Hydrographic Measurements Collected Aboard the UNOLS Ship R/V Endeavor, 16 February - 28 February 2016: Western Boundary Time Series Cruise EN574 (AB1602)

James A. Hooper V
Molly O. Baringer

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James A. Hooper V
University of Miami / Cooperative Institute for Marine and Atmospheric Studies
NOAA/ Atlantic Oceanographic and Meteorological Laboratory
Miami, Florida

Molly O. Baringer
NOAA/ Atlantic Oceanographic and Meteorological Laboratory
Miami, Florida

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The findings and conclusion on this report are those of the authors and do not necessarily represent the views of the funding agency.

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Abstract

This report summarizes the February 16 - February 28, 2016 cruise on the UNOLS ship R/V Endeavor from San Juan, Puerto Rico to Fort Lauderdale, FL involving full-water-column CTD and lowered ADCP profiles, along with shipboard ADCP profiles, conducted within the Northwest Providence Channel, Florida Straits, and east of Abaco Island, Bahamas. At each station, a package consisting of a Seabird Electronics Model 9/11+ CTD O2 system, an RDI 150 kHz Workhorse Lowered Acoustic Doppler Current Profiler, a RDI 300 kHz Workhorse Lowered Acoustic Doppler Current Profiler, and up to 24 10-liter Niskin bottles, was lowered to the bottom. This report includes a description of the calibrations procedures and profiles of pressure, salinity (conductivity), temperature, and dissolved oxygen concentration. Water samples were also collected at various depths and analyzed for salinity and oxygen concentrations to aid with CTD calibration. A total of 53 CTD-O2/LADCP stations were occupied. PIES/CPIES operations were conducted at 7 sites, including two successful recovery and deployments of PIES at sites A and C and PIES deployment at site WBLA6 for David Smeed from Southampton Oceanography Centre, UK. A malfunctioning glider was recovered for Charlie Ericksen from the University of Washington after the completion of the Abaco line. Note: Bahamian clearances were obtained with a waiver of port entry before and after the cruise.

1 Introduction

The Abaco time series began in August 1984 when NOAA extended its Straits of Florida program to include measurements of western boundary current transports and water mass properties east of Abaco, the Bahamas. Since 1986, 46 hydrographic sections have been completed east of Abaco, most including direct velocity observations by Pegasus and/or Lowered Acoustic Doppler Current Profiler (LADCP). Transient tracer (CFC) measurements have been made on 8 of these sections. Current meter arrays were also maintained from April 1986 to April 1997. A new international program funded by the United Kingdom's Rapid Climate Change Program and the United States National Science Foundation began in March 2004 and is currently scheduled to end in 2021. Included in this program is a new deployment of current meter moorings along the Abaco section (the UK segment of the program continues with moorings across to the east edge of the Atlantic basin). Independently, the National Oceanic and Atmospheric Administration began a monitoring program in September 2004 utilizing inverted echo sounder moorings (some including bottom pressure measurements and near-bottom current meters) along the Abaco section. All of these programs are collaborating with cientific analysis and logistics including ship time.

The repeated hydrographic and tracer sampling at Abaco has established a high-resolution record of water mass properties in the Deep Western Boundary Current (DWBC) at 26°N, which for temperature and salinity can be reasonably constructed back to about 1985 (Vaughan and Molinari, 1997; Molinari et al., 1998). Events such as the intense convection period in the Labrador Sea and renewal of classical Labrador Sea Water in the 1980's are clearly reflected in the cooling and freshening of the DWBC waters off Abaco, and the arrival of a strong CFC pulse, approximately 10 years later (e.g. van Sebille et al., 2011). This program is unique in that it is not just a single time series site, but instead is a section from which transport can be directly calculated, of which very few are available in the ocean that approach a decade or more in length.

To achieve the goals of NOAA's strategic plan in terms of understanding the Atlantic Ocean's role in decadal and longer time scale climate variability, these continued time series observations at Abaco are seen as serving three main purposes:

1. Monitoring of the DWBC for watermass and transport signatures related to changes in the strengths and regions of high latitude water mass formation in the North Atlantic. Monitoring watermass properties in the DWBC at key locations is one part of an effort to track decadal changes in large-scale watermass properties.

2. Serving as a western boundary endpoint of a subtropical Meridional Overturning Circulation (MOC) heat flux monitoring system designed to measure the interior dynamic height difference across the Atlantic basin and the associated baroclinic heat transport.

3. Monitoring the intensity of the Antilles current as an index (together with the Florida Current) of inter-annual variability in the strength of the subtropical gyre. Variations in the strength of the subtropical gyre in relation to the North Atlantic Oscillation

(NAO) has been proposed as an important mechanism in the atmosphere-ocean feed-back within coupled models (e.g. Latif and Barnett, 1996).

A hydrographic survey consisting of a repeat LADCP/CTD/rosette section in the western North Atlantic was carried out in February 2016 (Figure 1 and Table 2). The R/V Endeavor departed San Juan, Puerto Rico on 16 February 2016. A total of 53 LADCP/CTD/Rosette stations were occupied. Water samples (up to 24 for each station), LADCP, and CTD data were collected on each cast to within 10 m of the bottom. Salinity and dissolved oxygen samples were analyzed from the majority of bottles sampled on the rosette. The cruise ended in Ft. Lauderdale, FL on February 28, 2016.

Table 1: Cruise participants of R/V Endeavor Cruise AB1602.

Name	Responsibility	Affiliation	Nationality
Molly Baringer	Chief Scientist	NOAA/AOML	USA
James Hooper	CTD processing	UM/CIMAS	USA
Andrew Stefanick	Oxygen analysis, CTD operations	NOAA/AOML	USA
Thomas Sevilla	Salinity analysis LADCP processing	UM/CIMAS,	USA
Grant Rawson	Oxygen analysis CTD operations	UM/CIMAS,	USA
Pedro Pena	Salinity analysis, LADCP/IES operations	NOAA/AOML	USA
Miguel Figuerola Hernanadez	CTD watch	Univ. Puerto Rico	USA
Nelson Cordero	CTD watch	Univ. Puerto Rico	USA
Carlos R. Rivera Rosaly	CTD watch	Univ. Puerto Rico	USA

Table 2: Abaco Cruise – CTD Cast Summary

Station	Date	Time (GMT)	Latitude	Longitude	Depth
1	02/18/16	23:01:07	26.510N	69.509W	5457
2	02/19/16	05:57:00	26.521N	70.014W	5591
3	02/19/16	13:35:10	26.523N	70.524W	5589
4	02/19/16	21:50:11	26.517N	71.010W	5586
5	02/20/16	04:38:11	26.527N	71.504W	5520
6	02/20/16	11:25:07	26.531N	72.012W	5376
7	02/20/16	20:02:35	26.516N	72.376W	5286
8	02/21/16	01:47:45	26.517N	72.765W	5220
9	02/21/16	07:50:05	26.534N	73.122W	5126
10	02/21/16	13:31:59	26.518N	73.501W	4970
11	02/21/16	19:18:58	26.514N	73.863W	4806
12	02/22/16	00:40:38	26.517N	74.239W	4595
13	02/22/16	05:25:35	26.512N	74.533W	4553
14	02/22/16	09:58:06	26.519N	74.821W	4624
15	02/22/16	14:36:52	26.522N	75.086W	4682
16	02/22/16	19:32:28	26.515N	75.288W	4705
17	02/23/16	00:06:20	26.517N	75.486W	4755
18	02/23/16	04:52:42	26.510N	75.679W	4755
19	02/23/16	09:33:01	26.507N	75.884W	4828
20	02/23/16	14:33:04	26.487N	76.094W	4876
21	02/24/16	02:27:31	26.507N	76.193W	4890
22	02/24/16	07:17:57	26.498N	76.322W	4912
23	02/24/16	12:12:03	26.507N	76.477W	4920
24	02/24/16	16:39:17	26.503N	76.555W	4915
25	02/24/16	20:52:09	26.507N	76.631W	4663
26	02/25/16	00:49:39	26.486N	76.738W	3809
27	02/25/16	03:55:14	26.522N	76.827W	1276
28	02/25/16	05:43:44	26.524N	76.884W	452
29	02/26/16	18:24:13	26.069N	78.852W	296
30	02/26/16	19:43:08	26.166N	78.806W	441
31	02/26/16	21:09:00	26.250N	78.770W	513
32	02/26/16	22:31:53	26.333N	78.716W	691
33	02/27/16	00:15:49	26.433N	78.672W	760
34	02/27/16	06:39:27	26.997N	79.205W	482
35	02/27/16	07:53:25	27.004N	79.286W	610
36	02/27/16	09:12:14	27.012N	79.385W	677
37	02/27/16	11:13:20	27.030N	79.500W	755
38	02/27/16	12:55:42	27.015N	79.613W	653
39	02/27/16	14:18:30	27.014N	79.680W	531
40	02/27/16	15:49:46	27.014N	79.783W	383
41	02/27/16	17:11:25	27.012N	79.864W	255
42	02/27/16	18:36:18	27.012N	79.934W	139
43	02/28/16	02:57:01	26.052N	79.237W	337
44	02/28/16	03:58:25	26.053N	79.313W	484
45	02/28/16	05:12:18	26.058N	79.403W	594
46	02/28/16	06:28:17	26.053N	79.483W	676
47	02/28/16	07:48:44	26.065N	79.570W	764
48	02/28/16	09:21:33	26.061N	79.671W	697
49	02/28/16	10:50:38	26.066N	79.760W	607
50	02/28/16	12:20:13	26.063N	79.845W	329
51	02/28/16	18:28:01	26.064N	79.931W	270
52	02/28/16	20:13:55	26.055N	79.996W	246
53	02/28/16	21:08:09	26.048N	80.062W	141
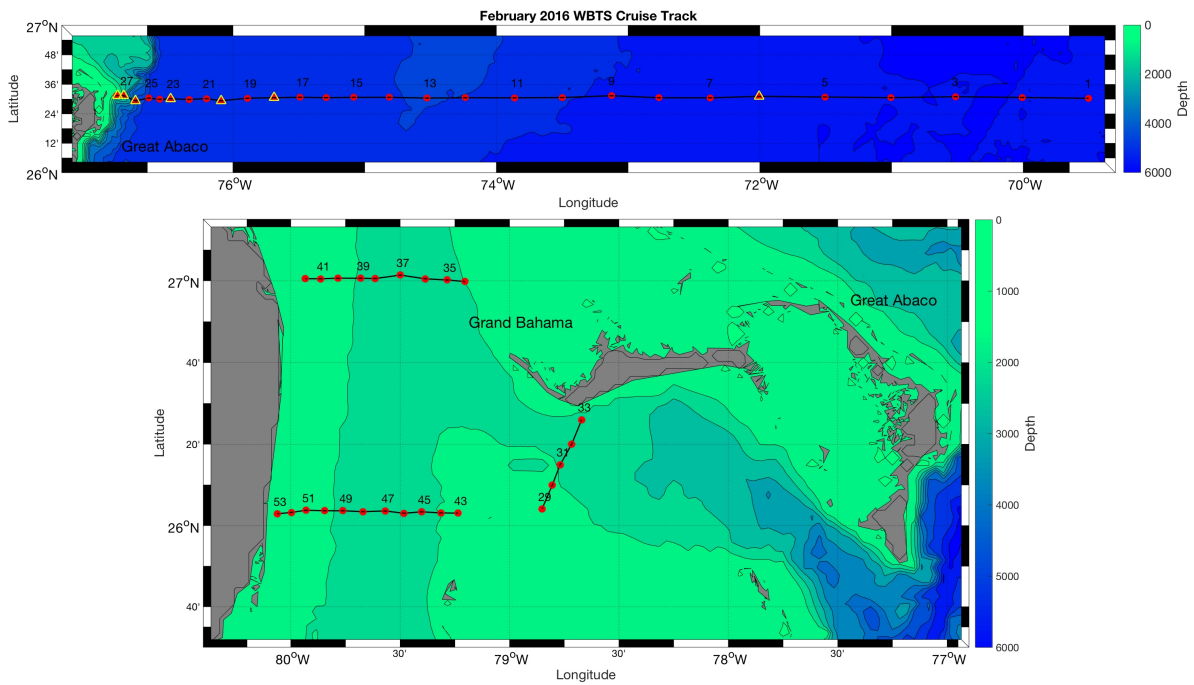
Figure 1: Abaco CTD station locations. The landmasses are shaded and the bathymetry is contoured at 1000 m intervals. The red dots are the CTD stations and the yellow triangles are the IES operations.

2   Cruise Narrative

The general plan of operations for the cruise was to proceed from San Juan Puerto Rico to 69.5°W, performing one test CTD cast in route. We then began the CTD section along 26.5°N working from east to west. During the Abaco CTD section, acoustic communication with the NOAA CPIES moorings were also completed. Upon completion of the Abaco CTD section, we completed three short CTD sections; one in Northwest Providence Channel and two in the Straits of Florida at 27°N and 26°N.

Departure from San Juan was approximately noon on Tuesday February 16. The departure was delayed because the shipping of the gear to San Jaun took longer than anticipated. The gear did no arrive until sometime that weekend. No delivers were possible Sunday and Monday was a national holiday. The ship took delivery of all science gear in the 20 foot container 9am Tuesday morning. It was a testament to hard work with all hands on deck that the ship was able to leave at noon. Once out of port, the first 3-5 days of the cruise was plagued with bad weather, 6-9 foot seas and up to 25 knots of sustained winds. During that time the operations of deploying and recovering the CTD were safe, but the CTD virtually always hit the side of the ship. By construction, the CTD is lifted off the deck with the winch and then extended outboard with a J-frame that tilts outward. The J-frame however is very short. There is barely a few feet clearance between the fully extended J-frame and the side of the ship with our CTD package. It is a given that the frame will hit the ship, and really just a matter of how severely. During the later half of the cruise, the ship agreed to remove the bulkhead railing which made deployment and especially recovery much safer.

During the test cast the O2 sensors where found to be approximately 25 $umol/kg$ apart from each other. It was determined that secondary sensor had the wrong coefficients and was replaced with the correct coefficients. With the new coefficients the sensors agreed to within 2-3 $umol/kg$. During the first few casts the primary O2 sensor had intermittent divergence from the secondary O2 sensor over 10's of meters. The sensor behaved normally the remainder of the cruise. There were several casts throughout the cruise with spikes across all channels during the upcast bottle stops between 500 m and the surface. Several attempts were made to fix the issue. It wasn't until the pump cable and both pumps were replaced that the issue was fixed. IES operations include the deployment and recovery of two IES's (at sites A and C) as well as the deployment of an IES at site WBLA6 for David Smeed from Southampton Oceanography Centre. IES telemetry was attempted during CTD casts. The data was too "noisy" from engine noise due to the deployment of the hydrophone over the aft port side. There was one successful telemetry session placing the hydrophone over the port bow. The rest of the telemetry was done after the completion of the CTD casts. After completion of the Abaco line there was a successful recovery mission for a malfunctioning glider for Charlie Ericksen from the University of Washington. There was a 10 hour steam to begin the Northwest Providence CTD section, followed by the section across 27°N and then 26°N. The cruise ended a day early on Sunday February 28 with offloading the following day.

3   Inverted Echo-Sounder Operations

Two deployments or recoveries were done on this cruise; one at site B and one at site D. Telemetry at the six main mooring sites was conducted (see Table 3). This maintenance consisted of acoustic download of the last 15 months of data as well as recovery and redeployment of one instrument that had reached the end of its battery life. A summary of each of the telemetry session is provided below.

Table 3: Inverted echo-sounder locations and operation.

IES Site	Type	Latitude	Longitude	Date	Operation
A	PIES	026°30.938′ N	076°50.036′ W	2/26/16	Telemetry
					Recovered and Deployed
A2	CPIES	026°30.062′ N	076°44.775′ W	2/26/16	Telemetry
B	PIES	026°29.480′ N	076°28.160′ W	2/24/16	Telemetry
C	PIES	026°30.020′ N	076°05.550′ W	2/23/16	Telemetry
					Recovered and Deployed
D	PIES	026°30.160′ N	075°42.330′ W	2/23/16	Telemetry
E	PIES	026°30.0′ N	071°59.998′ W	2/20/16	Telemetry
WBAL6	PIES	026°31.5′ N	076°52.560′ W	2/25/16	Deployed

3.1   Site E

Depth: 5233 m
Instrument: URI 6.2 PIES SN#301

Upon reaching the site we noticed that PIES 301 began sampling at about 3 minutes after the hour. To save time we decided to attempt telemetry during the CTD cast. The ships officers did not want us to do telemetry on the port aft side of the ship because they felt that it may be too close to the propeller and feared destroying the transducer and tangling the propeller. We decided to attempt telemetry on the starboard side of the ship near the winch cable. The first telemetry command was sent at 9:46 GMT but it was too noisy. We decided to let the PIES telemeter until the end of the record and we restart telemetry after the CTD cast. The ship was repositioned upstream of the site and we began to drift. The telemetry command was sent at 14:41:38 and we began recording data at 14:46:30

3.2   Site D

Depth: 4664 m
Instrument: URI 6.1e PIES SN#322

The telemetry command was sent to PIES 322 at 03:37:35 GMT and we began recording data at 3:47:56. Telemetry was done outside on the 01 deck port forward. The equipment was placed on top of lockers holding PFD's.

3.3   Site C

Depth: 4766 m
Instrument recovered: URI 6.2 PIES SN#281
Instrument deployed: URI 6.2 PIES SN#325

Deployment: PIES 325 was deployed at 12:52 GMT and it reached the bottom at 14:30 GMT. This was visually verified by looking at the knudsen display. To save time it was decided to first deploy PIES 325 and telemeter the data from PIES 281 as PIES 325 descended. We did not do this during a CTD. The Ship was positioned upstream of the site in order to drift over the PIES. PIES 325's clock was offset by 15 minutes so that it would sample 15 minutes after the hour.

Telemetry: The telemetry command was sent at 16:55:14 and we began recording data from PIES 281 at 17:05:49.

Recovery: After the telemetry session , the release command was sent at 18:54:58 GMT and PIES 281 went into release mode. At 19:08:56 the PIES went silent and the release command was issued at 19:09:33 where it entered release mode again. Because we had access to a knudsen we could visually confirm that the PIES was sending a 12kHz pulse both times. It was also clear, however, that the two times it entered release mode the periods were different. The PIES released it's anchor at 19:50:11 GMT and reached the surface at 21:21 GMT. The PIES was recovered without incident.

Telemetry was then attempted on datapod PIES S/N 159. This was really noisy and no data was downloaded. We did visually confirm that it was still there as we could see it sampling on the knudsen. We could also see that it's sampling time overlapped with PIES 281's sampling time.

3.4   Site B

Depth: 4805 m
Instrument: URI 6.2 PIES SN#323

Telemetry was done during the CTD cast. In order to distance the transducer from the CTD and the propeller, The equipment was setup outside forward port on the 01 deck on top of lockers holding PFD's. The telemetry command was sent at 13:13:51 GMT and we began to record data at 13:22:53. The telemetry went well at this site.

3.5   Site A2

Depth: 3865 m
Instrument: URI 6.2 CPIES SN#248

First attempt: Telemetry was attempted at this site on two occasions but no data was down-loaded. We did however confirm that the PIES was still there as it could be heard sampling and responding to commands. Both a DS7000 and a UDB9400 were used without success in an attempt to rule out a defective deck unit.

3.6   Site A

Depth: 1020 m
Instrument recovered: URI 6.2 PIES SN#282
Instrument deployed: URI 6.2 PIES SN#326

Telemetry: Soon after positioning about one mile upstream of the site, the transducer was lowered into the water and the telemetry command was sent. The command was sent at 6:54:54 GMT and data began to be recorded at 7:11:47 GMT. Since more than 10 minutes had passed,we can assume that the first several days of data were missed. Telemetry went well and at 8:12:17 GMT, the clear command was sent in order to reposition the ship. After repositioning 1 mile upstream, the telemetry session was restarted and we began to receive data from the PIES. Unfortunately the PIES reset it's pointer and we began to receive data from the beginning of the record. This was a huge waste of time so it was decided not to pause the telemetry when it came time to reposition the ship. After downloading enough data, the clear command was sent to pause the telemetry and to issue the release command.

Recovery: The release command was issued at 11:48:45 GMT. Using the knudsen in passive mode, we could visually determine when the PIES released it's anchor. The PIES left the bottom at 12:00 GMT and we heard the beacon at 12:19:38 GMT. The PIES was recovered without incident.

Deployment: At 12:46:41 GMT, PIES 326 was deployed at the site. Burst telemetry was done after confirming that it had reached the bottom.

3.7   Site WBLA6

Depth: 500 m
Instrument: URI 6.2 PIES SN#131

PIES 131 was deployed at 22:52:23 and we confirmed that it had reached the bottom by ranging to it. We attempted a burst telemetry session but we would drift too quickly over the site to receive data. Here is snippet from the rawdata file showing the PIES sampling.

The lines marked with an asterisk are the received 12khz pings and the fourth column in the line is the deck unit's counter. The receive-time differences between the lines are 18 seconds, 16 seconds and 18 seconds. This pattern perfectly matches the PIES sampling scheme.

```
@05 12.00 05 002.8221 1456445101505
@05 12.00 05 002.8263 1456445101593
@05 12.00 05 002.8305 1456445101679
@05 12.00 05 002.8347 1456445101769
@05 12.00 05 002.8389 1456445101873
*@05 12.00 05 003.5131 1456445102198
@05 12.00 05 003.5173 1456445102468
@05 12.00 05 003.5221 1456445102560
@05 12.00 05 003.5263 1456445102650
*@05 12.00 05 021.5382 1456445120213
@05 12.00 05 021.5424 1456445120302
@05 12.00 05 021.5524 1456445120388
@05 12.00 05 022.0601 1456445120733
@05 12.00 05 022.0776 1456445120823
*@05 12.00 05 037.5734 1456445136266
@05 12.00 05 055.5877 1456445154244
@05 12.00 05 055.5919 1456445154350
@05 12.00 05 055.5984 1456445154463
```

4   Standards and Pre-Cruise Calibrations

The CTD/O2 system is a real-time data acquisition system with the data from a Sea-Bird Electronics, Inc. (SBE) 9plus underwater unit transmitted via a conducting cable to a SBE 11plus deck unit (V2). The serial data from the underwater unit is sent to the deck unit in RS-232 NRZ format. The deck unit decodes the serial data and sends it to a personal computer for display and storage in a disk file using Sea-Bird Seasave software (version 7.23.2).

The SBE 911plus system transmits data from primary and auxiliary sensors in the form of binary numbers equivalent to the frequency or voltage outputs from those sensors. These are referred to as the raw data. The SBE software performs the calculations required to convert raw data to engineering units.

The SBE 911plus system is electrically and mechanically compatible with the standard, unmodified carousel water sampler, also made by Sea-Bird Electronics, Inc. A modem and carousel interface allows the 911plus system to control the operations of the carousel directly without interrupting the flow of data from the CTD.

The SBE 9plus underwater unit is configured with dual standard modular temperature (SBE 3 plus) and conductivity (SBE 4) sensors, which are mounted near the lower end cap.

The conductivity cell entrance is co-planar with the tip of the temperature sensor probe. The pressure sensor is mounted inside the underwater unit main housing. A centrifugal pump module flushes water through sensor tubing at a constant rate independent of the CTD's motion to improve dynamic performance. Dual dissolved oxygen sensors (SBE 43) are added to the pumped sensor configuration following the temperature-conductivity (TC) pair. A reference temperature sensor is mounted to the SBE 9plus. A list of sensors used during the cruise can be seen in Table 4.

Table 4: Equipment used during AB1602

Instrument	SN	Stations	Sensor Position	Comment
Sea-Bird SBE 32 24-palce Carousel Water Sampler	32 - 1079	0-53		
Sea-Bird SBE9plus CTD	1207	0-53		
Paroscientific Digiquartz Pressure Sensor	131013	0-53		
Sea-Bird SBE3plus Temperature Sensor	5898	0-53	Primary	
Sea-Bird SBE3plus Temperature Sensor	5889	0-53	Secondary	
Sea-Bird SBE35 Reference Temperature Sensor	0097	0-7,9-50		
Sea-Bird SBE4C Conductivity Sensor	4229	0-53	Primary	
Sea-Bird SBE4C Conductivity Sensor	4223	0-53	Secondary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	2961	0-53	Primary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	2085	0-25	Secondary	
Sea-Bird SBE5T Pump	7738	0-51	Primary	
Sea-Bird SBE5T Pump	7889	0-51	Secondary	
Sea-Bird SBE5T Pump	7274	52-53	Primary	
Sea-Bird SBE5T Pump	1072	52-53	Secondary	
Vale port VA 500 Altimeter		0-51		Scale 15.0 Range - 100 m
Benthos Altimeter (R/V Endeavor)		52-53		Scale 15.0 Range - 100 m
RDI LADCP - 150 kHz Broad Band (AOML)	18145	0-53	Downward	
RDI LADCP - 300 kHz Workhorse (AOML)	21584	0-53	Upward	

4.1 Pressure

The Paroscientific series 4000 Digiquartz high pressure transducer uses a quartz crystal resonator whose frequency of oscillation varies with pressure induced stress measuring changes in pressure as small as 0.01 parts per million with an absolute range of 0 to 10,000 psia (0 to 6885 dbar). Repeatability, hysteresis and pressure conformance are 0.002% of full-scale. The nominal pressure frequency (0 to full scale) is 34 to 38 kHz. The nominal temperature frequency is 172 kHz $\pm$ 50 ppm/$^\circ$C.

The pressure sensor utilized during AB1602 was s/n 1207. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration date and coefficients in Table 5 were entered into SEASAVE® using the configuration file.
Pressure coefficients are first formulated into:

$$
\begin{aligned}
c &= c_1 + c_2 * U + c_3 * U^2 \\
d &= d_1 + d_2 * U \\
t_0 &= t_1 + t_2 * U + t_3 * U^2 + t_4 * U^3 + t_5 * U^4
\end{aligned}
$$

where U is temperature in degrees Celsius. Pressure is computed according to:

$$
P\,(psia) = c * \left(1 - \frac{t_0^2}{t}\right) * \left[1 - d * \left(1 - \frac{t_0^2}{t}\right)\right]
$$

where t is pressure period (μs). SEASAVE® automatically implements this equation.

Table 5: <u>Pressure Calibration Date & Co</u>efficients.
s/n 1207

<u>November 3, 2014</u>

c_1 = -3.999674e+04
c_2 = 4.123031e-01
c_3 = 1.243250e-02
d_1 = 3.467300e-02
d_2 = 0.000000e+00
t_1 = 3.045295e+01
t_2 = -1.373450e-04
t_3 = 4.212880e-06
t_4 = 2.102830e-09
t_5 = 0.000000e+00
Slope = 1.00000000
Offset = 0.47000
AD590M = 1.279591e-02
AD590B = -8.694466e+00

4.2 Temperature

The temperature-sensing element is a glass-coated thermistor bead, pressure protected by a stainless steel tube. The sensor output frequency ranges from 5–13 kHz corresponding to temperatures from -5 to 35°C. The output frequency is inversely proportional to the square root of the thermistor resistance, which controls the output of a patented Wien Bridge circuit. The thermistor resistance is exponentially related to temperature. The SBE 3 thermometer has a typical accuracy/stability of ±0.004°C per year and resolution of 0.0003°C at 24 samples per second. The SBE 3 thermometer has a fast response time of 0.070 seconds.

Two temperature sensors (SBE 3plus) were used during AB1602, serial numbers (s/n) 5898and 5889. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients in Table 6 were entered into SEASAVE® using the configuration file. SEASAVE® automatically implements the equation below and converts between ITS-90 and IPTS-68 temperature scales as desired. The Temperature (ITS-90) is computed from g, h, i, j and f_0 and f is the instrument frequency (kHz) coefficients as follows:

$$T\left(^{\circ}C\right) = \frac{1}{\left\{g + h * \left[\ln\left(\frac{f_0}{f}\right)\right] + i * \left[\ln^2\left(\frac{f_0}{f}\right)\right] + j * \left[\ln^3\left(\frac{f_0}{f}\right)\right]\right\}} - 273.15$$

Table 6: Temperature Pre-Cruise Calibration Dates & Coefficients.

s/n 5898	s/n 5889
December 12, 2015	December 12, 2015
g = 4.35070052e-03	g = 4.35726715e-03
h = 6.26087544e-04	h = 6.28683329e-04
i = 1.90393879e-05	i = 1.95075328e-05
j = 1.33755597e-06	j = 1.39711924e-06
f_0 = 1000.0	f_0 = 1000.0

4.3 Conductivity

The flow-through conductivity-sensing element is a glass tube (cell) with three platinum electrodes (Seabird model SBE 4). The resistance measured between the center electrode and the end electrode pair is determined by the cell geometry and the specific conductance of the fluid within the cell, and controls the output frequency of a Wein Bridge circuit. The sensor has a frequency output of approximately 3 to 12 kHz corresponding to conductivity from 0 to 7 Siemens/meter (0 to 70 mmho/cm). The SBE 4 has a typical accuracy/stability of ±0.0003 S·m^{-1}/month and resolution of 0.00004 S·m^{-1} at 24 scans per second.

Two conductivity sensors were used during AB1602, serial numbers (s/n) 4229and 4223. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients shown in Table 7 were entered into Seasave using the configuration file.

Conductivity calibration certificates show an equation containing the appropriate pressure-dependent correction term to account for the effect of hydrostatic loading (pressure) on the conductivity cell:

$$C\ (Siemens/meter) = \frac{(g + h * f^2 + i * f^3 + j * f^4)}{[10 * (1 + c_{t_{cor}} * t + c_{p_{cor}} * p)]}$$

where g, h, i, j, $c_{t_{cor}}$, and $c_{p_{cor}}$ are the calibrations coefficients shown above, f is the instrument frequency (kHz), t is the water temperature (degrees Celsius), and p is the water pressure (dbar). SEASAVE® automatically implements this equation.

Table 7: Conductivity Pre-Cruise Calibration Dates & Coefficients.

s/n 4229	s/n 4223
November 11, 2015	November 12, 2015
g = -9.74326635e+00	g = -9.93177080e+00
h = 1.50452811e+00	h = 1.37413473e+00
i = -1.58352051e-03	i = -2.33031955e-03
j = 2.10536506e-04	j = 2.25550534e-04
CPcor = -9.5700e-08	CPcor = -9.5700e-08
CTcor = 3.2500e-06	CTcor = 3.2500e-06

4.4 Dissolved Oxygen

The SBE 43 dissolved oxygen sensor uses a membrane polarographic oxygen detector (MPOD). Oxygen sensors determine the dissolved oxygen concentration by counting the number of oxygen molecules per second (flux) that diffuse through a membrane. By knowing the flux of oxygen and the geometry of the diffusion path, the concentration of oxygen can be computed. The permeability of the membrane to oxygen is a function of temperature and ambient pressure. In order to minimize the errors in the oxygen measurement due to the temperature differences between the water and the oxygen sensor, a temperature compensation is calculated using a temperature measured near the active surface of the sensor. The interface electronics output voltages proportional to the temperature-compensated oxygen current. Initial computation of dissolved oxygen in engineering units is done in the software. The range for dissolved oxygen is 120% of surface saturation in all natural waters, fresh and salt, and the nominal accuracy is 2% of saturation.

Under extreme pressure, changes can occur in gas permeable Teflon membranes that affect their permeability characteristics. Some of these changes (plasticization and amorphous/crystalinity ratios) have long time constants and depend on the sensor's time-pressure history. These slow processes result in hysteresis in long, deep casts. The hysteresis correction algorithm operates through the entire data profile and corrects the oxygen voltage values for changes in membrane permeability as pressure varies. At each measurement, the correction to the membrane permeability is calculated based on the current pressure and how long the sensor spent at previous pressures.

Sea-Bird has implemented an optional hysteresis correction for dissolved oxygen data. The correction algorithm requires a continuous time series of data, with no temporal data gaps (although a continuous time series is necessary, a constant sampling interval is not required). Prior to processing, do not remove any data from the downcast or upcast (if to be used), other than a surface soak at the beginning of the downcast.

Oxygen sensors 2961and 2961were used during AB1602. The calibration dates and coefficients in Table 6.5 were entered into SEASAVE® using the configuration file.

Table 8: Oxygen Pre-Cruise Calibration Dates & Coefficients.

s/n 2961	s/n 2961
December 15, 2015	December 30, 2015
Soc = 0.4418	Soc = 0.4974
Voffset = -0.4941	Voffset = -0.5026
Tau20 = 1.21	Tau20 = 1.08
A = -4.4700e-03	A = -4.2974e-03
B = 2.2494e-04	B = 2.0874e-04
C = -3.1722e-06	C = -3.4479e-06
$E_{nominal}$ = 0.036	$E_{nominal}$ = 0.036

The use of these constants in linear equations of the form $I = mV + b$ and $T = kV + c$ yield sensor membrane current and temperature (with maximum error of about 0.5 °C) as a function of sensor output voltage.

Dissolved oxygen concentration is calculated according to:

$$O\,(ml/l) = \{Soc * (V + V_{offset} + tau(T,S) * \frac{\delta v}{\delta t}) + p1 * station\}$$
$$*(1.0 + A * T + B * T^2 + C * T^3) * OXSAT(T,S) * e^{E*(\frac{P}{K})}$$

where Soc, V_{offset}, tau, A, B, C, E and $p1$ are the calibration coefficients shown above and V is the instrument voltage (V). T, S and P are the temperature, salinity and pressure measured by the CTD. K is the temperature in the absolute scale (K), $\delta v/\delta t$ is the oxygen voltage time derivative, $station$ is the station number, and $OXSAT$ is the oxygen saturation

value calculated according to (Weiss, 1970):

$$OXSAT(\theta, S) = \exp\left\{A_1 + A_2 * \left(\frac{100}{\theta}\right) + A_3 * \ln\left(\frac{\theta}{100}\right) + A_4 * \left(\frac{\theta}{100}\right)\right.$$
$$\left. + S * \left[B_1 + B_2 * \left(\frac{\theta}{100}\right) + B_3 * \left(\frac{\theta}{100}\right)^2\right]\right\}$$

where θ is the absolute temperature (K); and

$$
\begin{array}{ll}
A_1 = -173.4292 & B_1 = -0.033096 \\
A_2 = 249.6339 & B_2 = 0.014259 \\
A_3 = 143.3483 & B_3 = -0.00170 \\
A_4 = -21.8492. &
\end{array}
$$

SEASAVE® automatically implements this equation.

The hysteresis correction is calculated, using the oxygen voltages, with the following algorithm:

$$D = 1 + H_1 * (e^{\left(\frac{P(i)}{H2}\right)} - 1)$$

$$C = e(-1 * \left(\frac{Time(i) - Time(i-1))}{H3}\right)$$

$$O_V(i) = O_{volt}(i) + V_{offset}$$

$$O_{newvolts}(i) = a * \frac{a}{D}$$

$$O_{finalvolts}(i) = O_{newvolts}(i) - V_{offset}$$

Where:

i = indexing variable (must be a continuous time series to work; can be performed on bin averaged data), where i = 1:end (end is largest data index point plus 1).
$P(i)$ = pressure (decibars) at index point i .
$Time(i)$ = time (seconds) from start of index point i.
$O_{volt}(i)$ = SBE 43 oxygen voltage output directly from sensor, with no calibration or hysteresis corrections, at index point i.
V_{offset} = correction for an electronic offset that is applied to voltage output of sensor. V_{offset} correction is always negative (see factory calibration sheet for this coefficient). V_{offset} is added to raw voltages prior to hysteresis correction. At end of hysteresis corrections, V_{offset} is removed prior to data conversion using SBE 43 calibration equation (see $O_{finalvolts}(i)$).
$O_V(i)$ = dissolved oxygen voltage value with V_{offset} correction (made prior to hysteresis correction) at index point i.
D and C are temporary variables used to simplify expression in processing loop.
$H1$ = amplitude of hysteresis correction function. Default = -0.033, range = -0.02 to -0.05 (varies from sensor to sensor).
$H2$ = function constant or curvature function for hysteresis. Default = 5000.

$H3$ = time constant for hysteresis (seconds). Default = 1450, range = 1200 to 2000 (varies from sensor to sensor).

$O_{newvolts}(i)$ = hysteresis-corrected oxygen value at index point i.

$O_{finalvolts}(i)$ = hysteresis-corrected oxygen value at index point i with V_{offset} removed.

This step is necessary prior to computing oxygen concentration using SBE 43 calibration equation.

4.5   Reference Temperature

The SBE 35RT is an accurate, ocean-range temperature sensor that is capable of measuring temperature in the ocean to depths of 6800 meters (22,300 ft). The SBE 35RT communicates via a standard RS-232 interface at 300 baud, 8 data bits, no parity. The SBE 35RT makes a temperature measurement each time a bottle fire confirmation is received, and stores the value in EEPROM. Each stored value contains the time and bottle position in addition to the temperature data, allowing comparison of the SBE 35RT record with CTD and water bottle data. Using one SBE 35RT eliminates the need for reversing thermometers, and provides higher accuracy temperature readings at lower cost. Calibration coefficients stored in EEPROM allow the SBE 35RT to transmit data in engineering units (Table 9. When configured in a real-time system, the SBE 35RT can use the system modem channel for two-way communications; it is not necessary to change cable connections to communicate with and retrieve data from the SBE 35RT. (2015, February 12). Retrieved from http://www.seabird.com/sites/default/files/documents/35RT_013.pdf.

The sensor measurement ranges from -5 to 35°C. The SBE 35RT digital reversing thermometer has a typical accuracy/stability of ±0.001°C per year and resolution of 0.000025°C.

Table 9: Reference Temperature Calibration Date & Coefficients.

s/n 0097
August 21, 2014
A0 = 4.214343e-03
A1 = -1.115737e-03
A2 = 1.719186e-04
A3 = -4.4132e-06
A4 = -9.611143e-07
Slope = 1.0000
Offset = 0.0000

5 Data Acquisition

CTD/rosette casts were performed with a package consisting of a 24-place, 10-liter rosette frame (AOML's pink frame), a 24-place water sampler (SBE32) and 24, 10-liter Bullister-style bottles. This package was deployed on all stations/casts. Underwater electronic components consisted of a Sea-Bird Electronics (SBE) 9 plus CTD with dual pumps and the following sensors: dual temperature (SBE3), dual conductivity (SBE4), dual dissolved oxygen (SBE43), reference temperature (SBE35), and a Valeport VA500 altimeter. The other underwater electronic components consisted of two RDI LADCPs. A total of 53 CTD/rosette casts were made, usually to within 10 m of the bottom.

The CTD's supplied a standard Sea-Bird format data stream at a data rate of 24 frames/second. The SBE9 plus CTD was connected to the SBE32 24-place pylon providing for single-conductor sea cable operations. Power to the SBE9plus CTD, SBE32 pylon, auxiliary sensors, and altimeter was provided through the sea cable from the SBE911plus deck unit in the computer lab. The rosette system was suspended from a UNOLS-standard three-conductor 0.322" electro-mechanical sea cable.

The CTD was mounted vertically attached to the bottom center of the rosette frame. All SBE4 conductivity and SBE3 temperature sensors and their respective pumps were mounted vertically as recommended by SBE, outboard of the CTD. The CTD was outfitted with dual pumps. Primary temperature, conductivity, and dissolved oxygen were plumbed on one pump and secondary temperature, conductivity, and dissolved oxygen on the other. Pump exhausts were attached to outside corners of the CTD cage and directed downward. The altimeter was mounted on the inside of a support strut adjacent to the bottom frame ring. The LADCP's were vertically mounted inside the bottle rings with one 150 kHz pointing down, the other 300 kHz transducer pointing up. Both of the R/V Endeavor's CTD winches were used on the starboard J-frame with the 24-place10-liter rosette. Winch 1 (forward winch) was the primary winch used throughout the cruise. Winch 2 (aft winch) was switched to for troubleshooting purposes for stations 10-20.

O-rings were changed as necessary and bottle maintenance was performed each day to insure proper closure and sealing. Valves were inspected for leaks and repaired or replaced as needed.

5.1 System Problems

There was spiking across all sensory channels for several of the casts, mostly in the upcast towards the end of the cast. Several changes were made throughout the cruise to try to troubleshoot the issue. The 911plus was swapped out, the reference temperature y-cable was replaced, reseated the cables at the termination, all three of the ships electrical terminations were tried, switched to the secondary winch, replaced the sea cable to the 911plus, swapped out deck units, removed the reference temperature sensor, changed altimeters and changed out both pumps and the y-cable to try to fix the problem. The last change, replacing the y-

cable and both pumps allowed for clean casts for the final two casts. It was later determined at the lab that the secondary pump, s/n 7889, had an intermittent power draw that could have caused the intermittent spiking across all channels.

5.2 Data Acquisition

The CTD data acquisition system consisted of an SBE-11plus (V2) deck unit and a networked generic PC workstation running Windows 7 located in the computer room. SBE Seasave software version 7.23.2 was used for data acquisition and to close bottles on the rosette.

The deck watch prepared the rosette typically after sampling the previous cast. All valves, vents, and lanyards were checked for proper orientation. The bottles were cocked and all hardware and connections rechecked. Fifteen minutes or so prior to station the deck unit was powered on and an on-deck pre-cast pressure was obtained. Once on station, the syringes were removed from the CTD sensor intake ports. Tag lines were necessary for both deployments and recoveries during this cruise. As soon as it was in the water, the CTD deck unit was powered on and the data acquisition system started. As directed by the deck watch leader, the CTD was taken down to 10 m for 2 minutes to remove any air bubble from the sensor lines and to make sure the sensors were behaving appropriately. The CTD was brought back to just below the surface with the console operator hitting "Mark Scan" before beginning the descent. The profiling rate was no more than 30 m/min to 50 m, 45 m/min to 200 m, and no more than 60 m/min deeper than 200 m. Upon recovery, the CTD deck unit was turned off just before recovery. The rosette was left on deck for sampling. The bottles and rosette were examined before samples were taken and anything unusual noted on the sample log.

The console watch monitored the progress of the deployment and quality of the CTD data through interactive graphics and operational displays. Additionally, the watch created a sample log for the deployment that would be later used to record the correspondence between rosette bottles and analytical samples taken. The altimeter channel, CTD pressure, wire-out and bathymetric depth were all monitored to determine the distance of the package from the bottom, usually allowing a safe approach to within 10 m.

On the up cast, the winch operator stopped at each bottle trip depth using a remote depth display located in the winch house. The CTD console operator waited 30 seconds before tripping a bottle using a "point and click" graphical trip button and 5 seconds after to allow the reference temperature sensor to sample. The data acquisition system responded with trip confirmation messages and the corresponding CTD data in a rosette bottle trip window on the display. All tripping attempts were noted on the console log. The console watch then directed the winch operator to raise the package up to the next bottle trip location. After the last bottle was tripped, the console watch directed the deck watch to bring the rosette on deck.
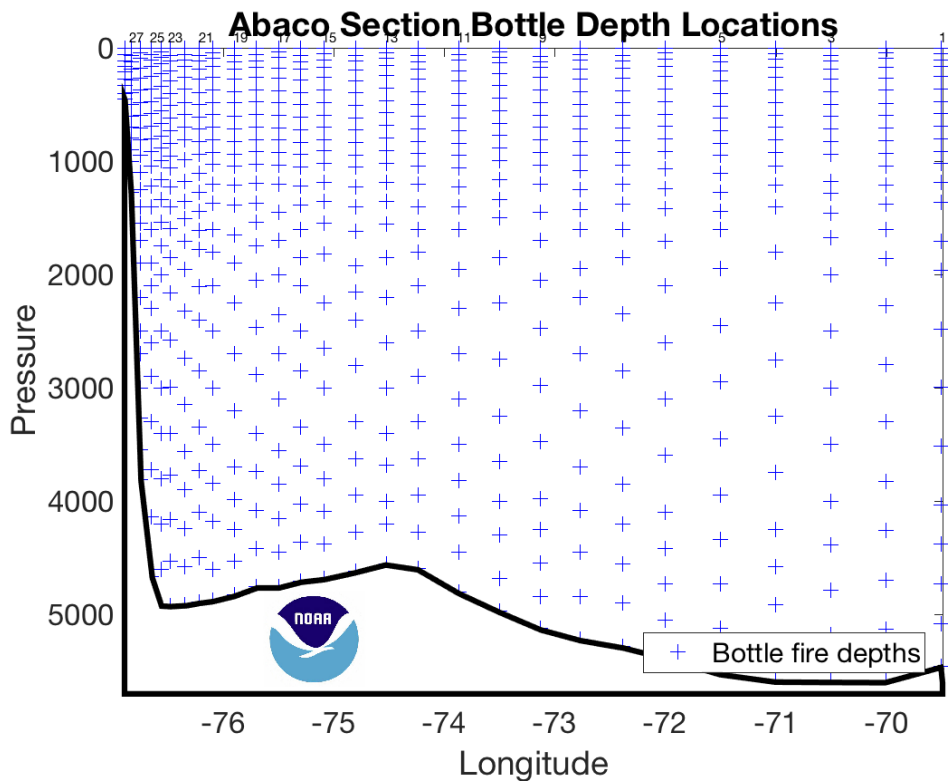
Figure 2: Bottle locations for 26.5°N Deep Western Boundary Current section east of Abaco Island.
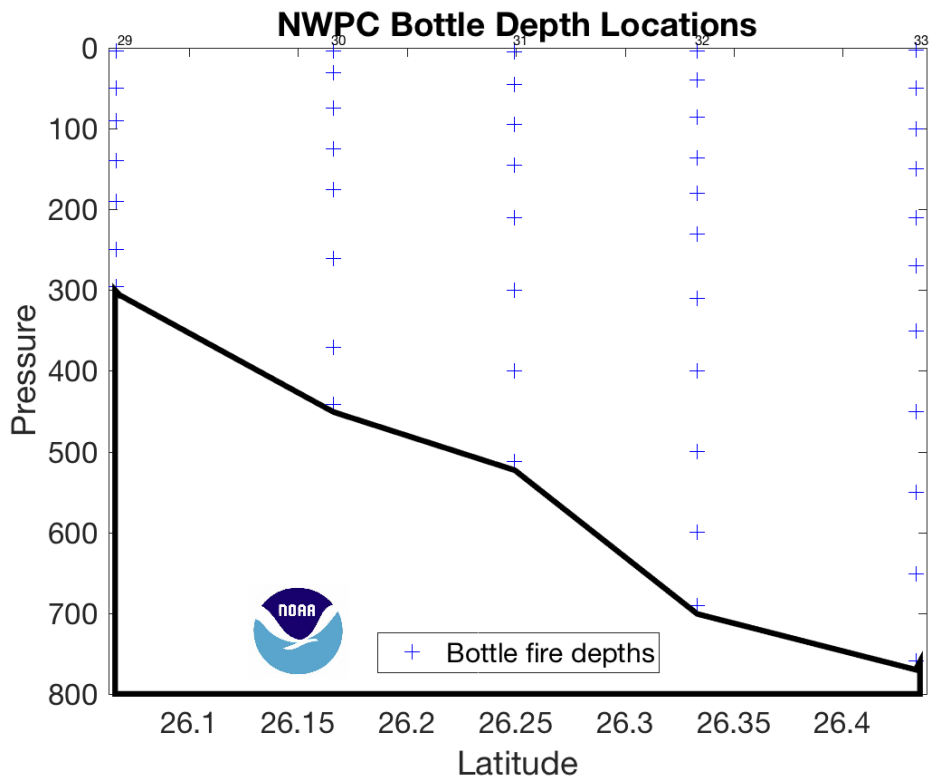
Figure 3: Bottle locations for along the Northwest Providence Channel section.
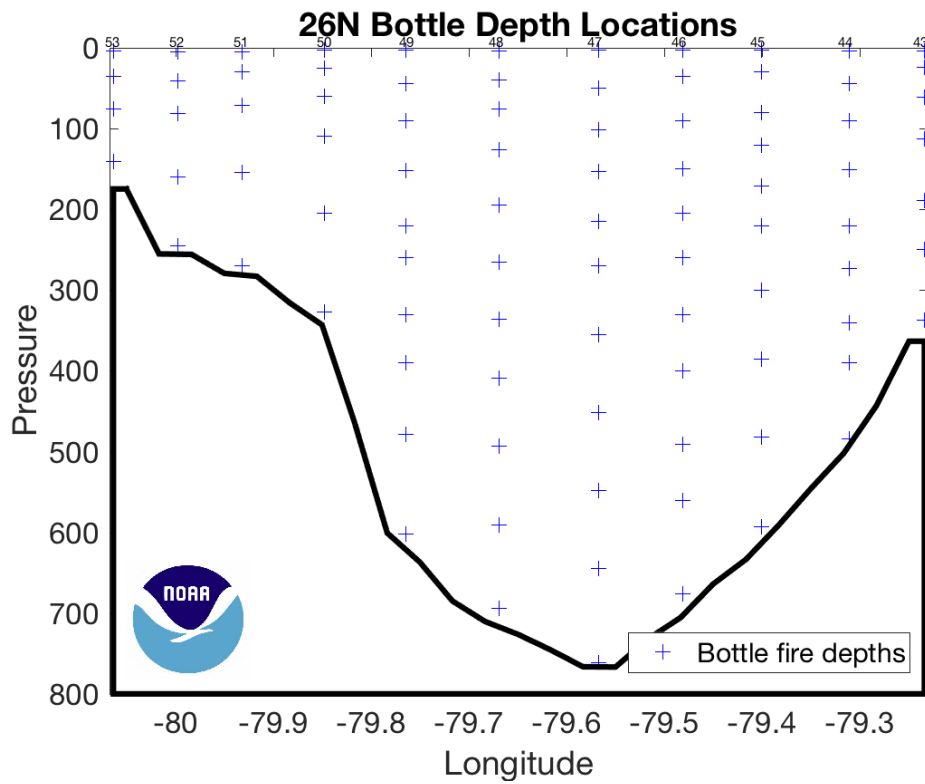
Figure 4: Bottle locations for 26°N section in the Florida Straits.
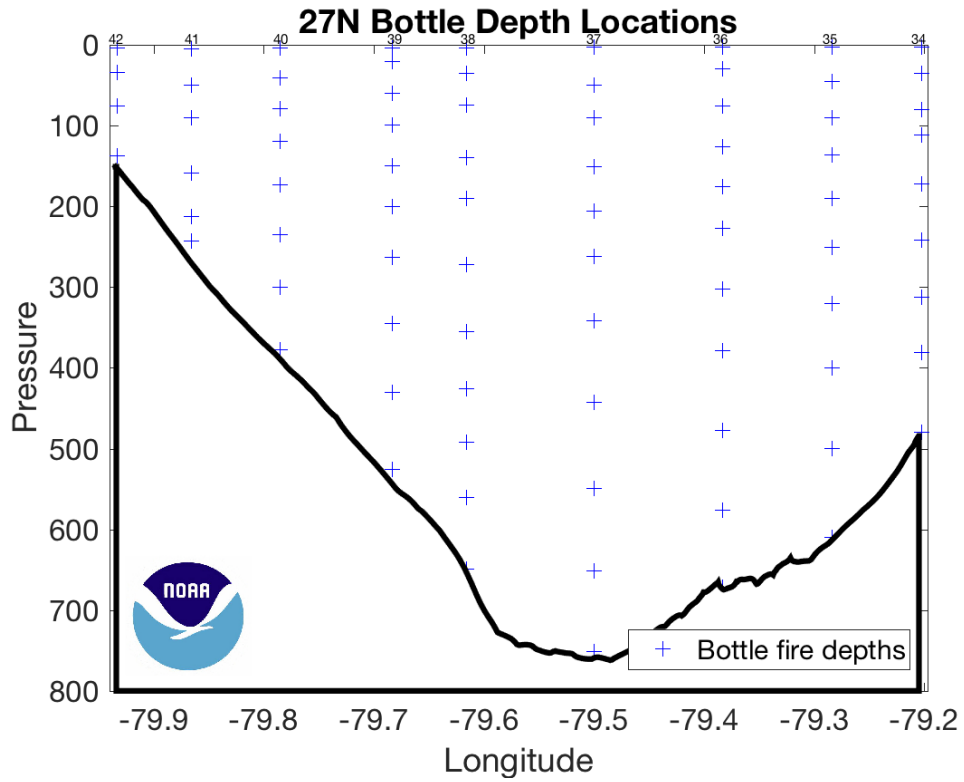
Figure 5: Bottle locations for 27°N section in the Florida Straits.

5.3 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using SEABIRD SBE Data Processing version 7.21k and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave on the Windows 7 workstation were copied onto the CTD-PROC workstation, and processed to a 1-dbar series and a 1-second time series. Bottle trip values were extracted and a 1-decibar (dbar) down cast pressure series created.

Raw data are acquired from the instruments and are stored unmodified. The conversion module DATCNV uses the instrument configuration and pre-cruise factory calibration coefficients to create a converted engineering unit data file that is utilized by all SBEDataProc® post processing modules. Unless otherwise noted, all calibration parameters given are factory default values recommended by Sea Bird Electronics, Inc. The following is the SBEDataProc® processing module sequence and specifications for primary calibrated data (1 dbar averages) uses the following routines in order for reduction of CTD/O2 data from this cruise:

1. DATCNV converts raw data into engineering units and creates a .ROS bottle file. Both down and up casts were processed for scan, elapsed time(s), depth, pressure, t0 ITS-90 C, t1 ITS-90 C, c0 S/m, c1 S/m, salinity (PSU), salinity 2 (PSU), oxygen voltage V, oxygen 2 voltage V, altimeter, oxygen umol/kg, oxygen 2 umol/kg, oxygen mll/l, oxygen 2 ml/l, oxygen dv/dt, oxygen dv/dt 2, latitude, and longitude. The scan range offset is 0 seconds and the scan range duration is 5.5 seconds. MARKSCAN was used to determine the number of scans acquired on deck and while priming the system to exclude these scans from processing.

2. ALIGNCTD aligns temperature, conductivity, and oxygen measurements in time relative to pressure to ensure that derived parameters are made using measurements from the same parcel of water. Primary and secondary conductivity are automatically advanced by 0.073 seconds and both oxygen are advanced by an additional 0.073 seconds.

3. WILDEDIT computes the standard deviation of 100 point bins, and then makes two passes through the data. The first pass flags points that differ from the mean by more than 2 standard deviations. A new standard deviation is computed excluding the flagged points and the second pass marks bad values greater than 20 standard deviations from the mean. For this data set, data were kept within a distance of 100 of the mean (i.e., all data).

4. FILTER applies a low pass filter to pressure with a time constant of 0.15 seconds. In order to produce zero phase (no time shift), the filter is first run forward through the file and then run backwards through the file.

5. CELLTM uses a recursive filter to remove conductivity cell thermal mass effects from measured conductivity. In areas with steep temperature gradients the thermal mass correction is on the order of 0.005 PSS-78. In other areas the correction is negligible. The value used for the thermal anomaly amplitude (alpha) was 0.03°C. The value used for the thermal anomaly time constant (1/beta) was 7.0°C.

6. LOOPEDIT removes scans associated with pressure slowdowns and reversals. If the CTD velocity is less than 0.25 m/s or the pressure is not greater than the previous maximum scan, the scan is omitted.

7. BOTTLESUM creates a summary of the bottle data. Bottle position, date, and time were output automatically. Pressure, temperature, conductivity, salinity, oxygen voltage and preliminary oxygen values were averaged over a 5 second interval.

8. DERIVE uses 1 dbar averaged pressure, temperature, and conductivity to compute primary and secondary salinities. Oxygen voltage is used to calculate oxygen concentrations.

9. BINAVG averages the data into 1 dbar bins. Each bin is centered on an integer pressure value, e.g., the 1 dbar bin averages scans where pressure is between 0.5 dbar and 1.5 dbar. There is no surface bin. The number of points averaged in each bin is included in the data file.

10. STRIP removes the computed oxygen variable.

11. TRANS converts the binary data file into ASCII format.

12. SPLIT separates the cast into upcast and downcast values.

CTD data were examined at the completion of each deployment for clean corrected sensor response and any calibration shifts. As bottle salinity and oxygen results became available, they were used to refine shipboard conductivity and oxygen sensor calibrations.

A total of 53 casts were processed.

5.4   CTD Calibration Procedures

Laboratory calibrations of the CTD pressure, temperature, conductivity, and oxygen sensors were all performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates are listed in Table 4.

Secondary temperature, conductivity and dissolved oxygen (T2, C2 and DO2) sensors served as calibration checks for the reported primary sensors. During the cruise, it was determined that the primary temperature and conductivity and secondary oxygen sensors behaved more stably during the cruise.

In-situ salinity and dissolved O2 check samples collected during each cast were used to calibrate the conductivity and dissolved O2 sensors.

5.4.1   Salinity Analysis

A model 8400B Guildline Autosal, s/n 105311, borrowed from WHOI by the R/V Endeavor located in the salinity analysis room, was used for all salinity measurements. The salinometer readings were logged on a computer using Ocean Scientific International's logging hardware and software. The Autosal's water bath temperature was set to 24°C, which the Autosal is designed to automatically maintain. The laboratory's temperature is typically set and maintained to just below 24°C, to help further stabilize reading values and improve accuracy. The room temperature was monitored by a digital thermometer. The temperature was used to gauge the stability of the room temperature and when the Autosal room temperature was acceptable to run salts. Salinity analyses were performed after samples had equilibrated to laboratory temperature, usually at least 12 hours after collection. The salinometer was standardized for each group of samples analyzed (usually 2 casts and up to 52 samples) using two bottles of standard seawater: one at the beginning and end of each group of measurements. The salinometer output was logged to a computer file. The software prompted the analyst to flush the instrument's cell and change samples when appropriate. Prior to each run a sub-standard flush, approximately 200 ml, of the conductivity cell was conducted to flush out the DI water used in between runs. For each calibration standard, the salinometer cell was initially flushed 6 times before a set of conductivity ratio reading was taken. For each sample, the salinometer cell was initially flushed at least 3 times before a set of conductivity ratio readings were taken.

IAPSO Standard Seawater Batch P-158 was used to standardize all casts (Table 10).

The salinity samples were collected in 200 ml Kimax high-alumina borosilicate bottles that had been rinsed at least three times with sample water prior to filling. The bottles were sealed with custom-made plastic insert thimbles and Nalgene screw caps. This assembly provides very low container dissolution and sample evaporation. Prior to sample collection, inserts were inspected for proper fit and loose inserts replaced to insure an airtight seal. PSS-78 salinity [UNES81] was calculated for each sample from the measured conductivity ratios.

Table 10: Nominal values for the batches of IAPSO standard seawater.

P-158
Use By: March 2018
K15: 0.99970
Salinity: 34.988

The offset between the initial standard seawater value and its reference value was applied to each sample. Then the difference (if any) between the initial and final vials of standard seawater was applied to each sample as a linear function of elapsed run time. The corrected salinity data was then incorporated into the cruise database. When duplicate measurements were deemed to have been collected and run properly, they were averaged and submitted with a quality flag of 6. On WBTS - AB1602, 925 salinity measurements were taken, including 78 duplicates, and approximately 40 vials of standard seawater (SSW) were used. Up to two duplicate samples were drawn from most casts to determine total analytical precision.

The running standard calibration values are shown in Figure 6. Through the course of the 13 day cruise, the autosal standards changed by $1.21 \cdot 10\text{-}5$ in conductivity ratio (about 0.0002 in salinity). The precision of the salinity measurements during the cruise were estimated by using the duplicate samples. From the 78 duplicate samples (Table 11), which corresponds to 8.3% of the total samples collected during this cruise, the average residual for the duplicates was $3.86 \cdot 10\text{-}4$ PSU with and standard deviation of 0.0013 PSU (Figure 6).
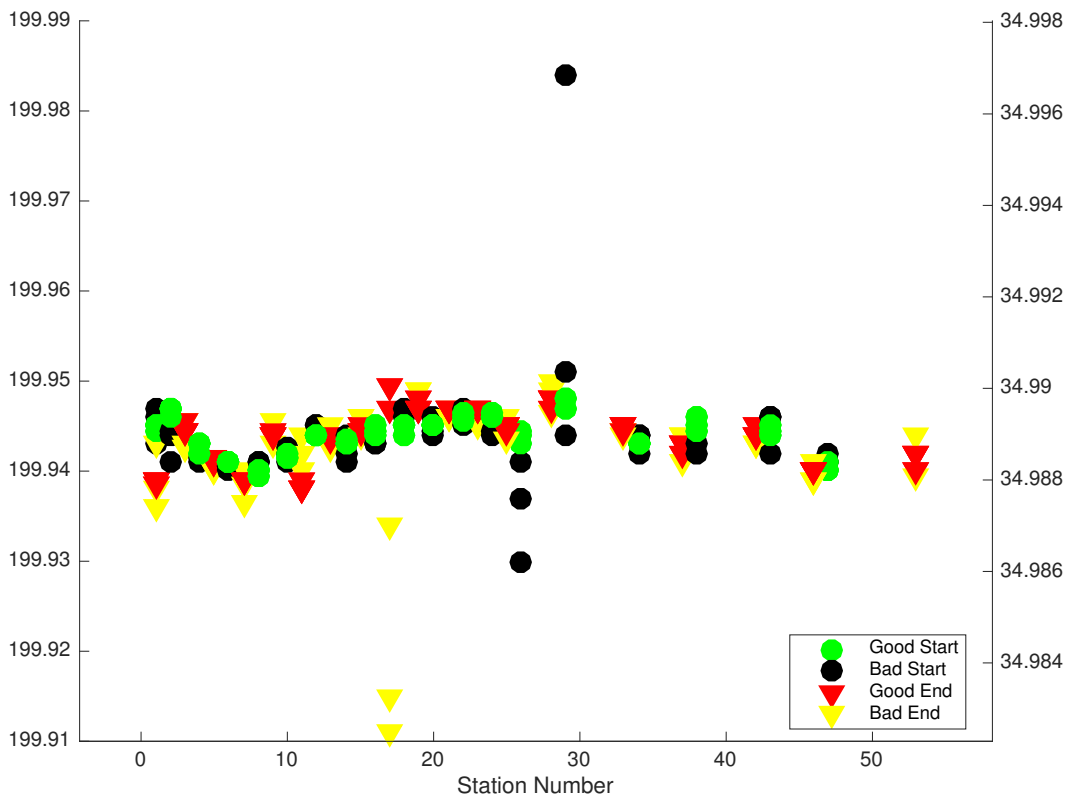
Figure 6: Standard vial calibrations throughout the cruise.
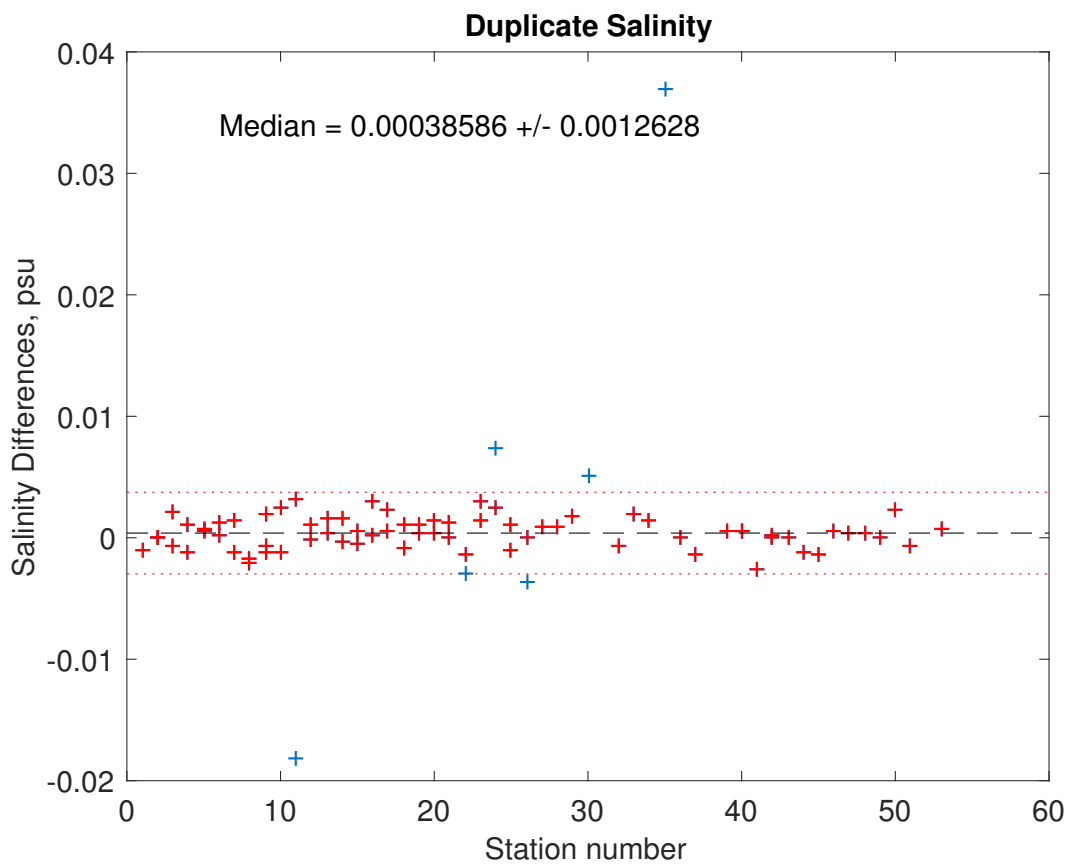
Figure 7: Salinity residuals of the duplicate samples.

Table 11: Duplicate salinity samples collected during the
ABACO cruise.

Station	Niskin	Salinity1	Salinity2	Differences
1	7	34.938	34.937	0.001
2	9	34.996	34.996	-0.000
2	16	35.596	35.596	-0.000
3	6	34.906	34.908	-0.002
3	21	36.649	36.649	0.001
4	7	34.915	34.914	0.001
4	13	35.058	35.059	-0.001
5	1	34.855	34.855	-0.001
5	9	34.976	34.976	-0.001
6	1	34.857	34.858	-0.001
6	19	36.526	36.526	-0.000
7	18	36.301	36.302	-0.002
7	22	36.665	36.664	0.001
8	9	34.976	34.974	0.002
8	20	36.581	36.579	0.002
9	1	34.861	34.860	0.001
9	3	34.884	34.884	0.001
9	18	36.361	36.363	-0.002
10	5	34.899	34.902	-0.003
10	17	36.111	36.110	0.001
11	1	34.889	34.870	0.018
11	21	36.695	36.699	-0.003
12	5	34.902	34.902	0.000
12	20	36.666	36.667	-0.001
13	11	35.001	35.001	-0.000
13	19	36.569	36.571	-0.002
14	9	34.960	34.961	-0.002
14	10	34.978	34.978	0.000
15	7	34.933	34.932	0.001
15	8	34.951	34.951	-0.001
16	4	34.894	34.897	-0.003
16	22	36.830	36.830	-0.000
17	7	34.930	34.932	-0.002
17	18	36.234	36.235	-0.001
18	3	34.889	34.890	-0.001
18	18	36.265	36.264	0.001
19	5	34.896	34.897	-0.000
19	17	35.836	35.837	-0.001
20	3	34.890	34.891	-0.000
20	16	35.548	35.549	-0.001
21	9	34.972	34.973	-0.001

21	18	36.260	36.260	-0.000
22	7	34.928	34.925	0.003
22	22	36.603	36.602	0.001
23	2	34.884	34.887	-0.003
23	7	34.934	34.935	-0.002
24	11	34.984	34.992	-0.007
24	17	35.999	36.002	-0.002
25	8	34.950	34.951	-0.001
25	23	36.648	36.647	0.001
26	6	34.941	34.941	-0.000
26	22	36.646	36.643	0.004
27	12	36.629	36.630	-0.001
28	2	36.499	36.500	-0.001
29	7	36.263	36.264	-0.002
30	7	36.335	36.341	-0.005
32	11	36.358	36.357	0.001
33	1	35.269	35.271	-0.002
34	2	36.448	36.449	-0.001
35	9	36.379	36.416	-0.037
36	3	35.644	35.644	-0.000
37	8	36.609	36.607	0.001
39	2	34.986	34.986	-0.001
40	3	35.725	35.726	-0.001
40	5	36.398	36.399	-0.001
41	2	35.519	35.516	0.003
42	1	36.097	36.097	-0.000
42	3	36.291	36.291	-0.000
43	1	36.443	36.443	0.000
44	9	36.280	36.279	0.001
45	9	36.282	36.281	0.001
46	1	34.915	34.916	-0.001
47	3	34.965	34.965	-0.000
48	4	35.233	35.234	-0.000
49	7	36.536	36.536	0.000
50	2	36.223	36.225	-0.002
51	2	36.485	36.484	0.001
53	2	36.426	36.427	-0.001

5.4.2 Oxygen Analysis

Dissolved oxygen analyses were performed with an automated titrator using amperometric end-point detection (Langdon, 2010). Sample titration, data logging, and graphical display were performed with a PC running a LabView program written by Ulises Rivero of AOML. Thiosulfate (17.5g per 500 ml) was dispensed by a 2 ml Gilmont burette driven with a stepper motor controlled by the titrator. Tests in the lab were performed to confirm that the precision and accuracy of the volume dispensed were comparable or superior to the Dosimat 665. The whole-bottle titration technique of Carpenter (1965), with modifications by Culberson et al. (1991), was used. Four replicate 10 *ml* iodate standards were run every 3-4 days or at the initial fill of new Thiosulfate and once again after bottle has reached half volume, which ever came first. The reagent blank determined as the difference between V1 and V2, the volumes of Thiosulfate required to titrate 1ml aliquots of the iodate standard, was determined two times during the cruise at the beginning and middle. This method was found during pre-cruise testing to produce a more reproducible blank value than the value determined as the intercept of a standard curve.

Dissolved oxygen samples were drawn from Niskin bottles into calibrated 125-150ml iodine titration flasks using silicon tubing. Bottles were rinsed three times and filled from the bottom, overflowing three volumes while taking care not to entrain any bubbles. The CTD temperatures were used to calculate *umol/kg* concentrations. 1ml of MnCl2 and 1ml of NaOH/NaI were added immediately after drawing the sample was concluded using a ThermoScientific REPIPET II. The flasks were then stoppered and shaken well. Deionized water (DIW) was added to the neck of each flask to create a water seal. The total number of oxygen samples collected from the rosette was 923 including 78 duplicate samples, up to two taken at random every cast. The samples were stored in the lab in plastic totes at room temperature for 1.5 hours before analysis. The data was incorporated into the cruise database shortly after analysis. Thiosulfate normality was calculated from the laboratory temperature for each sample run.

The dispenser used for the standard solution (SOCOREX Calibrex 520) and the burette were calibrated gravimetrically just before the cruise. Oxygen flask volumes were determined gravimetrically with degassed deionized water at AOML. The correction for buoyancy was applied.

The precision of the oxygen measurements during the cruise were estimated by using the duplicate samples. From the 78 duplicate samples (12), which corresponds to 8.5% of the total samples collected during this cruise, the average residual for the duplicates was -0.076 *umol/kg* with and standard deviation of 0.48 *umol/kg* (8).

During the initial setup for analyses the following instruments were used: Aoml Titrator #6, Burette #42, amp probe s/n: 3350011P and laptop Pufferfish, CD0004308634.

Comparison of the bottle samples with historical data showed that the bottle data was low on average by approximately 5 umol/kg. It was determined that the standards used

throughout the cruise were too high resulting in not enough thio being injected into the run samples causing the low oxygen values. The high standards were determined at the end of the cruise by Chris Langdon, who ran a new set of standards that were used to recalculate the oxygen values. The high standards during the cruise ranged from 709 - 717. The post cruise standard used to recalculate the oxygen was 703.9.
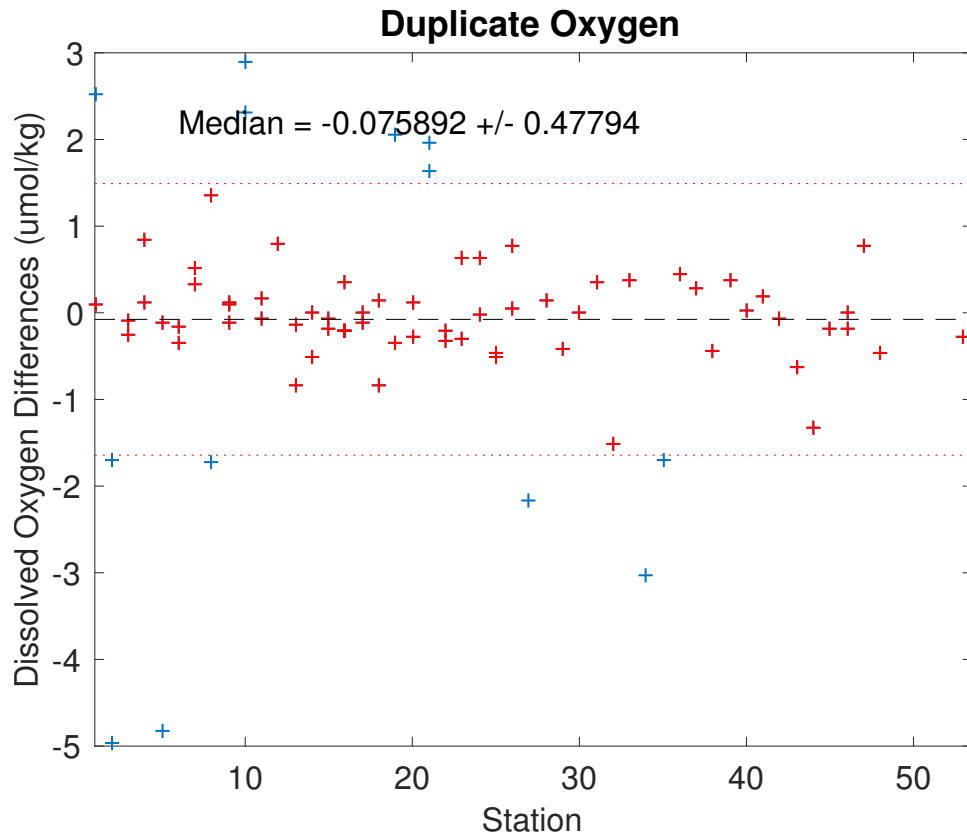
Figure 8: Oxygen residuals of the duplicate samples .

Table 12: Duplicate dissolved oxygen samples collected during the ABACO cruise (values in $umol/kg$).

Station	Niskin	Oxygen1	Oxygen2	Differences
1	9	257.3	259.8	-2.531
1	20	190.3	190.4	-0.106
2	1	257.0	255.3	1.696
2	12	221.4	216.4	4.970
3	2	265.7	265.6	0.082
3	8	269.3	269.0	0.248
4	7	274.4	274.5	-0.111
4	16	151.6	152.4	-0.840
5	5	273.5	273.4	0.104
5	7	273.5	268.7	4.822
6	3	270.4	270.1	0.335
6	14	155.9	155.7	0.150
7	11	253.1	253.4	-0.326
7	18	186.1	186.7	-0.517
8	5	276.2	274.5	1.725
8	20	197.6	199.0	-1.360
9	2	264.8	264.9	-0.100
9	3	270.2	270.1	0.125
9	7	274.0	274.1	-0.112
10	5	274.9	277.2	-2.309
10	9	267.7	270.6	-2.900
11	7	273.9	274.0	-0.161
11	18	182.9	182.9	0.077
12	18	175.8	176.6	-0.797
13	3	271.8	270.9	0.833
13	12	238.7	238.6	0.128
14	4	274.5	274.0	0.504
14	23	212.5	212.5	-0.013
15	3	271.6	271.4	0.187
15	4	273.1	273.1	0.076
16	7	271.4	271.8	-0.347
16	24	212.9	212.7	0.202
17	9	269.1	269.0	0.120
17	18	181.1	181.1	0.000
18	6	275.3	275.4	-0.145
18	20	196.2	195.4	0.829
19	11	257.3	259.4	-2.063
19	14	167.8	167.5	0.336
20	5	275.8	275.5	0.266
20	12	243.7	243.9	-0.128
21	7	270.5	272.2	-1.633

21	24	213.5	215.5	-1.955
22	3	272.9	272.6	0.319
22	20	189.1	188.9	0.198
23	7	273.2	272.9	0.306
23	9	269.4	270.1	-0.637
24	2	270.5	271.2	-0.642
24	17	167.8	167.8	0.010
25	4	275.8	275.3	0.469
25	19	193.7	193.2	0.522
26	9	265.2	266.0	-0.764
26	16	147.4	147.5	-0.059
27	13	220.3	218.1	2.172
28	6	205.3	205.5	-0.151
29	5	203.0	202.6	0.409
30	7	207.9	207.9	-0.011
31	7	206.7	207.1	-0.354
32	8	180.1	178.6	1.523
33	7	186.7	187.1	-0.370
34	1	167.5	164.5	3.032
35	1	140.3	138.6	1.697
36	3	128.4	128.9	-0.446
37	4	123.9	124.2	-0.289
38	4	126.2	125.8	0.439
39	4	136.8	137.2	-0.367
40	2	129.3	129.3	-0.025
41	3	139.3	139.4	-0.188
42	1	136.5	136.4	0.073
43	3	177.6	176.9	0.633
44	1	134.6	133.3	1.328
45	7	205.3	205.1	0.179
46	2	126.4	126.2	0.178
46	6	142.2	142.2	0.000
47	2	139.4	140.1	-0.765
48	4	122.3	121.8	0.456
53	4	217.7	217.5	0.275

6   Post-Cruise Calibrations

Post cruise sensor calibrations were done at Sea-Bird Electronics, Inc. Secondary temperature, conductivity and dissolved oxygen sensors served as calibration checks for the reported primary sensors. In-situ salinity and dissolved oxygen samples collected during each cast were used to calibrate the conductivity and dissolved oxygen sensors. The digital reverse thermometer was used to monitor the temperature sensors for pressure dependencies or offsets.

Primary TC pair T5898/C4229 was selected for final data reduction. Post calibrations are used to check for temperature offsets and conductivity drifts since the last calibration. The temperature offset, 0.0001 °C, and the conductivity drift, -0.0003 PSU/month, were minimal and no offset or drift correction was applied. Secondary oxygen sensor, s/n 2085, was used for the final data reduction.

6.1   CTD Data Processing

In addition to the Seasave processing modules, a group of Matlab script files called AOML/CTDCAL Toolbox were used. These scripts were based on earlier work of different groups as well as in modern statistical tools. They cover all the steps of the CTD data processing from the preliminary comparisons between sensors or bottle samples to data reductions and final sensors calibrations.

- FILL_SURFACE was used to copy the first good value of salinity, potential temperature, oxygen and oxygen current back to the surface. The program then calculated temperature and conductivity, and zeroed doc/dt of oxygen current for those records.

- DESPIKE1 removed spikes from primary temperature, salinity and oxygen data. Data were linearly interpolated over de-spiked records. Conductivity was back calculated, and sigma-theta and potential temperature were recomputed for the interpolated records.

- DESPIKE2 removed spikes from secondary sensors in the same method as DESPIKE1.

- Package slowdown and reversals due to ship roll can move mixed water in tow in front of the CTD sensors. This mixture can create artificial density inversions and other artifacts. In addition to the SEASOFT module LOOPEDIT, DELOOP, computes values of density locally referenced between every 1 dbar of pressure to compute N^2 = (- g/p) (dp/dz) and linearly interpolated measured parameters over those records where $N^2 \leq$ -1.0 e -05 s^{-2}.

Final calibrations are applied to delooped data files. ITS-90 temperature, salinity, and oxygen are computed, and WOCE quality flags are created.

6.2 CTD Pressure

Pressure sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw pressure data during each cast. Residual pressure offsets (the difference between the first and last submerged pressures) were examined to check for calibration shifts (see Figure 9 and Table 13). Pressure sensor s/n 1207 was used during stations 1-6 of the cruise with an initial pressure offset of 0.47 dbar applied to the configuration file for a total offset of 0.47. On deck pressures before the start of each cast was recorded and is plotted in Figure 9. The on deck pressure before and after the cast was stable at 0.03± 0.05 dbar and 0.14 ± 0.12 dbar. Pressure sensor s/n 1165 was used during the remaining stations of the cruise with an initial pressure offset of -1.3068 dbar applied to the configuration file for a total offset of -0.8369. The on deck pressure before and after the cast was stable at -0.11± 0.14 dbar and -0.15 ± 0.16 dbar. No offset correction was necessary for either pressure sensor.

Near surface pressure values (which is taken as the near-surface pressure at the markscan and the last fired bottle pressure) showed no remarkable trends over the cruise for either pressure sensor. The first pressure sensor, s/n 1207, was stable with near surface pressures of 4.0 ± 0.67 dbar before and 3.51 ± 0.96 dbar after and the second pressure sensor, s/n 1165, was stable with near surface pressures of 3.32 ± 0.96 dbar before and 3.72 ± 0.90 dbar after.
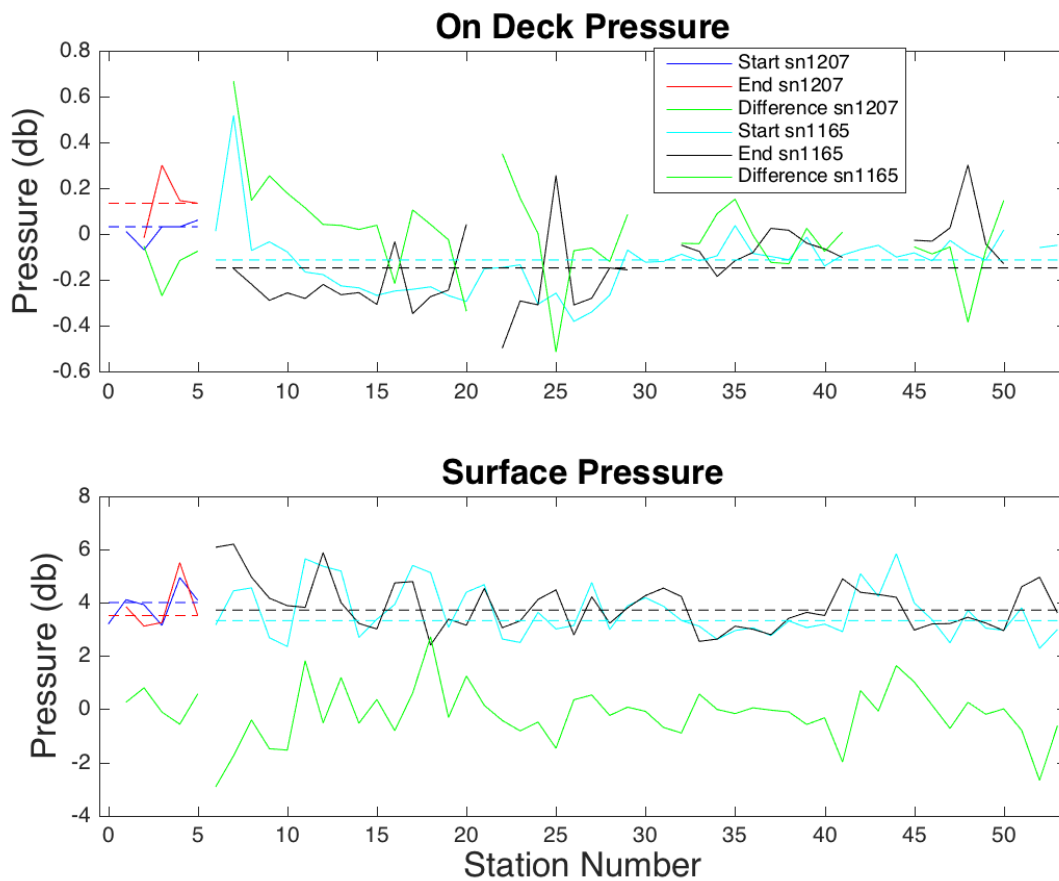
Figure 9: Pressure differences vs. station number. Top panel are the pressures measured on deck before the cast (blue/cyan), at the end of the upcast (red/black) and their respective difference (green) for s/n 1207, stations 1-6, and s/n 1165, stations 6-53. Bottom panel are the near sea surface pressure values measured at the start of the downcast (blue/cyan), at the end of the upcast (red/black) and their respective difference (green) for s/n 1207 and s/n 1165.

Table 13: Near surface Pressure values and scan number
used to remove surface soak and on-deck values.

Station	Markscan	Deck Prs Start	Deck Prs End	Sfc Prs Start	Sfc Prs End
0	5690		0.0648	3.1900	
1	3552	0.0121		4.1055	3.8420
2	4990	-0.0678	-0.0157	3.9167	3.1160
3	5185	0.0328	0.3008	3.1448	3.2520
4	4262	0.0327	0.1468	4.9338	5.4970
5	4079	0.0614	0.1352	4.0834	3.5110
6	6067	0.0140		3.1600	6.0730
7	4774	0.5180	-0.1500	4.4400	6.1880
8	4424	-0.0707	-0.2180	4.5500	4.9540
9	4801	-0.0332	-0.2882	2.6800	4.1630
10	5443	-0.0768	-0.2556	2.3500	3.8830
11	5835	-0.1648	-0.2799	5.6400	3.8200
12	4893	-0.1759	-0.2189	5.3600	5.8730
13	5034	-0.2251	-0.2636	5.1800	3.9950
14	4935	-0.2337	-0.2545	2.6900	3.2150
15	5128	-0.2664	-0.3058	3.3700	3.0070
16	7493	-0.2473	-0.0321	3.9300	4.7360
17	3931	-0.2400	-0.3461	5.3900	4.7860
18	4732	-0.2293	-0.2720	5.1200	2.4070
19	3812	-0.2676	-0.2433	3.0700	3.3790
20	4795	-0.2924	0.0435	4.3900	3.1470
21	5097	-0.1503		4.6700	4.5270
22	4400	-0.1451	-0.4969	2.6328	3.0550
23	4165	-0.1330	-0.2908	2.5003	3.3120
24	5530	-0.3047	-0.3078	3.6300	4.1150
25	6210	-0.2568	0.2562	3.0100	4.4750
26	5838	-0.3798	-0.3083	3.1400	2.7870
27	4807	-0.3388	-0.2789	4.7500	4.2170
28	4167	-0.2660	-0.1466	2.9900	3.2230
29	4846	-0.0689	-0.1553	3.8800	3.8020
30	4441	-0.1221		4.1800	4.2620
31	4275	-0.1183		3.8600	4.5410
32	3781	-0.0870	-0.0475	3.3300	4.2240
33	4148	-0.1160	-0.0749	3.1100	2.5430
34	4808	-0.0938	-0.1838	2.6200	2.6300
35	3987	0.0378	-0.1153	2.9500	3.1140
36	4755	-0.0837	-0.0793	3.0500	2.9980
37	717	-0.0970	0.0257	2.7600	2.7950
38	4515	-0.1109	0.0175	3.3100	3.4110
39	4450	-0.0126	-0.0386	3.0600	3.6320
40	4141	-0.1385	-0.0640	3.1900	3.5130
41	4623	-0.0909	-0.1012	2.9100	4.8890
42	3521	-0.0664		5.0800	4.3840
43	5954	-0.0482	-0.1117	4.2300	4.3020
44	4352	-0.0995		5.8300	4.1960
45	4158	-0.0811	-0.0262	3.9900	2.9670
46	3745	-0.1160	-0.0302	3.3500	3.1970
47	3731	-0.0273	0.0280	2.4900	3.2100
48	135	-0.0809	0.3020	3.7058	3.4480
49	4466	-0.1120	-0.0428	3.0400	3.2310
50	3741	0.0187	-0.1286	2.9600	2.9470
51	4250			3.8000	4.5900
52	2075	-0.0581		2.2800	4.9480
53	4392	-0.0478		2.9900	3.6100

6.3   CTD Temperature

Temperature sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw primary and secondary temperature data during each cast. Data accuracy, reproducibility and stability were examined by comparing the differences between the two different temperature sensors over a range of pressures (bottle trip locations) for each cast. These comparisons are summarized in Figure 10, which shows a median temperature difference between the two sensors of -0.0003 °C and a standard deviation of 0.007 °C.
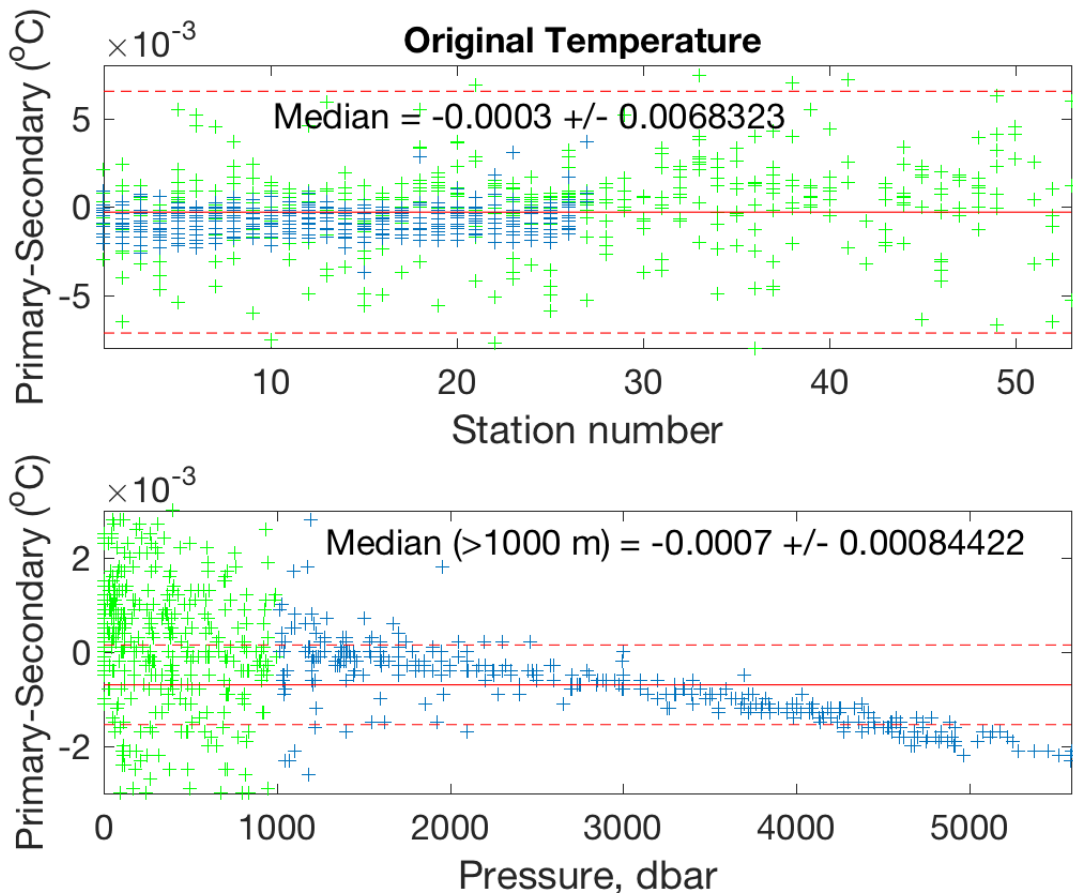
Figure 10: Temperature differences (before corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation (same for top and bottom).

A SBE 35RT reference temperature was used during the cruise as a check to monitor the behavior of the primary and secondary temperature sensors. This allows for corrections to be made if there is any significant pressure dependence or offset seen in the sensors throughout the cruise. The bottle and instrument differences are compared to a normal distribution using 2.8 * standard deviation to find clear outliers. After these procedures 666 data points (89.4 %) were used in the final calculations. The secondary temperature sensor, s/n 5889, had a strong pressure dependence approximately 0.002 °C at 5500 dbar. Both temperature sensors were corrected for using the reference temperature. The primary temperature sensor, s/n 5898, was used for all the final data values.

In order to calibrate the CTD temperature data against the reference temperature we assume a constant additive correction (offset), multiplicative correction (slope), time drift correction (represented by station number) and where needed, a linear pressure-dependent term. A non-linear function is used to derive these coefficients and are applied to

$$T_{new} = [m * T_{CTD} + (p_1 * station) + b + pcor * P]$$

with

	s/n 5898		s/n 5889	
	Sta 1-28	Sta 29-53	Sta 1-28	Sta 29-53
m	0.99998607	0.99983046	0.9999752	1.0000442
p_1	-0.00000605	0.0	-0.0000028	0.0
b	-0.00011388	0.00361462	0.0001311	-0.0010303
$pcor$	7.6718090e-08	-2.68275988e-06	-3.0592460e-07	1.5539452e-06

where T_{bottle} is bottle temperature (°C), T_{CTD} is pre-cruise calibrated CTD temperature (°C), m is the temperature slope, b is the offset (°C), P is the pressure, $pcor$ is the pressure correction coefficient, $station$ is the station number and p_1 is the polynomial coefficient. The fit is also weighted in such way that the final solution is preferentially forced to fit the data below a specified depth, in this case 1000 dbar. Two temperature coefficients were used for each sensor (Table 6.3). For the Abaco line, stations 1-26 were used to derive the coefficients, but were applied to stations 1-28. For the Florida Straits all three sections, stations 29-50 (no reference temperature for stations 51-53), were used to derive the coefficients. The corrected temperature sensors are summarized in Figure 11, which shows a median temperature difference between the two sensors of $1.14 \cdot 10\text{-}4$ °C and a standard deviation of 0.007 °C.
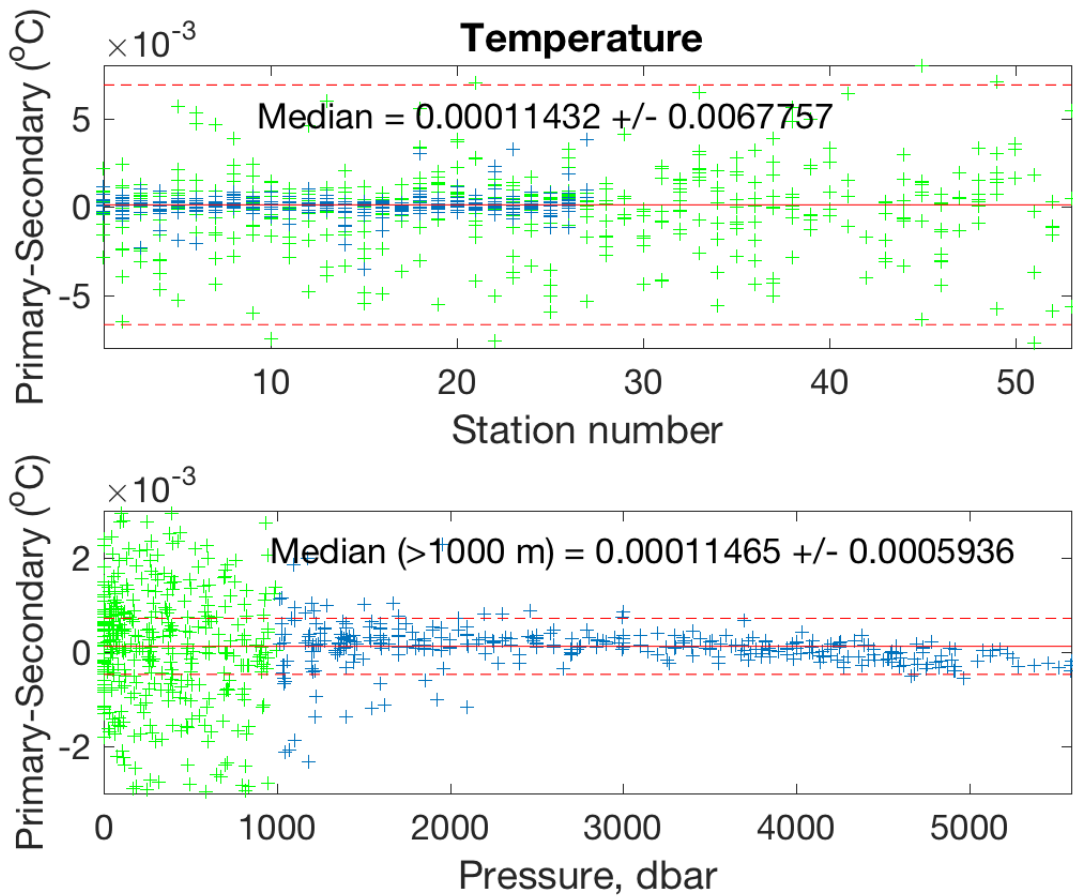
Figure 11: Temperature differences (after corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation (same for top and bottom).

6.4   Conductivity

Conductivity sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw primary and secondary conductivities. Comparisons between the primary and secondary sensors and between each of the sensors to conductivity calculated from bottle salinities were used to derive conductivity corrections. Uncorrected C1-C2 are shown in Figure 12 to help identify sensor drift. The sensors show a median difference of -1.2 · 10-3 mS/cm and a standard deviation of 0.008 mS/cm. The uncalibrated primary sensor comparison with the bottle salinities show a better residual with a median of -1.94 · 10-4 psu and a standard deviation of 0.001 psu (Figure 13). Therefore the primary sensor, s/n 4229, was used for all the final data values. The bottle and instrument differences are compared to a normal distribution using 2.8 * standard deviation to find clear outliers. Salts for stations 23 - 26 were determined to be bad from the initial comparison with the sensors and manually flagged as 4. After these procedures 612 data points (72.3 %) were used in the final calculations.

In order to calibrate the CTD conductivity data against the sample conductivity we assume a constant additive correction (offset), multiplicative correction (slope), time drift correction (represented by station number) and where needed, a linear pressure-dependent term. A non-linear function is used to derive these coefficients and are applied to

$$C_{new} = [m * C_{CTD} + (p_1 * station) + b + pcor * P]$$

with

	s/n 4229		
	Stations 1-15	Stations 16-28	Stations 29-53
m	0.9999349	0.9999522	0.9998157
p_1	1.421068e-05	-3.9831752e-05	0.0
b	0.0033178	0.002971	0.009851
$pcor$	-4.5402279e-07	-3.7145707e-07	-4.1145811e-06

where C_{bottle} is bottle conductivity (mS/cm), C_{CTD} is pre-cruise calibrated CTD conductivity (mS/cm), m is the conductivity slope, b is the offset (mS/cm), P is the pressure, $pcor$ is the pressure correction coefficient, $station$ is the station number and p_1 is the polynomial coefficient. The fit is also weighted in such way that the final solution is preferentially forced to fit the data below a specified depth, in this case 1000 dbar. Three conductivity coefficients were used to correct the primary conductivity (Table 6.4). The stations used are chosen by looking at residual trends between the sensor and bottle data. For the Abaco line, stations 1-15 and 16-26 were used to derive the coefficients and were applied to stations 1-15 and 16-28, respectively. For the Florida Straits all three sections, stations 29-53, were used to derive the coefficients.

The coefficients estimated by the equation above were then applied to the CTD conductivities and the final results (Figure 14 to Figure 17) show a residual of -8.18 · 10-5 psu (-1..11 · 10-4 psu for the data below 1000 dbar) and a standard deviation of 0.001 psu (0.0007 psu for the data below 1000 dbar). Also, 87.7% of the residuals for the data are within the confidence limits determined by the WOCE (± 0.002 psu) and this number increases to 100.0% if we consider only the data below 1000 dbar.

A final verification about the quality of the data was made by comparing the results of this cruise with some historical data (Figure 18 and Figure 19). Water mass properties are very stable, specially for deeper layers of the ocean, that way by comparing these values we can have a very good estimative of the quality of these data.
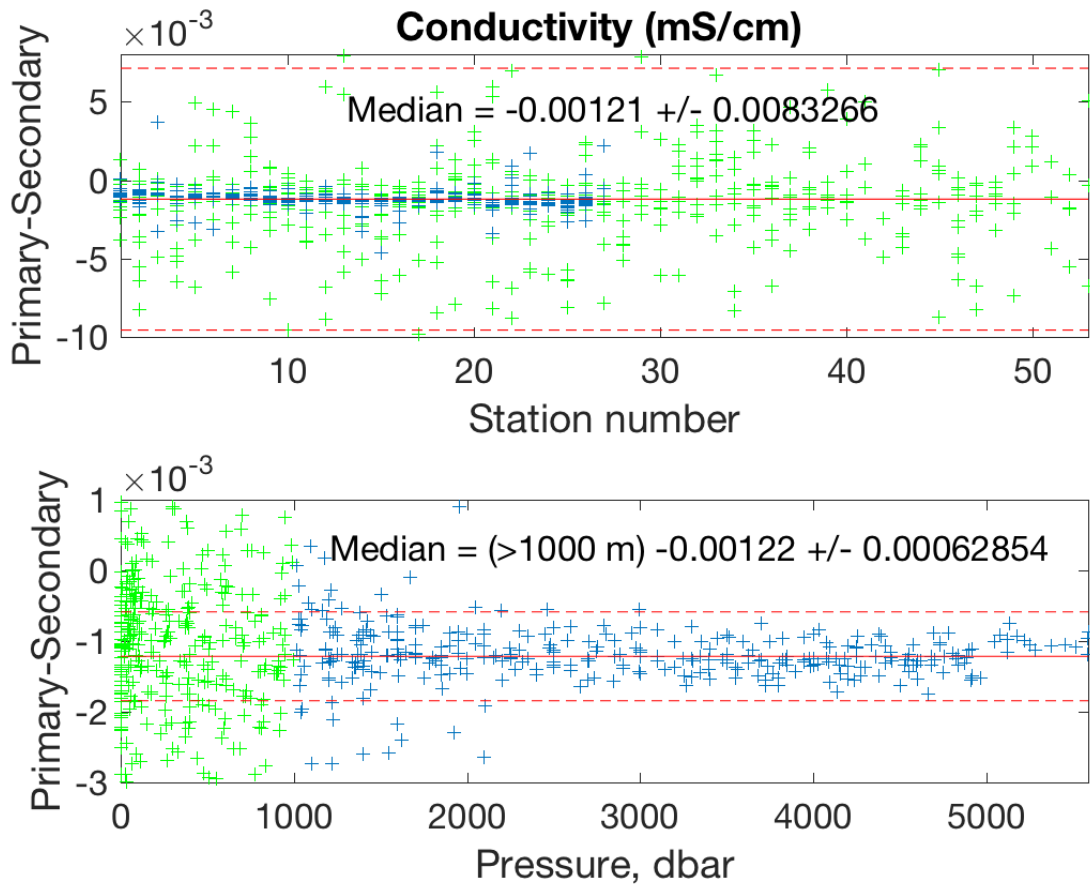
Figure 12: Conductivity (mS/cm) differences between sensors by station (top) and pressure (bottom). The red solid line represents the median with the red dashed representing the standard deviation.
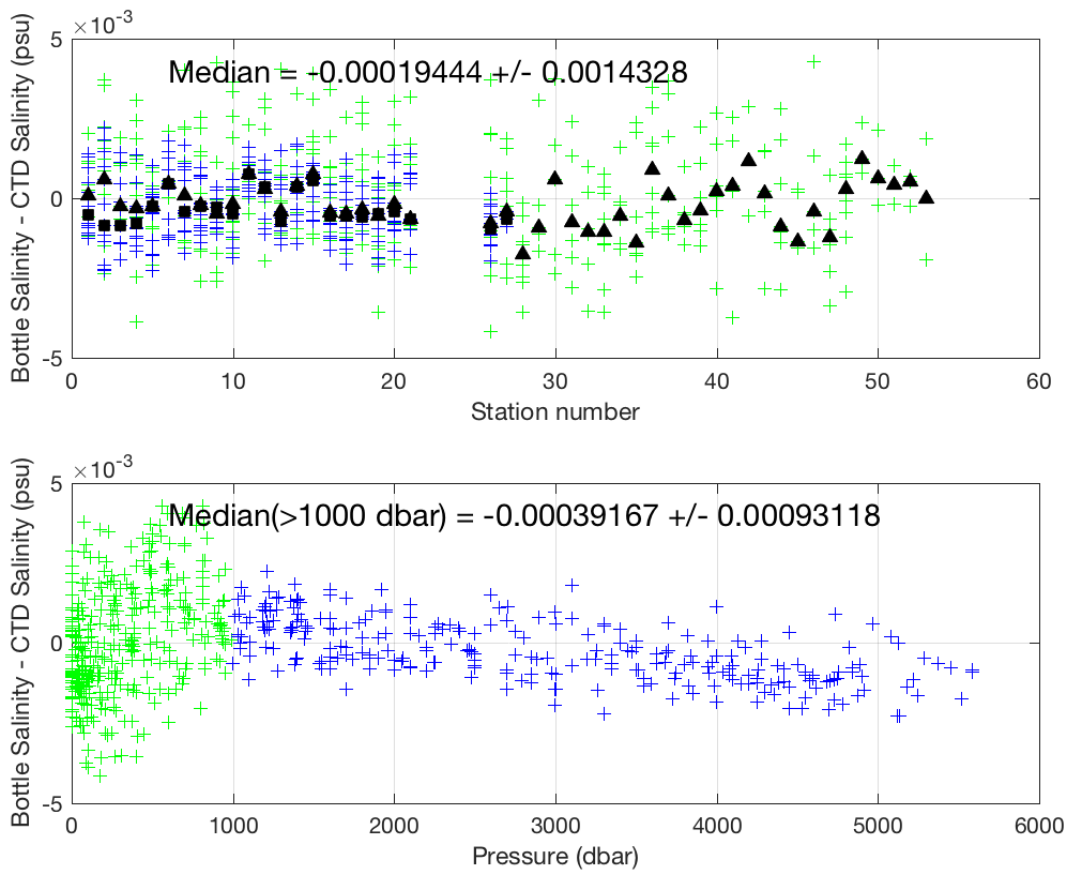
Figure 13: Bottle and uncalibrated secondary CTD salinity differences plotted against pressure. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.
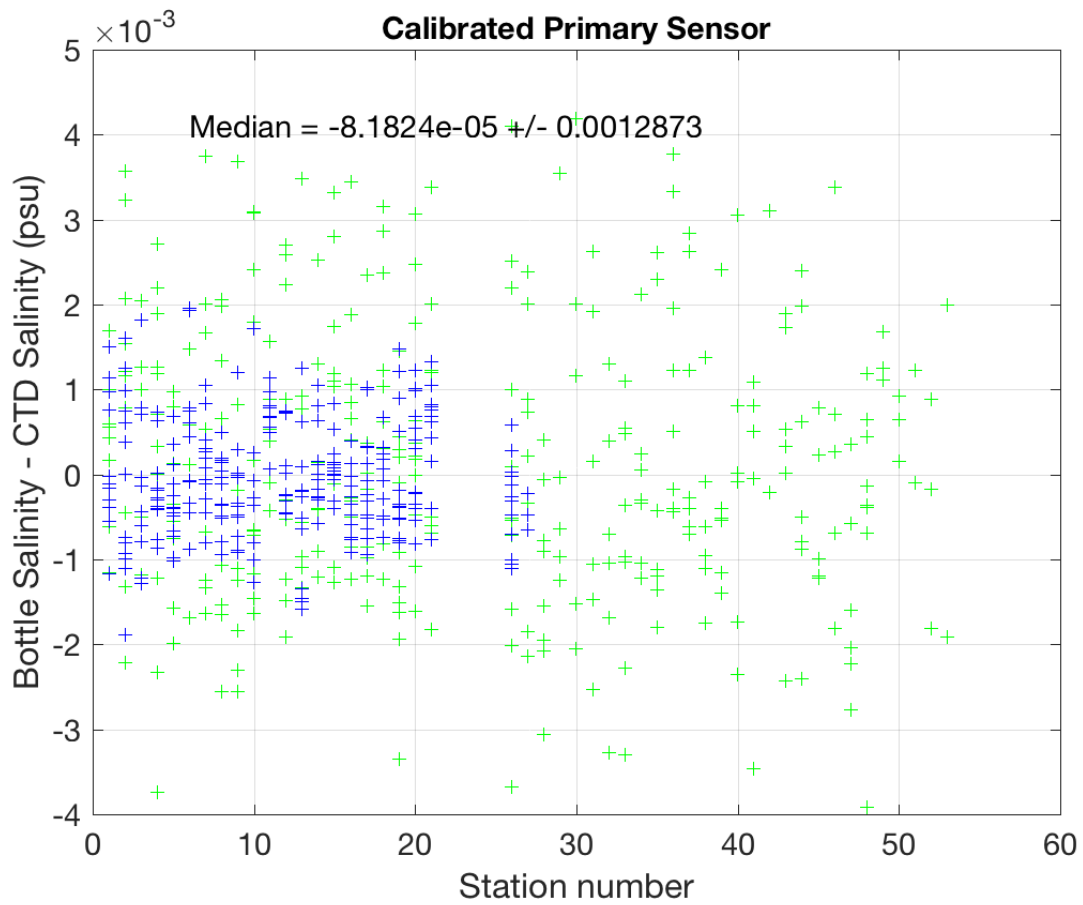
Figure 14: Bottle and calibrated secondary CTD salinity differences plotted vs. station.
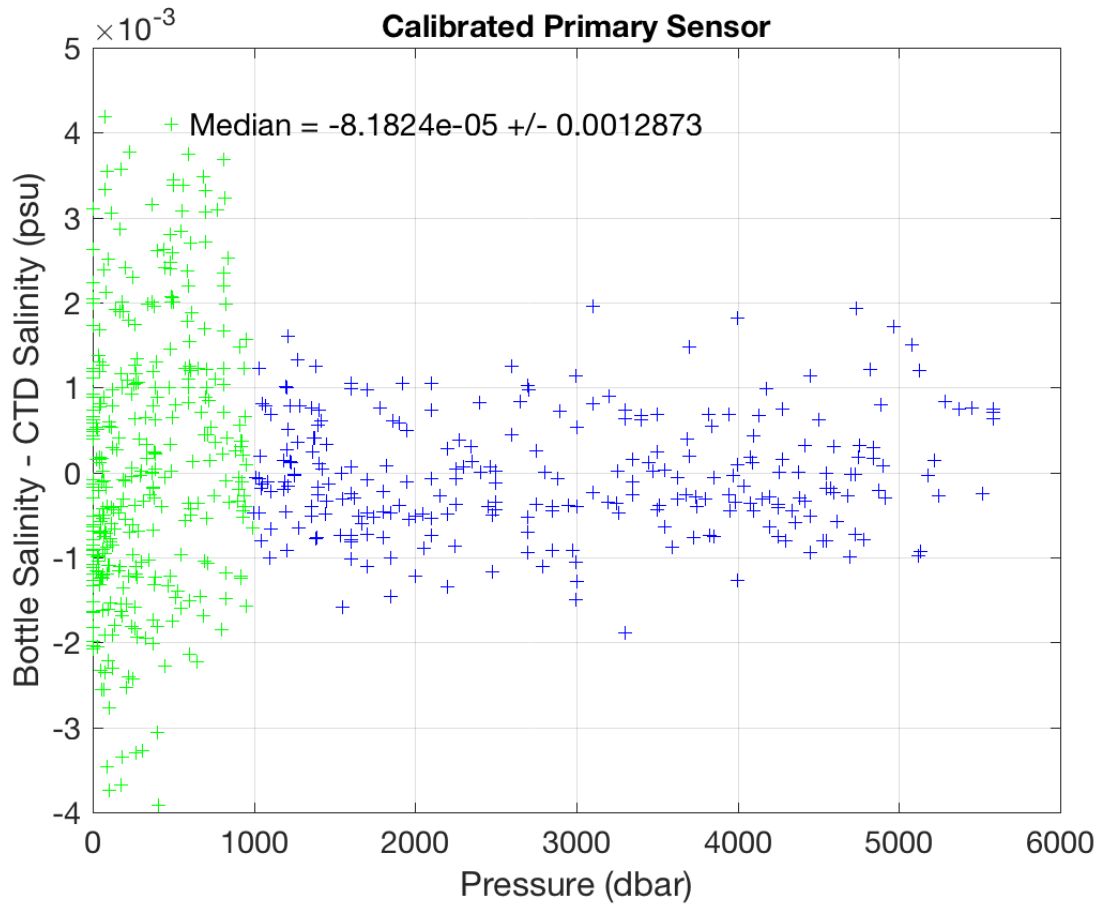
Figure 15: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure.
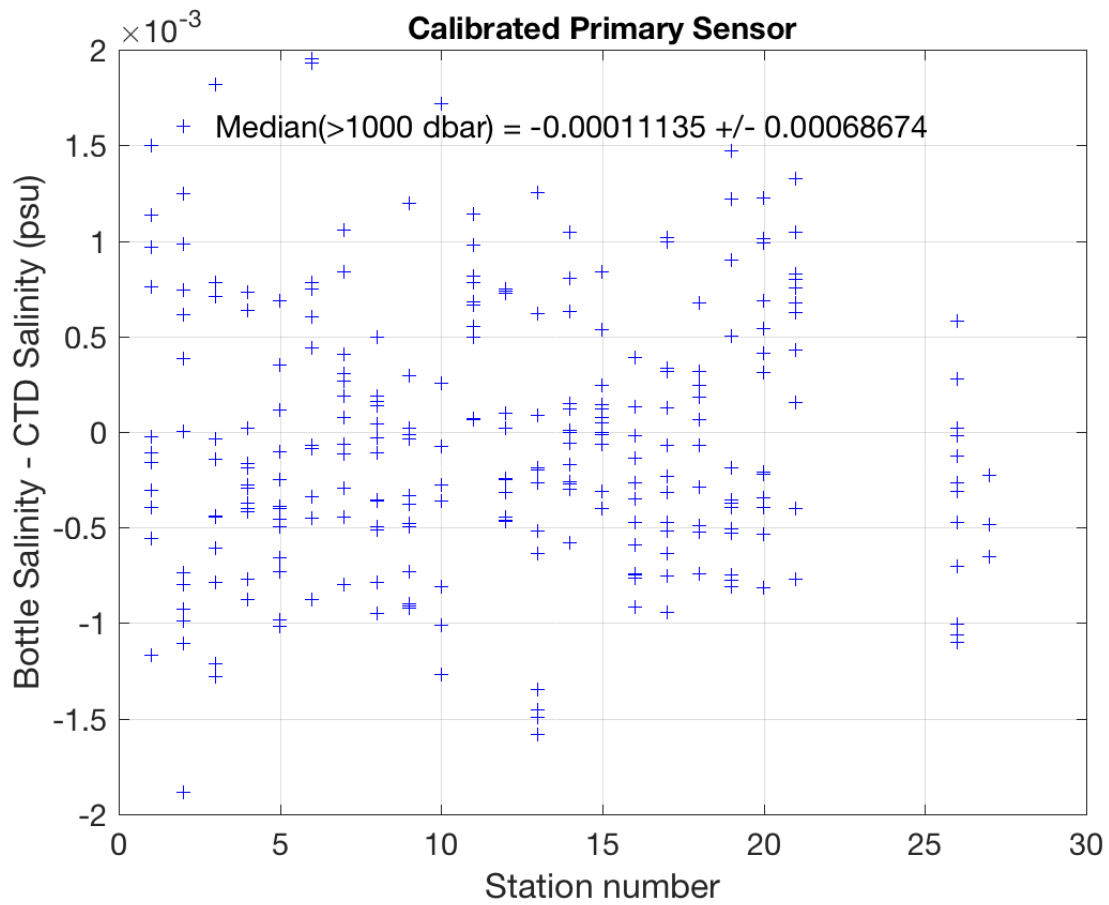
Figure 16: Bottle and calibrated secondary CTD salinity differences plotted vs. station below 1000 dbar.
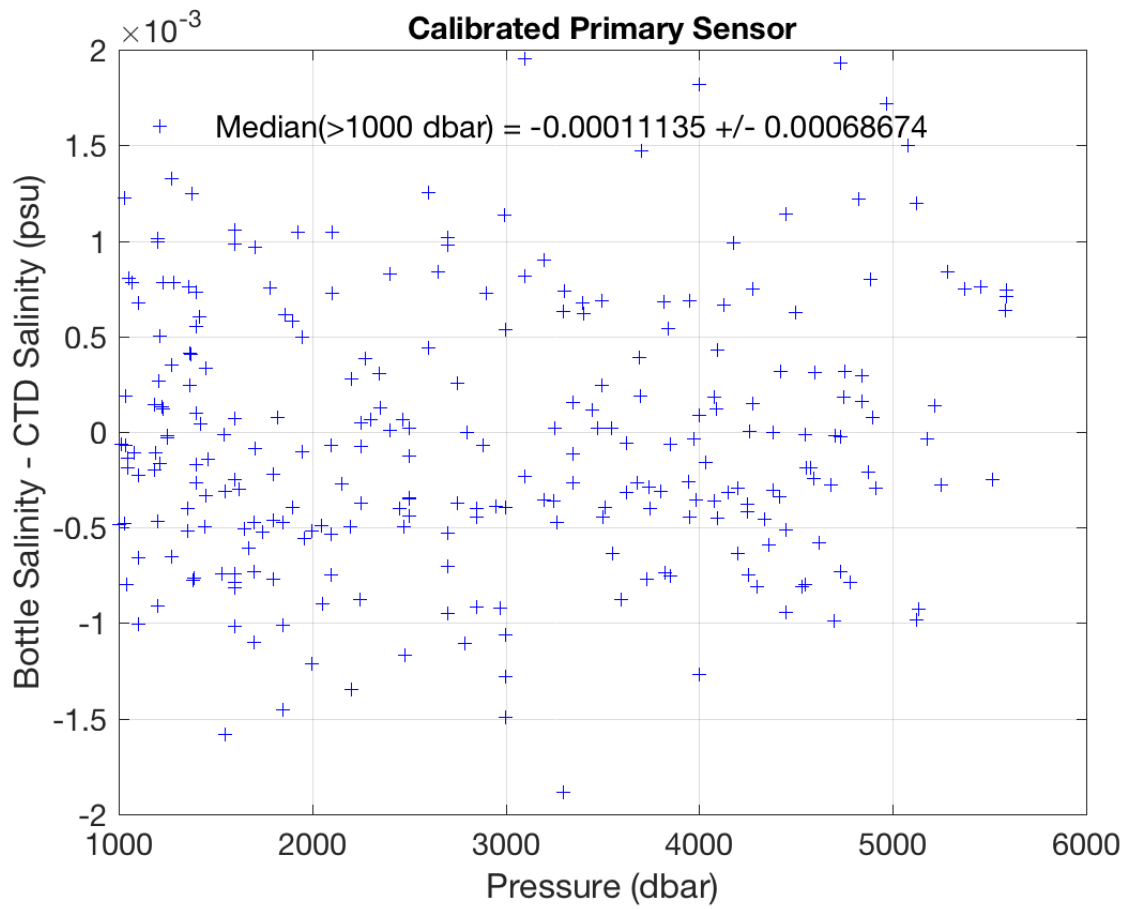
Figure 17: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure below 1000 dbar.
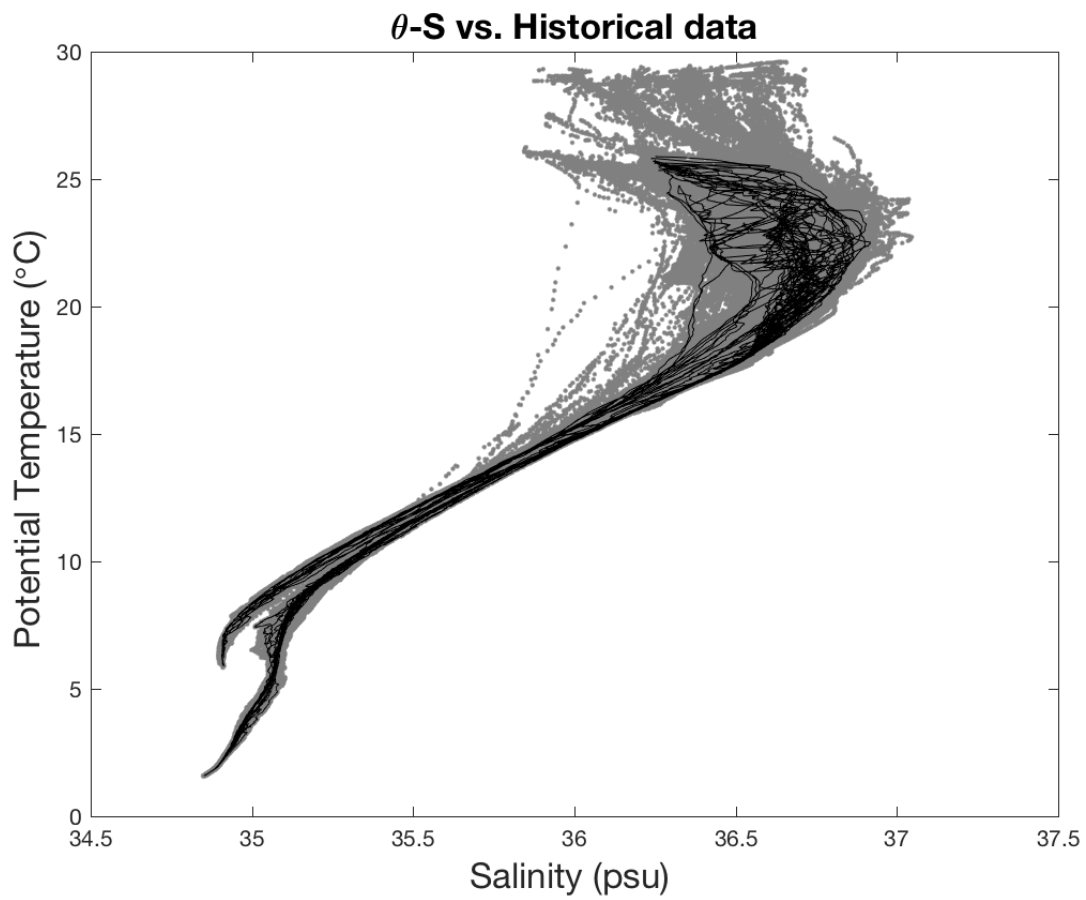
Figure 18: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.
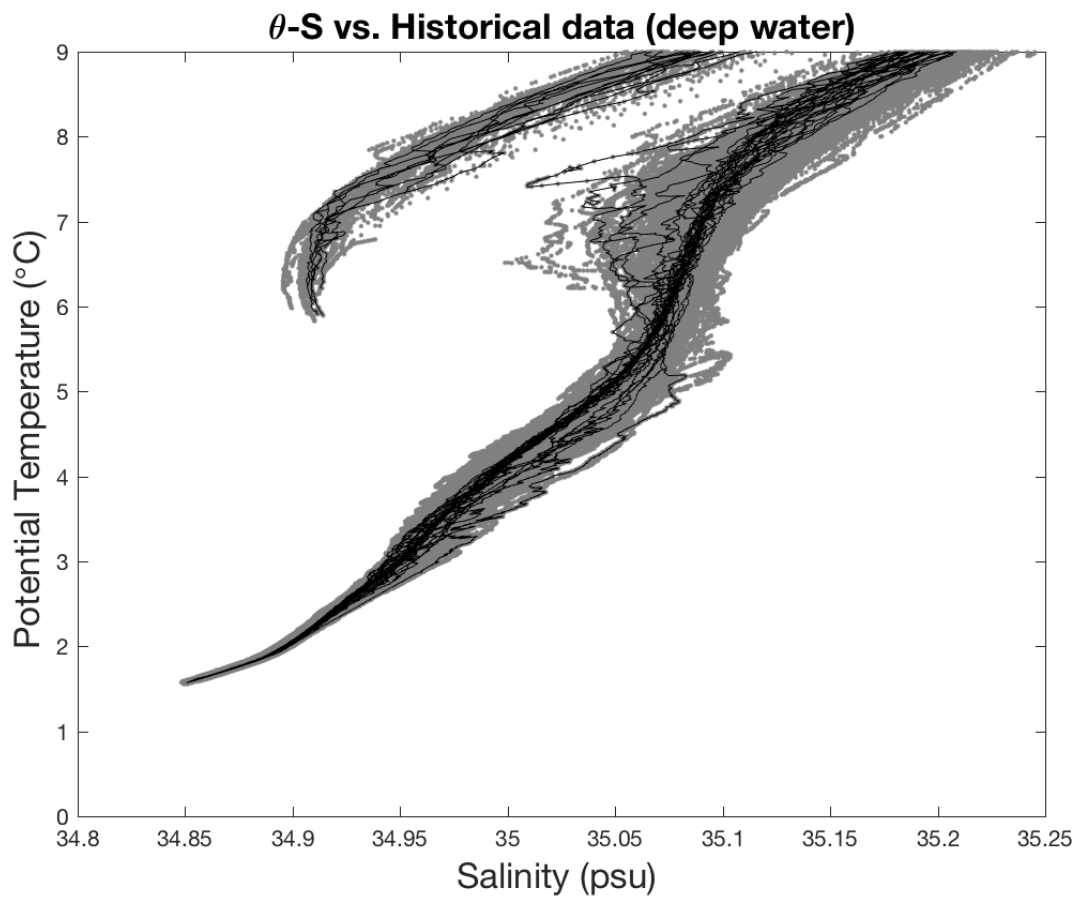
Figure 19: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

6.5 Dissolved Oxygen

Oxygen sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw primary and secondary conductivities. The DO sensors were calibrated to dissolved O2 check samples by matching the up cast bottle trips to down cast CTD data along neutral density surfaces, calculating CTD dissolved O_2, and then minimizing the residuals using a non-linear least-squares fitting procedure.

The algorithm used for converting oxygen sensor current and probe temperature measurements as described, requires a non-linear least squares regression technique in order to determine the best fit coefficients of the model for oxygen sensor behavior to the water sample observations. A non-linear least squares regression using the Gauss-Newton algorithm with Levenberg-Marquardt modifications for global convergence is used to profiles to the bottle data. This algorithm is independent of the first coefficients guess and demonstrates excellent convergence. This `oxfit.m` routine includes an optional time drift term (related with the station number), allowing all stations to be calibrated without breaking into discrete groupings. The Owens and Millard (1985) algorithm was modified as follows:

$$O \ (ml/l) = \{Soc * (V + V_{offset} + tau(T,S) * \frac{\delta v}{\delta t}) + p1 * station\}$$

$$*(1.0 + A * T + B * T^2 + C * T^3) * OXSAT(T,S) * e^{E*(\frac{P}{K})}$$

with

	S/N 2085		
	Stations 1-8	Stations 9-28	Stations 29-53
Soc	0.5067159	0.5023276	0.5098914
V_offset	-0.4839016	-0.4708411	-0.5240665
tau	1.08	1.14	1.33
A	-0.0064762	-0.0036964	0.0034563
B	0.0004042	0.0001962	-0.0003085
C	-0.0000079	-0.0000032	-0.0000063
E	0.0395543	0.0396216	0.0438464
$p1$	0.0009342	-0.0000064	0.0

where Soc, tau, V_{offset}, A, B, C, E and $p1$ are the calibration coefficients shown above and V is the instrument voltage (V). T, S and P are the temperature, salinity and pressure measured by the CTD. K is the temperature in the absolute scale, $station$ is the station number, and $OXSAT$ is the oxygen saturation.

A comparison between the primary and secondary sensors (Figure 20) was evaluated. The sensors show a median difference of 2.49 $umol/kg$ and a standard deviation of 0.49

umol/kg. The primary sensor had intermittent divergence from the secondary over 10's of meters in the first several stations. Therefore the secondary sensor, s/n 2085, was used for all the final data values (Figure 21).

Three oxygen coefficients were used to correct the secondary oxygen (Table 6.5). The stations used are chosen by looking at residual trends between the sensor and bottle data. For the Abaco line, stations 1-8 and 9-26 were used to derive the coefficients and were applied to stations 1-8 and 16-28, respectively. For the Florida Straits all three sections, stations 29-53, were used to derive the coefficients. Also, analogous to the conductivity, the data is compared with a normal distribution using 2.8 * standard deviation to remove outliers. After these procedures 763 data points (90.1%) were used in the final calculations.

By minimizing the differences between the oxygen samples and the CTD oxygen estimated from the equation described in this section, the new coefficients above were calculated and then applied to the CTD original data (Figure 22 to Figure 25). The residual is -0.03 *umol/kg* (-0.12 *umol/kg* for the data below 1000 dbar) and the standard deviation 1.1 *umol/kg* (0.95 *umol/kg* for the data below 1000 dbar). Also 98.4% of the residuals for the data are within the confidence limits determined by the WOCE ($\pm$ 1% of the dissolved oxygen measured) and this number increase to 99.4% if we consider only the data below 1000 dbar.

A final verification about the quality of the data, like in the salinity data, was made by comparing the results of this cruise with some historical data available at the location of the Abaco section and the other sections (Figure 26 & Figure 27). Again by investigating water mass properties, particularly for deeper layers of the ocean, we can have an estimative of the quality of these data.
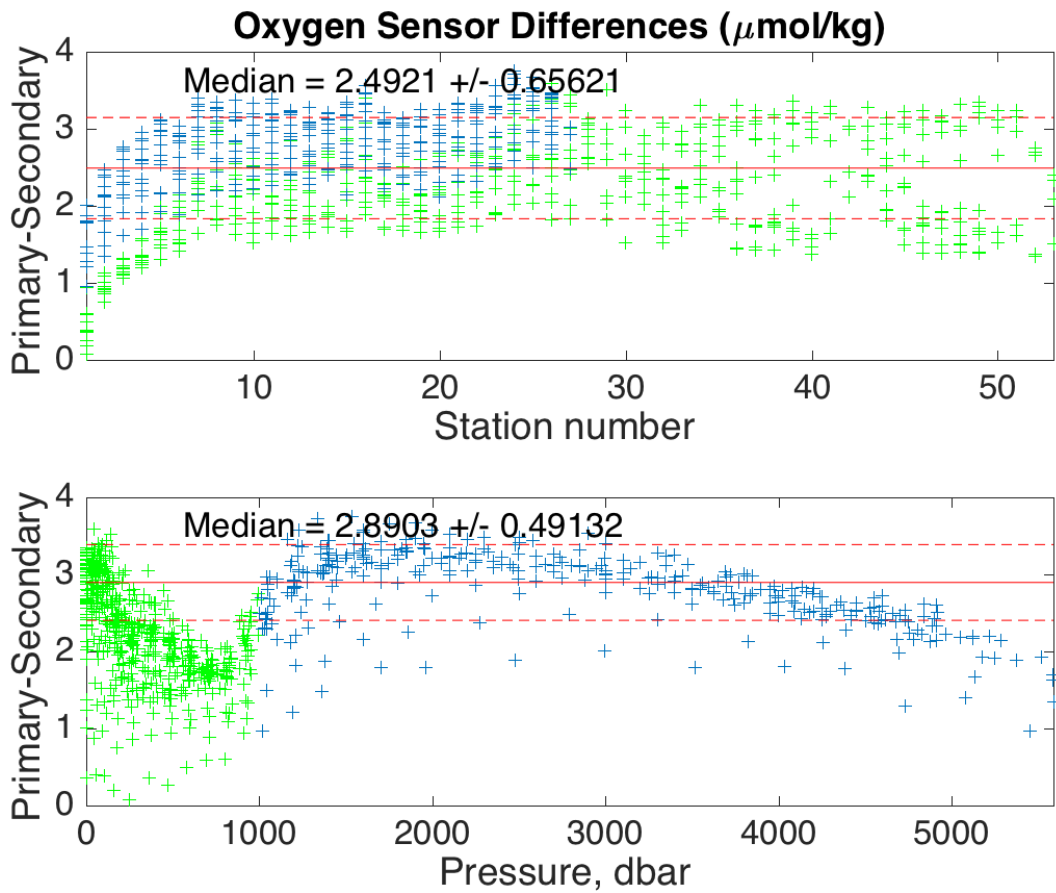
Figure 20: Dissolved oxygen differences between sensors by station (top) and by pressure (bottom). Sensor changes at station 15 and 24. The red solid line represents the median with the red dashed representing the standard deviation.
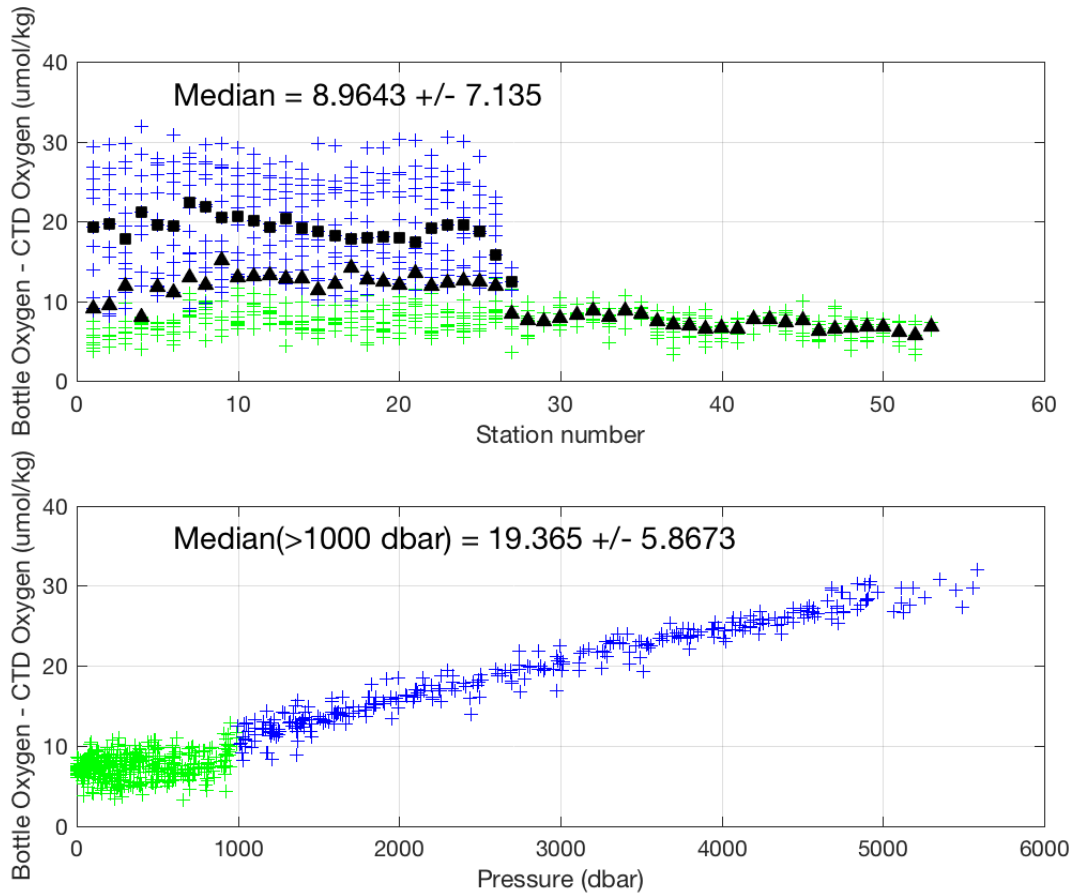
Figure 21: Bottle and uncalibrated secondary CTD oxygen differences plotted against station number. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.
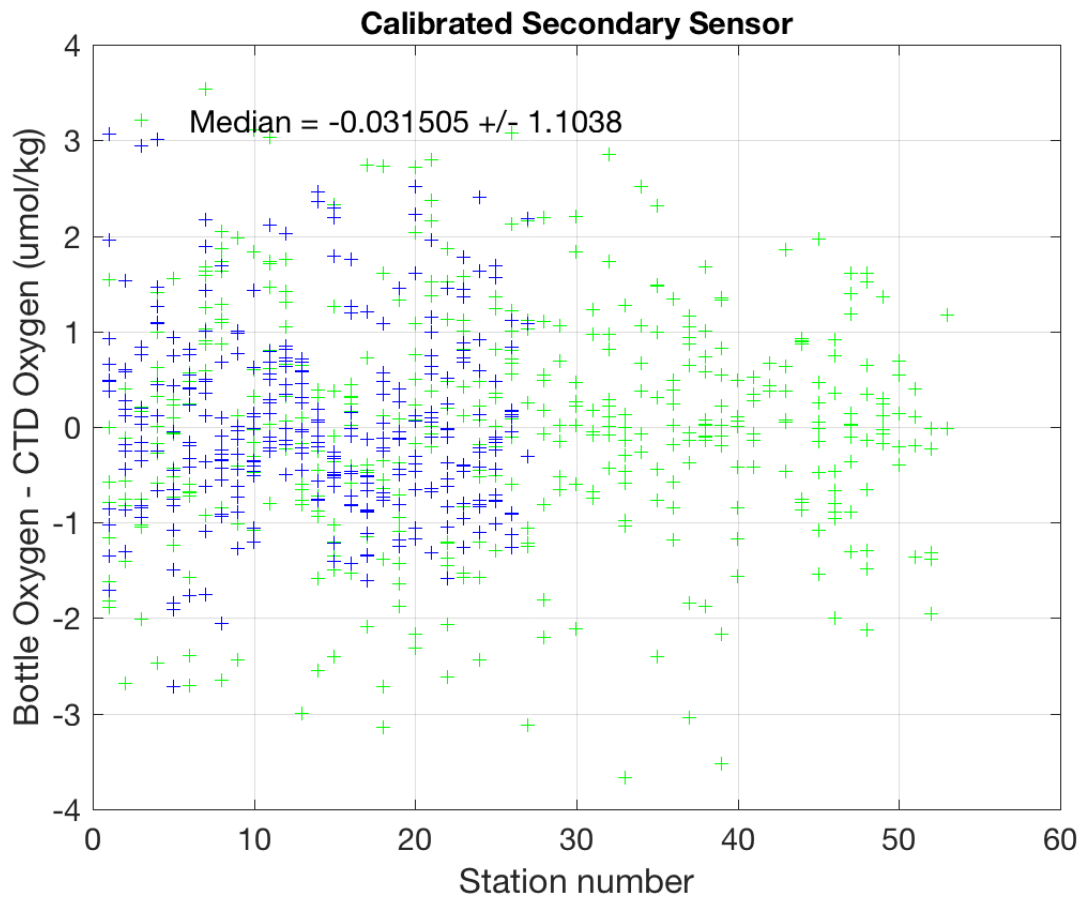
Figure 22: Bottle and calibrated secondary CTD oxygen differences plotted vs. station.
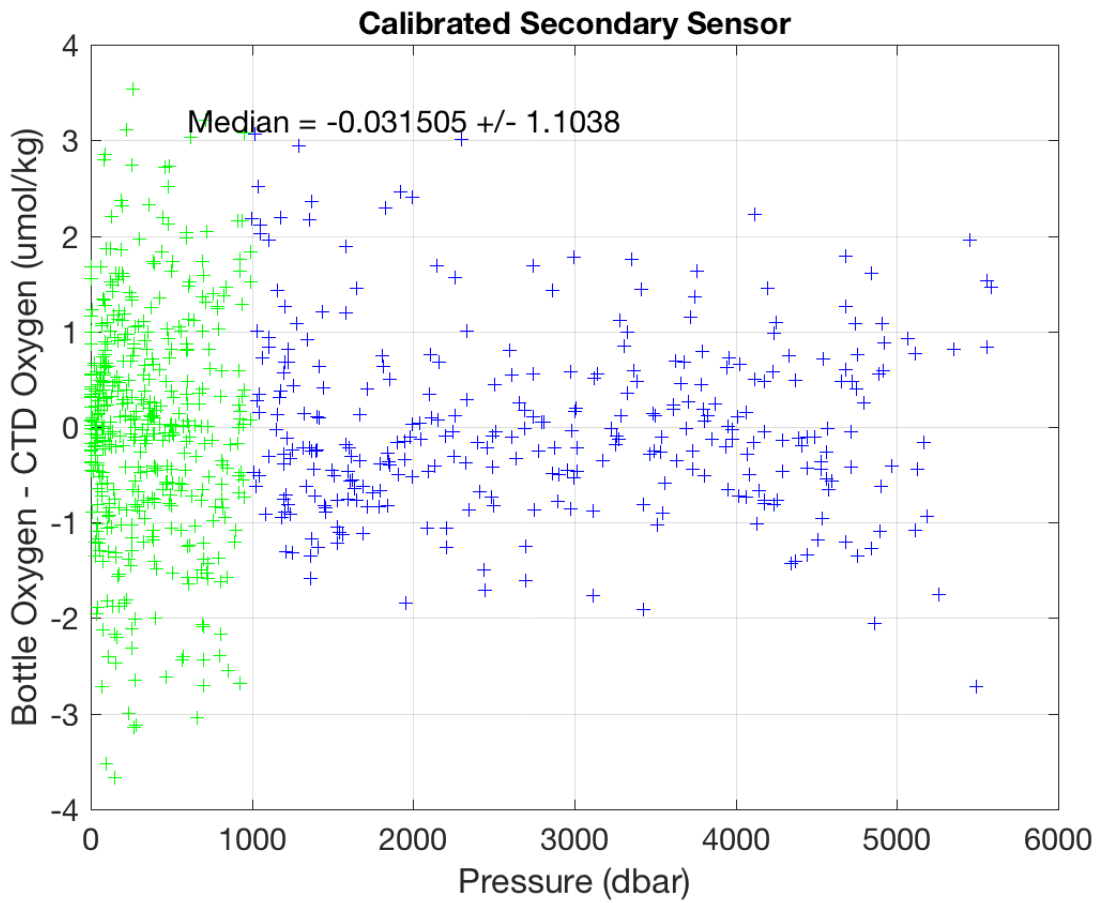
Figure 23: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure.
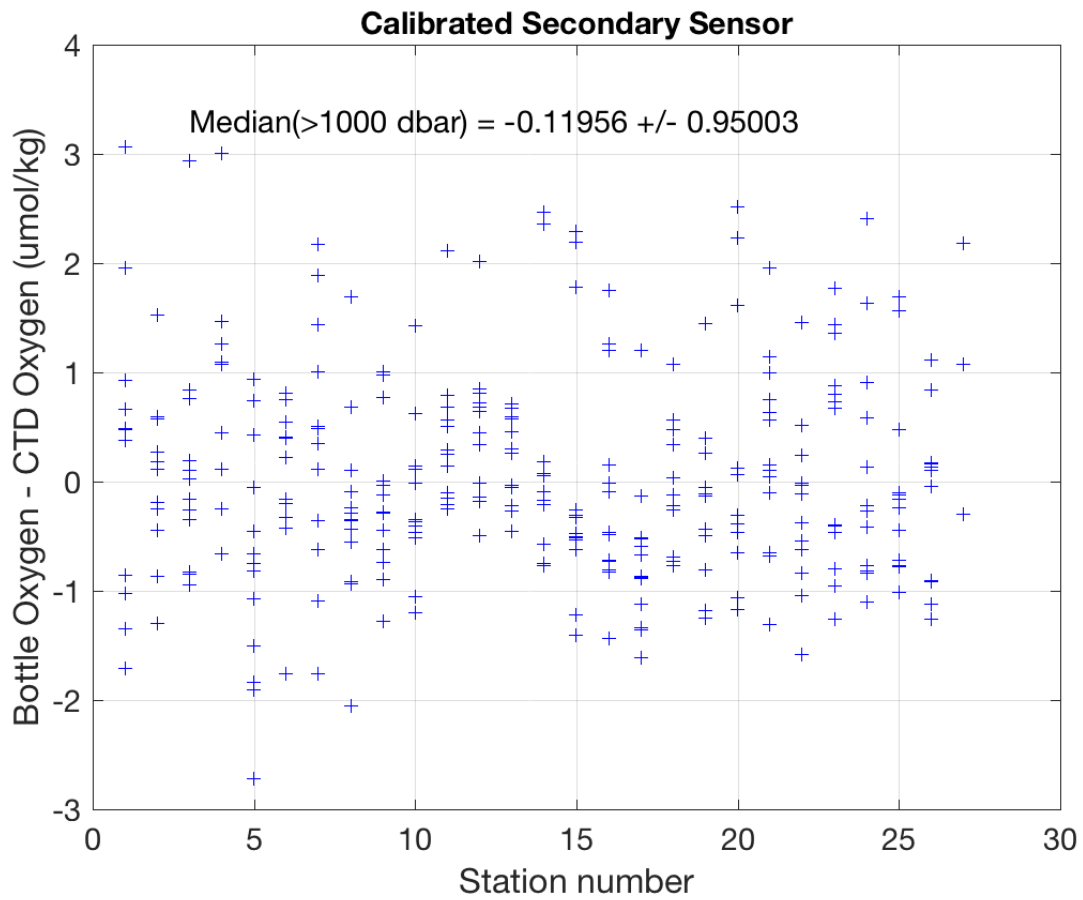
Figure 24: Bottle and calibrated secondary CTD oxygen differences plotted vs. station below 1000 dbar.
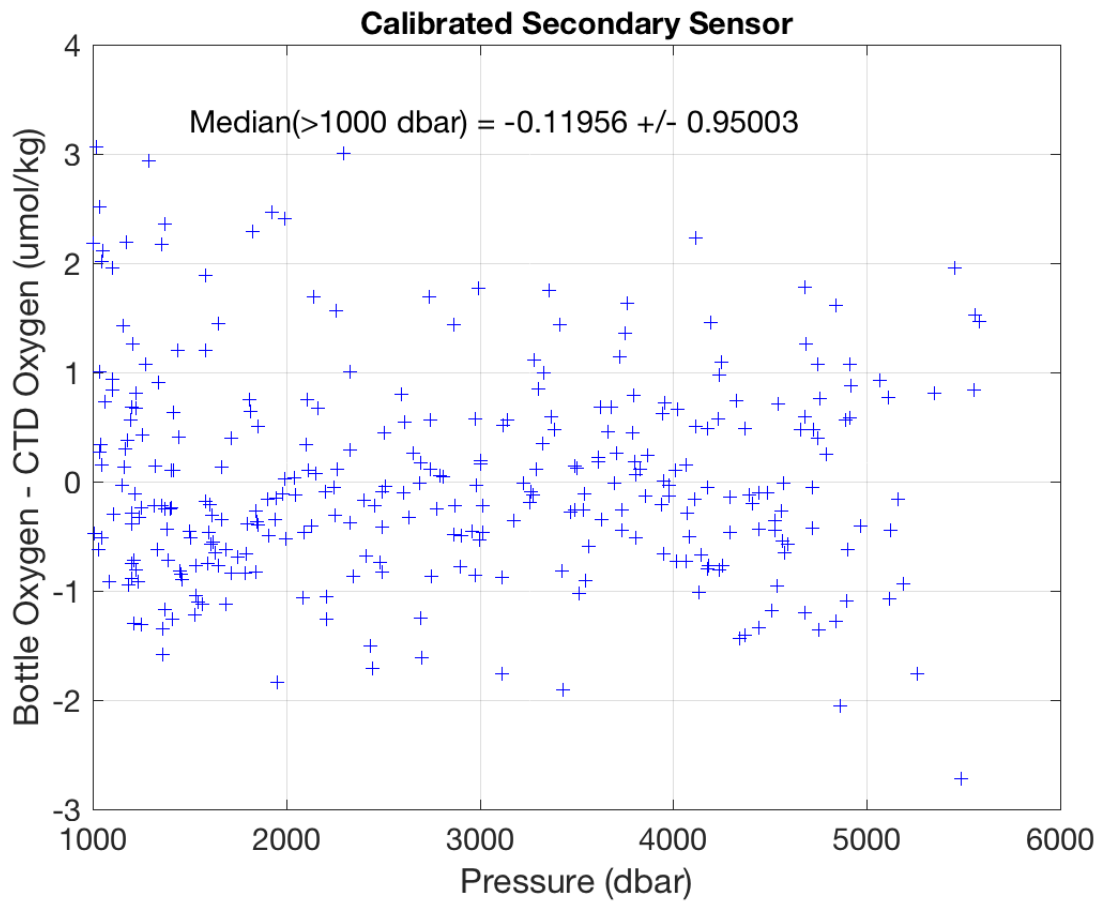
Figure 25: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure below 1000 dbar.
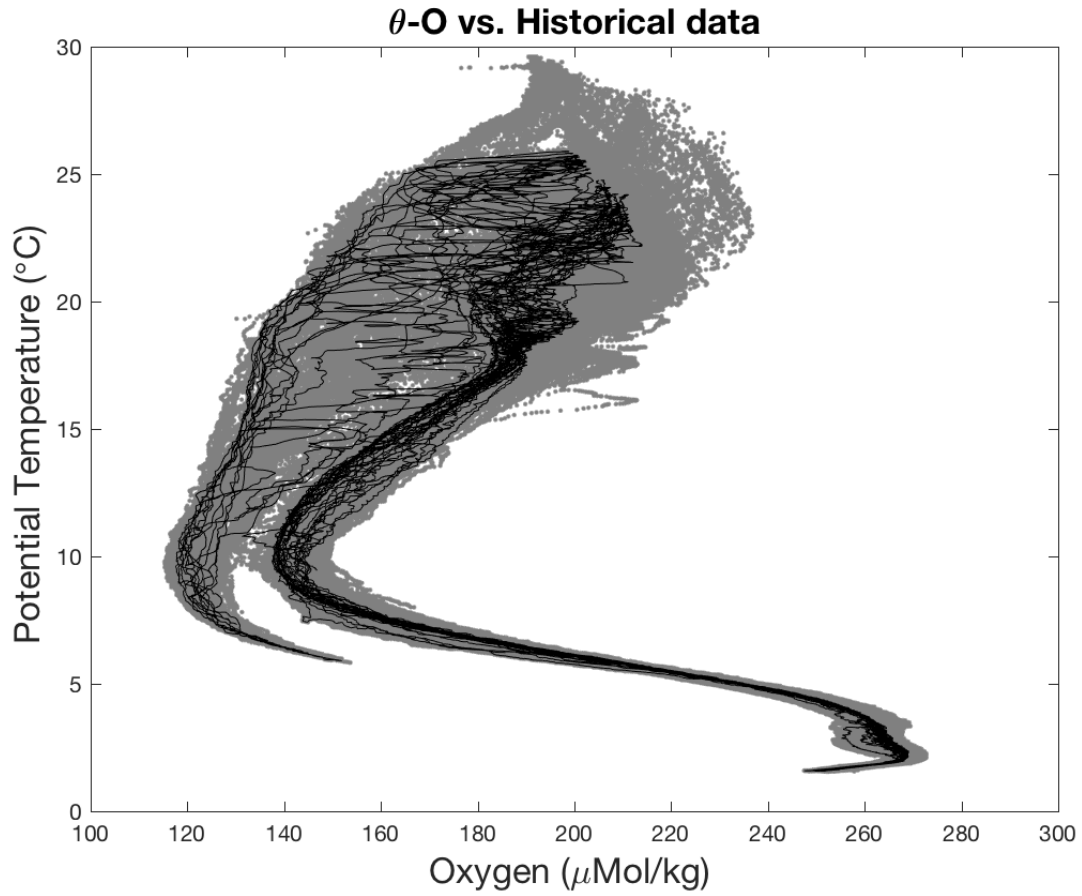
Figure 26: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.
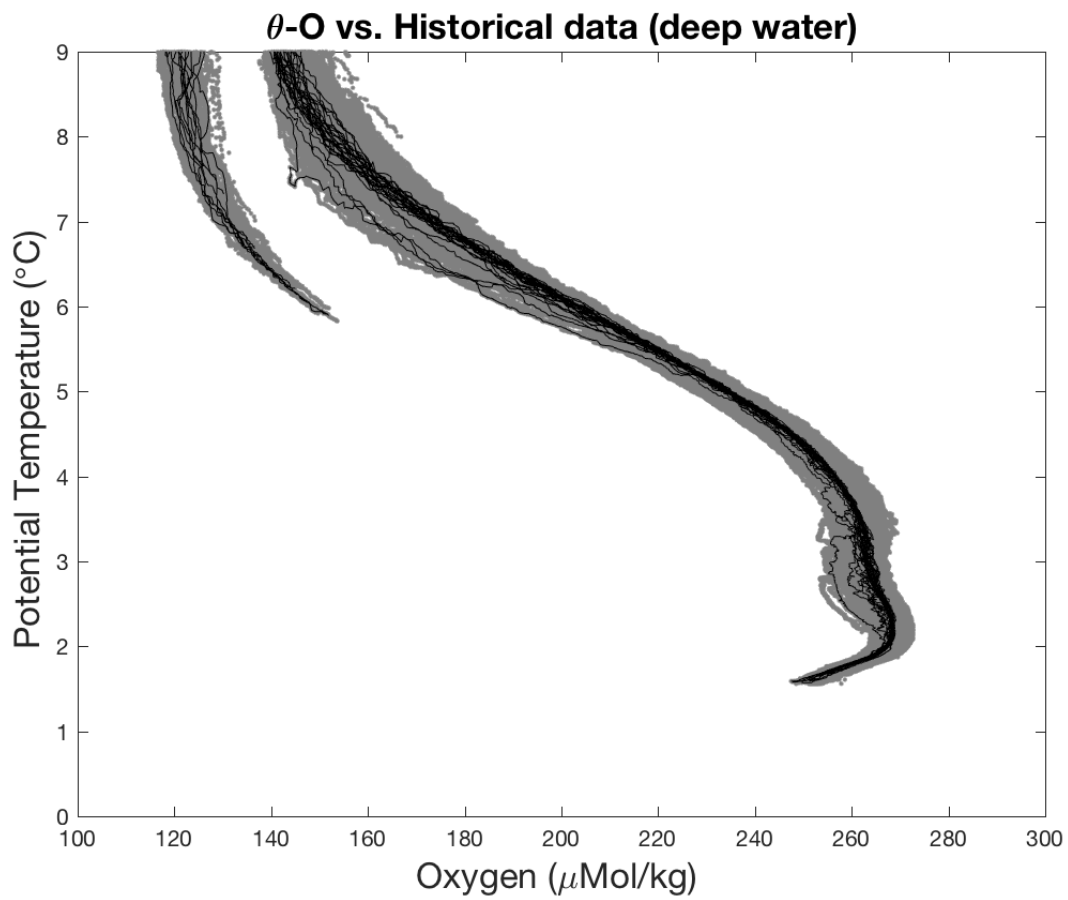
Figure 27: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

7 Final CTD Data Presentation

The final calibrated data files were used to produce the tables and station profile plots presented in Appendix A for each CTD station. The table on the top is in "standard depths" followed by the a table of the bottle trip depths. The corresponding profile plot is shown on the following page. Niskin bottle depths are presented on the right side of the profile plot. Bottle salinity and oxygen values are plotted as points in the three smaller plots.

Vertical sections of potential temperature, CTD salinity, neutral density, and CTD oxygen are contoured with pressure as the vertical axis and, for Abaco sections longitude as horizontal axis (Figure 28 to Figure 31). Nominal vertical exaggerations are 400:1 below 1000 dbar (lower panels) and 200:1 above 1000 dbar (upper panels). The Florida Current Section also uses longitude as the horizontal axis (Figure 32 to Figure 35). For the Northwest Providence Channel Sections latitude is used as horizontal axis (Figure 40 to Figure 43).

Post-cruise calibrations were applied to CTD data associated with bottle data using Matlab sub-routines (`apply_calibration.m`). WOCE quality flags were appended to bottle data records. "Bad values" (WOCE quality control value = 4) were flagged if the bottle samples failed the initial quality control and were not used for the calibration (which meant they typically fell outside 2.57 standard deviations of the difference between samples and uncalibrated CTD values). A second pass is applied, using the value of 2.5 times the standard deviation of the difference between calibrated CTD values and bottle samples, where bottle values may be flagged as "bad values" or as questionable (WOCE quality control value = 3).
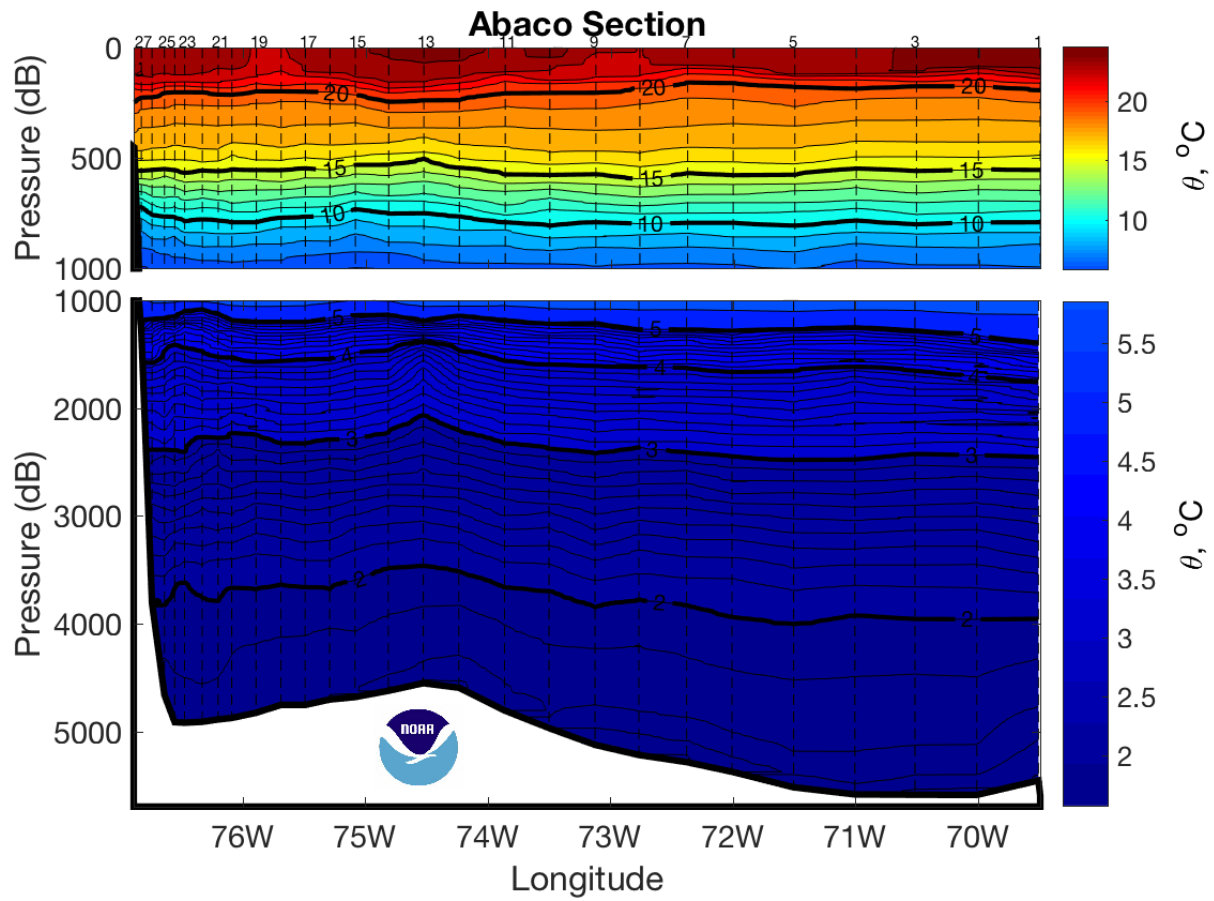
Figure 28: Potential Temperature (°C) section for the Abaco Section. Dashed vertical lines are the
CTD station locations.
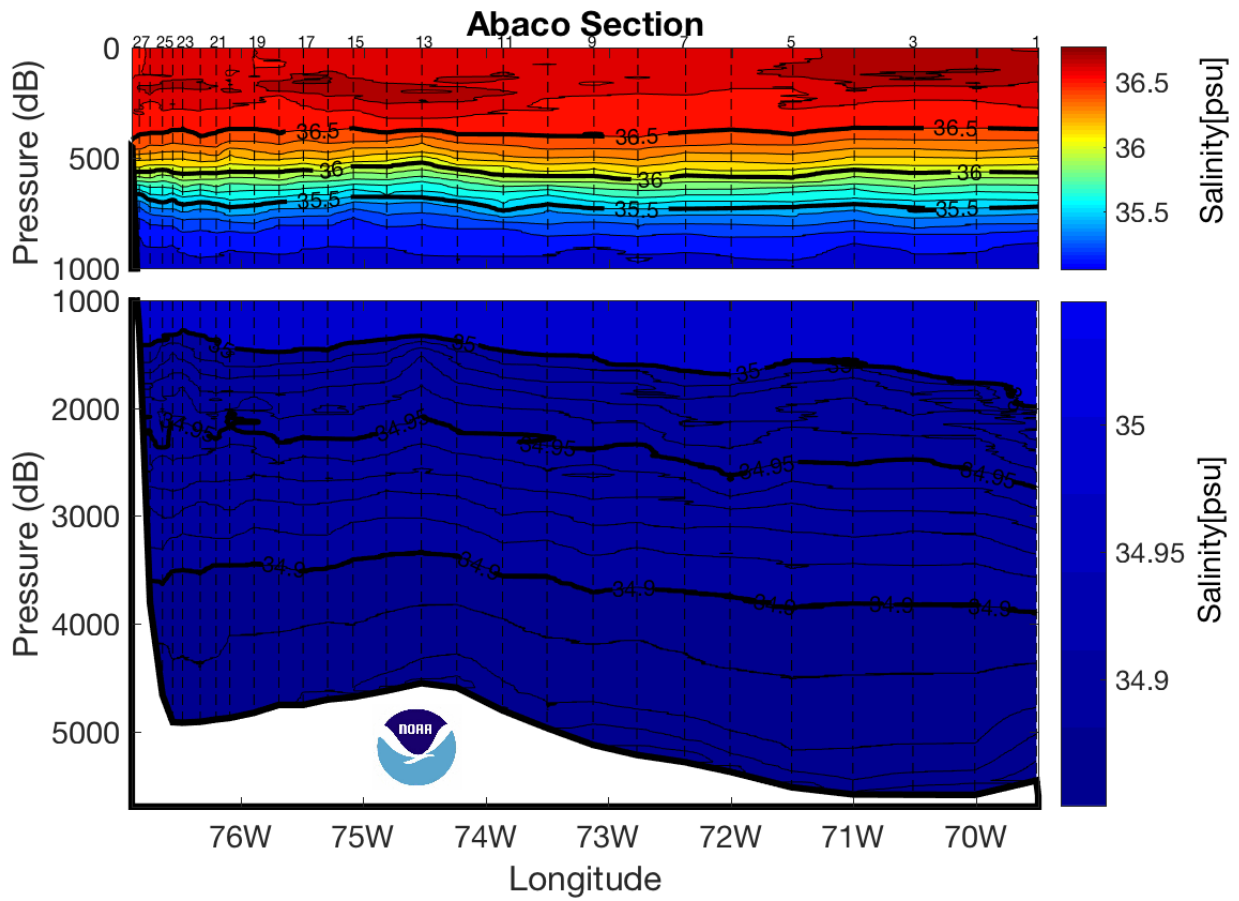
Figure 29: Salinity (PSS 78) section for the Abaco section. Dashed vertical lines are the CTD station locations.
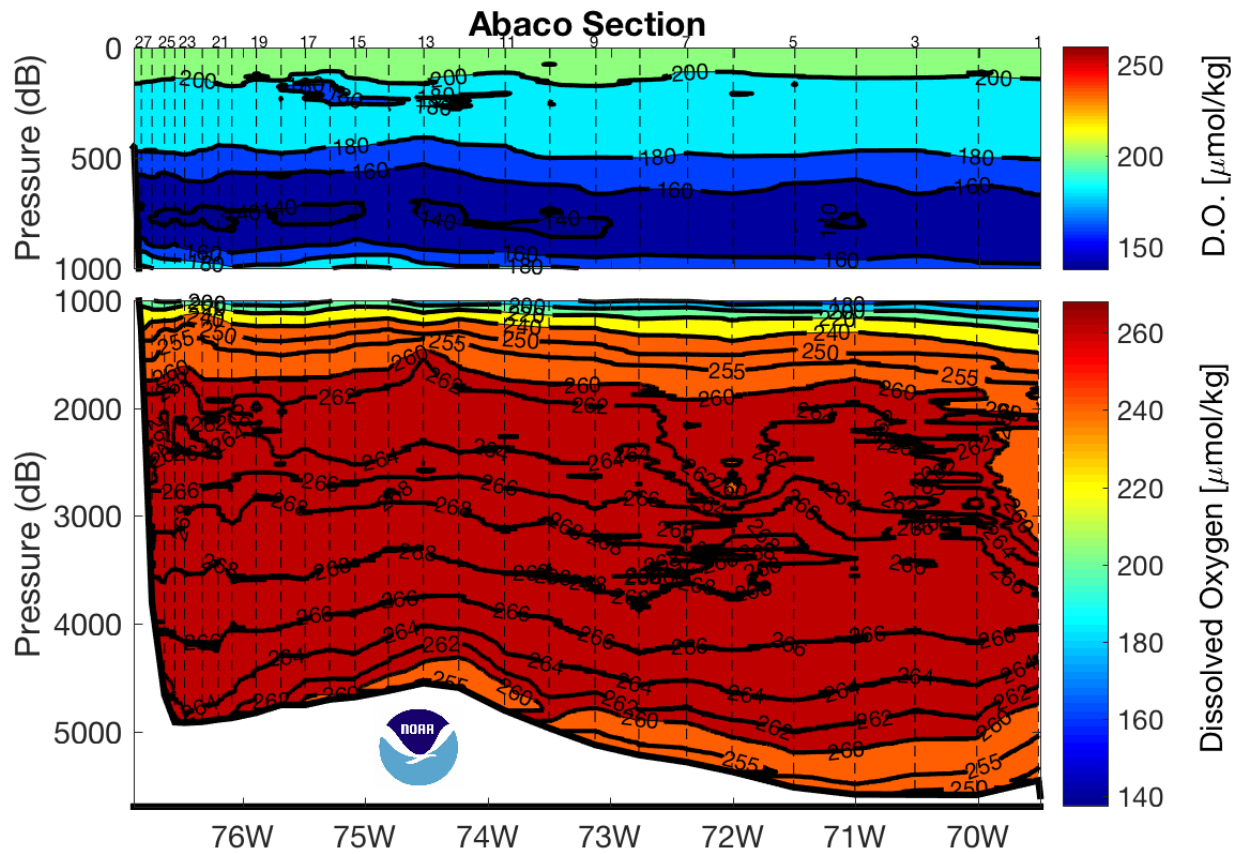
Figure 30: Dissolved Oxygen (*umol/kg*) section for the Abaco Section. Dashed vertical lines are the CTD station locations.
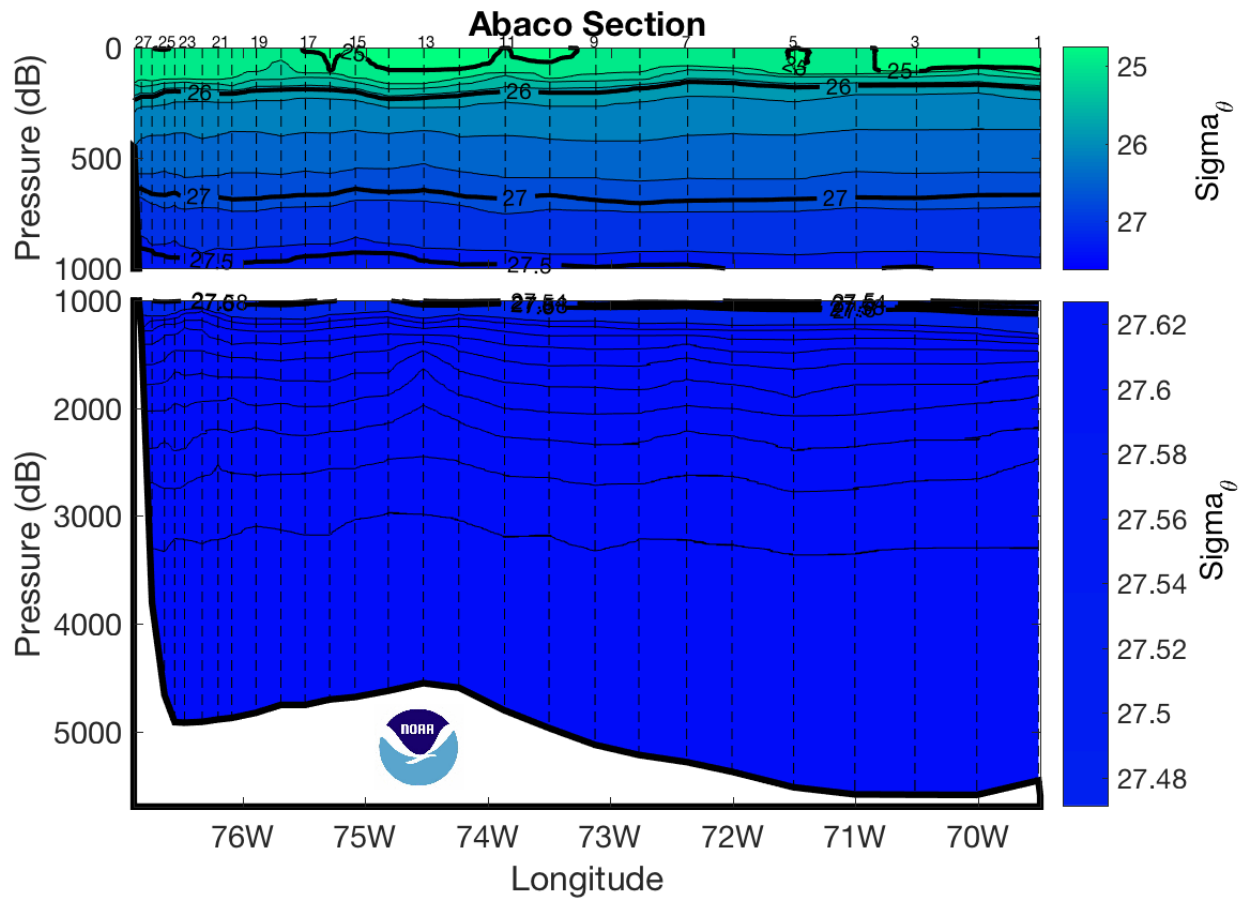
Figure 31: Neutral density (kg/m3) section for the Abaco Section. Dashed vertical lines are the CTD station locations.
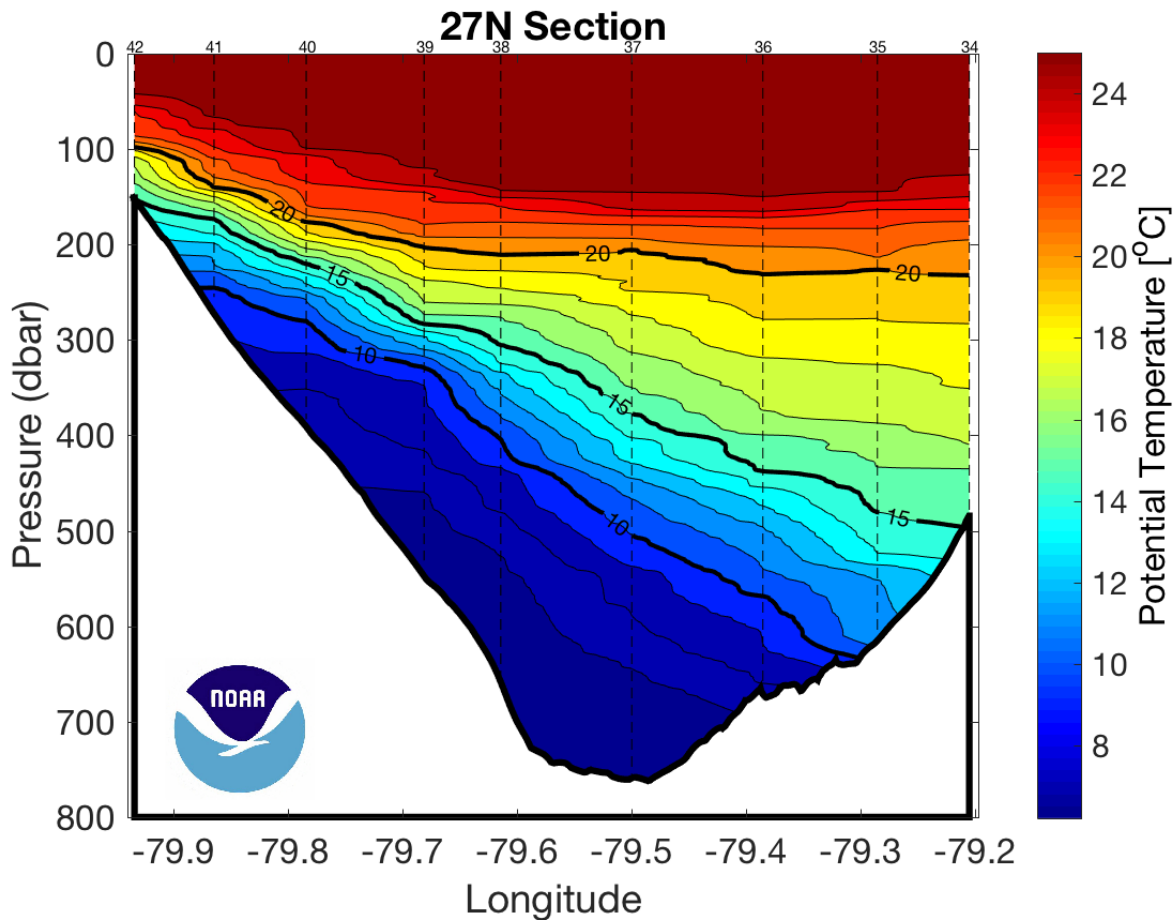
Figure 32: Potential Temperature (°C) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.
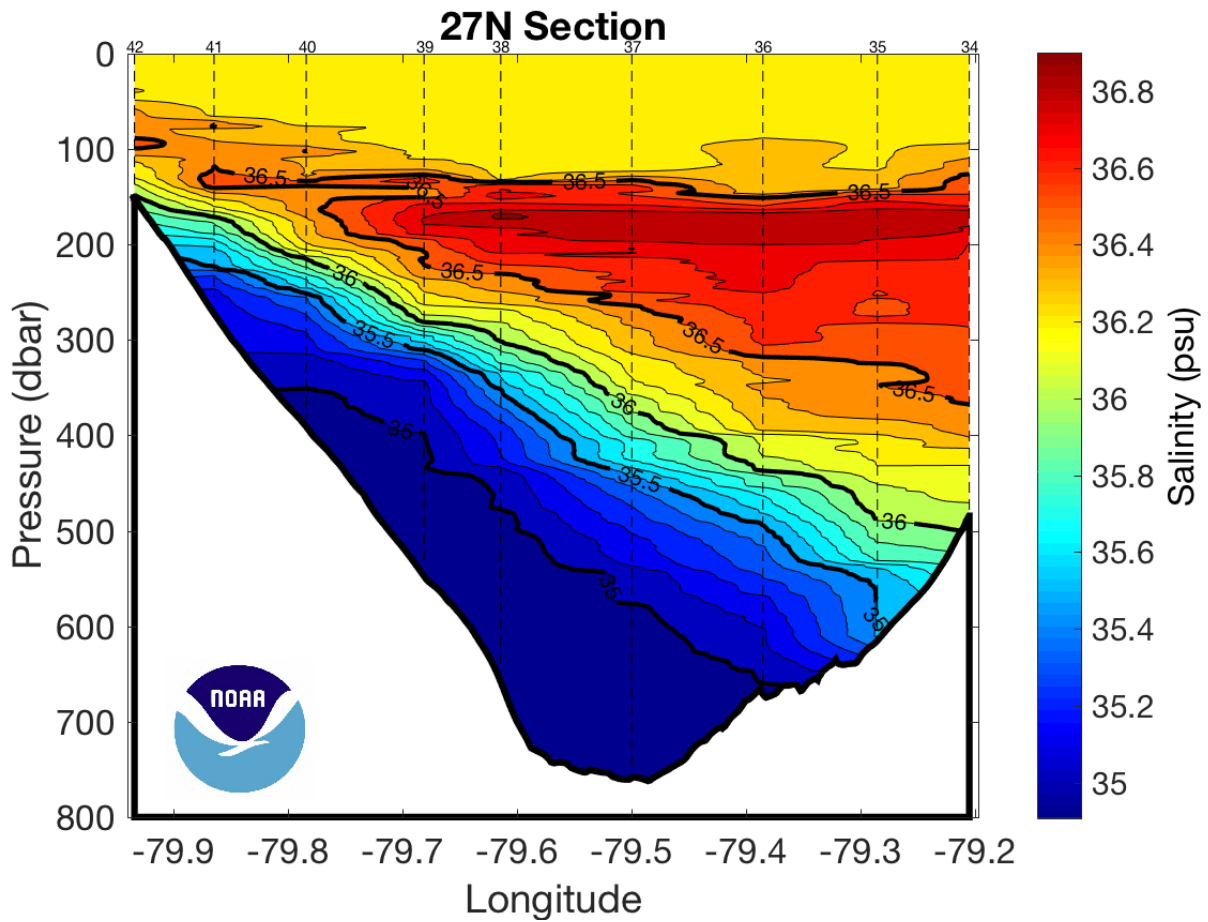
Figure 33: Salinity (PSS 78) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.
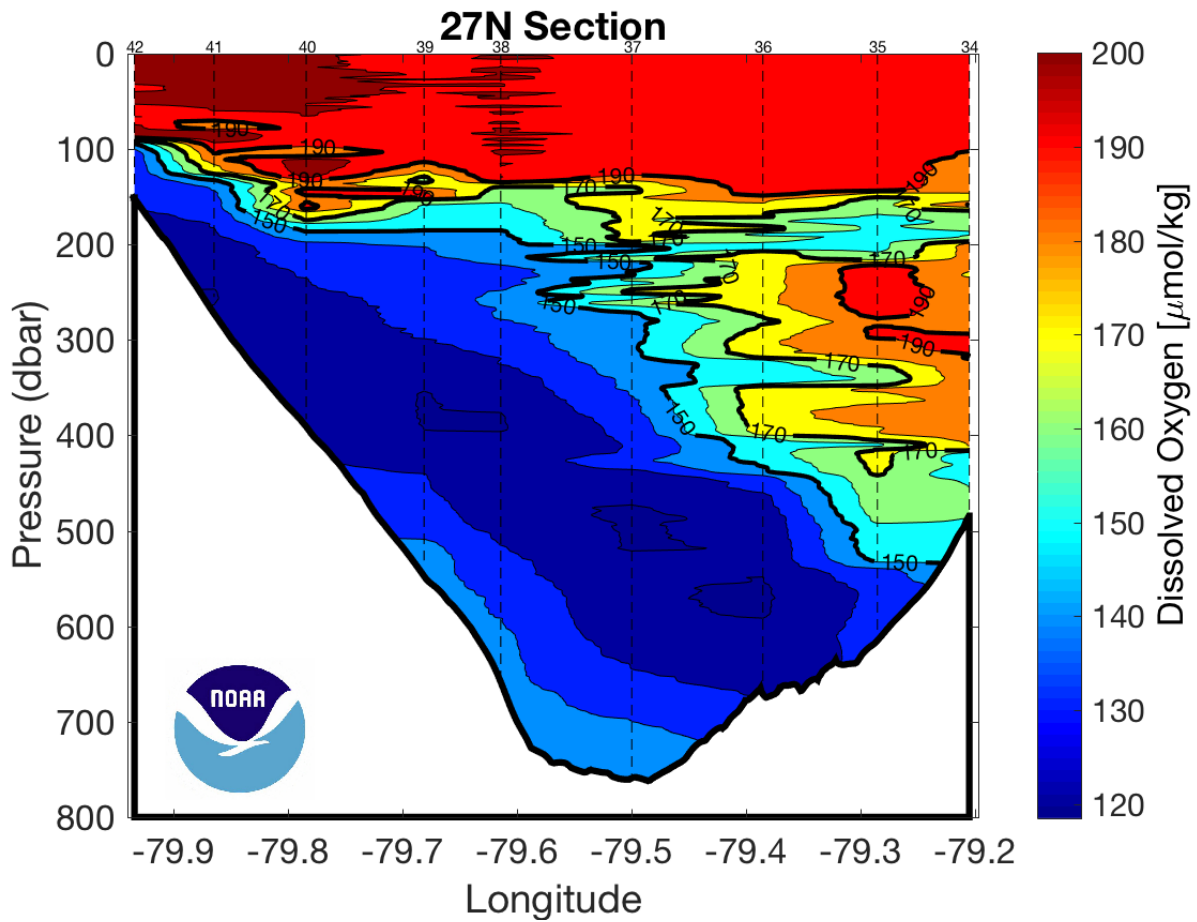
Figure 34: Dissolved Oxygen ($umol/kg$) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.
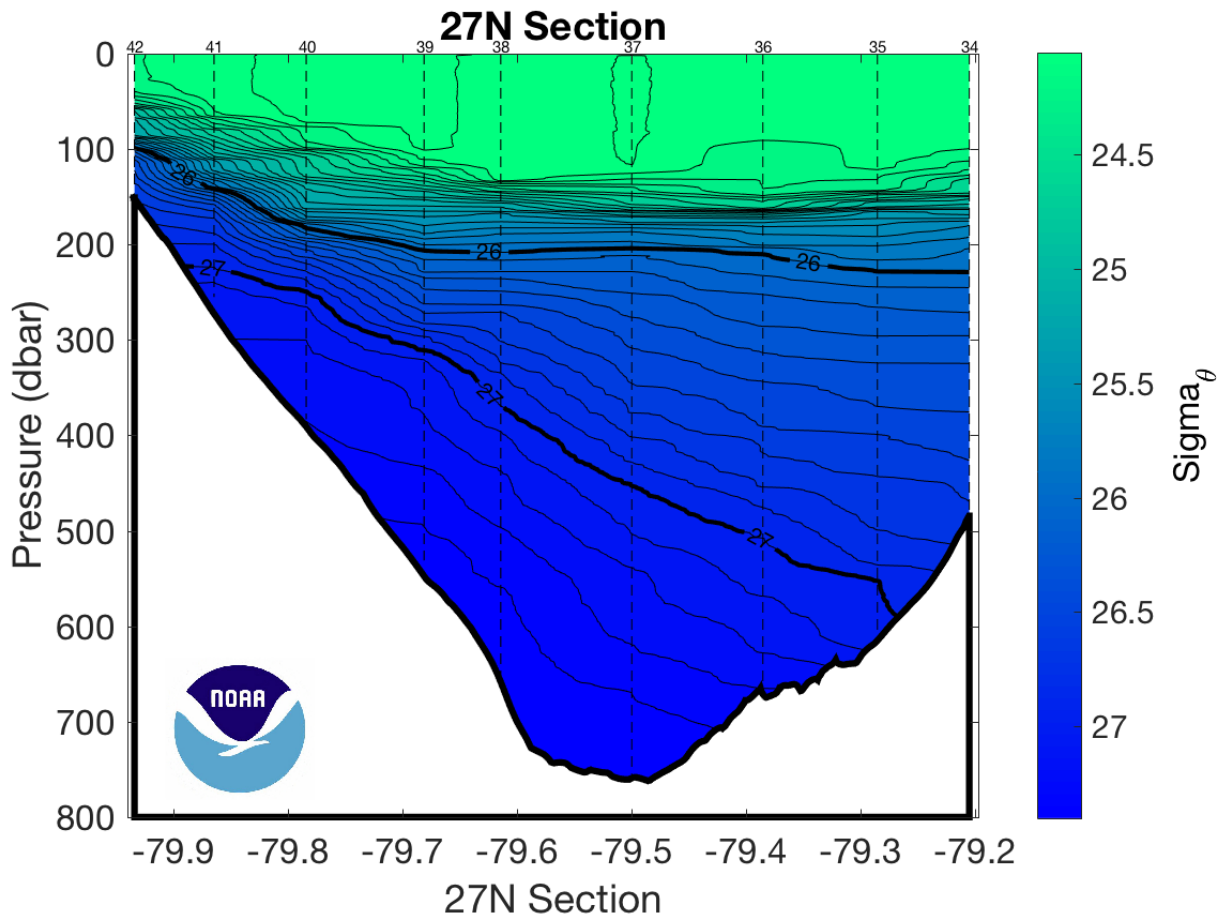
Figure 35: Neutral density (kg/m3) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.
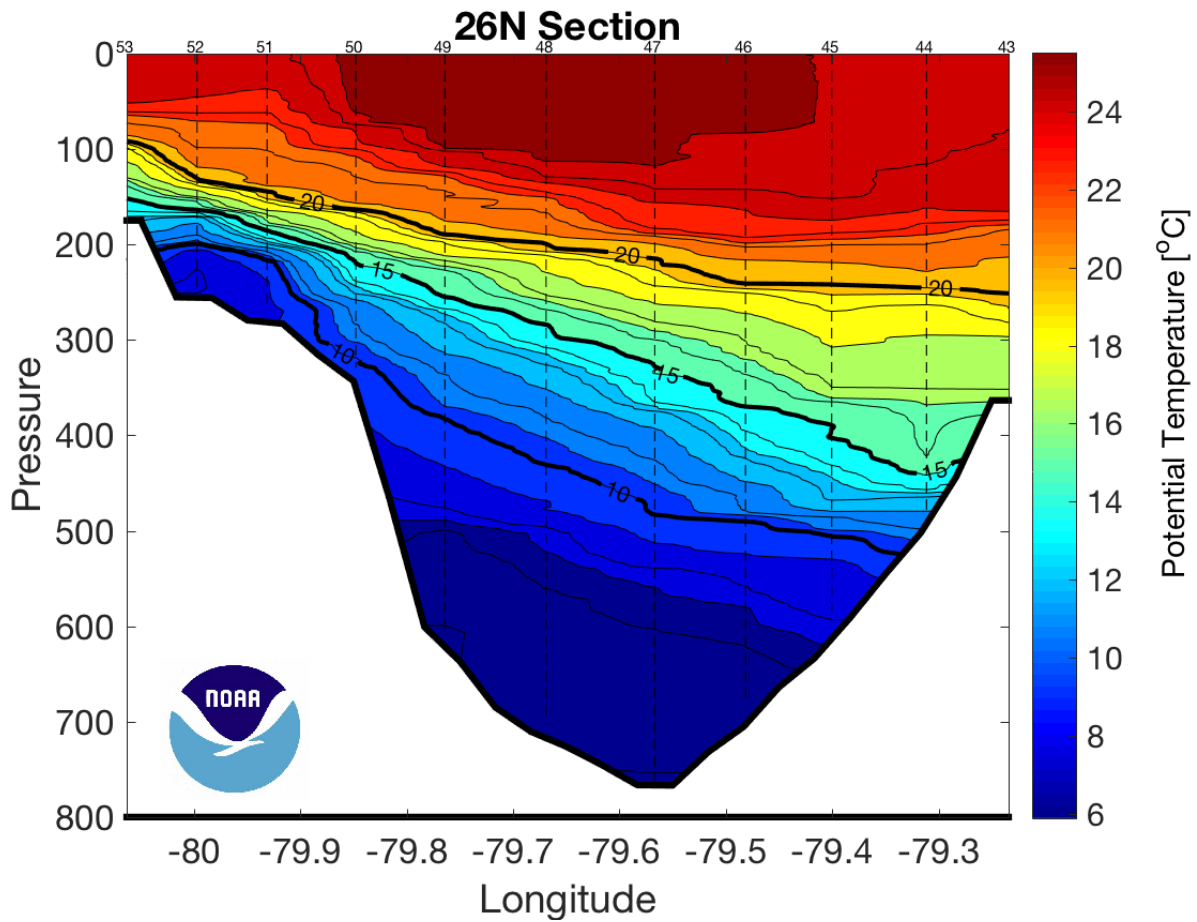
Figure 36: Potential Temperature (°C) section for the Florida Current South section. Contour intervals are 1°C. Dashed vertical lines are the CTD station locations.
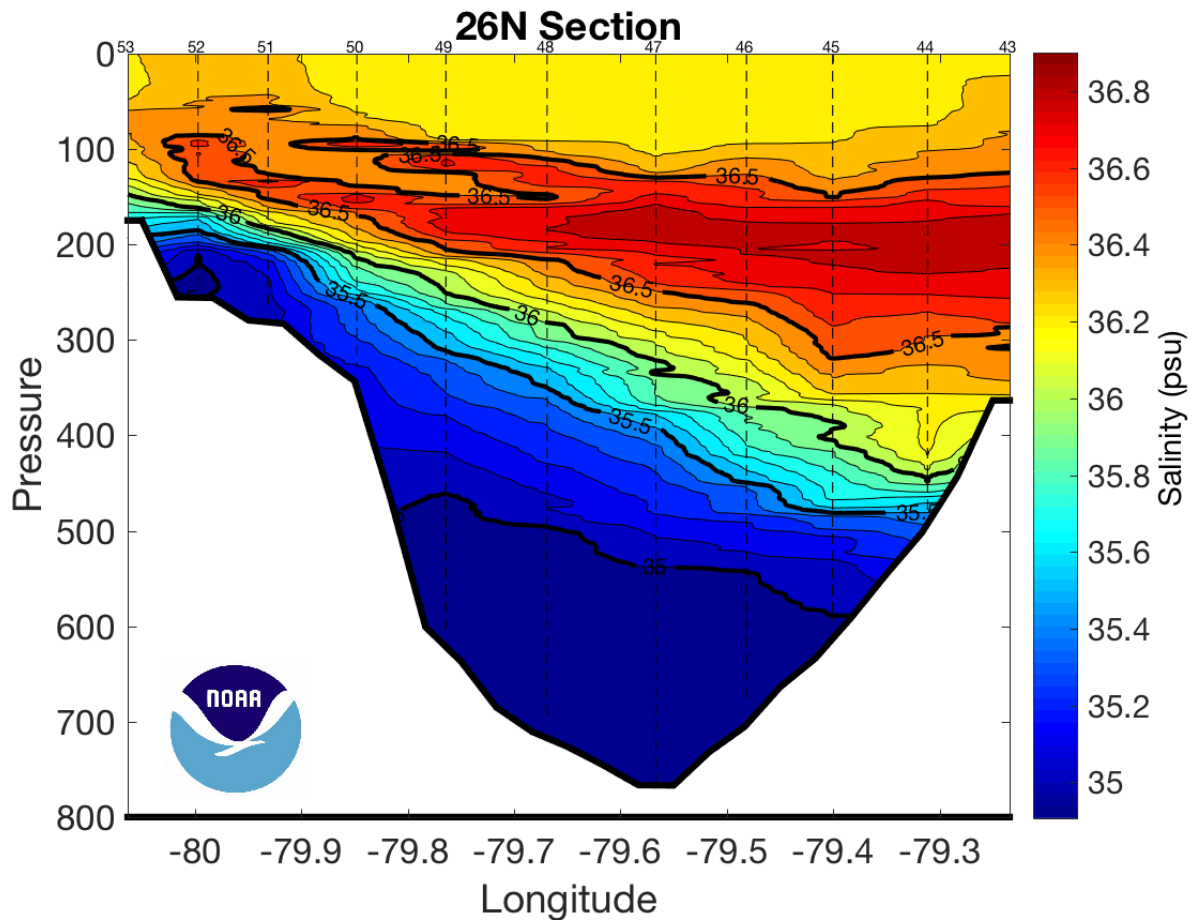
Figure 37: Salinity (PSS 78) section for the Florida Current South section. Contour intervals are 0.1. Dashed vertical lines are the CTD station locations.
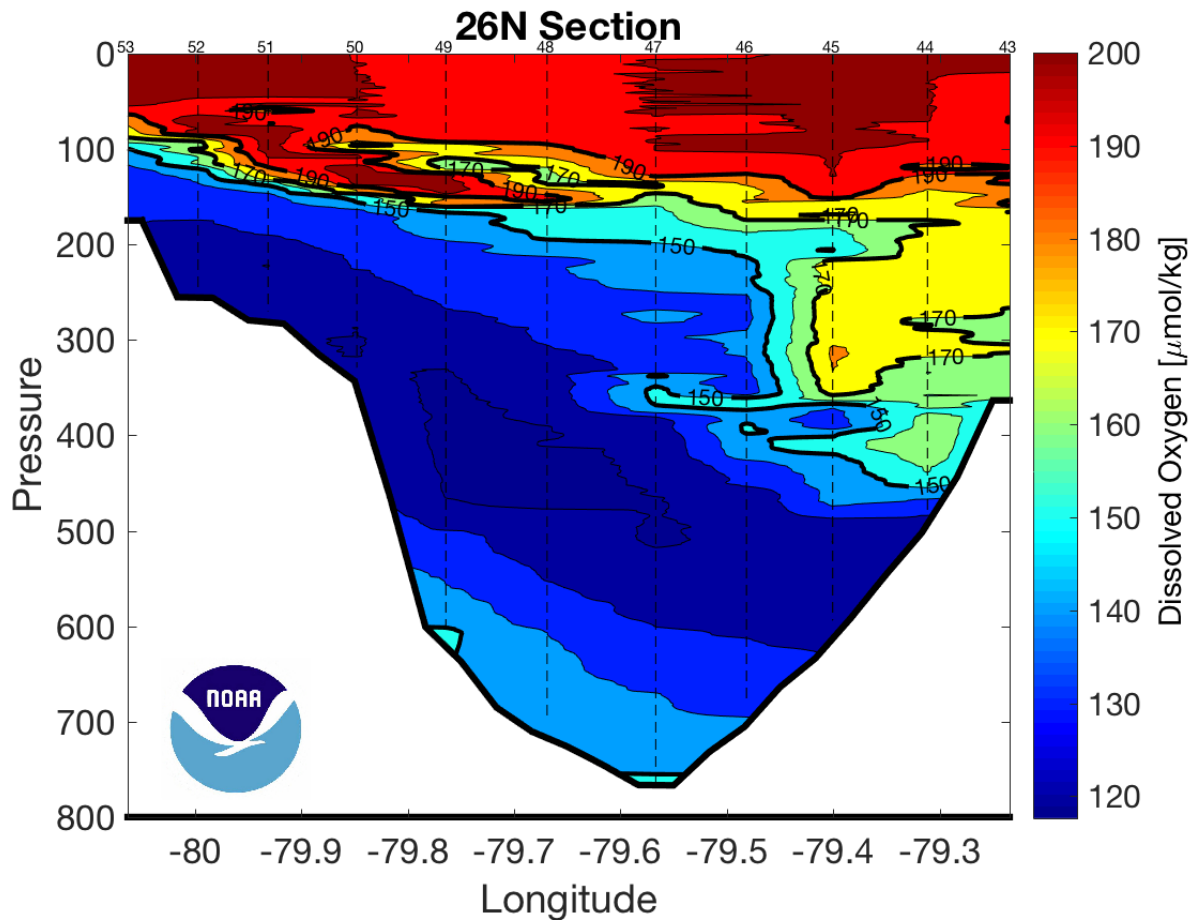
Figure 38: Dissolved Oxygen ($umol/kg$) section for the Florida Current South section. Contour intervals are $\approx$20 $umol/kg$. Dashed vertical lines are the CTD station locations.
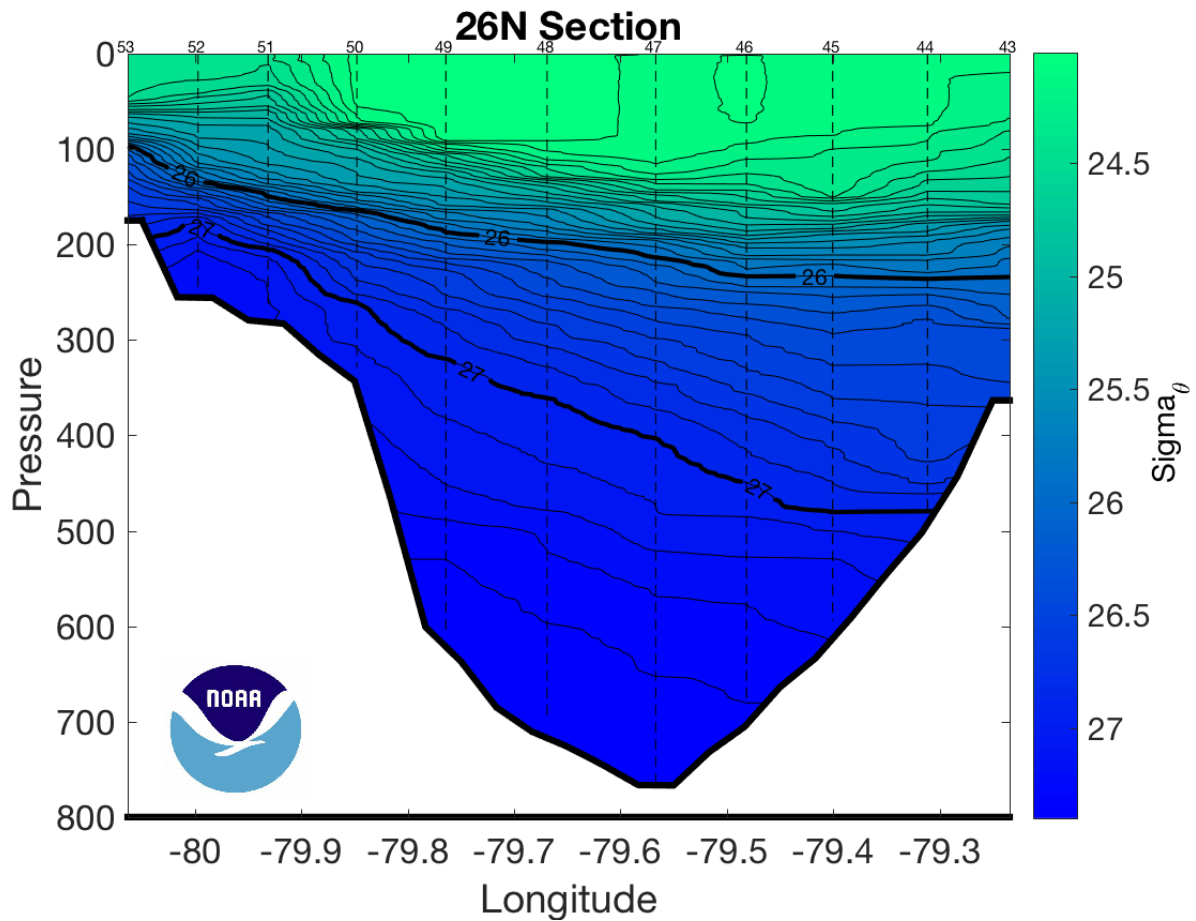
Figure 39: Neutral density (kg/m3) section for the Florida Current South section. Contour intervals are 0.1 kg/m3. Dashed vertical lines are the CTD station locations.
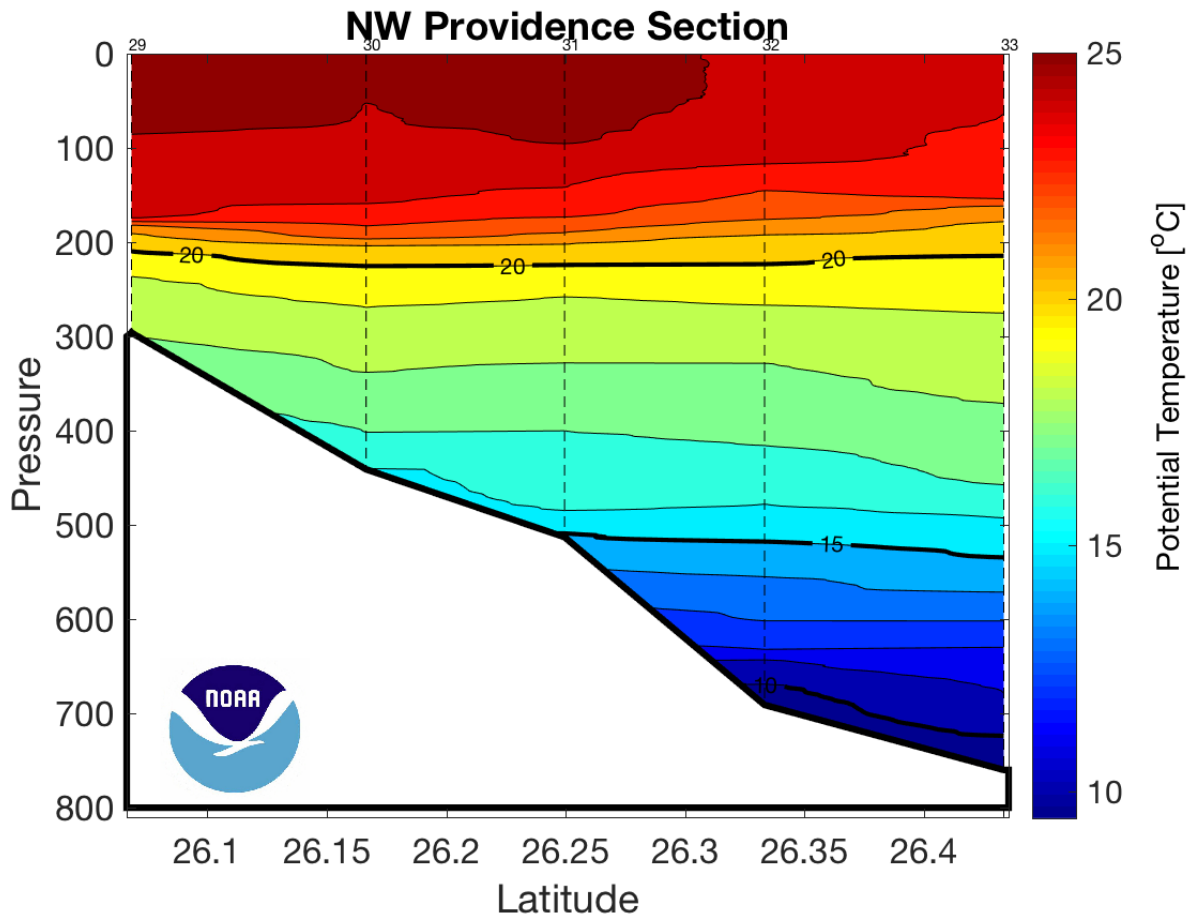
Figure 40: Potential Temperature (°C) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.
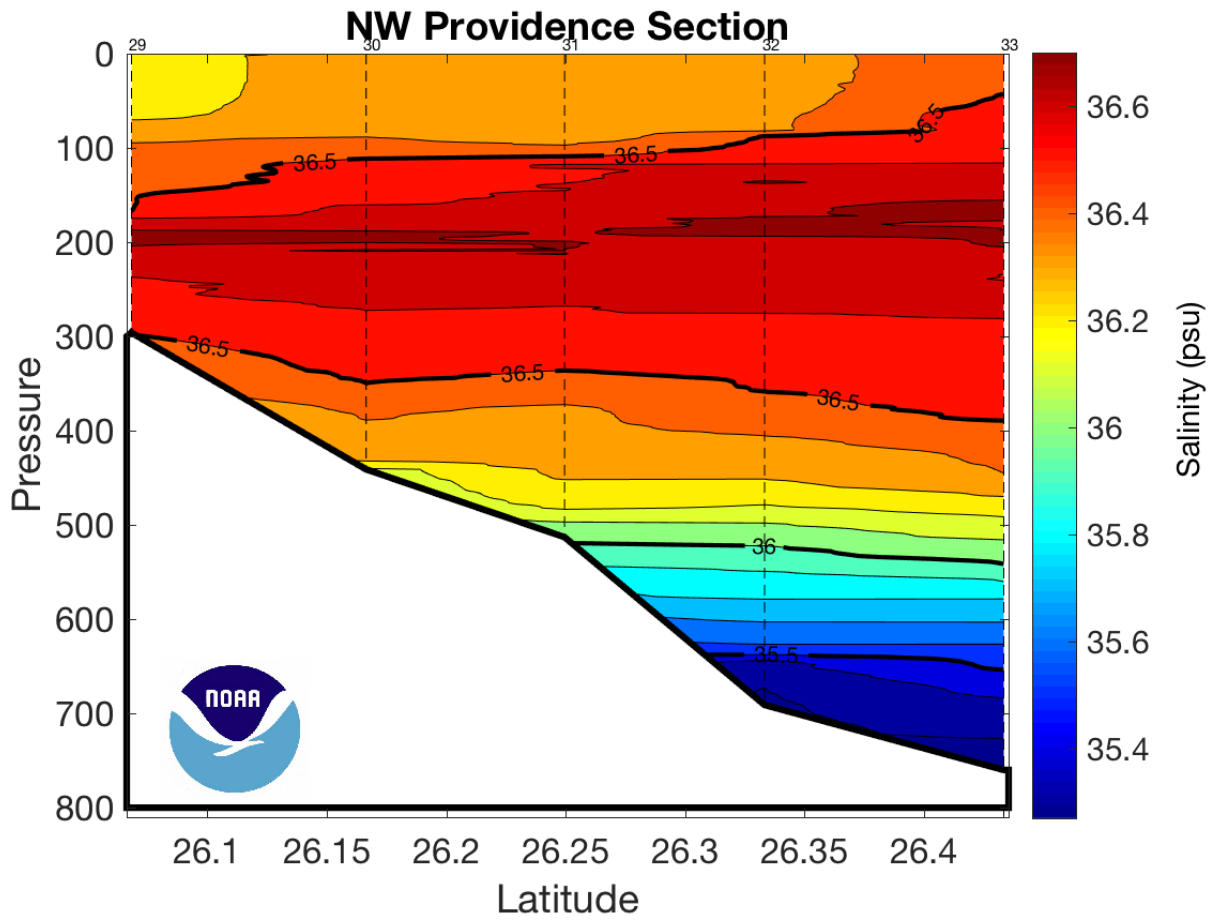
Figure 41: Salinity (PSS 78) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.
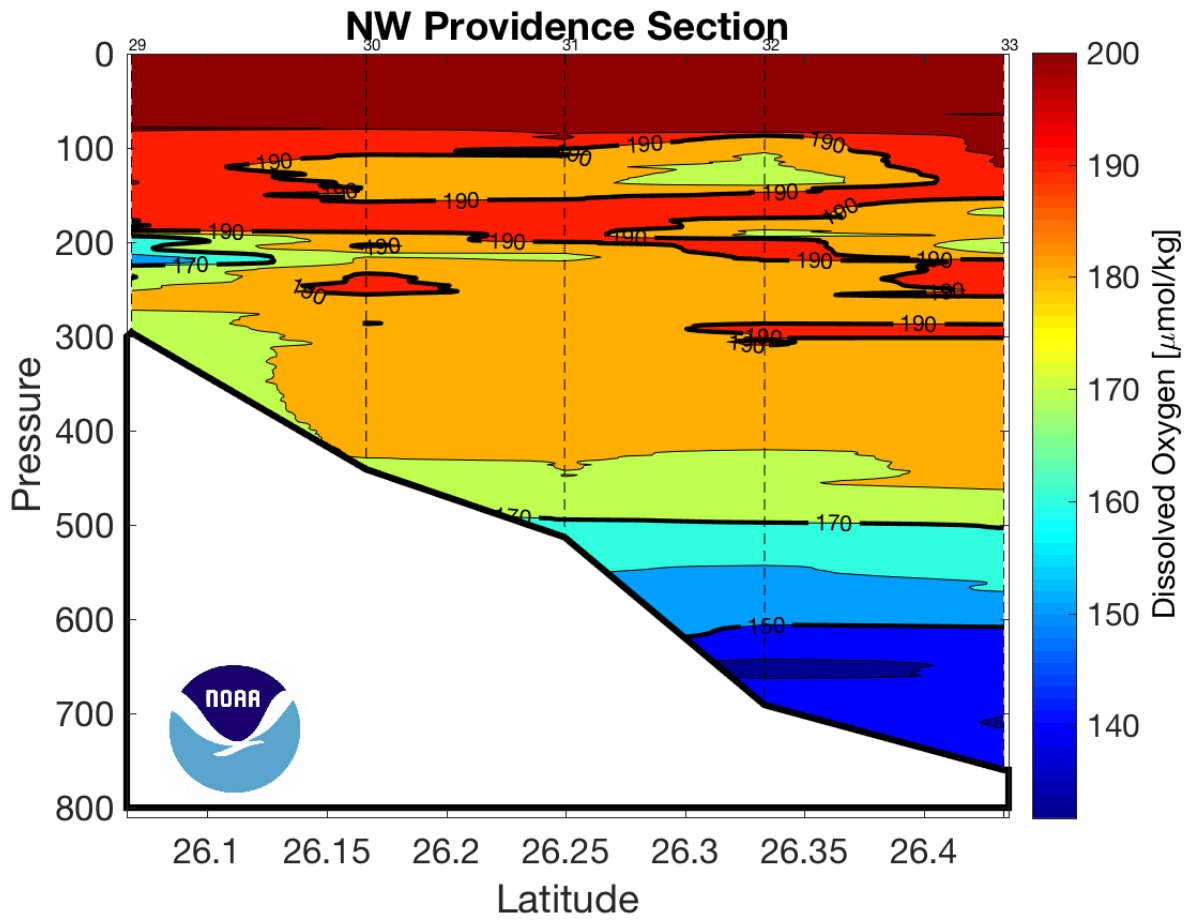
Figure 42: Dissolved Oxygen ($umol/kg$) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.
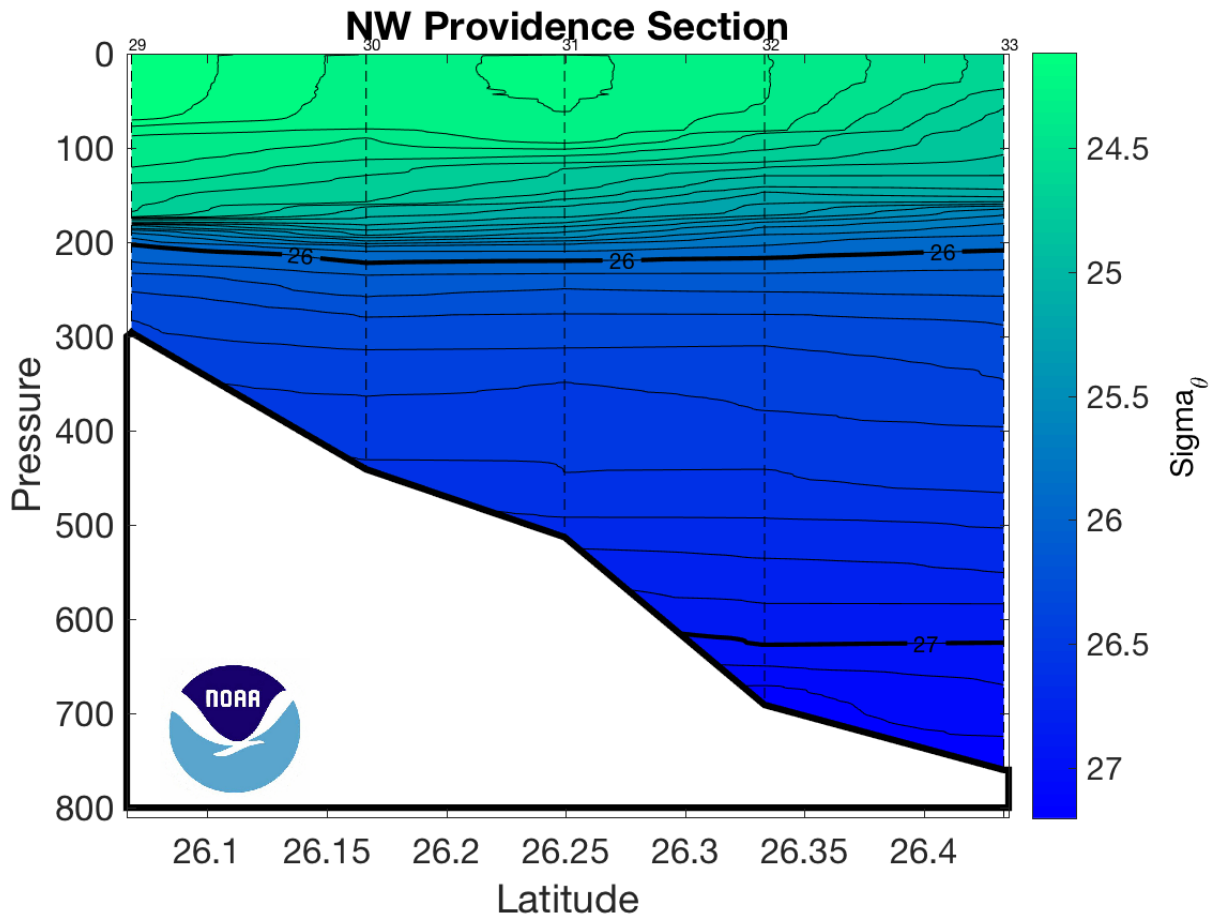
Figure 43: Neutral density (kg/m3) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

8   Acknowledgements

The successful completion of the cruise relied on dedicated assistance from many individuals on shore and on the UNOLS ship Endeavor. Funded investigators in the project and members of the Western Boundary Time Series, and the RAPID/MOC programs were instrumental in planning and executing the cruise. The participants in the cruise showed dedication and camaraderie during their 14 days at sea. Officers and crew of the Endeavor exhibited a high degree of professionalism and assistance to accomplish the mission and to make us feel at home during the voyage.

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A Hydrographic - CTD Data

Abaco February 2016 R/V Endeavor
CTD Station 1 (CTD001)
Latitude 26.506N Longitude 69.504W
18-Feb-2016 21:18Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.186	24.185	36.643	210.2	0.003	24.830
10	24.190	24.188	36.649	210.9	0.031	24.834
20	24.189	24.185	36.720	211.2	0.062	24.889
30	24.167	24.160	36.756	210.6	0.092	24.923
50	24.156	24.145	36.755	210.2	0.153	24.927
75	24.148	24.132	36.754	210.3	0.229	24.930
100	23.978	23.956	36.742	209.6	0.305	24.974
125	23.041	23.016	36.771	207.7	0.377	25.273
150	21.592	21.562	36.736	198.4	0.440	25.661
200	19.890	19.853	36.641	190.1	0.549	26.053
250	19.047	19.002	36.624	186.1	0.646	26.263
300	18.411	18.358	36.574	188.8	0.736	26.388
400	17.439	17.371	36.448	189.3	0.904	26.537
500	15.921	15.841	36.181	180.2	1.061	26.693
600	14.020	13.931	35.872	168.3	1.205	26.876
700	12.025	11.931	35.582	156.1	1.332	27.055
800	9.865	9.770	35.283	142.1	1.442	27.212
900	7.930	7.835	35.063	145.2	1.537	27.348
1000	7.024	6.924	35.053	163.0	1.621	27.471
1100	6.376	6.271	35.060	182.4	1.693	27.565
1200	5.802	5.692	35.069	202.4	1.757	27.647
1300	5.429	5.313	35.073	221.0	1.816	27.696
1400	5.084	4.962	35.076	232.2	1.870	27.740
1500	4.727	4.599	35.058	242.5	1.921	27.768
1750	4.130	3.985	35.020	252.7	2.042	27.804
2000	3.734	3.571	34.998	256.7	2.157	27.829
2500	3.161	2.958	34.965	255.8	2.378	27.861
3000	2.796	2.550	34.936	258.0	2.595	27.874
3500	2.511	2.218	34.912	264.8	2.811	27.884
4000	2.331	1.987	34.898	266.6	3.027	27.891
4500	2.266	1.866	34.888	263.1	3.250	27.892
5000	2.183	1.724	34.871	255.7	3.481	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5455	1	2.103	1.589	34.854	250.5
5079	2	2.167	1.699	34.869	255.1
4729	3	2.244	1.817	34.882	260.4
4381	4	2.276	1.890	34.889	263.7
4036	5	2.327	1.979	34.896	266.0
3516	6	2.506	2.211	34.912	263.5
2995	7	2.808	2.562	34.937	256.9
2480	8	3.212	3.010	34.966	254.7
1962	9	3.863	3.701	35.008	250.3
1704	10	4.295	4.152	35.036	248.6
1360	11	5.218	5.098	35.075	226.7
1190	12	5.889	5.779	35.067	199.1
1020	13	6.913	6.813	35.071	170.4
911	14	7.557	7.464	35.011	143.9
800	15	9.743	9.649	35.270	140.7
692	16	12.174	12.081	35.601	154.7
582	17	14.374	15.036	−999.000	−999.0
472	18	16.376	16.299	36.261	182.6
361	19	17.861	17.799	36.553	189.2
251	20	19.013	18.967	36.621	185.5
160	21	20.680	20.649	36.648	195.0
104	22	23.808	23.786	36.720	208.2
55	23	24.154	24.142	36.753	208.7
4	24	24.165	24.164	36.675	208.7

Abaco February 2016 R/V Endeavor
CTD Station 1 (CTD001)
Latitude 26.506 N   Longitude 69.504 W
18-Feb-2016 21:18 Z
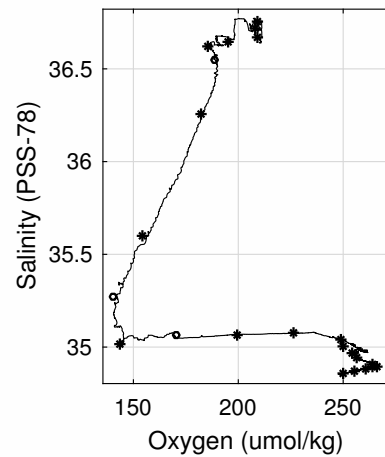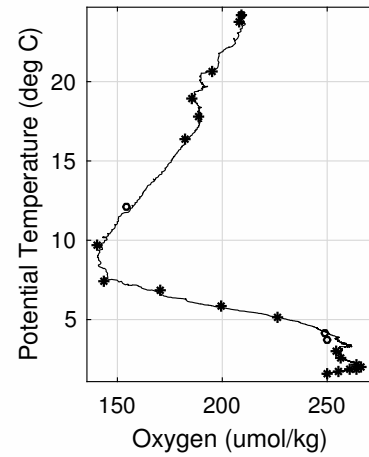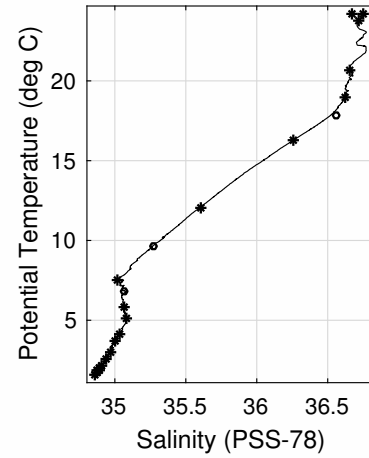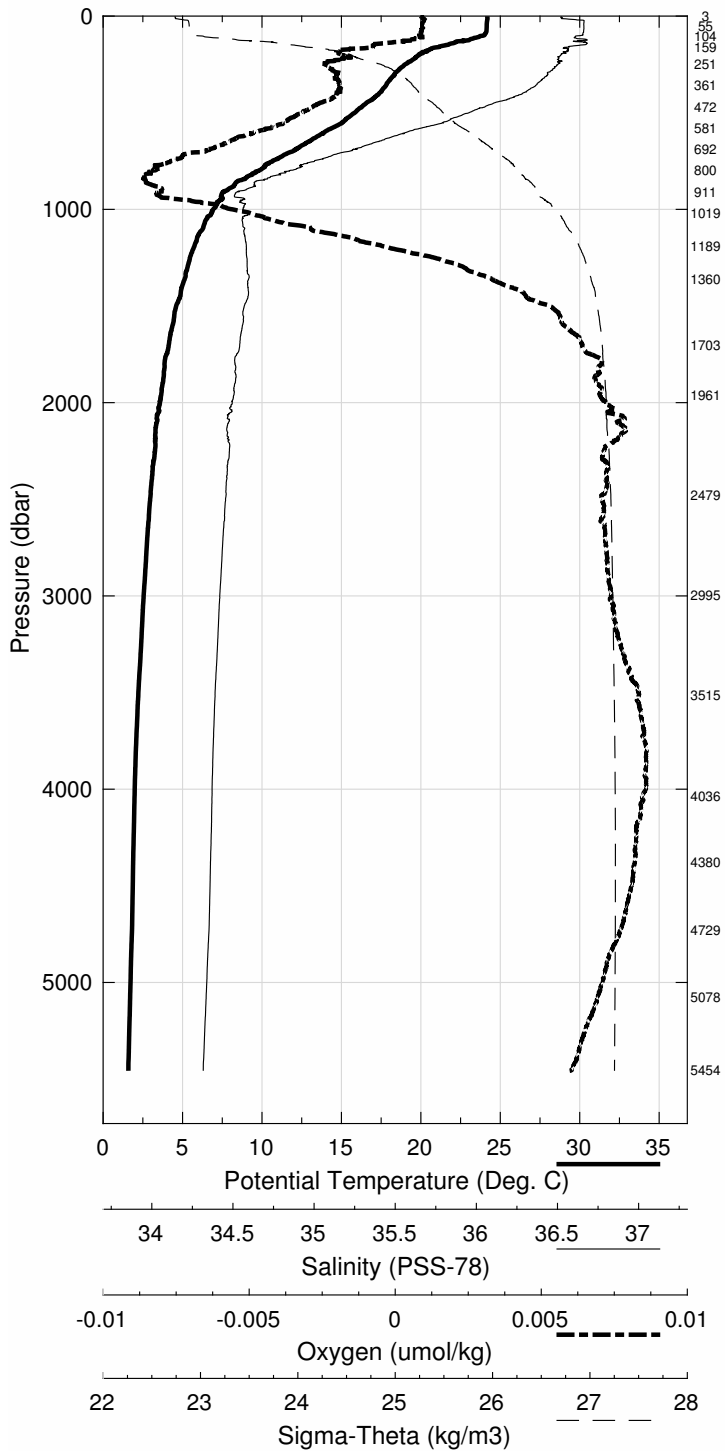
Abaco February 2016 R/V Endeavor
CTD Station 2 (CTD002)
Latitude 26.512N Longitude 70.008W
19-Feb-2016 04:11Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.084	24.084	36.776	209.8	0.003	24.962
10	24.086	24.084	36.775	209.7	0.030	24.961
20	24.087	24.083	36.775	209.8	0.060	24.961
30	24.088	24.081	36.775	210.0	0.090	24.962
50	24.101	24.090	36.774	209.7	0.150	24.958
75	24.106	24.090	36.776	209.8	0.225	24.960
100	22.714	22.694	36.849	208.3	0.297	25.425
125	21.537	21.512	36.706	199.8	0.359	25.652
150	20.844	20.815	36.734	193.3	0.415	25.865
200	19.418	19.381	36.657	184.7	0.516	26.189
250	18.736	18.691	36.593	187.7	0.608	26.319
300	18.275	18.222	36.560	188.9	0.696	26.412
400	17.395	17.327	36.438	188.8	0.863	26.540
500	16.048	15.968	36.202	179.3	1.022	26.680
600	13.986	13.898	35.857	163.6	1.166	26.871
700	11.973	11.879	35.577	154.4	1.293	27.060
800	9.877	9.782	35.294	143.3	1.404	27.219
900	8.200	8.103	35.130	147.2	1.499	27.360
1000	6.935	6.836	35.048	165.1	1.581	27.479
1100	6.309	6.205	35.076	188.6	1.651	27.586
1200	5.686	5.577	35.075	214.0	1.713	27.666
1300	5.184	5.069	35.063	230.8	1.769	27.717
1400	4.860	4.740	35.054	239.7	1.822	27.748
1500	4.512	4.386	35.027	248.7	1.872	27.766
1750	4.066	3.921	35.006	255.4	1.992	27.799
2000	3.683	3.520	34.985	258.6	2.107	27.823
2500	3.141	2.938	34.954	261.4	2.330	27.854
3000	2.751	2.506	34.927	264.8	2.548	27.871
3500	2.468	2.176	34.908	267.3	2.762	27.884
4000	2.335	1.991	34.897	267.0	2.977	27.889
4500	2.300	1.899	34.890	264.5	3.201	27.891
5000	2.287	1.825	34.883	260.6	3.437	27.892
5500	2.149	1.627	34.858	251.1	3.682	27.887

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5588	1	2.112	1.580	34.853	250.1
5132	2	2.275	1.796	34.878	258.7
4696	3	2.295	1.871	34.886	263.3
4258	4	2.314	1.941	34.892	265.5
3823	5	2.372	2.047	34.899	267.0
3300	6	2.589	2.316	34.914	266.4
2791	7	2.927	2.699	34.937	262.2
2275	8	3.334	3.150	34.959	261.5
1859	9	3.890	3.737	34.996	257.5
1601	10	4.398	4.264	35.029	248.1
1381	11	4.933	4.814	35.056	236.9
1211	12	5.597	5.488	35.075	215.4
1044	13	6.589	6.488	35.046	173.3
931	14	7.845	7.748	35.096	149.1
818	15	9.654	9.557	35.281	143.6
709	16	12.104	12.009	35.596	154.4
598	17	14.060	13.972	35.870	161.4
488	18	15.999	15.921	36.196	178.7
375	19	17.460	17.396	36.450	187.6
268	20	18.453	18.406	36.573	187.9
175	21	20.451	20.418	36.808	179.6
95	22	22.865	22.845	36.812	203.6
44	23	24.152	24.143	36.768	208.5
3	24	24.145	24.147	−999.000	−999.0

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Abaco February 2016 R/V Endeavor
CTD Station 2 (CTD002)
Latitude 26.512 N   Longitude 70.008 W
19-Feb-2016 04:11 Z

Abaco February 2016 R/V Endeavor
CTD Station 3 (CTD003)
Latitude 26.516N Longitude 70.513W
19-Feb-2016 11:48Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\mathrm{mol\cdot kg^{-1}}$	DynHt $\mathrm{m^2\cdot s^{-2}}$	SigT $\mathrm{kg\cdot m^{-3}}$
1	24.198	24.198	36.761	207.7	0.003	24.916
10	24.203	24.200	36.760	208.4	0.030	24.915
20	24.215	24.211	36.760	208.7	0.061	24.911
30	24.212	24.206	36.760	208.7	0.091	24.913
50	24.224	24.213	36.760	208.6	0.152	24.910
75	24.237	24.221	36.759	208.4	0.229	24.908
100	24.234	24.213	36.760	207.9	0.306	24.911
125	22.550	22.524	36.854	206.6	0.375	25.478
150	21.299	21.269	36.802	195.0	0.435	25.792
200	19.491	19.454	36.620	190.3	0.538	26.142
250	18.687	18.643	36.580	191.9	0.631	26.321
300	18.324	18.272	36.563	188.9	0.718	26.402
400	17.377	17.309	36.433	188.1	0.887	26.540
500	16.001	15.920	36.193	174.6	1.045	26.684
600	14.315	14.225	35.919	168.2	1.190	26.849
700	12.161	12.066	35.584	150.0	1.319	27.030
800	10.118	10.021	35.328	144.7	1.432	27.205
900	8.137	8.041	35.121	150.3	1.528	27.362
1000	6.922	6.824	35.083	176.2	1.608	27.508
1100	6.048	5.946	35.074	202.1	1.676	27.618
1200	5.448	5.341	35.065	223.2	1.735	27.687
1300	5.032	4.920	35.051	235.7	1.789	27.725
1400	4.680	4.562	35.032	245.6	1.840	27.751
1500	4.432	4.307	35.018	250.8	1.890	27.768
1750	3.960	3.817	34.990	258.2	2.009	27.797
2000	3.620	3.459	34.973	261.0	2.125	27.819
2500	3.121	2.919	34.948	262.8	2.348	27.851
3000	2.758	2.513	34.928	263.9	2.565	27.872
3500	2.458	2.167	34.908	267.1	2.779	27.884
4000	2.334	1.990	34.897	266.1	2.995	27.890
4500	2.296	1.895	34.889	263.8	3.218	27.891
5000	2.287	1.824	34.882	260.6	3.454	27.891
5500	2.167	1.645	34.861	252.9	3.699	27.888

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\mathrm{mol\cdot kg^{-1}}$
5588	1	2.119	1.587	34.854	250.6
5178	2	2.272	1.788	34.878	258.5
4782	3	2.294	1.858	34.885	262.2
4389	4	2.298	8.376	−999.000	−999.0
4000	5	2.330	1.986	34.898	266.0
3500	6	2.460	2.169	34.907	266.6
3002	7	2.744	2.498	34.925	264.5
2500	8	3.127	2.925	34.948	261.8
1999	9	3.600	3.439	34.966	261.1
1671	10	4.077	3.940	34.995	255.8
1461	11	4.526	4.404	35.022	247.7
1286	12	5.013	4.902	35.043	237.2
1181	13	5.519	5.413	35.002	219.8
936	14	7.724	7.627	35.066	156.6
828	15	9.365	9.269	35.214	139.3
714	16	11.913	11.817	35.564	151.5
606	17	14.160	14.070	35.887	163.8
496	18	15.966	15.886	36.180	174.6
387	19	17.417	17.351	36.439	187.9
275	20	18.463	18.414	36.572	187.7
185	21	19.702	19.668	36.649	187.2
119	22	22.407	22.383	36.873	203.0
64	23	24.223	24.209	36.766	208.2
3	24	24.213	24.212	36.768	152.9

Abaco February 2016 R/V Endeavor
CTD Station 3 (CTD003)
Latitude 26.516 N Longitude 70.513 W
19-Feb-2016 11:48 Z

Abaco February 2016 R/V Endeavor
CTD Station 4 (CTD004)
Latitude 26.510N Longitude 71.003W
19-Feb-2016 20:09Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.674	23.674	36.717	209.5	0.003	25.039
10	23.668	23.666	36.716	210.0	0.029	25.041
20	23.678	23.673	36.717	210.3	0.058	25.039
30	23.678	23.672	36.716	209.7	0.088	25.039
50	23.682	23.672	36.717	209.6	0.146	25.039
75	23.687	23.671	36.718	209.8	0.220	25.040
100	23.727	23.706	36.749	209.4	0.293	25.053
125	22.206	22.181	36.781	204.2	0.363	25.521
150	20.828	20.799	36.715	191.4	0.421	25.856
200	19.641	19.604	36.686	182.8	0.524	26.153
250	18.821	18.776	36.605	186.2	0.617	26.306
300	18.366	18.313	36.571	187.2	0.706	26.398
400	17.408	17.340	36.438	188.4	0.874	26.536
500	16.025	15.944	36.190	175.8	1.033	26.676
600	13.994	13.906	35.852	159.3	1.177	26.866
700	11.802	11.710	35.525	145.1	1.304	27.053
800	9.810	9.716	35.267	139.4	1.414	27.209
900	7.918	7.823	35.087	148.5	1.509	27.369
1000	6.883	6.784	35.061	169.0	1.589	27.497
1100	5.974	5.872	35.062	201.1	1.657	27.618
1200	5.373	5.267	35.059	226.5	1.716	27.691
1300	4.880	4.769	35.038	241.0	1.769	27.732
1400	4.610	4.492	35.022	247.6	1.820	27.751
1500	4.384	4.259	35.014	251.2	1.869	27.770
1750	3.851	3.710	34.975	260.5	1.988	27.796
2000	3.614	3.452	34.966	262.4	2.103	27.815
2500	3.181	2.978	34.950	262.7	2.329	27.848
3000	2.772	2.526	34.928	264.6	2.549	27.870
3500	2.468	2.176	34.908	267.8	2.764	27.884
4000	2.327	1.983	34.896	266.5	2.980	27.890
4500	2.300	1.899	34.890	264.5	3.203	27.891
5000	2.296	1.834	34.883	261.4	3.439	27.891
5500	2.214	1.690	34.866	254.7	3.685	27.888

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5584	1	2.102	1.571	34.852	250.8
5250	2	2.282	1.789	34.877	250.6
4914	3	2.296	1.844	34.884	262.7
4578	4	2.297	1.887	34.888	257.0
4250	5	2.302	1.930	34.891	265.9
3749	6	2.361	2.045	34.899	267.2
3252	7	2.572	2.305	34.914	267.0
2752	8	2.950	2.726	34.938	263.2
2249	9	3.335	3.154	34.955	265.0
1800	10	3.805	3.659	34.974	260.2
1402	11	4.651	4.533	35.035	244.8
1212	12	5.333	5.227	35.056	228.1
1042	13	6.566	6.466	35.059	182.4
922	14	7.654	7.559	35.057	150.7
811	15	9.609	9.514	35.243	139.9
702	16	12.150	12.056	35.577	148.0
591	17	14.378	14.289	35.915	162.9
482	18	16.513	16.433	36.270	180.1
371	19	17.831	17.767	36.501	189.9
262	20	18.910	18.863	36.604	186.9
171	21	20.993	20.960	36.810	188.1
102	22	23.584	23.563	36.712	208.8
50	23	23.612	23.602	36.693	210.0
5	24	23.599	23.598	36.697	218.9

Abaco February 2016 R/V Endeavor
CTD Station 4 (CTD004)
Latitude 26.510 N   Longitude 71.003 W
19-Feb-2016 20:09 Z

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Abaco February 2016 R/V Endeavor
CTD Station 5 (CTD005)
Latitude 26.514N Longitude 71.503W
20-Feb-2016 02:58Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.737	23.737	36.687	209.3	0.003	24.997
10	23.754	23.752	36.687	209.0	0.030	24.993
20	23.772	23.768	36.686	209.2	0.059	24.987
30	23.766	23.759	36.685	209.5	0.089	24.989
50	23.775	23.764	36.689	209.3	0.148	24.991
75	23.816	23.800	36.703	208.9	0.223	24.991
100	23.850	23.829	36.721	208.9	0.298	24.996
125	22.247	22.222	36.709	203.1	0.370	25.455
150	20.872	20.844	36.633	195.0	0.430	25.781
200	19.759	19.722	36.593	198.6	0.536	26.051
250	19.196	19.151	36.608	190.4	0.634	26.211
300	18.631	18.578	36.566	193.0	0.727	26.327
400	17.685	17.617	36.486	188.3	0.899	26.505
500	16.422	16.340	36.256	179.2	1.061	26.635
600	14.697	14.606	35.966	162.7	1.211	26.804
700	12.287	12.192	35.597	148.4	1.343	27.016
800	10.263	10.166	35.327	140.8	1.456	27.179
900	8.371	8.273	35.143	149.1	1.555	27.345
1000	7.131	7.031	35.095	172.0	1.638	27.489
1100	6.116	6.014	35.078	198.7	1.707	27.613
1200	5.360	5.254	35.057	227.2	1.766	27.690
1300	4.923	4.811	35.037	239.5	1.820	27.727
1400	4.637	4.519	35.020	247.0	1.871	27.746
1500	4.397	4.272	35.006	252.3	1.921	27.762
1750	3.984	3.841	34.983	258.5	2.042	27.790
2000	3.681	3.518	34.969	261.8	2.160	27.810
2500	3.177	2.974	34.950	263.1	2.388	27.847
3000	2.763	2.517	34.925	266.9	2.608	27.869
3500	2.481	2.189	34.909	267.3	2.823	27.884
4000	2.345	2.001	34.898	266.8	3.039	27.890
4500	2.305	1.904	34.890	265.1	3.264	27.891
5000	2.296	1.833	34.883	262.1	3.499	27.891
5500	2.127	1.606	34.855	251.1	3.745	27.886

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5519	1	2.129	1.606	34.855	249.0
5123	2	2.290	1.812	34.880	259.8
4729	3	2.302	1.873	34.886	263.3
4337	4	2.302	1.921	34.890	265.3
3948	5	2.352	2.014	34.899	266.1
3447	6	2.513	2.226	34.911	266.3
2950	7	2.787	2.546	34.926	266.1
2451	8	3.232	3.033	34.952	261.7
1950	9	3.767	3.608	34.976	259.4
1600	10	4.195	4.063	34.992	254.6
1445	11	4.526	4.405	35.013	248.8
1274	12	5.095	4.985	35.045	234.6
1105	13	6.084	5.981	35.076	200.6
950	14	7.744	7.645	35.115	159.6
843	15	9.386	9.288	35.223	139.9
733	16	11.438	11.343	35.481	141.8
621	17	14.236	14.143	35.890	157.8
514	18	16.345	16.261	36.246	177.4
405	19	17.684	17.614	36.483	188.4
290	20	18.830	18.778	36.581	189.6
205	21	19.740	19.702	36.587	198.6
120	22	23.860	23.835	36.774	208.0
71	23	23.804	23.789	36.710	209.1
3	24	23.760	23.759	36.696	210.1

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Abaco February 2016 R/V Endeavor
CTD Station 5 (CTD005)
Latitude 26.514 N   Longitude 71.503 W
20-Feb-2016 02:58 Z

Abaco February 2016 R/V Endeavor
CTD Station 6 (CTD006)
Latitude 26.519N Longitude 72.006W
20-Feb-2016 09:43Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.425	23.425	36.686	209.7	0.003	25.089
10	23.436	23.434	36.684	210.3	0.029	25.084
20	23.432	23.428	36.684	210.4	0.057	25.087
30	23.443	23.437	36.684	210.4	0.086	25.084
50	23.440	23.430	36.683	211.0	0.144	25.085
75	23.315	23.299	36.679	211.1	0.216	25.120
100	21.929	21.909	36.676	205.6	0.284	25.518
125	21.028	21.004	36.662	195.3	0.344	25.758
150	20.313	20.285	36.640	192.1	0.398	25.938
200	19.335	19.299	36.579	199.6	0.499	26.151
250	18.856	18.811	36.572	195.0	0.593	26.272
300	18.371	18.318	36.553	190.0	0.683	26.382
400	17.588	17.519	36.461	188.3	0.853	26.510
500	16.354	16.273	36.242	178.1	1.015	26.640
600	14.585	14.494	35.941	165.5	1.166	26.808
700	12.144	12.049	35.573	150.8	1.298	27.025
800	9.999	9.903	35.300	143.8	1.410	27.203
900	8.241	8.144	35.130	149.4	1.507	27.354
1000	6.997	6.897	35.079	170.6	1.589	27.495
1100	5.994	5.893	35.071	202.7	1.658	27.623
1200	5.468	5.361	35.070	221.6	1.716	27.688
1300	5.052	4.939	35.057	235.6	1.770	27.728
1400	4.776	4.657	35.046	241.4	1.822	27.751
1500	4.490	4.364	35.023	249.4	1.872	27.766
1750	3.993	3.850	34.994	257.1	1.992	27.798
2000	3.639	3.477	34.975	260.8	2.107	27.819
2500	3.162	2.959	34.957	259.6	2.331	27.855
3000	2.714	2.469	34.924	265.6	2.548	27.872
3500	2.426	2.135	34.905	268.6	2.760	27.885
4000	2.329	1.986	34.896	267.3	2.974	27.890
4500	2.290	1.889	34.889	265.0	3.198	27.891
5000	2.264	1.802	34.880	260.8	3.432	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5372	1	2.120	1.617	34.857	252.7
5049	2	2.255	8.990	−999.000	−999.0
4733	3	2.285	1.856	34.887	262.9
4418	4	2.292	1.901	34.889	264.2
4097	5	2.310	1.956	34.894	266.0
3597	6	2.387	2.087	34.901	268.2
3101	7	2.626	2.373	34.922	265.7
2599	8	3.055	2.844	34.950	260.1
2099	9	3.502	3.332	34.968	261.2
1704	10	4.031	3.892	34.996	256.7
1419	11	4.621	4.501	35.030	246.5
1242	12	5.278	5.168	35.065	228.4
1070	13	6.306	6.205	35.085	197.4
913	14	8.012	7.915	35.118	151.6
803	15	9.933	9.837	35.294	141.5
690	16	12.211	12.118	35.582	148.0
585	17	14.576	14.487	35.952	164.3
473	18	16.863	16.784	36.338	182.3
360	19	18.090	18.027	36.526	189.5
250	20	19.058	19.013	36.598	190.3
161	21	20.215	20.185	36.633	192.2
98	22	23.036	23.016	36.684	211.1
44	23	23.406	23.397	36.688	210.4
6	24	23.397	23.396	36.689	210.4

Abaco February 2016 R/V Endeavor
CTD Station 6 (CTD006)
Latitude 26.519 N   Longitude 72.006 W
20-Feb-2016 09:43 Z

Abaco February 2016 R/V Endeavor
CTD Station 7 (CTD007)
Latitude 26.509N Longitude 72.376W
20-Feb-2016 18:27Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.251	23.251	36.697	209.8	0.003	25.148
10	23.258	23.256	36.695	210.3	0.028	25.145
20	23.259	23.255	36.695	210.1	0.056	25.145
30	23.257	23.251	36.695	210.4	0.084	25.147
50	23.266	23.256	36.695	210.2	0.141	25.145
75	23.255	23.239	36.695	210.5	0.212	25.150
100	21.650	21.630	36.689	200.4	0.277	25.606
125	20.807	20.783	36.646	196.0	0.335	25.807
150	20.158	20.130	36.639	190.1	0.389	25.978
200	19.454	19.418	36.620	187.6	0.489	26.152
250	18.838	18.793	36.565	196.0	0.583	26.271
300	18.438	18.385	36.552	192.0	0.673	26.365
400	17.664	17.595	36.477	187.8	0.844	26.504
500	16.321	16.240	36.239	177.1	1.006	26.646
600	14.470	14.379	35.926	164.2	1.155	26.822
700	12.192	12.097	35.579	149.2	1.288	27.020
800	9.893	9.797	35.287	142.2	1.401	27.211
900	8.136	8.040	35.120	150.2	1.496	27.362
1000	6.842	6.744	35.086	177.9	1.576	27.522
1100	5.975	5.874	35.081	209.4	1.642	27.633
1200	5.383	5.277	35.068	226.0	1.700	27.696
1300	5.000	4.888	35.053	237.0	1.753	27.730
1400	4.683	4.565	35.044	244.4	1.804	27.760
1500	4.390	4.266	35.023	250.2	1.852	27.776
1750	3.962	3.819	34.996	257.2	1.970	27.802
2000	3.594	3.433	34.973	260.6	2.085	27.822
2500	3.095	2.893	34.949	262.0	2.306	27.855
3000	2.686	2.442	34.922	267.1	2.521	27.873
3500	2.423	2.132	34.906	267.7	2.733	27.886
4000	2.305	1.963	34.895	266.8	2.946	27.891
4500	2.264	1.864	34.886	264.4	3.168	27.891
5000	2.211	1.752	34.874	258.8	3.401	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5284	1	2.083	1.592	34.854	249.8
4898	2	2.236	1.788	34.878	259.3
4549	3	2.265	1.859	34.885	263.1
4199	4	2.284	1.919	34.891	265.7
3850	5	2.325	1.998	34.897	266.9
3350	6	2.509	2.232	34.911	268.0
2850	7	2.780	2.549	34.928	266.0
2349	8	3.267	3.077	34.960	261.6
1851	9	3.807	3.657	34.986	259.7
1601	10	4.206	4.074	35.008	254.9
1376	11	4.721	4.604	35.037	246.4
1207	12	5.373	5.266	35.066	−999.0
1037	13	6.559	6.459	35.089	187.9
925	14	7.725	7.629	35.099	158.0
816	15	9.649	9.553	35.256	143.1
707	16	12.191	12.096	35.584	150.6
596	17	14.547	14.457	35.943	166.5
487	18	16.668	16.587	36.301	181.6
376	19	17.879	17.814	36.505	189.4
266	20	18.714	18.667	36.562	197.3
176	21	19.850	19.817	36.631	189.0
116	22	21.044	21.022	36.665	196.7
66	23	23.273	23.259	36.692	211.2
6	24	23.308	23.307	36.694	244.3

Abaco February 2016 R/V Endeavor
CTD Station 7 (CTD007)
Latitude 26.509 N   Longitude 72.376 W
20-Feb-2016 18:27 Z

Abaco February 2016 R/V Endeavor
CTD Station 8 (CTD008)
Latitude 26.510N Longitude 72.766W
21-Feb-2016 00:15Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	22.981	22.981	36.656	211.1	0.003	25.196
10	22.987	22.985	36.654	211.1	0.028	25.193
20	22.989	22.985	36.654	210.7	0.055	25.193
30	22.988	22.981	36.654	211.3	0.083	25.194
50	22.955	22.945	36.644	210.3	0.139	25.197
75	22.940	22.925	36.640	210.3	0.208	25.200
100	22.875	22.855	36.639	209.2	0.278	25.219
125	22.060	22.035	36.615	205.8	0.345	25.436
150	21.091	21.062	36.633	198.5	0.408	25.721
200	19.886	19.849	36.632	193.3	0.515	26.048
250	19.114	19.068	36.576	197.3	0.613	26.209
300	18.705	18.652	36.564	192.9	0.705	26.306
400	17.861	17.792	36.506	188.3	0.880	26.478
500	16.771	16.688	36.316	179.7	1.046	26.599
600	14.902	14.809	35.994	166.6	1.200	26.781
700	12.614	12.517	35.643	152.4	1.335	26.988
800	10.053	9.956	35.303	142.4	1.449	27.196
900	8.292	8.195	35.143	150.9	1.546	27.357
1000	6.837	6.739	35.091	180.2	1.626	27.526
1100	6.058	5.955	35.081	206.4	1.692	27.623
1200	5.418	5.312	35.068	224.1	1.751	27.692
1300	4.974	4.862	35.051	238.2	1.804	27.732
1400	4.672	4.554	35.034	245.4	1.855	27.753
1500	4.469	4.343	35.024	250.1	1.904	27.769
1750	3.960	3.817	34.987	259.0	2.024	27.795
2000	3.601	3.439	34.966	262.5	2.140	27.816
2500	3.078	2.877	34.943	265.7	2.363	27.851
3000	2.690	2.446	34.922	267.7	2.579	27.873
3500	2.409	2.119	34.905	268.4	2.789	27.886
4000	2.279	1.937	34.892	267.3	3.001	27.890
4500	2.252	1.853	34.885	264.4	3.223	27.891
5000	2.167	1.709	34.868	257.4	3.455	27.889

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5218	1	2.081	1.598	34.854	251.9
4839	2	2.222	1.782	34.877	258.7
4450	3	2.255	1.861	34.885	263.6
4080	4	2.274	1.923	34.891	266.2
3699	5	2.343	2.033	34.899	268.7
3198	6	2.553	2.291	34.913	267.6
2699	7	2.895	2.677	34.932	267.2
2199	8	3.364	3.187	34.955	263.4
1947	9	3.681	3.523	34.975	260.8
1600	10	4.164	4.033	35.000	256.2
1423	11	4.635	4.515	35.031	246.8
1254	12	5.170	5.060	35.058	233.6
1083	13	6.057	5.956	35.074	203.9
943	14	7.615	7.517	35.103	161.0
825	15	9.701	9.604	35.269	144.2
715	16	12.078	11.981	35.566	153.1
606	17	14.753	14.660	35.979	166.7
496	18	16.795	16.712	36.322	181.9
386	19	17.908	17.841	36.508	189.5
276	20	18.910	18.861	36.580	193.2
186	21	20.378	20.342	36.695	186.9
108	22	22.792	22.770	36.645	210.6
56	23	22.907	22.896	36.641	211.8
5	24	22.898	22.897	36.643	211.3

Abaco February 2016 R/V Endeavor
CTD Station 8 (CTD008)
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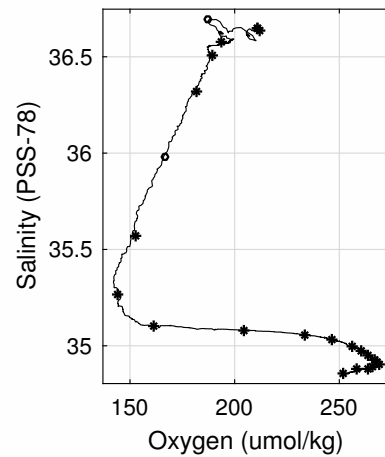
Abaco February 2016 R/V Endeavor
CTD Station 9 (CTD009)
Latitude 26.523N Longitude 73.124W
21-Feb-2016 06:15Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.185	23.185	36.687	211.1	0.003	25.160
10	23.189	23.187	36.685	210.9	0.028	25.158
20	23.131	23.127	36.680	210.2	0.056	25.171
30	22.886	22.880	36.654	211.7	0.084	25.223
50	22.785	22.774	36.645	211.8	0.138	25.247
75	22.772	22.756	36.643	212.0	0.207	25.251
100	22.773	22.752	36.645	211.7	0.275	25.253
125	22.332	22.307	36.637	203.3	0.343	25.375
150	21.682	21.652	36.631	202.8	0.407	25.556
200	20.274	20.236	36.676	189.8	0.519	25.977
250	19.298	19.252	36.580	198.5	0.619	26.164
300	18.833	18.779	36.573	193.1	0.713	26.281
400	17.862	17.792	36.501	187.4	0.889	26.474
500	16.568	16.486	36.281	179.6	1.054	26.620
600	14.482	14.392	35.928	164.6	1.204	26.821
700	12.217	12.122	35.585	151.9	1.336	27.020
800	9.872	9.776	35.266	138.7	1.448	27.198
900	8.143	8.047	35.100	148.3	1.547	27.345
1000	6.979	6.880	35.085	177.5	1.629	27.502
1100	5.862	5.761	35.070	211.8	1.696	27.639
1200	5.163	5.059	35.048	233.6	1.753	27.706
1300	4.787	4.676	35.028	243.9	1.805	27.735
1400	4.533	4.416	35.014	250.0	1.855	27.752
1500	4.312	4.188	35.001	254.0	1.904	27.767
1750	3.905	3.763	34.980	259.4	2.023	27.795
2000	3.605	3.443	34.966	262.0	2.139	27.816
2500	3.113	2.911	34.945	263.6	2.364	27.849
3000	2.722	2.478	34.923	266.8	2.581	27.870
3500	2.447	2.156	34.906	268.5	2.795	27.884
4000	2.299	1.956	34.894	266.7	3.009	27.890
4500	2.253	1.853	34.885	263.6	3.231	27.891
5000	2.139	1.682	34.864	254.9	3.462	27.888

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5124	1	2.118	1.646	34.861	253.2
4839	2	2.209	1.769	34.875	257.7
4549	3	2.251	1.845	34.884	262.8
4251	4	2.268	1.897	34.888	265.9
3975	5	2.306	1.966	34.894	266.5
3476	6	2.462	2.173	34.907	268.1
2974	7	2.741	2.499	34.923	266.6
2476	8	3.135	2.935	34.946	262.8
2052	9	3.559	3.393	34.964	262.4
1701	10	4.010	3.871	34.985	257.5
1452	11	4.402	4.282	35.006	251.3
1203	12	5.153	5.048	35.045	233.1
1031	13	6.673	6.573	35.080	185.7
921	14	8.159	8.060	35.138	154.2
812	15	9.940	9.843	35.292	141.5
702	16	12.247	12.152	35.595	150.7
591	17	14.660	14.570	35.955	168.5
483	18	16.979	16.898	36.362	182.1
373	19	18.129	18.064	36.533	187.9
262	20	19.245	19.198	36.608	190.3
173	21	20.413	20.381	36.614	198.5
122	22	22.369	22.344	36.631	151.0
72	23	22.769	22.755	36.632	210.7
4	24	23.114	23.117	−999.000	−999.0

Abaco February 2016 R/V Endeavor
CTD Station 9 (CTD009)
Latitude 26.523 N   Longitude 73.124 W
21-Feb-2016 06:15 Z
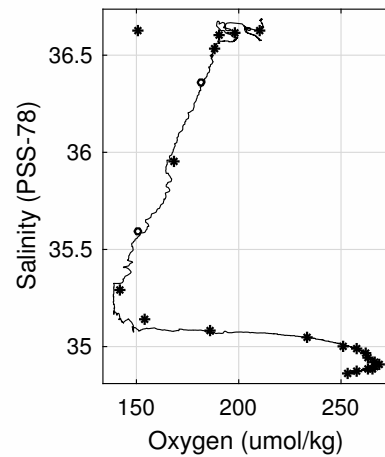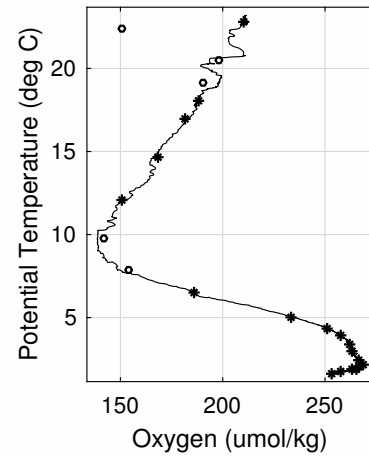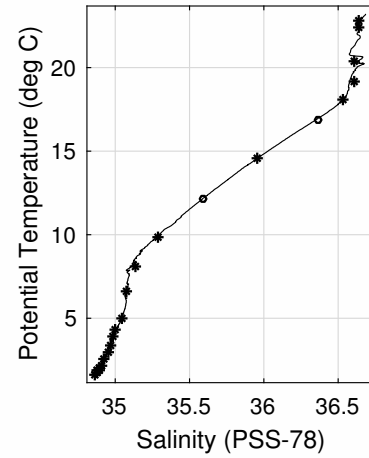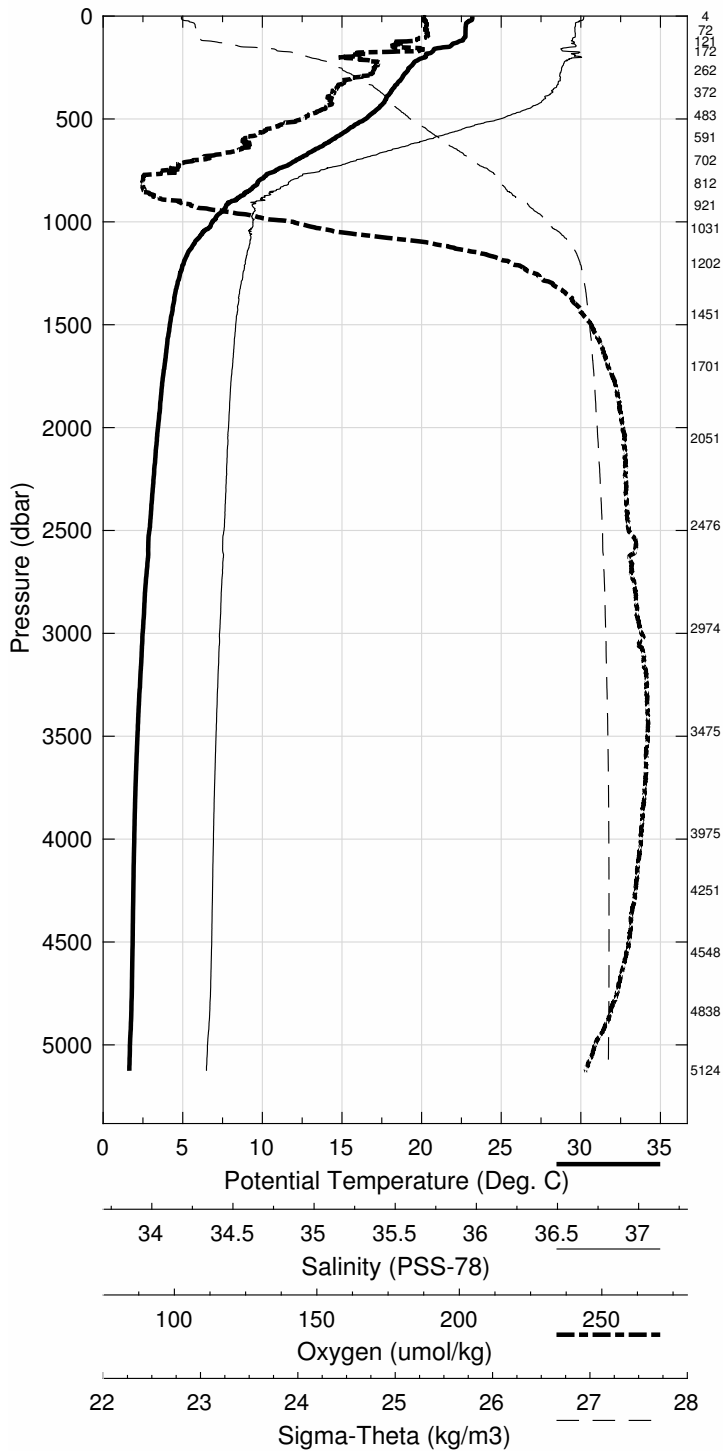
Abaco February 2016 R/V Endeavor
CTD Station 10 (CTD010)
Latitude 26.511N Longitude 73.499W
21-Feb-2016 12:02Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.499	24.499	36.679	204.2	0.003	24.763
10	24.497	24.495	36.677	204.9	0.032	24.763
20	24.500	24.496	36.677	204.8	0.064	24.763
30	24.500	24.494	36.677	204.8	0.095	24.763
50	23.852	23.841	36.636	205.2	0.158	24.928
75	23.637	23.621	36.719	198.5	0.233	25.056
100	23.030	23.009	36.645	210.8	0.304	25.179
125	22.937	22.912	36.642	209.9	0.374	25.205
150	21.991	21.961	36.665	200.4	0.443	25.495
200	20.092	20.055	36.627	194.3	0.555	25.989
250	19.354	19.309	36.577	199.9	0.656	26.147
300	18.700	18.647	36.573	190.7	0.750	26.315
400	17.807	17.738	36.500	188.6	0.924	26.487
500	16.679	16.597	36.301	180.0	1.089	26.609
600	14.425	14.335	35.919	165.2	1.240	26.826
700	11.772	11.680	35.516	142.2	1.368	27.051
800	10.207	10.110	35.304	138.1	1.481	27.170
900	8.436	8.338	35.129	145.7	1.581	27.324
1000	6.761	6.663	35.085	184.3	1.662	27.532
1100	5.898	5.797	35.071	210.4	1.727	27.635
1200	5.201	5.096	35.050	232.7	1.784	27.704
1300	4.815	4.705	35.028	243.3	1.836	27.732
1400	4.476	4.359	35.009	251.0	1.886	27.755
1500	4.306	4.182	35.001	254.0	1.935	27.768
1750	3.897	3.755	34.981	259.6	2.054	27.796
2000	3.551	3.390	34.962	262.4	2.169	27.818
2500	3.073	2.872	34.943	264.1	2.391	27.851
3000	2.615	2.373	34.918	267.9	2.605	27.875
3500	2.363	2.074	34.901	268.1	2.813	27.887
4000	2.270	1.928	34.891	265.8	3.024	27.890
4500	2.254	1.855	34.885	263.4	3.245	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4969	1	2.209	1.754	34.875	257.4
4679	2	2.245	1.824	34.881	260.8
4300	3	2.260	1.884	34.887	263.9
4000	4	2.276	1.934	34.891	265.4
3650	5	2.329	2.025	34.901	267.4
3249	6	2.489	2.224	34.909	268.4
2748	7	2.854	2.633	34.931	265.3
2251	8	3.325	3.143	34.954	262.6
1850	9	3.758	3.608	34.971	260.5
1501	10	4.279	4.156	35.002	253.9
1336	11	4.699	4.586	35.058	245.5
1164	12	5.465	5.362	35.019	224.9
994	13	6.859	6.762	35.085	182.2
883	14	8.414	8.318	35.127	144.6
775	15	10.370	10.275	35.322	−999.0
666	16	12.685	12.593	35.647	148.1
555	17	15.570	15.482	36.111	170.8
445	18	17.569	17.492	36.461	188.7
335	19	18.559	18.500	36.559	191.2
224	20	19.721	19.679	36.600	196.3
135	21	22.906	22.879	36.641	209.8
86	22	23.000	22.982	36.637	209.7
34	23	24.495	24.487	36.682	204.4
4	24	24.504	24.503	36.683	204.6

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Abaco February 2016 R/V Endeavor
CTD Station 10 (CTD010)
Latitude 26.511 N   Longitude 73.499 W
21-Feb-2016 12:02 Z

100

Abaco February 2016 R/V Endeavor
CTD Station 11 (CTD011)
Latitude 26.509N Longitude 73.863W
21-Feb-2016 17:51Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.639	23.639	36.684	209.2	0.003	25.024
10	23.623	23.621	36.681	209.0	0.029	25.027
20	23.594	23.590	36.679	209.1	0.059	25.035
30	23.588	23.582	36.680	209.0	0.088	25.038
50	23.576	23.565	36.679	209.1	0.146	25.042
75	23.532	23.516	36.675	208.9	0.220	25.054
100	23.231	23.210	36.682	206.5	0.292	25.149
125	21.758	21.733	36.713	193.2	0.359	25.595
150	21.018	20.989	36.683	194.2	0.417	25.779
200	20.242	20.205	36.716	182.9	0.525	26.017
250	19.313	19.267	36.649	182.0	0.623	26.213
300	18.585	18.531	36.594	184.9	0.714	26.360
400	17.667	17.599	36.480	183.2	0.885	26.506
500	16.532	16.449	36.279	175.9	1.048	26.627
600	14.486	14.395	35.931	162.6	1.196	26.822
700	12.361	12.265	35.607	151.1	1.327	27.009
800	9.772	9.677	35.256	140.1	1.442	27.207
900	8.050	7.954	35.113	152.4	1.536	27.370
1000	6.667	6.570	35.085	184.7	1.616	27.545
1100	5.639	5.540	35.064	218.3	1.678	27.661
1200	5.026	4.923	35.042	237.7	1.733	27.717
1300	4.667	4.558	35.022	246.4	1.784	27.744
1400	4.435	4.319	35.008	251.6	1.833	27.758
1500	4.212	4.089	34.997	255.4	1.881	27.774
1750	3.835	3.694	34.977	260.4	1.998	27.799
2000	3.514	3.353	34.960	263.1	2.112	27.819
2500	3.004	2.804	34.939	265.0	2.332	27.854
3000	2.636	2.393	34.919	267.4	2.544	27.874
3500	2.356	2.067	34.901	268.4	2.753	27.887
4000	2.243	1.902	34.889	265.3	2.963	27.891
4500	2.211	1.812	34.881	261.3	3.182	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4805	1	2.148	1.714	34.889	256.0
4450	2	2.220	1.828	34.884	261.9
4130	3	2.239	1.884	34.888	265.3
3821	4	2.270	1.949	34.894	266.9
3500	5	2.360	2.071	34.896	268.5
3102	6	2.541	2.290	34.914	268.3
2701	7	2.815	2.599	34.929	266.5
2300	8	3.164	2.981	34.947	263.7
1951	9	3.575	3.419	34.963	262.6
1602	10	4.063	3.932	34.988	257.3
1400	11	4.431	4.315	35.008	251.2
1228	12	5.002	4.897	35.040	238.5
1060	13	6.009	5.911	35.075	208.2
950	14	7.489	7.392	35.098	164.8
840	15	8.921	8.826	35.175	143.4
730	16	11.538	11.443	35.492	148.0
621	17	13.958	13.867	35.847	161.1
510	18	16.334	16.251	36.244	178.2
400	19	17.688	17.619	36.483	185.1
290	20	18.722	18.670	36.606	184.6
201	21	20.121	20.083	36.697	185.8
111	22	22.390	22.368	36.721	196.0
61	23	23.404	23.391	36.677	209.5
4	24	23.611	23.614	−999.000	−999.0

101

Abaco February 2016 R/V Endeavor
CTD Station 11 (CTD011)
Latitude 26.509 N   Longitude 73.863 W
21-Feb-2016 17:51 Z

102
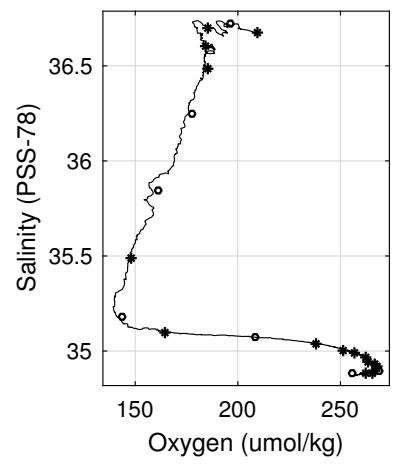
Abaco February 2016 R/V Endeavor
CTD Station 12 (CTD012)
Latitude 26.510N Longitude 74.236W
21-Feb-2016 23:17Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.474	24.473	36.671	206.0	0.003	24.765
10	24.472	24.470	36.669	205.6	0.032	24.764
20	24.463	24.459	36.667	205.9	0.064	24.766
30	24.227	24.221	36.670	206.9	0.095	24.840
50	24.093	24.082	36.676	207.4	0.157	24.887
75	23.874	23.858	36.663	206.2	0.233	24.943
100	23.628	23.607	36.641	205.8	0.309	25.001
125	23.313	23.287	36.679	201.0	0.383	25.124
150	22.612	22.582	36.791	188.8	0.452	25.413
200	20.641	20.603	36.710	186.9	0.571	25.905
250	19.685	19.638	36.689	180.4	0.674	26.146
300	18.814	18.760	36.620	181.7	0.768	26.322
400	17.742	17.673	36.490	184.0	0.941	26.495
500	16.151	16.070	36.216	171.8	1.102	26.667
600	13.714	13.627	35.802	153.6	1.246	26.885
700	11.548	11.456	35.481	141.5	1.372	27.066
800	9.454	9.362	35.224	140.0	1.480	27.235
900	8.093	7.997	35.140	156.7	1.573	27.384
1000	6.825	6.727	35.090	184.1	1.651	27.527
1100	5.444	5.347	35.060	224.9	1.714	27.681
1200	4.860	4.759	35.031	242.5	1.766	27.728
1300	4.493	4.386	35.013	250.8	1.815	27.755
1400	4.238	4.124	34.998	255.0	1.862	27.772
1500	4.032	3.912	34.985	258.5	1.909	27.784
1750	3.689	3.550	34.971	261.6	2.022	27.809
2000	3.359	3.201	34.958	262.8	2.132	27.833
2500	2.915	2.717	34.936	264.6	2.344	27.860
3000	2.521	2.280	34.913	268.3	2.550	27.879
3500	2.292	2.005	34.897	267.6	2.753	27.889
4000	2.206	1.866	34.887	264.2	2.960	27.892
4500	2.107	1.712	34.869	256.0	3.177	27.889

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4593	1	2.083	1.677	34.864	254.5
4276	2	2.168	1.797	34.880	259.8
3949	3	2.206	1.871	34.886	265.2
3624	4	2.251	1.952	34.893	267.4
3301	5	2.346	2.078	34.902	269.2
2900	6	2.579	2.347	34.917	267.1
2499	7	2.906	2.707	34.935	265.0
2102	8	3.266	3.100	34.954	262.9
1801	9	3.603	3.460	34.966	262.8
1600	10	3.904	3.775	34.980	259.5
1401	11	4.251	4.138	34.999	141.3
1200	12	4.747	4.647	35.024	245.4
1044	13	6.119	7.689	−999.000	−999.0
935	14	7.629	7.533	35.104	162.0
826	15	8.971	8.878	35.196	148.0
714	16	11.097	12.018	−999.000	−999.0
605	17	13.662	13.574	35.800	153.6
495	18	16.016	15.937	36.193	171.6
385	19	17.838	17.772	36.504	184.6
274	20	19.335	19.285	36.667	181.0
186	21	20.938	21.094	−999.000	−999.0
121	22	23.050	23.025	36.702	198.4
70	23	23.762	23.747	36.661	207.0
6	24	24.535	24.534	36.677	205.4

Abaco February 2016 R/V Endeavor
CTD Station 12 (CTD012)
Latitude 26.510 N   Longitude 74.236 W
21-Feb-2016 23:17 Z

Abaco February 2016 R/V Endeavor
CTD Station 13 (CTD013)
Latitude 26.507N Longitude 74.526W
22-Feb-2016 04:02Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.473	24.473	36.684	204.8	0.003	24.775
10	24.425	24.423	36.681	205.9	0.032	24.788
20	24.413	24.409	36.681	206.3	0.063	24.792
30	24.367	24.361	36.679	206.5	0.095	24.805
50	24.172	24.161	36.665	206.9	0.157	24.854
75	23.956	23.940	36.656	205.4	0.235	24.914
100	23.642	23.621	36.643	205.9	0.310	24.999
125	23.458	23.432	36.628	205.4	0.384	25.043
150	23.092	23.061	36.653	202.3	0.457	25.170
200	20.903	20.865	36.642	198.2	0.586	25.781
250	19.853	19.807	36.693	181.1	0.691	26.105
300	18.978	18.924	36.634	181.5	0.787	26.291
400	17.193	17.125	36.399	180.6	0.959	26.559
500	15.220	15.142	36.055	163.8	1.113	26.754
600	13.260	13.174	35.737	150.1	1.250	26.928
700	10.995	10.907	35.407	139.4	1.371	27.109
800	9.200	9.108	35.201	141.7	1.476	27.258
900	8.005	7.910	35.126	155.4	1.567	27.386
1000	6.705	6.608	35.086	186.6	1.643	27.540
1100	5.691	5.592	35.065	217.0	1.707	27.655
1200	5.027	4.924	35.039	236.4	1.762	27.715
1300	4.498	4.390	35.010	249.2	1.812	27.752
1400	4.001	3.890	34.985	257.5	1.858	27.785
1500	3.724	3.606	34.972	261.3	1.902	27.804
1750	3.414	3.278	34.961	262.7	2.007	27.828
2000	3.222	3.066	34.953	262.8	2.111	27.842
2500	2.841	2.644	34.931	265.9	2.317	27.862
3000	2.483	2.243	34.911	268.6	2.522	27.881
3500	2.272	1.986	34.896	267.0	2.723	27.890
4000	2.209	1.869	34.887	264.2	2.930	27.891
4500	2.138	1.742	34.872	256.8	3.147	27.889

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4551	1	2.086	1.686	34.865	254.9
4200	2	2.193	1.831	34.882	262.2
4000	3	2.211	1.871	34.887	264.0
3680	4	2.244	1.938	34.892	266.4
3401	5	2.307	2.030	34.899	268.2
3000	6	2.493	2.254	34.910	269.1
2600	7	2.753	2.548	34.928	266.1
2203	8	3.072	2.900	34.944	264.0
1850	9	3.349	3.205	34.956	262.6
1551	10	3.720	3.599	34.969	260.8
1355	11	4.353	4.242	35.001	251.3
1185	12	5.181	5.078	35.046	232.2
1016	13	6.501	6.404	35.083	187.2
907	14	7.605	7.512	35.107	162.3
796	15	8.990	10.092	−999.000	−999.0
684	16	11.456	11.367	35.472	140.4
575	17	13.929	13.845	35.840	154.0
465	18	16.469	16.392	36.268	174.0
355	19	18.345	18.283	36.570	183.3
245	20	20.141	20.095	36.721	179.5
155	21	22.674	22.642	36.753	192.5
95	22	23.751	23.731	36.648	207.1
45	23	24.316	24.306	36.673	205.6
4	24	24.457	24.456	36.690	205.5

Abaco February 2016 R/V Endeavor
CTD Station 13 (CTD013)
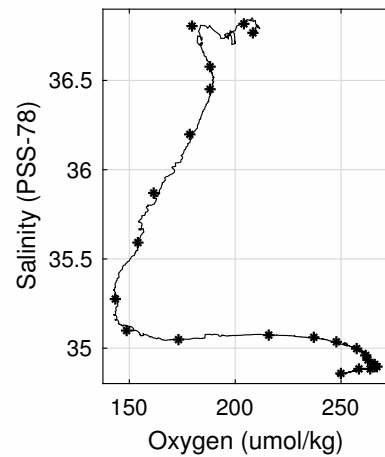**Latitude 26.507 N   Longitude 74.526 W**
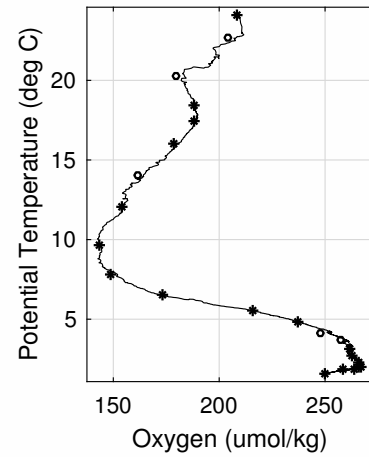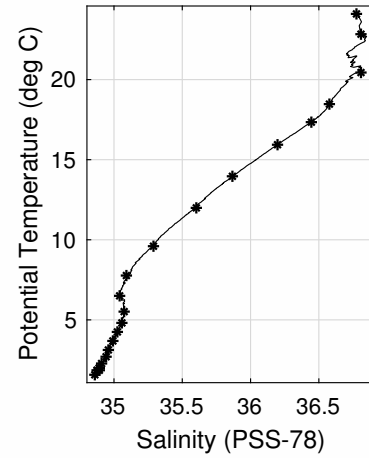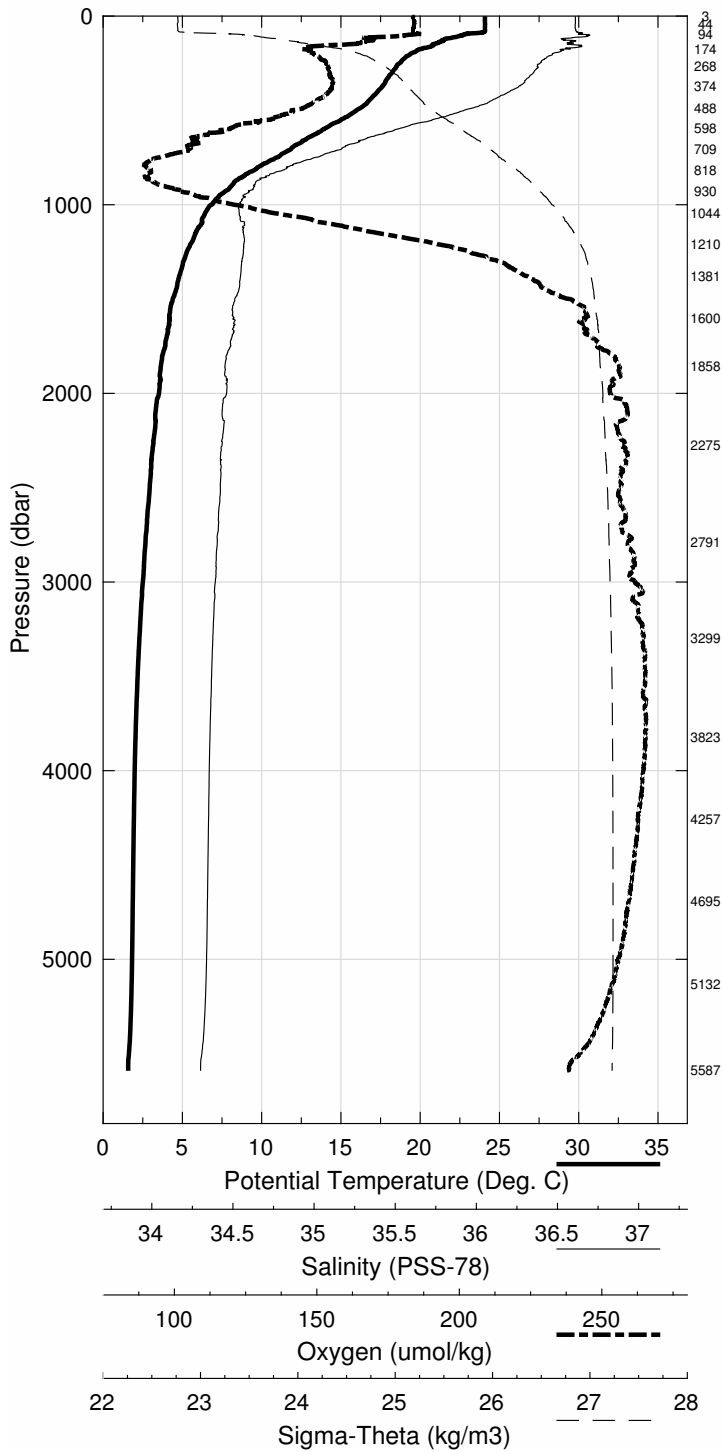**22-Feb-2016 04:02 Z**

Abaco February 2016 R/V Endeavor
CTD Station 14 (CTD014)
Latitude 26.512N Longitude 74.812W
22-Feb-2016 08:31Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.530	24.529	36.674	204.5	0.003	24.750
10	24.537	24.534	36.672	204.9	0.032	24.748
20	24.521	24.517	36.672	204.9	0.064	24.753
30	24.177	24.171	36.665	206.6	0.095	24.852
50	24.005	23.994	36.677	207.0	0.157	24.913
75	23.875	23.860	36.669	207.2	0.233	24.947
100	23.670	23.649	36.654	207.1	0.308	24.998
125	23.481	23.455	36.645	206.4	0.383	25.049
150	23.259	23.228	36.650	206.3	0.456	25.119
200	21.266	21.227	36.738	189.0	0.586	25.755
250	19.934	19.888	36.708	179.2	0.694	26.095
300	18.916	18.862	36.626	181.8	0.790	26.300
400	17.547	17.478	36.458	183.0	0.963	26.518
500	15.770	15.690	36.147	168.3	1.121	26.702
600	13.636	13.549	35.795	152.9	1.262	26.897
700	10.969	10.880	35.412	142.0	1.386	27.119
800	9.223	9.132	35.219	144.7	1.490	27.269
900	7.519	7.427	35.104	164.6	1.579	27.440
1000	6.149	6.057	35.077	201.2	1.650	27.606
1100	5.220	5.125	35.051	231.7	1.707	27.701
1200	4.717	4.617	35.025	244.9	1.758	27.739
1300	4.445	4.338	35.012	251.6	1.806	27.759
1400	4.225	4.111	34.997	255.0	1.854	27.772
1500	4.055	3.934	34.989	257.7	1.900	27.784
1750	3.697	3.558	34.970	261.3	2.013	27.808
2000	3.384	3.225	34.958	262.9	2.123	27.830
2500	2.915	2.717	34.937	264.2	2.336	27.861
3000	2.479	2.240	34.911	268.4	2.540	27.881
3500	2.282	1.995	34.896	267.4	2.742	27.889
4000	2.223	1.882	34.888	264.6	2.950	27.891
4500	2.190	1.792	34.878	259.6	3.169	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4619	1	2.110	1.701	34.867	254.8
4274	2	2.213	1.841	34.884	262.2
3948	3	2.230	1.895	34.889	264.9
3625	4	2.265	1.965	34.894	266.8
3299	5	2.356	2.089	34.903	267.9
2802	6	2.626	2.404	34.919	268.2
2403	7	2.989	2.799	34.941	263.3
2153	8	3.235	3.065	34.951	262.9
1924	9	3.456	3.303	34.961	265.0
1622	10	3.872	3.742	34.978	259.3
1400	11	4.267	4.153	34.998	256.7
1229	12	4.729	4.626	35.027	244.2
1050	13	5.477	5.384	35.057	215.6
947	14	6.633	6.542	35.080	187.8
838	15	8.439	8.347	35.152	148.9
727	16	10.588	10.498	35.371	142.8
620	17	12.925	12.838	35.697	146.9
508	18	15.399	15.319	36.093	166.1
397	19	17.291	17.224	36.415	181.4
288	20	18.929	18.877	36.638	181.0
197	21	20.910	20.872	36.745	−999.0
116	22	23.595	23.571	36.642	205.1
65	23	23.949	23.935	36.679	207.4
3	24	24.534	24.534	36.666	204.1

Abaco February 2016 R/V Endeavor
CTD Station 14 (CTD014)
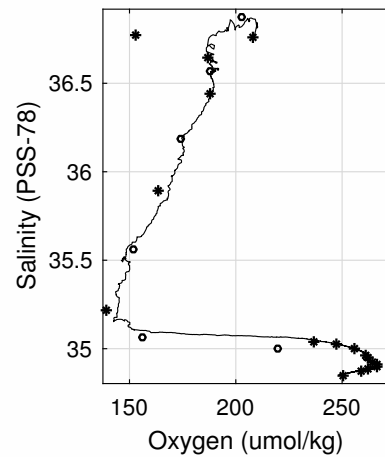**Latitude 26.512 N   Longitude 74.812 W**
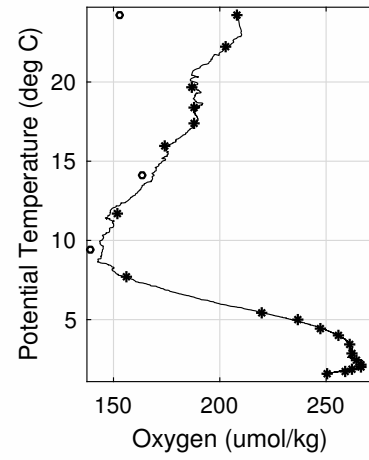**22-Feb-2016 08:31 Z**
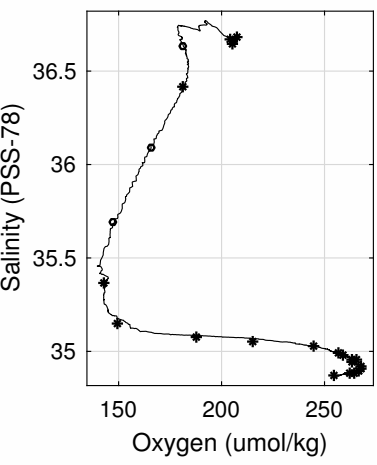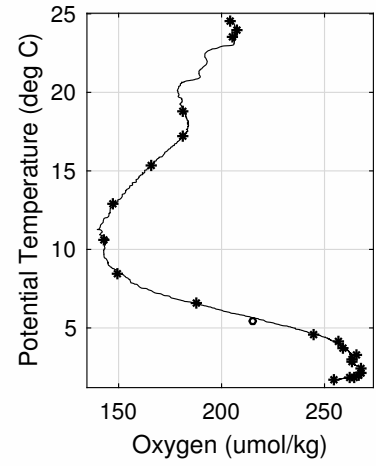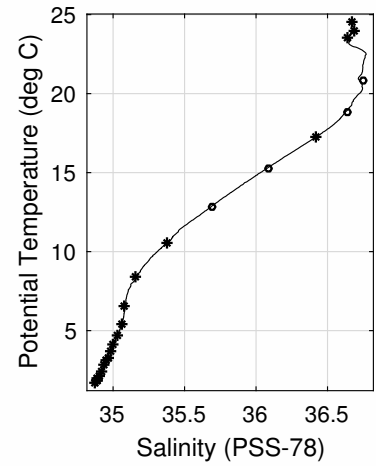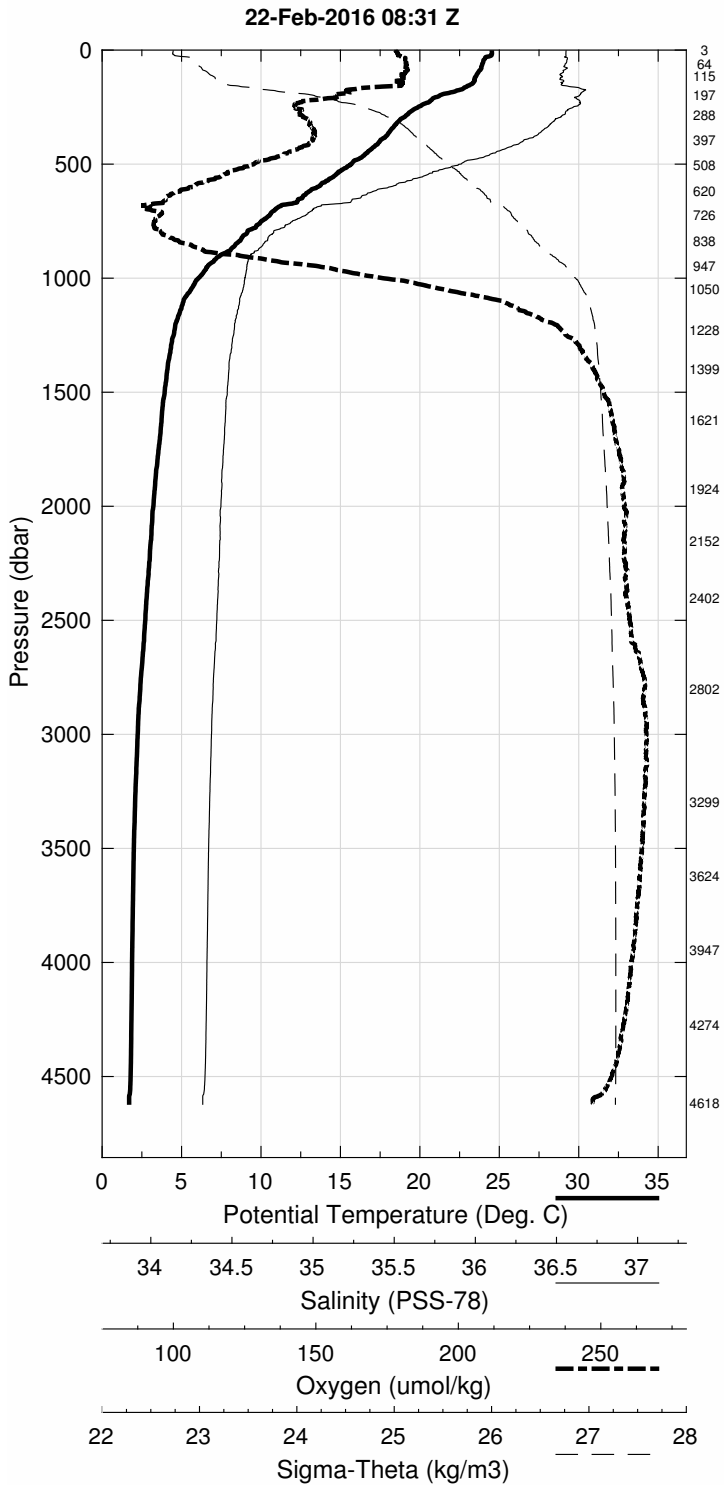
Abaco February 2016 R/V Endeavor
CTD Station 15 (CTD015)
Latitude 26.512N Longitude 75.084W
22-Feb-2016 13:09Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.619	23.618	36.667	207.8	0.003	25.017
10	23.619	23.617	36.666	208.3	0.029	25.017
20	23.622	23.618	36.665	208.7	0.059	25.016
30	23.620	23.614	36.665	208.4	0.088	25.017
50	23.499	23.488	36.651	207.9	0.147	25.043
75	23.410	23.395	36.643	207.1	0.220	25.065
100	23.416	23.395	36.656	208.5	0.293	25.075
125	23.148	23.122	36.661	208.6	0.365	25.158
150	22.207	22.177	36.774	191.0	0.432	25.516
200	20.373	20.335	36.737	181.0	0.545	25.998
250	19.212	19.167	36.659	179.8	0.644	26.247
300	18.398	18.345	36.578	184.4	0.733	26.395
400	17.478	17.410	36.448	184.2	0.902	26.527
500	15.877	15.797	36.167	170.1	1.061	26.692
600	13.515	13.428	35.775	154.7	1.202	26.906
700	10.899	10.811	35.396	140.0	1.323	27.118
800	8.732	8.643	35.157	144.3	1.425	27.298
900	7.328	7.237	35.100	169.8	1.509	27.464
1000	6.014	5.922	35.075	205.5	1.579	27.622
1100	5.325	5.229	35.055	228.6	1.636	27.692
1200	4.819	4.718	35.030	242.2	1.688	27.732
1300	4.475	4.368	35.011	250.3	1.737	27.756
1400	4.250	4.136	34.997	254.8	1.784	27.770
1500	4.089	3.967	34.990	256.7	1.831	27.782
1750	3.725	3.585	34.972	261.1	1.945	27.806
2000	3.452	3.293	34.962	262.2	2.056	27.827
2500	2.983	2.784	34.940	263.8	2.273	27.857
3000	2.522	2.282	34.913	268.5	2.481	27.879
3500	2.309	2.022	34.898	267.7	2.684	27.888
4000	2.253	1.912	34.890	265.7	2.894	27.891
4500	2.228	1.830	34.883	262.1	3.114	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4681	1	2.108	1.691	34.871	256.2
4380	2	2.236	1.851	34.885	262.0
4089	3	2.249	1.897	34.889	264.2
3799	4	2.264	1.945	34.892	265.7
3499	5	2.303	2.016	34.898	267.3
3001	6	2.522	2.282	34.913	268.0
2652	7	2.842	2.630	34.932	264.6
2251	8	3.209	3.030	34.951	262.0
1821	9	3.632	3.486	34.967	263.9
1545	10	4.023	3.898	34.987	256.7
1357	11	4.414	4.303	35.007	251.0
1186	12	4.951	4.850	35.037	240.9
1015	13	5.919	5.826	35.071	208.4
904	14	7.359	7.268	35.097	167.3
812	15	9.062	8.971	35.197	143.1
703	16	11.327	11.236	35.454	139.1
593	17	14.063	13.975	35.865	154.1
484	18	16.117	16.039	36.211	171.4
372	19	17.803	17.739	36.503	187.3
263	20	19.094	19.046	36.651	179.2
171	21	21.410	21.377	36.748	187.8
106	22	23.424	23.402	36.642	205.5
55	23	23.589	23.578	36.655	207.7
3	24	23.708	23.708	36.667	207.9

Abaco February 2016 R/V Endeavor
CTD Station 15 (CTD015)
Latitude 26.512 N   Longitude 75.084 W
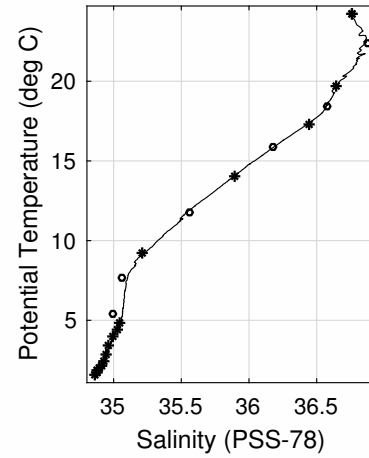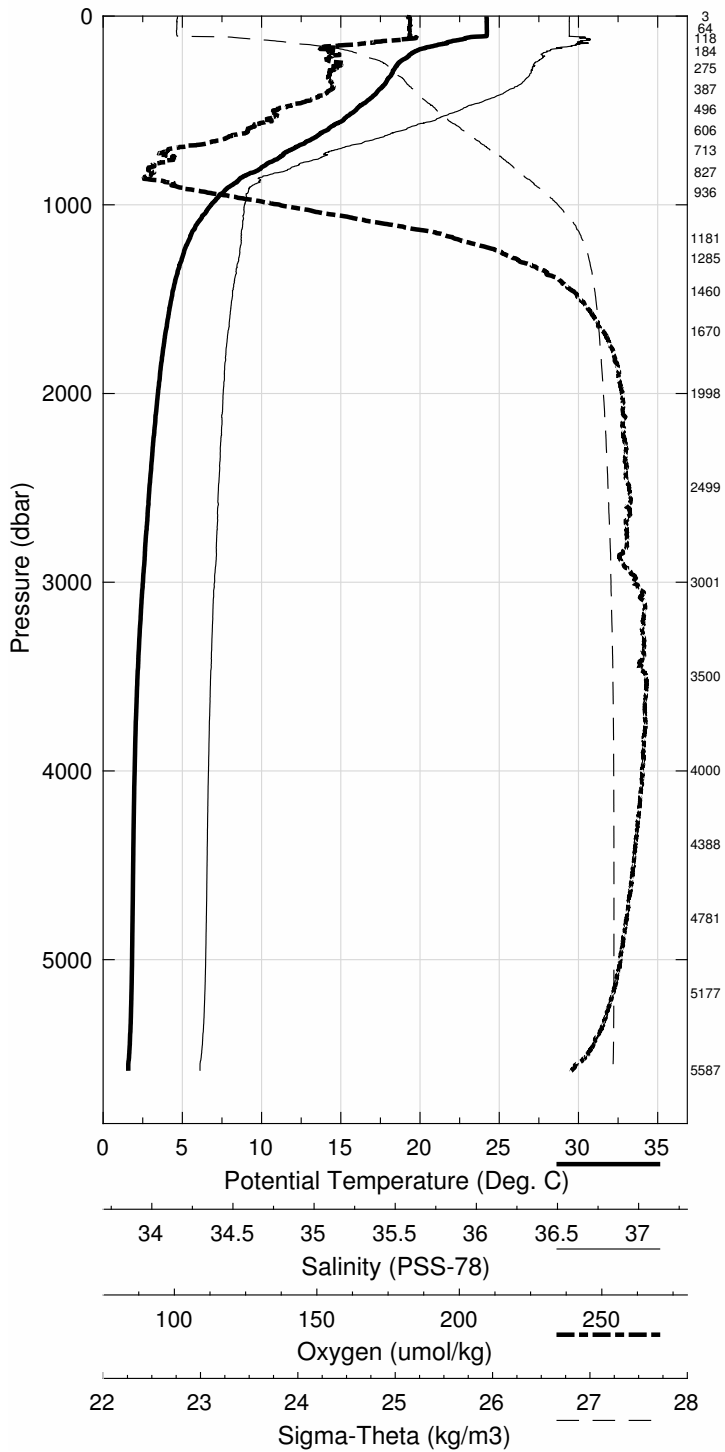**22-Feb-2016 13:09 Z**

110
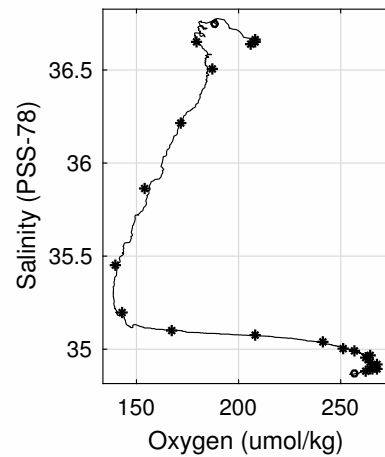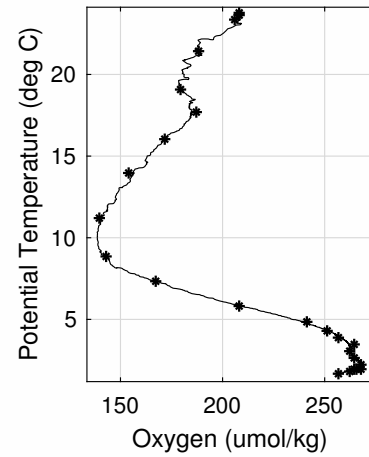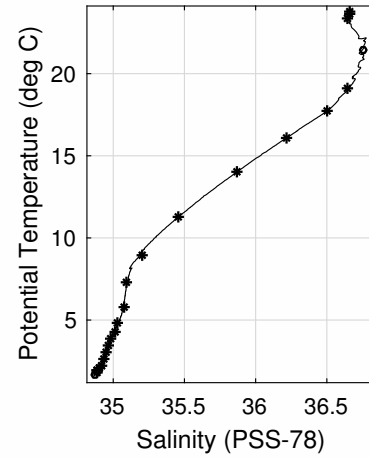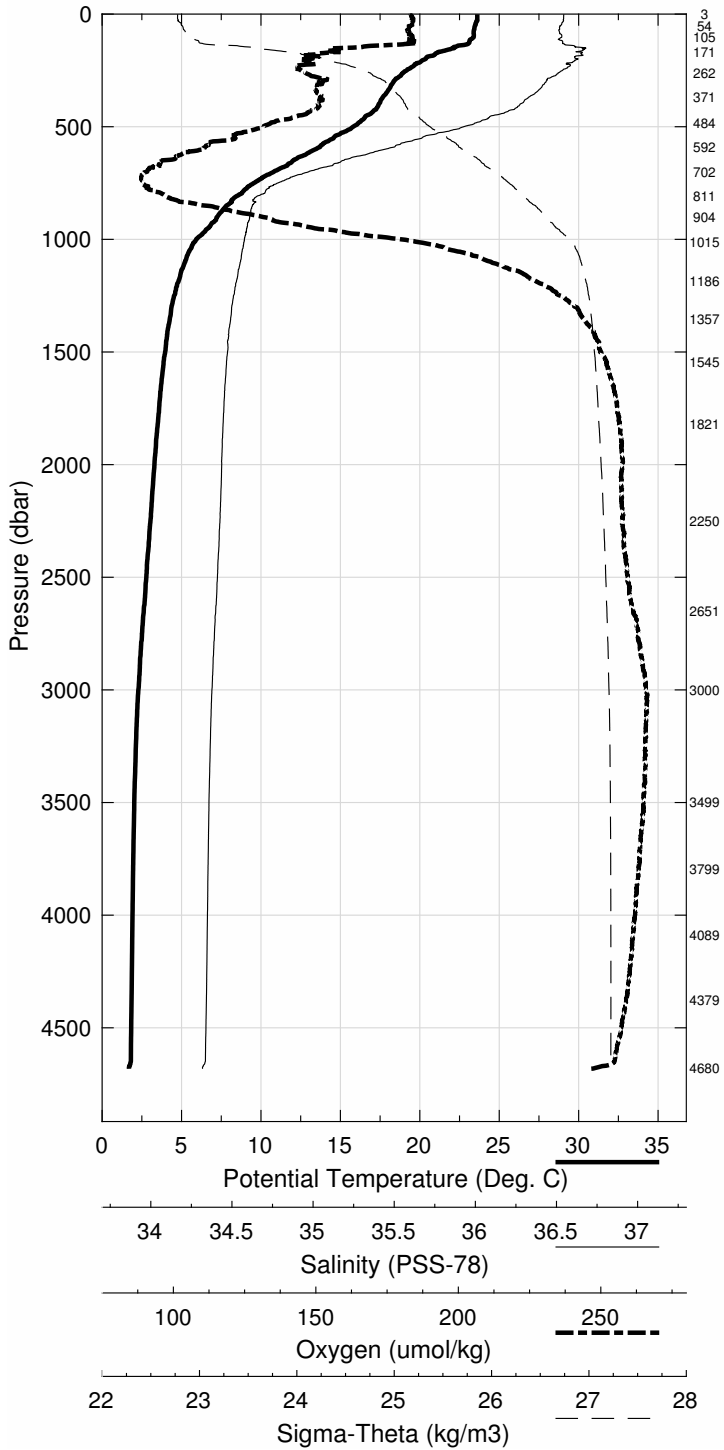
Abaco February 2016 R/V Endeavor
CTD Station 16 (CTD016)
Latitude 26.510N Longitude 75.291W
22-Feb-2016 18:01Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.863	23.863	36.677	207.0	0.003	24.952
10	23.837	23.834	36.674	207.0	0.030	24.959
20	23.763	23.759	36.674	207.1	0.060	24.981
30	23.756	23.750	36.674	207.4	0.089	24.984
50	23.754	23.743	36.674	207.3	0.149	24.986
75	23.754	23.738	36.674	207.4	0.224	24.987
100	23.749	23.728	36.675	206.4	0.299	24.991
125	22.399	22.374	36.803	188.7	0.368	25.482
150	21.347	21.318	36.800	180.8	0.428	25.777
200	20.108	20.071	36.727	178.8	0.536	26.061
250	19.148	19.102	36.654	179.8	0.632	26.260
300	18.536	18.483	36.589	182.9	0.722	26.369
400	17.575	17.506	36.464	183.4	0.893	26.516
500	16.252	16.171	36.232	171.6	1.053	26.656
600	13.898	13.810	35.836	154.1	1.199	26.874
700	11.593	11.502	35.489	140.4	1.325	27.064
800	9.341	9.249	35.213	140.2	1.433	27.245
900	7.550	7.458	35.100	161.8	1.524	27.433
1000	6.273	6.179	35.079	199.4	1.596	27.592
1100	5.435	5.338	35.058	224.9	1.655	27.681
1200	4.951	4.849	35.037	239.2	1.708	27.722
1300	4.592	4.484	35.018	248.1	1.758	27.748
1400	4.365	4.250	35.006	252.3	1.806	27.764
1500	4.169	4.046	34.993	256.0	1.854	27.776
1750	3.803	3.662	34.973	260.3	1.970	27.800
2000	3.484	3.324	34.959	262.9	2.084	27.822
2500	2.960	2.761	34.937	264.6	2.301	27.857
3000	2.584	2.343	34.915	268.1	2.511	27.876
3500	2.339	2.051	34.900	267.8	2.718	27.887
4000	2.251	1.909	34.890	265.2	2.928	27.891
4500	2.230	1.831	34.883	262.2	3.148	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4703	1	2.223	1.800	34.879	261.6
4360	2	2.236	1.854	34.884	262.0
4024	3	2.247	1.903	34.887	264.4
3690	4	2.299	1.991	34.896	267.0
3350	5	2.394	2.120	34.903	270.0
2851	6	2.666	2.438	34.920	266.7
2500	7	2.964	2.765	34.937	264.2
2101	8	3.394	3.226	34.957	261.8
1849	9	3.680	3.531	34.965	260.9
1601	10	4.033	3.903	34.985	258.6
1390	11	4.378	4.263	35.005	251.2
1221	12	4.845	4.742	35.032	240.8
1049	13	5.834	5.738	35.068	211.8
942	14	7.007	6.914	35.089	177.0
832	15	8.845	8.752	35.170	148.8
721	16	11.106	11.014	35.420	138.2
611	17	13.672	13.583	35.803	152.7
501	18	16.060	15.979	36.201	169.6
392	19	17.641	17.574	36.472	182.2
281	20	18.717	18.667	36.613	181.7
191	21	20.341	20.305	36.744	178.8
121	22	22.720	22.695	36.830	179.4
70	23	23.750	23.735	36.670	207.5
5	24	23.899	23.898	36.675	207.6

Abaco February 2016 R/V Endeavor
CTD Station 16 (CTD016)
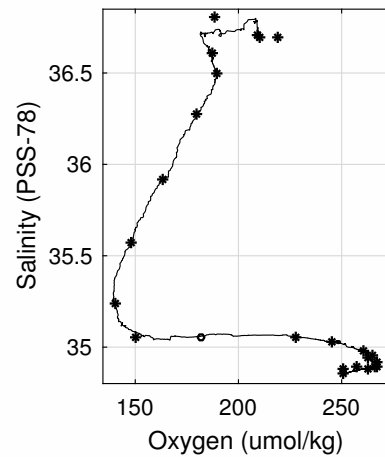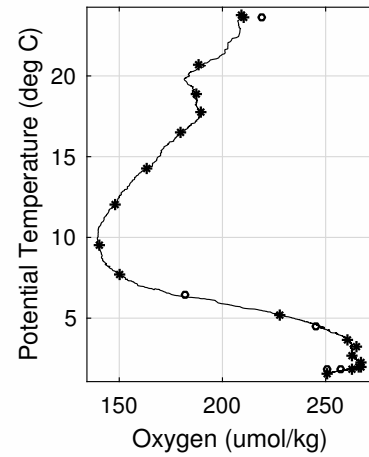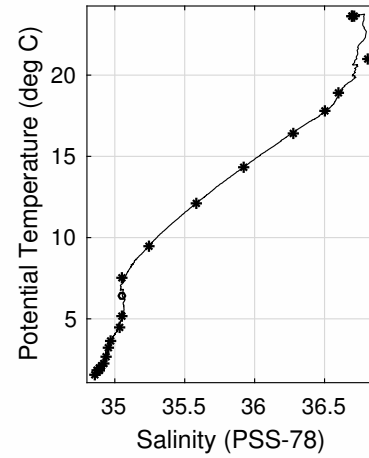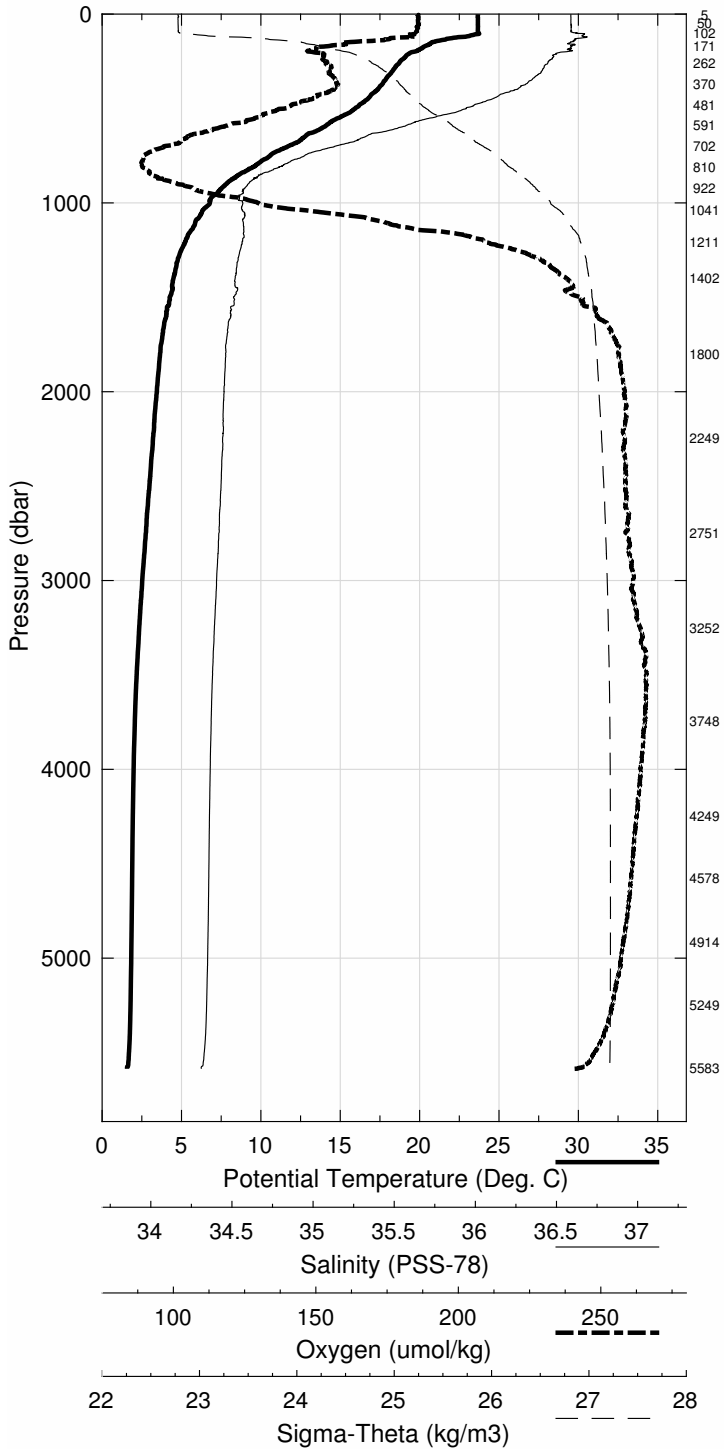## Latitude 26.510 N   Longitude 75.291 W
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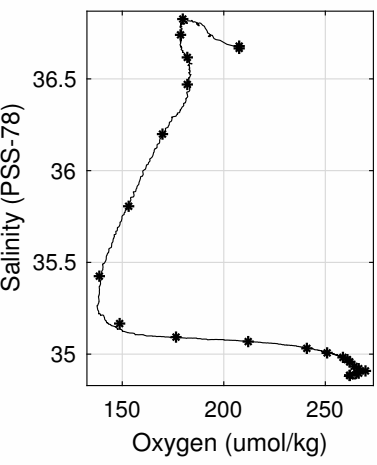
Abaco February 2016 R/V Endeavor
CTD Station 17 (CTD017)
Latitude 26.513N Longitude 75.491W
22-Feb-2016 22:41Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.845	23.845	36.688	208.3	0.003	24.966
10	23.844	23.841	36.686	208.6	0.030	24.966
20	23.682	23.678	36.681	208.5	0.060	25.010
30	23.618	23.612	36.681	209.2	0.089	25.030
50	23.527	23.517	36.675	209.6	0.147	25.054
75	23.181	23.165	36.663	209.4	0.220	25.147
100	23.145	23.124	36.670	207.9	0.291	25.164
125	22.363	22.338	36.801	186.9	0.359	25.491
150	21.490	21.461	36.829	179.6	0.419	25.760
200	20.027	19.990	36.720	179.2	0.526	26.077
250	18.895	18.850	36.611	185.9	0.621	26.292
300	18.434	18.381	36.577	185.7	0.710	26.385
400	17.492	17.423	36.450	184.5	0.880	26.525
500	16.045	15.964	36.195	171.0	1.040	26.676
600	13.840	13.752	35.826	154.3	1.183	26.878
700	11.514	11.423	35.479	141.2	1.309	27.071
800	9.402	9.310	35.217	139.5	1.418	27.238
900	7.689	7.596	35.108	161.1	1.508	27.419
1000	6.451	6.356	35.081	192.1	1.582	27.570
1100	5.740	5.640	35.071	214.4	1.644	27.655
1200	5.089	4.985	35.047	234.8	1.700	27.714
1300	4.700	4.591	35.027	245.3	1.751	27.743
1400	4.358	4.243	35.004	252.8	1.799	27.763
1500	4.197	4.074	34.997	255.3	1.847	27.776
1750	3.826	3.685	34.977	260.3	1.964	27.800
2000	3.519	3.359	34.962	262.4	2.077	27.821
2500	2.989	2.789	34.938	264.9	2.297	27.855
3000	2.610	2.368	34.917	268.0	2.508	27.875
3500	2.353	2.064	34.900	268.2	2.715	27.887
4000	2.261	1.919	34.891	265.8	2.926	27.890
4500	2.237	1.838	34.883	262.5	3.147	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4754	1	2.227	1.798	34.879	258.3
4451	2	2.240	1.847	34.883	261.6
4150	3	2.253	1.895	34.888	264.0
3851	4	2.268	1.943	34.891	265.7
3551	5	2.340	2.047	34.898	267.4
3101	6	2.527	2.277	34.912	267.8
2701	7	2.832	2.615	34.931	264.8
2352	8	3.147	2.959	34.946	262.9
2001	9	3.517	3.357	34.960	261.8
1701	10	3.892	3.755	34.980	258.3
1452	11	4.305	4.186	35.003	255.3
1204	12	5.071	4.967	35.045	234.2
1034	13	6.097	6.001	35.075	201.3
926	14	7.232	7.139	35.093	169.9
814	15	8.976	8.885	35.180	140.8
706	16	11.470	11.378	35.471	139.1
596	17	14.108	14.020	35.875	155.0
487	18	16.301	16.222	36.235	176.4
377	19	17.736	17.671	36.490	184.8
266	20	18.813	18.765	36.591	189.0
177	21	20.554	20.520	36.718	183.9
85	22	23.500	23.482	36.691	202.9
35	23	23.703	23.695	36.680	213.2
5	24	23.762	23.761	36.682	213.5

Abaco February 2016 R/V Endeavor
CTD Station 17 (CTD017)
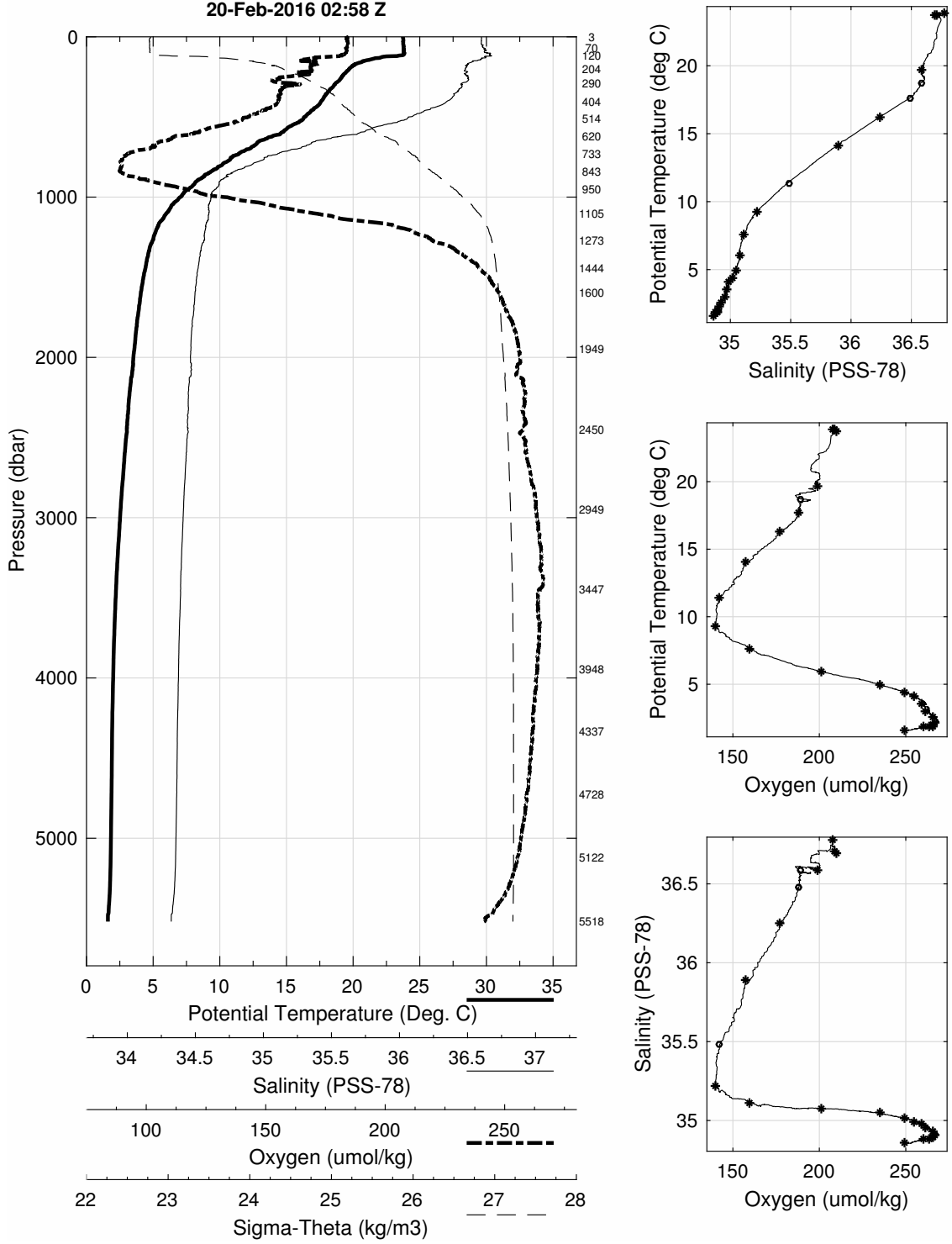## Latitude 26.513 N   Longitude 75.491 W
22-Feb-2016 22:41 Z
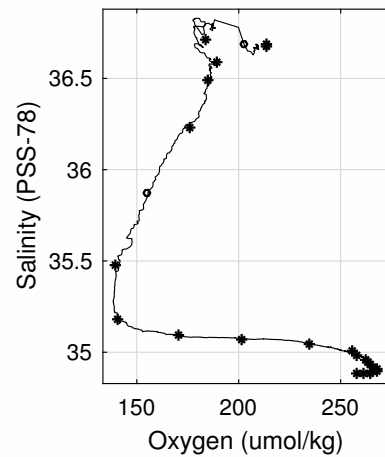
Abaco February 2016 R/V Endeavor
CTD Station 18 (CTD018)
Latitude 26.510N Longitude 75.689W
23-Feb-2016 03:26Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	22.768	22.768	36.611	211.0	0.003	25.223
10	22.772	22.770	36.610	211.5	0.027	25.221
20	22.760	22.756	36.610	211.9	0.055	25.226
30	22.731	22.724	36.621	211.7	0.082	25.243
50	22.623	22.613	36.615	211.6	0.137	25.271
75	22.235	22.220	36.582	213.7	0.203	25.358
100	22.060	22.040	36.627	208.1	0.269	25.443
125	21.714	21.689	36.611	208.4	0.332	25.530
150	21.583	21.554	36.688	199.5	0.393	25.626
200	19.928	19.891	36.668	184.5	0.503	26.064
250	19.013	18.968	36.575	197.5	0.600	26.234
300	18.497	18.444	36.569	190.2	0.691	26.363
400	17.680	17.612	36.473	188.8	0.863	26.497
500	16.284	16.202	36.227	179.8	1.026	26.645
600	14.321	14.231	35.906	158.6	1.173	26.838
700	11.658	11.566	35.496	142.0	1.301	27.057
800	9.338	9.246	35.204	139.9	1.410	27.238
900	7.910	7.815	35.126	158.2	1.502	27.401
1000	6.556	6.460	35.080	187.0	1.578	27.556
1100	5.700	5.601	35.072	217.1	1.641	27.660
1200	5.071	4.968	35.045	235.6	1.696	27.715
1300	4.718	4.609	35.028	245.0	1.747	27.742
1400	4.449	4.333	35.011	250.8	1.796	27.760
1500	4.244	4.121	34.999	254.8	1.845	27.772
1750	3.817	3.676	34.976	260.4	1.962	27.800
2000	3.508	3.348	34.963	262.2	2.075	27.823
2500	3.012	2.812	34.941	264.0	2.294	27.855
3000	2.567	2.325	34.914	268.9	2.504	27.876
3500	2.334	2.045	34.899	268.3	2.710	27.887
4000	2.269	1.927	34.891	266.2	2.921	27.890
4500	2.249	1.849	34.885	263.2	3.141	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4749	1	2.257	1.827	34.882	263.0
4419	2	2.244	1.854	34.885	262.9
4079	3	2.258	1.908	34.890	265.1
3739	4	2.286	1.973	34.894	266.9
3399	5	2.368	2.090	34.902	268.5
2881	6	2.661	2.430	34.919	267.9
2466	7	3.039	2.842	34.941	263.9
2050	8	3.473	3.308	34.961	262.0
1745	9	3.815	3.674	34.975	259.8
1536	10	4.178	4.052	34.994	254.9
1367	11	4.511	4.398	35.012	248.7
1197	12	5.093	4.989	35.049	235.9
1030	13	6.210	6.114	35.078	198.3
918	14	7.265	7.173	35.093	167.6
810	15	9.155	9.063	35.195	140.2
699	16	11.605	11.513	35.498	140.2
589	17	14.028	13.941	35.860	160.8
478	18	16.474	16.395	36.265	182.2
371	19	17.805	17.741	36.496	188.4
258	20	18.869	18.823	36.578	190.8
168	21	20.860	20.828	36.767	180.2
112	22	21.711	21.689	36.586	211.2
59	23	22.389	22.377	36.616	211.2
2	24	22.744	22.743	36.641	210.8

Abaco February 2016 R/V Endeavor
CTD Station 18 (CTD018)
Latitude 26.510 N   Longitude 75.689 W
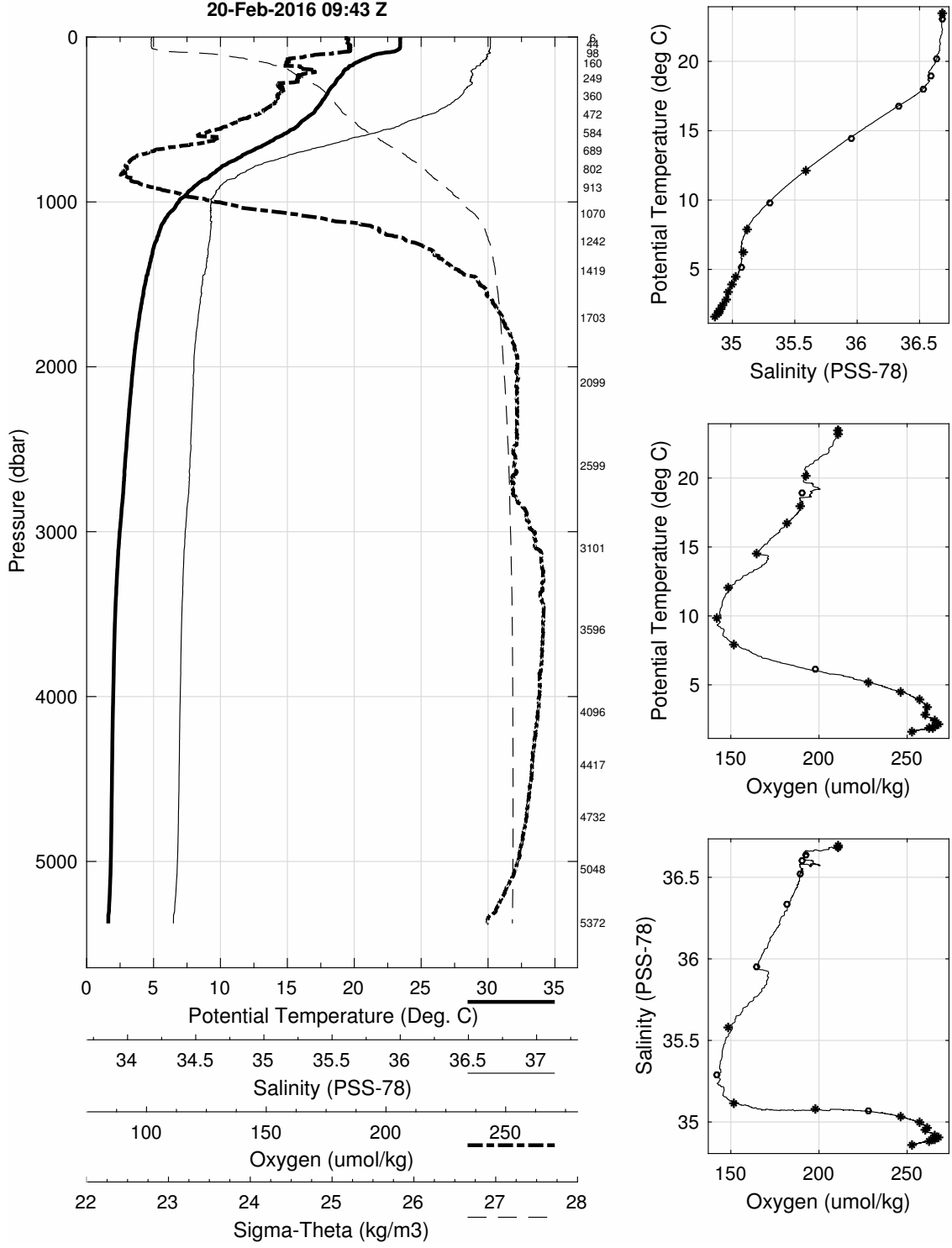**23-Feb-2016 03:26 Z**
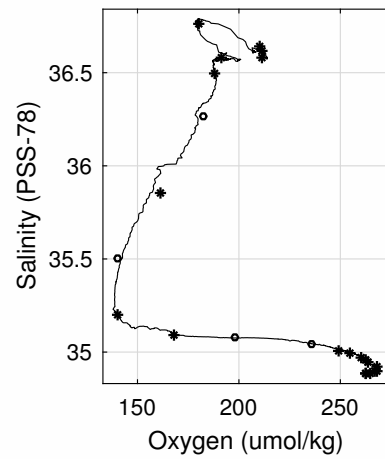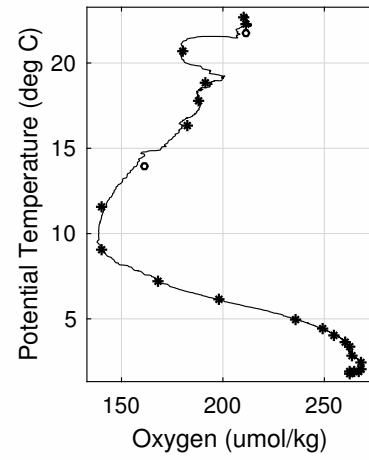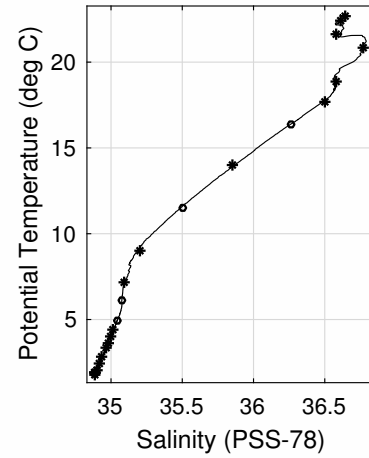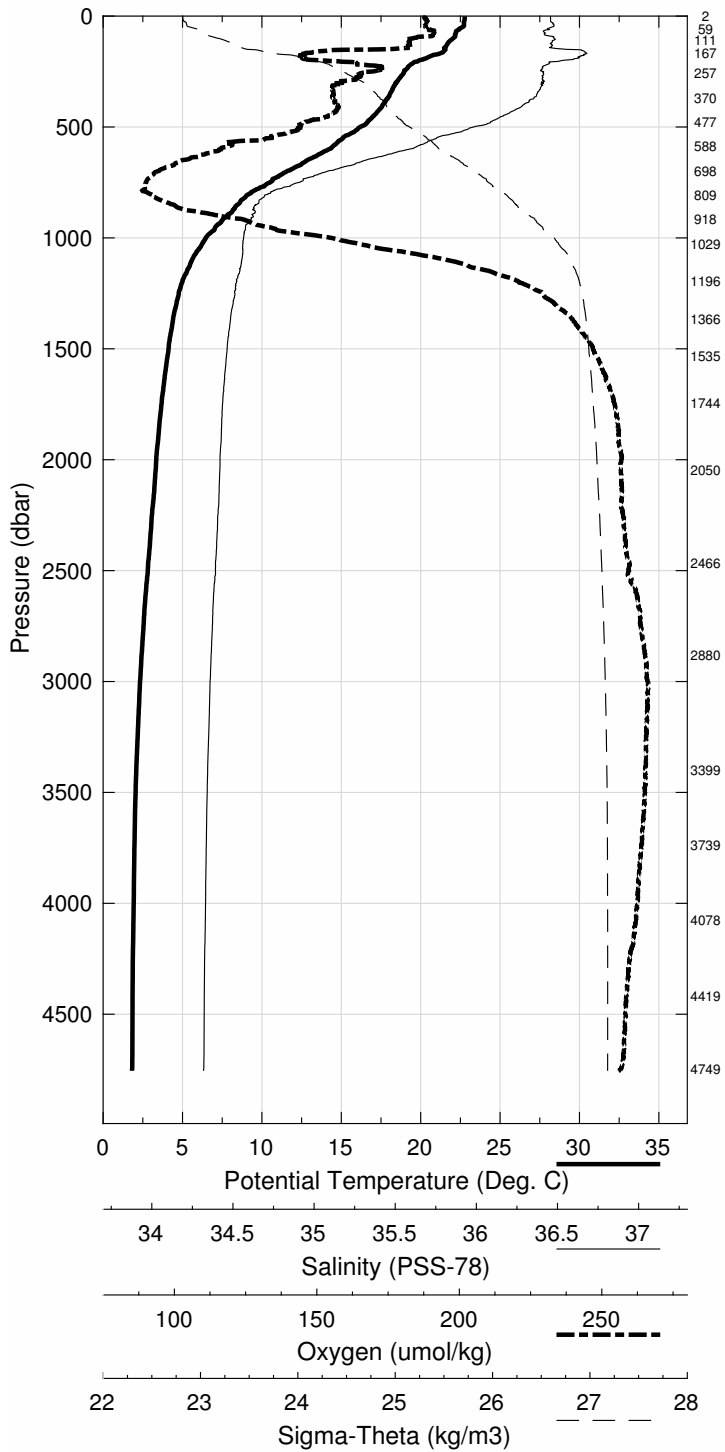
Abaco February 2016 R/V Endeavor
CTD Station 19 (CTD019)
Latitude 26.506N Longitude 75.891W
23-Feb-2016 08:10Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	22.832	22.832	36.601	211.2	0.003	25.197
10	22.835	22.833	36.600	211.3	0.028	25.196
20	22.832	22.828	36.599	210.7	0.055	25.197
30	22.833	22.827	36.598	211.0	0.083	25.197
50	22.788	22.778	36.596	210.7	0.139	25.209
75	22.774	22.758	36.599	210.1	0.208	25.217
100	22.728	22.707	36.603	209.1	0.277	25.235
125	22.025	22.000	36.690	197.9	0.343	25.502
150	21.450	21.420	36.680	194.7	0.405	25.657
200	19.987	19.949	36.665	186.2	0.514	26.046
250	19.122	19.077	36.606	185.8	0.612	26.230
300	18.411	18.358	36.553	190.5	0.703	26.372
400	17.471	17.403	36.446	187.9	0.873	26.527
500	16.268	16.187	36.234	172.5	1.033	26.654
600	14.075	13.987	35.866	155.1	1.179	26.859
700	11.964	11.870	35.541	142.2	1.308	27.034
800	9.891	9.796	35.295	144.5	1.420	27.218
900	7.912	7.817	35.118	156.2	1.513	27.394
1000	6.690	6.593	35.087	185.9	1.590	27.543
1100	5.745	5.645	35.072	214.9	1.654	27.655
1200	5.101	4.998	35.045	235.3	1.709	27.711
1300	4.705	4.596	35.025	245.5	1.760	27.742
1400	4.399	4.283	35.007	251.8	1.809	27.762
1500	4.196	4.073	34.996	255.5	1.857	27.776
1750	3.791	3.650	34.976	259.9	1.973	27.803
2000	3.415	3.256	34.951	264.5	2.086	27.822
2500	2.975	2.776	34.936	265.4	2.303	27.855
3000	2.546	2.305	34.913	269.0	2.513	27.877
3500	2.330	2.042	34.899	268.2	2.718	27.887
4000	2.275	1.933	34.891	266.4	2.929	27.890
4500	2.254	1.855	34.885	263.7	3.150	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4825	1	2.255	1.815	34.882	262.5
4533	2	2.255	1.851	34.884	262.3
4252	3	2.256	1.885	34.887	264.0
3983	4	2.277	1.937	34.891	266.2
3701	5	2.301	1.992	34.897	267.4
3201	6	2.423	2.164	34.906	259.9
2701	7	2.798	2.583	34.926	265.6
2251	8	3.178	2.999	34.945	263.9
1901	9	3.549	3.398	34.957	262.8
1650	10	3.929	3.796	34.981	259.7
1385	11	4.436	4.321	35.007	250.4
1214	12	5.003	4.899	35.040	236.9
1046	13	6.141	6.044	35.077	196.4
935	14	7.491	7.395	35.100	163.2
825	15	9.208	9.113	35.215	142.9
716	16	11.450	11.357	35.468	139.6
604	17	13.908	13.819	35.836	152.7
483	18	16.282	16.204	36.237	173.3
385	19	17.721	17.654	36.488	183.6
275	20	19.028	18.979	36.591	191.5
185	21	20.535	20.500	36.682	187.7
121	22	22.117	22.093	36.633	208.0
66	23	22.815	22.802	36.591	209.7
3	24	23.057	23.056	36.649	209.9

Abaco February 2016 R/V Endeavor
CTD Station 19 (CTD019)
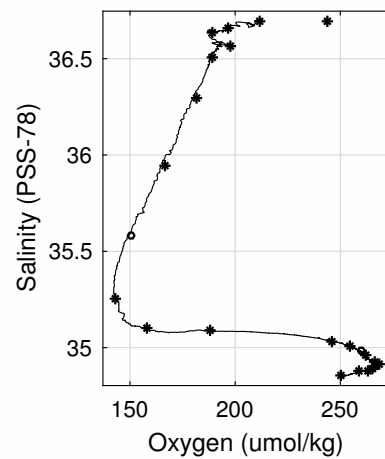**Latitude 26.506 N   Longitude 75.891 W**
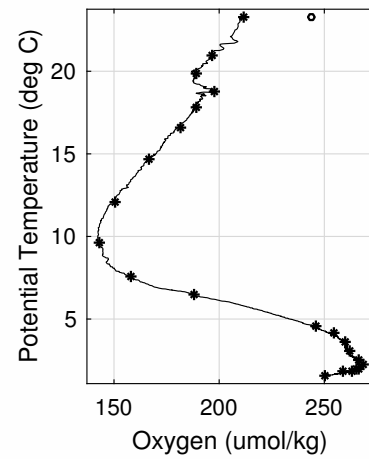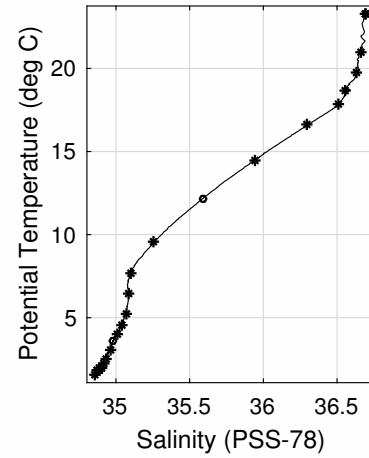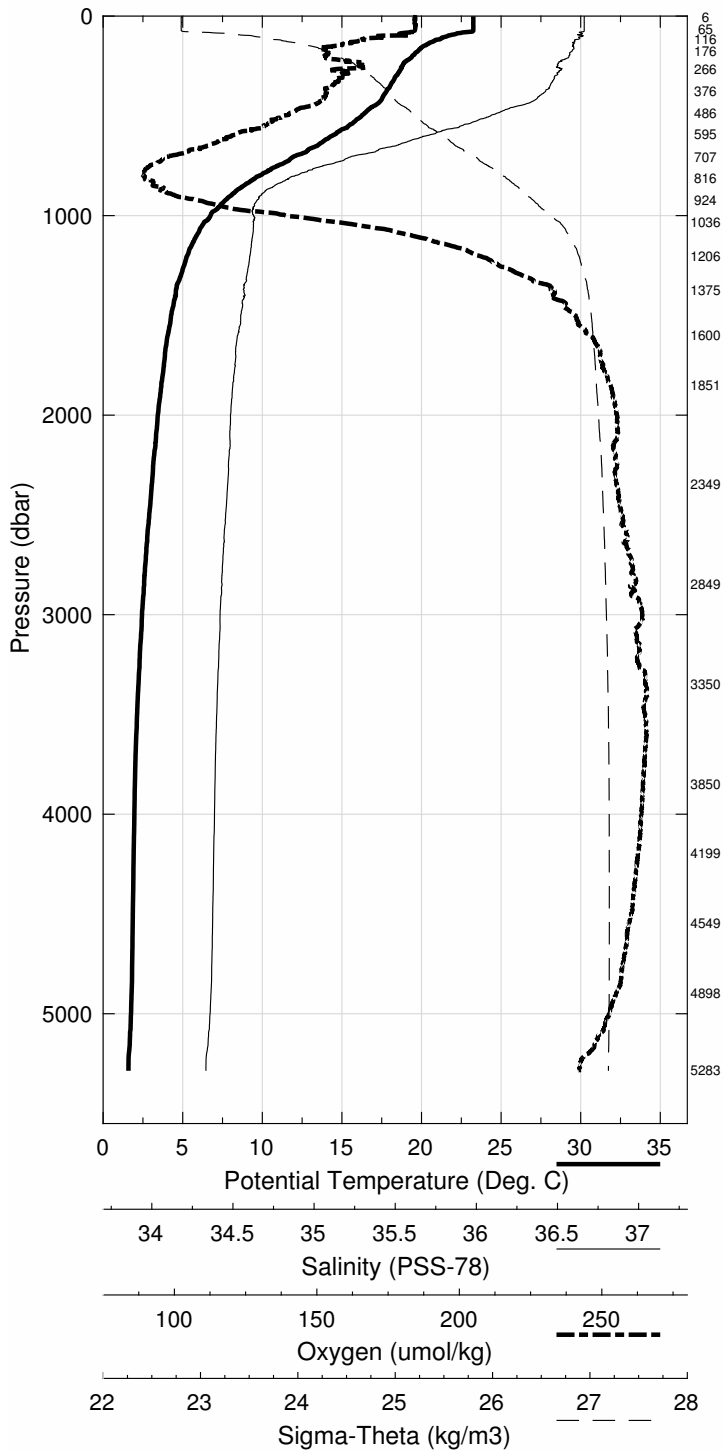**23-Feb-2016 08:10 Z**

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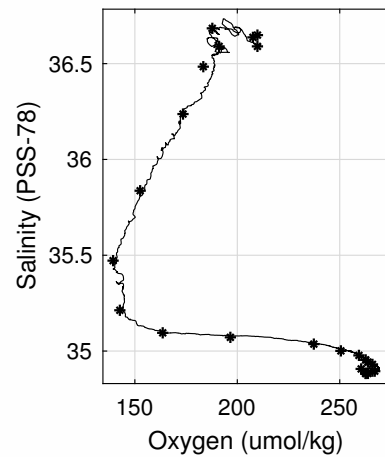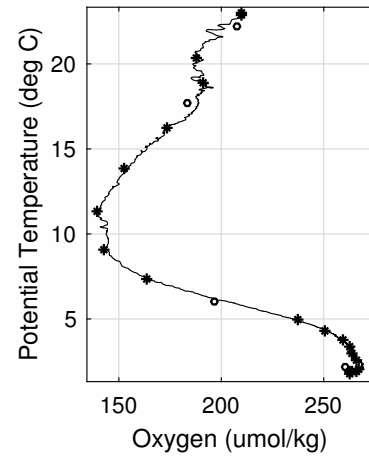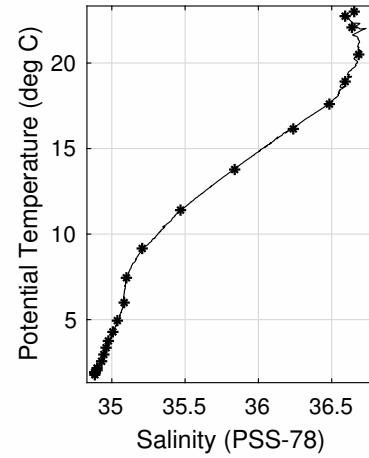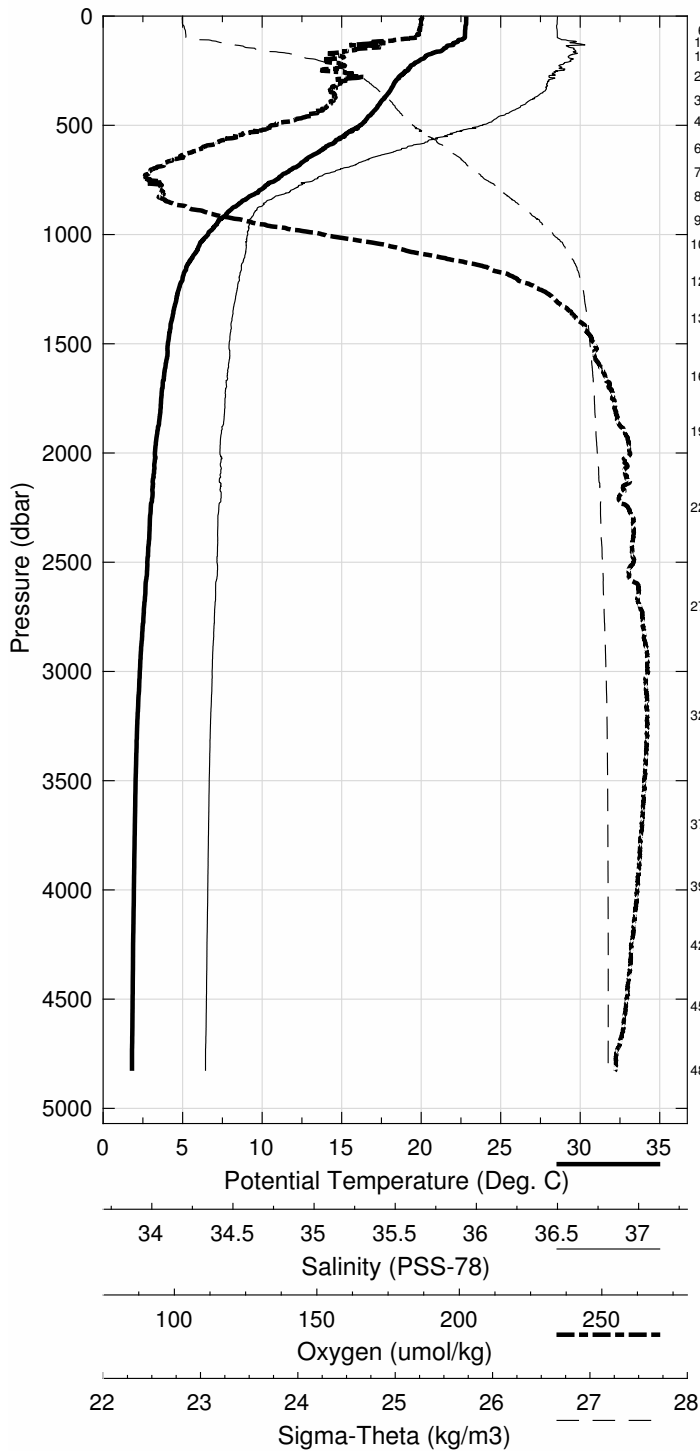
Abaco February 2016 R/V Endeavor
CTD Station 20 (CTD020)
Latitude 26.489N Longitude 76.090W
23-Feb-2016 13:06Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.521	23.520	36.661	208.2	0.003	25.042
10	23.522	23.520	36.660	208.1	0.029	25.041
20	23.524	23.520	36.660	208.7	0.058	25.041
30	23.527	23.521	36.660	208.4	0.087	25.041
50	23.526	23.516	36.659	208.6	0.146	25.041
75	23.384	23.369	36.649	205.9	0.219	25.077
100	22.945	22.925	36.608	207.3	0.291	25.176
125	22.802	22.776	36.588	208.8	0.361	25.204
150	22.005	21.975	36.602	209.7	0.429	25.443
200	20.578	20.540	36.725	183.2	0.548	25.933
250	19.204	19.158	36.602	189.8	0.648	26.205
300	18.537	18.484	36.556	193.6	0.740	26.343
400	17.468	17.399	36.442	187.5	0.911	26.525
500	15.872	15.792	36.166	169.5	1.069	26.693
600	13.959	13.871	35.847	154.7	1.213	26.869
700	12.218	12.123	35.577	143.2	1.342	27.014
800	9.947	9.851	35.278	139.5	1.456	27.195
900	8.137	8.041	35.119	150.8	1.552	27.361
1000	6.739	6.642	35.090	183.8	1.631	27.539
1100	5.587	5.489	35.065	220.1	1.693	27.668
1200	5.011	4.908	35.044	237.7	1.747	27.721
1300	4.558	4.450	35.013	249.9	1.797	27.748
1400	4.391	4.275	35.003	253.2	1.846	27.759
1500	4.166	4.044	34.990	256.6	1.894	27.774
1750	3.785	3.644	34.976	260.4	2.010	27.804
2000	3.461	3.302	34.962	261.9	2.121	27.826
2500	2.986	2.786	34.937	265.3	2.338	27.854
3000	2.637	2.394	34.919	267.3	2.550	27.874
3500	2.338	2.049	34.900	268.2	2.758	27.887
4000	2.275	1.933	34.891	266.0	2.969	27.890
4500	2.277	1.877	34.887	264.4	3.191	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4875	1	2.273	1.827	34.882	263.8
4599	2	2.284	1.871	34.886	262.7
4180	3	2.277	1.914	34.890	265.7
3839	4	2.284	1.960	34.893	266.1
3499	5	2.334	2.046	34.900	268.2
3001	6	2.629	2.386	34.918	267.0
2499	7	3.012	2.812	34.937	287.4
2099	8	3.309	3.143	34.947	263.4
1800	9	3.685	3.541	34.970	260.8
1600	10	4.009	3.879	34.987	257.4
1369	11	4.424	4.311	35.005	251.3
1200	12	5.003	4.900	35.043	237.2
1029	13	6.207	6.111	35.076	201.5
920	14	7.724	7.629	35.100	156.9
809	15	9.637	9.542	35.236	137.8
701	16	11.999	11.905	35.548	142.2
590	17	14.131	14.043	35.876	157.7
479	18	16.427	16.348	36.260	176.7
370	19	17.943	17.879	36.517	189.0
260	20	19.162	19.115	36.611	188.2
164	21	21.873	21.841	36.708	193.4
95	22	23.206	23.187	36.638	204.8
45	23	23.457	23.447	36.652	208.4
3	24	23.518	23.517	36.654	208.7

Abaco February 2016 R/V Endeavor
CTD Station 20 (CTD020)
**Latitude 26.489 N   Longitude 76.090 W**
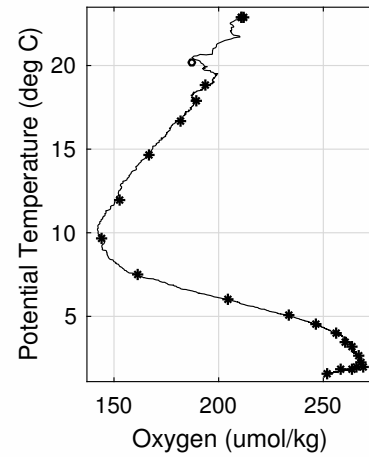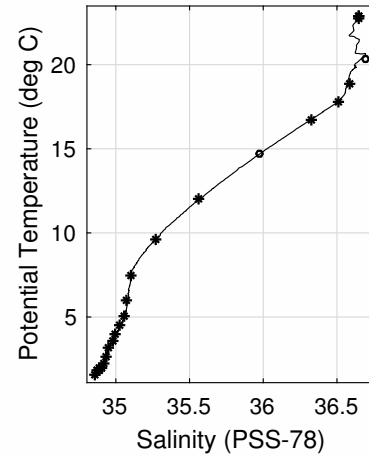**23-Feb-2016 13:06 Z**
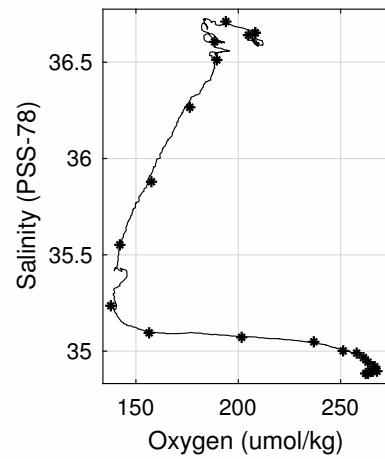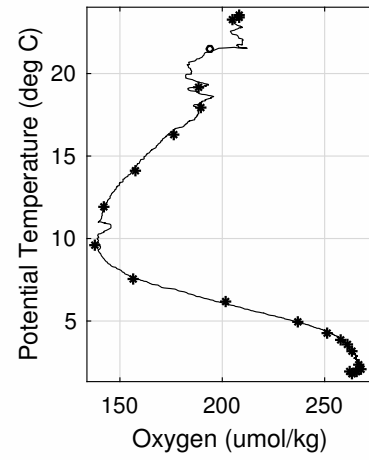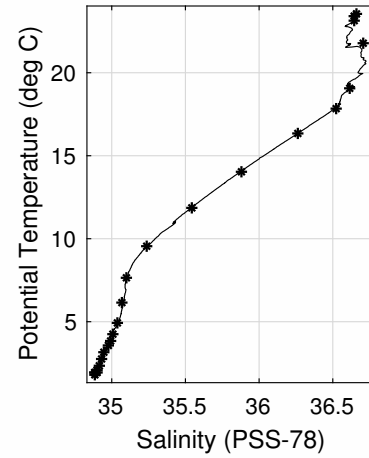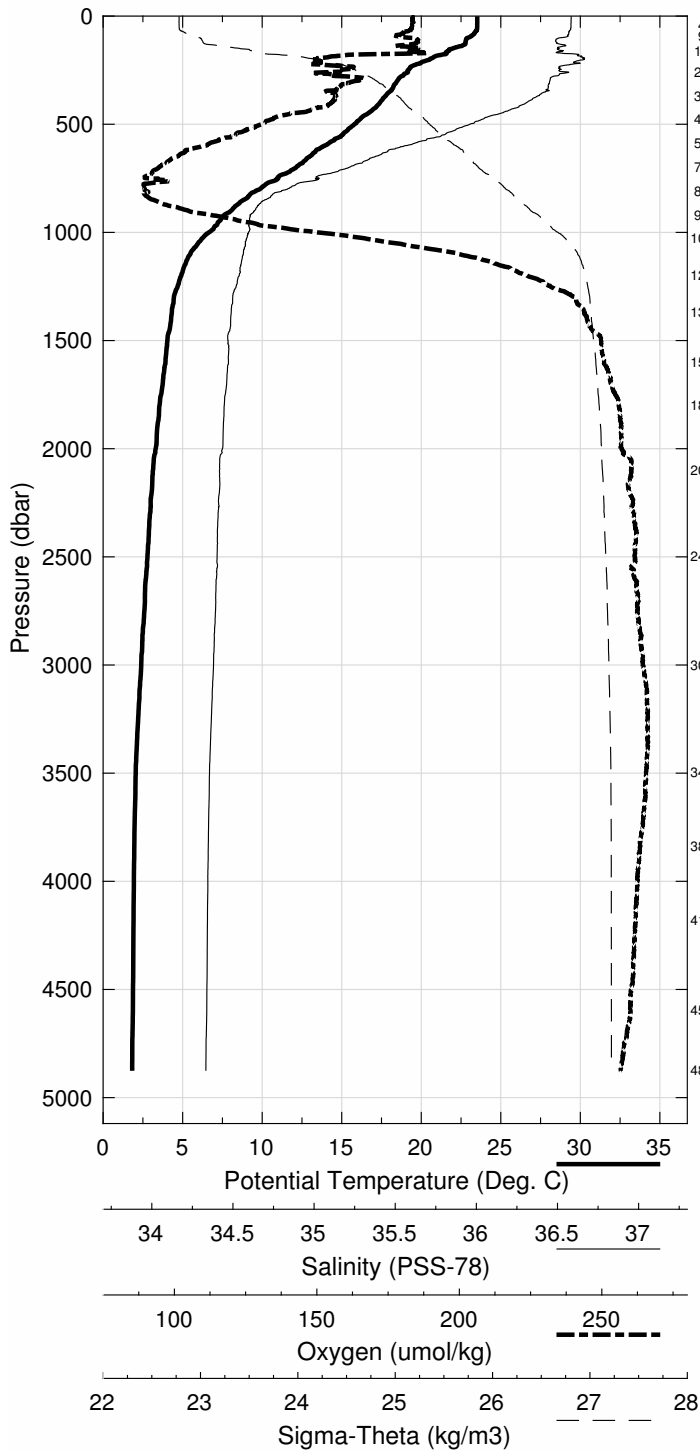
Abaco February 2016 R/V Endeavor
CTD Station 21 (CTD021)
Latitude 26.504N Longitude 76.201W
24-Feb-2016 00:57Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.517	23.517	36.653	208.6	0.003	25.037
10	23.518	23.516	36.652	209.1	0.029	25.036
20	23.501	23.496	36.652	209.2	0.058	25.042
30	23.494	23.488	36.652	209.2	0.088	25.045
50	23.454	23.443	36.651	209.1	0.146	25.057
75	23.378	23.363	36.642	208.2	0.219	25.074
100	22.883	22.862	36.606	209.3	0.290	25.193
125	22.771	22.745	36.625	209.5	0.360	25.240
150	22.085	22.055	36.604	208.7	0.429	25.421
200	20.306	20.268	36.670	187.1	0.546	25.964
250	19.283	19.237	36.635	184.5	0.646	26.210
300	18.572	18.518	36.558	193.1	0.738	26.335
400	17.706	17.637	36.488	183.9	0.910	26.502
500	16.383	16.301	36.256	173.5	1.072	26.644
600	14.197	14.108	35.885	156.7	1.219	26.849
700	11.754	11.662	35.512	141.7	1.349	27.052
800	9.824	9.729	35.258	138.1	1.460	27.200
900	8.086	7.990	35.135	157.3	1.556	27.382
1000	6.484	6.389	35.080	189.6	1.633	27.565
1100	5.293	5.197	35.047	228.1	1.693	27.689
1200	4.762	4.661	35.023	244.9	1.744	27.733
1300	4.488	4.380	35.008	250.7	1.793	27.751
1400	4.296	4.182	34.999	254.6	1.841	27.766
1500	4.151	4.029	34.995	256.2	1.888	27.779
1750	3.778	3.638	34.976	260.4	2.004	27.805
2000	3.488	3.328	34.965	261.7	2.115	27.826
2500	2.925	2.726	34.936	264.5	2.331	27.859
3000	2.624	2.381	34.916	268.4	2.541	27.873
3500	2.338	2.050	34.899	267.7	2.750	27.887
4000	2.326	1.983	34.894	266.7	2.962	27.888
4500	2.301	1.900	34.888	265.1	3.186	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4887	1	2.277	1.829	34.882	262.2
4501	2	2.301	1.900	34.889	264.8
4096	3	2.310	1.956	34.893	266.3
3727	4	2.320	2.008	34.895	267.1
3346	5	2.405	2.131	34.903	269.3
2849	6	2.747	2.517	34.924	266.5
2401	7	2.970	2.780	34.939	263.2
2103	8	3.339	3.172	34.956	261.8
1782	9	3.692	3.550	34.973	261.8
1613	10	3.942	3.812	35.000	257.8
1444	11	4.275	4.157	34.984	255.5
1274	12	4.643	4.537	35.019	245.9
1105	13	5.270	5.174	35.045	230.8
937	14	7.429	7.334	35.102	168.8
827	15	9.343	9.248	35.223	142.2
717	16	11.232	11.140	35.444	140.2
608	17	13.956	13.866	35.847	155.1
502	18	16.390	16.307	36.260	173.9
392	19	17.671	17.604	36.481	187.4
279	20	18.750	18.700	36.566	194.7
185	21	20.736	20.700	36.672	190.7
117	22	22.767	22.743	36.628	209.2
65	23	23.366	23.353	36.667	209.9
5	24	23.567	23.566	36.660	208.3

Abaco February 2016 R/V Endeavor
CTD Station 21 (CTD021)
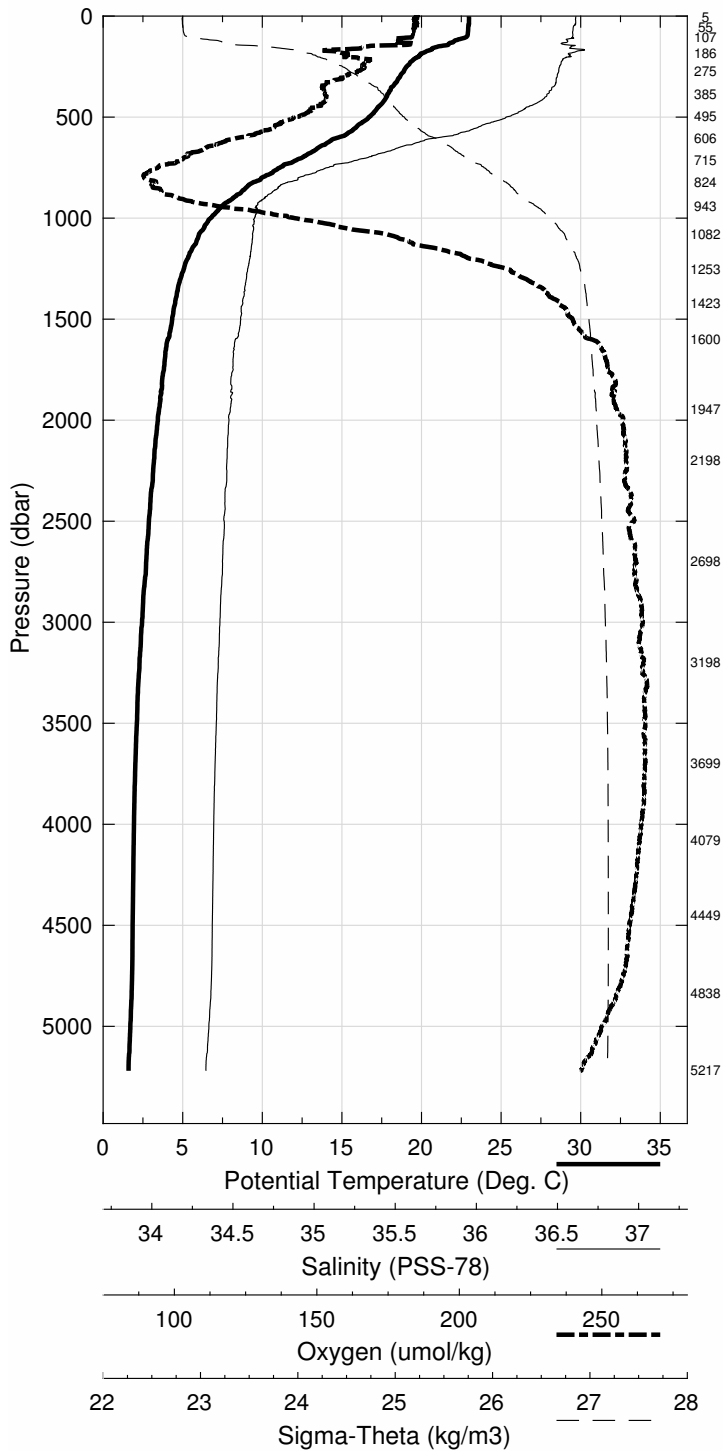**Latitude 26.504 N   Longitude 76.201 W**
24-Feb-2016 00:57 Z
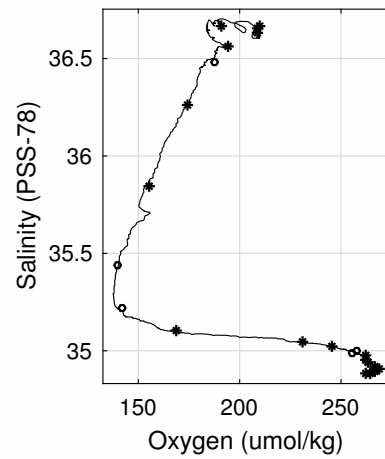
Abaco February 2016 R/V Endeavor
CTD Station 22 (CTD022)
Latitude 26.498N Longitude 76.331W
24-Feb-2016 05:48Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.538	23.538	36.664	209.1	0.003	25.039
10	23.544	23.542	36.663	208.5	0.029	25.037
20	23.536	23.532	36.662	209.3	0.058	25.039
30	23.508	23.502	36.658	209.0	0.088	25.045
50	23.511	23.501	36.658	208.9	0.146	25.045
75	23.455	23.439	36.655	209.1	0.219	25.061
100	23.274	23.254	36.635	205.8	0.292	25.100
125	22.917	22.892	36.626	207.4	0.363	25.199
150	22.402	22.372	36.722	192.0	0.432	25.421
200	20.124	20.087	36.661	187.7	0.547	26.006
250	19.184	19.139	36.625	185.4	0.645	26.228
300	18.618	18.564	36.591	185.9	0.736	26.349
400	17.830	17.761	36.503	187.1	0.908	26.484
500	16.333	16.252	36.241	177.0	1.071	26.644
600	14.259	14.170	35.891	164.5	1.219	26.840
700	11.631	11.539	35.493	141.4	1.346	27.060
800	9.717	9.623	35.254	140.7	1.456	27.215
900	8.140	8.044	35.125	152.2	1.551	27.365
1000	6.350	6.256	35.072	195.8	1.630	27.576
1100	4.954	4.861	35.037	238.6	1.685	27.720
1200	4.640	4.540	35.020	246.7	1.734	27.744
1300	4.363	4.257	35.004	253.1	1.782	27.762
1400	4.186	4.072	34.993	256.0	1.829	27.773
1500	4.103	3.982	34.993	256.6	1.875	27.783
1750	3.762	3.621	34.976	260.3	1.990	27.806
2000	3.469	3.310	34.963	261.5	2.101	27.827
2500	2.956	2.757	34.936	264.2	2.318	27.856
3000	2.613	2.371	34.915	268.4	2.529	27.873
3500	2.374	2.085	34.901	268.1	2.738	27.885
4000	2.309	1.966	34.893	266.3	2.951	27.889
4500	2.315	1.913	34.890	265.5	3.175	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4910	1	2.296	1.845	34.883	262.2
4579	2	2.310	1.899	34.888	264.4
4238	3	2.305	1.934	34.890	265.3
3898	4	2.313	1.981	34.893	266.2
3563	5	2.362	2.066	34.899	267.4
3144	6	2.545	2.290	34.910	268.8
2736	7	2.838	2.618	34.928	265.7
2321	8	3.098	2.913	34.942	263.8
1958	9	3.487	3.331	34.963	261.4
1703	10	3.797	3.660	34.976	259.0
1504	11	4.077	3.955	34.993	255.6
1353	12	4.260	4.150	34.996	253.6
1178	13	4.794	4.695	35.027	243.1
988	14	6.505	6.410	35.515	191.2
807	15	9.802	9.706	35.271	139.0
697	16	11.754	11.662	35.514	139.8
587	17	14.268	14.180	35.896	166.1
479	18	16.839	16.759	36.339	176.4
367	19	18.023	17.959	36.527	186.8
259	20	19.230	19.183	36.632	184.1
166	21	21.472	21.439	36.712	189.8
107	22	22.886	22.864	36.603	209.2
56	23	23.496	23.485	36.651	207.7
3	24	23.508	23.507	36.650	208.1

Abaco February 2016 R/V Endeavor
CTD Station 22 (CTD022)
**Latitude 26.498 N   Longitude 76.331 W**
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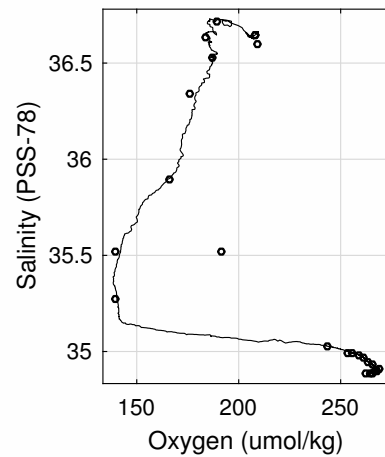
Abaco February 2016 R/V Endeavor
CTD Station 23 (CTD023)
Latitude 26.503N Longitude 76.475W
24-Feb-2016 10:46Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.562	23.561	36.665	208.1	0.003	25.032
10	23.568	23.566	36.663	208.3	0.029	25.030
20	23.572	23.568	36.663	209.0	0.058	25.029
30	23.572	23.566	36.663	208.8	0.088	25.030
50	23.577	23.566	36.663	208.9	0.147	25.030
75	23.467	23.451	36.648	208.2	0.220	25.052
100	23.360	23.339	36.642	207.4	0.293	25.081
125	22.983	22.958	36.612	204.8	0.365	25.169
150	22.145	22.115	36.701	195.3	0.433	25.478
200	20.142	20.104	36.661	188.0	0.546	26.001
250	19.264	19.218	36.623	186.5	0.644	26.205
300	18.579	18.525	36.587	185.6	0.736	26.356
400	17.567	17.498	36.459	187.8	0.907	26.514
500	16.160	16.079	36.206	178.3	1.068	26.657
600	14.425	14.334	35.916	161.2	1.216	26.824
700	11.986	11.892	35.545	142.1	1.346	27.034
800	9.795	9.700	35.264	139.0	1.458	27.209
900	7.848	7.753	35.110	156.3	1.553	27.397
1000	6.182	6.089	35.076	199.6	1.627	27.602
1100	5.081	4.987	35.045	235.2	1.683	27.712
1200	4.625	4.526	35.019	246.7	1.733	27.744
1300	4.293	4.187	34.998	254.0	1.780	27.765
1400	4.179	4.066	34.991	256.0	1.826	27.772
1500	4.029	3.908	34.985	258.0	1.872	27.784
1750	3.656	3.517	34.964	261.9	1.986	27.807
2000	3.441	3.281	34.952	263.9	2.097	27.821
2500	3.068	2.867	34.936	265.7	2.319	27.846
3000	2.651	2.408	34.917	268.2	2.535	27.872
3500	2.360	2.071	34.900	268.2	2.744	27.886
4000	2.309	1.966	34.893	266.4	2.955	27.889
4500	2.302	1.901	34.889	265.0	3.179	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4919	1	2.309	1.857	34.879	264.1
4529	2	2.298	1.893	34.886	263.9
4160	3	2.304	1.943	34.890	265.0
3769	4	2.294	1.978	34.892	266.2
3405	5	2.387	2.108	34.900	269.6
2994	6	2.656	2.413	34.916	269.9
2580	7	3.009	2.801	34.934	265.7
2164	8	3.334	3.161	34.947	263.3
1854	9	3.544	3.397	34.955	262.5
1595	10	3.852	3.725	34.972	259.3
1402	11	4.158	4.045	34.981	254.8
1229	12	4.444	4.344	35.005	251.1
1061	13	5.326	5.233	35.050	226.9
951	14	6.966	6.872	35.090	186.5
840	15	9.013	8.918	35.186	142.4
731	16	11.219	11.125	35.439	142.6
620	17	13.454	13.365	35.770	154.0
506	18	16.058	15.977	36.190	174.8
400	19	17.637	17.568	36.471	186.9
290	20	18.734	18.682	36.594	185.7
200	21	20.113	20.075	36.658	189.6
119	22	23.066	23.042	36.640	206.0
70	23	23.571	23.556	36.657	208.2
3	24	23.577	23.577	36.658	208.8

Abaco February 2016 R/V Endeavor
CTD Station 23 (CTD023)
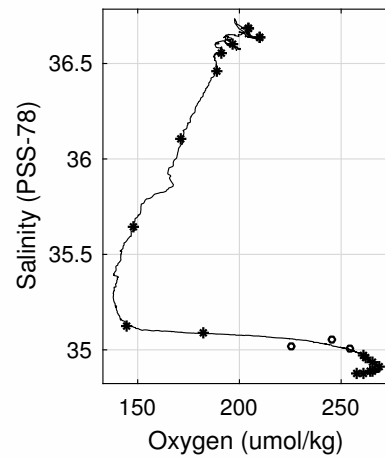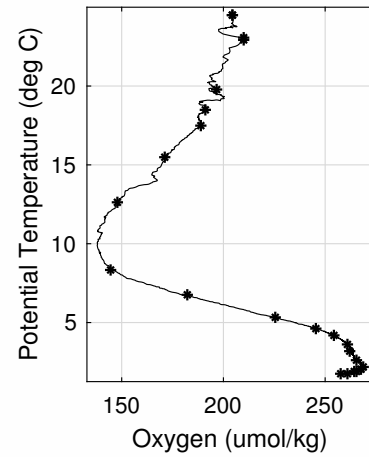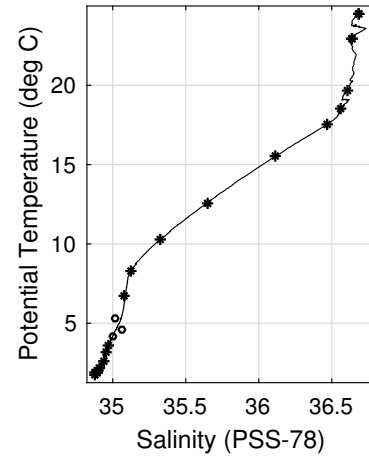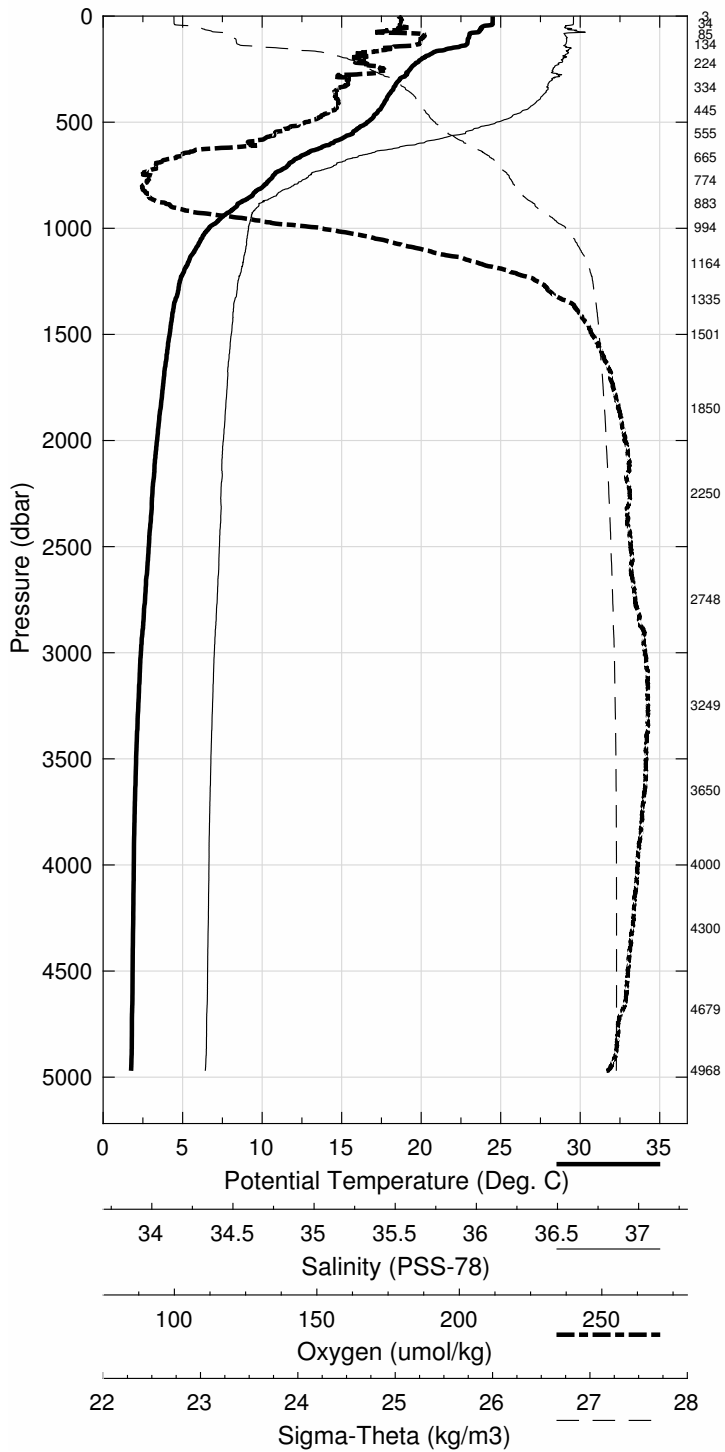**Latitude 26.503 N   Longitude 76.475 W**
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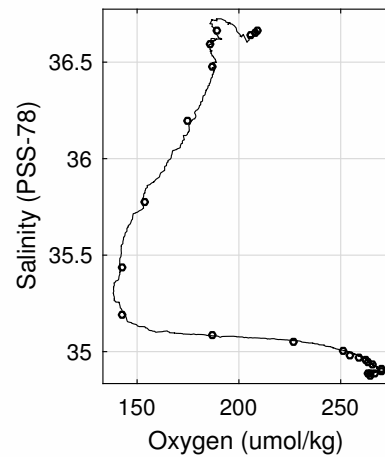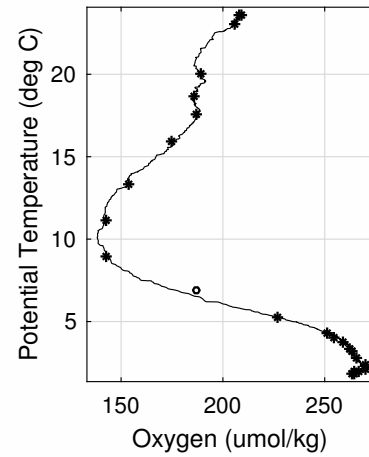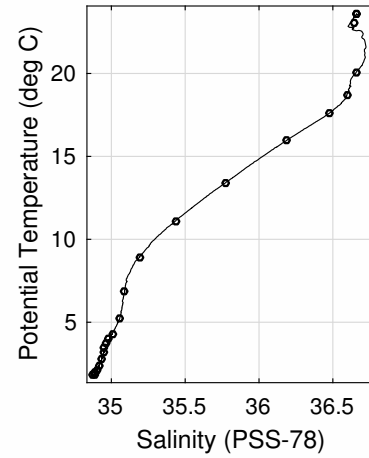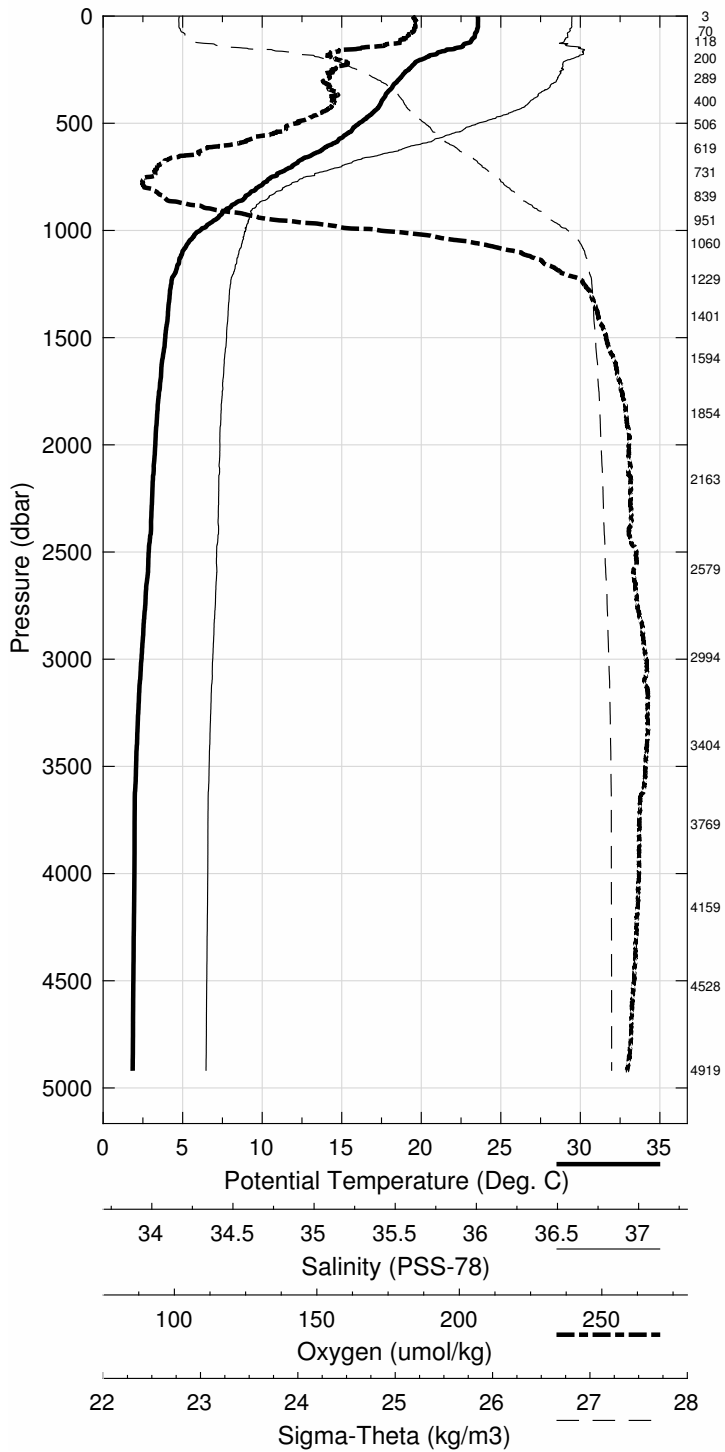
Abaco February 2016 R/V Endeavor
CTD Station 24 (CTD024)
Latitude 26.499N Longitude 76.555W
24-Feb-2016 15:10Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.610	23.610	36.664	207.5	0.003	25.018
10	23.606	23.604	36.663	207.6	0.029	25.019
20	23.569	23.565	36.663	208.4	0.059	25.030
30	23.567	23.561	36.663	208.3	0.088	25.031
50	23.567	23.556	36.663	208.0	0.147	25.033
75	23.488	23.472	36.656	206.7	0.220	25.053
100	23.348	23.327	36.650	205.2	0.293	25.090
125	22.914	22.889	36.622	203.3	0.365	25.197
150	22.353	22.322	36.706	193.4	0.433	25.423
200	20.048	20.010	36.655	188.3	0.547	26.022
250	19.183	19.137	36.604	189.3	0.645	26.212
300	18.548	18.495	36.586	185.3	0.736	26.363
400	17.583	17.514	36.463	186.4	0.907	26.513
500	16.181	16.100	36.210	177.9	1.067	26.656
600	13.991	13.902	35.852	154.8	1.214	26.867
700	11.503	11.412	35.474	142.7	1.339	27.069
800	9.351	9.259	35.222	142.0	1.447	27.250
900	7.559	7.466	35.098	162.2	1.536	27.430
1000	6.321	6.226	35.078	196.0	1.609	27.585
1100	5.336	5.240	35.055	227.7	1.667	27.691
1200	4.830	4.729	35.030	241.5	1.719	27.730
1300	4.427	4.321	35.006	251.0	1.768	27.757
1400	4.129	4.017	34.987	256.4	1.815	27.774
1500	3.982	3.861	34.979	258.5	1.861	27.784
1750	3.670	3.531	34.963	262.0	1.974	27.805
2000	3.423	3.264	34.953	263.3	2.086	27.823
2500	3.088	2.887	34.939	264.6	2.308	27.847
3000	2.696	2.452	34.921	267.0	2.525	27.871
3500	2.370	2.081	34.901	267.9	2.735	27.886
4000	2.307	1.964	34.893	266.3	2.947	27.889
4500	2.295	1.895	34.888	264.9	3.171	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4915	1	2.246	1.796	34.875	259.7
4599	2	2.297	1.884	34.885	263.5
4200	3	2.301	1.935	34.889	264.8
3799	4	2.309	1.989	34.893	266.9
3399	5	2.403	2.124	34.901	267.2
3000	6	2.678	2.435	34.913	266.8
2500	7	3.096	2.894	34.932	264.0
2000	8	3.420	3.262	34.947	265.4
1751	9	3.640	3.501	34.958	261.2
1535	10	3.936	3.813	34.972	257.8
1337	11	4.252	4.144	34.984	254.9
1166	12	4.994	4.894	35.036	236.7
996	13	6.348	6.254	35.076	194.5
885	14	7.886	7.793	35.108	154.3
776	15	9.942	9.849	35.280	138.0
666	16	12.320	12.230	35.592	142.2
556	17	14.929	14.843	36.000	163.4
445	18	17.124	17.049	36.381	185.0
335	19	18.219	18.161	36.552	185.1
226	20	19.618	19.576	36.623	188.9
136	21	22.184	22.157	36.624	205.0
85	22	23.476	23.458	36.655	206.5
35	23	23.515	23.507	36.653	207.5
4	24	23.734	23.733	36.664	207.8

Abaco February 2016 R/V Endeavor
CTD Station 24 (CTD024)
**Latitude 26.499 N   Longitude 76.555 W**
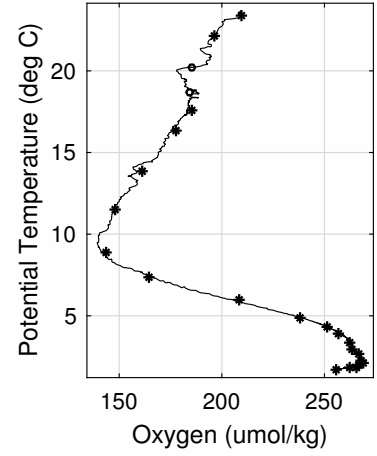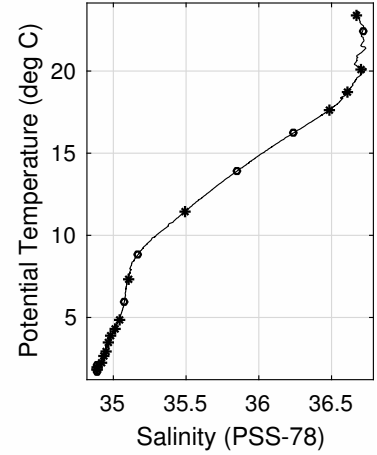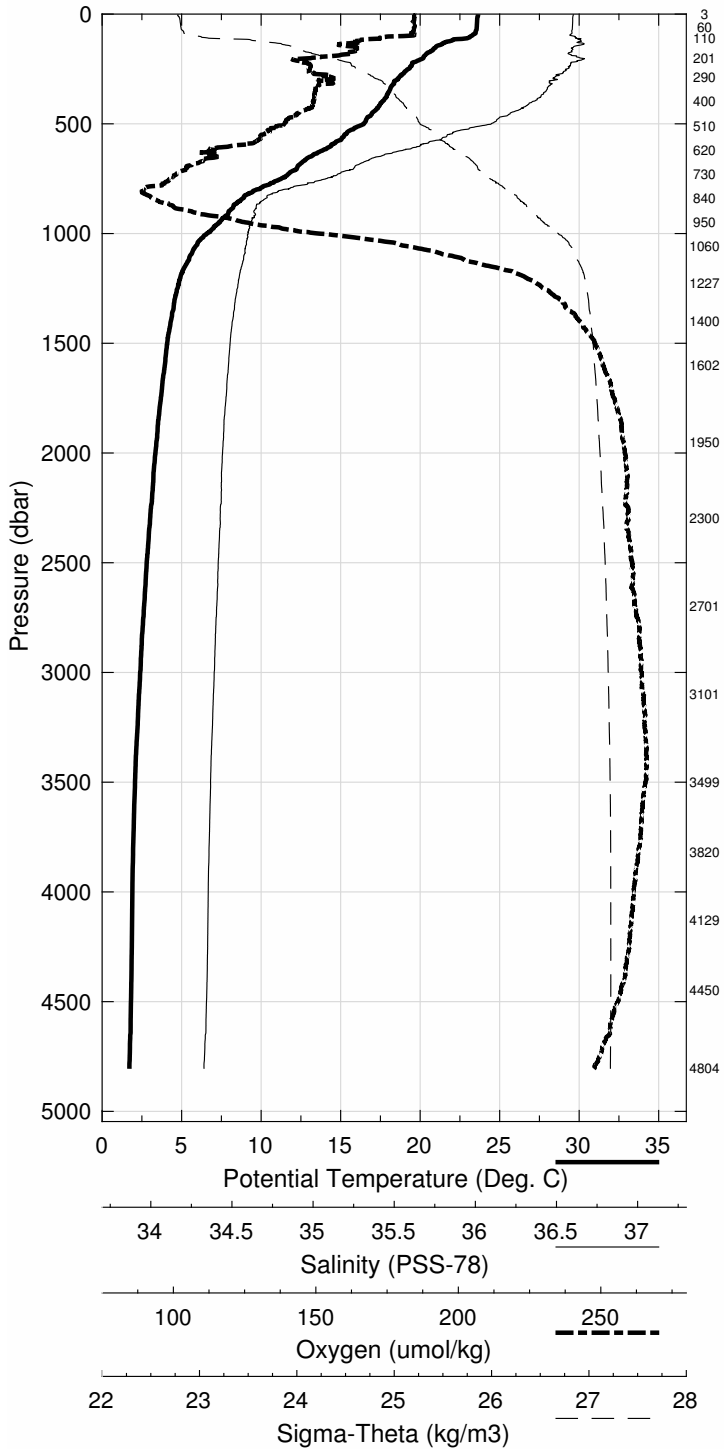**24-Feb-2016 15:10 Z**
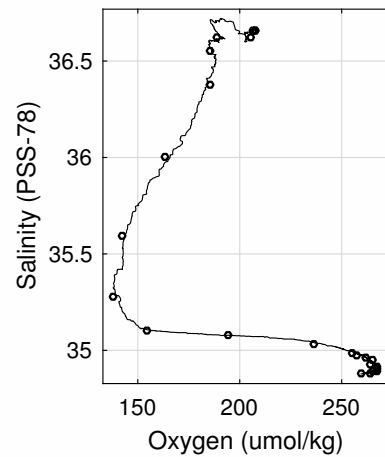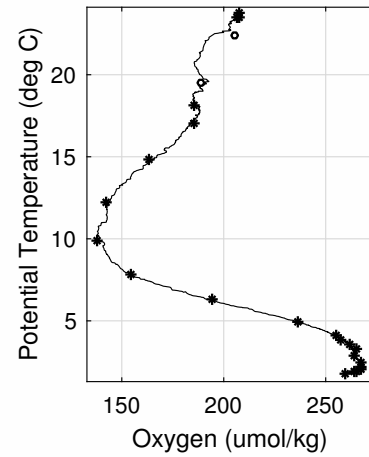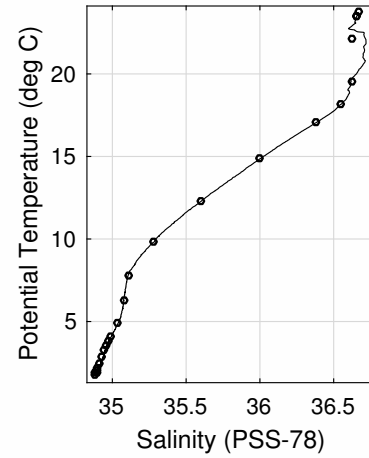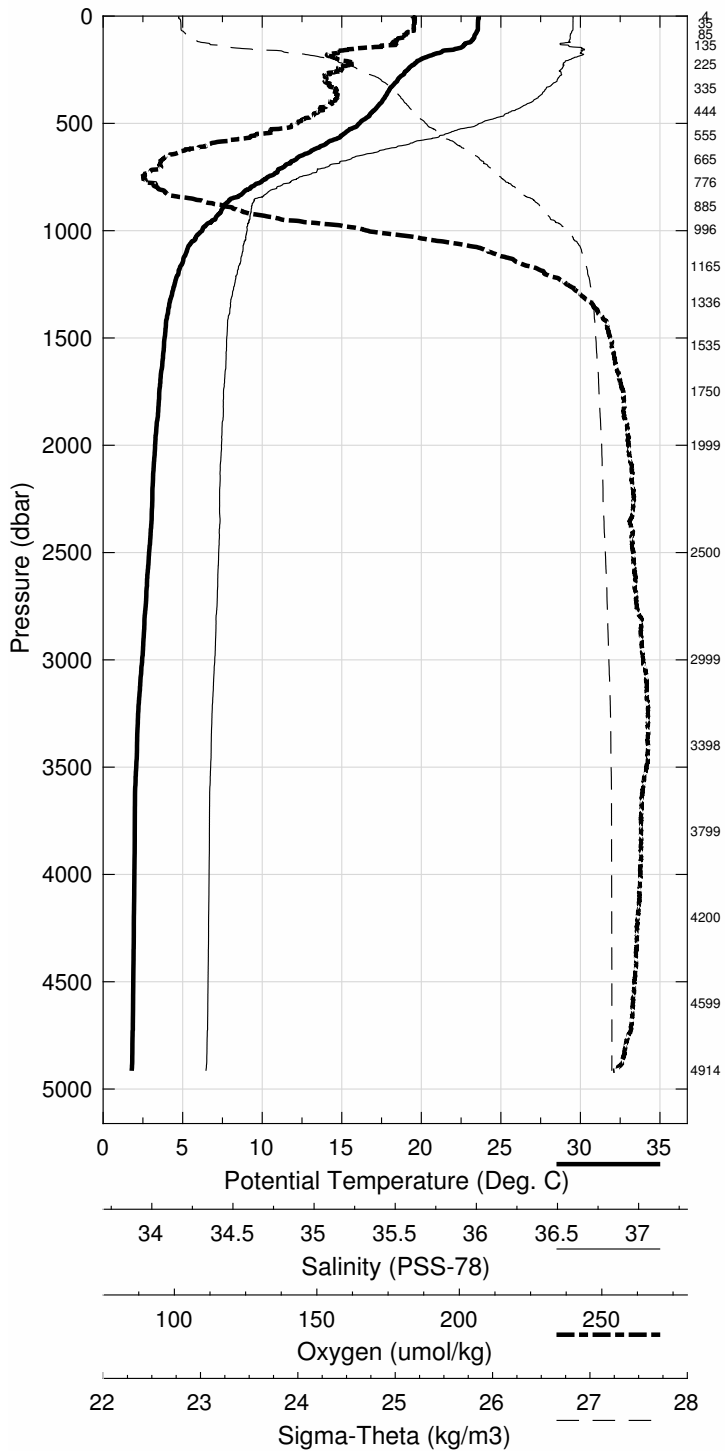
Abaco February 2016 R/V Endeavor
CTD Station 25 (CTD025)
Latitude 26.507N Longitude 76.639W
24-Feb-2016 19:25Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.730	23.730	36.667	208.7	0.003	24.984
10	23.681	23.679	36.663	208.8	0.030	24.997
20	23.561	23.557	36.663	208.2	0.059	25.032
30	23.554	23.548	36.662	208.3	0.088	25.035
50	23.494	23.484	36.654	207.8	0.147	25.047
75	23.397	23.381	36.641	207.1	0.220	25.068
100	23.360	23.340	36.640	205.5	0.293	25.079
125	22.750	22.725	36.594	204.3	0.364	25.223
150	22.366	22.335	36.693	196.5	0.433	25.410
200	20.139	20.101	36.659	188.2	0.547	26.001
250	19.346	19.300	36.608	190.5	0.647	26.173
300	18.600	18.547	36.575	186.8	0.740	26.341
400	17.656	17.587	36.474	186.6	0.912	26.503
500	16.249	16.167	36.225	175.4	1.074	26.652
600	13.673	13.586	35.802	151.2	1.218	26.894
700	11.749	11.657	35.508	141.9	1.345	27.050
800	9.409	9.316	35.217	139.2	1.454	27.237
900	7.694	7.601	35.102	159.0	1.544	27.413
1000	6.305	6.211	35.078	196.4	1.617	27.587
1100	5.467	5.369	35.059	223.7	1.677	27.678
1200	4.764	4.663	35.022	242.3	1.730	27.732
1300	4.405	4.299	35.003	252.1	1.778	27.757
1400	4.236	4.123	34.994	254.9	1.826	27.768
1500	4.096	3.975	34.985	257.0	1.873	27.777
1750	3.761	3.621	34.968	261.0	1.989	27.799
2000	3.539	3.378	34.958	262.6	2.103	27.816
2500	3.031	2.830	34.935	265.6	2.325	27.849
3000	2.696	2.452	34.920	267.2	2.543	27.870
3500	2.416	2.125	34.903	268.3	2.755	27.884
4000	2.297	1.955	34.893	266.2	2.969	27.889
4500	2.265	1.865	34.885	263.8	3.192	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4662	1	2.230	1.811	34.880	260.8
4138	2	2.287	1.929	34.890	264.5
3724	3	2.334	2.022	34.896	266.7
3300	4	2.534	2.262	34.909	268.1
2900	5	2.764	2.528	34.922	266.2
2599	6	3.004	2.794	34.933	265.3
2300	7	3.305	3.120	34.950	262.4
2101	8	3.372	3.204	34.951	263.0
1901	9	3.587	3.435	34.956	262.1
1602	10	3.902	3.773	34.975	258.6
1404	11	4.196	4.082	34.988	254.9
1223	12	4.700	4.598	35.020	243.4
1043	13	5.818	5.723	35.067	205.3
912	14	7.432	7.339	35.089	163.7
802	15	9.813	9.717	35.272	139.4
694	16	11.797	11.705	35.523	143.3
583	17	14.252	14.165	35.892	157.3
471	18	16.767	16.689	36.316	-999.0
362	19	18.108	18.045	36.533	188.5
252	20	19.267	19.221	36.616	188.0
163	21	22.055	22.023	36.713	191.3
111	22	23.377	23.354	36.642	206.4
61	23	23.468	23.455	36.647	208.1
4	24	23.766	23.765	36.663	208.1

Abaco February 2016 R/V Endeavor
CTD Station 25 (CTD025)
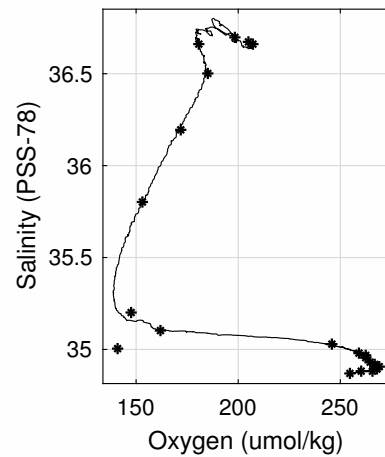**Latitude 26.507 N   Longitude 76.639 W**
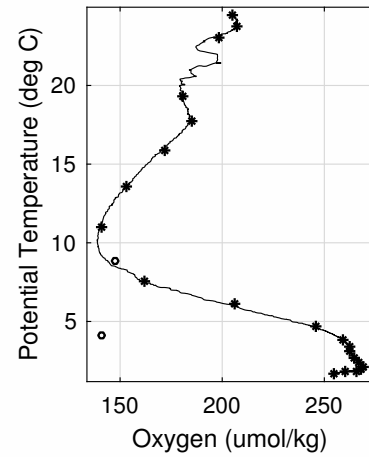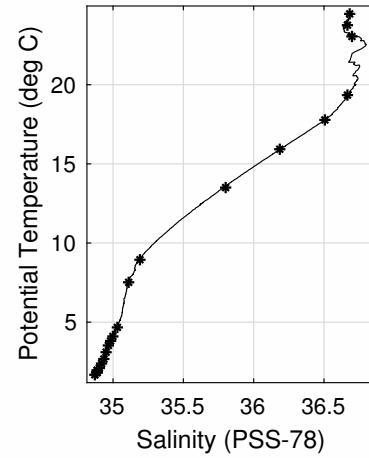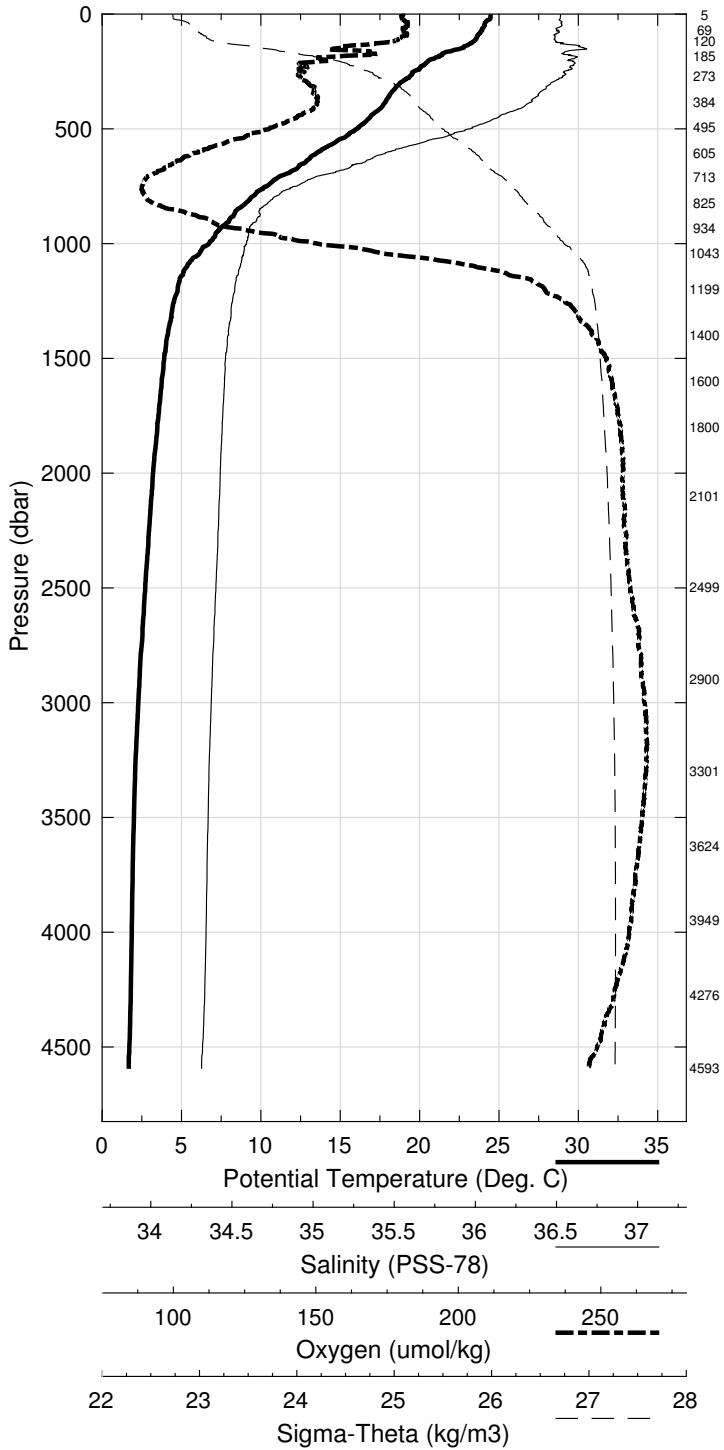**24-Feb-2016 19:25 Z**
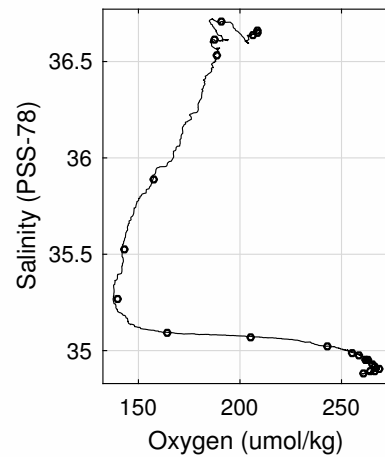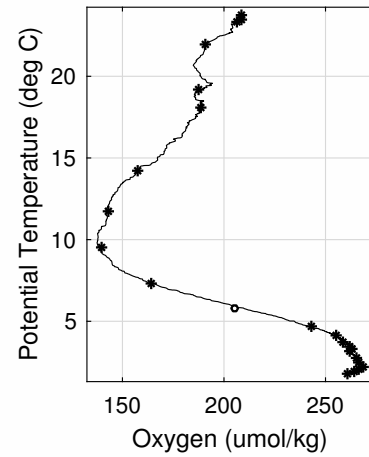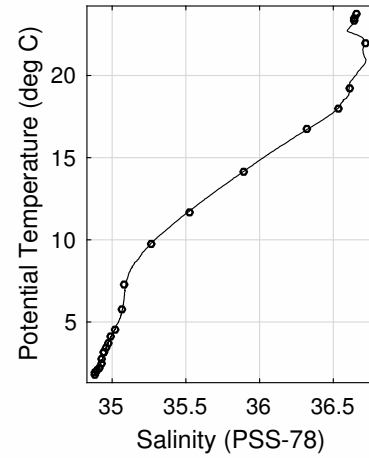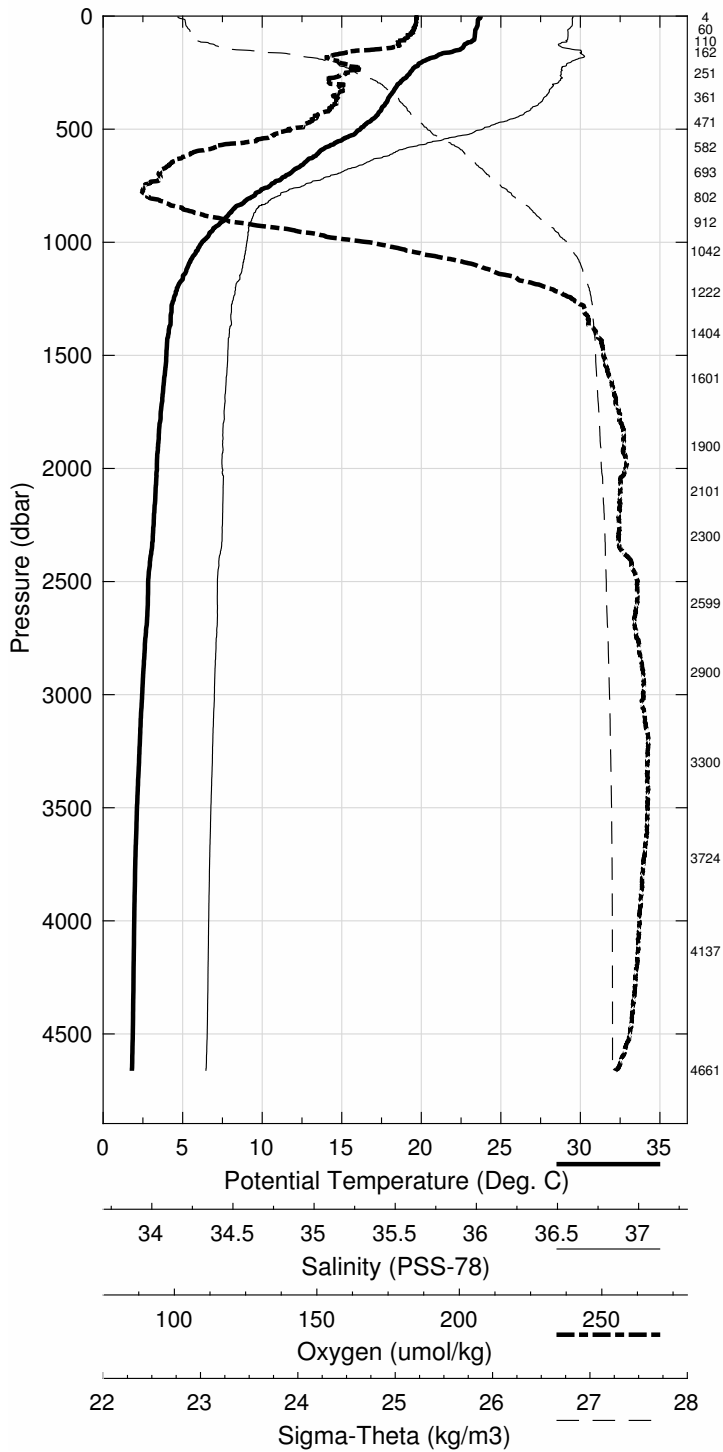
Abaco February 2016 R/V Endeavor
CTD Station 26 (CTD026)
Latitude 26.489N Longitude 76.740W
24-Feb-2016 23:39Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.639	23.639	36.658	208.6	0.003	25.005
10	23.640	23.638	36.657	208.4	0.029	25.004
20	23.554	23.550	36.654	208.2	0.059	25.028
30	23.477	23.471	36.652	208.5	0.088	25.049
50	23.452	23.441	36.652	208.6	0.146	25.058
75	23.373	23.357	36.647	208.2	0.219	25.079
100	23.308	23.287	36.647	207.3	0.292	25.099
125	23.036	23.010	36.600	209.0	0.364	25.145
150	22.626	22.595	36.622	202.1	0.434	25.282
200	20.913	20.874	36.715	186.2	0.556	25.835
250	19.329	19.283	36.584	196.8	0.660	26.159
300	18.751	18.697	36.573	192.1	0.754	26.302
400	17.681	17.612	36.481	185.4	0.928	26.503
500	16.293	16.211	36.239	172.1	1.090	26.652
600	14.026	13.938	35.851	158.6	1.236	26.858
700	11.405	11.315	35.466	142.4	1.362	27.081
800	9.245	9.154	35.207	141.3	1.469	27.256
900	7.707	7.613	35.110	160.6	1.558	27.418
1000	6.188	6.095	35.076	200.5	1.629	27.601
1100	5.458	5.361	35.058	223.3	1.688	27.678
1200	4.889	4.787	35.033	240.8	1.741	27.726
1300	4.627	4.519	35.018	247.8	1.791	27.744
1400	4.384	4.269	35.002	251.3	1.841	27.759
1500	4.303	4.179	34.997	253.2	1.889	27.765
1750	3.819	3.678	34.972	260.1	2.007	27.797
2000	3.486	3.326	34.955	263.1	2.121	27.818
2500	3.104	2.902	34.941	264.0	2.344	27.847
3000	2.658	2.415	34.918	267.8	2.560	27.871
3500	2.429	2.138	34.904	267.9	2.772	27.883

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3807	1	2.318	1.997	34.891	219.7
3549	2	2.406	2.111	34.902	267.2
3265	3	2.512	2.245	34.909	269.0
2999	4	2.654	2.411	34.916	268.0
2699	5	2.911	2.693	34.933	264.1
2499	6	3.103	2.901	34.941	263.8
2201	7	3.327	3.150	34.951	262.0
1899	8	3.629	3.477	34.963	284.1
1701	9	3.923	3.785	34.975	258.4
1549	10	4.164	4.037	34.990	254.3
1400	11	4.361	4.246	34.999	251.6
1250	12	4.774	4.669	35.025	243.0
1100	13	5.432	5.335	35.055	224.7
950	14	6.742	6.650	35.083	184.9
814	15	8.776	8.686	35.157	142.5
704	16	11.518	11.426	35.479	143.6
594	17	14.194	14.105	35.882	160.1
485	18	16.603	16.523	36.296	177.9
375	19	17.915	17.850	36.514	184.5
265	20	19.076	19.028	36.569	197.2
175	21	21.571	21.537	36.711	190.1
95	22	23.309	23.289	36.646	207.7
45	23	23.452	23.443	36.649	208.7
3	24	23.644	23.644	36.659	208.6

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Abaco February 2016 R/V Endeavor
CTD Station 26 (CTD026)
Latitude 26.489 N   Longitude 76.740 W
24-Feb-2016 23:39 Z
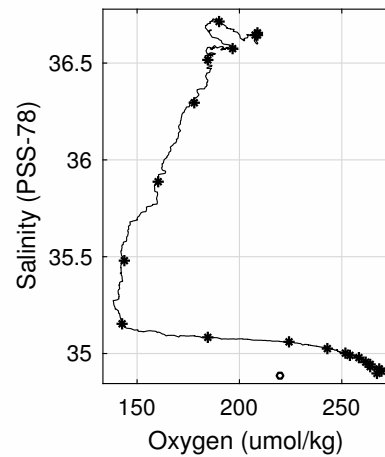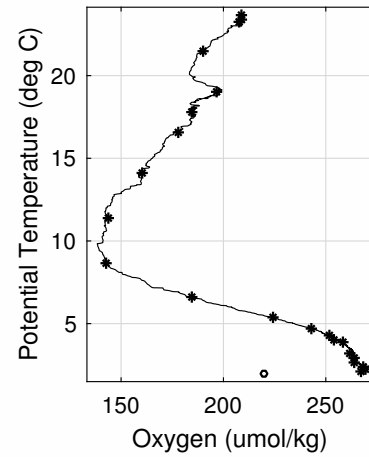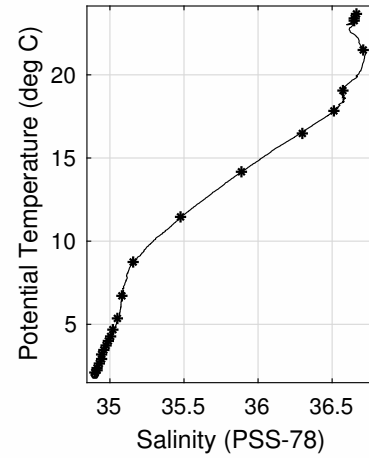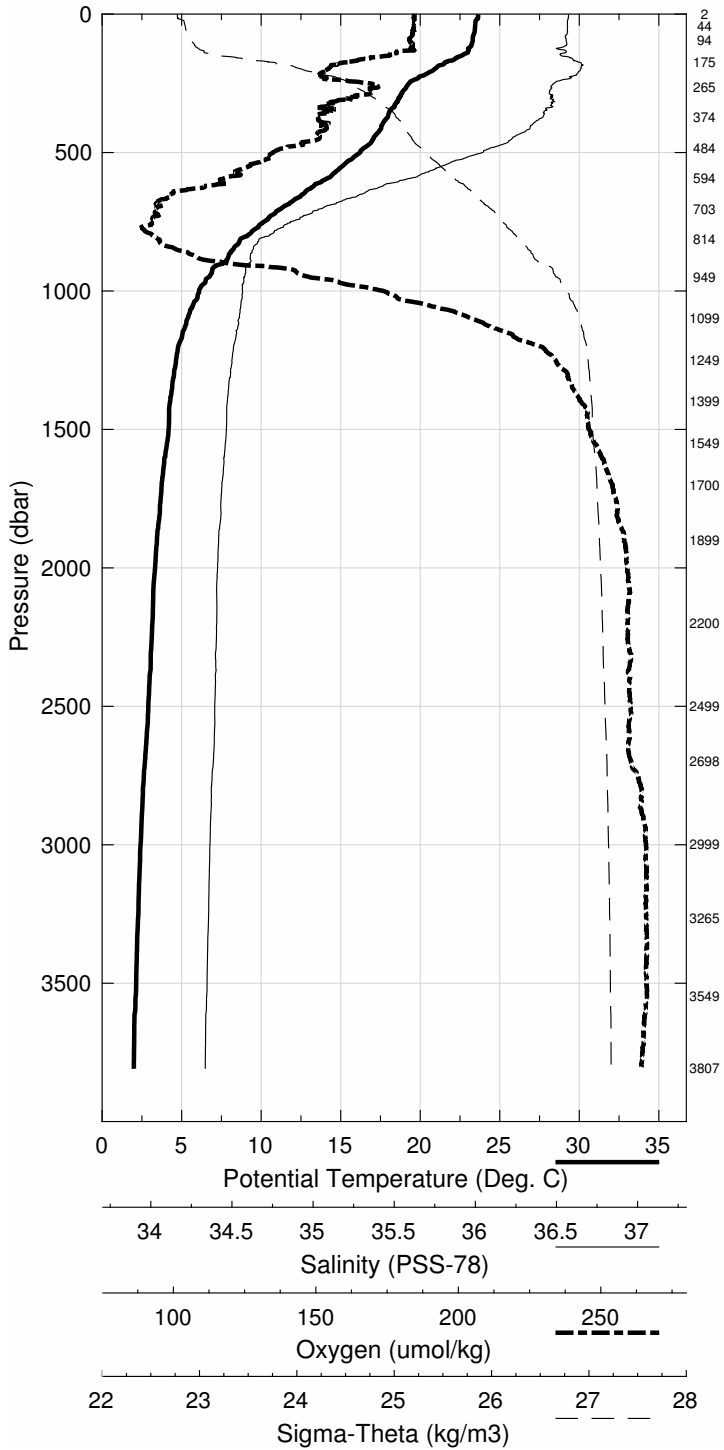
Abaco February 2016 R/V Endeavor
CTD Station 27 (CTD027)
Latitude 26.523N Longitude 76.828W
25-Feb-2016 03:26Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.282	23.282	36.528	209.5	0.003	25.011
10	23.281	23.279	36.526	210.8	0.029	25.010
20	23.273	23.269	36.525	210.7	0.059	25.013
30	23.275	23.268	36.525	210.9	0.088	25.013
50	23.068	23.057	36.542	209.5	0.147	25.087
75	23.002	22.986	36.550	209.6	0.219	25.114
100	23.022	23.001	36.577	208.6	0.290	25.130
125	23.089	23.064	36.635	208.4	0.362	25.155
150	22.424	22.394	36.638	201.8	0.431	25.351
200	20.738	20.699	36.679	189.0	0.555	25.855
250	19.532	19.486	36.612	193.2	0.659	26.127
300	18.883	18.829	36.623	184.2	0.754	26.306
400	17.786	17.717	36.498	186.4	0.927	26.491
500	16.456	16.374	36.266	175.1	1.091	26.635
600	13.898	13.810	35.836	155.1	1.238	26.873
700	10.578	10.492	35.361	140.5	1.358	27.148
800	8.324	8.238	35.130	147.8	1.456	27.340
900	7.149	7.059	35.089	171.9	1.539	27.481
1000	5.938	5.847	35.069	207.7	1.606	27.627
1100	5.244	5.149	35.047	230.3	1.663	27.695
1200	5.123	5.019	35.041	233.9	1.716	27.706

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
1275	1	4.770	4.662	35.022	243.9
1103	2	5.225	5.130	35.045	230.3
1001	3	5.918	5.826	35.067	210.4
900	4	6.993	6.904	35.086	176.6
799	5	8.541	8.453	35.145	147.2
700	6	10.639	10.552	35.368	139.5
600	7	13.912	13.824	35.835	154.0
503	8	16.460	16.377	36.269	174.0
391	9	17.828	17.760	36.504	186.1
281	10	18.985	18.934	36.610	186.8
189	11	20.970	20.934	36.691	190.4
120	12	23.056	23.031	36.629	214.6
70	13	23.024	23.010	36.556	214.9
4	14	23.280	23.279	36.543	216.3

Abaco February 2016 R/V Endeavor
CTD Station 27 (CTD027)
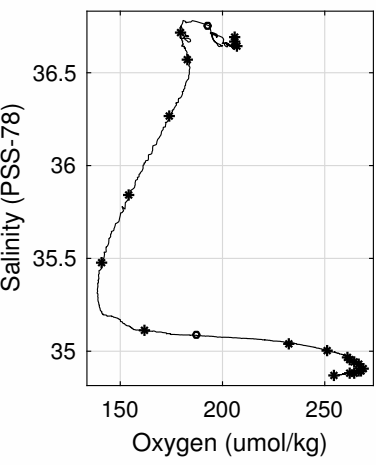## Latitude 26.523 N   Longitude 76.828 W
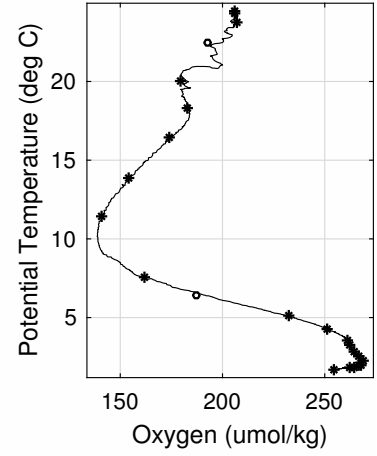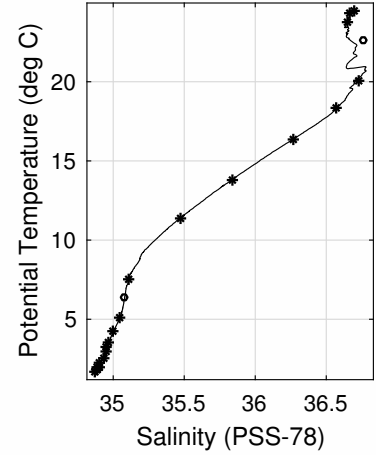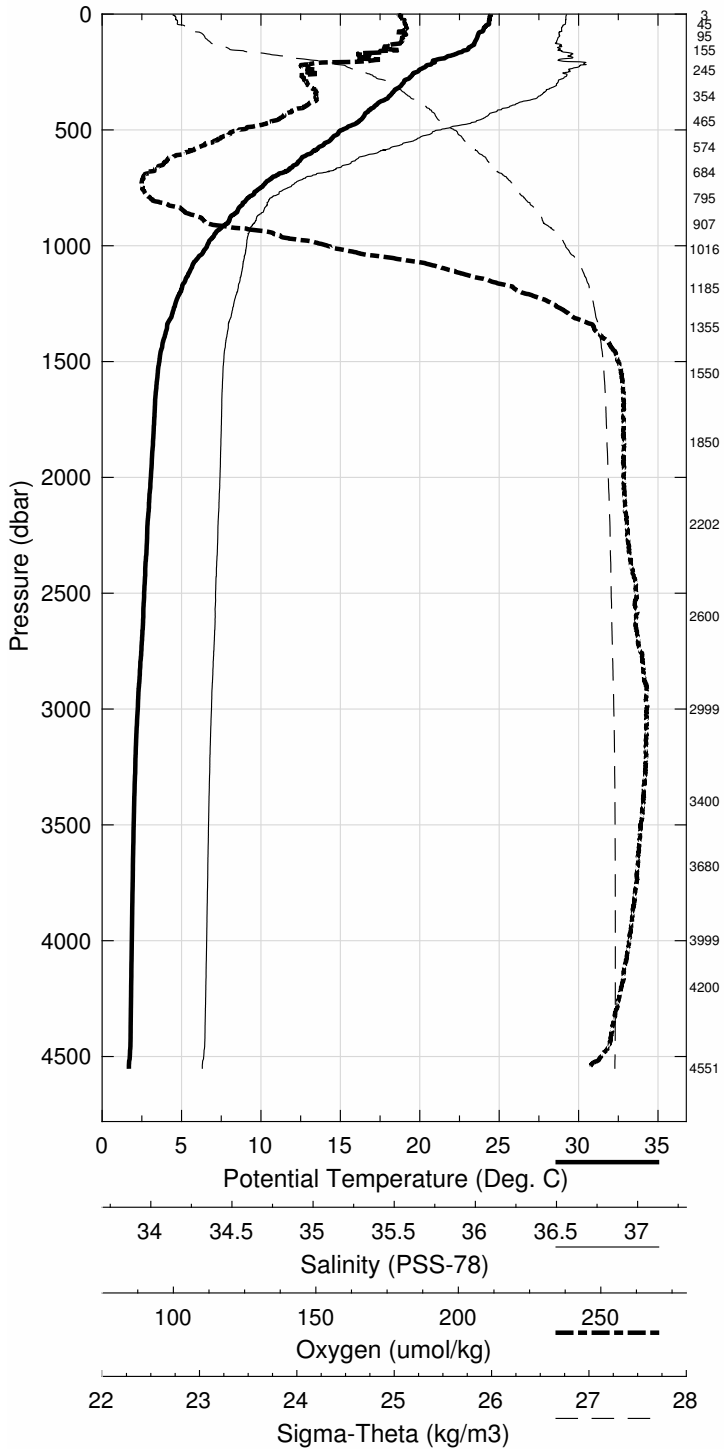## 25-Feb-2016 03:26 Z
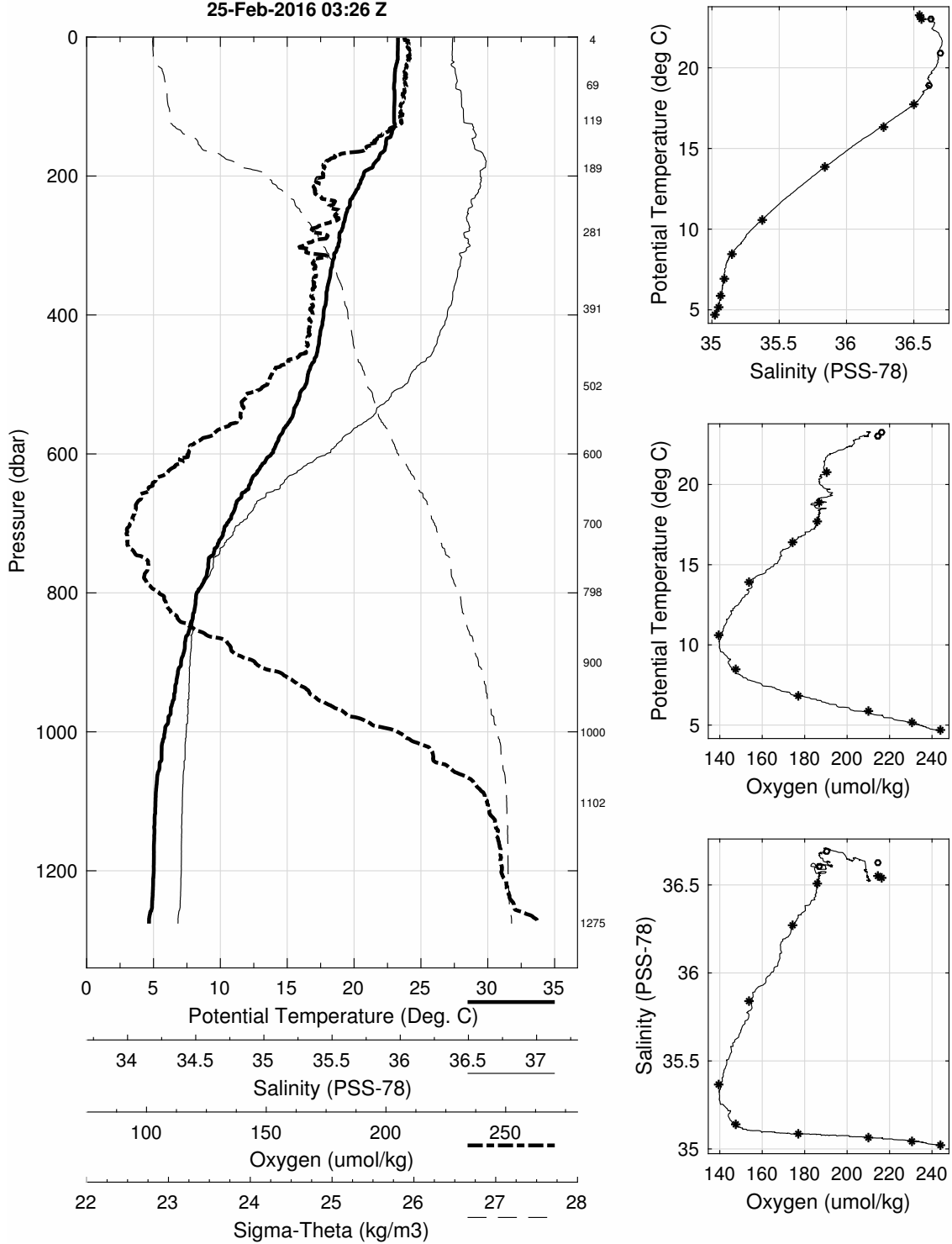
Abaco February 2016 R/V Endeavor
CTD Station 28 (CTD028)
Latitude 26.524N Longitude 76.886W
25-Feb-2016 05:30Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	23.343	23.343	36.568	209.4	0.003	25.023
10	23.337	23.335	36.566	210.1	0.029	25.024
20	23.275	23.271	36.559	210.1	0.059	25.038
30	23.137	23.131	36.539	209.7	0.088	25.063
50	23.071	23.061	36.549	208.8	0.145	25.092
75	23.043	23.027	36.551	208.7	0.217	25.103
100	23.047	23.026	36.567	208.5	0.290	25.115
125	23.019	22.994	36.575	208.2	0.362	25.131
150	22.753	22.723	36.621	204.3	0.433	25.244
200	20.848	20.810	36.671	190.7	0.555	25.818
250	19.948	19.901	36.684	182.6	0.662	26.073
300	19.053	18.999	36.588	191.4	0.760	26.236
400	17.945	17.876	36.505	187.3	0.937	26.456

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
451	1	17.639	17.561	36.463	187.4
400	2	17.926	17.857	36.500	187.1
331	3	18.398	18.340	36.550	189.7
271	4	19.441	19.391	36.630	189.1
212	5	20.554	20.514	36.685	186.9
160	6	22.350	22.318	36.648	200.3
112	7	23.013	22.990	36.577	208.4
61	8	23.048	23.036	36.542	209.3
3	9	23.339	23.338	36.562	210.5

Abaco February 2016 R/V Endeavor
CTD Station 28 (CTD028)
Latitude 26.524 N   Longitude 76.886 W
25-Feb-2016 05:30 Z
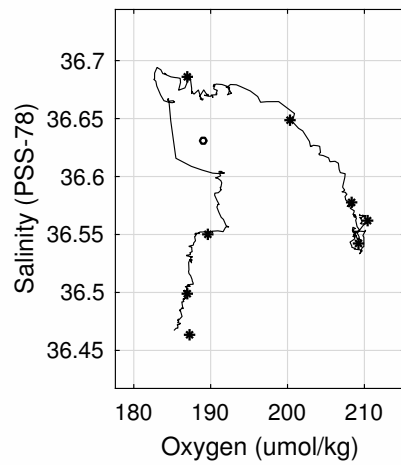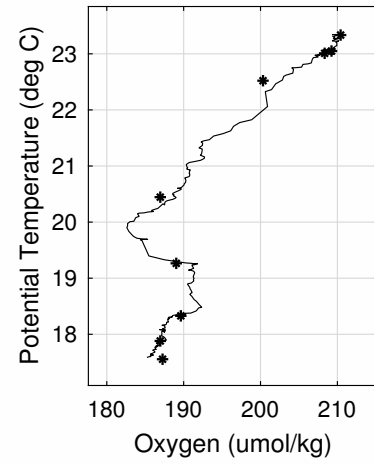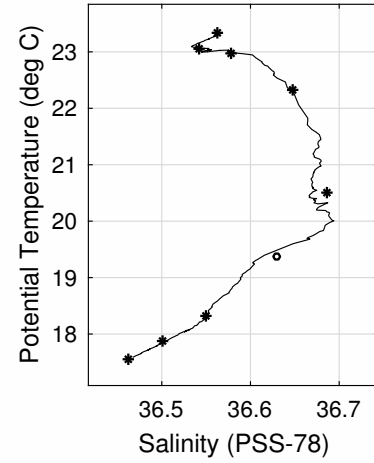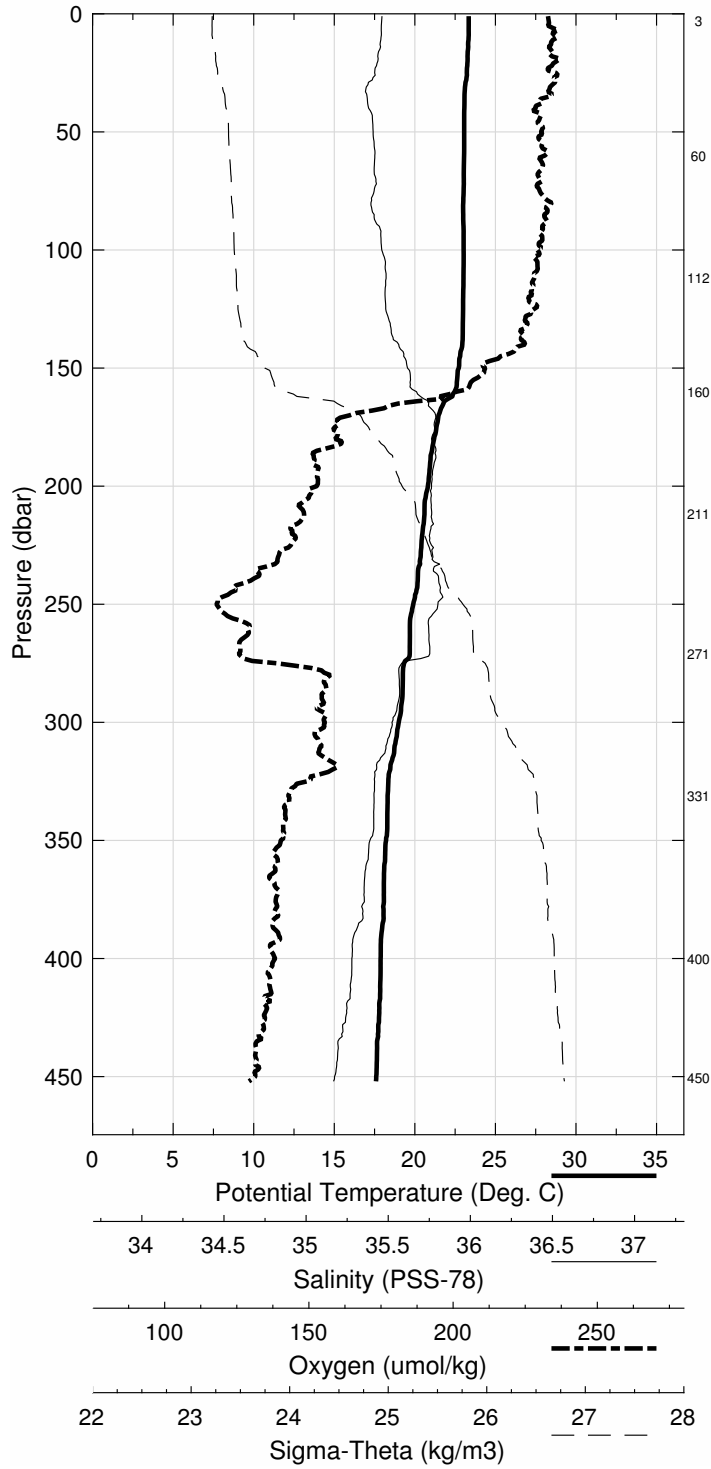
Abaco February 2016 R/V Endeavor
CTD Station 29 (CTD029)
Latitude 26.068N Longitude 78.852W
26-Feb-2016 18:11Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.575	25.574	36.263	200.2	0.004	24.119
10	25.575	25.573	36.262	200.7	0.038	24.119
20	25.577	25.572	36.262	200.6	0.076	24.119
30	25.575	25.568	36.262	201.1	0.114	24.120
50	25.546	25.535	36.269	200.9	0.190	24.136
75	25.239	25.222	36.339	200.5	0.284	24.285
100	24.865	24.843	36.410	197.1	0.373	24.455
125	24.734	24.707	36.432	195.9	0.461	24.513
150	24.353	24.321	36.495	192.9	0.546	24.678
200	20.552	20.514	36.736	162.0	0.688	25.948
250	18.852	18.807	36.597	178.5	0.785	26.292

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
296	1	18.112	18.060	36.504	173.1
249	2	18.865	18.820	36.595	178.8
190	3	20.972	20.936	36.756	172.1
140	4	24.419	24.389	36.474	196.0
90	5	24.971	24.951	36.394	198.0
50	6	25.530	25.519	36.268	201.1
4	7	25.561	25.561	36.263	200.9

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Abaco February 2016 R/V Endeavor
CTD Station 29 (CTD029)
**Latitude 26.068 N   Longitude 78.852 W**
26-Feb-2016 18:11 Z

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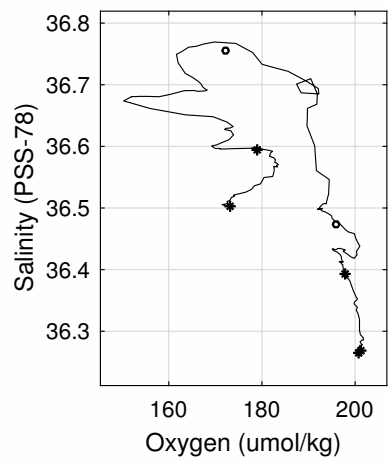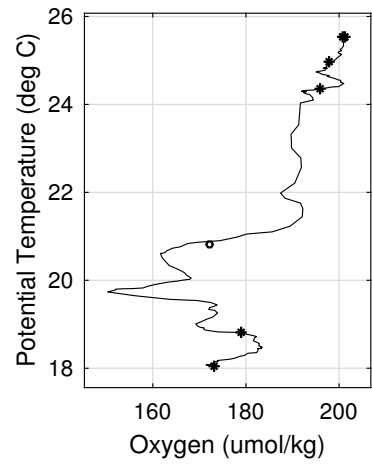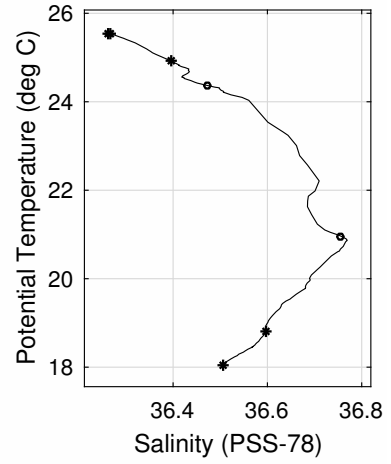
Abaco February 2016 R/V Endeavor
CTD Station 30 (CTD030)
Latitude 26.166N Longitude 78.805W
26-Feb-2016 19:28Z

Pressure dbar	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.051	25.050	36.340	202.3	0.004	24.339
10	25.047	25.045	36.339	203.1	0.036	24.340
20	25.054	25.049	36.339	202.5	0.072	24.338
30	25.034	25.027	36.339	202.9	0.108	24.345
50	25.024	25.013	36.340	202.5	0.179	24.350
75	24.982	24.966	36.348	201.1	0.269	24.371
100	24.724	24.703	36.449	191.8	0.356	24.528
125	24.485	24.458	36.541	185.8	0.441	24.671
150	24.220	24.188	36.569	187.9	0.522	24.774
200	21.673	21.634	36.695	187.1	0.667	25.609
250	19.399	19.353	36.603	193.3	0.772	26.155
300	18.531	18.478	36.566	184.3	0.864	26.352
400	17.079	17.011	36.376	182.4	1.032	26.568

Pressure dbar	Niskin	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
441	1	15.598	15.528	36.177	171.1
371	2	17.468	17.405	36.444	184.9
261	3	19.401	19.353	36.620	189.9
175	4	23.300	23.264	36.646	198.3
126	5	24.446	24.419	36.537	189.3
75	6	24.981	24.965	36.353	200.9
30	7	25.058	25.051	36.335	203.0
4	8	25.072	25.071	36.337	202.8

Abaco February 2016 R/V Endeavor
CTD Station 30 (CTD030)
Latitude 26.166 N Longitude 78.805 W
26-Feb-2016 19:28 Z
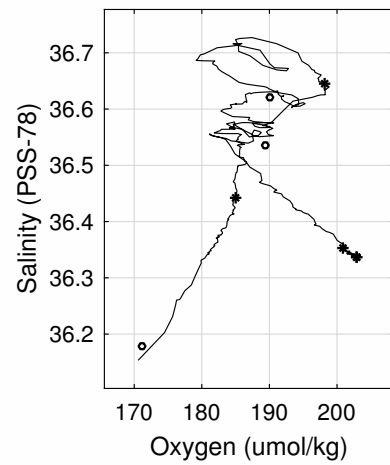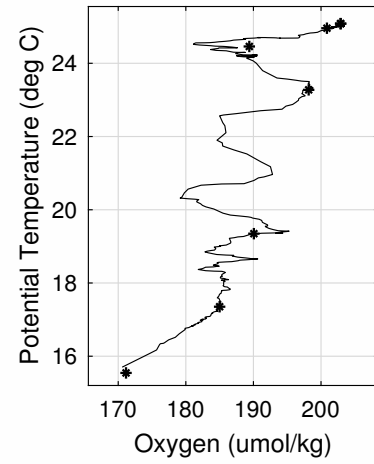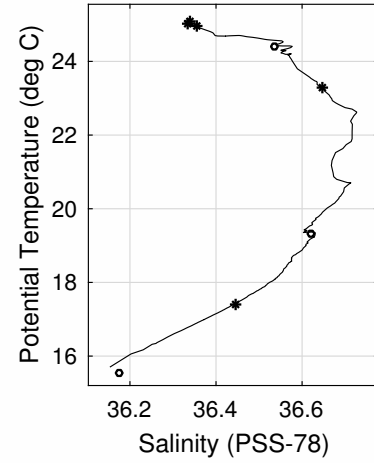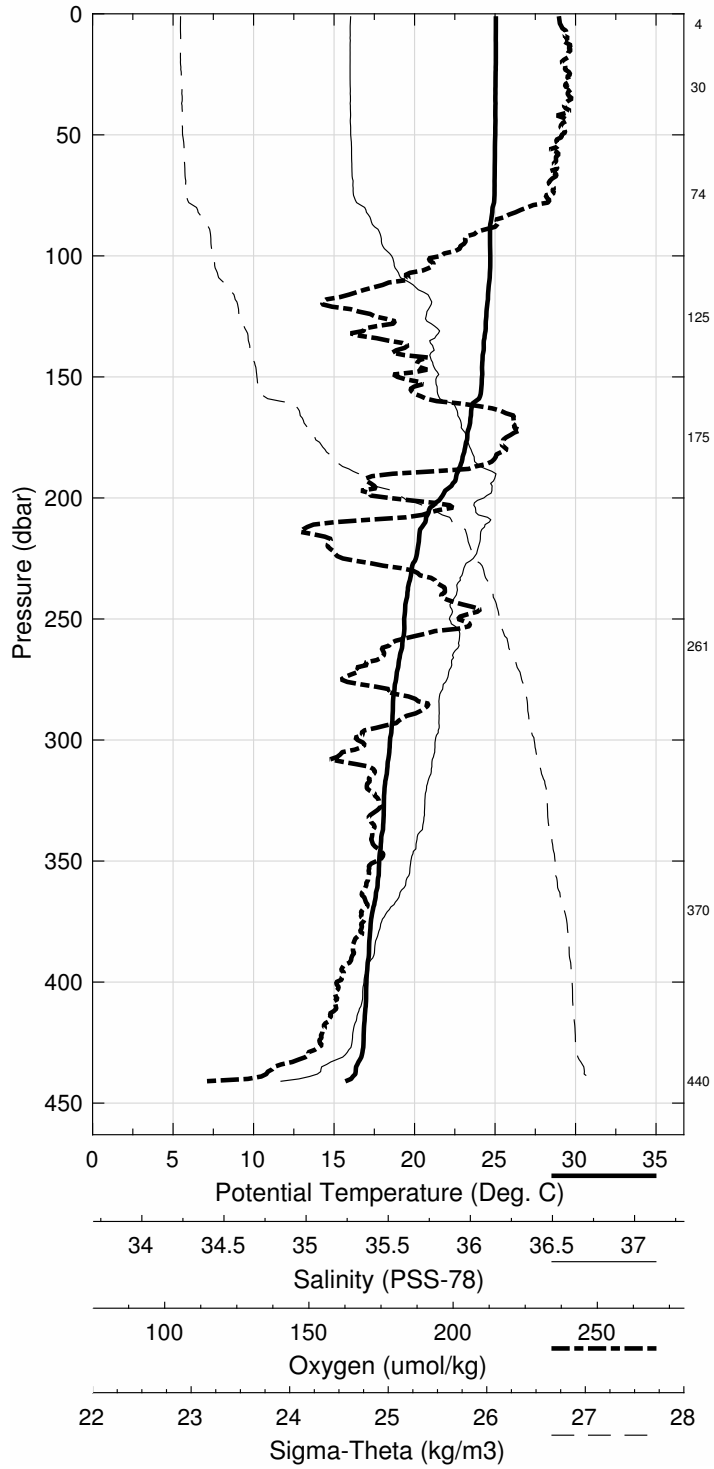
Abaco February 2016 R/V Endeavor
CTD Station 31 (CTD031)
Latitude 26.250N Longitude 78.769W
26-Feb-2016 20:54Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.201	25.201	36.313	202.5	0.004	24.273
10	25.207	25.205	36.312	202.8	0.036	24.270
20	25.210	25.206	36.312	202.6	0.073	24.270
30	25.209	25.202	36.312	203.0	0.109	24.271
50	25.170	25.159	36.322	202.3	0.183	24.292
75	25.147	25.131	36.331	201.7	0.274	24.307
100	24.876	24.854	36.410	190.8	0.364	24.451
125	24.151	24.125	36.585	184.9	0.447	24.805
150	23.839	23.807	36.618	185.2	0.526	24.924
200	21.190	21.151	36.708	188.9	0.664	25.754
250	19.241	19.195	36.620	184.5	0.766	26.209
300	18.414	18.361	36.558	188.2	0.857	26.375
400	17.068	17.001	36.374	182.6	1.023	26.569
500	15.363	15.285	36.076	166.6	1.180	26.738

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
513	1	15.044	14.964	36.023	164.1
401	2	17.093	17.026	36.384	182.2
300	3	18.440	18.387	36.560	187.6
210	4	20.442	20.402	36.699	178.3
146	5	24.058	24.027	36.610	182.0
95	6	25.064	25.043	36.369	195.5
45	7	25.150	25.140	36.325	202.0
5	8	25.200	25.199	36.313	204.0

Abaco February 2016 R/V Endeavor
CTD Station 31 (CTD031)
Latitude 26.250 N   Longitude 78.769 W
26-Feb-2016 20:54 Z

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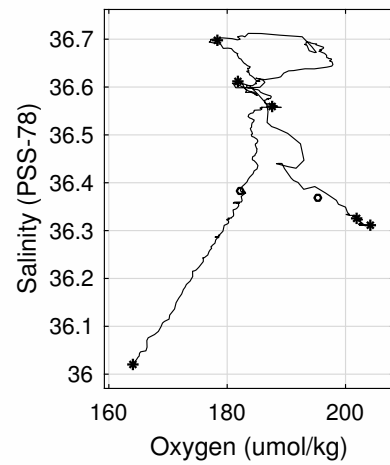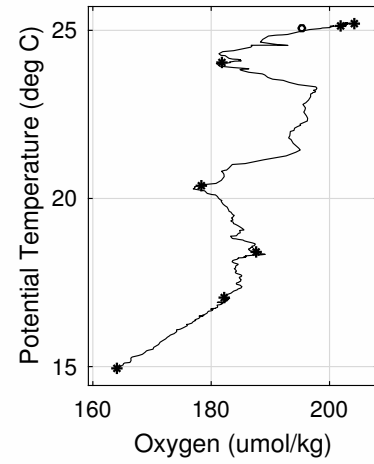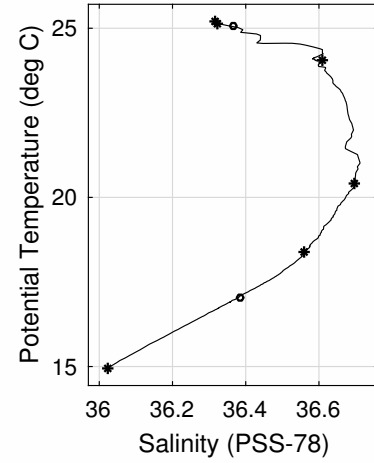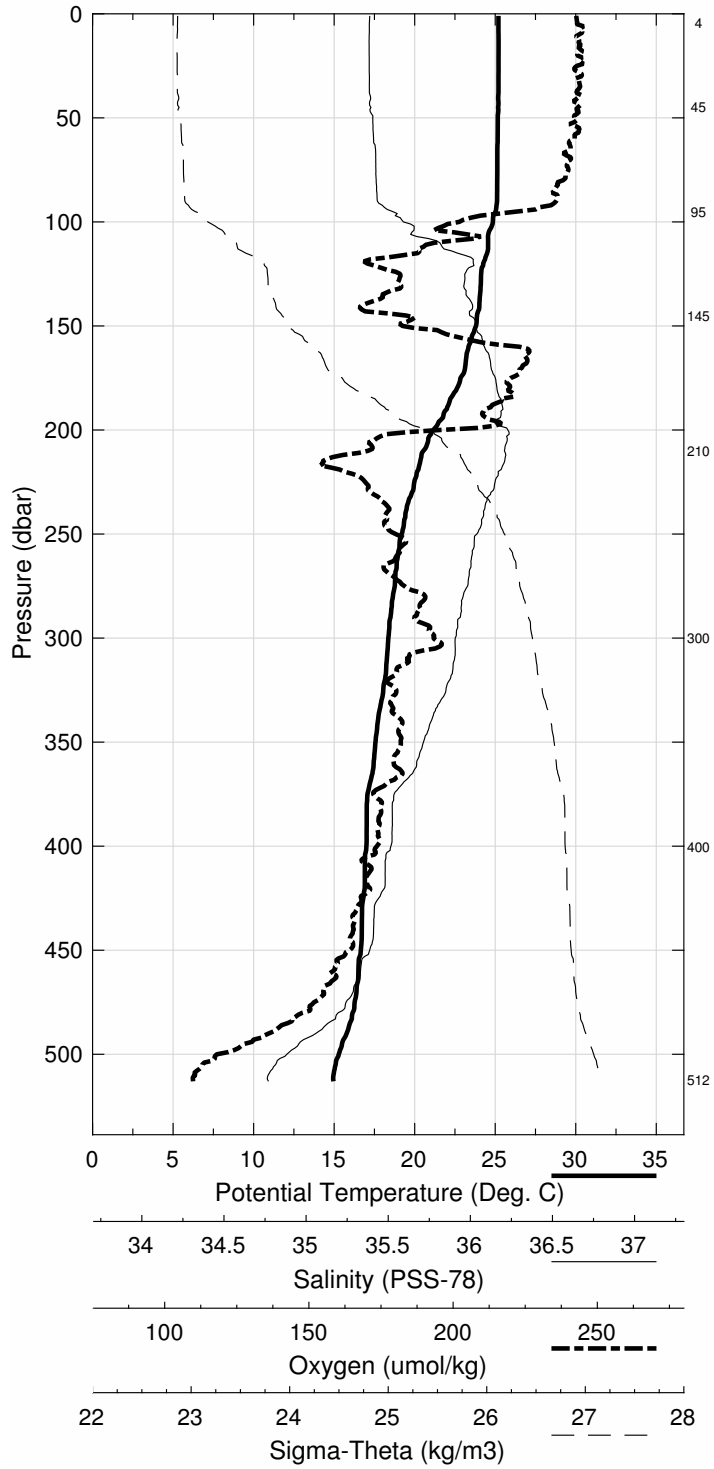
Abaco February 2016 R/V Endeavor
CTD Station 32 (CTD032)
Latitude 26.333N Longitude 78.716W
26-Feb-2016 22:13Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.907	24.907	36.358	202.2	0.004	24.396
10	24.924	24.922	36.356	202.1	0.035	24.391
20	24.916	24.911	36.358	201.8	0.071	24.395
30	24.919	24.913	36.358	202.1	0.106	24.395
50	24.914	24.903	36.358	201.2	0.177	24.398
75	24.779	24.763	36.378	200.4	0.265	24.455
100	24.397	24.375	36.523	182.7	0.349	24.683
125	23.842	23.816	36.645	175.0	0.429	24.942
150	22.907	22.876	36.669	192.0	0.502	25.236
200	20.523	20.485	36.639	195.5	0.628	25.883
250	19.371	19.325	36.624	185.1	0.730	26.178
300	18.370	18.317	36.553	190.1	0.821	26.382
400	17.348	17.280	36.421	183.9	0.990	26.538
500	15.459	15.380	36.092	168.6	1.147	26.730
600	13.154	13.069	35.721	151.0	1.285	26.938

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
691	1	9.758	9.677	35.286	146.8
600	2	13.167	13.082	35.708	151.9
500	3	15.448	15.369	36.085	168.1
400	4	17.332	17.264	36.412	183.4
310	5	18.248	18.194	36.539	188.7
230	6	19.883	19.841	36.655	183.9
181	7	21.686	21.650	36.723	185.3
136	8	23.635	23.606	36.701	175.0
86	9	24.521	24.503	36.490	186.9
40	10	24.922	24.913	36.359	201.6
4	11	24.907	24.906	36.357	202.1

Abaco February 2016 R/V Endeavor
CTD Station 32 (CTD032)
**Latitude 26.333 N   Longitude 78.716 W**
26-Feb-2016 22:13 Z
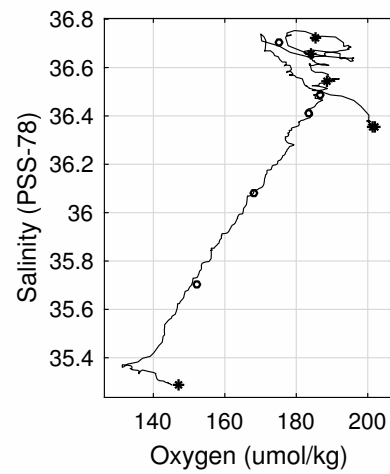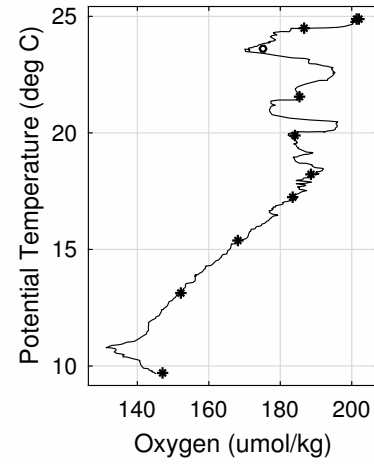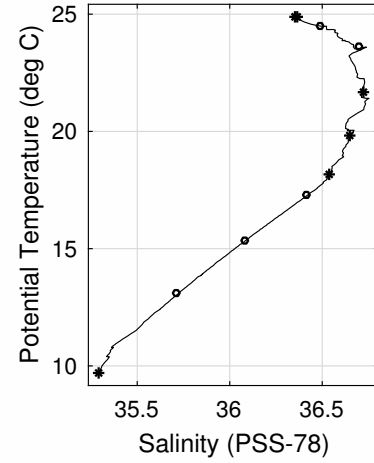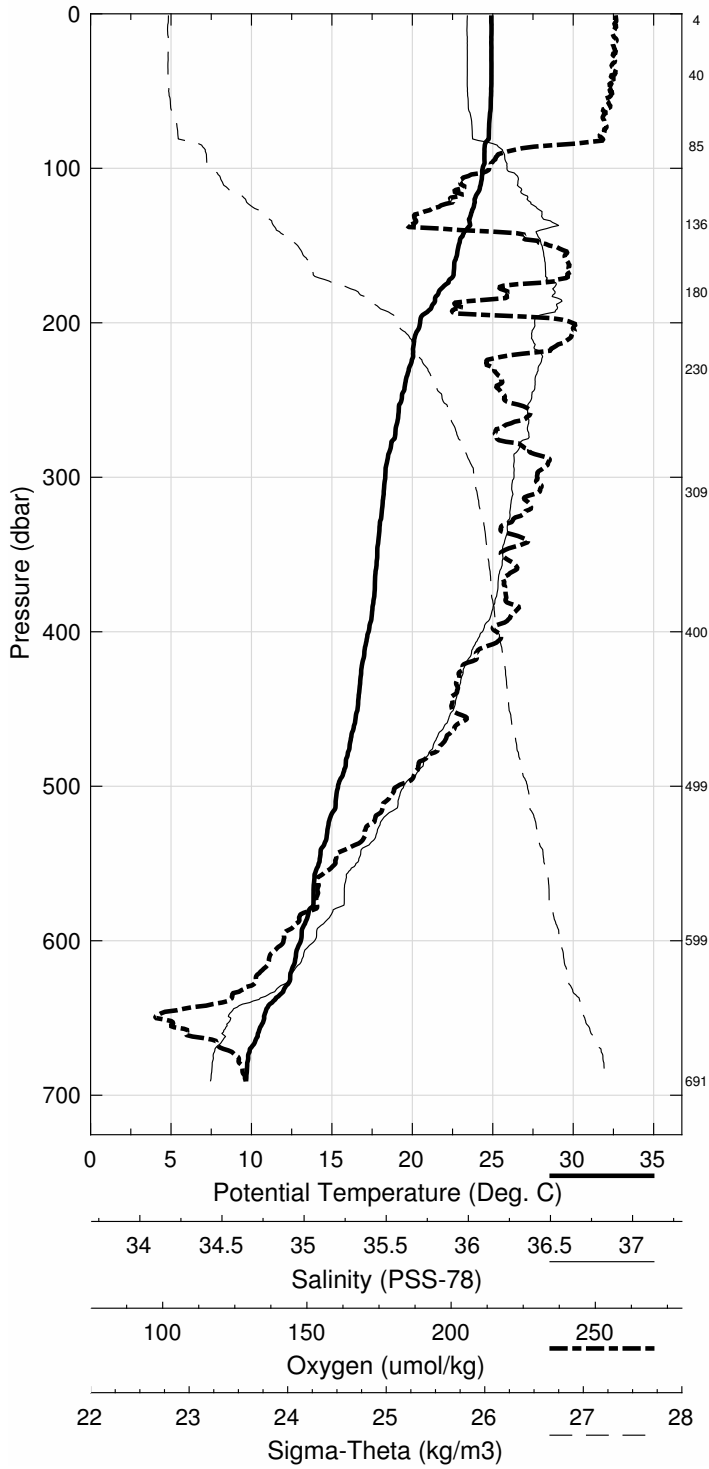
Abaco February 2016 R/V Endeavor
CTD Station 33 (CTD033)
Latitude 26.433N Longitude 78.671W
26-Feb-2016 23:56Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.379	24.379	36.469	200.2	0.003	24.641
10	24.382	24.380	36.468	201.0	0.033	24.640
20	24.380	24.375	36.472	201.4	0.066	24.644
30	24.379	24.372	36.472	201.0	0.099	24.645
50	24.069	24.059	36.516	205.0	0.163	24.772
75	23.927	23.911	36.569	202.3	0.242	24.856
100	23.790	23.769	36.558	203.1	0.320	24.890
125	23.626	23.600	36.621	198.3	0.396	24.988
150	23.211	23.180	36.668	193.3	0.470	25.147
200	20.436	20.398	36.710	174.5	0.588	25.960
250	19.364	19.319	36.614	191.2	0.689	26.173
300	18.685	18.631	36.586	192.2	0.782	26.329
400	17.557	17.489	36.450	184.7	0.956	26.509
500	15.857	15.777	36.161	170.4	1.117	26.692
600	13.146	13.061	35.718	152.1	1.258	26.937
700	10.581	10.495	35.364	140.1	1.375	27.150

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
759	1	9.551	9.463	35.270	145.9
651	2	11.710	11.625	35.514	142.4
551	3	14.782	14.698	35.978	162.5
450	4	17.215	17.139	36.392	182.1
350	5	18.285	18.223	36.543	184.4
270	6	19.075	19.026	36.626	182.7
210	7	20.189	20.150	36.673	182.1
150	8	23.235	23.204	36.672	192.4
100	9	23.810	23.789	36.559	204.3
50	10	24.101	24.135	−999.000	−999.0
3	11	24.324	24.324	36.474	201.1

Abaco February 2016 R/V Endeavor
CTD Station 33 (CTD033)
Latitude 26.433 N   Longitude 78.671 W
26-Feb-2016 23:56 Z
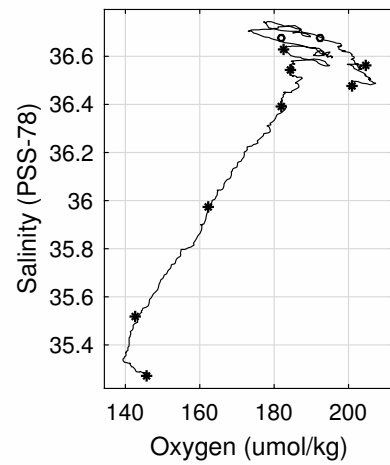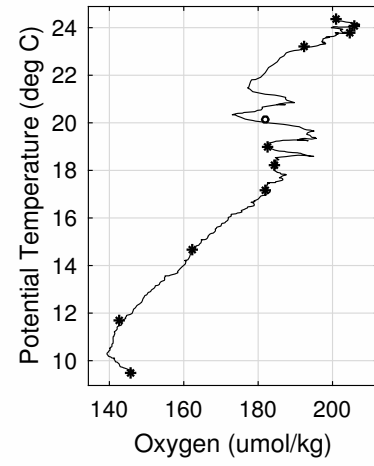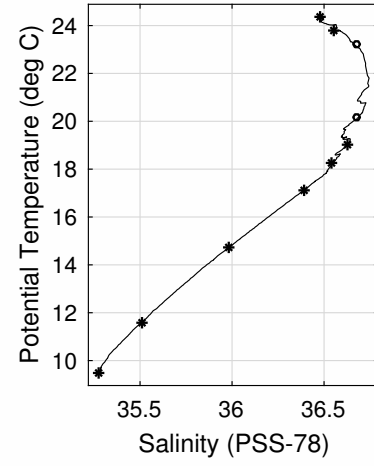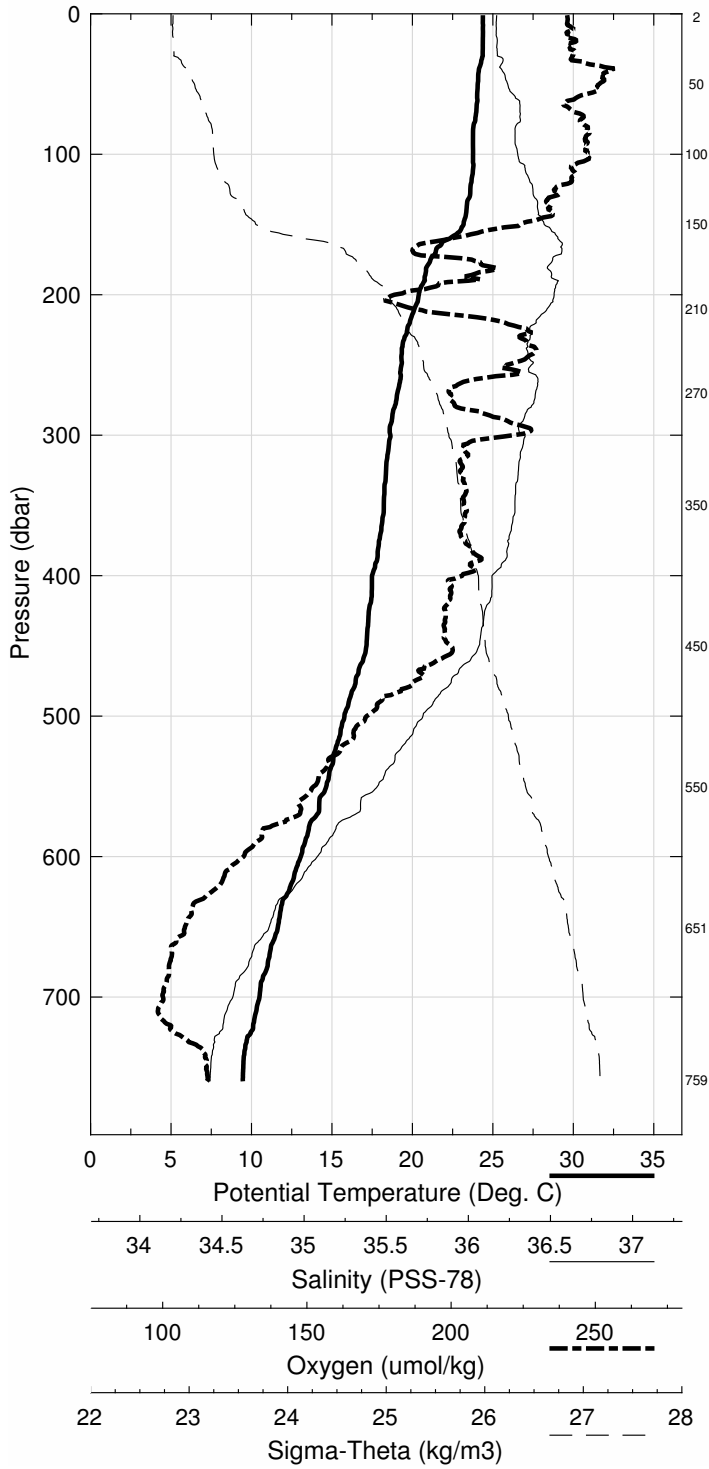
Abaco February 2016 R/V Endeavor
CTD Station 34 (CTD034)
Latitude 26.997N Longitude 79.205W
27-Feb-2016 06:24Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.527	25.527	36.268	199.1	0.004	24.138
10	25.536	25.534	36.267	198.8	0.038	24.135
20	25.539	25.535	36.267	199.5	0.076	24.135
30	25.541	25.534	36.267	199.0	0.113	24.135
50	25.541	25.530	36.266	199.2	0.189	24.136
75	25.518	25.502	36.282	198.9	0.284	24.156
100	25.540	25.518	36.353	191.7	0.378	24.204
125	25.132	25.105	36.480	182.0	0.470	24.428
150	23.929	23.897	36.695	174.6	0.553	24.956
200	20.732	20.694	36.698	183.2	0.680	25.871
250	19.483	19.437	36.637	185.1	0.784	26.159
300	18.683	18.629	36.566	193.7	0.879	26.314
400	17.308	17.240	36.414	184.6	1.050	26.542

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
480	1	15.518	15.442	36.089	163.2
381	2	17.496	17.430	36.448	186.1
313	3	18.567	18.512	36.558	194.1
242	4	19.824	19.779	36.653	187.0
172	5	22.622	22.587	36.819	165.0
111	6	25.523	25.498	36.350	193.0
80	7	25.538	25.520	36.273	216.3
35	8	25.528	25.520	36.267	200.1
3	9	25.509	25.508	36.268	200.5

Abaco February 2016 R/V Endeavor
CTD Station 34 (CTD034)
**Latitude 26.997 N   Longitude 79.205 W**
27-Feb-2016 06:24 Z
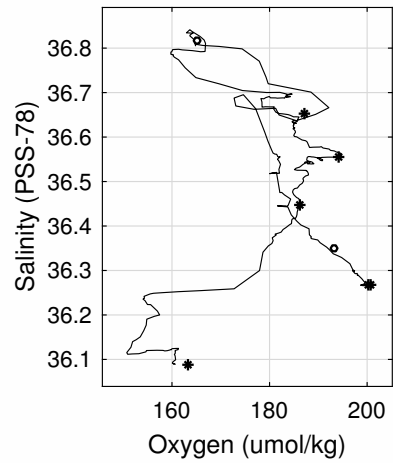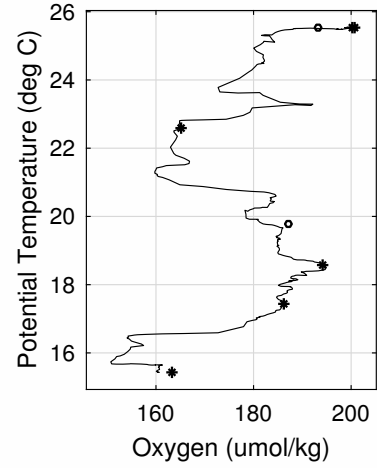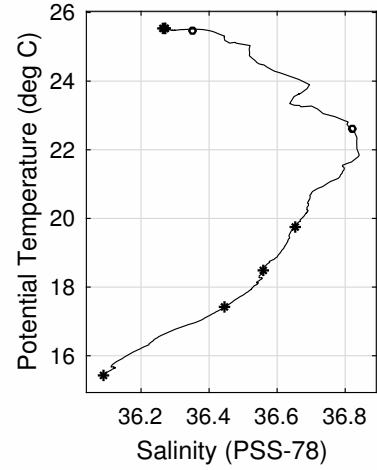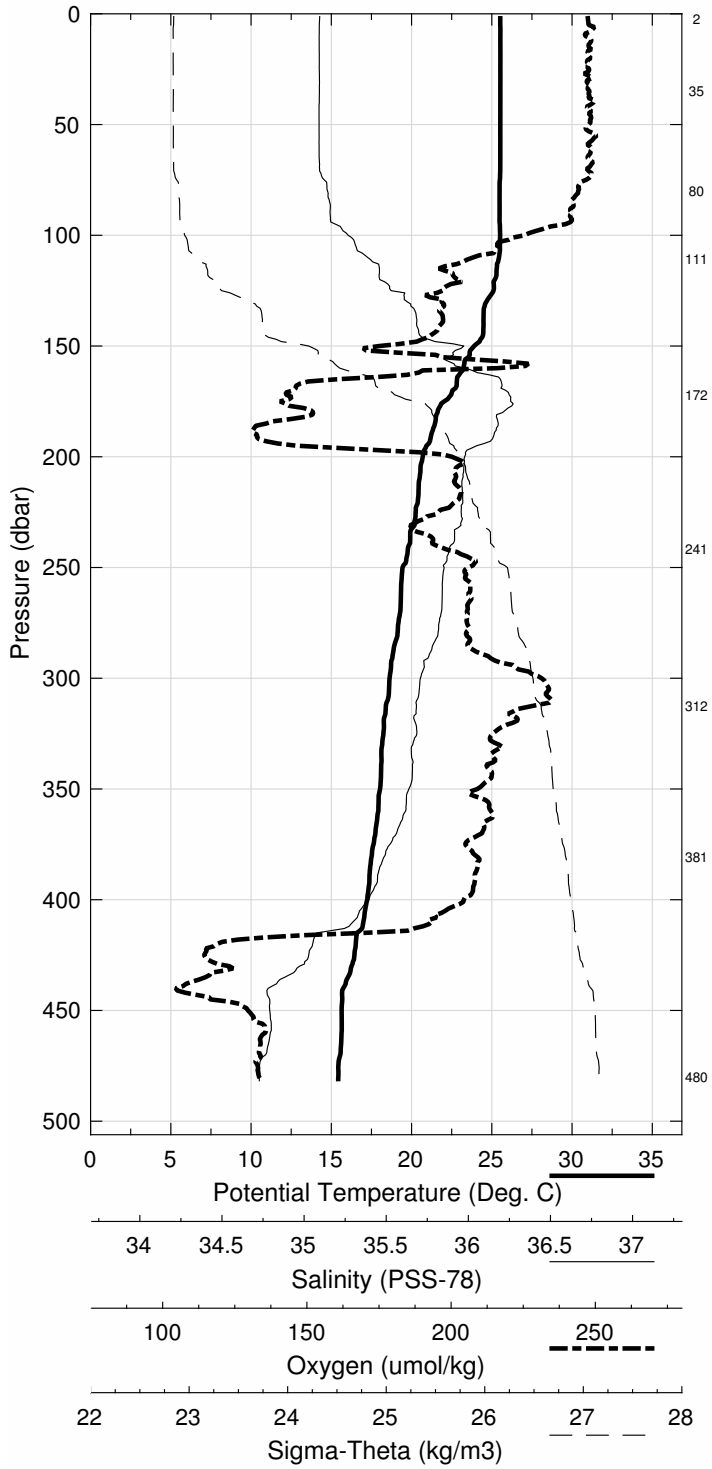
Abaco February 2016 R/V Endeavor
CTD Station 35 (CTD035)
Latitude 27.003N Longitude 79.285W
27-Feb-2016 07:36Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.475	25.475	36.285	199.0	0.004	24.167
10	25.490	25.488	36.283	199.6	0.037	24.161
20	25.491	25.487	36.283	199.4	0.075	24.162
30	25.494	25.488	36.283	199.5	0.113	24.161
50	25.500	25.489	36.283	199.9	0.188	24.161
75	25.503	25.487	36.283	199.7	0.282	24.162
100	25.505	25.482	36.284	199.7	0.377	24.163
125	25.328	25.300	36.324	199.4	0.472	24.250
150	24.483	24.450	36.656	168.4	0.561	24.760
200	21.383	21.344	36.793	156.2	0.691	25.765
250	19.522	19.476	36.597	196.9	0.797	26.119
300	18.715	18.661	36.581	189.1	0.892	26.317
400	16.623	16.557	36.284	177.8	1.061	26.606
500	14.589	14.513	35.941	156.0	1.209	26.805
600	11.927	11.848	35.507	133.3	1.335	27.012

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
610	1	11.933	11.852	35.510	136.6
500	2	14.599	14.524	35.950	156.9
400	3	16.406	16.341	36.234	161.3
321	4	18.052	17.996	36.494	166.7
251	5	19.326	19.280	36.591	195.7
190	6	21.639	21.602	36.813	158.1
136	7	25.252	25.223	36.355	199.9
90	8	25.503	25.483	36.284	199.9
45	9	25.499	25.489	36.379	175.8
3	10	25.465	25.464	36.283	200.5

Abaco February 2016 R/V Endeavor
CTD Station 35 (CTD035)
Latitude 27.003 N   Longitude 79.285 W
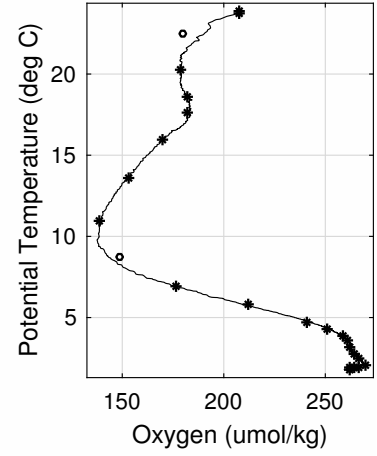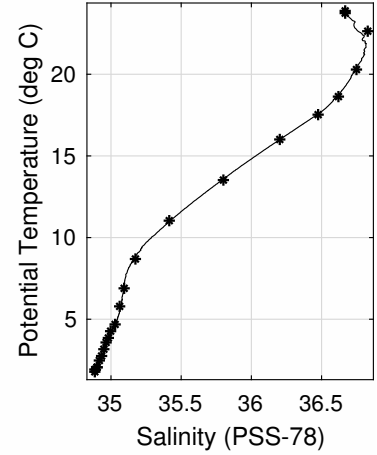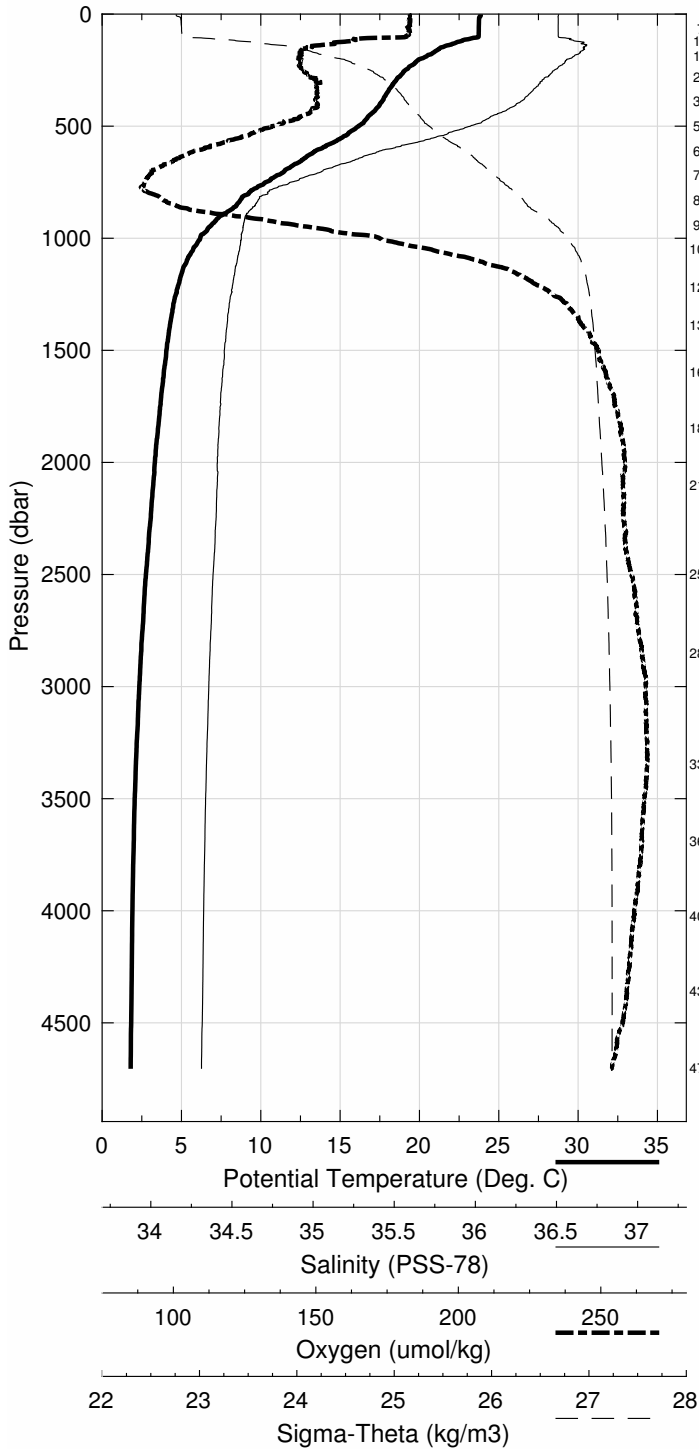**27-Feb-2016 07:36 Z**
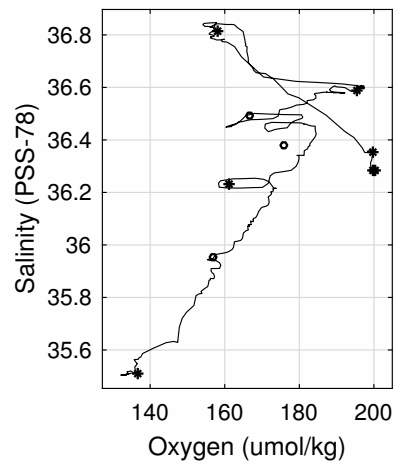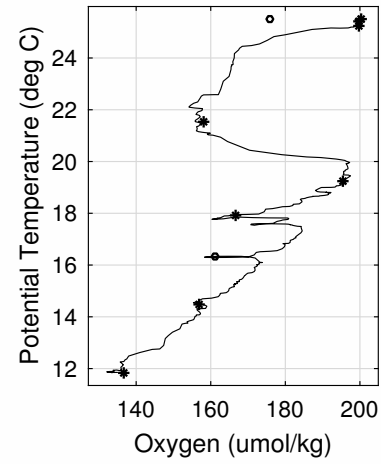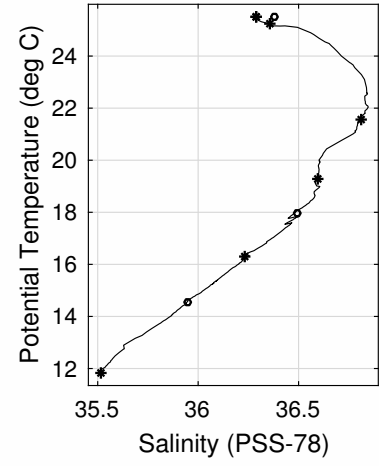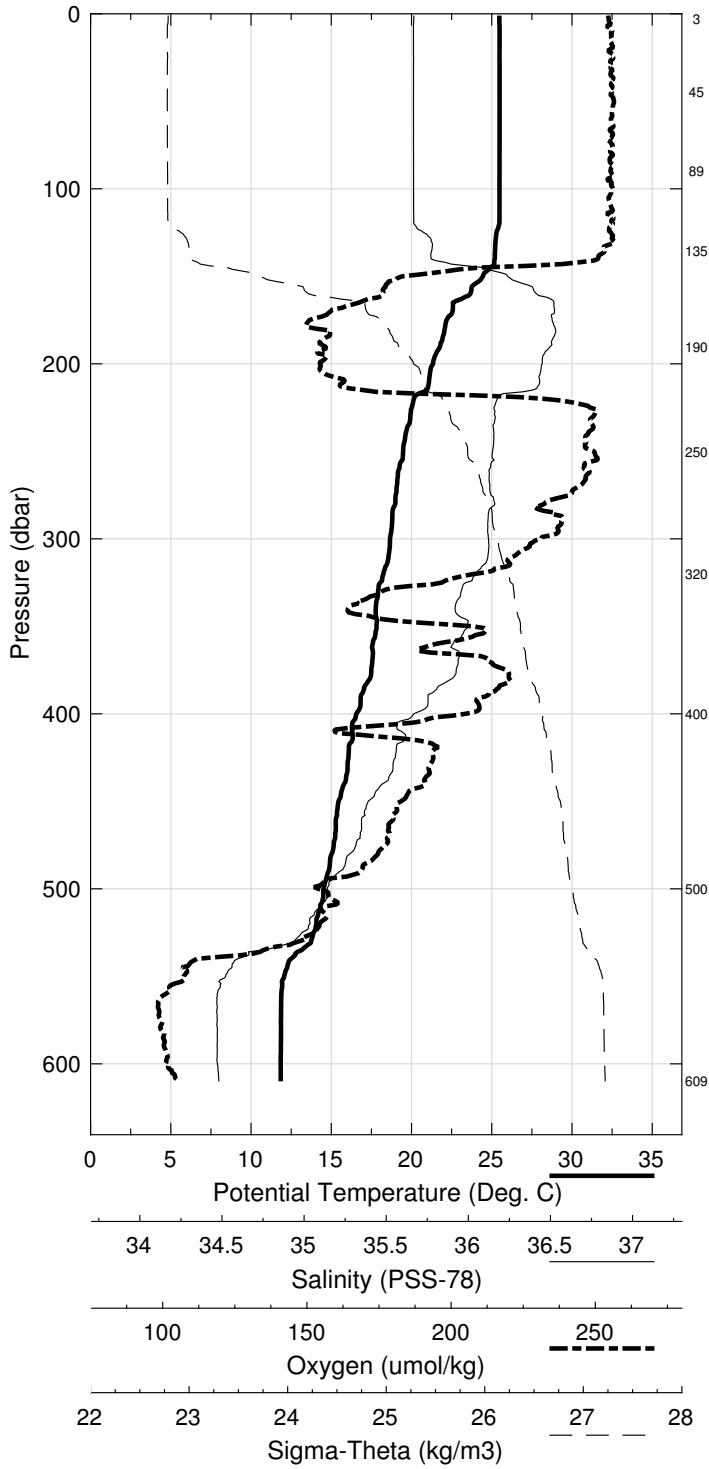
Abaco February 2016 R/V Endeavor
CTD Station 36 (CTD036)
Latitude 27.008N Longitude 79.385W
27-Feb-2016 08:54Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.518	25.518	36.280	198.7	0.004	24.150
10	25.526	25.523	36.279	198.7	0.038	24.147
20	25.528	25.524	36.279	199.1	0.075	24.147
30	25.531	25.525	36.279	199.1	0.113	24.147
50	25.533	25.522	36.279	199.5	0.189	24.148
75	25.538	25.521	36.281	199.1	0.283	24.150
100	25.287	25.265	36.345	198.0	0.377	24.277
125	25.163	25.136	36.320	198.0	0.469	24.298
150	25.111	25.078	36.440	189.2	0.561	24.406
200	21.418	21.379	36.831	160.1	0.699	25.784
250	19.666	19.620	36.712	176.4	0.801	26.169
300	18.726	18.672	36.622	178.1	0.894	26.345
400	15.927	15.863	36.149	168.6	1.059	26.663
500	11.975	11.908	35.477	122.7	1.196	26.977
600	9.225	9.157	35.107	121.1	1.307	27.176

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
672	1	7.306	7.239	34.951	131.2
577	2	9.860	9.792	35.169	119.0
478	3	12.991	12.924	35.644	125.3
378	4	16.790	16.727	36.330	174.0
303	5	18.504	18.450	35.644	172.3
228	6	20.250	20.207	36.768	176.5
176	7	22.778	22.742	36.858	161.5
127	8	25.178	25.150	36.317	198.7
75	9	25.535	25.518	36.283	199.5
30	10	25.527	25.520	36.280	199.4
3	11	25.515	25.515	36.279	199.9

Abaco February 2016 R/V Endeavor
CTD Station 36 (CTD036)
**Latitude 27.008 N   Longitude 79.385 W**
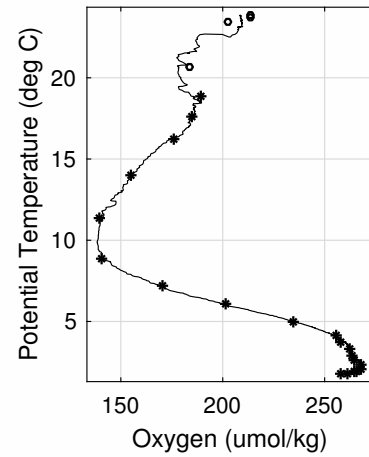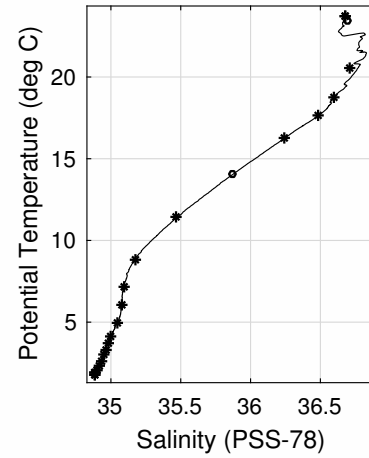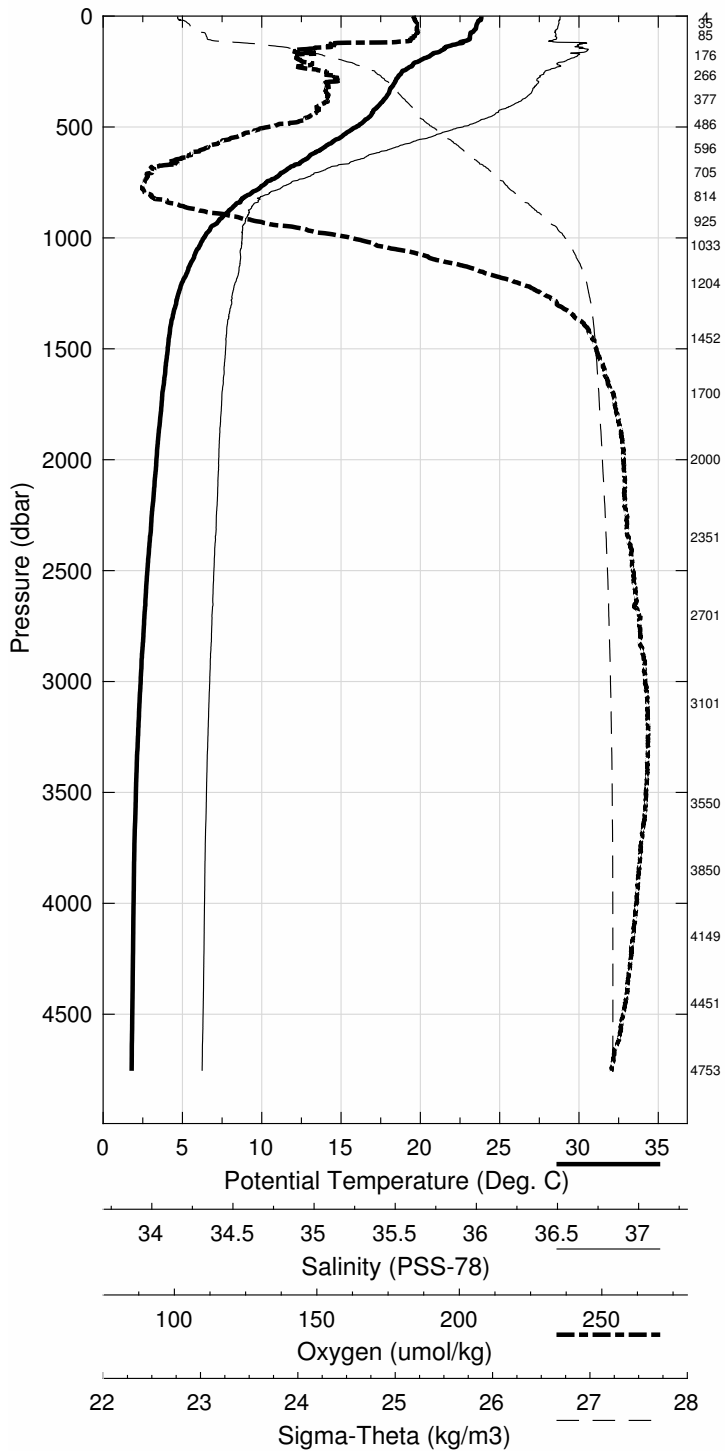**27-Feb-2016 08:54 Z**

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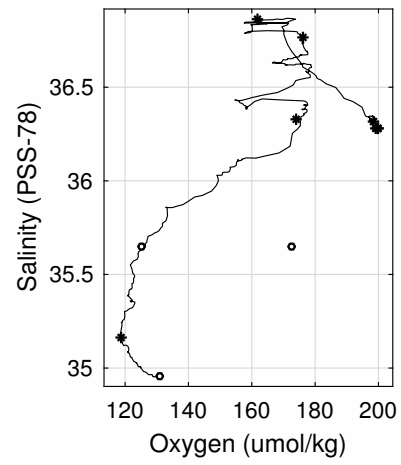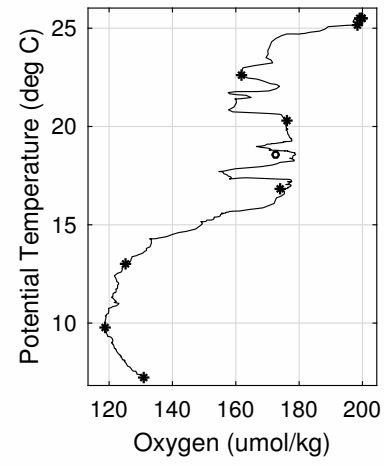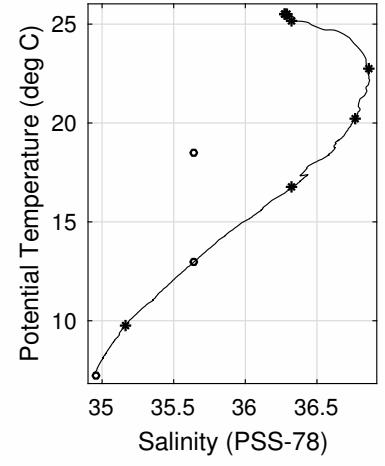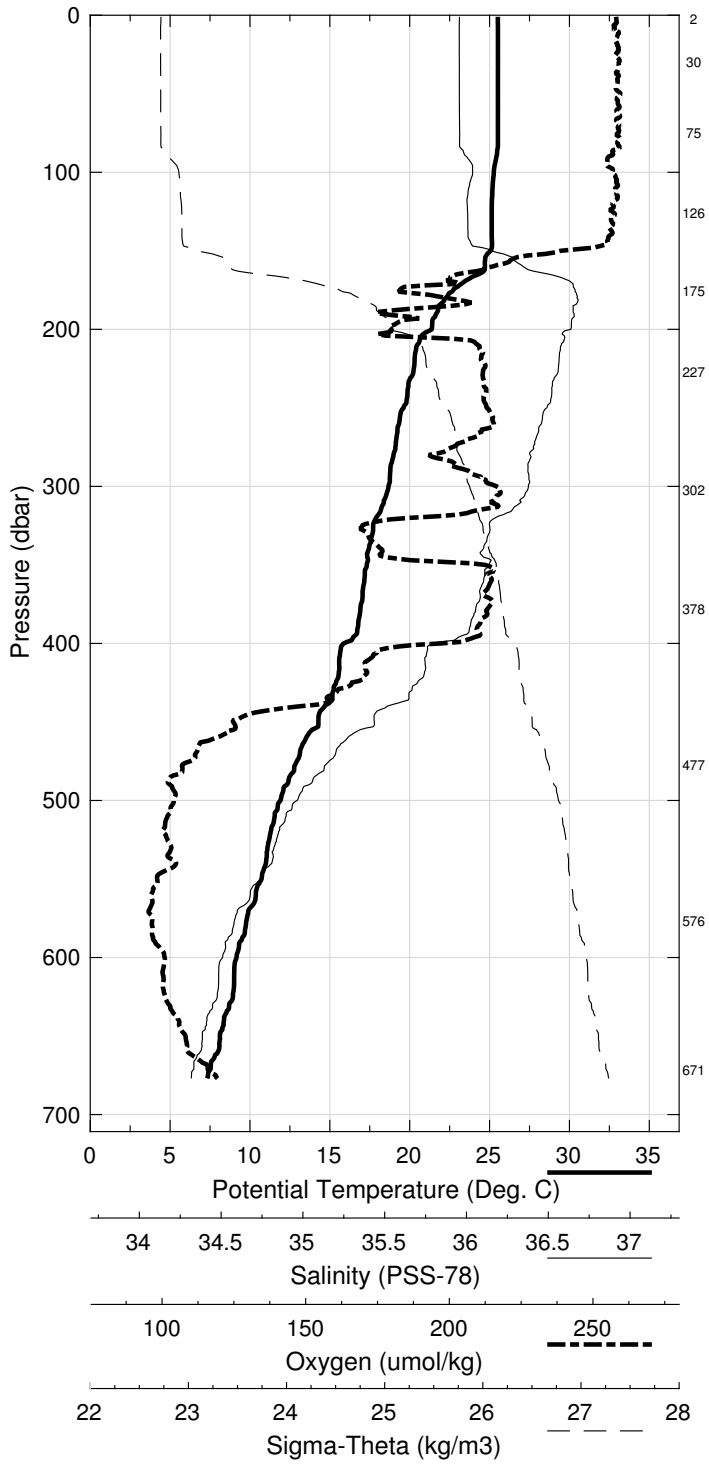
Abaco February 2016 R/V Endeavor
CTD Station 37 (CTD037)
Latitude 27.023N Longitude 79.500W
27-Feb-2016 10:55Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.624	25.624	36.250	199.1	0.004	24.094
10	25.626	25.624	36.249	199.0	0.038	24.093
20	25.633	25.628	36.249	199.1	0.076	24.092
30	25.635	25.629	36.249	199.0	0.115	24.092
50	25.638	25.627	36.249	198.4	0.191	24.092
75	25.639	25.623	36.249	199.4	0.287	24.094
100	25.646	25.624	36.249	199.3	0.384	24.093
125	25.609	25.581	36.367	193.0	0.480	24.196
150	24.521	24.488	36.624	179.1	0.568	24.725
200	20.476	20.438	36.727	156.2	0.699	25.962
250	18.856	18.811	36.596	172.8	0.796	26.290
300	17.344	17.293	36.355	147.0	0.882	26.484
400	14.263	14.204	35.837	132.3	1.034	26.791
500	10.151	10.092	35.206	118.9	1.153	27.097
600	7.941	7.879	34.960	122.1	1.251	27.260
700	6.475	6.410	34.908	140.0	1.333	27.426

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
752	1	6.301	6.232	34.907	143.6
652	2	6.825	6.763	34.907	129.7
549	3	8.529	8.470	35.024	121.6
443	4	11.382	11.325	35.385	120.8
342	5	16.411	16.355	36.210	143.5
262	6	18.477	18.431	36.592	178.2
206	7	19.984	19.945	36.685	147.8
151	8	24.537	24.505	36.608	180.3
90	9	25.642	25.622	36.248	199.7
50	10	25.635	25.624	36.248	199.2
3	11	25.617	25.616	36.249	199.8

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Abaco February 2016 R/V Endeavor
CTD Station 37 (CTD037)
Latitude 27.023 N   Longitude 79.500 W
27-Feb-2016 10:55 Z
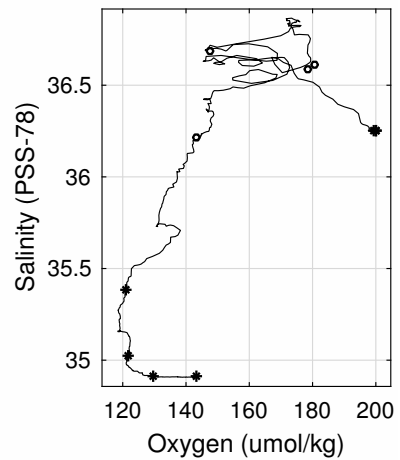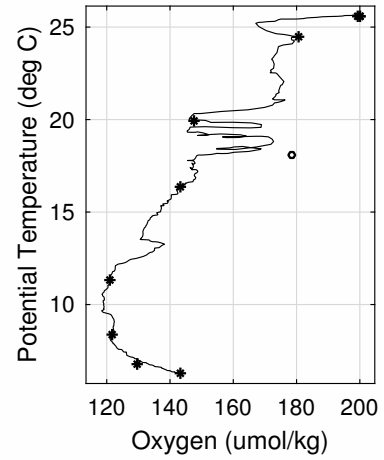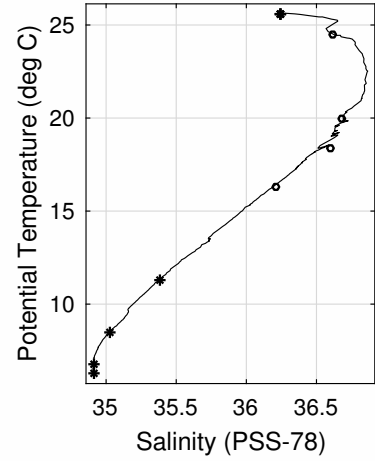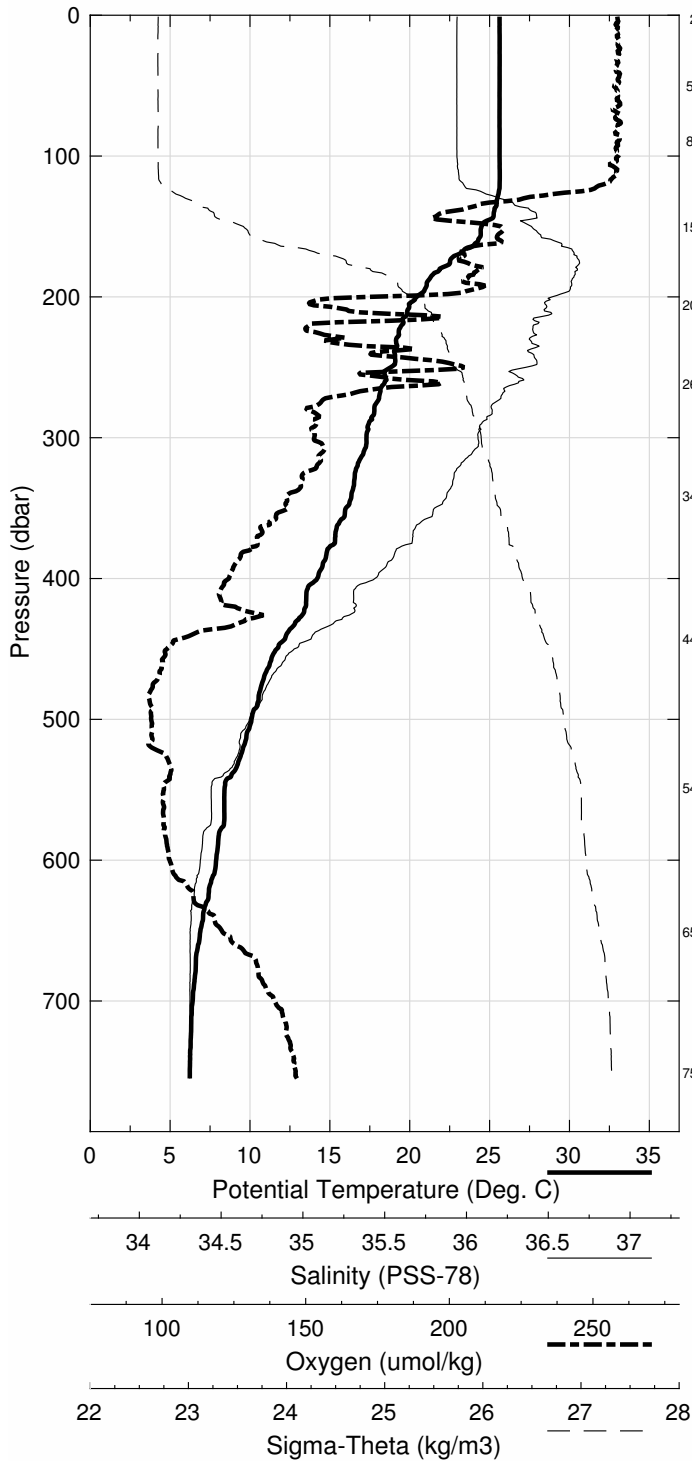
Abaco February 2016 R/V Endeavor
CTD Station 38 (CTD038)
Latitude 27.009N Longitude 79.614W
27-Feb-2016 12:37Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.497	25.497	36.269	200.5	0.004	24.147
10	25.515	25.512	36.267	199.7	0.038	24.142
20	25.500	25.495	36.267	200.6	0.075	24.147
30	25.509	25.502	36.268	200.0	0.113	24.145
50	25.513	25.502	36.267	199.9	0.189	24.145
75	25.519	25.502	36.267	199.6	0.283	24.145
100	25.533	25.511	36.267	200.3	0.379	24.142
125	25.536	25.508	36.270	200.1	0.474	24.145
150	24.197	24.165	36.766	160.5	0.562	24.930
200	20.810	20.772	36.778	148.3	0.686	25.911
250	17.720	17.677	36.389	141.3	0.782	26.417
300	15.317	15.271	36.014	135.9	0.859	26.694
400	10.144	10.096	35.228	120.3	0.980	27.113
500	7.607	7.557	34.962	127.6	1.075	27.310
600	6.446	6.391	34.910	140.7	1.152	27.431

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
650	1	6.378	7.370	−999.000	−999.0
560	2	6.697	7.548	−999.000	−999.0
492	3	7.765	7.715	34.965	125.6
426	4	9.564	9.516	35.182	122.7
355	5	12.165	12.118	35.523	123.1
272	6	16.627	16.583	36.227	140.4
190	7	21.452	21.415	36.782	150.2
140	8	25.394	25.363	36.625	169.4
75	9	25.532	25.515	36.266	200.4
35	10	25.525	25.518	36.269	200.4
3	11	25.489	25.488	36.268	201.8

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Abaco February 2016 R/V Endeavor
CTD Station 38 (CTD038)
**Latitude 27.009 N   Longitude 79.614 W**
27-Feb-2016 12:37 Z

156
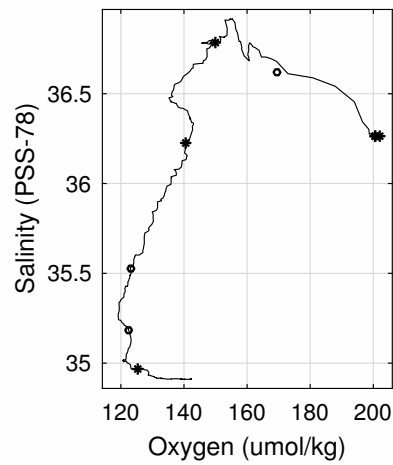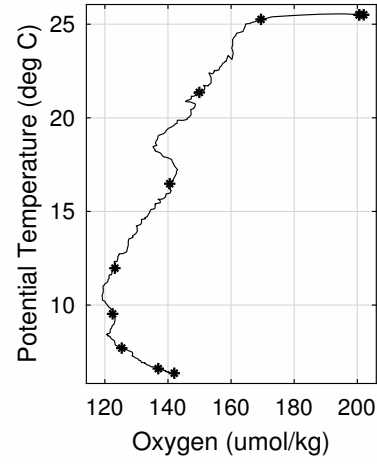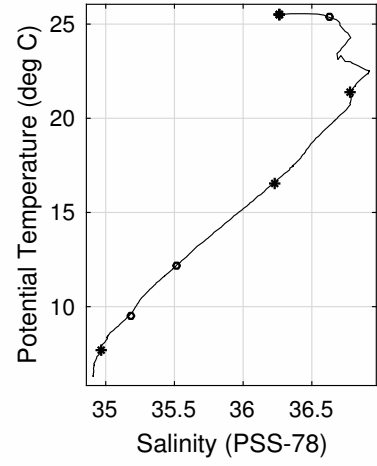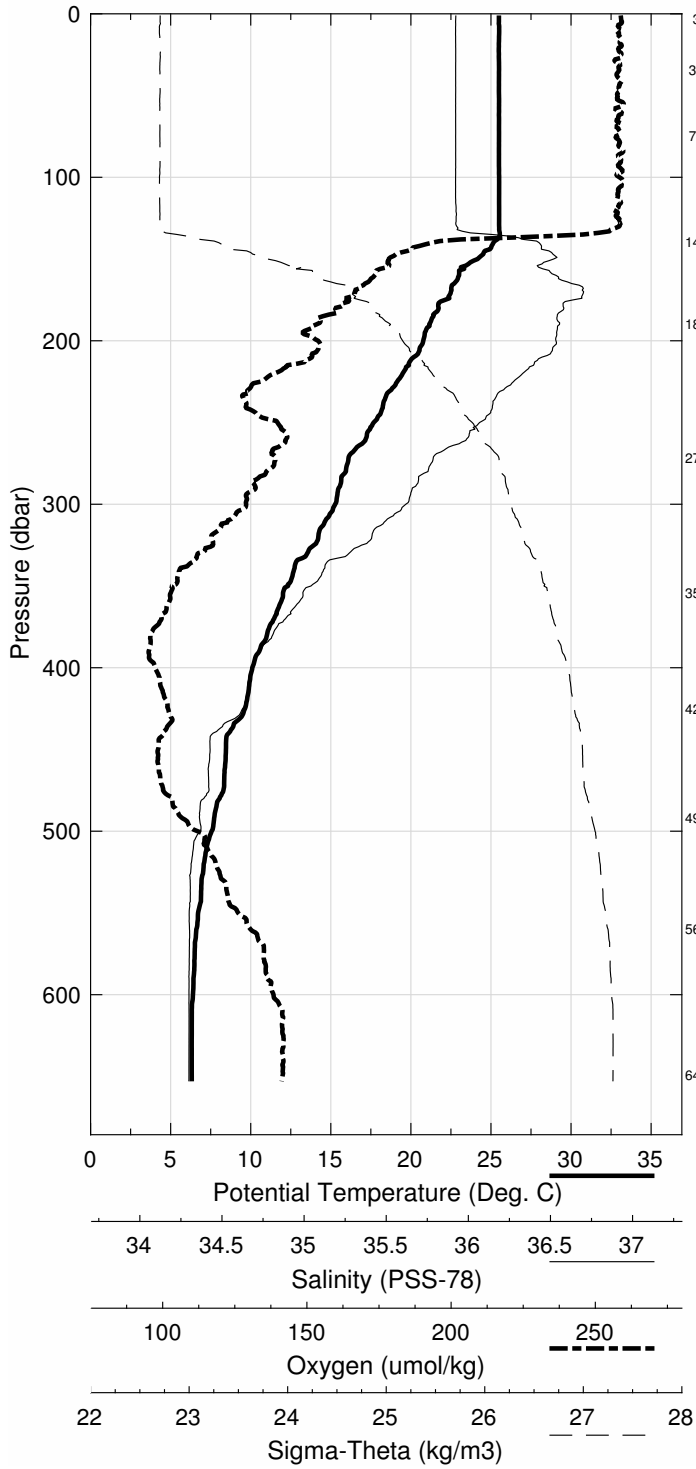
Abaco February 2016 R/V Endeavor
CTD Station 39 (CTD039)
Latitude 27.010N Longitude 79.681W
27-Feb-2016 14:03Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.703	25.703	36.245	198.7	0.004	24.066
10	25.704	25.701	36.244	199.2	0.038	24.066
20	25.702	25.698	36.244	199.2	0.077	24.067
30	25.709	25.702	36.244	199.2	0.115	24.065
50	25.711	25.700	36.244	199.7	0.192	24.066
75	25.718	25.702	36.244	199.3	0.289	24.065
100	25.693	25.671	36.255	196.8	0.386	24.084
125	24.942	24.914	36.489	177.1	0.479	24.493
150	22.809	22.778	36.419	194.7	0.559	25.074
200	20.323	20.285	36.553	142.5	0.685	25.871
250	17.398	17.356	36.298	134.1	0.780	26.425
300	12.926	12.885	35.655	128.8	0.854	26.924
400	8.331	8.289	34.997	120.6	0.953	27.228
500	6.675	6.629	34.916	137.1	1.034	27.403

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
526	1	6.263	6.216	34.912	145.0
430	2	7.846	7.802	34.986	127.1
345	3	9.158	9.120	35.110	120.7
263	4	16.301	16.259	36.160	133.5
200	5	20.327	20.289	36.559	142.5
150	6	23.136	23.105	36.477	189.0
100	7	25.699	25.677	36.278	194.7
60	8	25.701	25.687	36.244	199.3
21	9	25.697	25.692	36.244	199.3
4	10	25.691	25.691	36.244	199.4

Abaco February 2016 R/V Endeavor
CTD Station 39 (CTD039)
Latitude 27.010 N   Longitude 79.681 W
27-Feb-2016 14:03 Z

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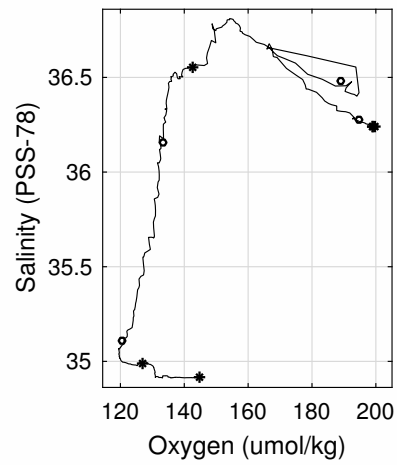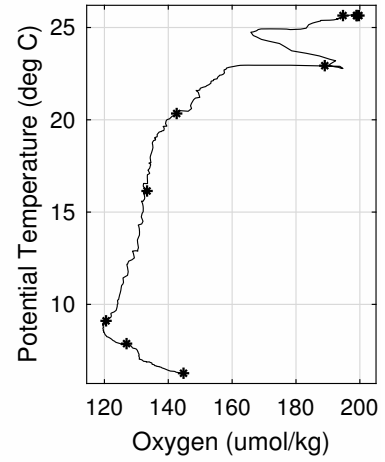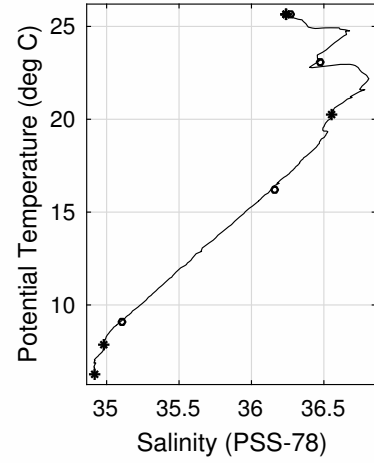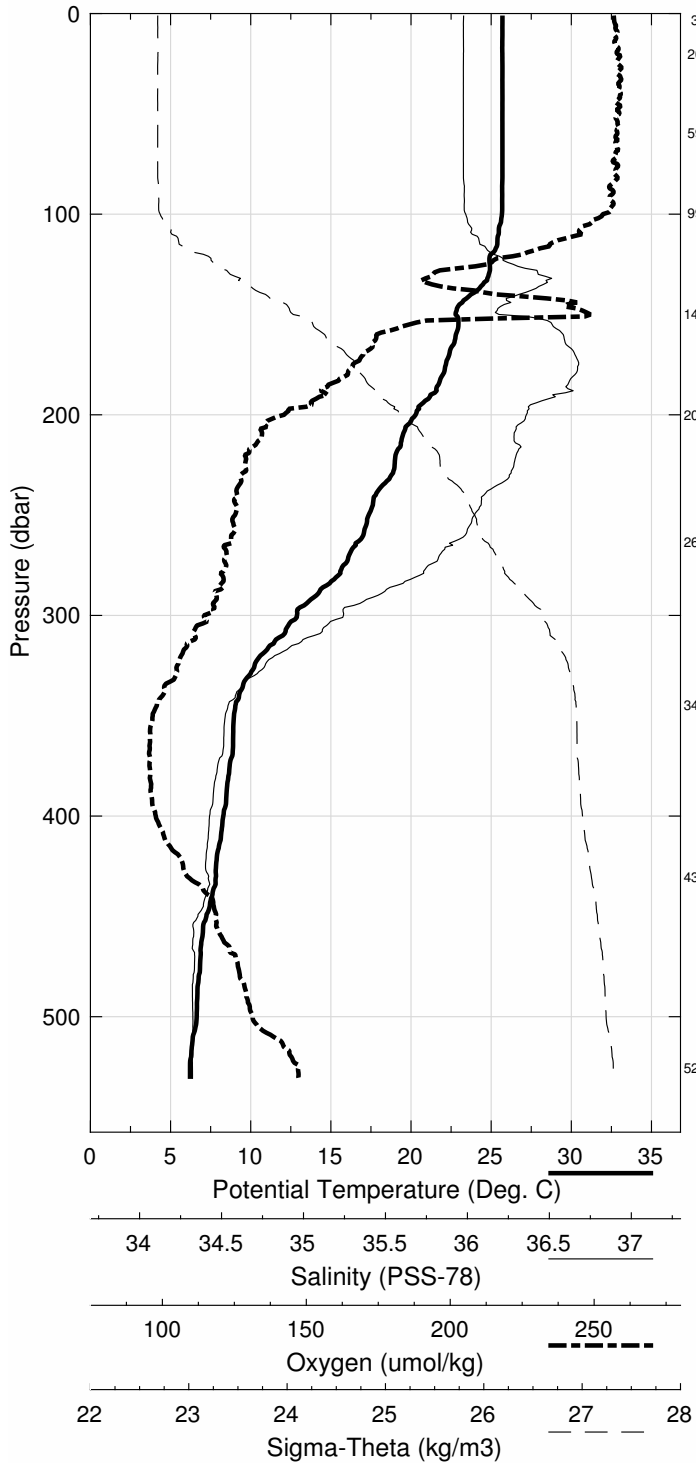
Abaco February 2016 R/V Endeavor
CTD Station 40 (CTD040)
Latitude 27.011N Longitude 79.784W
27-Feb-2016 15:35Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.742	25.742	36.252	200.4	0.004	24.059
10	25.736	25.734	36.251	200.2	0.038	24.061
20	25.746	25.742	36.250	200.6	0.077	24.057
30	25.747	25.740	36.250	200.5	0.116	24.058
50	25.745	25.734	36.250	200.2	0.193	24.060
75	25.587	25.570	36.275	197.9	0.289	24.129
100	24.915	24.893	36.471	183.9	0.381	24.486
125	23.516	23.490	36.390	205.4	0.461	24.845
150	22.220	22.190	36.456	188.6	0.534	25.271
200	17.496	17.462	36.289	137.1	0.648	26.392
250	11.958	11.925	35.519	127.9	0.716	27.007
300	9.370	9.336	35.174	126.0	0.765	27.200

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
378	1	7.699	7.661	34.965	126.1
300	2	9.497	9.463	35.189	125.9
235	3	13.172	13.139	35.726	130.4
174	4	20.829	20.796	36.438	174.5
119	5	23.556	23.531	36.399	205.8
79	6	25.292	25.275	36.327	193.3
40	7	25.746	25.737	36.251	200.2
4	8	25.744	25.743	36.251	200.4

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Abaco February 2016 R/V Endeavor
CTD Station 40 (CTD040)
Latitude 27.011 N   Longitude 79.784 W
27-Feb-2016 15:35 Z
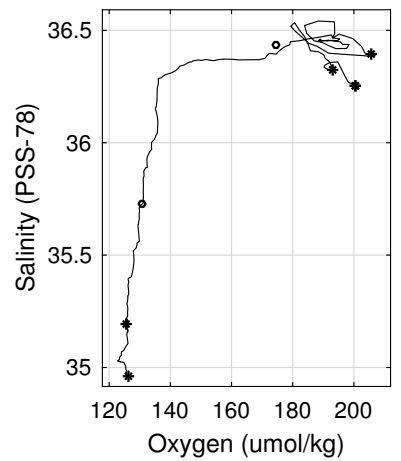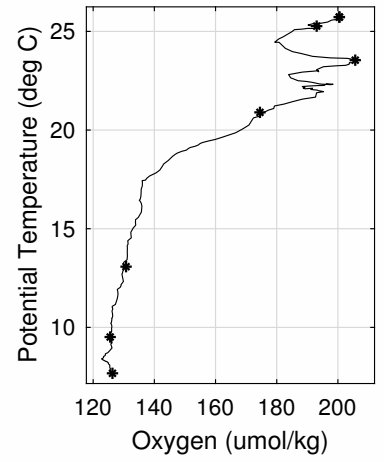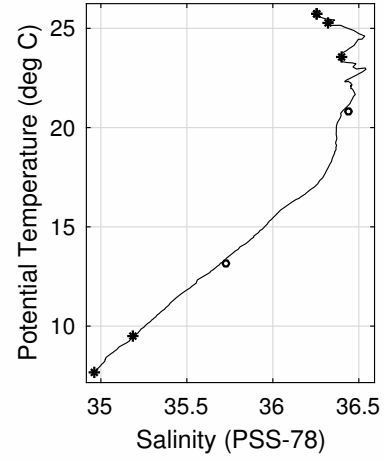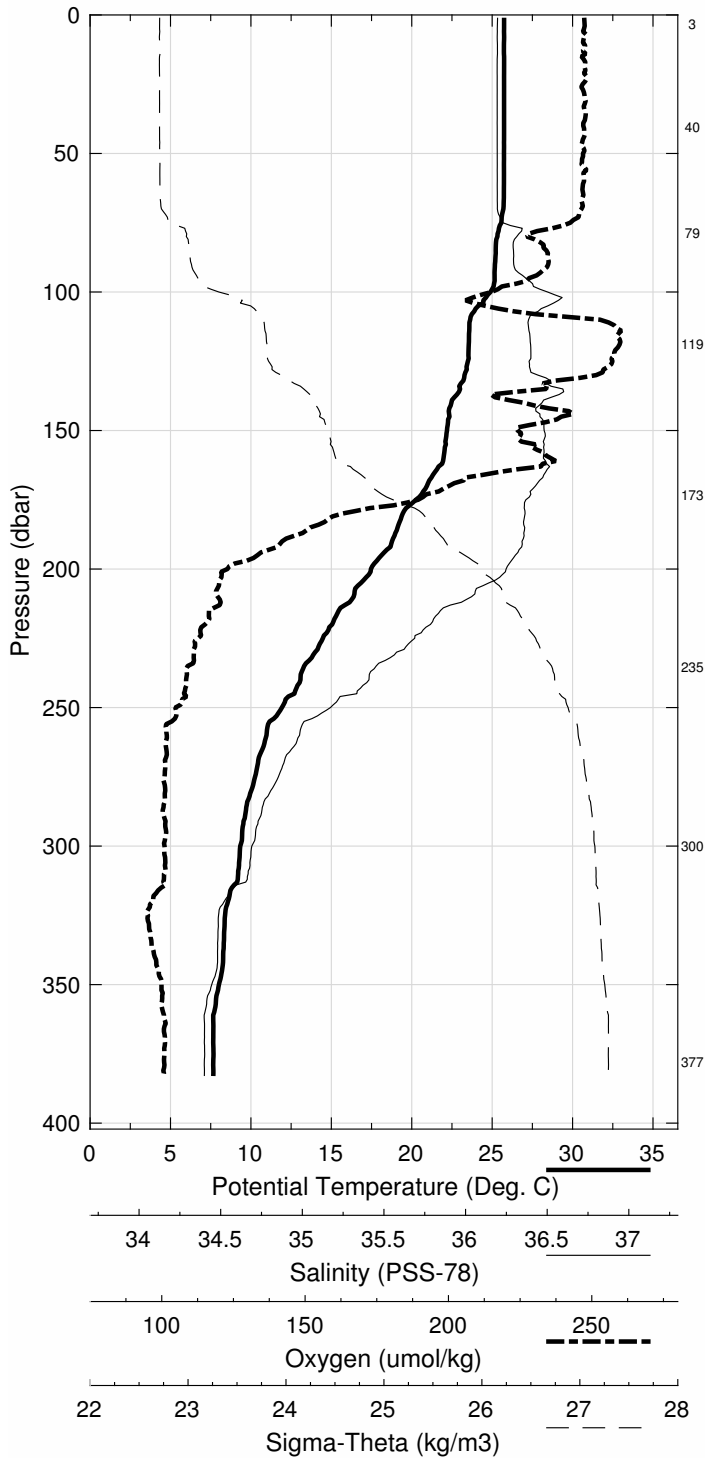
Abaco February 2016 R/V Endeavor
CTD Station 41 (CTD041)
Latitude 27.008N Longitude 79.864W
27-Feb-2016 16:58Z

Pressure dbar	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.533	25.532	36.264	201.7	0.004	24.133
10	25.536	25.534	36.262	201.4	0.038	24.131
20	25.542	25.538	36.262	201.1	0.076	24.130
30	25.546	25.539	36.261	202.0	0.113	24.129
50	25.448	25.437	36.265	201.6	0.189	24.164
75	24.795	24.779	36.513	179.3	0.280	24.552
100	22.878	22.858	36.427	193.9	0.359	25.058
125	21.402	21.378	36.532	172.3	0.426	25.557
150	17.954	17.929	36.331	137.6	0.479	26.310
200	12.860	12.832	35.616	125.8	0.549	26.904
250	9.690	9.662	35.175	119.5	0.603	27.146

Pressure dbar	Niskin	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
243	1	9.812	9.784	35.191	119.6
212	2	12.063	12.035	35.517	124.8
159	3	16.731	16.705	36.235	135.7
91	4	23.537	23.518	36.390	205.8
49	5	25.479	25.468	36.263	202.7
5	6	25.546	25.545	36.262	201.9

Abaco February 2016 R/V Endeavor
CTD Station 41 (CTD041)
**Latitude 27.008 N Longitude 79.864 W**
27-Feb-2016 16:58 Z
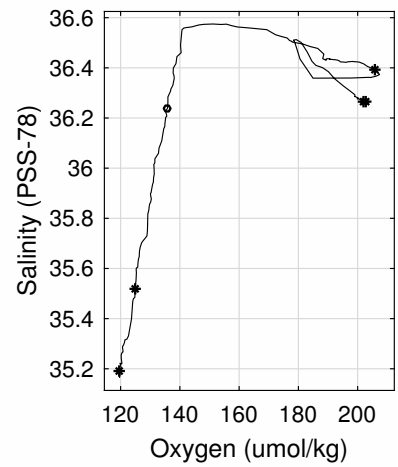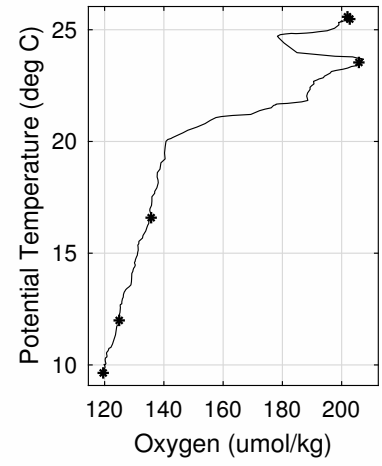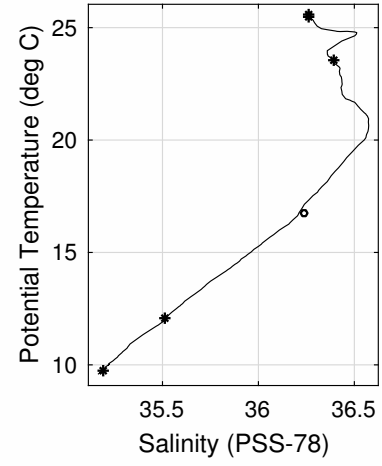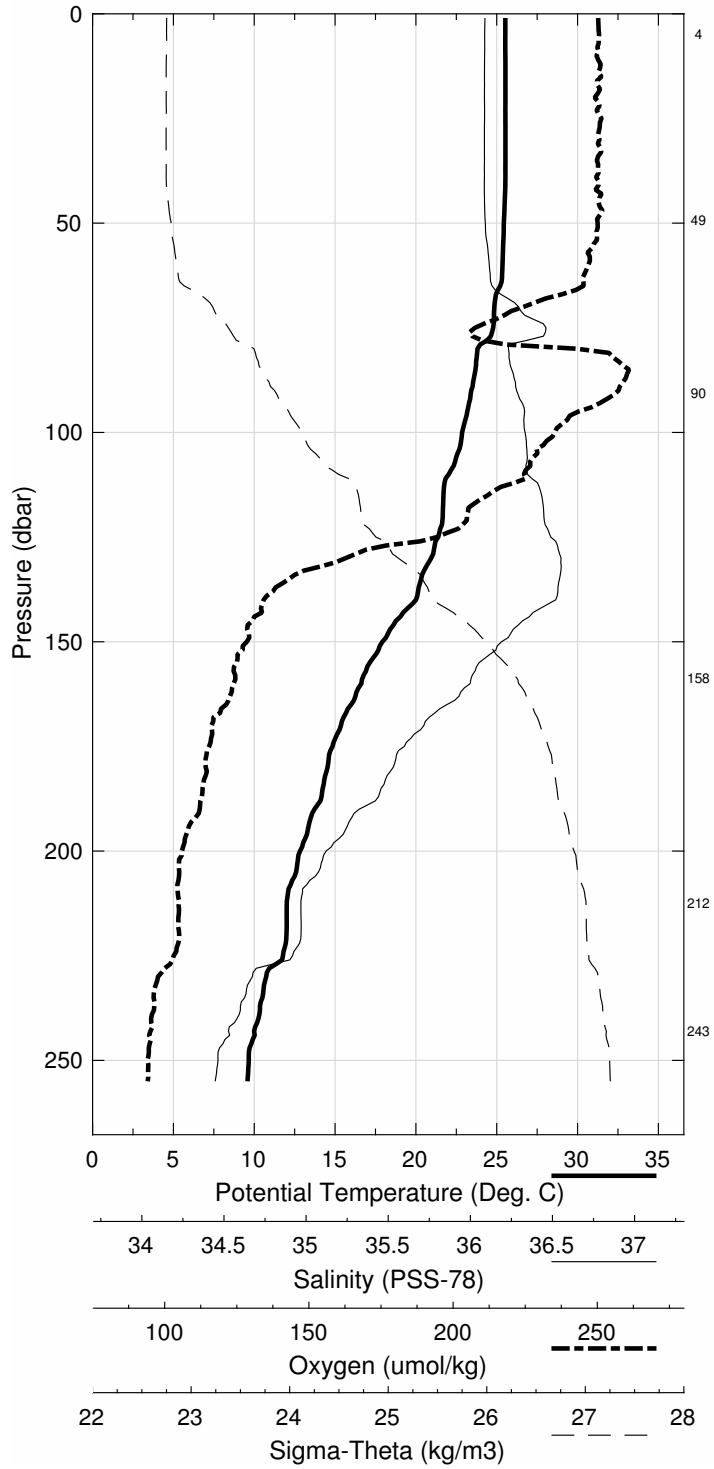
Abaco February 2016 R/V Endeavor
CTD Station 42 (CTD042)
Latitude 27.008N Longitude 79.934W
27-Feb-2016 18:26Z

Pressure dbar	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.322	25.322	36.281	202.2	0.004	24.211
10	25.322	25.320	36.279	201.6	0.037	24.210
20	25.309	25.305	36.280	202.2	0.074	24.215
30	25.240	25.233	36.286	200.8	0.111	24.242
50	24.267	24.256	36.318	201.5	0.183	24.563
75	22.182	22.167	36.429	203.1	0.257	25.257
100	19.398	19.380	36.505	139.3	0.318	26.074
125	16.744	16.723	36.218	132.5	0.360	26.516

Pressure dbar	Niskin	Temp90 $^{\circ}$C	PoTemp90 $^{\circ}$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
138	1	15.782	15.760	36.097	132.9
76	2	22.179	22.164	36.434	196.8
34	3	25.194	25.186	36.291	200.3
4	4	25.294	25.293	36.284	202.9

Abaco February 2016 R/V Endeavor
CTD Station 42 (CTD042)
Latitude 27.008 N   Longitude 79.934 W
27-Feb-2016 18:26 Z
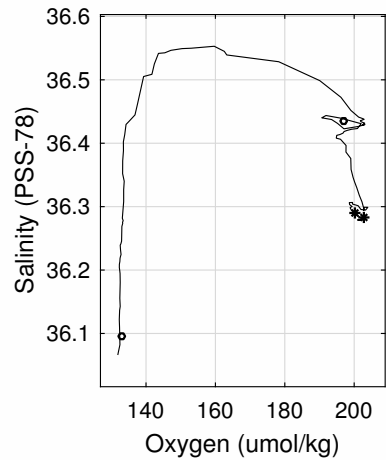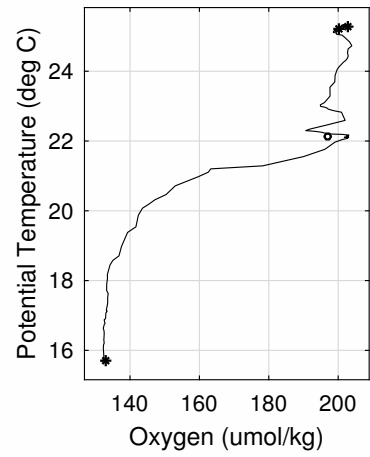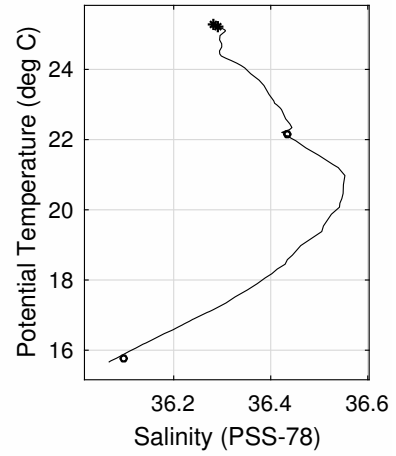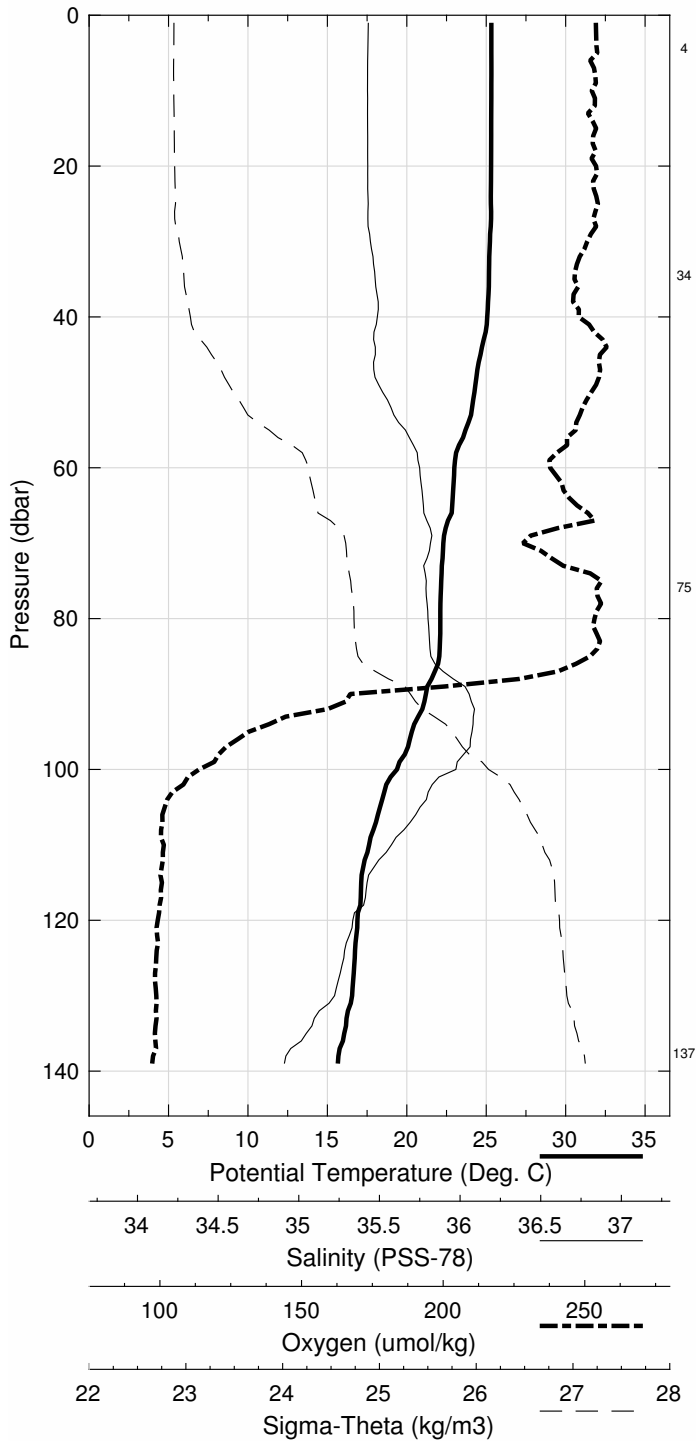
Abaco February 2016 R/V Endeavor
CTD Station 43 (CTD043)
Latitude 26.051N Longitude 79.236W
28-Feb-2016 02:43Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.343	25.343	36.262	201.3	0.004	24.190
10	25.348	25.345	36.260	201.4	0.037	24.188
20	25.349	25.345	36.282	199.7	0.074	24.205
30	25.353	25.347	36.327	195.7	0.111	24.238
50	25.339	25.328	36.332	195.0	0.185	24.247
75	25.194	25.178	36.391	191.2	0.277	24.338
100	24.855	24.833	36.442	192.4	0.365	24.483
125	24.727	24.700	36.509	190.2	0.451	24.574
150	24.439	24.407	36.636	185.2	0.535	24.759
200	21.339	21.300	36.818	171.7	0.671	25.796
250	20.208	20.161	36.752	173.5	0.778	26.056
300	18.004	17.952	36.491	165.3	0.872	26.427

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
337	1	17.684	17.626	36.443	166.1
250	2	20.182	20.135	36.746	173.6
189	3	21.793	21.756	36.847	172.8
113	4	24.786	24.761	36.465	192.3
61	5	25.354	25.340	36.364	191.1
24	6	25.367	25.362	36.309	197.4
4	7	25.327	25.326	36.267	200.9

Abaco February 2016 R/V Endeavor
CTD Station 43 (CTD043)
Latitude 26.051 N   Longitude 79.236 W
28-Feb-2016 02:43 Z
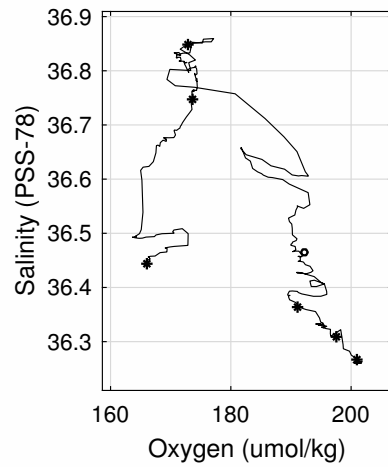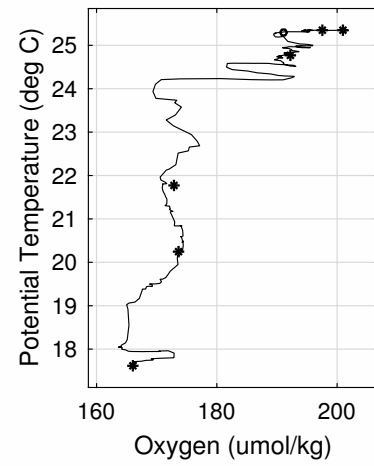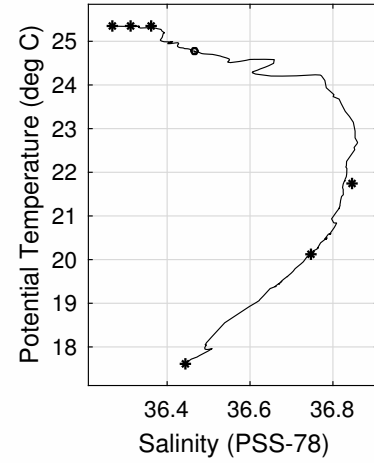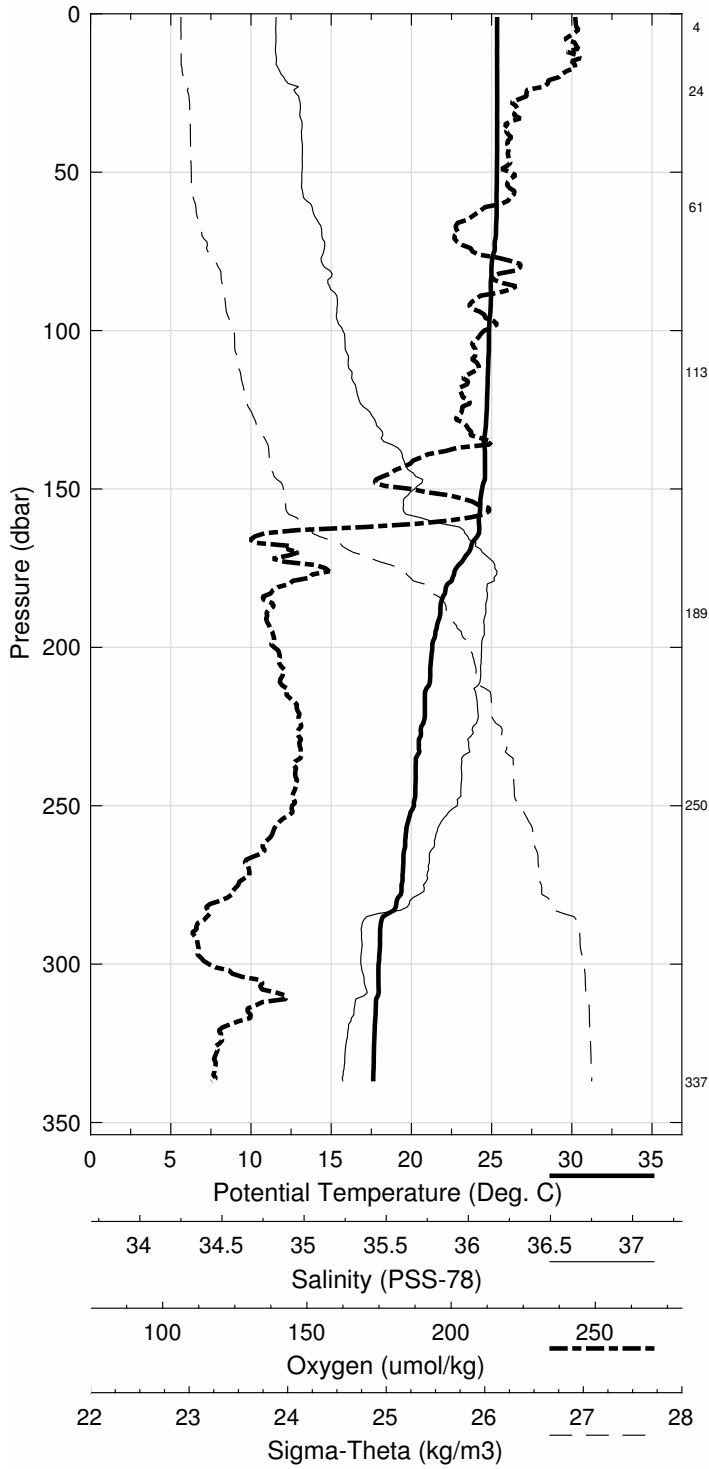
Abaco February 2016 R/V Endeavor
CTD Station 44 (CTD044)
Latitude 26.052N Longitude 79.312W
28-Feb-2016 03:43Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.400	25.400	36.278	200.2	0.004	24.185
10	25.399	25.397	36.276	200.6	0.037	24.184
20	25.399	25.394	36.276	200.5	0.075	24.185
30	25.400	25.394	36.276	200.0	0.112	24.185
50	25.409	25.398	36.276	200.5	0.187	24.184
75	25.418	25.402	36.294	199.7	0.281	24.196
100	25.166	25.144	36.375	198.1	0.372	24.336
125	24.805	24.778	36.463	191.3	0.461	24.515
150	24.445	24.412	36.673	173.2	0.545	24.785
200	22.035	21.995	36.859	177.4	0.686	25.633
250	19.633	19.587	36.711	176.5	0.797	26.177
300	17.939	17.887	36.499	173.2	0.885	26.449
400	16.207	16.142	36.220	165.6	1.044	26.653

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
484	1	11.634	11.571	35.462	130.5
390	2	16.202	16.139	36.218	164.9
340	3	17.202	17.145	36.358	160.8
274	4	18.653	18.604	36.596	179.0
221	5	21.341	21.298	36.833	175.2
151	6	24.496	24.464	36.680	173.8
91	7	25.228	25.209	36.341	200.5
45	8	25.407	25.397	36.280	211.9
4	9	25.397	25.396	36.280	211.3

Abaco February 2016 R/V Endeavor
CTD Station 44 (CTD044)
**Latitude 26.052 N   Longitude 79.312 W**
28-Feb-2016 03:43 Z
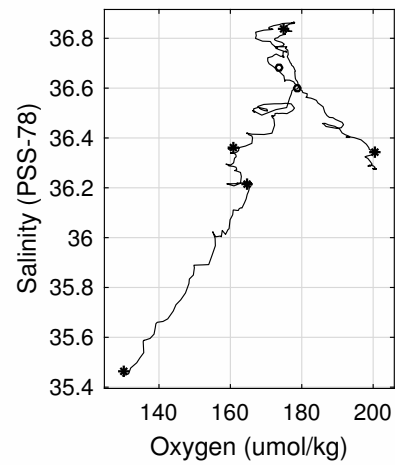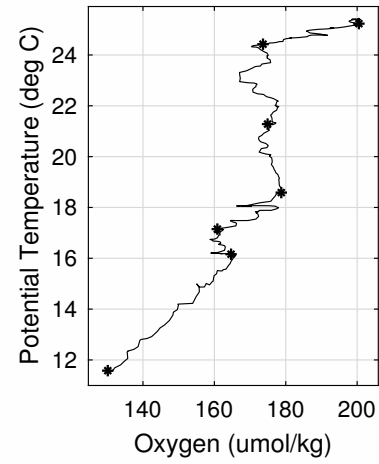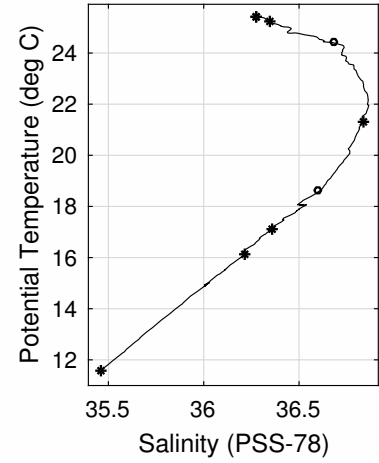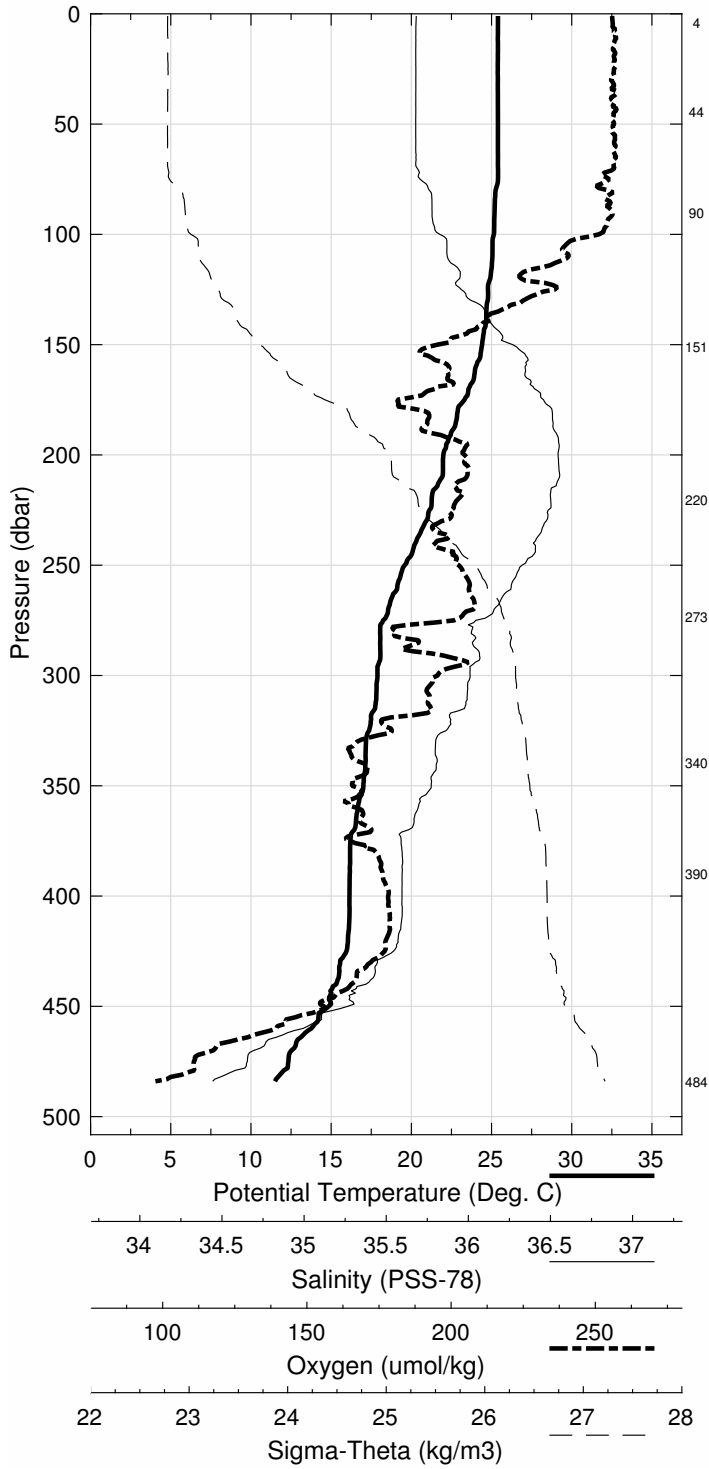
Abaco February 2016 R/V Endeavor
CTD Station 45 (CTD045)
Latitude 26.057N Longitude 79.402W
28-Feb-2016 04:56Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.458	25.457	36.284	200.3	0.004	24.171
10	25.453	25.451	36.283	200.9	0.037	24.173
20	25.458	25.453	36.283	200.2	0.075	24.172
30	25.476	25.469	36.282	200.4	0.112	24.167
50	25.474	25.463	36.283	200.0	0.188	24.168
75	25.462	25.446	36.284	200.7	0.282	24.175
100	25.260	25.238	36.366	200.5	0.375	24.301
125	25.221	25.194	36.368	200.3	0.466	24.316
150	25.303	25.270	36.488	194.1	0.557	24.384
200	22.046	22.006	36.766	151.6	0.707	25.559
250	19.694	19.648	36.704	174.4	0.816	26.156
300	18.200	18.148	36.549	176.5	0.907	26.422
400	15.087	15.025	36.018	149.1	1.064	26.751
500	10.360	10.299	35.253	126.4	1.191	27.098

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
593	1	7.962	7.901	34.986	124.4
482	2	12.095	12.031	35.553	134.0
385	3	15.228	15.168	35.996	133.9
300	4	18.207	18.155	36.550	178.9
220	5	20.521	20.479	36.783	174.4
171	6	23.748	23.712	36.803	162.8
120	7	25.183	25.157	36.354	200.3
80	8	25.396	25.378	36.296	201.7
30	9	25.455	25.449	36.281	200.5
3	10	25.440	25.440	36.282	200.6

Abaco February 2016 R/V Endeavor
CTD Station 45 (CTD045)
Latitude 26.057 N   Longitude 79.402 W
28-Feb-2016 04:56 Z
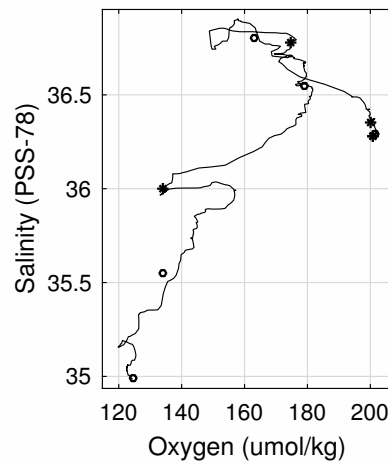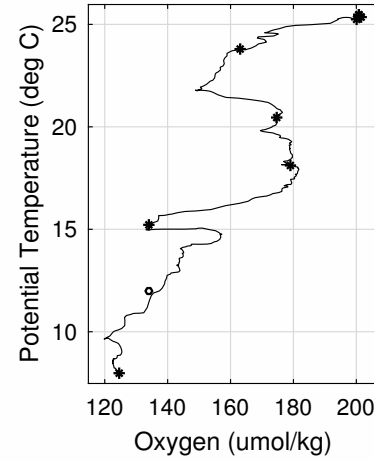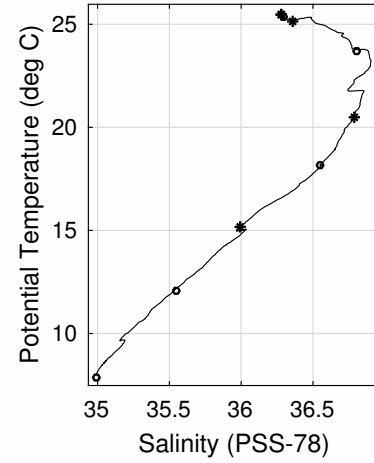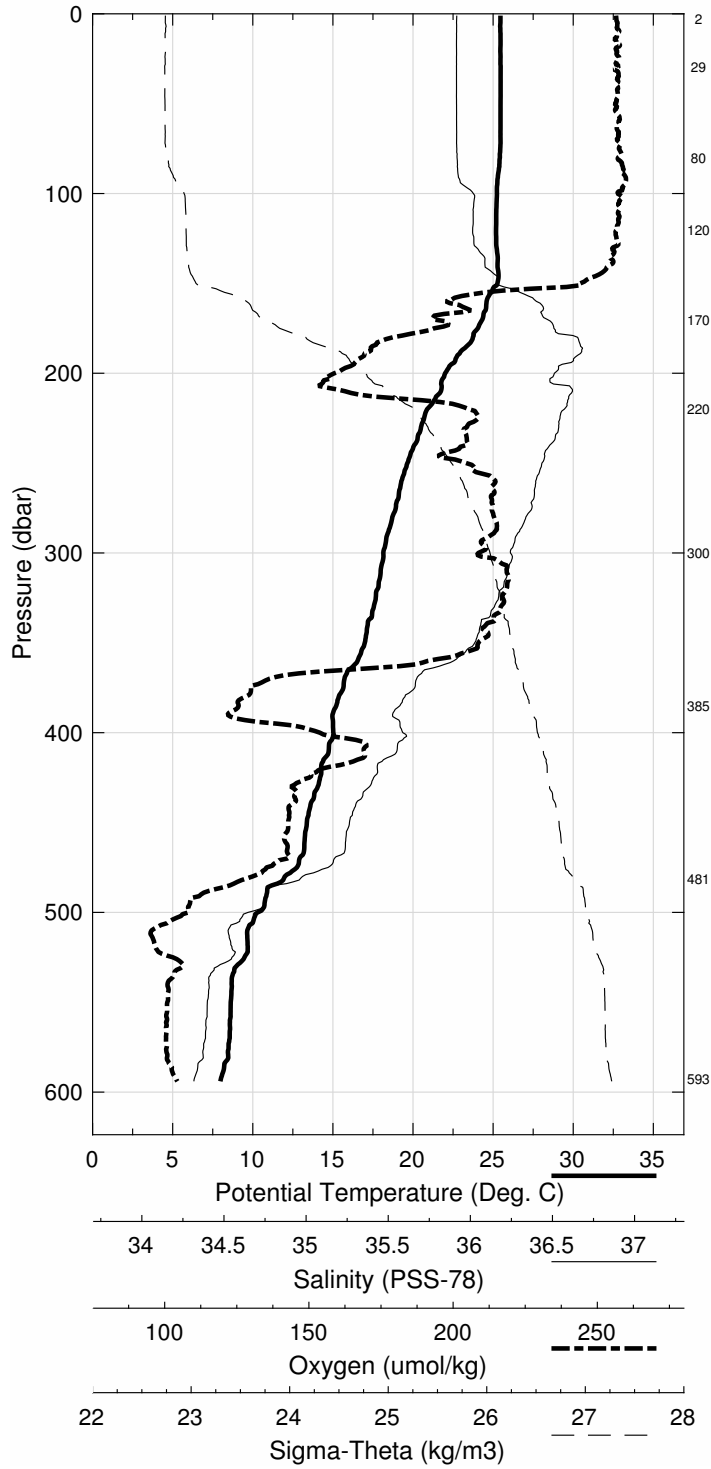
Abaco February 2016 R/V Endeavor
CTD Station 46 (CTD046)
Latitude 26.051N Longitude 79.483W
28-Feb-2016 06:11Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.659	25.659	36.251	199.9	0.004	24.084
10	25.665	25.663	36.249	200.5	0.038	24.081
20	25.668	25.663	36.248	200.0	0.077	24.081
30	25.675	25.669	36.249	200.1	0.115	24.079
50	25.676	25.665	36.253	200.0	0.192	24.084
75	25.627	25.610	36.276	198.8	0.288	24.118
100	25.409	25.387	36.316	201.6	0.382	24.217
125	25.240	25.213	36.496	189.8	0.473	24.407
150	24.604	24.572	36.619	178.7	0.560	24.696
200	22.483	22.442	36.869	154.4	0.708	25.513
250	19.111	19.065	36.566	142.0	0.818	26.202
300	17.068	17.018	36.298	141.9	0.905	26.507
400	13.887	13.829	35.834	149.4	1.051	26.868
500	9.661	9.603	35.174	123.0	1.169	27.155
600	7.450	7.390	34.944	128.0	1.261	27.319

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
676	1	6.756	6.692	34.916	136.9
560	2	8.007	7.949	34.979	122.9
491	3	10.286	10.227	35.264	122.0
400	4	13.880	13.822	35.830	147.2
330	5	16.156	16.103	36.136	136.5
260	6	18.667	18.621	36.505	138.5
205	7	21.979	21.938	36.814	152.6
150	8	24.657	24.625	36.656	174.9
90	9	25.545	25.525	36.254	194.3
35	10	25.681	25.673	36.349	199.2
3	11	25.666	25.665	36.253	199.1

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Abaco February 2016 R/V Endeavor
CTD Station 46 (CTD046)
**Latitude 26.051 N Longitude 79.483 W**
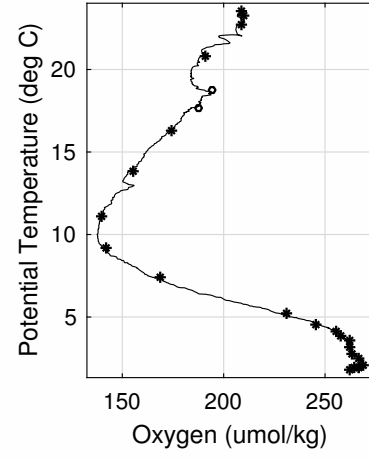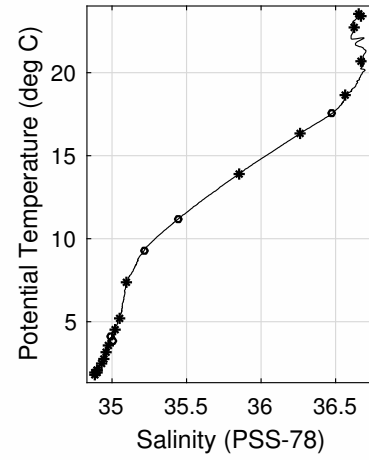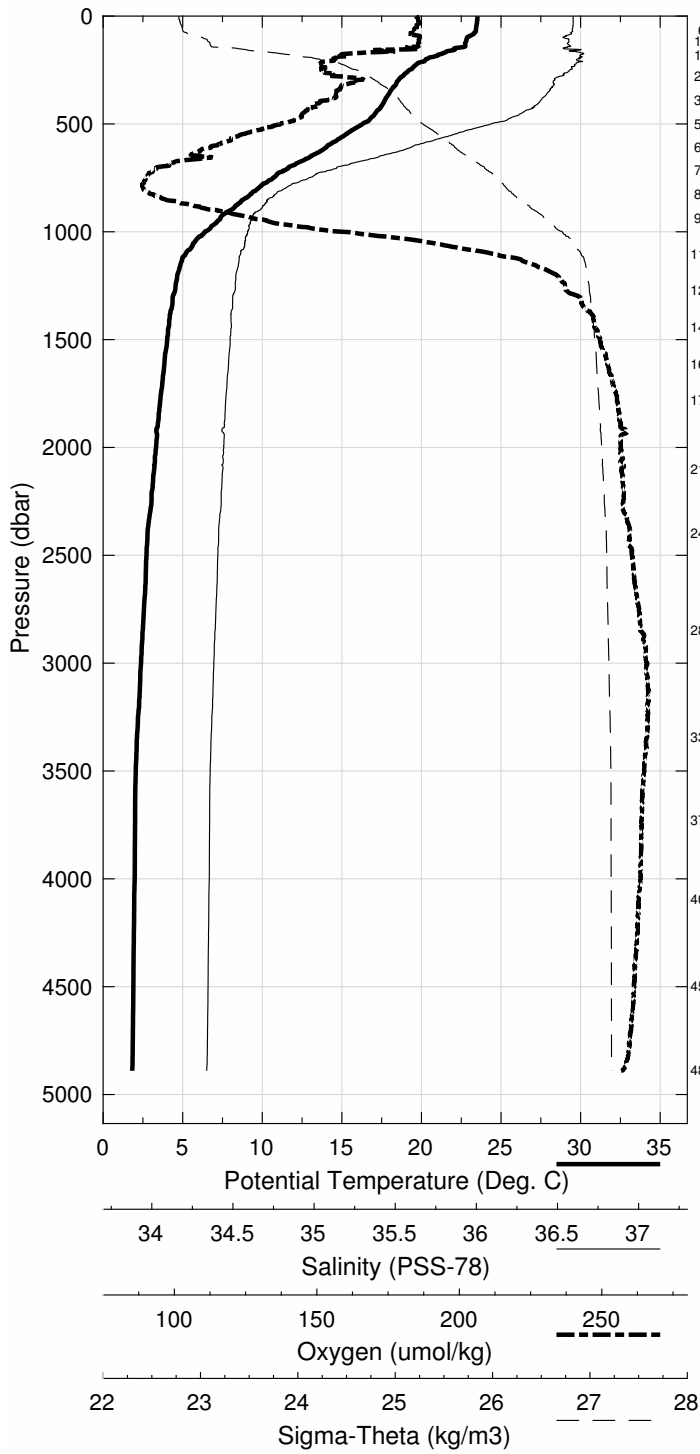**28-Feb-2016 06:11 Z**
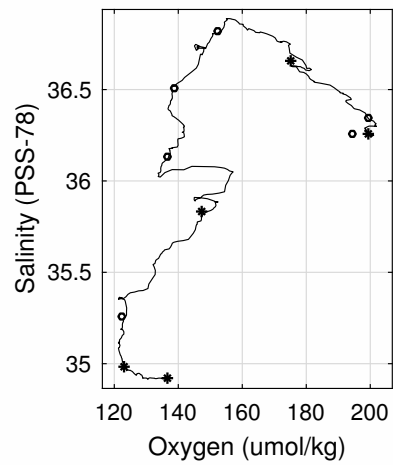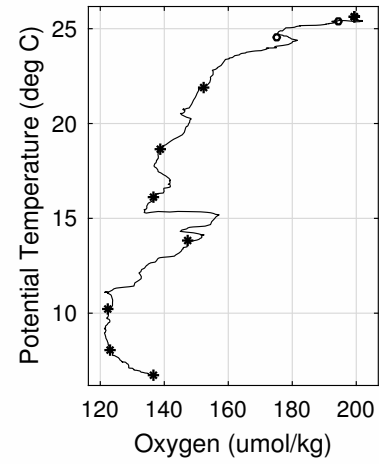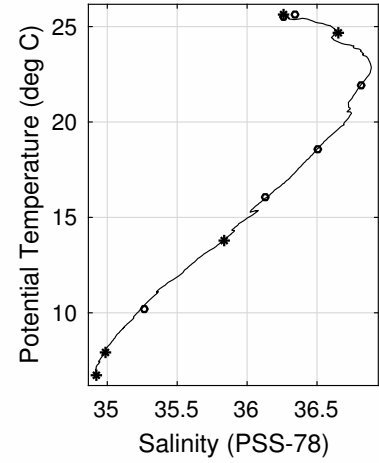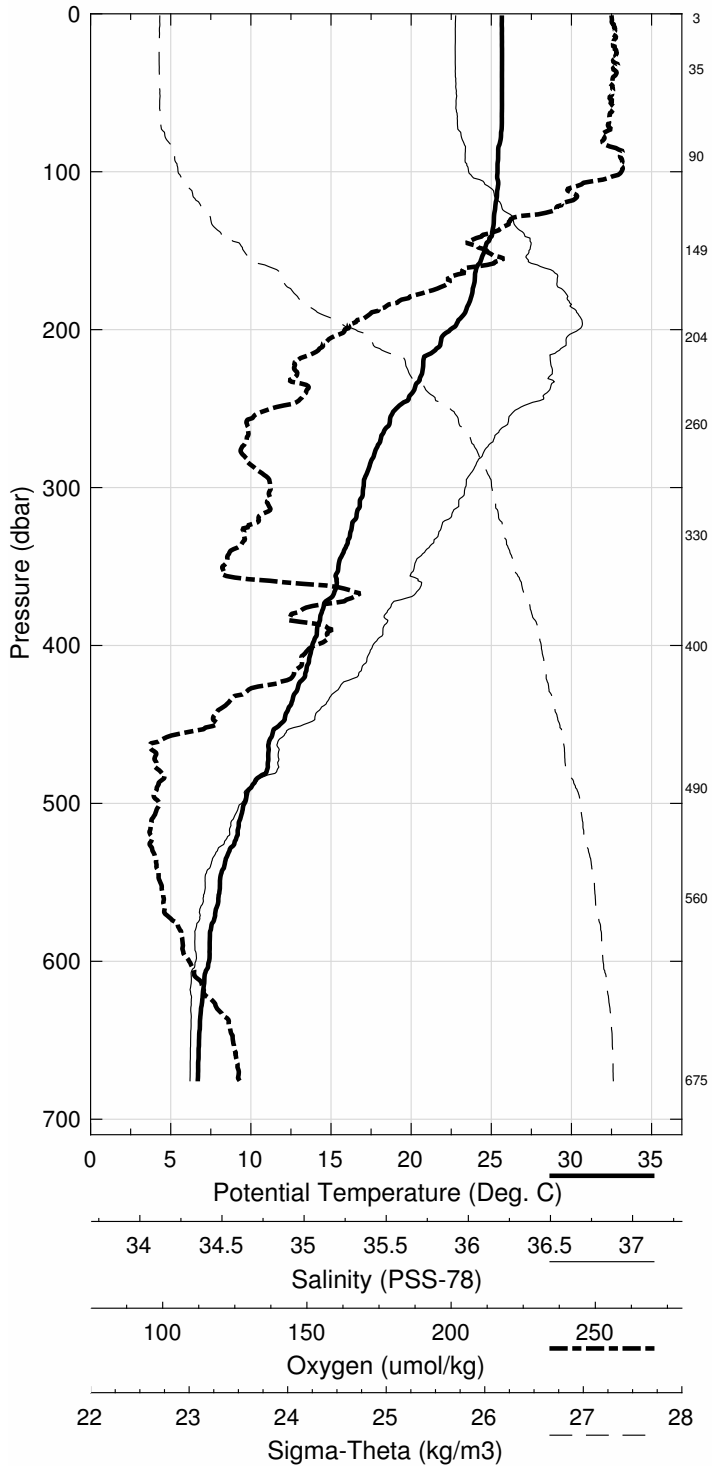
Abaco February 2016 R/V Endeavor
CTD Station 47 (CTD047)
Latitude 26.060N Longitude 79.569W
28-Feb-2016 07:28Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.540	25.540	36.279	199.3	0.004	24.142
10	25.545	25.543	36.277	200.4	0.038	24.140
20	25.555	25.550	36.277	200.1	0.075	24.137
30	25.551	25.544	36.278	200.3	0.113	24.140
50	25.556	25.545	36.278	200.1	0.189	24.140
75	25.561	25.544	36.278	199.7	0.284	24.140
100	25.565	25.543	36.278	200.4	0.379	24.140
125	25.459	25.432	36.389	196.3	0.474	24.258
150	24.436	24.404	36.744	164.3	0.560	24.841
200	20.957	20.918	36.775	148.4	0.696	25.868
250	18.509	18.465	36.494	139.8	0.795	26.300
300	16.036	15.988	36.127	136.9	0.878	26.618
400	11.782	11.730	35.449	122.5	1.012	26.989
500	9.443	9.386	35.117	118.8	1.121	27.147
600	7.163	7.105	34.920	129.9	1.211	27.341
700	6.426	6.361	34.907	141.2	1.289	27.433

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
762	1	5.990	5.922	34.911	152.7
644	2	6.710	6.649	34.910	136.0
548	3	7.885	7.828	34.965	124.0
452	4	10.543	11.148	−999.000	−999.0
355	5	13.991	13.939	35.884	151.9
270	6	17.426	17.380	36.329	142.5
215	7	20.230	20.189	36.713	145.2
153	8	24.159	24.126	36.762	163.1
102	9	25.568	25.546	36.307	197.5
50	10	25.541	25.530	36.273	201.2
3	11	25.519	25.518	36.273	199.9

Abaco February 2016 R/V Endeavor
CTD Station 47 (CTD047)
Latitude 26.060 N   Longitude 79.569 W
28-Feb-2016 07:28 Z

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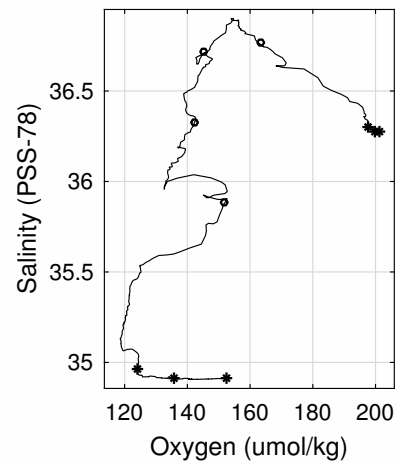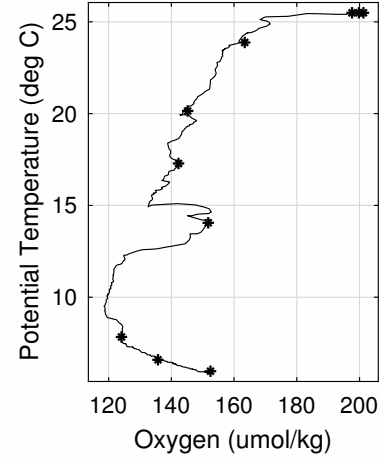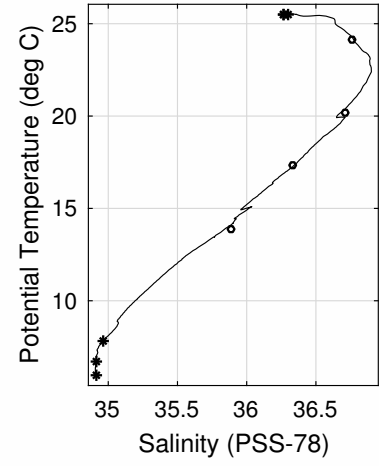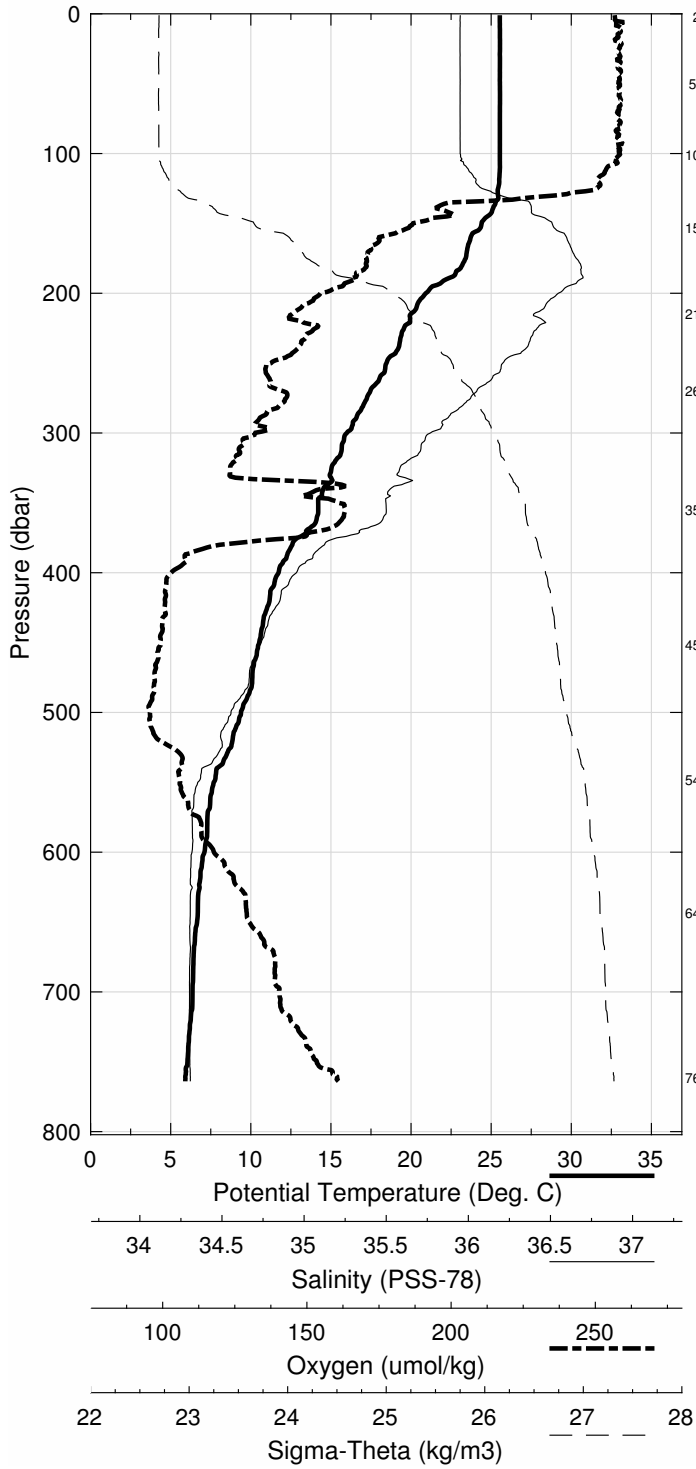
Abaco February 2016 R/V Endeavor
CTD Station 48 (CTD048)
Latitude 26.057N Longitude 79.670W
28-Feb-2016 09:06Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.802	25.802	36.240	199.1	0.004	24.031
10	25.822	25.819	36.239	199.4	0.039	24.025
20	25.824	25.820	36.239	199.0	0.078	24.025
30	25.824	25.818	36.240	198.8	0.116	24.026
50	25.829	25.818	36.239	198.7	0.194	24.025
75	25.835	25.818	36.240	198.7	0.292	24.026
100	25.686	25.664	36.374	186.8	0.389	24.176
125	25.190	25.163	36.647	167.4	0.479	24.537
150	22.546	22.515	36.466	195.4	0.556	25.185
200	20.025	19.988	36.683	145.1	0.677	26.049
250	17.179	17.137	36.282	135.3	0.766	26.466
300	14.662	14.617	35.899	131.1	0.840	26.750
400	10.626	10.577	35.273	119.5	0.959	27.064
500	7.877	7.826	34.978	125.5	1.060	27.283
600	6.596	6.540	34.913	137.0	1.142	27.413

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
695	1	6.114	6.051	34.911	147.5
591	2	6.722	6.666	34.910	135.8
493	3	8.511	8.458	35.063	122.5
409	4	10.389	10.340	35.233	118.8
336	5	12.524	12.479	35.570	125.2
265	6	16.320	16.277	36.148	135.6
195	7	20.571	20.533	36.763	151.2
126	8	25.125	25.098	36.648	169.3
76	9	25.835	25.818	36.243	197.9
40	10	25.829	25.820	36.242	198.5
3	11	25.813	25.812	36.240	198.2

Abaco February 2016 R/V Endeavor
CTD Station 48 (CTD048)
**Latitude 26.057 N   Longitude 79.670 W**
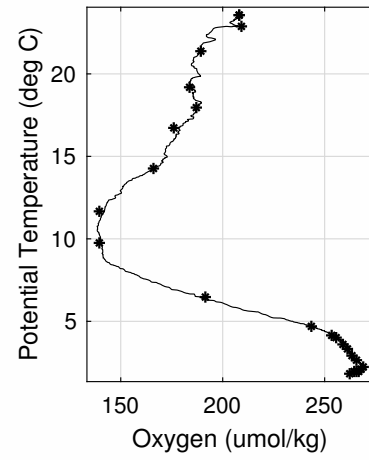**28-Feb-2016 09:06 Z**

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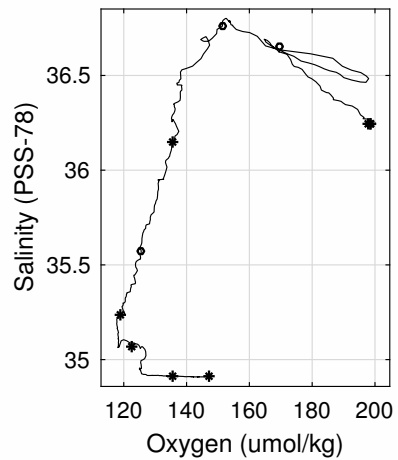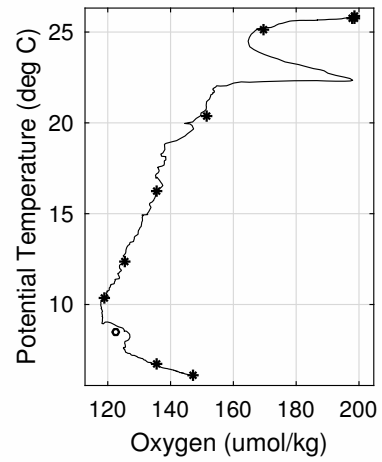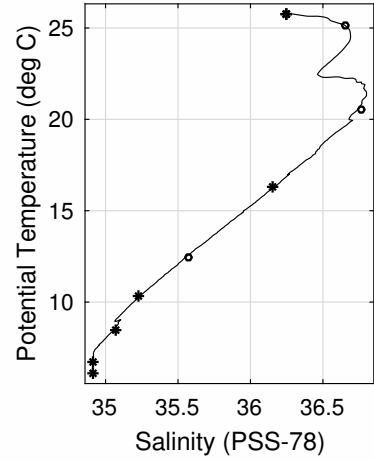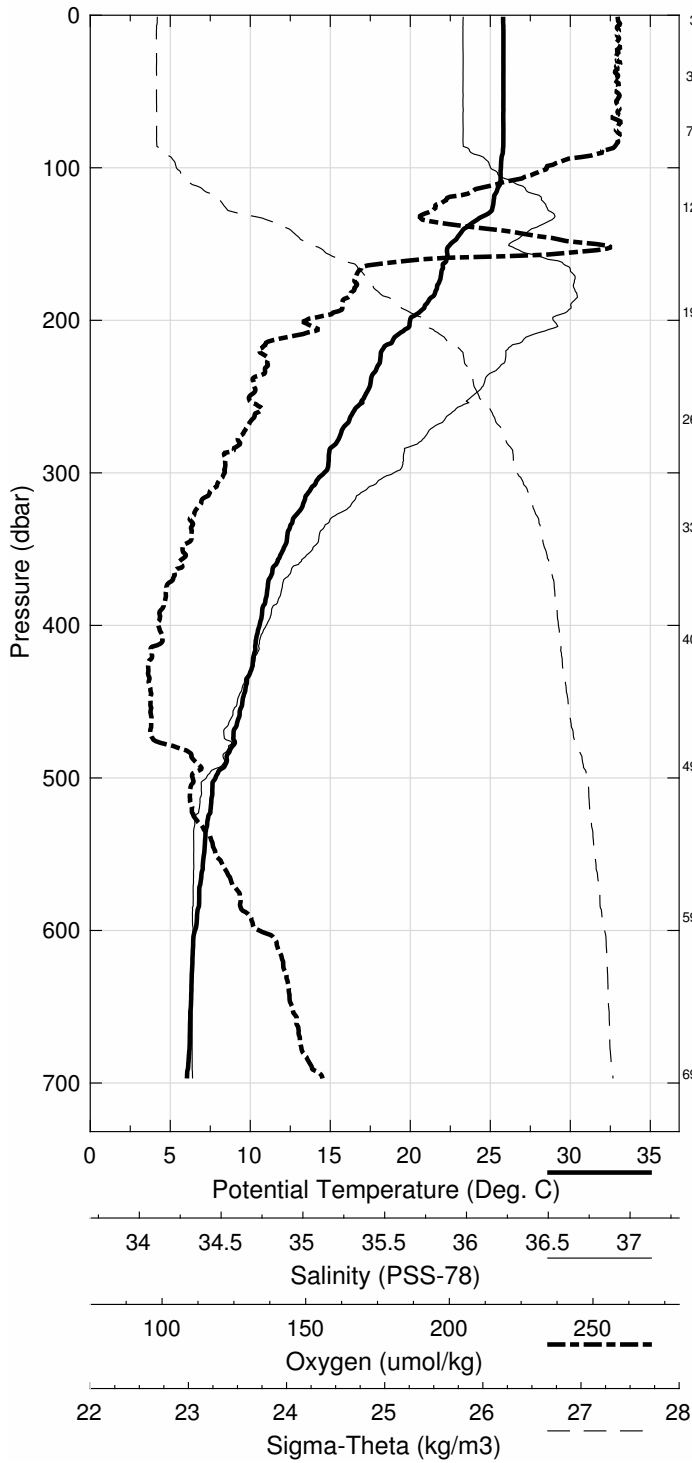
Abaco February 2016 R/V Endeavor
CTD Station 49 (CTD049)
Latitude 26.061N Longitude 79.762W
28-Feb-2016 10:33Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.882	25.882	36.254	198.2	0.004	24.017
10	25.893	25.890	36.252	198.0	0.039	24.012
20	25.905	25.901	36.252	198.1	0.078	24.009
30	25.901	25.895	36.252	198.4	0.117	24.011
50	25.906	25.895	36.253	198.5	0.195	24.012
75	25.909	25.892	36.252	198.1	0.293	24.012
100	25.408	25.386	36.589	171.2	0.389	24.424
125	22.759	22.733	36.468	193.1	0.468	25.124
150	22.061	22.031	36.564	189.2	0.537	25.398
200	18.989	18.953	36.532	136.4	0.649	26.205
250	15.298	15.259	36.004	132.6	0.728	26.689
300	12.506	12.466	35.560	124.1	0.792	26.934
400	9.714	9.668	35.150	117.8	0.902	27.125
500	6.986	6.939	34.913	130.9	0.996	27.359
600	6.040	5.987	34.912	149.4	1.069	27.485

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
603	1	5.986	5.932	34.915	151.9
479	2	7.856	8.561	−999.000	−999.0
390	3	9.858	9.813	35.161	117.6
330	4	11.461	11.419	35.373	119.7
260	5	14.981	14.941	35.958	132.2
220	6	17.148	17.111	36.242	134.6
152	7	21.851	21.821	36.536	178.6
90	8	25.899	25.879	36.335	191.9
45	9	25.897	25.887	36.255	198.3
3	10	25.870	25.869	36.255	198.4

Abaco February 2016 R/V Endeavor
CTD Station 49 (CTD049)
Latitude 26.061 N   Longitude 79.762 W
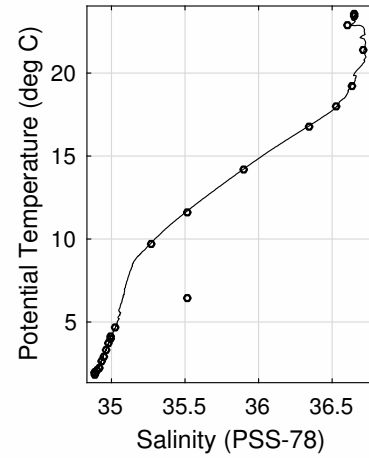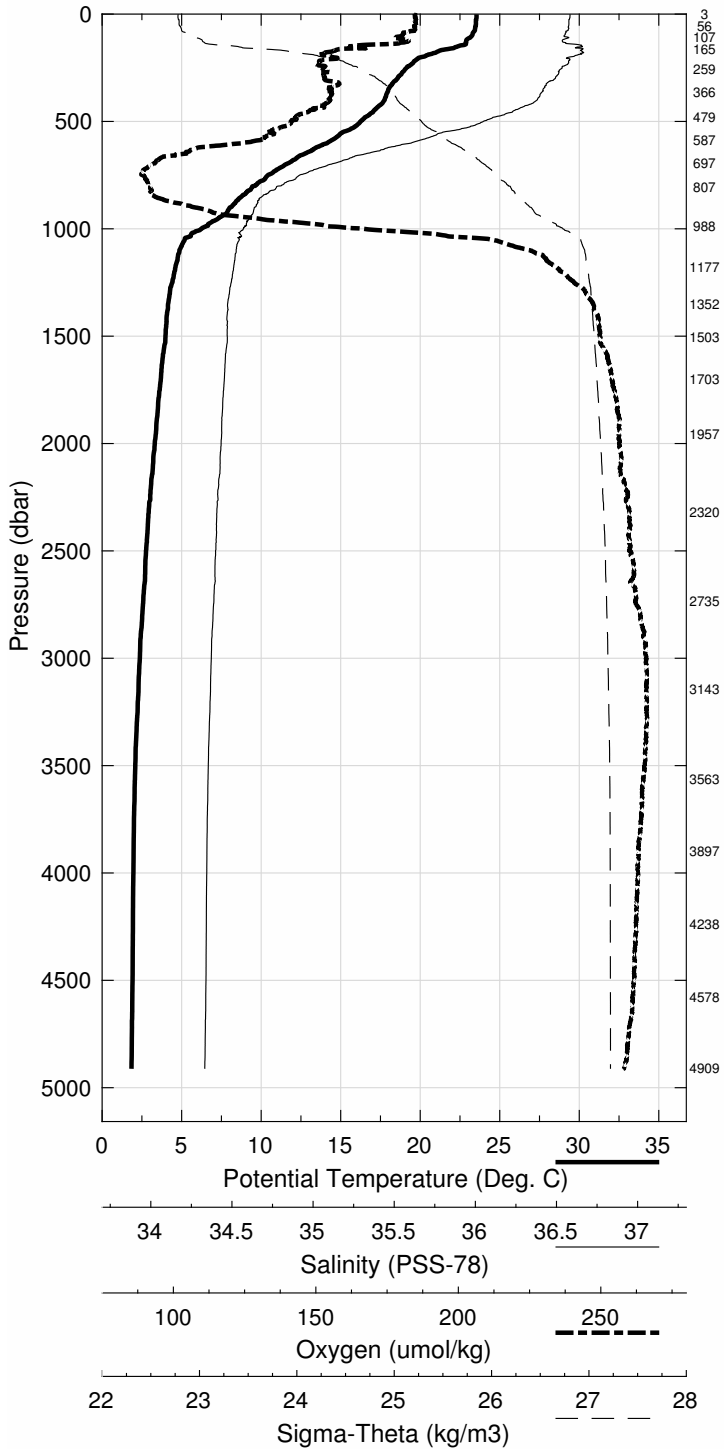**28-Feb-2016 10:33 Z**
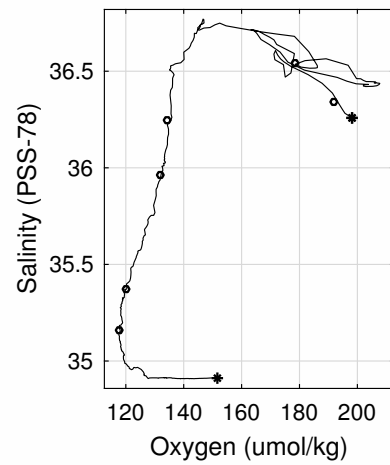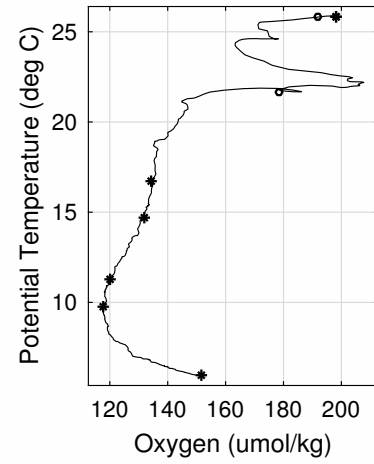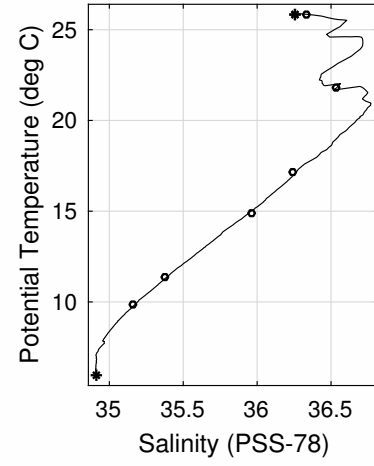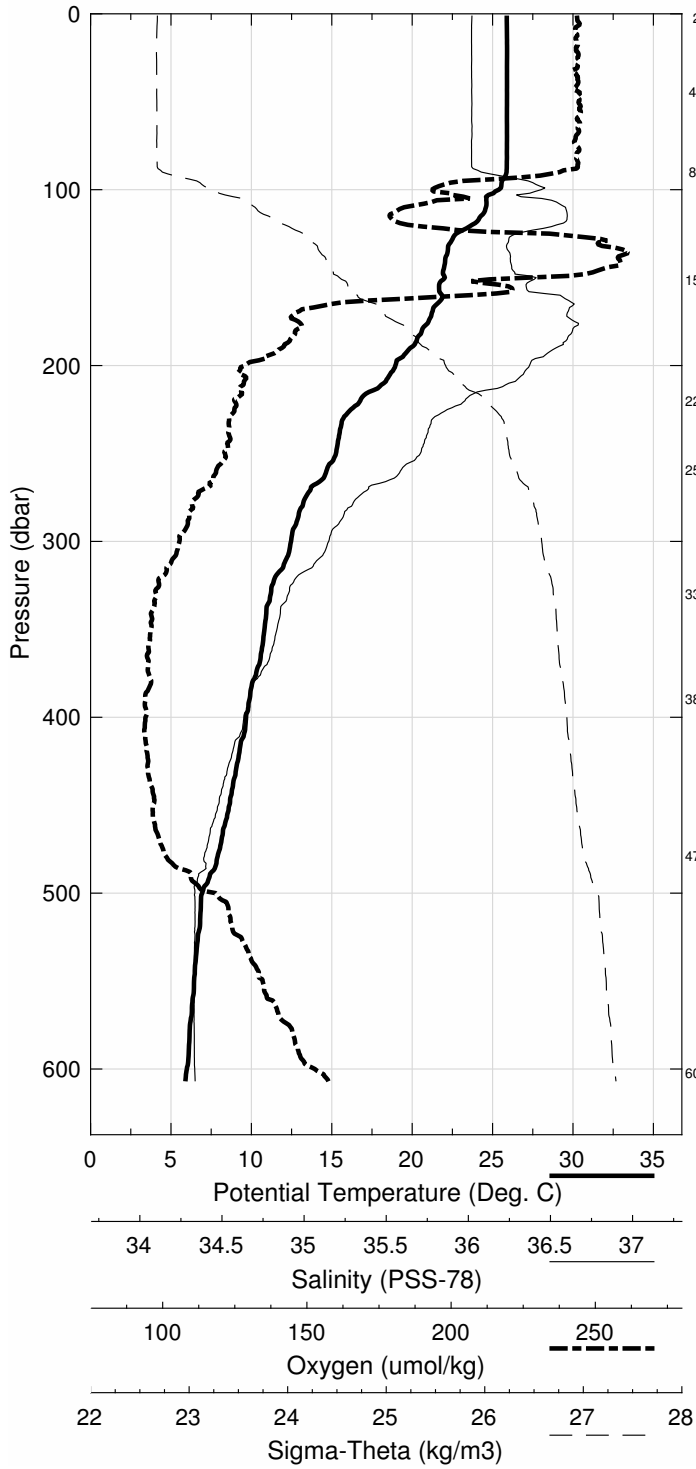
Abaco February 2016 R/V Endeavor
CTD Station 50 (CTD050)
Latitude 26.061N Longitude 79.846W
28-Feb-2016 12:09Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.710	25.710	36.249	199.6	0.004	24.067
10	25.725	25.722	36.248	200.2	0.038	24.062
20	25.705	25.700	36.248	199.8	0.077	24.069
30	25.715	25.708	36.249	200.0	0.115	24.067
50	25.713	25.702	36.254	200.1	0.192	24.073
75	24.879	24.863	36.403	189.5	0.286	24.444
100	23.000	22.979	36.525	177.2	0.365	25.097
125	22.060	22.035	36.437	205.6	0.435	25.301
150	21.543	21.513	36.736	154.4	0.500	25.674
200	16.835	16.802	36.203	133.8	0.596	26.485
250	13.168	13.133	35.667	125.7	0.665	26.883
300	10.683	10.646	35.293	119.5	0.720	27.068

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
327	1	9.829	9.791	35.189	120.6
204	2	16.569	16.535	36.224	133.5
110	3	22.717	22.695	36.499	191.9
60	4	25.696	25.683	36.265	200.3
25	5	25.735	25.729	36.247	199.5
3	6	25.688	25.688	36.250	199.6

Abaco February 2016 R/V Endeavor
CTD Station 50 (CTD050)
Latitude 26.061 N   Longitude 79.846 W
28-Feb-2016 12:09 Z

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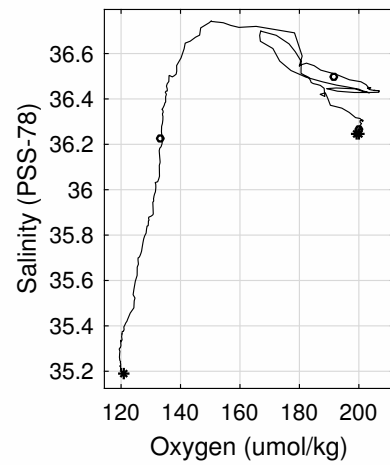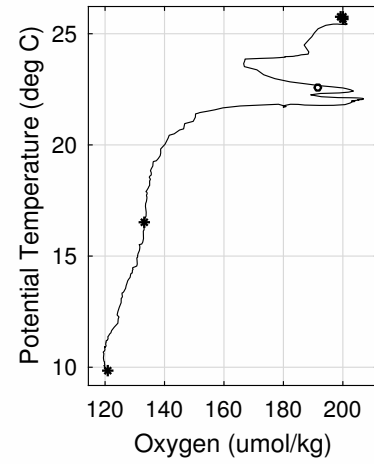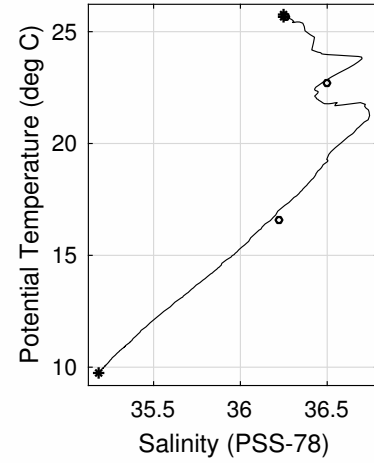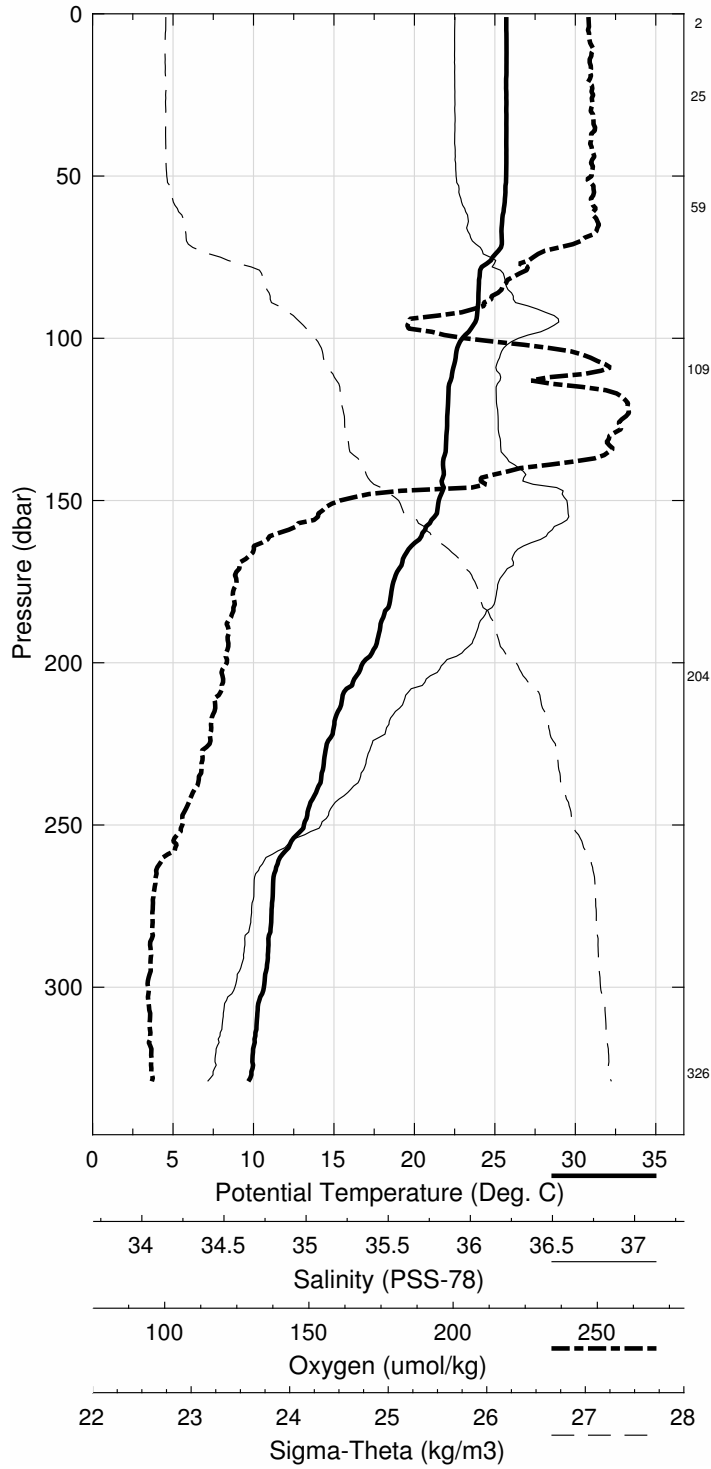
Abaco February 2016 R/V Endeavor
CTD Station 51 (CTD051)
Latitude 26.063N Longitude 79.931W
28-Feb-2016 18:18Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.727	24.727	36.328	204.6	0.003	24.428
10	24.546	24.544	36.334	205.4	0.035	24.489
20	24.432	24.428	36.340	206.4	0.069	24.528
30	24.280	24.274	36.345	206.9	0.103	24.578
50	23.466	23.456	36.405	199.4	0.167	24.867
75	22.322	22.307	36.424	197.1	0.240	25.214
100	22.036	22.016	36.444	205.2	0.308	25.311
125	21.427	21.403	36.498	183.8	0.374	25.524
150	19.755	19.727	36.538	138.0	0.431	26.008
200	12.865	12.838	35.621	126.9	0.509	26.907
250	8.890	8.863	35.077	120.8	0.558	27.200

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
269	1	8.479	8.451	35.035	121.9
154	2	19.358	19.330	36.484	135.6
72	3	22.600	22.586	36.464	186.0
30	4	24.261	24.254	36.351	206.6
5	5	24.869	24.868	36.319	204.9

Abaco February 2016 R/V Endeavor
CTD Station 51 (CTD051)
**Latitude 26.063 N   Longitude 79.931 W**
28-Feb-2016 18:18 Z
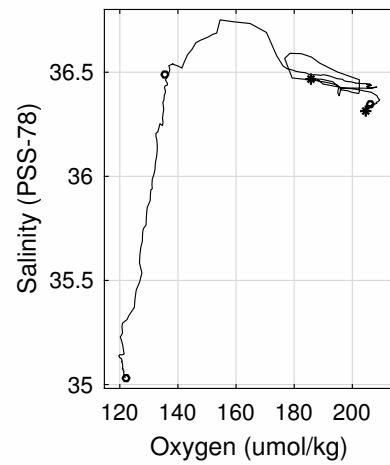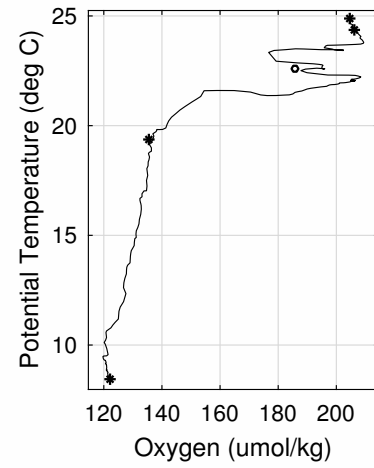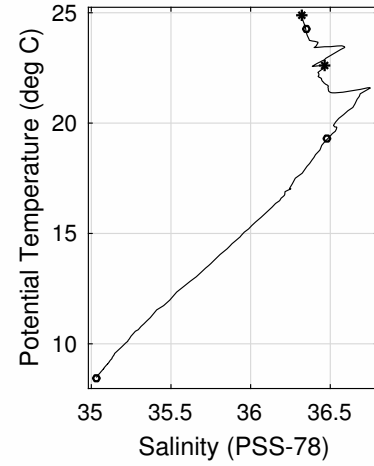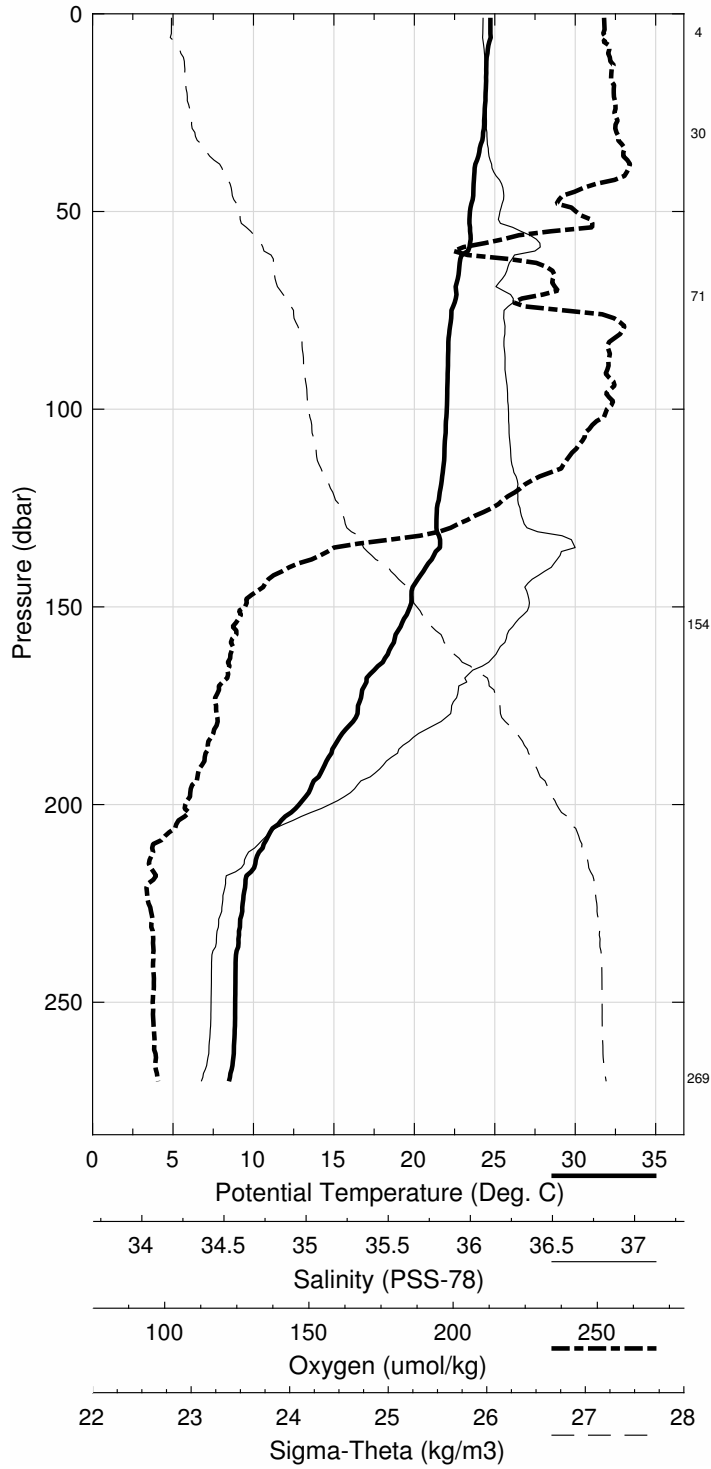
Abaco February 2016 R/V Endeavor
CTD Station 52 (CTD052)
Latitude 26.054N Longitude 79.996W
28-Feb-2016 20:05Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.761	24.761	36.326	205.6	0.004	24.417
10	24.764	24.762	36.325	206.2	0.035	24.416
20	24.714	24.710	36.323	206.2	0.070	24.430
30	24.441	24.435	36.322	207.1	0.105	24.512
50	23.807	23.796	36.406	197.3	0.171	24.767
75	22.378	22.363	36.420	205.8	0.246	25.194
100	21.832	21.812	36.542	172.8	0.313	25.443
125	20.438	20.414	36.563	143.7	0.373	25.844
150	17.023	16.998	36.223	135.5	0.422	26.454
200	9.625	9.603	35.185	124.8	0.481	27.164

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen μmol·kg^{-1}
245	1	7.893	7.869	34.965	122.0
160	2	15.623	15.598	35.998	132.1
81	3	22.287	22.270	36.423	200.2
40	4	24.381	24.372	36.358	203.9
5	5	24.804	24.803	36.323	205.4

Abaco February 2016 R/V Endeavor
CTD Station 52 (CTD052)
Latitude 26.054 N   Longitude 79.996 W
28-Feb-2016 20:05 Z
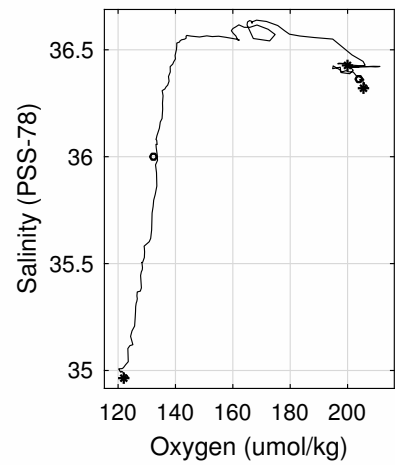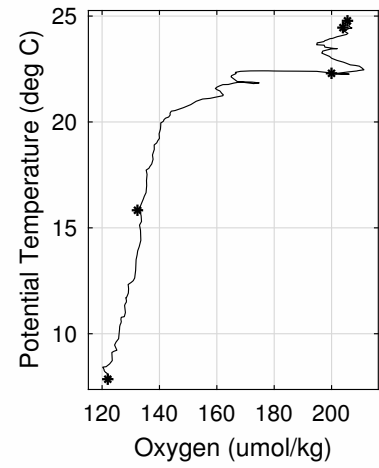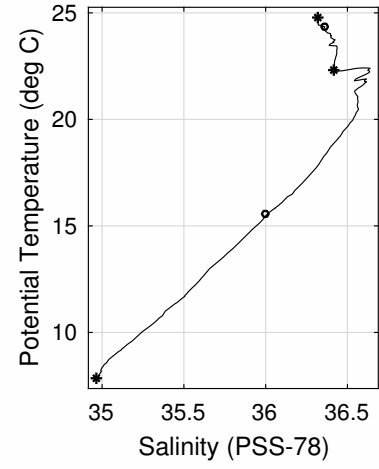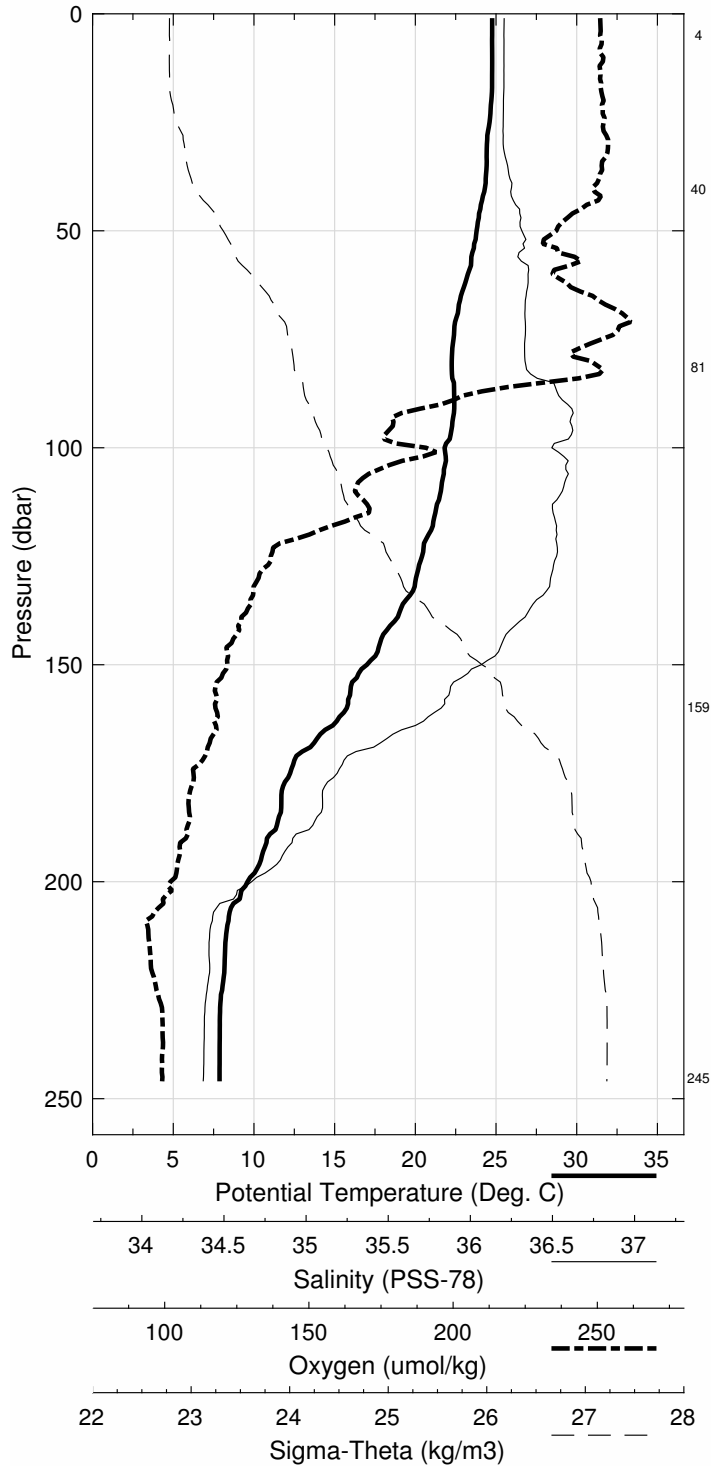
Abaco February 2016 R/V Endeavor
CTD Station 53 (CTD053)
Latitude 26.048N Longitude 80.062W
28-Feb-2016 21:00Z

Pressure dbar	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$	DynHt $\text{m}^2\cdot\text{s}^{-2}$	SigT $\text{kg}\cdot\text{m}^{-3}$
1	24.481	24.481	36.295	207.0	0.003	24.478
10	24.481	24.479	36.293	207.5	0.034	24.477
20	24.477	24.473	36.291	207.2	0.069	24.477
30	24.473	24.466	36.289	207.3	0.104	24.478
50	24.182	24.171	36.321	204.1	0.172	24.591
75	21.840	21.825	36.423	179.7	0.246	25.349
100	18.848	18.830	36.356	148.6	0.303	26.102
125	17.183	17.162	36.238	136.8	0.347	26.426

Pressure dbar	Niskin	Temp90 $^\circ$C	PoTemp90 $^\circ$C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
141	1	15.777	15.755	36.086	135.3
75	2	21.884	21.869	36.427	180.9
35	3	24.386	24.378	36.280	213.2
4	4	24.422	24.421	36.298	212.4

Abaco February 2016 R/V Endeavor
CTD Station 53 (CTD053)
**Latitude 26.048 N   Longitude 80.062 W**
28-Feb-2016 21:00 Z
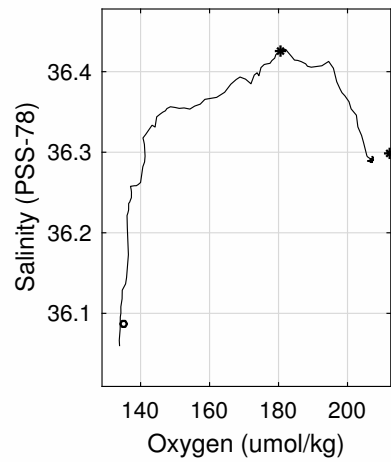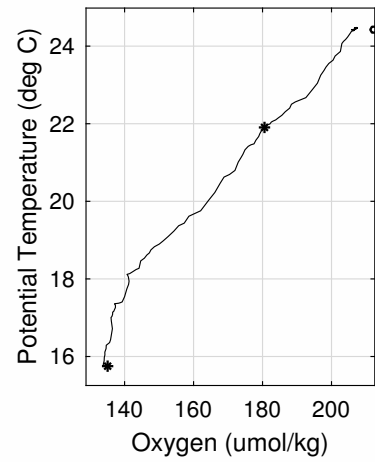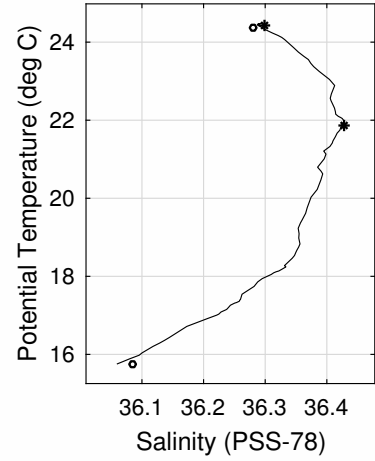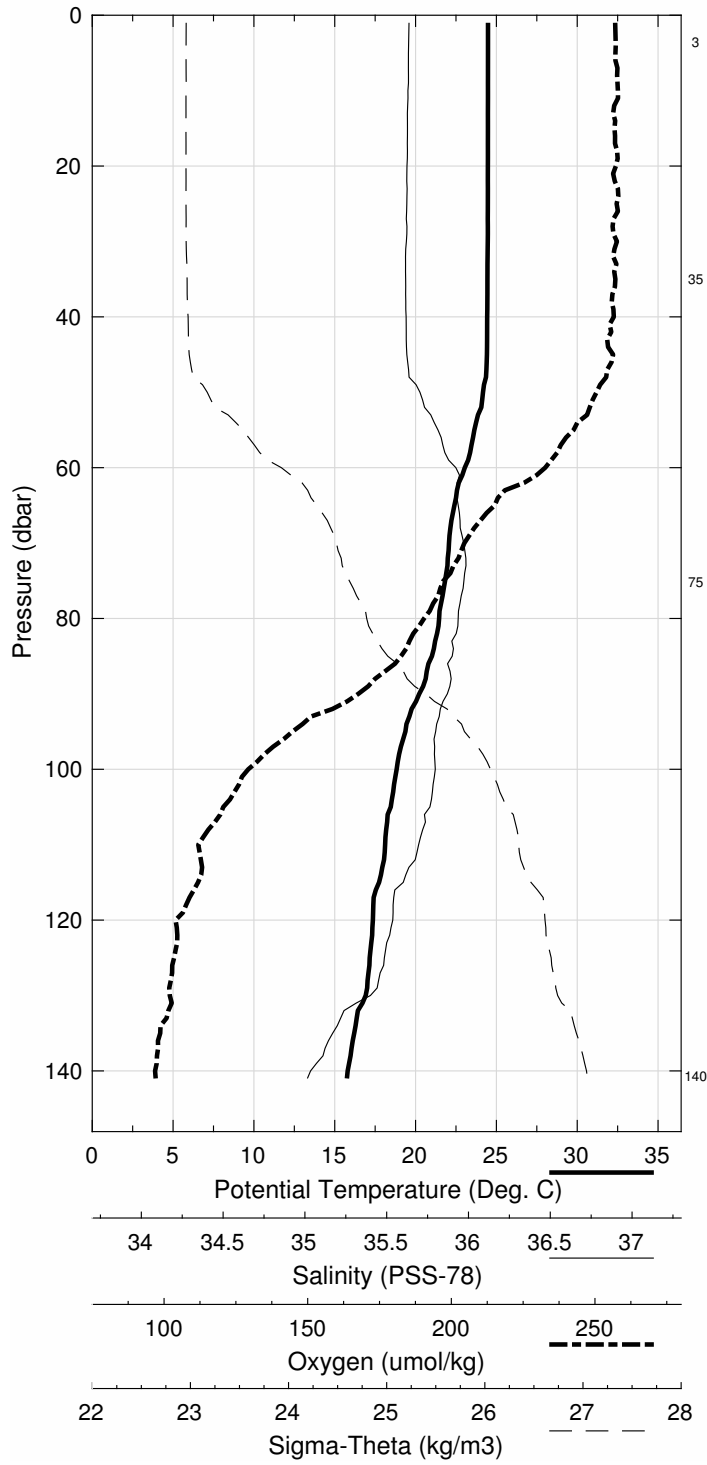
B WOCE Summary File

Table 14: Abaco Cruise – WOCE Summary File

SHIP/CRS EXPOCODE	WOCE SECT	STN	CAST	CAST TYPE	CAST DATE	UTC TIME	EVENT CODE	LAT	LON	NAV	UNC DPH	HT ABV BTM	WIRE OUT	MAX PRS	NO. BTLS	PARA-METERS	COMMENTS
WBTSEN	AB1602	1	1	ROS	02/18/2016	21:18	BE	26.502N	69.501W	GPS	103	1	2129	5457	24	1,2	nisk 17 did not close
WBTSEN	AB1602	1	1	ROS	02/18/2016	22:59	BO	26.510N	69.509W	GPS							
WBTSEN	AB1602	1	1	ROS	02/19/2016	01:02	EN	26.525N	69.521W	GPS							
WBTSEN	AB1602	2	1	ROS	02/19/2016	04:11	BE	26.502N	70.001W	GPS	174	1	5500	5591	24	1,2	nisk 24 no sample, lanyard hung on ADCP
WBTSEN	AB1602	2	1	ROS	02/19/2016	05:55	BO	26.521N	70.014W	GPS							
WBTSEN	AB1602	2	1	ROS	02/19/2016	08:09	EN	26.558N	70.028W	GPS							
WBTSEN	AB1602	3	1	ROS	02/19/2016	11:48	BE	26.509N	70.502W	GPS	4698	1	5600	5589	24	1,2	nisk 4 lanyard in endcap, nisk 17 leaked
WBTSEN	AB1602	3	1	ROS	02/19/2016	13:33	BO	26.523N	70.524W	GPS							
WBTSEN	AB1602	3	1	ROS	02/19/2016	15:41	EN	26.549N	70.547W	GPS							
WBTSEN	AB1602	4	1	ROS	02/19/2016	20:10	BE	26.502N	70.999W	GPS	1200	3	5508	5586	24	1,2	
WBTSEN	AB1602	4	1	ROS	02/19/2016	21:48	BO	26.517N	71.010W	GPS							
WBTSEN	AB1602	4	1	ROS	02/19/2016	23:49	EN	26.534N	71.033W	GPS							
WBTSEN	AB1602	5	1	ROS	02/20/2016	02:58	BE	26.502N	71.500W	GPS	1430	1	5455	5520	24	1,2	nisk 2 no sample, vent cap open
WBTSEN	AB1602	5	1	ROS	02/20/2016	04:36	BO	26.526N	71.504W	GPS							
WBTSEN	AB1602	5	1	ROS	02/20/2016	06:49	EN	26.568N	71.503W	GPS							
WBTSEN	AB1602	6	1	ROS	02/20/2016	09:44	BE	26.503N	72.000W	GPS	2566	7	5540	5376	24	1,2	
WBTSEN	AB1602	6	1	ROS	02/20/2016	11:23	BO	26.531N	72.012W	GPS							
WBTSEN	AB1602	6	1	ROS	02/20/2016	13:25	EN	26.570N	72.027W	GPS							
WBTSEN	AB1602	7	1	ROS	02/20/2016	18:27	BE	26.501N	72.380W	GPS	116	1	5332	5286	24	1,2	
WBTSEN	AB1602	7	1	ROS	02/20/2016	20:01	BO	26.516N	72.376W	GPS							
WBTSEN	AB1602	7	1	ROS	02/20/2016	21:58	EN	26.536N	72.381W	GPS							
WBTSEN	AB1602	8	1	ROS	02/21/2016	00:15	BE	26.501N	72.767W	GPS	2664	1	5330	5220	24	1,2	
WBTSEN	AB1602	8	1	ROS	02/21/2016	01:46	BO	26.517N	72.765W	GPS							
WBTSEN	AB1602	8	1	ROS	02/21/2016	03:45	EN	26.538N	72.760W	GPS							
WBTSEN	AB1602	9	1	ROS	02/21/2016	06:15	BE	26.511N	73.127W	GPS	4	0	5131	5126	24	1,2	
WBTSEN	AB1602	9	1	ROS	02/21/2016	07:48	BO	26.533N	73.122W	GPS							
WBTSEN	AB1602	9	1	ROS	02/21/2016	09:46	EN	26.502N	73.122W	GPS							
WBTSEN	AB1602	10	1	ROS	02/21/2016	12:02	BE	26.502N	73.499W	GPS	3595	2	5520	4970	24	1,2	nisk 24 no sample, lanyard hung on frame
WBTSEN	AB1602	10	1	ROS	02/21/2016	13:30	BO	26.588N	73.501W	GPS							
WBTSEN	AB1602	10	1	ROS	02/21/2016	15:19	EN	26.535N	73.503W	GPS							
WBTSEN	AB1602	11	1	ROS	02/21/2016	17:51	BE	26.504N	73.772W	GPS	4063	1	5035	4806	24	1,2	nisk 21 no sample, lanyard hung btm cap
WBTSEN	AB1602	11	1	ROS	02/21/2016	19:17	BO	26.544N	73.863W	GPS							
WBTSEN	AB1602	11	1	ROS	02/21/2016	21:12	EN	26.536N	73.874W	GPS							
WBTSEN	AB1602	12	1	ROS	02/21/2016	23:17	BE	26.501N	74.233W	GPS	2077	1	5232	4595	24	1,2	
WBTSEN	AB1602	12	1	ROS	02/22/2016	00:39	BO	26.517N	74.239W	GPS							
WBTSEN	AB1602	12	1	ROS	02/22/2016	02:22	EN	26.537N	74.244W	GPS							
WBTSEN	AB1602	13	1	ROS	02/22/2016	04:02	BE	26.502N	74.519W	GPS	3937	1	4670	4553	24	1,2	nisk 15 no sample, vent cap open
WBTSEN	AB1602	13	1	ROS	02/22/2016	05:24	BO	26.512N	74.533W	GPS							
WBTSEN	AB1602	13	1	ROS	02/22/2016	07:10	EN	26.523N	74.550W	GPS							
WBTSEN	AB1602	14	1	ROS	02/22/2016	08:31	BE	26.503N	74.802W	GPS	2128	1	4538	4624	24	1,2	
WBTSEN	AB1602	14	1	ROS	02/22/2016	09:56	BO	26.519N	74.821W	GPS							
WBTSEN	AB1602	14	1	ROS	02/22/2016	11:44	EN	26.540N	74.843W	GPS							
WBTSEN	AB1602	15	1	ROS	02/22/2016	13:09	BE	26.501N	75.081W	GPS	105	1	4585	4682	24	1,2	nisk 9 btm cap leak after vent cap open
WBTSEN	AB1602	15	1	ROS	02/22/2016	14:35	BO	26.527N	75.086W	GPS							
WBTSEN	AB1602	15	1	ROS	02/22/2016	16:23	EN	26.547N	75.084W	GPS							
WBTSEN	AB1602	16	1	ROS	02/22/2016	18:01	BE	26.504N	75.296W	GPS	5	0	4994	4705	24	1,2	
WBTSEN	AB1602	16	1	ROS	02/22/2016	19:31	BO	26.515N	75.288W	GPS							
WBTSEN	AB1602	16	1	ROS	02/22/2016	21:14	EN	26.527N	75.281W	GPS							
WBTSEN	AB1602	17	1	ROS	02/22/2016	22:42	BE	26.505N	75.498W	GPS	1193	3	4742	4755	24	1,2	nisk 8 top cap open
WBTSEN	AB1602	17	1	ROS	02/23/2016	00:05	BO	26.517N	75.486W	GPS							
WBTSEN	AB1602	17	1	ROS	02/23/2016	01:58	EN	26.525N	75.468W	GPS							
WBTSEN	AB1602	18	1	ROS	02/23/2016	03:26	BE	26.509N	75.700W	GPS	59	0	4706	4755	24	1,2	
WBTSEN	AB1602	18	1	ROS	02/23/2016	04:51	BO	26.511N	75.679W	GPS							
WBTSEN	AB1602	18	1	ROS	02/23/2016	06:40	EN	26.512N	75.645W	GPS							
WBTSEN	AB1602	19	1	ROS	02/23/2016	08:10	BE	26.505N	75.898W	GPS	65	1	4717	4828	24	1,2	
WBTSEN	AB1602	19	1	ROS	02/23/2016	09:31	BO	26.507N	75.884W	GPS							
WBTSEN	AB1602	19	1	ROS	02/23/2016	11:20	EN	26.497N	75.881W	GPS							
WBTSEN	AB1602	20	1	ROS	02/23/2016	13:07	BE	26.495N	76.090W	GPS	1356	5	5070	4876	24	1,2	nisk 9 btm cap leak after vent cap open
WBTSEN	AB1602	20	1	ROS	02/23/2016	14:31	BO	26.487N	76.094W	GPS							
WBTSEN	AB1602	20	1	ROS	02/23/2016	16:21	EN	26.484N	76.106W	GPS							
WBTSEN	AB1602	21	1	ROS	02/24/2016	00:57	BE	26.500N	76.213W	GPS	1763	1	4904	4890	24	1,2	
WBTSEN	AB1602	21	1	ROS	02/24/2016	02:26	BO	26.507N	76.193W	GPS							

nisk 17 btm cap leak

WBTSEN	AB1602	#		ROS	Date	Time		Lat	Lon	GPS						
WBTSEN	AB1602	22	1	ROS	02/24/2016	04:23	EN	26.515N	76.160W	GPS						
WBTSEN	AB1602	22	1	ROS	02/24/2016	05:48	BE	26.498N	76.342W	GPS						
WBTSEN	AB1602	22	1	ROS	02/24/2016	07:16	BO	26.498N	76.322W	GPS	56	0	4856	4912	24	1,2
WBTSEN	AB1602	23	1	ROS	02/24/2016	09:11	EN	26.493N	76.292W	GPS						
WBTSEN	AB1602	23	1	ROS	02/24/2016	10:46	BE	26.498N	76.473W	GPS						
WBTSEN	AB1602	23	1	ROS	02/24/2016	12:10	BO	26.507N	76.477W	GPS	70	1	4847	4920	24	1,2
WBTSEN	AB1602	24	1	ROS	02/24/2016	14:02	EN	26.493N	76.556W	GPS						
WBTSEN	AB1602	24	1	ROS	02/24/2016	15:11	BE	26.503N	76.555W	GPS						
WBTSEN	AB1602	24	1	ROS	02/24/2016	16:38	BO	26.518N	76.553W	GPS	4	0	4832	4915	24	1,2
WBTSEN	AB1602	25	1	ROS	02/24/2016	18:28	EN	26.509N	76.649W	GPS						
WBTSEN	AB1602	25	1	ROS	02/24/2016	19:25	BE	26.507N	76.631W	GPS						
WBTSEN	AB1602	25	1	ROS	02/24/2016	20:50	BO	26.500N	76.606W	GPS	2566	1	4970	4663	24	1,2
WBTSEN	AB1602	26	1	ROS	02/24/2016	22:38	EN	26.492N	76.743W	GPS						
WBTSEN	AB1602	26	1	ROS	02/24/2016	23:39	BE	26.486N	76.733W	GPS						
WBTSEN	AB1602	26	1	ROS	02/25/2016	00:48	BO	26.478N	76.738W	GPS	3	0	4592	3809	24	1,2
WBTSEN	AB1602	27	1	ROS	02/25/2016	02:20	EN	26.523N	76.733W	GPS						
WBTSEN	AB1602	27	1	ROS	02/25/2016	03:26	BE	26.522N	76.831W	GPS						
WBTSEN	AB1602	27	1	ROS	02/25/2016	03:53	BO	26.515N	76.827W	GPS	1093	4	3809	1276	14	1,2
WBTSEN	AB1602	28	1	ROS	02/25/2016	04:42	EN	26.524N	76.821W	GPS						
WBTSEN	AB1602	28	1	ROS	02/25/2016	05:30	BE	26.524N	76.888W	GPS						
WBTSEN	AB1602	28	1	ROS	02/25/2016	05:42	BO	26.524N	76.884W	GPS	447	16	1163	452	9	1,2
WBTSEN	AB1602	29	1	ROS	02/25/2016	06:04	EN	26.524N	76.876W	GPS						
WBTSEN	AB1602	29	1	ROS	02/26/2016	18:11	BE	26.067N	78.851W	GPS						
WBTSEN	AB1602	29	1	ROS	02/26/2016	18:22	BO	26.069N	78.852W	GPS	90	5	234	296	7	1,2
WBTSEN	AB1602	30	1	ROS	02/26/2016	18:37	EN	26.070N	78.854W	GPS						
WBTSEN	AB1602	30	1	ROS	02/26/2016	19:28	BE	26.166N	78.802W	GPS						
WBTSEN	AB1602	30	1	ROS	02/26/2016	19:41	BO	26.166N	78.806W	GPS	259	5	763	441	8	1,2
WBTSEN	AB1602	31	1	ROS	02/26/2016	20:01	EN	26.167N	78.811W	GPS						
WBTSEN	AB1602	31	1	ROS	02/26/2016	20:54	BE	26.249N	78.768W	GPS						
WBTSEN	AB1602	31	1	ROS	02/26/2016	21:07	BO	26.250N	78.770W	GPS	145	6	676	513	8	1,2
WBTSEN	AB1602	32	1	ROS	02/26/2016	21:27	EN	26.251N	78.772W	GPS						
WBTSEN	AB1602	32	1	ROS	02/26/2016	22:13	BE	26.333N	78.716W	GPS						
WBTSEN	AB1602	32	1	ROS	02/26/2016	22:30	BO	26.333N	78.716W	GPS	179	4	532	691	11	1,2
WBTSEN	AB1602	33	1	ROS	02/26/2016	22:53	EN	26.330N	78.713W	GPS						
WBTSEN	AB1602	33	1	ROS	02/26/2016	23:56	BE	26.434N	78.669W	GPS						
WBTSEN	AB1602	33	1	ROS	02/27/2016	00:14	BO	26.433N	78.672W	GPS	646	4	449	760	11	1,2
WBTSEN	AB1602	34	1	ROS	02/27/2016	00:40	EN	26.436N	78.677W	GPS						
WBTSEN	AB1602	34	1	ROS	02/27/2016	06:24	BE	26.998N	79.203W	GPS						
WBTSEN	AB1602	34	1	ROS	02/27/2016	06:38	BO	26.997N	79.205W	GPS	378	6	289	482	9	1,2
WBTSEN	AB1602	35	1	ROS	02/27/2016	06:59	EN	26.994N	79.209W	GPS						
WBTSEN	AB1602	35	1	ROS	02/27/2016	07:36	BE	27.003N	79.284W	GPS						
WBTSEN	AB1602	35	1	ROS	02/27/2016	07:52	BO	27.004N	79.286W	GPS	249	6	493	610	10	1,2
WBTSEN	AB1602	36	1	ROS	02/27/2016	08:15	EN	27.006N	79.288W	GPS						
WBTSEN	AB1602	36	1	ROS	02/27/2016	08:54	BE	27.003N	79.384W	GPS						
WBTSEN	AB1602	36	1	ROS	02/27/2016	09:10	BO	27.012N	79.385W	GPS	126	3	604	677	11	1,2
WBTSEN	AB1602	37	1	ROS	02/27/2016	09:36	EN	27.026N	79.379W	GPS						
WBTSEN	AB1602	37	1	ROS	02/27/2016	10:55	BE	27.018N	79.500W	GPS						
WBTSEN	AB1602	37	1	ROS	02/27/2016	11:12	BO	27.029N	79.500W	GPS	89	2	656	755	11	1,2
WBTSEN	AB1602	38	1	ROS	02/27/2016	11:37	EN	27.046N	79.494W	GPS						
WBTSEN	AB1602	38	1	ROS	02/27/2016	12:37	BE	27.002N	79.615W	GPS						
WBTSEN	AB1602	38	1	ROS	02/27/2016	12:54	BO	27.014N	79.613W	GPS	556	3	753	653	11	1,2
WBTSEN	AB1602	39	1	ROS	02/27/2016	13:19	EN	27.034N	79.609W	GPS						
WBTSEN	AB1602	39	1	ROS	02/27/2016	14:03	BE	27.004N	79.683W	GPS						
WBTSEN	AB1602	39	1	ROS	02/27/2016	14:17	BO	27.014N	79.680W	GPS	99	1	642	531	10	1,2
WBTSEN	AB1602	40	1	ROS	02/27/2016	14:38	EN	27.030N	79.676W	GPS						
WBTSEN	AB1602	40	1	ROS	02/27/2016	15:35	BE	27.005N	79.785W	GPS						
WBTSEN	AB1602	40	1	ROS	02/27/2016	15:48	BO	27.014N	79.783W	GPS	172	5	532	383	8	1,2
WBTSEN	AB1602	41	1	ROS	02/27/2016	16:06	EN	27.029N	79.781W	GPS						
WBTSEN	AB1602	41	1	ROS	02/27/2016	16:58	BE	27.003N	79.865W	GPS						
WBTSEN	AB1602	41	1	ROS	02/27/2016	17:10	BO	27.012N	79.864W	GPS	158	4	404	255	6	1,2
WBTSEN	AB1602	42	1	ROS	02/27/2016	17:25	EN	27.024N	79.863W	GPS						
WBTSEN	AB1602	42	1	ROS	02/27/2016	18:26	BE	27.024N	79.933W	GPS						
WBTSEN	AB1602	42	1	ROS	02/27/2016	18:35	BO	27.004N	79.934W	GPS	34	11	274	139	4	1,2
WBTSEN	AB1602	43	1	ROS	02/27/2016	18:45	EN	27.011N	79.931W	GPS						
WBTSEN	AB1602	43	1	ROS	02/28/2016	02:43	BE	26.050N	79.234W	GPS						
WBTSEN	AB1602	43	1	ROS	02/28/2016	02:55	BO	26.052N	79.237W	GPS	188	10	143	337	7	1,2

WBTSEN	AB1602			ROS	Date	Time		Lat	Lon	GPS							Notes
WBTSEN	AB1602	43	1	ROS	02/28/2016	03:10	EN	26.053N	79.239W	GPS							
WBTSEN	AB1602	44	1	ROS	02/28/2016	03:43	BE	26.051N	79.311W	GPS	219	8	129	484	9	1,2	
WBTSEN	AB1602	44	1	ROS	02/28/2016	03:57	BO	26.053N	79.313W	GPS							
WBTSEN	AB1602	45	1	ROS	02/28/2016	04:16	BE	26.057N	79.315W	GPS							
WBTSEN	AB1602	45	1	ROS	02/28/2016	04:56	EN	26.053N	79.401W	GPS	30	1	240	594	10	1,2	
WBTSEN	AB1602	45	1	ROS	02/28/2016	05:11	BO	26.058N	79.403W	GPS							
WBTSEN	AB1602	46	1	ROS	02/28/2016	05:35	EN	26.068N	79.408W	GPS							
WBTSEN	AB1602	46	1	ROS	02/28/2016	06:11	BE	26.047N	79.482W	GPS							
WBTSEN	AB1602	46	1	ROS	02/28/2016	06:27	BO	26.053N	79.483W	GPS	149	2	269	676	11	1,2	
WBTSEN	AB1602	47	1	ROS	02/28/2016	06:50	EN	26.062N	79.487W	GPS							
WBTSEN	AB1602	47	1	ROS	02/28/2016	07:28	BE	26.055N	79.567W	GPS							
WBTSEN	AB1602	47	1	ROS	02/28/2016	07:47	EN	26.065N	79.570W	GPS	268	6	323	764	11	1,2	nisk 4 no sample, lanyard hung btm cap
WBTSEN	AB1602	48	1	ROS	02/28/2016	08:14	BE	26.086N	79.576W	GPS							
WBTSEN	AB1602	48	1	ROS	02/28/2016	09:06	EN	26.054N	79.669W	GPS							
WBTSEN	AB1602	48	1	ROS	02/28/2016	09:20	BE	26.061N	79.671W	GPS	263	3	947	697	11	1,2	nisk 2 no sample, lanyard hung btm cap
WBTSEN	AB1602	49	1	ROS	02/28/2016	09:45	EN	26.078N	79.667W	GPS							
WBTSEN	AB1602	49	1	ROS	02/28/2016	10:33	BE	26.054N	79.764W	GPS							
WBTSEN	AB1602	49	1	ROS	02/28/2016	10:49	EN	26.065N	79.760W	GPS	3	5	711	607	10	1,2	
WBTSEN	AB1602	50	1	ROS	02/28/2016	11:11	EN	26.083N	79.756W	GPS							
WBTSEN	AB1602	50	1	ROS	02/28/2016	12:09	BE	26.057N	79.847W	GPS							
WBTSEN	AB1602	50	1	ROS	02/28/2016	12:18	EN	26.063N	79.845W	GPS	25	5	796	329	6	1,2	
WBTSEN	AB1602	51	1	ROS	02/28/2016	12:32	BE	26.072N	79.841W	GPS							
WBTSEN	AB1602	51	1	ROS	02/28/2016	18:18	EN	26.059N	79.931W	GPS							
WBTSEN	AB1602	51	1	ROS	02/28/2016	18:26	EN	26.064N	79.928W	GPS	153	11	740	270	5	1,2	
WBTSEN	AB1602	52	1	ROS	02/28/2016	18:41	BE	26.072N	79.997W	GPS							
WBTSEN	AB1602	52	1	ROS	02/28/2016	20:05	EN	26.053N	79.996W	GPS							
WBTSEN	AB1602	52	1	ROS	02/28/2016	20:12	BE	26.054N	79.993W	GPS	244	8	692	246	5	1,2	
WBTSEN	AB1602	53	1	ROS	02/28/2016	20:24	EN	26.056N	80.063W	GPS							
WBTSEN	AB1602	53	1	ROS	02/28/2016	21:00	BE	26.048N	80.062W	GPS							
WBTSEN	AB1602	53	1	ROS	02/28/2016	21:06	BO	26.048N	80.060W	GPS	140	13	478	141	4	1,2	
WBTSEN	AB1602	53	1	ROS	02/28/2016	21:15	EN	26.048N		GPS							

Note:Parameter 1 - salinity sampled, Parameter 2 - oxygen sampled

C WOCE Bottle Summary File

Table 15: Florida Current Cruise – WOCE Bottle Summary File

SHIP/CRS EXPOCODE	WOCE SECT	STN	CAST	BTL#	BTL# Flag	DATE	UTC TIME	LAT	LON	DEPTH	CTD PRS	CTD TMP	CTD SAL	SAL FLAG	BTL SAL	SAL FLAG	CTD OXY	OXY FLAG	BTL OXY	OXY FLAG
WBTSEN	AB1602	1	1	1	2	20160218	2301	26.510N	69.509W	5351	5455	2.103	34.853	2	34.854	2	248.5	2	250.5	2
WBTSEN	AB1602	1	1	2	2	20160218	2309	26.511N	69.510W	4986	5079	2.167	34.867	2	34.869	2	254.2	2	255.1	2
WBTSEN	AB1602	1	1	3	2	20160218	2316	26.512N	69.511W	4647	4729	2.244	34.882	2	34.882	2	259.9	2	260.4	2
WBTSEN	AB1602	1	1	4	2	20160218	2323	26.512N	69.511W	4308	4381	2.276	34.890	2	34.889	2	263.2	2	263.7	2
WBTSEN	AB1602	1	1	5	2	20160218	2330	26.513N	69.512W	3972	4036	2.327	34.897	2	34.896	2	265.4	2	266.0	2
WBTSEN	AB1602	1	1	6	2	20160218	2339	26.514N	69.513W	3464	3516	2.506	34.912	2	34.912	2	264.6	2	263.5	2
WBTSEN	AB1602	1	1	7	2	20160218	2349	26.515N	69.514W	2955	2995	2.808	34.936	2	34.937	2	257.7	2	256.9	2
WBTSEN	AB1602	1	1	8	2	20160218	2359	26.516N	69.515W	2449	2480	3.212	34.968	2	34.966	2	256.5	2	254.7	2
WBTSEN	AB1602	1	1	9	2	20160219	0009	26.516N	69.516W	1940	1962	3.863	35.008	2	35.008	2	241.3	2	250.3	4
WBTSEN	AB1602	1	1	10	2	20160219	0014	26.518N	69.516W	1686	1704	4.295	35.035	2	35.036	2	248.5	2	248.6	4
WBTSEN	AB1602	1	1	11	2	20160219	0021	26.519N	69.517W	1347	1360	5.218	35.074	2	35.075	2	228.0	2	226.7	2
WBTSEN	AB1602	1	1	12	2	20160219	0025	26.520N	69.517W	1179	1190	5.889	35.067	2	35.067	2	198.7	2	199.1	2
WBTSEN	AB1602	1	1	13	2	20160219	0029	26.520N	69.518W	1011	1020	6.913	35.068	2	35.071	2	167.3	2	170.4	2
WBTSEN	AB1602	1	1	14	2	20160219	0032	26.521N	69.518W	903	911	7.557	35.010	2	35.011	4	143.9	2	143.9	2
WBTSEN	AB1602	1	1	15	2	20160219	0035	26.522N	69.518W	793	800	9.743	35.266	2	35.270	4	142.3	2	140.7	2
WBTSEN	AB1602	1	1	16	2	20160219	0038	26.522N	69.518W	687	692	12.174	35.599	2	35.601	2	156.3	2	154.7	4
WBTSEN	AB1602	1	1	17	2	20160219	0041	26.523N	69.519W	577	582	14.374	35.924	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	1	1	18	2	20160219	0044	26.523N	69.519W	469	472	16.376	36.260	2	36.261	4	183.2	2	182.6	2
WBTSEN	AB1602	1	1	19	2	20160219	0047	26.523N	69.519W	359	361	17.861	36.514	2	36.553	4	190.0	2	189.2	2
WBTSEN	AB1602	1	1	20	2	20160219	0050	26.524N	69.520W	249	251	19.013	36.622	2	36.621	2	186.6	2	185.5	2
WBTSEN	AB1602	1	1	21	2	20160219	0053	26.524N	69.520W	159	160	20.680	36.648	2	36.648	2	193.5	2	195.0	2
WBTSEN	AB1602	1	1	22	2	20160219	0056	26.524N	69.520W	103	104	23.808	36.719	2	36.720	2	210.1	2	208.2	2
WBTSEN	AB1602	1	1	23	2	20160219	0059	26.525N	69.521W	55	55	24.154	36.753	2	36.753	2	210.6	2	208.7	2
WBTSEN	AB1602	1	1	24	2	20160219	0102	26.525N	69.521W	4	4	24.165	36.674	2	36.675	2	209.1	2	208.7	2
WBTSEN	AB1602	2	1	1	2	20160219	0556	26.521N	70.014W	5480	5588	2.112	34.852	2	34.853	2	248.5	2	250.1	2
WBTSEN	AB1602	2	1	2	2	20160219	0605	26.523N	70.014W	5038	5132	2.275	34.879	2	34.878	2	259.2	2	258.7	2
WBTSEN	AB1602	2	1	3	2	20160219	0613	26.526N	70.016W	4614	4696	2.295	34.887	2	34.886	2	262.7	2	263.3	2
WBTSEN	AB1602	2	1	4	2	20160219	0621	26.528N	70.017W	4188	4258	2.314	34.892	2	34.892	2	264.9	2	265.5	2
WBTSEN	AB1602	2	1	5	2	20160219	0629	26.531N	70.017W	3764	3823	2.372	34.900	2	34.899	2	266.9	2	267.0	2
WBTSEN	AB1602	2	1	6	2	20160219	0638	26.534N	70.019W	3253	3300	2.589	34.916	2	34.914	2	266.4	2	266.4	2
WBTSEN	AB1602	2	1	7	2	20160219	0649	26.537N	70.020W	2755	2791	2.927	34.938	2	34.937	2	263.1	2	262.2	2
WBTSEN	AB1602	2	1	8	2	20160219	0659	26.539N	70.021W	2248	2275	3.334	34.959	2	34.959	2	261.3	2	261.5	2
WBTSEN	AB1602	2	1	9	2	20160219	0708	26.542N	70.022W	1838	1859	3.890	34.995	2	34.996	2	247.6	2	257.5	4
WBTSEN	AB1602	2	1	10	2	20160219	0714	26.544N	70.023W	1584	1601	4.398	35.028	2	35.029	2	240.8	2	248.1	4
WBTSEN	AB1602	2	1	11	2	20160219	0721	26.545N	70.024W	1368	1381	4.933	35.054	2	35.056	2	237.1	2	236.9	2
WBTSEN	AB1602	2	1	12	2	20160219	0726	26.547N	70.025W	1199	1211	5.597	35.074	2	35.075	2	216.7	2	215.4	2
WBTSEN	AB1602	2	1	13	2	20160219	0731	26.548N	70.025W	1035	1044	6.589	35.047	2	35.046	2	173.0	2	173.3	2
WBTSEN	AB1602	2	1	14	2	20160219	0735	26.549N	70.026W	923	931	7.845	35.096	2	35.096	2	151.8	2	149.1	2
WBTSEN	AB1602	2	1	15	2	20160219	0738	26.550N	70.026W	811	818	9.654	35.278	2	35.281	2	144.3	2	143.6	2
WBTSEN	AB1602	2	1	16	2	20160219	0742	26.551N	70.026W	703	709	12.104	35.595	2	35.596	6	154.0	2	154.4	2
WBTSEN	AB1602	2	1	17	2	20160219	0745	26.552N	70.026W	593	598	14.060	35.869	2	35.870	2	158.4	2	161.4	4
WBTSEN	AB1602	2	1	18	2	20160219	0749	26.552N	70.027W	484	488	15.999	36.193	2	36.196	2	179.5	2	178.7	2
WBTSEN	AB1602	2	1	19	2	20160219	0752	26.553N	70.027W	372	375	17.460	36.449	2	36.450	2	189.1	2	187.6	2
WBTSEN	AB1602	2	1	20	2	20160219	0755	26.555N	70.027W	266	268	18.453	36.572	2	36.573	2	188.5	2	187.9	2
WBTSEN	AB1602	2	1	21	2	20160219	0759	26.555N	70.027W	174	175	20.451	36.804	2	36.808	2	178.2	2	179.6	4
WBTSEN	AB1602	2	1	22	2	20160219	0802	26.556N	70.027W	94	95	22.865	36.815	2	36.812	2	203.4	2	203.6	4
WBTSEN	AB1602	2	1	23	2	20160219	0805	26.557N	70.028W	44	44	24.152	36.769	2	36.768	2	208.7	2	208.5	2
WBTSEN	AB1602	2	1	24	2	20160219	0808	26.558N	70.028W	3	3	24.145	36.766	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	3	1	1	2	20160219	1335	26.523N	70.524W	5480	5588	2.119	34.853	2	34.854	2	249.8	2	250.6	2
WBTSEN	AB1602	3	1	2	2	20160219	1343	26.524N	70.526W	5082	5178	2.272	34.878	2	34.878	2	258.6	2	258.5	6
WBTSEN	AB1602	3	1	3	2	20160219	1351	26.525N	70.527W	4698	4782	2.294	34.886	2	34.885	2	261.5	2	262.2	2
WBTSEN	AB1602	3	1	4	2	20160219	1359	26.526N	70.528W	4316	4389	2.298	34.891	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	3	1	5	2	20160219	1407	26.527N	70.530W	3937	4000	2.330	34.896	2	34.898	2	265.9	2	266.0	2
WBTSEN	AB1602	3	1	6	2	20160219	1417	26.529N	70.532W	3449	3500	2.460	34.908	2	34.907	2	266.8	2	266.6	2
WBTSEN	AB1602	3	1	7	2	20160219	1426	26.530N	70.534W	2961	3002	2.744	34.926	2	34.925	6	264.3	2	264.5	2
WBTSEN	AB1602	3	1	8	2	20160219	1436	26.532N	70.536W	2469	2500	3.127	34.948	2	34.948	2	262.7	2	261.8	6
WBTSEN	AB1602	3	1	9	2	20160219	1446	26.533N	70.537W	1976	1999	3.600	34.967	2	34.966	2	261.1	2	261.1	2
WBTSEN	AB1602	3	1	10	2	20160219	1453	26.535N	70.539W	1653	1671	4.077	34.995	2	34.995	2	256.1	2	255.8	2
WBTSEN	AB1602	3	1	11	2	20160219	1458	26.536N	70.540W	1446	1461	4.526	35.022	2	35.022	2	248.6	2	247.7	2
WBTSEN	AB1602	3	1	12	2	20160219	1502	26.537N	70.540W	1273	1286	5.013	35.042	2	35.043	4	234.2	2	237.2	2
WBTSEN	AB1602	3	1	13	2	20160219	1505	26.538N	70.541W	1170	1181	5.519	35.064	2	35.002	4	220.8	2	219.8	2
WBTSEN	AB1602	3	1	14	2	20160219	1510	26.539N	70.542W	928	936	7.724	35.097	2	35.066	4	156.4	2	156.6	2

Cruise	Ship	Leg		Stn		Date	Cast	Latitude	Longitude				Sal 1		Sal 2		Var 1		Var 2	
WBTSEN	AB1602	3	1	15	2	20160219	1513	26.540N	70.542W	821	828	9.365	35.216	2	35.214	2	139.4	2	139.3	4
WBTSEN	AB1602	3	1	16	2	20160219	1517	26.541N	70.543W	708	714	11.913	35.568	2	35.564	2	148.3	2	151.5	2
WBTSEN	AB1602	3	1	17	2	20160219	1520	26.542N	70.543W	601	606	14.160	35.887	2	35.887	2	163.1	2	163.8	4
WBTSEN	AB1602	3	1	18	2	20160219	1523	26.543N	70.544W	492	496	15.966	36.185	2	36.180	2	163.1	2	174.6	2
WBTSEN	AB1602	3	1	19	2	20160219	1526	26.544N	70.544W	384	387	17.417	36.438	2	36.439	2	174.6	2	187.9	2
WBTSEN	AB1602	3	1	20	2	20160219	1529	26.545N	70.545W	273	275	18.463	36.565	2	36.572	2	188.7	2	187.7	2
WBTSEN	AB1602	3	1	21	2	20160219	1532	26.546N	70.545W	184	185	19.702	36.648	2	36.649	2	189.7	2	187.2	2
WBTSEN	AB1602	3	1	22	2	20160219	1535	26.547N	70.546W	118	119	22.407	36.878	2	36.873	2	188.2	2	203.0	4
WBTSEN	AB1602	3	1	23	2	20160219	1537	26.548N	70.546W	64	64	24.223	36.764	2	36.766	2	204.1	2	208.2	2
WBTSEN	AB1602	3	1	24	2	20160219	1541	26.549N	70.547W	3	3	24.213	36.766	2	36.768	2	208.0	2	152.9	4
WBTSEN	AB1602	4	1	1	2	20160219	2150	26.517N	71.011W	5476	5584	2.102	34.851	2	34.852	2	203.4	2	250.8	2
WBTSEN	AB1602	4	1	2	2	20160219	2156	26.518N	71.012W	5152	5250	2.282	34.878	2	34.877	2	249.3	2	250.6	4
WBTSEN	AB1602	4	1	3	2	20160219	2203	26.518N	71.013W	4827	4914	2.296	34.884	2	34.884	2	232.4	2	262.7	2
WBTSEN	AB1602	4	1	4	2	20160219	2209	26.519N	71.014W	4500	4578	2.297	34.888	2	34.888	2	261.6	2	257.0	4
WBTSEN	AB1602	4	1	5	2	20160219	2215	26.520N	71.016W	4180	4250	2.302	34.892	2	34.891	2	239.6	2	265.9	2
WBTSEN	AB1602	4	1	6	2	20160219	2225	26.521N	71.017W	3691	3749	2.361	34.900	2	34.899	2	264.8	2	267.2	6
WBTSEN	AB1602	4	1	7	2	20160219	2234	26.522N	71.019W	3206	3252	2.572	34.914	2	34.914	2	266.8	2	267.0	2
WBTSEN	AB1602	4	1	8	2	20160219	2244	26.523N	71.021W	2716	2752	2.950	34.938	2	34.938	2	266.8	2	263.2	2
WBTSEN	AB1602	4	1	9	2	20160219	2253	26.525N	71.022W	2222	2249	3.335	34.956	2	34.955	2	263.4	2	265.0	2
WBTSEN	AB1602	4	1	10	2	20160219	2302	26.525N	71.024W	1781	1800	3.805	34.975	2	34.974	2	262.0	2	260.2	6
WBTSEN	AB1602	4	1	11	2	20160219	2310	26.526N	71.025W	1388	1402	4.651	35.034	2	35.035	2	260.9	2	244.8	2
WBTSEN	AB1602	4	1	12	2	20160219	2314	26.527N	71.026W	1200	1212	5.333	35.056	2	35.056	2	237.7	2	228.1	2
WBTSEN	AB1602	4	1	13	2	20160219	2318	26.527N	71.027W	1032	1042	6.566	35.062	2	35.059	2	226.9	2	182.4	2
WBTSEN	AB1602	4	1	14	2	20160219	2321	26.528N	71.028W	914	922	7.654	35.058	2	35.057	2	179.7	2	150.7	4
WBTSEN	AB1602	4	1	15	2	20160219	2324	26.528N	71.028W	804	811	9.609	35.242	2	35.243	2	150.8	2	139.9	4
WBTSEN	AB1602	4	1	16	2	20160219	2327	26.529N	71.029W	697	702	12.150	35.574	2	35.577	2	139.9	2	148.0	2
WBTSEN	AB1602	4	1	17	2	20160219	2330	26.529N	71.029W	587	591	14.378	35.913	2	35.915	2	148.0	2	162.9	6
WBTSEN	AB1602	4	1	18	2	20160219	2333	26.530N	71.030W	478	482	16.513	36.270	2	36.270	2	163.1	2	180.1	2
WBTSEN	AB1602	4	1	19	2	20160219	2336	26.531N	71.030W	368	371	17.831	36.501	2	36.501	2	179.6	2	189.9	2
WBTSEN	AB1602	4	1	20	2	20160219	2338	26.531N	71.031W	260	262	18.910	36.602	2	36.604	2	188.9	2	186.9	2
WBTSEN	AB1602	4	1	21	2	20160219	2341	26.532N	71.031W	170	171	20.993	36.808	2	36.712	2	185.5	2	188.1	2
WBTSEN	AB1602	4	1	22	2	20160219	2344	26.532N	71.032W	102	102	23.584	36.716	2	36.693	2	190.6	2	208.8	2
WBTSEN	AB1602	4	1	23	2	20160219	2346	26.533N	71.032W	50	50	23.612	36.695	2	36.695	2	209.4	2	210.0	2
WBTSEN	AB1602	4	1	24	2	20160219	2348	26.534N	71.033W	5	5	23.599	36.696	2	36.697	2	205.1	2	218.9	4
WBTSEN	AB1602	5	1	1	2	20160220	0437	26.527N	71.504W	5413	5519	2.129	34.855	2	34.855	2	251.7	2	249.0	2
WBTSEN	AB1602	5	1	2	2	20160220	0450	26.530N	71.504W	5029	5123	2.290	34.881	2	34.880	2	260.9	2	259.8	2
WBTSEN	AB1602	5	1	3	2	20160220	0458	26.531N	71.504W	4646	4729	2.302	34.891	2	34.890	2	263.3	2	263.3	6
WBTSEN	AB1602	5	1	4	2	20160220	0505	26.534N	71.504W	4265	4337	2.302	34.898	2	34.899	2	264.6	2	265.3	2
WBTSEN	AB1602	5	1	5	2	20160220	0513	26.536N	71.504W	3886	3948	2.352	34.911	2	34.911	2	266.7	2	266.1	2
WBTSEN	AB1602	5	1	6	2	20160220	0522	26.538N	71.504W	3397	3447	2.513	34.926	2	34.926	2	268.2	2	266.3	2
WBTSEN	AB1602	5	1	7	2	20160220	0532	26.541N	71.504W	2910	2950	2.787	34.952	2	34.952	2	266.5	2	266.1	6
WBTSEN	AB1602	5	1	8	2	20160220	0542	26.544N	71.504W	2421	2451	3.232	34.976	2	34.976	2	263.2	2	261.7	2
WBTSEN	AB1602	5	1	9	2	20160220	0552	26.547N	71.504W	1928	1950	3.767	34.993	2	34.992	2	261.3	2	259.4	2
WBTSEN	AB1602	5	1	10	2	20160220	0559	26.549N	71.504W	1584	1600	4.195	35.013	2	35.013	2	255.4	2	254.6	2
WBTSEN	AB1602	5	1	11	2	20160220	0603	26.550N	71.504W	1430	1445	4.526	35.045	2	35.045	2	249.6	2	248.8	4
WBTSEN	AB1602	5	1	12	2	20160220	0607	26.552N	71.504W	1262	1274	5.095	35.076	2	35.076	2	234.2	2	234.6	2
WBTSEN	AB1602	5	1	13	2	20160220	0611	26.553N	71.504W	1095	1105	6.084	35.117	2	35.115	2	199.7	2	200.6	2
WBTSEN	AB1602	5	1	14	2	20160220	0614	26.555N	71.503W	942	950	7.744	35.223	2	35.223	2	160.3	2	159.6	2
WBTSEN	AB1602	5	1	15	2	20160220	0617	26.556N	71.503W	836	843	9.386	35.474	2	35.481	2	140.3	2	139.9	2
WBTSEN	AB1602	5	1	16	2	20160220	0621	26.557N	71.503W	727	733	11.438	35.889	2	35.890	2	142.3	2	141.8	4
WBTSEN	AB1602	5	1	17	2	20160220	0624	26.558N	71.503W	616	621	14.236	36.245	2	36.245	2	159.1	2	157.8	2
WBTSEN	AB1602	5	1	18	2	20160220	0627	26.560N	71.503W	510	514	16.345	36.477	2	36.483	2	177.5	2	177.4	2
WBTSEN	AB1602	5	1	19	2	20160220	0630	26.561N	71.503W	402	405	17.684	36.587	2	36.581	2	188.3	2	188.4	4
WBTSEN	AB1602	5	1	20	2	20160220	0634	26.563N	71.503W	288	290	18.830	36.588	2	36.774	2	187.7	2	189.6	2
WBTSEN	AB1602	5	1	21	2	20160220	0637	26.564N	71.503W	204	205	19.740	36.773	2	36.710	2	198.3	2	198.6	2
WBTSEN	AB1602	5	1	22	2	20160220	0640	26.565N	71.503W	120	120	23.860	36.710	2	36.698	2	208.0	2	208.0	2
WBTSEN	AB1602	5	1	23	2	20160220	0643	26.567N	71.503W	70	71	23.804	36.696	2	36.696	2	208.6	2	209.1	2
WBTSEN	AB1602	5	1	24	2	20160220	0648	26.568N	71.504W	3	3	23.760	36.696	2	36.696	2	210.1	2	210.1	2
WBTSEN	AB1602	6	1	1	2	20160220	1125	26.532N	72.012W	5271	5372	2.120	34.857	2	34.857	2	251.9	2	252.7	2
WBTSEN	AB1602	6	1	2	2	20160220	1131	26.533N	72.013W	4957	5049	2.255	34.879	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	6	1	3	2	20160220	1137	26.535N	72.014W	4650	4733	2.285	34.886	2	34.887	2	263.4	2	262.9	2
WBTSEN	AB1602	6	1	4	2	20160220	1143	26.536N	72.015W	4344	4418	2.292	34.890	2	34.889	2	264.2	2	264.2	2
WBTSEN	AB1602	6	1	5	2	20160220	1149	26.538N	72.016W	4031	4097	2.310	34.894	2	34.894	2	266.2	2	266.0	2
WBTSEN	AB1602	6	1	6	2	20160220	1158	26.540N	72.017W	3543	3597	2.387	34.902	2	34.902	2	268.0	2	268.2	2
WBTSEN	AB1602	6	1	7	2	20160220	1207	26.543N	72.018W	3058	3101	2.626	34.920	2	34.922	2	267.5	2	265.7	2
WBTSEN	AB1602	6	1	8	2	20160220	1217	26.545N	72.020W	2566	2599	3.055	34.949	2	34.950	2	260.1	2	260.1	2

WBTSEN	AB1602	6	1	9	2	20160220	1226	26.548N	72.021W	2075	2099	3.502	34.968	2	34.968	2	260.4	2	261.2	2
WBTSEN	AB1602	6	1	10	2	20160220	1234	26.551N	72.022W	1686	1704	4.031	34.996	2	34.996	2	256.4	2	256.7	2
WBTSEN	AB1602	6	1	11	2	20160220	1240	26.553N	72.023W	1405	1419	4.621	35.030	2	35.030	2	246.1	2	246.5	2
WBTSEN	AB1602	6	1	12	2	20160220	1245	26.555N	72.023W	1231	1242	5.278	35.085	2	35.084	2	185.2	2	228.4	4
WBTSEN	AB1602	6	1	13	2	20160220	1250	26.556N	72.024W	1061	1070	6.306	35.118	2	35.116	2	152.3	2	197.4	6
WBTSEN	AB1602	6	1	14	2	20160220	1254	26.557N	72.024W	905	913	8.012	35.294	2	35.284	2	143.9	2	151.6	2
WBTSEN	AB1602	6	1	15	2	20160220	1257	26.559N	72.025W	796	803	9.933	35.582	2	35.584	2	150.7	2	141.5	2
WBTSEN	AB1602	6	1	16	2	20160220	1300	26.560N	72.025W	684	690	12.211	35.952	2	35.944	2	165.8	2	148.0	2
WBTSEN	AB1602	6	1	17	2	20160220	1304	26.561N	72.026W	580	585	14.576	36.338	2	36.331	2	182.9	2	164.3	2
WBTSEN	AB1602	6	1	18	2	20160220	1307	26.563N	72.026W	469	473	16.863	36.526	2	36.512	2	189.2	2	182.3	4
WBTSEN	AB1602	6	1	19	2	20160220	1310	26.564N	72.026W	358	360	18.090	36.598	2	36.590	2	190.1	2	189.5	2
WBTSEN	AB1602	6	1	20	2	20160220	1314	26.565N	72.026W	248	250	19.058	36.633	2	36.615	2	191.7	2	190.3	2
WBTSEN	AB1602	6	1	21	2	20160220	1317	26.567N	72.027W	160	161	20.215	36.684	2	36.672	2	210.5	2	192.2	2
WBTSEN	AB1602	6	1	22	2	20160220	1319	26.568N	72.027W	98	98	23.036	36.688	2	36.688	2	211.1	2	211.1	2
WBTSEN	AB1602	6	1	23	2	20160220	1322	26.569N	72.027W	44	44	23.406	36.689	2	36.689	2	211.1	2	210.4	2
WBTSEN	AB1602	6	1	24	2	20160220	1324	26.570N	72.027W	6	6	23.397	36.689	2	36.689	2	211.1	2	210.4	2
WBTSEN	AB1602	7	1	1	2	20160220	2003	26.516N	72.376W	5185	5284	2.083	34.854	2	34.853	2	251.6	2	249.8	2
WBTSEN	AB1602	7	1	2	2	20160220	2011	26.517N	72.377W	4811	4898	2.236	34.878	2	34.878	2	260.4	2	259.3	2
WBTSEN	AB1602	7	1	3	2	20160220	2017	26.518N	72.378W	4472	4549	2.265	34.885	2	34.886	2	263.5	2	263.1	2
WBTSEN	AB1602	7	1	4	2	20160220	2024	26.520N	72.378W	4131	4199	2.284	34.891	2	34.891	2	265.2	2	265.7	2
WBTSEN	AB1602	7	1	5	2	20160220	2030	26.521N	72.378W	3791	3850	2.325	34.897	2	34.897	2	266.8	2	266.9	2
WBTSEN	AB1602	7	1	6	2	20160220	2040	26.522N	72.378W	3302	3350	2.509	34.911	2	34.911	2	267.7	2	268.0	2
WBTSEN	AB1602	7	1	7	2	20160220	2049	26.523N	72.378W	2812	2850	2.780	34.928	2	34.928	2	264.5	2	266.0	2
WBTSEN	AB1602	7	1	8	2	20160220	2059	26.525N	72.379W	2321	2349	3.267	34.960	2	34.960	2	260.5	2	261.6	6
WBTSEN	AB1602	7	1	9	2	20160220	2108	26.526N	72.379W	1831	1851	3.807	34.986	2	34.984	2	259.2	2	259.7	2
WBTSEN	AB1602	7	1	10	2	20160220	2113	26.527N	72.379W	1584	1601	4.206	35.008	2	35.007	2	253.1	2	254.9	2
WBTSEN	AB1602	7	1	11	2	20160220	2117	26.528N	72.379W	1362	1376	4.721	35.037	2	35.036	2	244.2	2	246.4	2
WBTSEN	AB1602	7	1	12	2	20160220	2121	26.529N	72.380W	1195	1207	5.373	35.066	2	35.066	2	-999.0	2	-999.0	9
WBTSEN	AB1602	7	1	13	2	20160220	2125	26.529N	72.380W	1028	1037	6.559	35.089	2	35.089	2	188.5	2	187.9	2
WBTSEN	AB1602	7	1	14	2	20160220	2128	26.530N	72.380W	917	925	7.725	35.099	2	35.099	2	156.4	2	158.0	2
WBTSEN	AB1602	7	1	15	2	20160220	2130	26.531N	72.380W	809	816	9.649	35.256	2	35.255	2	142.5	2	143.1	2
WBTSEN	AB1602	7	1	16	2	20160220	2133	26.531N	72.380W	701	707	12.191	35.584	2	35.578	2	149.0	2	150.6	2
WBTSEN	AB1602	7	1	17	2	20160220	2136	26.532N	72.380W	591	596	14.547	35.943	2	35.939	2	165.6	2	166.5	4
WBTSEN	AB1602	7	1	18	2	20160220	2139	26.532N	72.380W	483	487	16.668	36.301	2	36.299	2	180.5	2	181.6	2
WBTSEN	AB1602	7	1	19	2	20160220	2142	26.533N	72.380W	374	376	17.879	36.505	2	36.506	2	188.2	2	189.4	2
WBTSEN	AB1602	7	1	20	2	20160220	2144	26.533N	72.381W	264	266	18.714	36.562	2	36.561	2	193.8	2	197.3	2
WBTSEN	AB1602	7	1	21	2	20160220	2147	26.534N	72.381W	175	176	19.850	36.665	2	36.632	2	188.1	2	189.0	2
WBTSEN	AB1602	7	1	22	2	20160220	2149	26.535N	72.381W	116	116	21.044	36.692	2	36.664	2	197.7	2	196.7	2
WBTSEN	AB1602	7	1	23	2	20160220	2151	26.535N	72.381W	65	66	23.273	36.696	2	36.693	2	209.5	2	211.2	2
WBTSEN	AB1602	7	1	24	2	20160220	2154	26.535N	72.381W	6	6	23.308	36.694	2	36.696	2	206.3	2	244.3	2
WBTSEN	AB1602	8	1	1	2	20160221	0148	26.517N	72.765W	5121	5218	2.081	34.854	2	34.853	2	252.8	2	251.9	2
WBTSEN	AB1602	8	1	2	2	20160221	0156	26.518N	72.765W	4753	4839	2.222	34.877	2	34.878	2	260.8	2	258.7	2
WBTSEN	AB1602	8	1	3	2	20160221	0204	26.519N	72.766W	4375	4450	2.255	34.886	2	34.886	2	264.1	2	263.6	2
WBTSEN	AB1602	8	1	4	2	20160221	0211	26.520N	72.766W	4014	4080	2.274	34.891	2	34.891	2	266.5	2	266.2	4
WBTSEN	AB1602	8	1	5	2	20160221	0219	26.521N	72.766W	3643	3699	2.343	34.899	2	34.899	2	268.0	2	268.7	2
WBTSEN	AB1602	8	1	6	2	20160221	0228	26.522N	72.766W	3153	3198	2.553	34.914	2	34.913	2	268.0	2	267.6	2
WBTSEN	AB1602	8	1	7	2	20160221	0237	26.524N	72.765W	2664	2699	2.895	34.933	2	34.932	2	265.5	2	267.2	2
WBTSEN	AB1602	8	1	8	2	20160221	0247	26.525N	72.765W	2173	2199	3.364	34.956	2	34.955	2	265.2	2	263.4	2
WBTSEN	AB1602	8	1	9	2	20160221	0252	26.526N	72.764W	1925	1947	3.681	34.975	2	34.974	2	261.2	2	260.8	2
WBTSEN	AB1602	8	1	10	2	20160221	0259	26.527N	72.764W	1584	1600	4.164	35.000	2	35.001	2	256.8	2	256.2	2
WBTSEN	AB1602	8	1	11	2	20160221	0303	26.528N	72.764W	1409	1423	4.635	35.031	2	35.031	2	246.7	2	246.8	2
WBTSEN	AB1602	8	1	12	2	20160221	0307	26.529N	72.764W	1242	1254	5.170	35.058	2	35.058	2	233.8	2	233.6	2
WBTSEN	AB1602	8	1	13	2	20160221	0311	26.530N	72.763W	1073	1083	6.057	35.074	2	35.074	2	204.9	2	203.9	2
WBTSEN	AB1602	8	1	14	2	20160221	0315	26.530N	72.763W	935	943	7.615	35.103	2	35.102	2	159.7	2	161.0	2
WBTSEN	AB1602	8	1	15	2	20160221	0318	26.531N	72.763W	818	825	9.701	35.269	2	35.267	2	145.0	2	144.2	2
WBTSEN	AB1602	8	1	16	2	20160221	0321	26.532N	72.762W	709	715	12.078	35.566	2	35.567	2	151.0	2	153.1	6
WBTSEN	AB1602	8	1	17	2	20160221	0324	26.532N	72.762W	601	606	14.753	35.979	2	35.971	2	165.6	2	166.7	2
WBTSEN	AB1602	8	1	18	2	20160221	0327	26.533N	72.762W	492	496	16.795	36.322	2	36.320	2	180.3	2	181.9	2
WBTSEN	AB1602	8	1	19	2	20160221	0330	26.534N	72.762W	383	386	17.908	36.508	2	36.508	2	187.8	2	189.5	2
WBTSEN	AB1602	8	1	20	2	20160221	0333	26.535N	72.761W	274	276	18.910	36.580	2	36.578	2	195.5	2	193.2	4
WBTSEN	AB1602	8	1	21	2	20160221	0335	26.535N	72.761W	185	186	20.378	36.646	2	36.646	2	186.1	2	186.1	6
WBTSEN	AB1602	8	1	22	2	20160221	0338	26.536N	72.761W	107	108	22.792	36.644	2	36.641	2	209.6	2	210.6	2
WBTSEN	AB1602	8	1	23	2	20160221	0341	26.537N	72.760W	55	56	22.907	36.643	2	36.643	2	209.9	2	211.8	2
WBTSEN	AB1602	8	1	24	2	20160221	0344	26.538N	72.760W	5	5	22.898	36.645	2	36.644	2	210.4	2	211.3	2
WBTSEN	AB1602	9	1	1	2	20160221	0751	26.534N	73.122W	5030	5124	2.118	34.861	2	34.860	2	252.5	2	253.2	6
WBTSEN	AB1602	9	1	2	2	20160221	0757	26.535N	73.123W	4753	4839	2.209	34.875	2	34.875	2	259.0	2	257.7	6

WBTSEN	AB1602	9	1	3	2	20160221	0802	26.537N	73.122W	4471	4549	2.251	34.884	2	34.884	6	263.3	2	262.8	6
WBTSEN	AB1602	9	1	4	2	20160221	0808	26.538N	73.123W	4182	4251	2.268	34.889	2	34.888	2	264.9	2	265.9	2
WBTSEN	AB1602	9	1	5	2	20160221	0814	26.539N	73.123W	3912	3975	2.306	34.894	2	34.894	2	266.5	2	266.5	2
WBTSEN	AB1602	9	1	6	2	20160221	0823	26.541N	73.124W	3425	3476	2.462	34.907	2	34.907	2	268.4	2	268.1	2
WBTSEN	AB1602	9	1	7	2	20160221	0833	26.544N	73.124W	2934	2974	2.741	34.924	2	34.923	2	266.9	2	266.6	6
WBTSEN	AB1602	9	1	8	2	20160221	0843	26.546N	73.124W	2446	2476	3.135	34.947	2	34.946	2	263.6	2	262.8	2
WBTSEN	AB1602	9	1	9	2	20160221	0851	26.548N	73.124W	2028	2052	3.559	34.965	2	34.964	2	262.5	2	262.4	2
WBTSEN	AB1602	9	1	10	2	20160221	0859	26.550N	73.124W	1683	1701	4.010	34.986	2	34.985	2	258.1	2	257.5	2
WBTSEN	AB1602	9	1	11	2	20160221	0904	26.551N	73.124W	1437	1452	4.402	35.007	2	35.006	2	252.2	2	251.3	2
WBTSEN	AB1602	9	1	12	2	20160221	0910	26.553N	73.124W	1192	1203	5.153	35.046	2	35.045	2	233.4	2	233.1	2
WBTSEN	AB1602	9	1	13	2	20160221	0914	26.554N	73.124W	1022	1031	6.673	35.081	2	35.080	2	184.7	2	185.7	2
WBTSEN	AB1602	9	1	14	2	20160221	0917	26.555N	73.124W	913	921	8.159	35.139	2	35.138	2	143.5	2	154.2	4
WBTSEN	AB1602	9	1	15	2	20160221	0920	26.556N	73.124W	805	812	9.940	35.288	2	35.292	4	132.3	2	141.5	2
WBTSEN	AB1602	9	1	16	2	20160221	0923	26.556N	73.124W	697	702	12.247	35.588	2	35.595	4	153.1	2	150.7	2
WBTSEN	AB1602	9	1	17	2	20160221	0926	26.557N	73.124W	587	591	14.660	35.954	2	35.955	2	166.5	2	168.5	2
WBTSEN	AB1602	9	1	18	2	20160221	0929	26.558N	73.123W	479	483	16.979	36.356	2	36.356	2	182.5	2	182.1	4
WBTSEN	AB1602	9	1	19	2	20160221	0932	26.559N	73.123W	370	373	18.129	36.533	2	36.533	2	187.8	2	187.9	2
WBTSEN	AB1602	9	1	20	2	20160221	0935	26.560N	73.123W	260	262	19.245	36.610	2	36.608	2	192.6	2	190.3	4
WBTSEN	AB1602	9	1	21	2	20160221	0938	26.561N	73.123W	171	173	20.413	36.615	2	36.614	2	188.0	2	198.5	4
WBTSEN	AB1602	9	1	22	2	20160221	0940	26.561N	73.123W	121	122	22.369	36.634	2	36.631	2	199.5	2	151.0	2
WBTSEN	AB1602	9	1	23	2	20160221	0942	26.562N	73.122W	72	72	22.769	36.635	2	36.632	2	211.7	2	210.7	2
WBTSEN	AB1602	9	1	24	2	20160221	0945	26.563N	73.122W	4	4	23.114	36.685	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	10	1	1	2	20160221	1331	26.518N	73.501W	4879	4969	2.209	34.873	2	34.875	2	257.8	2	257.4	2
WBTSEN	AB1602	10	1	2	2	20160221	1338	26.519N	73.502W	4598	4679	2.245	34.882	2	34.881	2	262.0	2	260.8	2
WBTSEN	AB1602	10	1	3	2	20160221	1346	26.520N	73.502W	4229	4300	2.260	34.888	2	34.887	2	264.3	2	263.9	2
WBTSEN	AB1602	10	1	4	2	20160221	1351	26.521N	73.502W	3937	4000	2.276	34.892	2	34.891	4	264.8	2	265.4	2
WBTSEN	AB1602	10	1	5	2	20160221	1358	26.522N	73.503W	3595	3650	2.329	34.898	2	34.901	2	267.7	2	267.4	2
WBTSEN	AB1602	10	1	6	2	20160221	1406	26.523N	73.503W	3203	3249	2.489	34.909	2	34.931	2	268.4	2	268.4	2
WBTSEN	AB1602	10	1	7	2	20160221	1415	26.524N	73.503W	2713	2748	2.854	34.931	2	34.954	2	265.2	2	265.3	2
WBTSEN	AB1602	10	1	8	2	20160221	1424	26.526N	73.503W	2224	2251	3.325	34.954	2	34.971	2	263.7	2	262.6	2
WBTSEN	AB1602	10	1	9	2	20160221	1432	26.527N	73.503W	1830	1850	3.758	34.972	2	35.002	2	260.8	2	260.5	2
WBTSEN	AB1602	10	1	10	2	20160221	1439	26.528N	73.504W	1486	1501	4.279	34.998	2	35.019	4	254.4	2	253.9	2
WBTSEN	AB1602	10	1	11	2	20160221	1442	26.529N	73.503W	1323	1336	4.699	35.019	2	35.058	4	245.4	2	245.5	2
WBTSEN	AB1602	10	1	12	2	20160221	1446	26.529N	73.504W	1153	1164	5.465	35.057	2	35.085	2	223.5	2	224.9	2
WBTSEN	AB1602	10	1	13	2	20160221	1450	26.530N	73.504W	985	994	6.859	35.086	2	35.127	2	180.3	2	182.2	2
WBTSEN	AB1602	10	1	14	2	20160221	1453	26.530N	73.504W	876	883	8.414	35.127	2	35.319	9	145.7	2	144.6	2
WBTSEN	AB1602	10	1	15	2	20160221	1455	26.531N	73.504W	768	775	10.370	35.319	2	35.647	2	-999.0	9	-999.0	9
WBTSEN	AB1602	10	1	16	2	20160221	1458	26.531N	73.504W	660	666	12.685	35.649	2	36.111	2	148.4	2	148.1	2
WBTSEN	AB1602	10	1	17	2	20160221	1501	26.532N	73.503W	551	555	15.570	36.108	2	36.459	2	171.9	2	170.8	2
WBTSEN	AB1602	10	1	18	2	20160221	1504	26.533N	73.503W	442	445	17.569	36.459	2	36.559	2	188.1	2	188.7	2
WBTSEN	AB1602	10	1	19	2	20160221	1507	26.533N	73.503W	332	335	18.559	36.559	2	36.600	6	191.7	2	191.2	2
WBTSEN	AB1602	10	1	20	2	20160221	1509	26.534N	73.503W	222	224	19.721	36.599	2	36.637	2	193.1	2	196.3	2
WBTSEN	AB1602	10	1	21	2	20160221	1512	26.534N	73.503W	134	135	22.906	36.642	2	36.642	2	209.5	2	209.8	2
WBTSEN	AB1602	10	1	22	2	20160221	1514	26.535N	73.503W	85	86	23.000	36.683	2	36.682	2	210.8	2	209.7	2
WBTSEN	AB1602	10	1	23	2	20160221	1516	26.535N	73.503W	34	34	24.495	36.685	2	36.683	2	204.5	2	204.4	2
WBTSEN	AB1602	10	1	24	2	20160221	1518	26.535N	73.503W	4	4	24.504	36.685	2	36.685	2	204.6	2	204.6	6
WBTSEN	AB1602	11	1	1	2	20160221	1919	26.514N	73.863W	4720	4805	2.148	34.869	2	34.869	2	255.7	2	256.0	2
WBTSEN	AB1602	11	1	2	2	20160221	1928	26.515N	73.863W	4376	4450	2.220	34.883	2	34.883	4	262.0	2	261.9	2
WBTSEN	AB1602	11	1	3	2	20160221	1934	26.516N	73.863W	4063	4130	2.239	34.893	2	34.888	2	264.8	2	266.9	2
WBTSEN	AB1602	11	1	4	2	20160221	1942	26.517N	73.863W	3762	3821	2.270	34.901	2	34.893	2	266.1	2	268.5	2
WBTSEN	AB1602	11	1	5	2	20160221	1949	26.518N	73.863W	3449	3500	2.360	34.913	2	34.901	2	268.3	2	268.3	2
WBTSEN	AB1602	11	1	6	2	20160221	1958	26.519N	73.863W	3059	3102	2.541	34.928	2	34.913	4	267.7	2	266.5	2
WBTSEN	AB1602	11	1	7	2	20160221	2005	26.520N	73.864W	2667	2701	2.815	34.947	2	34.929	2	266.0	2	263.7	2
WBTSEN	AB1602	11	1	8	2	20160221	2012	26.521N	73.865W	2273	2300	3.164	34.962	2	34.947	2	263.4	2	262.6	2
WBTSEN	AB1602	11	1	9	2	20160221	2019	26.522N	73.866W	1929	1951	3.575	34.988	2	34.963	2	262.7	2	257.3	2
WBTSEN	AB1602	11	1	10	2	20160221	2026	26.524N	73.867W	1586	1602	4.063	35.007	2	34.988	2	257.5	2	251.2	2
WBTSEN	AB1602	11	1	11	2	20160221	2030	26.525N	73.868W	1386	1400	4.431	35.039	2	35.008	4	251.5	2	238.5	2
WBTSEN	AB1602	11	1	12	2	20160221	2035	26.526N	73.868W	1216	1228	5.002	35.072	2	35.040	2	237.8	2	208.2	2
WBTSEN	AB1602	11	1	13	2	20160221	2038	26.527N	73.869W	1050	1060	6.009	35.097	2	35.075	2	206.0	2	164.8	2
WBTSEN	AB1602	11	1	14	2	20160221	2041	26.528N	73.869W	942	950	7.489	35.167	2	35.098	2	164.8	2	143.4	4
WBTSEN	AB1602	11	1	15	2	20160221	2045	26.529N	73.870W	833	840	8.921	35.491	2	35.175	2	142.0	2	148.0	4
WBTSEN	AB1602	11	1	16	2	20160221	2048	26.530N	73.870W	724	730	11.538	35.843	2	35.492	4	147.3	2	161.1	2
WBTSEN	AB1602	11	1	17	2	20160221	2051	26.531N	73.871W	616	621	13.958	36.239	2	35.847	4	158.0	2	178.2	4
WBTSEN	AB1602	11	1	18	2	20160221	2054	26.531N	73.871W	506	510	16.334	36.482	2	36.244	2	176.4	2	185.1	2
WBTSEN	AB1602	11	1	19	2	20160221	2057	26.532N	73.872W	397	400	17.688	36.606	2	36.483	2	183.4	2	184.6	6
WBTSEN	AB1602	11	1	20	2	20160221	2100	26.533N	73.872W	288	290	18.722	36.635	2	36.606	2	183.6	2	184.3	4

WBTSEN	AB1602	11	1	2	21	20160221	2102	26.533N	73.872W	200	201	20.121	36.697	2	36.697	6	177.0	2	185.8	4
WBTSEN	AB1602	11	1	2	22	20160221	2105	26.534N	73.873W	110	111	22.390	36.716	2	36.721	4	196.8	2	196.0	2
WBTSEN	AB1602	11	1	2	23	20160221	2107	26.535N	73.873W	60	61	23.404	36.678	2	36.677	2	208.7	2	209.5	2
WBTSEN	AB1602	11	1	2	24	20160221	2110	26.517N	73.874W	4	4	23.611	36.685	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	12	1	2	1	20160222	0041	26.519N	74.239W	4514	4593	2.083	34.864	2	34.880	2	254.6	2	254.5	2
WBTSEN	AB1602	12	1	2	2	20160222	0047	26.520N	74.239W	4206	4276	2.168	34.879	2	34.886	2	259.9	2	259.8	2
WBTSEN	AB1602	12	1	2	3	20160222	0053	26.521N	74.240W	3887	3949	2.206	34.893	2	34.893	6	264.5	2	265.2	2
WBTSEN	AB1602	12	1	2	4	20160222	0059	26.522N	74.240W	3570	3624	2.251	34.901	2	34.902	2	266.7	2	267.4	2
WBTSEN	AB1602	12	1	2	5	20160222	0106	26.524N	74.241W	3254	3301	2.346	34.916	2	34.917	2	268.3	2	269.2	2
WBTSEN	AB1602	12	1	2	6	20160222	0113	26.525N	74.241W	2862	2900	2.579	34.935	2	34.935	2	267.6	2	267.1	2
WBTSEN	AB1602	12	1	2	7	20160222	0121	26.527N	74.242W	2468	2499	2.906	34.953	2	34.954	2	264.6	2	265.0	2
WBTSEN	AB1602	12	1	2	8	20160222	0129	26.528N	74.242W	2077	2102	3.266	34.966	2	34.966	2	262.6	2	262.9	2
WBTSEN	AB1602	12	1	2	9	20160222	0135	26.529N	74.243W	1781	1801	3.603	34.980	2	34.980	2	262.1	2	262.8	2
WBTSEN	AB1602	12	1	2	10	20160222	0139	26.530N	74.243W	1584	1600	3.904	34.999	2	34.999	2	259.7	2	259.5	2
WBTSEN	AB1602	12	1	2	11	20160222	0143	26.531N	74.243W	1387	1401	4.251	35.024	2	-999.000	9	244.1	2	141.3	4
WBTSEN	AB1602	12	1	2	12	20160222	0148	26.532N	74.243W	1189	1200	4.747	35.073	2	35.104	2	244.6	2	245.4	2
WBTSEN	AB1602	12	1	2	13	20160222	0151	26.532N	74.243W	1034	1044	6.119	35.105	2	-999.000	9	203.9	2	206.0	4
WBTSEN	AB1602	12	1	2	14	20160222	0154	26.533N	74.243W	927	935	7.629	35.197	2	35.196	2	160.3	2	162.0	2
WBTSEN	AB1602	12	1	2	15	20160222	0157	26.533N	74.244W	819	826	8.971	35.420	2	35.800	2	137.6	2	148.0	2
WBTSEN	AB1602	12	1	2	16	20160222	0200	26.534N	74.244W	708	714	11.097	35.798	2	36.193	2	140.1	2	141.4	2
WBTSEN	AB1602	12	1	2	17	20160222	0203	26.535N	74.244W	601	605	13.662	36.190	2	36.504	6	153.5	2	153.6	2
WBTSEN	AB1602	12	1	2	18	20160222	0206	26.535N	74.244W	491	495	16.016	36.504	2	36.667	2	170.8	2	171.6	2
WBTSEN	AB1602	12	1	2	19	20160222	0209	26.536N	74.244W	382	385	17.838	36.668	2	-999.000	9	184.0	2	184.6	2
WBTSEN	AB1602	12	1	2	20	20160222	0211	26.536N	74.244W	272	274	19.335	36.720	2	36.702	2	179.9	2	181.0	2
WBTSEN	AB1602	12	1	2	21	20160222	0214	26.537N	74.244W	184	186	20.938	36.704	2	36.661	2	-999.0	9	-999.0	9
WBTSEN	AB1602	12	1	2	22	20160222	0216	26.537N	74.244W	120	121	23.050	36.660	2	36.677	2	197.0	2	198.4	2
WBTSEN	AB1602	12	1	2	23	20160222	0218	26.537N	74.244W	69	70	23.762	36.675	2	36.660	2	205.1	2	207.0	2
WBTSEN	AB1602	12	1	2	24	20160222	0221	26.537N	74.244W	6	6	24.535	36.677	2	36.675	2	254.2	2	205.4	2
WBTSEN	AB1602	13	1	2	1	20160222	0526	26.512N	74.533W	4474	4551	2.086	34.865	2	34.865	2	262.3	2	254.9	2
WBTSEN	AB1602	13	1	2	2	20160222	0533	26.512N	74.535W	4132	4200	2.193	34.883	2	34.882	2	264.0	2	262.2	2
WBTSEN	AB1602	13	1	2	3	20160222	0537	26.513N	74.537W	3937	4000	2.211	34.887	2	34.887	2	266.0	2	264.0	2
WBTSEN	AB1602	13	1	2	4	20160222	0544	26.513N	74.537W	3625	3680	2.244	34.892	2	34.892	2	267.6	2	266.4	2
WBTSEN	AB1602	13	1	2	5	20160222	0549	26.514N	74.539W	3351	3401	2.307	34.899	2	34.899	2	268.5	2	268.2	2
WBTSEN	AB1602	13	1	2	6	20160222	0558	26.515N	74.540W	2959	3000	2.493	34.911	2	34.910	2	265.9	2	269.1	2
WBTSEN	AB1602	13	1	2	7	20160222	0605	26.516N	74.542W	2567	2600	2.753	34.927	2	34.928	2	263.3	2	266.1	2
WBTSEN	AB1602	13	1	2	8	20160222	0613	26.517N	74.543W	2177	2203	3.072	34.945	2	34.944	6	262.6	2	264.0	2
WBTSEN	AB1602	13	1	2	9	20160222	0619	26.518N	74.544W	1830	1850	3.349	34.957	2	34.956	4	262.9	2	262.6	2
WBTSEN	AB1602	13	1	2	10	20160222	0625	26.518N	74.544W	1535	1551	3.720	34.971	2	-999.000	9	261.2	2	260.8	2
WBTSEN	AB1602	13	1	2	11	20160222	0630	26.519N	74.545W	1342	1355	4.353	35.002	2	35.001	2	251.5	2	251.3	2
WBTSEN	AB1602	13	1	2	12	20160222	0634	26.519N	74.546W	1174	1185	5.181	35.046	2	35.046	2	231.9	2	232.2	2
WBTSEN	AB1602	13	1	2	13	20160222	0638	26.520N	74.546W	1007	1016	6.501	35.080	2	35.083	6	184.2	2	187.2	2
WBTSEN	AB1602	13	1	2	14	20160222	0641	26.520N	74.547W	899	907	7.605	35.107	2	35.107	2	161.7	2	162.3	2
WBTSEN	AB1602	13	1	2	15	20160222	0644	26.521N	74.547W	789	796	8.990	35.182	2	35.472	2	-999.0	9	-999.0	9
WBTSEN	AB1602	13	1	2	16	20160222	0647	26.521N	74.548W	679	684	11.456	35.469	2	35.840	2	141.1	2	140.4	2
WBTSEN	AB1602	13	1	2	17	20160222	0650	26.521N	74.549W	570	575	13.929	35.841	2	36.269	4	154.6	2	154.0	2
WBTSEN	AB1602	13	1	2	18	20160222	0653	26.522N	74.549W	462	465	16.469	36.269	2	36.570	2	174.0	2	174.0	2
WBTSEN	AB1602	13	1	2	19	20160222	0656	26.522N	74.549W	352	355	18.345	36.570	2	36.721	2	183.5	2	183.3	2
WBTSEN	AB1602	13	1	2	20	20160222	0659	26.522N	74.550W	243	245	20.141	36.720	2	36.753	2	182.5	2	179.5	2
WBTSEN	AB1602	13	1	2	21	20160222	0702	26.523N	74.550W	154	155	22.674	36.649	2	36.648	6	193.0	2	192.5	2
WBTSEN	AB1602	13	1	2	22	20160222	0705	26.523N	74.550W	95	95	23.751	36.672	2	36.673	6	206.4	2	207.1	2
WBTSEN	AB1602	13	1	2	23	20160222	0707	26.523N	74.550W	45	45	24.316	36.690	2	36.690	2	205.4	2	205.6	2
WBTSEN	AB1602	13	1	2	24	20160222	0710	26.523N	74.550W	4	4	24.457	36.691	2	36.691	2	205.5	2	205.5	2
WBTSEN	AB1602	14	1	2	1	20160222	0959	26.520N	74.821W	4540	4619	2.110	34.867	2	34.867	2	255.3	2	254.8	2
WBTSEN	AB1602	14	1	2	2	20160222	1005	26.521N	74.823W	4204	4274	2.213	34.884	2	34.884	2	263.0	2	264.2	2
WBTSEN	AB1602	14	1	2	3	20160222	1011	26.522N	74.824W	3886	3948	2.230	34.889	2	34.889	2	265.2	2	264.9	2
WBTSEN	AB1602	14	1	2	4	20160222	1018	26.523N	74.826W	3571	3625	2.265	34.894	2	34.894	6	266.6	2	266.8	2
WBTSEN	AB1602	14	1	2	5	20160222	1024	26.524N	74.827W	3252	3299	2.356	34.902	2	34.903	2	268.1	2	267.9	2
WBTSEN	AB1602	14	1	2	6	20160222	1033	26.526N	74.829W	2765	2802	2.626	34.919	2	34.919	2	263.5	2	268.2	2
WBTSEN	AB1602	14	1	2	7	20160222	1041	26.527N	74.830W	2373	2403	2.989	34.941	2	34.941	6	262.8	2	263.3	2
WBTSEN	AB1602	14	1	2	8	20160222	1046	26.528N	74.832W	2128	2153	3.235	34.952	2	34.951	2	262.5	2	262.9	2
WBTSEN	AB1602	14	1	2	9	20160222	1052	26.529N	74.833W	1903	1924	3.456	34.960	2	34.978	2	259.9	2	265.0	2
WBTSEN	AB1602	14	1	2	10	20160222	1057	26.530N	74.834W	1605	1622	3.872	34.978	2	34.998	2	254.3	2	259.3	2
WBTSEN	AB1602	14	1	2	11	20160222	1102	26.531N	74.835W	1386	1400	4.267	34.998	2	35.027	2	245.0	2	256.7	2
WBTSEN	AB1602	14	1	2	12	20160222	1106	26.532N	74.836W	1217	1229	4.729	35.027	2	35.057	6	213.7	2	244.2	2
WBTSEN	AB1602	14	1	2	13	20160222	1110	26.532N	74.837W	1041	1050	5.477	35.056	2	35.080	4	187.4	2	215.6	4
WBTSEN	AB1602	14	1	2	14	20160222	1113	26.533N	74.837W	939	947	6.633	35.081	2	35.081	2	187.8	2	187.8	2

WBTSEN	AB1602	14	1	15	2	20160222	1116	26.534N	74.838W	831	838	8.439	35.149	2	35.152	2	151.4	2	148.9	2
WBTSEN	AB1602	14	1	16	2	20160222	1120	26.534N	74.838W	721	727	10.588	35.370	2	35.371	2	144.4	2	142.8	2
WBTSEN	AB1602	14	1	17	2	20160222	1123	26.535N	74.839W	615	620	12.925	35.686	2	35.697	4	147.6	2	146.9	2
WBTSEN	AB1602	14	1	18	2	20160222	1126	26.536N	74.840W	504	508	15.399	36.085	2	36.093	4	165.8	2	166.1	2
WBTSEN	AB1602	14	1	19	2	20160222	1129	26.537N	74.840W	394	397	17.291	36.414	2	36.415	4	181.9	2	181.4	2
WBTSEN	AB1602	14	1	20	2	20160222	1132	26.538N	74.841W	286	288	18.929	36.634	2	36.638	4	181.9	2	181.0	2
WBTSEN	AB1602	14	1	21	2	20160222	1135	26.539N	74.841W	196	197	20.910	36.730	2	36.745	2	-999.0	9	-999.0	9
WBTSEN	AB1602	14	1	22	2	20160222	1138	26.540N	74.842W	115	116	23.595	36.643	2	36.642	2	206.0	2	205.1	2
WBTSEN	AB1602	14	1	23	2	20160222	1140	26.541N	74.842W	65	65	23.949	36.680	2	36.679	4	207.3	2	207.4	2
WBTSEN	AB1602	14	1	24	2	20160222	1143	26.543N	74.843W	3	3	24.534	36.667	2	36.666	2	204.4	2	204.1	2
WBTSEN	AB1602	15	1	1	2	20160222	1436	26.522N	75.086W	4600	4681	2.108	34.867	2	34.871	2	254.5	2	256.2	2
WBTSEN	AB1602	15	1	2	2	20160222	1444	26.524N	75.086W	4307	4380	2.236	34.885	2	34.885	2	263.4	2	262.0	2
WBTSEN	AB1602	15	1	3	2	20160222	1451	26.525N	75.086W	4024	4089	2.249	34.889	2	34.889	2	264.7	2	264.2	2
WBTSEN	AB1602	15	1	4	2	20160222	1456	26.527N	75.086W	3741	3799	2.264	34.892	2	34.892	2	266.2	2	265.7	2
WBTSEN	AB1602	15	1	5	2	20160222	1502	26.528N	75.086W	3448	3499	2.303	34.897	2	34.898	2	267.5	2	267.3	2
WBTSEN	AB1602	15	1	6	2	20160222	1511	26.530N	75.086W	2960	3001	2.522	34.912	2	34.913	2	268.5	2	268.0	2
WBTSEN	AB1602	15	1	7	2	20160222	1517	26.531N	75.086W	2618	2652	2.842	34.932	2	34.932	6	264.9	2	264.6	2
WBTSEN	AB1602	15	1	8	2	20160222	1525	26.533N	75.086W	2224	2251	3.209	34.951	2	34.951	6	262.3	2	262.0	2
WBTSEN	AB1602	15	1	9	2	20160222	1532	26.535N	75.086W	1801	1821	3.632	34.967	2	34.967	2	261.6	2	263.9	2
WBTSEN	AB1602	15	1	10	2	20160222	1537	26.536N	75.086W	1529	1545	4.023	34.987	2	34.987	2	258.0	2	256.7	2
WBTSEN	AB1602	15	1	11	2	20160222	1541	26.537N	75.086W	1344	1357	4.414	35.007	2	35.007	2	251.6	2	251.0	2
WBTSEN	AB1602	15	1	12	2	20160222	1545	26.539N	75.086W	1175	1186	4.951	35.036	2	35.037	2	238.7	2	240.9	2
WBTSEN	AB1602	15	1	13	2	20160222	1549	26.540N	75.086W	1006	1015	5.919	35.071	2	35.071	2	208.9	2	208.4	2
WBTSEN	AB1602	15	1	14	2	20160222	1552	26.541N	75.085W	896	904	7.359	35.098	2	35.097	2	168.5	2	167.3	2
WBTSEN	AB1602	15	1	15	2	20160222	1555	26.542N	75.085W	805	812	9.062	35.196	2	35.197	2	141.8	2	143.1	2
WBTSEN	AB1602	15	1	16	2	20160222	1558	26.543N	75.085W	697	703	11.327	35.451	2	35.454	2	140.6	2	139.1	2
WBTSEN	AB1602	15	1	17	2	20160222	1601	26.544N	75.085W	588	593	14.063	35.864	2	35.865	2	156.5	2	154.1	2
WBTSEN	AB1602	15	1	18	2	20160222	1605	26.545N	75.085W	481	484	16.117	36.208	2	36.211	2	171.5	2	171.4	2
WBTSEN	AB1602	15	1	19	2	20160222	1608	26.546N	75.085W	369	372	17.803	36.501	2	36.503	2	185.0	2	187.3	2
WBTSEN	AB1602	15	1	20	2	20160222	1611	26.547N	75.084W	261	263	19.094	36.649	2	36.651	4	180.2	2	179.2	2
WBTSEN	AB1602	15	1	21	2	20160222	1614	26.547N	75.084W	170	171	21.410	36.754	2	36.754	2	187.4	2	187.8	2
WBTSEN	AB1602	15	1	22	2	20160222	1616	26.547N	75.084W	105	106	23.424	36.643	2	36.642	2	206.9	2	205.5	2
WBTSEN	AB1602	15	1	23	2	20160222	1619	26.546N	75.084W	54	55	23.589	36.655	2	36.655	2	209.0	2	207.7	2
WBTSEN	AB1602	15	1	24	2	20160222	1622	26.546N	75.084W	3	3	23.708	36.668	2	36.667	2	208.2	2	207.9	2
WBTSEN	AB1602	16	1	1	2	20160222	1932	26.515N	75.288W	4621	4703	2.223	34.879	2	34.879	2	260.3	2	261.6	2
WBTSEN	AB1602	16	1	2	2	20160222	1939	26.516N	75.288W	4288	4360	2.236	34.885	2	34.885	2	263.5	2	262.0	2
WBTSEN	AB1602	16	1	3	2	20160222	1945	26.517N	75.287W	3961	4024	2.247	34.890	2	34.890	4	265.1	2	264.4	2
WBTSEN	AB1602	16	1	4	2	20160222	1951	26.518N	75.287W	3634	3690	2.299	34.895	2	34.895	6	267.0	2	267.0	2
WBTSEN	AB1602	16	1	5	2	20160222	1958	26.519N	75.287W	3301	3350	2.394	34.903	2	34.903	2	268.3	2	270.0	2
WBTSEN	AB1602	16	1	6	2	20160222	2007	26.520N	75.287W	2813	2851	2.666	34.920	2	34.920	2	267.2	2	266.7	2
WBTSEN	AB1602	16	1	7	2	20160222	2013	26.521N	75.286W	2469	2500	2.964	34.937	2	34.937	2	264.3	2	264.2	2
WBTSEN	AB1602	16	1	8	2	20160222	2020	26.522N	75.286W	2076	2101	3.394	34.958	2	34.957	2	262.3	2	261.8	2
WBTSEN	AB1602	16	1	9	2	20160222	2025	26.522N	75.286W	1829	1849	3.680	34.966	2	34.965	2	261.7	2	260.9	2
WBTSEN	AB1602	16	1	10	2	20160222	2030	26.523N	75.285W	1584	1601	4.033	34.986	2	34.985	2	257.4	2	258.6	2
WBTSEN	AB1602	16	1	11	2	20160222	2035	26.523N	75.285W	1376	1390	4.378	35.006	2	35.005	2	251.9	2	251.2	2
WBTSEN	AB1602	16	1	12	2	20160222	2038	26.524N	75.285W	1210	1221	4.845	35.032	2	35.032	2	241.6	2	240.8	2
WBTSEN	AB1602	16	1	13	2	20160222	2042	26.524N	75.285W	1040	1049	5.834	35.068	2	35.068	2	211.6	2	211.8	2
WBTSEN	AB1602	16	1	14	2	20160222	2045	26.525N	75.284W	933	942	7.007	35.089	2	35.089	2	176.7	2	177.0	2
WBTSEN	AB1602	16	1	15	2	20160222	2048	26.525N	75.284W	825	832	8.845	35.169	2	35.170	2	136.8	2	148.8	2
WBTSEN	AB1602	16	1	16	2	20160222	2051	26.526N	75.284W	715	721	11.106	35.419	2	35.420	2	139.7	2	138.2	2
WBTSEN	AB1602	16	1	17	2	20160222	2053	26.526N	75.284W	606	611	13.672	35.801	2	35.803	2	152.7	2	152.7	2
WBTSEN	AB1602	16	1	18	2	20160222	2056	26.527N	75.283W	497	501	16.060	36.198	2	36.201	2	170.2	2	169.6	2
WBTSEN	AB1602	16	1	19	2	20160222	2059	26.527N	75.283W	389	392	17.641	36.473	2	36.472	2	182.6	2	182.2	2
WBTSEN	AB1602	16	1	20	2	20160222	2102	26.527N	75.283W	279	281	18.717	36.612	2	36.613	2	181.5	2	181.7	2
WBTSEN	AB1602	16	1	21	2	20160222	2105	26.527N	75.282W	189	191	20.341	36.744	2	36.744	2	178.6	2	178.8	2
WBTSEN	AB1602	16	1	22	2	20160222	2107	26.526N	75.282W	120	121	22.720	36.831	2	36.830	2	185.9	2	179.4	4
WBTSEN	AB1602	16	1	23	2	20160222	2109	26.526N	75.282W	70	70	23.750	36.670	2	36.670	6	207.0	2	207.5	6
WBTSEN	AB1602	16	1	24	2	20160222	2113	26.525N	75.281W	5	5	23.899	36.674	2	36.675	2	207.3	2	207.6	2
WBTSEN	AB1602	17	1	1	2	20160223	0007	26.518N	75.486W	4671	4754	2.227	34.878	2	34.879	2	259.6	2	258.3	2
WBTSEN	AB1602	17	1	2	2	20160223	0013	26.518N	75.485W	4376	4451	2.240	34.884	2	34.883	2	262.9	2	261.6	2
WBTSEN	AB1602	17	1	3	2	20160223	0019	26.519N	75.485W	4083	4150	2.253	34.888	2	34.888	2	264.6	2	264.0	2
WBTSEN	AB1602	17	1	4	2	20160223	0026	26.519N	75.484W	3791	3851	2.268	34.892	2	34.891	2	265.9	2	265.7	2
WBTSEN	AB1602	17	1	5	2	20160223	0032	26.520N	75.483W	3498	3551	2.340	34.899	2	34.898	2	267.9	2	267.4	2
WBTSEN	AB1602	17	1	6	2	20160223	0040	26.520N	75.482W	3058	3101	2.527	34.912	2	34.912	2	268.7	2	267.8	2
WBTSEN	AB1602	17	1	7	2	20160223	0048	26.521N	75.481W	2667	2701	2.832	34.930	2	34.931	6	266.4	2	264.8	6
WBTSEN	AB1602	17	1	8	2	20160223	0055	26.521N	75.480W	2323	2352	3.147	34.946	2	34.946	2	263.8	2	262.9	2

Site	Cruise	Sta		Cast		Date	Code	Lat	Lon	Nobs1	Nobs2	Pres	Sal1		Sal2		Dir1		Dir2	
WBTSEN	AB1602	17	1	9	2	20160223	0102	26.522N	75.479W	1978	2001	3.517	34.961	2	34.960	2	262.3	2	261.8	6
WBTSEN	AB1602	17	1	10	2	20160223	0108	26.522N	75.478W	1683	1701	3.892	34.980	2	34.980	2	259.4	2	258.3	2
WBTSEN	AB1602	17	1	11	2	20160223	0113	26.522N	75.478W	1438	1452	4.305	35.003	2	35.003	2	254.0	2	255.3	2
WBTSEN	AB1602	17	1	12	2	20160223	0119	26.523N	75.477W	1193	1204	5.071	35.044	2	35.044	2	235.0	2	234.2	2
WBTSEN	AB1602	17	1	13	2	20160223	0123	26.523N	75.476W	1024	1034	6.097	35.075	2	35.075	2	201.8	2	201.3	2
WBTSEN	AB1602	17	1	14	2	20160223	0126	26.523N	75.475W	918	926	7.232	35.093	2	35.093	2	170.4	2	169.9	2
WBTSEN	AB1602	17	1	15	2	20160223	0129	26.523N	75.475W	808	814	8.976	35.178	2	35.178	2	141.2	2	140.8	2
WBTSEN	AB1602	17	1	16	2	20160223	0132	26.523N	75.474W	700	706	11.470	35.470	2	35.471	2	141.2	2	139.1	6
WBTSEN	AB1602	17	1	17	2	20160223	0135	26.523N	75.473W	592	596	14.108	35.868	2	35.875	2	155.5	2	155.0	2
WBTSEN	AB1602	17	1	18	2	20160223	0138	26.524N	75.473W	483	487	16.301	36.235	2	36.235	2	175.7	2	176.4	2
WBTSEN	AB1602	17	1	19	2	20160223	0143	26.524N	75.472W	374	377	17.736	36.490	2	36.490	2	186.0	2	184.8	4
WBTSEN	AB1602	17	1	20	2	20160223	0146	26.524N	75.471W	264	266	18.813	36.592	2	36.591	2	186.3	2	189.0	4
WBTSEN	AB1602	17	1	21	2	20160223	0149	26.524N	75.471W	176	177	20.554	36.700	2	36.691	2	173.5	2	183.9	4
WBTSEN	AB1602	17	1	22	2	20160223	0152	26.525N	75.470W	85	85	23.500	36.681	2	36.680	2	204.1	2	202.9	2
WBTSEN	AB1602	17	1	23	2	20160223	0154	26.525N	75.469W	35	35	23.703	36.683	2	36.682	2	203.7	2	213.2	2
WBTSEN	AB1602	17	1	24	2	20160223	0157	26.525N	75.469W	5	5	23.762	36.682	2	36.682	2	203.3	2	213.5	2
WBTSEN	AB1602	18	1	1	2	20160223	0453	26.510N	75.679W	4666	4749	2.257	34.882	2	34.882	2	262.0	2	263.0	6
WBTSEN	AB1602	18	1	2	2	20160223	0500	26.510N	75.677W	4345	4419	2.244	34.885	2	34.885	2	263.0	2	262.9	2
WBTSEN	AB1602	18	1	3	2	20160223	0506	26.510N	75.676W	4013	4079	2.258	34.889	2	34.890	2	265.8	2	265.1	2
WBTSEN	AB1602	18	1	4	2	20160223	0513	26.510N	75.674W	3682	3739	2.286	34.894	2	34.894	2	267.2	2	266.9	2
WBTSEN	AB1602	18	1	5	2	20160223	0519	26.509N	75.672W	3350	3399	2.368	34.901	2	34.902	2	268.1	2	268.5	2
WBTSEN	AB1602	18	1	6	2	20160223	0528	26.510N	75.670W	2842	2881	2.661	34.919	2	34.919	2	264.1	2	267.9	6
WBTSEN	AB1602	18	1	7	2	20160223	0535	26.510N	75.668W	2436	2466	3.039	34.940	2	34.941	2	261.9	2	263.9	2
WBTSEN	AB1602	18	1	8	2	20160223	0543	26.510N	75.666W	2027	2050	3.473	34.962	2	34.961	2	260.5	2	262.0	2
WBTSEN	AB1602	18	1	9	2	20160223	0549	26.510N	75.664W	1726	1745	3.815	34.976	2	34.975	2	255.6	2	259.8	2
WBTSEN	AB1602	18	1	10	2	20160223	0553	26.510N	75.662W	1520	1536	4.178	34.994	2	34.994	2	248.9	2	254.9	4
WBTSEN	AB1602	18	1	11	2	20160223	0557	26.510N	75.661W	1354	1367	4.511	35.011	2	35.012	2	235.4	2	248.7	2
WBTSEN	AB1602	18	1	12	2	20160223	0601	26.511N	75.660W	1186	1197	5.093	35.045	2	35.049	2	197.9	2	235.9	2
WBTSEN	AB1602	18	1	13	2	20160223	0605	26.511N	75.658W	1020	1030	6.210	35.076	2	35.078	2	168.2	2	198.3	2
WBTSEN	AB1602	18	1	14	2	20160223	0608	26.511N	75.657W	910	918	7.265	35.093	2	35.093	2	140.6	2	167.6	2
WBTSEN	AB1602	18	1	15	2	20160223	0611	26.511N	75.656W	803	810	9.155	35.194	2	35.195	2	141.6	2	140.2	2
WBTSEN	AB1602	18	1	16	2	20160223	0614	26.511N	75.655W	693	699	11.605	35.490	2	35.498	2	150.4	2	160.8	4
WBTSEN	AB1602	18	1	17	2	20160223	0617	26.511N	75.654W	584	589	14.028	35.857	2	35.860	2	179.5	2	182.2	2
WBTSEN	AB1602	18	1	18	2	20160223	0621	26.511N	75.653W	474	474	17.805	36.259	2	36.265	2	188.3	2	188.4	2
WBTSEN	AB1602	18	1	19	2	20160223	0624	26.511N	75.652W	368	371	18.869	36.493	2	36.496	2	193.9	2	190.8	6
WBTSEN	AB1602	18	1	20	2	20160223	0627	26.512N	75.651W	256	258	20.860	36.577	2	36.578	2	178.5	2	180.2	2
WBTSEN	AB1602	18	1	21	2	20160223	0630	26.512N	75.649W	167	168	21.711	36.764	2	36.767	2	201.9	2	211.2	4
WBTSEN	AB1602	18	1	22	2	20160223	0633	26.512N	75.648W	111	112	22.389	36.586	2	36.586	2	211.2	2	210.8	2
WBTSEN	AB1602	18	1	23	2	20160223	0635	26.512N	75.647W	59	59	22.744	36.617	2	36.616	2	213.9	2	213.9	2
WBTSEN	AB1602	18	1	24	2	20160223	0638	26.512N	75.646W	2	2	22.919	36.640	2	36.641	2	211.4	2	210.8	2
WBTSEN	AB1602	19	1	1	2	20160223	0932	26.506N	75.884W	4740	4825	2.255	34.880	2	34.882	2	262.1	2	262.5	6
WBTSEN	AB1602	19	1	2	2	20160223	0939	26.505N	75.884W	4456	4533	2.255	34.884	2	34.884	2	262.5	2	262.3	2
WBTSEN	AB1602	19	1	3	2	20160223	0945	26.504N	75.884W	4183	4252	2.256	34.888	2	34.887	2	264.8	2	264.0	2
WBTSEN	AB1602	19	1	4	2	20160223	0951	26.503N	75.884W	3920	3983	2.277	34.892	2	34.891	2	266.3	2	266.2	2
WBTSEN	AB1602	19	1	5	2	20160223	0957	26.503N	75.884W	3645	3701	2.301	34.895	2	34.897	2	267.1	2	267.4	2
WBTSEN	AB1602	19	1	6	2	20160223	1006	26.502N	75.884W	3156	3201	2.423	34.906	2	34.906	2	249.9	2	259.9	2
WBTSEN	AB1602	19	1	7	2	20160223	1015	26.502N	75.883W	2666	2701	2.798	34.926	2	34.926	2	266.8	2	265.6	4
WBTSEN	AB1602	19	1	8	2	20160223	1023	26.501N	75.883W	2224	2251	3.178	34.946	2	34.945	2	264.0	2	263.9	2
WBTSEN	AB1602	19	1	9	2	20160223	1030	26.501N	75.883W	1880	1901	3.549	34.958	2	34.957	2	263.3	2	262.8	2
WBTSEN	AB1602	19	1	10	2	20160223	1035	26.500N	75.882W	1632	1650	3.929	34.982	2	34.981	2	258.3	2	259.7	6
WBTSEN	AB1602	19	1	11	2	20160223	1040	26.500N	75.882W	1372	1385	4.436	35.008	2	35.007	2	250.8	2	250.4	2
WBTSEN	AB1602	19	1	12	2	20160223	1044	26.500N	75.882W	1203	1214	5.003	35.040	2	35.040	2	237.0	2	236.9	2
WBTSEN	AB1602	19	1	13	2	20160223	1047	26.499N	75.881W	1036	1046	6.141	35.077	2	35.077	2	193.9	2	196.4	4
WBTSEN	AB1602	19	1	14	2	20160223	1050	26.499N	75.881W	927	935	7.491	35.099	2	35.100	2	163.1	2	163.2	2
WBTSEN	AB1602	19	1	15	2	20160223	1053	26.499N	75.881W	818	825	9.208	35.215	2	35.215	2	143.9	2	142.9	2
WBTSEN	AB1602	19	1	16	2	20160223	1056	26.498N	75.881W	710	716	11.450	35.468	2	35.468	2	141.0	2	139.6	6
WBTSEN	AB1602	19	1	17	2	20160223	1059	26.498N	75.880W	599	604	13.908	35.838	2	35.836	2	154.4	2	152.7	2
WBTSEN	AB1602	19	1	18	2	20160223	1102	26.498N	75.880W	479	483	16.282	36.235	2	36.237	2	174.0	2	173.3	2
WBTSEN	AB1602	19	1	19	2	20160223	1105	26.498N	75.880W	382	385	17.721	36.490	2	36.488	2	183.0	2	183.6	4
WBTSEN	AB1602	19	1	20	2	20160223	1108	26.498N	75.880W	273	275	19.028	36.593	2	36.591	2	190.2	2	191.5	2
WBTSEN	AB1602	19	1	21	2	20160223	1110	26.498N	75.880W	184	185	20.535	36.685	2	36.682	2	189.6	2	187.7	2
WBTSEN	AB1602	19	1	22	2	20160223	1113	26.498N	75.880W	120	121	22.117	36.633	2	36.633	2	193.2	2	208.0	4
WBTSEN	AB1602	19	1	23	2	20160223	1115	26.497N	75.881W	65	66	22.815	36.592	2	36.591	2	210.8	2	209.7	2
WBTSEN	AB1602	19	1	24	2	20160223	1119	26.497N	75.881W	3	3	23.057	36.650	2	36.649	2	210.3	2	209.9	2
WBTSEN	AB1602	20	1	1	2	20160223	1433	26.487N	76.094W	4788	4875	2.273	34.882	2	34.882	2	262.1	2	263.8	2
WBTSEN	AB1602	20	1	2	2	20160223	1439	26.487N	76.095W	4520	4599	2.284	34.886	2	34.886	2	263.4	2	262.7	2

WBTSEN	AB1602	20	1	3	2	20160223	1447	26.486N	76.095W	4112	4180	2.277	34.889	2	34.890	6	263.5	2	265.7	2
WBTSEN	AB1602	20	1	4	2	20160223	1454	26.486N	76.096W	3779	3839	2.284	34.893	2	34.893	2	266.0	2	266.1	2
WBTSEN	AB1602	20	1	5	2	20160223	1500	26.486N	76.097W	3448	3499	2.334	34.899	2	34.900	2	268.0	2	268.2	6
WBTSEN	AB1602	20	1	6	2	20160223	1509	26.486N	76.098W	2960	3001	2.629	34.918	2	34.918	2	267.4	2	267.0	2
WBTSEN	AB1602	20	1	7	2	20160223	1518	26.485N	76.099W	2468	2499	3.012	34.937	2	34.937	2	249.6	2	287.4	4
WBTSEN	AB1602	20	1	8	2	20160223	1526	26.485N	76.099W	2075	2099	3.309	34.947	2	34.947	2	264.4	2	263.4	2
WBTSEN	AB1602	20	1	9	2	20160223	1532	26.485N	76.100W	1781	1800	3.685	34.970	2	34.970	2	261.2	2	260.8	2
WBTSEN	AB1602	20	1	10	2	20160223	1536	26.485N	76.101W	1583	1600	4.009	34.988	2	34.987	2	257.8	2	257.4	2
WBTSEN	AB1602	20	1	11	2	20160223	1541	26.485N	76.101W	1356	1369	4.424	35.004	2	35.005	2	252.4	2	251.3	6
WBTSEN	AB1602	20	1	12	2	20160223	1545	26.484N	76.102W	1189	1200	5.003	35.042	2	35.043	2	237.6	2	237.2	2
WBTSEN	AB1602	20	1	13	2	20160223	1549	26.484N	76.102W	1020	1029	6.207	35.075	2	35.076	2	199.0	2	201.5	2
WBTSEN	AB1602	20	1	14	2	20160223	1552	26.484N	76.103W	912	920	7.724	35.100	2	35.100	2	156.6	2	156.9	2
WBTSEN	AB1602	20	1	15	2	20160223	1555	26.484N	76.103W	802	809	9.637	35.236	2	35.236	6	139.9	2	137.8	2
WBTSEN	AB1602	20	1	16	2	20160223	1558	26.484N	76.103W	695	701	11.999	35.545	2	35.548	2	142.4	2	142.2	6
WBTSEN	AB1602	20	1	17	2	20160223	1601	26.484N	76.104W	585	590	14.131	35.874	2	35.876	2	155.7	2	157.7	2
WBTSEN	AB1602	20	1	18	2	20160223	1603	26.484N	76.104W	476	479	16.427	36.258	2	36.260	2	174.0	2	176.7	2
WBTSEN	AB1602	20	1	19	2	20160223	1606	26.484N	76.104W	367	370	17.943	36.517	2	36.517	2	188.5	2	189.0	2
WBTSEN	AB1602	20	1	20	2	20160223	1609	26.484N	76.105W	258	260	19.162	36.610	2	36.611	2	190.5	2	188.2	2
WBTSEN	AB1602	20	1	21	2	20160223	1612	26.484N	76.105W	163	164	21.873	36.709	2	36.708	2	206.4	2	193.4	4
WBTSEN	AB1602	20	1	22	2	20160223	1614	26.484N	76.105W	95	95	23.206	36.640	2	36.638	2	204.1	2	204.8	2
WBTSEN	AB1602	20	1	23	2	20160223	1617	26.484N	76.106W	45	45	23.457	36.652	2	36.652	2	207.4	2	208.4	2
WBTSEN	AB1602	20	1	24	2	20160223	1620	26.484N	76.106W	3	3	23.518	36.655	2	36.654	2	208.6	2	208.7	2
WBTSEN	AB1602	21	1	1	2	20160224	0227	26.507N	76.192W	4800	4887	2.277	34.881	2	34.882	2	261.6	2	262.2	2
WBTSEN	AB1602	21	1	2	2	20160224	0235	26.508N	76.192W	4425	4501	2.301	34.888	2	34.889	2	264.9	2	264.8	2
WBTSEN	AB1602	21	1	3	2	20160224	0243	26.508N	76.190W	4030	4096	2.310	34.892	2	34.893	2	266.2	2	266.3	2
WBTSEN	AB1602	21	1	4	2	20160224	0250	26.509N	76.189W	3671	3727	2.320	34.896	2	34.895	2	265.9	2	267.1	2
WBTSEN	AB1602	21	1	5	2	20160224	0257	26.509N	76.187W	3298	3346	2.405	34.903	2	34.903	2	268.3	2	269.3	2
WBTSEN	AB1602	21	1	6	2	20160224	0306	26.510N	76.185W	2812	2849	2.747	34.924	2	34.924	2	266.5	2	266.5	2
WBTSEN	AB1602	21	1	7	2	20160224	0315	26.511N	76.183W	2371	2401	2.970	34.939	2	34.939	2	263.9	2	263.2	2
WBTSEN	AB1602	21	1	8	2	20160224	0321	26.511N	76.181W	2079	2103	3.339	34.955	2	34.956	2	261.7	2	261.8	2
WBTSEN	AB1602	21	1	9	2	20160224	0327	26.511N	76.180W	1763	1782	3.692	34.972	2	34.973	2	261.0	2	261.0	2
WBTSEN	AB1602	21	1	10	2	20160224	0331	26.512N	76.178W	1597	1613	3.942	34.985	2	34.984	6	258.5	2	257.8	2
WBTSEN	AB1602	21	1	11	2	20160224	0335	26.512N	76.177W	1430	1444	4.275	35.001	2	35.000	4	254.8	2	255.5	2
WBTSEN	AB1602	21	1	12	2	20160224	0340	26.512N	76.176W	1262	1274	4.643	35.018	2	35.019	4	247.3	2	245.9	2
WBTSEN	AB1602	21	1	13	2	20160224	0344	26.513N	76.175W	1095	1105	5.270	35.044	2	35.045	2	228.8	2	230.8	4
WBTSEN	AB1602	21	1	14	2	20160224	0348	26.513N	76.173W	929	937	7.429	35.101	2	35.102	4	166.6	2	168.8	4
WBTSEN	AB1602	21	1	15	2	20160224	0351	26.513N	76.172W	820	827	9.343	35.217	2	35.223	4	140.8	2	142.2	2
WBTSEN	AB1602	21	1	16	2	20160224	0354	26.513N	76.171W	711	717	11.232	35.438	2	35.444	4	140.2	2	140.2	4
WBTSEN	AB1602	21	1	17	2	20160224	0357	26.514N	76.170W	604	608	13.956	35.845	2	35.847	6	153.6	2	155.1	4
WBTSEN	AB1602	21	1	18	2	20160224	0401	26.514N	76.169W	498	502	16.390	36.257	2	36.260	4	173.5	2	173.9	4
WBTSEN	AB1602	21	1	19	2	20160224	0406	26.514N	76.167W	389	392	17.671	36.476	2	36.481	2	178.0	2	187.4	2
WBTSEN	AB1602	21	1	20	2	20160224	0410	26.514N	76.166W	277	279	18.750	36.567	2	36.566	2	186.1	2	194.7	6
WBTSEN	AB1602	21	1	21	2	20160224	0413	26.514N	76.164W	184	185	20.736	36.669	2	36.628	2	188.4	2	190.7	4
WBTSEN	AB1602	21	1	22	2	20160224	0416	26.514N	76.163W	116	117	22.767	36.629	2	36.667	4	209.4	2	209.2	2
WBTSEN	AB1602	21	1	23	2	20160224	0418	26.515N	76.162W	64	65	23.366	36.667	2	36.660	4	207.1	2	209.9	2
WBTSEN	AB1602	21	1	24	2	20160224	0422	26.515N	76.161W	4	5	23.567	36.662	2	36.662	4	208.4	2	208.3	2
WBTSEN	AB1602	22	1	1	2	20160224	0719	26.498N	76.322W	4822	4910	2.296	34.885	2	34.883	4	262.8	2	262.2	2
WBTSEN	AB1602	22	1	2	2	20160224	0725	26.498N	76.321W	4500	4579	2.310	34.890	2	34.888	4	265.0	2	264.4	2
WBTSEN	AB1602	22	1	3	2	20160224	0731	26.498N	76.319W	4169	4238	2.305	34.892	2	34.893	4	263.9	2	265.3	2
WBTSEN	AB1602	22	1	4	2	20160224	0738	26.498N	76.318W	3837	3898	2.313	34.895	2	34.899	4	266.0	2	266.2	6
WBTSEN	AB1602	22	1	5	2	20160224	0744	26.498N	76.316W	3510	3563	2.362	34.900	2	34.910	4	267.5	2	267.4	2
WBTSEN	AB1602	22	1	6	2	20160224	0752	26.498N	76.315W	3100	3144	2.545	34.912	2	34.928	4	268.3	2	268.8	2
WBTSEN	AB1602	22	1	7	2	20160224	0800	26.498N	76.313W	2700	2736	2.838	34.929	2	34.942	4	265.7	2	265.7	2
WBTSEN	AB1602	22	1	8	2	20160224	0808	26.497N	76.311W	2293	2321	3.098	34.942	2	34.963	4	264.2	2	263.8	2
WBTSEN	AB1602	22	1	9	2	20160224	0816	26.497N	76.309W	1936	1958	3.487	34.963	2	34.976	4	261.5	2	261.4	2
WBTSEN	AB1602	22	1	10	2	20160224	0822	26.497N	76.308W	1685	1703	3.797	34.977	2	34.993	4	259.9	2	259.0	2
WBTSEN	AB1602	22	1	11	2	20160224	0827	26.497N	76.306W	1489	1504	4.077	34.992	2	34.997	4	256.6	2	253.6	2
WBTSEN	AB1602	22	1	12	2	20160224	0831	26.497N	76.305W	1340	1353	4.260	34.997	2	35.027	4	255.2	2	255.2	2
WBTSEN	AB1602	22	1	13	2	20160224	0835	26.496N	76.304W	1167	1178	4.794	35.026	2	35.075	4	243.1	2	243.1	2
WBTSEN	AB1602	22	1	14	2	20160224	0840	26.496N	76.303W	979	988	6.505	35.075	2	35.263	4	189.7	2	191.2	2
WBTSEN	AB1602	22	1	15	2	20160224	0844	26.496N	76.302W	800	807	9.802	35.263	2	35.271	4	140.4	2	139.0	2
WBTSEN	AB1602	22	1	16	2	20160224	0847	26.495N	76.301W	692	697	11.754	35.511	2	35.514	4	141.9	2	139.8	2
WBTSEN	AB1602	22	1	17	2	20160224	0850	26.495N	76.300W	583	587	14.268	35.892	2	35.896	4	165.6	2	166.1	2
WBTSEN	AB1602	22	1	18	2	20160224	0854	26.495N	76.299W	476	479	16.839	36.336	2	36.339	4	179.0	2	176.4	2
WBTSEN	AB1602	22	1	19	2	20160224	0857	26.495N	76.298W	364	367	18.023	36.527	2	36.527	4	186.6	2	186.8	2
WBTSEN	AB1602	22	1	20	2	20160224	0901	26.495N	76.296W	257	259	19.230	36.625	2	36.632	4	185.6	2	184.1	6

WBTSEN	AB1602	22	1	21	2	20160224	0903	26.494N	76.296W	164	166	21.472	36.705	2	36.712	4	188.7	2	189.8	2
WBTSEN	AB1602	22	1	22	2	20160224	0906	26.494N	76.295W	106	107	22.886	36.606	2	36.603	4	207.3	2	209.2	2
WBTSEN	AB1602	22	1	23	2	20160224	0908	26.494N	76.294W	56	56	23.496	36.654	2	36.651	4	208.9	2	207.7	2
WBTSEN	AB1602	22	1	24	2	20160224	0911	26.493N	76.293W	3	3	23.508	36.657	2	36.650	4	209.3	2	208.1	2
WBTSEN	AB1602	23	1	1	2	20160224	1212	26.507N	76.477W	4831	4919	2.309	34.886	2	34.879	4	263.2	2	264.1	2
WBTSEN	AB1602	23	1	2	2	20160224	1220	26.508N	76.477W	4452	4529	2.298	34.889	2	34.886	4	264.9	2	263.9	2
WBTSEN	AB1602	23	1	3	2	20160224	1227	26.509N	76.477W	4093	4160	2.304	34.895	2	34.892	4	265.8	2	265.0	2
WBTSEN	AB1602	23	1	4	2	20160224	1235	26.510N	76.478W	3712	3769	2.294	34.903	2	34.900	4	264.9	2	266.2	2
WBTSEN	AB1602	23	1	5	2	20160224	1242	26.511N	76.478W	3355	3405	2.387	34.918	2	34.916	4	268.2	2	269.6	2
WBTSEN	AB1602	23	1	6	2	20160224	1250	26.512N	76.478W	2954	2994	2.656	34.935	2	34.934	4	268.2	2	269.9	2
WBTSEN	AB1602	23	1	7	2	20160224	1258	26.512N	76.478W	2547	2580	3.009	34.949	2	34.947	4	264.8	2	265.7	2
WBTSEN	AB1602	23	1	8	2	20160224	1306	26.513N	76.478W	2139	2164	3.334	34.957	2	34.955	4	263.7	2	263.3	2
WBTSEN	AB1602	23	1	9	2	20160224	1313	26.514N	76.478W	1834	1854	3.544	34.973	2	34.972	4	262.9	2	262.5	2
WBTSEN	AB1602	23	1	10	2	20160224	1318	26.514N	76.478W	1578	1595	3.852	34.989	2	34.981	4	259.8	2	259.3	2
WBTSEN	AB1602	23	1	11	2	20160224	1322	26.515N	76.479W	1388	1402	4.158	35.007	2	35.005	4	256.0	2	254.8	2
WBTSEN	AB1602	23	1	12	2	20160224	1326	26.515N	76.479W	1218	1229	4.444	35.049	2	35.050	4	250.4	2	251.1	2
WBTSEN	AB1602	23	1	13	2	20160224	1330	26.516N	76.479W	1051	1061	5.326	35.090	2	35.090	4	226.2	2	226.9	2
WBTSEN	AB1602	23	1	14	2	20160224	1333	26.516N	76.479W	943	951	6.966	35.187	2	35.186	4	170.9	2	186.5	2
WBTSEN	AB1602	23	1	15	2	20160224	1336	26.517N	76.479W	833	840	9.013	35.438	2	35.439	4	144.0	2	142.4	2
WBTSEN	AB1602	23	1	16	2	20160224	1339	26.517N	76.479W	725	731	11.219	35.767	2	35.770	4	141.8	2	154.0	2
WBTSEN	AB1602	23	1	17	2	20160224	1342	26.517N	76.479W	615	620	13.454	36.191	2	36.190	4	152.9	2	174.8	2
WBTSEN	AB1602	23	1	18	2	20160224	1345	26.518N	76.479W	503	506	16.058	36.472	2	36.471	4	176.3	2	186.9	2
WBTSEN	AB1602	23	1	19	2	20160224	1348	26.518N	76.478W	397	400	17.637	36.596	2	36.594	4	186.8	2	185.7	2
WBTSEN	AB1602	23	1	20	2	20160224	1351	26.518N	76.478W	288	290	18.734	36.658	2	36.658	4	186.6	2	189.6	2
WBTSEN	AB1602	23	1	21	2	20160224	1353	26.518N	76.478W	199	200	20.113	36.660	2	36.657	4	188.0	2	206.0	2
WBTSEN	AB1602	23	1	22	2	20160224	1356	26.519N	76.478W	118	119	23.066	36.661	2	36.658	4	205.0	2	208.2	2
WBTSEN	AB1602	23	1	23	2	20160224	1358	26.519N	76.478W	70	70	23.571	36.658	2	36.658	4	208.6	2	208.2	2
WBTSEN	AB1602	23	1	24	2	20160224	1401	26.519N	76.478W	3	3	23.577	36.661	2	36.661	4	208.3	2	208.2	2
WBTSEN	AB1602	24	1	1	2	20160224	1639	26.504N	76.555W	4827	4915	2.246	34.879	2	34.875	4	259.1	2	259.7	2
WBTSEN	AB1602	24	1	2	2	20160224	1645	26.504N	76.555W	4520	4599	2.297	34.888	2	34.885	4	263.8	2	263.5	2
WBTSEN	AB1602	24	1	3	2	20160224	1653	26.505N	76.555W	4132	4200	2.301	34.892	2	34.889	4	265.6	2	264.8	2
WBTSEN	AB1602	24	1	4	2	20160224	1701	26.506N	76.555W	3741	3799	2.309	34.896	2	34.893	4	265.3	2	266.9	2
WBTSEN	AB1602	24	1	5	2	20160224	1709	26.507N	76.555W	3350	3399	2.403	34.904	2	34.901	4	268.0	2	267.2	2
WBTSEN	AB1602	24	1	6	2	20160224	1716	26.508N	76.555W	2959	3000	2.678	34.920	2	34.913	4	267.1	2	266.8	2
WBTSEN	AB1602	24	1	7	2	20160224	1726	26.509N	76.555W	2469	2500	3.096	34.940	2	34.932	4	264.4	2	264.0	2
WBTSEN	AB1602	24	1	8	2	20160224	1735	26.511N	76.555W	1977	2000	3.420	34.952	2	34.947	4	263.0	2	265.4	2
WBTSEN	AB1602	24	1	9	2	20160224	1740	26.511N	76.555W	1732	1751	3.640	34.961	2	34.958	4	262.1	2	261.2	2
WBTSEN	AB1602	24	1	10	2	20160224	1745	26.512N	76.555W	1520	1535	3.936	34.977	2	34.972	4	258.9	2	257.8	2
WBTSEN	AB1602	24	1	11	2	20160224	1749	26.513N	76.555W	1324	1337	4.252	34.994	2	34.984	4	254.0	2	254.9	2
WBTSEN	AB1602	24	1	12	2	20160224	1753	26.513N	76.554W	1155	1166	4.994	35.038	2	35.036	4	236.6	2	236.7	2
WBTSEN	AB1602	24	1	13	2	20160224	1757	26.514N	76.554W	987	996	6.348	35.077	2	35.076	4	194.5	2	194.5	2
WBTSEN	AB1602	24	1	14	2	20160224	1800	26.514N	76.554W	878	885	7.886	35.108	2	35.108	4	154.5	2	154.3	2
WBTSEN	AB1602	24	1	15	2	20160224	1803	26.515N	76.554W	770	776	9.942	35.282	2	35.280	4	138.8	2	138.0	2
WBTSEN	AB1602	24	1	16	2	20160224	1806	26.515N	76.554W	661	666	12.320	35.593	2	35.592	4	143.8	2	142.2	2
WBTSEN	AB1602	24	1	17	2	20160224	1809	26.516N	76.554W	551	556	14.929	36.000	2	36.000	4	165.9	2	163.4	2
WBTSEN	AB1602	24	1	18	2	20160224	1812	26.516N	76.554W	441	445	17.124	36.381	2	36.381	4	184.8	2	185.0	2
WBTSEN	AB1602	24	1	19	2	20160224	1815	26.517N	76.554W	333	335	18.219	36.555	2	36.552	4	186.3	2	185.1	2
WBTSEN	AB1602	24	1	20	2	20160224	1818	26.517N	76.554W	224	226	19.618	36.625	2	36.623	4	187.9	2	188.9	2
WBTSEN	AB1602	24	1	21	2	20160224	1821	26.518N	76.553W	135	136	22.184	36.623	2	36.624	4	188.7	2	205.0	2
WBTSEN	AB1602	24	1	22	2	20160224	1823	26.518N	76.553W	85	85	23.476	36.656	2	36.653	4	206.1	2	206.5	2
WBTSEN	AB1602	24	1	23	2	20160224	1825	26.518N	76.553W	35	35	23.515	36.655	2	36.655	4	208.0	2	207.5	2
WBTSEN	AB1602	24	1	24	2	20160224	1827	26.518N	76.553W	4	4	23.734	36.664	2	36.664	4	208.2	2	207.8	2
WBTSEN	AB1602	25	1	1	2	20160224	2052	26.507N	76.630W	4581	4662	2.230	34.881	2	34.880	4	260.3	2	260.8	2
WBTSEN	AB1602	25	1	2	2	20160224	2102	26.507N	76.628W	4071	4138	2.287	34.892	2	34.890	4	265.6	2	264.5	2
WBTSEN	AB1602	25	1	3	2	20160224	2110	26.506N	76.627W	3667	3724	2.334	34.898	2	34.896	4	267.2	2	266.7	2
WBTSEN	AB1602	25	1	4	2	20160224	2118	26.506N	76.625W	3253	3300	2.534	34.911	2	34.909	4	268.2	2	268.1	2
WBTSEN	AB1602	25	1	5	2	20160224	2125	26.506N	76.624W	2862	2900	2.764	34.924	2	34.922	4	265.4	2	265.3	2
WBTSEN	AB1602	25	1	6	2	20160224	2131	26.506N	76.622W	2599	2599	3.004	34.934	2	34.933	4	260.8	2	265.2	2
WBTSEN	AB1602	25	1	7	2	20160224	2137	26.505N	76.621W	2273	2300	3.305	34.951	2	34.950	4	261.3	2	262.4	2
WBTSEN	AB1602	25	1	8	2	20160224	2141	26.505N	76.620W	2077	2101	3.372	34.950	2	34.951	4	262.2	2	262.0	2
WBTSEN	AB1602	25	1	9	2	20160224	2146	26.505N	76.619W	1880	1901	3.587	34.959	2	34.956	4	259.3	2	262.1	2
WBTSEN	AB1602	25	1	10	2	20160224	2152	26.504N	76.618W	1585	1602	3.902	34.975	2	34.975	4	258.6	2	258.6	2
WBTSEN	AB1602	25	1	11	2	20160224	2157	26.504N	76.616W	1390	1404	4.196	34.989	2	34.988	4	255.1	2	254.9	2
WBTSEN	AB1602	25	1	12	2	20160224	2201	26.504N	76.615W	1211	1223	4.700	35.020	2	35.020	4	244.1	2	243.4	2
WBTSEN	AB1602	25	1	13	2	20160224	2205	26.503N	76.614W	1033	1043	5.818	35.068	2	35.067	4	203.7	2	205.3	2
WBTSEN	AB1602	25	1	14	2	20160224	2209	26.503N	76.614W	904	912	7.432	35.094	2	35.089	4	164.3	2	163.7	2

Data table (columns unlabeled in source):

WBTSEN	AB1602	25	1	15	2	20160224	2212	26.503N	76.613W	795	802	9.813	35.271	2	35.272	4	139.4	2	138.1	2
WBTSEN	AB1602	25	1	16	2	20160224	2215	26.503N	76.612W	688	694	11.797	35.517	2	35.523	4	143.3	2	141.9	2
WBTSEN	AB1602	25	1	17	2	20160224	2218	26.503N	76.611W	578	583	14.252	35.893	2	35.892	4	157.3	9	157.3	9
WBTSEN	AB1602	25	1	18	2	20160224	2221	26.502N	76.610W	468	471	16.767	36.318	2	36.316	4	-999.0	6	-999.0	6
WBTSEN	AB1602	25	1	19	2	20160224	2224	26.502N	76.609W	359	362	18.108	36.533	2	36.533	4	188.5	2	187.7	2
WBTSEN	AB1602	25	1	20	2	20160224	2227	26.501N	76.608W	250	252	19.267	36.615	2	36.616	4	188.0	2	189.3	2
WBTSEN	AB1602	25	1	21	2	20160224	2230	26.501N	76.608W	161	163	22.055	36.716	2	36.713	4	191.3	2	191.5	2
WBTSEN	AB1602	25	1	22	2	20160224	2232	26.500N	76.607W	110	111	23.377	36.643	2	36.642	4	206.4	2	206.1	2
WBTSEN	AB1602	25	1	23	2	20160224	2234	26.500N	76.606W	60	61	23.468	36.650	2	36.647	4	208.1	2	207.8	2
WBTSEN	AB1602	25	1	24	2	20160224	2237	26.500N	76.606W	4	4	23.766	36.666	2	36.663	4	219.7	4	245.7	4
WBTSEN	AB1602	26	1	1	2	20160225	0049	26.486N	76.738W	3749	3807	2.318	34.896	2	34.891	2	267.2	2	268.1	2
WBTSEN	AB1602	26	1	2	2	20160225	0055	26.486N	76.738W	3497	3549	2.406	34.902	2	34.902	2	269.0	2	267.9	2
WBTSEN	AB1602	26	1	3	2	20160225	0100	26.485N	76.738W	3219	3265	2.512	34.910	2	34.909	2	268.0	2	263.9	2
WBTSEN	AB1602	26	1	4	2	20160225	0106	26.485N	76.737W	2958	2999	2.654	34.917	2	34.916	2	264.1	2	263.3	2
WBTSEN	AB1602	26	1	5	2	20160225	0112	26.484N	76.737W	2664	2699	2.911	34.933	2	34.933	2	263.8	2	249.8	2
WBTSEN	AB1602	26	1	6	2	20160225	0117	26.484N	76.736W	2468	2499	3.103	34.941	2	34.951	6	262.0	2	258.3	2
WBTSEN	AB1602	26	1	7	2	20160225	0123	26.483N	76.736W	2175	2201	3.327	34.950	2	34.963	2	284.1	4	255.5	2
WBTSEN	AB1602	26	1	8	2	20160225	0129	26.483N	76.736W	1878	1899	3.629	34.962	2	34.975	2	258.4	2	251.5	2
WBTSEN	AB1602	26	1	9	2	20160225	0134	26.482N	76.735W	1683	1701	3.923	34.976	2	34.990	2	254.3	2	243.9	2
WBTSEN	AB1602	26	1	10	2	20160225	0137	26.482N	76.735W	1534	1549	4.164	34.990	2	34.999	2	251.6	2	223.8	2
WBTSEN	AB1602	26	1	11	2	20160225	0140	26.482N	76.735W	1386	1400	4.361	35.000	2	35.025	2	243.0	2	181.9	2
WBTSEN	AB1602	26	1	12	2	20160225	0144	26.481N	76.735W	1238	1250	4.774	35.025	2	35.055	2	224.7	2	143.1	2
WBTSEN	AB1602	26	1	13	2	20160225	0147	26.481N	76.735W	1090	1100	5.432	35.056	2	35.083	2	184.9	2	142.6	2
WBTSEN	AB1602	26	1	14	2	20160225	0151	26.481N	76.734W	941	950	6.742	35.083	2	35.157	6	142.5	2	159.3	2
WBTSEN	AB1602	26	1	15	2	20160225	0154	26.480N	76.734W	807	814	8.776	35.155	2	35.479	2	143.6	2	175.7	2
WBTSEN	AB1602	26	1	16	2	20160225	0157	26.480N	76.734W	698	704	11.518	35.479	2	35.882	2	160.1	2	183.8	2
WBTSEN	AB1602	26	1	17	2	20160225	0200	26.480N	76.734W	590	594	14.194	35.881	2	36.296	2	177.9	2	197.1	2
WBTSEN	AB1602	26	1	18	2	20160225	0202	26.479N	76.734W	481	485	16.603	36.292	2	36.514	2	184.5	2	188.9	2
WBTSEN	AB1602	26	1	19	2	20160225	0205	26.479N	76.734W	372	375	17.915	36.516	2	36.569	2	197.2	2	207.0	2
WBTSEN	AB1602	26	1	20	2	20160225	0208	26.479N	76.734W	263	265	19.076	36.571	2	36.646	2	190.1	2	208.8	2
WBTSEN	AB1602	26	1	21	2	20160225	0211	26.479N	76.733W	174	175	21.571	36.644	2	36.649	2	207.7	2	207.0	2
WBTSEN	AB1602	26	1	22	2	20160225	0213	26.479N	76.733W	94	95	23.309	36.650	2	36.659	2	208.7	2	208.8	2
WBTSEN	AB1602	26	1	23	2	20160225	0215	26.479N	76.733W	44	45	23.452	36.659	2	36.659	2	208.6	2	208.1	2
WBTSEN	AB1602	26	1	24	2	20160225	0219	26.479N	76.733W	3	3	23.644	36.543	2	36.543	2	243.9	6	242.9	6
WBTSEN	AB1602	27	1	1	2	20160225	0355	26.522N	76.826W	1263	1275	4.770	35.023	2	35.022	2	230.3	2	230.6	2
WBTSEN	AB1602	27	1	2	2	20160225	0400	26.521N	76.826W	1093	1103	5.225	35.045	2	35.045	2	210.4	2	208.2	2
WBTSEN	AB1602	27	1	3	2	20160225	0402	26.521N	76.826W	992	1001	5.918	35.086	2	35.067	2	176.6	2	174.5	2
WBTSEN	AB1602	27	1	4	2	20160225	0405	26.520N	76.825W	892	900	6.993	35.147	2	35.145	2	147.2	2	146.2	2
WBTSEN	AB1602	27	1	5	2	20160225	0408	26.520N	76.825W	792	799	8.541	35.368	2	35.368	2	139.5	2	140.8	2
WBTSEN	AB1602	27	1	6	2	20160225	0412	26.519N	76.825W	695	700	10.639	35.838	2	35.835	2	154.0	2	155.0	2
WBTSEN	AB1602	27	1	7	2	20160225	0415	26.519N	76.824W	595	600	13.912	36.267	2	36.269	2	174.0	2	175.0	2
WBTSEN	AB1602	27	1	8	2	20160225	0419	26.518N	76.824W	499	503	16.460	36.504	2	36.504	2	186.1	2	185.9	2
WBTSEN	AB1602	27	1	9	2	20160225	0423	26.518N	76.823W	388	391	17.828	36.599	2	36.610	2	186.8	2	190.0	2
WBTSEN	AB1602	27	1	10	2	20160225	0426	26.517N	76.823W	279	281	18.985	36.685	2	36.691	2	190.4	4	189.2	4
WBTSEN	AB1602	27	1	11	2	20160225	0431	26.517N	76.822W	188	189	20.970	36.635	2	36.629	4	214.6	4	203.2	4
WBTSEN	AB1602	27	1	12	2	20160225	0434	26.516N	76.822W	119	120	23.056	36.554	2	36.556	4	214.9	4	205.6	4
WBTSEN	AB1602	27	1	13	2	20160225	0437	26.516N	76.822W	69	70	23.024	36.542	2	36.543	4	216.3	4	206.6	4
WBTSEN	AB1602	27	1	14	2	20160225	0441	26.515N	76.821W	4	4	23.280	36.543	2	36.542	4	206.6	4	206.6	4
WBTSEN	AB1602	27	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	27	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	1	2	20160225	0545	26.524N	76.883W	447	451	17.639	36.463	2	36.463	2	187.4	2	185.2	2
WBTSEN	AB1602	28	1	2	2	20160225	0547	26.524N	76.882W	397	400	17.926	36.503	2	36.500	6	187.1	2	186.9	2
WBTSEN	AB1602	28	1	3	2	20160225	0549	26.524N	76.881W	329	331	18.398	36.552	2	36.550	4	189.5	2	188.5	2
WBTSEN	AB1602	28	1	4	2	20160225	0552	26.524N	76.880W	269	271	19.441	36.630	2	36.621	2	189.1	2	189.9	2
WBTSEN	AB1602	28	1	5	2	20160225	0554	26.524N	76.879W	210	212	20.554	36.685	2	36.687	2	186.9	6	188.7	6
WBTSEN	AB1602	28	1	6	2	20160225	0556	26.524N	76.879W	159	160	22.350	36.648	2	36.648	6	200.3	2	202.5	2
WBTSEN	AB1602	28	1	7	2	20160225	0559	26.524N	76.878W	111	112	23.013	36.577	2	36.578	2	208.4	2	208.5	2
WBTSEN	AB1602	28	1	8	2	20160225	0601	26.524N	76.878W	60	61	23.048	36.542	2	36.543	2	209.3	2	208.9	2

WBTSEN	AB1602	28	1	9	2	20160225	0604	26.524N	76.877W	3	3	23.339	36.564	2	36.562	2	210.0	2	210.5	2
WBTSEN	AB1602	28	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	28	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	1	2	20160226	1824	26.069N	78.852W	294	296	18.112	36.504	2	36.504	2	172.0	2	173.1	2
WBTSEN	AB1602	29	1	2	2	20160226	1826	26.069N	78.853W	248	249	18.865	36.596	2	36.595	2	178.1	2	178.8	2
WBTSEN	AB1602	29	1	3	2	20160226	1828	26.069N	78.853W	189	190	20.972	36.767	4	36.756	4	159.0	4	172.1	4
WBTSEN	AB1602	29	1	4	2	20160226	1830	26.070N	78.854W	139	140	24.419	36.465	2	36.474	2	196.7	2	196.0	2
WBTSEN	AB1602	29	1	5	2	20160226	1832	26.070N	78.854W	90	90	24.971	36.391	6	36.394	6	198.1	6	198.0	6
WBTSEN	AB1602	29	1	6	2	20160226	1834	26.070N	78.854W	50	50	25.530	36.269	2	36.268	2	201.6	2	201.1	2
WBTSEN	AB1602	29	1	7	2	20160226	1836	26.070N	78.854W	4	4	25.561	36.264	2	36.263	2	200.9	2	200.9	2
WBTSEN	AB1602	29	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	29	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	1	2	20160226	1943	26.167N	78.806W	438	441	15.598	36.124	4	36.177	4	169.3	2	171.1	2
WBTSEN	AB1602	30	1	2	2	20160226	1946	26.167N	78.807W	368	371	17.468	36.442	2	36.444	2	184.6	2	184.9	2
WBTSEN	AB1602	30	1	3	2	20160226	1949	26.167N	78.809W	259	261	19.401	36.632	2	36.646	2	192.0	2	189.9	2
WBTSEN	AB1602	30	1	4	2	20160226	1952	26.167N	78.810W	174	175	23.300	36.645	4	36.537	4	197.8	2	198.3	2
WBTSEN	AB1602	30	1	5	2	20160226	1954	26.167N	78.810W	125	126	24.446	36.548	2	36.548	2	187.1	2	189.3	2
WBTSEN	AB1602	30	1	6	2	20160226	1956	26.167N	78.810W	74	75	24.981	36.349	2	36.353	2	201.5	6	200.9	6
WBTSEN	AB1602	30	1	7	2	20160226	1959	26.167N	78.810W	30	30	25.058	36.338	2	36.335	2	202.8	2	203.0	2
WBTSEN	AB1602	30	1	8	2	20160226	2001	26.167N	78.810W	4	4	25.072	36.339	2	36.337	2	202.8	2	202.8	2
WBTSEN	AB1602	30	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	30	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	1	2	20160226	2109	26.250N	78.770W	509	513	15.044	36.024	2	36.023	2	164.2	2	164.1	2
WBTSEN	AB1602	31	1	2	2	20160226	2112	26.250N	78.770W	398	401	17.093	36.378	4	36.384	4	183.0	2	182.2	2

Sensor	Cruise	Stn		Seq		Date	ID	Lat	Lon	V1	V2	Temp	Sal1	F	Sal2	F	Ox1	F	Ox2	F
WBTSEN	AB1602	31	1	3	2	20160226	2115	26.250N	78.771W	298	300	18.440	36.561	2	36.560	2	188.2	2	187.6	2
WBTSEN	AB1602	31	1	4	2	20160226	2117	26.251N	78.771W	209	210	20.442	36.702	2	36.699	2	177.3	2	178.3	2
WBTSEN	AB1602	31	1	5	2	20160226	2120	26.251N	78.771W	145	146	24.058	36.608	4	36.610	4	182.0	2	182.0	2
WBTSEN	AB1602	31	1	6	2	20160226	2122	26.251N	78.772W	95	95	25.064	36.377	2	36.369	4	194.3	2	195.5	4
WBTSEN	AB1602	31	1	7	2	20160226	2124	26.251N	78.772W	45	45	25.150	36.325	2	36.325	2	201.8	2	202.0	6
WBTSEN	AB1602	31	1	8	2	20160226	2127	26.251N	78.772W	5	5	25.200	36.311	2	36.313	2	202.8	2	204.0	2
WBTSEN	AB1602	31	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	31	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	1	2	20160226	2231	26.333N	78.716W	686	691	9.758	35.287	2	35.286	2	145.1	2	146.8	2
WBTSEN	AB1602	32	1	2	2	20160226	2234	26.333N	78.716W	595	600	13.167	35.723	2	35.708	2	151.1	2	151.9	2
WBTSEN	AB1602	32	1	3	2	20160226	2236	26.333N	78.716W	496	500	15.448	36.090	2	36.085	2	168.1	2	168.1	2
WBTSEN	AB1602	32	1	4	2	20160226	2239	26.333N	78.716W	397	400	17.332	36.418	2	36.412	2	183.8	2	183.4	2
WBTSEN	AB1602	32	1	5	2	20160226	2241	26.332N	78.715W	308	310	18.248	36.543	2	36.539	2	188.4	2	188.7	2
WBTSEN	AB1602	32	1	6	2	20160226	2243	26.332N	78.715W	229	230	19.883	36.656	2	36.655	2	182.9	2	183.3	2
WBTSEN	AB1602	32	1	7	2	20160226	2245	26.332N	78.715W	179	181	21.686	36.725	2	36.723	2	185.2	2	185.3	2
WBTSEN	AB1602	32	1	8	2	20160226	2247	26.331N	78.714W	135	136	23.635	36.734	2	36.701	2	167.2	2	175.0	2
WBTSEN	AB1602	32	1	9	2	20160226	2249	26.331N	78.713W	85	86	24.521	36.503	2	36.490	2	184.1	2	186.9	2
WBTSEN	AB1602	32	1	10	2	20160226	2250	26.331N	78.713W	40	40	24.922	36.358	2	36.359	2	201.8	2	201.6	2
WBTSEN	AB1602	32	1	11	2	20160226	2252	26.331N	78.713W	4	4	24.907	36.357	2	36.357	2	201.8	2	202.1	2
WBTSEN	AB1602	32	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	32	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	1	2	20160227	0015	26.433N	78.673W	753	759	9.551	35.269	2	35.270	2	146.9	2	145.9	2
WBTSEN	AB1602	33	1	2	2	20160227	0018	26.433N	78.673W	646	651	11.710	35.514	2	35.514	2	143.4	2	142.4	2
WBTSEN	AB1602	33	1	3	2	20160227	0021	26.434N	78.674W	546	551	14.782	35.979	2	35.978	2	163.1	2	162.5	2
WBTSEN	AB1602	33	1	4	2	20160227	0024	26.434N	78.675W	447	450	17.215	36.394	2	36.392	2	182.2	2	182.1	2
WBTSEN	AB1602	33	1	5	2	20160227	0027	26.434N	78.676W	348	350	18.285	36.545	2	36.543	2	184.9	2	184.4	2
WBTSEN	AB1602	33	1	6	2	20160227	0029	26.435N	78.676W	268	270	19.075	36.630	2	36.626	2	182.7	2	182.7	2
WBTSEN	AB1602	33	1	7	2	20160227	0031	26.435N	78.676W	209	210	20.189	36.687	2	36.673	2	173.9	2	182.1	2
WBTSEN	AB1602	33	1	8	2	20160227	0033	26.435N	78.677W	149	150	23.235	36.663	2	36.672	2	196.0	2	192.4	2
WBTSEN	AB1602	33	1	9	2	20160227	0035	26.435N	78.677W	100	100	23.810	36.558	2	36.559	2	203.1	2	204.3	2
WBTSEN	AB1602	33	1	10	2	20160227	0037	26.436N	78.677W	50	50	24.101	36.501	2	-999.000	9	205.5	2	205.7	2
WBTSEN	AB1602	33	1	11	2	20160227	0040	26.436N	78.677W	3	3	24.324	36.473	2	36.474	2	201.4	2	201.1	2
WBTSEN	AB1602	33	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9

Ship	Cruise	Sta		Cast		Date	Time	Lat	Lon	N1	N2	V1	T1	T2	Q1	Dir1	Q2	Dir2	Q3
WBTSEN	AB1602	33	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	33	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	1	2	20160227	0640	26.996N	79.206W	476	480	15.518	36.090	36.089	2	160.7	2	163.2	2
WBTSEN	AB1602	34	1	2	2	20160227	0643	26.996N	79.206W	378	381	17.496	36.448	36.448	6	186.1	2	186.1	2
WBTSEN	AB1602	34	1	3	2	20160227	0645	26.996N	79.206W	310	313	18.567	36.653	36.558	2	194.3	2	194.1	4
WBTSEN	AB1602	34	1	4	2	20160227	0647	26.995N	79.207W	240	242	19.824	36.826	36.819	4	176.8	2	187.0	2
WBTSEN	AB1602	34	1	5	2	20160227	0650	26.995N	79.207W	171	172	22.622	36.373	36.350	2	164.6	2	165.0	4
WBTSEN	AB1602	34	1	6	2	20160227	0652	26.995N	79.208W	110	111	25.538	36.271	36.267	2	184.5	2	193.0	2
WBTSEN	AB1602	34	1	7	2	20160227	0654	26.995N	79.208W	80	80	25.528	36.268	36.268	2	194.8	2	216.3	4
WBTSEN	AB1602	34	1	8	2	20160227	0656	26.994N	79.208W	35	35	25.509	36.268	36.268	2	199.4	2	200.1	2
WBTSEN	AB1602	34	1	9	2	20160227	0658	26.994N	79.209W	3	3	25.509	36.268	36.268	2	199.4	2	200.5	2
WBTSEN	AB1602	34	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	34	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	1	2	20160227	0753	27.004N	79.286W	605	610	11.933	35.510	35.511	2	135.1	2	136.6	2
WBTSEN	AB1602	35	1	2	2	20160227	0756	27.004N	79.286W	496	500	14.599	35.950	35.944	4	157.3	2	156.9	2
WBTSEN	AB1602	35	1	3	2	20160227	0759	27.004N	79.286W	397	400	16.406	36.234	36.232	4	161.3	2	161.3	4
WBTSEN	AB1602	35	1	4	2	20160227	0801	27.005N	79.287W	318	321	18.052	36.494	36.484	2	167.5	2	195.7	2
WBTSEN	AB1602	35	1	5	2	20160227	0804	27.005N	79.287W	249	251	19.326	36.591	36.588	2	195.4	2	158.1	2
WBTSEN	AB1602	35	1	6	2	20160227	0806	27.005N	79.287W	189	190	21.639	36.813	36.814	2	155.8	2	199.9	2
WBTSEN	AB1602	35	1	7	2	20160227	0808	27.005N	79.288W	135	136	25.252	36.355	36.357	4	198.5	2	199.9	2
WBTSEN	AB1602	35	1	8	2	20160227	0810	27.006N	79.288W	89	90	25.503	36.284	36.285	2	202.3	2	175.8	4
WBTSEN	AB1602	35	1	9	2	20160227	0812	27.006N	79.288W	45	45	25.499	36.379	36.284	2	195.0	2	200.5	2
WBTSEN	AB1602	35	1	10	2	20160227	0814	27.006N	79.288W	3	3	25.465	36.283	36.284	2	199.5	2	200.5	2
WBTSEN	AB1602	35	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	35	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	1	2	20160227	0913	27.013N	79.385W	666	672	7.306	34.947	34.951	4	130.9	2	131.2	2
WBTSEN	AB1602	36	1	2	2	20160227	0916	27.015N	79.384W	572	577	9.860	35.168	35.169	4	119.0	2	119.0	6
WBTSEN	AB1602	36	1	3	2	20160227	0919	27.016N	79.383W	474	478	12.991	35.634	35.644	2	125.9	2	125.3	2
WBTSEN	AB1602	36	1	4	2	20160227	0921	27.017N	79.383W	376	378	16.790	36.328	36.330	4	175.1	2	174.0	4
WBTSEN	AB1602	36	1	5	2	20160227	0924	27.019N	79.382W	300	303	18.504	36.582	36.644	2	172.2	2	172.3	2
WBTSEN	AB1602	36	1	6	2	20160227	0926	27.020N	79.381W	226	228	20.250	36.859	36.768	2	176.1	2	176.5	2
WBTSEN	AB1602	36	1	7	2	20160227	0928	27.021N	79.381W	175	176	22.778	36.317	36.858	2	162.3	2	161.5	2
WBTSEN	AB1602	36	1	8	2	20160227	0930	27.022N	79.380W	126	127	25.178	36.280	36.317	2	198.9	2	198.7	2
WBTSEN	AB1602	36	1	9	2	20160227	0932	27.023N	79.380W	75	75	25.527	36.279	36.283	2	199.2	2	199.5	2
WBTSEN	AB1602	36	1	10	2	20160227	0934	27.025N	79.379W	30	30	25.535	36.280	36.280	2	198.9	2	199.4	2
WBTSEN	AB1602	36	1	11	2	20160227	0936	27.026N	79.379W	3	3	25.515	36.280	36.279	2	198.6	2	199.9	2
WBTSEN	AB1602	36	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	-999.000	9	-999.0	9	-999.0	9

Station	Cruise	c3	c4	Hr	c6	Date	ID	Lat	Lon	N1	N2	Ve	Vd	Fd	Vc	Fc	Vb	Fb	Va	Fa
WBTSEN	AB1602	36	1	15	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	16	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	17	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	18	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	19	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	20	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	21	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	22	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	23	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	36	1	24	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	1	2	20160227	1113	27.031N	79.499W	745	752	6.301	34.907	2	34.907	2	143.8	2	143.6	2
WBTSEN	AB1602	37	1	2	2	20160227	1116	27.032N	79.499W	646	652	6.825	34.906	2	34.907	2	132.7	2	129.7	2
WBTSEN	AB1602	37	1	3	2	20160227	1119	27.034N	79.498W	545	549	8.529	35.021	2	35.024	2	120.6	2	121.6	6
WBTSEN	AB1602	37	1	4	2	20160227	1122	27.036N	79.497W	440	443	11.382	35.382	2	35.385	2	120.9	2	120.8	2
WBTSEN	AB1602	37	1	5	2	20160227	1124	27.037N	79.497W	339	342	16.411	36.193	2	36.210	2	142.8	4	143.5	4
WBTSEN	AB1602	37	1	6	2	20160227	1127	27.039N	79.496W	260	262	18.477	36.582	2	36.592	2	146.1	2	178.2	2
WBTSEN	AB1602	37	1	7	2	20160227	1128	27.040N	79.496W	204	206	19.984	36.677	2	36.685	2	149.6	2	147.8	2
WBTSEN	AB1602	37	1	8	2	20160227	1130	27.041N	79.495W	150	151	24.537	36.631	2	36.608	2	179.4	2	180.3	2
WBTSEN	AB1602	37	1	9	2	20160227	1133	27.042N	79.495W	89	90	25.642	36.249	2	36.248	2	198.8	2	199.7	2
WBTSEN	AB1602	37	1	10	2	20160227	1134	27.044N	79.495W	50	50	25.635	36.248	2	36.248	2	199.6	2	199.2	2
WBTSEN	AB1602	37	1	11	2	20160227	1137	27.045N	79.494W	3	3	25.617	36.250	2	36.249	2	198.6	2	199.8	2
WBTSEN	AB1602	37	1	12	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	13	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	14	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	15	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	16	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	17	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	18	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	19	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	20	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	21	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	22	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	23	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	37	1	24	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	1	2	20160227	1256	27.016N	79.613W	644	650	6.378	34.909	2	34.912	2	142.4	2	142.3	2
WBTSEN	AB1602	38	1	2	2	20160227	1258	27.018N	79.612W	556	560	6.697	34.911	2	34.986	2	136.2	2	137.2	2
WBTSEN	AB1602	38	1	3	2	20160227	1301	27.019N	79.612W	489	492	7.765	34.967	2	35.182	2	125.5	2	125.6	6
WBTSEN	AB1602	38	1	4	2	20160227	1303	27.021N	79.611W	422	426	9.564	35.170	2	35.523	2	122.6	2	122.7	2
WBTSEN	AB1602	38	1	5	2	20160227	1306	27.023N	79.611W	352	355	12.165	35.505	2	36.227	2	123.0	2	123.1	2
WBTSEN	AB1602	38	1	6	2	20160227	1308	27.025N	79.611W	270	272	16.627	36.228	2	36.782	2	140.5	2	140.4	2
WBTSEN	AB1602	38	1	7	2	20160227	1310	27.026N	79.610W	189	190	21.452	36.782	2	36.625	2	150.3	2	150.2	2
WBTSEN	AB1602	38	1	8	2	20160227	1312	27.028N	79.610W	139	140	25.394	36.639	2	36.269	2	171.3	2	169.4	2
WBTSEN	AB1602	38	1	9	2	20160227	1314	27.030N	79.609W	74	75	25.532	36.267	2	36.268	2	199.7	2	200.4	2
WBTSEN	AB1602	38	1	10	2	20160227	1316	27.031N	79.609W	35	35	25.525	36.268	2	36.268	2	199.8	2	200.4	2
WBTSEN	AB1602	38	1	11	2	20160227	1318	27.033N	79.609W	3	3	25.489	36.268	2	36.268	2	200.1	2	201.8	2
WBTSEN	AB1602	38	1	12	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	13	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	14	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	15	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	16	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	17	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	18	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	19	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	20	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	21	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	22	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	23	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	38	1	24	2	20160227	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	1	2	20160227	1418	27.015N	79.680W	521	526	6.263	34.913	2	34.912	2	145.0	2	145.0	2
WBTSEN	AB1602	39	1	2	2	20160227	1421	27.017N	79.679W	427	430	7.846	34.987	6	34.986	6	125.7	6	127.1	6
WBTSEN	AB1602	39	1	3	2	20160227	1424	27.019N	79.679W	342	345	9.158	35.145	4	35.110	4	120.8	4	120.7	4
WBTSEN	AB1602	39	1	4	2	20160227	1426	27.021N	79.678W	261	263	16.301	36.556	4	36.160	4	132.7	4	133.5	2
WBTSEN	AB1602	39	1	5	2	20160227	1428	27.022N	79.678W	199	200	20.327	36.556	4	36.559	4	142.7	4	142.5	4
WBTSEN	AB1602	39	1	6	2	20160227	1430	27.024N	79.678W	149	150	23.136	36.472	4	36.477	4	191.2	2	189.0	2
WBTSEN	AB1602	39	1	7	2	20160227	1432	27.025N	79.678W	99	100	25.699	36.272	2	36.278	4	198.2	2	194.7	2
WBTSEN	AB1602	39	1	8	2	20160227	1434	27.027N	79.677W	59	60	25.701	36.245	2	36.244	2	198.0	2	199.3	2

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21
WBTSEN	AB1602	39	1	9	2	20160227	1436	27.028N	79.677W	20	21	25.697	36.245	2	36.244	2	199.1	2	199.3	2
WBTSEN	AB1602	39	1	10	2	20160227	1438	27.029N	79.676W	4	4	25.691	36.245	2	36.244	2	198.9	2	199.4	2
WBTSEN	AB1602	39	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	39	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	1	2	20160227	1550	27.015N	79.783W	375	378	7.699	34.966	2	34.965	2	126.0	2	126.1	2
WBTSEN	AB1602	40	1	2	2	20160227	1552	27.017N	79.783W	298	300	9.497	35.189	2	35.189	2	126.3	2	125.9	6
WBTSEN	AB1602	40	1	3	2	20160227	1554	27.019N	79.783W	234	235	13.172	35.695	2	35.726	4	129.9	2	130.4	2
WBTSEN	AB1602	40	1	4	2	20160227	1558	27.022N	79.782W	172	174	20.829	36.415	2	36.438	4	176.0	2	174.5	2
WBTSEN	AB1602	40	1	5	2	20160227	1600	27.023N	79.782W	118	119	23.556	36.396	2	36.399	6	206.7	2	205.8	2
WBTSEN	AB1602	40	1	6	2	20160227	1602	27.025N	79.781W	78	79	25.292	36.329	2	36.327	2	193.3	2	193.3	2
WBTSEN	AB1602	40	1	7	2	20160227	1604	27.026N	79.781W	40	40	25.746	36.250	2	36.251	2	201.4	2	200.2	2
WBTSEN	AB1602	40	1	8	2	20160227	1606	27.028N	79.781W	3	4	25.744	36.251	2	36.251	2	200.4	2	200.4	2
WBTSEN	AB1602	40	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	40	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	1	2	20160227	1712	27.014N	79.864W	241	243	9.812	35.191	2	35.191	2	119.7	2	119.6	2
WBTSEN	AB1602	41	1	2	2	20160227	1714	27.015N	79.864W	211	212	12.063	35.516	6	35.517	6	125.2	2	124.8	6
WBTSEN	AB1602	41	1	3	2	20160227	1717	27.017N	79.864W	158	159	16.731	36.214	2	36.235	2	135.2	2	135.7	2
WBTSEN	AB1602	41	1	4	2	20160227	1720	27.020N	79.864W	90	91	23.537	36.394	2	36.390	2	205.9	2	205.8	2
WBTSEN	AB1602	41	1	5	2	20160227	1722	27.022N	79.864W	49	49	25.479	36.262	2	36.263	2	202.4	2	202.7	2
WBTSEN	AB1602	41	1	6	2	20160227	1725	27.023N	79.863W	5	5	25.546	36.262	2	36.262	2	201.6	2	201.9	2
WBTSEN	AB1602	41	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	41	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	1	2	20160227	1835	27.012N	79.934W	137	138	15.782	36.080	2	36.097	4	132.5	2	132.9	6
WBTSEN	AB1602	42	1	2	2	20160227	1840	27.016N	79.933W	75	76	22.179	36.428	2	36.434	4	197.4	2	196.8	4

WBTSEN	AB1602	42	1	3	2	20160227	1842	27.018N	79.932W	34	34	25.194	36.291	2	36.291	6	199.9	2	200.3	2
WBTSEN	AB1602	42	1	4	2	20160227	1844	27.020N	79.932W	4	4	25.294	36.281	2	36.284	2	202.3	2	202.9	2
WBTSEN	AB1602	42	1	5	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	6	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	42	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	1	2	20160228	0256	26.052N	79.237W	335	337	17.684	36.443	2	36.443	6	165.7	2	166.1	2
WBTSEN	AB1602	43	1	2	2	20160228	0259	26.052N	79.237W	248	250	20.182	36.749	2	36.746	2	173.5	2	173.6	2
WBTSEN	AB1602	43	1	3	2	20160228	0301	26.052N	79.238W	188	189	21.793	36.845	2	36.845	4	171.0	2	172.8	6
WBTSEN	AB1602	43	1	4	2	20160228	0304	26.052N	79.238W	112	113	24.786	36.460	2	36.465	2	191.7	2	192.3	2
WBTSEN	AB1602	43	1	5	2	20160228	0306	26.053N	79.239W	61	61	25.354	36.364	2	36.364	2	189.9	2	191.1	4
WBTSEN	AB1602	43	1	6	2	20160228	0308	26.053N	79.239W	24	24	25.367	36.309	2	36.309	2	197.4	2	197.4	2
WBTSEN	AB1602	43	1	7	2	20160228	0310	26.053N	79.239W	4	4	25.327	36.266	2	36.267	2	201.3	2	200.9	2
WBTSEN	AB1602	43	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	43	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	1	2	20160228	0358	26.053N	79.313W	481	484	11.634	35.459	2	35.462	2	129.5	2	130.5	6
WBTSEN	AB1602	44	1	2	2	20160228	0400	26.054N	79.313W	387	390	16.202	36.218	2	36.218	2	165.6	2	164.9	2
WBTSEN	AB1602	44	1	3	2	20160228	0402	26.054N	79.314W	338	340	17.202	36.356	2	36.358	4	159.9	2	160.8	2
WBTSEN	AB1602	44	1	4	2	20160228	0404	26.054N	79.314W	272	274	18.653	36.612	2	36.596	2	178.1	2	179.0	4
WBTSEN	AB1602	44	1	5	2	20160228	0407	26.055N	79.314W	219	221	21.341	36.836	2	36.833	4	176.1	2	175.2	2
WBTSEN	AB1602	44	1	6	2	20160228	0409	26.055N	79.315W	150	151	24.496	36.691	2	36.680	4	174.5	2	173.8	2
WBTSEN	AB1602	44	1	7	2	20160228	0411	26.056N	79.315W	90	91	25.228	36.342	2	36.341	2	199.6	2	200.5	2
WBTSEN	AB1602	44	1	8	2	20160228	0413	26.056N	79.315W	44	45	25.407	36.280	2	36.280	6	195.4	2	211.9	4
WBTSEN	AB1602	44	1	9	2	20160228	0416	26.057N	79.315W	4	4	25.397	36.281	2	36.280	6	195.4	2	211.3	6
WBTSEN	AB1602	44	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9

WBTSEN	AB1602	Stn	Cast	Btl	c	Date	Time	Lat	Lon	P1	P2	Temp	Sal1	f	Sal2	f	O2a	f	O2b	f
WBTSEN	AB1602	44	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	44	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	1	2	20160228	0513	26.059N	79.404W	588	593	7.962	34.979	2	34.986	4	124.6	2	124.4	2
WBTSEN	AB1602	45	1	2	2	20160228	0516	26.061N	79.404W	478	482	12.095	35.534	2	35.553	4	136.8	2	134.0	4
WBTSEN	AB1602	45	1	3	2	20160228	0519	26.062N	79.405W	383	385	15.228	35.995	2	35.996	4	135.0	2	133.9	2
WBTSEN	AB1602	45	1	4	2	20160228	0522	26.063N	79.405W	298	300	18.207	36.784	2	36.550	2	176.9	2	178.9	2
WBTSEN	AB1602	45	1	5	2	20160228	0524	26.063N	79.406W	219	220	20.521	36.353	2	36.783	2	174.1	2	174.4	2
WBTSEN	AB1602	45	1	6	2	20160228	0526	26.064N	79.406W	170	171	23.748	36.791	2	36.354	4	164.3	2	162.8	6
WBTSEN	AB1602	45	1	7	2	20160228	0529	26.065N	79.406W	120	120	25.183	36.287	2	36.296	2	200.3	2	200.3	2
WBTSEN	AB1602	45	1	8	2	20160228	0531	26.066N	79.407W	80	80	25.396	36.282	2	36.281	4	201.2	2	201.7	2
WBTSEN	AB1602	45	1	9	2	20160228	0533	26.067N	79.407W	30	30	25.455	36.283	2	36.282	2	200.5	2	200.5	2
WBTSEN	AB1602	45	1	10	2	20160228	0535	26.068N	79.408W	3	3	25.440	36.283	2	36.282	2	201.1	2	200.6	2
WBTSEN	AB1602	45	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	45	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	1	2	20160228	0628	26.053N	79.484W	670	676	6.756	34.915	2	34.916	4	136.5	2	136.9	2
WBTSEN	AB1602	46	1	2	2	20160228	0631	26.054N	79.484W	556	560	8.007	34.976	2	34.979	2	123.6	2	122.9	6
WBTSEN	AB1602	46	1	3	2	20160228	0633	26.055N	79.484W	487	491	10.286	35.249	2	35.264	6	122.8	2	122.0	2
WBTSEN	AB1602	46	1	4	2	20160228	0636	26.056N	79.485W	397	400	13.880	35.832	2	35.830	2	149.2	2	147.2	4
WBTSEN	AB1602	46	1	5	2	20160228	0638	26.057N	79.485W	328	330	16.156	36.148	2	36.136	4	137.5	2	136.5	2
WBTSEN	AB1602	46	1	6	2	20160228	0640	26.058N	79.485W	258	260	18.667	36.511	2	36.505	2	137.8	2	138.5	6
WBTSEN	AB1602	46	1	7	2	20160228	0642	26.058N	79.485W	204	205	21.979	36.824	2	36.814	4	151.6	2	152.6	2
WBTSEN	AB1602	46	1	8	2	20160228	0644	26.059N	79.486W	149	150	24.657	36.656	2	36.656	2	174.5	2	174.9	4
WBTSEN	AB1602	46	1	9	2	20160228	0646	26.060N	79.486W	90	90	25.545	36.254	2	36.337	6	196.4	2	194.3	2
WBTSEN	AB1602	46	1	10	2	20160228	0648	26.061N	79.486W	35	35	25.681	36.254	2	36.349	4	200.1	2	199.2	4
WBTSEN	AB1602	46	1	11	2	20160228	0650	26.062N	79.487W	3	3	25.666	36.254	2	36.253	2	199.6	2	199.1	2
WBTSEN	AB1602	46	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	46	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	1	2	20160228	0748	26.066N	79.571W	755	762	5.990	34.911	2	34.911	6	151.3	2	152.7	2
WBTSEN	AB1602	47	1	2	2	20160228	0751	26.068N	79.571W	639	644	6.710	34.913	2	34.910	2	136.0	2	136.0	6
WBTSEN	AB1602	47	1	3	2	20160228	0753	26.069N	79.571W	544	548	7.885	34.967	2	34.965	6	123.9	2	124.0	2
WBTSEN	AB1602	47	1	4	2	20160228	0755	26.071N	79.572W	449	452	10.543	35.249	2	35.249	2	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	5	2	20160228	0759	26.073N	79.572W	353	355	13.991	35.819	2	35.884	4	151.9	2	151.9	2
WBTSEN	AB1602	47	1	6	2	20160228	0802	26.076N	79.573W	268	270	17.426	36.351	2	36.713	4	142.6	2	142.5	4
WBTSEN	AB1602	47	1	7	2	20160228	0804	26.078N	79.574W	213	215	20.230	36.678	2	36.762	4	144.0	2	145.2	2
WBTSEN	AB1602	47	1	8	2	20160228	0807	26.080N	79.574W	152	153	24.159	36.777	2	36.310	4	161.5	2	163.1	2
WBTSEN	AB1602	47	1	9	2	20160228	0809	26.082N	79.574W	101	102	25.568	36.310	2	36.307	2	198.8	2	197.5	2
WBTSEN	AB1602	47	1	10	2	20160228	0811	26.083N	79.575W	50	50	25.541	36.273	2	36.273	2	202.1	2	201.2	2
WBTSEN	AB1602	47	1	11	2	20160228	0813	26.085N	79.576W	3	3	25.519	36.275	2	36.273	2	200.2	2	199.9	2
WBTSEN	AB1602	47	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9

c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20	c21
WBTSEN	AB1602	47	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	47	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	1	2	20160228	0921	26.062N	79.671W	689	695	6.114	34.911	2	34.911	2	148.2	2	147.5	2
WBTSEN	AB1602	48	1	2	2	20160228	0924	26.063N	79.671W	587	591	6.722	34.910	2	34.910	2	135.5	2	135.8	2
WBTSEN	AB1602	48	1	3	2	20160228	0926	26.064N	79.671W	489	493	8.511	35.237	2	35.063	2	122.3	2	122.5	2
WBTSEN	AB1602	48	1	4	2	20160228	0929	26.067N	79.672W	406	409	10.389	35.556	6	35.570	6	120.3	6	118.8	6
WBTSEN	AB1602	48	1	5	2	20160228	0931	26.068N	79.672W	333	336	12.524	36.149	2	36.148	2	125.3	2	125.2	2
WBTSEN	AB1602	48	1	6	2	20160228	0934	26.070N	79.671W	263	265	16.320	36.742	2	36.763	2	136.2	2	135.6	2
WBTSEN	AB1602	48	1	7	2	20160228	0936	26.072N	79.670W	193	195	20.571	36.644	2	36.648	2	149.6	2	151.2	2
WBTSEN	AB1602	48	1	8	2	20160228	0939	26.074N	79.669W	125	126	25.125	36.254	2	36.242	2	167.8	2	169.3	2
WBTSEN	AB1602	48	1	9	2	20160228	0940	26.075N	79.669W	76	76	25.835	36.281	2	36.243	2	200.1	2	197.9	2
WBTSEN	AB1602	48	1	10	2	20160228	0942	26.076N	79.668W	40	40	25.829	36.253	2	36.242	2	199.8	2	198.5	2
WBTSEN	AB1602	48	1	11	2	20160228	0944	26.078N	79.667W	3	3	25.813	36.254	2	36.240	2	197.6	2	198.2	2
WBTSEN	AB1602	48	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	48	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	1	2	20160228	1050	26.067N	79.760W	598	603	5.986	34.914	2	34.915	2	151.6	2	151.9	2
WBTSEN	AB1602	49	1	2	2	20160228	1053	26.069N	79.759W	475	479	7.858	34.960	2	35.161	2	117.7	2	117.6	2
WBTSEN	AB1602	49	1	3	2	20160228	1056	26.071N	79.759W	387	390	9.858	35.166	2	35.373	2	119.8	2	119.7	2
WBTSEN	AB1602	49	1	4	2	20160228	1058	26.072N	79.758W	328	330	11.461	35.396	4	35.958	4	130.9	4	132.2	4
WBTSEN	AB1602	49	1	5	2	20160228	1100	26.074N	79.758W	258	260	14.981	35.953	6	36.242	6	134.5	6	134.6	6
WBTSEN	AB1602	49	1	6	2	20160228	1102	26.075N	79.757W	219	220	17.148	36.242	2	36.536	2	180.9	2	178.6	2
WBTSEN	AB1602	49	1	7	2	20160228	1104	26.077N	79.757W	150	152	21.851	36.254	2	36.335	2	194.0	2	191.9	2
WBTSEN	AB1602	49	1	8	2	20160228	1107	26.079N	79.756W	89	90	25.899	36.559	2	36.253	2	198.5	2	198.3	2
WBTSEN	AB1602	49	1	9	2	20160228	1108	26.080N	79.756W	44	45	25.897	36.281	2	36.255	2	198.2	2	198.4	2
WBTSEN	AB1602	49	1	10	2	20160228	1111	26.082N	79.756W	3	3	25.870	36.255	2	36.254	2	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	49	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	1	2	20160228	1220	26.064N	79.845W	324	327	9.829	35.189	2	35.189	2	120.1	2	120.6	2
WBTSEN	AB1602	50	1	2	2	20160228	1223	26.066N	79.844W	203	204	16.569	36.173	2	36.224	2	132.8	2	133.5	2
WBTSEN	AB1602	50	1	3	2	20160228	1226	26.068N	79.843W	109	110	22.717	36.474	4	36.499	4	196.9	4	191.9	4
WBTSEN	AB1602	50	1	4	2	20160228	1228	26.070N	79.843W	59	60	25.696	36.258	2	36.265	2	200.2	2	200.3	2
WBTSEN	AB1602	50	1	5	2	20160228	1230	26.071N	79.842W	25	25	25.735	36.246	2	36.247	2	199.7	2	199.5	2
WBTSEN	AB1602	50	1	6	2	20160228	1232	26.072N	79.842W	3	3	25.688	36.250	2	36.250	2	200.1	2	199.6	2
WBTSEN	AB1602	50	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9

Ship	Cruise	Sta		Seq		Date	ID	Lat	Lon			Temp	Sal1	F	Sal2	F	Dir1	F	Dir2	F
WBTSEN	AB1602	50	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	50	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	1	2	20160228	1829	26.065N	79.931W	267	269	8.479	35.027	2	35.035	4	121.8	2	121.9	2
WBTSEN	AB1602	51	1	2	2	20160228	1832	26.067N	79.931W	153	154	19.358	36.492	2	36.484	4	137.0	2	135.6	2
WBTSEN	AB1602	51	1	3	2	20160228	1836	26.069N	79.929W	71	72	22.600	36.464	2	36.464	4	188.6	2	186.0	4
WBTSEN	AB1602	51	1	4	2	20160228	1838	26.070N	79.928W	30	30	24.261	36.346	2	36.351	2	206.8	2	206.6	2
WBTSEN	AB1602	51	1	5	2	20160228	1840	26.072N	79.928W	5	5	24.869	36.318	2	36.319	2	204.5	2	204.9	2
WBTSEN	AB1602	51	1	6	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	51	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	1	2	20160228	2014	26.055N	79.995W	244	245	7.893	34.967	2	34.965	2	123.4	2	122.0	2
WBTSEN	AB1602	52	1	2	2	20160228	2017	26.055N	79.995W	159	160	15.623	36.026	2	35.998	4	133.4	2	132.1	2
WBTSEN	AB1602	52	1	3	2	20160228	2020	26.055N	79.994W	81	81	22.287	36.423	2	36.423	4	200.5	2	200.2	2
WBTSEN	AB1602	52	1	4	2	20160228	2022	26.056N	79.994W	40	40	24.381	36.346	2	36.358	2	205.4	2	203.9	2
WBTSEN	AB1602	52	1	5	2	20160228	2024	26.056N	79.993W	5	5	24.804	36.322	2	36.323	2	205.4	2	205.4	2
WBTSEN	AB1602	52	1	6	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	52	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	1	2	20160228	2108	26.048N	80.062W	140	141	15.777	36.059	2	36.086	4	134.1	2	135.3	2
WBTSEN	AB1602	53	1	2	2	20160228	2110	26.048N	80.061W	75	75	21.884	36.429	2	36.427	6	180.9	2	180.9	2

WBTSEN	AB1602	53	1	3	2	20160228	2112	26.048N	80.061W	35	35	24.386	36.275	2	36.280	2	201.8	2	213.2	4
WBTSEN	AB1602	53	1	4	2	20160228	2115	26.048N	80.060W	4	4	24.422	36.296	2	36.298	2	202.0	2	212.4	4
WBTSEN	AB1602	53	1	5	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	6	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	7	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	8	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	9	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	10	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	11	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	12	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	14	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	16	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	18	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	20	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	22	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB1602	53	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9