	2014	4	24	2	27.4	26.8
ws1409	2014	7	23	3	32.3	34.2
ws1414	2014	9	18	4	30.0	30.5
ws1419	2014	12	12	4	25.1	24.4

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.

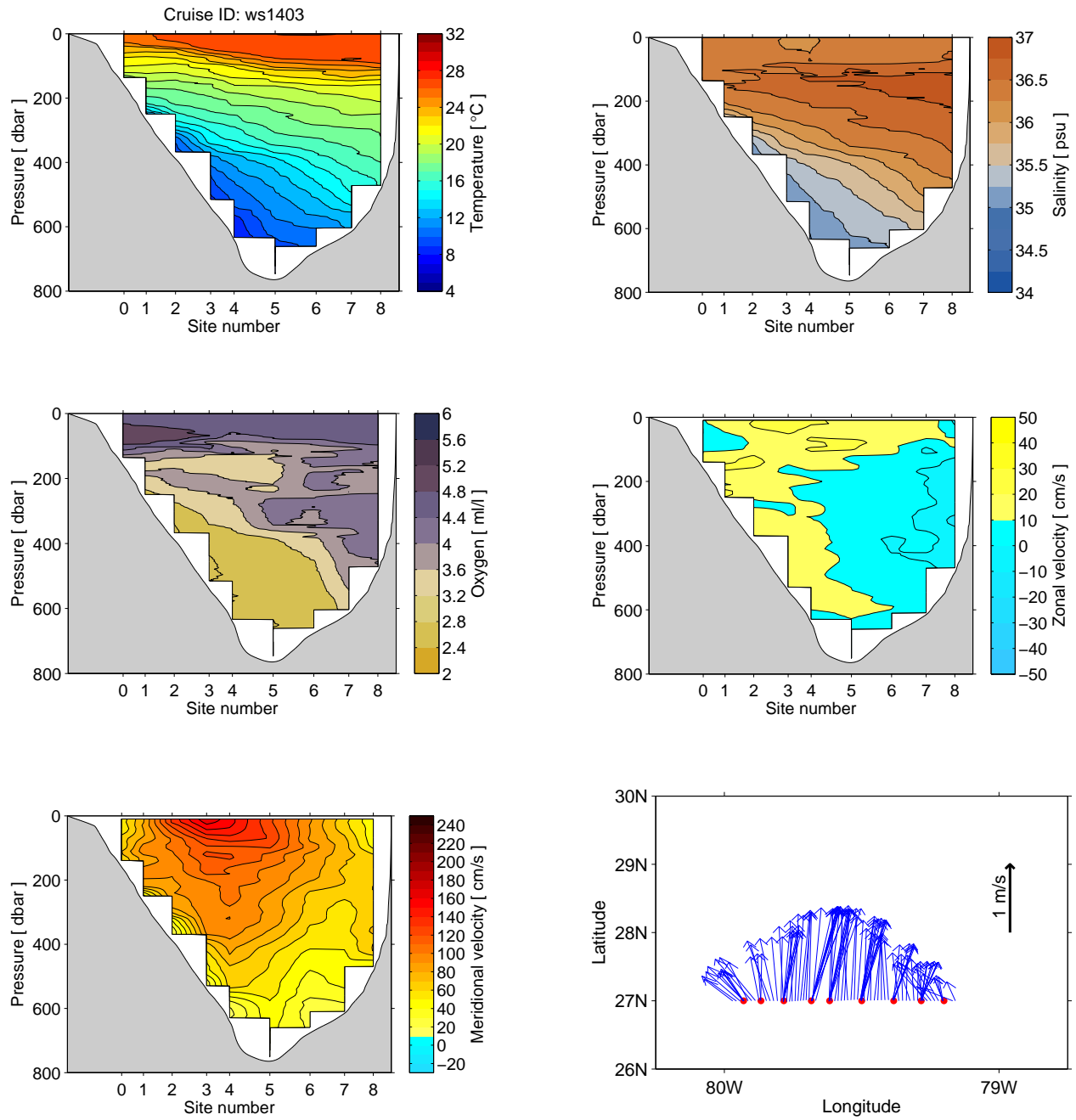


Figure 5: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

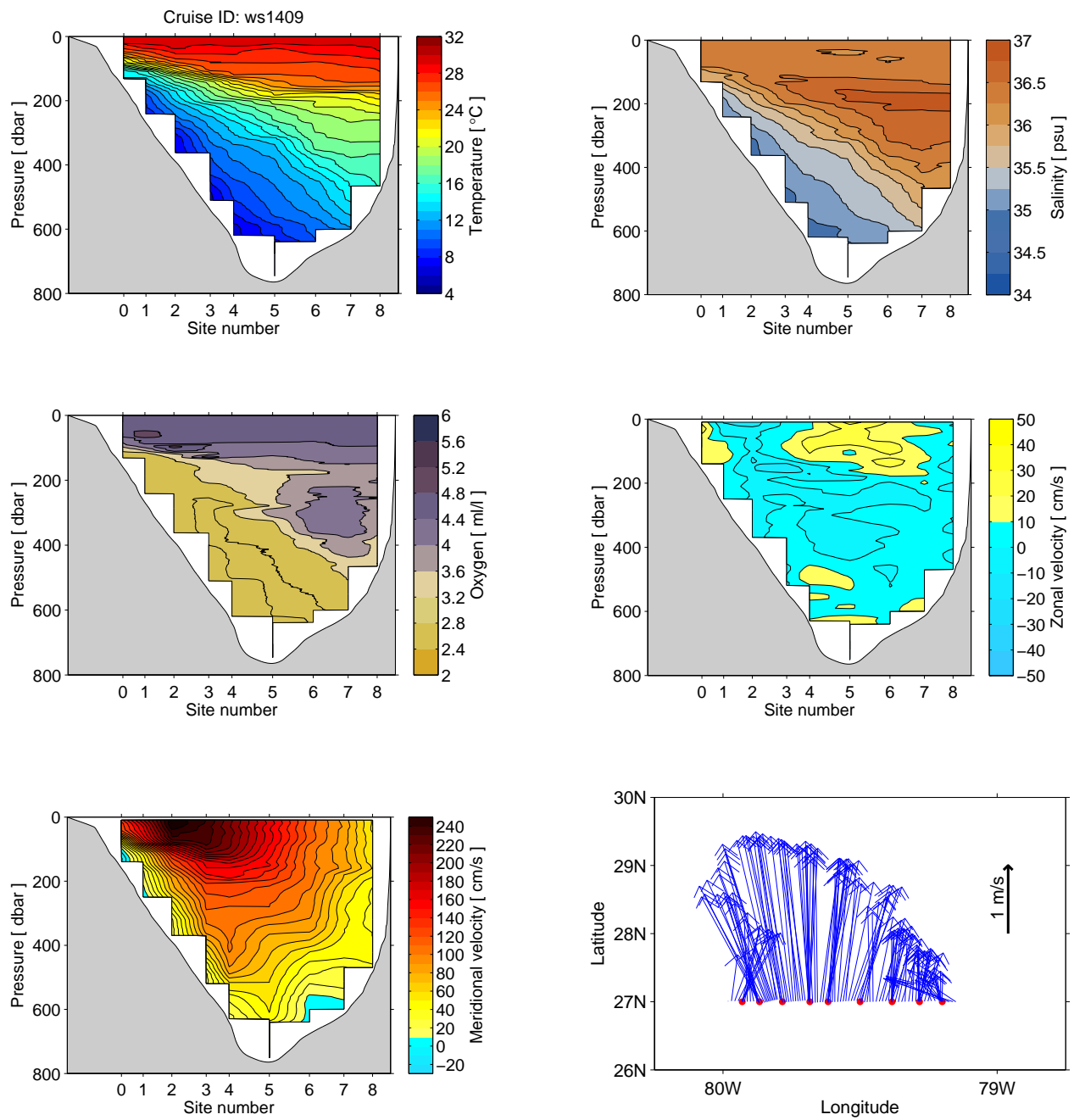


Figure 6: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

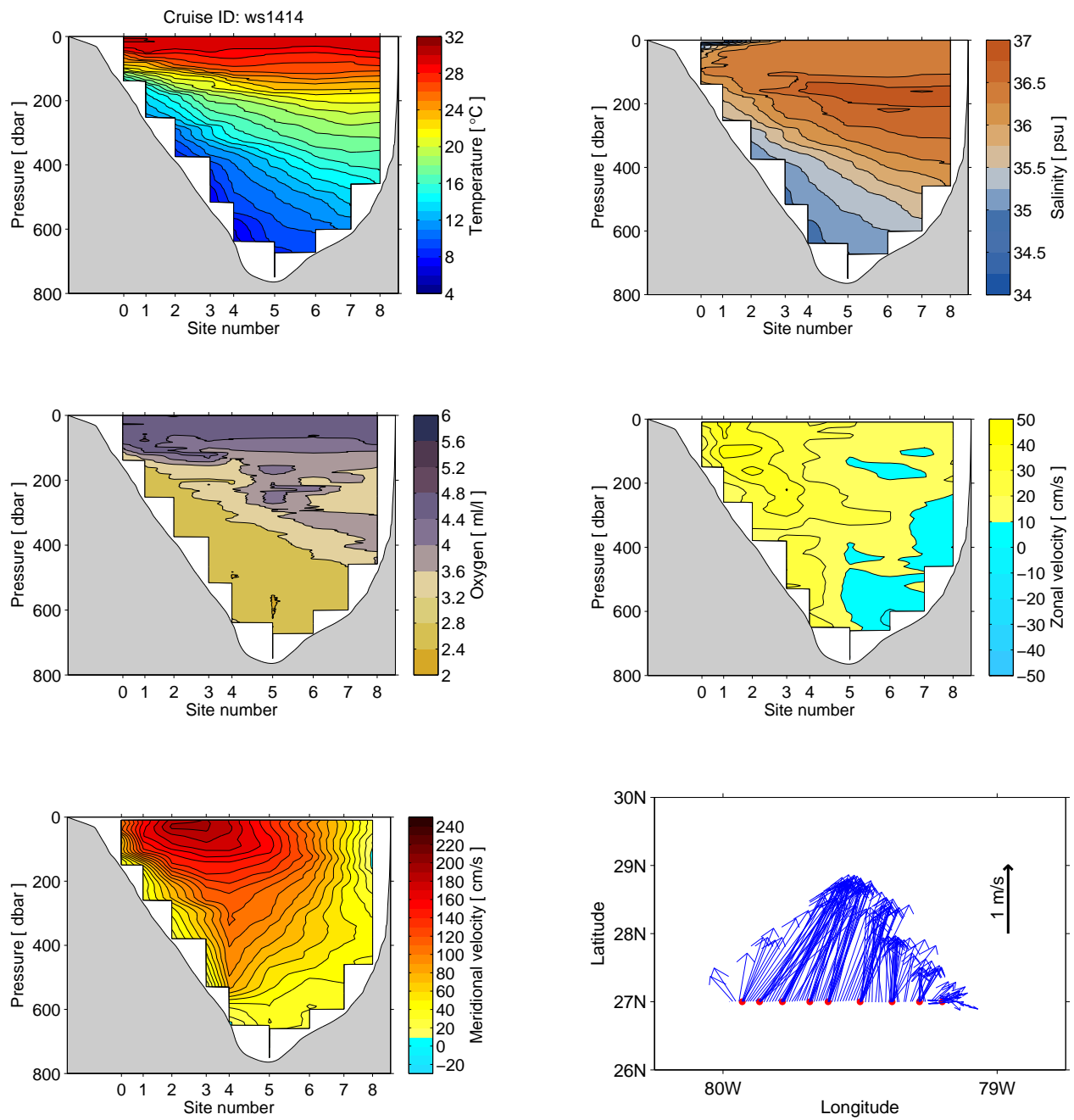


Figure 7: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

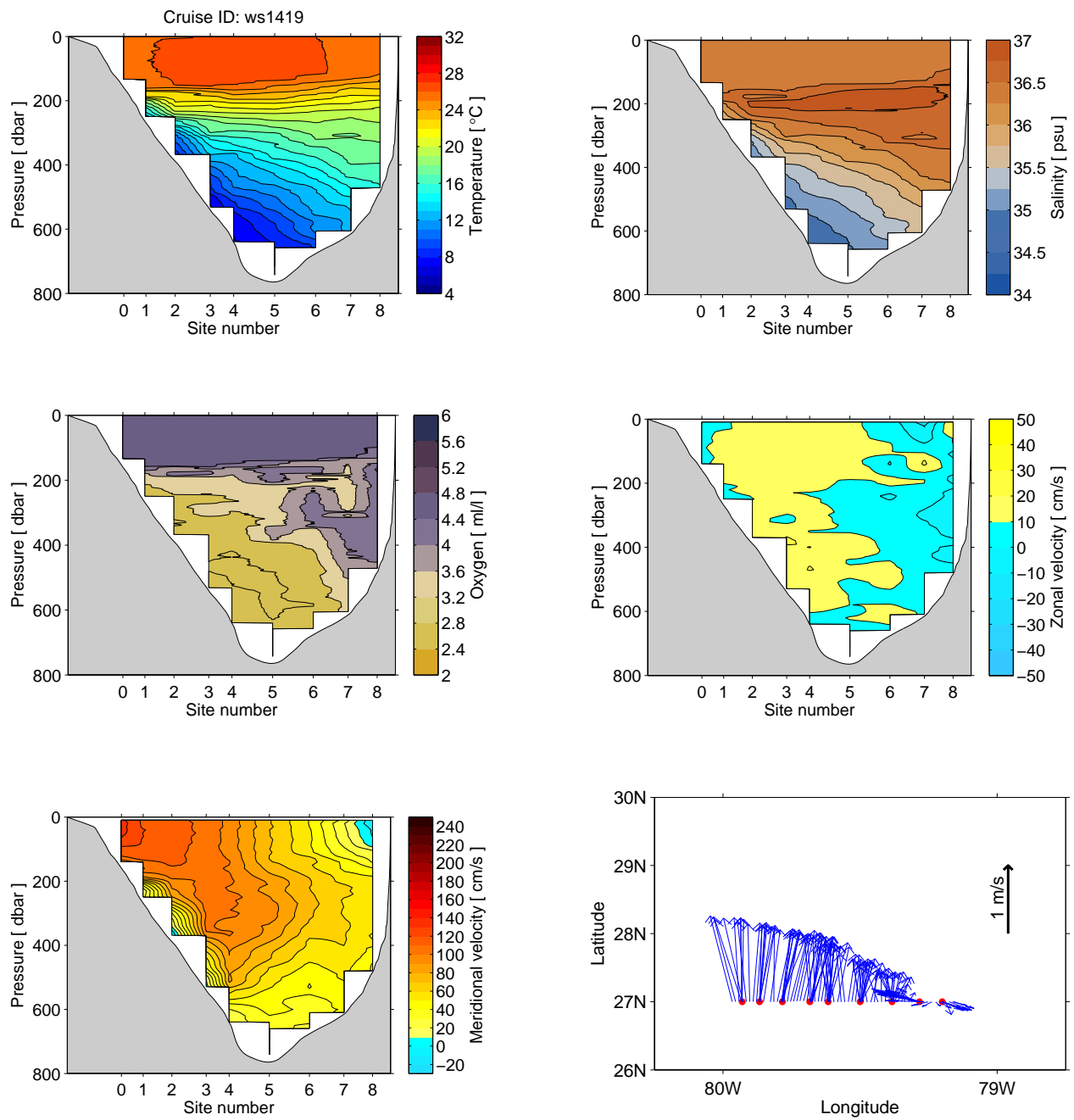


Figure 8: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

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

The cable voltage recording system suffered a total failure late during the previous year, on December 15, 2013. A new recording system was installed close to the beginning of this year on January 3, 2014. On March 8 the replacement system failed, and it was replaced on March 13. As a result, during the first three days of the year (January 1-3) and for those six days in March (March 8-13), no estimates for the Florida Current volume transport are available from the cable. Data are available for all other days throughout the year.

5.2 Dropsonde - XBT cruises

No problems arose during the year involving the dropsonde system.

The XBT system suffered several issues during the year. During the cruises on August 8, 2014 and on October 22, 2014, the XBT computer failed to record during one station only on each cruise. During the December 19, 2014 cruise, the XBT computer failed to record during several stations, and at one additional station it stopped recording prematurely.

5.3 CTD - LADCP - SADCP cruises

Several problems arose during the year involving the SADCP systems (which also impact the LADCP data).

During cruises ws1403 and ws1409, the ship's Teledyne RD Instruments 75 kHz Ocean Surveyor SADCP received no secondary heading information. These data are normally supplied by an Applanix POS MV directional GPS. However, during these two surveys the POS MV instrument was not functioning properly. After careful review of the SADCP data collected during both cruises, it was determined that the instrument's primary heading source (an SG Brown Gyrocompass) was sufficient to produce a final SADCP data set with a quality suitable for scientific analysis.

The final LADCP velocity profiles generated in this project generally incorporate concurrent SADCP data. Therefore, LADCP velocity profiles produced for the ws1403 and ws1409 cruises utilize the single heading source SADCP data. However, as with the final SADCP data set, we find these LADCP velocity profiles 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/0140278>).

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

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

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

7 Acknowledgements

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8 References

- Daneshzadeh, Y.-H. C., J. F. Festa, and S. M. Minton, 1994: **Procedures used at AOML to Quality Control Real Time XBT Data Collected in the Atlantic Ocean**, *NOAA Technical Memorandum ERL AOML-78*, 44 pp.
- Garcia, R. F., and C. S. Meinen, 2014: **Accuracy of Florida Current volume transport measurements at 27N using multiple observational techniques**, *J. Atmos. Ocean. Tech.*, **31** (5), 1169-1180, 10.1175/JTECH-D-13-00148.1.
- Firing, E., J. M. Hummon, and T. K. Chereskin, 2012: **Improving the quality and accessibility of current profile measurements in the Southern Ocean**. *Oceanography* **25**(3):164165, <http://dx.doi.org/10.5670/oceanog.2012.91>.
- Hooper, J. A., and M. O. Baringer, 2015: **Hydrographic measurements collected aboard the UNOLS Ship R/V Walton Smith, 2014: Western Boundary Time Series cruise: Florida Current**. *NOAA Data Report, OAR-AOML-50*, 122 pp.
- Larsen, J. C., 1992: **Transport and heat flux of the Florida Current at 27N derived from cross-stream voltages and profiling data: theory and observations**. *Philosophical Transactions of the Royal Society of London A*, **338**, 169-236.
- Larsen, J. C., and T. B. Sanford, 1985: **Florida Current volume transports from voltage measurements**. *Science*, **227**, 302-304.
- Meinen, C. S., M. O. Baringer, and R. F. Garcia, 2010: **Florida Current Transport Variability: An Analysis of Annual and Longer-Period Signals**, *Deep Sea Res. I*, **57** (7), 835-846, doi:10.1016/j.dsr.2010.04.001.
- Thurnherr, A. M., 2010: **A Practical Assessment of the Errors Associated with Full-Depth LADCP Profiles Obtained Using Teledyne RDI Workhorse Acoustic Doppler Current Profilers**. *J. Atmos. Oceanic Technol.*, **27**, 1215-1227, doi: 10.1175/2010JTECHO708.1.
- Visbeck, M., 2002: **Deep velocity profiling using lowered acoustic Doppler current profilers: Bottom track and inverse solutions**. *J. Atmos. Oceanic Technol.*, **19**, 794-807.

Appendix A:

Daily Florida Current transport data

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	NaN	30.6	30.4	28.5	21.1	32.5	29.4	33.3	28.1	31.1	29.8	28.3
2	NaN	31.4	30.5	29.4	20.7	31.3	28.9	32.9	28.3	30.9	27.8	28.3
3	NaN	32.2	32.3	31.1	21.7	31.3	29.4	33.4	28.4	29.9	26.7	26.8
4	28.4	32.7	32.3	32.1	23.0	32.2	29.6	34.4	28.2	29.1	27.8	26.1
5	27.9	33.0	28.9	31.9	24.4	32.7	29.6	34.0	28.0	28.1	29.2	25.9
6	28.0	32.1	28.0	30.8	26.5	32.8	31.5	32.8	28.6	27.2	31.2	27.6
7	25.8	29.4	26.6	29.8	28.1	32.8	34.3	31.7	29.7	28.1	32.7	28.8
8	23.9	28.4	NaN	30.0	28.3	33.3	34.9	30.7	30.1	30.8	33.4	26.3
9	25.3	28.2	NaN	28.5	27.9	33.7	34.6	29.6	30.4	31.9	34.2	23.3
10	26.8	27.9	NaN	26.0	29.0	34.1	34.4	29.6	30.1	32.1	33.6	21.4
11	29.3	28.6	NaN	27.4	29.8	34.8	33.6	30.5	29.1	32.9	30.4	22.7
12	32.2	28.6	NaN	29.4	29.5	35.0	31.5	32.2	28.1	34.5	28.4	25.6
13	32.5	28.9	NaN	29.2	29.2	35.0	31.3	33.9	28.4	35.7	28.2	27.6
14	32.5	29.3	25.9	28.8	30.1	35.8	33.1	34.9	29.4	36.9	29.0	29.2
15	31.2	28.9	27.2	29.3	32.0	35.9	32.8	33.9	29.2	37.9	29.8	29.2
16	27.9	29.0	30.7	28.8	33.2	35.8	31.4	31.3	29.0	37.7	29.6	28.5
17	27.6	28.3	31.8	25.8	31.9	35.4	32.5	30.0	29.3	36.8	30.4	29.1
18	27.9	30.0	30.8	23.3	30.9	34.6	33.0	30.9	30.3	37.6	32.3	30.2
19	28.2	31.5	28.1	24.7	30.3	33.3	32.4	31.9	30.5	37.6	31.8	31.0
20	29.4	32.5	26.5	24.8	29.6	33.0	32.6	32.0	29.6	36.3	31.8	31.5
21	31.4	34.3	26.5	22.2	30.4	33.8	32.3	31.3	28.3	35.7	32.8	31.7
22	32.3	35.3	28.1	21.6	32.9	34.7	31.1	30.1	27.3	35.0	33.2	29.9
23	32.7	35.6	30.6	23.9	33.2	35.7	31.6	30.0	28.4	33.6	33.9	29.4
24	31.3	34.7	30.8	26.2	31.7	35.8	33.1	29.4	29.8	33.8	35.1	29.1
25	30.7	33.2	29.6	28.0	30.7	34.9	33.4	26.9	29.5	32.3	34.9	29.2
26	31.6	32.9	28.1	29.0	30.6	33.6	33.3	25.0	28.8	30.5	33.0	29.1
27	32.1	33.0	27.6	27.9	31.5	32.2	32.4	24.9	27.8	31.0	31.0	29.4
28	32.6	31.4	29.5	25.5	34.1	32.6	33.0	23.9	27.6	31.6	28.9	31.2
29	32.6	–	31.2	23.4	35.8	33.2	34.7	24.9	28.4	31.6	26.9	32.9
30	31.4	–	31.0	22.5	35.5	31.6	34.9	27.0	29.9	31.3	27.0	32.2
31	30.4	–	29.3	–	34.1	–	34.3	27.9	–	31.0	–	29.2

Table 4: Florida Current daily transport estimated using voltage measurements on a telephone cable. Units are Sverdrups ($1 \text{ Sv} = 10^6 \text{ m}^3 \text{ s}^{-1}$). 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: 2014.01.28								
0	14:35:19	-79.9296	27.0003	14:42:57	-79.9299	27.0004	-5.42	2.19
1	14:59: 7	-79.8664	27.0007	15:12:23	-79.8671	27.0034	-8.20	35.92
2	15:32: 4	-79.7834	27.0013	15:51:58	-79.7839	27.0106	-3.97	84.76
3	16:15:43	-79.6834	27.0006	16:42:53	-79.6839	27.0156	-3.55	101.00
4	16:59:56	-79.6165	27.0005	17:34:28	-79.6178	27.0197	-5.53	102.32
5	17:57:24	-79.4995	27.0011	18:38:36	-79.5009	27.0205	-5.98	86.68
6	19: 2: 7	-79.3830	27.0006	19:38: 0	-79.3847	27.0138	-8.32	68.87
7	20: 3:36	-79.2831	27.0001	20:34:49	-79.2852	27.0096	-10.92	56.78
8	20:56:10	-79.1996	27.0002	21:21: 8	-79.2016	27.0064	-13.87	47.01
Cruise date: 2014.02.06								
0	12:12:37	-79.9299	27.0004	12:20:17	-79.9298	27.0047	3.13	102.38
1	12:36: 4	-79.8669	27.0008	12:49:18	-79.8668	27.0072	1.78	88.83
2	13: 9: 3	-79.7835	27.0004	13:29:23	-79.7844	27.0110	-10.02	94.35
3	13:51: 3	-79.6831	27.0006	14:18: 3	-79.6831	27.0156	0.37	102.54
4	14:35:23	-79.6166	27.0003	15: 7:55	-79.6165	27.0151	1.42	85.00
5	15:30:46	-79.4999	27.0004	16: 9:13	-79.5002	27.0130	-1.47	60.31
6	16:28:48	-79.3832	27.0001	17: 2:37	-79.3836	27.0096	-2.23	51.44
7	17:22: 5	-79.2833	27.0002	17:53:19	-79.2845	27.0087	-7.23	50.04
8	18:10:41	-79.1999	27.0002	18:34:49	-79.2017	27.0059	-12.64	43.63
Cruise date: 2014.04.25								
0	11:13:23	-79.9300	26.9999	11:21: 6	-79.9298	27.0009	3.58	23.63
1	11:36:57	-79.8665	27.0002	11:50:13	-79.8657	27.0052	10.50	70.05
2	12:10:19	-79.7834	27.0003	12:30: 0	-79.7818	27.0102	13.10	90.88
3	12:51:51	-79.6832	27.0004	13:18:46	-79.6821	27.0159	6.65	105.54
4	13:39:53	-79.6167	27.0002	14:12:59	-79.6154	27.0167	5.82	91.98
5	14:44:50	-79.4998	27.0020	15:24:27	-79.5002	27.0171	-2.07	70.14
6	15:53: 3	-79.3830	27.0003	16:26: 2	-79.3826	27.0099	1.57	53.64
7	16:48:29	-79.2833	27.0001	17:19:48	-79.2832	27.0077	-0.07	44.69
8	17:40:22	-79.1998	27.0001	18: 4:24	-79.2003	27.0038	-4.12	28.55

Table 5: Tables of dropsonde floats measurements made during the cruises on the indicated dates. Station numbers in left column are as shown in Table 1. Tables include information on where the dropsonde floats were deployed, where they surfaced, and the resulting estimated zonal (U) and meridional (V) vertically averaged velocity.

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2014.05.23								
0	12:10:54	-79.9300	27.0014	12:18:42	-79.9299	27.0064	0.32	116.34
1	12:36:55	-79.8666	27.0007	12:50:13	-79.8665	27.0083	0.45	105.03
2	13: 9:34	-79.7832	27.0008	13:28:55	-79.7834	27.0124	-2.66	109.62
3	13:50:23	-79.6829	27.0007	14:19:19	-79.6833	27.0190	-2.96	116.67
4	14:37: 1	-79.6163	27.0008	15: 9:53	-79.6169	27.0200	-3.10	108.10
5	15:33:27	-79.4998	27.0005	16:13:13	-79.5003	27.0194	-2.36	87.41
6	16:39: 0	-79.3830	27.0004	17:13: 6	-79.3834	27.0104	-1.25	55.01
7	17:35:32	-79.2832	27.0000	18: 7:13	-79.2838	27.0066	-3.95	38.75
8	18:26:32	-79.1996	27.0003	18:52:46	-79.2009	27.0054	-8.63	35.95
Cruise date: 2014.07.15								
0	12:14:41	-79.9296	27.0015	12:22:19	-79.9296	27.0058	0.96	105.93
1	12:41:27	-79.8667	27.0010	12:54:40	-79.8666	27.0076	1.67	90.36
2	13:17:30	-79.7834	27.0006	13:37:40	-79.7834	27.0104	0.56	88.64
3	14:45:22	-79.6828	27.0022	15:12:14	-79.6826	27.0166	1.30	96.74
4	15:36:29	-79.6173	27.0016	16: 9:18	-79.6172	27.0191	0.96	97.56
5	16:40: 2	-79.5001	27.0006	17:18: 4	-79.5007	27.0181	-2.26	84.37
6	17:42:17	-79.3835	27.0006	18:17:31	-79.3843	27.0126	-4.61	62.38
7	18:42:38	-79.2837	27.0004	19:14:42	-79.2851	27.0088	-7.35	47.80
8	19:36: 9	-79.1997	27.0004	20: 0:22	-79.2005	27.0048	-4.63	33.42
Cruise date: 2014.07.24								
0	12:20:44	-79.9298	27.0014	12:28:26	-79.9297	27.0037	0.92	53.90
1	12:51:41	-79.8663	27.0015	13: 4:54	-79.8659	27.0066	4.01	70.48
2	13:36:14	-79.7833	26.9998	13:55:53	-79.7822	27.0104	8.33	97.18
3	14:23:59	-79.6831	27.0006	14:50:28	-79.6822	27.0168	5.36	111.90
4	15: 8:19	-79.6163	27.0003	15:41:25	-79.6156	27.0201	3.20	110.08
5	16: 6:46	-79.4998	27.0007	16:43:49	-79.4998	27.0191	-0.38	91.13
6	17:16: 4	-79.3831	27.0003	17:50:13	-79.3835	27.0140	-1.85	73.62
7	18:12:34	-79.2831	27.0002	18:42:46	-79.2839	27.0101	-4.30	59.98
8	19: 1:31	-79.1999	27.0001	19:25:28	-79.2010	27.0048	-8.26	36.13

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: 2014.08.08								
0	11:58:17	-79.9301	27.0003	12: 6:51	-79.9308	27.0028	-12.10	54.14
1	12:22:53	-79.8669	27.0001	12:37:25	-79.8676	27.0045	-6.10	55.66
2	12:55:34	-79.7835	27.0006	13:15:22	-79.7846	27.0099	-9.76	85.53
3	13:41:56	-79.6835	27.0002	14: 9:28	-79.6848	27.0169	-7.99	110.97
4	14:31:56	-79.6171	27.0005	15: 5:16	-79.6182	27.0205	-5.61	110.53
5	15:35:36	-79.4998	27.0018	16:14:16	-79.5020	27.0220	-8.94	96.42
6	16:37:51	-79.3835	27.0005	17:12: 7	-79.3864	27.0145	-13.73	74.97
7	17:34:25	-79.2832	27.0001	18: 6:12	-79.2858	27.0110	-13.60	63.19
8	18:23:16	-79.1999	27.0001	18:47:40	-79.2028	27.0080	-19.62	60.32
Cruise date: 2014.08.21								
0	12:15: 3	-79.9357	26.9878	12:22:31	-79.9357	26.9896	0.75	41.55
1	12:43: 8	-79.8665	27.0006	12:56:38	-79.8666	27.0054	-1.47	64.00
2	13:17:15	-79.7832	27.0005	13:36:53	-79.7829	27.0111	2.05	98.84
3	13:54:16	-79.6833	27.0004	14:21:22	-79.6825	27.0164	6.05	108.58
4	14:36:20	-79.6168	27.0006	15: 9:34	-79.6160	27.0186	3.72	99.23
5	15:30:53	-79.5000	27.0001	16: 9:21	-79.4996	27.0172	1.53	81.87
6	16:33:12	-79.3832	27.0002	17: 9:46	-79.3831	27.0142	-0.18	70.19
7	17:27:14	-79.2832	26.9999	17:58: 6	-79.2840	27.0094	-3.32	56.59
8	18:21:48	-79.1998	27.0001	18:46:33	-79.2014	27.0064	-11.01	46.95
Cruise date: 2014.10.01								
0	11:47:10	-79.9288	27.0017	11:55: 1	-79.9284	27.0045	6.59	65.44
1	12:10:29	-79.8665	27.0000	12:23:43	-79.8655	27.0067	11.44	92.85
2	12:42:11	-79.7831	27.0004	13: 1:37	-79.7819	27.0129	8.86	117.93
3	13:19: 4	-79.6833	27.0003	13:46:19	-79.6823	27.0171	5.15	112.60
4	14: 3: 8	-79.6164	27.0005	14:36:22	-79.6153	27.0187	4.78	100.92
5	14:59: 2	-79.4994	27.0004	15:37:12	-79.4992	27.0171	0.39	80.27
6	15:59:13	-79.3832	27.0000	16:34:56	-79.3838	27.0115	-3.40	59.50
7	16:54:34	-79.2832	27.0000	17:26:28	-79.2847	27.0078	-8.14	45.73
8	17:44:15	-79.1998	27.0000	18: 9:34	-79.2010	27.0042	-8.88	31.82

Table 7: 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: 2014.10.22								
0	13:39:19	-79.9300	27.0005	13:47:47	-79.9301	27.0050	-2.15	97.97
1	14: 9:27	-79.8665	27.0007	14:24: 5	-79.8664	27.0083	1.86	94.28
2	14:45:53	-79.7828	27.0017	15: 8:47	-79.7823	27.0149	3.01	105.02
3	15:34:22	-79.6833	27.0003	16: 4:56	-79.6826	27.0186	4.43	109.61
4	16:26:33	-79.6167	27.0003	17: 2:48	-79.6160	27.0216	3.43	108.03
5	17:31:50	-79.5000	27.0001	18:15:17	-79.5007	27.0199	-3.02	83.95
6	18:41:21	-79.3834	27.0004	19:17:34	-79.3847	27.0125	-4.83	61.20
7	19:44: 1	-79.2834	27.0000	20:17:14	-79.2861	27.0110	-13.93	61.10
8	20:36:56	-79.1999	27.0001	21: 3:39	-79.2024	27.0078	-15.73	53.67
Cruise date: 2014.12.19								
0	13:14:31	-79.9298	27.0002	13:22:19	-79.9296	27.0020	4.15	41.10
1	13:40:38	-79.8664	27.0005	13:54: 2	-79.8655	27.0051	10.98	61.80
2	14:18:43	-79.7836	27.0005	14:38:16	-79.7829	27.0088	6.18	76.93
3	15: 1:10	-79.6832	27.0004	15:28:46	-79.6823	27.0157	5.61	102.28
4	15:48: 1	-79.6165	27.0003	16:20:50	-79.6158	27.0185	3.08	101.67
5	16:44: 2	-79.4998	27.0014	17:22:38	-79.4992	27.0174	2.45	76.21
6	17:45:38	-79.3833	27.0003	18:20:21	-79.3828	27.0105	1.90	54.61
7	18:39:21	-79.2833	26.9999	19:11:12	-79.2835	27.0069	-1.08	40.89
8	19:27: 1	-79.2001	26.9999	19:51:46	-79.2007	27.0035	-3.72	27.30

Table 8: Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.

Appendix C:

XBT temperature profiles

Cruise date: 2014.01.28									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	23.32	24.12	25.29	25.34	26.01	26.10	26.16	26.29	26.06
10	23.95	24.22	25.57	25.87	26.04	26.01	25.79	25.87	25.91
20	23.79	24.13	24.97	25.83	26.00	25.97	25.76	25.80	25.45
30	23.70	24.04	24.61	25.81	26.04	25.97	25.76	25.79	25.11
40	23.61	23.97	24.36	25.80	26.01	25.95	25.76	25.79	25.00
50	23.21	23.93	24.14	25.85	25.95	25.96	25.76	25.65	24.82
60	21.67	23.78	23.88	25.78	26.02	25.96	25.75	25.38	24.77
70	20.55	23.04	23.87	25.36	25.98	25.96	25.76	25.02	24.73
80	18.51	22.09	23.39	25.55	25.98	25.96	25.68	24.89	24.70
90	17.75	20.50	23.06	24.61	25.80	25.97	25.61	24.83	24.67
100	16.38	18.92	22.83	24.10	25.36	25.97	25.62	24.81	24.54
110	15.97	17.77	22.69	23.80	24.72	25.75	25.31	24.77	24.35
120	15.44	16.58	22.37	23.26	22.70	25.57	24.72	24.77	23.65
130	14.64	15.71	21.73	22.81	22.70	24.36	23.95	24.53	23.22
140	–	15.03	20.59	22.55	22.59	23.96	23.30	23.45	22.75
150	–	14.85	18.81	22.37	22.54	23.47	22.70	22.68	22.06
160	–	14.64	17.60	22.21	22.27	22.63	22.51	22.12	21.86
170	–	14.11	16.62	21.77	22.00	21.92	21.81	21.47	21.34
180	–	13.53	15.99	20.93	21.20	21.51	21.26	20.80	20.98
190	–	13.16	15.46	20.16	20.35	20.69	20.35	20.54	20.55
200	–	12.61	14.77	19.45	19.62	20.40	19.78	20.19	20.27
210	–	11.89	14.12	18.77	18.84	20.15	19.45	19.90	20.10
220	–	11.17	13.45	17.30	18.52	19.93	19.16	19.45	19.81
230	–	11.10	12.75	16.76	18.11	19.62	18.94	19.07	19.63
240	–	10.93	11.49	16.08	17.40	19.38	18.61	18.93	19.45
250	–	10.09	11.20	15.44	16.83	18.87	18.34	18.69	19.29
260	–	9.71	10.56	14.61	16.25	18.54	18.35	18.56	19.07
270	–	–	10.50	14.31	15.68	18.36	18.29	18.43	18.77
280	–	–	10.28	13.65	15.25	18.09	18.04	18.28	18.67
290	–	–	9.85	12.73	14.87	17.87	17.94	18.20	18.51
300	–	–	9.46	12.08	14.65	17.60	17.93	18.08	18.35
350	–	–	7.56	9.81	10.81	15.45	17.35	17.50	17.51
400	–	–	–	8.90	9.60	12.32	15.27	16.84	16.60
450	–	–	–	7.94	8.89	10.44	13.10	15.35	15.93
500	–	–	–	7.23	8.35	9.64	10.96	14.00	–
550	–	–	–	–	7.07	8.56	9.48	11.85	–
600	–	–	–	–	6.76	7.21	8.81	11.33	–
650	–	–	–	–	6.26	6.88	7.10	–	–
700	–	–	–	–	–	6.56	NaN	–	–
750	–	–	–	–	–	6.30	–	–	–

Table 9: 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: 2014.02.06									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	24.66	25.46	25.75	25.84	26.12	26.18	26.29	26.37	26.38
10	25.19	25.62	25.98	26.10	26.20	26.21	26.17	26.02	26.09
20	24.57	25.62	25.98	26.06	26.16	26.21	26.16	25.97	26.06
30	23.45	25.57	25.98	26.06	26.17	26.22	26.15	25.95	26.06
40	23.15	24.42	26.00	26.05	26.18	26.22	26.15	25.95	26.06
50	22.79	24.34	25.39	26.12	26.17	26.22	26.04	25.95	26.06
60	22.35	23.12	24.91	25.28	26.10	26.21	25.93	25.90	26.02
70	22.24	22.95	23.87	23.89	25.15	26.12	25.80	25.68	25.84
80	22.02	22.47	22.89	23.18	23.59	24.70	25.69	25.57	25.45
90	21.39	22.21	22.48	22.77	23.04	24.79	25.54	25.35	25.04
100	20.11	22.07	22.30	22.45	22.95	23.57	24.97	25.00	24.92
110	17.35	21.60	22.12	22.34	22.79	22.95	24.14	24.63	24.73
120	16.31	20.86	21.90	21.90	22.69	23.07	23.38	23.79	24.29
130	15.09	19.95	21.62	21.64	22.14	23.23	22.98	23.41	23.35
140	–	19.33	20.96	21.39	21.89	22.81	22.44	23.00	22.92
150	–	18.07	19.93	20.88	22.02	22.46	22.18	22.63	22.48
160	–	16.76	19.39	20.73	21.19	21.80	21.88	21.95	21.70
170	–	15.66	18.90	19.85	20.81	21.38	21.23	21.51	21.07
180	–	14.83	18.29	19.30	20.16	20.70	20.82	21.30	20.90
190	–	14.28	18.10	18.78	20.02	20.17	20.40	20.91	20.56
200	–	13.96	17.53	18.05	19.29	19.87	20.22	20.55	20.41
210	–	13.03	17.09	17.89	18.88	19.43	19.98	20.16	20.15
220	–	12.23	16.52	17.54	18.60	19.00	19.64	19.79	19.71
230	–	11.66	15.67	17.15	18.08	18.76	19.37	19.71	19.62
240	–	11.22	15.34	16.79	17.71	18.58	18.93	19.46	19.56
250	–	10.66	14.99	16.62	17.29	18.29	18.60	19.36	19.11
260	–	10.00	14.12	16.27	17.02	18.02	18.37	19.07	18.93
270	–	–	13.02	15.93	16.78	17.86	18.21	18.95	18.85
280	–	–	12.55	15.38	16.54	17.61	18.11	18.68	18.64
290	–	–	11.80	15.23	16.44	17.37	17.87	18.30	18.44
300	–	–	10.90	14.68	16.12	17.15	17.57	18.06	18.23
350	–	–	8.93	12.70	13.74	15.09	16.93	17.26	17.79
400	–	–	–	10.03	11.88	13.21	15.39	16.76	17.26
450	–	–	–	8.61	9.80	12.10	14.05	15.55	16.18
500	–	–	–	7.07	9.16	10.81	11.93	14.39	–
550	–	–	–	–	8.38	9.84	10.82	13.55	–
600	–	–	–	–	7.52	8.89	10.18	12.43	–
650	–	–	–	–	6.90	8.05	9.85	–	–
700	–	–	–	–	–	7.59	NaN	–	–
750	–	–	–	–	–	7.13	–	–	–

Table 10: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.04.25									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	25.86	25.77	26.57	27.04	26.94	26.53	27.15	27.81	27.83
10	26.05	25.95	26.94	27.10	27.01	26.86	26.86	27.00	27.01
20	26.05	25.95	26.90	27.04	27.00	26.86	26.86	26.93	26.93
30	26.04	25.93	26.78	27.04	26.81	26.88	26.85	26.88	26.80
40	25.89	25.93	26.57	27.03	26.84	26.81	26.86	26.83	26.70
50	25.04	25.86	26.40	26.79	26.70	26.71	26.76	26.79	26.47
60	24.36	25.83	26.10	26.47	26.51	26.49	26.64	26.68	26.41
70	22.63	25.43	25.70	26.19	26.42	26.28	26.56	26.58	26.37
80	20.79	23.95	25.13	25.80	26.17	26.20	26.54	26.58	26.28
90	19.52	22.13	24.65	25.23	25.87	26.07	26.42	26.50	26.12
100	18.52	19.67	23.72	24.53	25.59	26.04	26.34	26.29	25.94
110	18.11	18.84	21.56	23.75	24.96	25.63	26.20	26.26	25.70
120	17.06	18.28	21.24	22.52	24.31	25.08	25.46	25.90	25.30
130	16.39	17.71	20.45	21.56	23.32	24.32	24.91	24.99	24.37
140	–	17.25	20.23	20.11	22.28	23.83	24.13	24.17	23.78
150	–	16.81	18.94	20.19	21.39	23.30	23.78	23.31	23.28
160	–	16.28	18.19	19.93	21.06	22.51	22.80	22.91	22.90
170	–	16.24	17.35	19.40	20.34	21.73	22.04	22.43	22.16
180	–	15.61	17.21	18.60	20.03	20.93	21.73	21.69	21.87
190	–	14.72	16.95	18.30	19.16	20.40	21.38	21.43	21.68
200	–	14.36	16.79	17.98	18.76	19.80	21.12	21.36	21.53
210	–	14.06	16.51	17.82	18.53	19.44	20.74	21.03	20.84
220	–	13.89	16.29	17.60	18.23	18.76	20.35	20.67	20.65
230	–	13.53	16.08	17.26	17.92	18.56	20.06	20.09	20.08
240	–	12.51	15.76	16.89	17.47	18.43	19.44	19.88	19.79
250	–	11.71	15.45	16.67	17.26	18.05	18.51	19.55	19.39
260	–	10.88	14.98	16.13	17.10	17.40	18.40	19.30	19.01
270	–	–	14.60	15.86	16.79	17.26	18.29	19.07	18.86
280	–	–	14.01	15.65	16.45	17.13	18.16	18.89	18.77
290	–	–	13.32	15.33	16.20	17.08	17.78	18.62	18.59
300	–	–	12.37	14.76	15.94	16.94	17.51	18.37	18.48
350	–	–	10.81	13.01	14.75	16.18	16.85	17.43	17.69
400	–	–	–	12.00	13.45	15.72	16.08	16.19	17.02
450	–	–	–	10.38	12.31	14.31	15.25	15.15	15.52
500	–	–	–	9.57	10.78	12.78	14.22	14.19	–
550	–	–	–	–	9.89	11.69	12.64	13.38	–
600	–	–	–	–	9.31	10.71	11.50	12.59	–
650	–	–	–	–	8.47	9.65	10.06	–	–
700	–	–	–	–	–	8.64	9.90	–	–
750	–	–	–	–	–	7.76	–	–	–

Table 11: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.05.23									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	27.00	27.24	27.32	27.36	27.54	27.70	27.77	27.89	29.03
10	27.28	27.37	27.59	27.62	27.55	27.53	27.38	27.17	26.70
20	27.28	27.37	27.58	27.61	27.54	27.47	27.31	26.81	26.62
30	27.28	27.37	27.59	27.60	27.55	27.44	27.33	26.79	26.57
40	26.42	27.37	27.57	27.62	27.54	27.30	27.30	26.59	26.52
50	25.13	27.10	27.58	27.62	27.54	27.29	27.30	26.33	26.51
60	23.24	24.57	27.46	27.60	27.52	27.26	27.21	26.26	26.51
70	21.76	23.10	25.21	27.55	27.19	27.27	27.02	26.23	26.45
80	20.75	22.38	24.17	25.69	26.51	26.98	26.54	26.20	26.03
90	19.86	21.58	23.52	24.65	25.92	26.13	26.33	25.75	25.17
100	18.70	20.86	22.66	24.28	25.17	25.46	26.04	25.31	24.94
110	17.61	20.17	21.59	23.88	24.79	24.97	25.28	25.04	24.73
120	17.01	19.80	20.87	23.41	23.83	24.50	24.94	24.50	24.47
130	16.24	19.61	20.62	22.58	22.79	24.05	23.73	23.61	24.07
140	–	19.06	20.04	21.87	22.27	23.22	23.05	22.79	23.82
150	–	18.61	19.71	21.37	21.53	21.92	22.07	22.22	23.17
160	–	18.19	19.25	20.52	21.08	21.03	21.43	21.45	22.83
170	–	17.35	18.93	19.97	20.75	20.22	20.84	21.11	21.97
180	–	16.96	18.63	19.53	20.15	19.83	20.47	20.73	20.96
190	–	16.33	18.18	19.21	19.56	19.55	20.04	20.09	20.70
200	–	15.98	17.71	18.95	19.07	19.32	19.69	19.86	20.43
210	–	15.42	17.50	18.64	18.73	19.02	19.38	19.46	19.64
220	–	14.72	16.94	18.21	18.40	18.67	19.04	19.20	19.43
230	–	14.22	16.62	17.71	18.23	18.52	18.61	18.94	19.44
240	–	13.76	16.19	17.22	18.11	18.48	18.53	18.95	19.36
250	–	13.30	15.72	17.01	17.91	18.34	18.36	18.85	19.33
260	–	12.42	15.35	16.78	17.67	18.17	18.37	18.57	19.29
270	–	–	14.61	16.70	17.52	18.07	18.07	18.42	18.79
280	–	–	13.70	16.38	17.21	17.87	17.86	18.03	18.64
290	–	–	13.10	16.10	16.86	17.66	17.55	18.13	18.52
300	–	–	12.14	15.83	16.70	17.49	17.53	18.06	18.37
350	–	–	10.20	13.57	14.72	16.70	16.80	17.08	17.97
400	–	–	–	11.78	13.08	14.79	15.72	16.23	17.39
450	–	–	–	9.30	11.96	13.56	14.56	15.22	16.62
500	–	–	–	7.98	10.25	12.06	13.17	14.27	–
550	–	–	–	–	8.05	10.27	11.57	12.56	–
600	–	–	–	–	7.46	9.49	10.47	11.54	–
650	–	–	–	–	6.38	8.68	9.82	–	–
700	–	–	–	–	–	7.96	NaN	–	–
750	–	–	–	–	–	7.11	–	–	–

Table 12: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.07.15									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.63	29.44	29.64	29.56	29.59	29.58	29.39	29.11	29.28
10	29.31	29.48	29.57	29.54	29.62	29.63	29.28	28.95	28.95
20	28.75	29.29	29.37	29.42	29.45	29.62	29.18	28.93	28.92
30	27.39	28.33	28.98	29.30	29.30	29.49	28.93	28.81	28.93
40	26.99	28.00	28.37	28.82	29.01	29.02	28.73	28.70	28.91
50	25.88	26.99	27.30	28.03	28.34	28.48	28.61	28.62	28.66
60	24.53	26.90	27.05	27.61	28.10	27.99	28.54	28.13	28.62
70	23.97	26.27	26.62	27.28	27.32	27.34	28.02	27.73	28.57
80	22.84	25.07	26.48	27.03	27.06	27.28	27.73	27.17	28.54
90	21.00	23.69	26.36	26.67	26.79	26.97	27.43	26.57	28.46
100	19.61	23.16	25.51	26.10	26.56	26.75	27.29	26.45	28.36
110	16.59	22.42	24.44	25.55	25.54	26.62	26.93	26.37	27.68
120	15.64	20.94	24.15	25.07	25.44	26.59	26.72	26.31	26.31
130	15.05	19.43	22.81	24.45	24.86	26.39	26.50	26.31	26.32
140	–	17.00	21.32	24.20	24.61	26.04	26.14	26.17	26.06
150	–	15.58	21.03	23.47	23.93	25.43	25.74	25.88	25.62
160	–	14.46	20.52	22.51	23.80	24.67	25.22	24.62	24.24
170	–	13.44	19.47	21.77	22.70	23.65	24.25	24.09	24.17
180	–	12.99	19.08	20.58	21.87	23.00	23.50	23.46	23.44
190	–	12.30	17.75	19.74	21.15	22.01	22.62	23.17	22.92
200	–	11.38	16.42	19.20	20.35	21.07	21.83	22.45	22.62
210	–	10.71	14.69	18.77	19.79	20.29	21.22	21.80	20.89
220	–	10.44	13.77	18.68	18.92	19.69	20.75	20.76	20.27
230	–	9.69	12.91	18.05	18.20	18.76	20.31	20.35	20.27
240	–	9.49	12.34	17.41	17.79	18.54	20.00	19.91	20.02
250	–	9.12	11.63	16.92	17.54	18.21	19.39	19.48	19.58
260	–	8.78	11.10	16.61	17.29	17.85	19.01	19.12	19.38
270	–	–	10.52	15.81	16.94	17.39	18.59	18.72	19.19
280	–	–	10.02	15.20	16.51	17.21	18.10	18.56	18.86
290	–	–	9.71	14.86	16.29	16.84	17.99	18.37	18.71
300	–	–	9.51	13.82	15.98	16.45	17.57	18.30	18.56
350	–	–	8.12	10.85	13.53	15.09	16.78	16.86	17.69
400	–	–	–	8.64	11.12	13.71	15.73	16.02	16.39
450	–	–	–	7.75	9.46	11.47	14.56	15.26	15.90
500	–	–	–	6.72	7.88	9.47	13.45	14.56	–
550	–	–	–	–	7.53	8.76	10.19	12.47	–
600	–	–	–	–	6.87	8.31	9.36	10.97	–
650	–	–	–	–	6.37	7.59	9.10	–	–
700	–	–	–	–	–	6.84	8.76	–	–
750	–	–	–	–	–	6.46	–	–	–

Table 13: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.07.24									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.88	30.25	30.03	30.11	30.38	30.51	32.05	32.06	31.27
10	30.13	30.05	29.96	29.98	29.95	29.94	29.89	29.50	29.54
20	29.96	29.77	29.22	29.95	29.94	29.28	29.82	29.39	29.48
30	29.19	29.41	29.08	29.37	29.11	28.38	29.76	29.22	29.43
40	27.37	28.80	28.86	28.68	28.55	27.93	29.42	29.14	29.37
50	25.57	27.90	28.50	28.22	27.88	27.71	28.75	28.88	29.34
60	24.70	26.85	27.82	27.83	27.50	27.60	28.41	28.37	28.91
70	23.66	26.17	27.29	27.47	27.30	27.45	27.80	28.20	28.58
80	22.53	25.25	27.06	27.30	27.04	27.38	27.43	27.91	28.03
90	20.24	24.29	26.54	27.04	26.85	27.36	27.26	27.50	27.62
100	18.62	23.13	26.28	26.81	26.76	27.14	26.80	26.89	27.37
110	17.22	20.95	26.00	26.61	26.61	26.65	26.31	26.45	26.46
120	15.91	19.60	25.20	26.45	26.29	26.37	25.60	26.20	25.92
130	14.16	17.53	24.19	26.20	25.93	26.29	25.03	25.44	24.95
140	–	16.03	22.64	25.66	25.20	25.78	24.29	24.51	24.21
150	–	14.09	21.23	25.01	24.67	24.79	23.65	23.53	23.45
160	–	13.50	20.45	23.44	23.53	24.37	23.12	23.13	23.03
170	–	12.94	19.85	22.24	22.34	23.52	22.90	22.81	22.57
180	–	11.39	19.16	21.49	21.73	23.11	22.54	22.56	22.46
190	–	10.86	17.26	19.27	21.17	22.80	22.11	22.27	21.87
200	–	10.33	15.23	18.37	20.40	22.34	21.99	22.01	21.65
210	–	10.07	12.98	17.81	19.54	21.88	21.92	21.87	21.41
220	–	9.72	11.90	17.35	19.14	21.44	21.30	21.31	20.79
230	–	9.31	11.14	16.24	18.45	20.66	21.17	20.56	20.49
240	–	8.91	10.63	15.24	18.10	20.21	20.70	20.48	20.18
250	–	8.37	10.29	14.99	16.62	19.63	20.29	20.31	19.88
260	–	7.89	9.48	14.37	15.69	19.16	20.14	20.01	19.54
270	–	–	9.05	13.85	15.23	18.48	19.52	19.96	19.57
280	–	–	8.46	13.08	14.83	17.92	19.28	19.79	19.39
290	–	–	8.23	12.39	14.33	17.56	18.98	19.65	19.17
300	–	–	7.86	12.01	14.01	17.29	18.69	19.21	18.78
350	–	–	7.09	9.27	12.02	14.52	17.50	17.87	17.87
400	–	–	–	8.31	9.52	12.23	16.00	16.23	16.80
450	–	–	–	7.05	8.57	10.83	13.51	14.65	14.96
500	–	–	–	6.73	8.15	9.66	12.23	13.88	–
550	–	–	–	–	7.23	8.81	10.34	12.75	–
600	–	–	–	–	6.77	8.47	9.21	10.78	–
650	–	–	–	–	6.32	7.43	7.77	–	–
700	–	–	–	–	–	6.78	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

Table 14: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.08.08									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.20	30.03	30.21	NaN	30.11	29.97	29.84	30.12	30.09
10	30.51	30.50	30.54	NaN	30.39	30.13	29.81	29.80	29.81
20	30.12	30.42	30.29	NaN	29.95	29.98	29.75	29.51	29.77
30	29.56	29.85	29.58	NaN	29.67	29.77	29.66	29.22	29.20
40	28.85	29.03	28.94	NaN	29.11	29.48	29.53	29.06	28.72
50	28.05	27.70	28.20	NaN	28.89	28.69	29.36	28.43	28.42
60	26.64	26.60	27.35	NaN	27.98	27.69	28.26	27.73	27.60
70	25.63	26.05	26.43	NaN	27.49	27.19	28.07	27.30	27.04
80	23.76	25.70	25.82	NaN	26.59	26.42	27.18	27.20	26.87
90	22.25	24.78	25.42	NaN	26.20	26.08	26.53	26.90	26.72
100	20.50	23.75	25.29	NaN	25.97	25.64	26.17	26.51	26.52
110	18.89	23.19	24.62	NaN	25.46	25.36	25.62	25.92	25.77
120	17.97	21.74	23.80	NaN	25.12	25.25	24.98	25.40	25.44
130	17.26	20.44	22.55	NaN	24.28	24.88	24.67	25.01	24.74
140	-	18.90	21.69	NaN	23.82	24.37	23.86	24.61	24.41
150	-	17.41	21.07	NaN	23.28	24.02	23.72	23.89	23.92
160	-	15.57	20.69	NaN	23.03	23.52	23.38	23.05	22.86
170	-	14.60	20.34	NaN	22.65	23.44	22.84	22.69	22.78
180	-	13.56	19.68	NaN	20.80	22.89	22.37	22.36	22.33
190	-	11.98	19.38	NaN	19.91	22.03	21.79	21.73	21.70
200	-	11.44	18.33	NaN	19.21	20.88	20.88	21.11	21.43
210	-	10.78	16.64	NaN	18.74	20.13	20.41	20.72	21.06
220	-	10.25	14.47	NaN	18.52	19.51	19.90	20.32	20.50
230	-	9.67	12.60	NaN	17.95	18.94	19.44	19.96	20.06
240	-	9.55	11.75	NaN	17.87	18.67	19.12	19.57	19.58
250	-	9.26	11.20	NaN	17.54	18.51	19.08	19.38	19.43
260	-	9.09	10.61	NaN	17.46	18.31	18.81	19.20	19.20
270	-	-	10.01	NaN	16.87	18.04	18.78	18.93	19.09
280	-	-	9.49	NaN	16.47	17.94	18.62	18.77	18.81
290	-	-	9.12	NaN	16.29	17.71	18.38	18.45	18.70
300	-	-	8.72	NaN	16.04	17.26	18.21	18.29	18.54
350	-	-	7.63	NaN	14.33	16.12	17.19	17.24	17.57
400	-	-	-	NaN	11.55	13.37	14.94	16.22	16.54
450	-	-	-	NaN	9.05	11.35	13.44	14.57	16.18
500	-	-	-	NaN	7.91	9.89	12.06	13.79	-
550	-	-	-	-	7.69	NaN	10.84	12.98	-
600	-	-	-	-	6.63	NaN	10.42	12.28	-
650	-	-	-	-	6.11	NaN	8.68	-	-
700	-	-	-	-	-	NaN	NaN	-	-
750	-	-	-	-	-	NaN	-	-	-

Table 15: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.08.21									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.59	30.67	30.67	30.78	30.91	30.85	32.33	31.55	31.92
10	31.04	31.05	30.88	30.68	30.67	30.50	30.34	30.40	30.30
20	29.00	30.11	30.74	30.70	30.54	30.47	30.19	29.94	30.05
30	25.74	28.86	29.89	30.62	30.48	30.44	29.53	29.68	30.04
40	23.60	27.09	29.22	30.09	30.43	29.33	29.01	29.59	29.90
50	21.92	25.35	26.58	29.25	29.37	28.60	28.69	29.20	29.51
60	20.26	24.79	25.85	27.93	28.03	28.36	28.28	28.88	29.10
70	17.75	23.72	25.21	26.97	27.45	28.03	27.97	28.50	28.68
80	15.49	22.72	23.60	26.25	26.69	27.48	27.82	28.29	28.53
90	14.34	20.26	22.42	25.53	26.23	27.13	27.69	28.03	27.89
100	12.84	18.68	22.00	23.12	25.77	26.72	27.20	28.04	27.44
110	12.42	17.97	21.03	23.63	24.91	26.29	27.03	27.08	26.91
120	11.96	16.56	20.28	22.73	23.99	25.94	26.42	26.64	26.59
130	11.88	15.49	20.19	22.33	23.20	25.71	26.22	26.38	26.18
140	–	14.42	18.92	20.30	22.53	25.12	25.33	26.23	25.81
150	–	13.46	18.55	20.00	21.21	24.36	24.18	25.35	25.37
160	–	12.80	18.17	19.61	20.26	23.43	23.46	24.18	24.76
170	–	12.18	17.21	19.14	20.29	22.24	22.80	23.73	24.03
180	–	11.70	16.56	18.46	19.87	21.55	22.24	23.04	23.32
190	–	10.74	16.22	17.89	19.48	20.88	21.90	22.39	23.03
200	–	10.10	15.72	17.27	18.83	19.81	21.30	21.79	22.19
210	–	9.85	15.22	16.95	18.37	19.55	21.03	21.47	21.54
220	–	9.40	14.01	16.47	17.98	19.15	20.67	21.34	21.01
230	–	9.39	13.82	16.12	17.67	18.58	19.87	20.89	20.52
240	–	9.43	13.26	15.78	17.24	18.37	19.28	20.32	20.37
250	–	9.04	12.92	15.52	16.87	18.26	19.00	20.03	20.12
260	–	8.97	12.41	15.27	16.49	18.04	18.69	19.60	19.87
270	–	–	11.85	14.93	15.89	17.80	18.45	19.29	19.62
280	–	–	10.79	14.68	15.57	17.53	18.34	18.49	19.37
290	–	–	10.11	14.23	15.16	16.96	18.00	18.04	19.21
300	–	–	9.62	14.03	14.93	16.36	17.50	17.90	18.81
350	–	–	8.35	12.68	13.20	14.40	16.24	16.87	17.75
400	–	–	–	10.53	11.81	12.90	14.53	15.94	17.01
450	–	–	–	8.96	10.59	11.27	12.63	14.03	15.81
500	–	–	–	7.36	9.11	10.10	11.79	12.60	–
550	–	–	–	–	8.31	9.26	10.92	11.61	–
600	–	–	–	–	7.53	8.80	9.73	11.06	–
650	–	–	–	–	6.51	8.18	9.18	–	–
700	–	–	–	–	–	7.78	NaN	–	–
750	–	–	–	–	–	7.44	–	–	–

Table 16: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.10.01									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.11	29.00	29.02	29.14	29.20	29.25	29.55	29.69	29.97
10	29.62	29.67	29.20	29.35	29.29	29.21	29.22	29.35	29.28
20	29.56	29.66	29.29	29.31	29.26	29.15	29.19	29.28	29.20
30	29.62	29.71	29.14	29.30	29.27	29.09	29.18	29.18	29.20
40	29.63	29.58	29.04	29.27	29.15	29.05	29.16	29.18	29.19
50	29.61	29.54	29.03	29.10	29.05	28.99	29.14	29.05	28.91
60	29.30	29.41	28.99	28.61	28.79	28.94	29.14	28.84	28.28
70	28.03	28.65	28.86	28.16	28.59	28.87	28.95	28.45	28.19
80	26.19	27.21	28.53	27.96	27.93	28.63	28.80	28.19	27.78
90	24.72	25.67	27.87	27.78	27.77	28.42	28.76	27.88	27.56
100	23.42	24.48	26.87	27.51	27.61	28.05	27.90	27.58	27.34
110	22.09	23.36	24.87	27.14	27.19	27.88	27.53	26.98	26.79
120	21.47	22.18	24.01	26.96	26.84	27.56	26.83	26.71	26.12
130	19.91	20.73	22.39	26.00	26.60	26.82	26.30	26.12	25.11
140	–	19.50	21.35	24.20	25.88	26.34	25.84	25.75	24.92
150	–	19.12	20.29	23.17	24.16	25.81	25.29	25.17	24.70
160	–	18.56	19.47	21.96	23.01	24.87	24.74	24.39	23.58
170	–	17.81	19.11	20.86	21.56	23.66	23.98	23.62	22.85
180	–	17.24	18.81	20.22	20.97	23.00	23.76	22.65	22.29
190	–	17.16	18.66	19.85	20.56	22.11	22.73	22.07	21.82
200	–	16.71	18.10	19.28	20.03	21.50	21.88	21.55	21.46
210	–	16.36	17.56	18.67	19.62	21.12	21.29	20.97	21.13
220	–	15.89	17.04	18.29	19.20	20.81	20.85	20.63	20.62
230	–	14.71	16.64	17.62	19.10	20.21	20.56	20.16	20.39
240	–	14.34	16.19	17.39	18.53	20.13	19.96	19.80	20.12
250	–	14.06	15.69	17.01	17.69	19.65	19.66	19.54	19.95
260	–	13.19	15.30	16.57	17.20	19.09	19.10	19.25	19.82
270	–	–	14.96	16.09	16.65	17.96	18.70	19.13	19.55
280	–	–	13.95	15.68	16.02	17.52	18.50	18.85	19.37
290	–	–	13.36	15.03	15.60	17.13	18.25	18.60	19.21
300	–	–	12.44	14.52	15.23	16.66	18.03	18.41	19.09
350	–	–	10.88	12.51	13.06	15.23	16.63	17.54	18.45
400	–	–	–	11.12	11.68	14.00	15.49	16.56	17.51
450	–	–	–	9.69	10.46	12.14	14.02	15.31	16.28
500	–	–	–	8.64	9.43	10.54	12.22	13.97	–
550	–	–	–	–	8.72	9.47	11.01	12.57	–
600	–	–	–	–	7.44	8.70	10.02	12.00	–
650	–	–	–	–	6.65	8.14	9.35	–	–
700	–	–	–	–	–	7.46	NaN	–	–
750	–	–	–	–	–	7.15	–	–	–

Table 17: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.10.22									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	27.36	27.69	27.72	28.32	NaN	28.97	28.81	28.79	28.63
10	28.27	28.36	28.46	28.64	NaN	28.73	28.71	28.79	28.80
20	28.26	28.36	28.45	28.62	NaN	28.70	28.68	28.75	28.78
30	28.28	28.35	28.45	28.62	NaN	28.70	28.69	28.74	28.77
40	28.30	28.35	28.45	28.62	NaN	28.70	28.68	28.71	28.77
50	28.07	28.36	28.45	28.62	NaN	28.73	28.68	28.66	28.73
60	26.98	28.32	28.46	28.57	NaN	28.72	28.68	28.68	28.54
70	25.73	27.05	28.46	28.54	NaN	27.56	28.42	28.67	28.31
80	23.88	25.89	27.88	27.80	NaN	27.22	27.94	28.61	28.25
90	21.52	24.52	26.50	27.53	NaN	27.01	27.64	28.12	27.13
100	20.34	23.03	25.09	27.00	NaN	26.52	26.69	27.52	26.77
110	18.37	22.03	24.36	26.03	NaN	26.27	26.16	26.80	26.62
120	16.58	21.04	23.74	25.41	NaN	25.98	25.54	26.28	25.85
130	15.06	20.35	22.68	24.91	NaN	25.43	25.45	25.75	25.34
140	–	19.78	22.34	24.16	NaN	24.77	24.72	24.92	24.52
150	–	18.49	20.91	23.35	NaN	24.46	24.58	24.18	23.93
160	–	16.79	20.18	22.20	NaN	23.70	24.10	23.72	23.21
170	–	15.73	19.56	22.05	NaN	23.72	23.79	23.08	23.01
180	–	14.99	18.62	21.69	NaN	23.42	23.35	22.39	22.59
190	–	14.32	18.02	20.65	NaN	21.79	22.31	21.82	22.00
200	–	13.39	17.65	19.55	NaN	21.11	21.78	21.14	21.01
210	–	13.03	17.12	18.96	NaN	20.79	21.34	20.65	20.30
220	–	12.02	16.29	18.37	NaN	20.23	20.80	20.26	20.21
230	–	11.69	16.04	18.04	NaN	20.02	20.26	20.03	20.03
240	–	10.56	15.58	17.65	NaN	19.91	19.44	19.74	19.87
250	–	10.24	15.20	17.27	NaN	19.04	19.26	19.57	19.81
260	–	9.90	14.56	16.47	NaN	18.72	19.12	19.34	19.40
270	–	–	13.67	16.15	NaN	18.43	18.97	19.10	19.17
280	–	–	12.88	15.88	NaN	17.95	18.54	18.76	19.12
290	–	–	12.13	15.45	NaN	17.39	18.20	18.62	18.92
300	–	–	11.62	14.90	NaN	16.57	18.11	18.45	18.79
350	–	–	9.45	12.60	NaN	14.72	17.04	17.80	18.29
400	–	–	–	11.06	NaN	13.17	15.56	17.04	17.36
450	–	–	–	9.57	NaN	11.82	13.53	15.57	16.02
500	–	–	–	7.25	NaN	10.39	12.08	14.16	–
550	–	–	–	–	NaN	9.34	10.98	12.56	–
600	–	–	–	–	NaN	8.52	9.54	11.34	–
650	–	–	–	–	NaN	7.73	8.80	–	–
700	–	–	–	–	–	7.03	NaN	–	–
750	–	–	–	–	–	6.82	–	–	–

Table 18: Same as Table 9 for the cruise on the indicated date.

Cruise date: 2014.12.19									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	NaN	NaN	NaN	25.52	26.23	25.60	25.93	26.04	26.16
10	NaN	NaN	NaN	26.38	26.36	26.17	26.12	26.04	26.14
20	NaN	NaN	NaN	26.38	26.35	26.13	26.12	26.03	26.12
30	NaN	NaN	NaN	26.37	26.34	26.13	26.12	26.02	26.14
40	NaN	NaN	NaN	26.37	26.35	26.13	26.12	26.02	26.13
50	NaN	NaN	NaN	26.38	26.34	26.13	26.12	26.02	26.12
60	NaN	NaN	NaN	26.38	26.30	26.14	26.12	26.02	26.12
70	NaN	NaN	NaN	26.38	26.26	26.14	26.12	26.03	26.10
80	NaN	NaN	NaN	26.38	26.20	26.14	26.12	26.03	26.10
90	NaN	NaN	NaN	26.38	26.20	26.14	26.12	26.03	26.11
100	NaN	NaN	NaN	26.38	26.12	26.14	26.12	26.03	26.05
110	NaN	NaN	NaN	26.32	26.13	26.14	26.13	25.98	25.95
120	NaN	NaN	NaN	26.11	26.12	26.14	26.13	25.95	25.10
130	NaN	NaN	NaN	25.75	25.97	26.15	26.13	25.69	25.23
140	-	NaN	NaN	25.30	25.09	26.15	26.11	25.22	24.25
150	-	NaN	NaN	24.61	24.26	26.14	25.54	24.70	23.71
160	-	NaN	NaN	23.88	23.94	25.55	25.28	24.13	22.64
170	-	NaN	NaN	23.06	23.30	24.92	24.61	23.78	21.75
180	-	NaN	NaN	21.55	22.65	23.95	23.59	22.77	21.34
190	-	NaN	NaN	20.70	22.03	23.43	22.84	21.68	21.16
200	-	NaN	NaN	20.20	21.41	23.04	21.72	21.20	20.79
210	-	NaN	NaN	19.73	20.49	22.23	21.42	20.81	20.54
220	-	NaN	NaN	19.05	19.51	21.38	20.96	20.45	20.34
230	-	NaN	NaN	18.51	18.93	NaN	20.16	19.92	20.02
240	-	NaN	NaN	17.98	18.61	NaN	19.62	19.62	19.84
250	-	NaN	NaN	17.52	17.98	NaN	19.20	19.37	19.70
260	-	NaN	NaN	17.27	17.31	NaN	18.95	19.13	19.37
270	-	-	NaN	16.47	16.87	NaN	18.77	18.98	19.09
280	-	-	NaN	14.45	16.38	NaN	18.59	18.77	18.92
290	-	-	NaN	14.14	16.03	NaN	18.21	18.71	18.88
300	-	-	NaN	13.71	15.46	NaN	17.92	18.54	18.72
350	-	-	NaN	11.22	13.66	NaN	16.55	17.27	17.69
400	-	-	-	8.67	11.00	NaN	15.46	16.19	16.80
450	-	-	-	6.50	9.46	NaN	13.01	14.55	15.69
500	-	-	-	6.19	8.43	NaN	11.62	13.03	-
550	-	-	-	-	6.71	NaN	10.46	11.57	-
600	-	-	-	-	6.26	NaN	9.44	11.02	-
650	-	-	-	-	6.23	NaN	7.96	-	-
700	-	-	-	-	-	NaN	NaN	-	-
750	-	-	-	-	-	NaN	-	-	-

Table 19: Same as Table 9 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: 2014.04.24								
0	7:47:50	-79.9306	27.0002	7:58:37	-79.9306	26.9996	-1.53	50.27
1	7: 1:52	-79.8674	27.0016	7:16: 7	-79.8676	27.0047	4.11	71.88
2	6: 0:14	-79.7853	26.9896	6:19:45	-79.7854	26.9950	4.62	75.76
3	4:29:54	-79.6822	26.9997	4:56:30	-79.6805	27.0127	3.38	84.27
4	3: 7:57	-79.6188	26.9949	3:38:31	-79.6171	27.0106	3.42	81.14
5	1:32:11	-79.5012	27.0010	2: 7:43	-79.5044	27.0176	-0.60	65.02
6	23:59:10	-79.3829	27.0011	0:31: 5	-79.3843	27.0131	-3.38	49.87
7	22:45:46	-79.2843	27.0005	23:14:34	-79.2846	27.0025	-6.56	46.10
8	21:39:35	-79.2021	27.0006	22: 3: 9	-79.2041	27.0018	-13.27	49.59
Cruise date: 2014.07.23								
0	8:43:53	-79.9302	27.0002	8:54:37	-79.9306	27.0073	7.58	46.78
1	7:52:22	-79.8695	26.9913	8: 7:58	-79.8708	27.0044	-3.60	63.36
2	6:15:12	-79.7846	26.9987	6:37:58	-79.7891	27.0244	-15.11	100.34
3	4:22:26	-79.6850	26.9946	4:51:42	-79.6880	27.0264	-7.34	114.53
4	2:40: 3	-79.6170	26.9901	3:11: 7	-79.6172	27.0193	-3.88	107.28
5	0:52:56	-79.4989	26.9913	1:29: 8	-79.4969	27.0166	-1.66	80.78
6	23:21: 3	-79.3855	26.9948	23:52: 4	-79.3850	27.0110	-3.36	59.94
7	21:54:12	-79.2850	27.0032	22:23:43	-79.2857	27.0146	-3.14	43.04
8	20:42:53	-79.2010	27.0036	21:12:21	-79.2053	27.0127	-8.74	34.13
Cruise date: 2014.09.18								
0	10:31:40	-79.9283	27.0031	10:40:42	-79.9265	27.0073	8.72	63.69
1	9:30: 0	-79.8662	26.9994	9:43: 6	-79.8618	27.0062	20.91	81.76
2	8:18:52	-79.7845	26.9966	8:37:11	-79.7778	27.0089	19.82	93.93
3	6:45: 1	-79.6848	26.9993	7: 9:50	-79.6786	27.0205	17.04	94.53
4	5:17:34	-79.6153	26.9971	5:47:17	-79.6092	27.0225	12.82	99.99
5	3:23: 9	-79.4992	26.9970	4: 2:17	-79.4911	27.0217	2.56	74.07
6	1: 5:43	-79.3830	26.9976	1:35:51	-79.3756	27.0114	0.75	59.10
7	23:43:52	-79.2835	27.0004	0:10: 5	-79.2781	27.0067	-0.09	39.57
8	22:33: 0	-79.1985	27.0012	22:54:44	-79.1921	27.0038	-0.27	18.09

Table 20: 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: 2014.12.12								
0	10: 2:46	-79.9319	26.9995	10:11:45	-79.9303	27.0019	-3.01	112.27
1	9:11:50	-79.8678	27.0001	9:25:41	-79.8648	27.0030	1.17	81.71
2	8:10:13	-79.7870	26.9951	8:28:26	-79.7826	26.9999	4.78	69.62
3	6:46:48	-79.6799	26.9980	7:13:18	-79.6733	27.0099	5.18	76.00
4	5:28:25	-79.6154	26.9964	5:58:22	-79.6102	27.0080	4.06	75.67
5	3:49: 1	-79.4998	26.9926	4:25:31	-79.4940	27.0021	0.22	54.95
6	2:17:44	-79.3829	27.0004	2:49:18	-79.3793	27.0046	-2.20	44.23
7	1: 1:56	-79.2837	26.9995	1:31:20	-79.2841	27.0003	-6.01	39.10
8	23:57:22	-79.2004	26.9994	0:21: 5	-79.1986	26.9975	-8.75	27.41

Table 21: Same as Table 20 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws1403. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.84	36.41	4.64	NaN	NaN
10	25.84	36.41	4.66	-0.4	43.7
20	25.64	36.40	4.70	-0.9	45.0
30	24.75	36.38	4.78	-3.8	41.8
40	23.56	36.35	4.89	-8.8	39.9
50	23.20	36.36	4.89	-6.7	43.9
60	23.00	36.35	4.86	-3.4	50.7
70	22.29	36.39	4.87	-3.8	54.9
80	21.64	36.36	4.88	-4.3	55.1
90	21.44	36.36	4.85	-4.3	52.3
100	21.05	36.38	4.72	-4.3	52.9
110	20.63	36.45	4.50	1.8	59.7
120	20.08	36.49	4.19	7.1	58.8
130	18.89	36.32	3.97	6.2	53.8
140	NaN	NaN	NaN	4.3	51.3

Table 22: 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: ws1403. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.86	36.39	4.64	NaN	NaN
10	25.86	36.39	4.67	3.7	68.8
20	25.58	36.41	4.70	3.6	69.4
30	25.37	36.41	4.74	3.5	72.1
40	24.53	36.37	4.84	1.9	70.4
50	23.19	36.33	4.95	-0.9	69.3
60	22.69	36.33	4.97	-2.7	68.9
70	22.11	36.38	4.91	-5.1	72.0
80	21.62	36.34	4.94	-5.3	76.5
90	21.24	36.33	4.87	-3.8	81.1
100	20.88	36.44	4.69	-1.6	84.8
110	20.48	36.48	4.27	1.9	85.2
120	20.04	36.47	4.02	6.9	80.6
130	19.71	36.47	3.90	8.2	74.8
140	19.28	36.44	3.85	8.4	74.4
150	18.89	36.49	3.49	11.6	78.4
160	18.19	36.48	3.44	12.0	80.5
170	17.98	36.46	3.58	8.3	82.1
180	17.65	36.43	3.65	6.2	84.5
190	17.29	36.36	3.62	4.1	82.9
200	16.70	36.27	3.55	1.4	78.1
210	16.46	36.23	3.54	-0.7	75.2
220	15.70	36.10	3.47	5.8	70.8
230	14.41	35.87	3.28	13.1	52.9
240	13.54	35.74	3.11	13.4	37.4
250	11.94	35.50	2.90	9.0	25.9

Table 23: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.47	36.33	4.59	NaN	NaN
10	26.29	36.32	4.63	10.0	122.7
20	26.27	36.32	4.63	11.1	121.9
30	25.65	36.38	4.70	10.2	113.0
40	25.37	36.40	4.73	8.4	107.4
50	23.75	36.35	4.90	5.1	102.8
60	22.91	36.29	4.94	2.0	97.8
70	22.44	36.34	4.98	2.1	91.4
80	21.59	36.36	4.93	1.1	90.8
90	21.11	36.45	4.52	1.6	92.4
100	20.85	36.47	4.56	1.0	91.4
110	20.36	36.52	3.91	3.6	90.0
120	20.03	36.48	3.94	10.2	88.4
130	19.59	36.46	3.88	11.9	86.3
140	19.22	36.52	3.42	12.9	85.0
150	18.86	36.54	3.39	12.5	83.6
160	18.49	36.54	3.53	9.0	83.7
170	18.12	36.50	3.61	4.8	83.5
180	17.72	36.44	3.64	3.5	81.6
190	17.38	36.39	3.66	4.0	79.9
200	17.29	36.37	3.63	4.4	79.3
210	17.18	36.36	3.63	2.9	78.4
220	17.01	36.33	3.63	1.0	77.3
230	16.67	36.27	3.56	1.0	78.4
240	16.30	36.20	3.54	0.5	79.6
250	15.75	36.10	3.44	0.4	78.3
260	15.33	36.03	3.33	-0.2	77.3
270	15.04	35.98	3.23	-1.1	76.9
280	14.58	35.90	3.15	-0.4	73.5
290	13.74	35.77	3.10	3.2	68.1
300	12.79	35.62	3.04	7.4	61.5
350	9.82	35.18	2.78	2.4	16.0

Table 24: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.97	36.23	4.59	NaN	NaN
10	26.89	36.23	4.61	18.6	158.3
20	26.89	36.23	4.61	16.9	153.4
30	26.84	36.23	4.61	15.9	148.0
40	26.55	36.25	4.64	12.4	141.8
50	25.92	36.30	4.68	10.4	135.7
60	24.99	36.39	4.57	7.6	129.0
70	23.72	36.41	4.74	5.5	120.5
80	23.20	36.53	4.27	6.1	115.6
90	22.64	36.61	3.94	7.6	111.3
100	21.27	36.42	4.53	4.1	107.7
110	21.05	36.45	4.40	1.1	109.7
120	20.99	36.62	3.89	1.6	112.6
130	20.53	36.64	3.55	3.7	108.5
140	19.89	36.58	3.40	3.9	104.9
150	19.40	36.55	3.28	-0.7	103.4
160	18.91	36.56	3.34	-3.3	103.7
170	18.84	36.57	3.47	-2.1	103.8
180	18.57	36.55	3.47	0.8	101.4
190	18.15	36.50	3.63	2.7	96.3
200	17.88	36.46	3.64	3.5	90.6
210	17.68	36.44	3.65	1.3	88.4
220	17.46	36.40	3.66	0.1	88.0
230	17.26	36.37	3.66	1.4	87.2
240	17.03	36.33	3.61	1.6	85.2
250	16.88	36.30	3.58	1.6	83.4
260	16.55	36.25	3.59	0.8	82.9
270	16.20	36.19	3.52	-0.3	82.6
280	15.68	36.09	3.44	-1.7	85.0
290	15.38	36.04	3.37	-1.5	86.6
300	15.10	35.99	3.33	-0.7	87.5
350	13.35	35.70	3.12	2.5	84.8
400	11.30	35.40	2.90	4.6	57.3
450	9.92	35.19	2.78	1.4	39.7
500	9.09	35.09	2.78	4.1	26.4

Table 25: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.92	36.24	4.58	NaN	NaN
10	26.87	36.24	4.60	10.7	144.3
20	26.81	36.24	4.63	10.7	144.3
30	26.79	36.24	4.62	8.7	141.8
40	26.77	36.25	4.62	6.6	139.0
50	26.74	36.25	4.61	7.1	135.1
60	25.80	36.48	4.37	9.6	130.8
70	25.13	36.50	4.16	11.1	125.7
80	23.88	36.45	4.33	8.4	119.9
90	23.55	36.68	3.74	8.7	113.9
100	22.26	36.63	3.82	11.9	105.9
110	21.72	36.53	4.16	9.0	104.8
120	21.25	36.46	4.42	4.6	110.6
130	21.48	36.81	3.47	7.1	111.5
140	20.63	36.71	3.46	9.0	108.8
150	20.31	36.69	3.47	5.9	103.3
160	20.01	36.70	3.48	2.0	99.9
170	19.63	36.67	3.49	-1.3	98.8
180	19.29	36.64	3.52	-1.4	100.0
190	18.79	36.59	3.55	-0.2	99.4
200	18.52	36.55	3.58	1.1	96.7
210	18.13	36.50	3.62	-0.4	93.5
220	18.11	36.50	3.62	-4.0	91.4
230	17.54	36.41	3.64	-6.6	92.3
240	17.34	36.38	3.65	-6.0	93.2
250	17.05	36.33	3.62	-2.9	94.6
260	16.87	36.30	3.60	-0.4	94.5
270	16.83	36.30	3.58	2.0	92.7
280	16.42	36.22	3.58	3.8	90.2
290	15.97	36.15	3.49	3.4	89.2
300	15.71	36.10	3.43	1.6	89.1
350	14.40	35.87	3.23	2.1	85.5
400	12.26	35.52	2.95	2.4	76.2
450	11.36	35.38	2.89	5.2	65.0
500	10.43	35.24	2.83	2.4	55.9
550	9.08	35.08	2.82	7.3	38.7
600	8.35	35.01	2.81	0.0	8.9

Table 26: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.99	36.29	4.60	NaN	NaN
10	26.88	36.29	4.61	8.6	112.5
20	26.84	36.29	4.60	9.1	112.0
30	26.82	36.29	4.61	7.7	113.9
40	26.81	36.29	4.62	8.0	115.8
50	26.80	36.29	4.59	7.7	117.2
60	26.79	36.29	4.60	7.7	118.9
70	26.44	36.37	4.50	10.4	119.5
80	25.86	36.46	4.39	13.1	116.9
90	24.93	36.63	4.02	12.0	113.2
100	24.37	36.76	3.84	10.6	110.2
110	23.25	36.75	3.70	7.5	103.4
120	22.28	36.78	3.62	0.1	97.6
130	22.02	36.78	3.59	-1.9	97.0
140	21.18	36.70	3.62	-0.4	97.5
150	20.98	36.72	3.58	1.7	93.6
160	20.13	36.70	3.41	1.1	89.8
170	19.67	36.69	3.49	-1.4	86.9
180	19.52	36.68	3.48	-2.5	85.8
190	19.33	36.65	3.44	-3.8	85.9
200	19.08	36.63	3.50	-2.9	88.0
210	18.77	36.59	3.57	-1.6	87.9
220	18.29	36.51	3.61	-1.5	85.6
230	18.11	36.48	3.53	-4.4	82.8
240	18.03	36.48	3.58	-5.1	80.3
250	17.73	36.44	3.63	-5.0	78.1
260	17.79	36.50	3.95	-6.3	76.1
270	17.64	36.48	4.11	-7.0	75.5
280	17.47	36.47	4.24	-7.6	76.0
290	17.30	36.43	4.18	-6.4	77.3
300	17.15	36.41	4.22	-4.0	78.2
350	15.76	36.15	3.91	-3.1	71.5
400	13.59	35.74	3.11	-3.5	58.9
450	12.41	35.55	2.98	-2.3	50.2
500	11.86	35.46	2.92	-3.6	47.6
550	11.26	35.36	2.87	1.3	44.4
600	10.72	35.28	2.82	2.4	37.7
650	9.75	35.15	2.79	-2.1	33.5
700	8.70	35.04	2.79	-3.2	23.2
750	NaN	NaN	NaN	-2.0	5.8

Table 27: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.15	36.30	4.57	NaN	NaN
10	26.88	36.29	4.61	9.7	81.5
20	26.81	36.29	4.61	5.7	80.7
30	26.80	36.29	4.61	6.0	79.3
40	26.80	36.29	4.61	6.1	80.0
50	26.79	36.29	4.60	6.2	80.1
60	26.78	36.29	4.60	6.6	79.7
70	26.66	36.31	4.58	7.9	78.3
80	26.04	36.47	4.36	5.1	79.9
90	25.35	36.63	4.12	2.0	85.1
100	24.64	36.72	3.91	3.4	85.8
110	23.96	36.72	3.78	2.9	81.8
120	22.81	36.71	3.85	-1.7	77.3
130	22.61	36.80	3.64	-6.7	76.4
140	21.94	36.83	4.17	-8.7	77.4
150	21.42	36.84	4.18	-7.4	76.9
160	20.94	36.81	4.06	-5.2	76.2
170	20.31	36.77	3.93	-3.0	75.6
180	20.04	36.75	4.00	-4.3	74.7
190	19.92	36.75	4.12	-5.6	73.7
200	19.70	36.73	4.14	-4.7	71.2
210	19.49	36.71	4.13	-2.7	67.6
220	19.16	36.69	4.14	-0.4	64.2
230	18.79	36.63	4.07	-0.4	61.3
240	18.51	36.58	3.92	-0.9	58.7
250	18.46	36.58	3.88	-1.7	57.5
260	18.42	36.60	4.00	-2.9	57.4
270	18.27	36.57	4.10	-5.2	57.9
280	18.12	36.54	4.08	-7.5	56.6
290	17.86	36.50	4.01	-7.0	56.1
300	17.61	36.45	3.91	-5.7	56.0
350	16.54	36.28	4.02	-7.4	48.6
400	15.29	36.04	3.41	-10.9	41.4
450	14.17	35.84	3.22	-7.4	34.2
500	13.18	35.67	3.07	-4.9	27.0
550	12.32	35.53	2.96	-2.8	23.0
600	11.15	35.35	2.87	-0.1	15.6
650	10.41	35.26	2.88	-5.2	17.5

Table 28: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.88	36.29	4.60	NaN	NaN
10	26.82	36.29	4.60	10.0	54.0
20	26.79	36.29	4.60	8.1	52.3
30	26.78	36.29	4.61	6.4	53.0
40	26.75	36.29	4.59	6.4	53.6
50	26.58	36.33	4.58	4.7	56.4
60	26.27	36.40	4.65	2.1	59.7
70	26.22	36.41	4.66	-1.1	61.8
80	25.99	36.51	4.56	-4.8	63.5
90	25.74	36.63	4.45	-8.8	64.2
100	24.85	36.73	4.22	-11.9	63.6
110	24.45	36.73	3.89	-11.9	64.3
120	23.84	36.82	4.14	-6.0	65.6
130	23.28	36.84	4.18	-5.0	62.6
140	22.77	36.85	4.25	-5.0	60.4
150	21.66	36.84	4.14	-6.2	60.7
160	21.08	36.82	4.01	-10.8	59.0
170	20.73	36.79	3.92	-12.8	57.0
180	20.41	36.77	4.01	-10.3	58.2
190	20.03	36.75	3.96	-9.2	59.6
200	19.91	36.75	3.93	-10.2	60.2
210	19.51	36.70	3.89	-10.5	59.9
220	19.30	36.68	3.95	-9.4	58.4
230	19.28	36.68	3.99	-9.6	56.7
240	19.26	36.68	4.00	-9.4	55.3
250	19.12	36.65	4.02	-8.0	54.2
260	18.88	36.63	4.15	-5.9	50.3
270	18.64	36.60	4.18	-6.3	47.5
280	18.49	36.60	4.25	-9.4	46.6
290	18.07	36.56	4.33	-10.8	44.1
300	17.84	36.53	4.35	-11.8	43.5
350	17.05	36.37	4.06	-11.1	46.7
400	16.49	36.29	4.11	-7.7	42.4
450	15.51	36.12	3.90	-9.7	39.6
500	14.81	36.00	3.76	-5.5	34.5
550	13.29	35.75	3.53	-3.1	26.1
600	12.24	35.60	3.36	-6.9	13.8

Table 29: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1403. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.77	36.37	4.60	NaN	NaN
10	26.41	36.35	4.65	-12.4	31.5
20	26.30	36.35	4.69	-10.7	32.4
30	26.28	36.35	4.71	-8.8	34.4
40	26.30	36.39	4.69	-6.0	35.1
50	26.39	36.53	4.68	-2.4	33.7
60	26.32	36.55	4.66	-1.0	32.8
70	26.09	36.51	4.67	1.3	33.3
80	26.18	36.57	4.64	2.0	34.0
90	26.08	36.60	4.59	1.9	35.2
100	25.26	36.63	4.29	-2.9	39.2
110	24.41	36.72	4.14	-7.0	45.4
120	23.48	36.84	4.08	-8.5	50.3
130	22.81	36.86	4.23	-11.0	52.6
140	22.14	36.86	4.24	-14.1	53.4
150	21.54	36.85	3.96	-14.2	52.0
160	20.80	36.79	4.01	-13.2	52.1
170	20.51	36.77	3.97	-13.3	53.1
180	20.44	36.78	3.99	-16.2	53.9
190	20.35	36.79	3.83	-17.8	53.6
200	20.25	36.78	3.87	-17.6	52.3
210	20.07	36.78	3.80	-18.0	51.0
220	19.73	36.77	3.75	-17.4	49.8
230	19.64	36.73	3.69	-16.2	49.8
240	19.10	36.71	3.82	-16.4	52.9
250	18.97	36.64	4.17	-17.2	55.5
260	18.82	36.63	4.27	-17.3	57.7
270	18.68	36.62	4.33	-16.3	58.7
280	18.42	36.60	4.35	-15.2	59.2
290	18.22	36.58	4.36	-16.1	58.9
300	18.06	36.56	4.35	-18.7	58.7
350	17.80	36.52	4.36	-17.4	61.5
400	17.00	36.38	4.26	-17.7	60.4
450	16.17	36.23	4.00	-14.5	40.0

Table 30: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.84	36.33	4.45	NaN	NaN
10	29.79	36.33	4.49	7.9	125.9
20	29.26	36.36	4.57	11.7	115.7
30	27.59	36.28	4.69	16.5	113.8
40	26.85	36.37	4.68	12.8	112.1
50	25.59	36.36	4.63	7.3	99.9
60	23.88	36.34	4.58	2.6	77.6
70	21.42	36.37	4.10	2.3	47.4
80	20.64	36.37	4.04	1.7	27.5
90	18.77	36.11	3.94	4.6	9.7
100	15.82	35.87	3.53	8.2	-3.5
110	14.43	35.77	3.23	7.2	-10.7
120	14.11	35.80	3.00	8.6	-17.5
130	13.93	35.79	2.96	7.8	-22.1
140	NaN	NaN	NaN	7.0	-20.7

Table 31: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.76	36.35	4.45	NaN	NaN
10	29.77	36.35	4.48	-20.8	178.8
20	29.22	36.41	4.56	-17.5	167.9
30	28.43	36.39	4.62	-15.5	160.2
40	27.60	36.38	4.66	-15.0	157.4
50	26.63	36.41	4.96	-11.4	152.9
60	25.83	36.40	5.00	-6.8	147.3
70	24.56	36.39	4.69	0.8	138.3
80	23.01	36.31	4.51	2.6	123.1
90	20.87	36.24	4.34	2.3	93.0
100	18.82	36.16	3.97	3.5	68.1
110	15.54	35.84	3.54	6.8	47.8
120	15.10	35.96	3.05	8.0	39.3
130	13.89	35.79	2.97	4.5	34.6
140	13.28	35.70	2.95	-1.7	32.6
150	12.63	35.59	2.98	-4.1	27.2
160	11.34	35.42	2.96	-5.3	16.7
170	10.55	35.33	2.90	-4.7	8.0
180	9.90	35.24	2.90	-3.5	6.7
190	9.32	35.17	2.89	-2.4	6.1
200	9.20	35.16	2.89	-2.4	3.5
210	9.01	35.13	2.90	-1.5	0.3
220	8.90	35.13	2.92	-0.5	-2.8
230	8.41	35.05	2.92	-1.1	-4.1
240	8.11	35.01	2.88	-2.4	-8.0
250	NaN	NaN	NaN	-1.9	-10.9

Table 32: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.76	36.39	4.42	NaN	NaN
10	29.77	36.39	4.47	-25.0	247.5
20	29.69	36.38	4.48	-23.4	250.3
30	29.23	36.39	4.55	-14.9	246.8
40	28.85	36.35	4.56	-12.1	239.5
50	28.14	36.34	4.61	-12.5	231.6
60	27.80	36.35	4.61	-10.8	231.1
70	26.98	36.37	4.55	-13.5	221.8
80	25.97	36.43	4.55	-15.4	206.7
90	24.84	36.50	4.22	-14.0	175.0
100	22.96	36.35	4.84	-11.2	158.3
110	21.68	36.32	4.45	-13.7	138.9
120	19.20	36.35	3.53	-20.4	126.2
130	17.87	36.30	3.26	-21.1	118.6
140	17.15	36.22	3.19	-19.6	110.7
150	16.09	36.10	3.11	-19.5	106.2
160	15.12	35.96	3.04	-19.4	98.4
170	14.03	35.81	2.97	-15.9	86.9
180	13.74	35.77	2.94	-11.5	79.2
190	13.47	35.72	2.94	-11.4	71.6
200	12.98	35.66	2.93	-13.2	69.8
210	12.51	35.58	2.89	-15.9	67.7
220	11.89	35.48	2.85	-13.4	66.1
230	11.44	35.42	2.82	-11.3	61.4
240	11.15	35.38	2.81	-10.9	54.4
250	10.85	35.35	2.83	-12.1	47.8
260	10.49	35.31	2.86	-12.4	40.4
270	9.63	35.22	2.92	-12.5	34.7
280	9.31	35.18	2.92	-13.9	29.6
290	8.41	35.07	2.96	-16.7	25.7
300	8.07	35.03	2.96	-16.9	19.7
350	7.02	34.91	3.00	-16.2	4.7

Table 33: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.78	36.34	4.47	NaN	NaN
10	29.79	36.34	4.48	-6.8	229.8
20	29.77	36.34	4.50	-6.7	228.8
30	28.67	36.26	4.68	-5.2	224.7
40	28.54	36.26	4.70	-2.9	226.5
50	28.26	36.26	4.68	-2.8	225.1
60	27.56	36.27	4.60	-3.0	224.9
70	27.21	36.28	4.52	0.8	224.8
80	27.00	36.30	4.45	3.0	223.5
90	26.76	36.35	4.40	2.3	219.3
100	26.53	36.40	4.33	0.1	210.8
110	25.21	36.51	4.24	-1.8	201.0
120	23.73	36.51	4.00	-4.6	186.5
130	21.72	36.38	4.55	-12.2	167.0
140	19.71	36.54	3.40	-21.0	154.3
150	19.14	36.48	3.31	-26.2	151.7
160	18.58	36.46	3.27	-25.9	149.5
170	18.01	36.42	3.33	-18.1	146.0
180	17.72	36.39	3.38	-10.1	139.0
190	17.20	36.30	3.33	-8.1	131.1
200	16.77	36.23	3.29	-9.4	125.3
210	15.41	36.01	3.18	-11.2	117.5
220	14.39	35.85	3.00	-14.2	114.8
230	13.84	35.78	2.94	-11.7	113.1
240	13.58	35.74	2.93	-8.1	109.7
250	12.85	35.61	2.87	-5.9	105.7
260	12.54	35.57	2.75	-8.1	102.7
270	12.32	35.54	2.72	-9.9	101.9
280	12.21	35.52	2.70	-9.2	101.7
290	11.86	35.46	2.69	-4.5	99.8
300	11.55	35.41	2.69	-0.9	96.9
350	10.46	35.26	2.68	-3.7	86.2
400	9.73	35.19	2.80	-1.9	58.6
450	8.03	35.03	2.98	-9.3	30.8
500	6.76	34.91	3.12	-7.3	7.2

Table 34: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.85	36.34	4.48	NaN	NaN
10	29.86	36.36	4.48	-1.9	204.2
20	29.82	36.36	4.49	-1.5	202.4
30	28.98	36.26	4.60	-1.2	201.5
40	28.30	36.27	4.70	3.8	205.1
50	28.10	36.27	4.62	6.1	206.9
60	27.78	36.27	4.60	12.0	203.6
70	27.38	36.25	4.57	14.8	202.5
80	27.01	36.30	4.44	13.3	202.9
90	26.77	36.31	4.33	12.2	201.8
100	26.44	36.38	4.18	11.0	198.4
110	26.23	36.44	4.08	9.6	193.4
120	25.99	36.52	4.01	7.8	187.0
130	24.14	36.56	3.96	1.9	174.7
140	22.79	36.56	3.81	-9.1	164.0
150	21.66	36.72	3.54	-14.8	155.5
160	20.90	36.68	3.44	-17.4	148.7
170	19.79	36.55	3.40	-20.2	146.8
180	19.47	36.53	3.35	-19.6	147.9
190	18.67	36.48	3.37	-12.1	140.7
200	17.25	36.31	3.31	-5.7	124.8
210	16.57	36.21	3.26	-6.7	116.0
220	16.11	36.14	3.24	-11.7	113.0
230	15.84	36.10	3.19	-11.3	114.0
240	15.16	35.99	3.09	-13.7	112.4
250	14.73	35.92	3.01	-12.9	109.9
260	14.28	35.85	2.97	-10.4	106.0
270	13.64	35.74	2.81	-10.1	101.6
280	13.37	35.70	2.82	-9.2	99.6
290	13.35	35.72	3.09	-11.2	98.2
300	13.03	35.67	3.17	-12.6	97.2
350	11.41	35.39	2.83	-11.4	92.9
400	10.78	35.30	2.77	-9.3	92.1
450	9.83	35.15	2.77	-2.6	83.6
500	9.13	35.10	2.77	5.6	61.8
550	7.98	35.02	2.99	2.1	31.7
600	6.66	34.91	3.19	-1.5	13.2

Table 35: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.79	36.35	4.48	NaN	NaN
10	29.71	36.35	4.48	24.3	154.8
20	29.20	36.31	4.57	17.9	157.0
30	28.51	36.25	4.70	13.0	152.4
40	27.83	36.24	4.69	16.2	150.7
50	27.33	36.29	4.53	17.9	154.1
60	27.24	36.30	4.47	14.9	154.8
70	27.23	36.31	4.46	12.1	153.9
80	27.23	36.31	4.45	10.4	152.7
90	26.69	36.33	4.30	3.8	148.1
100	26.47	36.38	4.23	-2.3	147.3
110	26.35	36.42	4.17	-1.9	145.0
120	25.86	36.53	4.07	5.2	143.0
130	25.38	36.62	3.95	3.1	139.8
140	24.80	36.68	3.86	-4.4	137.8
150	24.58	36.73	3.83	-5.3	141.3
160	23.81	36.79	3.76	0.4	135.8
170	22.52	36.78	3.54	-2.2	127.7
180	22.08	36.76	3.48	-16.9	126.4
190	21.01	36.77	3.43	-11.8	124.9
200	19.47	36.63	3.46	-3.7	116.8
210	19.13	36.61	3.48	-1.5	111.6
220	17.97	36.44	3.49	-6.2	108.5
230	17.76	36.42	3.54	-7.4	106.4
240	17.42	36.37	3.54	-10.3	104.7
250	17.17	36.34	3.56	-14.8	103.7
260	17.06	36.32	3.57	-16.0	102.6
270	16.60	36.24	3.53	-14.4	100.3
280	15.87	36.11	3.25	-11.5	100.0
290	15.69	36.13	3.69	-10.5	97.5
300	15.40	36.09	3.72	-7.8	93.4
350	12.71	35.60	3.00	-14.5	73.6
400	11.72	35.44	2.83	-16.4	62.9
450	11.18	35.36	2.79	-7.9	58.1
500	10.62	35.28	2.77	0.6	51.4
550	10.23	35.22	2.76	-2.3	47.6
600	8.68	35.02	2.79	-2.3	41.0
650	7.50	34.96	3.02	7.4	25.5
700	6.66	34.91	3.19	12.7	24.3
750	NaN	NaN	NaN	-1.1	18.8

Table 36: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.63	36.31	4.49	NaN	NaN
10	29.67	36.36	4.51	8.8	105.8
20	29.33	36.35	4.57	6.9	105.2
30	28.91	36.29	4.62	4.9	103.8
40	28.52	36.27	4.69	3.7	103.8
50	28.30	36.26	4.72	1.3	105.2
60	27.83	36.23	4.68	3.8	106.0
70	27.47	36.25	4.57	9.4	105.2
80	26.92	36.33	4.40	16.8	101.6
90	26.84	36.34	4.35	16.7	96.9
100	26.84	36.34	4.34	15.3	95.1
110	26.56	36.39	4.25	10.3	94.0
120	26.35	36.43	4.18	9.2	94.7
130	25.94	36.52	4.05	15.6	94.2
140	25.72	36.56	4.02	17.7	92.8
150	25.68	36.57	3.97	10.1	93.4
160	24.60	36.70	3.80	3.4	95.6
170	23.00	36.81	3.55	3.6	96.1
180	21.66	36.84	3.42	-0.8	96.5
190	20.74	36.82	3.87	-5.9	95.6
200	20.20	36.75	3.81	-12.2	94.5
210	20.05	36.77	3.92	-16.6	93.7
220	19.99	36.76	3.98	-19.2	92.1
230	19.32	36.70	4.05	-19.5	88.5
240	18.96	36.64	3.99	-17.6	86.9
250	18.65	36.60	3.99	-14.9	86.4
260	18.60	36.60	3.97	-12.8	86.0
270	18.17	36.54	4.07	-7.5	86.5
280	18.15	36.55	4.06	-2.9	85.4
290	18.10	36.54	4.11	-0.2	84.9
300	17.94	36.53	4.21	-1.8	83.1
350	17.16	36.40	4.18	-11.5	75.1
400	14.90	35.98	3.51	-9.0	53.1
450	12.87	35.62	3.00	-7.8	30.3
500	12.20	35.51	2.90	-10.6	16.8
550	11.22	35.36	2.81	-4.6	2.3
600	10.40	35.24	2.78	-3.2	-4.7

Table 37: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.86	36.39	4.46	NaN	NaN
10	29.66	36.36	4.50	-5.2	75.7
20	29.26	36.32	4.56	-1.9	77.3
30	28.95	36.31	4.63	4.9	78.8
40	28.59	36.29	4.67	5.3	75.5
50	28.38	36.29	4.65	1.2	75.0
60	27.99	36.28	4.63	-7.0	74.8
70	27.66	36.28	4.59	-9.7	74.2
80	27.34	36.27	4.53	-6.8	74.8
90	27.04	36.29	4.45	-2.4	72.9
100	26.74	36.32	4.31	-0.1	71.4
110	26.60	36.45	4.27	0.6	73.0
120	26.54	36.49	4.23	3.4	72.9
130	26.40	36.50	4.20	2.7	73.1
140	26.12	36.55	4.11	-3.3	74.1
150	25.51	36.60	3.99	-2.7	77.1
160	24.60	36.70	3.90	0.8	77.1
170	23.79	36.81	3.78	1.9	69.2
180	21.48	36.86	3.84	-0.9	60.2
190	21.17	36.82	3.76	-0.3	59.2
200	20.72	36.81	3.88	1.5	57.4
210	20.38	36.79	3.91	-2.8	53.2
220	19.99	36.75	4.02	-6.9	50.2
230	19.87	36.73	4.05	-8.0	48.4
240	19.60	36.71	4.13	-10.5	47.3
250	19.31	36.68	4.02	-11.6	46.2
260	19.08	36.66	4.14	-11.6	43.9
270	18.93	36.65	4.11	-11.7	41.6
280	18.87	36.64	4.13	-11.3	41.0
290	18.52	36.60	4.05	-9.6	40.5
300	18.38	36.58	4.12	-7.3	41.5
350	17.73	36.50	4.26	-6.0	40.2
400	16.62	36.30	3.96	-2.2	33.0
450	15.33	36.03	3.46	-2.5	26.5
500	14.35	35.86	3.22	-4.8	18.1
550	13.32	35.68	3.05	-6.2	5.3
600	11.48	35.40	2.85	8.7	-7.3

Table 38: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1409. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.56	36.35	4.47	NaN	NaN
10	29.54	36.34	4.46	-8.4	38.4
20	29.26	36.34	4.53	-11.1	38.7
30	29.19	36.35	4.55	-4.4	37.6
40	29.06	36.34	4.57	-3.1	37.6
50	28.96	36.33	4.56	-6.1	40.5
60	28.40	36.29	4.59	-7.2	42.3
70	28.02	36.31	4.57	0.5	42.0
80	27.43	36.29	4.49	1.5	43.2
90	27.26	36.35	4.41	-2.2	42.6
100	27.07	36.36	4.39	-5.3	40.7
110	26.93	36.37	4.35	-8.4	40.1
120	26.61	36.41	4.25	-11.1	41.4
130	26.44	36.43	4.19	-12.3	43.5
140	26.06	36.51	4.17	-15.4	43.5
150	25.20	36.63	3.96	-18.1	47.8
160	24.46	36.72	3.86	-15.4	49.3
170	23.83	36.76	3.80	-10.2	45.8
180	22.95	36.78	3.91	-4.9	42.9
190	22.32	36.81	3.91	-4.5	38.8
200	21.55	36.81	4.01	-11.2	32.2
210	21.33	36.81	3.99	-16.5	30.9
220	20.80	36.78	3.82	-13.5	29.9
230	20.17	36.72	3.75	-8.3	28.4
240	20.00	36.72	3.83	-5.6	27.7
250	19.61	36.70	3.91	-5.0	27.4
260	18.99	36.61	3.84	-4.2	28.2
270	18.79	36.59	3.73	-3.4	29.2
280	18.77	36.61	3.89	-4.5	27.8
290	18.78	36.62	3.97	-6.8	27.0
300	18.61	36.58	3.89	-9.3	25.7
350	17.61	36.43	3.85	-12.1	28.0
400	16.46	36.21	3.49	-7.9	30.1
450	16.19	36.18	3.58	-10.1	32.1

Table 39: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.66	33.82	4.42	NaN	NaN
10	30.15	34.47	4.42	21.3	95.1
20	29.64	35.13	4.48	20.0	89.7
30	29.40	35.64	4.76	12.3	95.9
40	28.60	35.84	4.60	13.3	97.8
50	26.81	35.86	4.53	10.4	86.8
60	25.67	36.04	4.52	6.0	68.2
70	24.65	36.20	4.56	4.8	60.2
80	24.00	36.22	4.45	3.2	57.7
90	22.89	36.24	4.34	5.0	60.4
100	21.35	36.23	4.13	10.1	63.8
110	19.31	36.19	3.80	11.2	61.2
120	17.72	36.12	3.51	8.6	47.5
130	16.00	36.00	3.26	4.6	28.1
140	NaN	NaN	NaN	1.4	19.9
150	NaN	NaN	NaN	-1.4	23.1

Table 40: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.72	33.90	4.41	NaN	NaN
10	30.01	34.98	4.47	33.5	141.6
20	29.53	35.95	4.41	33.5	141.7
30	29.46	36.14	4.45	31.6	146.5
40	29.30	36.32	4.45	30.8	148.2
50	29.19	36.33	4.46	30.9	149.5
60	27.56	36.28	4.76	30.4	149.4
70	26.77	36.30	4.81	26.5	143.6
80	24.05	36.24	4.83	28.6	137.8
90	23.34	36.35	4.63	35.7	131.9
100	22.62	36.38	4.55	35.2	129.7
110	21.80	36.35	4.43	33.6	120.8
120	19.82	36.16	4.10	30.8	102.7
130	18.68	36.12	3.70	26.1	85.5
140	17.12	36.04	3.46	22.0	65.9
150	15.90	35.95	3.34	22.0	51.1
160	14.79	35.89	3.19	20.1	40.4
170	14.03	35.82	3.11	17.1	32.6
180	13.90	35.80	3.11	14.7	27.2
190	13.54	35.74	3.06	13.4	23.9
200	13.01	35.66	3.00	8.8	21.5
210	12.87	35.64	2.95	4.0	20.2
220	12.53	35.58	2.90	2.4	22.2
230	12.34	35.56	2.88	2.0	24.3
240	12.03	35.51	2.88	6.3	23.1
250	11.33	35.41	2.84	2.8	22.4
260	NaN	NaN	NaN	0.7	21.9

Table 41: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.34	35.54	4.40	NaN	NaN
10	29.24	36.05	4.43	19.4	174.1
20	29.25	36.29	4.42	18.1	179.6
30	29.28	36.32	4.44	17.2	182.4
40	28.95	36.32	4.51	20.3	178.6
50	28.04	36.34	4.50	24.2	172.3
60	27.48	36.36	4.42	26.0	166.6
70	27.02	36.39	4.30	28.3	164.0
80	26.66	36.41	4.31	29.9	160.6
90	25.87	36.46	4.06	34.9	157.7
100	24.31	36.37	4.58	33.2	150.6
110	22.60	36.36	4.43	30.1	143.1
120	21.77	36.40	4.32	28.2	137.9
130	21.07	36.42	4.10	25.2	133.8
140	20.45	36.43	3.90	25.1	131.3
150	19.58	36.40	3.65	31.0	127.9
160	18.81	36.42	3.25	36.0	119.0
170	17.61	36.21	3.35	33.1	108.8
180	16.11	36.02	3.25	27.6	101.4
190	15.43	35.95	3.23	24.6	90.5
200	15.26	35.98	3.18	20.6	79.5
210	14.64	35.90	3.11	16.0	72.7
220	14.46	35.88	3.13	13.5	67.5
230	14.03	35.81	3.08	12.1	64.8
240	13.59	35.74	3.02	12.0	63.1
250	13.27	35.69	3.00	14.0	62.2
260	12.73	35.61	3.02	16.5	55.9
270	12.17	35.53	2.97	15.8	47.8
280	11.53	35.43	2.90	17.7	40.3
290	10.65	35.30	2.84	17.5	35.9
300	10.46	35.29	2.82	15.5	32.6
350	8.99	35.11	2.85	8.1	20.2

Table 42: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.47	36.37	4.42	NaN	NaN
10	29.47	36.37	4.44	18.0	180.8
20	29.47	36.37	4.43	16.2	182.2
30	29.45	36.37	4.43	16.2	181.1
40	29.34	36.36	4.48	16.0	180.7
50	28.66	36.32	4.59	13.4	179.0
60	28.19	36.32	4.52	15.7	175.7
70	27.74	36.33	4.43	17.0	172.5
80	27.33	36.40	4.40	17.2	169.7
90	26.82	36.42	4.19	17.7	166.8
100	26.17	36.49	4.00	18.7	162.7
110	25.27	36.64	3.87	14.6	156.1
120	23.13	36.31	4.76	13.4	152.7
130	21.77	36.37	4.42	15.1	147.0
140	21.02	36.41	4.17	14.2	139.8
150	20.75	36.50	3.86	15.3	136.0
160	20.88	36.71	3.33	17.1	137.3
170	19.94	36.54	3.41	19.8	134.7
180	19.14	36.49	3.24	21.0	128.8
190	18.60	36.42	3.23	21.7	123.0
200	18.24	36.40	3.16	25.5	117.8
210	17.77	36.44	3.55	28.3	113.5
220	17.48	36.39	3.56	30.4	109.7
230	17.01	36.29	3.29	29.4	106.6
240	16.74	36.26	3.36	24.2	105.6
250	16.40	36.21	3.37	23.2	104.8
260	15.99	36.13	3.24	24.1	100.7
270	15.49	36.04	3.11	25.4	92.3
280	14.10	35.82	3.05	25.1	80.7
290	13.83	35.78	3.04	23.4	73.7
300	13.81	35.78	3.05	21.0	70.3
350	11.58	35.45	2.92	9.2	64.8
400	9.37	35.13	2.83	12.8	47.1
450	8.57	35.04	2.83	10.7	30.9
500	7.26	34.94	3.02	14.7	12.8

Table 43: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.41	36.36	4.44	NaN	NaN
10	29.42	36.36	4.45	9.2	169.6
20	29.43	36.36	4.48	9.9	170.0
30	29.29	36.35	4.49	10.7	172.7
40	28.90	36.30	4.60	10.2	172.3
50	28.54	36.26	4.60	10.9	169.9
60	28.35	36.26	4.58	10.8	166.1
70	27.88	36.27	4.45	8.9	164.1
80	27.36	36.30	4.31	7.4	165.5
90	27.20	36.35	4.30	8.6	166.4
100	26.60	36.43	4.11	10.2	161.9
110	25.90	36.53	3.98	11.7	157.6
120	25.05	36.65	3.84	13.6	151.5
130	23.74	36.64	3.84	10.2	145.4
140	22.93	36.78	3.55	8.0	140.2
150	22.22	36.77	3.46	8.8	135.4
160	21.59	36.78	3.43	7.4	132.9
170	20.76	36.71	3.46	6.2	131.1
180	19.59	36.49	3.37	5.1	128.6
190	19.16	36.47	3.29	7.4	127.2
200	18.64	36.42	3.20	13.1	122.9
210	18.05	36.40	3.15	16.2	118.8
220	17.83	36.43	3.39	17.2	114.8
230	17.76	36.43	3.58	16.6	112.0
240	17.23	36.32	3.29	16.2	109.5
250	16.86	36.27	3.29	16.1	108.7
260	16.46	36.21	3.26	17.1	106.7
270	16.15	36.17	3.32	17.9	104.5
280	15.98	36.14	3.31	16.6	104.4
290	15.92	36.13	3.30	16.2	102.6
300	15.69	36.09	3.19	13.1	100.9
350	12.61	35.57	2.89	6.8	98.2
400	10.91	35.32	2.83	11.7	90.9
450	10.27	35.23	2.83	15.1	88.4
500	9.71	35.15	2.80	17.9	79.0
550	8.92	35.08	2.87	17.5	59.0
600	7.01	34.93	3.11	9.6	17.1
650	NaN	NaN	NaN	18.8	-2.2

Table 44: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.23	36.32	4.45	NaN	NaN
10	29.23	36.32	4.48	11.0	131.0
20	29.16	36.32	4.47	11.0	131.0
30	29.15	36.34	4.49	9.0	132.1
40	28.96	36.34	4.56	9.0	134.8
50	28.17	36.30	4.56	10.8	137.6
60	27.82	36.32	4.50	9.9	141.4
70	27.22	36.33	4.40	5.9	143.9
80	27.05	36.34	4.34	3.9	145.0
90	26.85	36.34	4.33	3.2	145.3
100	26.78	36.34	4.30	0.2	143.4
110	26.16	36.46	4.04	1.8	141.5
120	25.48	36.60	3.87	-0.3	134.4
130	24.75	36.73	3.79	-1.1	130.6
140	24.25	36.81	3.82	-0.5	128.9
150	23.70	36.85	3.93	0.5	127.0
160	23.18	36.93	4.27	3.8	124.7
170	22.63	36.92	4.23	6.1	120.8
180	21.55	36.85	4.07	6.6	114.1
190	20.61	36.78	3.98	4.6	109.5
200	20.04	36.73	3.94	4.9	106.0
210	19.53	36.69	4.02	6.1	101.8
220	18.98	36.63	3.99	7.4	98.7
230	18.63	36.57	3.74	7.8	96.7
240	18.57	36.60	4.14	9.7	94.5
250	18.31	36.58	4.23	9.5	93.9
260	17.99	36.53	4.15	8.1	93.8
270	17.85	36.50	4.13	8.5	93.6
280	17.34	36.38	3.72	10.7	92.3
290	17.08	36.33	3.60	12.1	92.0
300	16.91	36.30	3.58	13.5	91.8
350	15.00	35.97	3.27	5.9	79.1
400	13.30	35.69	3.06	-0.4	69.7
450	11.85	35.46	2.90	-0.4	55.8
500	10.97	35.33	2.84	-3.2	45.4
550	10.19	35.21	2.81	-5.1	35.7
600	9.76	35.16	2.80	-0.8	29.6
650	9.15	35.08	2.80	4.3	28.7
700	7.95	34.97	2.92	-4.8	16.4
750	NaN	NaN	NaN	-0.6	3.7

Table 45: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.28	36.32	4.43	NaN	NaN
10	29.28	36.32	4.46	5.1	92.8
20	29.19	36.31	4.47	3.3	87.3
30	29.02	36.32	4.52	2.9	88.7
40	28.68	36.31	4.57	1.4	91.6
50	27.98	36.32	4.56	1.4	96.4
60	27.48	36.33	4.44	4.4	97.1
70	27.35	36.35	4.39	5.1	94.4
80	27.17	36.35	4.36	3.3	95.4
90	26.72	36.39	4.23	3.5	96.5
100	26.50	36.41	4.18	1.3	97.0
110	26.34	36.44	4.11	1.8	99.9
120	25.79	36.53	3.97	3.5	105.1
130	25.35	36.60	3.81	3.2	103.2
140	24.85	36.67	3.79	-1.2	97.2
150	23.87	36.76	3.69	-3.8	96.0
160	23.65	36.79	3.71	-4.3	93.5
170	22.47	36.83	3.75	-3.0	87.5
180	22.06	36.82	3.70	-2.7	85.7
190	21.58	36.80	3.60	0.2	86.2
200	21.18	36.77	3.44	8.3	82.7
210	20.51	36.74	3.42	9.9	80.3
220	20.35	36.78	4.31	6.6	78.6
230	19.88	36.74	4.18	5.3	77.1
240	19.46	36.66	3.74	4.6	74.8
250	19.04	36.60	3.48	3.6	73.7
260	18.74	36.57	3.54	3.8	70.7
270	18.59	36.55	3.57	5.5	69.8
280	18.33	36.52	3.60	7.0	67.1
290	18.17	36.49	3.61	10.3	62.2
300	18.00	36.47	3.62	10.3	58.4
350	16.72	36.27	3.59	7.4	56.4
400	15.19	36.00	3.34	5.3	52.3
450	13.75	35.76	3.14	3.0	44.9
500	12.09	35.49	2.94	-2.8	30.7
550	11.17	35.35	2.87	-8.3	21.6
600	10.22	35.23	2.89	-11.1	20.3
650	9.98	35.24	3.04	-9.0	17.8

Table 46: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.34	36.34	4.44	NaN	NaN
10	29.34	36.34	4.45	3.1	50.9
20	29.24	36.33	4.48	4.1	53.6
30	29.20	36.33	4.48	3.9	53.4
40	29.00	36.34	4.49	4.9	52.0
50	28.60	36.36	4.53	5.6	50.1
60	27.90	36.34	4.48	6.3	47.5
70	27.28	36.34	4.41	3.8	44.7
80	26.91	36.37	4.28	0.2	44.4
90	26.56	36.41	4.16	-0.0	44.2
100	26.14	36.48	4.03	-3.3	43.6
110	25.99	36.51	4.01	-3.5	46.1
120	25.62	36.57	3.94	1.4	49.7
130	24.71	36.68	3.80	1.9	51.9
140	24.32	36.72	3.72	2.2	50.4
150	23.57	36.76	3.67	2.7	46.5
160	23.26	36.74	3.72	0.5	45.7
170	23.01	36.79	3.60	-0.3	48.0
180	21.93	36.80	3.62	-0.7	48.9
190	21.88	36.83	3.79	3.6	48.7
200	21.70	36.83	3.77	8.8	47.2
210	20.74	36.75	3.39	9.4	43.0
220	20.44	36.73	3.43	8.3	38.4
230	20.24	36.72	3.42	5.7	37.4
240	20.04	36.70	3.43	5.0	37.9
250	19.83	36.69	3.44	2.4	38.0
260	19.66	36.67	3.47	0.0	38.8
270	19.28	36.63	3.48	0.7	37.8
280	18.66	36.56	3.56	-1.1	36.9
290	18.53	36.55	3.58	-5.7	37.5
300	18.42	36.53	3.60	-7.4	38.6
350	17.23	36.35	3.63	-4.7	43.9
400	16.05	36.17	3.62	-2.9	39.5
450	14.55	35.89	3.24	-2.2	33.2
500	13.53	35.72	3.10	-2.9	31.4
550	12.55	35.57	3.01	-2.4	27.1
600	11.43	35.45	3.14	-5.3	20.0

Table 47: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1414. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.37	36.34	4.44	NaN	NaN
10	29.37	36.34	4.45	6.3	13.3
20	29.23	36.32	4.48	6.0	13.0
30	29.16	36.33	4.49	4.2	10.6
40	29.14	36.33	4.48	6.4	12.4
50	28.76	36.34	4.49	7.2	10.4
60	28.55	36.33	4.51	1.5	5.4
70	27.98	36.32	4.51	2.8	0.7
80	27.71	36.30	4.52	2.8	-0.7
90	27.23	36.33	4.45	3.8	0.4
100	26.40	36.43	4.11	8.7	-0.9
110	25.89	36.52	4.01	7.0	-2.7
120	25.11	36.63	3.85	6.5	-4.2
130	24.72	36.68	3.78	10.3	-3.3
140	24.01	36.73	3.72	10.8	-3.1
150	23.46	36.77	3.63	5.1	-3.0
160	23.15	36.78	3.60	1.7	-1.5
170	22.44	36.80	3.51	7.3	6.5
180	21.78	36.79	3.46	11.0	10.3
190	21.52	36.78	3.44	12.9	11.9
200	21.15	36.78	3.44	7.7	12.0
210	20.60	36.74	3.43	3.4	13.8
220	20.46	36.73	3.43	1.9	15.1
230	20.08	36.70	3.41	0.9	17.3
240	19.76	36.67	3.42	-0.9	20.3
250	19.38	36.62	3.39	-2.6	22.3
260	19.13	36.59	3.41	-4.3	24.0
270	18.88	36.58	3.52	-7.4	26.9
280	18.61	36.55	3.54	-9.0	27.5
290	18.55	36.54	3.53	-8.8	27.9
300	18.39	36.52	3.57	-9.7	28.9
350	17.29	36.37	3.69	-6.0	34.0
400	16.27	36.21	3.74	-10.4	36.1
450	15.14	36.03	3.63	-2.7	24.0

Table 48: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.85	36.36	4.54	NaN	NaN
10	25.87	36.36	4.56	-8.2	122.7
20	25.88	36.36	4.55	-5.4	125.1
30	25.88	36.36	4.56	-4.0	123.6
40	25.87	36.36	4.55	-2.6	123.5
50	25.87	36.36	4.55	-1.9	123.1
60	25.87	36.36	4.56	-1.9	120.6
70	25.85	36.35	4.54	-2.5	119.2
80	25.78	36.34	4.57	-1.0	115.5
90	25.62	36.31	4.57	-0.6	110.6
100	25.49	36.28	4.58	-1.2	107.4
110	25.39	36.25	4.53	-2.5	103.4
120	25.42	36.29	4.54	-5.4	101.0
130	25.21	36.35	4.55	-3.7	94.5
140	NaN	NaN	NaN	-1.3	81.5

Table 49: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.98	36.37	4.48	NaN	NaN
10	25.97	36.37	4.49	-1.3	107.8
20	25.99	36.37	4.48	-1.3	107.8
30	25.99	36.37	4.51	-1.1	108.4
40	25.97	36.37	4.52	1.7	110.5
50	25.99	36.37	4.53	1.9	109.8
60	25.99	36.37	4.53	2.4	110.1
70	25.99	36.37	4.53	2.4	109.2
80	25.99	36.37	4.54	2.1	109.4
90	25.99	36.37	4.52	2.3	109.4
100	25.97	36.36	4.52	2.4	108.9
110	25.97	36.36	4.51	3.3	108.4
120	25.95	36.36	4.52	4.2	106.9
130	25.86	36.34	4.50	4.4	103.2
140	25.60	36.37	4.51	2.7	96.4
150	25.43	36.41	4.47	0.6	91.2
160	25.05	36.47	4.29	0.2	89.7
170	23.20	36.55	4.01	4.9	91.7
180	22.65	36.70	3.53	7.0	85.6
190	21.16	36.57	3.52	6.6	76.3
200	18.46	36.20	3.41	0.8	51.3
210	17.55	36.15	3.25	-4.7	26.9
220	16.35	36.05	3.16	-0.9	12.4
230	15.22	35.94	3.07	-2.5	1.7
240	14.64	35.87	2.99	-4.3	3.5
250	13.39	35.70	2.89	-4.5	6.3

Table 50: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.98	36.38	4.52	NaN	NaN
10	26.02	36.38	4.48	3.7	101.6
20	26.03	36.38	4.50	3.4	102.7
30	26.03	36.38	4.49	2.8	102.6
40	26.03	36.38	4.50	4.8	104.2
50	26.03	36.38	4.49	4.3	104.3
60	26.03	36.38	4.50	5.3	103.2
70	26.04	36.38	4.50	5.8	103.5
80	26.04	36.38	4.50	6.1	103.6
90	26.04	36.38	4.50	7.2	103.9
100	26.05	36.38	4.50	6.7	103.9
110	26.05	36.38	4.50	6.0	103.5
120	26.05	36.38	4.50	6.4	103.4
130	26.05	36.38	4.51	6.6	103.4
140	26.04	36.38	4.49	6.9	102.6
150	26.02	36.39	4.49	6.7	101.3
160	24.96	36.63	3.77	8.1	96.3
170	23.57	36.58	3.83	7.7	92.5
180	22.57	36.42	4.15	5.6	92.2
190	22.39	36.68	3.49	5.9	91.2
200	22.08	36.81	3.40	5.4	85.8
210	21.43	36.76	3.36	5.0	83.0
220	20.80	36.65	3.33	4.1	81.0
230	20.32	36.57	3.28	2.9	76.8
240	19.35	36.47	3.22	0.4	74.2
250	18.03	36.29	3.16	-0.3	68.8
260	16.21	36.03	3.16	1.3	61.5
270	15.48	35.93	3.06	6.7	53.1
280	14.26	35.78	3.07	8.9	41.2
290	12.95	35.62	2.94	9.3	29.1
300	11.45	35.43	2.91	5.8	19.4
350	9.10	35.12	2.83	2.8	-6.7

Table 51: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.02	36.38	4.51	NaN	NaN
10	26.03	36.38	4.51	4.6	98.3
20	26.03	36.38	4.51	4.6	98.3
30	26.02	36.38	4.51	6.3	98.1
40	26.04	36.38	4.52	5.7	97.1
50	26.04	36.38	4.52	6.1	98.1
60	26.03	36.38	4.50	5.7	97.6
70	26.04	36.38	4.50	6.2	97.2
80	26.04	36.38	4.50	5.8	97.6
90	26.05	36.38	4.52	5.3	95.8
100	26.05	36.38	4.53	6.2	95.7
110	26.05	36.38	4.49	6.6	95.2
120	26.05	36.38	4.51	6.0	94.2
130	26.06	36.38	4.50	5.8	95.4
140	26.05	36.38	4.52	6.5	96.4
150	26.05	36.38	4.49	6.0	96.0
160	25.24	36.49	4.12	3.8	95.7
170	24.10	36.52	3.92	2.4	94.7
180	23.25	36.54	4.07	3.7	92.4
190	22.63	36.77	3.58	8.3	91.2
200	22.12	36.80	3.43	7.9	92.0
210	21.27	36.77	3.37	4.9	94.4
220	20.88	36.74	3.31	2.5	94.2
230	20.31	36.68	3.31	0.4	95.8
240	19.69	36.59	3.24	3.1	99.1
250	18.86	36.48	3.09	5.7	99.5
260	17.99	36.39	3.05	6.8	97.3
270	17.79	36.40	3.12	6.0	94.6
280	17.58	36.39	3.38	3.1	94.9
290	17.31	36.35	3.40	1.5	94.3
300	16.97	36.29	3.42	-0.8	91.4
350	13.83	35.77	2.83	9.2	91.7
400	11.29	35.41	2.90	8.4	61.4
450	9.04	35.09	2.80	5.4	35.2
500	7.43	34.94	2.96	7.9	3.5

Table 52: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.21	36.48	4.51	NaN	NaN
10	26.21	36.47	4.50	5.2	86.5
20	26.22	36.47	4.50	5.2	86.5
30	26.23	36.47	4.52	4.8	87.0
40	26.23	36.47	4.50	4.5	85.0
50	26.23	36.47	4.52	4.1	85.3
60	26.24	36.47	4.52	3.2	85.2
70	26.24	36.47	4.51	3.0	86.0
80	26.24	36.47	4.50	3.3	85.6
90	26.25	36.47	4.51	4.0	85.0
100	26.26	36.47	4.49	4.2	85.8
110	26.23	36.46	4.51	4.2	87.4
120	26.23	36.46	4.51	5.1	88.6
130	26.24	36.47	4.52	5.0	89.3
140	26.23	36.47	4.48	6.1	90.7
150	25.94	36.63	4.32	4.8	89.9
160	25.43	36.64	3.97	3.3	87.9
170	24.84	36.69	3.71	1.7	89.8
180	24.09	36.76	3.62	0.5	90.8
190	23.40	36.80	3.54	2.3	91.1
200	22.57	36.81	3.46	6.9	91.7
210	21.79	36.80	3.39	6.7	90.8
220	21.22	36.77	3.35	3.6	89.2
230	20.50	36.71	3.32	-0.8	89.8
240	19.86	36.62	3.25	-0.0	93.5
250	19.30	36.59	3.24	1.7	94.6
260	18.60	36.49	3.20	1.9	91.6
270	18.11	36.46	3.34	4.0	91.8
280	17.47	36.35	3.35	3.9	90.8
290	17.22	36.31	3.22	2.8	90.1
300	16.68	36.23	3.18	2.6	91.8
350	14.39	35.86	2.90	-0.6	88.6
400	12.22	35.51	2.84	10.2	84.4
450	11.28	35.37	2.75	6.7	77.4
500	9.66	35.16	2.76	3.8	71.5
550	7.92	34.99	2.95	6.8	50.1
600	7.12	34.92	3.02	1.6	19.8

Table 53: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.08	36.38	4.49	NaN	NaN
10	26.08	36.38	4.48	1.9	60.9
20	26.07	36.38	4.49	1.9	60.9
30	26.07	36.38	4.50	2.0	62.2
40	26.07	36.38	4.51	2.5	60.1
50	26.09	36.38	4.50	2.4	60.4
60	26.09	36.38	4.52	1.7	60.4
70	26.09	36.38	4.51	2.3	61.7
80	26.09	36.38	4.51	3.6	61.3
90	26.09	36.38	4.50	3.5	60.9
100	26.09	36.38	4.51	4.1	60.2
110	26.09	36.38	4.51	4.3	61.2
120	26.10	36.38	4.51	4.5	59.9
130	26.10	36.38	4.52	4.2	59.9
140	25.79	36.56	4.31	5.3	60.6
150	25.31	36.67	4.05	8.0	64.3
160	24.89	36.77	4.00	8.0	66.8
170	24.44	36.83	4.22	6.1	68.9
180	23.71	36.84	4.08	4.6	71.5
190	23.32	36.87	4.27	-0.6	75.5
200	22.72	36.87	4.13	-3.8	78.5
210	21.92	36.81	3.81	-6.0	79.5
220	21.32	36.75	3.36	-5.5	77.2
230	20.80	36.73	3.33	-5.5	76.2
240	20.02	36.68	3.32	-4.6	78.2
250	19.36	36.63	3.36	-4.5	80.5
260	19.10	36.60	3.39	-4.9	81.5
270	18.59	36.53	3.42	-4.6	84.0
280	18.10	36.47	3.45	-3.1	85.0
290	17.62	36.39	3.44	-1.7	85.4
300	16.99	36.28	3.27	-3.0	84.6
350	15.83	36.15	3.77	-1.1	78.4
400	13.88	35.78	3.07	3.7	66.6
450	12.65	35.58	2.87	-0.7	58.5
500	10.92	35.31	2.77	-0.6	43.7
550	9.68	35.15	2.73	-0.2	35.7
600	8.82	35.04	2.74	-3.0	33.1
650	8.03	34.99	2.88	-3.1	23.5
700	7.21	34.93	3.02	2.7	16.8

Table 54: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.00	36.37	4.53	NaN	NaN
10	26.01	36.37	4.53	-4.3	39.5
20	26.02	36.37	4.55	-4.3	39.5
30	26.02	36.37	4.54	-3.8	39.9
40	26.02	36.37	4.55	-3.4	41.3
50	26.02	36.37	4.56	-2.9	41.7
60	26.03	36.37	4.56	-1.7	41.9
70	26.02	36.37	4.55	-0.4	42.1
80	26.03	36.37	4.54	0.6	41.3
90	26.03	36.37	4.55	0.5	41.0
100	26.03	36.37	4.54	0.1	41.9
110	26.03	36.37	4.55	0.2	42.4
120	25.97	36.41	4.52	-5.4	48.0
130	25.91	36.44	4.51	-9.9	53.8
140	25.27	36.65	4.22	-10.8	53.6
150	24.71	36.72	3.72	-8.3	51.0
160	24.11	36.83	4.17	-6.0	52.3
170	23.66	36.85	4.16	-2.6	55.6
180	23.02	36.81	3.62	0.3	57.8
190	22.49	36.81	3.45	0.9	59.9
200	21.78	36.82	3.60	1.8	60.8
210	21.09	36.78	3.50	-0.2	60.7
220	20.59	36.76	3.71	-5.0	60.0
230	20.11	36.74	3.87	-9.3	60.4
240	19.76	36.71	4.07	-11.7	61.1
250	19.39	36.68	4.13	-10.5	62.0
260	19.11	36.65	4.17	-8.2	63.2
270	18.94	36.64	4.13	-5.5	64.2
280	18.74	36.61	4.25	-3.4	63.0
290	18.57	36.59	4.23	-3.8	61.8
300	18.38	36.58	4.22	-3.9	61.5
350	16.63	36.25	3.50	-4.3	55.1
400	15.36	36.02	3.28	-1.6	48.5
450	13.86	35.77	3.06	0.9	40.7
500	12.72	35.62	3.08	3.7	31.9
550	12.23	35.55	3.04	-4.2	31.1
600	11.24	35.40	2.97	4.4	27.8
650	9.13	35.11	2.83	-2.4	17.9

Table 55: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.92	36.42	4.52	NaN	NaN
10	25.92	36.42	4.53	-25.3	17.0
20	25.92	36.42	4.53	-20.5	10.7
30	25.92	36.42	4.55	-19.3	11.7
40	25.93	36.42	4.54	-16.8	12.3
50	25.93	36.42	4.54	-15.5	13.4
60	25.94	36.43	4.53	-14.1	13.6
70	25.94	36.43	4.54	-11.8	15.2
80	25.94	36.43	4.53	-8.5	16.9
90	25.94	36.43	4.52	-5.6	19.2
100	25.94	36.44	4.54	-1.6	21.4
110	25.93	36.45	4.53	1.7	22.6
120	25.92	36.45	4.54	6.1	24.0
130	25.22	36.63	4.42	10.6	31.3
140	24.36	36.73	3.74	11.7	37.9
150	23.82	36.77	3.62	8.0	38.6
160	23.02	36.81	3.55	3.4	38.6
170	22.61	36.81	3.53	-1.6	40.3
180	22.22	36.81	3.49	-2.7	44.9
190	21.55	36.79	3.53	0.2	45.9
200	21.21	36.78	3.52	-0.0	46.4
210	20.90	36.76	3.51	-1.8	50.1
220	20.28	36.71	3.36	-1.9	51.7
230	19.87	36.67	3.33	-2.8	51.0
240	19.29	36.61	3.35	-2.6	51.9
250	19.12	36.59	3.36	-4.3	50.3
260	18.87	36.57	3.37	-6.1	48.9
270	18.77	36.55	3.38	-7.8	49.4
280	18.49	36.52	3.44	-9.7	50.0
290	18.29	36.50	3.50	-11.2	49.3
300	18.04	36.47	3.88	-11.9	49.0
350	17.60	36.47	4.26	-7.1	52.2
400	16.98	36.36	4.08	-7.9	50.0
450	15.66	36.13	3.89	-6.6	46.8
500	14.01	35.85	3.65	-6.2	41.9
550	12.80	35.67	3.41	-6.6	37.1
600	12.27	35.59	3.29	-1.6	30.5

Table 56: Same as Table 22 for the cruise ID and the station number indicated.

Cruise ID: ws1419. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.89	36.41	4.58	NaN	NaN
10	25.89	36.41	4.56	10.0	-19.0
20	25.89	36.41	4.57	9.9	-19.0
30	25.90	36.43	4.54	9.4	-14.4
40	25.85	36.46	4.55	9.3	-11.4
50	25.82	36.47	4.53	4.4	-11.4
60	25.78	36.49	4.50	0.2	-10.3
70	25.77	36.49	4.52	0.3	-7.9
80	25.77	36.49	4.52	-0.3	-7.2
90	25.65	36.50	4.49	-3.3	-3.0
100	25.30	36.56	4.34	-9.9	7.4
110	25.23	36.57	4.32	-12.3	13.8
120	24.90	36.65	4.20	-10.2	15.1
130	24.30	36.72	4.06	-8.7	17.4
140	24.00	36.76	3.92	-8.3	19.0
150	23.38	36.74	4.19	-4.9	25.7
160	23.16	36.71	4.29	-5.4	30.9
170	22.63	36.74	4.43	-8.8	33.7
180	22.20	36.73	4.33	-11.6	36.7
190	21.55	36.72	4.26	-12.5	44.5
200	20.87	36.72	4.29	-10.5	45.9
210	20.38	36.70	4.17	-8.5	45.4
220	20.06	36.67	4.16	-11.0	45.8
230	19.85	36.65	4.30	-14.0	46.2
240	19.68	36.65	4.31	-13.3	46.0
250	19.36	36.64	4.25	-14.2	46.3
260	19.19	36.64	4.24	-15.7	46.9
270	18.94	36.62	4.22	-16.5	45.4
280	18.68	36.60	4.21	-18.8	44.7
290	18.53	36.58	4.32	-17.8	43.6
300	18.44	36.57	4.23	-14.8	42.8
350	17.69	36.49	4.29	-12.8	40.7
400	16.95	36.36	4.16	-11.8	41.9
450	16.16	36.22	4.05	-9.8	30.9

Table 57: Same as Table 22 for the cruise ID and the station number indicated.

