



NOAA Data Report, OAR AOML- 60

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**Hydrographic Measurements Collected Aboard the NOAA Ship R/V Ronald H Brown, 11 September - 21 September 2007: Western Boundary Time Series Cruise RB-07-08 (AB0709)**

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Miami, Florida  
April 2018

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NATIONAL OCEANIC AND  
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Atmospheric Research

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UNITED STATES  
DEPARTMENT OF COMMERCE

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## Abstract

This report summarizes the September 11 - September 21, 2007 cruise on the NOAA ship R/V Ronald H Brown from Charleston, SC and returning to Charleston, SC involving full-water-column CTD, lowered ADCP, and 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 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 calibration 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 48 CTD-O2/LADCP stations were occupied. PIES/CPIES telemetry was conducted at 5 sites. A total of 72 XBT probes were deployed at 4 CTD stations (2, 3, 5 and 6) as part of a test comparing different XBT models against the CTD profiles. Seven drifters were deployed as part of NOAA's contribution to the Global Surface Drifter Program. A search and recovery mission by the National Oceanography Centre, Southampton, UK for a lost mooring at the WB4 site was attempted (after a failed attempt to locate the mooring on a previous cruise), but was unsuccessful when communication could not be established.

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## 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, 32 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 scientific 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. 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

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(NAO) has been proposed as an important mechanism in the atmosphere-ocean feedback 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 September 2007 (Figure 1 and Table 2). The R/V Ronald H Brown departed Charleston, SC on 11 September 2007. A total of 48 LADCP/CTD/Rosette stations were occupied. Water samples (up to 24 for each station), LADCP, and CTD data were collected on each cast generally to within 20 m of the bottom. Salinity and dissolved oxygen samples were analyzed from the majority of bottles sampled on the rosette. The cruise ended in Charleston, SC on September 21, 2007.

Table 1: Cruise participants of R/V Ronald H Brown Cruise AB0709.

Name	Affiliation
Christopher Meinen	NOAA/AOML
Carlos Fonseca	UM/CIMAS
Mehmet Ilicak	UM/CIMAS
Jonathan Molina	UM/CIMAS
Pedro Pena	NOAA/AOML
Ulises Rivero	NOAA/AOML
Ivan Savelyev	UM/CIMAS
Kyle Seaton	UM/CIMAS
John Wynar	NOCS, UK

Table 2: Abaco Cruise – CTD Cast Summary

Station	Date	Time (GMT)	Latitude	Longitude	Depth
1	09/13/07	18:26:53	26.500N	72.000W	5257
2	09/14/07	00:27:27	26.500N	72.384W	5224
3	09/14/07	06:35:30	26.500N	72.767W	5206
4	09/14/07	12:38:37	26.499N	73.133W	5120
5	09/14/07	18:39:46	26.500N	73.500W	5030
6	09/15/07	00:42:11	26.499N	73.860W	4806
7	09/15/07	06:40:49	26.500N	74.233W	4603
8	09/15/07	11:42:54	26.500N	74.517W	4555
9	09/15/07	16:55:13	26.500N	74.800W	4604
10	09/15/07	22:00:04	26.499N	75.084W	4668
11	09/16/07	03:00:15	26.501N	75.302W	4700
12	09/16/07	07:34:42	26.500N	75.500W	4747
13	09/16/07	11:53:40	26.500N	75.705W	4753
14	09/16/07	16:18:42	26.499N	75.901W	4809
15	09/16/07	21:34:40	26.500N	76.088W	4870
16	09/17/07	02:34:57	26.500N	76.217W	4877
17	09/17/07	08:15:13	26.500N	76.347W	4921
18	09/17/07	12:31:06	26.500N	76.476W	4910
19	09/17/07	16:48:27	26.500N	76.565W	4899
20	09/17/07	21:39:48	26.500N	76.655W	4632
21	09/18/07	02:04:06	26.500N	76.746W	3898
22	09/18/07	05:26:17	26.517N	76.832W	1109
23	09/18/07	08:07:00	26.525N	76.892W	310
24	09/18/07	20:13:09	26.432N	78.667W	752
25	09/18/07	21:58:08	26.332N	78.717W	675
26	09/18/07	23:27:34	26.248N	78.768W	505
27	09/19/07	01:00:41	26.164N	78.805W	432
28	09/19/07	02:44:00	26.067N	78.851W	284
29	09/19/07	06:30:24	26.049N	79.234W	319
30	09/19/07	07:49:46	26.050N	79.313W	478
31	09/19/07	09:02:17	26.051N	79.399W	580
32	09/19/07	10:21:17	26.054N	79.481W	664
33	09/19/07	11:49:08	26.059N	79.563W	752
34	09/19/07	13:31:37	26.056N	79.659W	690
35	09/19/07	15:18:01	26.051N	79.763W	592
36	09/19/07	16:47:32	26.041N	79.849W	305
37	09/19/07	18:27:25	26.041N	79.932W	239
38	09/19/07	19:29:25	26.042N	79.999W	235
39	09/19/07	20:21:01	26.049N	80.066W	107
40	09/20/07	02:05:19	26.996N	79.938W	118
41	09/20/07	03:22:51	26.997N	79.867W	249
42	09/20/07	04:50:10	27.000N	79.784W	370
43	09/20/07	06:20:52	27.004N	79.682W	518
44	09/20/07	07:51:45	26.999N	79.618W	623
45	09/20/07	09:30:37	26.996N	79.501W	743
46	09/20/07	11:01:38	26.994N	79.386W	637
47	09/20/07	12:42:32	27.003N	79.283W	606
48	09/20/07	13:55:55	26.992N	79.202W	477

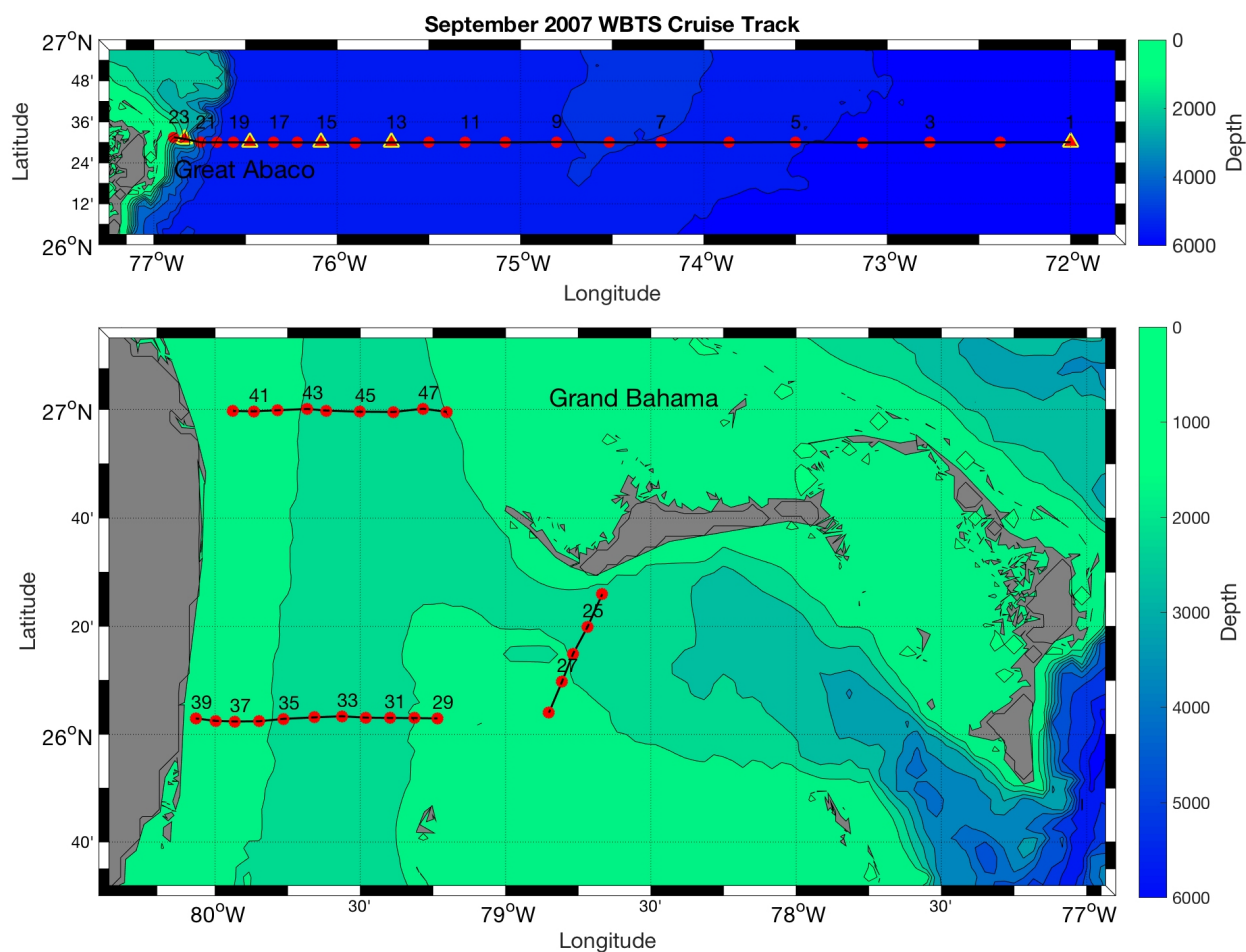


Figure 1: Abaco CTD station locations. The landmasses are shaded and the bathymetry is contoured at 1000 m intervals. The red dots are the CTD stations and the yellow triangles are the IES operations.

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## 2 *Cruise Narrative*

During the fall 2007 survey, a total of 48 hydrographic stations were occupied in the Florida Strait and East of Abaco Island, Bahamas (Figure 1) aboard the *R/V Ronald H Brown*. Table 2 provides a summary of cast information. At each station, profiles of temperature, salinity (conductivity) and dissolved oxygen concentration were collected to within approximately 20 m of the bottom. Water samples for calibration of the salinity and dissolved oxygen profiles were collected at each station using 10L niskin bottles. Acoustic telemetry in a total of five locations where Inverted Echo Sounder moorings had previously been deployed were performed in order to retrieve data before recovery of the instruments themselves (C. Meinen, personal comm.). A test comparing different XBT models to CTD profiles was done at four different CTD locations at the eastern end of the Abaco line. A total of 72 XBT probes were deployed. Seven surface drifters were deployed; three were deployed off the northern coast of Florida, two during the Abaco line, and two along 26 °N of the Florida Straits section. An upward and downward looking LADCP were mounted on the frame. The five most eastern stations of the Abaco line were cut to make up time due to a delayed departure resulting from the ships engineering department being understaffed.

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### 3 *Inverted Echo-Sounder Operations*

Acoustic telemetry was completed at five PIES/CPIES sites during the September 2007 Abaco cruise aboard the NOAA Ship Ronald H. Brown. The instruments had been deployed in either March 2006 (sites A and D) or September-October 2006 (sites B, C, and E), and as such each contained either approximately eighteen months of data (sites A and D) or twelve months of data (sites B, C, and E). Because data was successfully downloaded at all five sites during the March 2007 cruise (AB0703), only six months of data at each site were downloaded.

Table 3: Inverted echo-sounder nominal locations and operation.

IES Site	Type	Latitude	Longitude	Date	Operation
A	PIES	26°31.0' N	076°49.9' W	2/26/16	Telemetry
B	PIES	26°30.0' N	076°28.5' W	2/24/16	Telemetry
C	PIES	26°30.0' N	076°5.2' W	2/23/16	Telemetry
D	CPIES	26°30.0' N	075°42.2' W	2/23/16	Telemetry
E	PIES	26°30.0' N	072°0.0' W	2/20/16	Telemetry

#### 3.1 *Site A*

Depth: 1109 m

Instrument recovered: PIES SN#282

- Arrived on site September 18, 2007 at 04:55 GMT. CTD station #22 was commenced at the site prior to the start of telemetry.
- Data was downloaded with the "Obi-Wan-Kenobi" Benthos DS-7000 unit.
- Clear command was sent at 05:18 GMT, with no clear response.
- Telemetry command sent at 05:19 GMT, with a possible response.
- First data received at 05:21 GMT.
- A clear command was sent and acknowledged at 07:07 GMT because sufficient data had been recovered (back to Yearday 21).
- Final data was received at 07:07 GMT, for a total recovery time of one hour and forty-nine minutes.
- The ship drifted a total distance of 0.06 nm during the download.

#### 3.2 *Site B*

Depth: 4910 m

Instrument: PIES SN#122



- 
- Arrived on site September 17, 2007 at 10:58 GMT. CTD station #18 was commenced at the site prior to the start of telemetry.
  - Data was downloaded with the "Obi-Wan-Kenobi" Benthos DS-7000 unit.
  - Clear command sent at 11:15 GMT and two ping response received.
  - Telemetry command sent at 11:17 GMT with a possible response, but no data was received.
  - Second telemetry command sent at 11:23 GMT with a two ping response.
  - First data record received at 11:26 GMT.
  - A clear command was sent and acknowledged at 13:20 GMT because sufficient data had been received (back to Yearday 20).
  - Final data was received at 13:20 GMT, for a total recovery time of one hour and fifty-four minutes.
  - Ship drifted a total distance of less than 0.01 nm during the download.

### ***3.3 Site C***

Depth: 4870 m

Instrument recovered: PIES SN#134

- Arrived on site September 16, 2007 at 20:05 GMT. CTD station #15 was commenced at the site prior to the start of telemetry.
- Data was downloaded with the "Obi-Wan-Kenobi" Benthos DS-7000 unit.
- Clear command sent at 20:19 GMT and two ping response received.
- Telemetry command sent at 20:21 GMT, response received.
- First data record was received at 20:22 GMT.
- A clear command was sent and acknowledged at 21:57 GMT because sufficient data had been recovered (back to Yearday 41).
- Final data was received at 21:57 GMT, for a total recovery time of one hour and thirty-six minutes.
- The ship drifted a total distance of 0.01 nm.

### ***3.4 Site D***

Depth: 4753 m

Instrument: CPIES SN#133

- 
- Arrived on site September 16, 2007 at about 10:30 GMT. CTD station #13 was commenced at the site prior to the start of telemetry.
  - Data was downloaded with the newly christened "Obi-Wan-Kenobi" Benthos DS-7000 unit.
  - Clear command sent first at 11:02 GMT before it was noticed that this was during the sampling period. Clear command was sent and acknowledged at 11:08 GMT.
  - Telemetry command was sent at 11:10 GMT.
  - First data record was received at 11:12 GMT.
  - A clear command was sent and acknowledged at 13:09 GMT because sufficient data had been recovered (back to Yearday 41).
  - Final data was received at 13:08 GMT, for a total download time of one hour and fifty six minutes.
  - Distance drifted during the download was about 0.01 nm.

### ***3.5 Site E***

Depth: 5257 m

Instrument: PIES SN#140

- Arrived on site September 13, 2007 at 16:51 GMT. CTD station #1 was commenced at the site prior to the start of telemetry.
- Clear command sent and acknowledged September 13, 2007; 17:10 GMT.
- Telemetry command was sent 17:12 GMT with no reply; a second TELEM command was sent at 17:18 GMT.
- First data record was received at 17:21 GMT
- The data initially came in with no travel time or year day records. A quick evaluation lead to discovering that the Benthos DS-7000 unit we were using (SN#240) was not properly receiving channels 5-8. The SN#235 deck unit was quickly set up and we began receiving good data through that unit starting from the record with Yearday 235.
- A clear command was sent at 18:56 GMT because sufficient data had been received (back to Yearday 51).
- Final data was received at 18:55 GMT, for a total download length of 1 hour and 34 minutes for a six-month record. There were no crashes using the PrcvPDT.m program.
- Distance drifted between start and end of telemetry operation was about 0.01 nm.

---

## 4 *Surface Drifters*

Surface drifters were deployed from the fan tail on the ship during transits. Positions of the deployments of the surface drifters are given in Table 4. The first two were deployed off the northern coast of Florida at 31° 30' N, one off the continental shelf in transit to the east station of the Abaco line at 29° 30' N, two east of Abaco along 26° 30' N followed by two along 26° N.

Table 4: Summary of drifter deployments.

Number	Date	Time (GMT)	Latitude (N)	Longitude (W)
71777	9/12/2007	06:11	31° 32.601' N	78° 14.408' W
71210	9/12/2007	06:15	31° 32.233' N	78° 13.024' W
71202	9/12/2007	22:40	29° 28.334' N	75° 37.860' W
71182	9/14/2007	14:49	26° 30.001' N	73° 08.393' W
71197	9/17/2007	10:11	26° 30.003' N	76° 21.361' W
71172	9/19/2007	14:04	26° 04.136' N	79° 39.687' W
71173	9/19/2007	14:05	26° 04.113' N	79° 39.826' W

## 5 *Expendable Bathythermographs*

The XBT observations were made in pairs, with three different types of probes being dropped simultaneously each time. The probes were launched during the CTD casts noted in the table. The types of probes are T4, T6, and Deep Blue (DB), all made by Sippican. For the probe type column, the first type of probe was deployed from the hand-launcher designated #1 while simultaneously the second type of probe was deployed from the hand-launcher designated #2. Two final XBTs from Chief Survey Tech Jonathon Shannahoff's collection were also deployed to test the deep range of his T5 XBTs rated to 2000 m.

Table 5: Summary of simultaneous XBT deployments

XBT Pair #	CTD #	Probe Type	Latitude	Longitude	Date	Time
1	2	T6/DB	26 30.00 N	72 23.03 W	9/13/07	23:02
2	2	T4/T6	26 30.01 N	72 23.04 W	9/13/07	23:06
3	2	DB/T4	26 30.01 N	72 23.04 W	9/13/07	23:11
4	2	T6/DB	26 30.01 N	72 23.04 W	9/13/07	23:15
5	2	T4/T6	26 30.00 N	72 23.04 W	9/14/07	2:00
6	2	DB/T4	26 30.01 N	72 23.04 W	9/14/07	2:05
7	2	T6/DB	26 30.04 N	72 23.04 W	9/14/07	2:09
8	2	T4/T6	26 30.01 N	72 23.04 W	9/14/07	2:14
9	2	DB/T4	26 30.01 N	72 23.04 W	9/14/07	2:18
10	3	T6/DB	26 29.99 N	72 46.09 W	9/14/07	5:15
11	3	T4/T6	26 29.99 N	72 46.09 W	9/14/07	5:22
12	3	DB/T4	26 29.99 N	72 46.09 W	9/14/07	5:27
13	3	T6/DB	26 30.00 N	72 45.99 W	9/14/07	8:06
14	3	T4/T6	26 29.99 N	72 45.99 W	9/14/07	8:16
15	3	DB/T4	26 29.99 N	72 45.99 W	9/14/07	8:20
16	3	T6/DB	26 30.00 N	72 45.99 W	9/14/07	8:28
17	3	T4/T6	26 29.99 N	72 45.99 W	9/14/07	8:34
18	5	DB/T4	26 30.09 N	73 29.92 W	9/14/07	17:15
19	5	T6/DB	26 30.09 N	73 29.91 W	9/14/07	17:22
20	5	T4/T6	26 30.08 N	73 29.91 W	9/14/07	17:26
21	5	DB/T4	26 30.08 N	73 29.91 W	9/14/07	17:30
22	5	T6/DB	26 29.98 N	73 29.99 W	9/14/07	20:12
23	5	T4/T6	26 29.99 N	73 29.99 W	9/14/07	20:17
24	5	DB/T4	26 29.98 N	73 29.99 W	9/14/07	20:24
25	5	T6/DB	26 29.98 N	73 29.99 W	9/14/07	20:29
26	5	T4/T6	26 29.98 N	73 29.99 W	9/14/07	20:33
27	6	DB/T4	26 29.97 N	73 51.95 W	9/14/07	23:19
28	6	T6/DB	26 30.00 N	73 51.92 W	9/13/07	23:26
29	6	T4/T6	26 30.05 N	73 51.90 W	9/13/07	23:30
30	6	DB/T4	26 30.09 N	73 51.88 W	9/13/07	23:34
31	6	T6/DB	26 29.96 N	73 51.61 W	9/13/07	2:09
32	6	T4/T6	26 29.95 N	73 51.61 W	9/14/07	2:13
33	6	DB/T4	26 29.95 N	73 51.61 W	9/14/07	2:17
34	6	T6/DB	26 29.95 N	73 51.61 W	9/14/07	2:21
35	6	T4/T6	26 29.95 N	73 51.61 W	9/14/07	2:25
36	6	DB/T4	26 29.95 N	73 51.60 W	9/14/07	2:29
37	14	T5/T5	26 29.92 N	75 54.14 W	9/15/07	15:10

## 6 Standards and Pre-Cruise Calibrations

The CTD/O<sub>2</sub> 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. 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.

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 6.

Table 6: Equipment used during AB0709

Instrument	SN	Stations	Sensor Position	Comment
Sea-Bird SBE 32 24-palce Carousel Water Sampler		0-48		
Sea-Bird SBE9plus CTD	0363	0-48		
Paroscientific Digiquartz Pressure Sensor	95798	0-48		
Sea-Bird SBE3plus Temperature Sensor	2958	0-48	Primary	
Sea-Bird SBE3plus Temperature Sensor	4799	0-48	Secondary	
Sea-Bird SBE4C Conductivity Sensor	1374	0-48	Primary	
Sea-Bird SBE4C Conductivity Sensor	3338	0-48	Secondary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	1266	0-48	Primary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	0154	0-48	Secondary	
Simrad	802	0-2		
Simrad (Univ. Miami)		3-48		
RDI LADCP - 150 kHz Broad Band (AOML)	1133	0-48	Downward	
RDI LADCP - 300 kHz Workhorse (AOML)	1856	0-48	Upward	

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## 6.1 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 AB0709 was s/n 0363 . Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration date and coefficients in Table 7 were entered into SEASAVE<sup>®</sup> 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 ( $\mu$ s). SEASAVE<sup>®</sup> automatically implements this equation.

Table 7: Pressure Calibration Date & Coefficients.  
s/n 0363

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August 12, 2005
<hr/>
$c_1 = -4.698871e+04$
$c_2 = 6.928599e-01$
$c_3 = 1.264330e-02$
$d_1 = 3.832000e-02$
$d_2 = 0.000000e+00$
$t_1 = 2.996944e+01$
$t_2 = -1.348850e-04$
$t_3 = 3.953500e-06$
$t_4 = 2.102830e-09$
$t_5 = 0.000000e+00$
Slope = 1.00000000
Offset = -0.89100
AD590M = 1.141000e-02
AD590B = -8.428130e+00

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## 6.2 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  $\pm 0.004^\circ\text{C}$  per year and resolution of  $0.0003^\circ\text{C}$  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 AB0709, serial numbers (s/n) 2958 and 4799. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients in Table 8 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:

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

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

s/n 2958	s/n 4799
August 14, 2007	August 14, 2007
$g = 4.39475142\text{e-}03$	$g = 4.36382075\text{e-}03$
$h = 6.72710675\text{e-}04$	$h = 6.36625968\text{e-}04$
$i = 2.98713927\text{e-}05$	$i = 2.06198945\text{e-}05$
$j = 2.75340725\text{e-}06$	$j = 1.69170141\text{e-}06$
$f_0 = 1000.0$	$f_0 = 1000.0$

## 6.3 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  $\pm 0.0003 \text{ S}\cdot\text{m}^{-1}$ /month and resolution of  $0.00004 \text{ S}\cdot\text{m}^{-1}$  at 24 scans per second.

Two conductivity sensors were used during AB0709, serial numbers (s/n) 1374 and 3338. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients shown in Table 9 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:

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

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 9: Conductivity Pre-Cruise Calibration Dates & Coefficients.

s/n 1374	s/n 3338
August 14, 2007	June 22, 2007
$g = -3.96369757e+00$	$g = -9.97145386e+00$
$h = 4.83813307e+01$	$h = 1.54092348e+00$
$i = 9.04328324e-05$	$i = -1.73104395e-03$
$j = 3.14387229e-05$	$j = 2.24116667e-04$
$CP_{cor} = -9.5700e-08$	$CP_{cor} = -9.5700e-08$
$CT_{cor} = 3.2500e-06$	$CT_{cor} = 3.2500e-06$

## 6.4 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/crystallinity 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 1266 and 0154 were used during AB0709. The calibration dates and coefficients in Table 8.5 were entered into SEASAVE® using the configuration file.

Table 10: Oxygen Pre-Cruise Calibration Dates & Coefficients.

s/n 1266	s/n 1266
June 20, 2007	August 31, 2007
Soc = 0.4442	Soc = 0.4340
Boc = 0.0	Boc = 0.0
Voffset = -0.5207	Voffset = -0.5045
Pcor = 1.35e-004	Pcor = 1.35e-004
Tcor = 0.0007	Tcor = 0.0002
Tau20 = 0.0	Tau20 = 0.0

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:

$$O \text{ (ml/l)} = \left\{ Soc * \left( V + V_{offset} + tau(T, S) * \frac{\delta v}{\delta t} \right) * e^{(Tcor*T + Pcor*P)} * OXSAT(T, S) \right\}$$

where  $Soc$ ,  $Boc$ ,  $V_{offset}$ ,  $tau$ ,  $Tcor$  and  $Pcor$  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.  $\delta v/\delta t$  is the oxygen voltage time derivative and  $OXSAT$  is the oxygen

saturation value calculated according to (Weiss, 1970):

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

where  $\theta$  is the absolute temperature (K); and

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

SEASAVE® automatically implements this equation.

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

$$\begin{aligned} D &= 1 + H_1 * (e^{\frac{P(i)}{H_2}} - 1) \\ C &= e(-1 * \left( \frac{Time(i) - Time(i - 1)}{H_3} \right)) \\ O_V(i) &= O_{volt}(i) + V_{offset} \\ O_{newvolts}(i) &= a * \frac{a}{D} \\ O_{finalvolts}(i) &= O_{newvolts}(i) - V_{offset} \end{aligned}$$

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.

$H_1$  = amplitude of hysteresis correction function. Default = -0.033, range = -0.02 to -0.05 (varies from sensor to sensor).

$H_2$  = function constant or curvature function for hysteresis. Default = 5000.

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$H3$  = 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.

## 7 *Data Acquisition*

CTD/rosette casts were performed with a package consisting of a 24-place, 10-liter rosette 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), and a Valeport VA500 altimeter. The other underwater electronic components consisted of two RDI LADCPs. A total of 48 CTD/rosette casts were made, usually to within 20 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 circuit 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. A niskin bottle had to be removed to mount the upward looking 300 kHz ADCP.

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.

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## 7.1 *System Problems*

- Station 2 the Simard altimeter, s/n 802, appeared to not be kicking in on bottom approach and was replaced with UM's Simard altimeter. It was discovered that the Bathy2000 was being misread and the package was still 55 m off the bottom above the range of the altimeter to "see" the bottom.
- Station 16 there were 20 modulo errors during the cast. After the cast the 9plus sea cable pins were cleaned and the sea cable was replaced. No modulo errors the next cast.
- Stations 18 to 36 had occasional modulo errors.
- Station 37 to 47 had occasional stations with 5 or more modular errors.
- Station 48 had more than 20 modulo errors.

## 7.2 *Data Acquisition*

The CTD data acquisition system consisted of an SBE-11plus deck unit and a networked generic PC workstation located in the computer room. SBE Seasave software version 7.14c was used for data acquisition and to close bottles on the rosette.

The console watch initiated CTD deployments after the ship stopped on station. The watch maintained a console operations log containing a description of each deployment, a record of every attempt to close a bottle and any pertinent comments.

The deck watch leader directed the winch operator to raise the package, the boom and rosette were extended outboard, and the package quickly lowered into the water and submerged to 10 meters of wire out. No tag-lines were necessary for either deployments or recoveries during this cruise. The CTD sensor pumps were configured with a 60 second startup delay. The CTD console operator waited for the CTD sensor pumps to turn on, waited an additional 60 seconds for sensors to stabilize (all together about 2 minutes), then directed the winch operator to bring the package close to the surface, pause for typically 10 seconds, hitting "Mark Scan" and begin the descent. The profiling rate was no more than 30 m/min to 50 m, no more than 45 m/min to 100 m, and no more than 60 m/min deeper than 100 m depending on sea cable tension and the sea state.

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 20 m.

On the up cast, the winch operator was directed to stop at each bottle trip depth. The CTD console operator waited 30 seconds before tripping a bottle using a "point and click"

graphical trip button. 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. Once on deck, the console watch terminated the data acquisition, turned off the deck unit, and assisted with rosette sampling.

Upon completion of the cast, sensors were flushed and stored with deionized water. The bottles and rosette were examined before samples were taken, and anything unusual noted on the sample log. Niskin bottles were then sampled first for oxygen and then salinity.

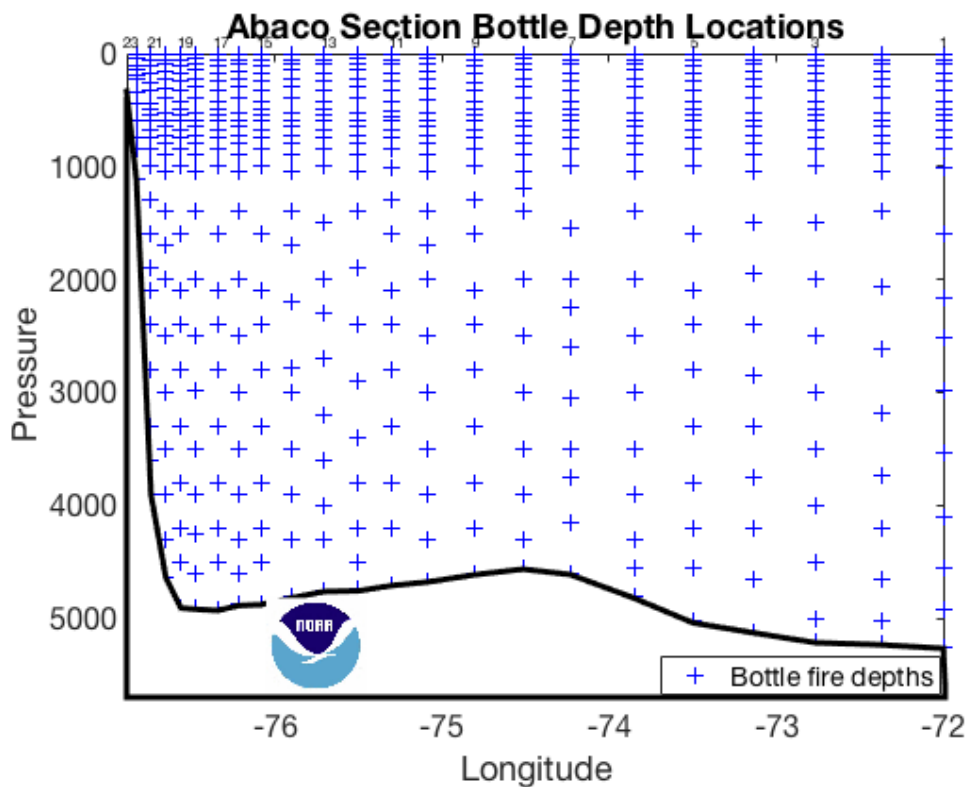


Figure 2: Bottle locations for 26.5°N Deep Western Boundary Current section east of Abaco Island.

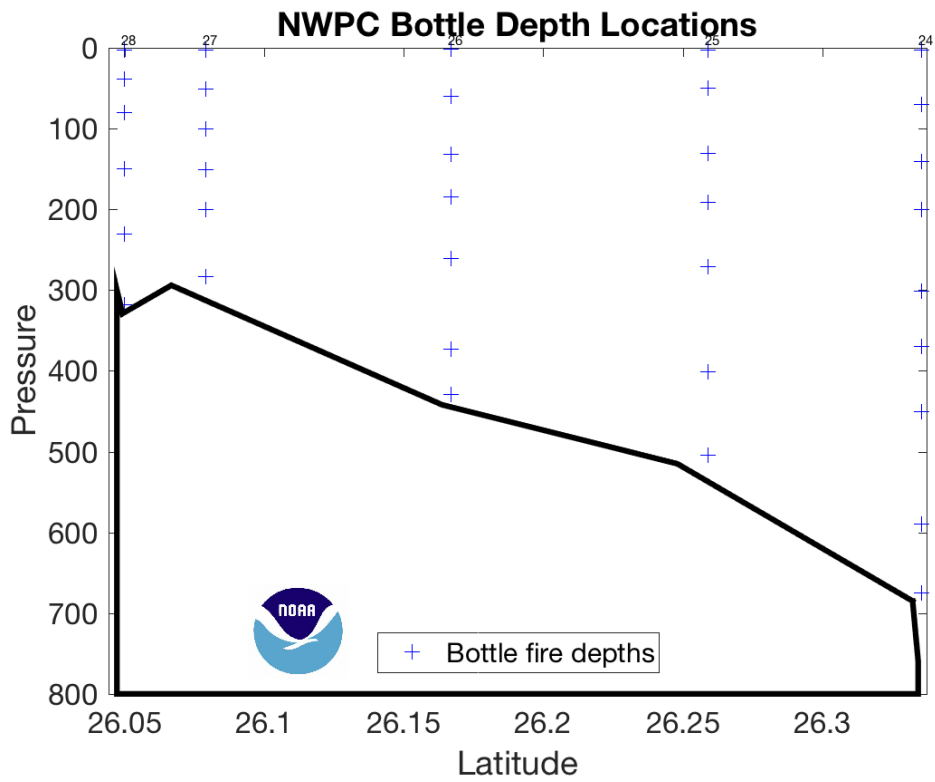


Figure 3: Bottle locations for along the Northwest Providence Channel section.

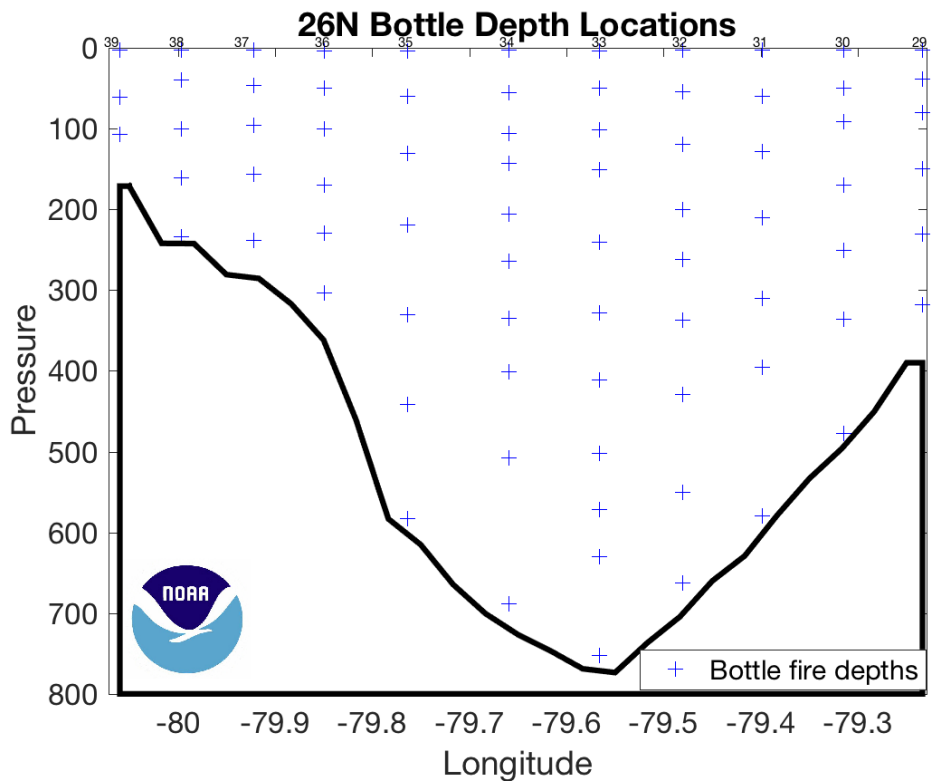


Figure 4: Bottle locations for 26°N section in the Florida Straits.

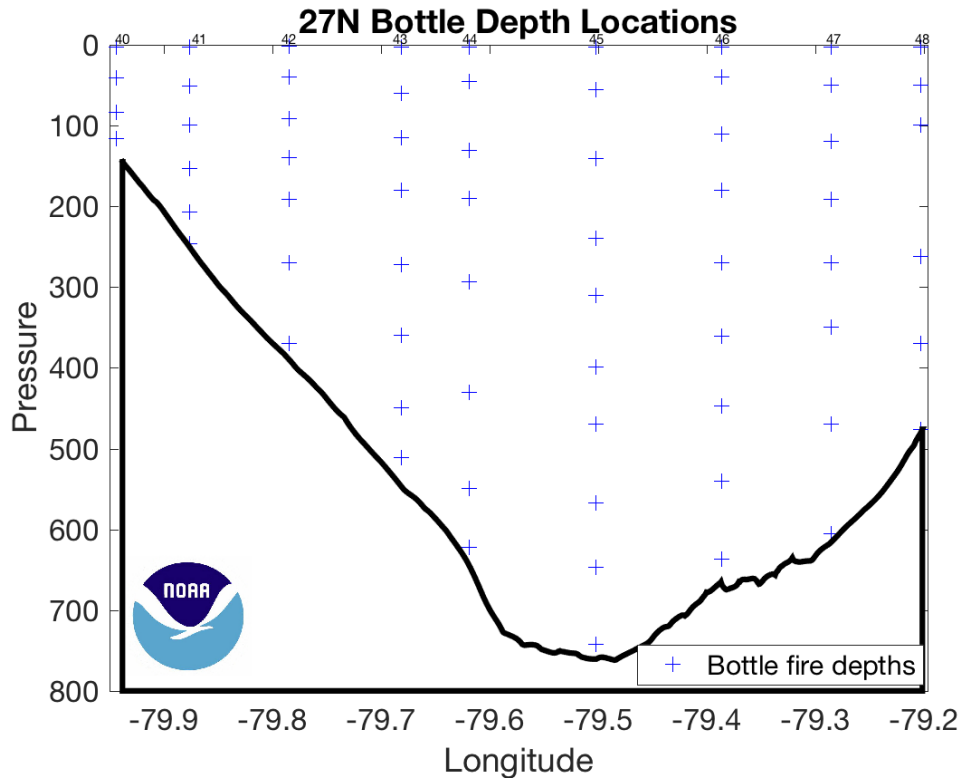


Figure 5: Bottle locations for 27°N section in the Florida Straits.



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### 7.3 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using SEABIRD SBE Data Processing version 7.23.1 and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave on a PC 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/O<sub>2</sub> 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 ml/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 1.073 seconds.
3. 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.
4. 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.
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

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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  $0.03^{\circ}\text{C}$ . The value used for the thermal anomaly time constant ( $1/\beta$ ) was  $7.0^{\circ}\text{C}$ .

6. 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).
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. TRANS converts the binary data file into ASCII format.
11. 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 48 casts were processed.

## ***7.4 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

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dates are listed in Table 6.

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.

#### 7.4.1 Salinity Analysis

Bottle salinity analyses were performed using a Guildline Model 8400B inductive autosalinometer, and a dedicated PC. Software allowed the user to standardize the autosalinometer. IAPSO Standard Seawater was used as the standard. The autosal was standardized before each run of samples was analyzed, typically every 48 samples.

Two different batches of the Ocean Scientific (OSIL) standard seawater (P147 and P149) were used in this cruise (Table 11).

Table 11: Nominal values for the batches of IAPSO standard seawater.

P-146	P-147
Stations: 1-9	Stations: 10-48
Use By: May 2005	Use By: June 2006
K15: 0.99979	K15: 0.99982
Salinity: 34.992	Salinity: 34.993

The running standard calibration values are shown in Figure 6. For stations 1-29 the autosal standards trended saltier by  $3.0 \cdot 10^{-4}$  in conductivity ratio ( $\approx 0.006$  in salinity) and for stations 30-48 the autosal standards trended fresher by  $1.5 \cdot 10^{-4}$  in conductivity ratio ( $\approx 0.003$  in salinity). The change in trend is likely from a break in running salts during the transit to the Northwest Providence Channel line after the completion of the Abaco line. The initial calibrations of the salts using the beginning and end standard runs to calculate the autosal run drift were biased too salty when compared to the deep T-S historical data (Figure 7). This was likely from applying an incorrect drift correction caused by an artificially fresh beginning standard due to not flushing enough times. Therefore, only the end standard for each run was used to apply a constant offset autosal correction. This improved the salts samples "freshening" them closer to the historical data (Figure 7). The precision of the salinity measurements during the cruise were estimated by using the duplicate samples. From the 6 duplicate samples (Table 12), which corresponds to 0.88% of the total samples,

674, collected during this cruise, the average residual for the duplicates was  $=1.98 \cdot 10^{-4}$  PSU with and standard deviation of 0.0012 PSU (Figure 6).

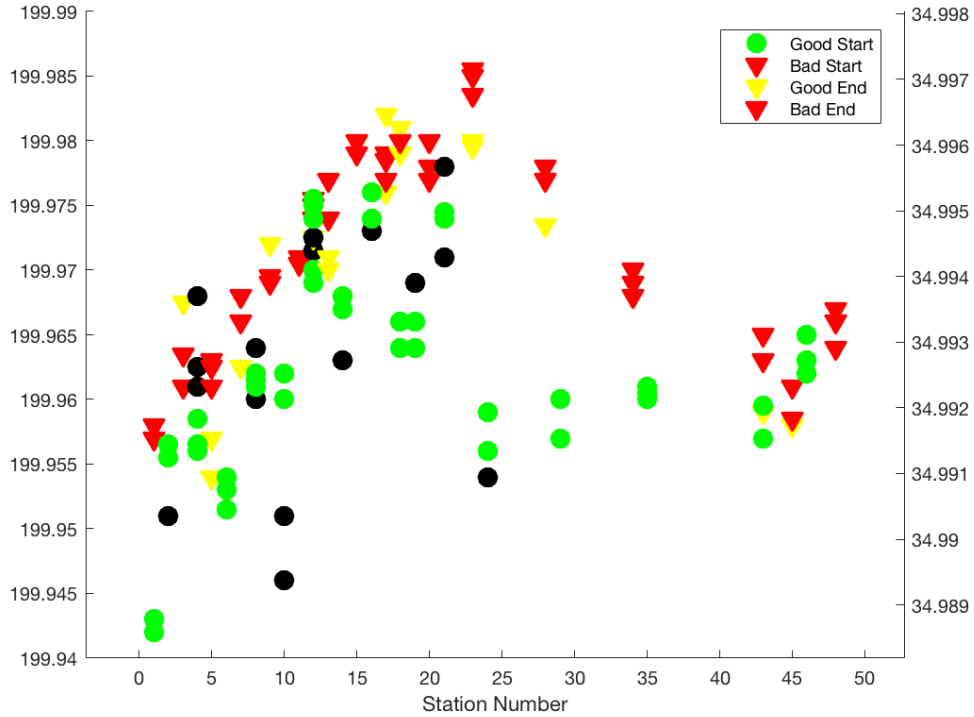


Figure 6: Standard vial calibrations throughout the cruise.

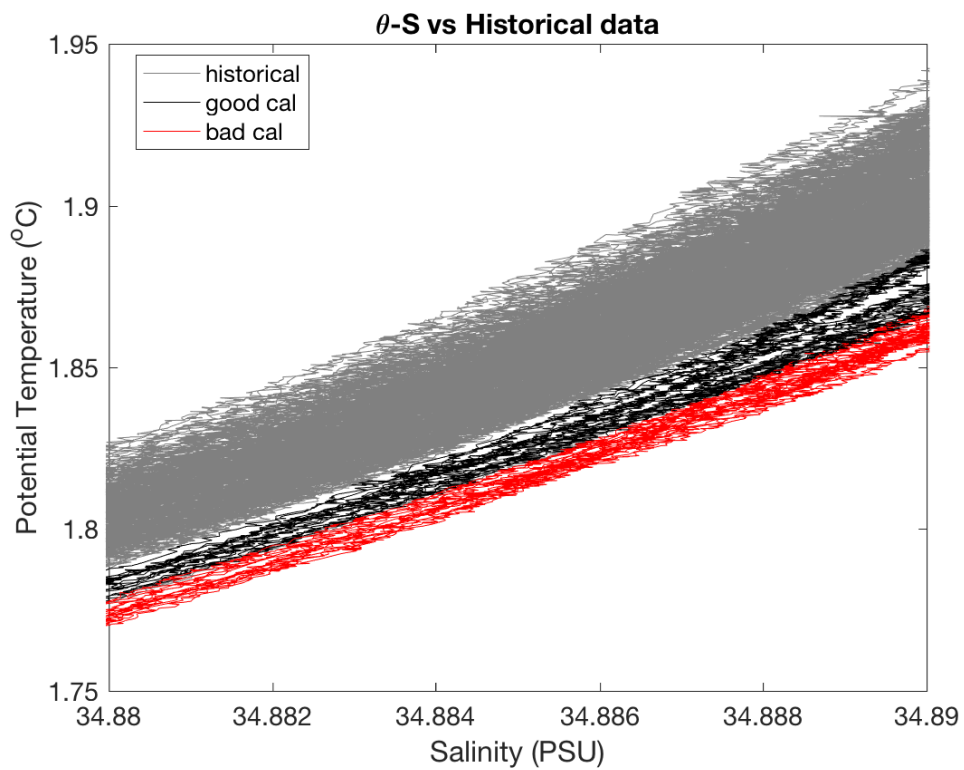


Figure 7: T-S plot using a slope correction with the beginning and ending standards (red) and only using the ending standards (black) for each run to calibrate the conductivity sensor.

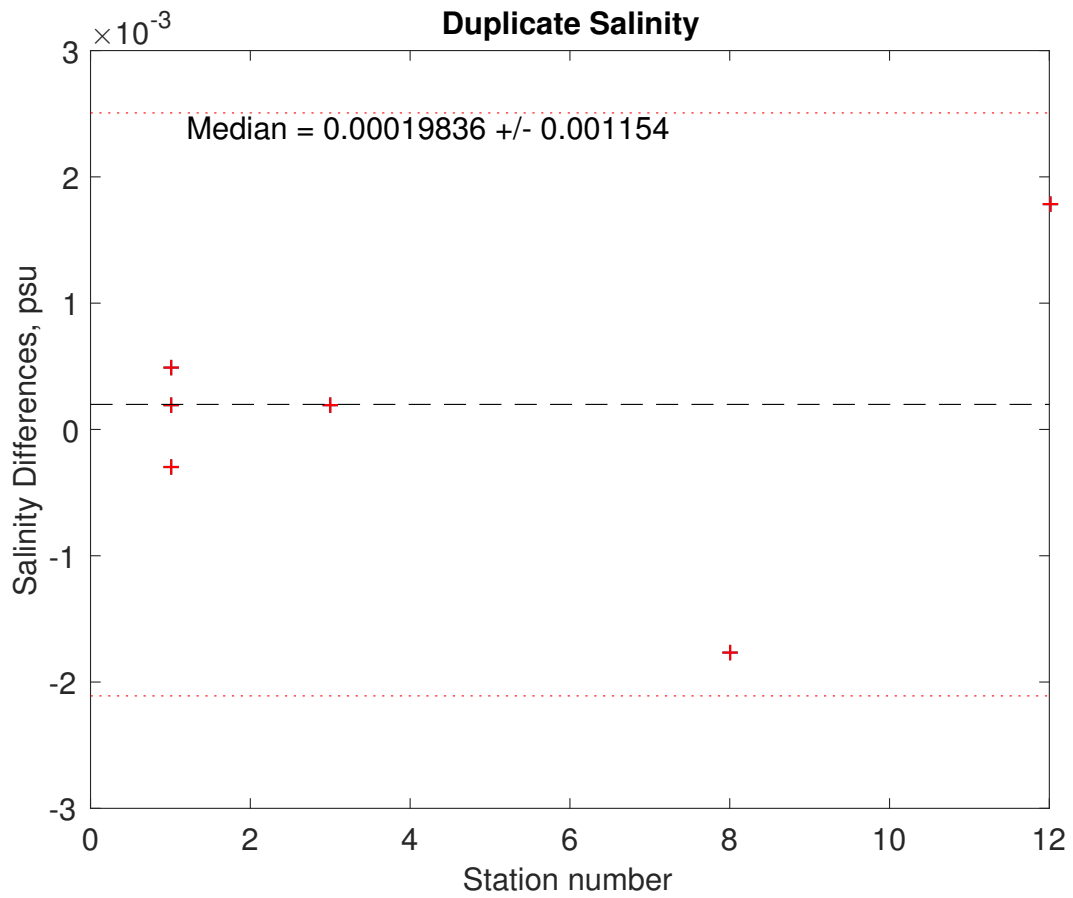


Figure 8: Salinity residuals of the duplicate samples.

Table 12: Duplicate salinity samples collected during the ABACO cruise.

Station	Niskin	Salinity1	Salinity2	Differences
1	15	35.997	35.997	0.000
1	21	36.690	36.691	-0.000
1	23	36.726	36.727	-0.000
3	21	36.755	36.755	-0.000
8	2	34.883	34.881	0.002
12	17	36.278	36.280	-0.002

#### 7.4.2 Oxygen Analysis

Bottle oxygen analyses were also performed using a photometric automatic Winkler method titration with a Carpenter modification, and a dedicated PC. The water samples are drawn (without air bubbles) from Niskin bottles immediately upon arrival on deck. Manganese sulfate (or chloride) is added to the sample, followed by the addition of an alkaline sodium hydroxide-sodium iodide solution. These solutions "pickle" the sample causing it to precipitate and react with the dissolved oxygen in the water sample. The sample is then dissolved and photometrically titrated to an end point with a standardized sodium thiosulphate solution. The content of oxygen value is calculated utilizing the volume of the water sample bottle and the amount of added thiosulphate. Automated titrating systems can attain a precision of about  $\pm 4.46 \text{ } \mu\text{mol}/\text{kg}$  (Friederich, et al., 1991).

The precision of the oxygen measurements during the cruise were estimated by using the duplicate samples. From the 717 samples taken 46 duplicates were drawn, which corresponds to 6.85% (Figure 13). The average residual for the duplicates was  $0.0 \text{ } \mu\text{mol}/\text{kg}$  with a standard deviation of  $2.63 \text{ } \mu\text{mol}/\text{kg}$  (Figure 9).

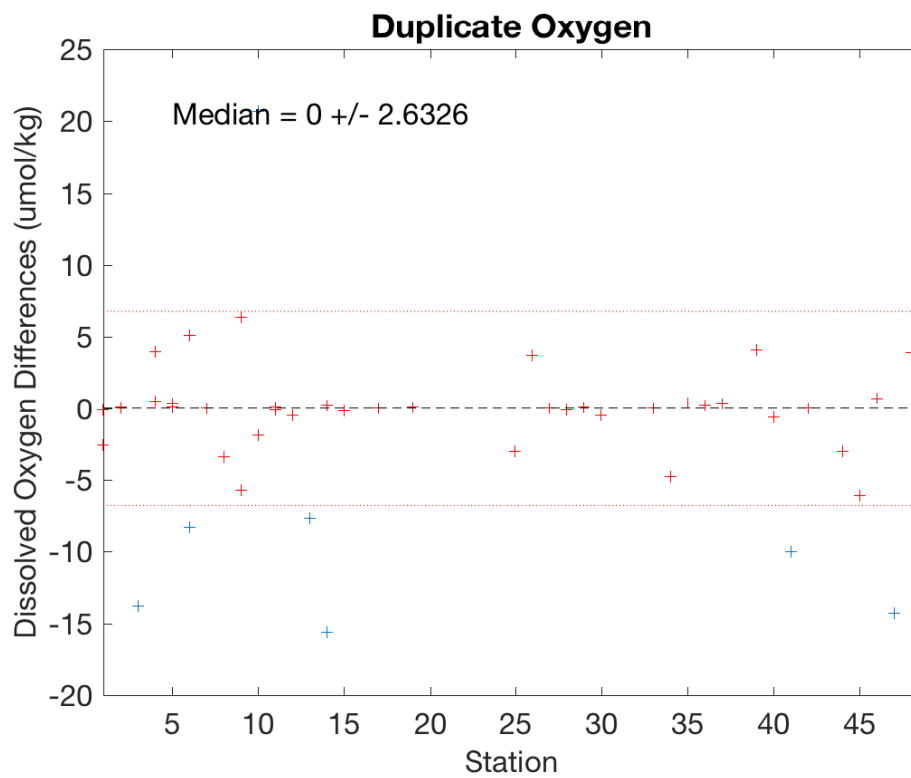


Figure 9: Oxygen residuals of the duplicate samples .



Table 13: Duplicate dissolved oxygen samples collected during the ABACO cruise (values in *umol/kg*).

Station	Niskin	Oxygen1	Oxygen2	Differences
1	2	267.5	264.9	2.600
1	5	272.8	272.7	0.100
2	20	207.4	207.4	0.000
2	21	207.8	207.9	-0.100
3	7	281.6	267.8	13.800
4	7	267.9	271.9	-4.000
4	17	173.1	173.6	-0.500
5	4	274.1	274.4	-0.300
5	6	270.0	270.1	-0.100
6	1	258.8	263.9	-5.100
6	5	274.0	265.7	8.300
7	3	273.1	273.1	0.000
8	24	201.4	198.0	3.400
9	7	269.0	275.4	-6.400
9	10	181.1	175.4	5.700
10	18	198.0	218.7	-20.700
10	19	218.7	216.8	1.900
11	3	273.9	273.8	0.100
11	5	270.2	270.3	-0.100
12	20	204.9	204.4	0.500
13	5	282.7	275.0	7.700
14	12	148.3	148.5	-0.200
14	13	159.9	144.3	15.600
15	1	267.6	267.4	0.200
17	8	269.6	269.6	0.000
19	2	271.5	271.6	-0.100
25	6	183.7	180.7	3.000
26	4	183.4	187.1	-3.700
27	6	194.7	194.7	0.000
28	2	183.7	183.6	0.100
29	4	171.7	171.8	-0.100
30	12	204.1	203.6	0.500
33	2	151.7	151.7	0.000
34	8	139.3	134.5	4.800
35	4	120.8	121.2	-0.400
36	2	126.8	127.0	-0.200
37	4	143.7	144.0	-0.300
39	2	177.0	181.1	-4.100
40	2	161.0	160.4	0.600
41	8	199.1	189.1	10.000
42	6	148.3	148.3	0.000
44	4	127.7	124.7	3.000
45	16	179.3	173.2	6.100
46	6	138.0	138.7	-0.700
47	8	188.2	173.9	14.300
48	4	192.4	196.3	-3.900

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## 8 *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 T2958/C1374 was selected for final data reduction. Secondary oxygen sensor, s/n 1266, was used for the final data reduction.

### 8.1 *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  $N^2 \leq -1.0 \text{ e } -05 \text{ s}^{-2}$ .

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

### 8.2 *CTD Pressure*

Pressure sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw pressure data during each cast. Residual pressure offsets were examined to check for calibration shifts (see Figure 10 and Table 14). Pressure sensor s/n 0363 was used during the cruise. On deck pressures before the start of each cast was recorded and is plotted

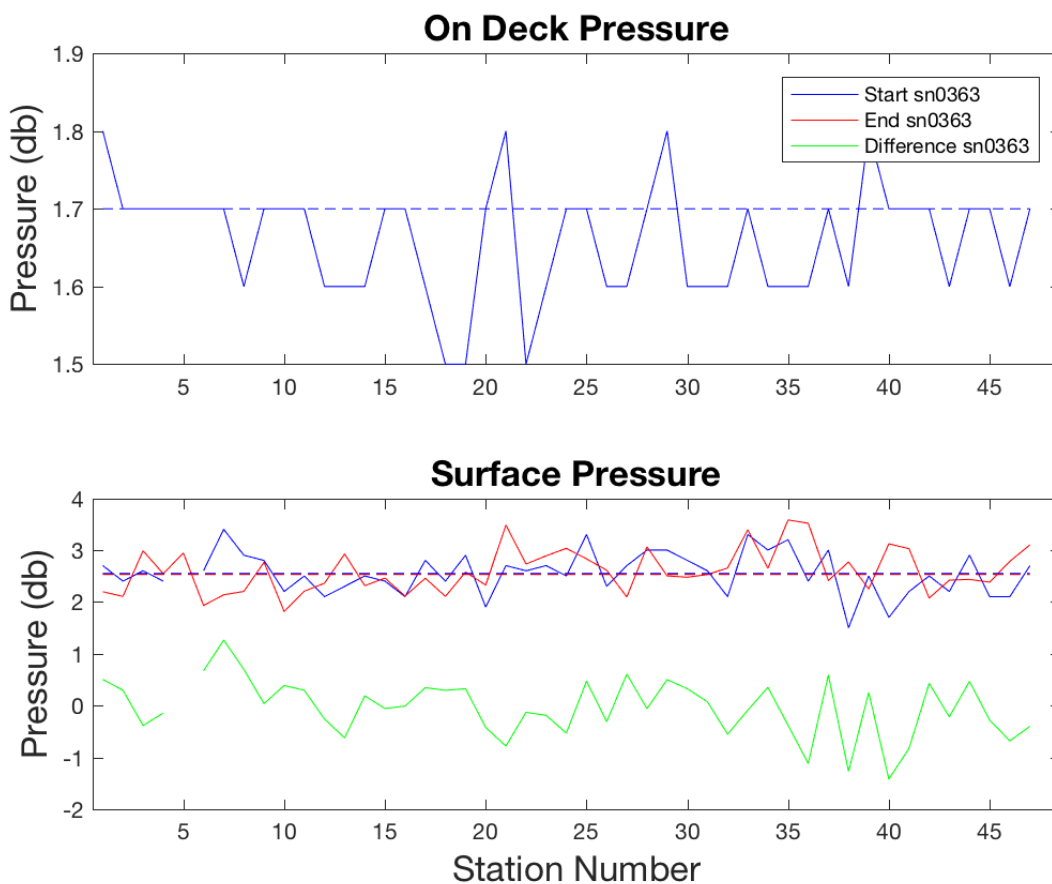


Figure 10: Pressure differences vs. station number. Top panel are the pressures measured on deck before the cast (blue). Bottom panel are the near sea surface pressure values measured at the start of the downcast (blue), at the end of the upcast (red) and their respective difference (green).

in Figure 10. The on deck pressure before the cast was stable with a median of  $1.7 \pm 0.08$  dbar. A pressure offset of -1.7 dbar applied to the configuration file for a total offset of -0.891.

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. The pressure sensor was stable with near surface pressures of  $2.55 \pm 0.41$  dbar before and  $2.52 \pm 0.43$  dbar after.

Table 14: 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
1	7814	1.8000	-999	2.7000	2.1960
2	18354	1.7000	-999	2.4000	2.1040
3	13216	1.7000	-999	2.6000	2.9870
4	12535	1.7000	-999	2.4000	2.5440
5	21400	1.7000	-999	-999	2.9430
6	25915	1.7000	-999	2.6000	1.9300
7	18288	1.7000	-999	3.4000	2.1370
8	9864	1.6000	-999	2.9000	2.2020
9	18580	1.7000	-999	2.8000	2.7650
10	11831	1.7000	-999	2.2000	1.8140
11	9810	1.7000	-999	2.5000	2.2060
12	10254	1.6000	-999	2.1000	2.3600
13	8281	1.6000	-999	2.3000	2.9250
14	14316	1.6000	-999	2.5000	2.3130
15	13985	1.7000	-999	2.4000	2.4580
16	8410	1.7000	-999	2.1000	2.1110
17	7152	1.6000	-999	2.8000	2.4560
18	6712	1.5000	-999	2.4000	2.1060
19	10001	1.5000	-999	2.9000	2.5760
20	8394	1.7000	-999	1.9000	2.3240
21	12132	1.8000	-999	2.7000	3.4830
22	9060	1.5000	-999	2.6000	2.7310
23	16670	1.6000	-999	2.7000	2.8900
24	25882	1.7000	-999	2.5000	3.0330
25	19537	1.7000	-999	3.3000	2.8300
26	20088	1.6000	-999	2.3000	2.6110
27	25107	1.6000	-999	2.7000	2.0950
28	28569	1.7000	-999	3.0000	3.0620
29	13605	1.8000	-999	3.0000	2.5010
30	25241	1.6000	-999	2.8000	2.4760
31	7253	1.6000	-999	2.6000	2.5280
32	11068	1.6000	-999	2.1000	2.6540
33	10817	1.7000	-999	3.3000	3.3910
34	9002	1.6000	-999	3.0000	2.6490
35	7062	1.6000	-999	3.2000	3.5810
36	10728	1.6000	-999	2.4000	3.5180
37	18187	1.7000	-999	3.0000	2.4120
38	14955	1.6000	-999	1.5000	2.7710
39	12370	1.8000	-999	2.5000	2.2490
40	26884	1.7000	-999	1.7000	3.1210
41	20496	1.7000	-999	2.2000	3.0260
42	11902	1.7000	-999	2.5000	2.0740
43	8538	1.6000	-999	2.2000	2.4190
44	7831	1.7000	-999	2.9000	2.4340
45	6412	1.7000	-999	2.1000	2.3800
46	7367	1.6000	-999	2.1000	2.7820
47	22261	1.7000	-999	2.7000	3.1010
48	7451	1.8000	-999	2.4000	2.9870

### 8.3 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 11, which shows a median temperature difference between the two sensors of  $-0.0001$  °C and a standard deviation of  $0.005$  °C.

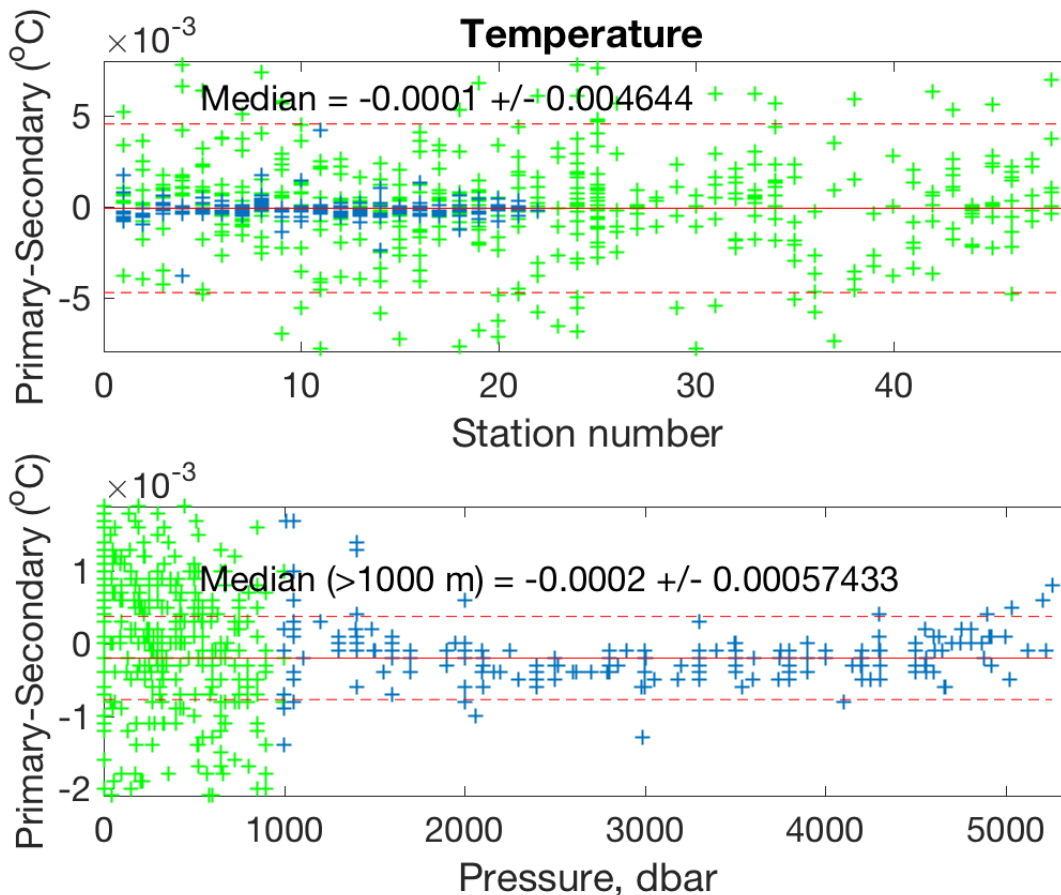


Figure 11: Temperature differences (after corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation (same for top and bottom).

## 8.4 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  $4.3 \cdot 10^{-3}$  mS/cm and a standard deviation of 0.005 mS/cm. The uncalibrated primary sensor comparison with the bottle salinities show a better residual with a median of  $7.0 \cdot 10^{-4}$  psu and a standard deviation of 0.002 psu (Figure 13). Therefore the primary sensor, s/n 1374, was used for all the final data values. The bottle and instrument differences are compared to a normal distribution using  $2.8 \cdot$  standard deviation to find clear outliers. Bottle salts for stations 2, 6, 7, 10, 11, and 20 were determined to be bad runs and were manually flagged as 4. After these procedures 471 data points (69.9 %) 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 1374	
	Stations 1-21	Stations 22-48
$m$	1.0000694	1.0001518
$p_1$	9.1599556e-06	0
$b$	-0.0020314	-0.0060839
$pcor$	-5.29481405e-08	1.5516136e-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 8.4). The stations used are chosen by looking at residual trends between the sensor and bottle data. For the Abaco line, stations 1-21 were used to derive the coefficients. For the Florida Straits all three sections, stations 22-48, 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  $-8.18 \cdot 10^{-5}$

psu ( $-1.11 \cdot 10^{-4}$  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, 69.4% of the residuals for the data are within the confidence limits determined by the WOCE ( $\pm 0.002$  psu) and this number increases to 90.8% 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.

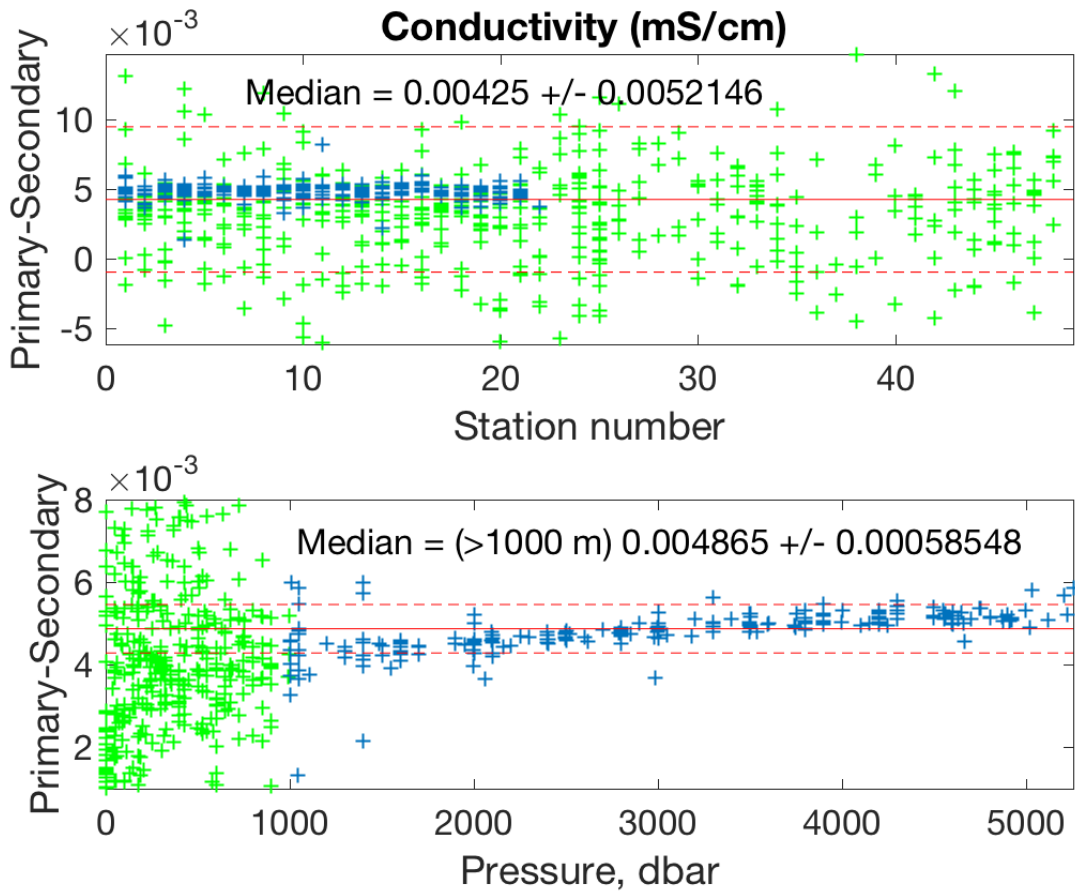


Figure 12: Conductivity (mS/cm) differences between sensors by station (top) and pressure (bottom). The red solid line represents the median with the red dashed representing the standard deviation.

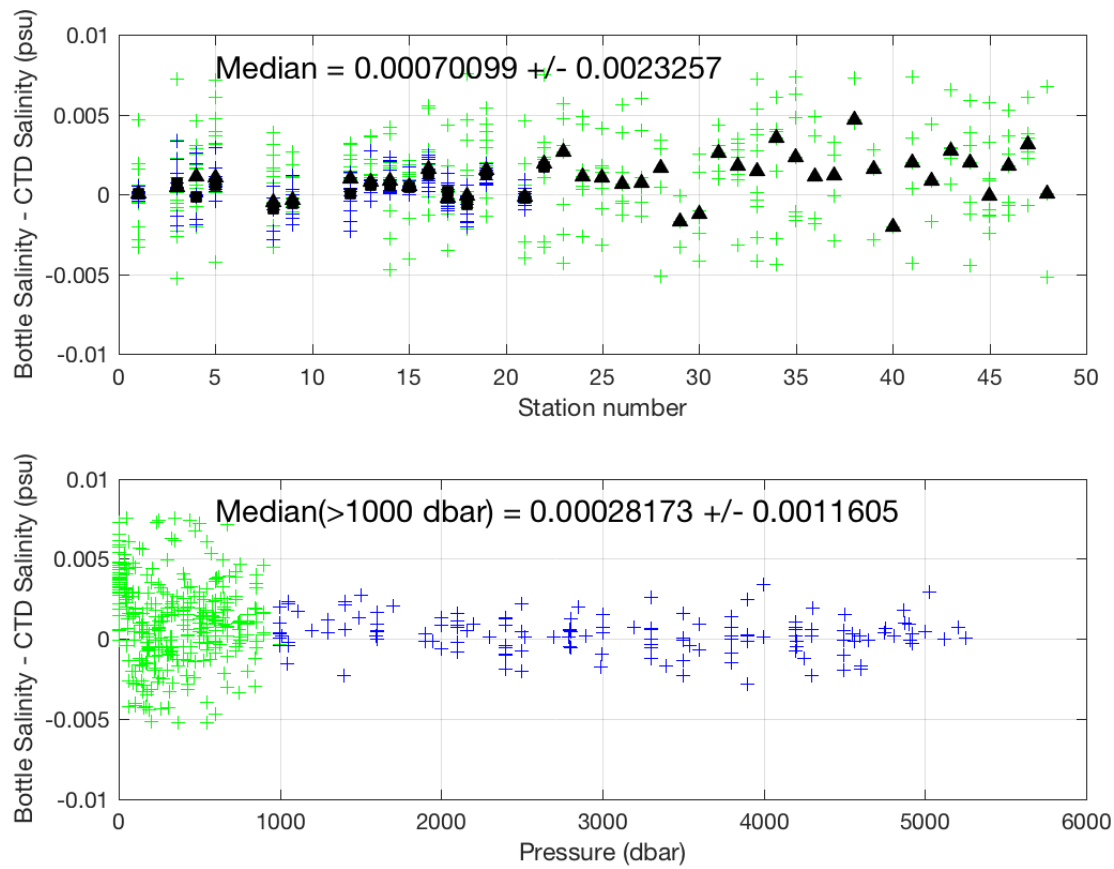


Figure 13: Bottle and uncalibrated primary CTD salinity differences plotted against pressure. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.



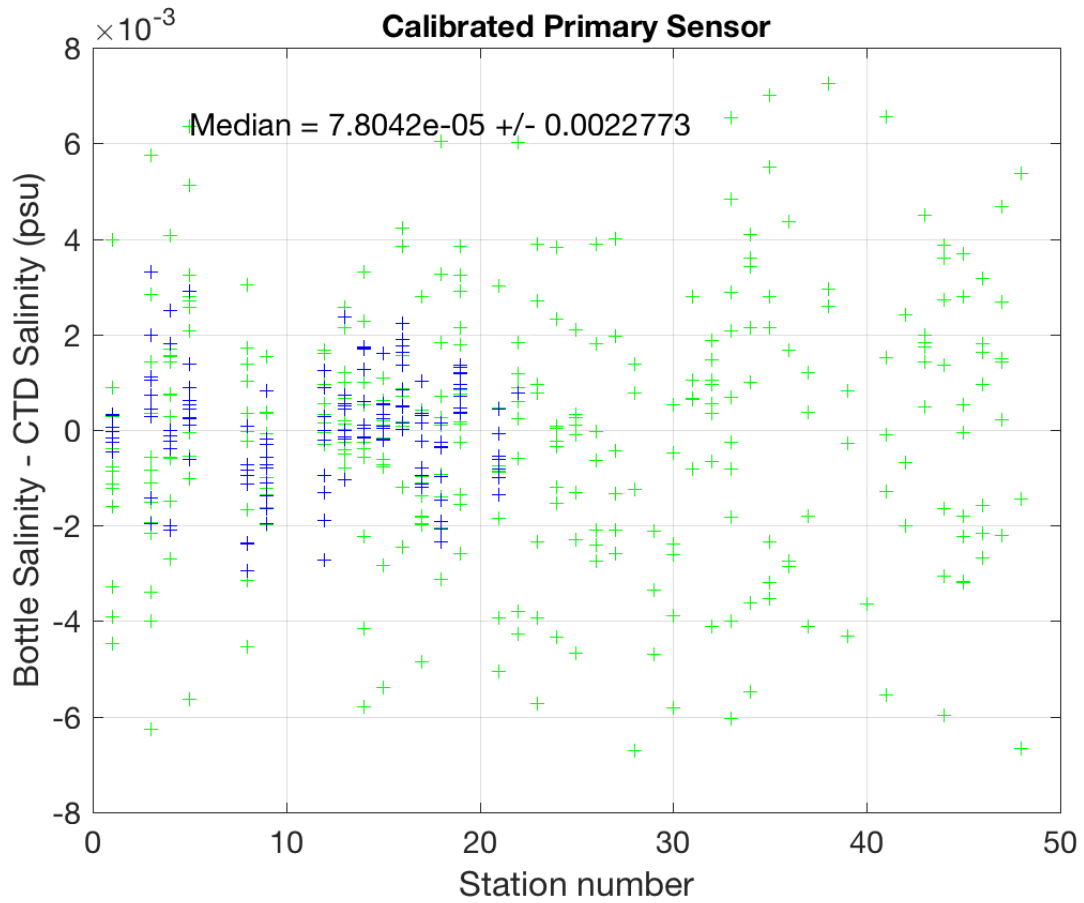


Figure 14: Bottle and calibrated primary CTD salinity differences plotted vs. station.

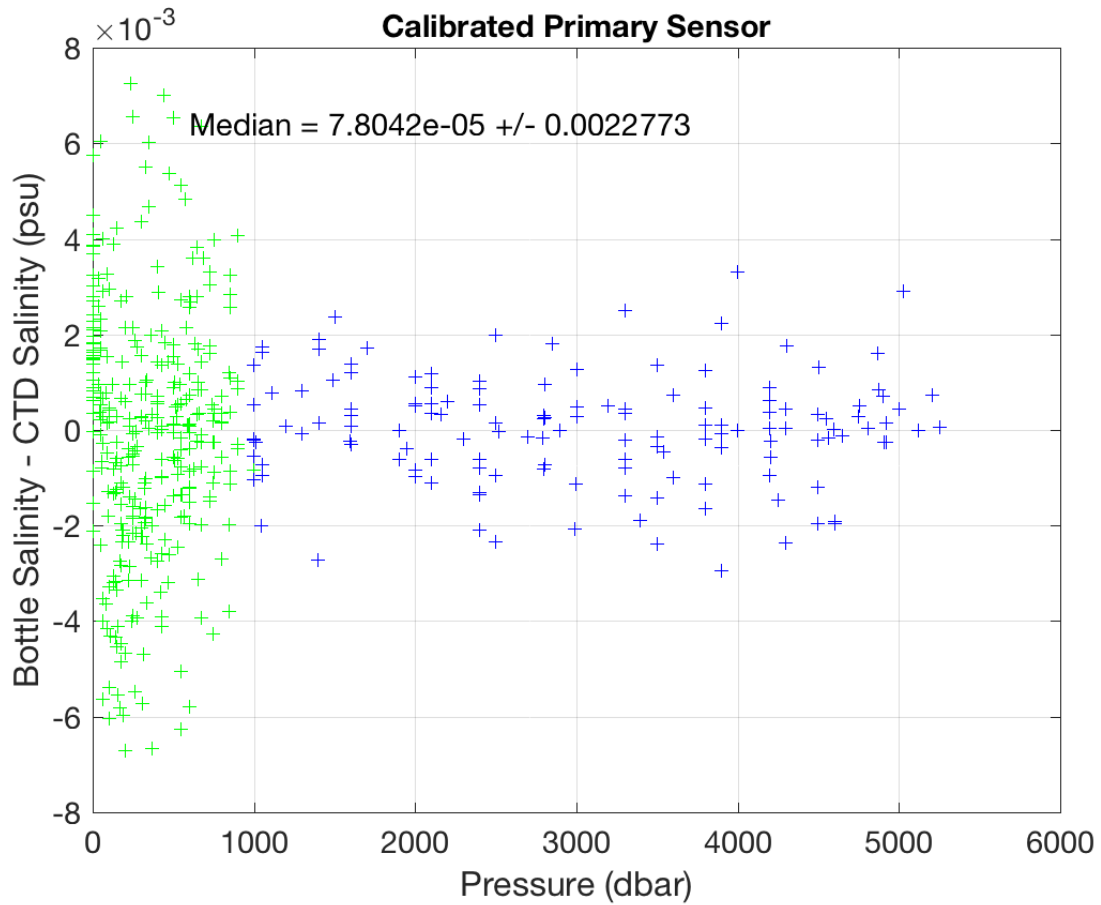


Figure 15: Bottle and calibrated primary CTD salinity differences plotted vs. pressure.

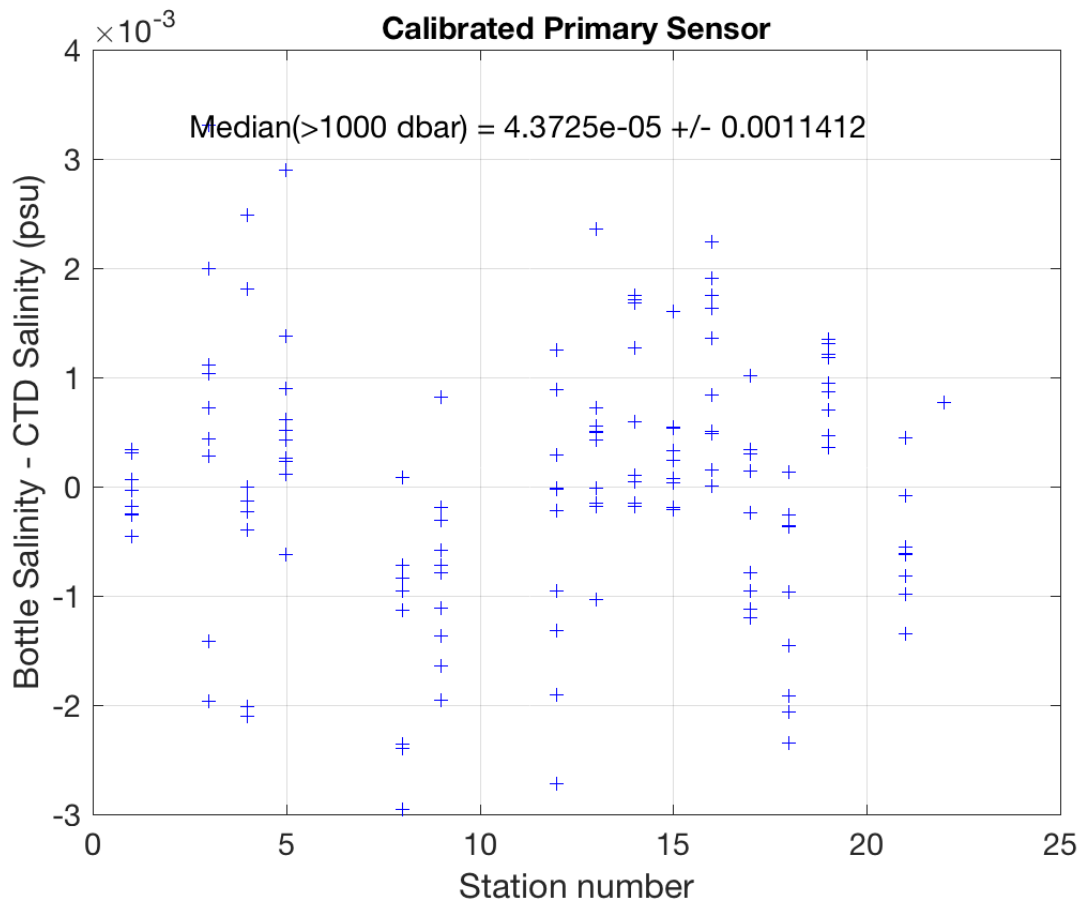


Figure 16: Bottle and calibrated primary CTD salinity differences plotted vs. station below 1000 dbar.

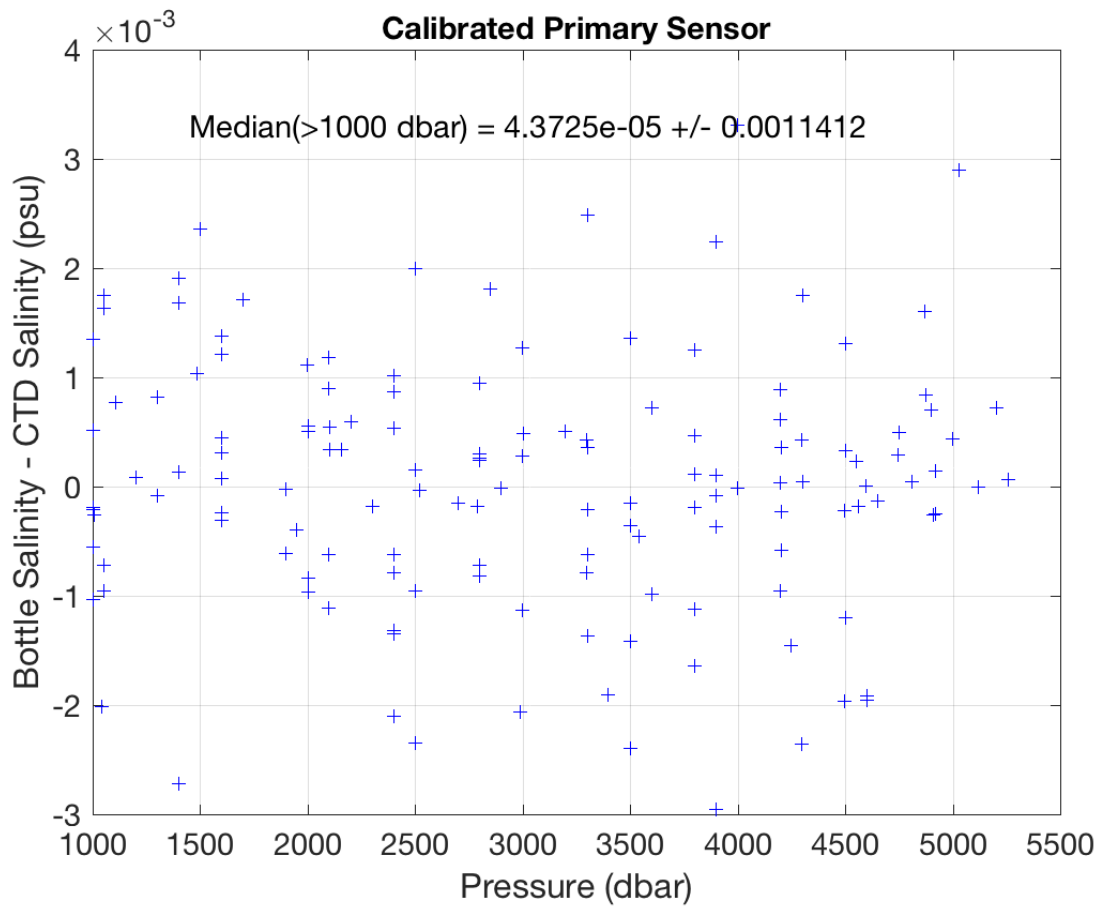


Figure 17: Bottle and calibrated primary CTD salinity differences plotted vs. pressure below 1000 dbar.

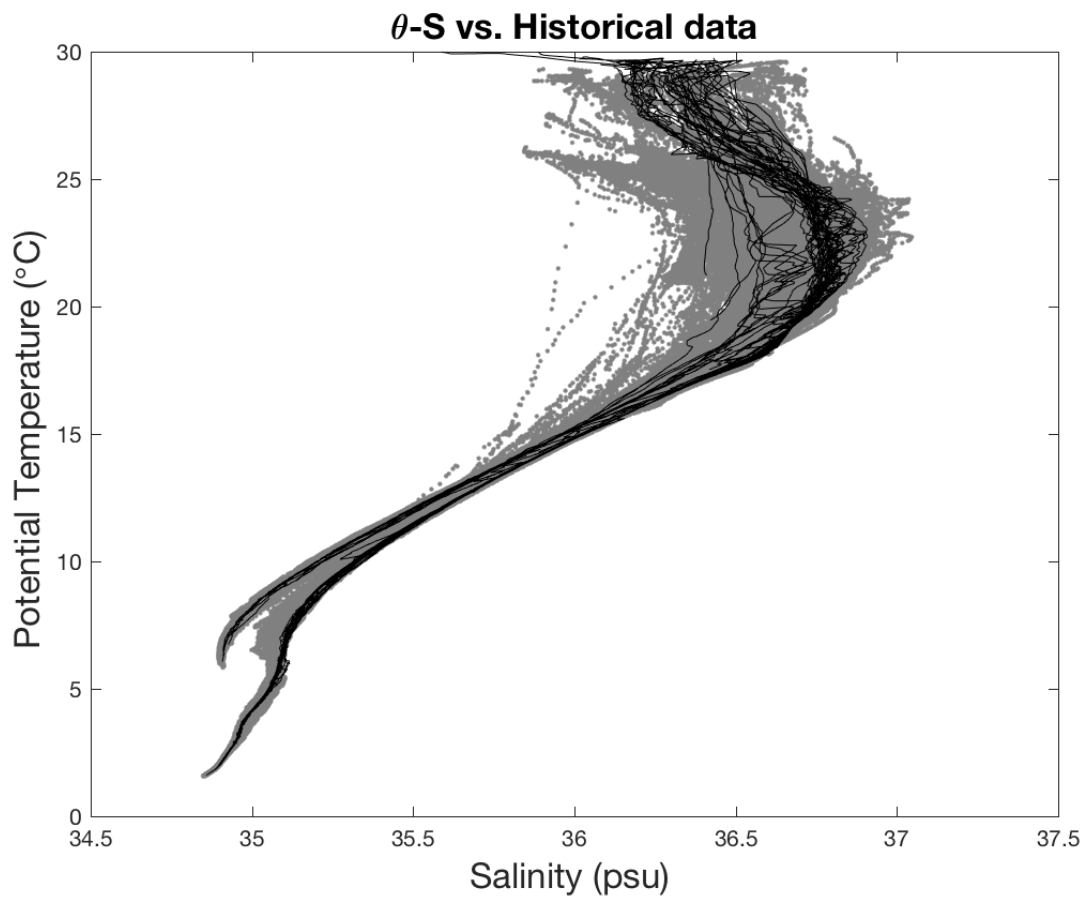


Figure 18: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

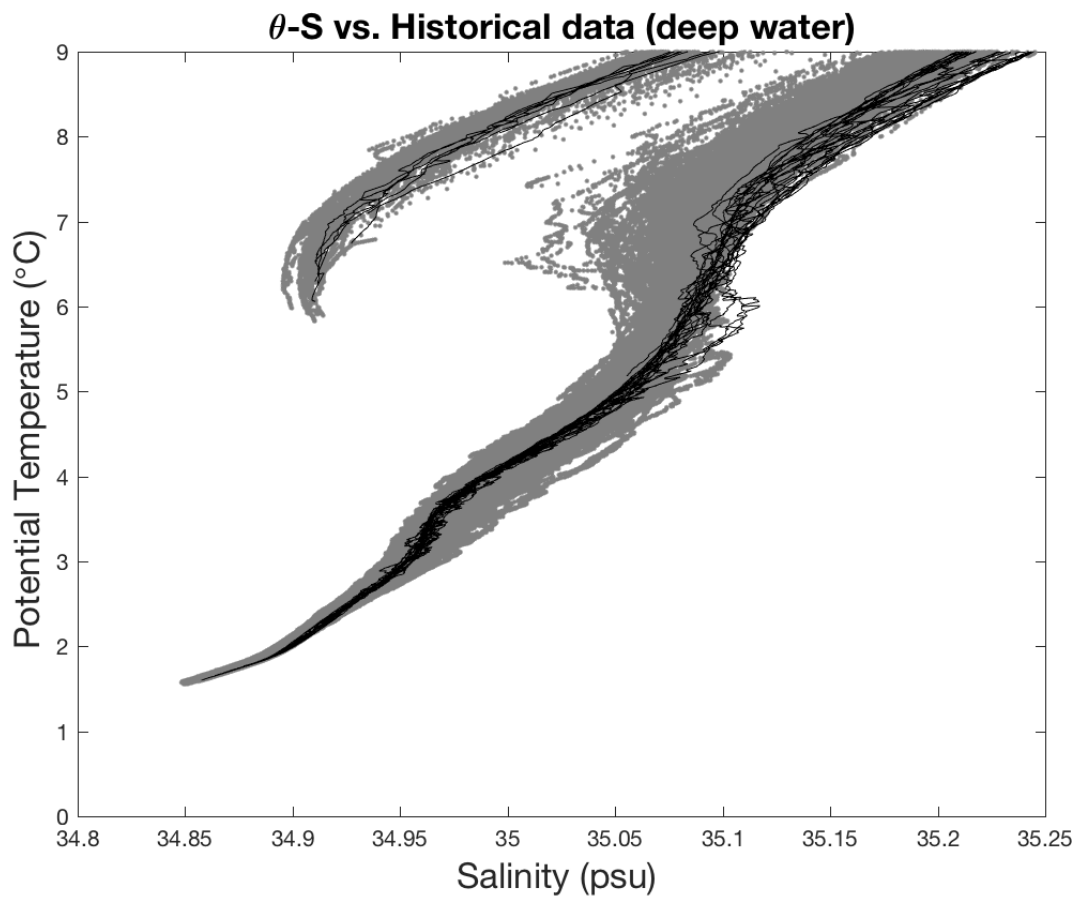


Figure 19: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

## 8.5 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 O<sub>2</sub> check samples by matching the up cast bottle trips to down cast CTD data along neutral density surfaces, calculating CTD dissolved O<sub>2</sub>, 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:

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

with

	S/N 1266	
	Stations 1-21	Stations 22-48
<i>Soc</i>	0.4670081	0.4860238
<i>V<sub>offset</sub></i>	-0.5250439	-0.5607210
<i>tau</i>	0.76	0.81
<i>A</i>	-0.0039455	-0.0002728
<i>B</i>	0.0003241	-0.0000218
<i>C</i>	-0.000006	0.0000007
<i>E</i>	0.0380561	0.0341367
<i>p1</i>	0.0001333	0

where *Soc*, *tau*, *V<sub>offset</sub>*, *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 -1.93 *umol/kg* and a standard deviation of 1.05

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*umol/kg*. The primary sensor, s/n 1266, was used for all the final data values (Figure 21).

Two oxygen coefficients were used to correct the secondary oxygen (Table 8.5). The stations used are chosen by looking at residual trends between the sensor and bottle data. For the Abaco line, stations 1-21 was used to derive the coefficients. For the Florida Straits all three sections, stations 22-48, were used to derive the coefficients. Also, analogous to the conductivity, the data is compared with a normal distribution using  $2.8 \times$  standard deviation to remove outliers. After these procedures 496 data points (73.9%) 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  $-0.09 \text{ umol/kg}$  ( $-0.04 \text{ umol/kg}$  for the data below 1000 dbar) and the standard deviation  $1.3 \text{ umol/kg}$  ( $0.81 \text{ umol/kg}$  for the data below 1000 dbar). Also 94.2% 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 98.0% 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.



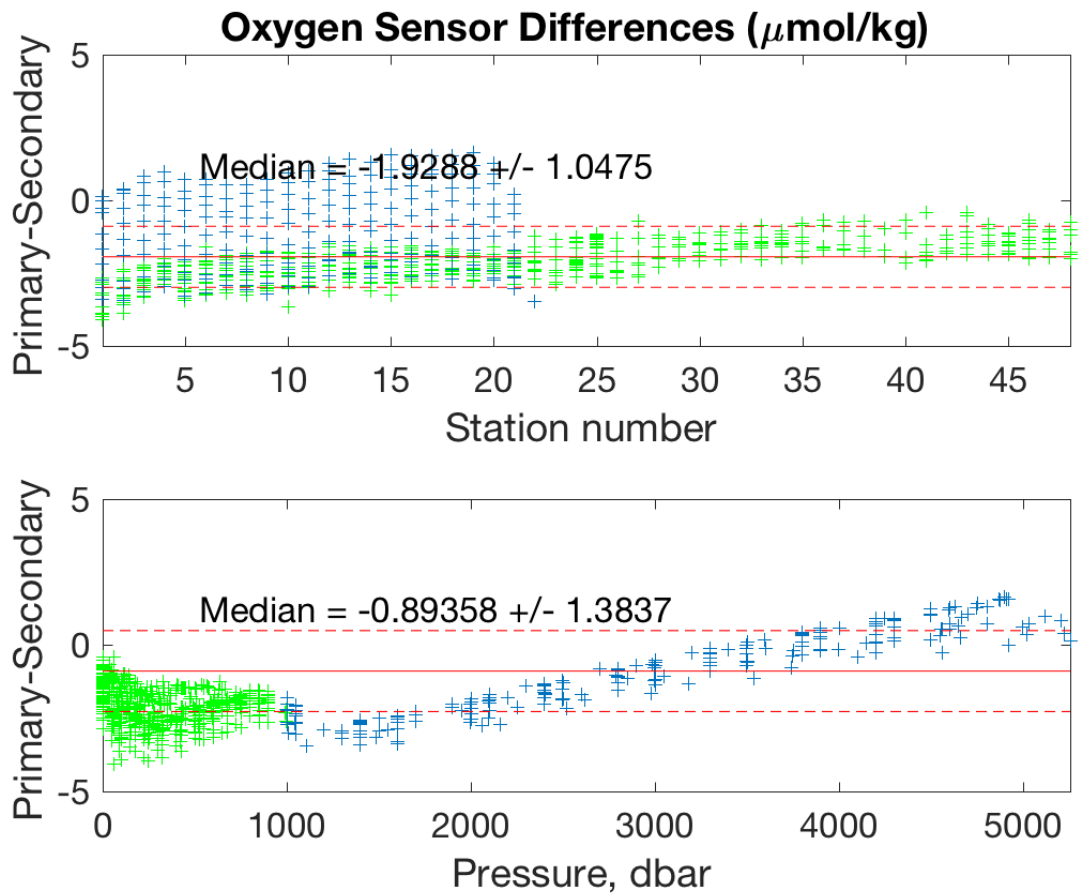


Figure 20: Dissolved oxygen differences between sensors by station (top) and by pressure (bottom). Sensor changes at station 15 and 24. The red solid line represents the median with the red dashed representing the standard deviation.

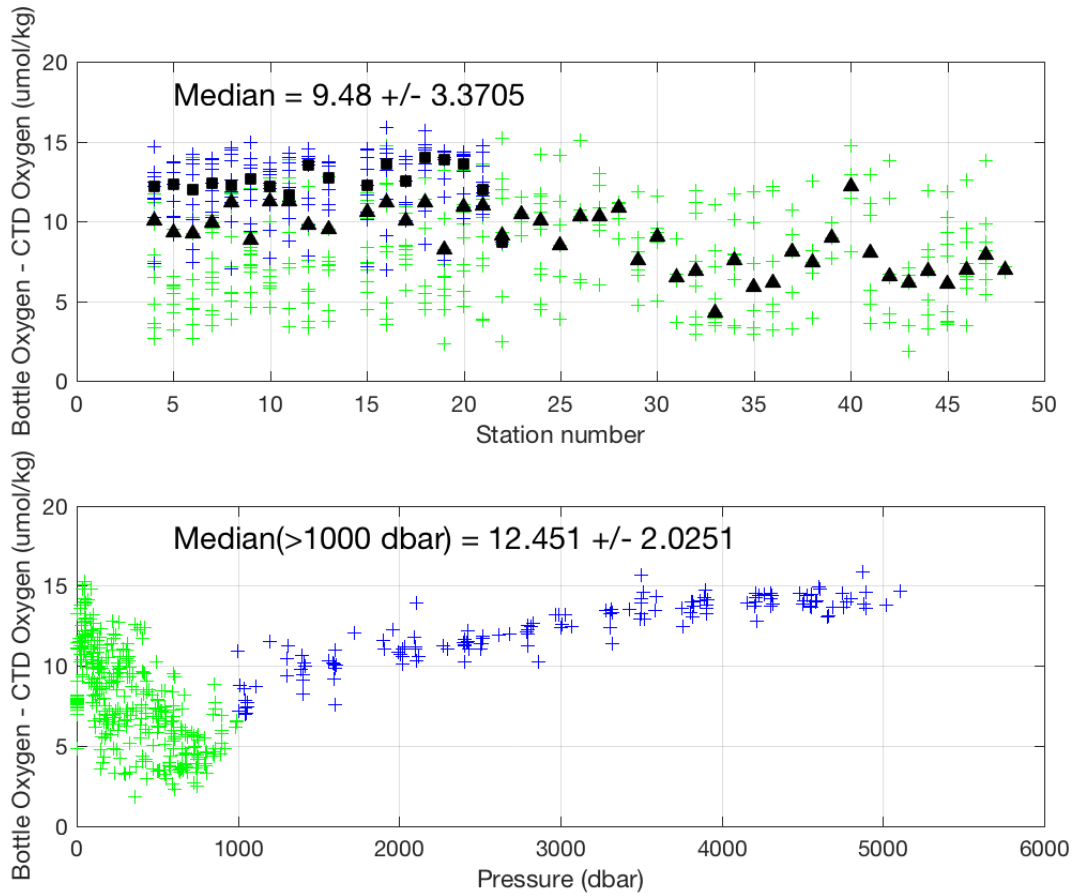


Figure 21: Bottle and uncalibrated secondary CTD oxygen differences plotted against station number. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.

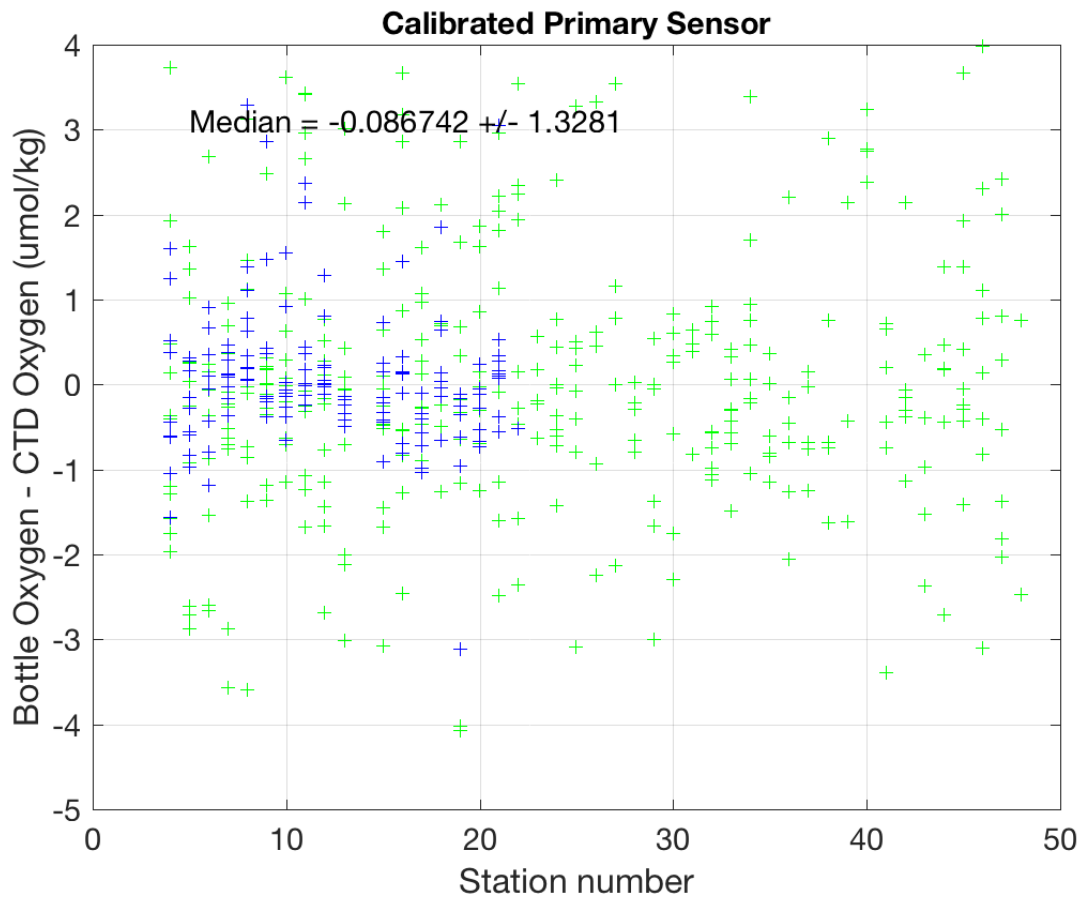


Figure 22: Bottle and calibrated secondary CTD oxygen differences plotted vs. station.

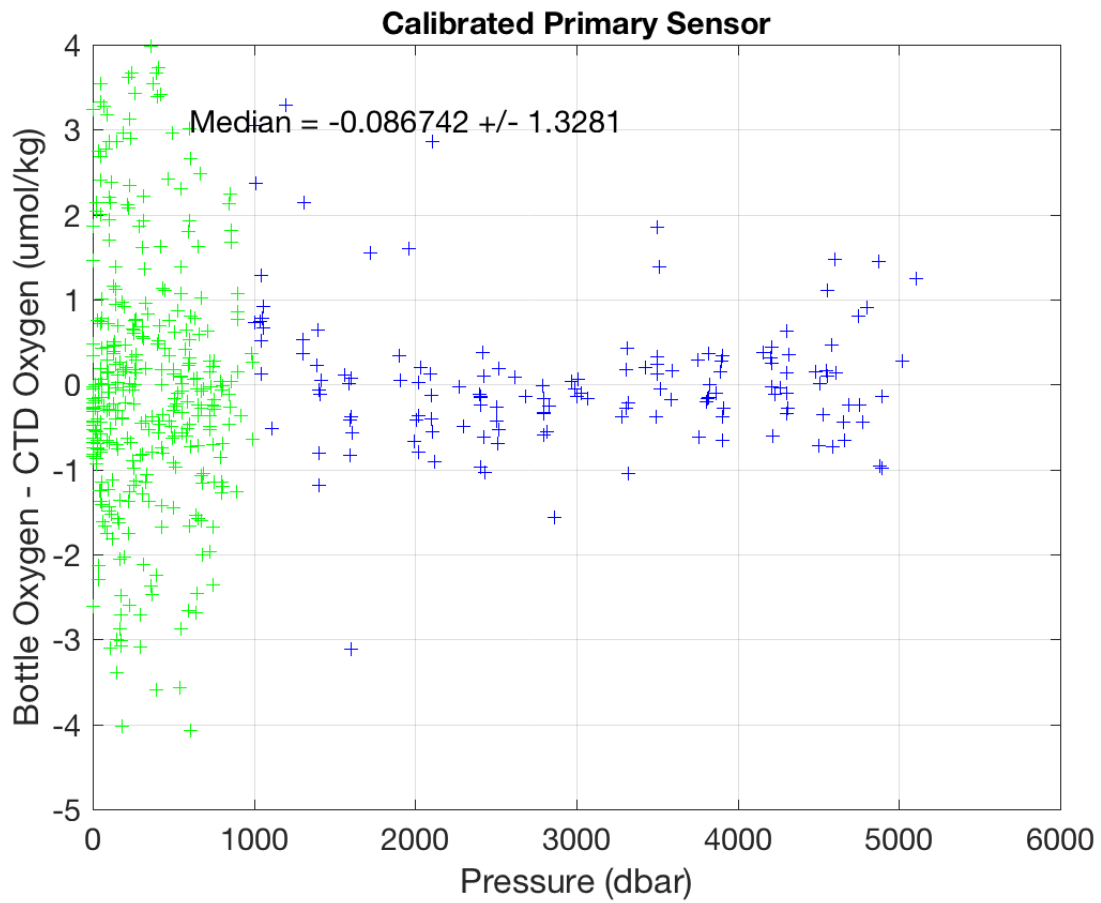


Figure 23: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure.

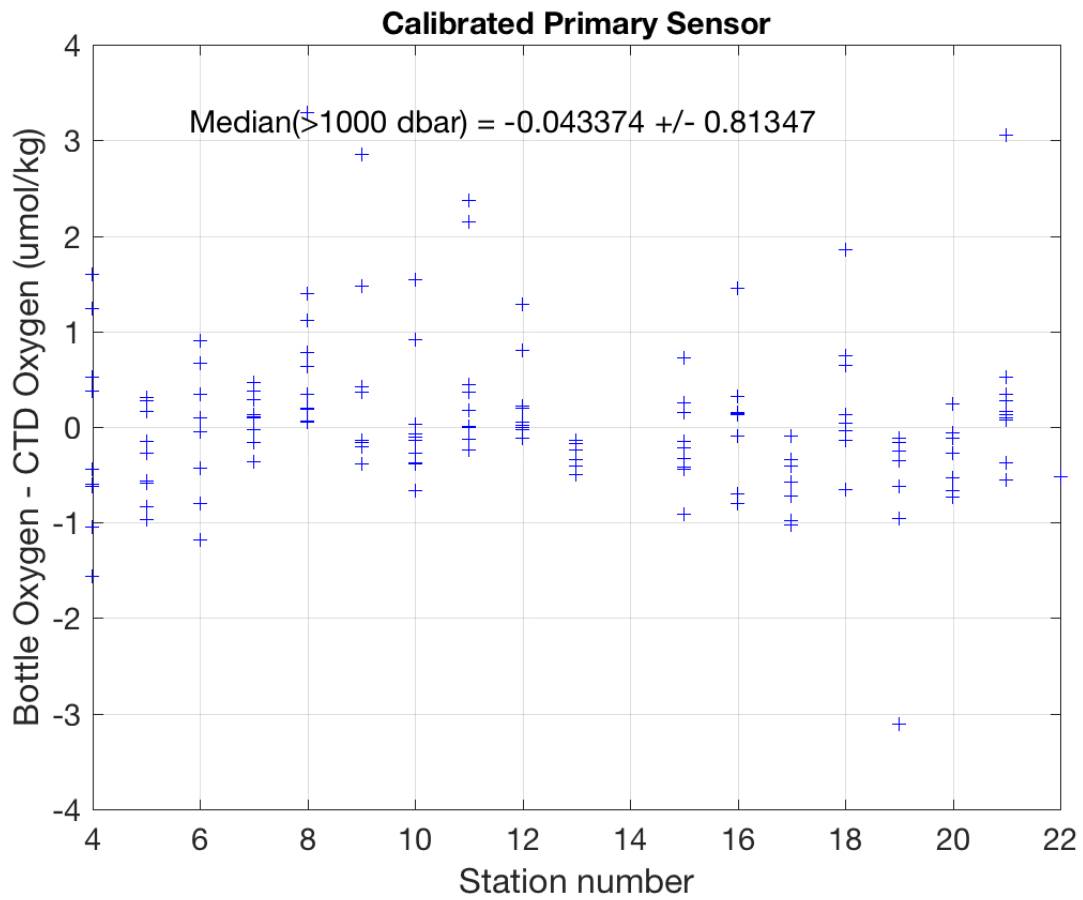


Figure 24: Bottle and calibrated secondary CTD oxygen differences plotted vs. station below 1000 dbar.

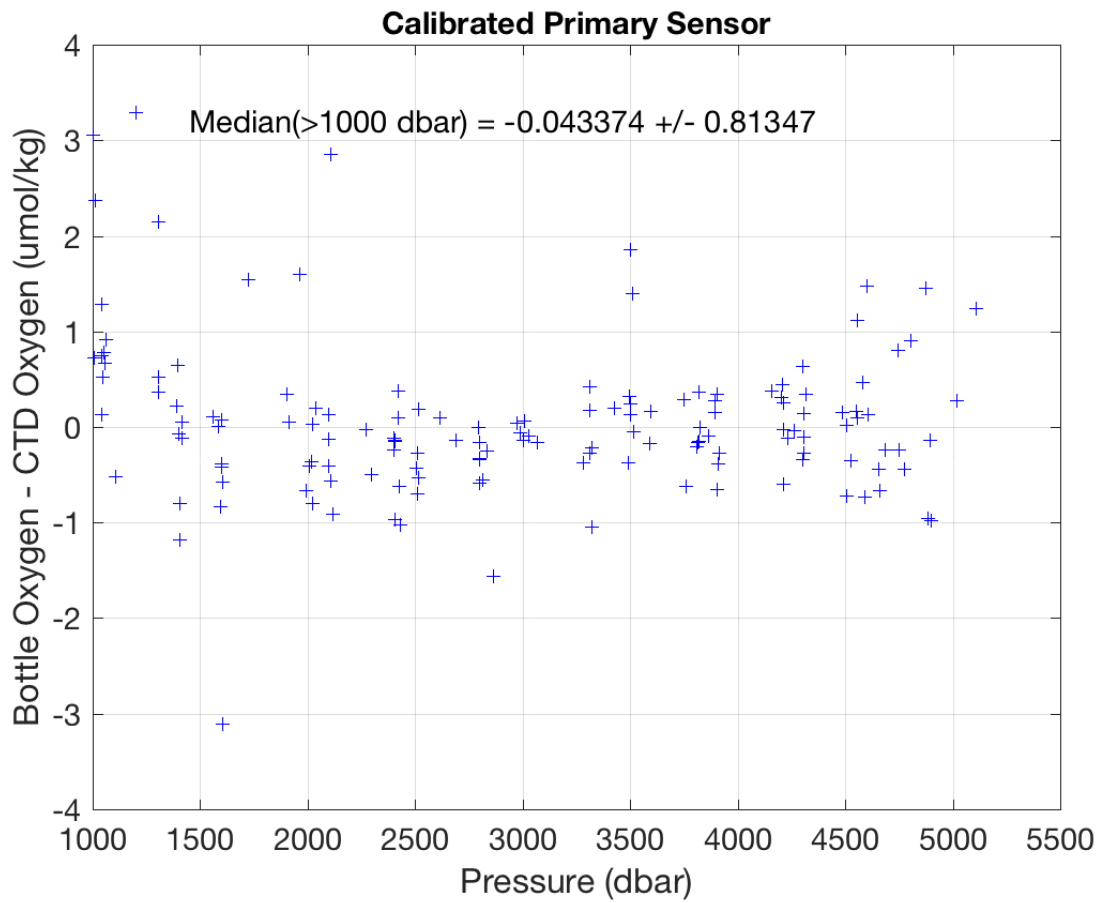


Figure 25: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure below 1000 dbar.

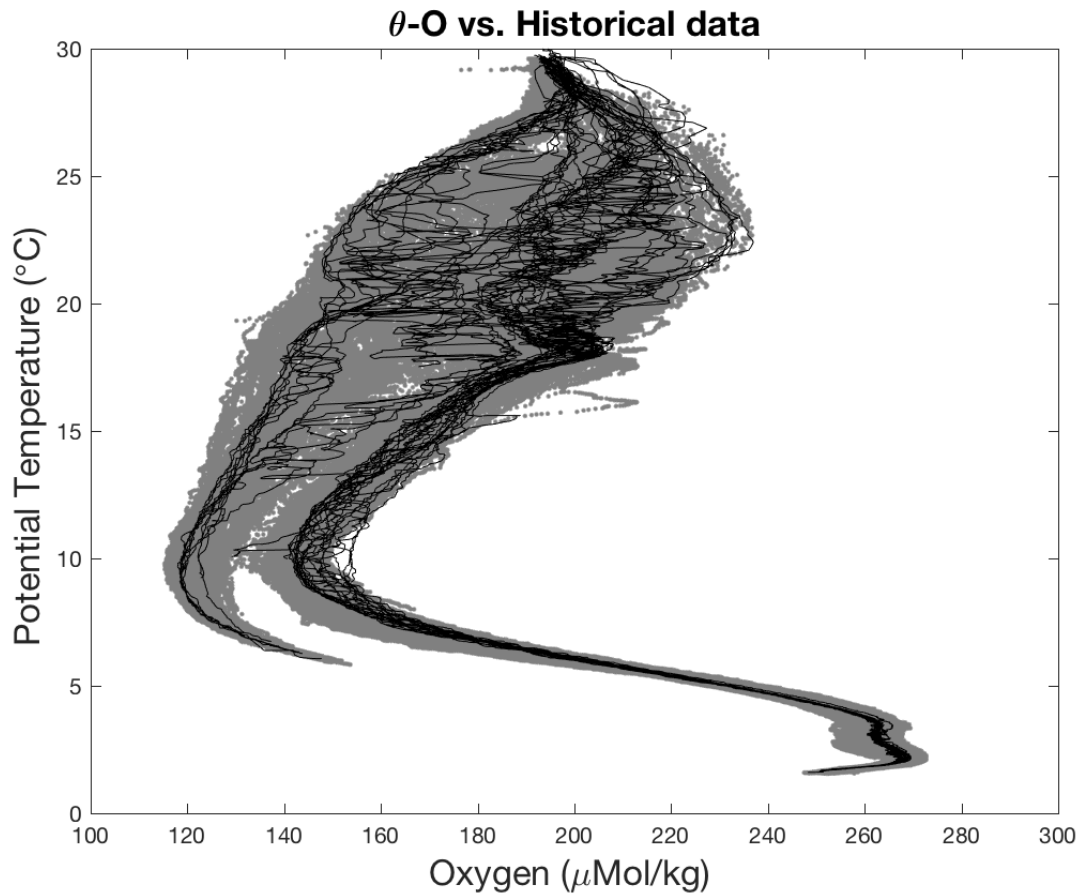


Figure 26: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

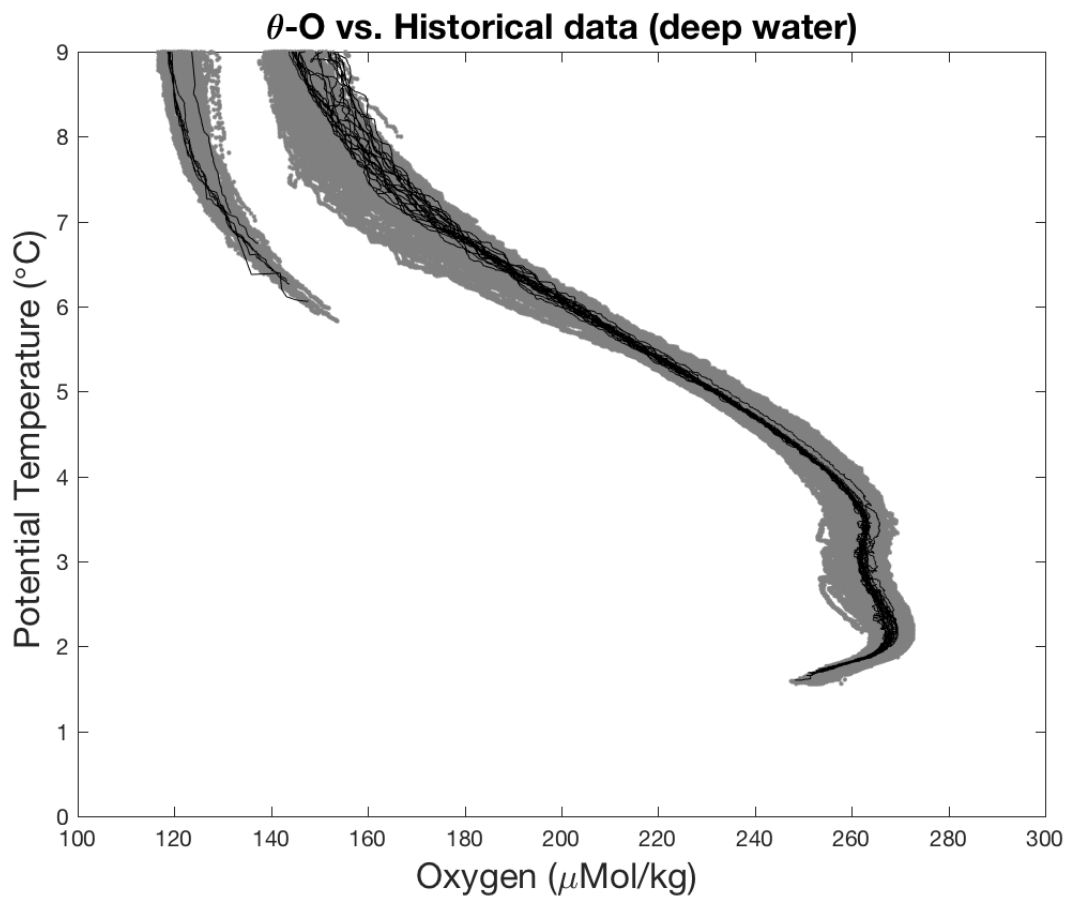


Figure 27: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.



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## 9 *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).

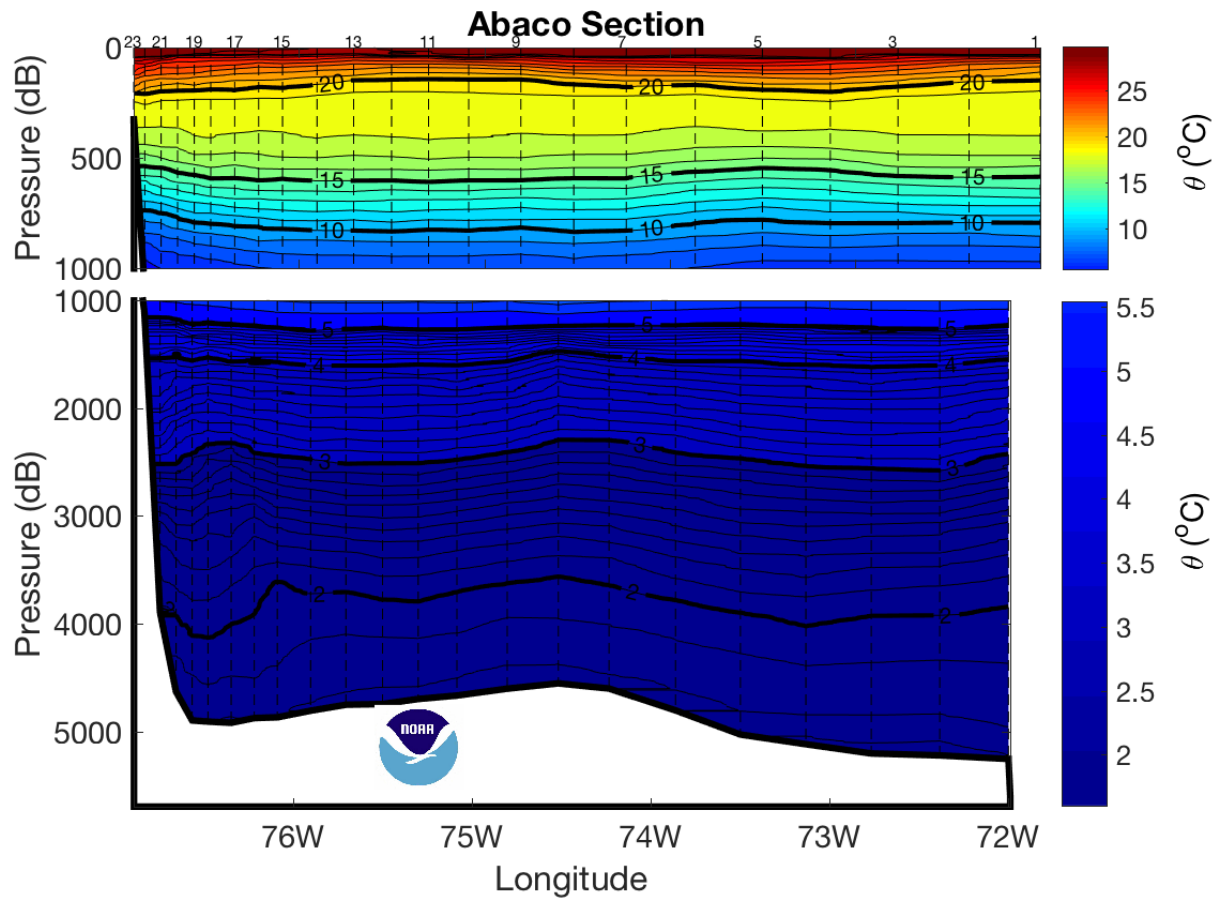


Figure 28: Potential Temperature ( $^{\circ}\text{C}$ ) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

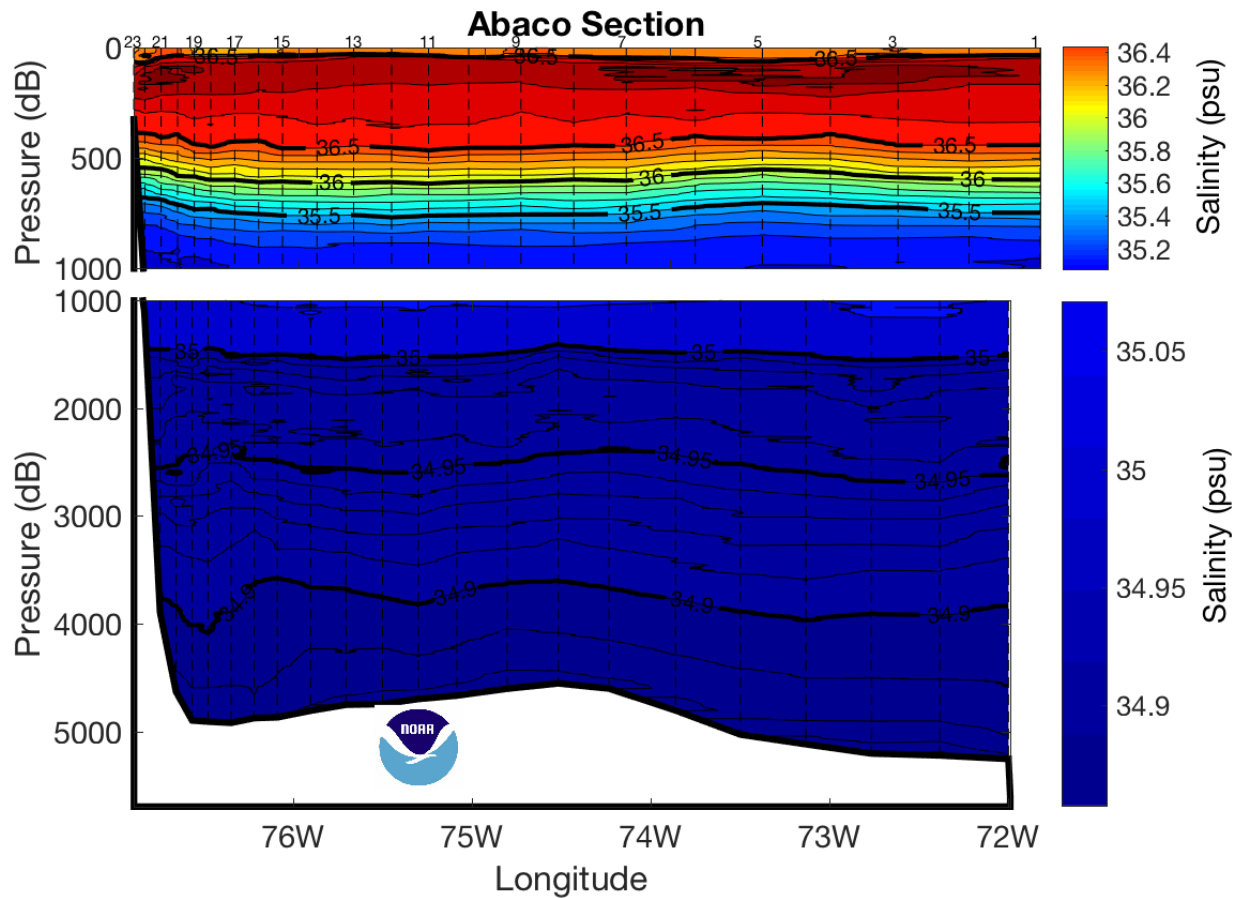


Figure 29: Salinity (PSS 78) section for the Abaco section. Dashed vertical lines are the CTD station locations.

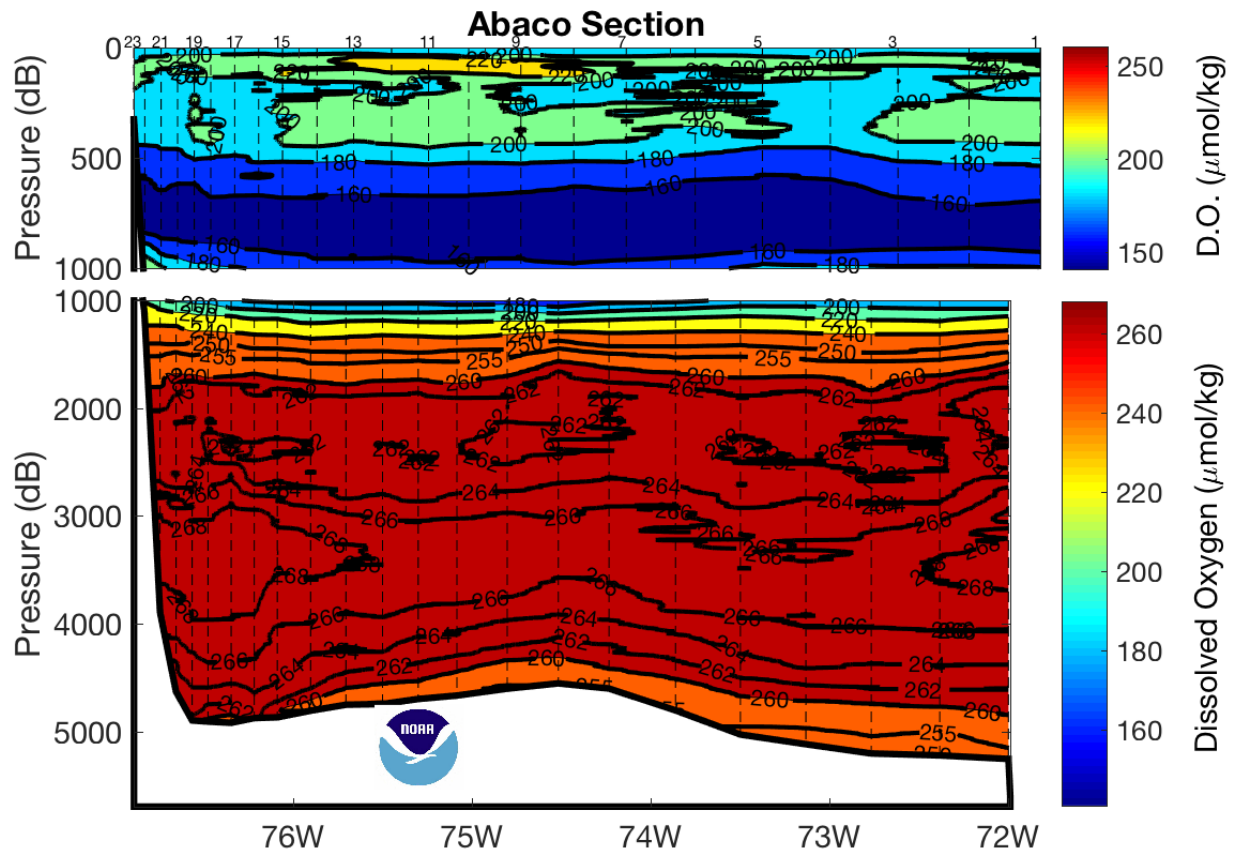


Figure 30: Dissolved Oxygen ( $\mu\text{mol/kg}$ ) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

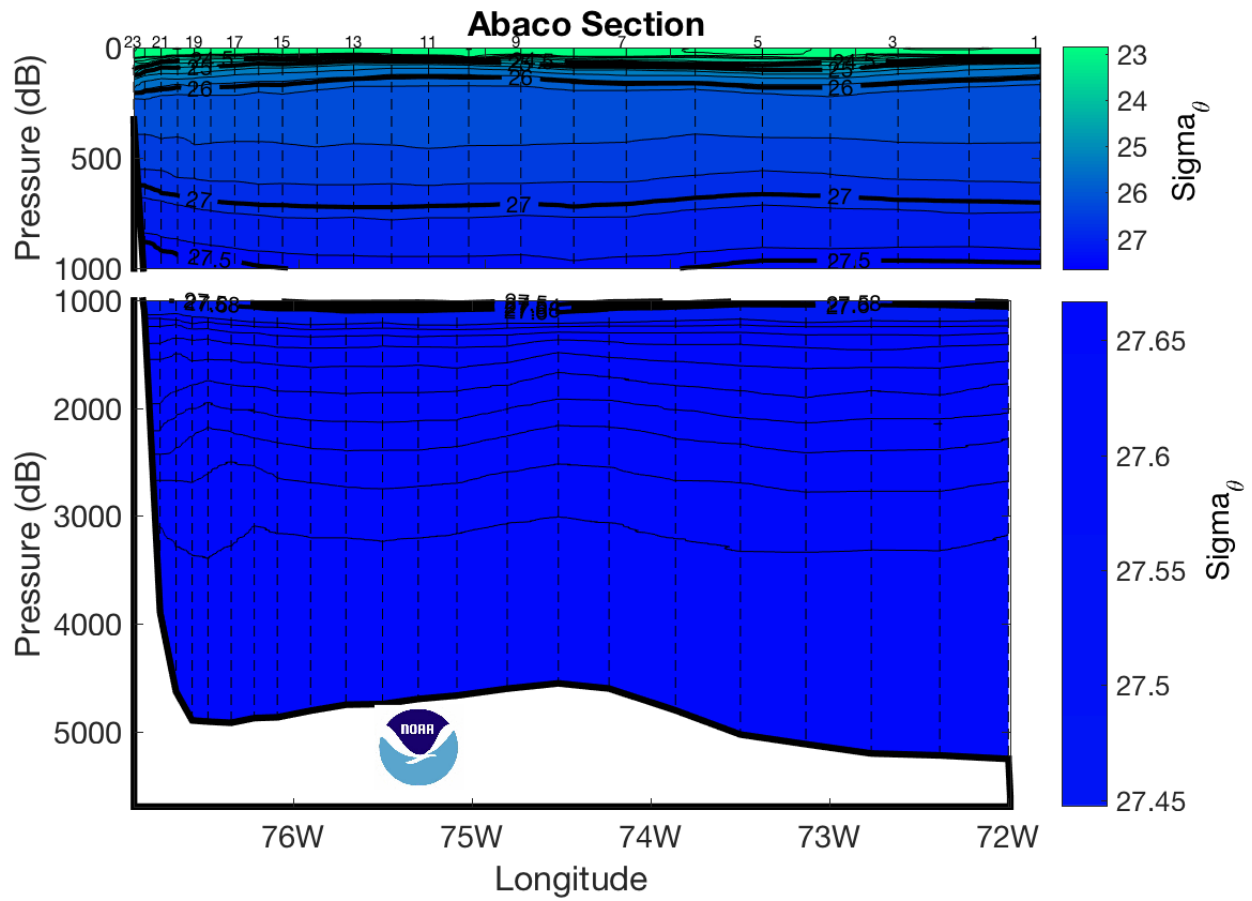


Figure 31: Neutral density (kg/m<sup>3</sup>) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

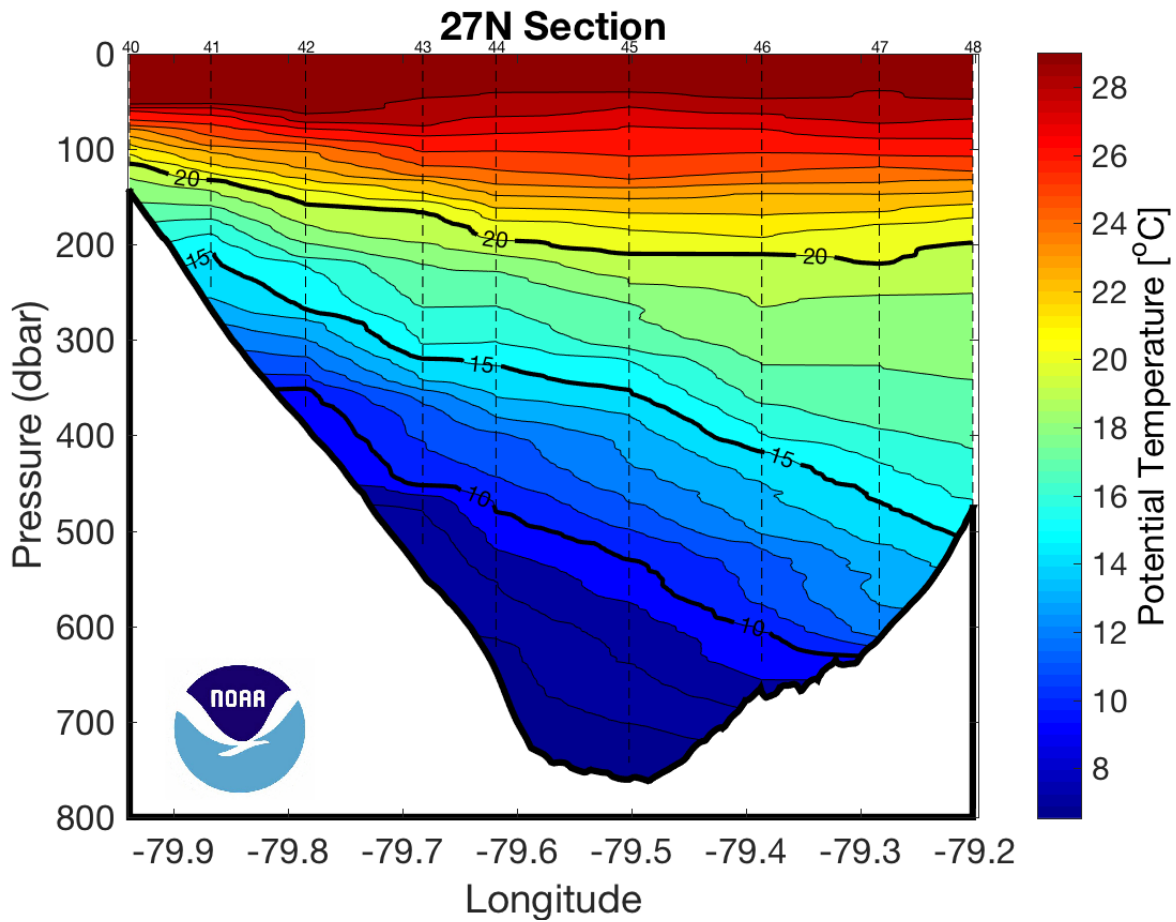


Figure 32: Potential Temperature (°C) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

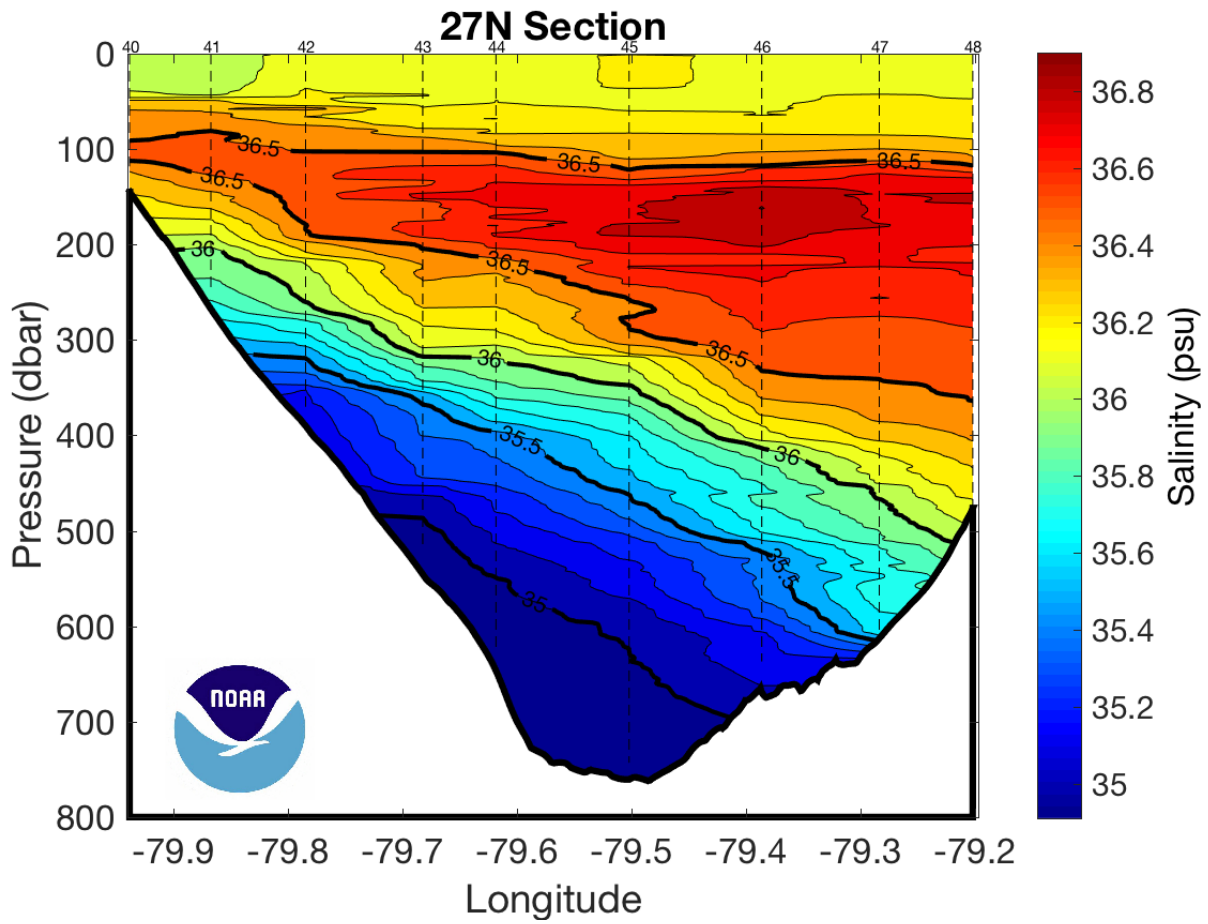


Figure 33: Salinity (PSS 78) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

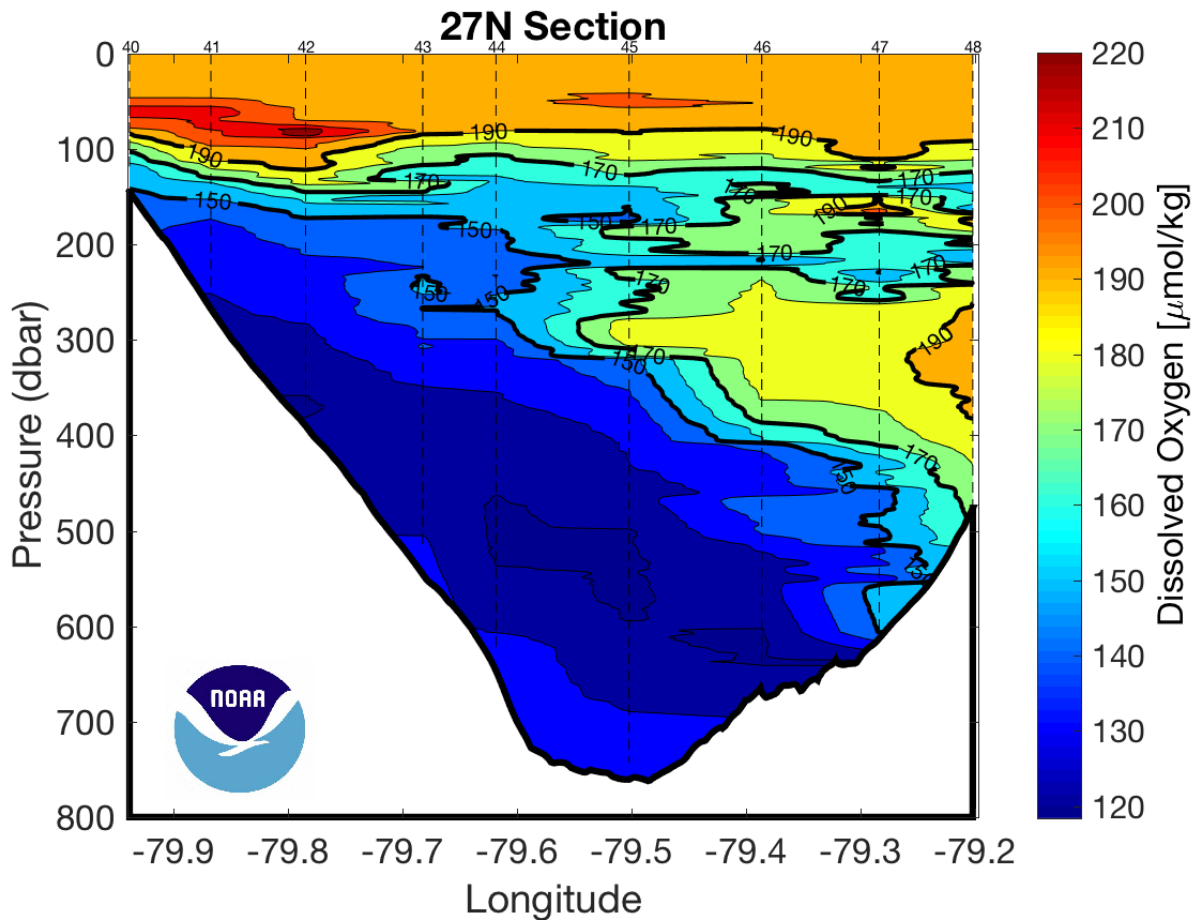


Figure 34: Dissolved Oxygen ( $\mu\text{mol}/\text{kg}$ ) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.



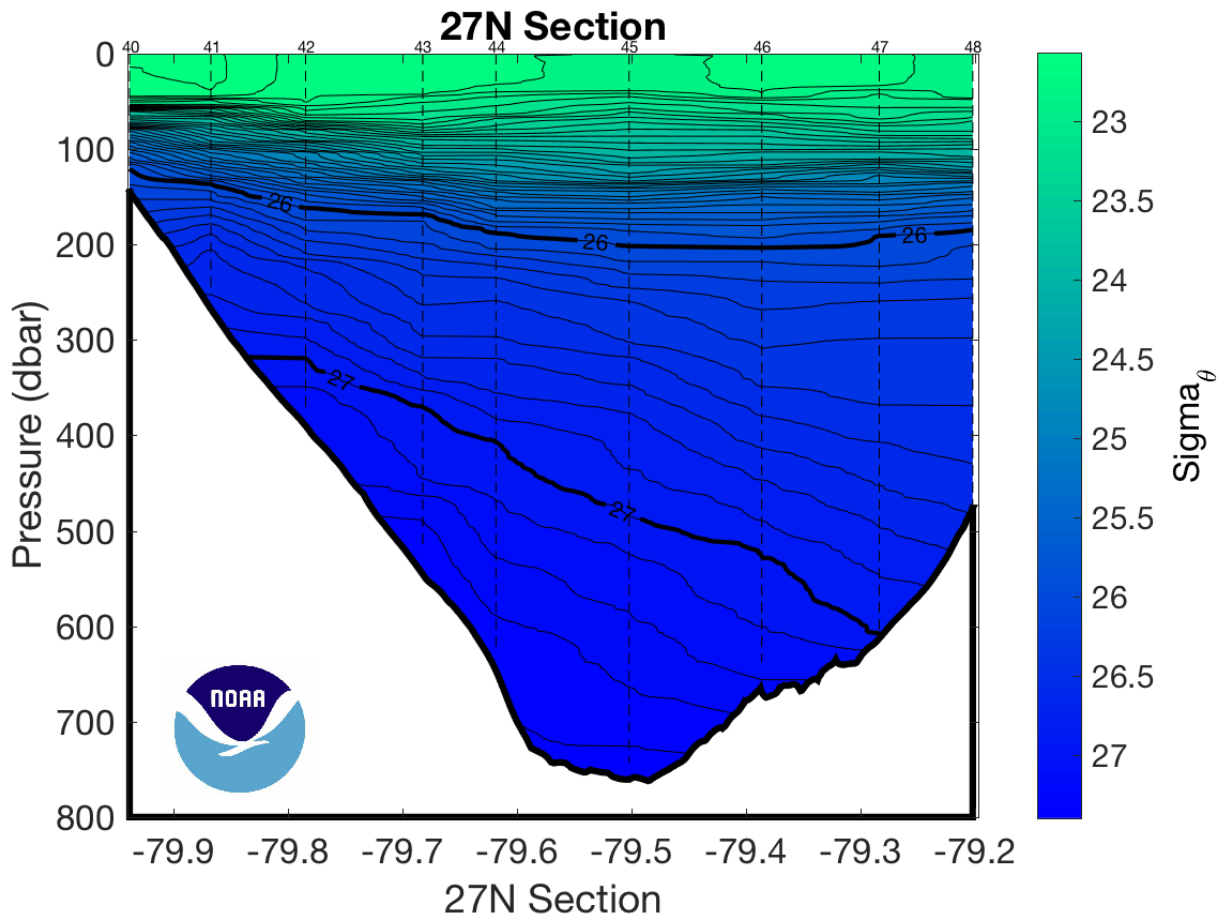


Figure 35: Neutral density (kg/m<sup>3</sup>) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

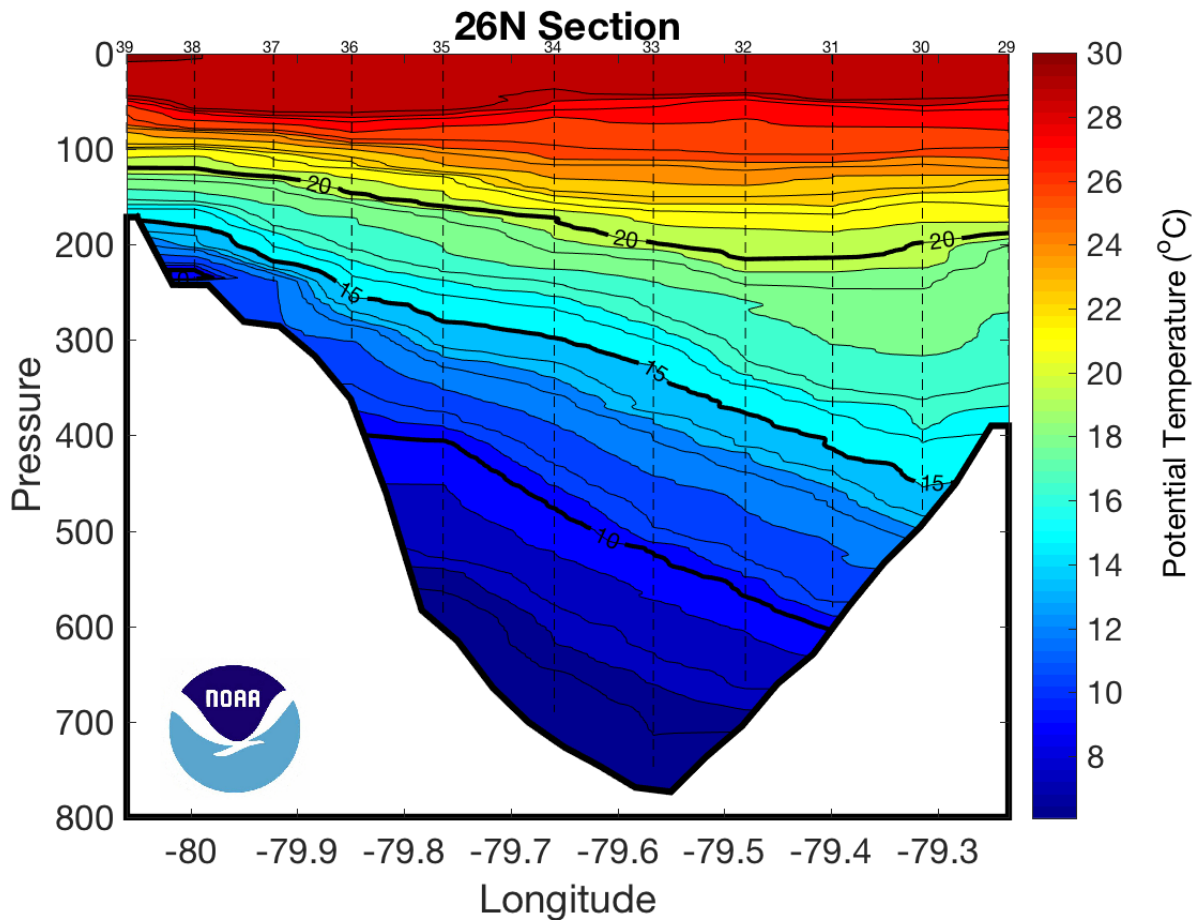


Figure 36: Potential Temperature (°C) section for the Florida Current South section. Contour intervals are 1°C. Dashed vertical lines are the CTD station locations.

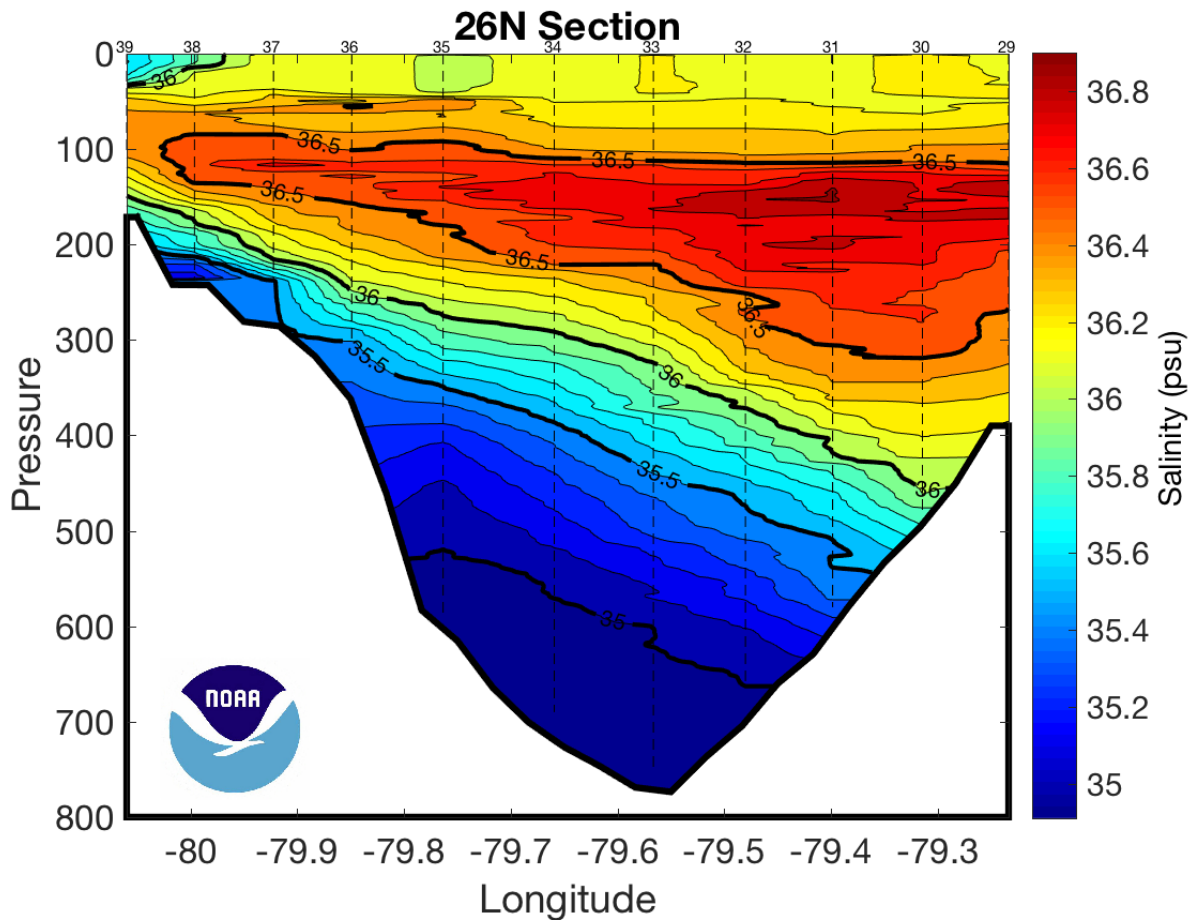


Figure 37: Salinity (PSS 78) section for the Florida Current South section. Contour intervals are 0.1. Dashed vertical lines are the CTD station locations.

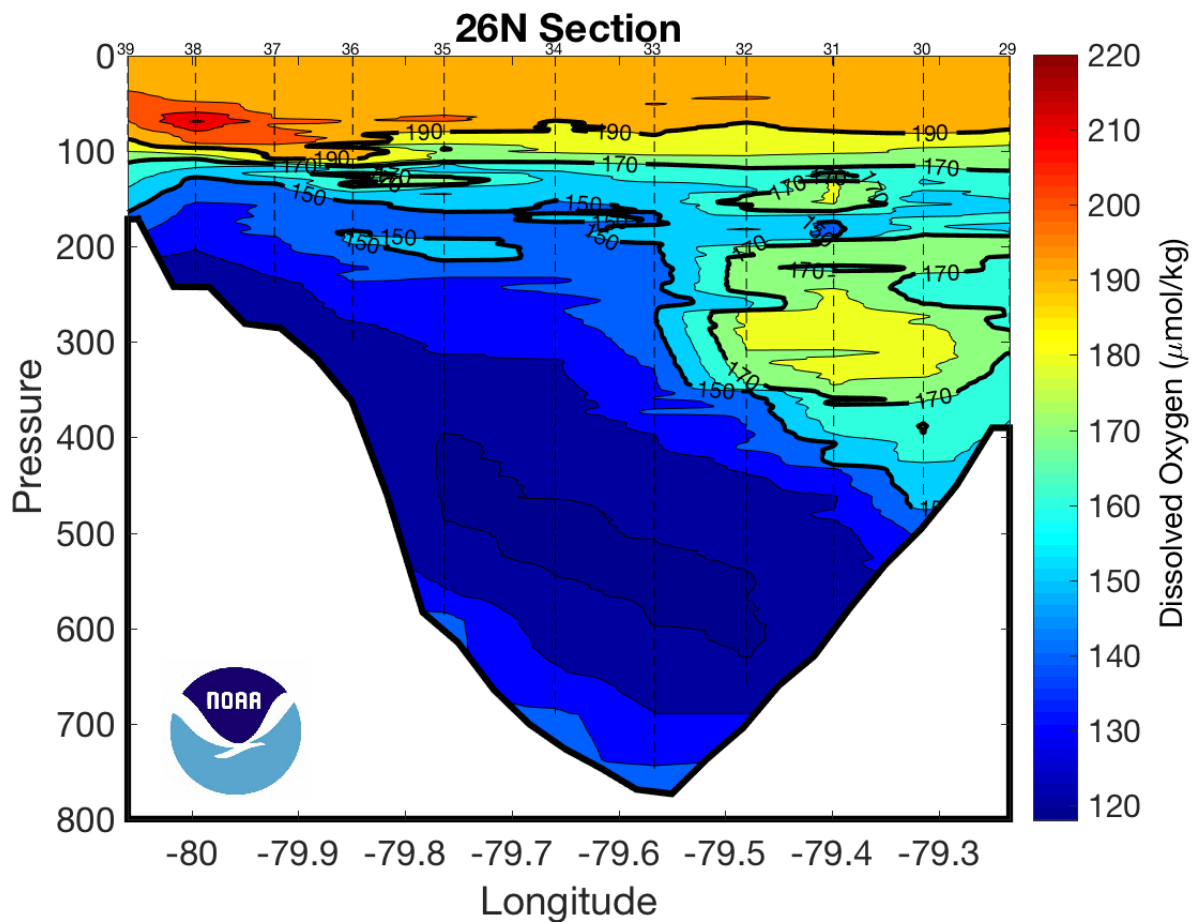


Figure 38: Dissolved Oxygen ( $\mu\text{mol/kg}$ ) section for the Florida Current South section. Contour intervals are  $\approx 20 \mu\text{mol/kg}$ . Dashed vertical lines are the CTD station locations.

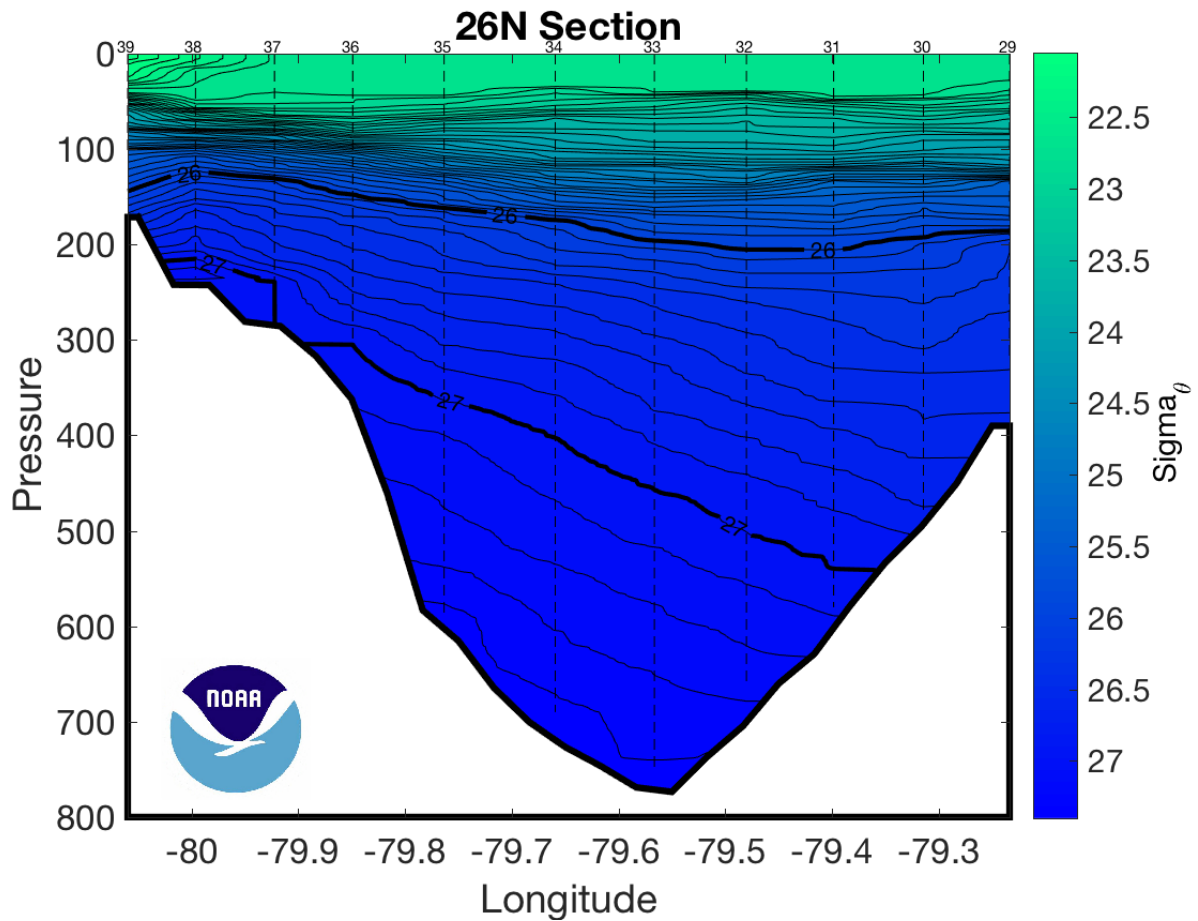


Figure 39: Neutral density (kg/m<sup>3</sup>) section for the Florida Current South section. Contour intervals are 0.1 kg/m<sup>3</sup>. Dashed vertical lines are the CTD station locations.

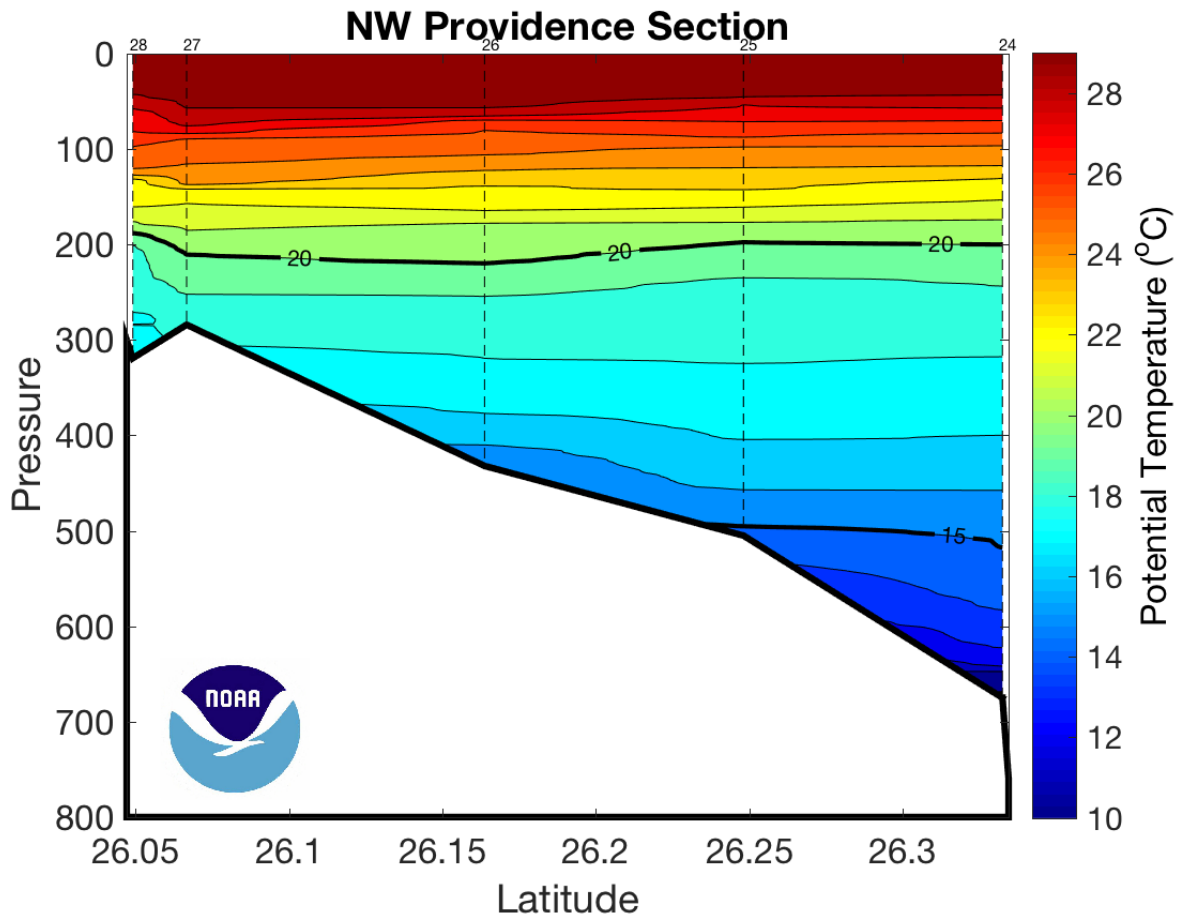


Figure 40: Potential Temperature (°C) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

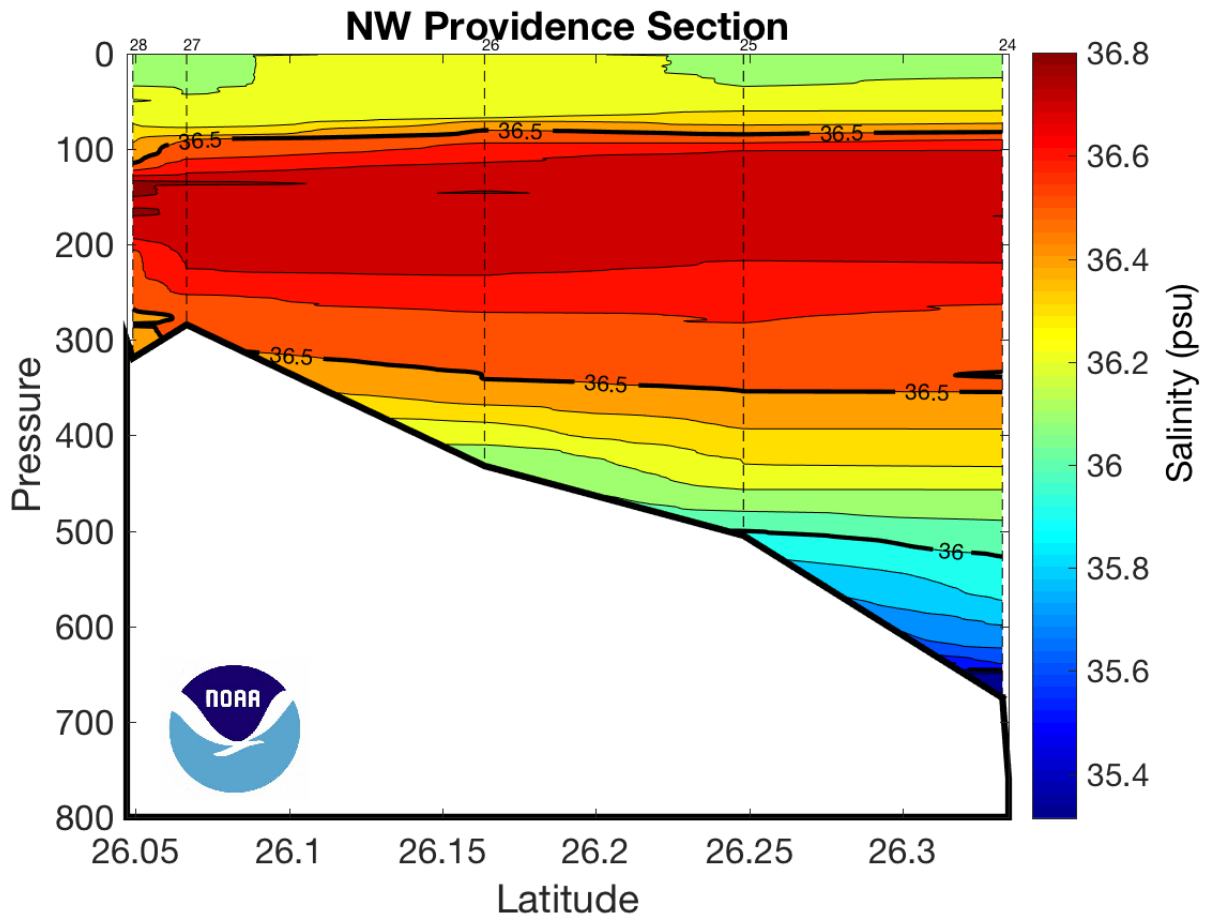


Figure 41: Salinity (PSS 78) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

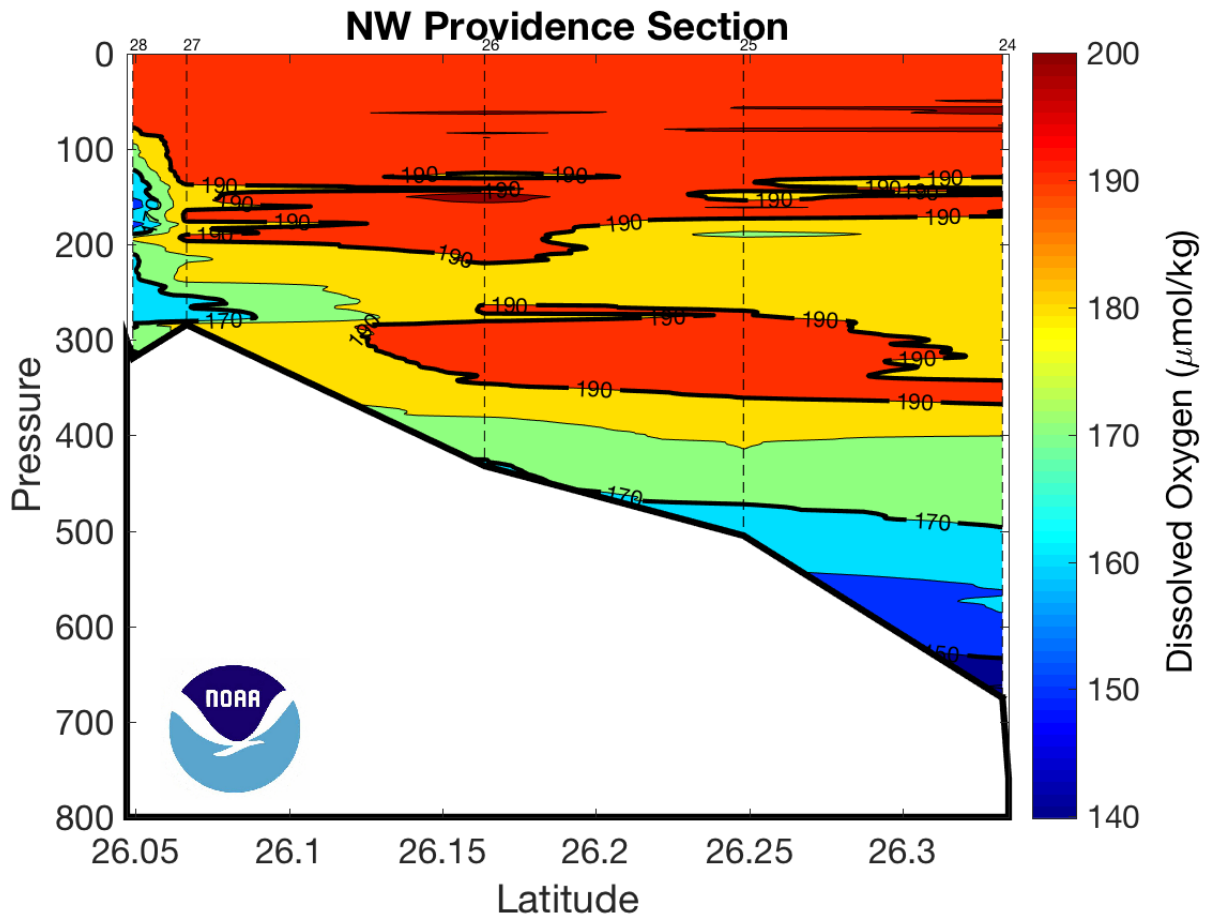


Figure 42: Dissolved Oxygen ( $\mu\text{mol/kg}$ ) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.



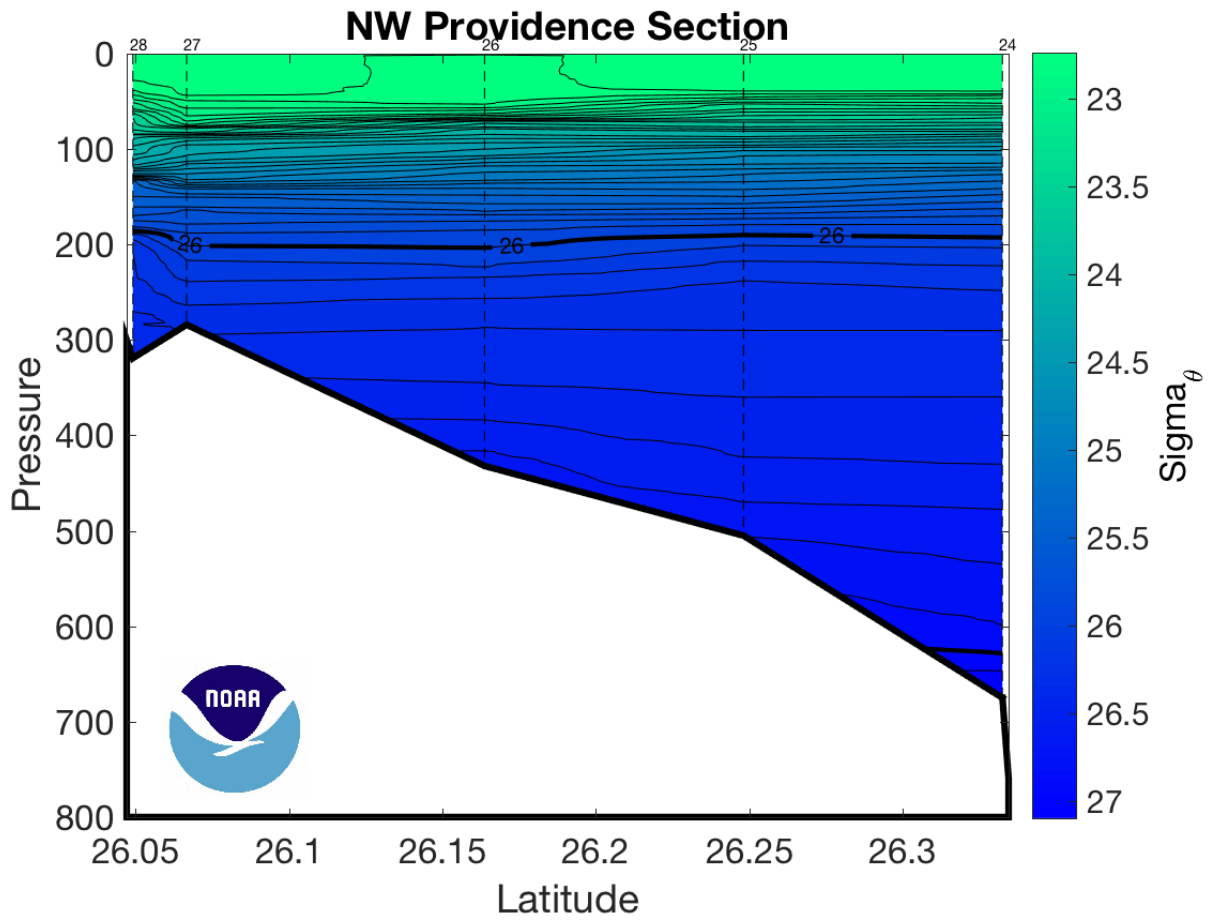


Figure 43: Neutral density ( $\text{kg}/\text{m}^3$ ) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

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## *10 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.

The U.S. Western Boundary Time Series Program is sponsored by NOAA's Office of Climate Observation. The U.S. Meridional Overturning Heat transport and Circulation Array is sponsored by the National Science Foundation's Physical Oceanography Program. The UK RAPID/MOC program is sponsored by the National Environmental Research Council (NERC). In particular, we wish to thank program managers Jim Todd (NOAA), Diane Stanitski (NOAA), David Legler (NOAA), Mike Johnson (NOAA), Eric Itsweire (NSF/OCE), and MERIC Srokosz (NERC) for their financial support in the effort. This research was also carried out in part under the auspices of the Cooperative Institute of Marine and Atmospheric Studies (CIMAS), a Cooperative Institute of the University of Miami and the National Oceanic and Atmospheric Administration (NOAA), cooperative agreement #NA10OAR4320143. Additional support was provided by OAA's Atlantic Oceanographic and Meteorological Laboratory.

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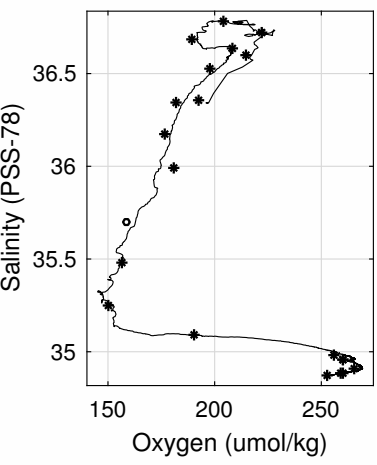
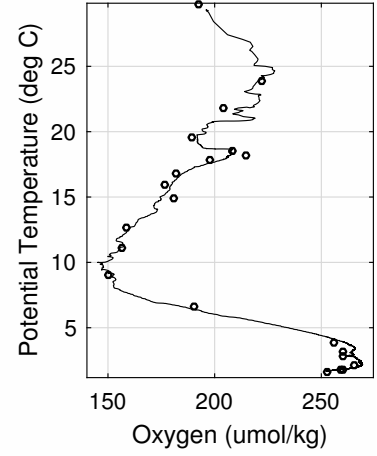
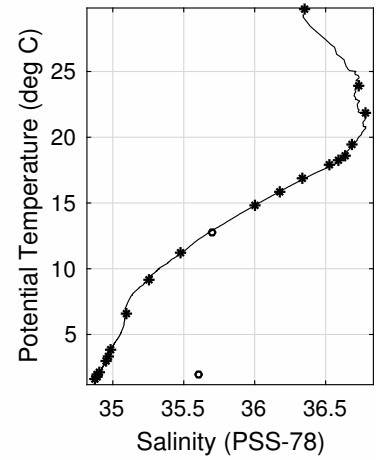
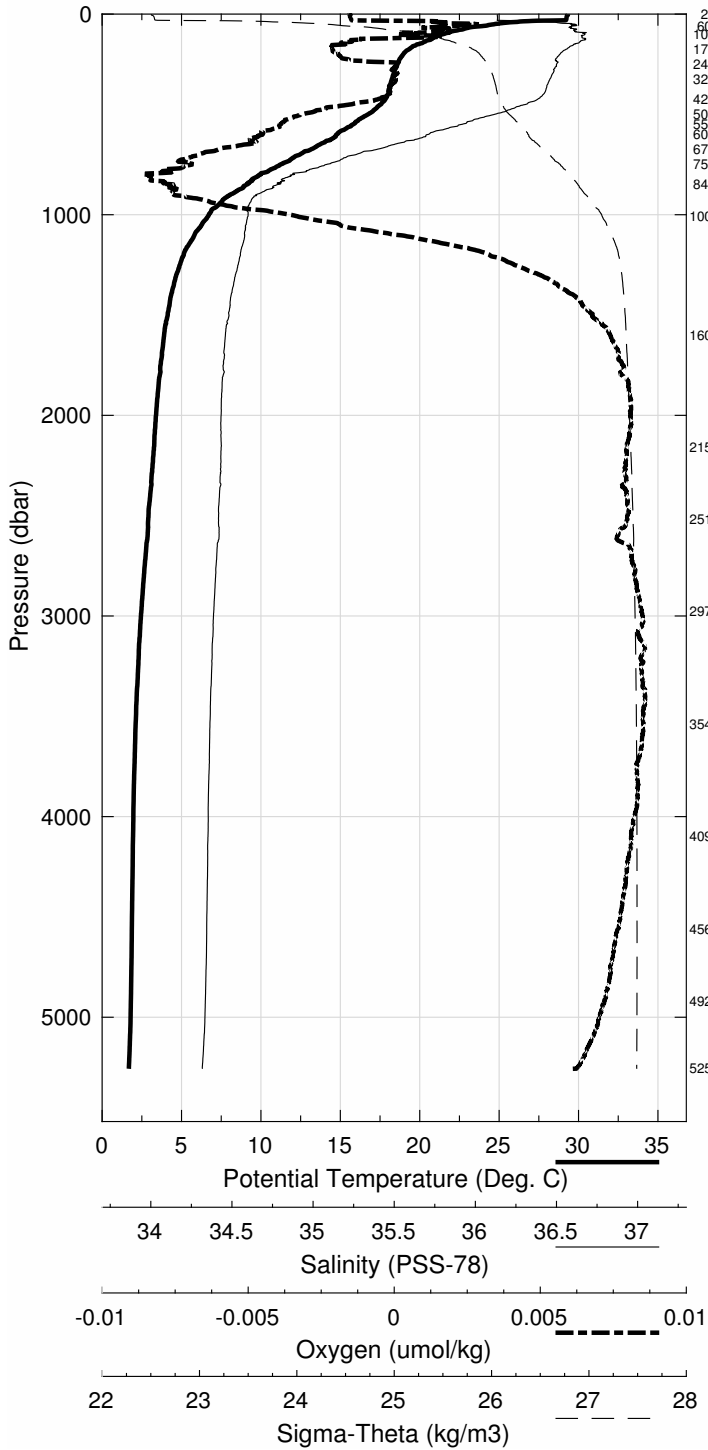
## *A Hydrographic - CTD Data*

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 1 (CTD001)  
 Latitude 26.501N Longitude 72.000W  
 13-Sep-2007 16:51Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.330	29.330	36.343	196.1	0.005	22.962
10	29.268	29.265	36.343	196.7	0.049	22.983
20	29.246	29.241	36.343	196.6	0.098	22.992
30	29.215	29.208	36.342	196.5	0.146	23.002
50	24.726	24.715	36.728	227.4	0.221	24.735
75	22.779	22.764	36.739	220.5	0.294	25.322
100	21.493	21.473	36.781	211.3	0.355	25.719
125	20.740	20.716	36.780	199.0	0.410	25.927
150	19.937	19.909	36.727	196.1	0.461	26.104
200	19.000	18.964	36.655	193.3	0.554	26.296
250	18.642	18.598	36.638	208.0	0.642	26.377
300	18.394	18.341	36.616	207.7	0.728	26.425
400	18.066	17.996	36.573	205.3	0.898	26.478
500	16.818	16.735	36.327	184.2	1.065	26.597
600	14.870	14.778	35.995	174.8	1.217	26.789
700	12.549	12.453	35.637	159.1	1.353	26.996
800	10.072	9.975	35.325	146.4	1.467	27.210
900	8.141	8.045	35.135	152.9	1.562	27.373
1000	6.814	6.716	35.097	181.6	1.641	27.534
1100	5.919	5.818	35.080	207.7	1.706	27.639
1200	5.246	5.141	35.059	230.8	1.763	27.705
1300	4.776	4.666	35.033	243.2	1.815	27.740
1400	4.465	4.349	35.013	251.5	1.865	27.759
1500	4.253	4.130	35.001	256.1	1.913	27.774
1750	3.818	3.677	34.973	263.9	2.030	27.798
2000	3.556	3.395	34.962	265.6	2.145	27.817
2500	3.121	2.919	34.949	264.9	2.368	27.852
3000	2.689	2.445	34.924	268.6	2.584	27.874
3500	2.424	2.133	34.908	268.7	2.794	27.887
4000	2.309	1.966	34.898	266.6	3.007	27.892
4500	2.279	1.879	34.891	263.0	3.229	27.894
5000	2.253	1.792	34.881	258.0	3.462	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5257	1	2.175	1.684	34.868	253.1
4920	2	2.260	1.809	34.883	259.0
4560	3	2.279	1.871	34.890	260.2
4100	4	2.303	1.945	35.601	-999.0
3540	5	2.401	2.107	34.906	265.3
2980	6	2.708	7.140	-999.000	-999.0
2519	7	3.116	2.912	34.952	259.7
2160	8	3.426	3.252	34.963	260.2
1600	9	4.036	3.906	34.985	255.5
1009	10	6.649	6.551	35.092	190.2
850	11	9.217	9.119	35.252	150.3
751	12	11.235	11.139	35.479	157.0
675	13	12.893	12.798	35.697	158.8
601	15	14.896	14.803	35.997	180.7
550	16	15.960	15.872	36.173	176.2
500	17	16.900	16.817	36.340	181.6
425	18	17.902	17.828	36.532	198.2
325	19	18.290	18.232	36.598	214.6
250	20	18.642	18.598	36.632	208.1
175	21	19.512	19.479	36.690	189.2
100	22	21.872	21.852	36.779	204.6
60	23	23.858	23.845	36.727	222.1
2	24	29.703	29.703	36.351	192.1

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 1 (CTD001)  
 Latitude 26.501 N Longitude 72.000 W  
 13-Sep-2007 16:51 Z

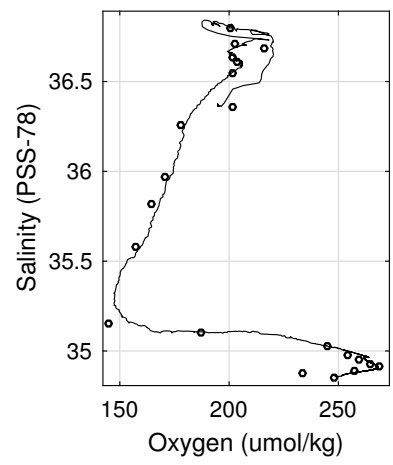
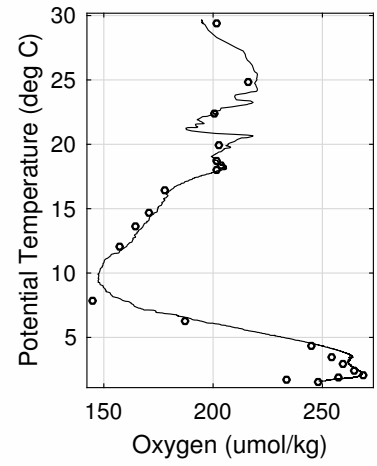
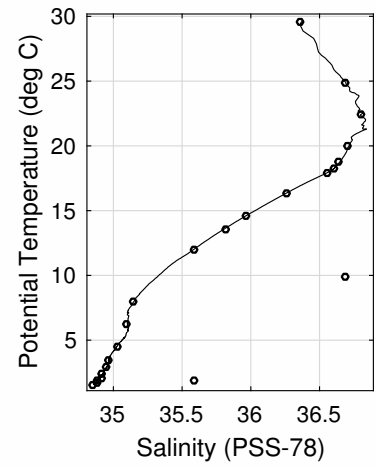
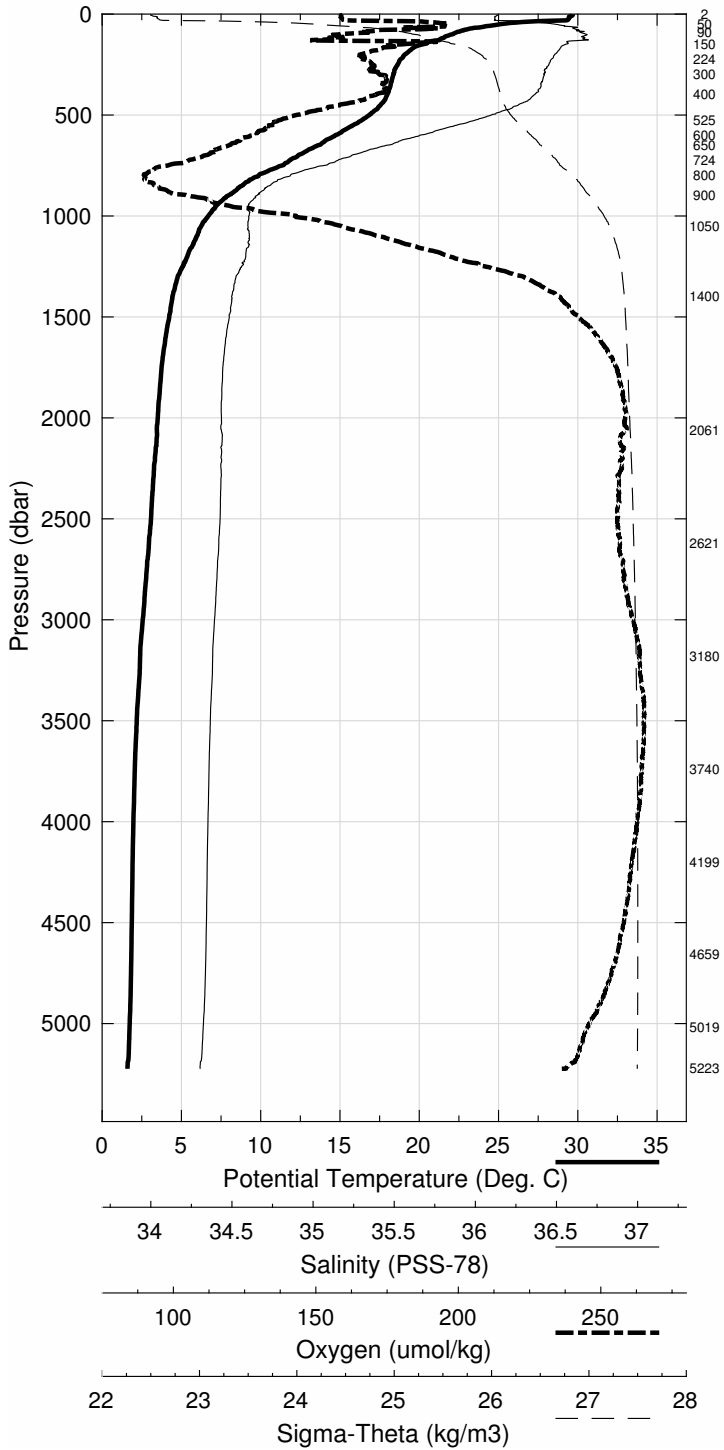


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 2 (CTD002)  
 Latitude 26.500N Longitude 72.384W  
 13-Sep-2007 22:48Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.682	29.682	36.380	194.6	0.005	22.870
10	29.589	29.587	36.370	194.6	0.050	22.895
20	29.447	29.442	36.364	195.1	0.099	22.939
30	29.342	29.335	36.366	195.9	0.148	22.977
50	25.135	25.124	36.670	219.9	0.226	24.566
75	23.072	23.057	36.776	214.2	0.302	25.264
100	22.108	22.087	36.830	194.7	0.366	25.585
125	21.321	21.297	36.827	192.1	0.424	25.804
150	20.230	20.202	36.725	209.5	0.477	26.024
200	19.121	19.085	36.669	199.6	0.572	26.276
250	18.679	18.635	36.639	202.6	0.661	26.368
300	18.422	18.369	36.617	204.0	0.747	26.418
400	18.044	17.974	36.565	203.4	0.918	26.477
500	16.923	16.839	36.345	184.1	1.085	26.585
600	14.794	14.702	35.981	173.6	1.238	26.794
700	12.456	12.360	35.632	162.0	1.372	27.010
800	9.970	9.874	35.319	147.7	1.486	27.223
900	8.018	7.923	35.145	158.2	1.579	27.399
1000	6.782	6.684	35.107	184.2	1.656	27.547
1100	6.059	5.957	35.109	203.9	1.720	27.644
1200	5.483	5.376	35.091	221.2	1.778	27.703
1300	4.881	4.770	35.042	239.0	1.830	27.735
1400	4.543	4.426	35.019	247.8	1.881	27.756
1500	4.356	4.231	35.007	252.4	1.930	27.767
1750	3.890	3.748	34.974	261.5	2.049	27.792
2000	3.672	3.509	34.967	263.5	2.166	27.810
2500	3.287	3.081	34.960	261.8	2.396	27.846
3000	2.805	2.559	34.931	265.6	2.619	27.870
3500	2.474	2.182	34.910	268.0	2.835	27.885
4000	2.316	1.972	34.898	266.4	3.049	27.892
4500	2.271	1.871	34.890	263.2	3.271	27.894
5000	2.197	1.738	34.875	254.9	3.502	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5223	1	2.086	1.602	34.857	248.3
5020	2	2.198	1.737	34.873	233.5
4660	3	2.260	1.841	34.886	257.1
4200	4	2.291	1.921	35.586	-999.0
3741	5	2.379	2.063	34.910	268.6
3181	6	2.654	2.392	34.921	265.0
2621	7	3.168	2.953	34.954	259.6
2061	8	3.627	3.459	34.972	254.4
1400	9	4.560	4.442	35.023	244.7
1050	10	6.347	6.248	35.101	186.8
901	11	8.021	7.926	35.149	145.3
800	12	9.960	9.862	36.691	-999.0
725	13	12.084	11.986	35.584	157.0
650	15	13.724	13.630	35.814	164.9
601	16	14.742	14.651	35.966	170.6
525	17	16.428	16.342	36.255	177.9
400	18	17.995	17.926	36.552	201.2
300	19	18.383	18.330	36.608	203.5
225	20	18.757	18.716	36.639	202.1
151	21	19.936	19.908	36.707	202.6
90	22	22.421	22.403	36.797	200.5
51	23	24.862	24.851	36.687	215.6
2	24	29.505	29.505	36.360	201.8

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 2 (CTD002)  
 Latitude 26.500 N Longitude 72.384 W  
 13-Sep-2007 22:48 Z



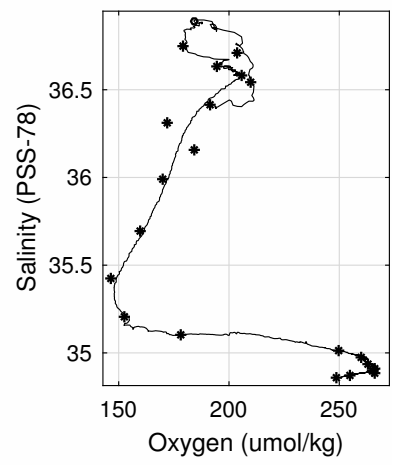
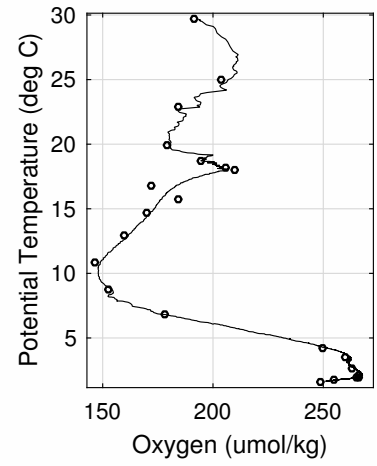
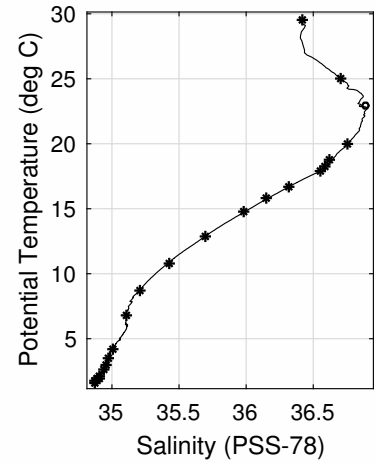
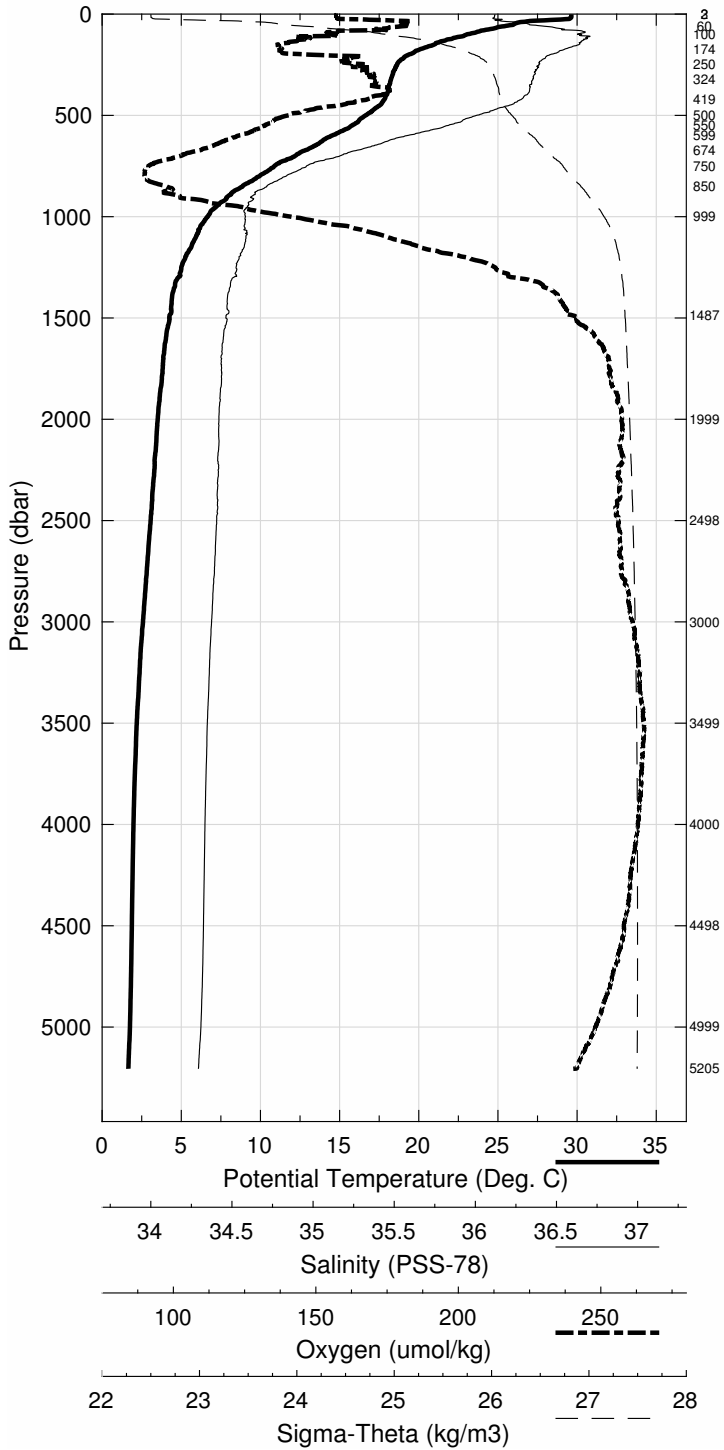


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 3 (CTD003)  
 Latitude 26.500N Longitude 72.767W  
 14-Sep-2007 05:01Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.639	29.639	36.404	193.8	0.005	22.903
10	29.630	29.627	36.401	194.0	0.050	22.904
20	29.575	29.570	36.393	194.0	0.099	22.918
30	28.135	28.128	36.404	205.7	0.147	23.409
50	26.013	26.002	36.580	209.0	0.225	24.225
75	24.468	24.452	36.765	203.3	0.310	24.843
100	23.055	23.034	36.852	194.2	0.382	25.329
125	21.844	21.819	36.864	186.3	0.445	25.686
150	21.004	20.975	36.841	180.1	0.501	25.903
200	19.404	19.367	36.691	187.3	0.601	26.219
250	18.668	18.623	36.632	200.0	0.690	26.366
300	18.390	18.337	36.607	202.4	0.777	26.419
400	18.015	17.945	36.562	204.7	0.947	26.483
500	16.717	16.634	36.308	182.4	1.113	26.606
600	14.594	14.503	35.946	170.5	1.265	26.811
700	12.280	12.185	35.598	156.6	1.398	27.018
800	10.034	9.938	35.319	148.1	1.510	27.212
900	8.030	7.934	35.140	156.6	1.604	27.394
1000	6.773	6.676	35.108	183.0	1.680	27.549
1100	6.017	5.915	35.110	206.1	1.744	27.651
1200	5.359	5.252	35.075	224.9	1.800	27.705
1300	4.925	4.813	35.046	236.5	1.853	27.733
1400	4.530	4.414	35.015	247.2	1.903	27.753
1500	4.363	4.239	35.007	251.6	1.952	27.766
1750	3.970	3.827	34.984	259.3	2.072	27.792
2000	3.671	3.508	34.970	262.3	2.189	27.813
2500	3.268	3.063	34.959	261.5	2.419	27.846
3000	2.829	2.582	34.932	264.8	2.642	27.869
3500	2.478	2.186	34.910	267.5	2.858	27.884
4000	2.322	1.979	34.898	266.1	3.073	27.891
4500	2.276	1.875	34.890	262.7	3.295	27.893
5000	2.218	1.758	34.877	256.0	3.527	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5205	1	2.142	1.659	34.865	248.9
5000	2	2.217	1.757	34.877	254.9
4499	3	2.276	1.875	34.888	265.6
4000	4	2.322	1.979	34.902	265.3
3500	5	2.487	2.195	34.910	266.1
3001	6	2.829	2.582	34.934	263.2
2499	7	3.256	3.051	34.962	274.0
2000	8	3.678	3.515	34.972	260.2
1488	9	4.356	4.233	35.007	249.7
999	10	6.868	6.770	35.107	178.2
850	11	8.843	8.748	35.210	152.4
750	12	10.957	10.862	35.422	146.8
675	13	13.007	12.912	35.700	159.5
600	15	14.843	14.751	35.984	170.0
551	16	15.894	15.806	36.155	184.6
501	17	16.753	16.670	36.312	172.4
419	18	17.980	17.907	36.549	209.4
325	19	18.276	18.219	36.587	205.3
250	20	18.753	18.709	36.629	194.6
175	21	20.046	20.013	36.755	179.3
101	22	23.032	23.011	36.889	184.0
60	23	24.984	24.971	36.708	203.6
3	24	29.617	29.616	36.412	191.5
3	14	29.615	29.616	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 3 (CTD003)  
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 14-Sep-2007 05:01 Z

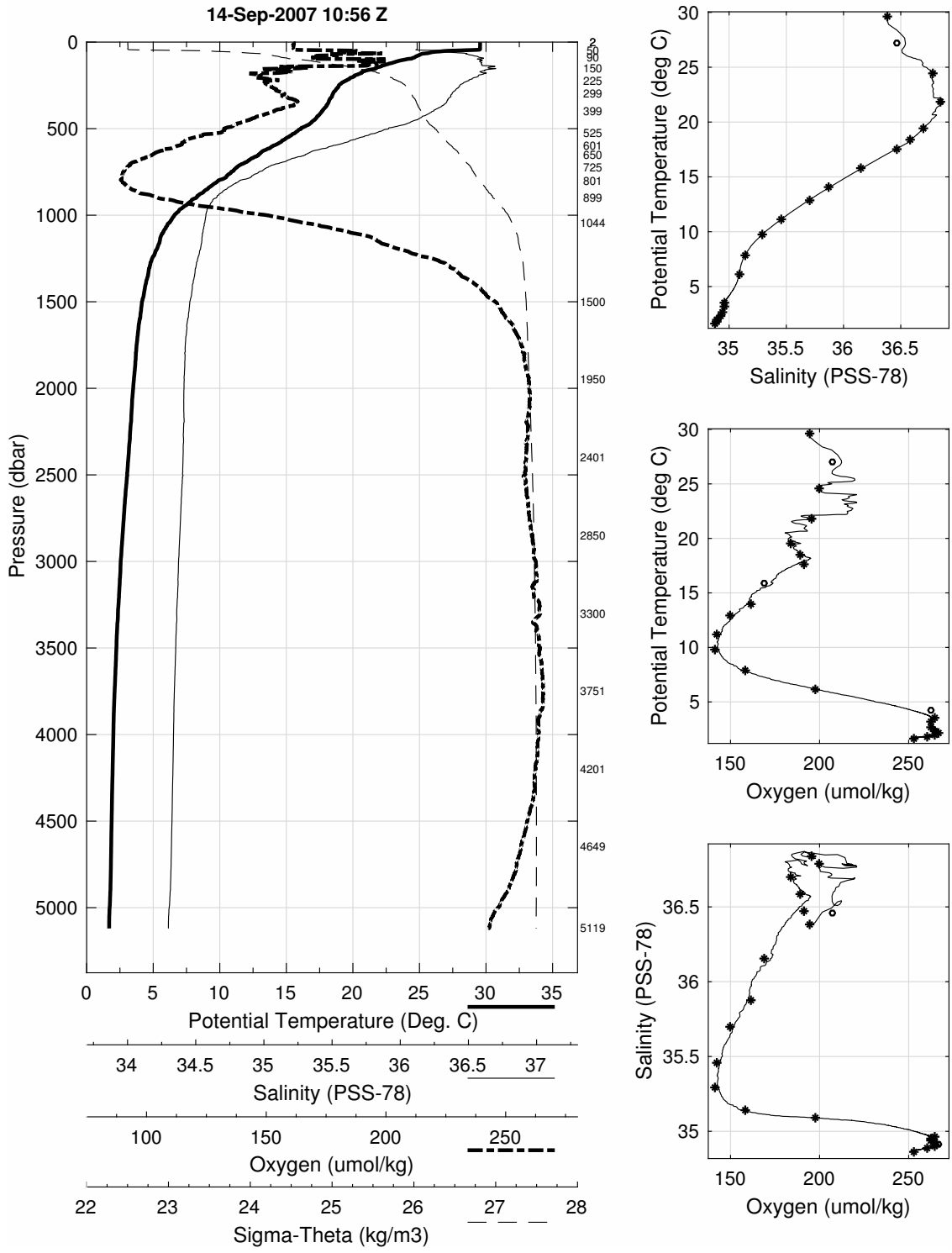


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 4 (CTD004)  
 Latitude 26.499N Longitude 73.133W  
 14-Sep-2007 10:56Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.556	29.555	36.391	193.9	0.005	22.921
10	29.558	29.555	36.390	193.8	0.049	22.920
20	29.557	29.552	36.390	193.5	0.099	22.922
30	29.559	29.552	36.390	193.7	0.148	22.922
50	27.153	27.142	36.541	212.3	0.244	23.834
75	25.018	25.001	36.721	206.7	0.334	24.642
100	24.008	23.986	36.776	220.4	0.413	24.991
125	22.710	22.685	36.783	218.4	0.483	25.378
150	21.744	21.714	36.825	196.1	0.546	25.685
200	20.090	20.053	36.760	183.3	0.652	26.091
250	18.989	18.944	36.650	186.8	0.747	26.298
300	18.551	18.498	36.603	191.0	0.836	26.375
400	17.736	17.667	36.483	187.9	1.008	26.491
500	16.187	16.106	36.215	173.3	1.171	26.658
600	14.091	14.002	35.871	159.2	1.317	26.860
700	11.908	11.815	35.546	145.7	1.445	27.049
800	9.982	9.887	35.305	142.8	1.556	27.209
900	8.316	8.218	35.160	153.6	1.652	27.367
1000	6.686	6.589	35.097	185.7	1.730	27.552
1100	5.830	5.730	35.079	210.4	1.794	27.649
1200	5.338	5.232	35.063	225.7	1.851	27.697
1300	4.846	4.735	35.037	240.0	1.903	27.735
1400	4.547	4.430	35.016	247.4	1.954	27.753
1500	4.275	4.152	34.999	253.3	2.002	27.769
1750	3.891	3.749	34.971	261.0	2.122	27.789
2000	3.657	3.494	34.964	263.3	2.240	27.809
2500	3.251	3.047	34.956	262.1	2.470	27.846
3000	2.802	2.556	34.930	265.3	2.692	27.869
3500	2.524	2.231	34.913	266.5	2.909	27.883
4000	2.350	2.006	34.899	266.2	3.127	27.891
4500	2.276	1.876	34.890	262.8	3.350	27.894
5000	2.186	1.727	34.873	254.1	3.582	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5119	1	2.164	1.691	34.868	252.8
4649	2	2.260	1.842	34.887	260.4
4202	3	2.317	1.950	34.896	264.5
3752	4	2.419	2.101	34.914	266.9
3301	5	2.623	2.349	34.923	264.7
2850	6	2.922	2.688	34.940	262.7
2402	7	3.315	3.119	34.956	262.6
1951	8	3.691	3.533	34.965	264.8
1501	9	4.286	4.167	33.046	263.0
1045	10	6.263	6.164	35.088	198.1
900	11	7.920	7.826	35.141	158.4
801	12	9.869	9.774	35.289	141.7
725	13	11.293	11.199	35.464	142.1
651	15	12.956	12.864	35.698	150.2
601	16	14.128	14.038	35.875	161.5
525	17	15.883	15.799	36.159	168.8
400	18	17.671	17.602	36.469	190.8
299	19	18.469	18.416	36.588	188.9
225	20	19.488	19.446	36.698	184.3
151	21	21.934	21.904	36.840	195.7
91	22	24.526	24.507	36.784	200.0
50	23	27.273	27.262	36.460	207.0
3	24	29.563	29.562	36.389	194.2
3	14	29.564	29.565	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 4 (CTD004)  
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 14-Sep-2007 10:56 Z

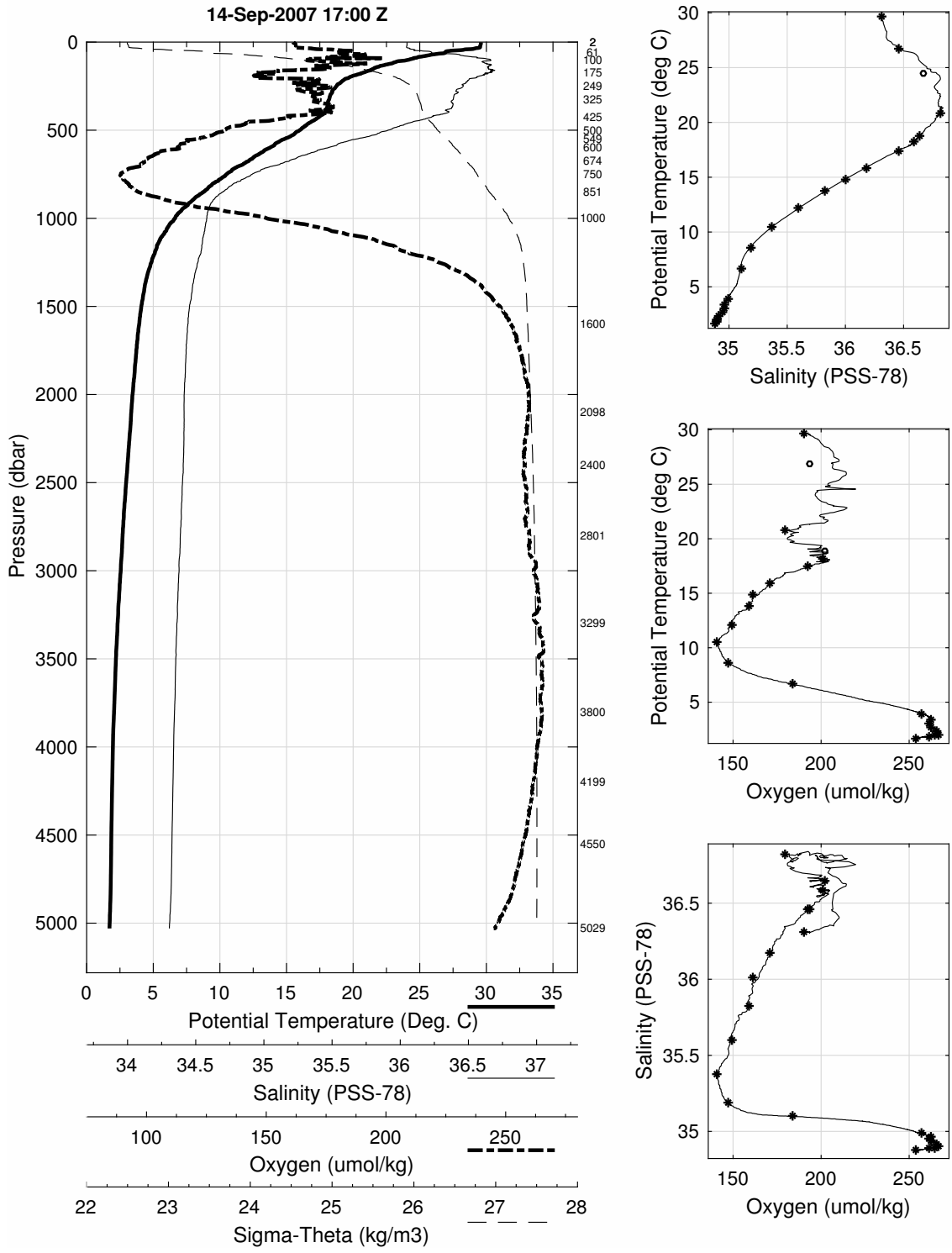


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 5 (CTD005)  
 Latitude 26.501N Longitude 73.499W  
 14-Sep-2007 17:00Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.592	29.592	36.310	192.6	0.005	22.848
10	29.587	29.585	36.309	193.4	0.050	22.849
20	29.555	29.550	36.309	193.5	0.100	22.862
30	29.532	29.525	36.306	193.3	0.150	22.868
50	27.269	27.257	36.398	210.1	0.243	23.689
75	25.678	25.661	36.633	211.9	0.341	24.372
100	24.209	24.188	36.811	196.9	0.423	24.957
125	22.663	22.638	36.801	212.7	0.493	25.405
150	21.575	21.545	36.802	203.0	0.554	25.715
200	19.757	19.720	36.732	183.7	0.660	26.157
250	18.786	18.741	36.648	203.8	0.752	26.348
300	18.345	18.292	36.594	197.5	0.839	26.421
400	17.958	17.888	36.556	204.0	1.008	26.493
500	16.059	15.979	36.194	172.6	1.169	26.671
600	13.834	13.746	35.830	158.4	1.313	26.883
700	11.636	11.544	35.513	147.7	1.438	27.075
800	9.637	9.543	35.268	143.2	1.547	27.239
900	8.001	7.905	35.135	155.5	1.640	27.394
1000	6.731	6.634	35.098	184.7	1.716	27.547
1100	5.784	5.684	35.078	211.7	1.779	27.655
1200	5.211	5.106	35.062	227.5	1.835	27.712
1300	4.744	4.634	35.030	242.0	1.886	27.741
1400	4.446	4.330	35.011	249.5	1.935	27.759
1500	4.227	4.104	34.994	254.4	1.984	27.771
1750	3.870	3.728	34.973	260.5	2.102	27.793
2000	3.609	3.447	34.962	263.0	2.219	27.812
2500	3.167	2.964	34.952	261.8	2.445	27.850
3000	2.803	2.557	34.931	264.6	2.664	27.870
3500	2.488	2.196	34.911	266.6	2.880	27.884
4000	2.312	1.969	34.898	265.6	3.096	27.892
4500	2.252	1.852	34.888	262.0	3.317	27.894
5000	2.187	1.729	34.873	254.0	3.548	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5030	1	2.179	1.717	34.875	253.5
4551	2	2.252	1.846	34.888	261.5
4199	3	2.285	1.920	34.895	264.5
3801	4	2.371	2.048	34.903	266.8
3300	5	2.593	2.320	34.919	266.0
2801	6	2.935	2.706	34.940	262.7
2400	7	3.262	3.068	34.957	260.9
2099	8	3.514	3.344	34.963	262.3
1601	9	4.081	3.950	34.986	256.6
1001	10	6.764	6.666	35.100	184.1
851	11	8.743	8.649	35.188	147.3
750	12	10.580	10.487	35.372	140.9
675	13	12.243	12.152	35.602	149.1
600	15	13.809	13.722	35.828	158.5
550	16	14.930	14.845	36.007	161.5
501	17	15.979	15.899	36.177	171.2
425	18	17.517	17.444	36.455	192.8
325	19	18.262	18.205	36.583	200.7
250	20	18.852	18.808	36.645	202.3
175	21	20.833	20.799	36.824	179.2
101	22	24.498	24.477	36.670	-999.0
61	23	26.688	26.674	36.456	193.0
3	24	29.634	29.634	36.312	190.4
3	14	29.639	29.641	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
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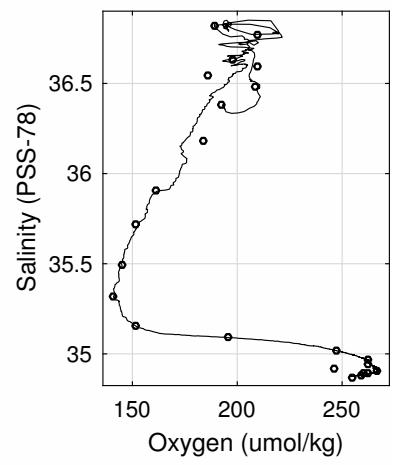
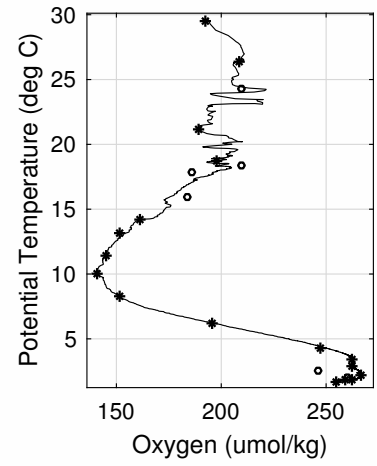
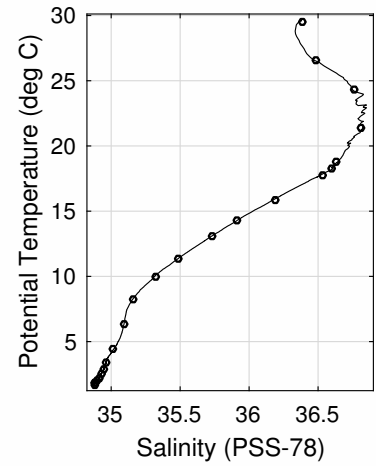
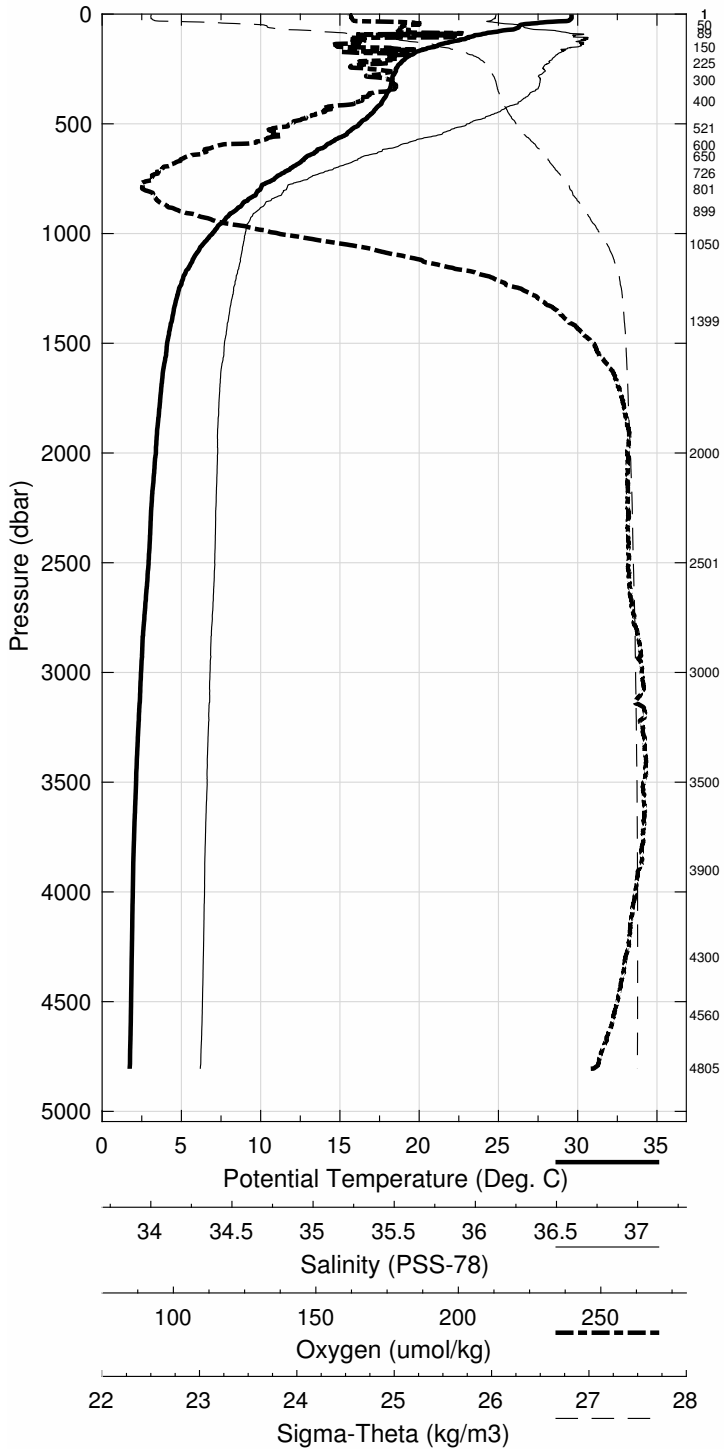


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 6 (CTD006)  
 Latitude 26.500N Longitude 73.862W  
 14-Sep-2007 23:00Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.607	29.607	36.382	193.1	0.005	22.897
10	29.614	29.612	36.379	193.1	0.050	22.893
20	29.614	29.609	36.378	193.9	0.099	22.893
30	29.441	29.434	36.353	194.2	0.149	22.934
50	26.381	26.370	36.513	206.3	0.235	24.059
75	25.259	25.242	36.684	206.8	0.329	24.540
100	23.472	23.451	36.784	217.3	0.406	25.155
125	22.121	22.096	36.789	195.8	0.472	25.551
150	20.977	20.948	36.790	191.5	0.529	25.872
200	19.195	19.159	36.673	204.5	0.627	26.259
250	18.588	18.544	36.626	197.9	0.716	26.381
300	18.346	18.294	36.608	203.6	0.802	26.430
400	17.716	17.648	36.498	195.1	0.971	26.508
500	16.314	16.232	36.237	178.9	1.133	26.646
600	14.198	14.109	35.887	159.9	1.280	26.850
700	12.040	11.946	35.566	146.2	1.409	27.039
800	10.070	9.974	35.313	141.5	1.521	27.201
900	8.393	8.295	35.160	150.9	1.618	27.355
1000	7.080	6.980	35.104	175.2	1.699	27.504
1100	5.962	5.860	35.082	206.0	1.766	27.636
1200	5.218	5.114	35.057	228.6	1.823	27.707
1300	4.784	4.674	35.034	240.8	1.875	27.740
1400	4.507	4.390	35.016	248.0	1.924	27.757
1500	4.220	4.097	34.997	254.2	1.972	27.774
1750	3.809	3.668	34.971	261.3	2.090	27.797
2000	3.551	3.390	34.963	262.7	2.204	27.818
2500	3.132	2.930	34.948	263.2	2.426	27.850
3000	2.695	2.451	34.924	266.3	2.642	27.873
3500	2.429	2.139	34.909	266.8	2.853	27.888
4000	2.277	1.935	34.896	264.9	3.065	27.894
4500	2.225	1.827	34.885	260.2	3.284	27.894

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4805	1	2.172	1.738	34.873	254.3
4561	2	2.219	1.813	34.881	259.5
4301	3	2.239	1.863	34.888	262.5
3900	4	2.287	1.955	34.895	260.1
3501	5	2.428	2.137	34.909	266.6
3001	6	2.712	2.467	34.923	246.1
2502	7	3.134	2.931	34.947	262.7
2001	8	3.515	3.355	34.963	262.2
1400	9	4.483	4.367	35.014	246.9
1051	10	6.357	6.258	35.090	195.4
900	11	8.340	8.242	35.157	151.6
801	12	10.078	9.981	35.316	141.2
727	13	11.480	11.386	35.489	144.7
650	15	13.178	13.086	35.725	151.8
601	16	14.366	14.275	35.909	161.5
521	17	16.011	15.927	36.184	184.3
400	18	17.879	17.809	36.539	186.0
300	19	18.359	18.306	36.598	210.0
225	20	18.785	18.744	36.630	197.5
150	21	21.350	21.321	36.816	189.5
90	22	24.369	24.350	36.765	209.4
50	23	26.552	26.541	36.484	209.1
2	24	29.516	29.515	36.385	192.9
2	14	29.522	29.523	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 6 (CTD006)  
 Latitude 26.500 N Longitude 73.862 W  
 14-Sep-2007 23:00 Z



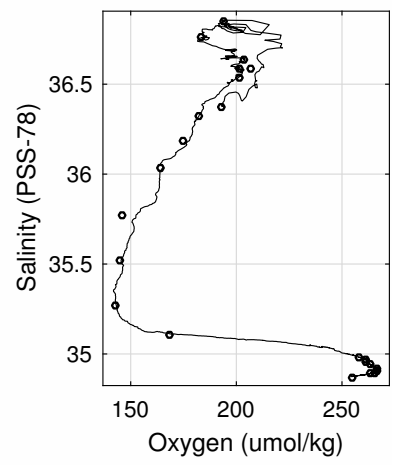
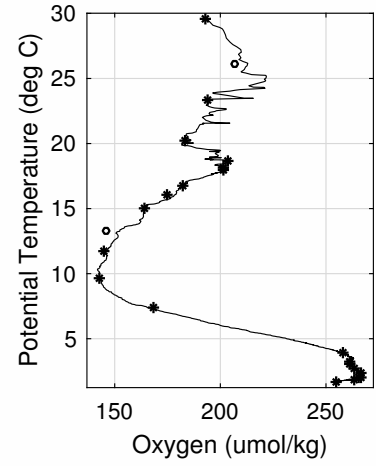
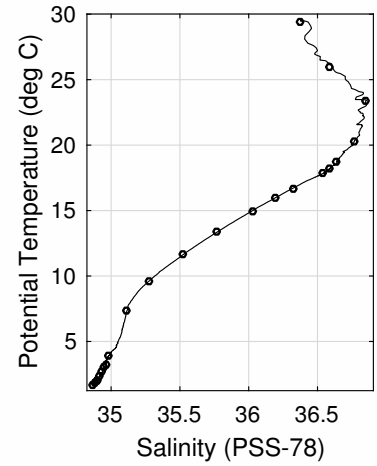
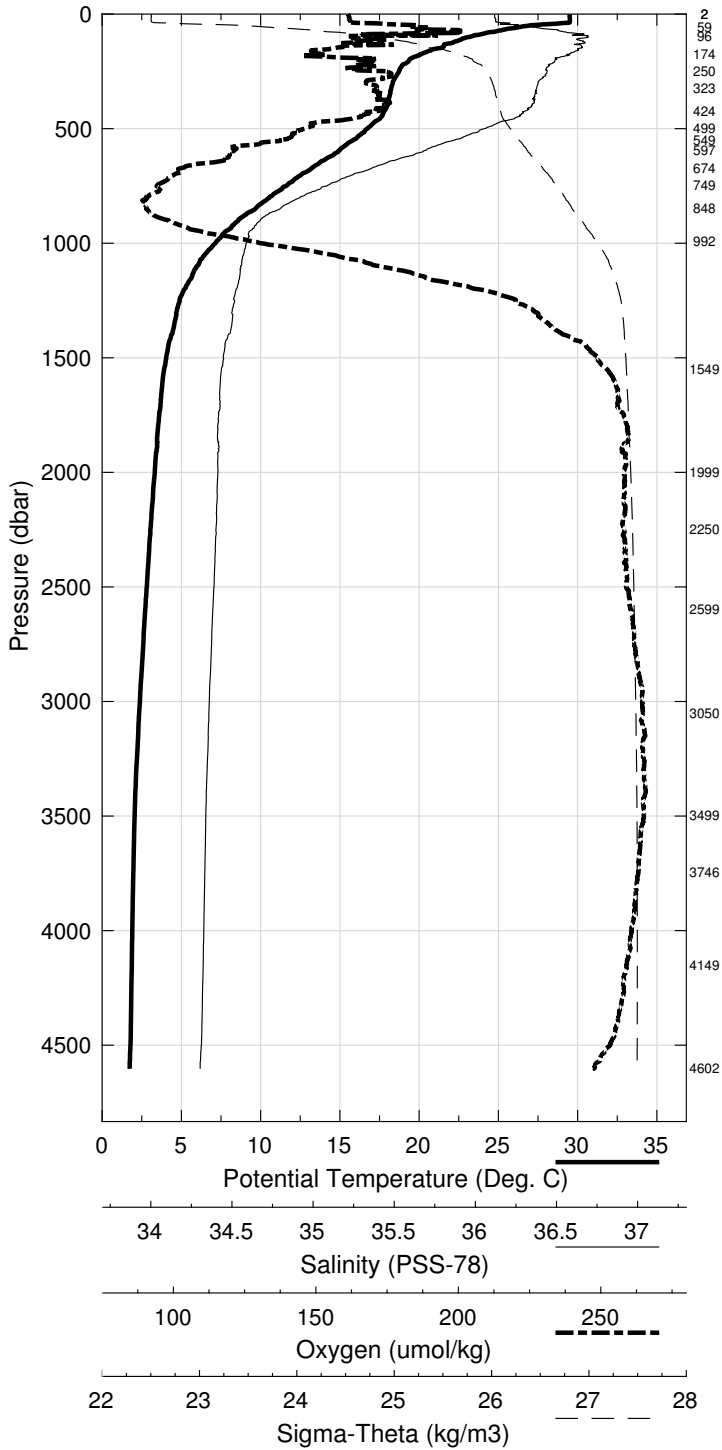


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 7 (CTD007)  
 Latitude 26.500N Longitude 74.234W  
 15-Sep-2007 05:11Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.493	29.493	36.378	193.1	0.005	22.933
10	29.493	29.491	36.378	193.3	0.049	22.933
20	29.516	29.511	36.382	193.1	0.099	22.929
30	29.517	29.510	36.383	193.4	0.148	22.931
50	26.946	26.935	36.481	209.1	0.240	23.854
75	24.894	24.878	36.719	221.3	0.331	24.678
100	23.155	23.134	36.855	194.5	0.404	25.302
125	22.162	22.137	36.841	193.6	0.469	25.578
150	21.142	21.113	36.808	189.1	0.527	25.840
200	19.416	19.379	36.686	197.2	0.627	26.212
250	18.770	18.726	36.646	203.2	0.718	26.350
300	18.394	18.341	36.600	197.7	0.805	26.413
400	18.055	17.985	36.568	201.9	0.975	26.477
500	16.814	16.730	36.326	182.4	1.142	26.597
600	14.987	14.895	36.013	163.8	1.295	26.776
700	12.678	12.581	35.656	149.8	1.431	26.985
800	10.664	10.564	35.385	142.8	1.549	27.154
900	8.693	8.593	35.182	148.4	1.651	27.325
1000	7.239	7.138	35.110	171.4	1.735	27.486
1100	6.076	5.973	35.081	201.0	1.804	27.620
1200	5.305	5.199	35.059	225.2	1.862	27.699
1300	4.801	4.691	35.037	239.7	1.914	27.740
1400	4.484	4.368	35.018	247.1	1.964	27.761
1500	4.166	4.044	34.993	255.3	2.011	27.776
1750	3.740	3.600	34.969	261.9	2.127	27.802
2000	3.482	3.322	34.965	262.1	2.239	27.827
2500	3.017	2.817	34.945	262.5	2.455	27.858
3000	2.627	2.385	34.922	266.4	2.666	27.877
3500	2.339	2.051	34.904	266.8	2.872	27.890
4000	2.244	1.903	34.893	263.9	3.081	27.894
4500	2.184	1.787	34.880	258.4	3.298	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4602	1	2.151	1.742	34.872	255.3
4150	2	2.230	1.872	34.888	262.9
3746	3	2.281	1.968	34.898	265.7
3499	4	2.342	2.054	34.901	267.0
3051	5	2.571	2.324	34.918	266.5
2599	6	2.917	2.709	34.938	263.8
2251	7	3.213	3.034	34.953	261.6
1999	8	3.462	3.303	34.963	261.7
1550	9	4.022	3.897	34.982	258.2
993	10	7.415	7.314	35.113	168.2
849	11	9.705	9.604	35.274	142.7
750	12	11.735	11.636	35.523	145.1
675	13	13.462	13.365	35.773	146.1
597	15	15.117	15.024	36.034	164.5
549	16	16.042	15.953	36.188	174.5
500	17	16.828	16.744	36.325	182.1
424	18	17.927	17.853	36.541	201.9
324	19	18.259	18.202	36.582	201.4
250	20	18.712	18.667	36.635	203.2
175	21	20.293	20.260	36.759	183.2
97	22	23.386	23.365	36.848	193.5
59	23	26.013	25.999	36.583	206.9
2	24	29.457	29.457	36.377	193.0
2	14	29.457	29.458	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 7 (CTD007)  
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 15-Sep-2007 05:11 Z

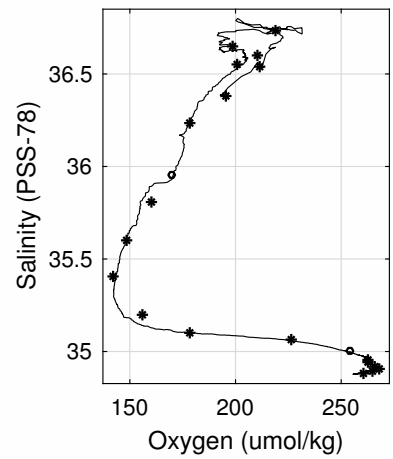
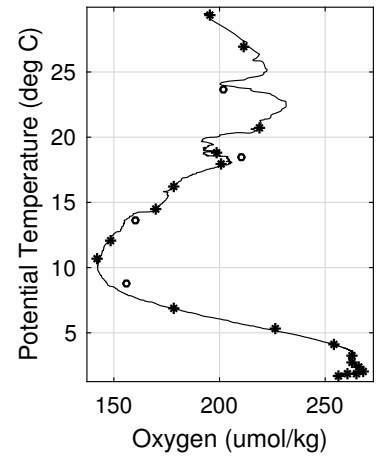
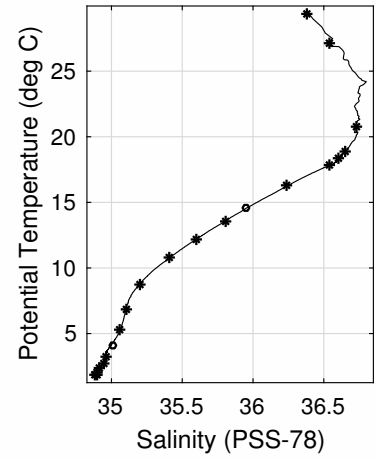
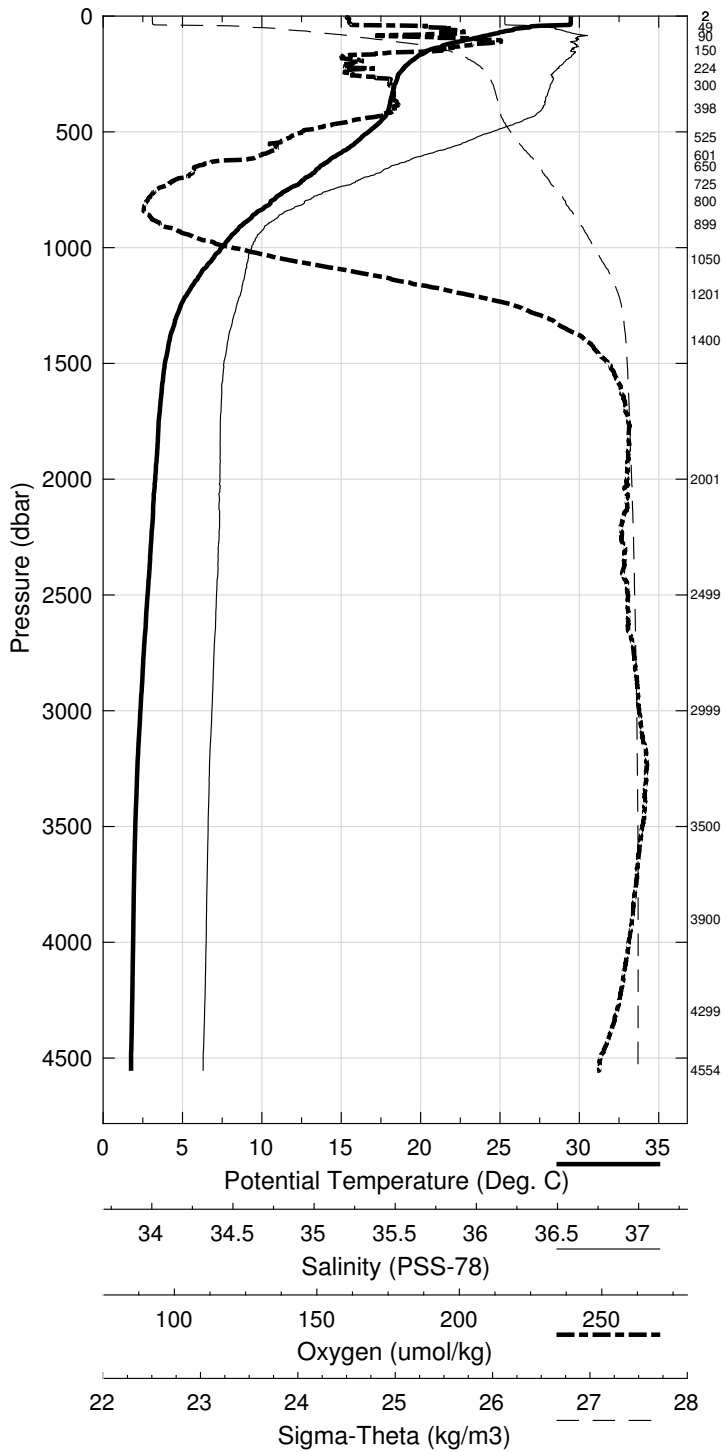


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 8 (CTD008)  
 Latitude 26.500N Longitude 74.517W  
 15-Sep-2007 10:18Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.466	29.466	36.388	192.7	0.005	22.949
10	29.463	29.460	36.387	193.4	0.049	22.951
20	29.465	29.460	36.387	193.4	0.098	22.951
30	29.465	29.458	36.387	193.5	0.147	22.952
50	26.622	26.611	36.632	216.5	0.236	24.072
75	24.770	24.754	36.731	220.2	0.324	24.725
100	23.173	23.152	36.756	226.0	0.399	25.222
125	21.500	21.475	36.746	224.0	0.462	25.692
150	20.415	20.387	36.717	215.9	0.518	25.969
200	19.339	19.303	36.683	194.9	0.616	26.230
250	18.675	18.630	36.625	193.5	0.706	26.358
300	18.400	18.347	36.614	203.6	0.792	26.422
400	18.061	17.991	36.574	205.0	0.962	26.480
500	16.799	16.716	36.322	181.8	1.129	26.597
600	14.820	14.728	35.981	171.8	1.282	26.789
700	12.827	12.729	35.676	151.2	1.418	26.971
800	10.665	10.565	35.385	143.1	1.537	27.154
900	8.889	8.787	35.197	146.8	1.640	27.307
1000	7.565	7.461	35.120	164.5	1.727	27.448
1100	6.349	6.244	35.089	193.6	1.801	27.591
1200	5.401	5.294	35.065	222.3	1.861	27.692
1300	4.709	4.600	35.028	242.3	1.914	27.744
1400	4.298	4.183	35.002	252.4	1.962	27.768
1500	4.006	3.886	34.980	258.1	2.009	27.783
1750	3.639	3.500	34.963	263.1	2.122	27.808
2000	3.443	3.284	34.962	262.8	2.233	27.828
2500	3.001	2.801	34.944	263.1	2.448	27.859
3000	2.587	2.345	34.921	265.7	2.657	27.880
3500	2.313	2.025	34.902	266.6	2.862	27.891
4000	2.230	1.889	34.892	263.2	3.069	27.894
4500	2.157	1.760	34.877	256.1	3.286	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4555	1	2.161	8.433	-999.000	-999.0
4299	2	2.194	1.820	34.882	260.7
3900	3	2.237	1.907	34.891	264.3
3501	4	2.311	2.023	34.900	267.8
2999	5	2.588	2.346	34.921	265.9
2499	6	2.983	2.784	34.943	263.1
2001	7	3.398	3.240	34.961	262.3
1401	8	4.241	4.127	35.005	253.9
1201	9	5.397	5.291	35.065	225.8
1051	10	6.968	6.864	35.101	178.8
900	11	8.913	8.811	35.203	155.6
801	12	10.821	10.720	35.405	142.5
725	13	12.243	12.145	35.596	148.1
650	15	13.689	13.595	35.805	159.7
601	16	14.627	14.535	35.957	169.7
525	17	16.325	16.240	36.237	178.6
398	18	17.997	17.928	36.547	201.2
300	19	18.406	18.353	36.597	210.4
224	20	18.918	18.878	36.645	198.6
150	21	20.837	20.809	36.733	218.8
90	22	23.841	23.904	-999.000	-999.0
49	23	27.102	27.091	36.540	211.3
2	24	29.441	29.441	36.376	195.2
2	14	29.442	29.443	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 8 (CTD008)  
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 15-Sep-2007 10:18 Z

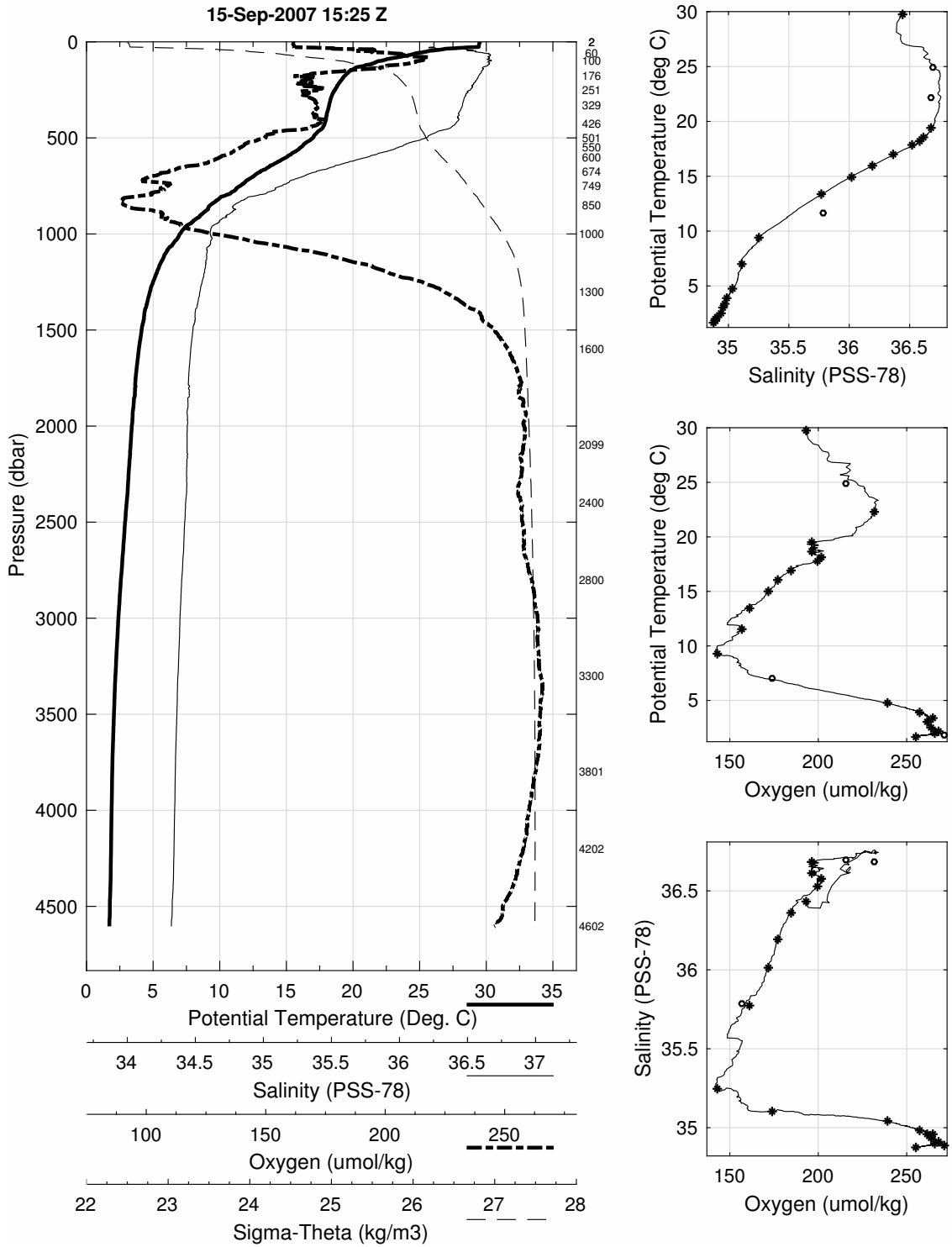


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 9 (CTD009)  
 Latitude 26.502N Longitude 74.803W  
 15-Sep-2007 15:25Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.513	29.513	36.422	193.5	0.005	22.959
10	29.470	29.468	36.419	193.7	0.049	22.972
20	29.451	29.446	36.421	193.9	0.098	22.981
30	28.417	28.410	36.392	200.1	0.146	23.306
50	25.581	25.570	36.669	217.5	0.224	24.427
75	23.766	23.750	36.744	228.3	0.304	25.036
100	21.963	21.943	36.750	230.6	0.371	25.564
125	20.856	20.832	36.733	221.2	0.429	25.860
150	19.840	19.812	36.704	208.8	0.480	26.113
200	19.153	19.117	36.669	197.7	0.573	26.268
250	18.700	18.656	36.635	200.2	0.662	26.360
300	18.363	18.310	36.596	199.6	0.749	26.418
400	18.044	17.975	36.564	200.6	0.920	26.477
500	17.081	16.996	36.374	185.0	1.087	26.571
600	15.106	15.013	36.028	171.6	1.243	26.762
700	12.630	12.533	35.650	151.0	1.379	26.990
800	10.497	10.398	35.374	148.8	1.496	27.175
900	8.684	8.584	35.202	154.8	1.595	27.343
1000	7.107	7.007	35.101	169.8	1.677	27.498
1100	6.037	5.935	35.081	201.3	1.746	27.625
1200	5.391	5.284	35.067	221.7	1.804	27.695
1300	4.879	4.768	35.041	238.6	1.857	27.734
1400	4.496	4.380	35.014	248.4	1.907	27.756
1500	4.258	4.135	34.999	253.6	1.956	27.771
1750	3.827	3.686	34.973	261.1	2.073	27.797
2000	3.557	3.396	34.965	262.2	2.188	27.820
2500	3.092	2.890	34.950	261.8	2.410	27.855
3000	2.637	2.394	34.923	266.3	2.623	27.877
3500	2.348	2.060	34.904	267.0	2.829	27.890
4000	2.224	1.883	34.891	263.7	3.037	27.894
4500	2.149	1.753	34.877	255.9	3.254	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4603	1	2.123	1.715	34.869	255.0
4202	2	2.206	1.843	34.887	271.2
3801	3	2.252	1.933	34.894	265.4
3301	4	2.433	2.163	34.909	267.8
2801	5	2.813	2.587	34.933	264.2
2400	6	3.202	3.008	34.956	261.4
2100	7	3.476	3.307	34.964	264.8
1601	8	4.065	3.934	34.987	257.1
1301	9	4.851	4.740	35.040	239.4
1000	10	7.143	7.042	35.104	173.5
851	11	9.463	9.364	35.249	142.9
750	12	11.673	11.574	35.790	156.7
675	13	13.455	13.358	35.769	161.1
600	15	15.042	14.949	36.013	171.9
550	16	16.088	15.999	36.193	177.5
501	17	17.011	16.926	36.361	185.1
427	18	17.864	17.790	36.527	200.0
329	19	18.247	18.189	36.581	201.3
252	20	18.589	18.545	36.610	196.0
176	21	19.466	19.434	36.682	196.6
100	22	22.261	22.241	36.683	231.9
60	23	24.975	24.962	36.694	215.5
3	24	29.766	29.765	36.436	193.1
3	14	29.749	29.750	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 9 (CTD009)  
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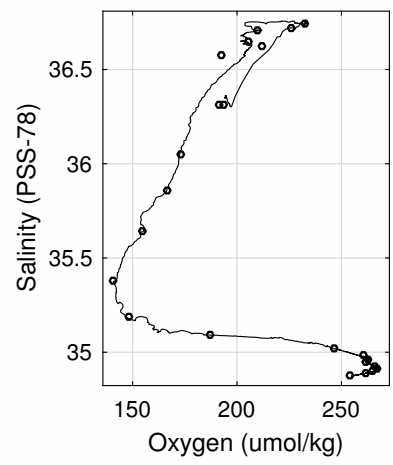
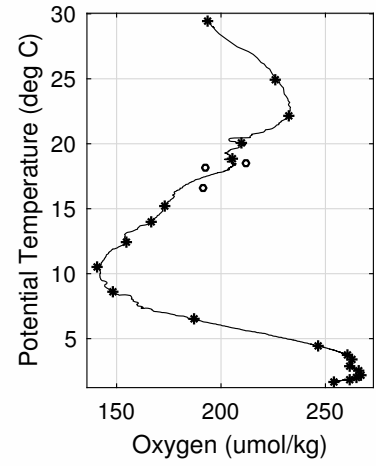
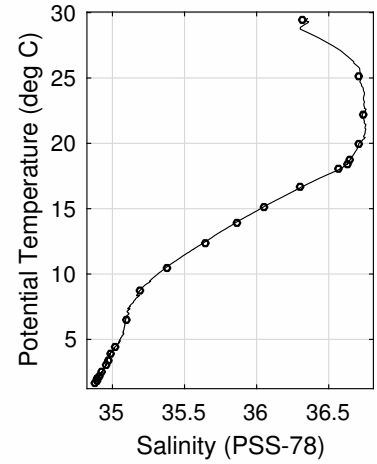
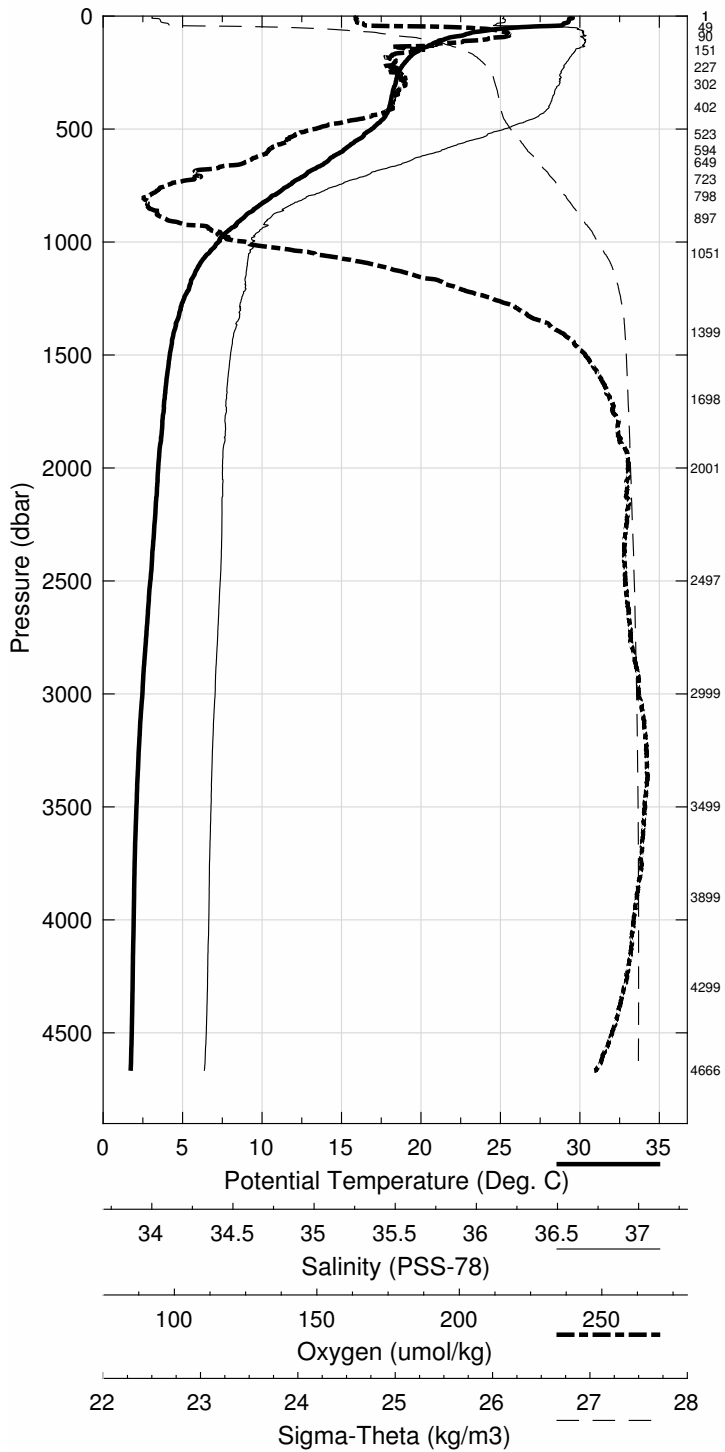


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 10 (CTD010)  
 Latitude 26.500N Longitude 75.084W  
 15-Sep-2007 20:33Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.538	29.538	36.353	194.6	0.005	22.898
10	29.490	29.488	36.346	194.3	0.050	22.911
20	29.308	29.303	36.360	194.5	0.098	22.984
30	29.160	29.153	36.343	195.2	0.147	23.022
50	26.148	26.137	36.674	220.7	0.237	24.254
75	23.150	23.135	36.748	232.6	0.315	25.221
100	21.601	21.581	36.745	227.6	0.379	25.662
125	20.720	20.696	36.750	214.9	0.434	25.910
150	19.936	19.908	36.708	210.9	0.486	26.090
200	19.096	19.060	36.667	204.3	0.579	26.280
250	18.643	18.598	36.637	204.8	0.668	26.376
300	18.446	18.393	36.628	206.9	0.754	26.421
400	18.086	18.016	36.575	203.3	0.924	26.475
500	16.971	16.887	36.354	183.9	1.092	26.581
600	15.131	15.038	36.033	172.2	1.247	26.760
700	12.865	12.767	35.687	153.8	1.384	26.972
800	10.645	10.545	35.377	141.6	1.503	27.151
900	8.790	8.690	35.185	146.8	1.605	27.313
1000	7.353	7.251	35.111	166.9	1.690	27.471
1100	6.163	6.060	35.086	199.1	1.761	27.613
1200	5.523	5.415	35.076	219.6	1.820	27.686
1300	4.975	4.863	35.052	235.5	1.874	27.733
1400	4.558	4.441	35.020	246.1	1.925	27.754
1500	4.322	4.198	35.003	252.3	1.974	27.767
1750	3.954	3.811	34.982	259.1	2.093	27.792
2000	3.628	3.466	34.963	263.1	2.210	27.811
2500	3.172	2.969	34.952	262.3	2.438	27.849
3000	2.713	2.468	34.926	265.7	2.655	27.874
3500	2.385	2.095	34.906	267.3	2.865	27.889
4000	2.265	1.923	34.895	264.5	3.075	27.894
4500	2.200	1.802	34.883	259.0	3.293	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4667	1	2.148	1.732	34.875	254.3
4300	2	2.229	1.854	34.890	261.8
3900	3	2.278	1.947	34.900	264.8
3500	4	2.396	2.107	34.909	266.9
2999	5	2.717	2.472	34.928	265.6
2498	6	3.166	2.964	34.953	262.1
2001	7	3.607	3.445	34.965	263.1
1699	8	3.961	3.823	34.982	260.9
1400	9	4.567	4.449	35.024	246.3
1052	10	6.585	6.484	35.095	187.5
898	11	8.763	8.663	35.187	148.0
799	12	10.624	10.525	35.378	140.9
723	13	12.524	12.424	35.641	154.7
649	15	14.061	13.965	35.859	166.4
594	16	15.287	15.194	36.051	172.6
524	17	16.726	16.639	36.309	191.2
403	18	18.102	18.032	36.571	192.9
302	19	18.489	18.435	36.628	212.1
227	20	18.837	18.796	36.646	205.4
152	21	20.035	20.006	36.712	209.2
91	22	22.203	22.184	36.745	232.6
50	23	25.190	25.179	36.714	226.2
2	24	29.491	29.491	36.311	193.4
2	14	29.495	29.496	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 10 (CTD010)  
 Latitude 26.500 N Longitude 75.084 W  
 15-Sep-2007 20:33 Z



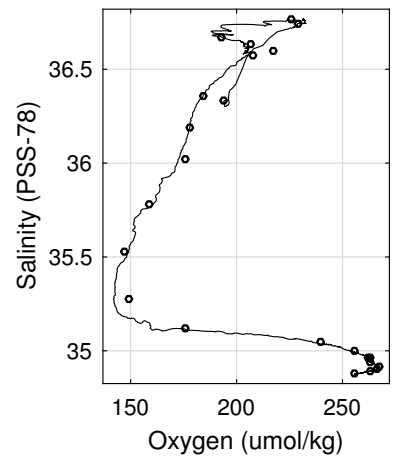
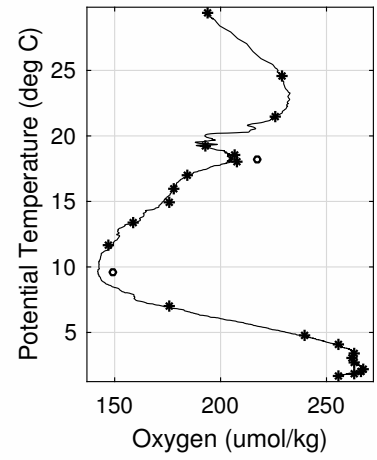
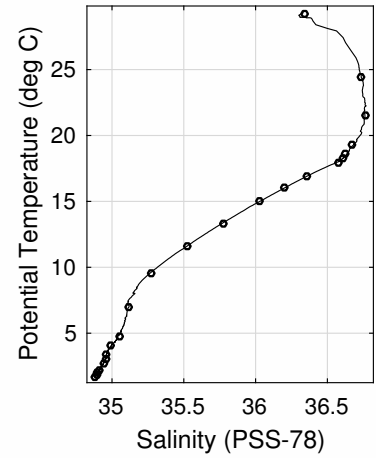
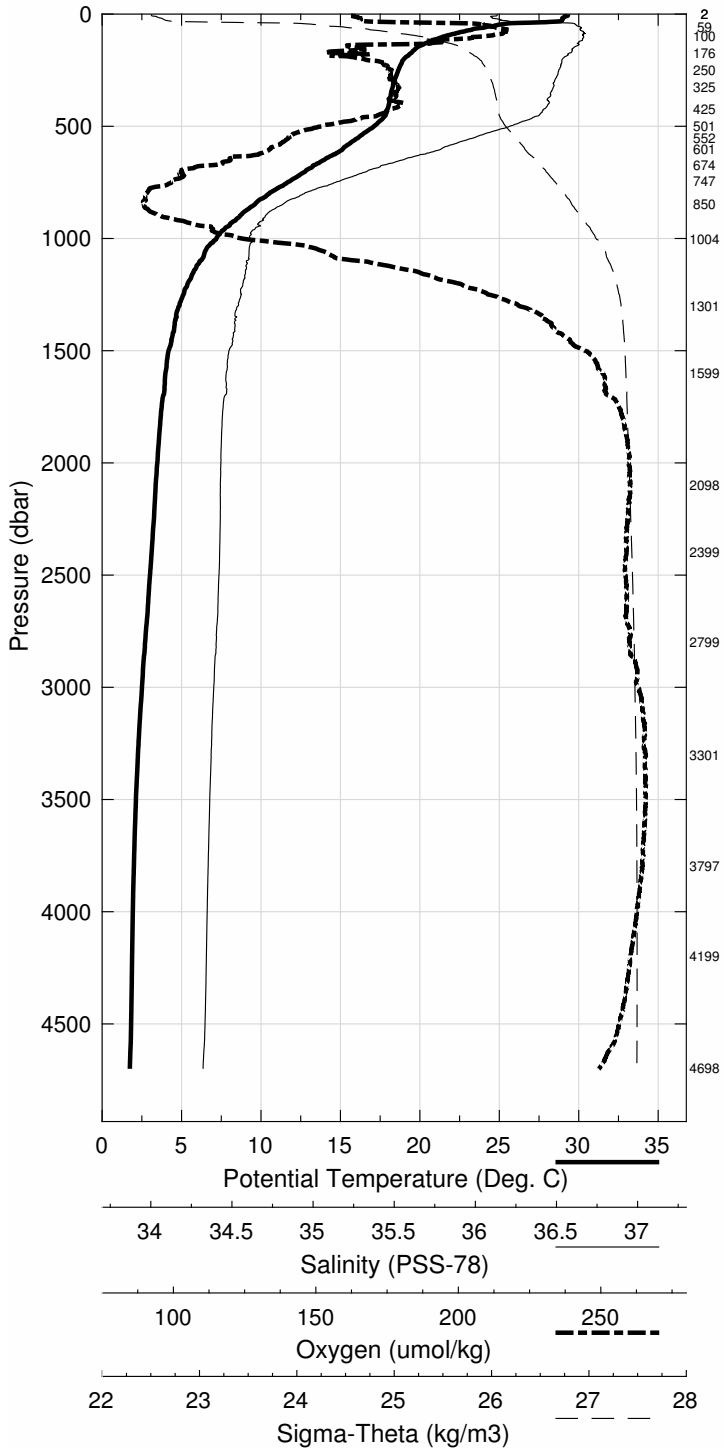


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 11 (CTD011)  
 Latitude 26.500N Longitude 75.301W  
 16-Sep-2007 01:34Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.325	29.324	36.335	194.3	0.005	22.957
10	29.123	29.121	36.301	194.4	0.049	23.001
20	28.971	28.966	36.321	196.5	0.097	23.068
30	28.929	28.922	36.385	196.7	0.145	23.130
50	24.838	24.827	36.726	227.5	0.221	24.699
75	22.905	22.890	36.753	232.1	0.295	25.296
100	21.500	21.480	36.761	226.5	0.358	25.703
125	20.569	20.545	36.737	216.6	0.413	25.941
150	19.831	19.803	36.711	195.8	0.463	26.120
200	19.033	18.997	36.657	196.9	0.556	26.289
250	18.683	18.638	36.638	204.0	0.645	26.366
300	18.430	18.377	36.617	204.8	0.731	26.416
400	18.124	18.054	36.586	206.4	0.902	26.474
500	17.192	17.108	36.394	186.8	1.071	26.559
600	15.258	15.164	36.058	173.8	1.227	26.751
700	12.901	12.803	35.689	151.7	1.366	26.967
800	10.623	10.523	35.378	142.9	1.485	27.156
900	8.773	8.673	35.184	146.6	1.586	27.314
1000	7.293	7.192	35.109	166.6	1.671	27.478
1100	6.255	6.152	35.091	195.8	1.740	27.605
1200	5.492	5.385	35.073	220.4	1.800	27.687
1300	4.972	4.860	35.050	235.5	1.854	27.731
1400	4.652	4.534	35.033	244.3	1.905	27.755
1500	4.301	4.178	35.004	252.0	1.954	27.770
1750	3.890	3.748	34.975	260.4	2.073	27.792
2000	3.637	3.474	34.964	263.0	2.189	27.811
2500	3.214	3.010	34.954	261.9	2.418	27.848
3000	2.752	2.506	34.929	265.2	2.638	27.872
3500	2.417	2.127	34.909	267.0	2.849	27.888
4000	2.273	1.931	34.896	264.9	3.061	27.894
4500	2.222	1.823	34.885	260.4	3.280	27.894

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4699	1	2.168	1.747	34.877	255.7
4200	2	2.251	1.887	34.894	263.5
3798	3	2.313	1.992	34.901	266.4
3302	4	2.522	2.251	34.919	267.1
2799	5	2.946	2.717	34.942	262.9
2399	6	3.312	3.117	34.959	262.0
2099	7	3.545	3.375	34.963	263.0
1600	8	4.159	4.027	34.998	255.5
1301	9	4.921	4.810	35.050	239.2
1004	10	7.124	7.024	35.121	175.5
851	11	9.684	9.583	35.272	148.8
747	12	11.775	11.676	35.531	147.3
675	13	13.494	13.397	35.777	158.8
601	15	15.054	14.961	36.023	175.3
552	16	16.055	15.966	36.194	177.9
502	17	17.020	16.935	36.361	184.1
425	18	18.055	17.980	36.572	207.2
325	19	18.274	18.217	36.602	217.6
250	20	18.611	18.567	36.629	206.7
177	21	19.249	19.217	36.675	192.4
100	22	21.573	21.553	36.762	225.4
60	23	24.493	24.480	36.740	229.5
2	24	29.241	29.240	36.335	194.0
2	14	29.256	29.256	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 11 (CTD011)  
 Latitude 26.500 N Longitude 75.301 W  
 16-Sep-2007 01:34 Z

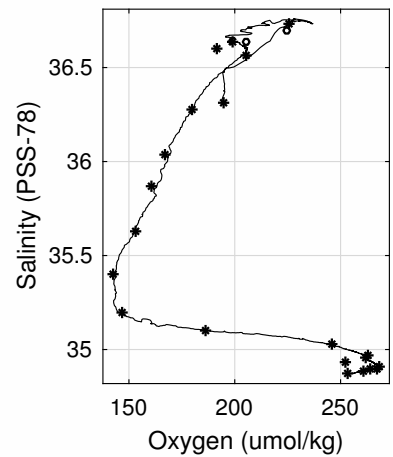
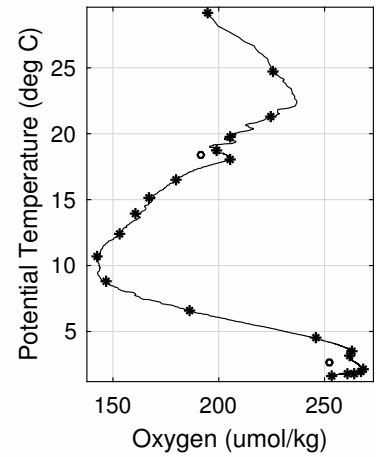
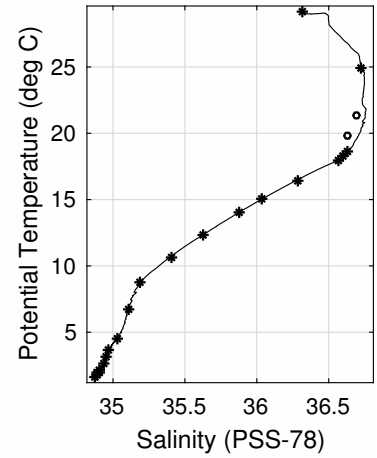
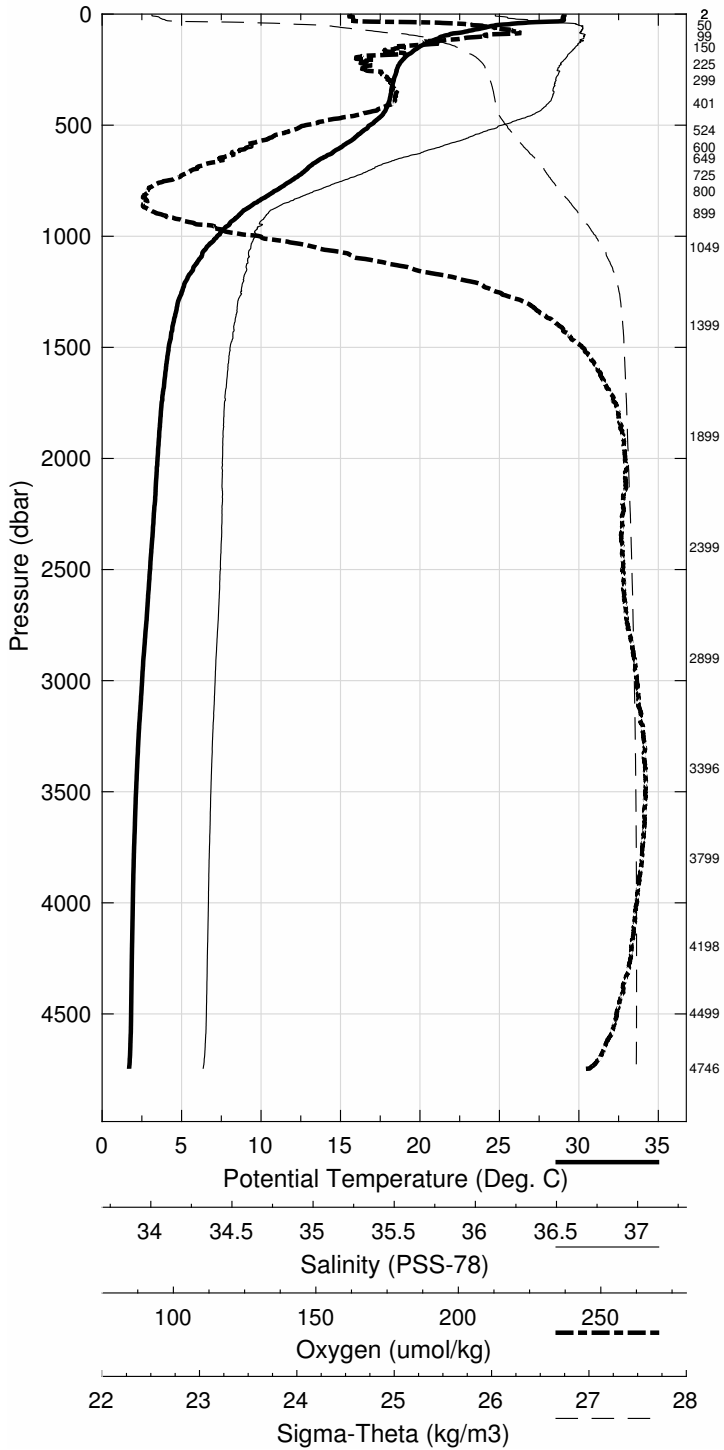


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 12 (CTD012)  
 Latitude 26.500N Longitude 75.500W  
 16-Sep-2007 06:06Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.096	29.096	36.316	194.2	0.005	23.021
10	29.023	29.021	36.332	194.1	0.048	23.058
20	29.017	29.012	36.402	195.1	0.096	23.113
30	29.008	29.000	36.482	195.1	0.143	23.177
50	24.766	24.755	36.730	225.0	0.220	24.724
75	23.098	23.083	36.740	234.7	0.295	25.230
100	21.486	21.467	36.756	227.6	0.358	25.703
125	20.599	20.575	36.735	214.0	0.413	25.931
150	19.931	19.904	36.710	208.0	0.464	26.093
200	19.017	18.981	36.661	195.7	0.558	26.296
250	18.587	18.543	36.624	198.3	0.646	26.380
300	18.397	18.344	36.615	204.4	0.732	26.424
400	18.095	18.025	36.579	205.2	0.902	26.476
500	16.936	16.853	36.347	183.3	1.069	26.584
600	15.132	15.039	36.036	168.8	1.225	26.762
700	12.957	12.859	35.701	155.3	1.361	26.964
800	10.874	10.773	35.412	143.8	1.482	27.138
900	8.780	8.680	35.186	147.1	1.585	27.315
1000	7.346	7.244	35.127	171.9	1.670	27.484
1100	6.254	6.150	35.090	197.1	1.740	27.604
1200	5.397	5.291	35.070	223.4	1.799	27.696
1300	4.869	4.758	35.040	238.2	1.852	27.735
1400	4.565	4.447	35.022	246.3	1.902	27.755
1500	4.310	4.186	35.002	252.2	1.951	27.768
1750	3.887	3.745	34.974	260.4	2.071	27.792
2000	3.649	3.487	34.965	262.8	2.188	27.810
2500	3.217	3.013	34.954	262.1	2.417	27.847
3000	2.762	2.517	34.928	265.7	2.637	27.871
3500	2.425	2.134	34.907	267.9	2.850	27.886
4000	2.275	1.933	34.895	265.6	3.062	27.893
4500	2.222	1.824	34.885	260.6	3.281	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4746	1	2.123	1.698	34.869	253.5
4499	2	2.222	1.823	34.885	260.7
4199	3	2.245	1.881	34.892	264.3
3800	4	2.307	1.987	34.900	266.9
3396	5	2.462	2.182	34.909	268.0
2900	6	2.823	2.587	34.933	252.1
2400	7	3.311	3.115	34.958	262.0
1900	8	3.732	3.578	34.968	262.4
1399	9	4.601	4.484	35.023	246.0
1050	10	6.756	6.653	35.105	185.8
900	11	8.837	8.736	35.191	147.0
800	12	10.805	10.705	35.401	142.6
726	13	12.491	12.392	35.633	152.8
649	15	14.107	14.010	35.872	160.6
600	16	15.114	15.021	36.032	167.3
524	17	16.570	16.483	36.279	179.9
401	18	18.041	17.971	36.567	205.2
300	19	18.363	18.310	36.606	191.7
226	20	18.708	18.668	36.635	199.4
150	21	19.793	19.766	36.634	205.5
99	22	21.360	21.341	36.700	224.1
50	23	24.939	24.928	36.729	225.5
2	24	29.088	29.087	36.310	194.3
2	14	29.085	29.086	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 12 (CTD012)  
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 16-Sep-2007 06:06 Z

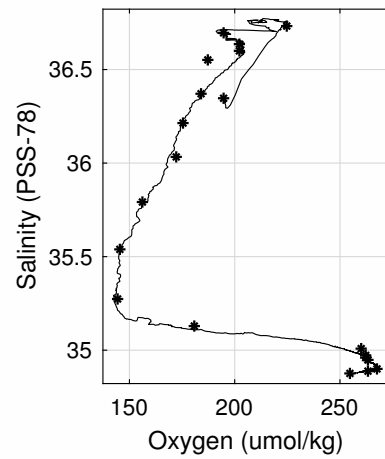
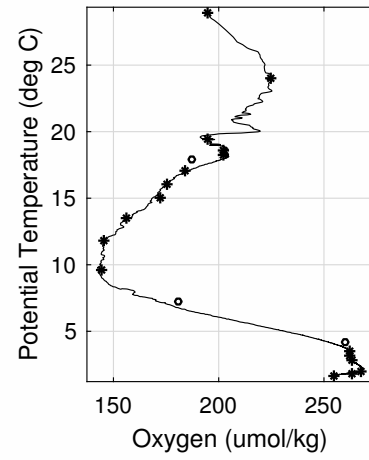
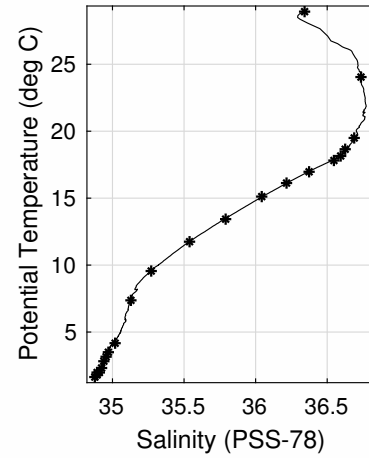
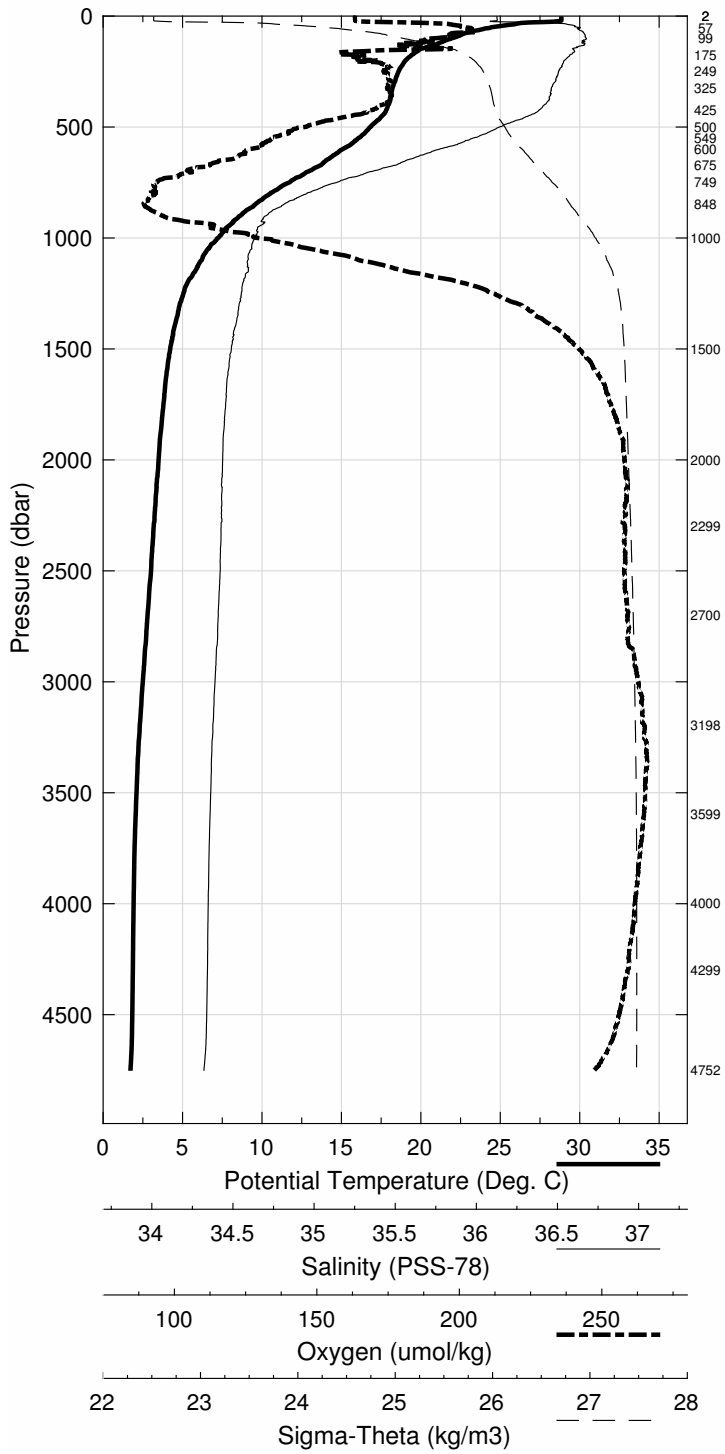


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 13 (CTD013)  
 Latitude 26.500N Longitude 75.705W  
 16-Sep-2007 10:28Z

Pressure dbar	Temp90 °C	PoTemp90 °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	28.846	28.846	36.327	195.5	0.005	23.113
10	28.850	28.848	36.327	195.3	0.048	23.112
20	28.848	28.843	36.326	195.4	0.095	23.112
30	26.546	26.540	36.573	211.4	0.139	24.050
50	24.468	24.457	36.725	222.2	0.208	24.810
75	22.920	22.905	36.757	221.1	0.281	25.294
100	21.973	21.953	36.771	215.1	0.345	25.577
125	21.070	21.045	36.764	211.2	0.403	25.825
150	19.964	19.936	36.706	214.0	0.456	26.081
200	19.055	19.019	36.661	200.8	0.550	26.287
250	18.644	18.599	36.633	202.8	0.638	26.373
300	18.386	18.333	36.611	203.8	0.724	26.424
400	18.025	17.956	36.563	202.2	0.894	26.480
500	16.885	16.801	36.338	182.7	1.061	26.589
600	15.165	15.071	36.041	168.9	1.217	26.759
700	13.039	12.940	35.707	154.2	1.356	26.953
800	10.625	10.525	35.383	144.9	1.475	27.159
900	8.719	8.619	35.179	147.4	1.576	27.319
1000	7.340	7.238	35.125	171.1	1.660	27.484
1100	6.306	6.201	35.090	196.4	1.730	27.598
1200	5.426	5.319	35.066	221.9	1.790	27.690
1300	4.929	4.817	35.047	236.7	1.844	27.733
1400	4.604	4.486	35.027	245.1	1.894	27.755
1500	4.348	4.224	35.008	251.4	1.943	27.769
1750	3.941	3.799	34.980	259.4	2.063	27.791
2000	3.651	3.489	34.965	262.7	2.180	27.810
2500	3.220	3.016	34.953	262.7	2.409	27.846
3000	2.744	2.498	34.927	266.2	2.629	27.872
3500	2.392	2.102	34.906	268.0	2.839	27.888
4000	2.260	1.919	34.893	265.4	3.050	27.893
4500	2.234	1.835	34.886	261.4	3.269	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4752	1	2.146	1.720	34.872	254.3
4299	2	2.246	1.871	34.890	263.2
4001	3	2.263	1.922	34.894	281.3
3599	4	2.358	2.058	34.905	267.5
3198	5	2.572	2.310	34.919	275.0
2700	6	3.034	2.814	34.944	263.6
2300	7	3.379	3.192	34.959	262.4
2001	8	3.651	3.489	34.967	262.4
1500	9	4.332	4.208	35.011	259.9
1001	10	7.426	7.323	35.131	180.9
848	11	9.734	9.633	35.277	144.7
750	12	11.900	11.800	35.544	145.3
675	13	13.576	13.478	35.788	155.8
601	15	15.136	15.043	36.038	171.8
550	16	16.168	16.079	36.208	175.0
500	17	17.066	16.982	36.368	184.5
426	18	17.957	17.883	36.547	187.0
325	19	18.284	18.227	36.596	201.8
250	20	18.640	18.596	36.632	202.8
176	21	19.471	19.438	36.692	194.6
100	22	21.946	22.025	-999.000	-999.0
58	23	24.137	24.125	36.735	224.4
3	24	28.989	28.988	36.343	194.4
3	14	28.992	28.993	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 13 (CTD013)  
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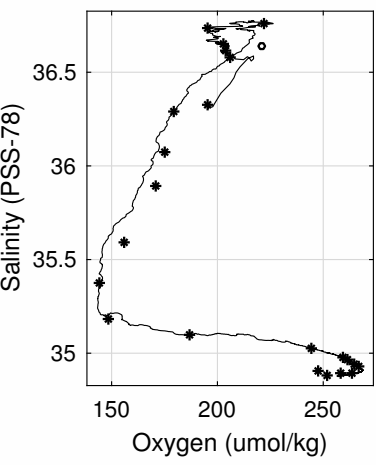
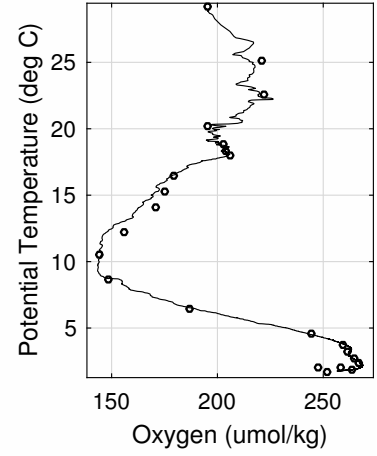
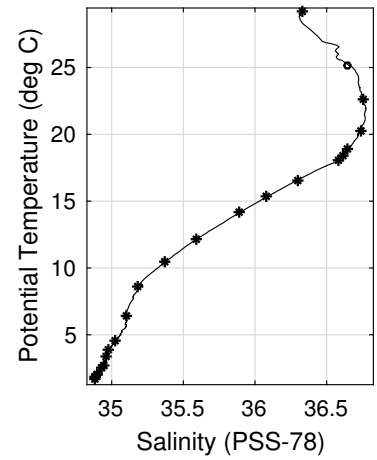
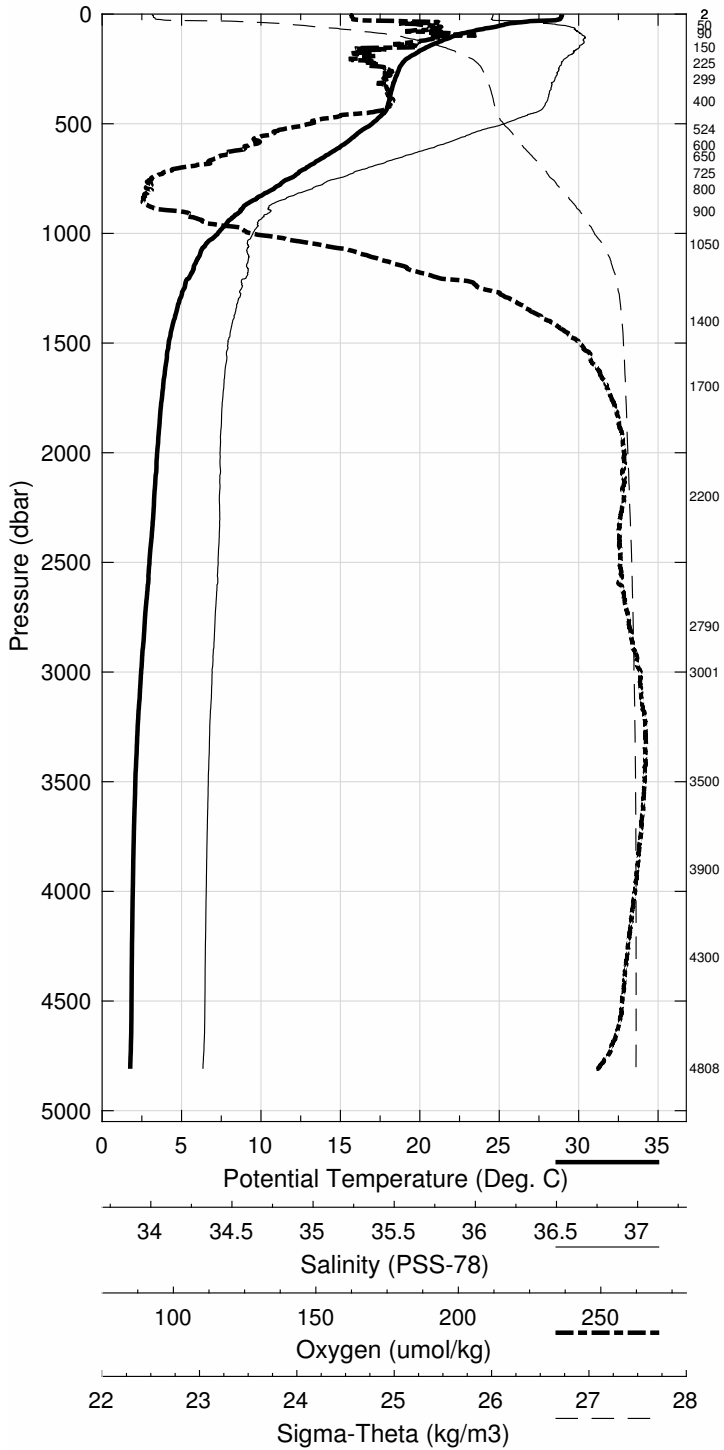


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 14 (CTD014)  
 Latitude 26.499N Longitude 75.902W  
 16-Sep-2007 14:48Z

Pressure dbar	Temp90 °C	PoTemp90 °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	28.952	28.952	36.319	195.3	0.005	23.071
10	28.915	28.913	36.315	195.4	0.048	23.081
20	28.858	28.854	36.312	195.8	0.096	23.098
30	27.822	27.814	36.388	201.6	0.142	23.500
50	25.226	25.215	36.649	214.4	0.217	24.522
75	23.508	23.493	36.735	210.7	0.295	25.106
100	22.178	22.158	36.768	216.2	0.362	25.517
125	21.302	21.278	36.768	212.4	0.421	25.764
150	20.502	20.474	36.747	211.6	0.476	25.968
200	19.306	19.269	36.679	200.2	0.574	26.235
250	18.736	18.692	36.645	203.5	0.663	26.358
300	18.483	18.430	36.623	203.9	0.750	26.408
400	18.118	18.048	36.583	205.4	0.921	26.473
500	17.065	16.981	36.371	185.1	1.089	26.572
600	15.159	15.066	36.040	169.5	1.245	26.760
700	12.957	12.858	35.697	152.9	1.383	26.962
800	10.820	10.719	35.409	145.5	1.503	27.145
900	8.802	8.701	35.214	152.9	1.604	27.334
1000	7.387	7.285	35.126	170.5	1.688	27.477
1100	6.244	6.140	35.103	199.3	1.758	27.616
1200	5.602	5.494	35.092	216.5	1.817	27.689
1300	5.011	4.898	35.054	234.9	1.871	27.730
1400	4.615	4.497	35.025	244.8	1.922	27.752
1500	4.315	4.191	35.001	252.3	1.971	27.767
1750	3.909	3.767	34.976	260.0	2.091	27.791
2000	3.625	3.463	34.962	263.2	2.207	27.811
2500	3.183	2.980	34.953	262.3	2.435	27.849
3000	2.700	2.456	34.923	267.3	2.653	27.873
3500	2.379	2.090	34.904	268.3	2.863	27.888
4000	2.271	1.929	34.894	265.9	3.074	27.892
4500	2.249	1.849	34.887	262.7	3.294	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4809	1	2.203	1.768	34.877	251.4
4300	2	2.249	1.873	34.890	263.8
3900	3	2.285	1.954	34.896	258.1
3500	4	2.378	2.089	34.904	248.0
3001	5	2.699	2.455	34.926	266.8
2791	6	2.906	2.679	34.938	264.1
2200	7	3.478	3.300	34.962	261.4
1700	8	3.961	3.823	34.982	259.0
1400	9	4.633	4.515	35.029	244.1
1050	10	6.589	6.488	35.099	186.9
900	11	8.702	8.602	35.186	148.2
800	12	10.570	10.471	35.377	144.5
725	13	12.234	12.135	35.595	155.7
651	15	14.235	14.138	35.894	171.1
601	16	15.415	15.321	36.077	174.9
525	17	16.636	16.549	36.292	179.5
401	18	18.094	18.024	36.576	205.7
300	19	18.421	18.368	36.610	204.0
225	20	18.863	18.823	36.647	202.5
150	21	20.272	20.244	36.735	195.1
90	22	22.634	22.616	36.755	221.6
50	23	25.187	25.176	36.643	221.4
2	24	29.137	29.137	36.326	195.3
2	14	29.111	29.112	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 14 (CTD014)  
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 16-Sep-2007 14:48 Z



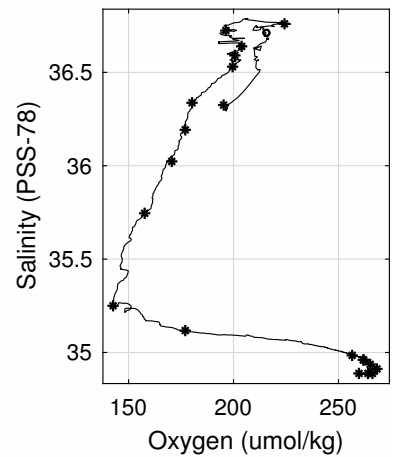
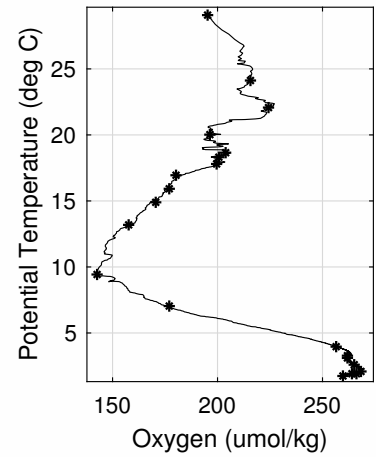
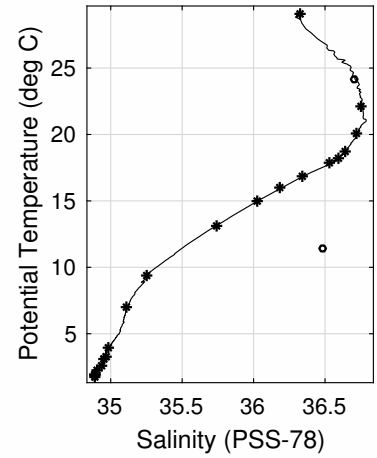
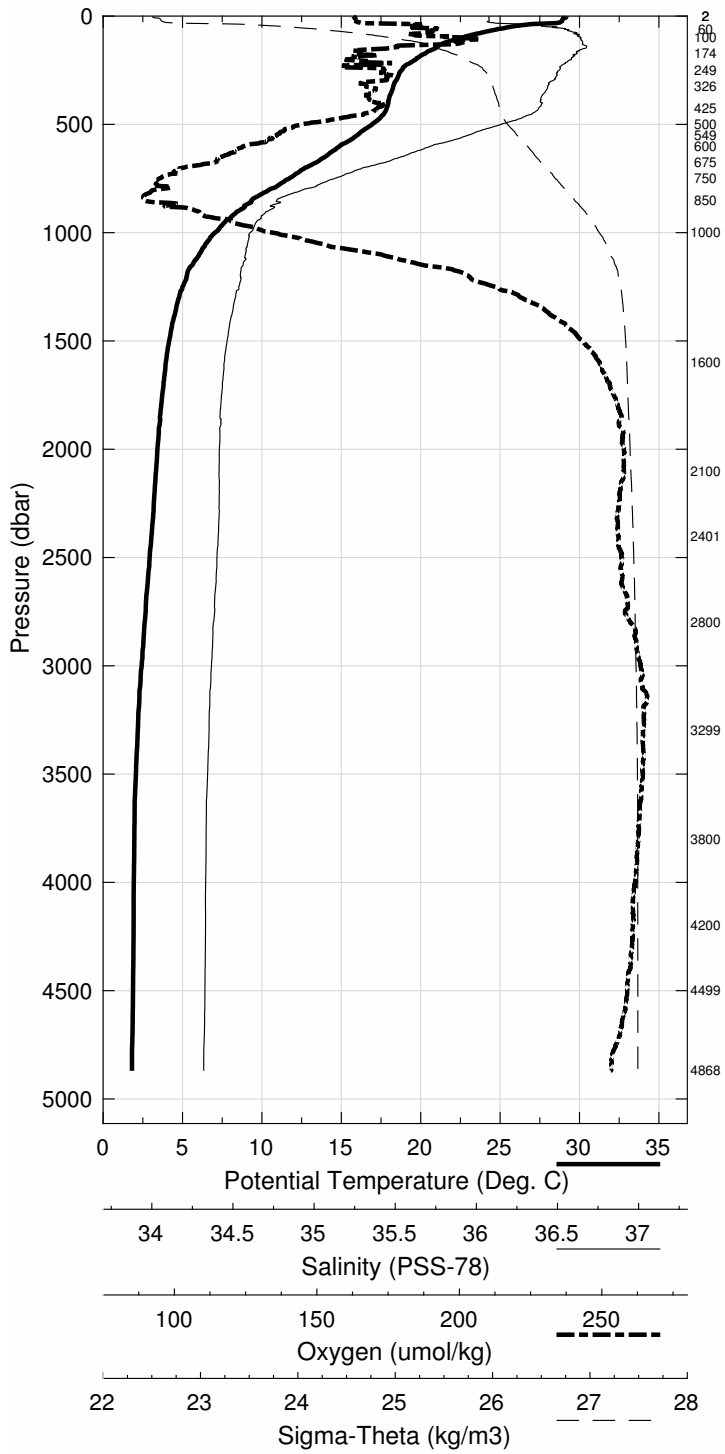


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 15 (CTD015)  
 Latitude 26.500N Longitude 76.088W  
 16-Sep-2007 20:04Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.172	29.172	36.304	195.6	0.005	22.986
10	28.973	28.970	36.302	195.8	0.049	23.052
20	28.920	28.915	36.303	196.2	0.097	23.071
30	28.747	28.740	36.314	197.2	0.144	23.138
50	25.646	25.635	36.624	209.9	0.225	24.373
75	23.955	23.939	36.732	214.0	0.306	24.972
100	22.608	22.588	36.760	222.5	0.376	25.389
125	21.470	21.445	36.769	222.4	0.437	25.718
150	20.903	20.874	36.773	203.6	0.493	25.879
200	19.735	19.698	36.712	193.9	0.595	26.148
250	18.845	18.800	36.651	203.2	0.687	26.335
300	18.473	18.420	36.614	201.5	0.774	26.403
400	18.023	17.954	36.566	201.2	0.945	26.484
500	17.026	16.942	36.364	182.4	1.113	26.576
600	14.998	14.906	36.014	168.1	1.268	26.775
700	12.826	12.728	35.677	152.9	1.405	26.972
800	10.605	10.505	35.383	146.5	1.524	27.163
900	8.634	8.534	35.205	156.3	1.623	27.353
1000	7.138	7.037	35.115	175.2	1.705	27.504
1100	6.163	6.060	35.091	202.3	1.773	27.617
1200	5.372	5.266	35.065	224.3	1.832	27.696
1300	4.886	4.775	35.041	237.6	1.884	27.734
1400	4.547	4.430	35.018	246.7	1.935	27.754
1500	4.279	4.155	35.000	253.1	1.983	27.770
1750	3.864	3.723	34.972	260.8	2.102	27.793
2000	3.579	3.418	34.961	263.3	2.218	27.814
2500	3.131	2.929	34.949	262.8	2.443	27.851
3000	2.669	2.425	34.922	267.5	2.658	27.874
3500	2.353	2.064	34.903	268.1	2.866	27.889
4000	2.272	1.930	34.893	266.2	3.076	27.892
4500	2.283	1.882	34.890	264.1	3.297	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4868	1	2.261	1.816	34.885	260.2
4500	2	2.286	1.886	34.891	264.4
4200	3	2.287	1.922	34.893	265.8
3800	4	2.283	1.963	34.896	121.6
3300	5	2.436	2.166	34.909	267.9
2800	6	2.852	2.625	34.935	264.6
2401	7	3.231	3.037	34.956	262.0
2101	8	3.498	3.328	34.964	262.3
1600	9	4.090	3.959	34.988	256.9
1001	10	7.063	6.963	35.112	177.5
851	11	9.520	9.421	35.254	142.8
750	12	11.568	11.469	36.486	-999.0
675	13	13.250	13.154	35.743	157.5
600	15	15.046	14.953	36.021	170.4
550	16	16.054	15.965	36.190	176.5
500	17	16.928	16.844	36.342	180.4
425	18	17.863	17.790	36.529	199.6
326	19	18.327	18.270	36.593	200.2
250	20	18.746	18.701	36.637	203.6
175	21	20.148	20.116	36.724	196.0
100	22	22.175	22.155	36.759	224.8
61	23	24.231	24.218	36.711	215.2
2	24	29.112	29.112	36.320	195.4
2	14	29.086	29.087	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 15 (CTD015)  
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 16-Sep-2007 20:04 Z

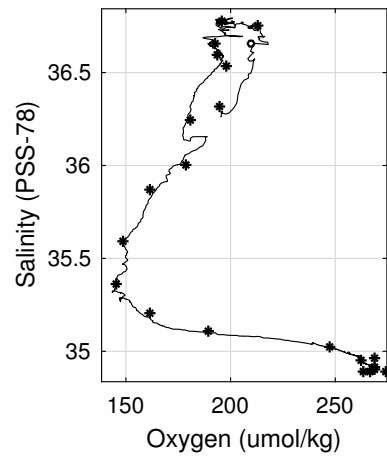
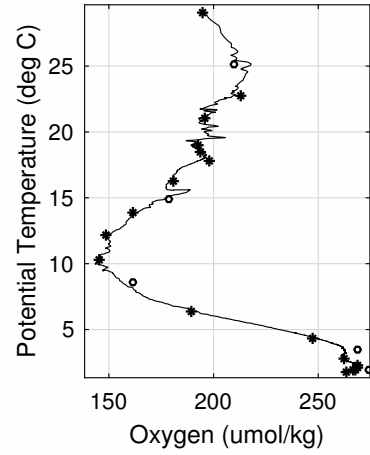
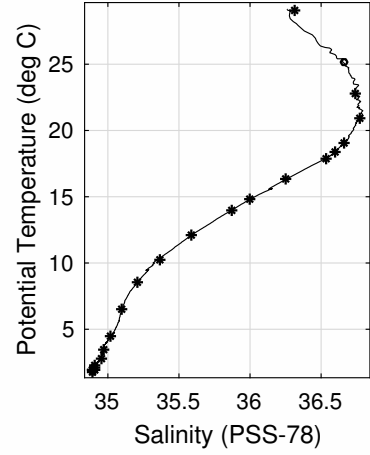
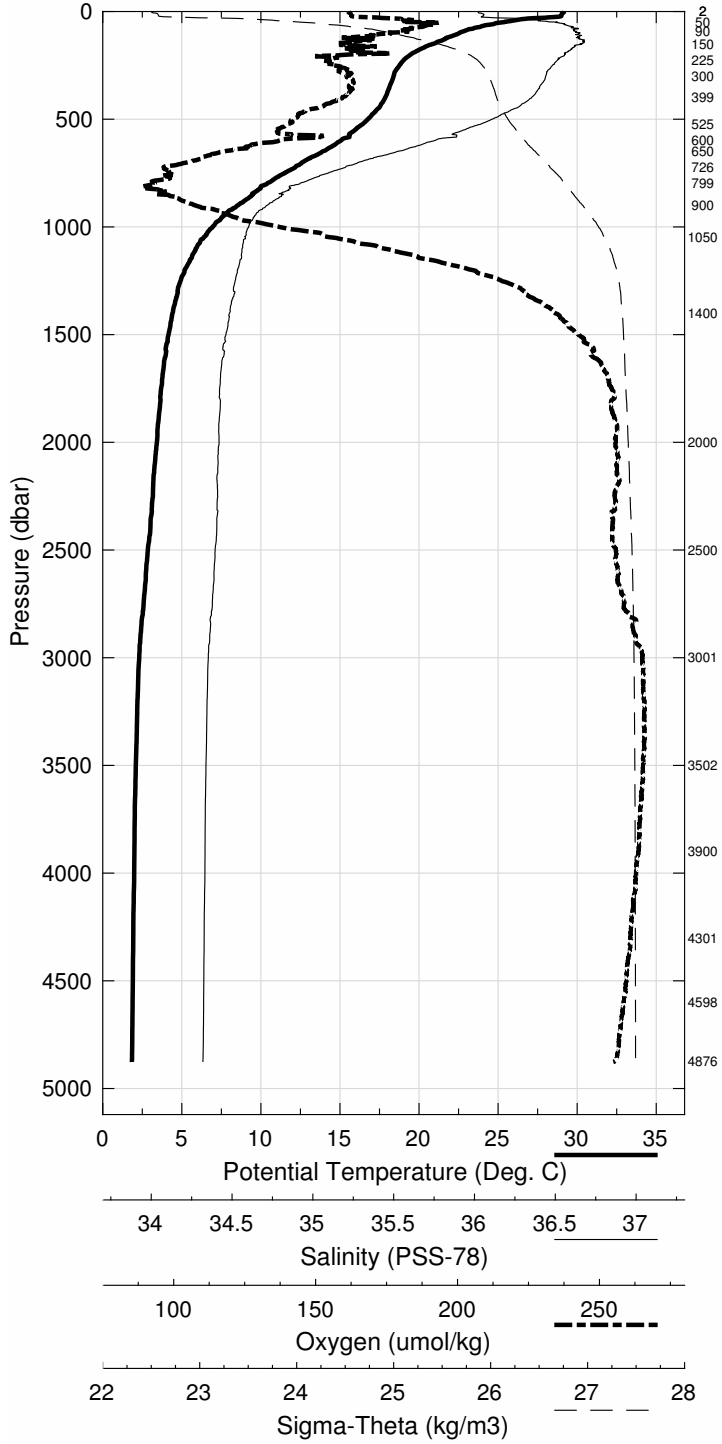


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 16 (CTD016)  
 Latitude 26.500N Longitude 76.217W  
 17-Sep-2007 01:06Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.152	29.152	36.263	195.1	0.005	22.962
10	29.029	29.027	36.282	195.8	0.049	23.018
20	29.007	29.002	36.288	195.7	0.097	23.031
30	27.515	27.508	36.382	203.6	0.144	23.595
50	25.310	25.299	36.653	216.3	0.219	24.499
75	23.604	23.588	36.727	211.4	0.297	25.072
100	22.576	22.556	36.771	205.8	0.366	25.406
125	21.698	21.673	36.765	201.7	0.428	25.652
150	20.922	20.893	36.773	193.3	0.485	25.873
200	19.500	19.464	36.694	194.9	0.586	26.196
250	18.803	18.759	36.633	191.4	0.677	26.332
300	18.439	18.386	36.599	194.8	0.765	26.400
400	17.933	17.863	36.529	193.5	0.936	26.477
500	16.849	16.766	36.332	181.2	1.102	26.593
600	15.136	15.042	36.041	177.6	1.257	26.766
700	12.718	12.621	35.665	154.7	1.394	26.985
800	10.484	10.385	35.370	146.3	1.511	27.174
900	8.632	8.532	35.206	156.7	1.610	27.354
1000	7.052	6.952	35.115	177.8	1.690	27.516
1100	5.987	5.885	35.082	204.0	1.757	27.632
1200	5.276	5.171	35.059	226.3	1.815	27.702
1300	4.855	4.744	35.044	239.3	1.867	27.740
1400	4.532	4.415	35.020	247.1	1.917	27.757
1500	4.285	4.161	35.002	252.9	1.965	27.771
1750	3.832	3.690	34.970	261.3	2.084	27.794
2000	3.583	3.422	34.967	262.3	2.198	27.819
2500	3.051	2.850	34.948	262.4	2.420	27.857
3000	2.548	2.307	34.914	269.1	2.630	27.877
3500	2.381	2.091	34.902	269.2	2.836	27.886
4000	2.331	1.987	34.897	267.5	3.050	27.890
4500	2.304	1.902	34.891	265.0	3.273	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4877	1	2.290	1.843	34.887	262.9
4599	2	2.300	1.887	34.890	274.0
4301	3	2.308	1.930	34.895	266.3
3900	4	2.336	2.004	34.900	268.2
3502	5	2.384	2.095	34.904	269.3
3001	6	2.528	2.288	34.914	269.0
2500	7	3.051	2.851	34.950	261.8
2001	8	3.557	3.396	34.965	268.8
1401	9	4.544	4.427	35.026	246.9
1050	10	6.567	6.466	35.104	189.4
900	11	8.655	8.555	35.210	161.4
800	12	10.406	10.308	35.360	145.1
726	13	12.173	12.075	35.586	148.3
651	15	14.039	13.943	35.864	161.6
601	16	14.937	14.844	36.005	179.1
525	17	16.412	16.326	36.251	180.4
400	18	17.971	17.901	36.540	197.5
300	19	18.422	18.368	36.592	194.0
226	20	19.111	19.070	36.662	192.2
151	21	21.027	20.998	36.779	195.9
91	22	22.803	22.784	36.747	213.2
50	23	25.174	25.163	36.659	209.4
2	24	29.092	29.091	36.322	195.2
2	14	29.089	29.090	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 16 (CTD016)  
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 17-Sep-2007 01:06 Z

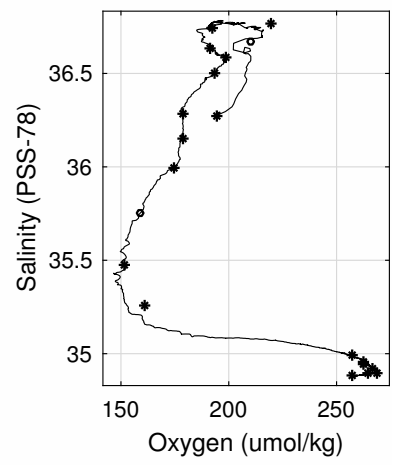
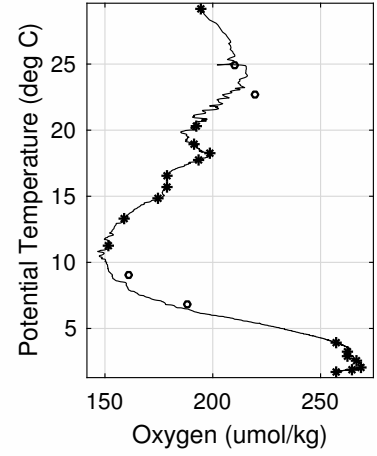
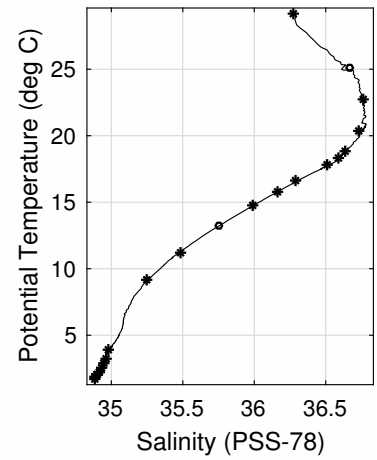
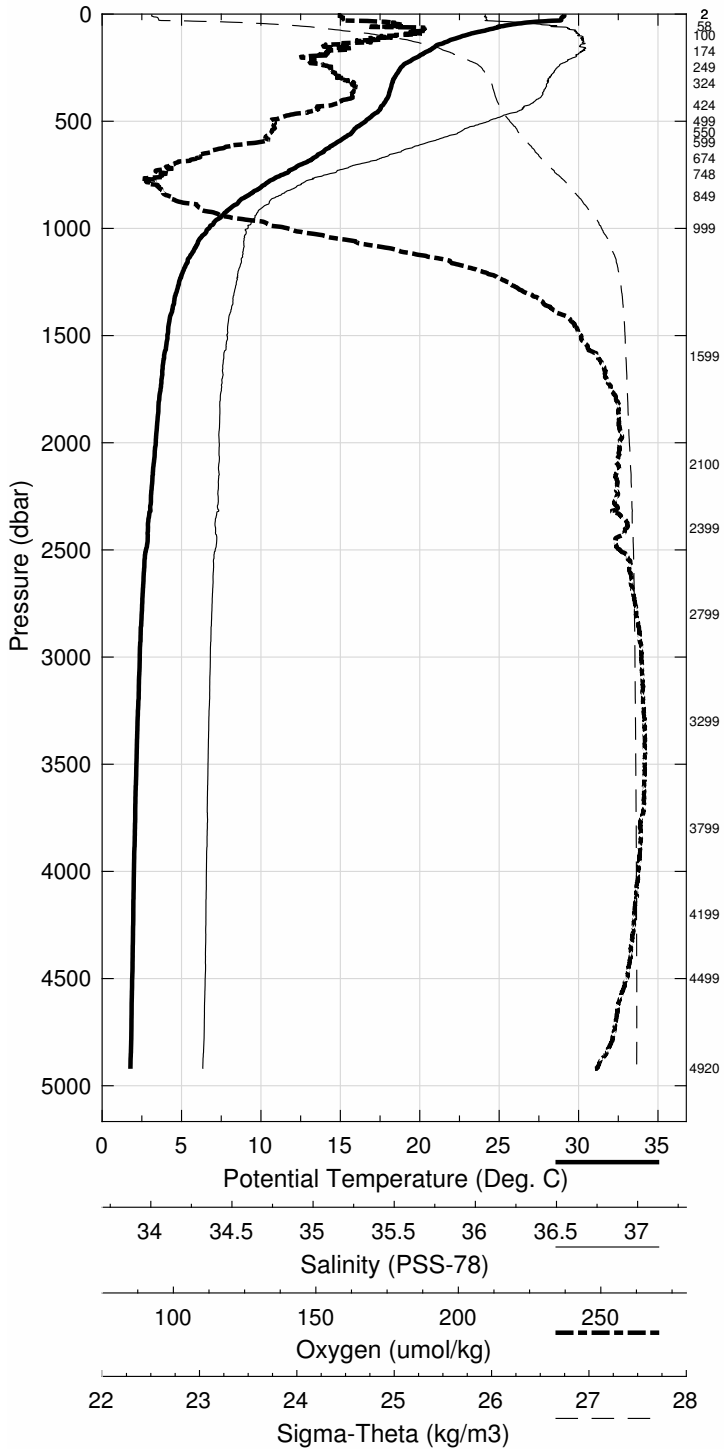


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 17 (CTD017)  
 Latitude 26.500N Longitude 76.347W  
 17-Sep-2007 06:45Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.100	29.100	36.285	194.9	0.005	22.996
10	29.089	29.086	36.282	195.1	0.049	22.998
20	28.919	28.914	36.288	195.5	0.097	23.060
30	28.818	28.811	36.283	195.8	0.145	23.091
50	25.691	25.680	36.570	210.2	0.225	24.318
75	24.199	24.183	36.733	215.9	0.308	24.899
100	22.857	22.837	36.743	208.9	0.380	25.304
125	21.839	21.814	36.773	198.7	0.443	25.618
150	21.013	20.984	36.756	190.6	0.501	25.836
200	19.909	19.872	36.733	185.2	0.605	26.118
250	18.852	18.807	36.641	192.3	0.698	26.326
300	18.426	18.373	36.599	194.9	0.786	26.404
400	17.963	17.893	36.539	195.7	0.957	26.478
500	16.679	16.596	36.302	178.3	1.123	26.610
600	14.855	14.762	35.994	174.3	1.275	26.791
700	12.688	12.591	35.658	154.2	1.410	26.985
800	10.207	10.110	35.352	150.2	1.526	27.208
900	8.261	8.164	35.179	160.2	1.620	27.389
1000	6.819	6.721	35.103	182.1	1.698	27.539
1100	5.885	5.784	35.081	208.6	1.763	27.644
1200	5.197	5.093	35.055	229.4	1.819	27.708
1300	4.779	4.669	35.035	240.2	1.870	27.742
1400	4.454	4.338	35.014	248.8	1.920	27.761
1500	4.231	4.108	35.001	253.8	1.968	27.775
1750	3.817	3.676	34.972	261.1	2.085	27.797
2000	3.536	3.375	34.962	263.2	2.199	27.819
2500	2.956	2.757	34.941	263.3	2.417	27.860
3000	2.611	2.369	34.917	268.6	2.626	27.875
3500	2.447	2.156	34.906	269.3	2.837	27.883
4000	2.345	2.001	34.898	267.8	3.053	27.890
4500	2.292	1.891	34.892	265.1	3.277	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4921	1	2.233	1.783	34.879	257.2
4500	2	2.292	1.892	34.891	264.2
4199	3	2.329	1.962	34.895	282.6
3799	4	2.370	2.048	34.900	268.2
3300	5	2.500	2.229	34.909	276.6
2800	6	2.721	2.497	34.926	266.9
2399	7	3.061	2.870	34.948	262.8
2100	8	3.422	3.254	34.962	262.3
1599	9	4.037	3.907	34.987	257.3
1000	10	6.840	6.745	33.143	188.4
849	11	9.214	9.117	35.252	160.5
749	12	11.360	11.263	35.478	151.5
674	13	13.376	13.279	35.755	159.3
600	15	14.856	14.764	35.991	174.9
550	16	15.848	15.760	36.155	179.1
499	17	16.634	16.551	36.289	178.5
425	18	17.822	17.748	36.507	193.8
325	19	18.364	18.307	36.591	198.2
250	20	18.894	18.849	36.638	191.9
175	21	20.340	20.307	36.737	192.4
100	22	22.789	22.769	36.766	219.9
59	23	25.050	25.038	36.670	210.2
2	24	29.123	29.123	36.271	194.2
2	14	29.123	29.124	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
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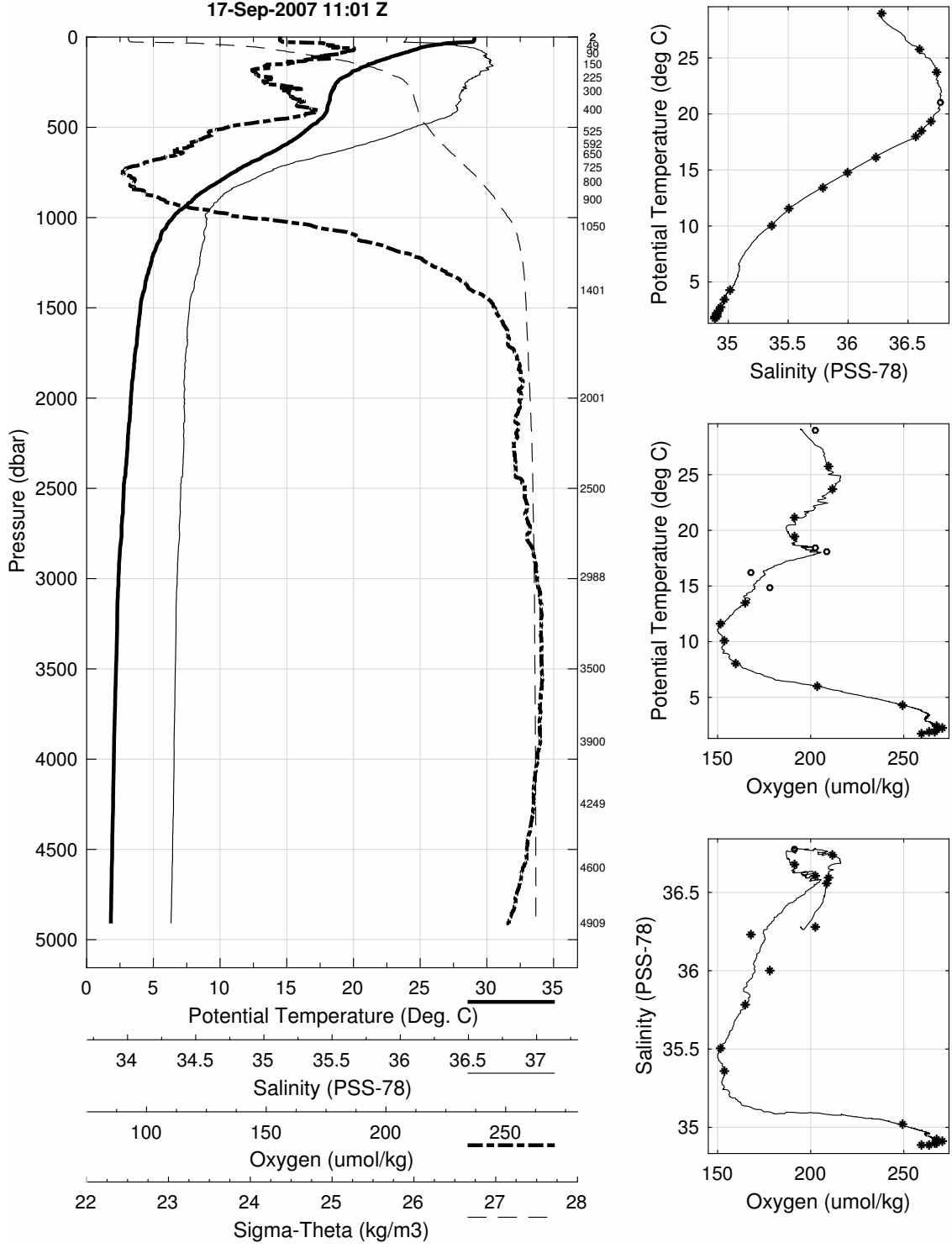


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 18 (CTD018)  
 Latitude 26.500N Longitude 76.476W  
 17-Sep-2007 11:01Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.070	29.070	36.280	194.9	0.005	23.002
10	29.069	29.067	36.277	194.6	0.049	23.001
20	29.032	29.027	36.271	194.9	0.097	23.010
30	28.006	27.999	36.330	200.8	0.145	23.395
50	25.517	25.506	36.593	208.4	0.223	24.389
75	24.398	24.382	36.718	215.0	0.306	24.828
100	23.275	23.254	36.743	208.5	0.380	25.182
125	22.245	22.220	36.775	201.9	0.447	25.505
150	21.152	21.122	36.776	195.6	0.506	25.813
200	19.874	19.837	36.712	187.7	0.611	26.112
250	18.808	18.763	36.632	191.4	0.704	26.330
300	18.449	18.396	36.609	196.6	0.791	26.406
400	18.100	18.030	36.581	204.0	0.963	26.476
500	16.779	16.696	36.319	180.0	1.129	26.600
600	14.890	14.798	35.999	170.1	1.283	26.787
700	12.313	12.218	35.599	156.3	1.417	27.013
800	10.015	9.919	35.341	153.5	1.529	27.232
900	8.045	7.950	35.163	161.6	1.621	27.410
1000	6.553	6.457	35.088	185.5	1.697	27.562
1100	5.658	5.559	35.079	216.6	1.758	27.671
1200	5.105	5.001	35.058	231.4	1.813	27.721
1300	4.738	4.629	35.040	242.0	1.863	27.750
1400	4.435	4.319	35.016	249.0	1.912	27.765
1500	4.147	4.026	34.992	255.8	1.959	27.777
1750	3.776	3.635	34.971	261.7	2.076	27.801
2000	3.476	3.317	34.960	263.3	2.189	27.824
2500	2.985	2.785	34.941	264.3	2.406	27.858
3000	2.627	2.385	34.919	267.9	2.618	27.875
3500	2.492	2.200	34.908	269.0	2.830	27.882
4000	2.385	2.040	34.901	267.8	3.048	27.889
4500	2.316	1.914	34.892	264.9	3.274	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4909	1	2.264	1.814	34.883	259.8
4600	2	2.292	1.879	34.888	263.8
4249	3	2.359	1.986	34.897	266.8
3901	4	2.394	2.060	34.901	268.0
3500	5	2.495	2.203	34.909	270.8
2988	6	2.647	2.406	34.919	267.6
2500	7	3.001	2.801	34.941	-999.0
2001	8	3.510	3.350	34.963	-999.0
1401	9	4.462	4.345	35.019	249.3
1050	10	6.135	7.713	-999.000	-999.0
900	11	8.147	9.424	-999.000	-999.0
800	12	10.144	10.047	35.357	153.7
725	13	11.650	11.555	35.506	151.1
651	15	13.564	13.470	35.784	165.3
593	16	14.888	14.797	35.997	177.6
525	17	16.281	16.196	36.228	167.9
400	18	18.081	18.011	36.562	208.3
300	19	18.501	18.448	36.609	202.9
226	20	19.430	19.389	36.684	191.2
150	21	21.117	21.088	36.772	191.7
90	22	23.771	23.752	36.744	211.2
50	23	25.853	25.841	36.596	210.1
2	24	29.040	29.040	36.281	202.6
2	14	29.037	29.038	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
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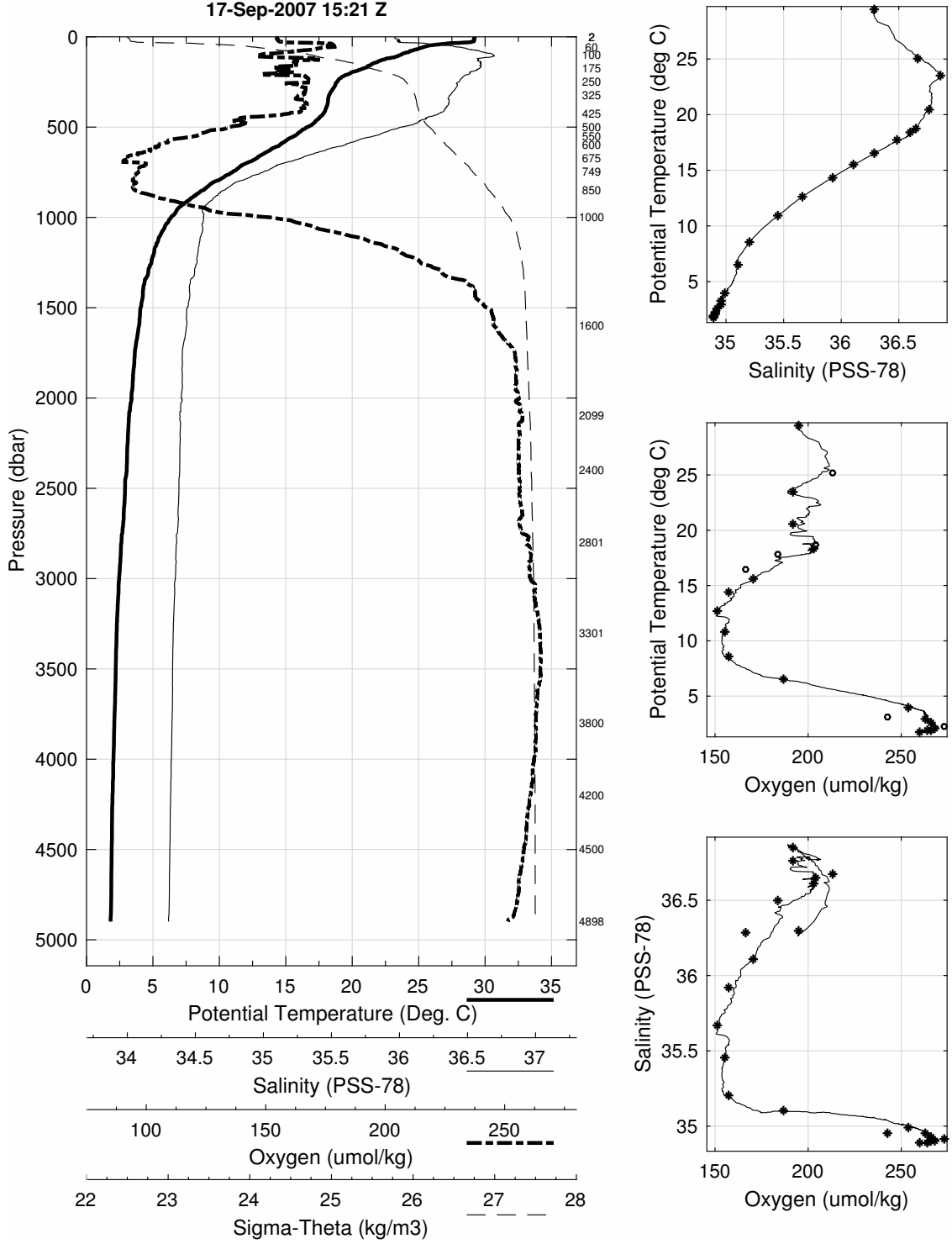


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 19 (CTD019)  
 Latitude 26.500N Longitude 76.565W  
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Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$	DynHt $\text{m}^2\cdot\text{s}^{-2}$	SigT $\text{kg}\cdot\text{m}^{-3}$
1	29.217	29.217	36.265	194.3	0.005	22.941
10	29.165	29.163	36.267	194.8	0.049	22.961
20	29.175	29.170	36.284	194.9	0.098	22.971
30	28.910	28.903	36.285	196.7	0.147	23.062
50	25.686	25.675	36.613	209.3	0.227	24.352
75	24.604	24.588	36.756	201.9	0.312	24.795
100	23.677	23.656	36.862	189.9	0.386	25.154
125	22.440	22.415	36.774	205.3	0.454	25.449
150	21.507	21.477	36.786	200.3	0.515	25.722
200	19.947	19.910	36.722	197.6	0.623	26.100
250	18.897	18.852	36.653	204.2	0.716	26.323
300	18.502	18.448	36.621	202.6	0.804	26.402
400	18.064	17.994	36.567	201.2	0.975	26.474
500	16.680	16.597	36.301	181.2	1.142	26.609
600	14.615	14.524	35.953	161.1	1.293	26.811
700	12.105	12.011	35.583	157.1	1.424	27.040
800	9.796	9.701	35.310	154.0	1.535	27.245
900	7.879	7.784	35.152	163.1	1.625	27.426
1000	6.450	6.355	35.097	192.9	1.699	27.583
1100	5.656	5.557	35.082	215.0	1.759	27.673
1200	5.176	5.072	35.062	230.3	1.813	27.716
1300	4.762	4.652	35.042	241.2	1.864	27.749
1400	4.370	4.255	35.010	250.5	1.913	27.767
1500	4.200	4.077	34.998	254.3	1.960	27.776
1750	3.777	3.637	34.968	262.0	2.077	27.798
2000	3.536	3.375	34.961	263.4	2.191	27.819
2500	3.103	2.901	34.947	263.5	2.412	27.852
3000	2.698	2.454	34.924	266.6	2.629	27.873
3500	2.490	2.198	34.908	269.4	2.842	27.882
4000	2.376	2.032	34.901	267.6	3.061	27.890
4500	2.296	1.895	34.891	264.7	3.285	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4898	1	2.266	1.817	34.884	259.7
4500	2	2.295	1.894	34.893	264.2
4201	3	2.320	1.954	34.897	266.2
3801	4	2.415	2.092	34.905	267.9
3301	5	2.536	2.264	34.913	273.6
2801	6	2.822	2.596	34.931	266.2
2400	7	3.188	2.995	34.953	262.7
2100	8	3.374	3.206	34.959	242.3
1600	9	4.069	3.939	34.994	253.5
1001	10	6.577	6.480	35.098	187.1
851	11	8.654	8.560	35.208	157.3
750	12	10.994	10.899	35.452	154.9
675	13	12.720	12.627	35.664	150.8
601	15	14.411	14.320	35.919	156.9
551	16	15.614	15.527	36.114	170.3
501	17	16.625	16.542	36.290	166.9
426	18	17.785	17.711	36.492	183.8
326	19	18.388	18.330	36.606	202.7
250	20	18.826	18.782	36.647	204.4
175	21	20.547	20.513	36.761	192.0
101	22	23.540	23.519	36.854	192.0
61	23	25.091	25.077	36.670	213.5
3	24	29.454	29.454	36.292	195.0
3	14	29.452	29.453	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
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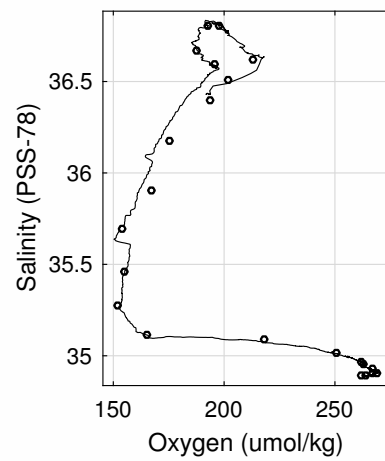
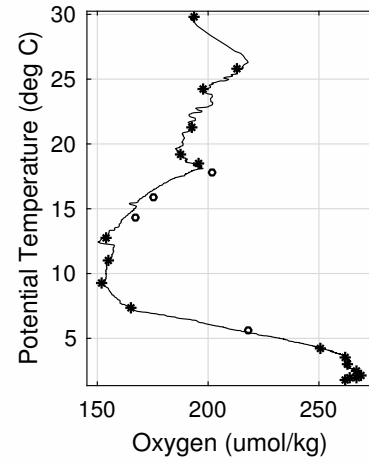
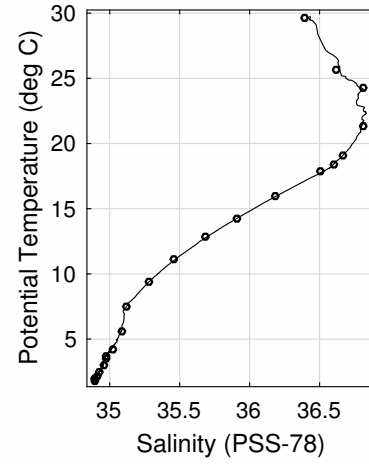
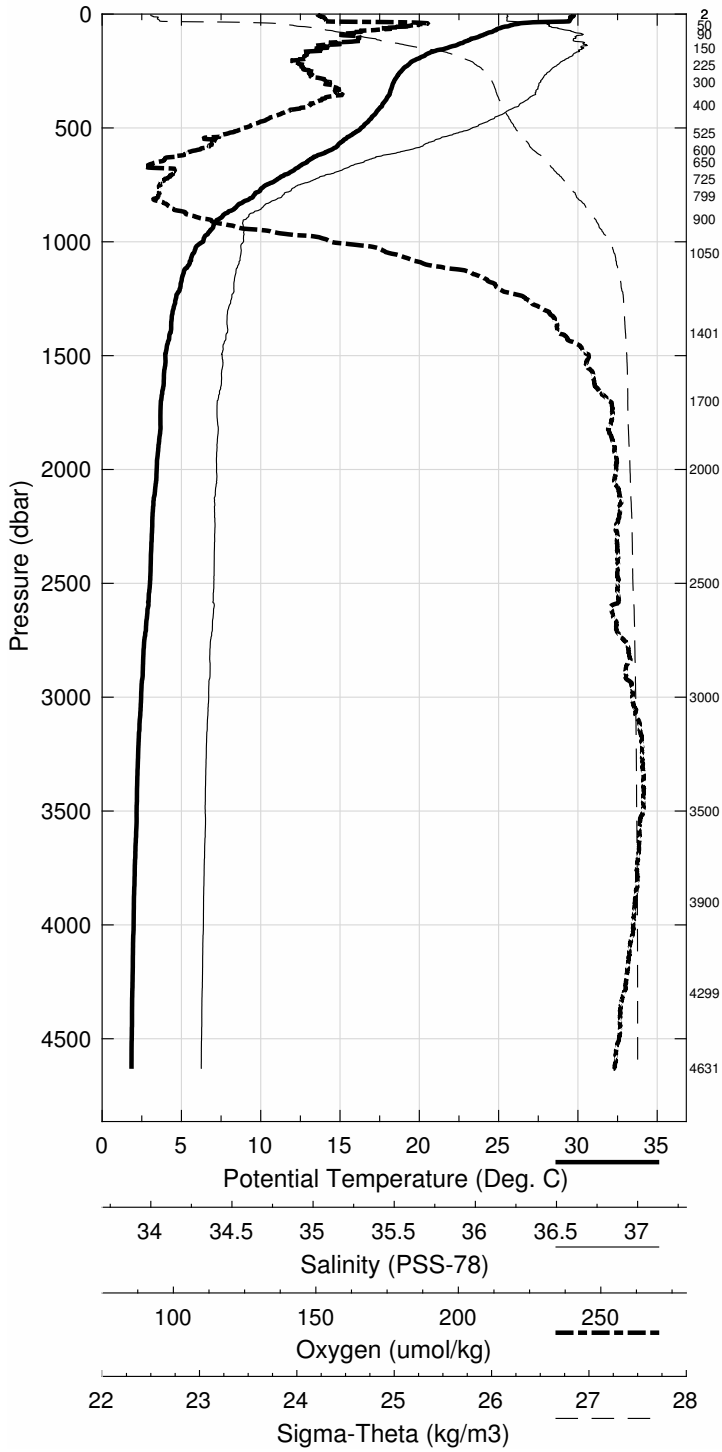


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 20 (CTD020)  
 Latitude 26.500N Longitude 76.655W  
 17-Sep-2007 20:15Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.741	29.741	36.432	191.7	0.005	22.888
10	29.685	29.683	36.435	192.2	0.050	22.911
20	29.547	29.542	36.431	193.4	0.099	22.956
30	29.476	29.468	36.429	193.6	0.148	22.980
50	25.742	25.731	36.643	213.9	0.227	24.357
75	24.679	24.663	36.752	202.0	0.311	24.769
100	23.744	23.723	36.776	201.8	0.387	25.069
125	22.802	22.776	36.821	195.0	0.457	25.381
150	21.723	21.693	36.812	191.3	0.519	25.681
200	19.810	19.773	36.722	187.2	0.625	26.136
250	18.911	18.866	36.646	189.8	0.718	26.315
300	18.428	18.375	36.597	194.8	0.806	26.402
400	17.728	17.659	36.491	189.9	0.976	26.499
500	16.413	16.331	36.254	173.9	1.139	26.636
600	14.388	14.298	35.916	162.1	1.288	26.832
700	11.850	11.757	35.550	157.4	1.416	27.063
800	9.619	9.525	35.295	153.6	1.522	27.263
900	7.466	7.374	35.113	165.2	1.609	27.455
1000	6.456	6.361	35.101	194.8	1.681	27.585
1100	5.582	5.484	35.075	217.6	1.739	27.677
1200	5.033	4.930	35.052	234.4	1.792	27.724
1300	4.576	4.468	35.021	245.8	1.841	27.753
1400	4.432	4.316	35.019	249.1	1.890	27.768
1500	4.107	3.985	34.992	256.3	1.937	27.782
1750	3.818	3.677	34.967	261.9	2.053	27.793
2000	3.601	3.440	34.964	262.9	2.169	27.815
2500	3.222	3.018	34.951	263.2	2.395	27.844
3000	2.703	2.458	34.925	266.7	2.612	27.873
3500	2.466	2.174	34.908	269.1	2.824	27.884
4000	2.329	1.986	34.898	266.9	3.040	27.891
4500	2.267	1.866	34.889	263.5	3.262	27.893

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4631	1	2.267	1.851	34.889	262.0
4300	2	2.276	1.899	34.893	264.2
3901	3	2.335	2.002	34.901	267.0
3500	4	2.465	2.173	34.908	269.4
3000	5	2.709	2.465	34.929	266.7
2500	6	3.207	3.003	34.952	262.7
2000	7	3.619	3.457	34.969	262.1
1700	8	3.828	3.691	34.970	277.5
1401	9	4.370	4.255	35.019	250.6
1050	10	5.770	5.675	35.090	218.1
900	11	7.514	7.422	35.119	165.0
800	12	9.425	9.333	35.277	152.3
725	13	11.165	11.072	35.464	155.3
650	15	12.884	12.793	35.689	154.2
600	16	14.365	14.275	35.910	166.9
525	17	16.004	15.919	36.182	174.8
400	18	17.864	17.795	36.510	201.8
301	19	18.480	18.427	36.600	195.2
226	20	19.195	19.153	36.673	187.7
151	21	21.390	21.361	36.805	192.2
91	22	24.246	24.227	36.805	197.5
51	23	25.746	25.735	36.624	213.0
2	24	29.621	29.620	36.398	193.6
2	14	29.629	29.630	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 20 (CTD020)  
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 17-Sep-2007 20:15 Z

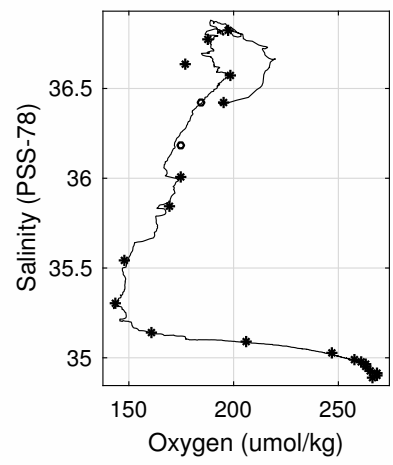
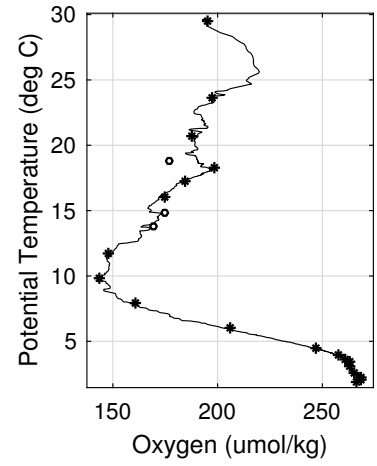
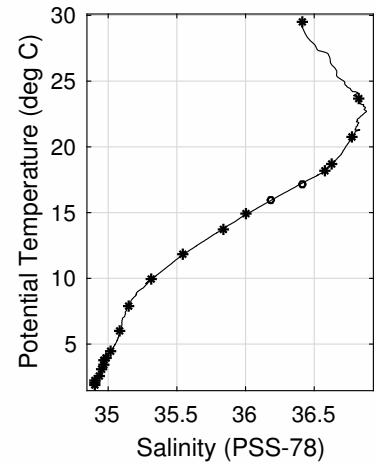
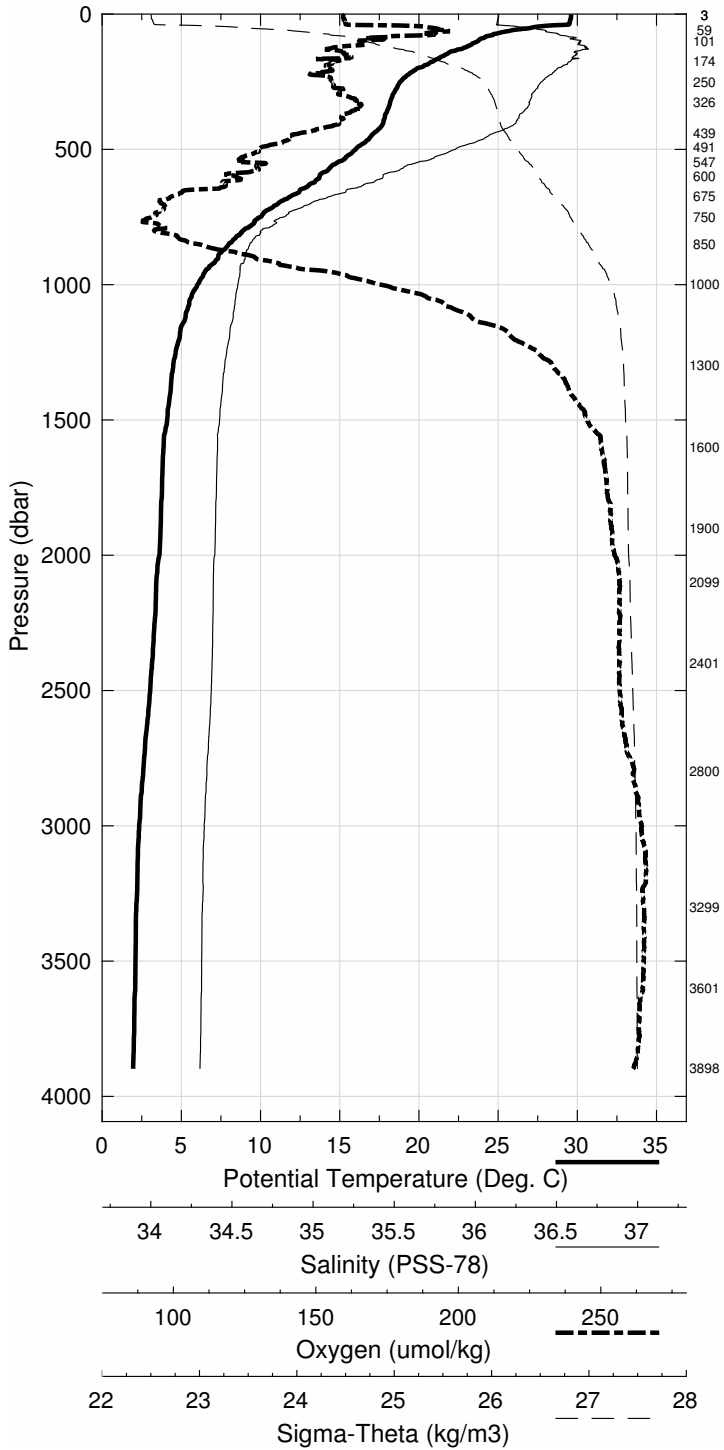


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 21 (CTD021)  
 Latitude 26.500N Longitude 76.744W  
 18-Sep-2007 00:48Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.606	29.606	36.423	193.3	0.005	22.928
10	29.605	29.602	36.422	193.0	0.049	22.929
20	29.566	29.561	36.416	193.4	0.099	22.939
30	29.534	29.527	36.414	193.7	0.148	22.948
50	27.129	27.118	36.597	215.1	0.240	23.884
75	24.692	24.675	36.730	216.2	0.329	24.748
100	23.751	23.730	36.841	196.7	0.404	25.116
125	22.833	22.807	36.866	190.4	0.473	25.406
150	21.688	21.658	36.814	194.2	0.535	25.693
200	19.941	19.904	36.723	189.3	0.644	26.102
250	18.872	18.828	36.641	190.6	0.737	26.320
300	18.384	18.331	36.590	193.6	0.825	26.408
400	17.824	17.755	36.511	192.2	0.995	26.491
500	16.090	16.009	36.199	171.9	1.157	26.668
600	13.819	13.732	35.831	166.0	1.301	26.886
700	11.208	11.119	35.460	147.6	1.425	27.112
800	8.981	8.891	35.206	145.7	1.527	27.297
900	7.419	7.328	35.126	171.1	1.612	27.472
1000	6.107	6.015	35.088	202.6	1.680	27.621
1100	5.432	5.335	35.068	222.8	1.737	27.689
1200	4.985	4.882	35.046	236.0	1.789	27.725
1300	4.598	4.490	35.022	245.9	1.839	27.751
1400	4.425	4.309	35.009	250.1	1.888	27.760
1500	4.229	4.107	34.995	254.4	1.936	27.771
1750	3.924	3.781	34.979	259.4	2.053	27.793
2000	3.775	3.610	34.970	261.3	2.172	27.803
2500	3.237	3.033	34.953	262.6	2.404	27.845
3000	2.581	2.339	34.917	268.3	2.619	27.878
3500	2.396	2.106	34.904	268.6	2.826	27.886

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
3898	1	2.288	1.957	34.895	266.3
3601	2	2.391	2.090	34.902	268.5
3300	3	2.448	2.178	34.909	268.0
2800	4	2.811	2.585	34.931	265.4
2402	5	3.317	3.122	34.955	262.6
2100	6	3.598	3.427	34.964	262.7
1900	7	3.849	3.693	34.974	260.9
1601	8	4.010	3.880	34.986	258.1
1300	9	4.590	4.482	35.022	246.5
1001	10	6.118	6.025	35.089	205.9
851	11	7.957	7.867	35.142	160.7
750	12	9.956	9.867	35.305	143.1
675	13	11.918	11.829	35.548	148.2
601	15	13.893	13.805	35.840	169.1
547	16	14.969	14.885	36.005	174.6
492	17	16.088	16.009	36.187	175.1
440	18	17.286	17.211	36.421	184.6
326	19	18.274	18.217	36.579	198.4
251	20	18.826	18.781	36.632	176.7
174	21	20.796	20.763	36.779	188.1
102	22	23.658	23.636	36.826	197.0
60	23	25.575	25.612	-999.000	-999.0
3	24	29.564	29.563	36.421	195.6
3	14	29.562	29.563	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 21 (CTD021)  
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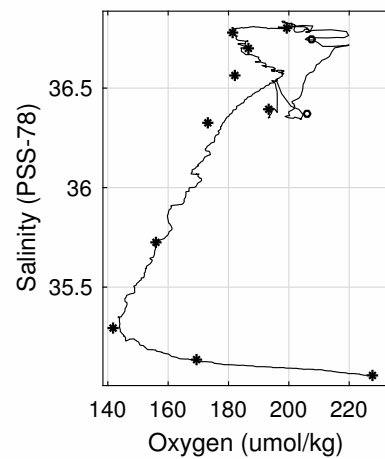
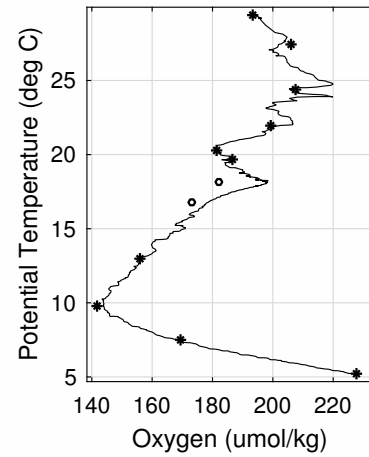
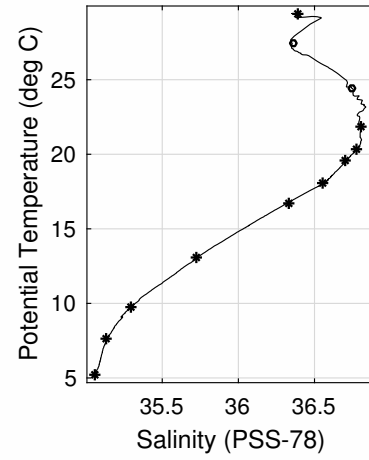
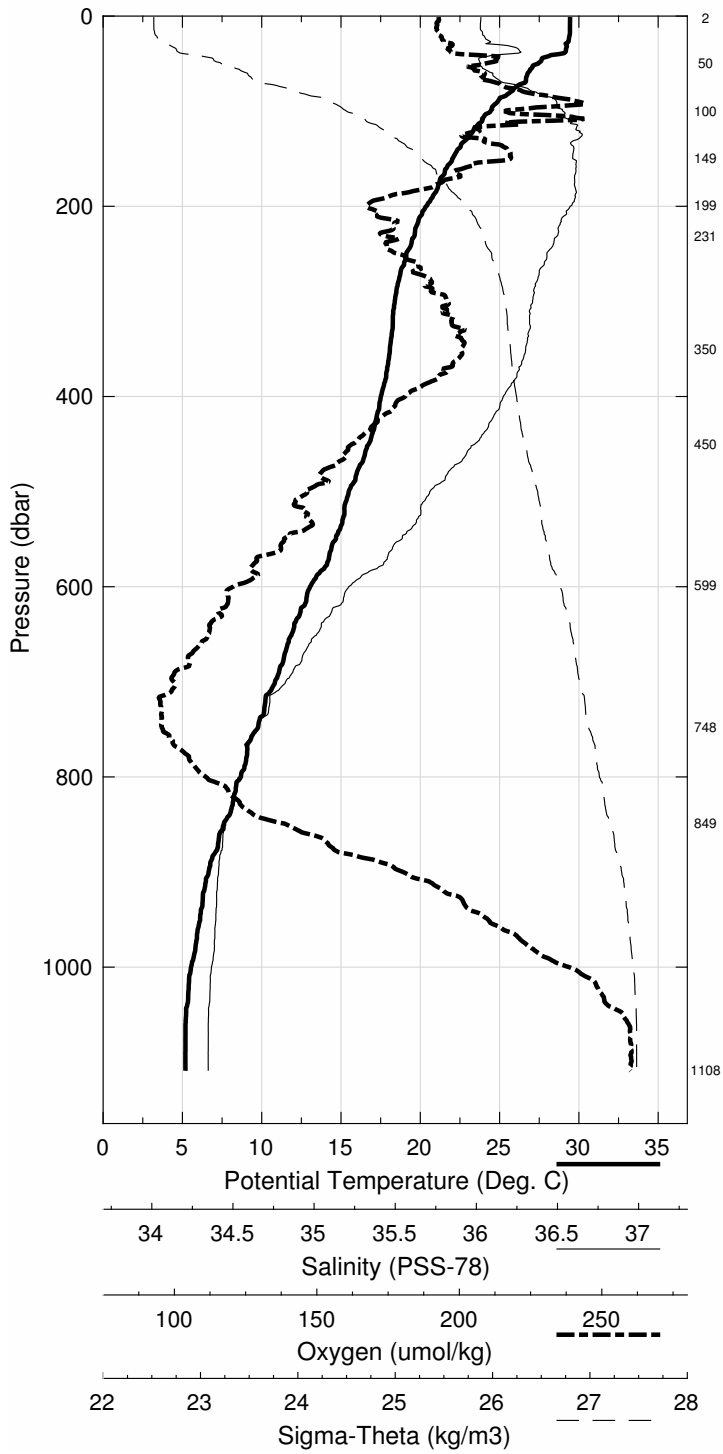


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 22 (CTD022)  
 Latitude 26.517N Longitude 76.832W  
 18-Sep-2007 04:58Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.444	29.443	36.354	193.6	0.005	22.932
10	29.441	29.438	36.351	193.4	0.049	22.931
20	29.425	29.420	36.363	193.7	0.098	22.946
30	29.205	29.198	36.438	196.2	0.147	23.078
50	27.449	27.438	36.354	201.9	0.238	23.597
75	26.002	25.985	36.561	205.7	0.339	24.216
100	24.450	24.429	36.745	205.4	0.424	24.834
125	23.179	23.153	36.836	197.7	0.497	25.282
150	22.044	22.014	36.792	206.6	0.562	25.576
200	20.405	20.367	36.779	180.9	0.674	26.021
250	19.162	19.117	36.668	186.4	0.771	26.267
300	18.443	18.390	36.600	195.1	0.860	26.400
400	17.581	17.512	36.461	187.6	1.030	26.512
500	15.561	15.482	36.110	170.0	1.189	26.721
600	13.128	13.043	35.725	156.7	1.330	26.946
700	10.925	10.836	35.424	146.1	1.448	27.135
800	8.773	8.684	35.206	151.8	1.547	27.330
900	6.737	6.650	35.105	187.3	1.626	27.550
1000	5.629	5.540	35.071	217.1	1.687	27.667
1100	5.281	5.186	35.055	228.3	1.741	27.697

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
1109	1	5.278	5.182	35.056	227.6
849	2	7.665	7.578	35.135	169.3
748	3	9.823	9.734	35.290	141.5
599	4	13.128	13.043	35.727	155.9
450	5	16.828	16.753	36.325	173.0
351	6	18.119	18.057	36.558	182.4
232	7	19.590	19.547	36.704	186.9
200	8	20.367	20.329	36.776	181.1
150	9	21.928	21.898	36.805	199.6
101	10	24.384	24.363	36.743	207.5
50	11	27.525	27.513	36.367	206.0
3	12	29.456	29.456	36.395	193.4

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 22 (CTD022)  
 Latitude 26.517 N Longitude 76.832 W  
 18-Sep-2007 04:58 Z



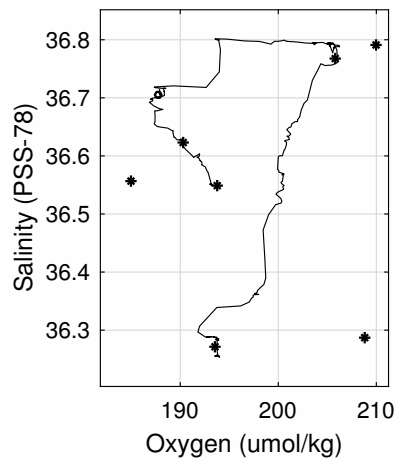
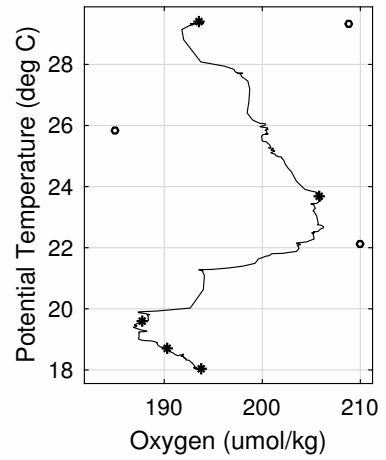
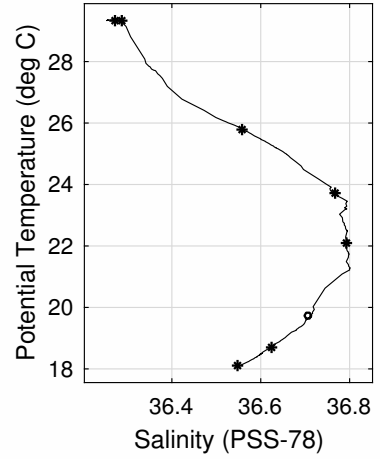
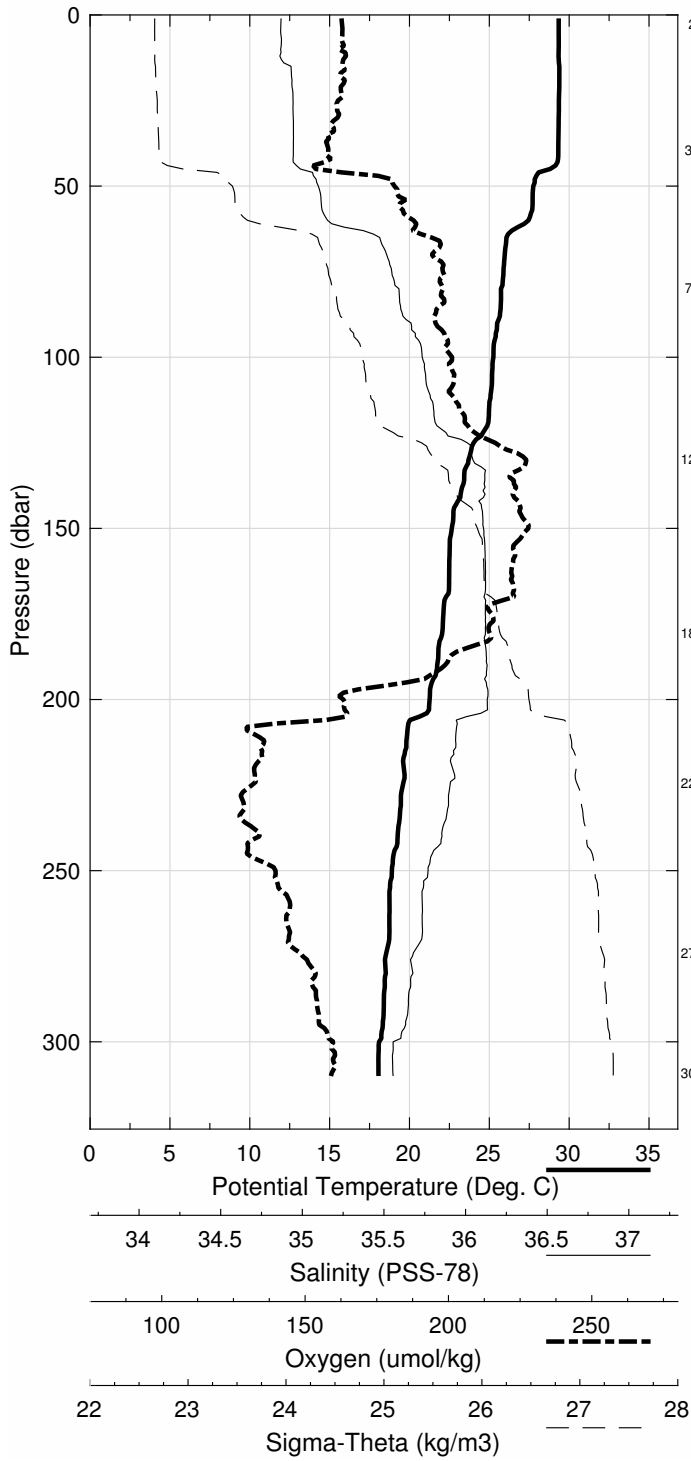


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 23 (CTD023)  
 Latitude 26.525N Longitude 76.892W  
 18-Sep-2007 07:49Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.344	29.344	36.256	193.7	0.005	22.892
10	29.344	29.342	36.255	193.5	0.050	22.892
20	29.387	29.382	36.285	193.9	0.099	22.900
30	29.351	29.343	36.288	193.4	0.149	22.916
50	27.766	27.754	36.354	197.3	0.245	23.494
75	25.903	25.886	36.548	200.5	0.346	24.237
100	25.277	25.255	36.628	201.1	0.436	24.494
125	24.043	24.017	36.747	204.0	0.520	24.960
150	22.680	22.650	36.790	206.2	0.590	25.393
200	21.300	21.261	36.799	193.8	0.715	25.793
250	18.944	18.899	36.644	189.3	0.812	26.304
300	18.149	18.097	36.551	193.2	0.900	26.437

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
309	1	18.147	18.093	36.550	193.7
274	2	18.784	18.734	36.622	190.2
225	3	19.782	19.740	36.707	187.7
181	4	22.130	22.094	36.791	210.0
130	5	23.779	23.751	36.766	205.8
80	6	25.816	25.798	36.558	185.0
39	7	29.317	29.307	36.287	208.7
3	8	29.352	29.352	36.270	193.6

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 23 (CTD023)  
 Latitude 26.525 N Longitude 76.892 W  
 18-Sep-2007 07:49 Z

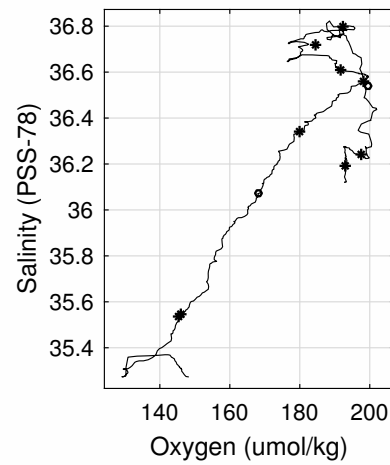
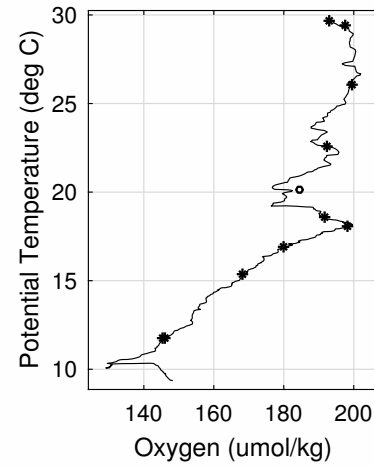
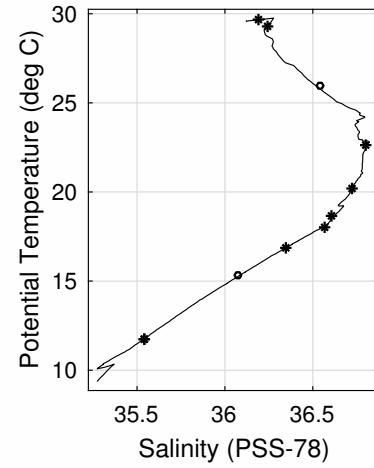
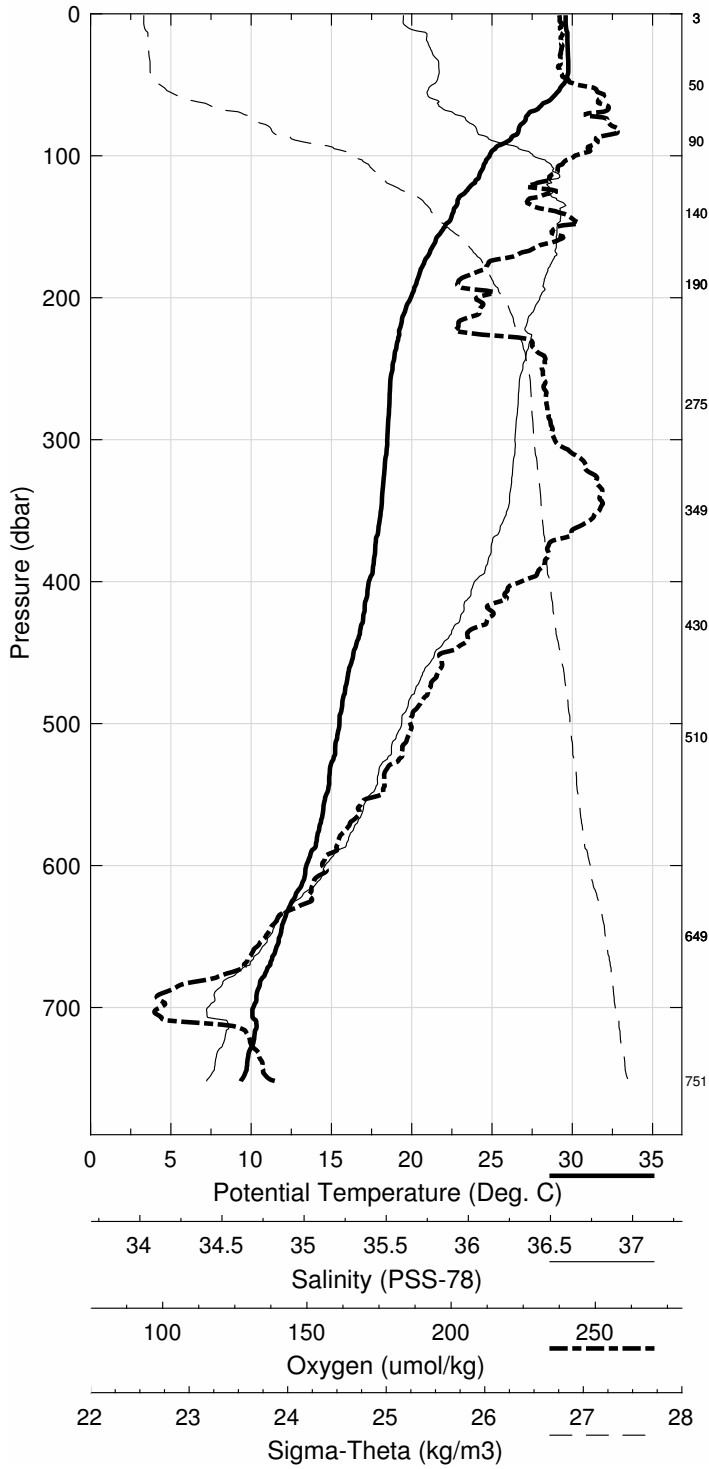


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 24 (CTD024)  
 Latitude 26.432N Longitude 78.667W  
 18-Sep-2007 19:38Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.586	29.586	36.122	192.8	0.005	22.709
10	29.614	29.612	36.144	192.8	0.051	22.717
20	29.705	29.700	36.227	193.2	0.102	22.749
30	29.738	29.731	36.255	192.9	0.153	22.759
50	29.424	29.412	36.246	195.6	0.255	22.861
75	27.100	27.082	36.393	200.3	0.370	23.741
100	24.879	24.858	36.681	195.2	0.465	24.656
125	23.413	23.387	36.766	192.4	0.542	25.160
150	22.098	22.068	36.785	192.2	0.607	25.555
200	19.976	19.938	36.710	179.8	0.717	26.083
250	18.850	18.805	36.637	190.0	0.810	26.323
300	18.527	18.474	36.603	192.0	0.899	26.381
400	17.394	17.326	36.428	186.7	1.069	26.532
500	15.576	15.497	36.114	169.4	1.225	26.720
600	13.525	13.439	35.785	155.5	1.366	26.911
700	10.215	10.131	35.278	130.0	1.484	27.147

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
752	1	9.451	10.479	-999.000	-999.0
650	2	11.834	11.748	35.541	145.7
650	3	11.825	12.643	-999.000	-999.0
650	4	11.817	11.731	35.541	146.0
510	5	15.408	15.966	-999.000	-999.0
510	6	15.409	15.329	36.073	168.3
430	7	16.938	17.379	-999.000	-999.0
431	8	16.939	16.867	36.345	179.8
350	9	18.120	18.459	-999.000	-999.0
350	10	18.122	18.060	36.563	198.4
275	11	18.649	18.910	-999.000	-999.0
275	12	18.649	18.600	36.611	191.5
191	13	20.204	20.371	-999.000	-999.0
191	15	20.204	20.371	-999.000	-999.0
191	16	20.204	20.168	36.719	184.7
141	17	22.601	22.708	-999.000	-999.0
141	18	22.603	22.575	36.797	192.6
90	19	25.912	25.965	-999.000	-999.0
90	20	25.916	25.896	36.541	199.2
51	21	29.349	29.370	-999.000	-999.0
51	22	29.360	29.348	36.241	197.6
3	23	29.644	29.646	-999.000	-999.0
3	24	29.649	29.648	36.188	193.2
3	14	29.622	29.623	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 24 (CTD024)  
 Latitude 26.432 N Longitude 78.667 W  
 18-Sep-2007 19:38 Z

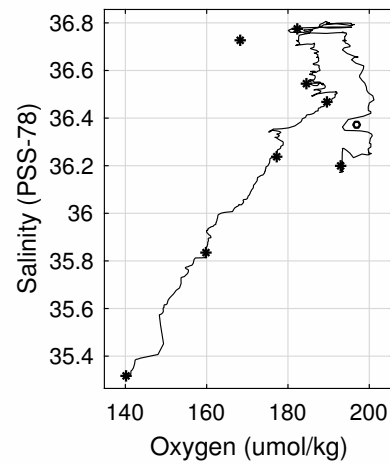
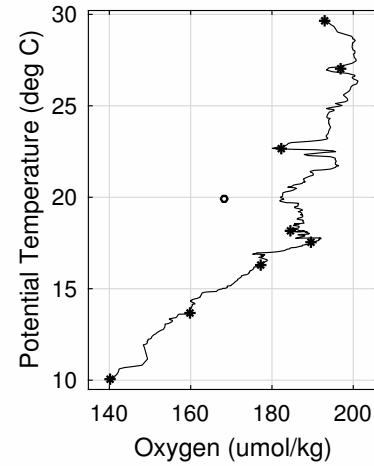
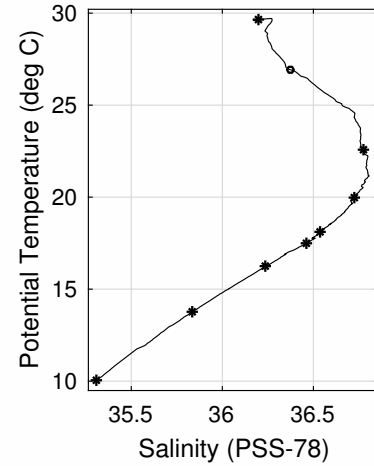
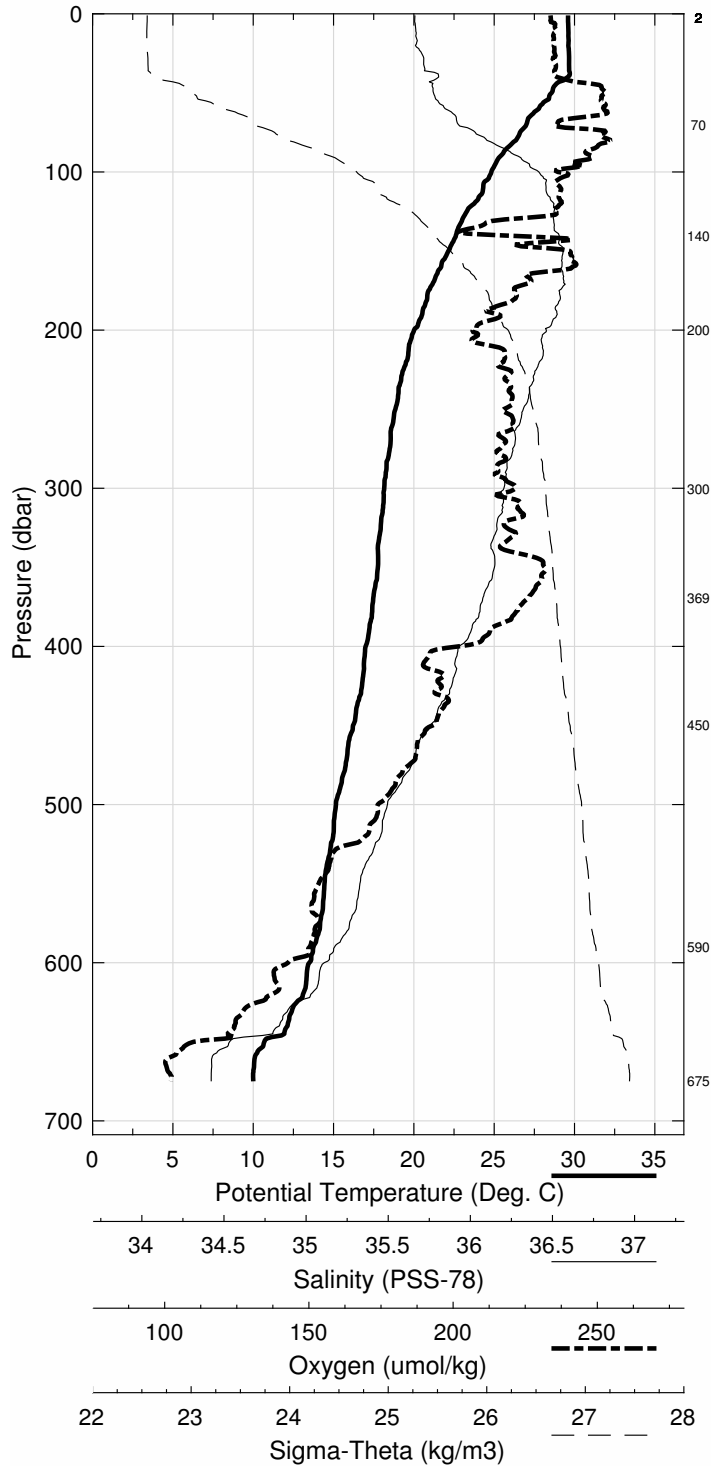


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 25 (CTD025)  
 Latitude 26.332N Longitude 78.717W  
 18-Sep-2007 21:30Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.599	29.599	36.173	192.8	0.005	22.743
10	29.620	29.617	36.176	193.6	0.051	22.739
20	29.622	29.617	36.175	193.3	0.102	22.738
30	29.668	29.661	36.210	193.4	0.153	22.749
50	28.582	28.570	36.251	200.5	0.253	23.147
75	26.624	26.606	36.427	200.4	0.362	23.919
100	24.846	24.824	36.695	193.8	0.452	24.677
125	23.319	23.293	36.759	193.4	0.529	25.183
150	22.175	22.145	36.798	195.5	0.596	25.544
200	20.051	20.014	36.727	182.1	0.707	26.076
250	18.895	18.851	36.629	186.4	0.801	26.306
300	18.207	18.154	36.548	188.0	0.889	26.420
400	17.062	16.995	36.359	180.1	1.055	26.559
500	15.227	15.149	36.057	169.1	1.209	26.754
600	13.578	13.492	35.791	156.7	1.349	26.905

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
675	2	10.082	10.001	35.314	140.4
590	4	13.803	13.717	35.830	159.7
450	6	16.309	16.236	36.235	177.5
370	8	17.585	17.522	36.465	189.6
301	10	18.211	18.158	36.542	184.3
200	12	20.024	19.986	36.723	168.4
140	16	22.665	22.637	36.771	182.1
70	18	26.981	26.965	36.374	197.0
3	20	29.593	29.592	36.204	193.0
3	22	29.599	29.600	-999.000	-999.0
3	24	29.597	29.598	-999.000	-999.0
3	1	29.601	29.602	-999.000	-999.0
3	3	29.610	29.611	-999.000	-999.0
3	5	29.589	29.591	-999.000	-999.0
3	7	29.600	29.601	-999.000	-999.0
3	9	29.559	29.561	-999.000	-999.0
3	11	29.556	29.558	-999.000	-999.0
3	13	29.566	29.567	-999.000	-999.0
3	14	29.579	29.581	-999.000	-999.0
3	15	29.575	29.576	-999.000	-999.0
3	17	29.577	29.578	-999.000	-999.0
3	19	29.582	29.584	-999.000	-999.0
3	21	29.587	29.588	-999.000	-999.0
3	23	29.584	29.585	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 25 (CTD025)  
 Latitude 26.332 N Longitude 78.717 W  
 18-Sep-2007 21:30 Z

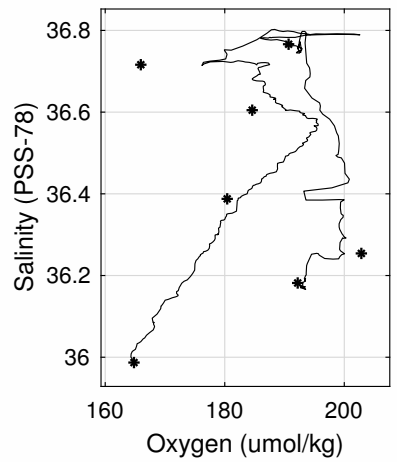
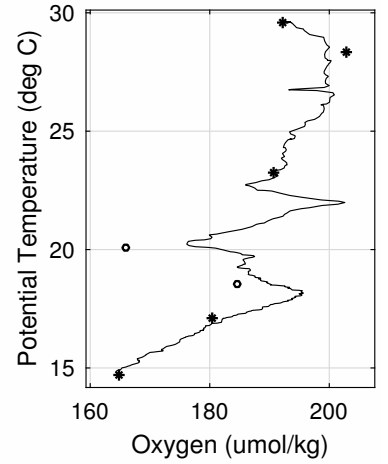
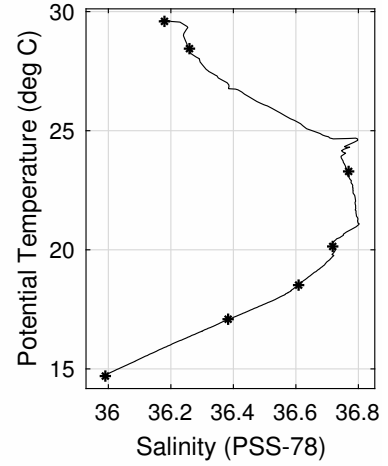
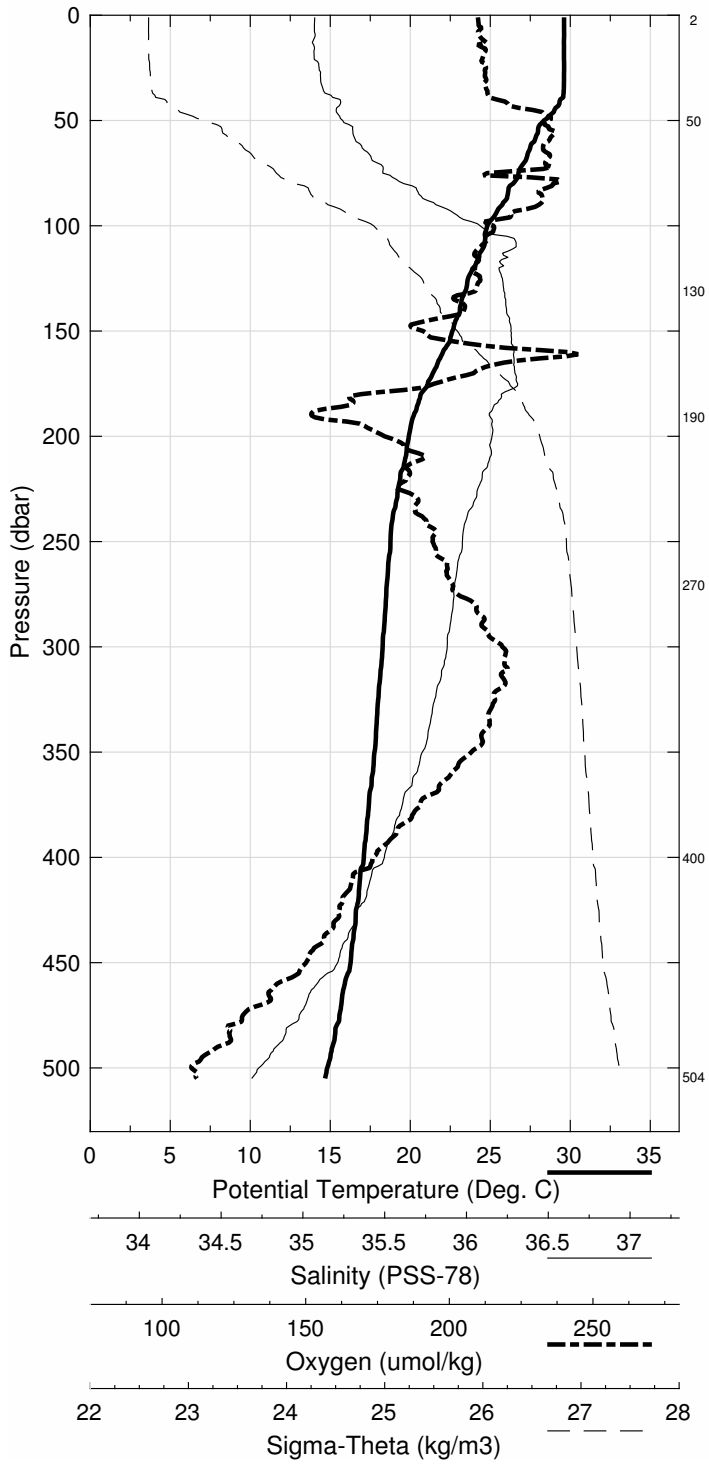


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 26 (CTD026)  
 Latitude 26.248N Longitude 78.768W  
 18-Sep-2007 23:01Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.612	29.612	36.174	192.7	0.005	22.739
10	29.616	29.613	36.175	192.9	0.051	22.739
20	29.609	29.605	36.172	193.2	0.102	22.740
30	29.614	29.607	36.192	193.5	0.153	22.754
50	28.366	28.354	36.260	199.4	0.253	23.226
75	26.780	26.763	36.385	193.6	0.362	23.837
100	24.835	24.814	36.686	194.2	0.454	24.673
125	23.638	23.612	36.755	192.9	0.532	25.086
150	22.661	22.630	36.781	187.3	0.602	25.392
200	19.945	19.908	36.723	183.4	0.715	26.101
250	18.806	18.762	36.631	188.2	0.808	26.330
300	18.324	18.272	36.584	195.1	0.895	26.418
400	17.166	17.098	36.389	182.3	1.062	26.558
500	14.886	14.809	36.000	164.3	1.214	26.786

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
505	2	14.821	14.744	35.988	164.8
401	4	17.168	17.101	36.386	180.5
271	6	18.603	18.555	36.606	184.5
191	8	20.165	20.129	36.718	166.1
131	10	23.310	23.282	36.767	190.7
50	12	28.469	28.457	36.256	202.7
3	16	29.606	29.605	36.181	192.1

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 26 (CTD026)  
 Latitude 26.248 N Longitude 78.768 W  
 18-Sep-2007 23:01 Z



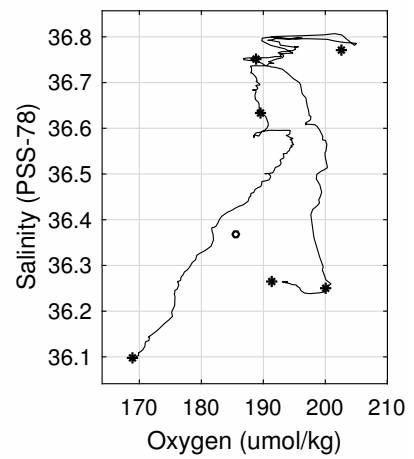
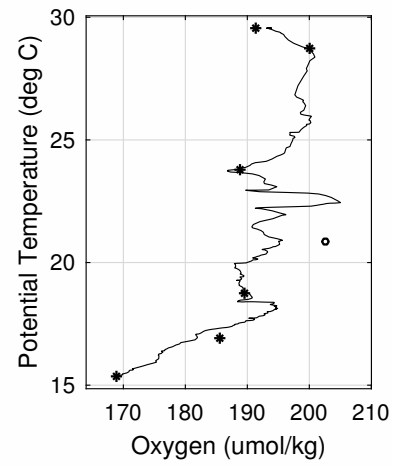
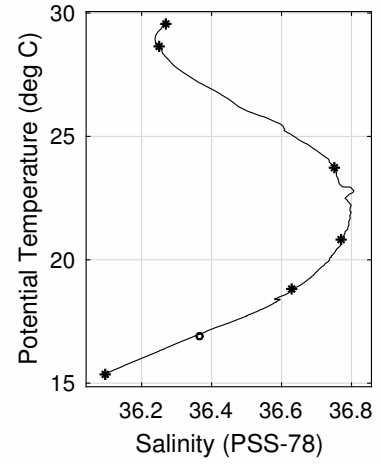
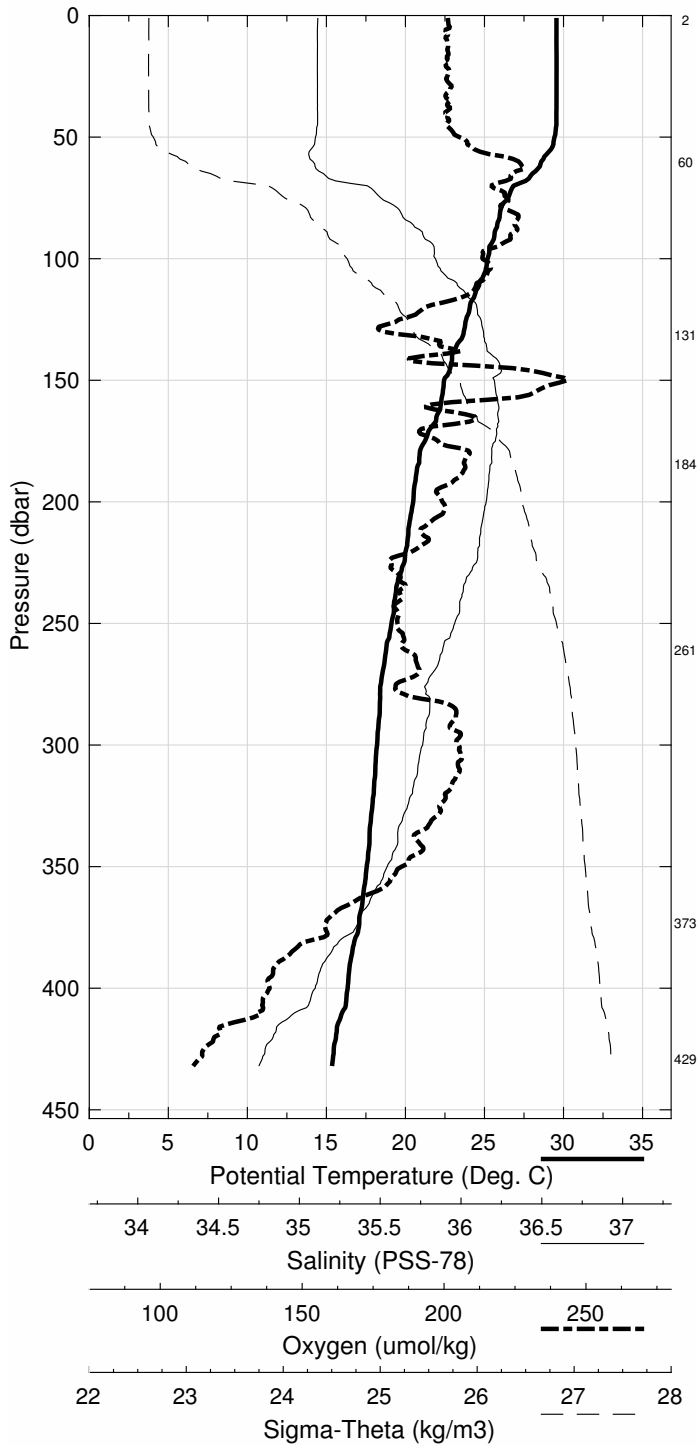


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 27 (CTD027)  
 Latitude 26.164N Longitude 78.805W  
 19-Sep-2007 00:34Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.555	29.555	36.265	193.5	0.005	22.827
10	29.554	29.552	36.264	193.4	0.050	22.827
20	29.564	29.559	36.264	193.3	0.101	22.825
30	29.565	29.557	36.264	193.8	0.151	22.825
50	29.439	29.427	36.258	194.6	0.252	22.865
75	26.508	26.491	36.451	199.2	0.366	23.974
100	25.217	25.195	36.612	196.8	0.457	24.500
125	23.870	23.844	36.746	188.8	0.538	25.011
150	22.473	22.442	36.786	205.0	0.608	25.450
200	20.528	20.490	36.761	193.0	0.723	25.975
250	19.164	19.118	36.669	188.7	0.822	26.267
300	18.259	18.206	36.574	194.6	0.909	26.427
400	16.412	16.347	36.258	176.4	1.073	26.635

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
429	2	15.464	15.397	36.096	169.0
373	4	16.976	16.913	36.367	185.5
261	6	18.830	18.783	36.632	189.7
185	8	20.866	20.830	36.773	202.5
131	10	23.803	23.776	36.753	188.7
60	12	28.684	28.670	36.251	200.1
2	16	29.549	29.549	36.267	191.4

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 27 (CTD027)  
 Latitude 26.164 N Longitude 78.805 W  
 19-Sep-2007 00:34 Z

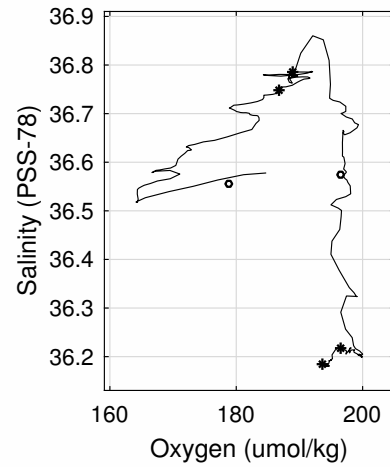
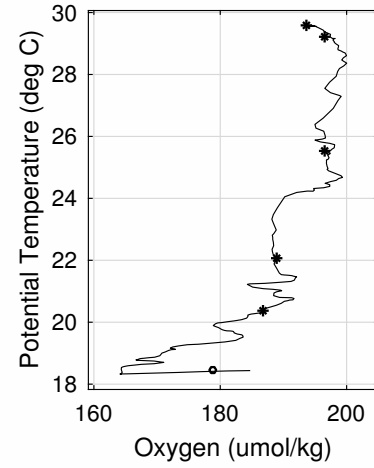
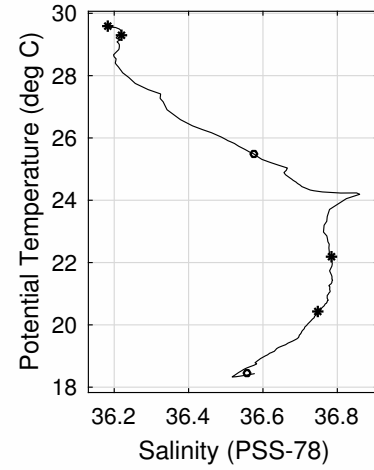
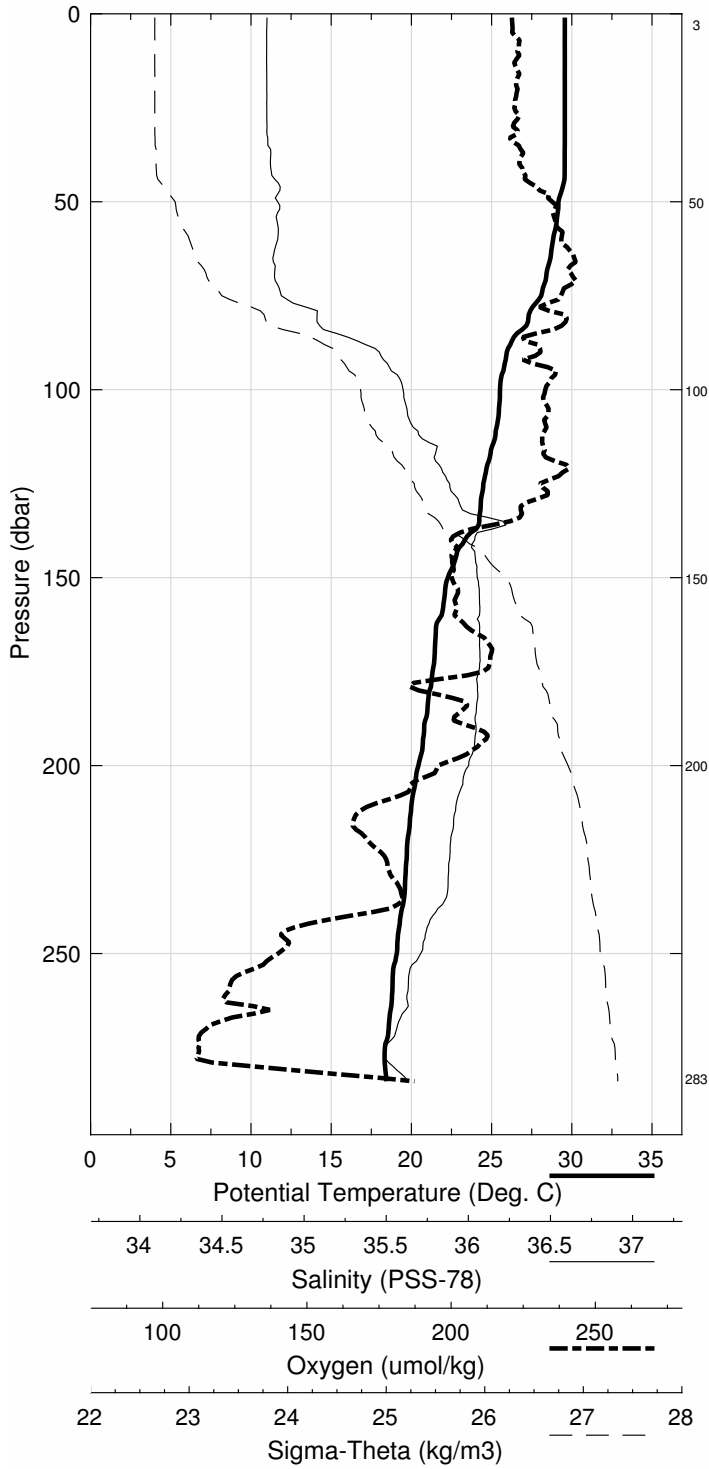


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 28 (CTD028)  
 Latitude 26.067N Longitude 78.851W  
 19-Sep-2007 02:17Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.566	29.566	36.182	193.9	0.005	22.761
10	29.566	29.564	36.181	194.5	0.051	22.760
20	29.570	29.565	36.181	194.5	0.102	22.760
30	29.572	29.565	36.182	194.0	0.153	22.761
50	29.176	29.164	36.212	197.8	0.254	22.919
75	28.113	28.095	36.222	198.6	0.375	23.283
100	25.547	25.525	36.568	197.1	0.474	24.365
125	24.511	24.484	36.700	196.6	0.560	24.784
150	22.308	22.278	36.779	188.3	0.632	25.491
200	20.474	20.436	36.755	187.0	0.747	25.984
250	19.136	19.090	36.618	171.9	0.845	26.235

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
284	2	18.484	18.434	36.557	178.9
200	4	20.465	20.427	36.749	186.6
150	6	22.210	22.180	36.785	188.9
100	8	25.540	25.518	36.574	196.6
51	10	29.313	29.301	36.218	196.6
3	12	29.557	29.556	36.184	193.8

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 28 (CTD028)  
 Latitude 26.067 N Longitude 78.851 W  
 19-Sep-2007 02:17 Z

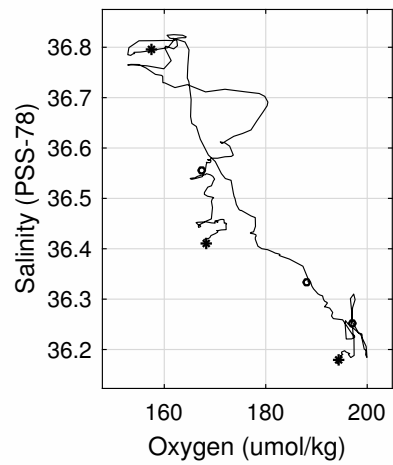
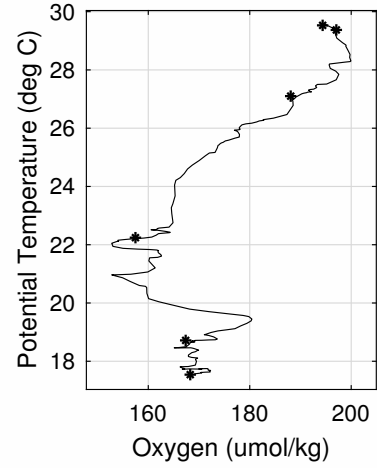
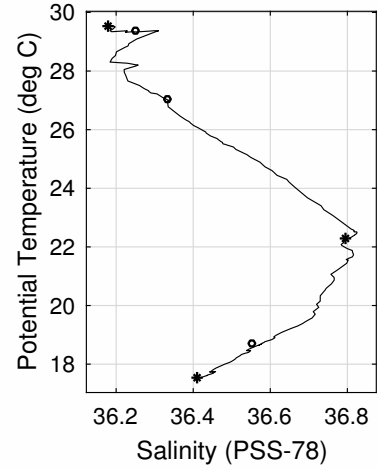
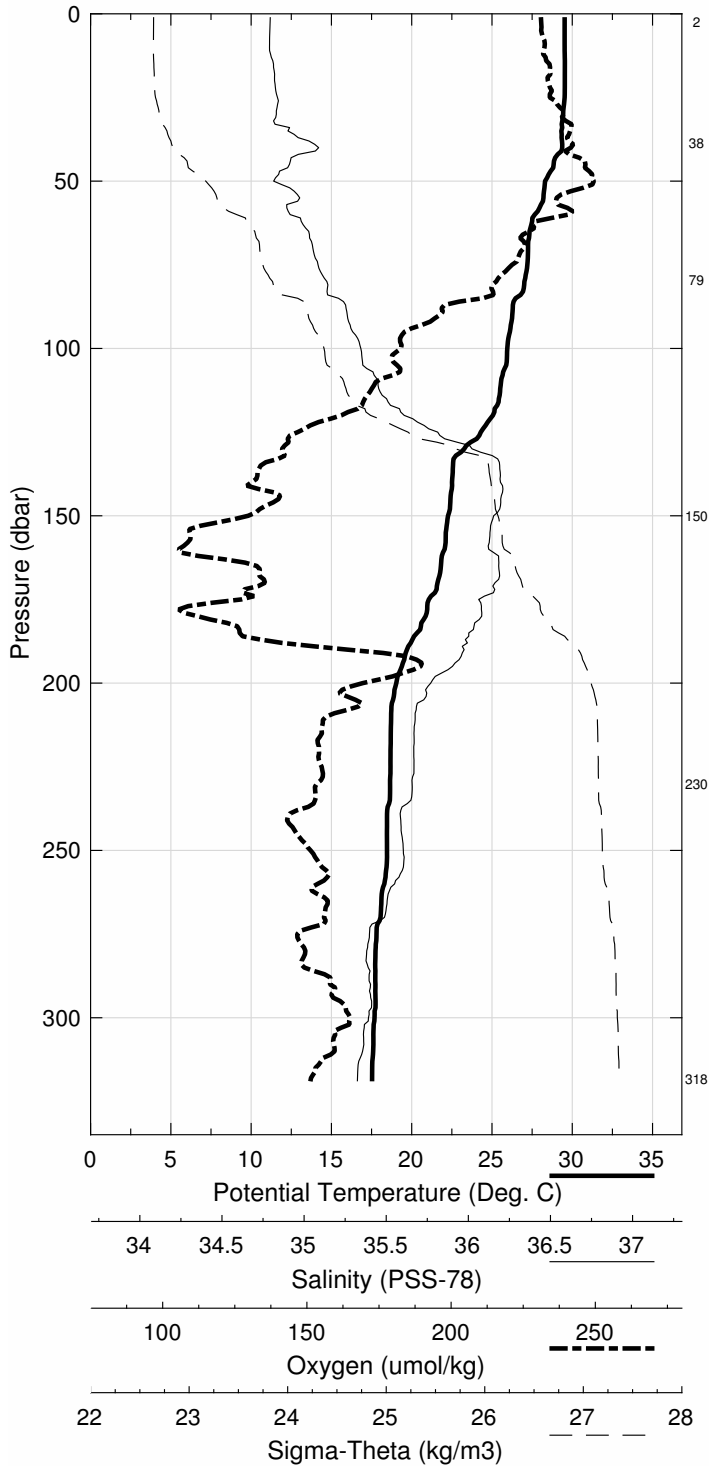


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 29 (CTD029)  
 Latitude 26.049N Longitude 79.234W  
 19-Sep-2007 06:13Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.526	29.525	36.175	193.9	0.005	22.769
10	29.528	29.526	36.173	194.3	0.051	22.768
20	29.541	29.536	36.187	194.7	0.102	22.774
30	29.440	29.433	36.192	196.5	0.152	22.813
50	28.318	28.306	36.184	199.9	0.250	23.185
75	27.219	27.201	36.308	190.7	0.361	23.639
100	25.975	25.952	36.428	178.0	0.462	24.126
125	24.331	24.304	36.643	166.3	0.552	24.795
150	22.293	22.263	36.799	160.7	0.619	25.511
200	19.077	19.041	36.623	173.7	0.730	26.252
250	18.505	18.461	36.547	167.8	0.819	26.342
300	17.736	17.684	36.449	172.3	0.905	26.461

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
318	2	17.585	17.530	36.412	168.1
230	4	18.710	18.669	36.553	167.3
150	6	22.289	22.259	36.795	157.6
80	8	27.044	27.025	36.335	188.0
39	10	29.399	29.390	36.250	197.0
3	12	29.546	29.546	36.177	194.3

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 29 (CTD029)  
 Latitude 26.049 N Longitude 79.234 W  
 19-Sep-2007 06:13 Z

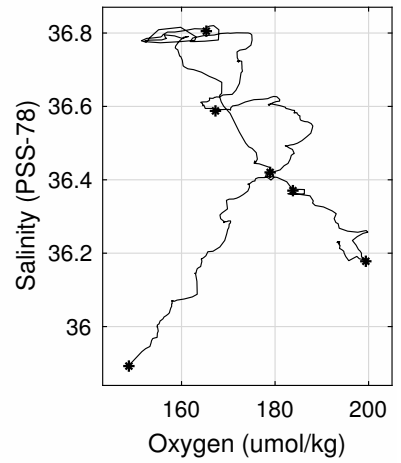
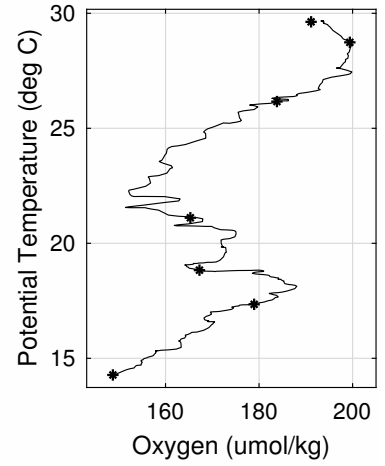
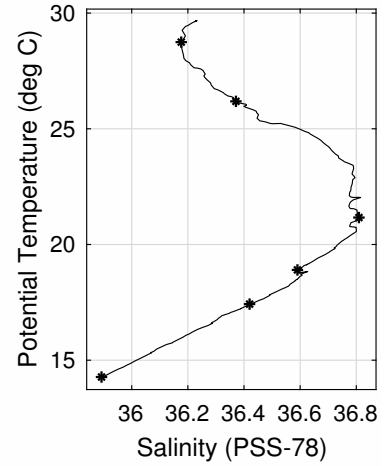
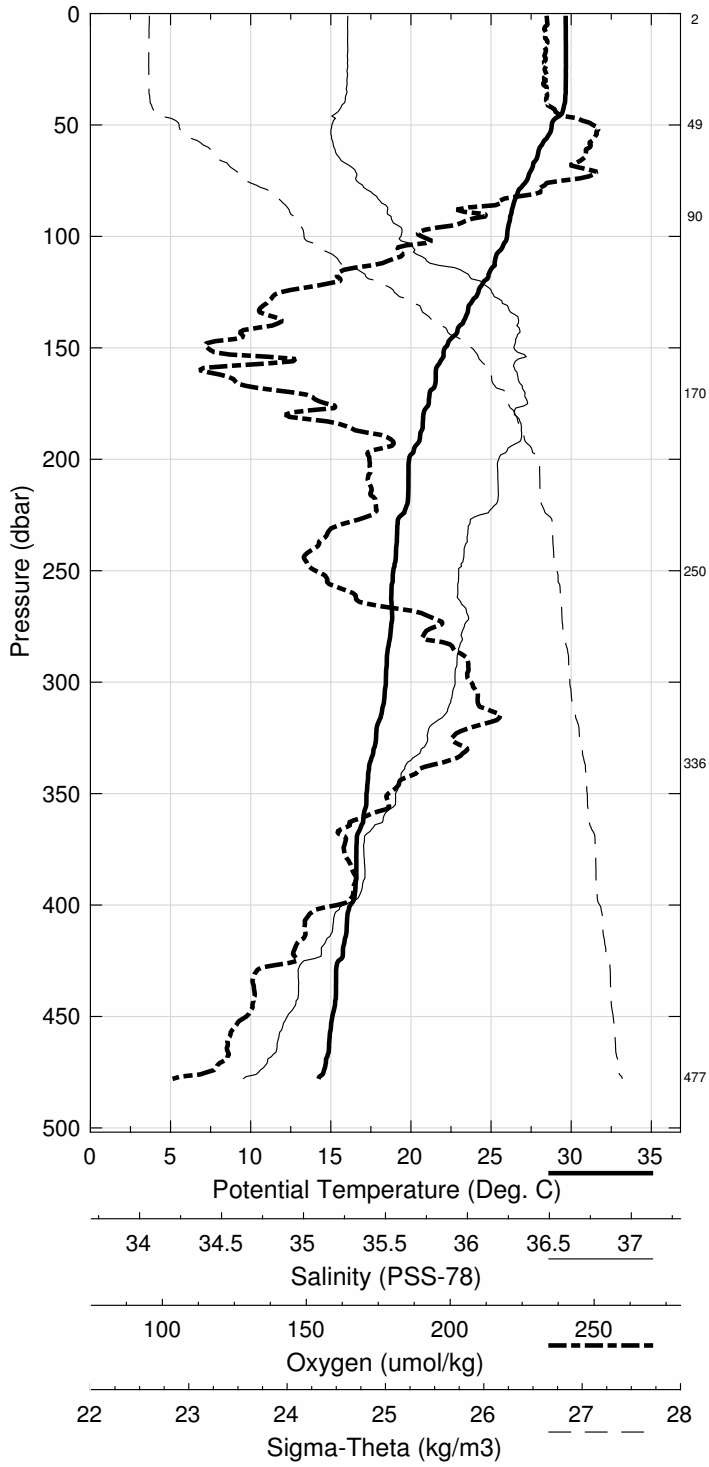


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 30 (CTD030)  
 Latitude 26.050N Longitude 79.313W  
 19-Sep-2007 07:21Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.657	29.657	36.232	193.7	0.005	22.767
10	29.666	29.664	36.231	193.6	0.051	22.765
20	29.675	29.670	36.231	193.6	0.102	22.762
30	29.671	29.663	36.229	193.7	0.153	22.763
50	28.794	28.782	36.179	199.4	0.254	23.023
75	27.240	27.223	36.260	195.5	0.368	23.596
100	26.021	25.998	36.405	178.5	0.468	24.095
125	24.235	24.208	36.703	161.3	0.556	24.869
150	22.146	22.116	36.775	152.4	0.626	25.535
200	19.925	19.888	36.726	172.1	0.737	26.109
250	18.945	18.900	36.594	165.6	0.832	26.266
300	18.488	18.434	36.583	184.5	0.922	26.376
400	16.287	16.222	36.217	168.2	1.086	26.633

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
477	2	14.331	14.259	35.891	148.7
337	4	17.478	17.421	36.421	179.0
250	6	18.924	18.879	36.590	167.4
170	8	21.226	21.193	36.806	165.5
91	10	26.239	26.218	36.371	183.9
50	12	28.805	28.793	36.179	199.3
2	16	29.638	29.639	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 30 (CTD030)  
 Latitude 26.050 N Longitude 79.313 W  
 19-Sep-2007 07:21 Z



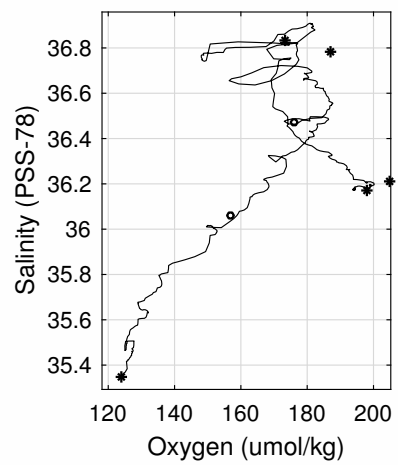
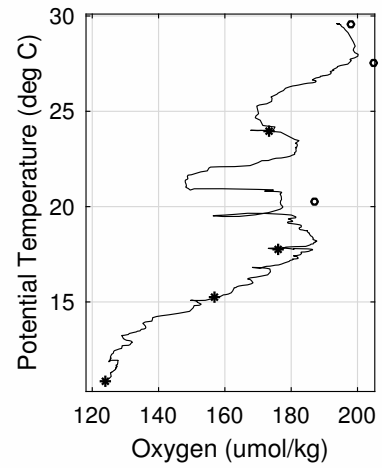
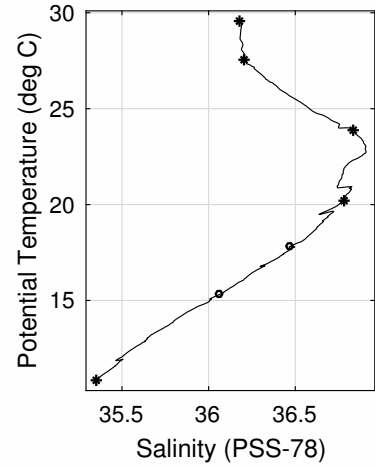
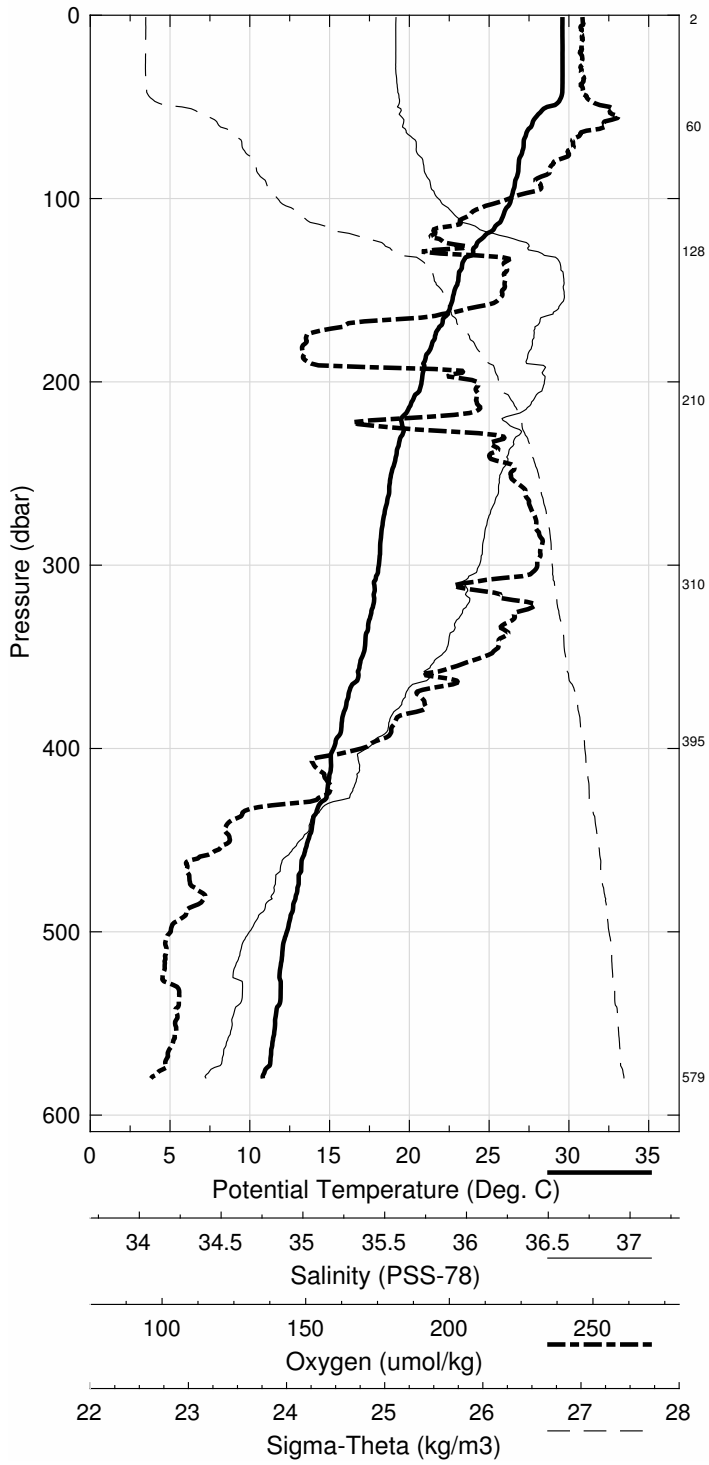


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 31 (CTD031)  
 Latitude 26.051N Longitude 79.399W  
 19-Sep-2007 08:45Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.595	29.595	36.175	194.3	0.005	22.746
10	29.596	29.593	36.174	193.8	0.051	22.745
20	29.604	29.599	36.174	193.8	0.102	22.744
30	29.608	29.600	36.174	194.2	0.153	22.743
50	28.648	28.636	36.181	198.7	0.255	23.073
75	27.084	27.066	36.266	191.9	0.366	23.650
100	26.400	26.378	36.359	182.2	0.469	23.940
125	24.242	24.215	36.753	173.1	0.560	24.905
150	22.864	22.834	36.906	181.0	0.629	25.428
200	20.801	20.763	36.821	176.9	0.748	25.946
250	18.913	18.868	36.632	182.4	0.845	26.303
300	18.140	18.088	36.538	186.8	0.932	26.429
400	15.312	15.250	36.047	157.9	1.091	26.724
500	12.389	12.321	35.536	126.4	1.225	26.943

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
579	2	10.909	10.836	35.350	123.8
396	4	15.385	15.323	36.059	157.1
310	6	17.843	17.789	36.469	176.2
210	8	20.293	20.254	36.780	186.8
129	10	23.932	23.905	36.832	173.3
60	12	27.596	27.582	36.206	204.7
3	16	29.601	29.600	36.174	198.2

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 31 (CTD031)  
 Latitude 26.051 N Longitude 79.399 W  
 19-Sep-2007 08:45 Z

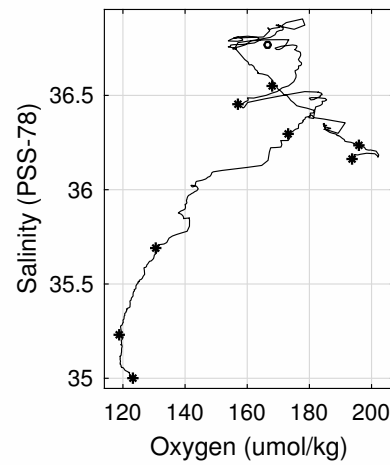
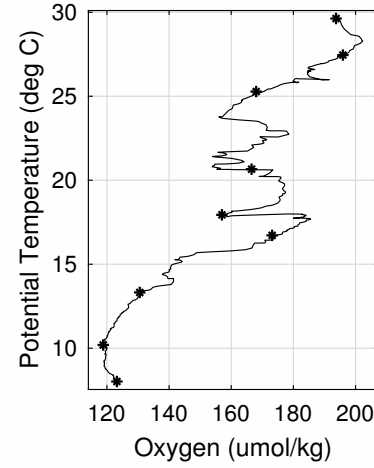
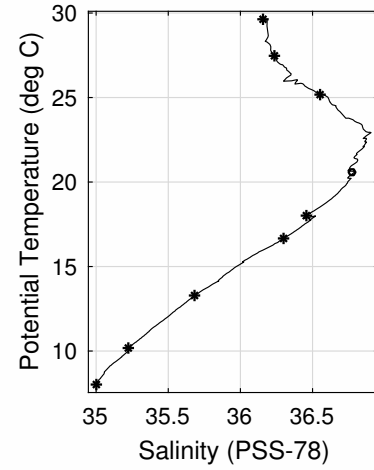
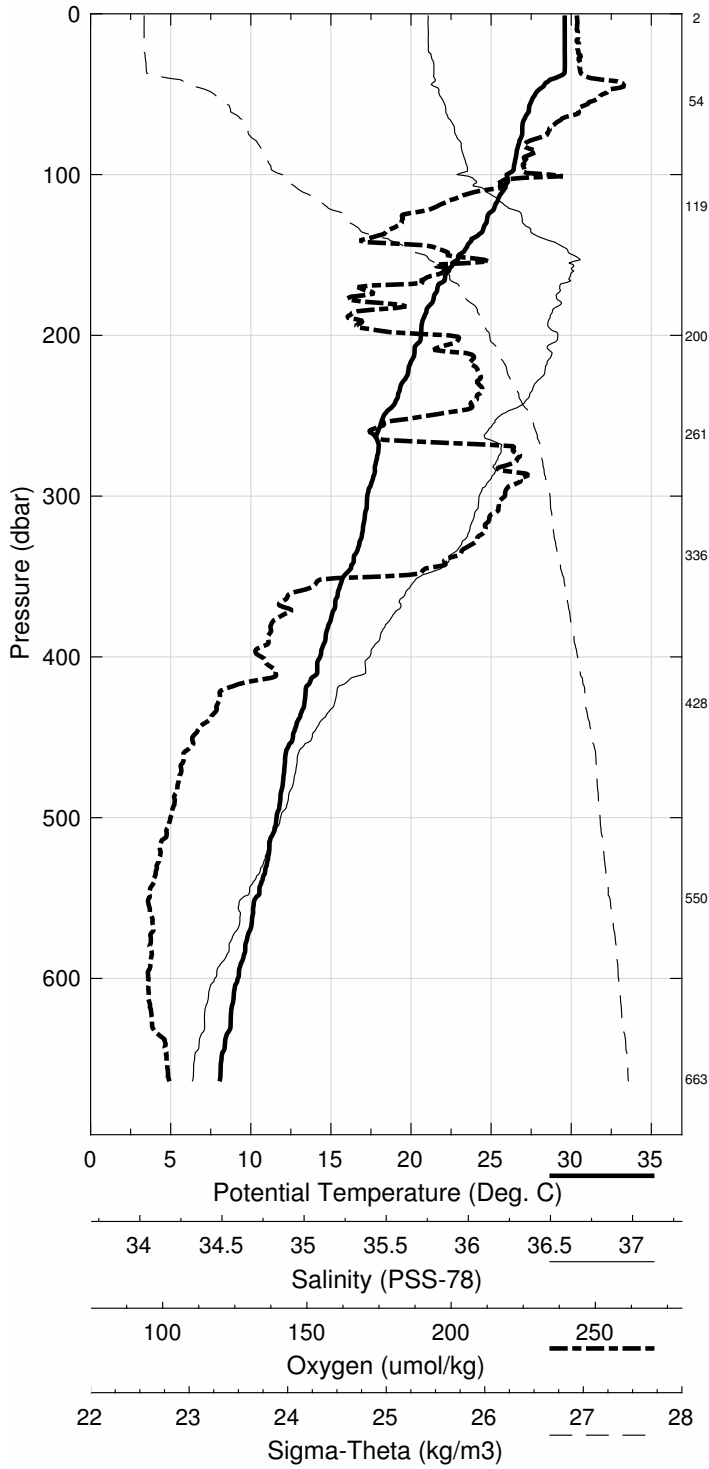


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 32 (CTD032)  
 Latitude 26.051N Longitude 79.481W  
 19-Sep-2007 09:59Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.595	29.595	36.158	194.0	0.005	22.733
10	29.600	29.597	36.158	193.9	0.051	22.732
20	29.602	29.598	36.159	194.4	0.102	22.732
30	29.610	29.603	36.184	194.5	0.153	22.749
50	27.764	27.752	36.212	198.5	0.251	23.387
75	26.957	26.940	36.292	188.9	0.359	23.710
100	25.989	25.967	36.299	189.2	0.461	24.024
125	24.832	24.805	36.616	163.5	0.553	24.623
150	23.010	22.979	36.870	171.2	0.630	25.359
200	20.658	20.620	36.796	171.6	0.747	25.965
250	18.344	18.300	36.511	167.8	0.844	26.355
300	17.320	17.269	36.408	181.4	0.927	26.531
400	14.390	14.331	35.869	138.9	1.077	26.788
500	11.672	11.607	35.431	123.0	1.203	26.999
600	9.257	9.189	35.107	119.2	1.313	27.172

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
663	2	8.126	8.056	34.999	123.3
551	4	10.271	10.205	35.230	118.6
429	6	13.393	13.332	35.688	130.8
337	8	16.704	16.649	36.298	173.2
262	10	18.024	17.979	36.453	157.3
200	12	20.646	20.608	36.767	166.2
120	16	25.231	25.204	36.551	168.4
54	18	27.479	27.466	36.234	196.2
3	20	29.581	29.581	36.163	193.7

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 32 (CTD032)  
 Latitude 26.051 N Longitude 79.481 W  
 19-Sep-2007 09:59 Z

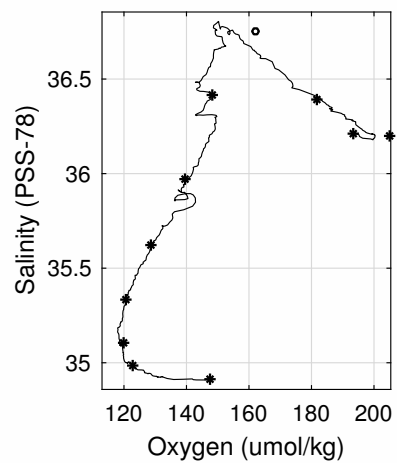
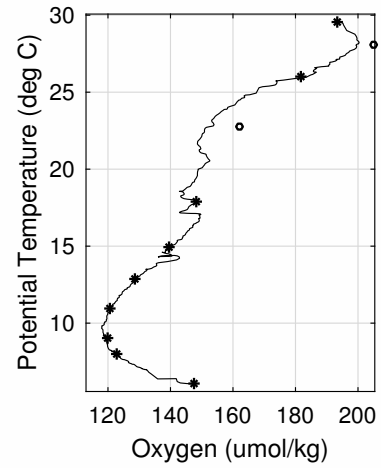
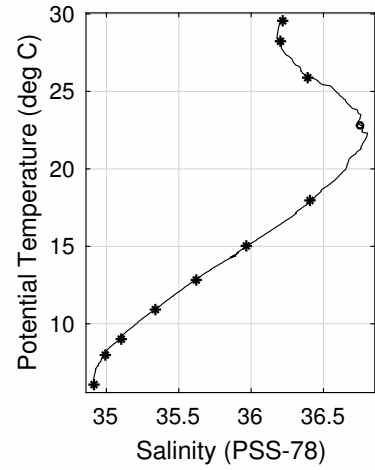
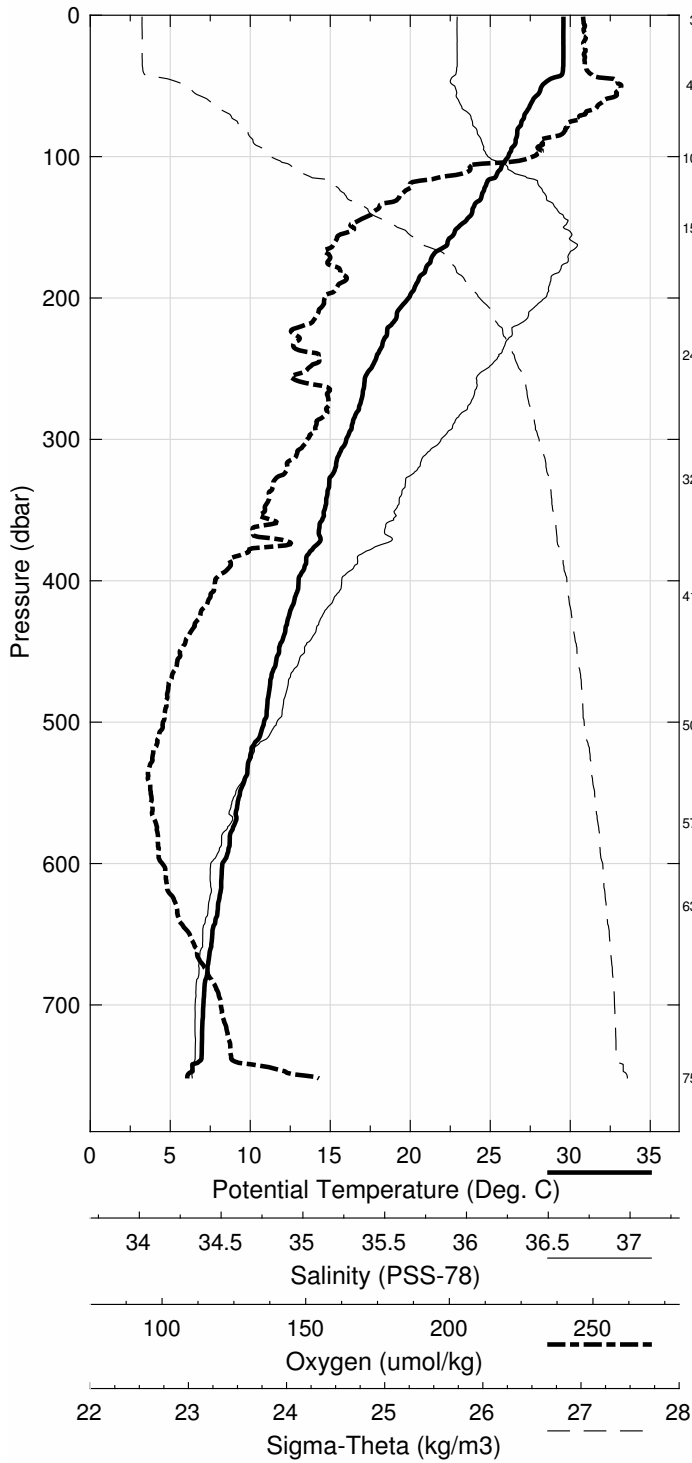


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 33 (CTD033)  
 Latitude 26.056N Longitude 79.564W  
 19-Sep-2007 11:25Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.574	29.574	36.213	193.7	0.005	22.782
10	29.572	29.569	36.212	193.7	0.051	22.782
20	29.573	29.568	36.212	193.7	0.101	22.783
30	29.578	29.571	36.213	194.0	0.152	22.782
50	28.244	28.232	36.201	200.4	0.252	23.222
75	26.976	26.959	36.288	191.6	0.362	23.701
100	26.147	26.124	36.364	184.9	0.464	24.024
125	24.578	24.551	36.635	162.6	0.554	24.714
150	23.031	23.000	36.735	153.7	0.629	25.250
200	19.932	19.895	36.645	148.8	0.746	26.045
250	17.578	17.536	36.358	145.8	0.838	26.427
300	16.048	16.000	36.134	145.7	0.917	26.620
400	13.076	13.020	35.645	129.7	1.056	26.889
500	10.920	10.857	35.326	120.6	1.175	27.056
600	8.322	8.258	35.001	120.5	1.278	27.236
700	7.139	7.070	34.925	130.7	1.366	27.350

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
752	2	6.130	6.061	34.910	147.6
630	4	8.077	8.011	34.990	122.9
572	6	9.116	9.052	35.106	119.7
503	8	10.936	10.873	35.334	120.4
411	10	12.894	12.837	35.616	128.3
328	12	15.072	15.021	35.969	139.7
240	16	17.952	17.910	36.413	148.0
151	18	22.836	22.805	36.748	162.2
102	20	25.946	25.923	36.390	181.6
50	22	28.233	28.222	36.205	205.3
3	24	29.556	29.556	36.211	193.3

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 33 (CTD033)  
 Latitude 26.056 N Longitude 79.564 W  
 19-Sep-2007 11:25 Z

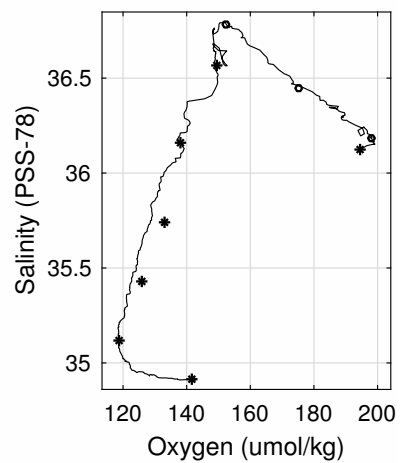
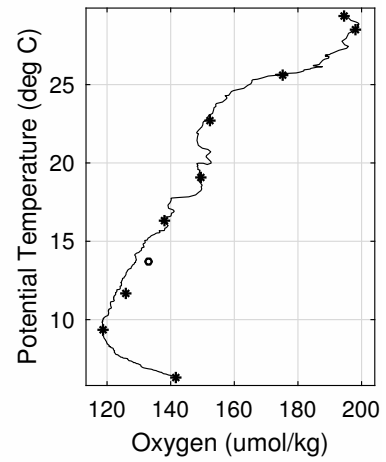
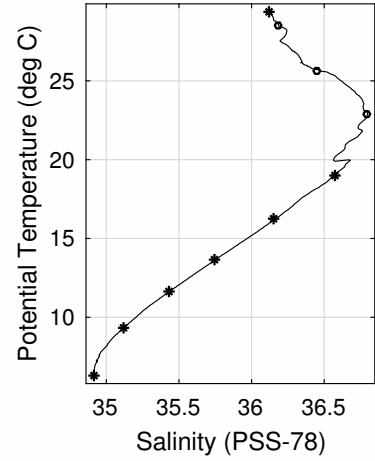
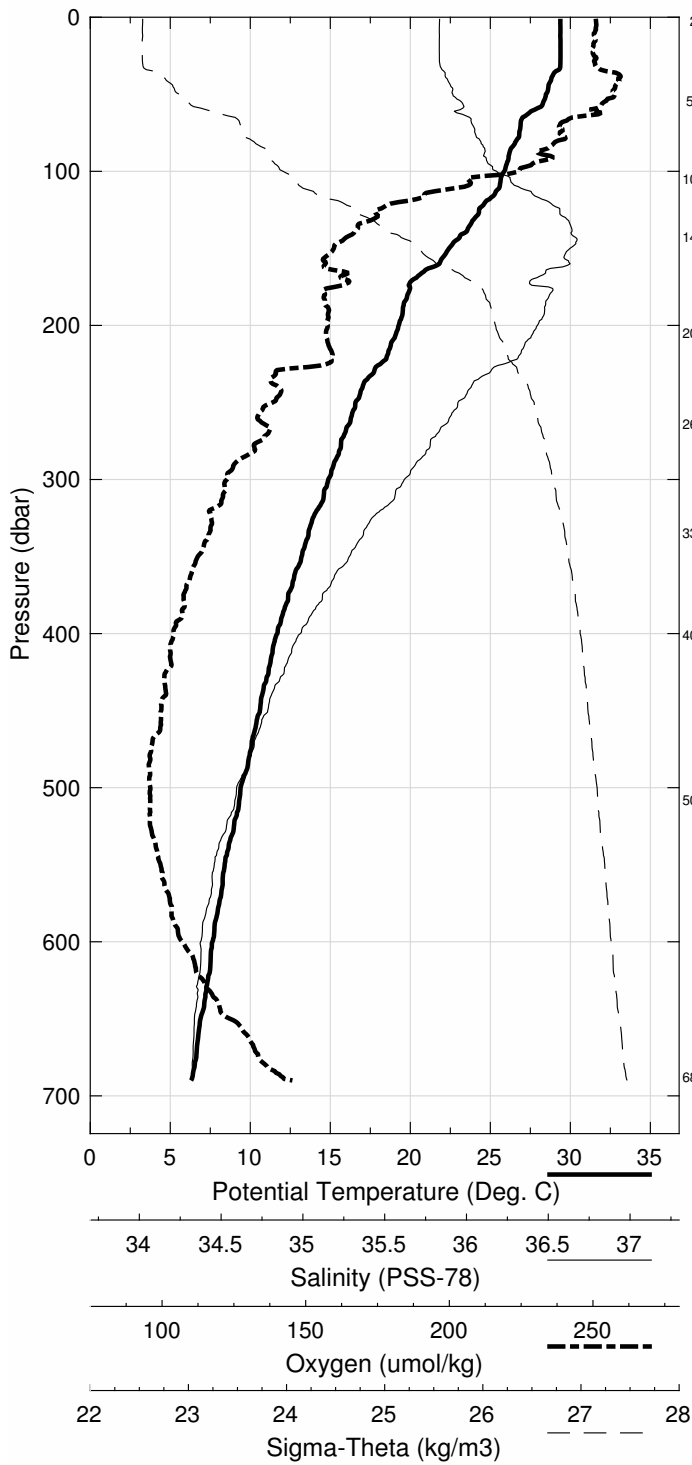


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 34 (CTD034)  
 Latitude 26.052N Longitude 79.659W  
 19-Sep-2007 13:11Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.376	29.376	36.124	194.9	0.005	22.781
10	29.382	29.379	36.122	194.7	0.051	22.779
20	29.389	29.384	36.122	194.3	0.101	22.777
30	29.385	29.378	36.124	194.8	0.152	22.781
50	28.481	28.469	36.188	198.2	0.250	23.134
75	26.830	26.813	36.297	188.6	0.360	23.755
100	25.894	25.872	36.403	181.8	0.460	24.133
125	24.325	24.298	36.713	157.4	0.548	24.850
150	22.448	22.417	36.763	150.1	0.620	25.439
200	19.308	19.272	36.603	149.0	0.727	26.176
250	16.611	16.570	36.214	139.6	0.814	26.548
300	14.921	14.875	35.950	131.8	0.888	26.733
400	11.743	11.691	35.441	122.7	1.015	26.991
500	9.449	9.392	35.128	118.7	1.124	27.154
600	7.694	7.633	34.951	124.2	1.219	27.290

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
688	2	6.376	6.313	34.914	141.9
508	4	9.391	9.333	35.123	118.5
401	6	11.670	11.617	35.433	126.1
335	8	13.691	13.643	35.745	133.3
264	10	16.305	16.262	36.159	137.7
205	12	19.089	19.052	36.572	149.2
143	16	22.956	22.927	36.786	152.2
105	18	25.712	25.688	36.448	174.9
55	20	28.506	28.492	36.189	197.8
3	22	29.395	29.394	36.125	194.4

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 34 (CTD034)  
 Latitude 26.052 N Longitude 79.659 W  
 19-Sep-2007 13:11 Z



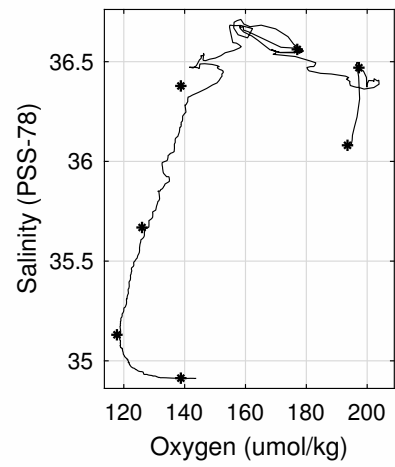
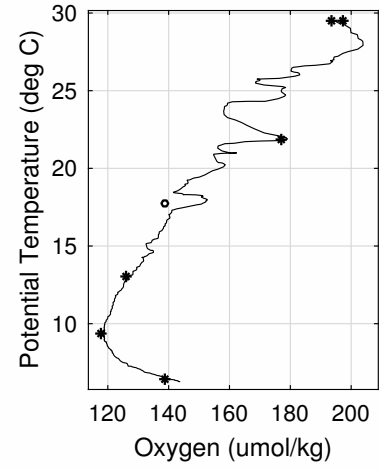
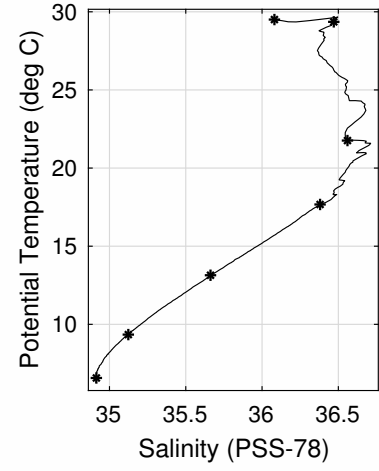
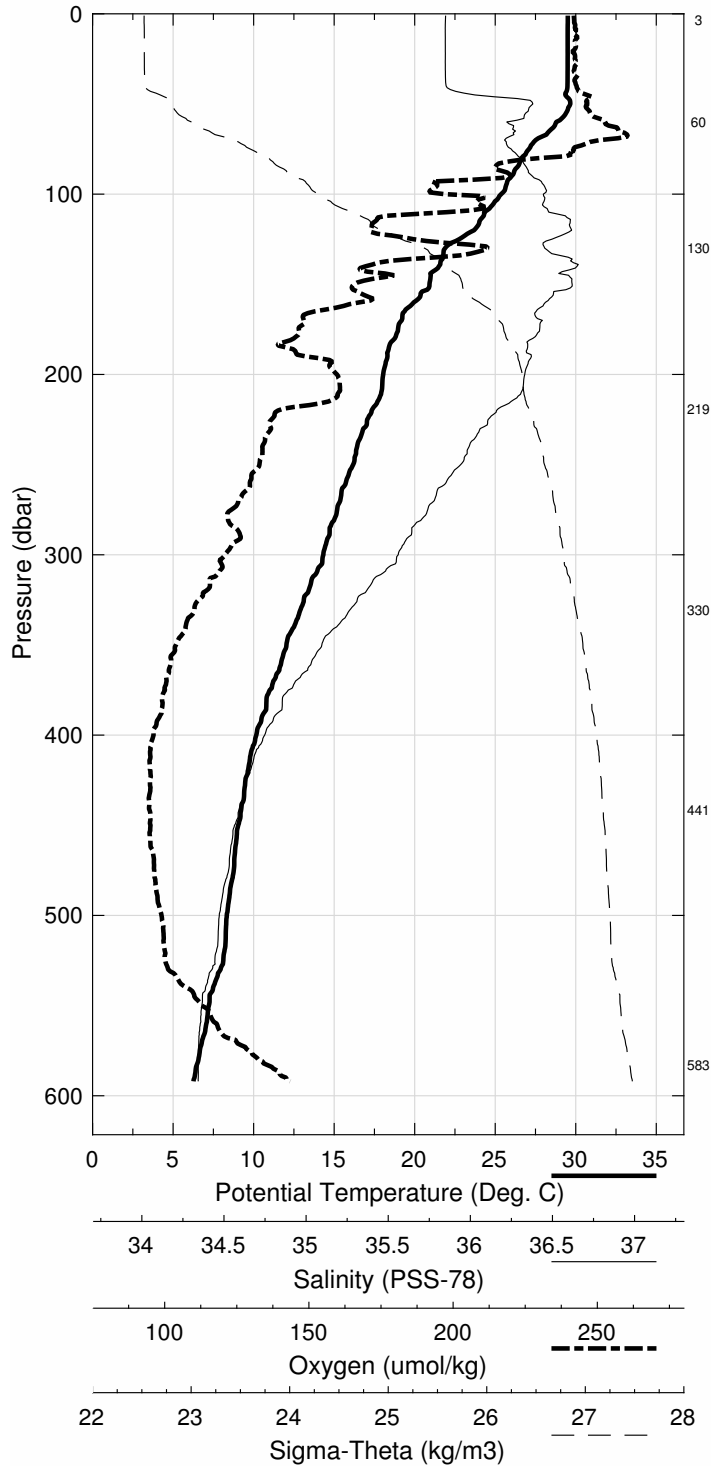


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 35 (CTD035)  
 Latitude 26.048N Longitude 79.764W  
 19-Sep-2007 15:01Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.507	29.506	36.083	194.3	0.005	22.707
10	29.500	29.498	36.082	194.4	0.051	22.709
20	29.502	29.497	36.082	194.4	0.103	22.709
30	29.504	29.496	36.082	194.5	0.154	22.709
50	29.673	29.661	36.497	196.8	0.256	22.965
75	27.111	27.094	36.394	194.2	0.371	23.738
100	25.390	25.368	36.546	171.3	0.467	24.397
125	22.791	22.765	36.587	165.8	0.546	25.206
150	20.947	20.918	36.683	155.2	0.607	25.798
200	18.080	18.045	36.458	152.1	0.703	26.378
250	16.218	16.178	36.155	138.3	0.784	26.595
300	14.373	14.328	35.859	132.1	0.855	26.781
400	10.211	10.164	35.227	119.5	0.974	27.101
500	8.384	8.331	35.012	120.9	1.072	27.233

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
583	2	6.551	6.497	34.914	139.1
442	4	9.396	9.346	35.127	117.8
331	6	13.150	13.103	35.668	126.0
219	8	17.691	17.653	36.382	138.6
130	10	21.851	21.825	36.562	177.0
60	12	29.423	29.409	36.473	197.1
4	16	29.522	29.521	36.082	193.9

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 35 (CTD035)  
 Latitude 26.048 N Longitude 79.764 W  
 19-Sep-2007 15:01 Z

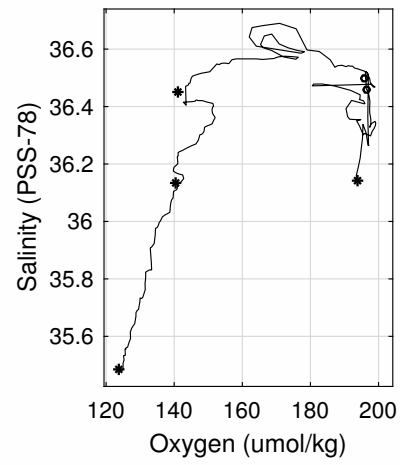
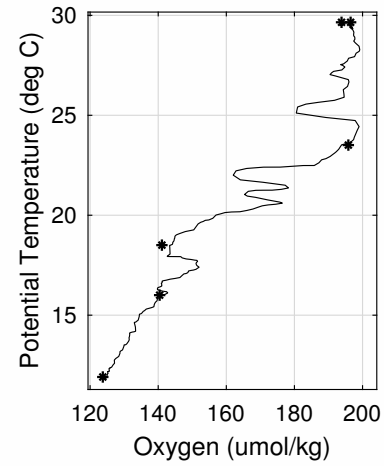
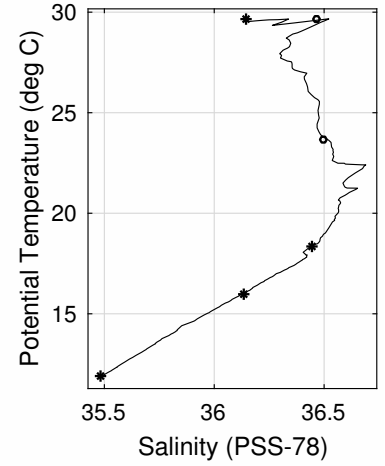
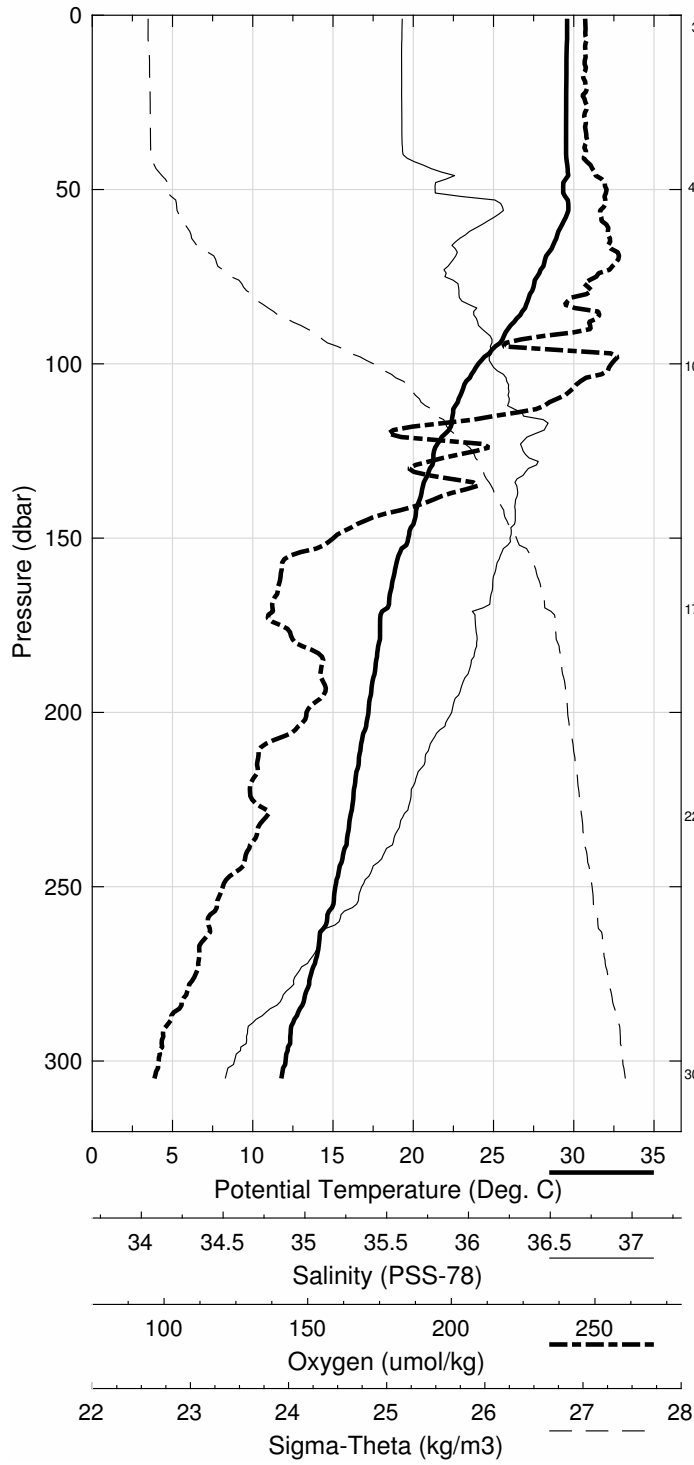


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 36 (CTD036)  
 Latitude 26.040N Longitude 79.849W  
 19-Sep-2007 16:33Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.585	29.585	36.141	193.7	0.005	22.723
10	29.559	29.556	36.139	193.8	0.051	22.732
20	29.540	29.535	36.139	193.8	0.102	22.739
30	29.530	29.523	36.140	193.8	0.154	22.744
50	29.354	29.341	36.265	197.2	0.255	22.899
75	27.735	27.718	36.302	195.5	0.374	23.466
100	24.075	24.054	36.476	198.0	0.471	24.743
125	21.319	21.294	36.595	176.1	0.540	25.628
150	19.715	19.688	36.546	153.2	0.595	26.024
200	17.242	17.208	36.327	148.9	0.683	26.483
250	15.183	15.144	35.989	135.4	0.758	26.702
300	12.083	12.043	35.510	125.1	0.822	26.977

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
304	2	11.895	11.855	35.487	123.6
230	4	16.061	16.024	36.133	140.3
170	6	18.370	18.341	36.447	141.3
101	8	23.659	23.638	36.499	195.9
49	10	29.617	29.605	36.461	196.8
4	12	29.604	29.603	36.142	193.5

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 36 (CTD036)  
 Latitude 26.040 N Longitude 79.849 W  
 19-Sep-2007 16:33 Z

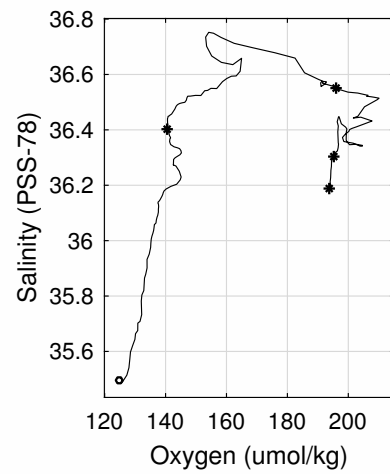
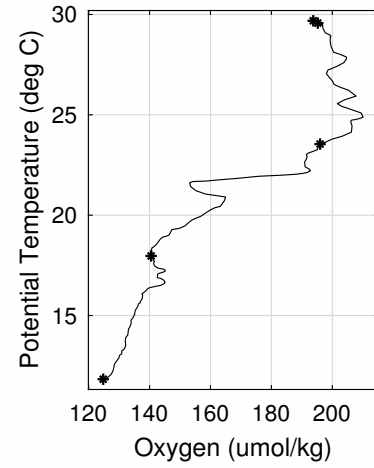
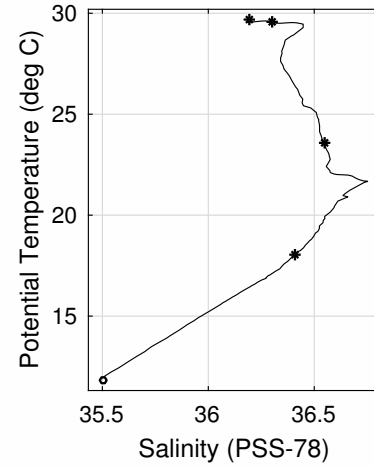
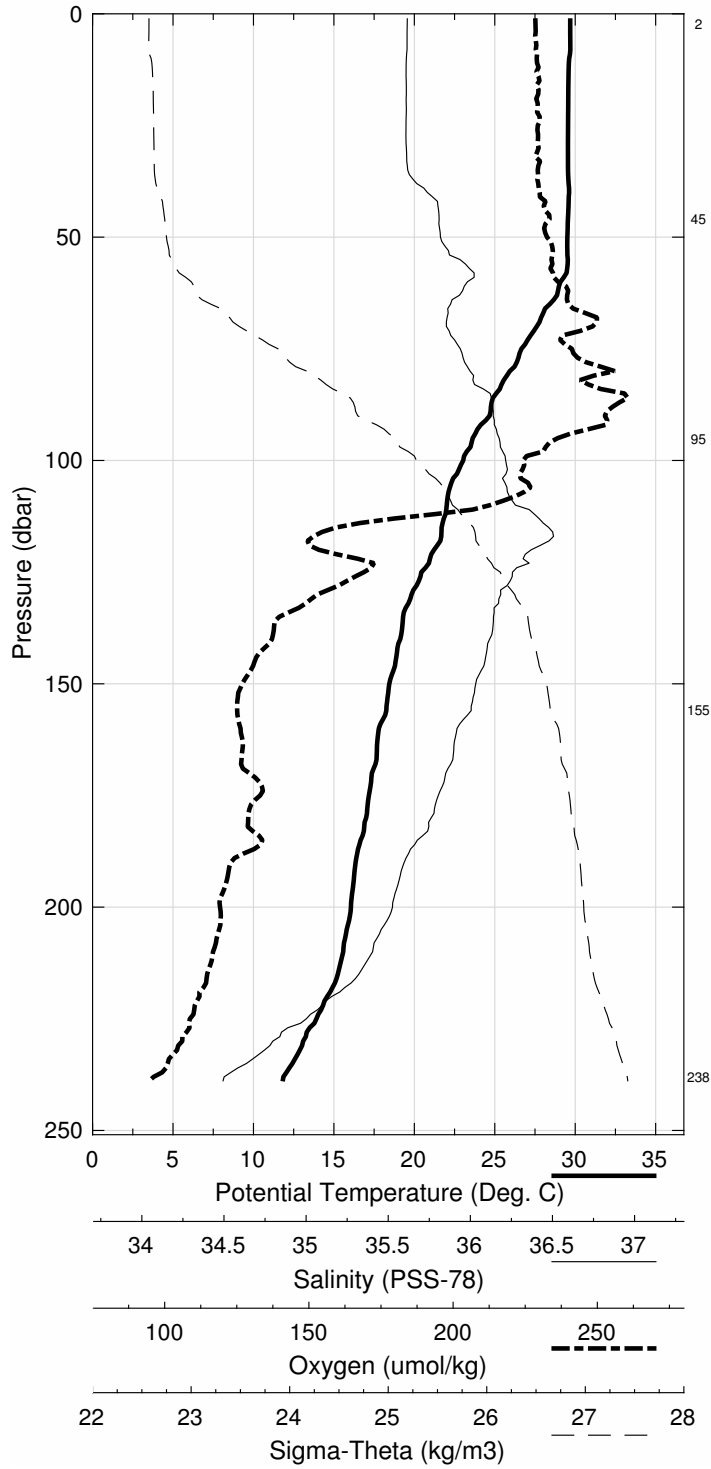


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 37 (CTD037)  
 Latitude 26.040N Longitude 79.932W  
 19-Sep-2007 18:07Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.689	29.689	36.191	193.7	0.005	22.726
10	29.627	29.625	36.188	193.9	0.051	22.745
20	29.571	29.566	36.187	194.1	0.102	22.765
30	29.556	29.549	36.188	194.3	0.153	22.771
50	29.523	29.510	36.318	195.8	0.254	22.882
75	26.674	26.657	36.395	200.2	0.370	23.878
100	23.057	23.037	36.569	191.5	0.456	25.113
125	20.459	20.435	36.595	163.2	0.518	25.862
150	18.469	18.443	36.454	141.5	0.567	26.275
200	16.090	16.058	36.134	137.6	0.647	26.607

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
238	2	11.888	11.856	35.499	124.6
156	4	18.048	18.021	36.405	140.2
95	6	23.547	23.527	36.549	195.9
46	8	29.555	29.543	36.305	194.9
2	10	29.704	29.703	36.190	193.9

**Abaco September 2007 R/V Ronald H Brown**  
**CTD Station 37 (CTD037)**  
**Latitude 26.040 N Longitude 79.932 W**  
**19-Sep-2007 18:07 Z**

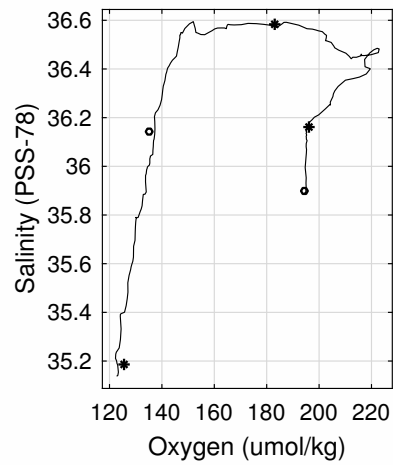
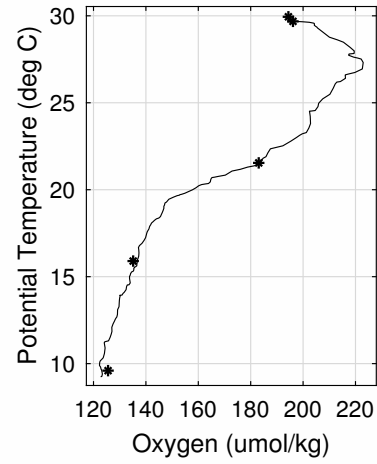
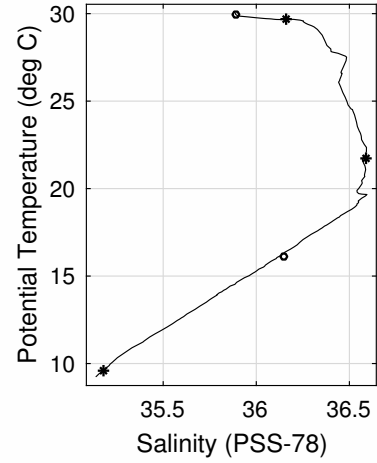
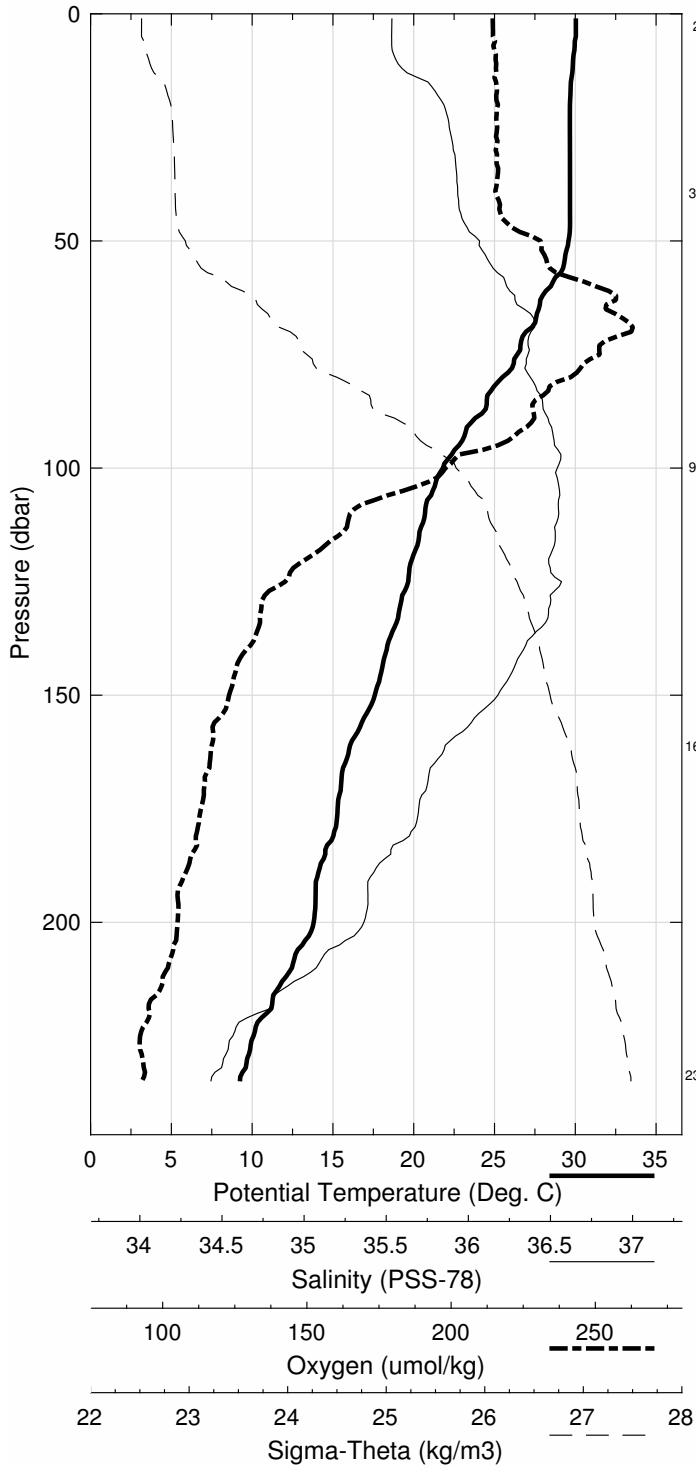


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 38 (CTD038)  
 Latitude 26.041N Longitude 79.999W  
 19-Sep-2007 19:12Z

Pressure dbar	Temp90 °C	PoTemp90 °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	30.035	30.035	35.890	194.3	0.005	22.381
10	29.868	29.865	35.905	194.9	0.054	22.451
20	29.673	29.668	36.105	195.4	0.107	22.669
30	29.675	29.668	36.145	194.9	0.159	22.698
50	29.589	29.576	36.254	204.1	0.261	22.811
75	26.422	26.405	36.455	216.2	0.373	24.004
100	21.828	21.808	36.577	184.7	0.453	25.471
125	19.685	19.662	36.594	152.0	0.509	26.068
150	17.615	17.589	36.330	140.5	0.554	26.393
200	13.837	13.808	35.773	130.0	0.624	26.825

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
234	2	9.610	9.583	35.185	125.5
161	4	16.117	16.091	36.147	135.1
100	6	21.790	21.770	36.587	182.9
40	8	29.709	29.700	36.159	195.8
3	10	29.991	29.991	35.895	194.3

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 38 (CTD038)  
 Latitude 26.041 N Longitude 79.999 W  
 19-Sep-2007 19:12 Z



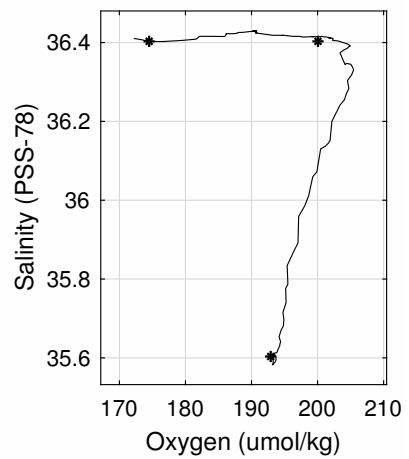
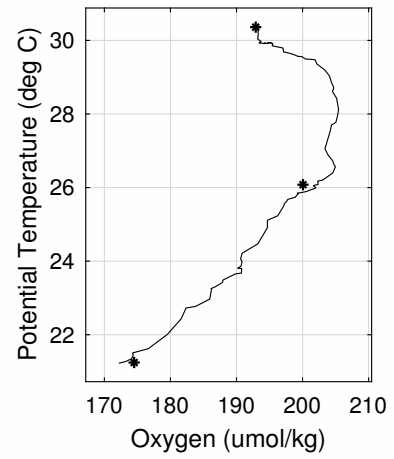
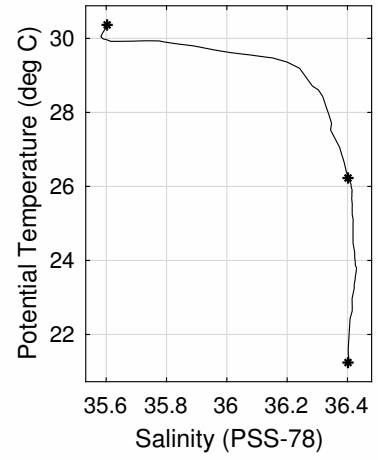
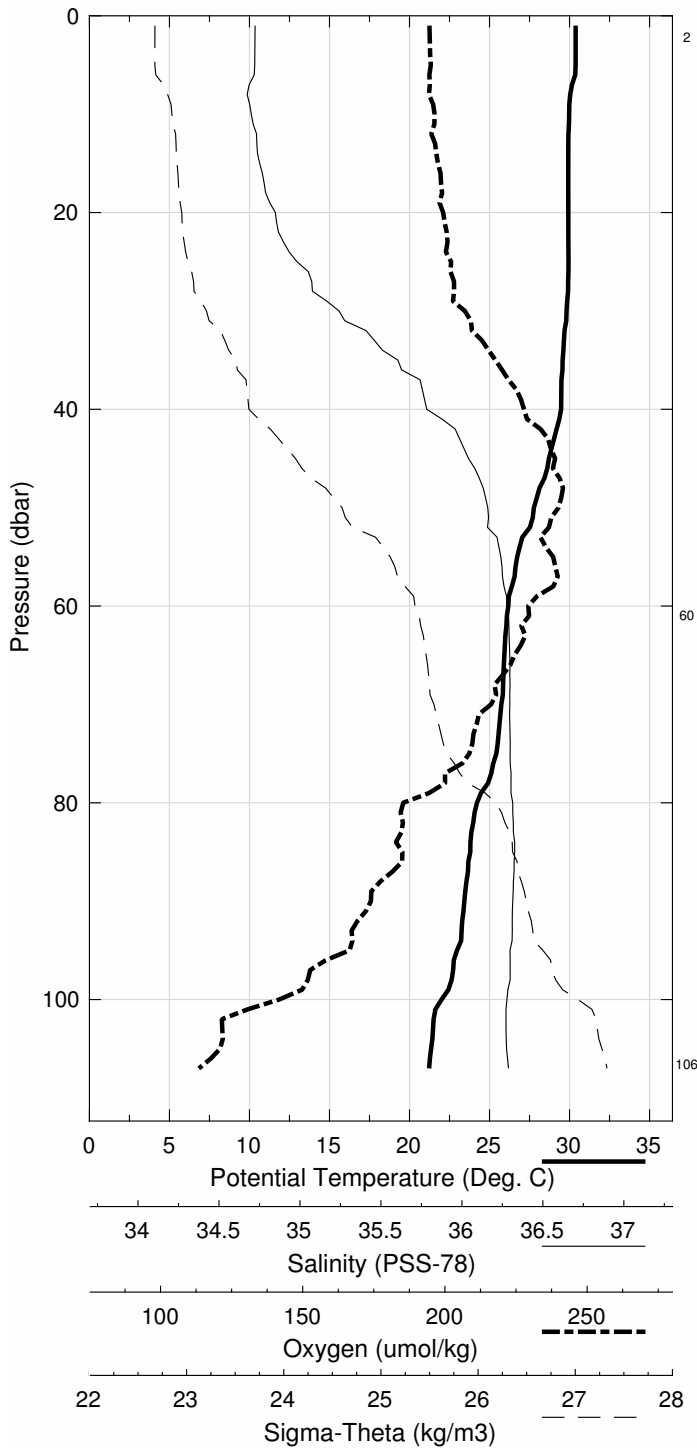


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 39 (CTD039)  
 Latitude 26.049N Longitude 80.066W  
 19-Sep-2007 20:08Z

Pressure dbar	Temp90 °C	PoTemp90 °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	30.381	30.381	35.607	193.3	0.006	22.051
10	29.979	29.976	35.595	193.7	0.057	22.181
20	29.928	29.923	35.671	194.5	0.113	22.256
30	29.822	29.814	35.873	196.5	0.168	22.444
50	27.784	27.772	36.345	205.0	0.268	23.481
75	25.443	25.426	36.416	196.9	0.365	24.281
100	22.026	22.006	36.405	179.5	0.444	25.285

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
107	2	21.251	21.230	36.404	174.6
61	4	26.240	26.227	36.400	200.1
2	6	30.375	30.375	35.604	192.9

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 39 (CTD039)  
 Latitude 26.049 N Longitude 80.066 W  
 19-Sep-2007 20:08 Z

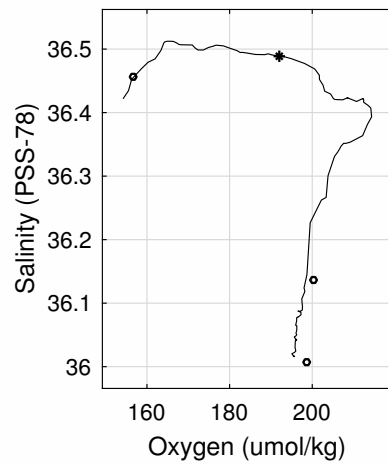
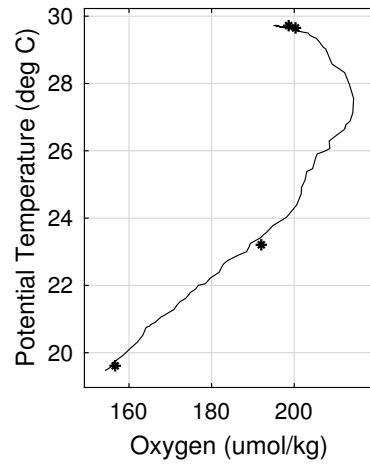
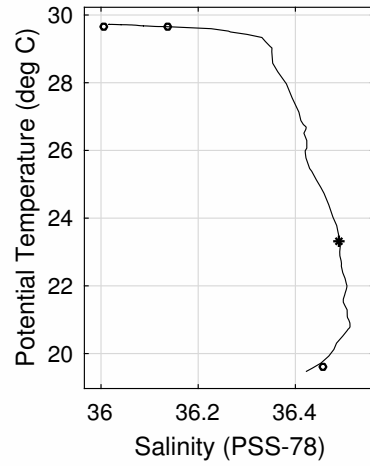
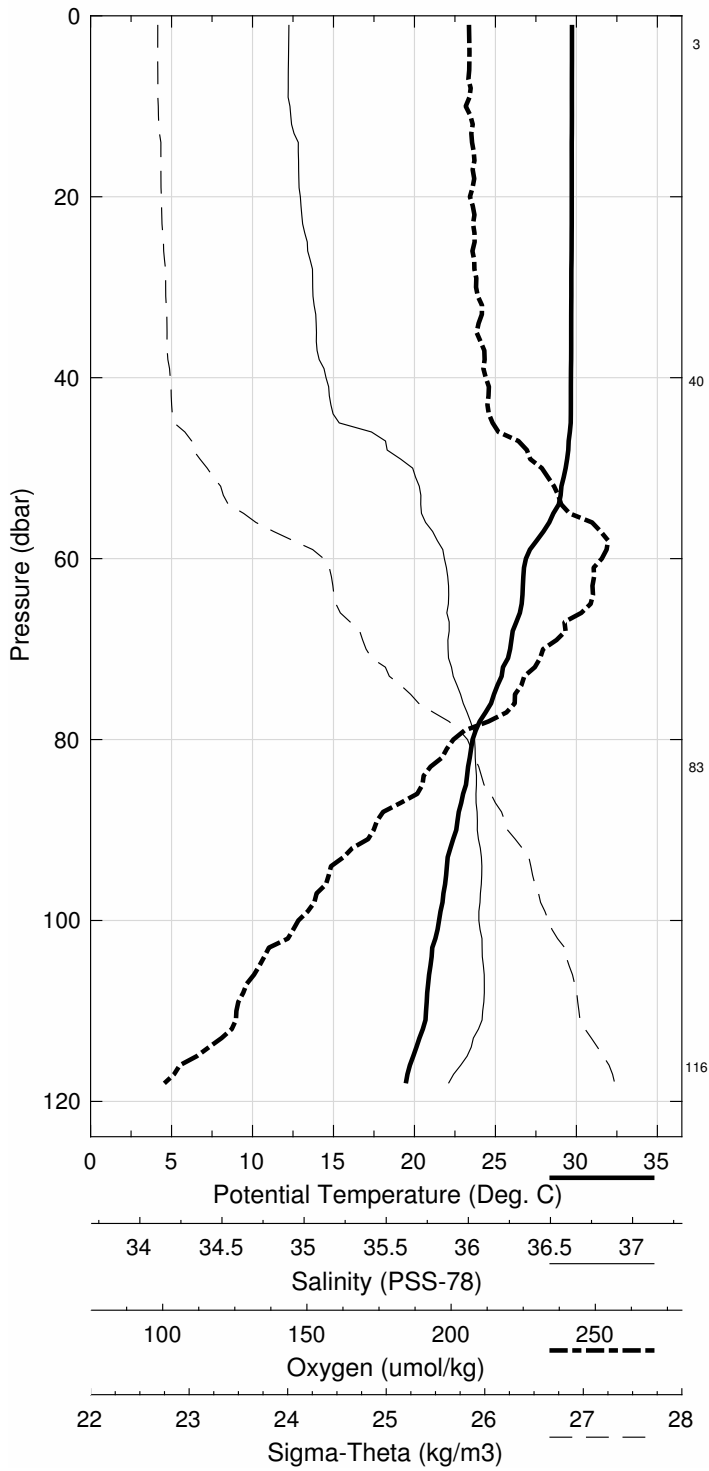


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 40 (CTD040)  
 Latitude 26.995N Longitude 79.938W  
 20-Sep-2007 01:42Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.728	29.728	36.018	195.5	0.005	22.582
10	29.725	29.722	36.020	195.1	0.053	22.586
20	29.718	29.713	36.047	195.6	0.105	22.609
30	29.695	29.688	36.078	196.5	0.157	22.641
50	29.348	29.336	36.331	205.4	0.260	22.951
75	24.928	24.911	36.452	201.7	0.364	24.466
100	21.538	21.518	36.499	172.4	0.435	25.492

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
116	2	19.628	19.607	36.457	156.6
83	4	23.333	23.316	36.490	192.1
40	6	29.650	29.640	36.135	200.3
3	8	29.687	29.686	36.008	198.8

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 40 (CTD040)  
 Latitude 26.995 N Longitude 79.938 W  
 20-Sep-2007 01:42 Z

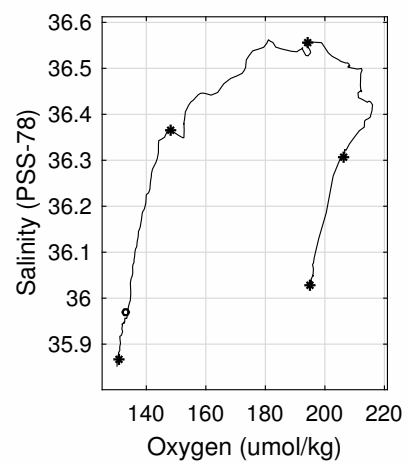
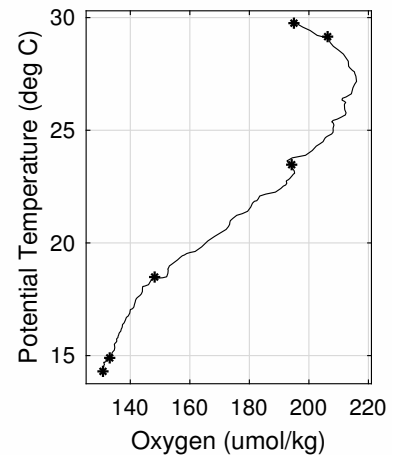
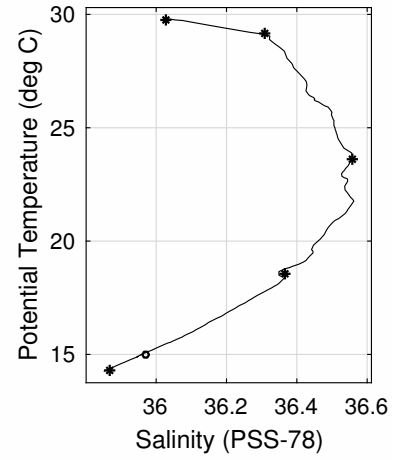
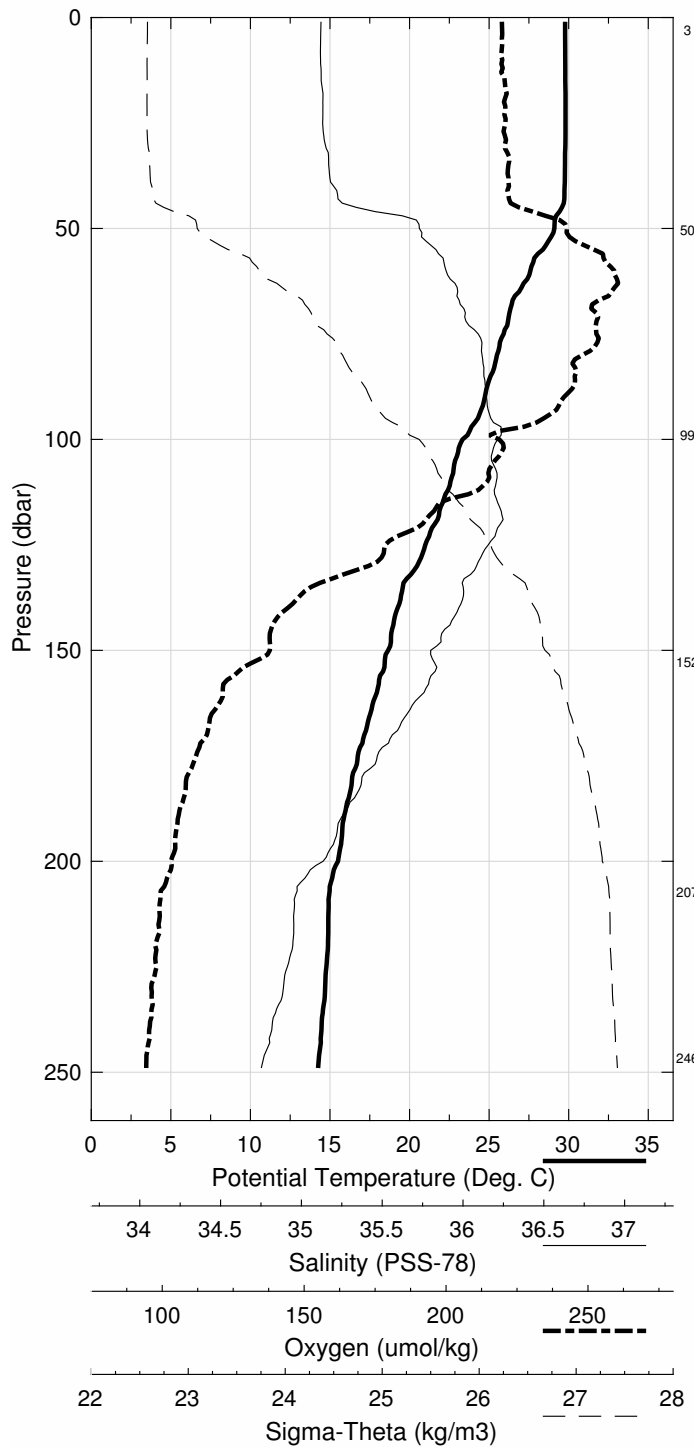


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 41 (CTD041)  
 Latitude 26.994N Longitude 79.867W  
 20-Sep-2007 03:00Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.776	29.776	36.027	194.9	0.005	22.573
10	29.787	29.784	36.025	194.9	0.053	22.569
20	29.806	29.801	36.032	195.2	0.105	22.568
30	29.801	29.793	36.039	195.4	0.158	22.576
50	29.112	29.100	36.316	206.7	0.261	23.019
75	25.928	25.911	36.489	212.1	0.367	24.185
100	23.349	23.328	36.546	194.4	0.453	25.011
125	21.012	20.988	36.518	173.6	0.520	25.654
150	18.679	18.653	36.349	152.6	0.572	26.142
200	15.534	15.503	36.033	134.6	0.653	26.656

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
247	2	14.345	14.308	35.866	130.8
207	4	15.012	14.981	35.972	132.8
153	6	18.564	18.537	36.365	148.2
99	8	23.677	23.656	36.556	194.2
51	10	29.142	29.129	36.306	206.0
3	12	29.762	29.761	36.028	194.6

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 41 (CTD041)  
 Latitude 26.994 N Longitude 79.867 W  
 20-Sep-2007 03:00 Z

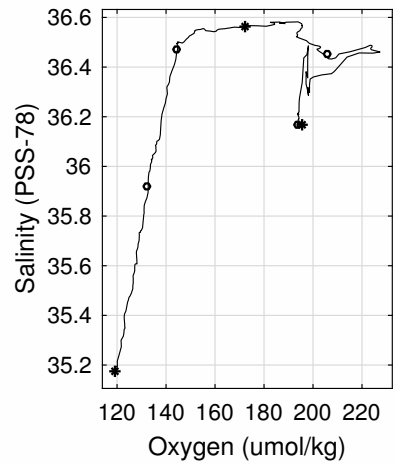
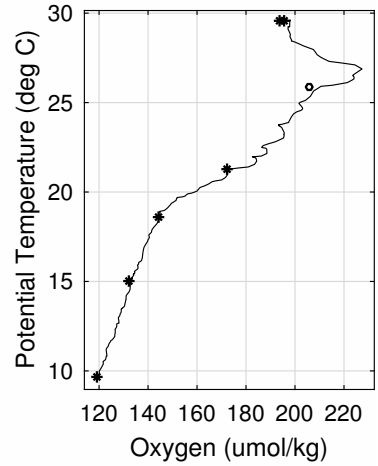
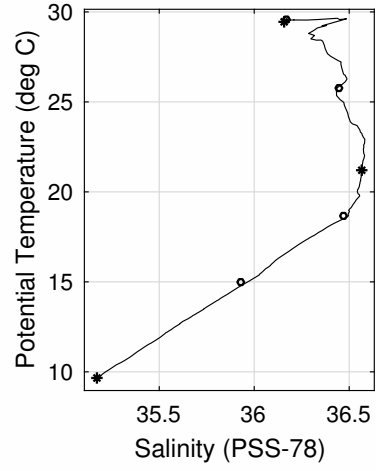
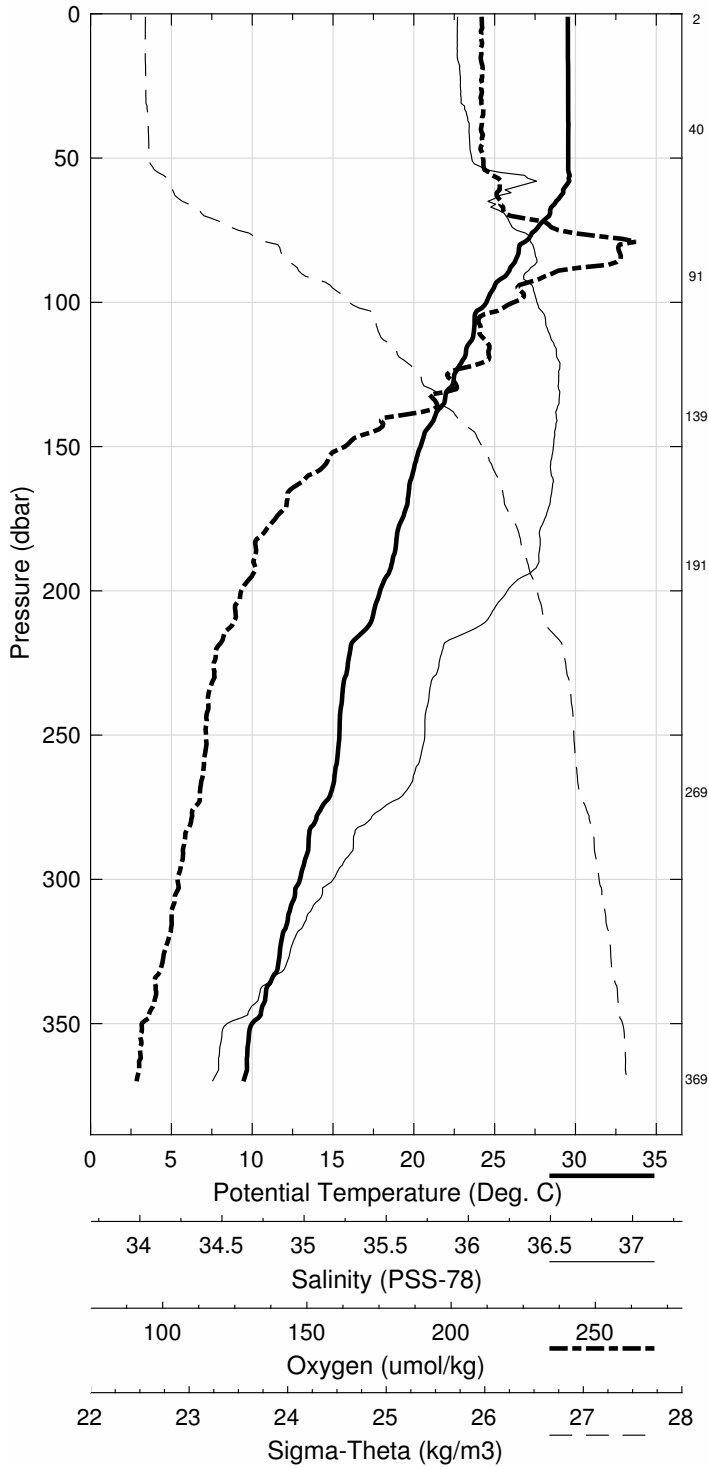


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 42 (CTD042)  
 Latitude 26.998N Longitude 79.784W  
 20-Sep-2007 04:31Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.531	29.531	36.162	193.9	0.005	22.757
10	29.534	29.532	36.160	194.0	0.051	22.756
20	29.551	29.546	36.171	193.9	0.102	22.759
30	29.556	29.549	36.176	193.9	0.153	22.762
50	29.564	29.552	36.220	194.2	0.254	22.794
75	27.543	27.525	36.404	210.6	0.374	23.606
100	24.512	24.490	36.487	200.8	0.468	24.621
125	22.528	22.502	36.577	186.4	0.544	25.274
150	20.444	20.416	36.555	164.2	0.606	25.837
200	17.943	17.909	36.366	141.7	0.704	26.341
250	15.432	15.393	36.027	134.0	0.781	26.676
300	12.993	12.951	35.652	127.9	0.848	26.908

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
369	2	9.690	9.648	35.175	119.2
270	4	14.993	14.952	35.924	132.0
191	6	18.642	18.608	36.469	144.5
140	8	21.280	21.253	36.567	172.3
91	10	25.758	25.738	36.449	206.0
40	12	29.558	29.549	36.164	193.8
2	16	29.511	29.511	36.163	195.9

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 42 (CTD042)  
 Latitude 26.998 N Longitude 79.784 W  
 20-Sep-2007 04:31 Z



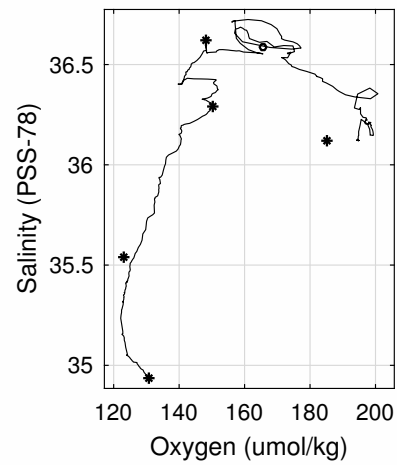
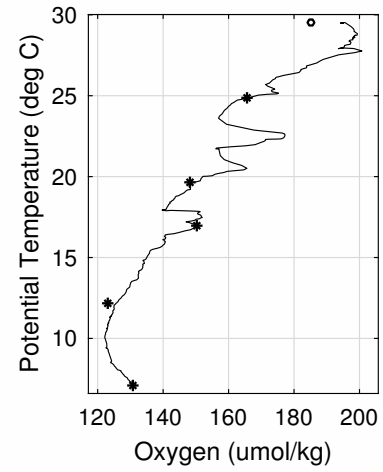
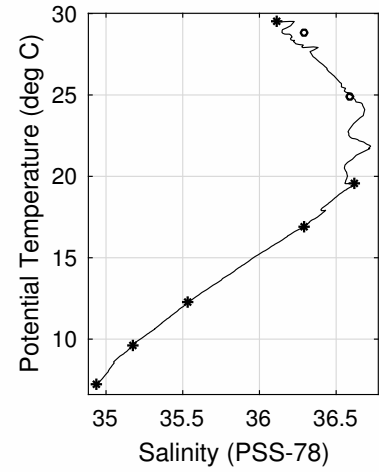
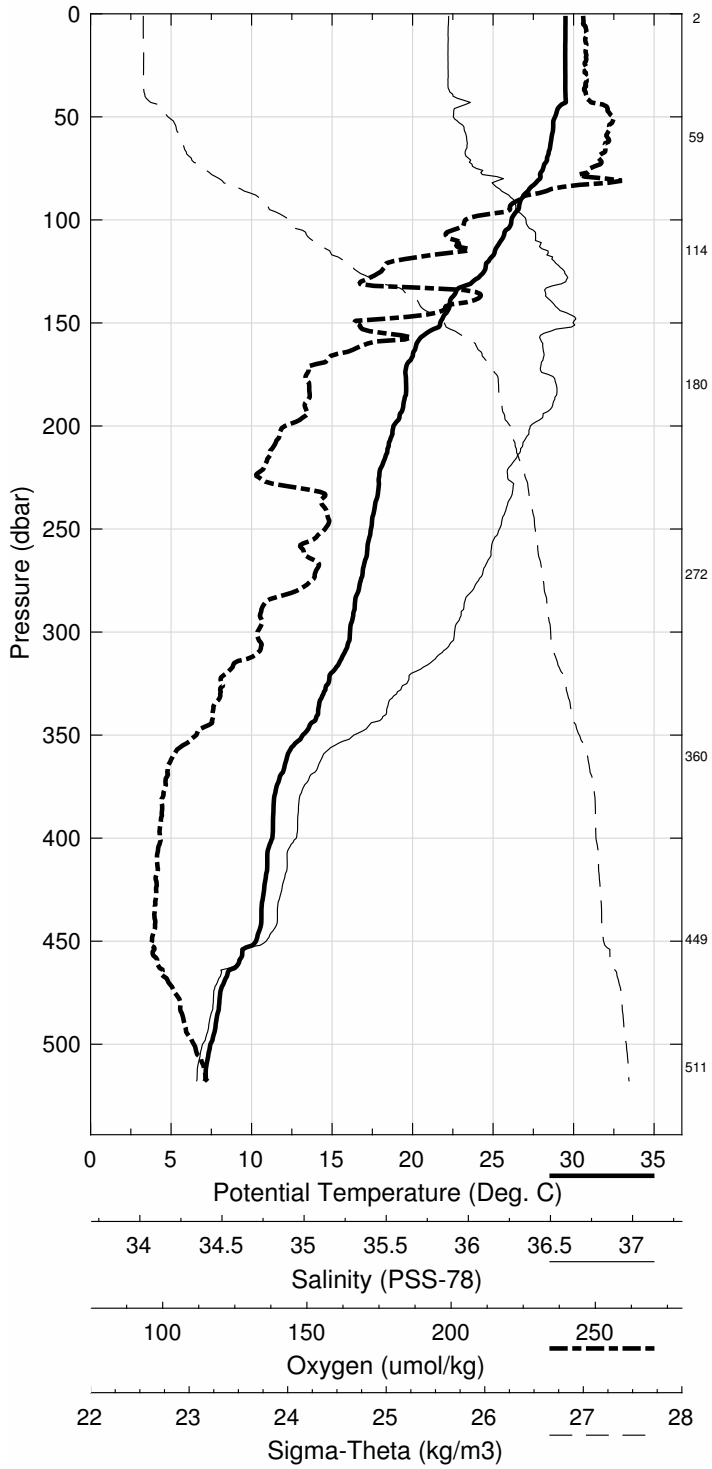


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 43 (CTD043)  
 Latitude 27.002N Longitude 79.682W  
 20-Sep-2007 06:04Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.497	29.497	36.125	194.3	0.005	22.741
10	29.493	29.491	36.121	195.0	0.051	22.741
20	29.484	29.479	36.121	194.8	0.102	22.744
30	29.495	29.488	36.122	194.5	0.153	22.742
50	28.862	28.850	36.146	199.3	0.254	22.975
75	28.124	28.106	36.254	195.4	0.373	23.303
100	26.167	26.144	36.489	174.6	0.478	24.112
125	24.467	24.440	36.671	160.6	0.566	24.775
150	21.745	21.715	36.711	156.1	0.635	25.599
200	18.846	18.810	36.510	144.6	0.738	26.224
250	17.454	17.411	36.364	151.2	0.825	26.462
300	16.160	16.112	36.152	140.0	0.904	26.608
400	11.340	11.289	35.406	123.7	1.032	27.038
500	7.490	7.440	34.963	129.4	1.131	27.327

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
511	2	7.211	7.161	34.938	130.4
449	4	9.631	9.579	35.178	-999.0
360	6	12.275	12.227	35.537	123.2
272	8	16.958	16.913	36.287	150.1
180	10	19.602	19.569	36.620	148.2
115	12	24.875	24.850	36.592	165.7
60	16	28.830	28.815	36.296	209.4
2	18	29.462	29.461	36.119	184.9

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 43 (CTD043)  
 Latitude 27.002 N Longitude 79.682 W  
 20-Sep-2007 06:04 Z

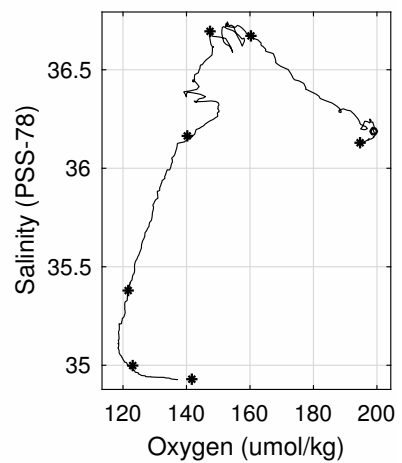
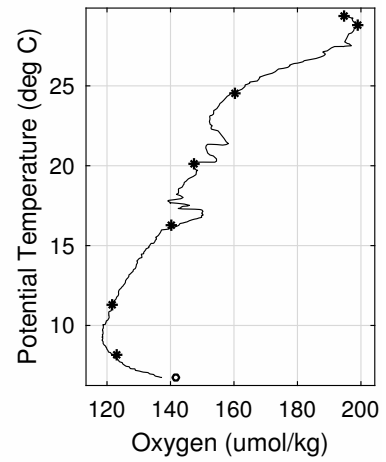
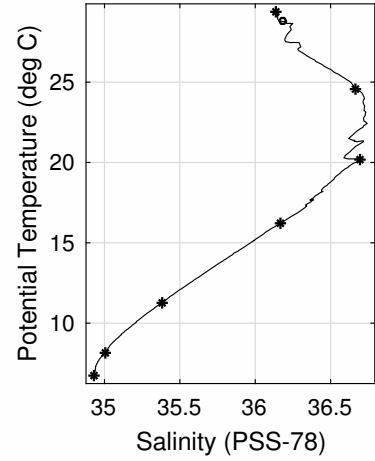
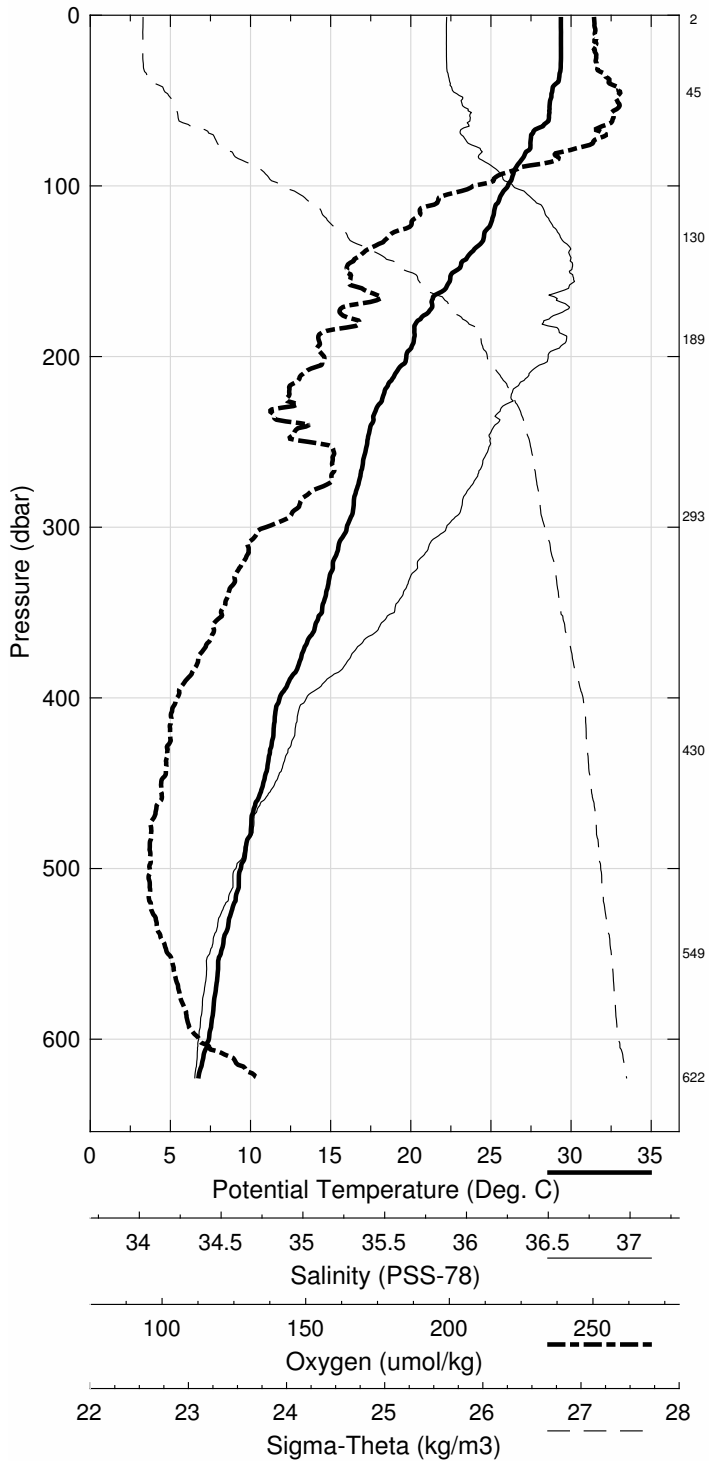


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 44 (CTD044)  
 Latitude 26.997N Longitude 79.618W  
 20-Sep-2007 07:34Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.365	29.364	36.132	194.8	0.005	22.791
10	29.373	29.371	36.130	194.9	0.051	22.788
20	29.375	29.370	36.130	195.0	0.101	22.789
30	29.363	29.356	36.132	195.5	0.152	22.794
50	28.705	28.693	36.201	198.7	0.251	23.069
75	27.478	27.460	36.234	194.6	0.367	23.499
100	26.079	26.056	36.449	174.0	0.470	24.109
125	24.816	24.789	36.652	162.5	0.558	24.655
150	22.793	22.762	36.718	152.3	0.634	25.306
200	19.758	19.721	36.617	148.5	0.749	26.070
250	17.328	17.286	36.339	145.8	0.838	26.474
300	16.058	16.010	36.131	138.5	0.917	26.616
400	11.874	11.821	35.462	123.3	1.053	26.982
500	9.453	9.396	35.123	118.6	1.163	27.150
600	7.461	7.401	34.946	127.1	1.256	27.320

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
622	2	6.851	6.792	34.933	141.8
550	4	8.232	8.174	35.004	122.9
431	6	11.310	11.256	35.378	121.7
294	8	16.272	16.224	36.163	140.0
190	10	20.248	20.212	36.696	147.8
130	12	24.607	24.579	36.671	160.2
46	16	28.785	28.774	36.183	198.8
2	18	29.367	29.366	36.130	194.5

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 44 (CTD044)  
 Latitude 26.997 N Longitude 79.618 W  
 20-Sep-2007 07:34 Z

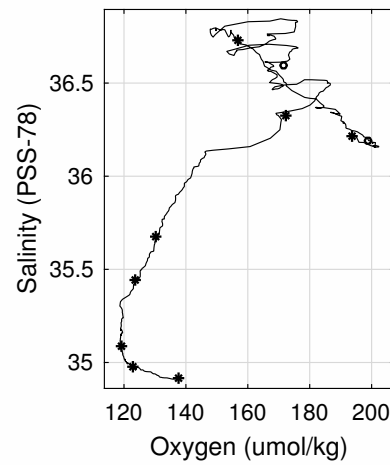
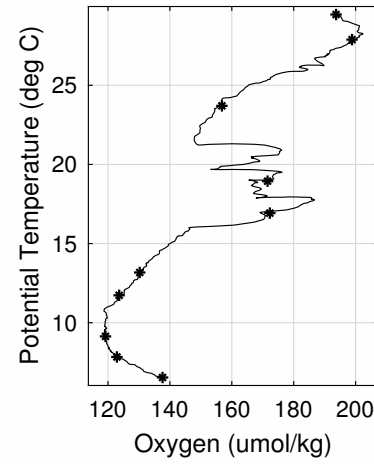
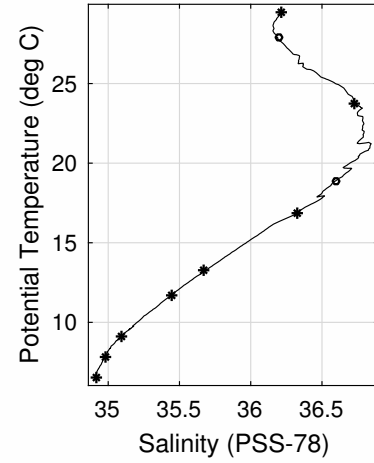
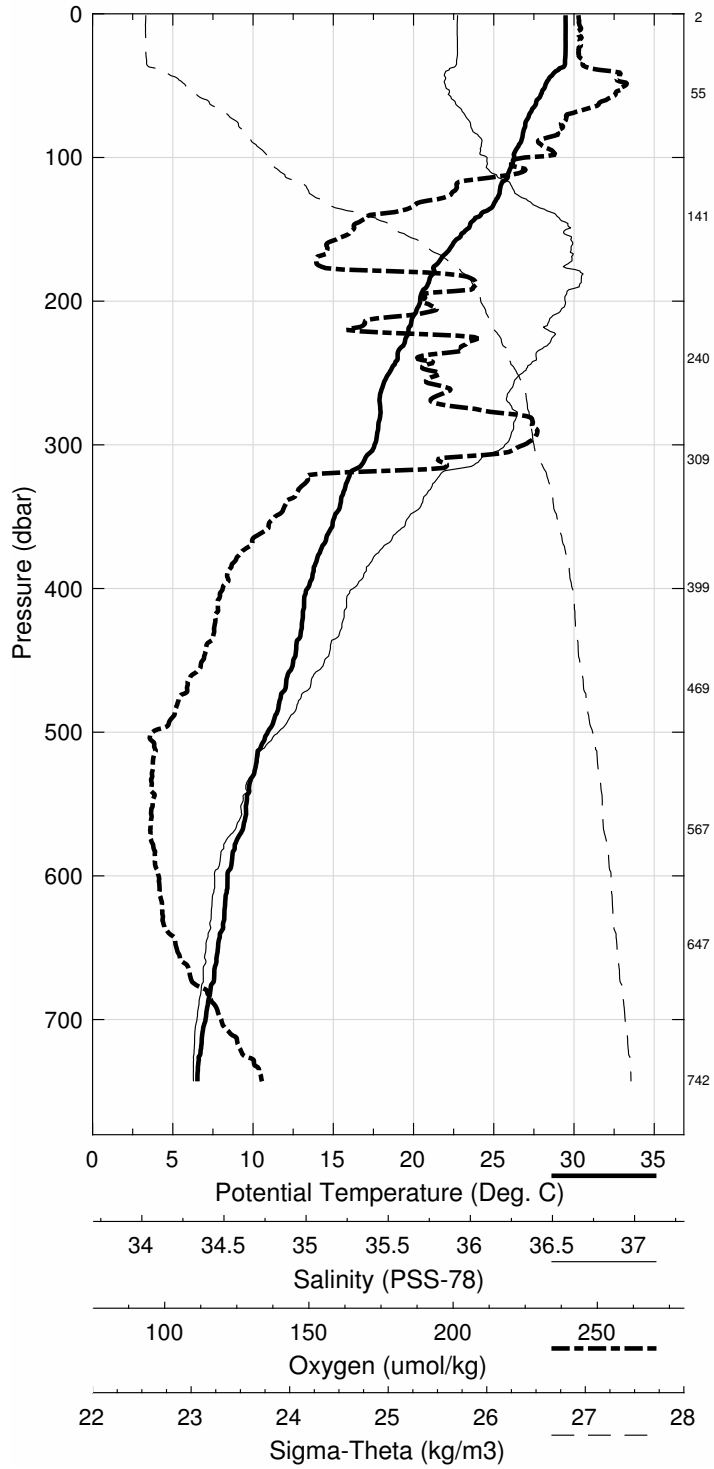


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 45 (CTD045)  
 Latitude 26.993N Longitude 79.502W  
 20-Sep-2007 09:10Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.474	29.474	36.222	193.8	0.005	22.822
10	29.479	29.476	36.221	194.3	0.050	22.820
20	29.482	29.477	36.221	194.0	0.101	22.820
30	29.466	29.459	36.220	194.0	0.151	22.826
50	28.224	28.213	36.162	202.0	0.249	23.199
75	27.016	26.999	36.282	191.4	0.360	23.685
100	26.300	26.278	36.369	184.4	0.463	23.979
125	25.387	25.360	36.507	171.6	0.557	24.370
150	23.354	23.323	36.762	154.4	0.638	25.177
200	20.450	20.412	36.756	166.3	0.756	25.992
250	18.531	18.487	36.545	169.5	0.852	26.333
300	17.616	17.565	36.456	184.3	0.937	26.495
400	13.444	13.387	35.704	131.5	1.081	26.859
500	10.974	10.911	35.332	119.2	1.205	27.051
600	8.474	8.409	35.016	120.2	1.309	27.224
700	7.104	7.036	34.929	131.2	1.399	27.358

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
742	2	6.609	6.539	34.911	137.9
647	4	7.895	7.828	34.977	123.2
568	6	9.205	9.141	35.091	119.2
469	8	11.792	11.731	35.442	123.4
399	10	13.274	13.218	35.674	130.4
310	12	16.929	16.877	36.324	171.9
240	16	18.871	18.828	36.598	171.7
141	18	23.817	23.787	36.731	157.0
55	20	27.891	27.878	36.195	198.8
2	22	29.469	29.469	36.221	193.7

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 45 (CTD045)  
 Latitude 26.993 N Longitude 79.502 W  
 20-Sep-2007 09:10 Z

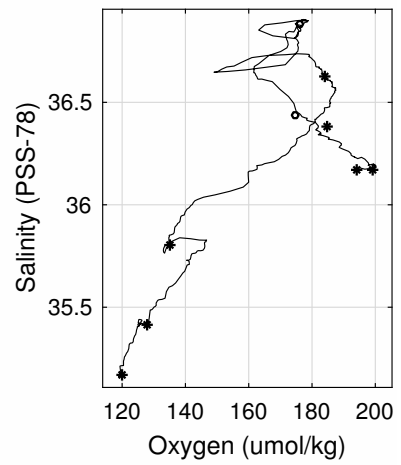
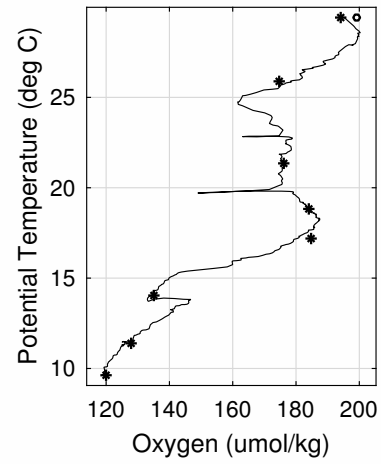
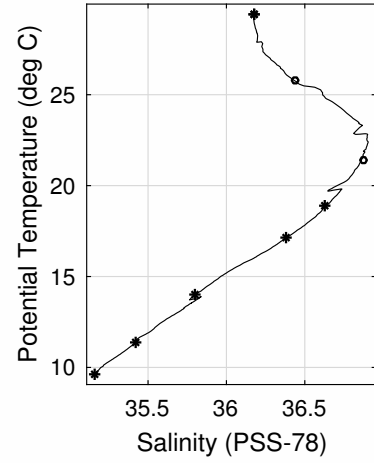
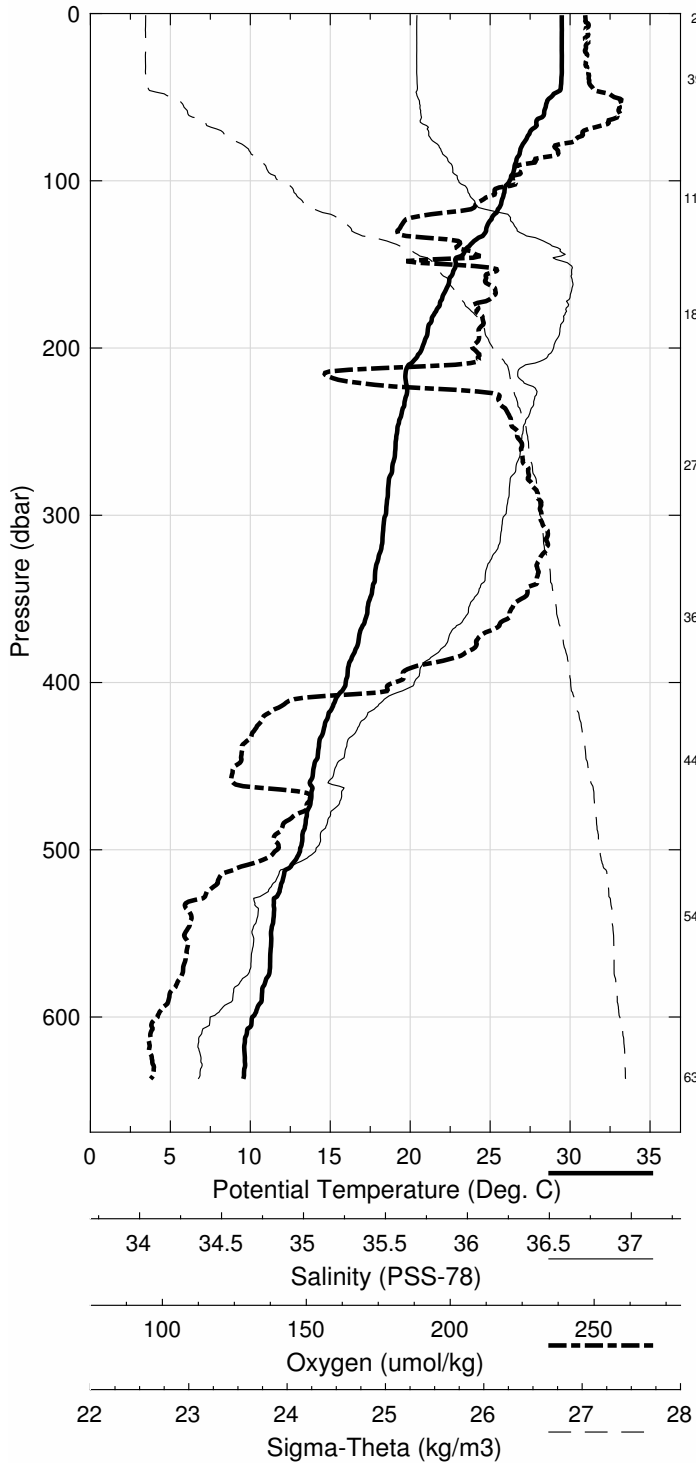


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 46 (CTD046)  
 Latitude 26.992N Longitude 79.386W  
 20-Sep-2007 10:41Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.480	29.479	36.178	193.9	0.005	22.787
10	29.487	29.485	36.177	194.1	0.051	22.785
20	29.483	29.478	36.177	194.0	0.101	22.787
30	29.488	29.481	36.177	194.0	0.152	22.786
50	28.816	28.803	36.181	198.9	0.253	23.017
75	27.288	27.271	36.243	192.3	0.368	23.567
100	26.240	26.217	36.372	181.5	0.471	24.001
125	24.941	24.913	36.624	162.6	0.563	24.595
150	22.884	22.854	36.888	170.5	0.638	25.409
200	20.783	20.745	36.814	174.5	0.755	25.945
250	19.230	19.184	36.671	182.4	0.854	26.252
300	18.510	18.457	36.587	186.4	0.944	26.373
400	16.028	15.964	36.165	161.1	1.108	26.653
500	13.184	13.114	35.708	140.9	1.245	26.919
600	10.191	10.118	35.215	120.4	1.362	27.100

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
636	2	9.661	9.586	35.166	120.1
540	4	11.436	11.367	35.420	128.2
447	6	14.051	13.986	35.799	134.7
361	8	17.235	17.174	36.387	184.8
270	10	18.909	18.860	36.630	184.2
180	12	21.375	21.339	36.878	176.0
111	16	25.814	25.789	36.438	174.6
40	22	29.481	29.471	36.176	199.2
3	24	29.478	29.477	36.174	193.9

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 46 (CTD046)  
 Latitude 26.992 N Longitude 79.386 W  
 20-Sep-2007 10:41 Z



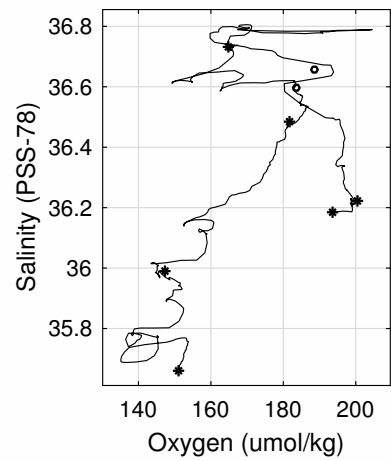
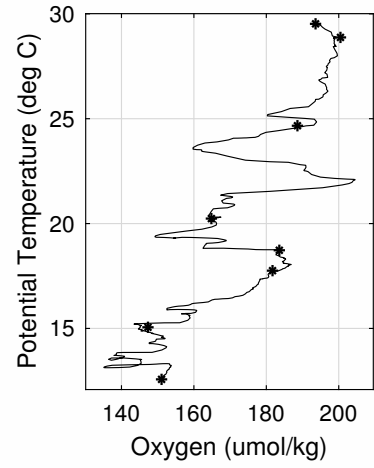
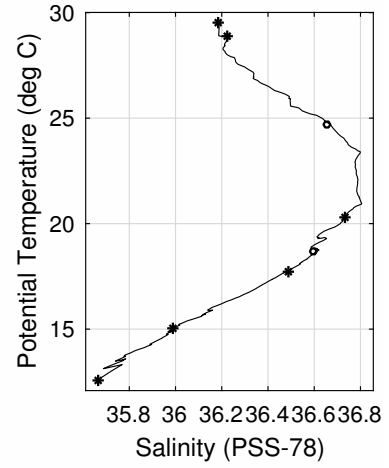
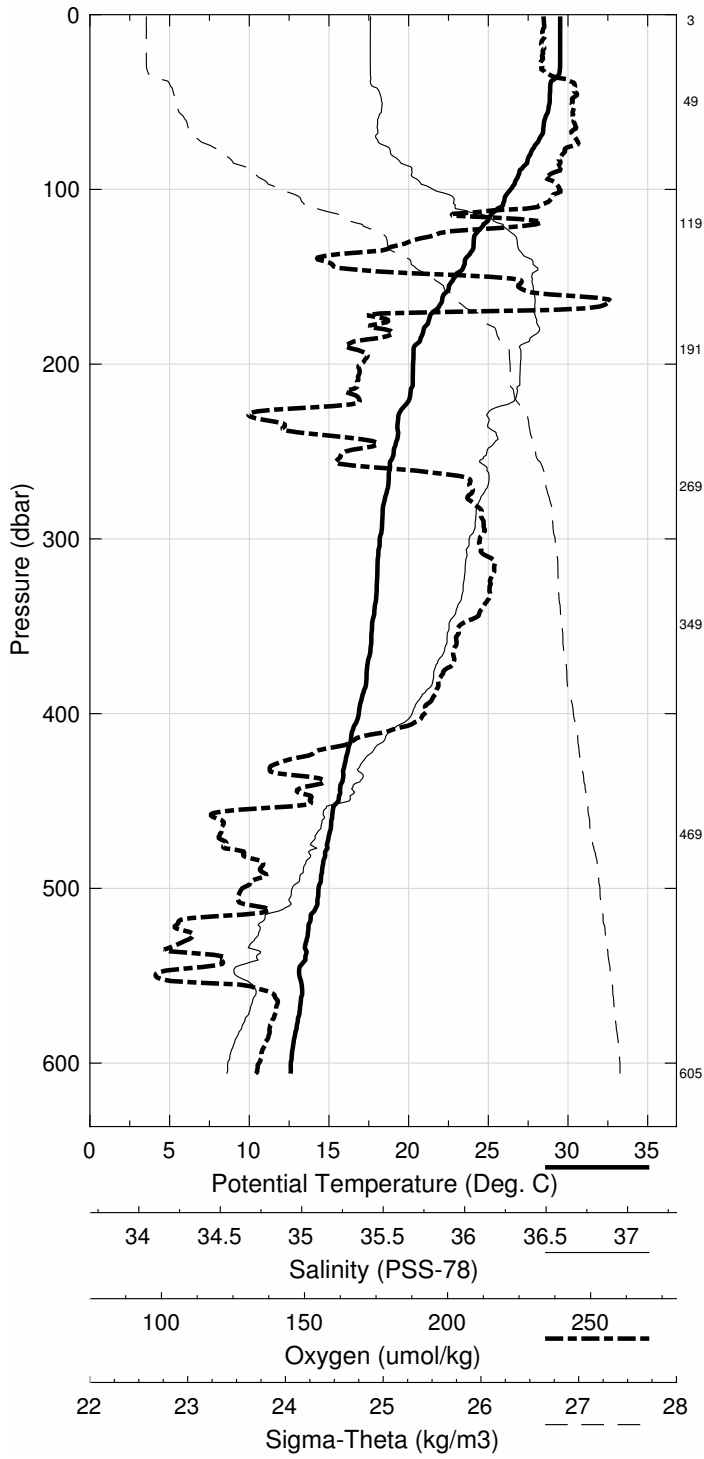


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 47 (CTD047)  
 Latitude 27.002N Longitude 79.283W  
 20-Sep-2007 12:11Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.510	29.510	36.188	194.3	0.005	22.784
10	29.509	29.507	36.186	194.1	0.051	22.784
20	29.513	29.508	36.186	194.2	0.101	22.784
30	29.512	29.505	36.187	194.1	0.152	22.785
50	28.863	28.851	36.228	198.8	0.251	23.037
75	27.927	27.909	36.240	198.8	0.369	23.357
100	26.422	26.399	36.416	196.6	0.475	23.977
125	24.277	24.250	36.704	178.4	0.564	24.857
150	22.952	22.921	36.776	186.1	0.638	25.304
200	20.316	20.278	36.735	166.4	0.754	26.012
250	19.110	19.064	36.613	164.1	0.853	26.238
300	18.237	18.184	36.547	184.6	0.942	26.412
400	16.936	16.869	36.339	176.1	1.109	26.574
500	14.422	14.347	35.901	148.3	1.258	26.810
600	12.692	12.609	35.666	150.9	1.389	26.987

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
606	2	12.648	12.564	35.661	151.1
469	4	15.120	15.047	35.992	147.6
349	6	17.813	17.753	36.484	181.9
270	8	18.702	18.654	36.595	183.4
192	10	20.342	20.306	36.732	164.9
120	12	24.725	24.699	36.656	188.4
50	16	28.872	28.860	36.225	200.7
3	22	29.509	29.508	36.184	193.8

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 47 (CTD047)  
 Latitude 27.002 N Longitude 79.283 W  
 20-Sep-2007 12:11 Z

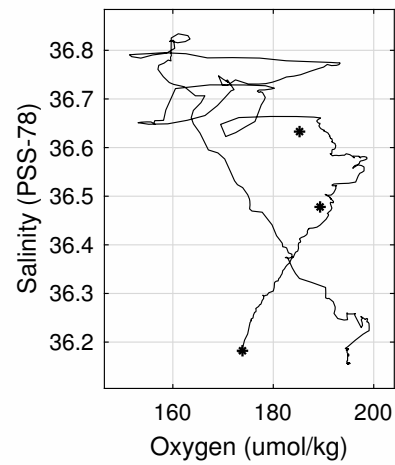
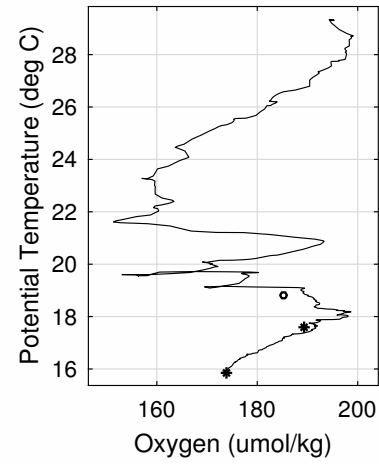
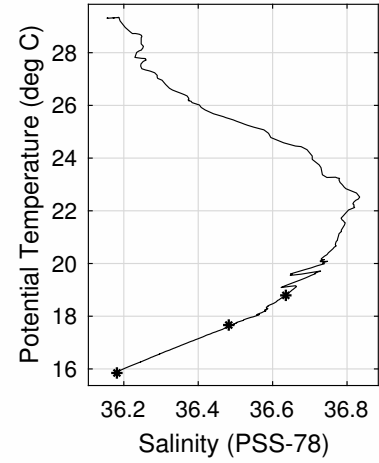
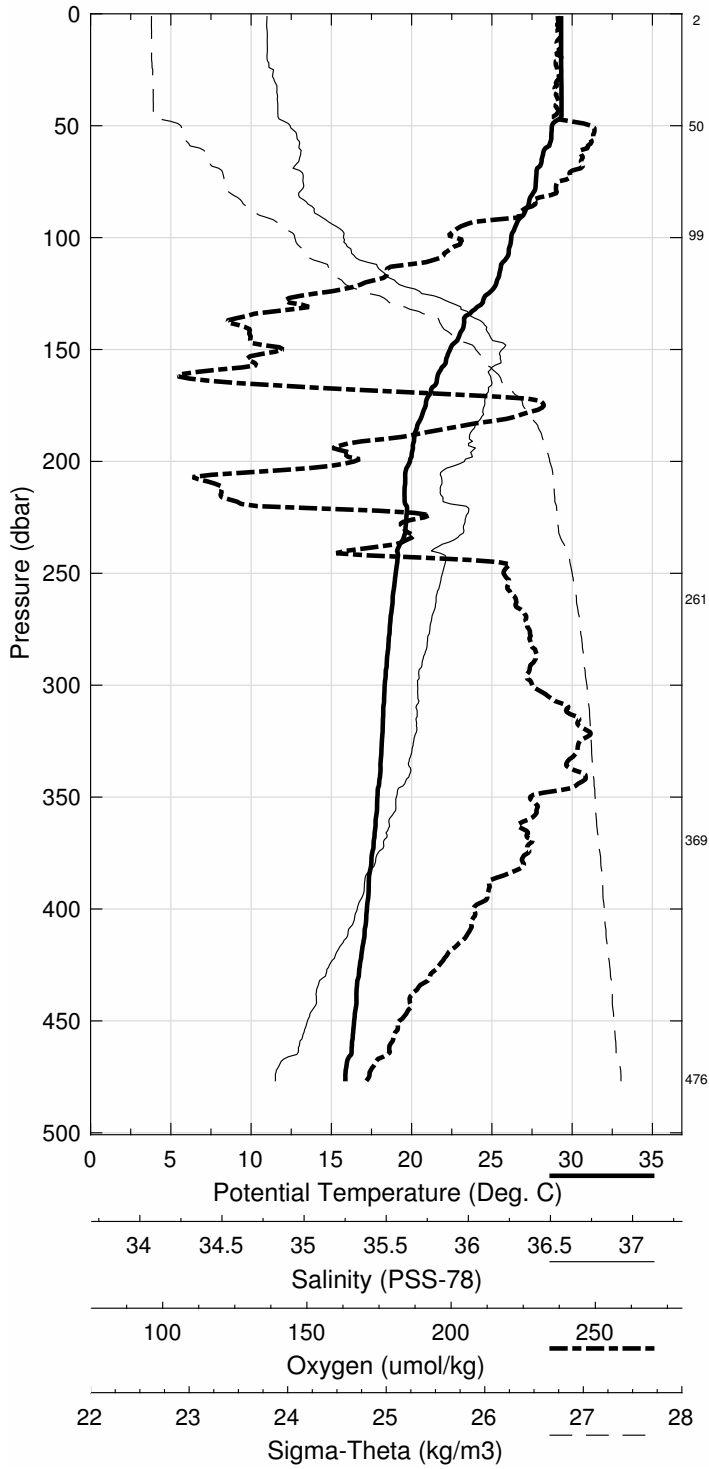


Abaco September 2007 R/V Ronald H Brown  
 CTD Station 48 (CTD048)  
 Latitude 26.992N Longitude 79.202W  
 20-Sep-2007 13:41Z

Pressure dbar	Temp90 °C	PoTemp90 °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	29.313	29.313	36.156	194.9	0.005	22.827
10	29.316	29.313	36.157	195.3	0.050	22.827
20	29.316	29.311	36.156	195.3	0.101	22.827
30	29.333	29.326	36.177	194.8	0.151	22.838
50	28.755	28.743	36.221	198.7	0.251	23.068
75	27.759	27.741	36.258	194.8	0.367	23.426
100	26.230	26.207	36.373	183.2	0.473	24.004
125	24.807	24.780	36.595	167.1	0.565	24.614
150	22.427	22.397	36.823	163.4	0.637	25.491
200	19.936	19.899	36.717	171.6	0.748	26.099
250	19.053	19.008	36.654	188.7	0.844	26.284
300	18.374	18.321	36.583	192.0	0.932	26.405
400	17.280	17.213	36.412	185.2	1.100	26.547

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
476	2	15.934	15.857	36.182	173.8
370	4	17.694	17.631	36.479	189.3
262	6	18.876	18.829	36.634	185.0
99	8	26.274	26.331	-999.000	-999.0
50	10	28.800	28.823	-999.000	-999.0
3	12	29.321	29.323	-999.000	-999.0

Abaco September 2007 R/V Ronald H Brown  
 CTD Station 48 (CTD048)  
 Latitude 26.992 N Longitude 79.202 W  
 20-Sep-2007 13:41 Z



*B WOCE Summary File*

Table 15: Abaco Cruise - WOCE Summary File

SHIP/CHS EXPCODE	WOCE SECT	STN	CST	CST TYPE	CST DATE	UTC TIME	EVENT CODE	LAT	LOE	NAV	UNC DPH	HT ABV BTM	WIRE OUT	MAX PRS	NO BTLS	PARA- METERS	COMMENTS
WBTSRHB	AB0709	1	1	ROS	09132013	1651	BE	26.500N	72.000W	GPS	5159	22	5079	5257	23	1,2	nisk 6 did not close
WBTSRHB	AB0709	1	1	ROS	09132013	1651	BO	26.500N	72.000W	GPS	5159	22	5079	5257	23	1,2	nisk 6 did not close
WBTSRHB	AB0709	1	1	ROS	09132013	2036	EN	26.500N	72.000W	GPS	5159	22	5079	5257	23	1,2	nisk 6 did not close
WBTSRHB	AB0709	2	1	ROS	09132013	2248	BE	26.500N	72.384W	GPS	1041	52	5042	5224	23	1,2	anomolous temp nisk 4, 12
WBTSRHB	AB0709	2	1	ROS	09132013	2248	BO	26.500N	72.384W	GPS	1041	52	5042	5224	23	1,2	anomolous temp nisk 4, 12
WBTSRHB	AB0709	2	1	ROS	09142013	0238	EN	26.500N	72.384W	GPS	1041	52	5042	5224	23	1,2	anomolous temp nisk 4, 12
WBTSRHB	AB0709	3	1	ROS	09142013	0501	BE	26.500N	72.767W	GPS	5109	24	5009	5206	24	1,2	
WBTSRHB	AB0709	3	1	ROS	09142013	0501	BO	26.500N	72.767W	GPS	5109	24	5009	5206	24	1,2	
WBTSRHB	AB0709	3	1	ROS	09142013	0840	EN	26.500N	72.767W	GPS	5109	24	5009	5206	24	1,2	
WBTSRHB	AB0709	4	1	ROS	09142013	1056	BE	26.499N	73.133W	GPS	5026	26	4925	5120	24	1,2	
WBTSRHB	AB0709	4	1	ROS	09142013	1056	BO	26.499N	73.133W	GPS	5026	26	4925	5120	24	1,2	
WBTSRHB	AB0709	4	1	ROS	09142013	1439	EN	26.499N	73.133W	GPS	5026	26	4925	5120	24	1,2	
WBTSRHB	AB0709	5	1	ROS	09142013	1700	BE	26.500N	73.500W	GPS	4939	19	4852	5030	24	1,2	lanyard caught bottom end cap
WBTSRHB	AB0709	5	1	ROS	09142013	1700	BO	26.500N	73.500W	GPS	4939	19	4852	5030	24	1,2	lanyard caught bottom end cap
WBTSRHB	AB0709	5	1	ROS	09142013	2044	EN	26.500N	73.500W	GPS	4939	19	4852	5030	24	1,2	lanyard caught bottom end cap
WBTSRHB	AB0709	6	1	ROS	09142013	2300	BE	26.499N	73.860W	GPS	4721	20	4619	4806	24	1,2	
WBTSRHB	AB0709	6	1	ROS	09142013	2300	BO	26.499N	73.860W	GPS	4721	20	4619	4806	24	1,2	
WBTSRHB	AB0709	6	1	ROS	09152013	0250	EN	26.499N	73.860W	GPS	4721	20	4619	4806	24	1,2	
WBTSRHB	AB0709	7	1	ROS	09152013	0511	BE	26.500N	74.233W	GPS	4523	20	4425	4603	24	1,2	
WBTSRHB	AB0709	7	1	ROS	09152013	0511	BO	26.500N	74.233W	GPS	4523	20	4425	4603	24	1,2	
WBTSRHB	AB0709	7	1	ROS	09152013	0830	EN	26.500N	74.233W	GPS	4523	20	4425	4603	24	1,2	
WBTSRHB	AB0709	8	1	ROS	09152013	1018	BE	26.500N	74.517W	GPS	4477	17	4381	4555	24	1,2	
WBTSRHB	AB0709	8	1	ROS	09152013	1018	BO	26.500N	74.517W	GPS	4477	17	4381	4555	24	1,2	
WBTSRHB	AB0709	8	1	ROS	09152013	1339	EN	26.500N	74.517W	GPS	4477	17	4381	4555	24	1,2	
WBTSRHB	AB0709	9	1	ROS	09152013	1525	BE	26.500N	74.800W	GPS	4524	18	4445	4604	24	1,2	
WBTSRHB	AB0709	9	1	ROS	09152013	1525	BO	26.500N	74.800W	GPS	4524	18	4445	4604	24	1,2	
WBTSRHB	AB0709	9	1	ROS	09152013	1855	EN	26.500N	74.800W	GPS	4524	18	4445	4604	24	1,2	
WBTSRHB	AB0709	10	1	ROS	09152013	2033	BE	26.499N	75.084W	GPS	4586	22	4494	4668	24	1,2	
WBTSRHB	AB0709	10	1	ROS	09152013	2033	BO	26.499N	75.084W	GPS	4586	22	4494	4668	24	1,2	
WBTSRHB	AB0709	10	1	ROS	09162013	0003	EN	26.499N	75.084W	GPS	4586	22	4494	4668	24	1,2	
WBTSRHB	AB0709	11	1	ROS	09162013	0134	BE	26.501N	75.302W	GPS	4617	20	4516	4700	24	1,2	
WBTSRHB	AB0709	11	1	ROS	09162013	0134	BO	26.501N	75.302W	GPS	4617	20	4516	4700	24	1,2	
WBTSRHB	AB0709	11	1	ROS	09162013	0448	EN	26.501N	75.302W	GPS	4617	20	4516	4700	24	1,2	
WBTSRHB	AB0709	12	1	ROS	09162013	0606	BE	26.500N	75.500W	GPS	4664	22	4562	4747	24	1,2	
WBTSRHB	AB0709	12	1	ROS	09162013	0606	BO	26.500N	75.500W	GPS	4664	22	4562	4747	24	1,2	
WBTSRHB	AB0709	12	1	ROS	09162013	0914	EN	26.500N	75.500W	GPS	4664	22	4562	4747	24	1,2	
WBTSRHB	AB0709	13	1	ROS	09162013	1028	BE	26.500N	75.705W	GPS	4669	22	4569	4753	24	1,2	nisk 21 leaking
WBTSRHB	AB0709	13	1	ROS	09162013	1028	BO	26.500N	75.705W	GPS	4669	22	4569	4753	24	1,2	nisk 21 leaking
WBTSRHB	AB0709	13	1	ROS	09162013	1339	EN	26.500N	75.705W	GPS	4669	22	4569	4753	24	1,2	nisk 21 leaking
WBTSRHB	AB0709	14	1	ROS	09162013	1448	BE	26.499N	75.901W	GPS	4724	21	4629	4809	24	1,2	
WBTSRHB	AB0709	14	1	ROS	09162013	1448	BO	26.499N	75.901W	GPS	4724	21	4629	4809	24	1,2	
WBTSRHB	AB0709	14	1	ROS	09162013	1823	EN	26.499N	75.901W	GPS	4724	21	4629	4809	24	1,2	
WBTSRHB	AB0709	15	1	ROS	09162013	2004	BE	26.500N	76.088W	GPS	4782	20	4701	4870	24	1,2	
WBTSRHB	AB0709	15	1	ROS	09162013	2004	BO	26.500N	76.088W	GPS	4782	20	4701	4870	24	1,2	
WBTSRHB	AB0709	15	1	ROS	09162013	2341	EN	26.500N	76.088W	GPS	4782	20	4701	4870	24	1,2	
WBTSRHB	AB0709	16	1	ROS	09172013	0106	BE	26.500N	76.217W	GPS	4790	25	4708	4877	24	1,2	
WBTSRHB	AB0709	16	1	ROS	09172013	0106	BO	26.500N	76.217W	GPS	4790	25	4708	4877	24	1,2	
WBTSRHB	AB0709	16	1	ROS	09172013	0429	EN	26.500N	76.217W	GPS	4790	25	4708	4877	24	1,2	
WBTSRHB	AB0709	17	1	ROS	09172013	0645	BE	26.500N	76.347W	GPS	4833	20	4739	4921	24	1,2	
WBTSRHB	AB0709	17	1	ROS	09172013	0645	BO	26.500N	76.347W	GPS	4833	20	4739	4921	24	1,2	
WBTSRHB	AB0709	17	1	ROS	09172013	1000	EN	26.500N	76.347W	GPS	4833	20	4739	4921	24	1,2	
WBTSRHB	AB0709	18	1	ROS	09172013	1101	BE	26.500N	76.476W	GPS	4822	20	4909	4910	24	1,2	
WBTSRHB	AB0709	18	1	ROS	09172013	1101	BO	26.500N	76.476W	GPS	4822	20	4909	4910	24	1,2	
WBTSRHB	AB0709	18	1	ROS	09172013	1416	EN	26.500N	76.476W	GPS	4822	20	4909	4910	24	1,2	
WBTSRHB	AB0709	19	1	ROS	09172013	1521	BE	26.500N	76.565W	GPS	4811	93	4715	4899	24	1,2	
WBTSRHB	AB0709	19	1	ROS	09172013	1521	BO	26.500N	76.565W	GPS	4811	93	4715	4899	24	1,2	
WBTSRHB	AB0709	19	1	ROS	09172013	1852	EN	26.500N	76.565W	GPS	4811	93	4715	4899	24	1,2	
WBTSRHB	AB0709	20	1	ROS	09172013	2015	BE	26.500N	76.655W	GPS	4552	22	4460	4632	24	1,2	
WBTSRHB	AB0709	20	1	ROS	09172013	2015	BO	26.500N	76.655W	GPS	4552	22	4460	4632	24	1,2	
WBTSRHB	AB0709	20	1	ROS	09172013	2339	EN	26.500N	76.655W	GPS	4552	22	4460	4632	24	1,2	
WBTSRHB	AB0709	21	1	ROS	09182013	0048	BE	26.500N	76.746W	GPS	3837	19	3768	3898	24	1,2	
WBTSRHB	AB0709	21	1	ROS	09182013	0048	BO	26.500N	76.746W	GPS	3837	19	3768	3898	24	1,2	



WBTSRHB	AB0709	43	1	ROS	09202013	0641	EN	27.004N	79.682W	GFS										
WBTSRHB	AB0709	44	1	ROS	09202013	0734	BE	26.999N	79.618W	GFS										
WBTSRHB	AB0709	44	1	ROS	09202013	0734	BO	26.999N	79.618W	GFS	617	53	605	623	8	1,2				
WBTSRHB	AB0709	44	1	ROS	09202013	0810	EN	26.999N	79.618W	GFS										
WBTSRHB	AB0709	45	1	ROS	09202013	0910	BE	26.996N	79.501W	GFS										
WBTSRHB	AB0709	45	1	ROS	09202013	0910	BO	26.996N	79.501W	GFS	736	22	721	743	10	1,2				
WBTSRHB	AB0709	45	1	ROS	09202013	0952	EN	26.996N	79.501W	GFS										
WBTSRHB	AB0709	46	1	ROS	09202013	1041	BE	26.994N	79.386W	GFS										
WBTSRHB	AB0709	46	1	ROS	09202013	1041	BO	26.994N	79.386W	GFS	3	86	619	637	9	1,2				
WBTSRHB	AB0709	46	1	ROS	09202013	1119	EN	26.994N	79.386W	GFS										
WBTSRHB	AB0709	47	1	ROS	09202013	1211	BE	27.003N	79.283W	GFS										
WBTSRHB	AB0709	47	1	ROS	09202013	1211	BO	27.003N	79.283W	GFS	601	15	589	606	8	1,2				
WBTSRHB	AB0709	47	1	ROS	09202013	1300	EN	27.003N	79.283W	GFS										
WBTSRHB	AB0709	48	1	ROS	09202013	1341	BE	26.992N	79.202W	GFS										
WBTSRHB	AB0709	48	1	ROS	09202013	1341	BO	26.992N	79.202W	GFS	472	22	471	477	6	1,2				
WBTSRHB	AB0709	48	1	ROS	09202013	1413	EN	26.992N	79.202W	GFS										

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



*C WOCE Bottle Summary File*

Table 16: Abaco Cruise - WOCE Bottle Summary File

SHIP/CHS EXPOCODE	WOCE SECT	STN	CAST	BTL#	BTL# Flag	DATE	UTC TIME	LAT	LOX	DEPTH	CTD PRS	CTD TMP	CTD SAL	SAL FLAG	BTL SAL	SAL FLAG	CTD OXY	CTD OXY	OXY FLAG	BTL OXY	OXY FLAG
WBTSRHH	AB0709	1	1	1	2	20070913	1826	26.500N	72.000W	5159	5257	2.175	34.868	2	34.868	2	239.2	2	253.1	4	
WBTSRHH	AB0709	1	1	2	2	20070913	1826	26.500N	72.000W	4833	4920	2.260	34.883	2	34.883	2	245.7	2	259.0	4	
WBTSRHH	AB0709	1	1	3	2	20070913	1826	26.500N	72.000W	4483	4560	2.279	34.890	2	34.890	2	249.3	2	260.2	4	
WBTSRHH	AB0709	1	1	4	2	20070913	1826	26.500N	72.000W	4034	4100	2.303	34.897	2	34.897	2	-999.0	9	-999.0	9	
WBTSRHH	AB0709	1	1	5	2	20070913	1826	26.500N	72.000W	3488	3540	2.401	34.907	2	34.906	2	255.9	2	265.3	4	
WBTSRHH	AB0709	1	1	6	2	20070913	1826	26.500N	72.000W	2948	3040	2.708	34.926	2	-999.000	9	-999.0	9	-999.0	9	
WBTSRHH	AB0709	1	1	7	2	20070913	1826	26.500N	72.000W	2488	2519	3.116	34.953	2	34.952	2	253.4	2	259.7	4	
WBTSRHH	AB0709	1	1	8	2	20070913	1826	26.500N	72.000W	2135	2160	4.036	34.985	2	34.985	2	253.8	2	260.2	4	
WBTSRHH	AB0709	1	1	9	2	20070913	1826	26.500N	72.000W	1584	1600	6.426	34.985	2	34.985	2	250.7	2	255.5	4	
WBTSRHH	AB0709	1	1	10	2	20070913	1826	26.500N	72.000W	1000	1009	6.649	35.093	2	35.092	2	180.2	2	190.2	4	
WBTSRHH	AB0709	1	1	11	2	20070913	1826	26.500N	72.000W	843	850	9.217	35.253	2	35.253	2	147.9	2	150.3	4	
WBTSRHH	AB0709	1	1	12	2	20070913	1826	26.500N	72.000W	745	751	11.235	35.475	2	35.479	2	151.3	2	157.0	4	
WBTSRHH	AB0709	1	1	13	2	20070913	1826	26.500N	72.000W	669	675	12.893	35.683	2	35.697	4	156.5	2	158.8	4	
WBTSRHH	AB0709	1	1	14	2	20070913	1826	26.500N	72.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9	
WBTSRHH	AB0709	1	1	15	2	20070913	1826	26.500N	72.000W	596	601	14.896	36.174	2	35.997	6	168.4	2	180.7	4	
WBTSRHH	AB0709	1	1	16	2	20070913	1826	26.500N	72.000W	546	550	15.960	36.174	2	36.173	2	172.6	2	176.2	4	
WBTSRHH	AB0709	1	1	17	2	20070913	1826	26.500N	72.000W	496	500	16.900	36.339	2	36.340	2	178.0	2	181.6	4	
WBTSRHH	AB0709	1	1	18	2	20070913	1826	26.500N	72.000W	422	425	17.902	36.536	2	36.532	2	195.5	2	198.2	4	
WBTSRHH	AB0709	1	1	19	2	20070913	1826	26.500N	72.000W	322	325	18.290	36.599	2	36.598	2	198.4	2	214.6	4	
WBTSRHH	AB0709	1	1	20	2	20070913	1826	26.500N	72.000W	248	250	18.642	36.633	2	36.632	2	198.4	2	214.6	4	
WBTSRHH	AB0709	1	1	21	2	20070913	1826	26.500N	72.000W	174	175	19.512	36.695	2	36.690	6	183.0	2	208.1	4	
WBTSRHH	AB0709	1	1	22	2	20070913	1826	26.500N	72.000W	99	100	21.872	36.782	2	36.779	2	203.1	2	204.6	4	
WBTSRHH	AB0709	1	1	23	2	20070913	1826	26.500N	72.000W	60	60	23.858	36.726	2	36.727	6	209.2	2	222.1	4	
WBTSRHH	AB0709	1	1	24	2	20070913	1826	26.500N	72.000W	2	2	29.703	36.352	2	36.351	2	187.7	2	192.1	4	
WBTSRHH	AB0709	2	1	1	2	20070914	0030	26.500N	72.374W	5127	5223	2.086	34.858	2	34.857	2	236.5	2	248.3	4	
WBTSRHH	AB0709	2	1	2	2	20070914	0030	26.500N	72.374W	4929	5020	2.198	34.875	2	34.873	4	241.5	2	233.5	4	
WBTSRHH	AB0709	2	1	3	2	20070914	0030	26.500N	72.374W	4579	4660	2.260	34.888	2	34.886	4	248.0	2	257.1	4	
WBTSRHH	AB0709	2	1	4	2	20070914	0030	26.500N	72.374W	4132	4200	2.291	34.895	2	35.586	4	-999.0	9	-999.0	9	
WBTSRHH	AB0709	2	1	5	2	20070914	0030	26.500N	72.374W	3684	3741	2.379	34.904	2	34.910	4	254.6	2	268.6	4	
WBTSRHH	AB0709	2	1	6	2	20070914	0030	26.500N	72.374W	3136	3181	2.654	34.923	2	34.921	4	254.7	2	265.0	4	
WBTSRHH	AB0709	2	1	7	2	20070914	0030	26.500N	72.374W	2588	2621	3.168	34.955	2	34.954	4	251.0	2	259.6	4	
WBTSRHH	AB0709	2	1	8	2	20070914	0030	26.500N	72.374W	2038	2061	3.627	34.971	2	34.972	4	251.9	2	254.4	4	
WBTSRHH	AB0709	2	1	9	2	20070914	0030	26.500N	72.374W	1387	1400	4.560	35.023	4	35.023	4	238.8	2	244.7	4	
WBTSRHH	AB0709	2	1	10	2	20070914	0030	26.500N	72.374W	1041	1050	6.347	35.101	2	35.101	4	188.4	2	188.4	4	
WBTSRHH	AB0709	2	1	11	2	20070914	0030	26.500N	72.374W	893	901	8.021	35.147	2	35.149	4	153.3	2	145.3	4	
WBTSRHH	AB0709	2	1	12	2	20070914	0030	26.500N	72.374W	793	800	9.960	35.317	2	36.691	4	-999.0	9	-999.0	9	
WBTSRHH	AB0709	2	1	13	2	20070914	0030	26.500N	72.374W	719	725	12.084	35.381	2	35.384	4	154.4	2	157.0	4	
WBTSRHH	AB0709	2	1	14	2	20070914	0030	26.500N	72.374W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9	
WBTSRHH	AB0709	2	1	15	2	20070914	0030	26.500N	72.374W	645	650	13.724	35.812	2	35.814	4	162.1	2	164.9	4	
WBTSRHH	AB0709	2	1	16	2	20070914	0030	26.500N	72.374W	596	601	14.742	35.971	2	35.966	4	166.7	2	170.6	4	
WBTSRHH	AB0709	2	1	17	2	20070914	0030	26.500N	72.374W	521	525	16.428	36.253	2	36.255	4	172.9	2	177.9	4	
WBTSRHH	AB0709	2	1	18	2	20070914	0030	26.500N	72.374W	397	400	17.995	36.552	2	36.552	2	193.6	2	201.2	4	
WBTSRHH	AB0709	2	1	19	2	20070914	0030	26.500N	72.374W	298	300	18.383	36.609	2	36.608	4	196.4	2	203.5	4	
WBTSRHH	AB0709	2	1	20	2	20070914	0030	26.500N	72.374W	223	225	18.757	36.640	2	36.639	4	192.6	2	202.1	4	
WBTSRHH	AB0709	2	1	21	2	20070914	0030	26.500N	72.374W	150	151	19.936	36.709	2	36.707	4	196.8	2	202.6	4	
WBTSRHH	AB0709	2	1	22	2	20070914	0030	26.500N	72.374W	89	90	22.421	36.796	2	36.797	4	190.9	2	200.5	4	
WBTSRHH	AB0709	2	1	23	2	20070914	0030	26.500N	72.374W	50	51	24.862	36.691	2	36.691	4	207.3	2	215.6	4	
WBTSRHH	AB0709	2	1	24	2	20070914	0030	26.500N	72.374W	2	2	29.505	36.357	2	36.360	4	183.9	2	201.8	4	
WBTSRHH	AB0709	3	1	1	2	20070914	0639	26.500N	72.768W	5109	5205	2.142	34.864	2	34.865	2	238.2	2	248.9	4	
WBTSRHH	AB0709	3	1	2	2	20070914	0639	26.500N	72.768W	4909	5000	2.217	34.877	2	34.877	2	242.6	2	254.9	4	
WBTSRHH	AB0709	3	1	3	2	20070914	0639	26.500N	72.768W	4423	4499	2.276	34.890	2	34.888	2	249.4	2	265.6	4	
WBTSRHH	AB0709	3	1	4	2	20070914	0639	26.500N	72.768W	3937	4000	2.322	34.898	2	34.902	2	252.9	2	265.3	4	
WBTSRHH	AB0709	3	1	5	2	20070914	0639	26.500N	72.768W	3448	3500	2.487	34.912	2	34.910	2	254.8	2	266.1	4	
WBTSRHH	AB0709	3	1	6	2	20070914	0639	26.500N	72.768W	2960	3001	2.829	34.933	2	34.934	2	252.9	2	263.2	4	
WBTSRHH	AB0709	3	1	7	2	20070914	0639	26.500N	72.768W	2468	2499	3.256	34.960	2	34.962	2	250.2	2	274.0	4	
WBTSRHH	AB0709	3	1	8	2	20070914	0639	26.500N	72.768W	1977	2000	3.678	34.971	2	34.972	2	251.7	2	280.2	4	
WBTSRHH	AB0709	3	1	9	2	20070914	0639	26.500N	72.768W	1473	1488	4.356	35.006	2	35.007	2	242.1	2	249.7	4	
WBTSRHH	AB0709	3	1	10	2	20070914	0639	26.500N	72.768W	990	999	6.868	35.108	2	35.107	2	173.7	2	178.2	4	
WBTSRHH	AB0709	3	1	11	2	20070914	0639	26.500N	72.768W	843	850	8.843	35.207	2	35.210	2	148.8	2	152.4	4	
WBTSRHH	AB0709	3	1	12	2	20070914	0639	26.500N	72.768W	744	750	10.957	35.422	2	35.422	2	144.1	2	146.8	4	
WBTSRHH	AB0709	3	1	13	2	20070914	0639	26.500N	72.768W	669	675	13.007	35.698	2	35.700	2	156.2	2	159.5	4	
WBTSRHH	AB0709	3	1	14	2	20070914	0639	26.500N	72.768W	3	3	29.615	36.404	2	-999.000	9	-999.0	9	-999.0	9	

WBTSRHH	AB0709	3	1	15	2	20070914	0639	26.500N	72.768W	595	600	14.843	35.986	2	35.984	2	165.5	2	170.0	4
WBTSRHH	AB0709	3	1	16	2	20070914	0639	26.500N	72.768W	546	551	15.894	36.161	2	36.155	2	170.0	2	184.6	4
WBTSRHH	AB0709	3	1	17	2	20070914	0639	26.500N	72.768W	497	501	16.753	36.312	2	36.312	2	175.3	2	172.4	4
WBTSRHH	AB0709	3	1	18	2	20070914	0639	26.500N	72.768W	416	419	17.980	36.552	2	36.549	2	194.5	2	209.4	4
WBTSRHH	AB0709	3	1	19	2	20070914	0639	26.500N	72.768W	322	325	18.276	36.589	2	36.587	2	194.5	2	205.3	4
WBTSRHH	AB0709	3	1	20	2	20070914	0639	26.500N	72.768W	249	250	18.753	36.631	2	36.629	2	185.9	2	194.6	4
WBTSRHH	AB0709	3	1	21	2	20070914	0639	26.500N	72.768W	174	175	20.046	36.756	2	36.755	6	171.8	2	179.3	4
WBTSRHH	AB0709	3	1	22	2	20070914	0639	26.500N	72.768W	100	101	23.032	36.899	2	36.889	4	183.5	2	184.0	4
WBTSRHH	AB0709	3	1	23	2	20070914	0639	26.500N	72.768W	60	60	24.984	36.712	2	36.708	2	195.5	2	203.6	4
WBTSRHH	AB0709	3	1	24	2	20070914	0639	26.500N	72.768W	3	3	29.617	36.406	2	36.412	2	182.9	2	191.5	4
WBTSRHH	AB0709	4	1	1	2	20070914	1239	26.498N	73.133W	5026	5119	2.164	34.868	2	34.868	2	251.6	2	252.8	4
WBTSRHH	AB0709	4	1	2	2	20070914	1239	26.498N	73.133W	4569	4649	2.260	34.887	2	34.887	2	260.9	2	260.4	2
WBTSRHH	AB0709	4	1	3	2	20070914	1239	26.498N	73.133W	4133	4202	2.317	34.897	2	34.896	2	265.1	2	264.5	2
WBTSRHH	AB0709	4	1	4	2	20070914	1239	26.498N	73.133W	3694	3752	2.419	34.905	2	34.914	4	267.5	2	266.9	2
WBTSRHH	AB0709	4	1	5	2	20070914	1239	26.498N	73.133W	3254	3301	2.623	34.921	2	34.923	2	265.8	2	264.7	2
WBTSRHH	AB0709	4	1	6	2	20070914	1239	26.498N	73.133W	2813	2850	2.922	34.938	2	34.940	2	264.2	2	262.7	2
WBTSRHH	AB0709	4	1	7	2	20070914	1239	26.498N	73.133W	2373	2402	3.315	34.958	2	34.956	2	262.2	2	262.6	6
WBTSRHH	AB0709	4	1	8	2	20070914	1239	26.498N	73.133W	1929	1951	3.691	34.965	2	34.965	2	263.2	2	264.8	2
WBTSRHH	AB0709	4	1	9	2	20070914	1239	26.498N	73.133W	1486	1501	4.286	35.000	2	33.046	4	243.8	2	263.0	4
WBTSRHH	AB0709	4	1	10	2	20070914	1239	26.498N	73.133W	1035	1045	6.263	35.090	2	35.088	2	197.6	2	198.1	2
WBTSRHH	AB0709	4	1	11	2	20070914	1239	26.498N	73.133W	892	900	7.920	35.137	2	35.141	2	158.7	2	158.4	2
WBTSRHH	AB0709	4	1	12	2	20070914	1239	26.498N	73.133W	794	801	9.869	35.292	2	35.289	2	142.9	2	141.7	2
WBTSRHH	AB0709	4	1	13	2	20070914	1239	26.498N	73.133W	719	725	11.293	35.465	2	35.464	2	144.1	2	142.1	2
WBTSRHH	AB0709	4	1	14	2	20070914	1239	26.498N	73.133W	3	3	29.564	36.386	2	36.464	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	4	1	15	2	20070914	1239	26.498N	73.133W	646	651	12.956	35.697	2	35.698	2	151.8	2	150.2	2
WBTSRHH	AB0709	4	1	16	2	20070914	1239	26.498N	73.133W	596	601	14.128	35.875	2	35.875	2	159.5	2	161.5	2
WBTSRHH	AB0709	4	1	17	2	20070914	1239	26.498N	73.133W	521	525	15.883	36.159	2	36.159	2	166.6	2	168.8	4
WBTSRHH	AB0709	4	1	18	2	20070914	1239	26.498N	73.133W	397	400	17.671	36.468	2	36.469	2	187.1	2	190.8	2
WBTSRHH	AB0709	4	1	19	2	20070914	1239	26.498N	73.133W	297	299	18.469	36.587	2	36.588	2	190.2	2	188.9	2
WBTSRHH	AB0709	4	1	20	2	20070914	1239	26.498N	73.133W	224	225	19.488	36.698	2	36.698	2	186.0	2	184.3	2
WBTSRHH	AB0709	4	1	21	2	20070914	1239	26.498N	73.133W	150	151	21.934	36.840	2	36.840	2	196.1	2	195.7	2
WBTSRHH	AB0709	4	1	22	2	20070914	1239	26.498N	73.133W	90	91	24.526	36.783	2	36.784	2	199.9	2	200.0	2
WBTSRHH	AB0709	4	1	23	2	20070914	1239	26.498N	73.133W	50	50	27.273	36.443	2	36.460	4	200.0	2	207.0	4
WBTSRHH	AB0709	4	1	24	2	20070914	1239	26.498N	73.133W	3	3	29.563	36.387	2	36.389	2	193.8	2	194.2	2
WBTSRHH	AB0709	5	1	1	2	20070914	1839	26.500N	73.498W	4939	5030	2.179	34.872	2	34.875	2	253.3	2	253.5	2
WBTSRHH	AB0709	5	1	2	2	20070914	1839	26.500N	73.498W	4473	4551	2.252	34.888	2	34.888	2	261.3	2	261.5	2
WBTSRHH	AB0709	5	1	3	2	20070914	1839	26.500N	73.498W	4131	4199	2.285	34.894	2	34.895	2	264.2	2	264.5	2
WBTSRHH	AB0709	5	1	4	2	20070914	1839	26.500N	73.498W	3743	3801	2.371	34.903	2	34.903	2	266.8	6	266.6	6
WBTSRHH	AB0709	5	1	5	2	20070914	1839	26.500N	73.498W	3253	3300	2.593	34.918	2	34.919	2	266.3	2	266.0	2
WBTSRHH	AB0709	5	1	6	2	20070914	1839	26.500N	73.498W	2764	2801	2.935	34.940	2	34.940	2	263.3	2	262.7	6
WBTSRHH	AB0709	5	1	7	2	20070914	1839	26.500N	73.498W	2371	2400	3.262	34.957	2	34.957	2	261.9	2	260.9	2
WBTSRHH	AB0709	5	1	8	2	20070914	1839	26.500N	73.498W	2075	2099	3.514	34.962	2	34.963	2	262.9	2	262.3	2
WBTSRHH	AB0709	5	1	9	2	20070914	1839	26.500N	73.498W	1584	1601	4.081	34.985	2	34.985	2	257.4	2	256.6	2
WBTSRHH	AB0709	5	1	10	2	20070914	1839	26.500N	73.498W	992	1001	6.764	35.099	2	35.100	2	183.9	2	184.1	2
WBTSRHH	AB0709	5	1	11	2	20070914	1839	26.500N	73.498W	844	851	8.743	35.185	2	35.188	2	147.2	2	147.3	2
WBTSRHH	AB0709	5	1	12	2	20070914	1839	26.500N	73.498W	744	750	10.580	35.371	2	35.372	2	141.1	2	140.9	2
WBTSRHH	AB0709	5	1	13	2	20070914	1839	26.500N	73.498W	669	675	12.243	35.595	2	35.602	2	148.1	2	149.1	2
WBTSRHH	AB0709	5	1	14	2	20070914	1839	26.500N	73.498W	3	3	29.639	36.308	2	36.308	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	5	1	15	2	20070914	1839	26.500N	73.498W	595	600	13.809	35.825	2	35.828	2	158.3	2	158.5	2
WBTSRHH	AB0709	5	1	16	2	20070914	1839	26.500N	73.498W	546	550	14.930	36.002	2	36.007	2	164.4	2	161.5	2
WBTSRHH	AB0709	5	1	17	2	20070914	1839	26.500N	73.498W	497	501	15.979	36.177	2	36.177	2	172.2	2	171.2	2
WBTSRHH	AB0709	5	1	18	2	20070914	1839	26.500N	73.498W	422	425	17.517	36.453	2	36.455	2	191.2	2	192.8	2
WBTSRHH	AB0709	5	1	19	2	20070914	1839	26.500N	73.498W	323	325	18.262	36.584	2	36.583	2	199.3	2	200.7	2
WBTSRHH	AB0709	5	1	20	2	20070914	1839	26.500N	73.498W	248	250	18.852	36.645	2	36.645	2	185.2	2	182.3	4
WBTSRHH	AB0709	5	1	21	2	20070914	1839	26.500N	73.498W	174	175	20.433	36.821	2	36.824	2	182.0	2	179.2	2
WBTSRHH	AB0709	5	1	22	2	20070914	1839	26.500N	73.498W	100	101	24.498	36.742	2	36.670	4	179.2	2	199.0	9
WBTSRHH	AB0709	5	1	23	2	20070914	1839	26.500N	73.498W	61	61	26.688	36.461	2	36.456	2	194.6	2	193.0	4
WBTSRHH	AB0709	5	1	24	2	20070914	1839	26.500N	73.498W	3	3	29.634	36.309	2	36.312	2	193.0	2	190.4	2
WBTSRHH	AB0709	6	1	1	2	20070915	0043	26.500N	73.848W	4721	4805	2.172	36.874	2	34.873	4	253.4	2	254.3	6
WBTSRHH	AB0709	6	1	2	2	20070915	0043	26.500N	73.848W	4483	4561	2.219	34.884	2	34.884	4	259.4	2	259.5	2
WBTSRHH	AB0709	6	1	3	2	20070915	0043	26.500N	73.848W	4230	4301	2.239	34.890	2	34.888	4	262.1	2	262.5	2
WBTSRHH	AB0709	6	1	4	2	20070915	0043	26.500N	73.848W	3840	3900	2.287	34.897	4	34.897	4	260.1	2	260.1	4
WBTSRHH	AB0709	6	1	5	2	20070915	0043	26.500N	73.848W	3449	3501	2.428	34.910	2	34.909	4	266.6	2	266.6	2
WBTSRHH	AB0709	6	1	6	2	20070915	0043	26.500N	73.848W	2960	3001	2.712	34.925	4	34.923	4	254.1	2	246.1	4
WBTSRHH	AB0709	6	1	7	2	20070915	0043	26.500N	73.848W	2470	2502	3.134	34.949	2	34.947	4	263.1	2	262.7	2
WBTSRHH	AB0709	6	1	8	2	20070915	0043	26.500N	73.848W	1978	2001	3.515	34.962	2	34.963	4	263			

WBTSRHH	AB0709	6	1	9	2	20070915	0043	26.500N	73.848W	1386	1400	4.483	35.015	2	35.014	4	248.1	2	246.9	2
WBTSRHH	AB0709	6	1	10	2	20070915	0043	26.500N	73.848W	1041	1051	6.357	35.090	2	35.090	4	194.7	2	195.4	2
WBTSRHH	AB0709	6	1	11	2	20070915	0043	26.500N	73.848W	892	900	8.340	35.156	2	35.157	4	151.4	2	151.6	2
WBTSRHH	AB0709	6	1	12	2	20070915	0043	26.500N	73.848W	794	801	10.078	35.317	2	35.316	4	141.2	2	141.2	2
WBTSRHH	AB0709	6	1	13	2	20070915	0043	26.500N	73.848W	721	727	11.480	35.488	2	35.489	4	145.1	2	144.7	2
WBTSRHH	AB0709	6	1	14	2	20070915	0043	26.500N	73.848W	645	650	13.178	36.383	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	6	1	15	2	20070915	0043	26.500N	73.848W	596	601	14.366	35.728	2	35.725	4	153.3	2	151.8	2
WBTSRHH	AB0709	6	1	16	2	20070915	0043	26.500N	73.848W	517	521	16.011	36.184	2	36.184	4	168.3	2	161.5	2
WBTSRHH	AB0709	6	1	17	2	20070915	0043	26.500N	73.848W	397	400	17.879	36.520	2	36.520	4	187.7	2	186.0	4
WBTSRHH	AB0709	6	1	18	2	20070915	0043	26.500N	73.848W	298	300	18.359	36.599	2	36.599	4	191.1	2	186.0	4
WBTSRHH	AB0709	6	1	19	2	20070915	0043	26.500N	73.848W	224	225	18.785	36.630	2	36.630	4	191.1	2	210.0	4
WBTSRHH	AB0709	6	1	20	2	20070915	0043	26.500N	73.848W	149	150	21.350	36.815	2	36.816	4	200.1	2	197.5	2
WBTSRHH	AB0709	6	1	21	2	20070915	0043	26.500N	73.848W	89	90	24.369	36.761	2	36.765	4	189.3	2	189.5	2
WBTSRHH	AB0709	6	1	22	2	20070915	0043	26.500N	73.848W	50	50	26.552	36.485	2	36.484	4	206.4	2	209.4	4
WBTSRHH	AB0709	6	1	23	2	20070915	0043	26.500N	73.848W	50	2	29.516	36.383	2	36.385	4	193.7	2	209.1	2
WBTSRHH	AB0709	6	1	24	2	20070915	0043	26.500N	73.848W	4523	4602	2.151	36.875	2	36.875	4	193.7	2	192.9	2
WBTSRHH	AB0709	7	1	1	2	20070915	0643	26.500N	74.234W	4083	4150	2.230	34.875	2	34.872	4	254.8	2	255.3	2
WBTSRHH	AB0709	7	1	2	2	20070915	0643	26.500N	74.234W	3689	3746	2.281	34.899	2	34.888	4	262.5	2	262.9	2
WBTSRHH	AB0709	7	1	3	2	20070915	0643	26.500N	74.234W	3448	3499	2.342	34.904	2	34.963	4	265.4	2	265.7	6
WBTSRHH	AB0709	7	1	4	2	20070915	0643	26.500N	74.234W	3009	3051	2.571	34.920	2	34.901	4	266.8	2	267.0	2
WBTSRHH	AB0709	7	1	5	2	20070915	0643	26.500N	74.234W	2567	2599	2.917	34.938	2	34.918	4	266.6	2	266.5	2
WBTSRHH	AB0709	7	1	6	2	20070915	0643	26.500N	74.234W	2224	2251	3.213	34.956	2	34.938	4	263.8	2	263.8	2
WBTSRHH	AB0709	7	1	7	2	20070915	0643	26.500N	74.234W	1977	1999	3.462	34.964	2	34.953	4	261.6	2	261.6	2
WBTSRHH	AB0709	7	1	8	2	20070915	0643	26.500N	74.234W	1534	1550	4.022	34.983	2	34.963	4	262.1	2	262.9	2
WBTSRHH	AB0709	7	1	9	2	20070915	0643	26.500N	74.234W	984	993	7.415	35.114	2	34.982	4	258.1	2	258.2	2
WBTSRHH	AB0709	7	1	10	2	20070915	0643	26.500N	74.234W	842	849	9.705	35.114	2	35.113	4	167.8	2	168.2	2
WBTSRHH	AB0709	7	1	11	2	20070915	0643	26.500N	74.234W	744	750	11.735	35.522	2	35.274	4	143.0	2	142.7	2
WBTSRHH	AB0709	7	1	12	2	20070915	0643	26.500N	74.234W	669	675	13.462	35.771	2	35.523	4	145.8	2	145.1	2
WBTSRHH	AB0709	7	1	13	2	20070915	0643	26.500N	74.234W	669	675	13.462	35.771	2	35.773	4	147.2	2	146.1	4
WBTSRHH	AB0709	7	1	14	2	20070915	0643	26.500N	74.234W	593	597	15.117	36.375	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	7	1	15	2	20070915	0643	26.500N	74.234W	545	549	16.042	36.031	2	36.031	4	165.0	2	164.5	2
WBTSRHH	AB0709	7	1	16	2	20070915	0643	26.500N	74.234W	496	500	16.828	36.186	2	36.188	4	178.1	2	174.5	2
WBTSRHH	AB0709	7	1	17	2	20070915	0643	26.500N	74.234W	421	424	17.927	36.324	2	36.325	4	182.7	2	182.1	2
WBTSRHH	AB0709	7	1	18	2	20070915	0643	26.500N	74.234W	321	324	18.259	36.542	2	36.541	4	201.2	2	201.9	2
WBTSRHH	AB0709	7	1	19	2	20070915	0643	26.500N	74.234W	249	250	18.712	36.583	2	36.582	4	200.4	2	201.4	2
WBTSRHH	AB0709	7	1	20	2	20070915	0643	26.500N	74.234W	174	175	20.293	36.636	2	36.635	4	203.5	2	203.2	2
WBTSRHH	AB0709	7	1	21	2	20070915	0643	26.500N	74.234W	96	97	23.386	36.766	2	36.759	4	183.2	2	183.2	2
WBTSRHH	AB0709	7	1	22	2	20070915	0643	26.500N	74.234W	59	59	26.013	36.837	2	36.837	4	193.6	2	193.5	2
WBTSRHH	AB0709	7	1	23	2	20070915	0643	26.500N	74.234W	2	2	29.457	36.567	2	36.583	4	200.4	2	206.9	4
WBTSRHH	AB0709	7	1	24	2	20070915	0643	26.500N	74.234W	4477	4555	2.161	36.375	2	36.377	4	193.7	2	193.0	2
WBTSRHH	AB0709	8	1	1	2	20070915	1143	26.500N	74.517W	4228	4299	2.194	34.877	2	34.877	4	255.2	2	256.3	2
WBTSRHH	AB0709	8	1	2	2	20070915	1143	26.500N	74.517W	3840	3900	2.237	34.885	2	34.882	6	260.1	2	260.7	2
WBTSRHH	AB0709	8	1	3	2	20070915	1143	26.500N	74.517W	3449	3501	2.311	34.894	2	34.891	2	264.0	2	264.3	2
WBTSRHH	AB0709	8	1	4	2	20070915	1143	26.500N	74.517W	2959	2999	2.588	34.922	2	34.900	2	266.4	2	267.8	2
WBTSRHH	AB0709	8	1	5	2	20070915	1143	26.500N	74.517W	2468	2499	2.983	34.944	2	34.921	2	265.8	2	265.9	2
WBTSRHH	AB0709	8	1	6	2	20070915	1143	26.500N	74.517W	1979	2001	3.398	34.961	2	34.943	2	262.9	2	263.1	2
WBTSRHH	AB0709	8	1	7	2	20070915	1143	26.500N	74.517W	1387	1401	4.241	34.998	2	34.961	2	262.1	2	262.3	2
WBTSRHH	AB0709	8	1	8	2	20070915	1143	26.500N	74.517W	1190	1201	5.397	35.065	2	35.005	4	253.9	2	253.9	2
WBTSRHH	AB0709	8	1	9	2	20070915	1143	26.500N	74.517W	1041	1051	6.968	35.102	2	35.065	2	222.6	2	225.8	2
WBTSRHH	AB0709	8	1	10	2	20070915	1143	26.500N	74.517W	596	601	8.913	35.202	2	35.101	2	178.0	2	178.8	2
WBTSRHH	AB0709	8	1	11	2	20070915	1143	26.500N	74.517W	521	525	10.821	35.404	2	35.203	2	141.9	2	155.6	4
WBTSRHH	AB0709	8	1	12	2	20070915	1143	26.500N	74.517W	794	801	12.243	35.593	2	35.405	2	143.4	2	142.5	2
WBTSRHH	AB0709	8	1	13	2	20070915	1143	26.500N	74.517W	719	725	12.442	35.593	2	35.596	2	148.1	2	148.1	2
WBTSRHH	AB0709	8	1	14	2	20070915	1143	26.500N	74.517W	645	650	14.627	36.374	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	8	1	15	2	20070915	1143	26.500N	74.517W	596	601	16.325	35.805	2	35.805	2	149.3	2	159.7	4
WBTSRHH	AB0709	8	1	16	2	20070915	1143	26.500N	74.517W	521	525	17.997	35.949	2	35.957	4	170.4	2	169.7	4
WBTSRHH	AB0709	8	1	17	2	20070915	1143	26.500N	74.517W	395	398	18.406	36.236	2	36.237	2	178.7	2	178.6	2
WBTSRHH	AB0709	8	1	18	2	20070915	1143	26.500N	74.517W	298	300	18.406	36.549	2	36.547	2	204.8	2	201.2	2
WBTSRHH	AB0709	8	1	19	2	20070915	1143	26.500N	74.517W	223	224	18.918	36.600	2	36.597	2	194.3	2	210.4	4
WBTSRHH	AB0709	8	1	20	2	20070915	1143	26.500N	74.517W	149	150	20.837	36.648	2	36.645	2	195.4	2	198.6	2
WBTSRHH	AB0709	8	1	21	2	20070915	1143	26.500N	74.517W	89	90	23.841	36.737	2	36.733	2	217.7	2	218.8	2
WBTSRHH	AB0709	8	1	22	2	20070915	1143	26.500N	74.517W	49	49	26.500	36.827	2	-999.000	9	202.3	2	202.2	4
WBTSRHH	AB0709	8	1	23	2	20070915	1143	26.500N	74.517W	89	49	27.102	36.538	2	36.540	2	212.7	2	211.3	2
WBTSRHH	AB0709	8	1	24	2	20070915	1143	26.500N	74.517W	2	2	29.441	36.376	2	36.376	2	193.8	2	195.2	6
WBTSRHH	AB0709	9	1	1	2	20070915	1655	26.502N	74.803W	4524	4603	2.123	34.871	2	34.869	2	253.5	2	255.0	2
WBTSRHH	AB0709	9	1	2	2	20070915	1655	26.502N	74.803W	4134	4202	2.206	34.887	2	34.887	2</				

WBTSRHH	AB0709	9	1	3	2	20070915	1655	26.502N	74.803W	3743	3801	2.252	34.896	2	34.894	2	265.6	2	265.4	2
WBTSRHH	AB0709	9	1	4	2	20070915	1655	26.502N	74.803W	3254	3301	2.433	34.910	2	34.909	2	267.4	2	267.8	2
WBTSRHH	AB0709	9	1	5	2	20070915	1655	26.502N	74.803W	2764	2801	2.813	34.934	2	34.933	2	264.4	2	264.2	2
WBTSRHH	AB0709	9	1	6	2	20070915	1655	26.502N	74.803W	2371	2400	3.202	34.956	2	34.956	2	261.6	2	261.4	2
WBTSRHH	AB0709	9	1	7	2	20070915	1655	26.502N	74.803W	2076	2100	3.476	34.964	2	34.964	2	262.0	2	261.8	6
WBTSRHH	AB0709	9	1	8	2	20070915	1655	26.502N	74.803W	1584	1601	4.065	34.987	2	34.987	2	257.4	2	257.1	2
WBTSRHH	AB0709	9	1	9	2	20070915	1655	26.502N	74.803W	1288	1301	4.851	35.039	2	35.040	2	239.0	2	239.4	2
WBTSRHH	AB0709	9	1	10	2	20070915	1655	26.502N	74.803W	991	1000	7.143	35.104	2	35.104	2	163.4	2	173.5	4
WBTSRHH	AB0709	9	1	11	2	20070915	1655	26.502N	74.803W	844	851	9.463	35.249	2	35.249	2	143.0	2	142.9	2
WBTSRHH	AB0709	9	1	12	2	20070915	1655	26.502N	74.803W	744	750	11.673	35.249	2	35.249	2	136.4	2	136.7	2
WBTSRHH	AB0709	9	1	13	2	20070915	1655	26.502N	74.803W	669	675	13.455	35.771	2	35.769	2	158.6	2	161.1	2
WBTSRHH	AB0709	9	1	14	2	20070915	1655	26.502N	74.803W	3	3	29.749	36.433	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	9	1	15	2	20070915	1655	26.502N	74.803W	596	600	15.042	36.014	2	36.013	2	171.6	2	171.9	2
WBTSRHH	AB0709	9	1	16	2	20070915	1655	26.502N	74.803W	546	550	16.088	36.194	2	36.193	2	177.5	2	177.5	2
WBTSRHH	AB0709	9	1	17	2	20070915	1655	26.502N	74.803W	497	501	17.011	36.359	2	36.361	2	184.9	2	185.1	2
WBTSRHH	AB0709	9	1	18	2	20070915	1655	26.502N	74.803W	424	427	17.864	36.528	2	36.527	2	200.4	2	200.0	2
WBTSRHH	AB0709	9	1	19	2	20070915	1655	26.502N	74.803W	327	329	18.247	36.582	2	36.581	2	201.1	2	201.3	2
WBTSRHH	AB0709	9	1	20	2	20070915	1655	26.502N	74.803W	250	252	18.589	36.610	2	36.610	2	197.2	2	196.0	2
WBTSRHH	AB0709	9	1	21	2	20070915	1655	26.502N	74.803W	175	176	19.466	36.684	2	36.682	2	198.0	2	196.6	2
WBTSRHH	AB0709	9	1	22	2	20070915	1655	26.502N	74.803W	100	100	22.261	36.755	2	36.683	4	231.9	2	231.9	2
WBTSRHH	AB0709	9	1	23	2	20070915	1655	26.502N	74.803W	60	60	24.975	36.685	2	36.694	4	208.8	2	215.5	4
WBTSRHH	AB0709	9	1	24	2	20070915	1655	26.502N	74.803W	3	3	29.766	36.436	2	36.436	2	193.4	2	193.1	2
WBTSRHH	AB0709	10	1	1	2	20070915	2201	26.500N	75.084W	4586	4667	2.148	34.873	2	34.875	4	255.0	2	254.3	2
WBTSRHH	AB0709	10	1	2	2	20070915	2201	26.500N	75.084W	4229	4300	2.229	34.889	2	34.890	4	261.9	2	261.8	2
WBTSRHH	AB0709	10	1	3	2	20070915	2201	26.500N	75.084W	3839	3900	2.278	34.897	2	34.890	4	265.2	2	264.8	2
WBTSRHH	AB0709	10	1	4	2	20070915	2201	26.500N	75.084W	3448	3500	2.396	34.907	2	34.909	4	267.2	2	266.9	2
WBTSRHH	AB0709	10	1	5	2	20070915	2201	26.500N	75.084W	2959	2999	2.717	34.927	2	34.928	4	265.7	2	265.6	2
WBTSRHH	AB0709	10	1	6	2	20070915	2201	26.500N	75.084W	2467	2498	3.166	34.952	2	34.953	4	262.4	2	262.1	2
WBTSRHH	AB0709	10	1	7	2	20070915	2201	26.500N	75.084W	1979	2001	3.607	34.963	2	34.965	4	263.1	2	263.1	2
WBTSRHH	AB0709	10	1	8	2	20070915	2201	26.500N	75.084W	1681	1699	3.961	34.979	2	34.982	4	259.3	2	260.9	2
WBTSRHH	AB0709	10	1	9	2	20070915	2201	26.500N	75.084W	1386	1400	4.567	35.021	2	35.024	4	246.3	2	246.3	2
WBTSRHH	AB0709	10	1	10	2	20070915	2201	26.500N	75.084W	1042	1052	6.585	35.092	2	35.095	4	186.6	2	187.5	2
WBTSRHH	AB0709	10	1	11	2	20070915	2201	26.500N	75.084W	890	898	8.763	35.184	2	35.187	4	146.9	2	148.0	2
WBTSRHH	AB0709	10	1	12	2	20070915	2201	26.500N	75.084W	792	799	10.624	35.376	2	35.378	4	140.9	2	140.9	2
WBTSRHH	AB0709	10	1	13	2	20070915	2201	26.500N	75.084W	717	723	12.524	35.637	2	35.641	2	154.1	2	154.7	2
WBTSRHH	AB0709	10	1	14	2	20070915	2201	26.500N	75.084W	644	649	29.495	36.305	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	10	1	15	2	20070915	2201	26.500N	75.084W	589	594	14.061	35.857	2	35.859	4	166.4	2	166.4	2
WBTSRHH	AB0709	10	1	16	2	20070915	2201	26.500N	75.084W	520	524	15.287	36.054	2	36.051	4	172.8	2	172.6	2
WBTSRHH	AB0709	10	1	17	2	20070915	2201	26.500N	75.084W	400	403	16.726	36.306	2	36.309	4	174.2	2	191.2	4
WBTSRHH	AB0709	10	1	18	2	20070915	2201	26.500N	75.084W	300	302	18.102	36.568	2	36.571	4	194.7	2	192.9	4
WBTSRHH	AB0709	10	1	19	2	20070915	2201	26.500N	75.084W	225	227	18.489	36.626	2	36.626	4	196.7	2	212.1	4
WBTSRHH	AB0709	10	1	20	2	20070915	2201	26.500N	75.084W	151	152	22.035	36.710	2	36.646	4	201.8	2	205.4	2
WBTSRHH	AB0709	10	1	21	2	20070915	2201	26.500N	75.084W	90	91	22.203	36.710	2	36.712	4	210.0	2	209.2	2
WBTSRHH	AB0709	10	1	22	2	20070915	2201	26.500N	75.084W	50	50	25.190	36.716	4	36.745	4	232.3	2	232.6	2
WBTSRHH	AB0709	10	1	23	2	20070915	2201	26.500N	75.084W	2	2	29.491	36.716	4	36.714	4	227.4	2	226.2	2
WBTSRHH	AB0709	10	1	24	2	20070915	2201	26.500N	75.084W	4617	4699	2.168	36.304	2	36.311	4	194.0	2	193.4	2
WBTSRHH	AB0709	11	1	1	2	20070916	0302	26.500N	75.300W	4132	4200	2.251	34.875	2	34.877	4	255.9	2	255.7	2
WBTSRHH	AB0709	11	1	2	2	20070916	0302	26.500N	75.300W	3740	3798	2.313	34.892	2	34.894	4	263.1	2	263.5	2
WBTSRHH	AB0709	11	1	3	2	20070916	0302	26.500N	75.300W	3255	3302	2.522	34.901	2	34.901	4	266.1	2	266.4	6
WBTSRHH	AB0709	11	1	4	2	20070916	0302	26.500N	75.300W	2763	2799	2.946	34.942	2	34.942	4	266.9	2	267.1	2
WBTSRHH	AB0709	11	1	5	2	20070916	0302	26.500N	75.300W	2370	2399	3.312	34.958	2	34.942	4	262.9	2	262.9	6
WBTSRHH	AB0709	11	1	6	2	20070916	0302	26.500N	75.300W	2075	2099	3.545	34.962	2	34.959	4	262.2	2	262.0	2
WBTSRHH	AB0709	11	1	7	2	20070916	0302	26.500N	75.300W	1583	1600	4.159	34.995	2	34.998	4	255.5	2	263.0	2
WBTSRHH	AB0709	11	1	8	2	20070916	0302	26.500N	75.300W	1289	1301	4.921	35.045	2	34.998	4	255.5	2	263.0	2
WBTSRHH	AB0709	11	1	9	2	20070916	0302	26.500N	75.300W	995	1004	7.124	35.119	2	35.050	4	237.0	2	239.2	2
WBTSRHH	AB0709	11	1	10	2	20070916	0302	26.500N	75.300W	843	851	9.684	35.272	2	35.121	4	173.1	2	175.5	2
WBTSRHH	AB0709	11	1	11	2	20070916	0302	26.500N	75.300W	741	747	11.775	35.530	2	35.272	4	137.3	2	148.8	4
WBTSRHH	AB0709	11	1	12	2	20070916	0302	26.500N	75.300W	669	675	13.494	35.777	2	35.531	4	149.0	2	147.3	2
WBTSRHH	AB0709	11	1	13	2	20070916	0302	26.500N	75.300W	597	601	15.054	36.329	2	35.777	4	159.9	2	158.8	2
WBTSRHH	AB0709	11	1	14	2	20070916	0302	26.500N	75.300W	520	524	29.256	36.329	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	11	1	15	2	20070916	0302	26.500N	75.300W	448	452	18.055	36.021	2	36.023	4	172.6	2	175.3	2
WBTSRHH	AB0709	11	1	16	2	20070916	0302	26.500N	75.300W	498	502	17.020	36.359	2	36.194	4	177.9	2	177.9	2
WBTSRHH	AB0709	11	1	17	2	20070916	0302	26.500N	75.300W	422	425	18.055	36.571	2	36.359	4	184.4	2	184.1	2
WBTSRHH	AB0709	11	1	18	2	20070916	0302	26.500N	75.300W	323	325	18.274	36.600	2	36.572	4	203.8	2	207.2	2
WBTSRHH	AB0709	11	1	19	2	20070916	0302	26.500N	75.300W	248	250	18.611	36.627	2	36.602	4	196.2	2	217.6	4
WBTSRHH	AB0709	11	1	20	2	20070916	0302	26.500N	75.300W	248										

WBTSRHB	AB0709	11	1	21	2	20070916	0302	26.500N	75.300W	176	177	19,249	36,671	2	36,675	4	189.5	2	192.4	2
WBTSRHB	AB0709	11	1	22	2	20070916	0302	26.500N	75.300W	99	100	21,573	36,761	2	36,762	4	226.7	2	225.4	2
WBTSRHB	AB0709	11	1	23	2	20070916	0302	26.500N	75.300W	59	60	24,493	36,734	2	36,740	4	228.5	2	229.5	2
WBTSRHB	AB0709	11	1	24	2	20070916	0302	26.500N	75.300W	59	2	29,241	36,326	2	36,335	4	194.4	2	194.0	2
WBTSRHB	AB0709	12	1	1	2	20070916	0734	26.501N	75.501W	4664	4746	2,123	34,869	2	34,885	2	253.5	2	253.5	2
WBTSRHB	AB0709	12	1	2	2	20070916	0734	26.501N	75.501W	4423	4499	2,222	34,885	2	34,885	2	260.7	2	260.7	2
WBTSRHB	AB0709	12	1	3	2	20070916	0734	26.501N	75.501W	4130	4199	2,245	34,891	2	34,892	2	264.4	2	264.3	2
WBTSRHB	AB0709	12	1	4	2	20070916	0734	26.501N	75.501W	3741	3800	2,307	34,899	2	34,900	2	266.9	2	266.9	2
WBTSRHB	AB0709	12	1	5	2	20070916	0734	26.501N	75.501W	3347	3396	2,462	34,910	2	34,909	2	267.8	2	268.0	2
WBTSRHB	AB0709	12	1	6	2	20070916	0734	26.501N	75.501W	2861	2900	2,823	34,933	2	34,933	2	252.8	2	252.1	4
WBTSRHB	AB0709	12	1	7	2	20070916	0734	26.501N	75.501W	2370	2400	3,311	34,958	2	34,958	2	262.1	2	262.0	4
WBTSRHB	AB0709	12	1	8	2	20070916	0734	26.501N	75.501W	1879	1900	3,732	34,968	2	34,968	2	262.4	2	262.4	2
WBTSRHB	AB0709	12	1	9	2	20070916	0734	26.501N	75.501W	1385	1399	4,601	35,026	2	35,023	2	245.7	2	246.0	2
WBTSRHB	AB0709	12	1	10	2	20070916	0734	26.501N	75.501W	1040	1050	6,756	35,106	2	35,105	2	184.5	2	185.8	2
WBTSRHB	AB0709	12	1	11	2	20070916	0734	26.501N	75.501W	892	900	8,837	35,191	2	35,191	2	146.2	2	147.0	2
WBTSRHB	AB0709	12	1	12	2	20070916	0734	26.501N	75.501W	794	800	10,805	35,401	2	35,401	2	143.8	2	142.6	2
WBTSRHB	AB0709	12	1	13	2	20070916	0734	26.501N	75.501W	720	726	12,491	35,632	2	35,633	2	152.5	2	152.8	2
WBTSRHB	AB0709	12	1	14	2	20070916	0734	26.501N	75.501W	2	2	29,085	36,307	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	12	1	15	2	20070916	0734	26.501N	75.501W	644	649	14,107	36,872	2	35,872	2	163.3	2	160.6	2
WBTSRHB	AB0709	12	1	16	2	20070916	0734	26.501N	75.501W	595	600	15,114	36,932	2	36,932	2	169.0	2	167.3	2
WBTSRHB	AB0709	12	1	17	2	20070916	0734	26.501N	75.501W	520	524	16,570	36,979	2	36,979	6	180.1	2	179.9	2
WBTSRHB	AB0709	12	1	18	2	20070916	0734	26.501N	75.501W	398	401	18,041	36,566	2	36,567	2	204.7	2	205.2	2
WBTSRHB	AB0709	12	1	19	2	20070916	0734	26.501N	75.501W	297	300	18,363	36,606	2	36,606	2	195.0	2	191.7	4
WBTSRHB	AB0709	12	1	20	2	20070916	0734	26.501N	75.501W	224	226	18,708	36,634	2	36,635	2	199.4	2	199.4	6
WBTSRHB	AB0709	12	1	21	2	20070916	0734	26.501N	75.501W	149	150	19,793	36,698	2	36,634	4	205.4	2	205.5	2
WBTSRHB	AB0709	12	1	22	2	20070916	0734	26.501N	75.501W	99	99	21,360	36,754	2	36,700	4	225.6	2	224.1	2
WBTSRHB	AB0709	12	1	23	2	20070916	0734	26.501N	75.501W	50	50	24,939	36,727	2	36,729	2	226.3	2	225.5	2
WBTSRHB	AB0709	12	1	24	2	20070916	0734	26.501N	75.501W	2	2	29,088	36,308	2	36,310	2	194.5	2	194.3	2
WBTSRHB	AB0709	13	1	1	2	20070916	1155	26.500N	75.705W	4669	4752	2,146	34,872	2	34,872	2	254.5	2	254.3	2
WBTSRHB	AB0709	13	1	2	2	20070916	1155	26.500N	75.705W	4228	4299	2,246	34,890	2	34,890	2	263.5	2	263.2	2
WBTSRHB	AB0709	13	1	3	2	20070916	1155	26.500N	75.705W	3937	4001	2,263	34,894	2	34,894	2	251.4	2	281.3	4
WBTSRHB	AB0709	13	1	4	2	20070916	1155	26.500N	75.705W	3546	3599	2,358	34,904	2	34,905	2	267.7	2	267.5	2
WBTSRHB	AB0709	13	1	5	2	20070916	1155	26.500N	75.705W	3153	3198	2,572	34,918	2	34,919	2	254.7	2	275.0	4
WBTSRHB	AB0709	13	1	6	2	20070916	1155	26.500N	75.705W	2665	2700	3,034	34,944	2	34,944	2	263.7	2	263.6	2
WBTSRHB	AB0709	13	1	7	2	20070916	1155	26.500N	75.705W	2272	2300	3,379	34,959	2	34,959	2	262.9	2	262.4	2
WBTSRHB	AB0709	13	1	8	2	20070916	1155	26.500N	75.705W	1978	2001	3,651	34,966	2	34,967	2	262.8	2	262.9	4
WBTSRHB	AB0709	13	1	9	2	20070916	1155	26.500N	75.705W	1485	1500	4,332	35,008	2	35,011	2	242.0	2	259.9	4
WBTSRHB	AB0709	13	1	10	2	20070916	1155	26.500N	75.705W	992	1001	7,426	35,132	2	35,131	2	164.1	2	180.9	4
WBTSRHB	AB0709	13	1	11	2	20070916	1155	26.500N	75.705W	841	848	9,734	35,275	2	35,277	2	142.5	2	144.7	2
WBTSRHB	AB0709	13	1	12	2	20070916	1155	26.500N	75.705W	744	750	11,900	35,544	2	35,544	2	146.0	2	145.3	2
WBTSRHB	AB0709	13	1	13	2	20070916	1155	26.500N	75.705W	670	675	13,576	35,788	2	35,788	2	157.8	2	155.8	2
WBTSRHB	AB0709	13	1	14	2	20070916	1155	26.500N	75.705W	3	3	28,992	36,340	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	13	1	15	2	20070916	1155	26.500N	75.705W	596	601	15,136	36,036	2	36,038	2	168.8	2	171.8	2
WBTSRHB	AB0709	13	1	16	2	20070916	1155	26.500N	75.705W	546	550	16,168	36,209	2	36,208	2	175.0	2	175.0	2
WBTSRHB	AB0709	13	1	17	2	20070916	1155	26.500N	75.705W	496	500	17,066	36,368	2	36,368	2	185.0	2	184.5	2
WBTSRHB	AB0709	13	1	18	2	20070916	1155	26.500N	75.705W	423	426	17,957	36,547	2	36,547	2	192.0	2	187.0	4
WBTSRHB	AB0709	13	1	19	2	20070916	1155	26.500N	75.705W	323	325	18,284	36,595	2	36,596	2	203.9	2	201.8	2
WBTSRHB	AB0709	13	1	20	2	20070916	1155	26.500N	75.705W	248	250	18,640	36,633	2	36,632	2	202.8	2	202.8	2
WBTSRHB	AB0709	13	1	21	2	20070916	1155	26.500N	75.705W	175	176	19,471	36,691	2	36,692	2	202.8	2	194.6	2
WBTSRHB	AB0709	13	1	22	2	20070916	1155	26.500N	75.705W	99	100	21,946	36,760	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	13	1	23	2	20070916	1155	26.500N	75.705W	57	58	24,137	36,736	2	36,735	2	224.0	2	224.4	2
WBTSRHB	AB0709	13	1	24	2	20070916	1155	26.500N	75.705W	3	3	28,989	36,341	2	36,343	2	194.5	2	194.4	2
WBTSRHB	AB0709	14	1	1	2	20070916	1618	26.499N	75.901W	4724	4809	2,203	34,877	2	34,877	2	242.2	2	251.4	4
WBTSRHB	AB0709	14	1	2	2	20070916	1618	26.499N	75.901W	4230	4300	2,249	34,890	2	34,890	2	249.5	2	263.8	4
WBTSRHB	AB0709	14	1	3	2	20070916	1618	26.499N	75.901W	3840	3900	2,285	34,896	2	34,896	2	252.4	2	258.1	4
WBTSRHB	AB0709	14	1	4	2	20070916	1618	26.499N	75.901W	3449	3500	2,378	34,905	2	34,904	2	254.6	2	248.0	4
WBTSRHB	AB0709	14	1	5	2	20070916	1618	26.499N	75.901W	2960	3001	2,699	34,924	2	34,924	2	254.2	2	266.8	4
WBTSRHB	AB0709	14	1	6	2	20070916	1618	26.499N	75.901W	2754	2791	2,906	34,938	2	34,938	2	252.0	2	264.1	4
WBTSRHB	AB0709	14	1	7	2	20070916	1618	26.499N	75.901W	2174	2200	3,478	34,961	2	34,962	2	251.5	2	261.4	4
WBTSRHB	AB0709	14	1	8	2	20070916	1618	26.499N	75.901W	1682	1700	3,961	34,981	2	34,982	2	248.6	2	259.0	4
WBTSRHB	AB0709	14	1	9	2	20070916	1618	26.499N	75.901W	1387	1400	4,633	35,027	2	35,029	2	234.9	2	244.1	4
WBTSRHB	AB0709	14	1	10	2	20070916	1618	26.499N	75.901W	1041	1050	6,589	35,098	2	35,098	2	180.9	2	186.9	4
WBTSRHB	AB0709	14	1	11	2	20070916	1618	26.499N	75.901W	892	900	8,702	35,186	2	35,186	2	146.0	2	148.2	4
WBTSRHB	AB0709	14	1	12	2	20070916	1618	26.499N	75.901W	793	800	10,570	35,377	2	35,377	2	140.1	2	144.5	4
WBTSRHB	AB0709	14	1	13	2	20070916	1618	26.499N	75.901W	719	725	12,234	35,591	2	35,595	2	141.9	2	155.7	4
WBTSRHB	AB0709	14	1	14	2	20070916	1618	26.499N	75.901W											

WBTSRHB	AB0709	14	1	15	2	20070916	1618	26.499N	75.901W	645	14.235	35.893	2	35.894	157.3	2	171.1	4
WBTSRHB	AB0709	14	1	16	2	20070916	1618	26.499N	75.901W	601	15.415	36.083	2	36.077	165.3	2	174.9	4
WBTSRHB	AB0709	14	1	17	2	20070916	1618	26.499N	75.901W	521	16.636	36.291	2	36.292	172.4	2	179.5	4
WBTSRHB	AB0709	14	1	18	2	20070916	1618	26.499N	75.901W	398	18.094	36.575	2	36.576	196.2	2	205.7	4
WBTSRHB	AB0709	14	1	19	2	20070916	1618	26.499N	75.901W	298	18.421	36.612	2	36.610	194.2	2	204.0	4
WBTSRHB	AB0709	14	1	20	2	20070916	1618	26.499N	75.901W	224	18.863	36.648	2	36.647	191.9	2	202.5	4
WBTSRHB	AB0709	14	1	21	2	20070916	1618	26.499N	75.901W	149	20.272	36.735	2	36.735	189.1	2	195.1	4
WBTSRHB	AB0709	14	1	22	2	20070916	1618	26.499N	75.901W	90	22.634	36.759	2	36.755	207.3	2	221.6	4
WBTSRHB	AB0709	14	1	23	2	20070916	1618	26.499N	75.901W	50	25.187	36.658	2	36.643	202.4	2	221.4	4
WBTSRHB	AB0709	14	1	24	2	20070916	1618	26.499N	75.901W	2	29.137	36.324	2	36.326	187.6	2	195.3	4
WBTSRHB	AB0709	15	1	1	2	20070916	2137	26.500N	76.088W	4782	2.261	34.883	2	34.885	260.7	2	260.7	6
WBTSRHB	AB0709	15	1	2	2	20070916	2137	26.500N	76.088W	4423	2.286	34.890	2	34.891	264.3	2	264.4	2
WBTSRHB	AB0709	15	1	3	2	20070916	2137	26.500N	76.088W	4132	2.287	34.893	2	34.893	265.5	2	265.8	2
WBTSRHB	AB0709	15	1	4	2	20070916	2137	26.500N	76.088W	3742	2.283	34.896	2	34.896	252.8	2	121.6	4
WBTSRHB	AB0709	15	1	5	2	20070916	2137	26.500N	76.088W	3253	2.436	34.909	2	34.909	268.1	2	267.9	2
WBTSRHB	AB0709	15	1	6	2	20070916	2137	26.500N	76.088W	2763	2.852	34.935	2	34.935	265.0	2	264.6	2
WBTSRHB	AB0709	15	1	7	2	20070916	2137	26.500N	76.088W	2372	3.231	34.956	2	34.956	262.2	2	262.0	2
WBTSRHB	AB0709	15	1	8	2	20070916	2137	26.500N	76.088W	2077	3.498	34.963	2	34.964	263.2	2	262.3	2
WBTSRHB	AB0709	15	1	9	2	20070916	2137	26.500N	76.088W	1584	4.090	34.988	2	34.988	257.3	2	256.9	2
WBTSRHB	AB0709	15	1	10	2	20070916	2137	26.500N	76.088W	992	7.063	35.112	2	35.112	176.8	2	177.5	2
WBTSRHB	AB0709	15	1	11	2	20070916	2137	26.500N	76.088W	843	9.520	35.253	2	35.254	143.3	2	142.8	2
WBTSRHB	AB0709	15	1	12	2	20070916	2137	26.500N	76.088W	744	11.568	35.502	2	36.486	4	-999.0	9	
WBTSRHB	AB0709	15	1	13	2	20070916	2137	26.500N	76.088W	670	13.250	35.744	2	35.743	157.5	2	157.5	2
WBTSRHB	AB0709	15	1	14	2	20070916	2137	26.500N	76.088W	2	19.086	36.317	2	-999.000	9	-999.0	9	
WBTSRHB	AB0709	15	1	15	2	20070916	2137	26.500N	76.088W	595	15.046	36.021	2	36.021	168.6	2	170.4	2
WBTSRHB	AB0709	15	1	16	2	20070916	2137	26.500N	76.088W	545	16.054	36.190	2	36.190	176.4	2	176.5	2
WBTSRHB	AB0709	15	1	17	2	20070916	2137	26.500N	76.088W	496	16.928	36.342	2	36.342	181.9	2	180.4	2
WBTSRHB	AB0709	15	1	18	2	20070916	2137	26.500N	76.088W	422	17.863	36.530	2	36.529	201.3	2	199.6	2
WBTSRHB	AB0709	15	1	19	2	20070916	2137	26.500N	76.088W	324	18.327	36.592	2	36.593	198.9	2	200.2	2
WBTSRHB	AB0709	15	1	20	2	20070916	2137	26.500N	76.088W	248	18.746	36.638	2	36.637	203.0	2	203.6	2
WBTSRHB	AB0709	15	1	21	2	20070916	2137	26.500N	76.088W	174	22.175	36.724	2	36.724	199.1	2	196.0	2
WBTSRHB	AB0709	15	1	22	2	20070916	2137	26.500N	76.088W	100	22.175	36.764	2	36.759	225.3	2	224.8	2
WBTSRHB	AB0709	15	1	23	2	20070916	2137	26.500N	76.088W	61	24.231	36.725	2	36.711	215.5	2	215.2	2
WBTSRHB	AB0709	15	1	24	2	20070916	2137	26.500N	76.088W	2	29.112	36.320	2	36.320	195.9	2	195.4	2
WBTSRHB	AB0709	16	1	1	2	20070917	0236	26.500N	76.217W	4790	2.290	34.886	2	34.887	261.4	2	262.9	2
WBTSRHB	AB0709	16	1	2	2	20070917	0236	26.500N	76.217W	4520	2.300	34.890	2	34.890	249.8	2	274.0	4
WBTSRHB	AB0709	16	1	3	2	20070917	0236	26.500N	76.217W	4230	2.308	34.893	2	34.895	266.1	2	266.3	2
WBTSRHB	AB0709	16	1	4	2	20070917	0236	26.500N	76.217W	3839	2.336	34.908	2	34.900	268.2	2	268.2	2
WBTSRHB	AB0709	16	1	5	2	20070917	0236	26.500N	76.217W	3451	2.384	34.903	2	34.904	269.0	2	269.3	2
WBTSRHB	AB0709	16	1	6	2	20070917	0236	26.500N	76.217W	2961	2.528	34.913	2	34.914	269.1	2	269.0	2
WBTSRHB	AB0709	16	1	7	2	20070917	0236	26.500N	76.217W	2500	3.051	34.950	2	34.950	262.5	2	261.8	2
WBTSRHB	AB0709	16	1	8	2	20070917	0236	26.500N	76.217W	1978	3.557	34.965	2	34.965	250.8	2	268.8	4
WBTSRHB	AB0709	16	1	9	2	20070917	0236	26.500N	76.217W	1387	4.544	35.024	2	35.026	247.7	2	246.9	2
WBTSRHB	AB0709	16	1	10	2	20070917	0236	26.500N	76.217W	1041	6.567	35.102	2	35.104	189.3	2	189.4	2
WBTSRHB	AB0709	16	1	11	2	20070917	0236	26.500N	76.217W	892	8.655	35.209	2	35.210	150.9	2	161.4	4
WBTSRHB	AB0709	16	1	12	2	20070917	0236	26.500N	76.217W	793	10.406	35.359	2	35.360	146.3	2	145.1	2
WBTSRHB	AB0709	16	1	13	2	20070917	0236	26.500N	76.217W	720	12.173	35.584	2	35.586	148.3	2	148.3	2
WBTSRHB	AB0709	16	1	14	2	20070917	0236	26.500N	76.217W	2	29.089	36.316	2	-999.000	9	-999.0	9	
WBTSRHB	AB0709	16	1	15	2	20070917	0236	26.500N	76.217W	645	14.039	35.863	2	35.864	164.0	2	161.6	2
WBTSRHB	AB0709	16	1	16	2	20070917	0236	26.500N	76.217W	596	14.937	36.006	2	36.005	167.7	2	179.1	4
WBTSRHB	AB0709	16	1	17	2	20070917	0236	26.500N	76.217W	521	16.412	36.253	2	36.251	179.5	2	180.4	2
WBTSRHB	AB0709	16	1	18	2	20070917	0236	26.500N	76.217W	397	17.971	36.540	2	36.540	193.8	2	197.5	2
WBTSRHB	AB0709	16	1	19	2	20070917	0236	26.500N	76.217W	298	18.422	36.590	2	36.592	194.8	2	194.0	2
WBTSRHB	AB0709	16	1	20	2	20070917	0236	26.500N	76.217W	224	19.111	36.662	2	36.662	190.2	2	192.2	2
WBTSRHB	AB0709	16	1	21	2	20070917	0236	26.500N	76.217W	150	21.027	36.775	2	36.777	193.1	2	195.9	2
WBTSRHB	AB0709	16	1	22	2	20070917	0236	26.500N	76.217W	90	22.803	36.747	2	36.749	210.0	2	213.2	2
WBTSRHB	AB0709	16	1	23	2	20070917	0236	26.500N	76.217W	50	25.174	36.622	2	36.622	204.5	2	209.4	4
WBTSRHB	AB0709	16	1	24	2	20070917	0236	26.500N	76.217W	2	29.092	36.318	2	36.322	195.8	2	195.2	2
WBTSRHB	AB0709	17	1	1	2	20070917	0815	26.500N	76.347W	4833	2.233	34.879	2	34.879	258.2	2	257.2	2
WBTSRHB	AB0709	17	1	2	2	20070917	0815	26.500N	76.347W	4424	2.292	34.892	2	34.891	264.9	2	264.2	4
WBTSRHB	AB0709	17	1	3	2	20070917	0815	26.500N	76.347W	4131	2.329	34.896	2	34.895	252.3	2	282.6	4
WBTSRHB	AB0709	17	1	4	2	20070917	0815	26.500N	76.347W	3741	2.370	34.901	2	34.900	268.2	2	268.2	2
WBTSRHB	AB0709	17	1	5	2	20070917	0815	26.500N	76.347W	3253	2.500	34.910	2	34.909	255.6	2	276.6	4
WBTSRHB	AB0709	17	1	6	2	20070917	0815	26.500N	76.347W	2763	2.721	34.925	2	34.925	267.2	2	266.9	2
WBTSRHB	AB0709	17	1	7	2	20070917	0815	26.500N	76.347W	2370	3.061	34.947	2	34.948	263.8	2	262.8	2
WBTSRHB	AB0709	17	1	8	2	20070917	0815	26.500N	76.347W	2076	3.422	34.961	2	34.962	262.7	2	262.3	6

WBTSRHB	AB0709	17	1	9	2	20070917	0815	26.500N	76.347W	1583	1599	4.037	34.987	2	34.987	257.9	2	257.9	2	257.3	2
WBTSRHB	AB0709	17	1	10	2	20070917	0815	26.500N	76.347W	991	1000	6.840	35.105	4	33.143	174.9	2	174.9	2	188.4	4
WBTSRHB	AB0709	17	1	11	2	20070917	0815	26.500N	76.347W	842	849	9.214	35.254	2	35.252	147.5	2	147.5	2	160.5	4
WBTSRHB	AB0709	17	1	12	2	20070917	0815	26.500N	76.347W	743	749	11.360	35.479	2	35.478	151.2	2	151.2	2	151.5	4
WBTSRHB	AB0709	17	1	13	2	20070917	0815	26.500N	76.347W	669	674	13.376	35.761	2	-999.000	159.6	2	159.6	2	159.3	2
WBTSRHB	AB0709	17	1	14	2	20070917	0815	26.500N	76.347W	595	600	14.856	35.993	2	35.991	174.4	2	174.4	2	-999.0	9
WBTSRHB	AB0709	17	1	15	2	20070917	0815	26.500N	76.347W	546	550	15.848	36.157	2	36.155	178.1	2	178.1	2	179.1	2
WBTSRHB	AB0709	17	1	16	2	20070917	0815	26.500N	76.347W	496	499	16.634	36.290	2	36.289	178.3	2	178.3	2	178.5	2
WBTSRHB	AB0709	17	1	17	2	20070917	0815	26.500N	76.347W	422	425	17.822	36.508	2	36.507	194.2	2	194.2	2	193.8	2
WBTSRHB	AB0709	17	1	18	2	20070917	0815	26.500N	76.347W	322	325	18.364	36.592	2	36.591	196.5	2	196.5	2	198.2	2
WBTSRHB	AB0709	17	1	19	2	20070917	0815	26.500N	76.347W	248	250	18.894	36.640	2	36.638	192.7	2	192.7	2	191.9	2
WBTSRHB	AB0709	17	1	20	2	20070917	0815	26.500N	76.347W	174	175	20.340	36.742	2	36.737	191.4	2	191.4	2	192.4	2
WBTSRHB	AB0709	17	1	21	2	20070917	0815	26.500N	76.347W	100	100	22.789	36.766	2	36.766	194.6	2	194.6	2	219.9	4
WBTSRHB	AB0709	17	1	22	2	20070917	0815	26.500N	76.347W	58	59	25.050	36.659	2	36.670	192.2	2	192.2	2	210.2	4
WBTSRHB	AB0709	17	1	23	2	20070917	0815	26.500N	76.347W	58	2	29.123	36.269	2	36.271	194.5	2	194.5	2	194.2	2
WBTSRHB	AB0709	18	1	1	2	20070917	1230	26.500N	76.476W	4822	4909	2.264	34.883	2	34.883	259.9	2	259.9	2	259.8	2
WBTSRHB	AB0709	18	1	2	2	20070917	1230	26.500N	76.476W	4521	4600	2.292	34.890	2	34.888	263.7	2	263.7	2	263.8	2
WBTSRHB	AB0709	18	1	3	2	20070917	1230	26.500N	76.476W	4180	4249	2.359	34.898	2	34.897	266.8	2	266.8	2	266.8	2
WBTSRHB	AB0709	18	1	4	2	20070917	1230	26.500N	76.476W	3840	3901	2.394	34.902	2	34.901	268.7	2	268.7	2	268.0	2
WBTSRHB	AB0709	18	1	5	2	20070917	1230	26.500N	76.476W	3449	3500	2.495	34.909	2	34.909	269.0	2	269.0	2	270.8	2
WBTSRHB	AB0709	18	1	6	2	20070917	1230	26.500N	76.476W	2948	2988	2.647	34.921	2	34.919	267.6	2	267.6	2	267.6	2
WBTSRHB	AB0709	18	1	7	2	20070917	1230	26.500N	76.476W	2469	2500	3.001	34.943	2	34.941	267.6	2	267.6	2	-999.0	9
WBTSRHB	AB0709	18	1	8	2	20070917	1230	26.500N	76.476W	1979	2001	3.510	34.963	2	34.963	-999.0	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	18	1	9	2	20070917	1230	26.500N	76.476W	1387	1401	4.462	35.019	2	35.019	248.6	2	248.6	2	249.3	2
WBTSRHB	AB0709	18	1	10	2	20070917	1230	26.500N	76.476W	1041	1050	6.135	35.092	2	-999.000	203.1	2	203.1	2	203.9	2
WBTSRHB	AB0709	18	1	11	2	20070917	1230	26.500N	76.476W	892	900	8.147	35.171	2	-999.000	160.8	2	160.8	2	159.5	2
WBTSRHB	AB0709	18	1	12	2	20070917	1230	26.500N	76.476W	794	800	10.144	35.357	2	35.357	153.7	2	153.7	2	153.7	2
WBTSRHB	AB0709	18	1	13	2	20070917	1230	26.500N	76.476W	719	725	11.650	35.507	2	35.506	151.6	2	151.6	2	151.1	2
WBTSRHB	AB0709	18	1	14	2	20070917	1230	26.500N	76.476W	2	2	29.037	36.278	2	-999.000	189.9	2	189.9	2	-999.0	9
WBTSRHB	AB0709	18	1	15	2	20070917	1230	26.500N	76.476W	646	651	13.564	35.787	2	35.784	165.5	2	165.5	2	165.3	2
WBTSRHB	AB0709	18	1	16	2	20070917	1230	26.500N	76.476W	588	593	14.888	35.997	2	35.997	163.2	2	163.2	2	177.6	4
WBTSRHB	AB0709	18	1	17	2	20070917	1230	26.500N	76.476W	521	525	16.281	36.229	2	36.228	167.5	2	167.5	2	167.9	4
WBTSRHB	AB0709	18	1	18	2	20070917	1230	26.500N	76.476W	397	400	18.081	36.562	2	36.562	191.6	2	191.6	2	208.3	4
WBTSRHB	AB0709	18	1	19	2	20070917	1230	26.500N	76.476W	298	300	18.501	36.611	2	36.609	188.9	2	188.9	2	202.9	4
WBTSRHB	AB0709	18	1	20	2	20070917	1230	26.500N	76.476W	224	226	19.130	36.685	2	36.684	189.1	2	189.1	2	191.2	2
WBTSRHB	AB0709	18	1	21	2	20070917	1230	26.500N	76.476W	149	150	21.117	36.757	4	36.772	191.0	2	191.0	2	191.7	2
WBTSRHB	AB0709	18	1	22	2	20070917	1230	26.500N	76.476W	90	90	23.771	36.741	2	36.744	211.9	2	211.9	2	211.2	2
WBTSRHB	AB0709	18	1	23	2	20070917	1230	26.500N	76.476W	50	50	25.853	36.590	2	36.596	209.4	2	209.4	2	210.1	2
WBTSRHB	AB0709	18	1	24	2	20070917	1230	26.500N	76.476W	2	2	29.040	36.280	2	36.281	183.2	2	183.2	2	202.6	4
WBTSRHB	AB0709	19	1	1	2	20070917	1650	26.500N	76.565W	4811	4898	2.266	34.883	2	34.884	260.6	2	260.6	2	259.7	2
WBTSRHB	AB0709	19	1	2	2	20070917	1650	26.500N	76.565W	4424	4500	2.295	34.892	2	34.893	264.5	2	264.5	2	264.2	6
WBTSRHB	AB0709	19	1	3	2	20070917	1650	26.500N	76.565W	4133	4201	2.320	34.897	2	34.897	266.3	2	266.3	2	266.2	2
WBTSRHB	AB0709	19	1	4	2	20070917	1650	26.500N	76.565W	3742	3801	2.415	34.905	2	34.905	268.1	2	268.1	2	267.9	2
WBTSRHB	AB0709	19	1	5	2	20070917	1650	26.500N	76.565W	3254	3301	2.536	34.912	2	34.913	255.6	2	255.6	2	273.6	4
WBTSRHB	AB0709	19	1	6	2	20070917	1650	26.500N	76.565W	2765	2801	2.822	34.930	2	34.931	266.4	2	266.4	2	266.2	2
WBTSRHB	AB0709	19	1	7	2	20070917	1650	26.500N	76.565W	2371	2400	3.188	34.952	2	34.953	263.3	2	263.3	2	262.7	2
WBTSRHB	AB0709	19	1	8	2	20070917	1650	26.500N	76.565W	2076	2100	3.374	34.958	2	34.959	252.5	2	252.5	2	242.3	4
WBTSRHB	AB0709	19	1	9	2	20070917	1650	26.500N	76.565W	1584	1600	4.069	34.993	2	34.994	256.6	2	256.6	2	253.5	2
WBTSRHB	AB0709	19	1	10	2	20070917	1650	26.500N	76.565W	992	1001	6.577	35.097	2	35.098	187.8	2	187.8	2	187.1	2
WBTSRHB	AB0709	19	1	11	2	20070917	1650	26.500N	76.565W	843	851	8.654	35.205	2	35.208	155.6	2	155.6	2	157.3	2
WBTSRHB	AB0709	19	1	12	2	20070917	1650	26.500N	76.565W	743	750	10.994	35.452	2	35.452	155.1	2	155.1	2	154.9	2
WBTSRHB	AB0709	19	1	13	2	20070917	1650	26.500N	76.565W	670	675	12.720	35.663	2	35.664	152.0	2	152.0	2	150.8	2
WBTSRHB	AB0709	19	1	14	2	20070917	1650	26.500N	76.565W	3	3	29.452	36.287	2	-999.000	161.0	2	161.0	2	-999.0	9
WBTSRHB	AB0709	19	1	15	2	20070917	1650	26.500N	76.565W	596	601	14.411	35.919	2	35.919	170.6	2	170.6	2	170.3	2
WBTSRHB	AB0709	19	1	16	2	20070917	1650	26.500N	76.565W	547	551	15.614	36.116	2	36.114	173.0	2	173.0	2	170.3	2
WBTSRHB	AB0709	19	1	17	2	20070917	1650	26.500N	76.565W	497	501	16.625	36.289	2	36.290	173.0	2	173.0	2	166.9	4
WBTSRHB	AB0709	19	1	18	2	20070917	1650	26.500N	76.565W	422	426	17.785	36.495	2	36.492	189.0	2	189.0	2	183.8	4
WBTSRHB	AB0709	19	1	19	2	20070917	1650	26.500N	76.565W	323	326	18.388	36.605	2	36.606	202.1	2	202.1	2	202.7	2
WBTSRHB	AB0709	19	1	20	2	20070917	1650	26.500N	76.565W	249	250	18.826	36.645	2	36.647	188.9	2	188.9	2	204.4	4
WBTSRHB	AB0709	19	1	21	2	20070917	1650	26.500N	76.565W	174	175	20.547	36.762	2	36.761	196.0	2	196.0	2	192.0	2
WBTSRHB	AB0709	19	1	22	2	20070917	1650	26.500N	76.565W	100	101	23.540	36.854	2	36.854	189.1	2	189.1	2	192.0	2
WBTSRHB	AB0709	19	1	23	2	20070917	1650	26.500N	76.565W	60	61	25.091	36.667	2	36.670	195.3	2	195.3	2	213.5	4
WBTSRHB	AB0709	19																			



WBTSRHH	AB0709	20	1	3	2	20070917	2139	26.500N	76.655W	3840	3901	2.335	34.899	2	34.901	4	267.2	2	267.0	2
WBTSRHH	AB0709	20	1	4	2	20070917	2139	26.500N	76.655W	3449	3500	2.465	34.907	2	34.908	4	269.1	2	269.4	2
WBTSRHH	AB0709	20	1	5	2	20070917	2139	26.500N	76.655W	2960	3000	2.709	34.925	2	34.929	4	266.7	2	266.7	2
WBTSRHH	AB0709	20	1	6	2	20070917	2139	26.500N	76.655W	2469	2500	3.207	34.951	2	34.952	4	263.2	2	262.7	2
WBTSRHH	AB0709	20	1	7	2	20070917	2139	26.500N	76.655W	1978	2000	3.619	34.967	2	34.969	4	262.8	2	262.1	2
WBTSRHH	AB0709	20	1	8	2	20070917	2139	26.500N	76.655W	1682	1700	3.828	34.970	4	34.970	4	250.8	2	277.5	4
WBTSRHH	AB0709	20	1	9	2	20070917	2139	26.500N	76.655W	1387	1401	4.370	35.014	2	35.014	4	250.8	2	250.6	2
WBTSRHH	AB0709	20	1	10	2	20070917	2139	26.500N	76.655W	1041	1050	5.770	35.086	2	35.090	4	203.1	2	218.1	4
WBTSRHH	AB0709	20	1	11	2	20070917	2139	26.500N	76.655W	892	900	7.514	35.116	2	35.119	4	164.1	2	165.0	2
WBTSRHH	AB0709	20	1	12	2	20070917	2139	26.500N	76.655W	793	800	9.425	35.116	2	35.119	4	164.1	2	165.0	2
WBTSRHH	AB0709	20	1	13	2	20070917	2139	26.500N	76.655W	719	725	11.165	35.463	2	35.464	4	155.1	2	152.3	2
WBTSRHH	AB0709	20	1	14	2	20070917	2139	26.500N	76.655W	645	650	29.629	36.393	2	-999.000	9	155.1	2	155.3	2
WBTSRHH	AB0709	20	1	15	2	20070917	2139	26.500N	76.655W	645	650	12.884	35.686	4	35.689	4	152.6	2	154.2	2
WBTSRHH	AB0709	20	1	16	2	20070917	2139	26.500N	76.655W	595	600	14.365	35.910	2	35.910	4	155.6	2	166.9	4
WBTSRHH	AB0709	20	1	17	2	20070917	2139	26.500N	76.655W	521	525	16.004	36.179	2	36.182	2	163.7	2	174.8	4
WBTSRHH	AB0709	20	1	18	2	20070917	2139	26.500N	76.655W	397	400	17.864	36.509	2	36.510	4	182.8	2	201.8	4
WBTSRHH	AB0709	20	1	19	2	20070917	2139	26.500N	76.655W	299	301	18.480	36.598	2	36.600	4	193.4	2	195.2	2
WBTSRHH	AB0709	20	1	20	2	20070917	2139	26.500N	76.655W	224	226	19.195	36.668	2	36.673	4	187.7	2	187.7	2
WBTSRHH	AB0709	20	1	21	2	20070917	2139	26.500N	76.655W	150	151	21.390	36.803	2	36.805	4	192.5	2	192.2	2
WBTSRHH	AB0709	20	1	22	2	20070917	2139	26.500N	76.655W	90	91	24.246	36.803	2	36.805	4	197.8	2	197.5	2
WBTSRHH	AB0709	20	1	23	2	20070917	2139	26.500N	76.655W	50	51	25.746	36.620	2	36.624	4	214.3	2	213.0	2
WBTSRHH	AB0709	20	1	24	2	20070917	2139	26.500N	76.655W	2	2	29.621	36.392	2	36.398	4	191.7	2	193.6	2
WBTSRHH	AB0709	21	1	1	2	20070918	0204	26.500N	76.743W	3837	3898	2.288	34.895	2	34.895	2	266.0	2	260.9	2
WBTSRHH	AB0709	21	1	2	2	20070918	0204	26.500N	76.743W	3547	3601	2.391	34.903	2	34.902	2	268.4	2	268.5	2
WBTSRHH	AB0709	21	1	3	2	20070918	0204	26.500N	76.743W	3253	3300	2.448	34.910	2	34.909	2	268.4	2	268.5	2
WBTSRHH	AB0709	21	1	4	2	20070918	0204	26.500N	76.743W	2764	2800	2.811	34.931	2	34.931	2	266.0	2	265.4	2
WBTSRHH	AB0709	21	1	5	2	20070918	0204	26.500N	76.743W	2372	2402	3.317	34.957	2	34.955	2	262.5	2	262.6	2
WBTSRHH	AB0709	21	1	6	2	20070918	0204	26.500N	76.743W	2076	2100	3.598	34.964	2	34.964	2	262.6	2	262.7	2
WBTSRHH	AB0709	21	1	7	2	20070918	0204	26.500N	76.743W	1879	1900	3.849	34.975	2	34.974	2	260.6	2	260.9	2
WBTSRHH	AB0709	21	1	8	2	20070918	0204	26.500N	76.743W	1584	1601	4.010	34.985	2	34.985	2	258.1	2	258.1	2
WBTSRHH	AB0709	21	1	9	2	20070918	0204	26.500N	76.743W	1288	1300	4.590	35.022	2	35.022	2	245.9	2	246.5	2
WBTSRHH	AB0709	21	1	10	2	20070918	0204	26.500N	76.743W	992	1001	6.118	35.090	2	35.089	2	202.9	2	205.9	2
WBTSRHH	AB0709	21	1	11	2	20070918	0204	26.500N	76.743W	844	851	7.957	35.143	2	35.142	2	158.9	2	160.7	2
WBTSRHH	AB0709	21	1	12	2	20070918	0204	26.500N	76.743W	744	750	9.956	35.306	2	35.305	2	144.2	2	143.1	2
WBTSRHH	AB0709	21	1	13	2	20070918	0204	26.500N	76.743W	670	675	11.918	35.552	2	35.548	2	149.8	2	148.2	2
WBTSRHH	AB0709	21	1	14	2	20070918	0204	26.500N	76.743W	3	3	29.562	36.416	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	21	1	15	2	20070918	0204	26.500N	76.743W	596	601	13.893	35.840	2	35.840	2	157.3	2	169.1	4
WBTSRHH	AB0709	21	1	16	2	20070918	0204	26.500N	76.743W	543	547	14.969	36.010	2	36.005	2	162.1	2	174.6	4
WBTSRHH	AB0709	21	1	17	2	20070918	0204	26.500N	76.743W	488	492	16.088	36.194	2	36.187	4	172.2	2	175.1	2
WBTSRHH	AB0709	21	1	18	2	20070918	0204	26.500N	76.743W	437	440	17.286	36.404	2	36.421	4	183.5	2	184.6	2
WBTSRHH	AB0709	21	1	19	2	20070918	0204	26.500N	76.743W	324	326	18.274	36.581	2	36.579	2	196.1	2	198.4	2
WBTSRHH	AB0709	21	1	20	2	20070918	0204	26.500N	76.743W	249	251	18.826	36.634	2	36.632	2	181.5	2	176.7	4
WBTSRHH	AB0709	21	1	21	2	20070918	0204	26.500N	76.743W	173	174	20.796	36.780	2	36.779	2	190.6	2	188.1	2
WBTSRHH	AB0709	21	1	22	2	20070918	0204	26.500N	76.743W	101	102	23.658	36.825	2	36.826	2	197.0	2	197.0	2
WBTSRHH	AB0709	21	1	23	2	20070918	0204	26.500N	76.743W	59	60	25.575	36.659	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	21	1	24	2	20070918	0204	26.500N	76.743W	3	3	29.564	36.418	2	36.421	2	193.6	2	195.6	2
WBTSRHH	AB0709	22	1	1	2	20070918	0526	26.517N	76.832W	1098	1109	5.278	35.056	2	35.056	2	228.1	2	227.6	2
WBTSRHH	AB0709	22	1	2	2	20070918	0526	26.517N	76.832W	842	849	7.665	35.139	2	35.135	2	167.0	2	169.3	2
WBTSRHH	AB0709	22	1	3	2	20070918	0526	26.517N	76.832W	742	748	9.823	35.294	2	35.290	2	143.9	2	141.5	2
WBTSRHH	AB0709	22	1	4	2	20070918	0526	26.517N	76.832W	594	599	13.128	35.726	2	35.727	2	156.4	2	155.9	2
WBTSRHH	AB0709	22	1	5	2	20070918	0526	26.517N	76.832W	447	450	16.828	36.323	2	36.325	2	170.5	2	173.0	4
WBTSRHH	AB0709	22	1	6	2	20070918	0526	26.517N	76.832W	348	351	18.119	36.552	2	36.558	2	188.0	2	182.4	4
WBTSRHH	AB0709	22	1	7	2	20070918	0526	26.517N	76.832W	230	232	19.590	36.704	2	36.704	2	184.6	2	186.9	2
WBTSRHH	AB0709	22	1	8	2	20070918	0526	26.517N	76.832W	198	200	20.367	36.776	2	36.776	2	180.9	2	181.1	2
WBTSRHH	AB0709	22	1	9	2	20070918	0526	26.517N	76.832W	149	150	21.928	36.805	2	36.805	2	201.2	2	199.6	2
WBTSRHH	AB0709	22	1	10	2	20070918	0526	26.517N	76.832W	100	101	24.384	36.750	4	36.743	4	205.6	2	207.5	2
WBTSRHH	AB0709	22	1	11	2	20070918	0526	26.517N	76.832W	50	50	27.525	36.374	2	36.367	4	202.5	2	206.0	2
WBTSRHH	AB0709	22	1	12	2	20070918	0526	26.517N	76.832W	3	3	29.456	36.394	2	36.395	2	193.6	2	193.4	2
WBTSRHH	AB0709	22	1	13	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	14	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	15	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	16	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	17	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	18	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	19	2	20070918	0526	26.517N	76.832W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	20	2	20070918	0526	26.51												

WBTSRHH	AB0709	22	1	21	2	20070918	0526	26.517N	76.832W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	22	2	20070918	0526	26.517N	76.832W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	23	2	20070918	0526	26.517N	76.832W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	22	1	24	2	20070918	0526	26.517N	76.832W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	1	2	20070918	0808	26.525N	76.891W	307	309	18.147	2	36.556	2	193.1	2	193.7	2
WBTSRHH	AB0709	23	1	2	2	20070918	0808	26.525N	76.891W	272	274	18.784	2	36.622	2	190.0	2	190.2	2
WBTSRHH	AB0709	23	1	3	2	20070918	0808	26.525N	76.891W	223	225	19.782	2	36.714	2	188.3	2	187.7	2
WBTSRHH	AB0709	23	1	4	2	20070918	0808	26.525N	76.891W	179	181	22.130	2	36.791	2	192.7	2	210.0	4
WBTSRHH	AB0709	23	1	5	2	20070918	0808	26.525N	76.891W	129	130	23.779	2	36.762	2	206.1	2	205.8	2
WBTSRHH	AB0709	23	1	6	2	20070918	0808	26.525N	76.891W	79	80	25.816	2	36.557	2	188.9	2	185.0	4
WBTSRHH	AB0709	23	1	7	2	20070918	0808	26.525N	76.891W	39	39	29.327	2	36.287	2	181.6	2	208.7	4
WBTSRHH	AB0709	23	1	8	2	20070918	0808	26.525N	76.891W	3	3	29.352	2	36.267	2	193.8	2	193.6	2
WBTSRHH	AB0709	23	1	9	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	10	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	11	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	12	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	13	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	14	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	15	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	16	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	17	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	18	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	19	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	20	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	21	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	22	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	23	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	23	1	24	2	20070918	0808	26.525N	76.891W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	24	1	1	2	20070918	2013	26.457N	78.654W	746	752	9.451	2	35.273	2	146.4	2	145.7	2
WBTSRHH	AB0709	24	1	2	2	20070918	2013	26.457N	78.654W	644	650	11.834	2	35.541	2	146.4	2	145.7	2
WBTSRHH	AB0709	24	1	3	2	20070918	2013	26.457N	78.654W	644	650	11.827	2	35.538	2	146.3	2	146.0	2
WBTSRHH	AB0709	24	1	4	2	20070918	2013	26.457N	78.654W	645	650	11.817	2	35.537	2	146.3	2	146.0	2
WBTSRHH	AB0709	24	1	5	2	20070918	2013	26.457N	78.654W	506	510	15.408	2	36.083	2	168.9	2	168.3	2
WBTSRHH	AB0709	24	1	6	2	20070918	2013	26.457N	78.654W	506	510	15.409	2	36.083	2	168.9	2	168.3	2
WBTSRHH	AB0709	24	1	7	2	20070918	2013	26.457N	78.654W	427	430	16.938	2	36.343	2	168.9	2	168.3	2
WBTSRHH	AB0709	24	1	8	2	20070918	2013	26.457N	78.654W	347	350	18.122	2	36.345	2	181.2	2	179.8	2
WBTSRHH	AB0709	24	1	9	2	20070918	2013	26.457N	78.654W	427	431	16.939	2	36.345	2	181.2	2	179.8	2
WBTSRHH	AB0709	24	1	10	2	20070918	2013	26.457N	78.654W	347	350	18.122	2	36.345	2	181.2	2	179.8	2
WBTSRHH	AB0709	24	1	11	2	20070918	2013	26.457N	78.654W	273	275	18.649	2	36.563	2	198.9	2	198.4	2
WBTSRHH	AB0709	24	1	12	2	20070918	2013	26.457N	78.654W	273	275	18.649	2	36.563	2	198.9	2	198.4	2
WBTSRHH	AB0709	24	1	13	2	20070918	2013	26.457N	78.654W	189	191	20.204	2	36.611	2	190.7	2	191.5	2
WBTSRHH	AB0709	24	1	14	2	20070918	2013	26.457N	78.654W	3	3	20.204	2	36.611	2	190.7	2	191.5	2
WBTSRHH	AB0709	24	1	15	2	20070918	2013	26.457N	78.654W	3	3	20.204	2	36.611	2	190.7	2	191.5	2
WBTSRHH	AB0709	24	1	16	2	20070918	2013	26.457N	78.654W	189	191	20.204	2	36.611	2	190.7	2	191.5	2
WBTSRHH	AB0709	24	1	17	2	20070918	2013	26.457N	78.654W	140	141	22.601	2	36.801	2	192.6	2	192.6	2
WBTSRHH	AB0709	24	1	18	2	20070918	2013	26.457N	78.654W	140	141	22.603	2	36.801	2	192.6	2	192.6	2
WBTSRHH	AB0709	24	1	19	2	20070918	2013	26.457N	78.654W	90	90	25.912	2	36.528	2	192.6	2	192.6	2
WBTSRHH	AB0709	24	1	20	2	20070918	2013	26.457N	78.654W	90	90	25.916	2	36.528	2	192.6	2	192.6	2
WBTSRHH	AB0709	24	1	21	2	20070918	2013	26.457N	78.654W	50	51	29.349	2	36.541	2	198.8	2	199.2	2
WBTSRHH	AB0709	24	1	22	2	20070918	2013	26.457N	78.654W	50	51	29.349	2	36.541	2	198.8	2	199.2	2
WBTSRHH	AB0709	24	1	23	2	20070918	2013	26.457N	78.654W	50	51	29.349	2	36.541	2	198.8	2	199.2	2
WBTSRHH	AB0709	24	1	24	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	25	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	26	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	27	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	28	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	29	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	24	1	30	2	20070918	2013	26.457N	78.654W	3	3	29.644	2	36.241	2	195.2	2	197.6	2
WBTSRHH	AB0709	25	1	1	2	20070918	2158	26.335N	78.717W	3	3	29.649	2	36.189	2	193.2	2	193.2	2
WBTSRHH	AB0709	25	1	2	2	20070918	2158	26.335N	78.717W	3	3	29.649	2	36.189	2	193.2	2	193.2	2
WBTSRHH	AB0709	25	1	3	2	20070918	2158	26.335N	78.717W	670	675	10.082	2	36.200	2	199.0	2	199.0	2
WBTSRHH	AB0709	25	1	4	2	20070918	2158	26.335N	78.717W	585	590	13.803	2	35.314	2	140.5	2	140.4	2
WBTSRHH	AB0709	25	1	5	2	20070918	2158	26.335N	78.717W	3	3	29.589	2	36.199	2	199.0	2	199.0	2
WBTSRHH	AB0709	25	1	6	2	20070918	2158	26.335N	78.717W	447	450	16.309	2	36.237	2	177.1	2	177.5	6
WBTSRHH	AB0709	25	1	7	2	20070918	2158	26.335N	78.717W	3	3	29.600	2	36.202	2	199.0	2	199.0	2
WBTSRHH	AB0709	25	1	8	2	20070918	2158	26.335N	78.717W	367	370	17.585	2	36.465	2	190.4	2	189.6	2
WBTSRHH	AB0709	25	1	9	2	20070918	2158	26.335N	78.717W	3	3	29.559	2	36.464	2	190.4	2	189.6	2
WBTSRHH	AB0709	25	1	10	2	20070918	2158	26.335N	78.717W	299	301	18.211	2	36.542	2	187.4	2	184.3	2
WBTSRHH	AB0709	25	1	11	2	20070918	2158	26.335N	78.717W	3	3	29.556	2	36.542	2	187.4	2	184.3	2
WBTSRHH	AB0709	25	1	12	2	20070918	2158	26.335N	78.717W	199	200	20.024	2	36.7					





WBTSRHB	AB0709	31	1	3	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	4	2	2	20070919	0902	26.050N	79.398W	393	396	15.385	36.067	2	36.059	4	156.6	2	157.1	2
WBTSRHB	AB0709	31	1	5	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	6	2	2	20070919	0902	26.050N	79.398W	308	310	17.843	36.460	4	36.469	4	177.1	2	176.2	2
WBTSRHB	AB0709	31	1	7	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	8	2	2	20070919	0902	26.050N	79.398W	209	210	20.293	36.777	2	36.780	2	167.9	2	186.8	4
WBTSRHB	AB0709	31	1	9	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	10	2	2	20070919	0902	26.050N	79.398W	128	129	23.932	36.832	2	36.832	2	172.9	2	173.3	2
WBTSRHB	AB0709	31	1	11	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	12	2	2	20070919	0902	26.050N	79.398W	60	60	27.596	36.205	2	36.206	2	186.1	2	204.7	4
WBTSRHB	AB0709	31	1	13	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	14	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	15	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	16	2	2	20070919	0902	26.050N	79.398W	3	3	29.601	36.173	2	36.174	2	186.1	2	198.2	4
WBTSRHB	AB0709	31	1	17	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	18	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	19	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	20	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	21	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	22	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	23	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	31	1	24	2	2	20070919	0902	26.050N	79.398W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	1	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	2	2	2	20070919	1022	26.047N	79.480W	658	663	8.126	34.998	2	34.999	2	122.7	2	123.3	2
WBTSRHB	AB0709	32	1	3	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	4	2	2	20070919	1022	26.047N	79.480W	546	551	10.271	35.230	2	35.230	2	119.2	2	118.6	2
WBTSRHB	AB0709	32	1	5	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	6	2	2	20070919	1022	26.047N	79.480W	425	429	13.393	35.692	2	35.688	2	131.5	2	130.8	2
WBTSRHB	AB0709	32	1	7	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	8	2	2	20070919	1022	26.047N	79.480W	334	337	16.704	36.297	2	36.298	2	174.3	2	173.2	2
WBTSRHB	AB0709	32	1	9	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	10	2	2	20070919	1022	26.047N	79.480W	260	262	18.024	36.452	2	36.453	2	158.3	2	157.3	2
WBTSRHB	AB0709	32	1	11	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	12	2	2	20070919	1022	26.047N	79.480W	199	200	20.646	36.776	4	36.767	4	165.3	2	166.2	2
WBTSRHB	AB0709	32	1	13	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	14	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	15	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	16	2	2	20070919	1022	26.047N	79.480W	119	120	25.231	36.550	2	36.551	2	169.5	2	168.4	2
WBTSRHB	AB0709	32	1	17	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	18	2	2	20070919	1022	26.047N	79.480W	54	54	27.479	36.234	2	36.234	2	195.4	2	196.2	2
WBTSRHB	AB0709	32	1	19	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	20	2	2	20070919	1022	26.047N	79.480W	3	3	29.581	36.162	2	36.163	2	194.2	2	193.7	2
WBTSRHB	AB0709	32	1	21	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	22	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	23	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	32	1	24	2	2	20070919	1022	26.047N	79.480W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	1	2	2	20070919	1149	26.049N	79.566W	746	752	6.130	34.911	2	34.910	2	147.9	2	147.6	6
WBTSRHB	AB0709	33	1	2	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	3	2	2	20070919	1149	26.049N	79.566W	625	630	8.077	34.991	2	34.990	2	122.8	2	122.9	2
WBTSRHB	AB0709	33	1	4	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	5	2	2	20070919	1149	26.049N	79.566W	567	572	9.116	35.101	2	35.106	2	119.3	2	119.7	2
WBTSRHB	AB0709	33	1	6	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	7	2	2	20070919	1149	26.049N	79.566W	499	503	10.936	35.328	2	35.334	2	120.8	2	120.4	2
WBTSRHB	AB0709	33	1	8	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	9	2	2	20070919	1149	26.049N	79.566W	408	411	12.894	35.614	2	35.616	2	128.9	2	128.3	2
WBTSRHB	AB0709	33	1	10	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	11	2	2	20070919	1149	26.049N	79.566W	326	328	15.072	35.970	2	35.969	2	140.1	2	139.7	2
WBTSRHB	AB0709	33	1	12	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	13	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	14	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	15	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	33	1	16	2	2	20070919	1149	26.049N	79.566W	239	240	17.952	36.417	2	36.413	2	147.7	2	148.0	2
WBTSRHB	AB0709	33	1	17	2	2	20070919	1149	26.049N	79.566W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9		

WBTSRHH	AB0709	33	1	21	2	20070919	1149	26.049N	79.566W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	33	1	22	2	20070919	1149	26.049N	79.566W	50	28.233	9	36.203	9	188.3	2	205.3	4
WBTSRHH	AB0709	33	1	23	2	20070919	1149	26.049N	79.566W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	33	1	24	2	20070919	1149	26.049N	79.566W	3	29.556	2	36.210	2	194.0	2	193.3	2
WBTSRHH	AB0709	34	1	1	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	2	2	20070919	1333	26.044N	79.659W	682	6.376	9	34.911	9	143.0	2	141.9	2
WBTSRHH	AB0709	34	1	3	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	4	2	20070919	1333	26.044N	79.659W	504	9.391	2	35.122	2	118.6	2	118.5	2
WBTSRHH	AB0709	34	1	5	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	6	2	20070919	1333	26.044N	79.659W	398	11.670	9	35.430	9	122.7	2	126.1	2
WBTSRHH	AB0709	34	1	7	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	8	2	20070919	1333	26.044N	79.659W	332	13.691	9	35.748	9	124.0	2	133.3	4
WBTSRHH	AB0709	34	1	9	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	10	2	20070919	1333	26.044N	79.659W	264	16.305	9	36.165	9	137.0	2	137.7	2
WBTSRHH	AB0709	34	1	11	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	12	2	20070919	1333	26.044N	79.659W	204	19.089	2	36.570	2	148.7	2	149.2	2
WBTSRHH	AB0709	34	1	13	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	14	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	15	2	20070919	1333	26.044N	79.659W	55	28.506	4	36.179	4	197.8	2	197.8	2
WBTSRHH	AB0709	34	1	16	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	17	2	20070919	1333	26.044N	79.659W	142	22.956	4	36.801	4	151.3	2	152.2	2
WBTSRHH	AB0709	34	1	18	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	19	2	20070919	1333	26.044N	79.659W	105	25.712	4	36.459	4	173.2	2	174.9	2
WBTSRHH	AB0709	34	1	20	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	21	2	20070919	1333	26.044N	79.659W	55	28.506	4	36.189	4	197.8	2	197.8	2
WBTSRHH	AB0709	34	1	22	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	34	1	23	2	20070919	1333	26.044N	79.659W	3	29.395	2	36.121	2	194.6	2	194.4	2
WBTSRHH	AB0709	34	1	24	2	20070919	1333	26.044N	79.659W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	1	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	2	2	20070919	1520	26.042N	79.763W	578	6.551	9	34.912	9	139.7	2	139.1	2
WBTSRHH	AB0709	35	1	3	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	4	2	20070919	1520	26.042N	79.763W	438	9.396	2	35.120	2	118.6	2	117.8	6
WBTSRHH	AB0709	35	1	5	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	6	2	20070919	1520	26.042N	79.763W	329	13.150	9	35.662	9	127.2	2	126.0	2
WBTSRHH	AB0709	35	1	7	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	8	2	20070919	1520	26.042N	79.763W	218	17.691	9	36.385	9	144.4	2	138.6	4
WBTSRHH	AB0709	35	1	9	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	10	2	20070919	1520	26.042N	79.763W	129	21.851	9	36.565	9	176.6	2	177.0	2
WBTSRHH	AB0709	35	1	11	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	12	2	20070919	1520	26.042N	79.763W	60	29.423	2	36.477	2	197.1	2	197.1	2
WBTSRHH	AB0709	35	1	13	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	14	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	15	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	16	2	20070919	1520	26.042N	79.763W	4	29.522	2	36.079	2	194.7	2	193.9	2
WBTSRHH	AB0709	35	1	17	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	18	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	19	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	20	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	21	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	22	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	23	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	35	1	24	2	20070919	1520	26.042N	79.763W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	1	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	2	2	20070919	1649	26.036N	79.849W	302	11.895	9	35.483	9	124.0	2	123.6	6
WBTSRHH	AB0709	36	1	3	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	4	2	20070919	1649	26.036N	79.849W	228	16.061	9	36.136	9	141.5	2	140.3	2
WBTSRHH	AB0709	36	1	5	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	6	2	20070919	1649	26.036N	79.849W	169	18.370	9	36.450	9	143.4	2	141.3	2
WBTSRHH	AB0709	36	1	7	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	8	2	20070919	1649	26.036N	79.849W	100	23.659	4	36.499	4	193.7	2	195.9	2
WBTSRHH	AB0709	36	1	9	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	10	2	20070919	1649	26.036N	79.849W	49	29.617	4	36.477	4	196.9	2	196.8	2
WBTSRHH	AB0709	36	1	11	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	12	2	20070919	1649	26.036N	79.849W	3	29.604	2	36.141	2	194.2	2	193.5	2
WBTSRHH	AB0709	36	1	13	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	36	1	14	2	20070919	1649	26.036N	79.849W	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9







WBTSRHH	AB0709	42	1	3	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	4	2	20070920	0450	26.991N	79.784W	268	270	14.993	35.955	2	35.924	4	133.1	2	132.0
WBTSRHH	AB0709	42	1	5	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	6	2	20070920	0450	26.991N	79.784W	190	191	18.642	36.484	4	36.469	4	144.6	2	144.5
WBTSRHH	AB0709	42	1	7	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	8	2	20070920	0450	26.991N	79.784W	139	140	21.280	36.567	2	36.567	2	172.6	2	172.3
WBTSRHH	AB0709	42	1	9	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	10	2	20070920	0450	26.991N	79.784W	91	91	25.758	36.436	2	36.449	4	201.5	2	206.0
WBTSRHH	AB0709	42	1	11	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	12	2	20070920	0450	26.991N	79.784W	40	40	29.558	36.196	4	36.164	4	193.9	2	193.8
WBTSRHH	AB0709	42	1	13	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	14	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	15	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	16	2	20070920	0450	26.991N	79.784W	2	2	29.511	36.161	2	36.163	2	193.8	2	195.9
WBTSRHH	AB0709	42	1	17	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	18	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	19	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	20	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	21	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	22	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	23	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	42	1	24	2	20070920	0450	26.991N	79.784W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	1	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	2	2	20070920	0622	26.993N	79.681W	507	511	7.211	34.938	2	34.938	2	131.4	2	130.4
WBTSRHH	AB0709	43	1	3	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	4	2	20070920	0622	26.993N	79.681W	446	449	9.631	35.176	2	35.178	2	148.6	2	148.2
WBTSRHH	AB0709	43	1	5	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	6	2	20070920	0622	26.993N	79.681W	357	360	12.275	35.535	2	35.537	2	125.5	2	123.2
WBTSRHH	AB0709	43	1	7	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	8	2	20070920	0622	26.993N	79.681W	270	272	16.958	36.285	2	36.287	2	149.8	2	150.1
WBTSRHH	AB0709	43	1	9	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	10	2	20070920	0622	26.993N	79.681W	179	180	19.602	36.619	2	36.620	2	148.6	2	148.2
WBTSRHH	AB0709	43	1	11	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	12	2	20070920	0622	26.993N	79.681W	114	115	24.875	36.583	2	36.592	4	167.3	2	165.7
WBTSRHH	AB0709	43	1	13	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	14	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	15	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	16	2	20070920	0622	26.993N	79.681W	60	60	28.830	36.282	2	36.296	4	186.6	2	209.4
WBTSRHH	AB0709	43	1	17	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	18	2	20070920	0622	26.993N	79.681W	2	2	29.462	36.114	2	36.119	2	183.0	2	184.9
WBTSRHH	AB0709	43	1	19	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	20	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	21	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	22	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	23	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	43	1	24	2	20070920	0622	26.993N	79.681W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	1	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	2	2	20070920	0753	26.987N	79.619W	617	622	6.851	34.929	2	34.933	2	132.6	2	141.8
WBTSRHH	AB0709	44	1	3	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	4	2	20070920	0753	26.987N	79.619W	545	550	8.232	35.001	2	35.004	2	121.5	2	122.9
WBTSRHH	AB0709	44	1	5	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	6	2	20070920	0753	26.987N	79.619W	427	431	11.310	35.377	2	35.378	2	121.5	2	121.7
WBTSRHH	AB0709	44	1	7	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	8	2	20070920	0753	26.987N	79.619W	292	294	16.272	36.165	2	36.163	2	142.7	2	140.0
WBTSRHH	AB0709	44	1	9	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	10	2	20070920	0753	26.987N	79.619W	189	190	20.248	36.702	2	36.696	2	147.6	2	147.8
WBTSRHH	AB0709	44	1	11	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	12	2	20070920	0753	26.987N	79.619W	129	130	24.607	36.674	2	36.671	2	159.8	2	160.2
WBTSRHH	AB0709	44	1	13	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	14	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	15	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	16	2	20070920	0753	26.987N	79.619W	45	46	28.785	36.175	4	36.183	4	198.6	2	198.8
WBTSRHH	AB0709	44	1	17	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	18	2	20070920	0753	26.987N	79.619W	2	2	29.367	36.126	2	36.130	2	194.9	2	194.5
WBTSRHH	AB0709	44	1	19	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHH	AB0709	44	1	20	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0

WBTSRHH	AB0709	44	1	21	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	44	1	22	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	44	1	23	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	44	1	24	2	20070920	0753	26.987N	79.619W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	1	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	2	2	20070920	0930	26.985N	79.503W	736	742	6.609	34.911	138.2	2	137.9	2	137.9	2
WBTSRHH	AB0709	45	1	3	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	4	2	20070920	0930	26.985N	79.503W	642	647	7.895	34.974	123.3	2	123.3	2	123.3	2
WBTSRHH	AB0709	45	1	5	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	6	2	20070920	0930	26.985N	79.503W	563	568	9.205	35.093	118.8	2	118.8	2	118.8	2
WBTSRHH	AB0709	45	1	7	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	8	2	20070920	0930	26.985N	79.503W	466	469	11.792	35.445	123.8	2	123.8	2	123.8	2
WBTSRHH	AB0709	45	1	9	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	10	2	20070920	0930	26.985N	79.503W	396	399	13.274	35.674	130.8	2	130.8	2	130.8	2
WBTSRHH	AB0709	45	1	11	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	12	2	20070920	0930	26.985N	79.503W	308	310	16.929	36.327	170.0	2	170.0	2	171.9	2
WBTSRHH	AB0709	45	1	13	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	14	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	15	2	20070920	0930	26.985N	79.503W	55	55	27.891	36.186	200.2	4	200.2	4	198.8	2
WBTSRHH	AB0709	45	1	16	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	17	2	20070920	0930	26.985N	79.503W	2	2	29.469	36.217	194.0	2	194.0	2	193.7	2
WBTSRHH	AB0709	45	1	18	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	19	2	20070920	0930	26.985N	79.503W	140	141	23.817	36.734	155.6	2	155.6	2	157.0	2
WBTSRHH	AB0709	45	1	20	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	21	2	20070920	0930	26.985N	79.503W	55	55	27.891	36.186	200.2	4	200.2	4	198.8	2
WBTSRHH	AB0709	45	1	22	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	45	1	23	2	20070920	0930	26.985N	79.503W	2	2	29.469	36.217	194.0	2	194.0	2	193.7	2
WBTSRHH	AB0709	45	1	24	2	20070920	0930	26.985N	79.503W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	1	2	20070920	1101	26.988N	79.386W	443	447	14.051	35.800	133.6	2	133.6	2	134.7	6
WBTSRHH	AB0709	46	1	2	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	3	2	20070920	1101	26.988N	79.386W	631	636	9.661	35.164	119.4	2	119.4	2	120.1	2
WBTSRHH	AB0709	46	1	4	2	20070920	1101	26.988N	79.386W	358	361	17.235	36.389	180.8	2	180.8	2	184.8	2
WBTSRHH	AB0709	46	1	5	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	6	2	20070920	1101	26.988N	79.386W	268	270	18.909	36.632	184.0	2	184.0	2	184.2	2
WBTSRHH	AB0709	46	1	7	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	8	2	20070920	1101	26.988N	79.386W	179	180	21.375	36.856	176.4	2	176.4	2	176.0	2
WBTSRHH	AB0709	46	1	9	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	10	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	11	2	20070920	1101	26.988N	79.386W	110	111	25.814	36.426	177.7	2	177.7	2	174.6	2
WBTSRHH	AB0709	46	1	12	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	13	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	14	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	15	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	16	2	20070920	1101	26.988N	79.386W	110	111	25.814	36.426	177.7	2	177.7	2	174.6	2
WBTSRHH	AB0709	46	1	17	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	18	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	19	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	20	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	21	2	20070920	1101	26.988N	79.386W	39	40	29.481	36.173	186.4	2	186.4	2	199.2	4
WBTSRHH	AB0709	46	1	22	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	46	1	23	2	20070920	1101	26.988N	79.386W	3	3	29.478	36.173	194.7	2	194.7	2	193.9	2
WBTSRHH	AB0709	46	1	24	2	20070920	1101	26.988N	79.386W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	1	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	2	2	20070920	1242	26.991N	79.286W	601	606	12.648	35.659	151.1	2	151.1	2	151.1	2
WBTSRHH	AB0709	47	1	3	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	4	2	20070920	1242	26.991N	79.286W	466	469	15.120	35.991	145.1	2	145.1	2	147.6	2
WBTSRHH	AB0709	47	1	5	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	6	2	20070920	1242	26.991N	79.286W	346	349	17.813	36.480	183.3	2	183.3	2	181.9	2
WBTSRHH	AB0709	47	1	7	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	8	2	20070920	1242	26.991N	79.286W	268	270	18.702	36.602	183.1	2	183.1	2	183.4	2
WBTSRHH	AB0709	47	1	9	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	10	2	20070920	1242	26.991N	79.286W	190	192	20.342	36.734	166.9	2	166.9	2	164.9	2
WBTSRHH	AB0709	47	1	11	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	12	2	20070920	1242	26.991N	79.286W	119	120	24.725	36.667	190.3	2	190.3	2	188.4	2
WBTSRHH	AB0709	47	1	13	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9
WBTSRHH	AB0709	47	1	14	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	9	-999,000	9	-999.0	9	-999.0	9

WBTSRHB	AB0709	47	1	15	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	16	2	20070920	1242	26.991N	79.286W	50	-999	28.872	-999,000	2	198.7	2	200.7	2
WBTSRHB	AB0709	47	1	17	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	18	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	19	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	20	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	21	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	22	2	20070920	1242	26.991N	79.286W	3	-999	29.509	-999,000	2	194.3	2	193.8	2
WBTSRHB	AB0709	47	1	23	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	47	1	24	2	20070920	1242	26.991N	79.286W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	1	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	2	2	20070920	1356	26.990N	79.203W	472	-999	15.934	-999,000	2	173.0	2	173.8	2
WBTSRHB	AB0709	48	1	3	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	4	2	20070920	1356	26.990N	79.203W	367	-999	17.694	-999,000	2	191.8	2	189.3	6
WBTSRHB	AB0709	48	1	5	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	6	2	20070920	1356	26.990N	79.203W	262	-999	18.876	-999,000	2	180.1	2	185.0	4
WBTSRHB	AB0709	48	1	7	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	8	2	20070920	1356	26.990N	79.203W	99	-999	26.274	-999,000	2	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	9	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	10	2	20070920	1356	26.990N	79.203W	50	-999	28.800	-999,000	2	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	11	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	12	2	20070920	1356	26.990N	79.203W	3	-999	29.321	-999,000	2	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	13	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	14	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	15	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	16	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	17	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	18	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	19	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	20	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	21	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	22	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	23	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9
WBTSRHB	AB0709	48	1	24	2	20070920	1356	26.990N	79.203W	-999	-999	-999,000	-999,000	9	-999.0	9	-999.0	9