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Oceanographic data collected in the Straits of Florida at 27°N during the year 2004, including the estimated Florida Current transport

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Contents

Table of Contents **iv**

List of Figures **v**

List of Tables **ix**

Abstract **x**

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 **14**

5.1 Cable observations 14

5.2 Dropsonde - XBT cruises 14

5.3 CTD - LADCP - SADCP cruises 14

6 Data availability **16**

7 Acknowledgements **17**

8 References **18**

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

9 Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel. 13

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 insuficient 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 Sv = 10^6 m^3 s^{-1}). NaN values indicate no data is available on that day; dashes indicate that day does not exist in that month/year. Table oriented such that each row is the day of the month and each column is the month. 20

5 Tables of dropsonde floats measurements made during the cruises on the indicated dates. Station numbers in left column are as shown in Table 1. Tables include information on where the dropsonde floats were deployed, where they surfaced, and the resulting estimated zonal (U) and meridional (V) vertically averaged velocity. NaN indicates no observation at that station. 22

6 Same as Table 5 for dropsonde measurements during the cruises on the indicated dates. 23

7 Same as Table 5 for dropsonde measurements during the cruises on the indicated dates. 24

8 Expendable bathythermograph (XBT) temperature profile data collected during the cruise on the date indicated at the top. Left column indicates the estimated depth in meters from the fall rate. Temperature units are degrees Celsius. NaN indicates missing values due to instrument failure, and dashes indicates depths below bottom for each station. 26

9 Same as Table 8 for the cruise on the indicated date. 27

10 Same as Table 8 for the cruise on the indicated date. 28

11 Same as Table 8 for the cruise on the indicated date. 29

12 Same as Table 8 for the cruise on the indicated date. 30

13 Same as Table 8 for the cruise on the indicated date. 31

14 Same as Table 8 for the cruise on the indicated date. 32

15 Same as Table 8 for the cruise on the indicated date. 33

16 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. . . 35

17 Same as Table 16 for LADCP data collected on the indicated dates. 36

18 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. 38

19 Same as Table 18 for the cruise ID and the station number indicated. 39

20 Same as Table 18 for the cruise ID and the station number indicated. 40

21 Same as Table 18 for the cruise ID and the station number indicated. 41

22 Same as Table 18 for the cruise ID and the station number indicated. 42

23 Same as Table 18 for the cruise ID and the station number indicated. 43

24 Same as Table 18 for the cruise ID and the station number indicated. 44

25 Same as Table 18 for the cruise ID and the station number indicated. 45

26 Same as Table 18 for the cruise ID and the station number indicated. 46

27 Same as Table 18 for the cruise ID and the station number indicated. 47

28 Same as Table 18 for the cruise ID and the station number indicated. 48

29 Same as Table 18 for the cruise ID and the station number indicated. 49

30 Same as Table 18 for the cruise ID and the station number indicated. 50

31 Same as Table 18 for the cruise ID and the station number indicated. 51

32 Same as Table 18 for the cruise ID and the station number indicated. 52

33 Same as Table 18 for the cruise ID and the station number indicated. 53

34 Same as Table 18 for the cruise ID and the station number indicated. 54

35 Same as Table 18 for the cruise ID and the station number indicated. 55

36 Same as Table 18 for the cruise ID and the station number indicated. 56

37 Same as Table 18 for the cruise ID and the station number indicated. 57
38 Same as Table 18 for the cruise ID and the station number indicated. 58
39 Same as Table 18 for the cruise ID and the station number indicated. 59
40 Same as Table 18 for the cruise ID and the station number indicated. 60
41 Same as Table 18 for the cruise ID and the station number indicated. 61
42 Same as Table 18 for the cruise ID and the station number indicated. 62
43 Same as Table 18 for the cruise ID and the station number indicated. 63
44 Same as Table 18 for the cruise ID and the station number indicated. 64
45 Same as Table 18 for the cruise ID and the station number indicated. 65
46 Same as Table 18 for the cruise ID and the station number indicated. 66
47 Same as Table 18 for the cruise ID and the station number indicated. 67
48 Same as Table 18 for the cruise ID and the station number indicated. 68
49 Same as Table 18 for the cruise ID and the station number indicated. 69
50 Same as Table 18 for the cruise ID and the station number indicated. 70
51 Same as Table 18 for the cruise ID and the station number indicated. 71
52 Same as Table 18 for the cruise ID and the station number indicated. 72
53 Same as Table 18 for the cruise ID and the station number indicated. 73
54 Same as Table 18 for the cruise ID and the station number indicated. 74
55 Same as Table 18 for the cruise ID and the station number indicated. 75
56 Same as Table 18 for the cruise ID and the station number indicated. 76
57 Same as Table 18 for the cruise ID and the station number indicated. 77
58 Same as Table 18 for the cruise ID and the station number indicated. 78
59 Same as Table 18 for the cruise ID and the station number indicated. 79
60 Same as Table 18 for the cruise ID and the station number indicated. 80
61 Same as Table 18 for the cruise ID and the station number indicated. 81

62 Same as Table 18 for the cruise ID and the station number indicated. 82

Abstract

This report summarizes the Florida Current data collected along 27°N during calendar year 2004 as part of the NOAA-funded Western Boundary Time Series project. This includes the daily Florida Current volume transport values estimated from one-minute voltage data on an out-of-service telephone cable, as well as observations collected on cruises on R/V Walton Smith (i.e. full-water-column conductivity-temperature-depth, CTD, and shipboard and lowered acoustic Doppler current profiler, SADCP and LADCP, profiles). The report also includes dropsonde and expendable bathythermograph (XBT) data collected on small boat cruises. The data presented herein are in final processed and quality controlled form. The report also documents where the electronic files for these data can be obtained.

1 Introduction

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

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

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

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

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

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

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

1.1 Continuous observations

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

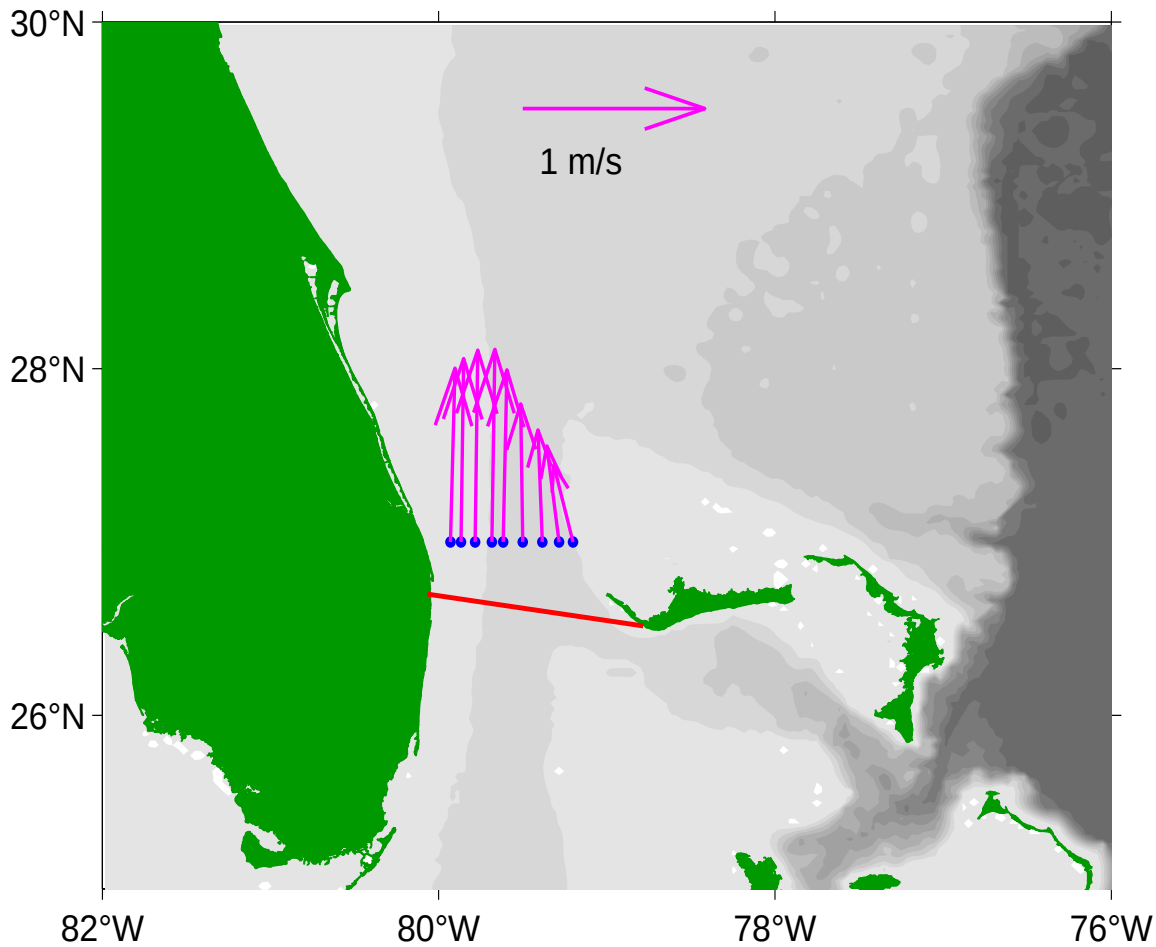

Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities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

1.2 Shipboard measurements

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

2 Cable observations

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

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

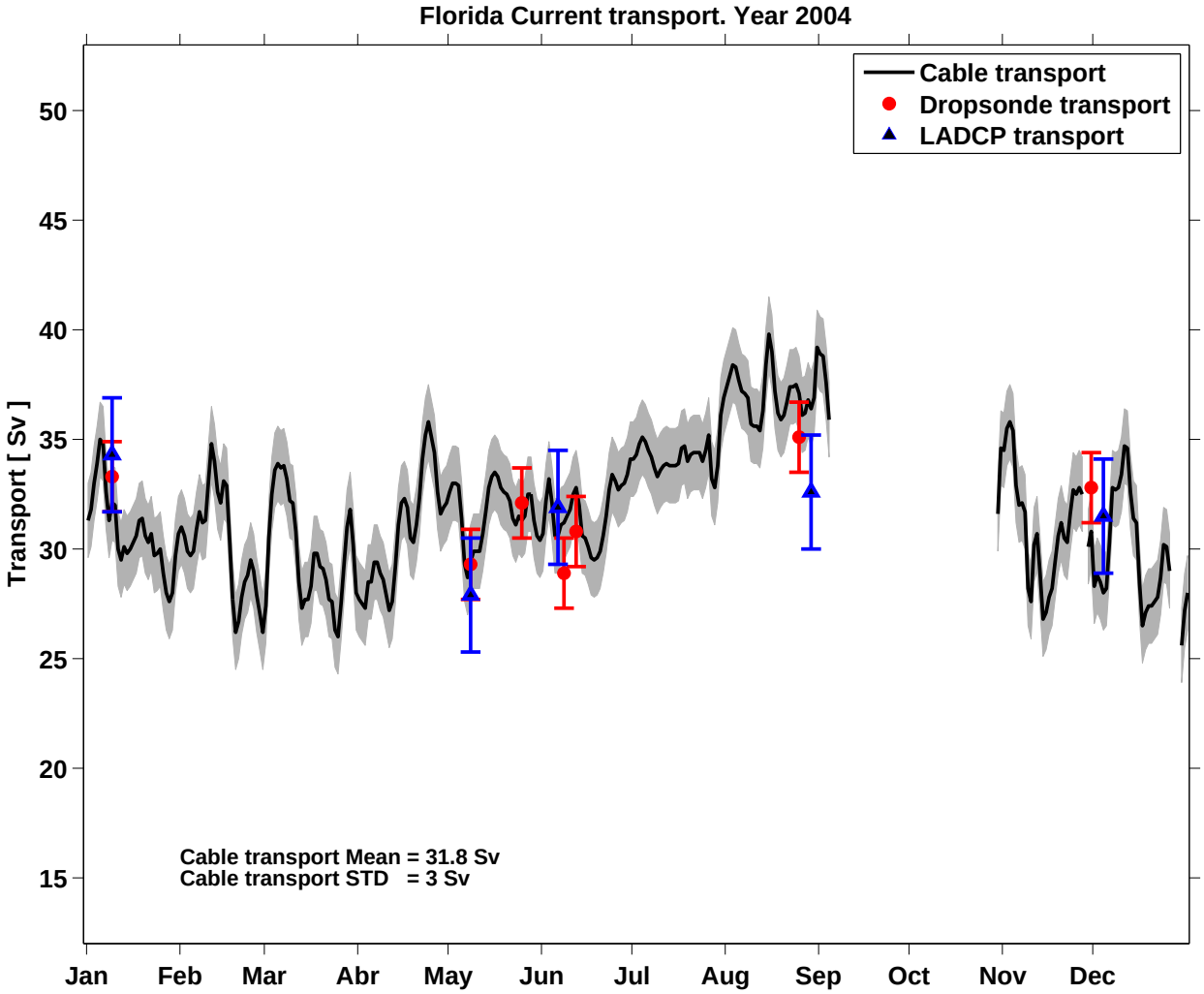

Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates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

3 Dropsonde - XBT cruises

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

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

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

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

Cruise No.	Year	Month	Day	Hour mean	Transport	Transport detided
1	2004	1	9	14	31.7	33.3
2	2004	1	13	14	NaN	NaN
3	2004	5	7	14	29.0	29.3
4	2004	5	24	13	32.0	32.1
5	2004	6	7	14	28.7	28.9
6	2004	6	11	14	32.5	30.8
7	2004	8	24	13	38.3	35.1
8	2004	9	1	13	NaN	NaN
9	2004	11	29	15	30.7	32.8

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

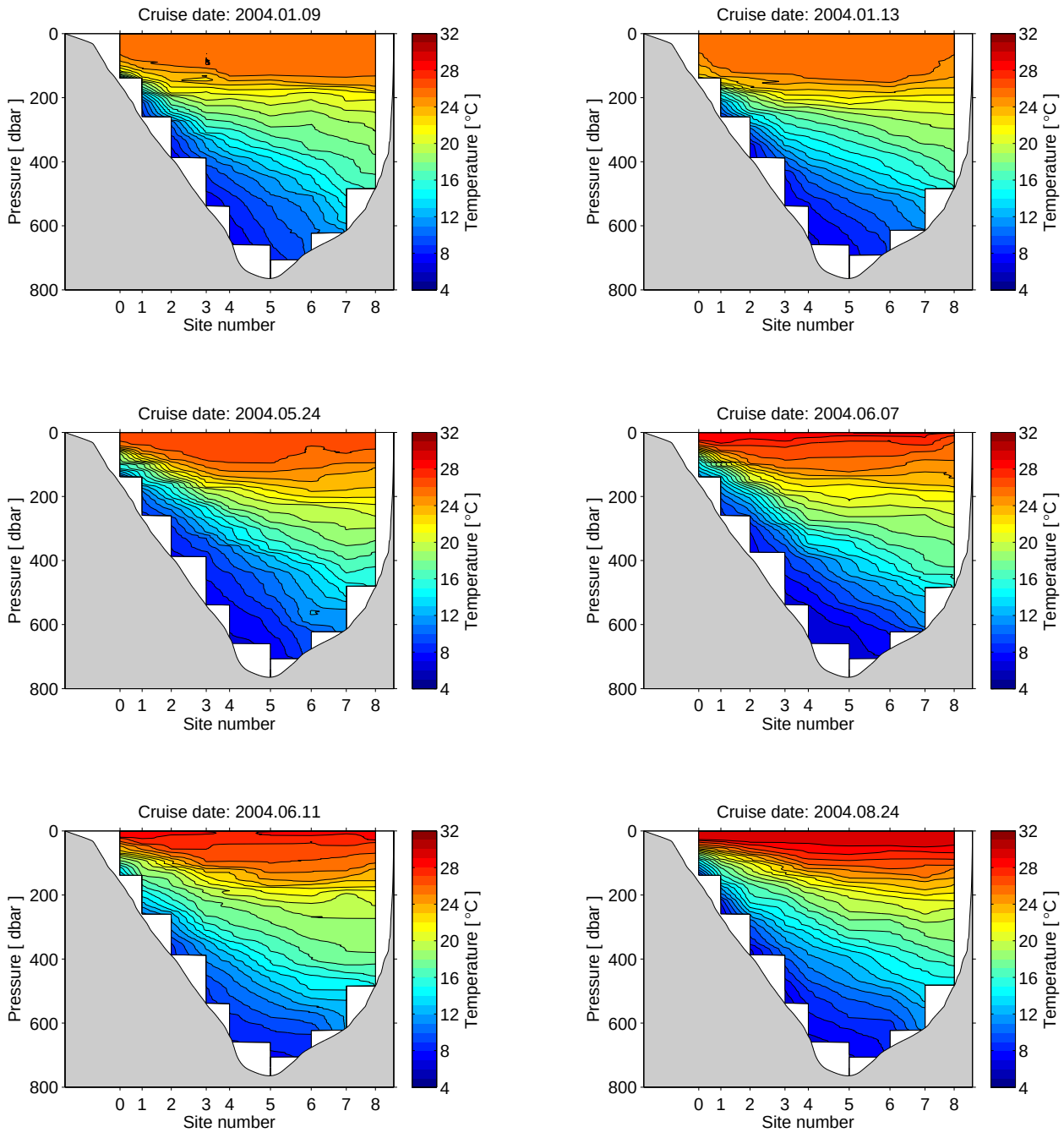

Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

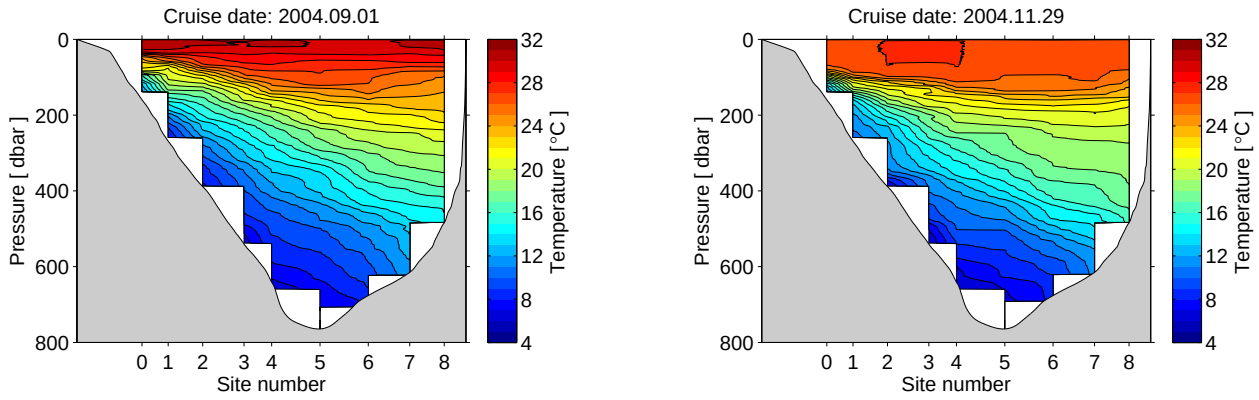

Figure 4: Same as Figure 3 for the data collected on the cruise date indicated.

4 CTD - LADCP - SADCP cruises

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

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

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

Cruise ID	Year	Month	Day	Hour mean	Transport	Transport detided
ws0402	2004	1	9	11	33.8	34.0
ws0412	2004	5	7	11	27.2	27.9
ws0415	2004	6	5	12	30.9	31.9
ws0422	2004	8	28	14	33.1	32.6
ws0433	2004	12	3	13	32.1	31.5

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

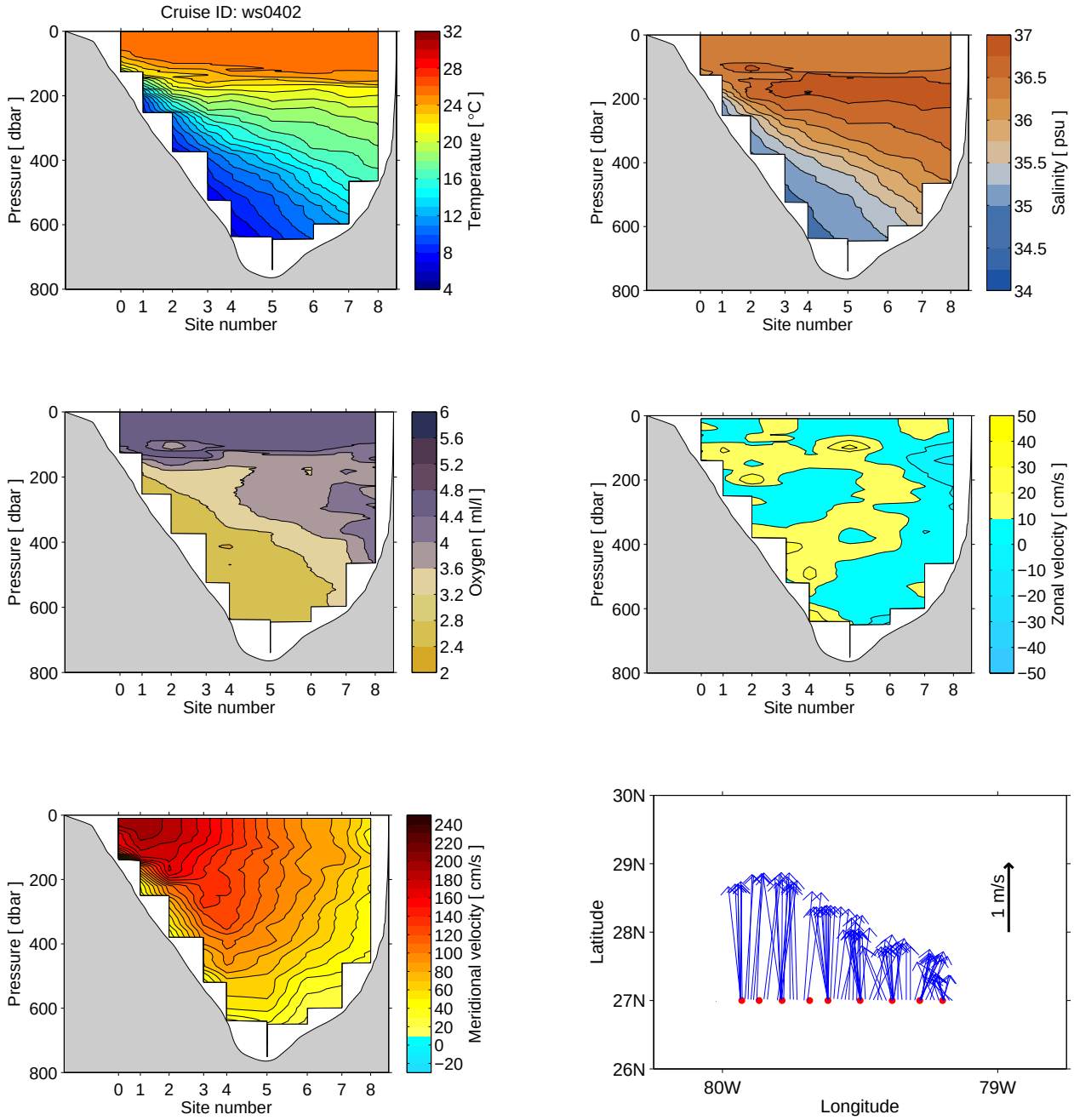

Figure 5: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

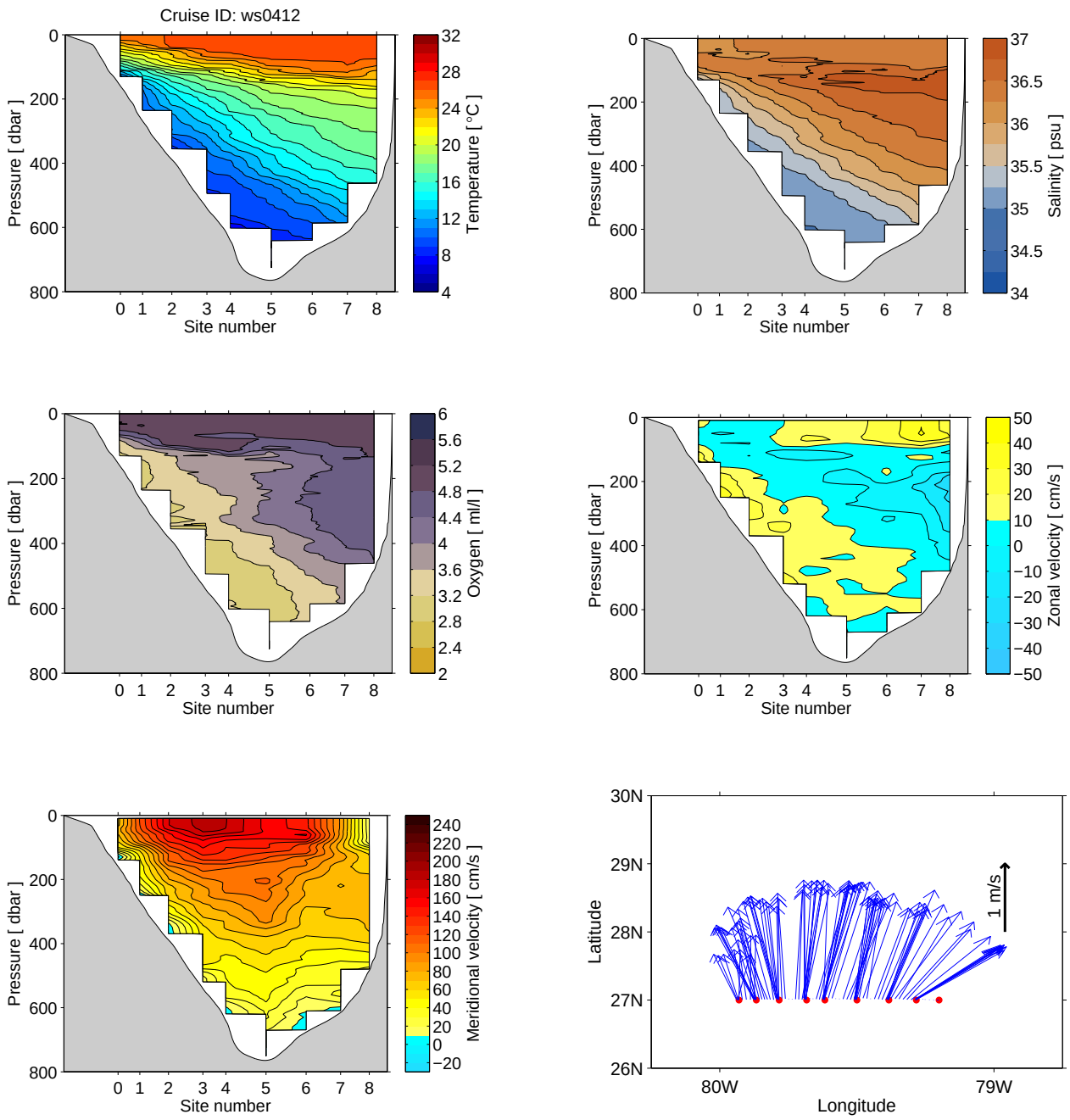

Figure 6: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

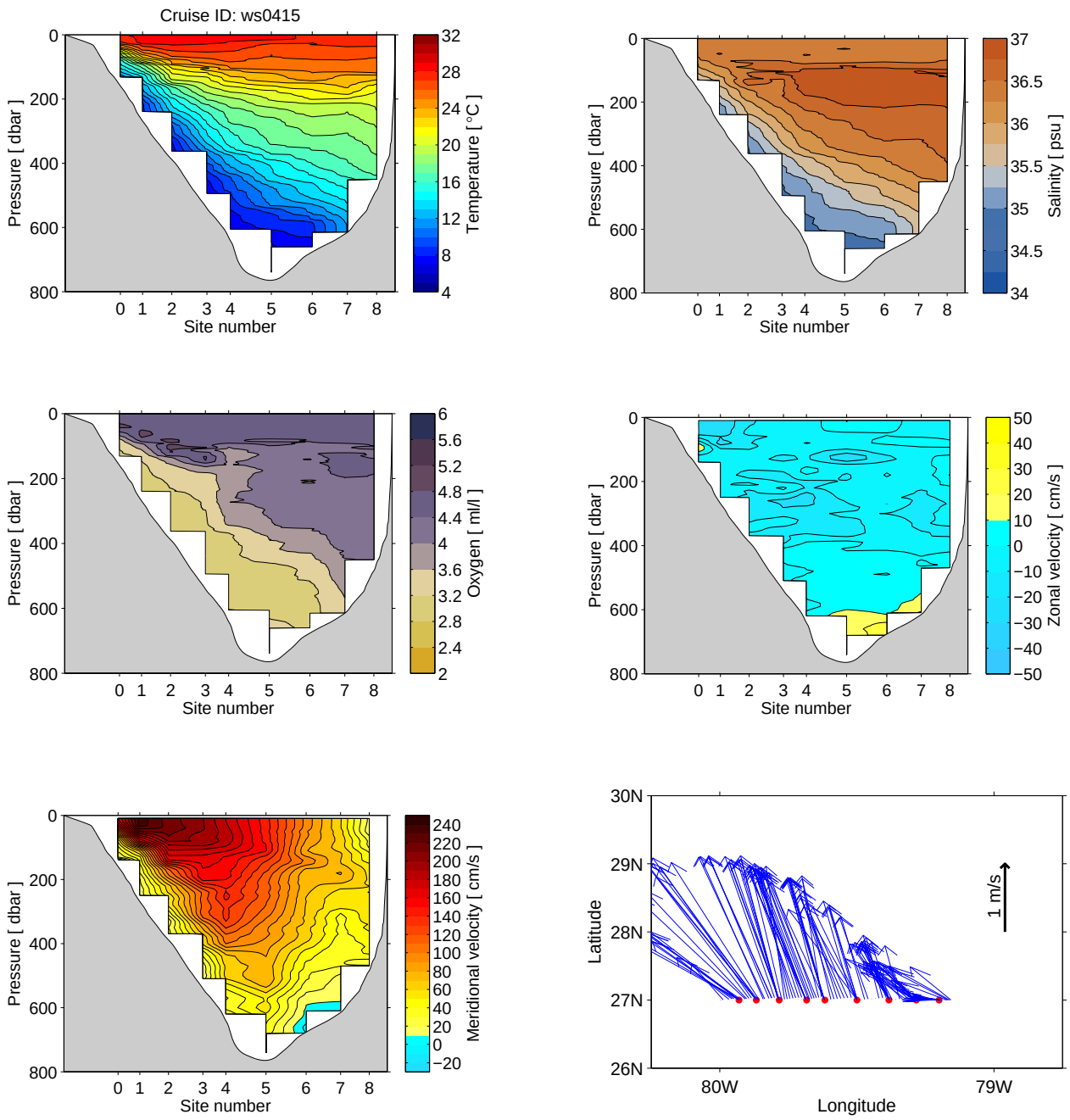

Figure 7: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

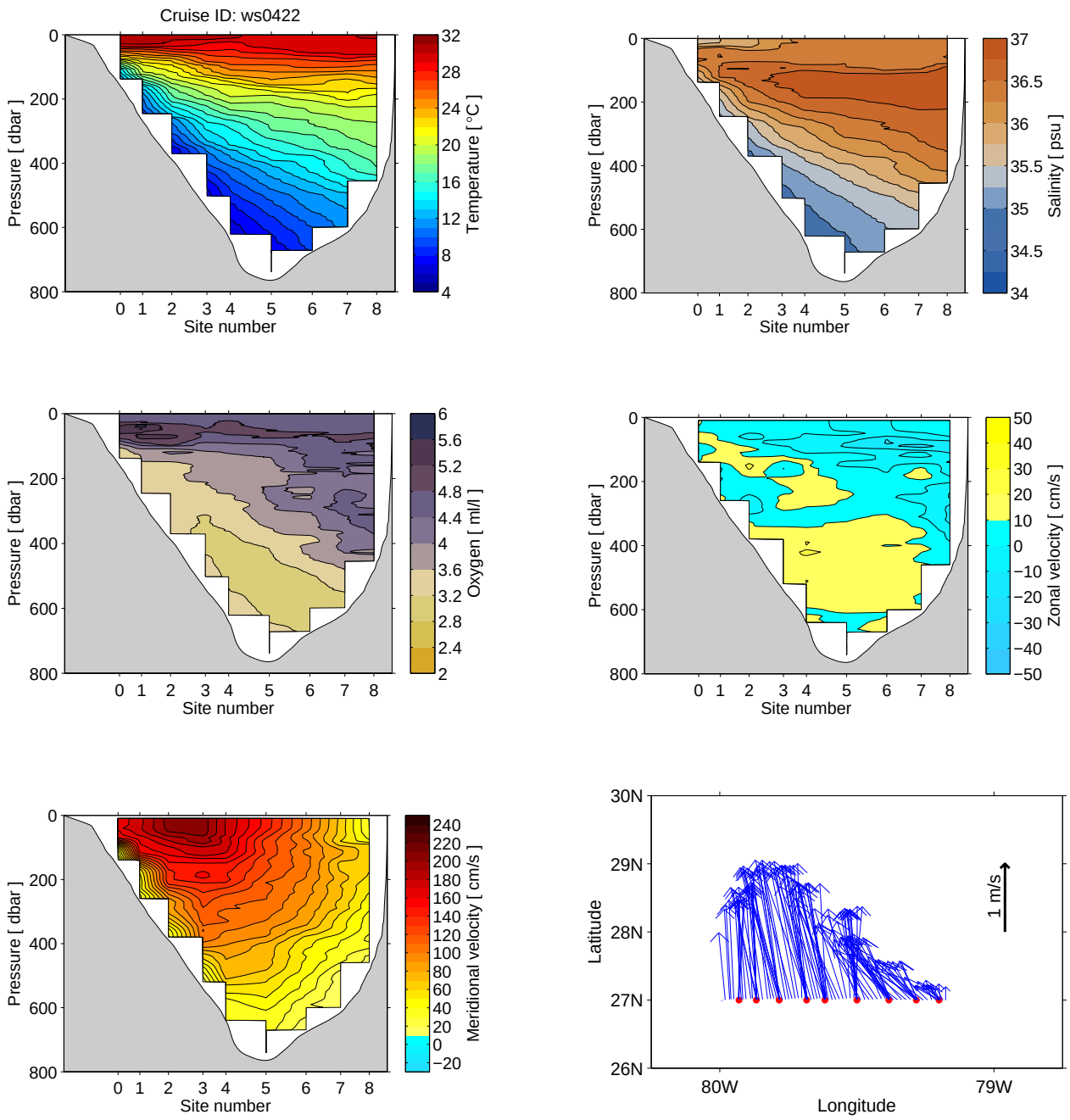

Figure 8: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

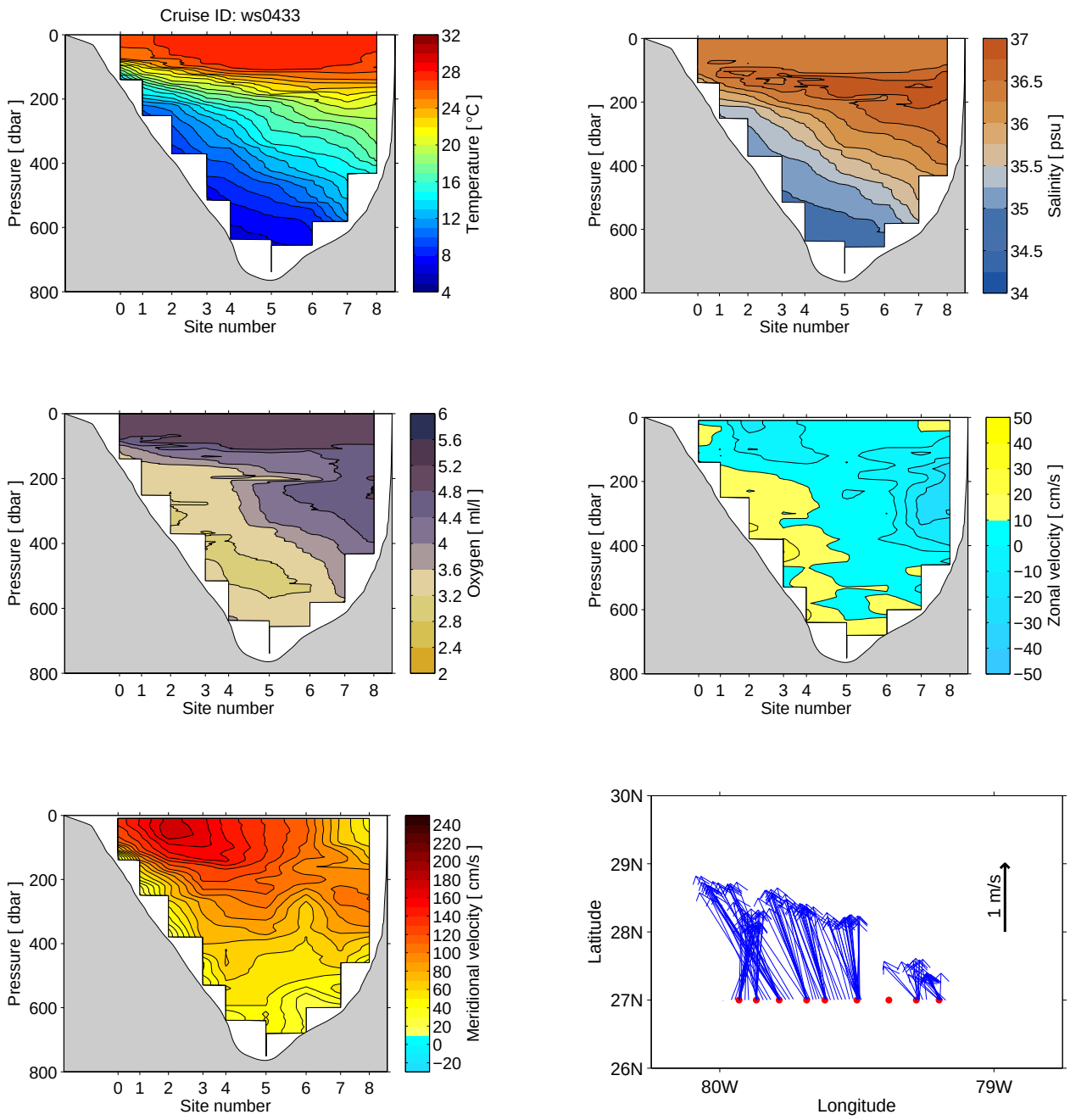

Figure 9: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

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 recording system (and the building that housed it) was severely damaged by Hurricanes Frances and Jeanne in early September 2004. Also the cable voltage recording system failed during one day in November and during three days in December. As a result, for those 55 days between September 4 and October 28, for the one day on November 27, and for three days during December 26-28, there are no estimates for the Florida Current volume transport from the cable. Data are available for all other days throughout the year.

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

5.2 Dropsonde - XBT cruises

During this year on two cruises (January 13, and September 1) the dropsonde instrument failed at one or two sites; as a result we were not able to estimate the transport for those two cruises. Also, during the January 9 cruise the dropsonde instrument failed at one station; transport was calculated for this cruise.

The XBT system failed during the cruise of May 7, and no XBT data were collected for that complete section.

5.3 CTD - LADCP - SADCP cruises

During 2004, standard SADCP data collection methods included the use of a 150 kHz RDI Ocean Surveyor SADCP (OS150), which continuously measured near-surface currents to a depth of 200 meters. For LADCP, generally a single downward-facing 300 kHz RDI Workhorse (WH300) was deployed at each station. Beginning in December 2004 (ws0433), however, a dual LADCP configuration (simultaneously deployed upward and downward-looking instruments) was implemented.

During the year, there were periodic dropouts in the SADCP dataset on multiple cruises (between stations 4 and 5 on ws0402, stations 7 and 8 on ws0412, and stations 5 and 7 on ws0433). However, in general the 2004 SADCP dataset was suitable to provide improved quality LADCP data profiles

for all cruises. The final LADCP datasets for cruises ws0402, ws0415, and ws0433 were found to be of good quality and suitable for scientific analysis.

During the ws0412 cruise, extreme wire angles on casts 1-6 led to poor data quality in the corresponding LADCP profiles and no ancillary bottom track data for stations 1-3. Additionally, during the ws0422 cruise, casts 0-3 suffered from extreme wire angles and bottom track data were compromised on stations 2 and 5. As a result of these problems on ws0412 and ws0422, velocity profiles for the affected stations may underestimate the true ocean velocity. These profiles should be used with caution.

6 Data availability

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

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

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

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

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

7 Acknowledgements

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Appendix A:

Daily Florida Current transport data

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	31.3	31.0	30.5	27.5	33.0	32.2	34.3	37.9	38.8	NaN	35.5	28.8
2	31.8	30.6	32.5	27.3	33.0	33.2	34.8	38.4	37.6	NaN	35.8	28.5
3	33.0	29.9	33.6	28.5	32.9	32.1	35.1	38.3	35.9	NaN	35.4	28.0
4	33.9	29.7	33.9	28.5	31.4	30.6	34.9	37.7	NaN	NaN	32.9	28.2
5	35.0	29.9	33.7	29.4	29.3	30.6	34.5	37.2	NaN	NaN	32.0	30.3
6	34.8	30.9	33.8	29.4	28.7	31.1	34.2	37.1	NaN	NaN	32.1	32.8
7	32.6	31.7	33.2	28.9	29.4	31.2	33.7	36.9	NaN	NaN	31.7	32.7
8	31.3	31.2	32.2	28.6	29.9	31.5	33.3	35.7	NaN	NaN	28.2	32.8
9	32.1	31.3	32.1	27.9	29.9	31.8	33.6	35.6	NaN	NaN	27.6	33.4
10	32.0	33.1	30.8	27.2	29.9	32.5	33.8	35.6	NaN	NaN	30.2	34.7
11	30.0	34.8	28.5	27.6	30.7	32.8	33.9	35.4	NaN	NaN	30.7	34.6
12	29.5	34.0	27.3	29.2	31.7	32.0	33.8	36.3	NaN	NaN	28.9	32.6
13	30.1	32.6	27.7	31.1	32.8	30.6	33.8	38.4	NaN	NaN	26.8	31.4
14	29.8	32.1	27.7	32.1	33.3	30.5	33.8	39.8	NaN	NaN	27.1	31.2
15	30.0	33.1	28.3	32.3	33.5	30.1	33.9	39.0	NaN	NaN	27.8	28.5
16	30.3	32.9	29.8	31.9	33.3	29.6	34.6	37.2	NaN	NaN	28.2	26.5
17	30.6	30.4	29.8	30.5	32.8	29.5	34.7	36.2	NaN	NaN	29.4	27.1
18	31.3	27.7	29.2	30.3	32.6	29.6	34.0	35.9	NaN	NaN	30.6	27.4
19	31.4	26.2	29.1	31.1	32.5	29.9	34.3	36.1	NaN	NaN	31.2	27.4
20	30.6	26.7	28.6	32.3	32.2	30.6	34.4	36.7	NaN	NaN	30.5	27.6
21	30.3	27.8	27.7	34.1	31.4	31.5	34.4	37.4	NaN	NaN	30.3	27.8
22	30.7	28.5	27.6	35.2	31.1	32.7	34.4	37.4	NaN	NaN	31.6	28.7
23	29.7	28.8	26.3	35.8	31.5	33.4	34.0	37.5	NaN	NaN	32.7	30.2
24	29.8	29.5	26.0	35.1	31.3	33.1	34.5	37.1	NaN	NaN	32.5	30.1
25	30.0	29.0	27.5	34.4	31.5	32.7	35.2	36.1	NaN	NaN	32.8	29.0
26	28.9	27.9	29.3	32.6	32.5	32.9	33.2	36.2	NaN	NaN	32.5	NaN
27	28.0	27.1	31.0	31.6	32.5	33.0	32.8	36.8	NaN	NaN	NaN	NaN
28	27.6	26.2	31.8	31.9	31.3	33.4	33.8	36.4	NaN	NaN	30.1	NaN
29	28.0	27.4	30.2	32.1	30.6	34.1	36.1	36.9	NaN	31.6	30.8	25.6
30	29.7	–	28.0	32.6	30.4	34.1	36.9	39.2	NaN	34.6	28.3	27.2
31	30.7	–	27.7	–	30.7	–	37.4	38.9	–	34.5	–	28.0

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

Appendix B:

Dropsonde vertical mean velocities

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2004.01.09								
0	12: 5:18	-79.9296	27.0004	12:10:51	-79.9299	27.0045	-9.13	137.68
1	12:25:25	-79.8663	27.0003	12:35: 3	-79.8662	27.0063	1.98	114.16
2	12:52:24	-79.7832	27.0000	13: 5:51	-79.7829	27.0078	4.00	107.15
3	13:25:19	-79.6833	26.9994	13:45:33	-79.6828	27.0104	3.71	100.07
4	14: 0:50	-79.6168	26.9998	14:23:15	-79.6166	27.0101	0.73	83.50
5	14:44:56	-79.5001	27.0000	15:11:51	-79.5000	27.0100	0.72	68.25
6	15:34:10	-79.3827	26.9991	15:57:39	-79.3825	27.0059	1.29	53.56
7	–	–	–	–	–	–	NaN	NaN
8	16:54:11	-79.1998	26.9999	17:11:21	-79.2008	27.0036	-9.37	39.22
Cruise date: 2004.01.13								
0	–	–	–	–	–	–	NaN	NaN
1	12:29: 3	-79.8666	27.0000	12:38:33	-79.8664	27.0055	4.10	106.31
2	12:55:33	-79.7835	27.0000	13: 9:57	-79.7836	27.0078	-0.98	99.24
3	13:29:25	-79.6835	26.9995	13:47:45	-79.6836	27.0105	-1.09	110.32
4	14: 4:17	-79.6167	27.0003	14:26:45	-79.6166	27.0122	1.08	97.43
5	14:48:26	-79.4999	27.0000	15:16:45	-79.5000	27.0121	-0.27	78.86
6	15:38:41	-79.3835	26.9994	16: 3:33	-79.3836	27.0077	-0.53	61.79
7	16:22:19	-79.2834	26.9999	16:44:27	-79.2840	27.0053	-4.03	45.44
8	–	–	–	–	–	–	NaN	NaN
Cruise date: 2004.05.07								
0	11: 6:42	-79.9302	27.0003	11:12:21	-79.9302	27.0026	-0.20	74.68
1	11:31:22	-79.8666	27.0000	11:41: 8	-79.8663	27.0037	6.56	70.53
2	12: 0:29	-79.7832	27.0003	12:14:26	-79.7831	27.0064	1.17	80.07
3	12:35:48	-79.6830	27.0000	12:54:45	-79.6830	27.0092	0.61	88.21
4	13:11:46	-79.6162	27.0005	13:36:38	-79.6167	27.0107	-2.70	75.16
5	14: 0:29	-79.5001	27.0004	14:30:57	-79.5005	27.0125	-2.04	73.16
6	14:53:26	-79.3830	27.0002	15:18:15	-79.3834	27.0081	-2.65	57.88
7	15:38:58	-79.2831	26.9998	16: 0:15	-79.2836	27.0056	-4.55	50.13
8	16:19:33	-79.2003	26.9996	16:35:39	-79.2015	27.0034	-12.35	43.79

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

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2004.05.24								
0	11: 1: 9	-79.9301	27.0004	11: 6:35	-79.9304	27.0033	-6.62	98.13
1	11:22:27	-79.8667	27.0004	11:32: 9	-79.8673	27.0048	-9.82	81.54
2	11:51: 3	-79.7834	27.0003	12: 5: 3	-79.7840	27.0061	-7.85	75.15
3	12:27: 4	-79.6836	26.9998	12:46:57	-79.6844	27.0104	-6.47	97.73
4	13: 3:52	-79.6170	27.0000	13:30: 3	-79.6182	27.0127	-7.59	88.53
5	13:53:10	-79.5001	27.0000	14:20:51	-79.5019	27.0119	-10.37	79.42
6	14:44:40	-79.3834	26.9999	15: 9:21	-79.3847	27.0086	-8.15	64.60
7	15:29:50	-79.2830	26.9999	15:52:21	-79.2843	27.0068	-9.78	56.94
8	16:11:23	-79.1999	26.9998	16:27:39	-79.2013	27.0036	-13.53	43.89
Cruise date: 2004.06.07								
0	11:47: 0	-79.9292	27.0020	11:52:42	-79.9292	27.0045	-0.01	78.77
1	11:20:32	-79.8675	27.0032	11:29:51	-79.8672	27.0070	4.12	73.14
2	12:24:47	-79.7856	27.0008	12:39:15	-79.7854	27.0072	3.09	79.44
3	13: 6:57	-79.6860	27.0017	13:25:51	-79.6859	27.0111	0.60	90.69
4	13:45:40	-79.6185	27.0014	14: 9:21	-79.6185	27.0123	-0.07	84.91
5	14:41:14	-79.5018	27.0007	15: 8: 9	-79.5021	27.0110	-0.89	70.91
6	15:37:32	-79.3854	27.0006	16: 2:57	-79.3862	27.0081	-4.32	54.58
7	16:28:18	-79.2873	27.0000	16:50:27	-79.2881	27.0047	-5.34	38.94
8	17:13: 8	-79.2014	27.0007	17:32:15	-79.2032	27.0053	-14.68	44.49
Cruise date: 2004.06.11								
0	10:57:36	-79.9299	27.0002	11: 3:21	-79.9296	27.0026	8.37	76.55
1	11:21:30	-79.8658	27.0013	11:31:45	-79.8645	27.0075	19.60	111.32
2	11:53:54	-79.7833	27.0006	12: 7:57	-79.7819	27.0097	15.53	118.88
3	12:30: 0	-79.6833	27.0007	12:51: 9	-79.6815	27.0136	13.72	111.72
4	13: 8:47	-79.6152	27.0170	13:32:45	-79.6135	27.0290	10.64	91.36
5	14: 1:25	-79.4988	26.9996	14:30:15	-79.4976	27.0110	7.01	72.76
6	14:57: 6	-79.3823	26.9997	15:21:33	-79.3823	27.0070	-0.21	54.86
7	15:44:32	-79.2818	26.9998	16: 8:21	-79.2828	27.0063	-6.88	50.59
8	16:25:21	-79.1992	27.0000	16:42:45	-79.1999	27.0027	-6.72	29.23

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: 2004.08.24								
0	11: 2:54	-79.9294	27.0001	11: 9:28	-79.9295	27.0048	-4.44	123.21
1	11:22:46	-79.8667	27.0004	11:32:21	-79.8668	27.0066	-2.25	118.51
2	11:49:43	-79.7832	27.0005	12: 3:57	-79.7828	27.0098	3.74	119.99
3	12:24:15	-79.6834	26.9999	12:44:57	-79.6826	27.0135	5.96	121.08
4	12:59:11	-79.6167	27.0000	13:23:45	-79.6153	27.0146	9.42	108.22
5	13:43:37	-79.5002	26.9999	14:15: 3	-79.4997	27.0152	2.63	89.40
6	14:34:48	-79.3835	26.9997	14:59:20	-79.3837	27.0094	-1.36	73.08
7	15:19:33	-79.2837	26.9996	15:42:15	-79.2844	27.0068	-5.29	58.56
8	15:58:45	-79.2002	26.9999	16:15:39	-79.2007	27.0034	-5.36	38.30
Cruise date: 2004.09.01								
0	11: 6:49	-79.9297	27.0006	11:15:40	-79.9301	27.0088	-21.47	199.79
1	11:27:11	-79.8671	26.9999	11:39: 3	-79.8672	27.0101	-8.10	163.16
2	11:54: 2	-79.7836	26.9996	12:11:15	-79.7843	27.0146	-36.62	180.79
3	12:28:45	-79.6834	26.9998	12:48: 3	-79.6837	27.0136	-5.31	134.58
4	13: 0: 7	-79.6167	26.9998	13:23: 3	-79.6169	27.0144	-5.49	119.97
5	13:42:56	-79.4999	27.0001	14:11:15	-79.5002	27.0129	-18.32	86.78
6	14:29:50	-79.3835	26.9998	14:53: 3	-79.3841	27.0077	-9.67	65.87
7	15: 9:26	-79.2838	26.9998	15:32:58	-79.2853	27.0064	-19.34	54.52
8	–	–	–	–	–	–	NaN	NaN
Cruise date: 2004.11.29								
0	12:20:33	-79.9298	27.0002	12:26: 3	-79.9298	27.0033	0.06	105.06
1	12:42:24	-79.8665	27.0004	12:52:50	-79.8662	27.0062	5.47	100.88
2	13:14: 2	-79.7834	27.0001	13:27:45	-79.7830	27.0079	3.97	104.33
3	13:51:45	-79.6836	27.0008	14:10: 3	-79.6834	27.0110	2.40	102.29
4	14:29:24	-79.6167	26.9998	14:53: 3	-79.6163	27.0115	3.26	91.43
5	15:16:38	-79.5000	26.9996	15:44:51	-79.4999	27.0105	1.08	71.30
6	16: 8:29	-79.3833	26.9999	16:31:33	-79.3838	27.0063	-3.52	50.79
7	16:56:50	-79.2834	27.0001	17:18:51	-79.2845	27.0043	-7.51	35.91
8	17:37:30	-79.2001	26.9996	17:54:21	-79.2013	27.0028	-11.36	35.93

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

Appendix C:

XBT temperature profiles

Cruise date: 2004.01.09									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	24.21	24.60	25.04	25.06	24.81	25.19	24.75	24.57	24.43
10	25.59	25.78	25.77	25.98	25.94	25.82	25.71	25.39	25.29
20	25.57	25.78	25.76	25.98	25.92	25.81	25.70	25.38	25.28
30	25.56	25.79	25.75	25.98	25.94	25.82	25.62	25.38	25.28
40	25.56	25.79	25.76	25.99	25.94	25.82	25.53	25.38	25.28
50	25.57	25.79	25.76	25.99	25.94	25.81	25.43	25.38	25.28
60	25.51	25.80	25.75	25.99	25.94	25.79	25.41	25.38	25.28
70	24.87	25.81	25.77	25.99	25.94	25.80	25.42	25.39	25.25
80	24.27	25.75	25.76	26.00	25.94	25.78	25.41	25.39	25.20
90	23.72	24.80	25.23	26.01	25.95	25.76	25.41	25.40	25.20
100	22.96	24.39	24.98	25.48	25.95	25.70	25.41	25.40	25.19
110	21.64	23.96	24.68	24.74	25.89	25.55	25.41	25.39	25.21
120	20.21	22.95	24.02	24.24	25.74	25.02	25.31	25.37	25.21
130	17.52	22.50	23.42	23.02	25.09	24.99	25.11	25.24	25.12
140	–	21.55	23.33	22.82	24.34	24.40	24.75	24.95	24.57
150	–	19.65	22.91	23.24	23.84	23.80	24.36	24.46	24.30
160	–	17.59	22.43	22.78	23.08	22.83	23.58	24.12	24.14
170	–	16.47	21.83	21.72	22.41	22.24	22.00	22.62	23.55
180	–	14.80	21.61	21.08	21.71	21.73	21.37	21.89	22.90
190	–	12.58	20.22	20.76	20.91	21.31	20.57	21.26	21.80
200	–	11.60	18.34	20.49	20.18	20.90	20.28	21.06	21.27
210	–	10.29	17.72	19.81	19.60	20.41	19.89	21.02	20.93
220	–	9.29	17.20	19.19	19.21	20.11	19.59	20.52	20.47
230	–	9.12	16.14	18.69	18.68	19.82	19.32	20.19	20.36
240	–	8.89	15.47	18.40	18.38	19.51	19.01	19.98	20.08
250	–	8.71	14.46	17.78	18.12	19.19	18.69	19.63	19.94
260	–	8.46	13.09	17.22	17.66	18.91	18.53	19.47	19.70
270	–	–	11.90	16.91	17.18	18.49	18.31	19.14	19.34
280	–	–	10.25	16.55	16.88	18.26	18.10	18.83	19.14
290	–	–	9.87	16.00	16.31	18.03	17.95	18.73	19.12
300	–	–	9.42	15.50	15.83	17.67	17.90	18.60	19.03
350	–	–	8.00	12.13	14.07	15.95	17.20	17.41	18.17
400	–	–	–	10.34	11.74	13.71	15.46	16.77	17.65
450	–	–	–	8.86	10.08	11.86	13.94	16.26	16.78
500	–	–	–	7.67	8.94	11.02	12.56	15.19	–
550	–	–	–	–	8.20	9.91	11.38	13.87	–
600	–	–	–	–	7.65	9.44	10.87	12.50	–
650	–	–	–	–	7.01	9.03	10.26	–	–
700	–	–	–	–	–	8.26	10.24	–	–
750	–	–	–	–	–	7.36	–	–	–

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

Cruise date: 2004.01.13									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	24.89	25.07	24.83	24.93	25.13	23.95	24.76	24.39	24.43
10	25.39	25.69	25.68	25.74	25.78	25.73	25.46	25.30	25.29
20	25.38	25.69	25.69	25.74	25.78	25.73	25.46	25.29	25.27
30	25.38	25.69	25.70	25.74	25.78	25.73	25.43	25.29	25.25
40	25.38	25.68	25.70	25.74	25.78	25.73	25.33	25.28	25.25
50	25.32	25.69	25.69	25.74	25.78	25.73	25.28	25.28	25.21
60	25.03	25.70	25.71	25.74	25.78	25.72	25.27	25.30	25.17
70	24.82	25.69	25.70	25.75	25.79	25.72	25.27	25.29	24.97
80	24.54	25.70	25.71	25.75	25.79	25.72	25.27	25.29	24.89
90	24.22	25.69	25.71	25.74	25.79	25.68	25.27	25.30	24.67
100	23.86	25.67	25.71	25.75	25.79	25.59	25.26	25.31	24.70
110	23.21	24.80	25.71	25.74	25.81	25.53	25.27	25.26	24.44
120	23.18	24.58	25.72	25.71	25.83	25.47	25.26	25.18	24.41
130	22.41	24.18	24.39	24.54	25.50	25.46	25.27	24.93	24.22
140	–	22.85	23.96	24.31	24.93	25.29	25.28	24.55	23.84
150	–	22.25	23.52	24.13	24.26	24.83	25.15	24.00	23.45
160	–	20.57	23.55	23.95	23.58	23.85	24.27	23.20	23.20
170	–	18.77	22.67	23.49	23.14	23.35	23.34	22.99	22.99
180	–	16.43	20.98	22.61	22.70	22.98	23.12	22.58	22.50
190	–	14.96	19.43	22.03	22.13	22.48	22.44	22.06	22.20
200	–	14.21	18.37	21.45	21.38	22.11	21.46	21.92	21.35
210	–	12.73	17.93	20.43	20.50	21.61	20.86	21.15	21.19
220	–	11.71	17.20	19.68	20.04	21.03	20.65	20.74	20.73
230	–	10.86	16.88	19.03	18.96	20.35	20.23	20.38	20.64
240	–	10.38	16.14	17.92	18.23	19.71	19.93	20.14	20.45
250	–	9.72	14.83	17.20	17.75	18.90	19.65	19.74	20.17
260	–	8.70	13.77	16.75	17.40	18.48	19.11	19.52	19.70
270	–	–	13.34	16.46	16.99	18.15	18.85	19.25	19.41
280	–	–	12.76	16.04	16.71	17.73	18.60	19.06	19.22
290	–	–	11.46	15.64	16.40	17.24	18.46	18.95	19.14
300	–	–	10.58	15.32	15.92	17.02	18.25	18.86	18.91
350	–	–	7.33	12.94	14.18	15.51	16.78	17.74	18.19
400	–	–	–	9.87	12.31	13.94	15.27	16.40	17.67
450	–	–	–	7.93	10.26	12.25	13.95	15.66	16.64
500	–	–	–	7.29	9.00	10.58	11.74	13.51	–
550	–	–	–	–	7.77	9.55	10.69	12.21	–
600	–	–	–	–	7.18	8.40	10.16	11.48	–
650	–	–	–	–	6.70	7.91	9.18	–	–
700	–	–	–	–	–	7.51	NaN	–	–
750	–	–	–	–	–	7.13	–	–	–

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

Cruise date: 2004.05.24									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	26.40	26.49	26.61	26.25	26.37	25.58	25.85	25.72	26.12
10	26.52	26.80	26.94	26.99	26.94	26.35	26.22	26.29	26.48
20	26.43	26.79	26.94	26.97	26.93	26.32	26.18	26.27	26.40
30	25.75	26.80	26.94	26.96	26.93	26.31	26.16	26.17	26.35
40	25.11	25.75	26.93	26.96	26.93	26.27	26.03	26.08	26.24
50	23.31	25.33	26.75	26.96	26.94	26.27	25.96	26.07	26.12
60	20.19	24.80	25.63	26.97	26.61	26.26	25.96	26.02	25.93
70	18.59	23.29	25.49	26.70	26.39	26.19	25.90	25.95	25.80
80	18.23	22.28	25.28	26.22	26.31	26.18	25.72	25.64	25.61
90	17.77	20.58	24.23	25.96	26.11	26.08	25.62	25.42	25.13
100	15.90	17.71	23.34	25.50	25.72	25.95	25.32	24.75	24.79
110	15.04	17.39	22.68	24.92	25.67	25.44	25.15	24.63	24.08
120	13.21	15.90	21.90	24.38	25.14	25.12	24.63	24.36	23.88
130	11.61	15.49	20.32	23.77	24.75	24.71	24.12	23.95	23.72
140	–	15.10	19.39	22.74	23.92	24.31	24.10	23.73	23.58
150	–	14.51	17.97	22.17	23.05	23.86	24.11	23.58	23.40
160	–	13.93	15.89	21.69	22.10	23.23	23.85	23.34	23.25
170	–	12.26	15.59	21.21	21.21	22.73	23.34	23.11	23.05
180	–	11.31	15.03	19.68	20.12	22.10	23.07	23.01	22.78
190	–	10.61	14.73	18.94	19.70	21.69	22.78	22.81	22.59
200	–	10.00	14.05	18.23	19.35	21.23	22.17	22.06	22.27
210	–	9.84	12.94	17.58	18.98	20.63	21.56	21.40	21.63
220	–	9.61	12.54	16.46	18.75	20.03	20.93	20.98	21.15
230	–	9.40	11.84	15.34	18.21	19.73	19.71	20.66	20.78
240	–	9.16	11.12	14.72	17.83	19.37	19.51	19.89	20.44
250	–	8.88	10.73	14.45	16.99	18.97	19.31	19.67	20.30
260	–	8.45	10.25	14.21	16.48	18.64	19.25	19.34	20.05
270	–	–	9.47	13.53	15.57	18.41	19.21	19.21	19.82
280	–	–	9.35	12.99	15.18	17.98	18.99	19.15	19.54
290	–	–	9.01	12.72	14.73	17.58	18.44	19.15	19.35
300	–	–	8.61	12.33	13.81	16.93	18.11	19.02	18.98
350	–	–	8.04	9.73	12.13	15.25	17.09	18.12	17.88
400	–	–	–	8.63	10.04	12.54	15.14	16.91	16.65
450	–	–	–	8.07	8.83	10.71	13.12	15.76	15.33
500	–	–	–	7.45	8.28	10.25	12.40	14.21	–
550	–	–	–	–	7.62	9.05	11.87	12.11	–
600	–	–	–	–	7.15	8.18	11.02	11.50	–
650	–	–	–	–	6.57	7.43	9.82	–	–
700	–	–	–	–	–	7.06	9.16	–	–
750	–	–	–	–	–	6.80	–	–	–

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

Cruise date: 2004.06.07									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	27.60	27.41	27.62	28.66	28.25	28.93	29.62	29.84	29.25
10	28.72	28.64	28.71	28.54	28.17	28.06	28.06	28.05	27.08
20	28.57	28.50	28.00	28.26	27.58	27.32	27.49	27.98	26.17
30	26.94	28.39	27.32	27.77	27.26	26.83	26.98	27.46	25.98
40	25.83	27.23	27.01	27.48	26.61	26.50	26.67	26.96	25.65
50	23.61	26.52	26.61	26.78	26.40	26.17	26.60	26.77	25.49
60	20.80	25.13	26.47	26.40	26.16	26.12	26.52	26.01	25.37
70	18.28	23.80	25.98	26.30	26.09	26.07	26.34	25.54	25.25
80	16.53	22.94	25.58	26.26	25.99	25.92	25.70	25.20	25.22
90	15.11	21.82	25.31	25.96	25.89	25.72	25.40	24.78	24.94
100	14.52	19.06	24.42	25.75	25.86	25.62	25.47	24.45	24.73
110	13.81	17.16	23.05	25.30	25.26	25.49	25.02	24.24	24.67
120	12.97	15.79	21.96	24.47	24.76	25.13	24.58	24.11	24.35
130	11.95	14.86	20.82	23.54	24.24	24.43	24.31	23.67	24.16
140	–	13.69	20.17	22.89	23.51	23.45	23.83	23.46	24.10
150	–	13.21	19.90	22.22	22.79	22.50	23.31	23.43	23.47
160	–	12.58	18.31	21.89	22.26	22.07	22.91	23.12	23.21
170	–	11.89	16.67	21.60	21.95	21.78	22.09	22.48	23.00
180	–	11.43	15.28	20.93	21.38	21.71	21.72	22.17	22.31
190	–	10.88	14.42	20.49	20.68	21.67	21.06	21.23	21.84
200	–	10.45	13.39	19.05	20.29	21.51	20.60	21.10	21.55
210	–	9.85	12.80	18.68	20.02	21.00	20.48	21.04	21.20
220	–	9.58	12.20	18.30	19.59	20.80	20.29	20.96	20.84
230	–	9.11	11.51	17.97	19.20	20.30	19.88	20.38	20.52
240	–	8.91	11.17	16.86	18.91	19.57	19.66	19.78	20.43
250	–	8.83	10.84	16.25	18.63	19.39	19.33	19.34	20.27
260	–	8.76	10.03	15.57	18.47	19.11	19.02	18.94	19.82
270	–	–	9.60	15.18	18.09	18.79	18.83	18.80	19.64
280	–	–	8.96	14.48	17.60	17.94	18.61	18.72	19.42
290	–	–	8.65	13.03	16.98	17.38	18.26	18.55	19.23
300	–	–	8.15	12.38	16.16	17.17	18.10	18.38	18.93
350	–	–	7.55	10.09	13.92	14.67	17.06	17.51	18.02
400	–	–	–	8.77	10.17	12.82	15.31	16.95	17.49
450	–	–	–	7.89	8.94	11.85	13.49	15.38	16.09
500	–	–	–	6.98	7.78	9.96	11.98	13.83	–
550	–	–	–	–	6.78	8.58	10.23	12.53	–
600	–	–	–	–	6.39	7.23	8.82	11.41	–
650	–	–	–	–	6.18	6.60	7.98	–	–
700	–	–	–	–	–	6.31	7.21	–	–
750	–	–	–	–	–	6.16	–	–	–

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

Cruise date: 2004.06.11									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	27.58	27.47	27.98	27.31	26.55	27.41	27.71	27.90	27.50
10	28.27	28.64	28.18	28.00	27.92	28.02	28.18	27.97	28.13
20	27.97	28.27	27.70	27.82	27.80	27.96	27.85	27.87	28.09
30	26.27	27.68	27.53	27.62	27.34	27.56	27.07	27.85	27.93
40	24.88	27.01	27.44	27.19	27.09	27.05	26.96	27.30	26.79
50	23.71	25.48	27.20	27.08	26.61	26.69	26.86	26.71	26.51
60	23.13	24.78	26.79	26.97	26.58	26.26	26.44	26.53	26.22
70	21.81	23.32	25.61	26.73	26.50	26.16	26.37	26.21	25.99
80	19.41	21.85	24.93	26.50	26.44	26.06	26.17	26.01	25.65
90	18.16	19.99	23.41	26.16	26.31	26.04	26.02	25.91	25.44
100	17.02	19.23	22.88	25.58	25.79	26.01	25.88	25.72	25.02
110	15.53	19.03	21.86	24.57	25.61	25.83	25.62	25.63	24.62
120	14.27	18.71	20.33	23.30	23.69	25.54	25.50	25.13	23.78
130	13.67	18.39	19.11	22.91	22.99	25.05	24.91	24.55	23.62
140	–	17.94	18.59	22.10	22.77	24.58	24.84	24.11	23.36
150	–	17.24	18.15	21.60	22.72	24.18	24.72	23.58	23.17
160	–	16.66	18.08	20.94	21.97	23.62	23.48	22.78	22.76
170	–	15.94	17.96	20.42	21.37	23.18	22.77	22.19	22.33
180	–	15.60	17.30	19.52	20.53	21.53	21.99	21.52	21.19
190	–	14.66	16.83	19.28	20.30	21.17	21.42	20.43	20.93
200	–	14.26	16.34	18.80	19.99	20.76	21.21	19.73	20.54
210	–	13.60	15.98	18.35	19.13	20.38	20.80	19.64	20.36
220	–	13.12	15.58	17.86	18.39	19.88	20.30	19.58	20.18
230	–	12.70	15.05	17.84	18.08	19.33	19.87	19.56	20.07
240	–	11.81	14.48	17.85	17.95	18.76	19.69	19.28	19.78
250	–	11.32	13.56	17.57	17.63	18.60	19.56	19.08	19.67
260	–	10.66	12.71	17.34	17.44	18.44	19.17	19.07	19.45
270	–	–	12.14	16.76	17.24	18.34	18.99	19.05	19.08
280	–	–	11.95	16.53	17.09	18.06	18.91	18.76	18.84
290	–	–	11.69	15.85	17.00	17.95	18.87	18.50	18.65
300	–	–	11.27	15.32	16.65	17.67	18.64	18.47	18.38
350	–	–	9.03	12.48	14.60	16.44	17.69	18.18	18.25
400	–	–	–	11.05	12.66	15.19	17.00	17.93	17.64
450	–	–	–	10.00	11.01	13.45	15.07	15.81	16.06
500	–	–	–	8.84	10.16	11.93	13.81	13.77	–
550	–	–	–	–	9.42	10.60	11.88	12.64	–
600	–	–	–	–	8.60	9.36	9.98	12.13	–
650	–	–	–	–	8.01	8.64	8.56	–	–
700	–	–	–	–	–	7.60	8.44	–	–
750	–	–	–	–	–	6.82	–	–	–

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

Cruise date: 2004.08.24									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.97	27.74	28.42	28.85	28.76	28.99	28.40	28.71	29.18
10	29.90	29.70	29.68	29.89	29.89	29.76	29.74	29.71	29.74
20	29.83	29.70	29.67	29.87	29.79	29.74	29.72	29.71	29.66
30	28.10	28.77	29.57	29.65	29.74	29.74	29.69	29.70	29.63
40	26.25	27.01	28.56	28.92	28.95	29.56	29.31	29.68	29.45
50	24.46	25.74	27.40	28.36	28.57	28.70	28.72	29.00	28.52
60	21.54	24.38	26.58	27.81	28.16	28.49	28.03	28.29	28.16
70	19.05	22.36	25.28	27.17	27.94	28.15	27.82	27.64	27.94
80	17.02	20.71	23.43	26.26	27.63	27.66	27.33	27.35	27.34
90	15.13	19.49	22.84	25.50	26.90	27.12	26.84	26.75	26.90
100	13.68	18.62	21.07	24.56	26.40	26.67	26.52	26.42	26.44
110	12.38	17.59	20.53	23.24	25.67	25.87	26.33	25.98	25.56
120	11.24	16.66	19.83	23.34	24.51	25.13	25.84	25.80	24.89
130	9.72	16.14	19.49	21.94	23.68	24.69	25.19	25.69	24.66
140	–	15.71	18.82	21.14	22.77	24.45	24.42	25.20	24.22
150	–	14.96	18.09	20.40	21.55	23.90	23.92	24.45	23.80
160	–	14.33	17.38	19.21	21.15	22.99	23.41	23.76	23.22
170	–	12.93	16.78	18.43	20.62	22.21	22.90	23.47	22.97
180	–	11.86	16.40	17.89	19.68	21.34	22.42	23.22	22.43
190	–	11.29	16.22	17.57	19.37	20.65	21.86	22.78	22.21
200	–	10.26	15.89	17.07	18.68	20.33	21.22	22.06	21.72
210	–	9.61	15.70	16.40	18.38	19.99	20.67	21.46	21.30
220	–	8.28	15.22	16.05	18.06	19.56	20.27	20.73	20.73
230	–	7.81	14.70	15.70	17.74	19.38	19.92	20.41	20.43
240	–	7.44	13.95	15.24	17.28	19.27	19.80	20.33	20.11
250	–	7.16	13.22	15.18	16.97	19.02	19.34	20.22	19.65
260	–	7.05	12.13	15.06	16.24	18.63	18.98	19.95	19.39
270	–	–	11.76	14.65	15.98	18.21	18.29	19.68	19.10
280	–	–	10.69	14.15	15.57	17.95	17.90	19.23	18.90
290	–	–	10.29	14.03	15.42	17.69	17.60	18.84	18.80
300	–	–	9.69	13.63	14.85	17.32	17.57	18.54	18.67
350	–	–	8.23	11.68	13.00	15.24	16.48	17.23	17.90
400	–	–	–	9.79	11.60	12.92	14.72	16.04	16.53
450	–	–	–	8.22	10.42	11.91	13.70	14.89	15.30
500	–	–	–	6.96	8.93	10.70	11.65	13.67	–
550	–	–	–	–	8.07	9.54	10.17	12.19	–
600	–	–	–	–	7.33	8.38	8.69	11.83	–
650	–	–	–	–	6.65	7.69	8.15	–	–
700	–	–	–	–	–	6.91	8.10	–	–
750	–	–	–	–	–	6.55	–	–	–

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

Cruise date: 2004.09.01									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.73	30.65	29.76	29.66	29.78	29.56	28.98	29.61	29.39
10	30.44	30.22	30.02	29.99	30.06	29.97	29.88	30.04	30.07
20	30.61	30.23	29.85	29.98	29.94	29.96	29.86	30.02	30.05
30	29.67	29.93	29.37	29.56	29.36	29.45	29.44	29.53	29.87
40	26.64	27.79	28.35	29.03	28.89	28.95	29.06	28.93	29.15
50	23.99	26.01	27.62	28.63	28.61	28.04	28.34	28.46	28.24
60	23.19	24.22	27.36	28.08	28.39	27.54	27.74	28.09	28.01
70	22.69	21.83	26.41	27.48	27.76	27.36	27.41	27.22	27.18
80	21.57	20.91	24.67	26.86	27.42	27.07	26.99	26.34	26.20
90	18.87	20.51	22.80	26.19	26.78	26.95	26.25	25.81	25.50
100	15.64	20.14	21.37	25.29	26.24	26.72	26.10	25.45	24.97
110	14.50	19.73	20.56	24.28	25.63	26.63	26.04	25.37	24.58
120	12.87	19.00	19.64	22.70	25.05	26.31	25.67	25.01	24.28
130	12.35	18.37	18.60	21.57	24.35	24.88	25.35	24.53	24.16
140	–	17.35	17.78	21.03	23.48	24.16	25.14	24.30	23.99
150	–	16.25	17.29	20.36	22.18	23.74	24.48	24.06	23.85
160	–	15.40	16.61	20.10	20.96	23.08	23.96	23.45	23.73
170	–	13.97	16.27	18.87	20.20	22.28	23.00	23.36	23.53
180	–	13.47	15.80	18.29	19.78	21.50	22.34	23.25	23.27
190	–	12.70	15.49	17.69	18.92	21.16	22.04	22.57	23.02
200	–	11.43	15.01	16.97	18.37	20.76	21.89	21.91	22.76
210	–	10.63	14.71	16.50	17.89	20.62	21.35	21.42	22.49
220	–	10.04	13.55	16.04	17.47	20.05	20.95	21.30	21.99
230	–	9.20	13.21	15.34	16.90	19.26	20.67	21.06	21.50
240	–	8.70	12.95	15.00	16.51	18.51	19.97	20.67	20.92
250	–	8.37	12.41	14.64	16.28	18.32	19.69	19.81	20.45
260	–	8.09	11.75	14.33	15.97	18.17	19.58	19.71	20.27
270	–	–	11.17	13.87	15.72	17.85	19.06	19.69	19.99
280	–	–	10.93	13.53	14.94	17.69	18.77	19.62	19.71
290	–	–	10.44	13.21	14.73	17.25	18.41	19.27	19.41
300	–	–	10.24	12.94	14.47	16.41	18.01	18.93	19.29
350	–	–	8.57	11.00	13.02	14.02	16.94	17.67	18.05
400	–	–	–	9.93	11.74	13.19	15.12	16.00	16.44
450	–	–	–	9.17	10.14	11.36	13.36	14.68	15.01
500	–	–	–	7.39	9.21	9.97	11.47	13.28	–
550	–	–	–	–	8.67	9.23	10.75	12.43	–
600	–	–	–	–	7.74	8.42	9.81	11.80	–
650	–	–	–	–	6.51	7.72	9.07	–	–
700	–	–	–	–	–	7.09	8.21	–	–
750	–	–	–	–	–	6.70	–	–	–

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

Cruise date: 2004.11.29									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	25.63	26.07	25.78	26.11	26.00	25.76	25.16	25.71	25.85
10	26.49	26.92	27.01	27.05	27.02	26.87	26.33	26.40	26.47
20	26.49	26.92	27.03	27.05	27.02	26.85	26.30	26.40	26.45
30	26.49	26.93	27.02	27.05	27.02	26.84	26.31	26.40	26.46
40	26.50	26.77	27.02	27.06	27.02	26.84	26.31	26.40	26.46
50	26.45	26.59	27.02	27.04	27.02	26.78	26.32	26.41	26.45
60	26.12	26.57	27.02	27.00	27.02	26.70	26.33	26.40	26.46
70	25.90	26.49	26.96	26.73	27.02	26.60	26.27	26.40	26.42
80	24.77	26.32	26.43	26.48	26.84	26.37	26.20	26.20	26.00
90	22.36	25.64	26.19	26.16	26.78	26.17	26.13	26.24	25.60
100	18.92	23.92	25.79	26.00	26.71	25.94	25.89	26.14	25.30
110	16.06	21.68	23.48	25.04	26.20	25.79	25.84	25.99	24.90
120	13.90	20.32	22.31	24.11	25.42	25.35	25.46	25.42	24.42
130	12.50	19.18	21.10	22.08	24.66	25.14	25.71	25.08	23.85
140	–	17.46	20.43	21.86	23.13	24.58	24.55	24.45	23.49
150	–	15.53	19.60	21.74	22.22	23.11	24.07	23.69	23.12
160	–	13.86	18.80	20.89	21.66	22.79	23.01	22.75	22.02
170	–	13.01	17.97	20.55	20.97	22.07	22.24	22.15	21.44
180	–	12.51	16.64	19.49	20.48	21.36	21.83	21.52	20.96
190	–	12.12	16.05	18.53	20.31	20.69	20.83	21.11	20.84
200	–	11.71	15.44	17.80	19.62	20.29	20.27	20.80	20.74
210	–	11.47	14.48	17.87	19.25	19.94	20.25	20.38	20.55
220	–	11.25	13.98	17.45	18.97	19.22	20.08	20.17	20.07
230	–	11.11	12.93	17.03	18.56	18.83	19.67	20.02	19.94
240	–	10.99	12.69	16.74	18.41	18.20	19.24	19.57	19.62
250	–	10.69	12.49	16.20	17.83	17.97	19.03	19.29	19.37
260	–	10.45	12.33	16.02	16.98	17.92	18.95	19.21	19.21
270	–	–	11.91	15.48	16.56	17.85	18.84	18.92	19.05
280	–	–	11.80	14.85	16.34	17.77	18.84	18.73	18.93
290	–	–	11.77	14.59	16.05	17.72	18.59	18.59	18.78
300	–	–	11.78	14.43	15.61	17.62	18.47	18.59	18.70
350	–	–	10.65	12.65	14.34	15.83	17.91	17.92	18.16
400	–	–	–	11.04	12.06	14.08	16.60	16.79	17.74
450	–	–	–	9.66	10.82	11.81	14.58	15.54	16.94
500	–	–	–	7.01	10.03	10.08	12.84	13.78	–
550	–	–	–	–	8.75	9.18	10.73	12.10	–
600	–	–	–	–	6.98	8.33	9.33	11.35	–
650	–	–	–	–	6.35	7.12	8.37	–	–
700	–	–	–	–	–	6.53	NaN	–	–
750	–	–	–	–	–	6.44	–	–	–

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

Appendix D:

LADCP vertical mean velocities

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2004.01.09								
0	6:17:45	-79.9319	27.0052	6:29:39	-79.9348	27.0182	0.17	135.08
1	7:23: 1	-79.8679	27.0025	7:41:48	-79.8644	27.0177	0.65	123.22
2	8:27:23	-79.7848	27.0026	8:51:48	-79.7906	27.0239	1.41	116.07
3	9:48:21	-79.6838	27.0021	10:15: 4	-79.6818	27.0182	1.27	108.85
4	11:13:29	-79.6165	27.0008	11:48: 7	-79.6182	27.0269	2.74	97.09
5	12:40:56	-79.4989	26.9993	13:15:20	-79.4992	27.0177	-0.02	71.77
6	14: 2:36	-79.3822	27.0004	14:33:37	-79.3778	27.0137	-1.85	55.93
7	15:12:55	-79.2822	27.0017	15:39:39	-79.2771	27.0101	-4.29	47.63
8	16:11: 8	-79.1983	27.0014	16:32: 3	-79.1959	27.0027	-9.66	36.93
Cruise date: 2004.05.07								
0	6:16:56	-79.9320	27.0042	6:28: 6	-79.9370	27.0062	4.29	39.79
1	7: 8:56	-79.8697	27.0043	7:24: 1	-79.8766	27.0132	3.66	54.95
2	8:18:60	-79.7851	27.0029	8:40:49	-79.7935	27.0209	2.40	76.51
3	9:37:57	-79.6851	27.0034	10: 7: 0	-79.6934	27.0269	2.04	84.01
4	10:48:42	-79.6186	27.0028	11:19:20	-79.6248	27.0286	0.81	74.48
5	12:13:47	-79.5023	27.0019	12:50:27	-79.5101	27.0304	-2.11	67.00
6	13:43:43	-79.3854	27.0013	14:16:21	-79.3919	27.0247	-1.85	57.68
7	15: 0:48	-79.2848	27.0009	15:25:57	-79.2867	27.0144	-2.64	49.55
8	16: 0:31	-79.2012	26.9997	16:21:33	-79.2068	27.0002	-13.97	43.86
Cruise date: 2004.06.05								
0	16:55:33	-79.9321	27.0055	17: 5:48	-79.9343	27.0157	-16.52	65.98
1	15:56:37	-79.8689	27.0078	16:15: 9	-79.8718	27.0286	-20.88	83.58
2	14:44:32	-79.7841	27.0063	15: 7:53	-79.7870	27.0326	-19.66	101.02
3	13:22: 2	-79.6857	27.0069	13:50: 7	-79.6905	27.0366	-17.92	105.61
4	12: 3:42	-79.6185	27.0068	12:37: 1	-79.6232	27.0397	-14.88	104.92
5	10:31:31	-79.4999	27.0057	11: 6:12	-79.5008	27.0351	-11.22	81.62
6	8:54:43	-79.3835	27.0048	9:31: 9	-79.3837	27.0299	-8.16	44.66
7	7:33:27	-79.2871	27.0045	8: 5:58	-79.2926	27.0217	-12.81	34.38
8	6:26:32	-79.1993	27.0012	6:50:22	-79.2004	27.0096	-11.66	33.20

Table 16: 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: 2004.08.28								
0	19: 8: 0	-79.9303	27.0042	19:20:34	-79.9307	27.0152	-0.51	95.39
1	18: 5:60	-79.8667	27.0039	18:26:22	-79.8663	27.0217	-2.41	98.21
2	16:56:34	-79.7829	27.0053	17:19:11	-79.7826	27.0277	-3.48	116.17
3	15:39:27	-79.6835	27.0053	16: 7:16	-79.6812	27.0328	-1.27	115.02
4	14:27:22	-79.6176	27.0050	14:59:54	-79.6123	27.0329	1.79	98.59
5	12:58:14	-79.4997	27.0054	13:35:36	-79.5003	27.0325	-2.78	76.24
6	11:32:44	-79.3835	27.0027	12: 8:11	-79.3797	27.0232	-2.76	58.29
7	10:21:21	-79.2846	27.0021	10:51: 9	-79.2798	27.0106	-4.28	40.18
8	9:16:43	-79.1997	27.0008	9:42:51	-79.1955	27.0027	-13.56	32.18
Cruise date: 2004.12.03								
0	20: 4:13	-79.9297	27.0001	20:15:32	-79.9288	27.0019	2.41	83.60
1	18:44:31	-79.8655	27.0006	18:59: 6	-79.8645	27.0061	-0.15	80.38
2	17:10:17	-79.7817	27.0029	17:29:37	-79.7833	27.0133	-3.39	87.59
3	15: 9:50	-79.6824	27.0009	15:34:27	-79.6806	27.0130	-1.14	90.33
4	13:23:39	-79.6145	27.0027	13:52:36	-79.6109	27.0163	0.03	84.64
5	11: 8:23	-79.4969	27.0046	11:42: 2	-79.4887	27.0175	-2.90	73.20
6	9:16:10	-79.3825	27.0032	9:49:26	-79.3738	27.0165	-5.04	57.94
7	7:50:36	-79.2822	27.0027	8:22:41	-79.2739	27.0077	-14.55	65.56
8	6:32:59	-79.1989	27.0001	7: 3:36	-79.1935	27.0071	-21.99	64.29

Table 17: Same as Table 16 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws0402. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.38	36.26	4.62	NaN	NaN
10	25.38	36.26	4.63	-0.4	182.4
20	25.40	36.26	4.65	-0.1	182.2
30	25.40	36.26	4.65	1.0	181.5
40	25.38	36.26	4.67	4.3	176.9
50	25.23	36.27	4.65	-2.4	165.5
60	24.89	36.29	4.67	-10.8	154.4
70	24.41	36.34	4.64	-9.4	154.4
80	23.79	36.34	4.61	-2.9	151.6
90	23.26	36.35	4.59	3.3	150.7
100	22.64	36.31	4.52	4.3	144.2
110	21.54	36.23	4.33	-0.8	123.8
120	19.59	36.13	4.06	0.8	103.6
130	NaN	NaN	NaN	3.1	39.8
140	NaN	NaN	NaN	12.4	-20.0

Table 18: 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: ws0402. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.58	36.27	4.60	NaN	NaN
10	25.59	36.27	4.61	-1.4	186.7
20	25.59	36.27	4.62	-1.4	186.7
30	25.60	36.27	4.62	-1.4	186.7
40	25.60	36.27	4.60	-1.4	186.7
50	25.61	36.27	4.62	-0.9	184.8
60	25.61	36.27	4.62	-1.8	184.4
70	25.61	36.27	4.63	-0.8	182.7
80	25.27	36.33	4.61	-1.5	179.5
90	24.38	36.47	4.50	3.7	177.5
100	23.81	36.48	4.54	10.3	172.7
110	23.24	36.39	4.53	11.6	169.7
120	22.89	36.35	4.58	8.9	166.0
130	22.29	36.35	4.42	6.5	160.2
140	21.34	36.33	4.26	4.9	145.3
150	18.18	36.16	3.75	9.9	118.1
160	16.96	36.11	3.50	7.3	93.3
170	15.71	35.99	3.38	-3.7	82.2
180	13.67	35.72	3.28	-3.5	72.2
190	12.42	35.55	3.19	-1.4	57.0
200	10.88	35.34	3.13	-1.5	46.0
210	9.56	35.20	3.00	-6.1	35.1
220	9.23	35.16	2.99	-7.4	31.1
230	8.80	35.11	2.97	-7.2	28.1
240	8.71	35.10	2.97	-3.3	26.9
250	8.54	35.09	2.98	-2.5	20.9

Table 19: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.79	36.29	4.55	NaN	NaN
10	25.80	36.29	4.56	-0.5	177.9
20	25.80	36.29	4.56	-0.5	177.9
30	25.80	36.29	4.56	-0.6	177.9
40	25.80	36.29	4.57	-0.8	177.9
50	25.80	36.29	4.57	-0.5	178.1
60	25.80	36.29	4.58	0.4	177.3
70	25.80	36.29	4.59	0.2	176.3
80	25.80	36.29	4.58	0.2	174.5
90	25.51	36.69	4.15	-1.0	165.9
100	24.99	36.80	3.82	2.4	165.4
110	24.57	36.82	3.80	4.5	166.6
120	23.17	36.44	4.37	1.5	166.5
130	22.93	36.47	4.47	1.0	165.7
140	22.90	36.62	4.39	-0.4	161.3
150	22.04	36.52	4.28	-3.9	159.0
160	21.68	36.51	4.19	0.9	160.8
170	21.00	36.62	3.88	7.1	161.8
180	20.04	36.66	3.60	9.1	156.8
190	19.32	36.64	3.55	16.1	148.2
200	18.24	36.47	3.55	18.9	133.8
210	16.88	36.23	3.40	13.9	117.3
220	15.69	36.03	3.32	-0.8	97.3
230	15.06	35.96	3.24	-7.1	94.2
240	14.38	35.88	3.18	-7.3	91.6
250	12.74	35.64	3.13	-1.3	84.7
260	11.19	35.41	2.97	3.6	73.2
270	10.55	35.32	2.93	3.7	66.1
280	10.31	35.30	2.93	-0.4	61.2
290	10.07	35.27	2.94	-2.0	58.5
300	9.79	35.23	2.96	-3.6	53.7
350	8.34	35.06	2.98	1.5	34.6

Table 20: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.90	36.31	4.53	NaN	NaN
10	25.90	36.32	4.54	1.8	155.7
20	25.90	36.32	4.55	1.8	155.7
30	25.91	36.32	4.53	1.8	155.7
40	25.92	36.32	4.56	1.8	155.7
50	25.92	36.32	4.55	1.0	156.6
60	25.92	36.32	4.54	-0.4	155.7
70	25.92	36.32	4.55	1.8	152.3
80	25.92	36.32	4.56	-0.2	152.5
90	25.93	36.33	4.53	0.7	150.4
100	24.96	36.47	4.34	4.0	146.5
110	24.50	36.51	4.41	5.5	141.6
120	23.99	36.48	4.42	5.9	138.7
130	23.32	36.36	4.56	8.9	134.9
140	23.23	36.49	4.54	9.2	134.6
150	23.80	36.90	4.00	7.6	134.2
160	23.08	36.90	3.69	4.4	130.8
170	22.44	36.91	3.66	2.5	130.0
180	21.19	36.82	3.54	-0.6	131.9
190	20.74	36.79	3.53	-4.3	130.3
200	20.31	36.74	3.51	-6.2	128.6
210	19.64	36.66	3.50	-1.8	124.5
220	19.08	36.58	3.49	-2.1	123.0
230	18.64	36.55	3.51	-3.8	122.6
240	18.12	36.47	3.49	-5.9	120.4
250	17.57	36.38	3.48	-9.1	120.0
260	16.86	36.27	3.41	-9.6	124.7
270	15.98	36.13	3.30	-5.0	126.6
280	15.68	36.09	3.25	-2.8	122.7
290	14.84	35.95	3.19	-1.9	119.6
300	14.46	35.89	3.18	-2.4	112.3
350	11.87	35.49	2.91	0.2	96.2
400	9.78	35.19	2.83	14.0	81.1
450	8.73	35.06	2.89	2.0	62.7
500	7.29	34.95	3.05	0.7	33.0

Table 21: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.91	36.30	4.54	NaN	NaN
10	25.91	36.31	4.53	-1.8	135.0
20	25.91	36.31	4.54	-1.8	135.0
30	25.92	36.31	4.54	-1.8	135.0
40	25.92	36.31	4.55	-1.9	135.1
50	25.92	36.31	4.56	-2.0	135.6
60	25.93	36.31	4.55	-3.1	134.6
70	25.93	36.31	4.55	-3.4	135.4
80	25.93	36.31	4.55	-2.3	134.8
90	25.93	36.31	4.56	-3.3	134.2
100	25.61	36.35	4.53	-2.6	128.1
110	24.90	36.42	4.49	-0.9	122.0
120	25.23	36.76	3.97	-1.6	121.8
130	24.58	36.84	3.80	7.2	120.5
140	23.96	36.85	3.76	9.2	119.8
150	23.25	36.89	3.68	6.5	118.9
160	22.33	36.80	3.64	1.0	116.4
170	21.77	36.86	3.58	-2.8	113.8
180	21.06	36.75	3.54	-3.1	117.6
190	20.37	36.72	3.54	-1.4	120.4
200	19.67	36.66	3.55	-1.0	121.9
210	19.13	36.61	3.56	-1.4	122.3
220	18.71	36.55	3.55	-0.4	121.5
230	18.42	36.53	3.56	-1.4	123.3
240	18.04	36.46	3.57	-4.1	122.7
250	17.63	36.40	3.56	-2.9	120.0
260	17.25	36.35	3.54	-1.3	117.9
270	16.74	36.27	3.52	-3.1	117.2
280	16.67	36.26	3.50	-4.4	117.6
290	15.90	36.12	3.38	-4.9	115.1
300	15.44	36.05	3.35	-3.4	115.5
350	14.00	35.82	3.26	7.3	112.9
400	11.33	35.41	2.87	7.7	92.1
450	9.95	35.21	2.85	1.9	82.9
500	8.87	35.07	2.87	13.1	63.9
550	7.98	34.98	2.94	1.6	52.9
600	7.16	34.94	3.09	7.4	40.5

Table 22: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.79	36.28	4.56	NaN	NaN
10	25.79	36.28	4.55	-4.9	100.1
20	25.80	36.28	4.56	-4.9	100.1
30	25.81	36.28	4.56	-4.8	100.2
40	25.81	36.28	4.56	-4.6	100.3
50	25.81	36.28	4.58	-3.0	101.1
60	25.81	36.28	4.57	-0.7	101.5
70	25.81	36.29	4.56	4.3	100.4
80	25.78	36.30	4.58	12.7	103.5
90	25.73	36.32	4.57	19.2	105.6
100	25.60	36.34	4.55	25.7	107.6
110	25.14	36.38	4.50	11.3	102.4
120	25.00	36.59	4.36	6.5	103.6
130	24.55	36.69	4.05	3.9	101.5
140	24.03	36.79	3.89	1.4	98.1
150	22.93	36.86	3.68	3.1	99.0
160	22.41	36.92	3.66	2.6	101.0
170	21.89	36.90	3.62	-1.2	100.6
180	21.30	36.87	3.65	-2.9	99.6
190	20.97	36.84	3.66	-2.0	97.4
200	20.57	36.80	3.68	-1.2	94.8
210	20.21	36.77	3.69	-1.0	94.4
220	19.92	36.73	3.70	-1.4	95.3
230	19.42	36.68	3.73	-1.6	93.5
240	19.08	36.63	3.74	-0.5	94.9
250	18.66	36.59	3.83	-0.1	96.9
260	18.39	36.55	3.88	-2.2	95.8
270	18.14	36.51	3.85	-0.2	95.7
280	17.95	36.49	3.90	2.8	94.3
290	17.70	36.45	3.88	3.9	94.8
300	17.42	36.40	3.83	4.8	93.5
350	15.46	36.06	3.43	-0.2	79.4
400	13.61	35.75	3.18	0.8	82.8
450	11.48	35.42	2.99	-0.2	66.1
500	10.32	35.25	2.92	-5.8	57.8
550	9.72	35.17	2.88	-8.3	55.4
600	9.16	35.10	2.89	-7.1	45.2
650	8.38	35.02	2.90	2.5	28.3
700	7.71	34.96	2.97	3.5	21.2
750	NaN	NaN	NaN	-0.7	20.1

Table 23: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.35	36.37	4.55	NaN	NaN
10	25.34	36.38	4.58	-1.1	76.6
20	25.34	36.38	4.59	-1.1	76.6
30	25.35	36.38	4.59	-1.2	76.6
40	25.35	36.38	4.60	-1.5	76.8
50	25.35	36.38	4.59	-2.0	77.9
60	25.35	36.38	4.60	-4.0	78.9
70	25.35	36.38	4.59	-4.7	79.2
80	25.35	36.38	4.60	-4.6	80.0
90	25.35	36.38	4.59	-5.2	81.1
100	25.36	36.38	4.58	-5.3	81.5
110	25.38	36.41	4.56	-5.1	80.0
120	25.38	36.46	4.46	-7.6	77.9
130	25.14	36.65	4.19	-6.1	76.4
140	24.41	36.79	3.89	-2.4	73.8
150	23.57	36.87	3.77	-1.3	71.8
160	22.49	36.90	3.68	5.7	73.5
170	21.49	36.87	3.61	9.2	75.2
180	20.96	36.82	3.60	6.1	77.2
190	20.62	36.80	3.60	5.0	80.5
200	20.39	36.78	3.60	6.0	83.0
210	19.96	36.73	3.63	5.7	81.8
220	19.61	36.69	3.68	4.2	79.6
230	19.21	36.64	3.67	2.7	77.5
240	18.87	36.60	3.66	3.8	75.4
250	18.56	36.56	3.68	4.9	73.4
260	18.41	36.54	3.70	3.9	74.0
270	18.26	36.52	3.70	1.0	73.3
280	18.05	36.49	3.69	-2.1	72.3
290	17.89	36.47	3.78	-2.5	70.6
300	17.46	36.40	3.80	-0.6	69.0
350	17.26	36.36	3.66	4.5	67.3
400	15.91	36.13	3.47	3.6	56.8
450	14.27	35.86	3.24	-5.8	47.4
500	13.09	35.67	3.17	-4.3	31.5
550	11.41	35.41	2.97	-4.8	21.3
600	10.95	35.34	2.95	-7.8	10.9
650	NaN	NaN	NaN	-25.1	4.5

Table 24: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.36	36.35	4.55	NaN	NaN
10	25.36	36.35	4.56	3.6	67.3
20	25.36	36.35	4.56	3.6	67.3
30	25.36	36.35	4.56	3.6	67.2
40	25.36	36.36	4.56	3.6	66.8
50	25.36	36.36	4.56	4.7	65.9
60	25.36	36.36	4.56	3.1	66.4
70	25.37	36.36	4.57	2.1	67.4
80	25.37	36.36	4.56	-1.0	66.5
90	25.27	36.40	4.49	-7.7	67.0
100	25.22	36.43	4.42	-10.0	69.0
110	25.23	36.47	4.36	-9.5	71.2
120	25.17	36.55	4.21	-11.4	72.6
130	24.75	36.75	3.91	-14.5	72.4
140	24.54	36.79	3.85	-17.1	71.8
150	24.32	36.82	3.83	-15.4	71.3
160	23.41	36.89	3.75	-14.9	67.5
170	22.07	36.89	3.91	-12.3	62.1
180	21.57	36.88	4.05	-9.0	60.9
190	21.31	36.86	4.02	-8.7	59.1
200	21.17	36.85	3.95	-5.2	57.4
210	20.69	36.81	3.88	-1.0	56.6
220	20.19	36.77	4.10	0.3	57.5
230	20.07	36.76	4.24	-1.3	56.8
240	19.87	36.74	4.27	-2.6	57.4
250	19.61	36.71	4.28	-1.6	57.2
260	19.38	36.69	4.29	-0.5	56.5
270	18.91	36.64	4.31	-0.6	52.4
280	18.76	36.62	4.33	-2.3	48.0
290	18.70	36.61	4.25	-1.5	45.8
300	18.65	36.60	4.29	-1.2	45.7
350	17.36	36.41	4.02	-7.7	45.5
400	16.60	36.25	3.58	-7.5	43.3
450	15.97	36.15	3.52	-7.6	35.6
500	14.83	35.96	3.45	-1.5	28.2
550	13.83	35.81	3.35	1.7	17.4
600	NaN	NaN	NaN	-11.8	15.2

Table 25: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0402. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.30	36.39	4.58	NaN	NaN
10	25.29	36.39	4.58	-0.8	42.2
20	25.28	36.39	4.58	-0.8	42.1
30	25.27	36.39	4.57	-0.8	41.7
40	25.27	36.40	4.57	-0.8	40.3
50	25.26	36.41	4.56	-0.8	34.8
60	25.25	36.42	4.53	-4.2	31.9
70	25.25	36.44	4.50	-7.0	33.7
80	25.21	36.45	4.49	-9.5	36.2
90	25.24	36.48	4.44	-12.5	37.1
100	25.25	36.50	4.37	-16.3	40.2
110	25.22	36.51	4.33	-16.6	44.0
120	25.14	36.56	4.27	-17.4	49.4
130	24.61	36.58	4.37	-23.0	53.6
140	24.32	36.54	4.49	-25.8	52.5
150	24.08	36.71	4.29	-21.5	51.8
160	23.38	36.88	3.88	-15.5	48.6
170	22.40	36.89	4.01	-14.5	41.5
180	21.76	36.87	3.88	-17.8	40.6
190	21.30	36.82	3.62	-20.1	43.0
200	20.92	36.81	3.77	-18.4	42.0
210	20.80	36.80	3.75	-15.1	42.2
220	20.38	36.77	3.68	-10.3	38.6
230	20.03	36.74	3.91	-10.5	38.2
240	19.94	36.73	3.71	-11.2	39.8
250	19.61	36.69	3.77	-10.5	35.9
260	19.34	36.67	3.91	-8.9	31.8
270	19.21	36.66	4.07	-9.6	29.4
280	19.12	36.64	4.04	-11.5	31.3
290	18.99	36.63	3.97	-10.9	34.3
300	18.96	36.63	4.05	-7.5	35.7
350	18.13	36.53	4.32	-6.9	34.7
400	17.52	36.44	4.25	-6.0	32.6
450	16.67	36.31	4.14	-7.3	23.3

Table 26: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.03	36.07	5.09	NaN	NaN
10	25.03	36.07	5.13	1.1	56.0
20	24.43	36.09	5.16	1.0	56.2
30	23.47	36.09	5.20	0.9	56.8
40	22.51	36.20	5.00	-3.5	64.3
50	21.35	36.35	4.82	-6.1	64.3
60	20.27	36.42	4.59	-3.4	59.0
70	19.37	36.47	4.05	-3.1	55.4
80	18.11	36.37	3.67	-2.7	51.1
90	16.72	36.24	3.42	2.8	43.7
100	15.60	36.07	3.35	4.9	40.6
110	14.83	35.96	3.31	12.3	22.3
120	12.23	35.58	3.19	16.1	0.0
130	10.65	35.36	3.13	15.6	-12.7
140	NaN	NaN	NaN	24.5	0.2

Table 27: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.23	36.09	5.10	NaN	NaN
10	25.23	36.09	5.09	-1.0	110.8
20	25.21	36.09	5.10	-1.3	110.7
30	24.94	36.05	5.13	-2.5	110.0
40	23.67	36.10	5.20	-5.9	108.7
50	22.57	36.19	5.08	-12.6	106.1
60	21.51	36.29	4.83	-6.4	98.8
70	20.63	36.40	4.67	-8.3	95.2
80	19.79	36.44	4.28	-10.0	91.4
90	19.25	36.43	4.04	-6.3	80.1
100	18.09	36.43	3.82	-4.6	61.7
110	15.99	36.08	3.57	-5.9	50.7
120	15.21	35.99	3.38	-7.2	44.7
130	14.62	35.92	3.30	-8.6	40.8
140	13.41	35.73	3.22	-7.2	38.6
150	12.39	35.57	3.12	-2.5	36.0
160	11.70	35.47	3.07	2.9	32.3
170	11.20	35.39	3.07	8.2	33.5
180	10.81	35.34	3.07	14.2	32.8
190	10.71	35.32	3.09	16.5	30.2
200	10.55	35.31	3.11	18.8	26.0
210	10.50	35.31	3.14	18.1	21.5
220	10.42	35.31	3.18	22.4	16.2
230	10.28	35.30	3.20	26.0	10.9
240	NaN	NaN	NaN	29.6	1.7
250	NaN	NaN	NaN	25.2	-15.7

Table 28: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.27	36.40	4.93	NaN	NaN
10	26.27	36.40	4.92	-4.6	159.6
20	26.26	36.40	4.93	-4.6	159.6
30	26.27	36.40	4.92	-4.6	159.7
40	26.01	36.34	4.94	-3.6	157.0
50	23.53	36.00	5.16	-7.2	143.4
60	23.08	36.18	5.14	-4.9	136.8
70	22.94	36.36	5.14	-6.2	136.5
80	22.03	36.45	5.13	-10.4	132.0
90	21.29	36.46	5.14	-9.2	122.9
100	20.11	36.40	4.64	-6.7	117.8
110	19.18	36.47	4.01	-2.3	110.0
120	18.07	36.37	3.70	0.4	100.6
130	16.83	36.24	3.61	-6.2	100.6
140	16.25	36.19	3.54	-7.0	101.2
150	15.74	36.11	3.54	-3.0	95.6
160	15.14	36.02	3.52	-0.5	87.3
170	14.71	35.96	3.53	1.0	79.5
180	14.32	35.89	3.51	1.9	75.7
190	13.62	35.77	3.38	0.2	71.4
200	13.50	35.75	3.34	4.0	69.4
210	13.24	35.71	3.32	4.1	63.1
220	12.95	35.67	3.31	4.5	57.4
230	12.30	35.56	3.23	5.3	55.7
240	12.06	35.52	3.22	4.6	56.4
250	11.82	35.48	3.22	8.2	54.5
260	11.66	35.46	3.21	12.0	52.8
270	11.56	35.44	3.19	15.6	46.3
280	11.29	35.41	3.16	17.5	39.6
290	11.04	35.37	3.15	17.4	34.0
300	11.01	35.37	3.18	17.4	32.2
350	8.78	35.11	3.18	4.8	-6.1

Table 29: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.50	36.40	4.94	NaN	NaN
10	26.51	36.40	4.94	-0.3	175.1
20	26.52	36.40	4.93	-0.2	175.0
30	26.52	36.40	4.91	0.2	174.5
40	26.52	36.40	4.89	0.8	173.5
50	26.04	36.41	4.94	2.0	170.6
60	25.35	36.44	5.00	3.3	166.2
70	24.89	36.58	4.75	2.9	153.3
80	23.97	36.49	5.07	3.0	149.4
90	22.90	36.49	5.11	0.3	143.7
100	22.22	36.46	5.14	-8.5	140.6
110	20.38	36.44	4.74	-18.2	137.4
120	19.39	36.62	3.91	-13.6	132.8
130	18.47	36.53	3.59	-9.4	125.9
140	18.26	36.52	3.83	-3.5	119.6
150	17.56	36.43	3.92	-0.3	111.1
160	17.20	36.36	3.93	-5.3	104.4
170	17.01	36.32	3.82	-8.1	102.0
180	16.40	36.23	3.62	-2.9	97.5
190	15.95	36.15	3.72	-1.6	92.1
200	15.52	36.08	3.67	-3.3	88.5
210	15.22	36.03	3.67	-3.4	83.9
220	14.92	35.98	3.59	-4.3	80.1
230	14.49	35.91	3.48	-5.2	75.8
240	14.17	35.85	3.39	-6.4	75.8
250	14.02	35.83	3.40	-4.4	78.3
260	13.75	35.79	3.37	-1.0	77.8
270	13.32	35.72	3.36	0.3	71.7
280	12.89	35.65	3.35	-1.7	67.8
290	12.66	35.61	3.29	-2.3	67.4
300	12.39	35.57	3.32	-0.4	65.7
350	11.08	35.37	3.19	13.5	48.0
400	10.26	35.25	3.17	6.4	46.1
450	9.60	35.16	3.13	5.8	48.2
500	NaN	NaN	NaN	15.5	10.0

Table 30: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.49	36.36	4.90	NaN	NaN
10	26.49	36.36	4.90	7.6	170.5
20	26.49	36.36	4.88	7.6	170.5
30	26.48	36.36	4.89	7.8	170.3
40	26.50	36.36	4.86	7.9	169.9
50	26.40	36.39	4.83	8.1	169.1
60	25.87	36.52	4.76	11.5	154.7
70	25.38	36.60	4.60	12.4	144.4
80	24.09	36.49	4.96	6.7	138.6
90	23.21	36.49	5.00	1.3	131.9
100	22.35	36.47	5.05	-7.9	130.0
110	21.44	36.46	4.99	-17.6	129.2
120	20.63	36.47	4.75	-18.9	127.9
130	20.05	36.62	4.09	-13.0	124.5
140	19.08	36.64	3.80	-6.4	120.0
150	18.52	36.57	3.82	-0.4	111.7
160	17.88	36.46	3.82	-0.9	102.6
170	17.50	36.41	3.74	-3.9	98.3
180	17.19	36.36	3.84	-4.2	95.3
190	16.97	36.32	3.84	-4.5	93.5
200	16.69	36.28	3.83	-6.2	92.2
210	16.42	36.23	3.71	-7.0	90.9
220	16.22	36.20	3.71	-7.8	91.6
230	16.19	36.20	3.79	-8.3	92.6
240	15.96	36.17	3.81	-4.1	91.0
250	15.15	36.02	3.72	2.9	85.5
260	14.86	35.97	3.50	4.9	81.7
270	14.63	35.93	3.48	6.6	77.8
280	14.38	35.90	3.46	9.6	74.9
290	14.26	35.88	3.57	9.6	73.3
300	14.00	35.84	3.57	6.1	69.9
350	12.78	35.66	3.53	0.0	61.0
400	10.82	35.33	3.16	4.4	46.9
450	9.81	35.19	3.12	1.6	37.5
500	9.49	35.16	3.15	2.3	30.7
550	9.29	35.12	3.15	5.2	26.2
600	7.36	34.95	3.23	-8.3	-1.0

Table 31: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.49	36.36	4.96	NaN	NaN
10	26.48	36.36	4.96	6.4	147.0
20	26.48	36.36	4.95	6.4	147.0
30	26.49	36.36	4.94	6.5	147.1
40	26.50	36.36	4.93	6.7	147.1
50	26.50	36.36	4.92	6.9	148.4
60	26.50	36.36	4.91	7.8	147.5
70	26.49	36.36	4.90	8.4	142.8
80	25.86	36.52	4.74	0.6	132.3
90	25.44	36.71	4.56	-9.7	131.0
100	24.63	36.73	4.40	-5.7	131.5
110	23.68	36.72	4.43	-9.4	124.9
120	23.65	36.98	3.94	-10.9	116.9
130	22.50	36.88	3.92	-9.2	111.4
140	21.38	36.68	4.29	-3.9	107.8
150	20.40	36.79	3.91	-4.1	96.6
160	19.61	36.70	3.79	-9.8	93.1
170	19.44	36.68	3.89	-14.6	97.1
180	19.07	36.65	3.99	-17.5	96.9
190	18.62	36.58	4.10	-17.5	96.2
200	18.53	36.57	4.11	-15.5	103.0
210	18.42	36.56	4.12	-9.1	102.9
220	17.95	36.48	4.06	-5.3	95.4
230	17.42	36.41	4.09	-4.8	91.6
240	17.16	36.36	3.99	-6.4	93.6
250	17.00	36.35	4.05	-8.1	93.1
260	16.62	36.28	3.99	-7.7	92.1
270	16.53	36.29	4.15	-10.3	89.9
280	16.47	36.28	4.18	-8.6	88.4
290	16.22	36.24	4.17	-7.9	87.9
300	16.08	36.21	4.15	-7.2	85.9
350	14.89	36.00	3.87	2.4	71.9
400	13.75	35.81	3.56	1.0	56.7
450	11.72	35.48	3.34	2.3	44.5
500	10.31	35.27	3.16	1.1	38.4
550	9.67	35.17	3.12	-0.3	32.7
600	9.12	35.11	3.11	8.4	25.5
650	8.23	35.01	3.13	-0.0	15.8
700	7.39	34.96	3.20	-2.5	7.7
750	NaN	NaN	NaN	-11.5	-2.1

Table 32: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.25	36.31	4.98	NaN	NaN
10	26.25	36.31	4.98	13.2	133.0
20	26.25	36.31	4.97	13.2	133.1
30	26.25	36.32	4.99	13.4	133.4
40	26.25	36.32	4.98	13.6	133.9
50	26.24	36.32	4.97	13.7	142.6
60	26.22	36.33	4.96	13.9	151.0
70	26.23	36.34	4.96	12.2	147.5
80	26.02	36.49	4.81	10.6	134.7
90	25.84	36.72	4.62	-0.8	117.9
100	25.25	36.76	4.52	-7.9	114.2
110	25.05	36.71	4.57	-9.8	116.3
120	24.27	36.78	4.57	-5.1	109.3
130	22.80	36.87	4.26	-6.8	94.5
140	21.91	36.88	4.19	-9.9	89.4
150	21.76	36.88	4.19	-3.9	90.8
160	20.76	36.83	4.17	0.9	89.4
170	20.08	36.76	4.15	2.2	83.1
180	19.62	36.73	4.35	0.3	78.7
190	19.26	36.68	4.39	-4.7	75.0
200	18.92	36.64	4.39	-7.5	70.8
210	18.79	36.62	4.43	-11.5	68.4
220	18.71	36.61	4.45	-13.7	67.8
230	18.67	36.61	4.47	-16.3	67.7
240	18.40	36.56	4.42	-17.7	69.2
250	18.20	36.55	4.48	-16.3	69.2
260	17.88	36.51	4.50	-16.0	67.0
270	17.67	36.48	4.51	-13.7	65.7
280	17.18	36.39	4.45	-11.3	61.6
290	16.93	36.35	4.40	-10.4	58.4
300	16.88	36.35	4.39	-7.8	56.7
350	16.24	36.24	4.34	-9.4	56.4
400	15.20	36.05	4.01	-1.8	44.7
450	14.03	35.87	3.93	6.5	39.5
500	12.16	35.56	3.58	9.8	26.5
550	10.60	35.30	3.27	-0.1	13.7
600	9.68	35.18	3.25	-1.2	4.8
650	NaN	NaN	NaN	-6.2	-4.8

Table 33: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.11	36.38	5.06	NaN	NaN
10	26.12	36.38	5.05	29.9	78.5
20	26.12	36.38	5.07	29.9	78.5
30	26.12	36.37	5.06	30.0	78.4
40	26.12	36.37	5.06	30.2	78.4
50	26.12	36.37	5.05	31.4	77.0
60	26.12	36.38	5.04	29.1	77.0
70	26.07	36.39	5.01	25.0	75.1
80	26.02	36.41	4.98	16.1	69.9
90	26.01	36.42	4.97	8.8	65.6
100	25.69	36.54	4.91	-4.3	64.2
110	25.33	36.69	4.67	-6.9	67.3
120	24.89	36.72	4.63	4.1	73.3
130	24.64	36.73	4.64	3.3	75.3
140	22.87	36.85	4.81	-6.7	72.4
150	22.22	36.89	4.66	-10.1	65.8
160	20.95	36.80	4.55	-12.5	61.6
170	20.34	36.76	4.57	-14.7	63.6
180	19.93	36.74	4.53	-13.3	63.6
190	19.74	36.73	4.58	-14.0	63.8
200	19.55	36.71	4.62	-17.2	63.9
210	19.27	36.68	4.65	-22.4	60.4
220	18.87	36.64	4.68	-22.3	59.3
230	18.76	36.63	4.67	-20.0	60.8
240	18.61	36.61	4.65	-18.2	60.8
250	18.44	36.59	4.67	-17.7	60.3
260	18.27	36.57	4.65	-16.2	60.2
270	18.11	36.54	4.65	-15.8	60.8
280	18.06	36.54	4.65	-13.8	61.2
290	17.95	36.52	4.66	-11.7	60.7
300	17.88	36.51	4.67	-10.2	63.0
350	17.18	36.41	4.60	-6.2	52.5
400	16.16	36.23	4.43	-4.7	44.0
450	15.20	36.07	4.10	-4.2	31.7
500	13.62	35.82	3.83	-7.4	23.8
550	12.40	35.63	3.71	-4.6	21.6
600	NaN	NaN	NaN	4.7	-2.2

Table 34: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0412. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.21	36.35	4.99	NaN	NaN
10	26.20	36.35	5.00	14.1	1.6
20	26.21	36.35	5.00	14.1	1.6
30	26.19	36.35	5.05	14.1	1.6
40	26.19	36.35	5.03	14.2	1.6
50	26.18	36.35	5.00	19.0	2.4
60	26.18	36.35	5.01	20.2	3.3
70	26.15	36.36	4.99	17.5	4.0
80	25.97	36.47	4.90	3.2	2.2
90	25.94	36.51	4.85	-4.6	10.4
100	24.80	36.78	4.93	-9.3	29.5
110	24.36	36.81	4.88	-11.3	42.3
120	23.53	36.84	4.89	-6.5	49.2
130	23.32	36.86	4.84	-4.8	50.6
140	22.96	36.85	4.77	-11.0	51.2
150	22.77	36.87	4.75	-15.8	52.7
160	22.17	36.84	4.71	-12.8	57.0
170	20.86	36.79	4.62	-18.5	56.3
180	20.62	36.77	4.54	-31.1	58.3
190	20.45	36.76	4.55	-35.3	64.8
200	19.97	36.73	4.57	-35.8	66.4
210	19.60	36.70	4.59	-38.7	65.6
220	19.29	36.67	4.63	-34.1	64.8
230	18.98	36.64	4.65	-30.7	66.9
240	18.88	36.64	4.64	-31.5	67.0
250	18.85	36.63	4.67	-33.0	67.3
260	18.57	36.60	4.71	-31.6	66.0
270	18.36	36.58	4.73	-28.7	63.1
280	18.33	36.58	4.75	-27.1	61.9
290	18.31	36.57	4.75	-27.6	61.8
300	18.15	36.55	4.74	-27.0	60.5
350	17.62	36.48	4.72	-24.3	61.2
400	16.65	36.32	4.59	-16.0	49.2
450	15.82	36.18	4.40	-7.8	36.5

Table 35: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.76	36.44	4.61	NaN	NaN
10	27.33	36.46	4.65	-30.7	158.4
20	27.08	36.47	4.69	-31.6	154.6
30	25.71	36.45	4.79	-34.0	138.8
40	23.81	36.43	4.87	-36.5	117.8
50	21.23	36.35	4.57	-35.5	96.1
60	19.05	36.24	4.22	-23.4	79.1
70	17.47	36.14	3.91	-15.0	55.1
80	15.60	36.00	3.50	-1.3	41.5
90	14.98	35.99	3.32	8.4	34.3
100	14.35	35.90	3.25	6.1	26.9
110	13.25	35.75	3.20	-2.2	22.2
120	12.38	35.63	3.16	-12.0	15.1
130	11.38	35.48	3.12	-12.6	11.0
140	NaN	NaN	NaN	-11.0	-27.2

Table 36: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.39	36.29	4.55	NaN	NaN
10	28.39	36.35	4.55	-39.3	225.8
20	28.37	36.37	4.55	-39.3	225.6
30	27.44	36.46	4.63	-39.2	225.2
40	26.58	36.49	4.73	-38.0	212.9
50	25.62	36.50	4.80	-38.1	199.2
60	24.42	36.48	4.86	-29.9	176.6
70	23.02	36.45	4.84	-30.9	156.0
80	21.22	36.38	4.67	-36.2	140.9
90	18.66	36.20	4.16	-25.4	115.3
100	17.26	36.13	3.82	-18.3	83.7
110	16.45	36.08	3.62	-18.1	62.1
120	15.41	35.98	3.44	-17.6	50.9
130	14.14	35.87	3.26	-11.4	37.4
140	13.86	35.83	3.23	-12.4	33.0
150	13.27	35.74	3.18	-12.4	30.4
160	12.11	35.58	3.12	-11.4	24.9
170	11.92	35.56	3.12	-12.3	21.5
180	11.49	35.49	3.11	-14.3	19.6
190	10.79	35.40	3.09	-10.2	13.2
200	9.93	35.26	3.02	-10.0	8.9
210	9.46	35.19	2.98	-10.8	8.3
220	8.81	35.09	2.92	-12.6	6.6
230	8.75	35.09	2.93	-11.4	3.3
240	8.71	35.08	2.93	-11.2	4.2
250	NaN	NaN	NaN	-11.2	4.2

Table 37: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.44	36.38	4.53	NaN	NaN
10	28.42	36.38	4.55	-20.7	205.2
20	28.34	36.37	4.55	-20.5	205.4
30	28.17	36.36	4.58	-19.8	206.2
40	27.66	36.32	4.62	-16.9	208.5
50	26.97	36.34	4.69	-15.7	203.8
60	26.43	36.43	4.68	-22.8	201.0
70	25.79	36.55	4.61	-21.0	199.3
80	24.23	36.49	4.87	-20.4	191.3
90	24.09	36.70	4.68	-23.4	182.1
100	22.36	36.47	4.95	-20.0	175.1
110	21.49	36.51	4.90	-15.2	168.7
120	21.05	36.49	4.76	-14.6	163.4
130	20.60	36.59	4.44	-16.3	157.3
140	19.97	36.59	3.86	-15.7	148.9
150	18.96	36.47	3.69	-13.0	131.4
160	17.26	36.26	3.54	-17.5	110.9
170	16.44	36.18	3.43	-23.2	98.2
180	16.12	36.16	3.40	-24.6	93.4
190	15.57	36.09	3.36	-19.7	87.1
200	14.71	35.95	3.30	-10.8	75.6
210	14.36	35.89	3.26	-8.5	66.3
220	13.99	35.84	3.23	-16.2	55.7
230	13.64	35.78	3.20	-21.8	54.3
240	13.08	35.70	3.18	-20.7	51.6
250	12.32	35.60	3.13	-26.8	44.1
260	11.76	35.51	3.10	-27.8	39.2
270	11.05	35.41	3.06	-24.8	42.4
280	10.39	35.32	3.05	-21.0	42.4
290	9.82	35.25	3.03	-20.9	35.6
300	9.73	35.23	3.03	-22.8	27.8
350	7.69	34.98	3.02	-16.8	9.9

Table 38: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.50	36.31	4.55	NaN	NaN
10	28.51	36.32	4.54	-17.0	190.6
20	28.40	36.37	4.55	-17.0	190.6
30	27.94	36.34	4.61	-16.9	191.0
40	27.62	36.32	4.65	-17.8	191.6
50	27.29	36.36	4.67	-18.9	189.2
60	26.64	36.38	4.69	-17.4	185.0
70	26.24	36.50	4.59	-15.5	183.7
80	25.81	36.55	4.53	-14.4	189.3
90	24.83	36.56	4.70	-10.6	185.0
100	23.80	36.59	4.59	-10.6	174.2
110	23.12	36.80	4.14	-16.9	167.3
120	21.91	36.57	4.52	-21.5	162.4
130	21.10	36.45	4.71	-22.8	157.3
140	20.73	36.45	4.83	-18.7	155.1
150	20.19	36.45	4.55	-15.7	151.4
160	19.92	36.47	4.11	-17.8	151.1
170	19.54	36.46	3.83	-20.1	148.7
180	19.03	36.50	3.67	-23.4	148.1
190	18.59	36.46	3.50	-24.2	148.9
200	18.11	36.44	3.44	-22.1	143.2
210	17.63	36.37	3.41	-14.1	133.4
220	16.84	36.26	3.36	-8.3	121.8
230	16.57	36.22	3.33	-11.3	110.3
240	16.05	36.16	3.29	-21.4	102.5
250	15.67	36.10	3.26	-27.5	102.8
260	15.48	36.07	3.25	-31.9	104.9
270	15.08	36.01	3.23	-30.7	103.9
280	14.85	35.97	3.22	-30.3	102.6
290	14.59	35.93	3.22	-28.7	103.4
300	14.08	35.84	3.19	-24.4	105.9
350	12.30	35.58	3.12	-24.4	71.9
400	9.94	35.24	3.03	-14.4	51.9
450	8.07	35.03	3.07	-9.4	15.0
500	NaN	NaN	NaN	-12.2	1.6

Table 39: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.41	36.35	4.54	NaN	NaN
10	28.39	36.36	4.55	-15.8	169.9
20	28.05	36.34	4.59	-15.7	170.2
30	27.68	36.30	4.64	-15.3	171.5
40	27.34	36.28	4.69	-14.5	173.2
50	27.10	36.25	4.71	-12.4	175.6
60	26.78	36.27	4.73	-12.0	177.0
70	26.47	36.37	4.68	-16.6	177.3
80	26.12	36.50	4.53	-20.6	176.1
90	25.71	36.61	4.44	-16.9	173.0
100	25.08	36.79	4.04	-16.9	168.2
110	23.88	36.94	3.90	-16.0	161.4
120	23.44	36.98	3.85	-18.3	155.3
130	22.98	36.99	3.88	-18.3	149.0
140	22.57	36.98	3.87	-14.5	148.3
150	21.75	36.87	3.95	-11.7	148.7
160	21.09	36.89	3.84	-7.9	147.5
170	20.32	36.79	3.69	-6.4	144.3
180	19.84	36.74	3.68	-10.9	144.2
190	19.27	36.67	3.71	-15.4	145.1
200	18.67	36.59	3.78	-22.4	140.0
210	18.43	36.56	3.79	-22.0	137.2
220	18.20	36.52	3.79	-21.1	134.2
230	17.72	36.45	3.79	-27.7	129.7
240	17.43	36.42	3.93	-33.4	130.5
250	17.39	36.42	3.96	-34.0	132.8
260	17.25	36.40	3.97	-32.4	131.9
270	17.20	36.39	3.98	-32.2	127.3
280	16.74	36.31	3.89	-28.7	123.9
290	16.34	36.24	3.84	-23.7	121.6
300	16.04	36.20	3.80	-22.0	122.2
350	14.98	35.99	3.43	-22.8	110.9
400	12.51	35.59	3.10	-5.6	90.2
450	9.90	35.22	3.01	-5.4	56.3
500	8.90	35.09	2.99	-8.3	53.4
550	7.90	35.00	3.08	-6.5	26.3
600	7.49	34.97	3.16	-11.0	23.7

Table 40: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	28.20	36.34	4.56	NaN	NaN
10	28.20	36.34	4.58	0.1	134.1
20	27.57	36.31	4.64	-0.2	134.3
30	26.85	36.25	4.74	-1.3	134.8
40	26.57	36.29	4.71	-4.3	135.2
50	26.35	36.31	4.67	-13.2	134.1
60	26.07	36.32	4.67	-14.2	135.5
70	25.88	36.37	4.61	-13.6	135.9
80	25.79	36.62	4.29	-13.6	136.2
90	25.63	36.76	4.51	-16.7	139.8
100	25.29	36.76	4.38	-20.5	140.5
110	24.92	36.80	4.24	-28.5	141.0
120	24.01	36.90	4.13	-38.3	134.4
130	23.67	36.94	4.06	-37.6	127.0
140	23.61	36.95	4.13	-26.8	121.5
150	22.79	36.97	4.23	-16.6	117.0
160	21.93	36.95	4.22	-15.4	114.6
170	21.39	36.91	4.14	-18.7	113.0
180	20.78	36.86	4.10	-21.2	107.7
190	20.37	36.82	4.20	-21.2	105.6
200	20.12	36.79	4.22	-19.3	103.7
210	19.78	36.75	4.24	-17.5	102.5
220	19.46	36.71	4.23	-15.4	104.4
230	18.86	36.63	4.18	-13.1	104.7
240	18.48	36.59	4.16	-13.1	102.5
250	18.35	36.57	4.13	-15.4	104.5
260	17.89	36.50	4.12	-19.1	103.3
270	17.78	36.48	4.09	-20.8	100.7
280	17.77	36.48	4.08	-23.0	99.9
290	17.57	36.45	4.05	-20.9	98.6
300	17.49	36.43	4.03	-18.5	96.2
350	16.59	36.29	3.93	-26.6	81.7
400	14.27	35.90	3.49	-8.2	75.9
450	13.49	35.76	3.38	-7.9	68.8
500	11.65	35.45	3.05	-7.9	69.0
550	9.32	35.16	3.05	-3.6	51.9
600	8.30	35.05	3.11	0.0	45.4
650	6.99	34.93	3.25	5.1	30.0
700	6.62	34.93	3.36	-1.0	27.4

Table 41: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.86	36.32	4.62	NaN	NaN
10	27.87	36.31	4.62	-4.6	86.2
20	27.63	36.36	4.66	-4.7	86.3
30	27.01	36.29	4.72	-5.3	86.3
40	26.80	36.34	4.69	-6.4	85.2
50	26.54	36.36	4.68	-10.6	81.1
60	26.51	36.37	4.66	-9.6	82.3
70	26.38	36.43	4.65	-8.1	80.9
80	25.87	36.63	4.42	-7.8	78.6
90	25.43	36.71	4.34	-12.7	75.9
100	25.19	36.77	4.33	-15.2	72.0
110	25.12	36.79	4.38	-15.2	70.5
120	24.98	36.80	4.31	-21.0	72.6
130	24.64	36.86	4.19	-22.5	81.6
140	24.26	36.91	3.98	-18.8	87.4
150	23.30	36.94	4.14	-16.5	85.9
160	22.60	36.95	4.13	-16.5	74.8
170	22.02	36.94	4.15	-10.5	67.0
180	21.82	36.94	4.17	-9.1	63.7
190	21.37	36.91	4.15	-10.8	61.6
200	21.08	36.87	4.08	-11.8	62.3
210	20.26	36.78	3.98	-11.9	61.5
220	19.78	36.74	4.06	-10.9	63.1
230	19.74	36.73	4.10	-13.5	62.7
240	19.43	36.70	4.16	-17.9	61.6
250	19.13	36.67	4.17	-18.8	60.5
260	18.97	36.65	4.18	-13.9	59.4
270	18.63	36.61	4.14	-10.0	60.1
280	18.45	36.59	4.27	-13.9	59.2
290	18.25	36.56	4.28	-17.4	59.0
300	18.17	36.55	4.27	-20.3	58.9
350	17.29	36.41	4.18	-12.1	53.4
400	16.02	36.19	3.77	-13.8	48.0
450	14.52	35.93	3.49	-1.1	31.6
500	13.32	35.72	3.28	-8.1	21.1
550	11.26	35.39	3.05	-3.9	10.5
600	8.78	35.07	3.05	-3.5	-0.5
650	7.76	34.99	3.15	13.3	-10.1

Table 42: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.77	36.32	4.63	NaN	NaN
10	27.78	36.33	4.64	-16.8	50.9
20	27.68	36.32	4.65	-17.1	50.8
30	27.09	36.31	4.70	-18.0	50.7
40	26.89	36.31	4.71	-18.6	50.8
50	26.76	36.31	4.73	-15.6	54.2
60	26.35	36.36	4.68	-11.4	54.0
70	26.25	36.42	4.66	-4.5	55.8
80	25.99	36.51	4.58	-4.3	56.3
90	25.77	36.59	4.55	-8.9	55.3
100	25.47	36.98	4.14	-14.1	55.7
110	25.30	37.00	4.34	-15.0	58.3
120	24.35	36.89	4.36	-11.9	61.4
130	23.69	36.86	4.74	-13.6	61.1
140	23.64	36.86	4.74	-13.7	60.0
150	23.37	36.85	4.73	-13.9	60.3
160	23.13	36.86	4.66	-17.7	64.9
170	22.79	36.85	4.60	-18.0	67.9
180	22.24	36.84	4.56	-16.8	70.9
190	21.55	36.83	4.48	-19.4	69.3
200	20.88	36.80	4.38	-18.6	67.3
210	20.13	36.75	4.35	-12.0	61.5
220	19.70	36.71	4.34	-18.1	53.6
230	19.38	36.68	4.32	-21.1	49.7
240	19.00	36.64	4.33	-20.9	46.5
250	18.86	36.63	4.34	-21.6	44.1
260	18.61	36.60	4.35	-22.0	42.0
270	18.48	36.58	4.34	-24.7	41.3
280	18.32	36.56	4.32	-25.6	40.9
290	18.20	36.55	4.31	-26.1	40.7
300	18.08	36.53	4.29	-24.2	31.6
350	17.55	36.45	4.23	-20.8	27.3
400	16.94	36.36	4.16	-14.7	23.4
450	15.82	36.16	3.94	-11.2	20.7
500	14.50	35.96	3.83	-4.9	8.5
550	13.05	35.73	3.65	0.1	5.8
600	12.06	35.59	3.56	7.4	-3.3

Table 43: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0415. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.79	36.34	4.63	NaN	NaN
10	27.75	36.34	4.64	-14.3	7.2
20	27.74	36.33	4.65	-14.4	6.9
30	27.72	36.33	4.66	-14.8	5.6
40	26.88	36.32	4.70	-14.9	3.8
50	26.40	36.37	4.68	-10.5	2.7
60	26.18	36.43	4.64	-12.9	8.1
70	26.13	36.53	4.63	-10.3	14.4
80	25.81	36.57	4.58	-2.8	17.7
90	25.65	36.67	4.52	-7.8	16.8
100	25.21	36.81	4.40	-14.5	19.2
110	25.15	37.01	4.40	-14.2	27.1
120	24.94	37.02	4.29	-8.5	31.8
130	23.38	36.92	4.11	-4.5	32.5
140	23.01	36.86	4.52	-3.3	33.4
150	22.35	36.84	4.62	-3.3	40.3
160	21.44	36.81	4.54	-3.5	44.3
170	21.17	36.80	4.48	-1.8	46.5
180	20.89	36.80	4.43	0.5	47.1
190	20.50	36.77	4.38	-2.5	47.9
200	20.15	36.76	4.35	-5.6	48.5
210	20.11	36.75	4.35	-9.0	47.8
220	20.07	36.75	4.35	-11.4	50.2
230	20.02	36.75	4.35	-15.9	49.2
240	19.93	36.74	4.35	-16.3	50.2
250	19.65	36.71	4.36	-18.2	48.6
260	19.59	36.71	4.36	-19.1	46.9
270	19.37	36.68	4.36	-19.3	47.6
280	19.06	36.65	4.36	-17.2	46.2
290	18.95	36.64	4.37	-15.9	45.0
300	18.77	36.62	4.36	-14.3	46.6
350	18.17	36.54	4.33	-21.9	43.3
400	17.74	36.48	4.29	-11.2	32.5
450	16.59	36.29	4.11	-5.7	19.2

Table 44: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.58	35.72	4.66	NaN	NaN
10	30.44	35.72	4.67	0.4	153.5
20	30.43	35.76	4.69	0.3	153.5
30	29.68	36.22	4.93	-0.1	153.5
40	28.19	36.34	5.33	-3.9	157.5
50	26.02	36.42	5.48	3.5	148.3
60	24.20	36.49	5.27	8.3	146.9
70	22.37	36.51	4.99	7.0	140.4
80	20.14	36.30	4.56	0.2	110.6
90	18.02	36.13	4.11	-5.8	72.2
100	16.30	35.99	3.75	-9.4	41.5
110	14.27	35.81	3.42	-5.6	25.5
120	13.61	35.74	3.34	-1.4	18.5
130	12.65	35.63	3.28	-1.4	13.9
140	NaN	NaN	NaN	0.8	-0.3

Table 45: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.56	35.74	4.69	NaN	NaN
10	30.46	35.75	4.69	-2.4	166.5
20	30.31	35.89	4.74	-2.6	166.7
30	29.92	36.29	4.92	-3.4	167.3
40	28.10	36.37	5.69	-5.8	168.3
50	26.18	36.50	5.53	-2.0	166.4
60	25.08	36.50	5.19	-1.2	162.2
70	23.88	36.47	5.25	-1.1	154.2
80	22.46	36.50	5.14	3.8	151.1
90	21.22	36.51	4.83	3.8	149.5
100	20.54	36.51	4.31	2.2	146.7
110	20.08	36.51	3.97	2.8	144.6
120	19.68	36.51	3.76	7.2	136.4
130	18.06	36.31	3.62	8.1	118.3
140	16.86	36.12	3.60	0.8	98.3
150	15.43	35.93	3.57	-7.8	78.7
160	13.63	35.74	3.39	-11.4	59.9
170	12.86	35.66	3.29	-10.2	45.4
180	12.13	35.58	3.28	-7.6	40.0
190	11.47	35.49	3.28	-10.7	36.0
200	10.90	35.42	3.26	-9.9	34.2
210	10.63	35.38	3.26	-8.6	32.8
220	10.50	35.36	3.25	-7.6	34.9
230	10.15	35.31	3.25	-4.3	35.2
240	9.57	35.23	3.22	-0.5	25.6
250	NaN	NaN	NaN	2.9	17.1
260	NaN	NaN	NaN	2.9	17.0

Table 46: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.16	35.90	4.70	NaN	NaN
10	30.10	35.90	4.70	-3.9	194.4
20	29.99	35.89	4.72	-4.0	194.4
30	29.60	36.07	4.77	-4.2	194.1
40	28.46	36.29	4.93	-5.0	193.5
50	27.24	36.37	5.04	-10.5	190.6
60	26.10	36.49	4.99	-14.9	183.7
70	24.37	36.48	5.32	-9.5	175.5
80	23.16	36.54	5.16	-5.3	169.1
90	22.56	36.55	5.07	-0.5	163.6
100	21.73	36.59	4.33	2.7	158.6
110	21.20	36.62	3.96	-1.3	155.8
120	20.54	36.55	4.07	-2.1	152.2
130	20.49	36.66	3.80	4.1	146.1
140	19.82	36.59	3.69	8.2	141.9
150	19.12	36.52	3.56	12.6	138.9
160	18.50	36.45	3.42	11.1	135.8
170	17.80	36.38	3.40	5.6	129.8
180	17.50	36.35	3.41	2.4	127.0
190	16.95	36.28	3.51	-1.3	127.5
200	16.66	36.24	3.49	-5.5	128.4
210	15.95	36.12	3.43	-6.2	124.0
220	15.13	35.99	3.34	-4.2	116.3
230	14.47	35.88	3.32	-4.2	103.0
240	13.84	35.79	3.29	-9.6	94.2
250	13.36	35.72	3.28	-14.0	87.3
260	11.79	35.49	3.26	-16.2	78.4
270	11.10	35.43	3.24	-19.0	71.6
280	10.80	35.39	3.25	-19.4	72.3
290	10.41	35.35	3.27	-17.2	74.5
300	10.20	35.33	3.28	-11.1	72.4
350	7.72	35.02	3.36	0.8	33.3

Table 47: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.13	36.24	4.63	NaN	NaN
10	30.08	36.24	4.64	-7.9	195.8
20	29.30	36.27	4.76	-8.0	195.8
30	28.87	36.27	4.76	-8.2	196.0
40	28.61	36.27	4.78	-8.6	196.2
50	27.99	36.32	4.86	-8.0	195.7
60	27.09	36.42	4.76	-3.5	193.4
70	26.68	36.48	4.73	-10.0	185.6
80	26.32	36.53	4.63	-17.1	187.9
90	25.13	36.74	4.30	-9.7	178.9
100	24.30	36.71	4.17	-7.0	168.4
110	23.76	36.76	4.08	-3.9	167.7
120	23.44	36.82	3.95	0.1	167.0
130	22.34	36.81	3.86	1.9	155.2
140	21.37	36.78	3.76	-1.7	144.1
150	20.87	36.80	3.73	-7.5	139.5
160	20.16	36.71	3.71	-10.3	136.6
170	19.69	36.69	3.74	-7.8	137.6
180	19.27	36.63	3.74	-2.5	142.9
190	18.89	36.58	3.76	1.3	143.8
200	18.29	36.49	3.74	1.9	137.6
210	17.67	36.39	3.64	0.7	130.4
220	17.07	36.30	3.59	-2.2	127.4
230	16.76	36.25	3.53	-2.8	124.4
240	16.21	36.17	3.45	0.1	120.4
250	15.85	36.12	3.45	3.1	117.6
260	15.56	36.07	3.47	2.3	114.1
270	15.03	35.98	3.39	4.7	112.9
280	14.45	35.89	3.38	5.8	111.8
290	14.31	35.87	3.42	0.2	109.3
300	13.87	35.79	3.28	-4.6	105.1
350	11.51	35.43	3.13	3.5	99.5
400	10.07	35.22	3.01	3.8	87.2
450	7.89	35.02	3.29	2.5	48.5
500	6.60	34.92	3.48	3.0	12.2

Table 48: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.06	36.27	4.63	NaN	NaN
10	30.02	36.27	4.64	-4.2	169.4
20	29.23	36.27	4.76	-4.2	169.3
30	28.57	36.27	4.85	-4.5	169.3
40	28.42	36.28	4.86	-5.1	169.0
50	27.85	36.33	4.86	-10.0	169.3
60	27.64	36.35	4.82	-12.2	169.4
70	26.86	36.44	4.70	-13.5	164.2
80	26.45	36.47	4.58	-12.0	166.1
90	26.13	36.60	4.42	-11.7	166.5
100	25.51	36.74	4.20	-14.7	163.3
110	24.97	36.84	4.09	-11.4	162.3
120	24.43	36.91	4.02	-4.4	158.1
130	23.77	36.95	3.94	-0.1	152.9
140	22.61	36.95	3.84	2.6	145.8
150	21.75	36.90	3.83	1.4	138.8
160	20.69	36.80	3.77	1.9	135.5
170	20.56	36.79	3.77	0.9	133.9
180	20.49	36.79	3.78	0.8	130.8
190	20.11	36.74	3.78	1.9	131.1
200	19.76	36.70	3.77	6.2	133.4
210	19.17	36.62	3.78	8.7	129.9
220	18.68	36.56	3.79	7.2	123.2
230	18.16	36.48	3.76	3.8	118.0
240	17.73	36.42	3.75	0.7	113.1
250	17.04	36.29	3.55	1.9	108.4
260	16.30	36.18	3.53	2.5	105.9
270	15.79	36.10	3.41	3.4	103.3
280	15.24	36.01	3.21	-0.4	100.7
290	15.04	35.99	3.36	-2.1	100.4
300	14.75	35.94	3.38	-1.4	97.6
350	13.64	35.75	3.26	1.6	95.0
400	11.31	35.40	3.10	10.0	81.5
450	9.93	35.20	3.01	8.3	69.9
500	8.69	35.05	3.08	8.5	63.8
550	7.42	34.95	3.23	5.5	43.1
600	6.47	34.91	3.52	-2.3	21.7

Table 49: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.84	36.34	4.67	NaN	NaN
10	29.84	36.34	4.66	-14.6	135.9
20	29.82	36.34	4.66	-14.4	135.8
30	29.80	36.36	4.68	-13.8	135.6
40	29.15	36.35	4.74	-12.3	134.9
50	28.67	36.38	4.80	-5.2	130.2
60	27.78	36.34	4.82	-12.7	125.8
70	27.54	36.34	4.83	-15.9	120.3
80	26.45	36.50	4.53	-20.5	115.5
90	26.41	36.51	4.50	-21.4	115.0
100	25.69	36.68	4.27	-17.1	116.5
110	25.29	36.76	4.19	-9.9	118.8
120	24.85	36.82	4.12	-5.2	118.4
130	24.46	36.88	4.04	-5.5	113.3
140	24.01	36.93	3.97	-12.5	110.7
150	23.74	36.95	3.93	-13.7	111.6
160	22.44	36.94	3.88	-4.5	112.3
170	21.21	36.86	3.83	-2.0	110.9
180	20.69	36.82	3.84	-2.0	109.5
190	19.92	36.74	3.84	-1.2	107.7
200	19.56	36.69	3.86	-1.9	104.2
210	19.04	36.62	3.88	-2.9	100.0
220	18.73	36.58	3.91	-2.4	102.9
230	18.48	36.55	4.03	0.3	103.2
240	18.17	36.51	4.05	2.1	101.7
250	18.02	36.49	4.05	0.5	100.5
260	17.83	36.46	4.04	-0.6	100.4
270	17.46	36.40	4.00	-1.2	97.5
280	17.15	36.35	3.96	-1.3	97.5
290	17.11	36.34	3.95	-1.7	99.2
300	16.92	36.31	3.94	-0.5	95.6
350	15.25	36.02	3.61	1.0	82.9
400	13.25	35.69	3.28	4.7	67.6
450	11.65	35.45	3.13	1.1	63.6
500	10.36	35.26	3.04	2.0	55.0
550	9.38	35.13	3.03	1.2	43.9
600	8.41	35.03	3.04	3.0	32.6
650	7.50	34.95	3.23	-4.8	27.6
700	6.82	34.92	3.39	-12.0	28.0

Table 50: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.98	36.36	4.65	NaN	NaN
10	29.98	36.36	4.65	-11.4	96.1
20	29.93	36.35	4.66	-11.4	96.1
30	29.87	36.39	4.68	-11.7	95.9
40	29.62	36.40	4.70	-12.4	95.4
50	29.28	36.38	4.77	-15.6	91.7
60	28.56	36.39	4.82	-20.8	86.2
70	27.60	36.36	4.78	-30.3	87.3
80	27.02	36.39	4.73	-30.6	92.3
90	26.36	36.40	4.70	-28.3	95.5
100	26.28	36.49	4.59	-17.9	93.6
110	25.78	36.73	4.56	-13.3	87.7
120	24.73	36.84	4.52	-11.9	88.5
130	23.94	36.87	4.44	-11.8	93.4
140	23.37	36.90	4.49	-11.8	93.7
150	23.32	36.90	4.46	-11.9	94.4
160	22.76	36.91	4.50	-11.7	94.6
170	22.45	36.92	4.30	-10.8	92.2
180	21.16	36.84	4.12	-6.5	90.2
190	20.55	36.80	4.18	-6.7	90.3
200	20.31	36.78	4.14	-8.9	88.9
210	19.81	36.72	4.16	-7.5	86.7
220	19.68	36.71	4.14	-5.6	84.8
230	19.12	36.63	3.95	-6.5	83.8
240	19.07	36.63	3.95	-9.5	85.4
250	18.57	36.56	4.01	-8.7	82.1
260	18.24	36.51	3.97	-6.0	81.4
270	18.06	36.51	4.14	-5.8	80.4
280	17.96	36.49	4.24	-6.1	79.5
290	17.73	36.46	4.31	-5.4	76.9
300	17.25	36.36	4.06	-0.7	75.6
350	16.28	36.21	3.91	8.1	66.6
400	14.45	35.92	3.60	-0.7	42.7
450	13.34	35.74	3.58	5.1	39.4
500	11.73	35.46	3.18	6.9	31.2
550	11.04	35.36	3.10	5.7	22.5
600	9.99	35.22	3.12	1.9	12.6
650	9.62	35.17	3.10	7.0	5.0

Table 51: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.93	36.33	4.65	NaN	NaN
10	29.94	36.33	4.65	-0.1	56.8
20	29.91	36.33	4.66	-0.4	56.7
30	29.83	36.34	4.68	-1.6	56.4
40	29.41	36.35	4.74	-3.1	56.0
50	29.35	36.37	4.76	-12.5	56.3
60	29.10	36.38	4.78	-17.5	56.3
70	28.20	36.30	4.83	-20.2	53.5
80	27.46	36.34	4.84	-27.6	49.8
90	26.77	36.40	4.76	-33.2	55.1
100	25.98	36.57	4.54	-24.6	65.5
110	25.07	36.77	4.47	-7.9	71.5
120	24.40	36.85	4.40	-6.4	71.3
130	23.48	36.90	4.55	-14.2	68.2
140	22.88	36.92	4.53	-13.2	61.5
150	22.45	36.90	4.42	-4.6	57.0
160	22.22	36.90	4.43	2.7	57.5
170	22.07	36.90	4.42	4.5	58.5
180	22.01	36.90	4.42	7.0	61.4
190	21.51	36.88	4.42	3.7	64.5
200	21.29	36.87	4.38	-4.2	65.1
210	20.58	36.81	4.32	-8.3	61.3
220	20.11	36.76	4.32	-8.8	59.8
230	19.91	36.73	4.34	-7.3	61.8
240	19.70	36.71	4.49	-10.4	61.1
250	19.36	36.67	4.56	-13.6	61.3
260	19.10	36.65	4.56	-12.8	60.0
270	18.75	36.61	4.49	-9.7	57.1
280	18.55	36.58	4.51	-7.4	56.5
290	18.39	36.57	4.52	-7.6	58.0
300	18.25	36.55	4.51	-8.3	52.7
350	17.34	36.39	4.31	1.9	44.3
400	16.07	36.20	4.09	0.9	29.4
450	14.89	35.99	3.82	-1.2	23.4
500	12.58	35.60	3.33	7.2	3.8
550	11.62	35.44	3.20	-0.1	0.6
600	NaN	NaN	NaN	-0.1	7.9

Table 52: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0422. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.15	36.36	4.64	NaN	NaN
10	30.08	36.34	4.64	-1.3	19.6
20	29.85	36.30	4.66	-1.4	19.6
30	29.82	36.30	4.66	-1.9	19.7
40	29.81	36.30	4.66	-2.6	19.9
50	29.65	36.27	4.68	-3.3	20.2
60	29.01	36.24	4.81	-10.7	23.5
70	27.68	36.31	4.86	-17.9	27.4
80	26.87	36.59	4.78	-24.7	32.7
90	26.22	36.79	4.78	-25.8	49.8
100	25.57	36.87	4.82	-27.2	54.2
110	25.14	36.83	4.71	-21.0	53.2
120	24.64	36.85	4.38	-16.0	53.1
130	24.13	36.90	4.48	-10.5	54.2
140	23.67	36.91	4.57	-9.6	57.6
150	23.27	36.91	4.44	-13.1	56.4
160	22.60	36.89	4.43	-15.1	52.6
170	21.83	36.88	4.27	-16.9	50.3
180	21.39	36.88	4.33	-11.6	49.7
190	20.72	36.82	4.29	-7.5	48.7
200	20.51	36.80	4.20	-8.5	45.8
210	20.32	36.78	4.24	-12.9	43.9
220	20.06	36.75	4.24	-18.5	41.5
230	19.84	36.73	4.26	-19.4	40.7
240	19.65	36.71	4.30	-20.5	40.1
250	19.46	36.69	4.34	-20.3	37.8
260	19.34	36.68	4.30	-17.9	36.6
270	19.14	36.65	4.30	-19.2	34.0
280	18.90	36.62	4.21	-22.2	33.1
290	18.78	36.62	4.33	-22.4	32.7
300	18.70	36.61	4.53	-21.5	29.4
350	17.99	36.52	4.48	-17.9	24.4
400	17.12	36.37	4.28	-7.7	22.3
450	15.55	36.09	3.79	-7.2	7.0

Table 53: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.58	35.72	4.66	NaN	NaN
10	30.44	35.72	4.67	0.4	153.5
20	30.43	35.76	4.69	0.3	153.5
30	29.68	36.22	4.93	-0.1	153.5
40	28.19	36.34	5.33	-3.9	157.5
50	26.02	36.42	5.48	3.5	148.3
60	24.20	36.49	5.27	8.3	146.9
70	22.37	36.51	4.99	7.0	140.4
80	20.14	36.30	4.56	0.2	110.6
90	18.02	36.13	4.11	-5.8	72.2
100	16.30	35.99	3.75	-9.4	41.5
110	14.27	35.81	3.42	-5.6	25.5
120	13.61	35.74	3.34	-1.4	18.5
130	12.65	35.63	3.28	-1.4	13.9
140	NaN	NaN	NaN	0.8	-0.3

Table 54: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.56	35.74	4.69	NaN	NaN
10	30.46	35.75	4.69	-2.4	166.5
20	30.31	35.89	4.74	-2.6	166.7
30	29.92	36.29	4.92	-3.4	167.3
40	28.10	36.37	5.69	-5.8	168.3
50	26.18	36.50	5.53	-2.0	166.4
60	25.08	36.50	5.19	-1.2	162.2
70	23.88	36.47	5.25	-1.1	154.2
80	22.46	36.50	5.14	3.8	151.1
90	21.22	36.51	4.83	3.8	149.5
100	20.54	36.51	4.31	2.2	146.7
110	20.08	36.51	3.97	2.8	144.6
120	19.68	36.51	3.76	7.2	136.4
130	18.06	36.31	3.62	8.1	118.3
140	16.86	36.12	3.60	0.8	98.3
150	15.43	35.93	3.57	-7.8	78.7
160	13.63	35.74	3.39	-11.4	59.9
170	12.86	35.66	3.29	-10.2	45.4
180	12.13	35.58	3.28	-7.6	40.0
190	11.47	35.49	3.28	-10.7	36.0
200	10.90	35.42	3.26	-9.9	34.2
210	10.63	35.38	3.26	-8.6	32.8
220	10.50	35.36	3.25	-7.6	34.9
230	10.15	35.31	3.25	-4.3	35.2
240	9.57	35.23	3.22	-0.5	25.6
250	NaN	NaN	NaN	2.9	17.1
260	NaN	NaN	NaN	2.9	17.0

Table 55: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.16	35.90	4.70	NaN	NaN
10	30.10	35.90	4.70	-3.9	194.4
20	29.99	35.89	4.72	-4.0	194.4
30	29.60	36.07	4.77	-4.2	194.1
40	28.46	36.29	4.93	-5.0	193.5
50	27.24	36.37	5.04	-10.5	190.6
60	26.10	36.49	4.99	-14.9	183.7
70	24.37	36.48	5.32	-9.5	175.5
80	23.16	36.54	5.16	-5.3	169.1
90	22.56	36.55	5.07	-0.5	163.6
100	21.73	36.59	4.33	2.7	158.6
110	21.20	36.62	3.96	-1.3	155.8
120	20.54	36.55	4.07	-2.1	152.2
130	20.49	36.66	3.80	4.1	146.1
140	19.82	36.59	3.69	8.2	141.9
150	19.12	36.52	3.56	12.6	138.9
160	18.50	36.45	3.42	11.1	135.8
170	17.80	36.38	3.40	5.6	129.8
180	17.50	36.35	3.41	2.4	127.0
190	16.95	36.28	3.51	-1.3	127.5
200	16.66	36.24	3.49	-5.5	128.4
210	15.95	36.12	3.43	-6.2	124.0
220	15.13	35.99	3.34	-4.2	116.3
230	14.47	35.88	3.32	-4.2	103.0
240	13.84	35.79	3.29	-9.6	94.2
250	13.36	35.72	3.28	-14.0	87.3
260	11.79	35.49	3.26	-16.2	78.4
270	11.10	35.43	3.24	-19.0	71.6
280	10.80	35.39	3.25	-19.4	72.3
290	10.41	35.35	3.27	-17.2	74.5
300	10.20	35.33	3.28	-11.1	72.4
350	7.72	35.02	3.36	0.8	33.3

Table 56: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.13	36.24	4.63	NaN	NaN
10	30.08	36.24	4.64	-7.9	195.8
20	29.30	36.27	4.76	-8.0	195.8
30	28.87	36.27	4.76	-8.2	196.0
40	28.61	36.27	4.78	-8.6	196.2
50	27.99	36.32	4.86	-8.0	195.7
60	27.09	36.42	4.76	-3.5	193.4
70	26.68	36.48	4.73	-10.0	185.6
80	26.32	36.53	4.63	-17.1	187.9
90	25.13	36.74	4.30	-9.7	178.9
100	24.30	36.71	4.17	-7.0	168.4
110	23.76	36.76	4.08	-3.9	167.7
120	23.44	36.82	3.95	0.1	167.0
130	22.34	36.81	3.86	1.9	155.2
140	21.37	36.78	3.76	-1.7	144.1
150	20.87	36.80	3.73	-7.5	139.5
160	20.16	36.71	3.71	-10.3	136.6
170	19.69	36.69	3.74	-7.8	137.6
180	19.27	36.63	3.74	-2.5	142.9
190	18.89	36.58	3.76	1.3	143.8
200	18.29	36.49	3.74	1.9	137.6
210	17.67	36.39	3.64	0.7	130.4
220	17.07	36.30	3.59	-2.2	127.4
230	16.76	36.25	3.53	-2.8	124.4
240	16.21	36.17	3.45	0.1	120.4
250	15.85	36.12	3.45	3.1	117.6
260	15.56	36.07	3.47	2.3	114.1
270	15.03	35.98	3.39	4.7	112.9
280	14.45	35.89	3.38	5.8	111.8
290	14.31	35.87	3.42	0.2	109.3
300	13.87	35.79	3.28	-4.6	105.1
350	11.51	35.43	3.13	3.5	99.5
400	10.07	35.22	3.01	3.8	87.2
450	7.89	35.02	3.29	2.5	48.5
500	6.60	34.92	3.48	3.0	12.2

Table 57: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.06	36.27	4.63	NaN	NaN
10	30.02	36.27	4.64	-4.2	169.4
20	29.23	36.27	4.76	-4.2	169.3
30	28.57	36.27	4.85	-4.5	169.3
40	28.42	36.28	4.86	-5.1	169.0
50	27.85	36.33	4.86	-10.0	169.3
60	27.64	36.35	4.82	-12.2	169.4
70	26.86	36.44	4.70	-13.5	164.2
80	26.45	36.47	4.58	-12.0	166.1
90	26.13	36.60	4.42	-11.7	166.5
100	25.51	36.74	4.20	-14.7	163.3
110	24.97	36.84	4.09	-11.4	162.3
120	24.43	36.91	4.02	-4.4	158.1
130	23.77	36.95	3.94	-0.1	152.9
140	22.61	36.95	3.84	2.6	145.8
150	21.75	36.90	3.83	1.4	138.8
160	20.69	36.80	3.77	1.9	135.5
170	20.56	36.79	3.77	0.9	133.9
180	20.49	36.79	3.78	0.8	130.8
190	20.11	36.74	3.78	1.9	131.1
200	19.76	36.70	3.77	6.2	133.4
210	19.17	36.62	3.78	8.7	129.9
220	18.68	36.56	3.79	7.2	123.2
230	18.16	36.48	3.76	3.8	118.0
240	17.73	36.42	3.75	0.7	113.1
250	17.04	36.29	3.55	1.9	108.4
260	16.30	36.18	3.53	2.5	105.9
270	15.79	36.10	3.41	3.4	103.3
280	15.24	36.01	3.21	-0.4	100.7
290	15.04	35.99	3.36	-2.1	100.4
300	14.75	35.94	3.38	-1.4	97.6
350	13.64	35.75	3.26	1.6	95.0
400	11.31	35.40	3.10	10.0	81.5
450	9.93	35.20	3.01	8.3	69.9
500	8.69	35.05	3.08	8.5	63.8
550	7.42	34.95	3.23	5.5	43.1
600	6.47	34.91	3.52	-2.3	21.7

Table 58: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.84	36.34	4.67	NaN	NaN
10	29.84	36.34	4.66	-14.6	135.9
20	29.82	36.34	4.66	-14.4	135.8
30	29.80	36.36	4.68	-13.8	135.6
40	29.15	36.35	4.74	-12.3	134.9
50	28.67	36.38	4.80	-5.2	130.2
60	27.78	36.34	4.82	-12.7	125.8
70	27.54	36.34	4.83	-15.9	120.3
80	26.45	36.50	4.53	-20.5	115.5
90	26.41	36.51	4.50	-21.4	115.0
100	25.69	36.68	4.27	-17.1	116.5
110	25.29	36.76	4.19	-9.9	118.8
120	24.85	36.82	4.12	-5.2	118.4
130	24.46	36.88	4.04	-5.5	113.3
140	24.01	36.93	3.97	-12.5	110.7
150	23.74	36.95	3.93	-13.7	111.6
160	22.44	36.94	3.88	-4.5	112.3
170	21.21	36.86	3.83	-2.0	110.9
180	20.69	36.82	3.84	-2.0	109.5
190	19.92	36.74	3.84	-1.2	107.7
200	19.56	36.69	3.86	-1.9	104.2
210	19.04	36.62	3.88	-2.9	100.0
220	18.73	36.58	3.91	-2.4	102.9
230	18.48	36.55	4.03	0.3	103.2
240	18.17	36.51	4.05	2.1	101.7
250	18.02	36.49	4.05	0.5	100.5
260	17.83	36.46	4.04	-0.6	100.4
270	17.46	36.40	4.00	-1.2	97.5
280	17.15	36.35	3.96	-1.3	97.5
290	17.11	36.34	3.95	-1.7	99.2
300	16.92	36.31	3.94	-0.5	95.6
350	15.25	36.02	3.61	1.0	82.9
400	13.25	35.69	3.28	4.7	67.6
450	11.65	35.45	3.13	1.1	63.6
500	10.36	35.26	3.04	2.0	55.0
550	9.38	35.13	3.03	1.2	43.9
600	8.41	35.03	3.04	3.0	32.6
650	7.50	34.95	3.23	-4.8	27.6
700	6.82	34.92	3.39	-12.0	28.0

Table 59: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.98	36.36	4.65	NaN	NaN
10	29.98	36.36	4.65	-11.4	96.1
20	29.93	36.35	4.66	-11.4	96.1
30	29.87	36.39	4.68	-11.7	95.9
40	29.62	36.40	4.70	-12.4	95.4
50	29.28	36.38	4.77	-15.6	91.7
60	28.56	36.39	4.82	-20.8	86.2
70	27.60	36.36	4.78	-30.3	87.3
80	27.02	36.39	4.73	-30.6	92.3
90	26.36	36.40	4.70	-28.3	95.5
100	26.28	36.49	4.59	-17.9	93.6
110	25.78	36.73	4.56	-13.3	87.7
120	24.73	36.84	4.52	-11.9	88.5
130	23.94	36.87	4.44	-11.8	93.4
140	23.37	36.90	4.49	-11.8	93.7
150	23.32	36.90	4.46	-11.9	94.4
160	22.76	36.91	4.50	-11.7	94.6
170	22.45	36.92	4.30	-10.8	92.2
180	21.16	36.84	4.12	-6.5	90.2
190	20.55	36.80	4.18	-6.7	90.3
200	20.31	36.78	4.14	-8.9	88.9
210	19.81	36.72	4.16	-7.5	86.7
220	19.68	36.71	4.14	-5.6	84.8
230	19.12	36.63	3.95	-6.5	83.8
240	19.07	36.63	3.95	-9.5	85.4
250	18.57	36.56	4.01	-8.7	82.1
260	18.24	36.51	3.97	-6.0	81.4
270	18.06	36.51	4.14	-5.8	80.4
280	17.96	36.49	4.24	-6.1	79.5
290	17.73	36.46	4.31	-5.4	76.9
300	17.25	36.36	4.06	-0.7	75.6
350	16.28	36.21	3.91	8.1	66.6
400	14.45	35.92	3.60	-0.7	42.7
450	13.34	35.74	3.58	5.1	39.4
500	11.73	35.46	3.18	6.9	31.2
550	11.04	35.36	3.10	5.7	22.5
600	9.99	35.22	3.12	1.9	12.6
650	9.62	35.17	3.10	7.0	5.0

Table 60: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.93	36.33	4.65	NaN	NaN
10	29.94	36.33	4.65	-0.1	56.8
20	29.91	36.33	4.66	-0.4	56.7
30	29.83	36.34	4.68	-1.6	56.4
40	29.41	36.35	4.74	-3.1	56.0
50	29.35	36.37	4.76	-12.5	56.3
60	29.10	36.38	4.78	-17.5	56.3
70	28.20	36.30	4.83	-20.2	53.5
80	27.46	36.34	4.84	-27.6	49.8
90	26.77	36.40	4.76	-33.2	55.1
100	25.98	36.57	4.54	-24.6	65.5
110	25.07	36.77	4.47	-7.9	71.5
120	24.40	36.85	4.40	-6.4	71.3
130	23.48	36.90	4.55	-14.2	68.2
140	22.88	36.92	4.53	-13.2	61.5
150	22.45	36.90	4.42	-4.6	57.0
160	22.22	36.90	4.43	2.7	57.5
170	22.07	36.90	4.42	4.5	58.5
180	22.01	36.90	4.42	7.0	61.4
190	21.51	36.88	4.42	3.7	64.5
200	21.29	36.87	4.38	-4.2	65.1
210	20.58	36.81	4.32	-8.3	61.3
220	20.11	36.76	4.32	-8.8	59.8
230	19.91	36.73	4.34	-7.3	61.8
240	19.70	36.71	4.49	-10.4	61.1
250	19.36	36.67	4.56	-13.6	61.3
260	19.10	36.65	4.56	-12.8	60.0
270	18.75	36.61	4.49	-9.7	57.1
280	18.55	36.58	4.51	-7.4	56.5
290	18.39	36.57	4.52	-7.6	58.0
300	18.25	36.55	4.51	-8.3	52.7
350	17.34	36.39	4.31	1.9	44.3
400	16.07	36.20	4.09	0.9	29.4
450	14.89	35.99	3.82	-1.2	23.4
500	12.58	35.60	3.33	7.2	3.8
550	11.62	35.44	3.20	-0.1	0.6
600	NaN	NaN	NaN	-0.1	7.9

Table 61: Same as Table 18 for the cruise ID and the station number indicated.

Cruise ID: ws0433. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.15	36.36	4.64	NaN	NaN
10	30.08	36.34	4.64	-1.3	19.6
20	29.85	36.30	4.66	-1.4	19.6
30	29.82	36.30	4.66	-1.9	19.7
40	29.81	36.30	4.66	-2.6	19.9
50	29.65	36.27	4.68	-3.3	20.2
60	29.01	36.24	4.81	-10.7	23.5
70	27.68	36.31	4.86	-17.9	27.4
80	26.87	36.59	4.78	-24.7	32.7
90	26.22	36.79	4.78	-25.8	49.8
100	25.57	36.87	4.82	-27.2	54.2
110	25.14	36.83	4.71	-21.0	53.2
120	24.64	36.85	4.38	-16.0	53.1
130	24.13	36.90	4.48	-10.5	54.2
140	23.67	36.91	4.57	-9.6	57.6
150	23.27	36.91	4.44	-13.1	56.4
160	22.60	36.89	4.43	-15.1	52.6
170	21.83	36.88	4.27	-16.9	50.3
180	21.39	36.88	4.33	-11.6	49.7
190	20.72	36.82	4.29	-7.5	48.7
200	20.51	36.80	4.20	-8.5	45.8
210	20.32	36.78	4.24	-12.9	43.9
220	20.06	36.75	4.24	-18.5	41.5
230	19.84	36.73	4.26	-19.4	40.7
240	19.65	36.71	4.30	-20.5	40.1
250	19.46	36.69	4.34	-20.3	37.8
260	19.34	36.68	4.30	-17.9	36.6
270	19.14	36.65	4.30	-19.2	34.0
280	18.90	36.62	4.21	-22.2	33.1
290	18.78	36.62	4.33	-22.4	32.7
300	18.70	36.61	4.53	-21.5	29.4
350	17.99	36.52	4.48	-17.9	24.4
400	17.12	36.37	4.28	-7.7	22.3
450	15.55	36.09	3.79	-7.2	7.0

Table 62: Same as Table 18 for the cruise ID and the station number indicated.

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