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Hydrographic Measurements Collected Aboard the NOAA Ship R/V Ronald H Brown, 16 April - 5 May 2009: Western Boundary Time Series Cruise RB-0901 (AB0904)

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September 2015

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Abstract

This report summarizes the April 16 - May 5, 2009 cruise on the *R/V Ronald H Brown* involving full-water-column CTD and lowered ADCP profiles, along with shipboard ADCP profiles, conducted within the Florida Straits, the Northwest Providence Channel, and east of Abaco Island, Bahamas. A package consisting of a Seabird Electronics Model 9/11+ CTD O2 system, a RDI 150 kHz Workhorse Lowered Acoustic Doppler Current Profiler, a RDI 300 kHz Workhorse Lowered Acoustic Doppler Current Profiler, and 23 10-liter Niskin bottles, was to be lowered to the bottom. This report includes a description of the calibrations procedures and profiles of pressure, salinity (conductivity), temperature, and dissolved oxygen concentration. Water samples were also collected at various depths and analyzed for salinity and oxygen concentration to aid with CTD calibration. A total of 60 CTD-O2/LADCP stations were occupied. PIES/CPIES operations were conducted from 5 sites, involving deployment and telemetry. Mooring operations include recovery of six moorings with a mixture of current meters, Acoustic Doppler Current Profilers (ADCPs), and temperature/salinity recorders, and two bottom landers with bottom pressure recordings. Seven moorings and two bottom landers were deployed. As a part of NOAA's contribution to the Global Surface Drifter Program six surface drifters were deployed.

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, 35 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

(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 April-May 2009 (Figure 1 and Table 2). The *R/V Ronald H Brown* departed Charlseton, SC at 14:30 local time on April 16, 2009. A total of 60 LADCP/CTD/Rosette stations were occupied. Water samples (up to 23 for each station), LADCP, and CTD data were collected on each cast to within 20 m of the bottom. Salinity and dissolved oxygen samples were analyzed from the majority of bottles sampled on the rosette. Mooring operations included recovery of six subsurface moorings and two bottom landers and deployment/redeployment of seven subsurface moorings and two bottom landers with a mixture of current meters, ADCP's, and temperature/salinity recorders. The cruise ended in Charleston on May 5, 2009.

The goals of cruise RB-0901 were to:

1. Service the U.K. moorings within the western boundary array of the RAPID/MOCHA trans-basin observing system. This includes six taut wire subsurface current meter/CTD moorings, and two "bottom-lander" moorings containing high-precision bottom pressure gauges.
2. Conduct hydrographic (CTDO2) and direct current profiling (lowered-ADCP, "LADC") stations along the 26.5° N mooring section off Abaco, Bahamas; across two sections of the Florida Straits, 26N and 27N; and across the Northwest Providence Channel, including continuous shipboard ADCP observations; and
3. Service one bottom pressure/inverted echo sounder (PIES) moorings and retrieve data from five additional PIES moorings via acoustic telemetry.

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

Name	Responsibility	Affiliation
Chris Meinen	Chief Scientist	NOAA/AOML
Andrew Stefanick	Technician	NOAA/AOML
Carlos Fonseca	Scientist	CIMAS/ U. Miami
Kyle Seaton	Technician	RSMAS/ U. Miami
Pedro Pena	Technician	NOAA/AOML
Benjamin Shaw	Student	CIMAS/ U. Miami
Wendy Saintval	Student	CIMAS/ U. Miami
Darren Rayner	Scientist	NOC Southampton
Harry Bryden		NOC Southampton
Emma Heslop		NOC Southampton
Paul Wright	Scientist	NOC Southampton
Rob McLachlan	Technician	NOC Southampton
Christian Crowe	Technician	NOC Southampton
Colin Hutton	Technician	NOC Southampton
David Childs	Technician	NOC Southampton
Stephen Whittle	Technician	NOC Southampton

Table 2: Abaco Cruise – CTD Cast Summary

Station	Date	Time (GMT)	Latitude	Longitude	Depth
1	04/18/09	15:39:36	26.525N	76.892W	314
2	04/18/09	17:42:58	26.517N	76.832W	1123
3	04/18/09	22:00:11	26.500N	76.743W	3895
4	04/19/09	02:56:12	26.513N	76.652W	4604
5	04/19/09	07:54:39	26.500N	76.565W	4899
6	04/19/09	13:35:44	26.504N	76.474W	4909
7	04/19/09	18:49:29	26.496N	76.347W	4933
8	04/20/09	00:25:44	26.501N	76.218W	4884
9	04/20/09	05:34:32	26.500N	76.087W	4872
10	04/20/09	10:35:50	26.499N	75.897W	4808
11	04/20/09	15:50:18	26.500N	75.703W	4757
12	04/20/09	21:19:56	26.499N	75.500W	4752
13	04/21/09	03:14:58	26.500N	75.300W	4700
14	04/21/09	08:00:53	26.500N	75.083W	4670
15	04/21/09	13:19:17	26.500N	74.800W	4594
16	04/21/09	19:01:58	26.500N	74.517W	4556
17	04/22/09	00:40:26	26.500N	74.233W	4602
18	04/22/09	06:40:51	26.500N	73.867W	4808
19	04/22/09	12:27:59	26.501N	73.498W	5031
20	04/22/09	18:45:44	26.500N	73.133W	5126
21	04/23/09	01:01:34	26.498N	72.767W	5214
22	04/23/09	06:58:39	26.500N	72.383W	5267
23	04/23/09	12:53:38	26.500N	72.000W	5369
24	04/23/09	20:17:08	26.500N	71.500W	5509
25	04/24/09	03:24:53	26.500N	71.000W	5576
26	04/24/09	10:41:22	26.501N	70.502W	5579
27	04/24/09	17:35:01	26.500N	70.000W	5580
28	04/25/09	00:49:23	26.500N	69.502W	5397
29	04/27/09	03:44:25	26.375N	75.706W	4685
30	04/27/09	06:44:30	26.375N	75.706W	3402
31	04/28/09	07:54:44	26.493N	76.472W	4908
32	04/29/09	01:23:43	26.455N	76.630W	3399
33	04/30/09	06:43:06	26.473N	76.727W	3801
34	04/30/09	23:09:50	26.466N	76.711W	4099
35	05/01/09	03:38:59	26.372N	76.746W	4100
36	05/01/09	21:54:55	26.433N	78.667W	749
37	05/01/09	23:57:37	26.346N	78.711W	700
38	05/02/09	01:59:59	26.250N	78.767W	506
39	05/02/09	03:30:56	26.166N	78.800W	431
40	05/02/09	05:26:26	26.067N	78.849W	288
41	05/02/09	09:00:30	26.058N	79.226W	306
42	05/02/09	10:12:23	26.052N	79.311W	475
43	05/02/09	11:38:52	26.043N	79.405W	585
44	05/02/09	13:08:24	26.039N	79.481W	663
45	05/02/09	15:28:45	26.049N	79.570W	752
46	05/02/09	17:19:32	26.044N	79.662W	692
47	05/02/09	19:16:26	26.051N	79.765W	594
48	05/02/09	20:36:10	26.045N	79.849W	306
49	05/02/09	21:50:16	26.046N	79.930W	259
50	05/02/09	22:49:46	26.042N	79.997W	236
51	05/03/09	00:08:14	26.042N	80.059W	152
52	05/03/09	06:43:33	26.997N	79.936W	135
53	05/03/09	07:50:23	26.998N	79.868W	246
54	05/03/09	09:03:00	26.993N	79.787W	367
55	05/03/09	10:21:33	26.995N	79.686W	528
56	05/03/09	11:47:06	27.009N	79.621W	634
57	05/03/09	13:46:35	26.987N	79.502W	733
58	05/03/09	15:34:35	26.979N	79.383W	667
59	05/03/09	17:10:07	26.994N	79.284W	606
60	05/03/09	18:29:10	26.998N	79.200W	470

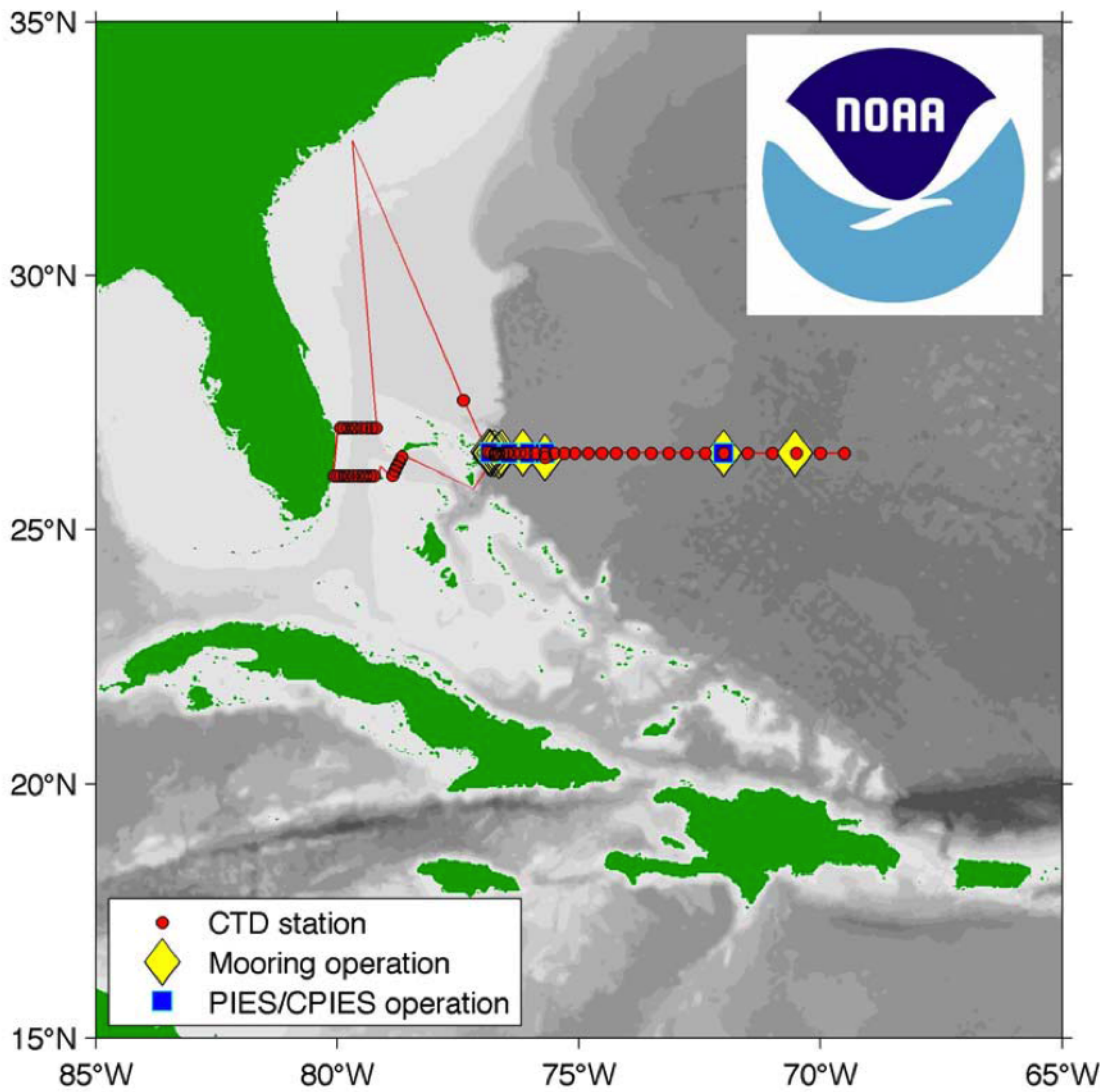


Figure 1: Abaco, Florida Straits, and NWPC CTD station and mooring locations. Land masses are shaded green.

2 Cruise Narrative

The following section is a personal communication of Chris Meinen.

The cruise was originally scheduled to depart from Charleston on April 15th and return to Charleston on May 5th, however problems with the engines (specifically with a field exciter in a propulsion unit) resulted in Commanding Officer Capt. Gerd Glang pushing back the schedule for the cruise by one day. The cruise departed from Charleston on April 16th at 14:30 (local) heading towards the east side of Abaco Island, Bahamas.

Initially the plan was to do a test cast en route and then clear Bahamian Customs and Immigration at Marsh Harbor in the morning on Saturday, April 18th. The test cast was done in the evening on April 17th as planned, however, in the morning on April 18th the waves were deemed too large for a safe deployment of the small boat for clearing in Marsh Harbor. The Customs and Immigration visit was postponed until later in the cruise. Subsequent to this decision the Brown immediately headed to the site of the WB-ADCP mooring, where the old mooring was recovered and the new mooring was deployed.

The ship then transited to the site of the first CTD station on the "Abaco" line and the section commenced. During the Abaco section, telemetry data was obtained from the PIES at sites A, C, and E as well as from the CPIES at site D. Telemetry was attempted with the PIES at site B, however the instrument failed to respond. Also during the completion of the Abaco section, several casts were used for the calibration of Microcat sensor packages for use on the UK moorings either just recovered or to be deployed later in the cruise, and several mooring releases were also tested on the later casts in this line. The Abaco CTD section (28 stations) was completed on Friday, April 24th.

Mooring operations by the UK group commenced at first light on Saturday, April 25th. During the mooring operations, additional attempts to telemeter, and then to release and recover the PIES at site B were made, however these efforts failed. As a result a 'backup' IES was deployed at the B site. A second telemetry download at the PIES at site A was successfully completed during the mooring operations because the first download had been rather noisy. Also, during the mooring operations a bottom moored pressure sensor owned by the University of Miami was scheduled to be recovered at the request of Dr. Bill Johns. The attempt at recovery failed when the mooring abruptly sank during hook-up, probably due to the vessel prop destroying several of the mooring flotation spheres. The moored sensor and acoustic releases are now likely irretrievably lost.

After the mooring operations were completed on Friday, May 1st the ship transited to the Northwest Providence Channel. Bahamian Customs and Immigration were cleared at Port Lucaya, Grand Bahama Island. Immediately after the customs clearance procedures were completed, the short (5 station) CTD section across the Northwest Providence Channel was initiated, followed by sections across the Florida Straits at 26°N and 27°N (11 and 9 stations, respectively). After the final CTD station along 27°N, the ship collected two additional smooth shipboard ADCP sections along the 27°N section for aiding in tidal and

resolution analyses.

The ship returned to Charleston on May 5th, one day earlier than required, at the request of the chief scientist. Note that during the cruise six surface drifters were deployed as part of the NOAA Surface Drifter program.

3 Inverted Echo-Sounder Operations

NOAA maintains a line of inverted echo sounders (IES) along 26°30' N as part of its Western Boundary Time Series project. From the 5 sites where data telemetry was attempted, 4 were very successful (sites A, C, D and E). Data telemetry was tried twice at site B but was unable to establish communication. Release commands were also sent but the instrument never replied. The instrument was considered lost. A replacement using an older model was then deployed at this site. The activities involving inverted echo sounders are summarized in Table 3.

Table 3: Inverted echo-sounder locations and operation.

IES Site	Type	Latitude	Longitude	Operation
A	PIES	26°30.7' N	76°50.4' W	Telemetry
B	PIES	26°29.6' N	76°28.3' W	Deployment
C	PIES	26°30.0' N	76°05.7' W	Telemetry
D	CPIES	26°30.0' N	75°42.2' W	Telemetry
E	PIES	26°29.9' N	72°00.3' W	Telemetry

4 Mooring Operations

In total six moorings and two landers were recovered, and seven moorings and two landers were deployed for the UK Rapid-MOC project. Positions of the mooring recoveries and deployments are given in the two tables below, Table 4 and Table 5. Recovery of a third lander was attempted for Bill Johns from RSMAS, Miami but this was lost when attempting to hook into it from the ship.

Instrumentation recovered from the moorings consisted of 52 SeaBird SBE37 MicroCAT CTDs, four SeaBird SBE26 Bottom Pressure Recorders (BPRs), 23 Aanderaa RCM11 current meters and one RDI 75kHz Longranger ADCP. Of these instruments three MicroCATs were flooded so yielded no data. The replacement moorings consist of 54 SeaBird SBE37 CTDs, four Seabird SBE53 BPRs, fourteen Aanderaa RCM11 current meters, nine Nortek Aquadopp current meters and one RDI 75kHz Longranger ADCP.

In addition to the established mooring sites, an extra mooring was deployed to compare different makes of current meter. This mooring had one each of a Nortek Aquadopp, an InterOcean S4, an Aanderaa RCM11, a Sontek Argonaut MD, a TRDI Doppler Volume Sampler and a TRDI 300kHz Workhorse Sentinel ADCP.

The current meter comparison mooring will be recovered in Autumn 2009, with the main moorings recovered in Spring 2010, except the landers (WBL1 and WBL2) which will be deployed for 2 years with recovery in 2011.

Mooring operations were conducted from the stern with a double barrel winch and dual reeler system used in conjunction with a floating block raised and lowered from the A-frame through use of the ship's airtuggers. The ship's cranes were used for anchor deployments.

Prior to deployment cross calibrations of the MicroCAT CTDs were completed by lowering the instruments on the shipboard CTD frame with five-minute bottle stops to allow the slower responding MicroCAT sensors time to stabilize relative to the shipboard CTD. Eight casts (stations 11, 12, 15-17, 19-20, and 23) with up to six instruments were combined with the long WBTS section east of Abaco Island, and a further six casts (stations 30-35) with up to twelve instruments completed during the nights of the mooring operations. Acoustic releases were also lowered on the frame and tested at depth prior to their use on moorings.

Table 4: Summary of U.S. mooring recovery operations.

Mooring Site	NMFD-ID	Deployment Cruise	Latitude (N)	Longitude (W)	Date	Time
WB6	2007/07	RB0701	26° 30.02'	70° 31.21'	25/4/09	10:48
WB4	2008/04	SJ0408	26° 25.16'	75° 42.29'	27/4/09	10:45
WBL2	2007/06	RB0701	26° 31.04'	76° 08.86'	27/4/09	17:08
WBH2	2008/08	SJ0408	26° 27.90'	76° 39.03'	28/4/09	17:15
WB2	2008/03	SJ0408	26° 30.12'	76° 44.52'	29/4/09	10:42
WBL1	2007/05	RB0701	26° 30.38'	76° 44.68'	29/4/09	15:24
WB1	2008/02	SJ0408	26° 30.00'	76° 49.23'	30/4/09	10:31
WBADCP	2008/05	SJ0408	26° 31.52'	76° 52.12'	18/4/09	14:02
E-lander	n/a	n/a	26° 30.52'	71° 58.38'	25/4/09	20:36

Table 5: Summary of U.S. mooring deployment operations.

Mooring Site	Latitude (N)	Longitude (W)	Depth	Date of Deployment	Time
WBADCP	26° 31.54'	76° 52.08'	593	18/4/09	13:52
WB6	26° 29.691'	70° 31.313'	5488	25/4/09	13:54
WB4	26° 21.180'	75° 43.320'	4713	26/4/09	21:04
WBL2	26° 21.261'	75° 42.949'	4713	26/4/09	22:39
WBCM	26° 30.0'	76° 35.986'	4825	28/4/09	13:16
WBH2	26° 29.076'	75° 37.980'	4736	28/4/09	16:24
WB2	26° 30.805'	76° 44.425'	3884	29/4/09	22:04
WBL1	26° 30.378'	76° 44.629'	3882	29/4/09	14:27
WB1	26° 30.132'	76° 49.038'	1390	30/4/09	19:03

5 *Surface Drifters*

Positions of the deployments of the surface drifters are given in Table 6.

Table 6: Summary of drifter deployments.

Drifter ID	Date	Time	Latitude (N)	Longitude (W)
88646	04/21/2009	21:52	26° 30.00'	74° 30.59'
88627	04/22/2009	04:35	26° 29.99'	73° 59.85'
88624	04/22/2009	15:33	26° 30.01'	73° 29.34'
88642	04/22/2009	22:18	26° 29.99'	73° 00.04'
88638	05/03/2009	14:37	27° 99.60'	79° 29.59'
88628	05/03/2009	16:18	26° 59.83'	79° 22.68'

6 *Standards and Pre-Cruise Calibrations*

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

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 911plus 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 list of sensors used during the cruise can be seen in Table 7.

Table 7: Equipment used during AB0904

Instrument	SN	Stations	Use
Sea-Bird SBE32 24-place Carousel Water Sampler	328531-0031	1-60	
Sea-Bird SBE9plus CTD	09P36257-378	1-60	
Paroscientific Digiquartz Pressure Sensor	92973	1-60	
Sea-Bird SBE3plus Temperature Sensor	4799	1-60	primary
Sea-Bird SBE3plus Temperature Sensor	2958	1-60	secondary
Sea-Bird SBE4C Conductivity Sensor	2980	1-60	primary
Sea-Bird SBE4C Conductivity Sensor	1346	1-60	secondary
Sea-Bird SBE43 Dissolved Oxygen Sensor	1348	1-60	primary
Sea-Bird SBE43 Dissolved Oxygen Sensor	0154	1-60	secondary
Sea-Bird SBE5T Pump	3897	1-60	primary
Sea-Bird SBE5T Pump	3953	1-60	secondary
Simrad 807 Altimeter AOML		1-60	range 280m
RDI LADCP - 150 kHz Broad Band	1133	1-28	downlook
RDI LADCP - 300 kHz Workhorse	1410	1-17 36-60	uplook
RDI LADCP - 300 kHz Workhorse	1898	18-28 36-60	uplook/downlook

6.1 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 AB0904, serial numbers (s/n) 2980 and 1346. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue,

Washington during March 2009. The coefficients shown in Table 8 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 8: Calibration coefficients for the conductivity sensors.

s/n 2980	s/n 1346
March 17, 2009	March 19, 2009
$g = -1.00406373e+01$	$g = -4.02150996e+00$
$h = 1.37194507e+00$	$h = 5.29684879e+01$
$i = -1.35099693e-04$	$i = 7.18463174e-06$
$j = 7.95774772e-05$	$j = 3.06584010e-05$
$CP_{cor} = -9.5700e-08$	$CP_{cor} = -9.5700e-08$
$CT_{cor} = 3.2500e-06$	$CT_{cor} = 3.2500e-06$

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 $\pm 0.001^\circ\text{C}$ per year and resolution of $0.001^\circ\text{C}/\text{year}$ at 24 samples per second. The SBE 3 thermometer has a fast response time of 0.065 seconds.

Two temperature sensors (SBE 3plus) were used during AB0904, serial numbers (s/n) 4799 and 2958. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington during March 2009. The following coefficients (Table 9) 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:

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

Table 9: Calibration coefficients for the temperature sensors.

s/n 4799	s/n 2958
March 18, 2009	March 18, 2009
$g = 4.36401867\text{e-}03$	$g = 4.39493929\text{e-}03$
$h = 6.37068419\text{e-}04$	$h = 6.73116035\text{e-}04$
$i = 2.09335409\text{e-}05$	$i = 3.01662761\text{e-}05$
$j = 1.76469979\text{e-}06$	$j = 2.82477227\text{e-}06$
$f_0 = 1000.0$	$f_0 = 1000.0$

6.3 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 sensors utilized during AB0904 was s/n 973. Pre-cruise sensor calibrations was performed at Sea-Bird Electronics, Inc. in Bellevue, Washington on August 2004. The following coefficients (Table 10) were entered into SEASAVE[®] using the configuration file:

Pressure coefficients are first formulated into:

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

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

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

where t is pressure period (μ s). SEASAVE[®] automatically implements this equation.

Table 10: Calibration coefficients for the pressure sensor.

s/n 973
August 15, 2004
$c_1 = -4.481307e+04$
$c_2 = -6.537544e-01$
$c_3 = 1.443480e-02$
$d_1 = 3.647800e-02$
$d_2 = 0.000000e+00$
$t_1 = 3.040635e+01$
$t_2 = -4.877567e-04$
$t_3 = 4.277270e-06$
$t_4 = 2.826111e-09$
$t_5 = 0.000000e+00$
Slope = 1.00001000
Offset = -1.66
AD590M = 1.285440e-02
AD590B = -8.443557e+00

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 1348 and 0154 were used during AB0904. The following oxygen coefficients (Table 11) were entered into SEASAVE® using the configuration file:

Table 11: Calibration coefficients for the dissolved oxygen sensors.

s/n 1348	s/n 0154
March 17, 2009	March 17, 2009
Soc = 0.4793	Soc = 0.4473
Voffset = -0.5152	Voffset = -0.5133
Tau20 = 1.52	Tau20 = 1.42
A = -9.4740e-04	A = -7.9640e-04
B = 1.4866e-04	B = 1.1544e-04
C = -2.8206e-06	C = -2.5069e-06
$E_{nominal}$ = 0.036	$E_{nominal}$ = 0.036

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

Dissolved oxygen concentration is calculated according to:

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

where Soc , V_{offset} , tau , A , B , C , E and $p1$ are the calibration coefficients shown above and V is the instrument voltage (V). T , S and P are the temperature, salinity and pressure measured by the CTD. K is the temperature in the absolute scale (K), $\delta v/\delta t$ is the oxygen voltage time derivative, $station$ is the station number, and $OXSAT$ is the oxygen saturation value calculated according to (Weiss, 1970):

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

where θ is the absolute temperature (K); and

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

SEASAVE® automatically implements this equation.

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

$$\begin{aligned}D &= 1 + H_1 * (e^{\left(\frac{P(i)}{H2}\right)} - 1) \\C &= e(-1 * \left(\frac{Time(i) - Time(i - 1))}{H3}\right)) \\O_V(i) &= O_{volt}(i) + V_{offset} \\O_{newvolts}(i) &= a * \frac{a}{D} \\O_{finalvolts}(i) &= O_{newvolts}(i) - V_{offset}\end{aligned}$$

Where:

i = indexing variable (must be a continuous time series to work; can be performed on bin averaged data), where $i = 1:\text{end}$ (end is largest data index point plus 1).

$P(i)$ = pressure (decibars) at index point i .

$Time(i)$ = time (seconds) from start of index point i .

$O_{volt}(i)$ = SBE 43 oxygen voltage output directly from sensor, with no calibration or hysteresis corrections, at index point i .

V_{offset} = correction for an electronic offset that is applied to voltage output of sensor. V_{offset} correction is always negative (see factory calibration sheet for this coefficient). V_{offset} is added to raw voltages prior to hysteresis correction. At end of hysteresis corrections, V_{offset} is removed prior to data conversion using SBE 43 calibration equation (see $O_{finalvolts}(i)$).

$O_V(i)$ = dissolved oxygen voltage value with V_{offset} correction (made prior to hysteresis correction) at index point i .

D and C are temporary variables used to simplify expression in processing loop.

$H1$ = amplitude of hysteresis correction function. Default = -0.033, range = -0.02 to -0.05 (varies from sensor to sensor).

$H2$ = function constant or curvature function for hysteresis. Default = 5000.

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

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

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

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

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 23, 10-liter Bullister-style bottles. 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 Simrad 807 altimeter. The other underwater electronic components consisted of two RDI LADCPs. A total of 60 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 SBE9 plus CTD, SBE32 pylon, auxiliary sensors, and altimeter was provided through the sea cable from the SBE911plus deck unit. The rosette system was suspended from a UNOLS-standard three-conductor 0.322" electro-mechanical sea cable on the forward winch for stations 1-44 and a 0.375" cable on the aft winch from stations 45-60.

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.

7.1 *System Problems*

During the test cast CTD s/n 09P10779-363 was used, however it was determined that the on-deck pressure prior to the cast for that sensor was much too high (6.3 dbar). After the completion of the cast this value was almost the same (5.8 dbar). Because this value was so large compared to previous values when this CTD was used, it was decided to swap in a different CTD unit (CTD s/n 09P36257-378). Subsequent to this cast, the same CTD equipment was used for the entire cruise. The unit s/n 09P10779-363 was sent to Seabird for evaluation. After several tests the problem was found on the acquisition circuit in the SBE-9 that was misreading the internal temperature of the pressure sensor, which enters in the algorithm to calculate the pressure.

Only two more significant problems developed with the CTD system during the cruise. During casts 1 through 5 or so, the 0.322 CTD wire (sea-cable) on the forward winch was having wrap problems and the package had to be raised and lowered small distances when it was near the deepest point in the cast before the package could be brought up in order to improve the wire wrapping. After several deep casts this problem went away.

The most significant issue first became a problem with CTD station 30. During this cast, which was one of the calibration dip casts for the UK microcat sensors, the CTD recorded 217 modulo errors. The next day during the next microcat dip cast (CTD station#31) a total of 114 modulo errors were recorded. The nature of the problem was not immediately obvious because the modulo errors only occurred on the upcast, when the package was near 2500-3000 dbar (on 4800 dbar casts) and only when the package was moving (i.e. not during the 5 minute bottle stops). As a first effort to solve the problem all of the connections on the package (e.g. sea cable, sensor cables) were checked and the ship ET switched the communication ports on the back of the deck unit for the carousel. On the subsequent cast (CTD station 32) there was only 1 modulo error, which may have been due to on-the-fly changing of the Seabird software to account for the communication port changes (which had been forgotten prior to starting the cast). The next cast (CTD station 33) had no modulo errors.

On CTD station 34 the modulo error problem returned with more than 300 modulo errors (again only in the 2500-3000 dbar range, only on the up-cast, and only when the package was moving). The sea cable connection was reseated again by the ship Survey Tech and on the subsequent cast (CTD station 35) only 14 modulo errors were observed (same pattern as the previous cast). The next morning it was found that the cable to the water sampler/carousel had not been reseated with all of the other cables a few days earlier. When the connection was pulled off, water was found inside the connector and the grease had turned yellow. Cleaning and reseating this cable appeared to have solved the problem through the end of the Northwest Providence Channel section, although all of the remaining casts were in much shallower water (less than 800 dbar), which may also explain the reason for the improved performance.

On CTD station 43, modulo errors began returning again in a small number (9) despite the cast being fairly shallow (<800 dbar), and on CTD station 44 there were 28 modulo errors and more importantly there were about a half-dozen significant spikes in the pressure, temperature, and salinity. The best guess at this point was that there was an electrical contact problem in either the termination or the sea cable itself, or an electrical problem in the CTD fish or in the deck unit. None of these sources of error specifically lent themselves to the exact conditions we were observing. Because the aft winch wire was already terminated and ready to use, the decision was made to swap from the forward winch drum carrying 0.322 wire to the aft winch drum carrying a new spool of 0.375 wire. Approximately one hour was required to switch over from the 0.322 wire to the 0.375 wire.

During the quick testing of the new 0.375 wire a file was created as CTD station 45, however that file contains only on-deck data. The actual cast done was called CTD station 45A.

The files for station 45 were deleted after the casts and the station 45A files were renamed as station 45. The subsequent casts along the 26°N CTD section in the Straits of Florida and during the 27°N did not have any modulo errors, which confirms that the problem was either in the termination or in the sea-cable (because the same CTD fish and deck unit were used with the new wire).

On CTD station 43 it appears that something was causing the oxygen and conductivity sensors to diverge in the upper 40-50 dbar. The problem was flow related, not an electronics problem with the sensors. Below 50 m the offsets/errors went away. The problem continued through CTD station 55 despite adjusting the tubing and changing the pump between sites (This report was done much later after the cruise and is unclear which pump was swapped out). Between CTD stations 55 and 56 the flow tubes were flushed from the outlet and this solved the problem.

7.2 Data Acquisition Procedure

The deck watch prepared the rosette typically within a few minutes prior to each cast. All valves, vents, and lanyards were checked for proper orientation. The bottles were cocked and all hardware and connections rechecked. Once stopped on station, the LADCP was turned on and syringes were removed from the CTD sensor intake ports. As directed by the deck watch leader, the CTD was powered on and the data acquisition system started.

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 squirt 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.

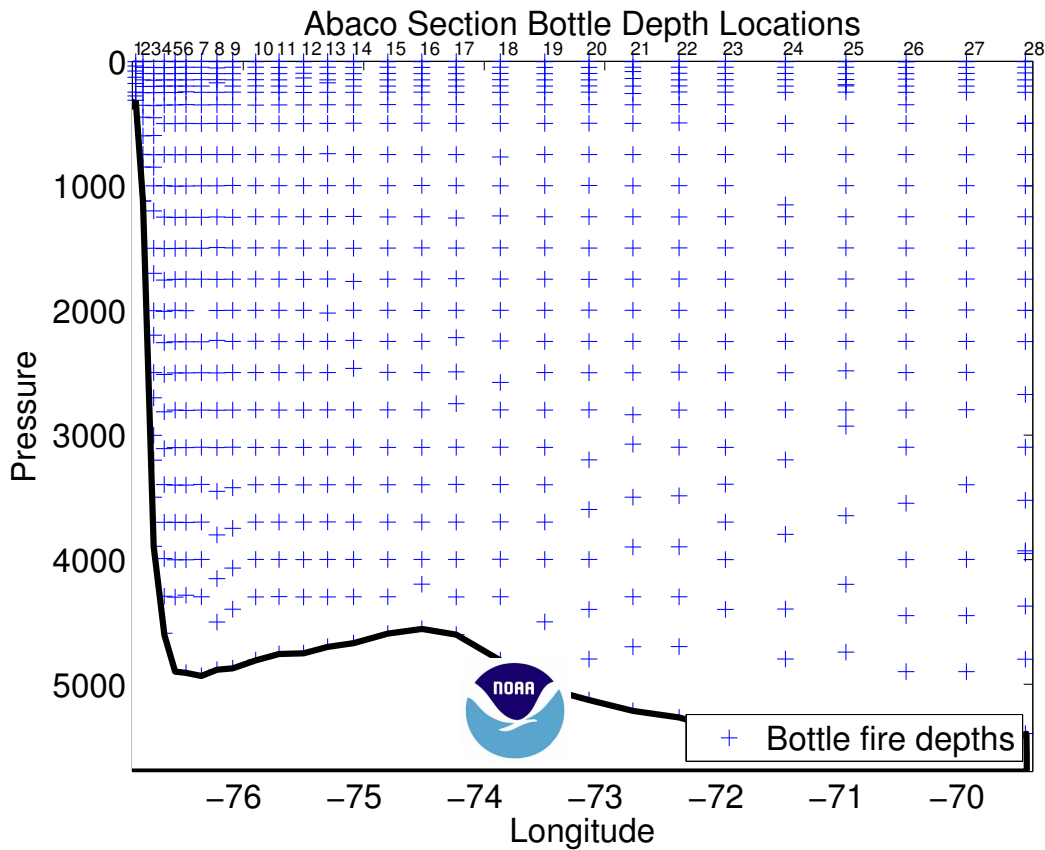


Figure 2: Bottle locations for 26.5°N Deep Western Boundary Current section east of Abaco Island.

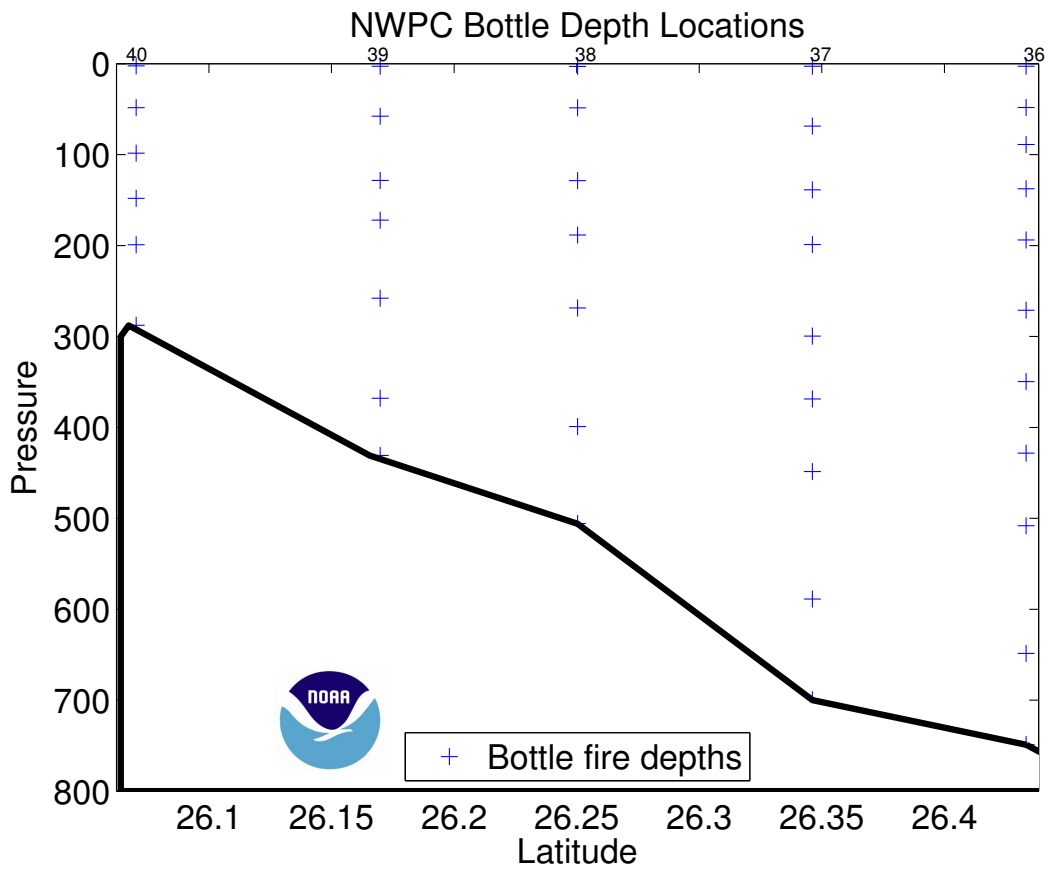


Figure 3: Bottle locations for along the Northwest Providence Channel section.

Figure of the 26N line

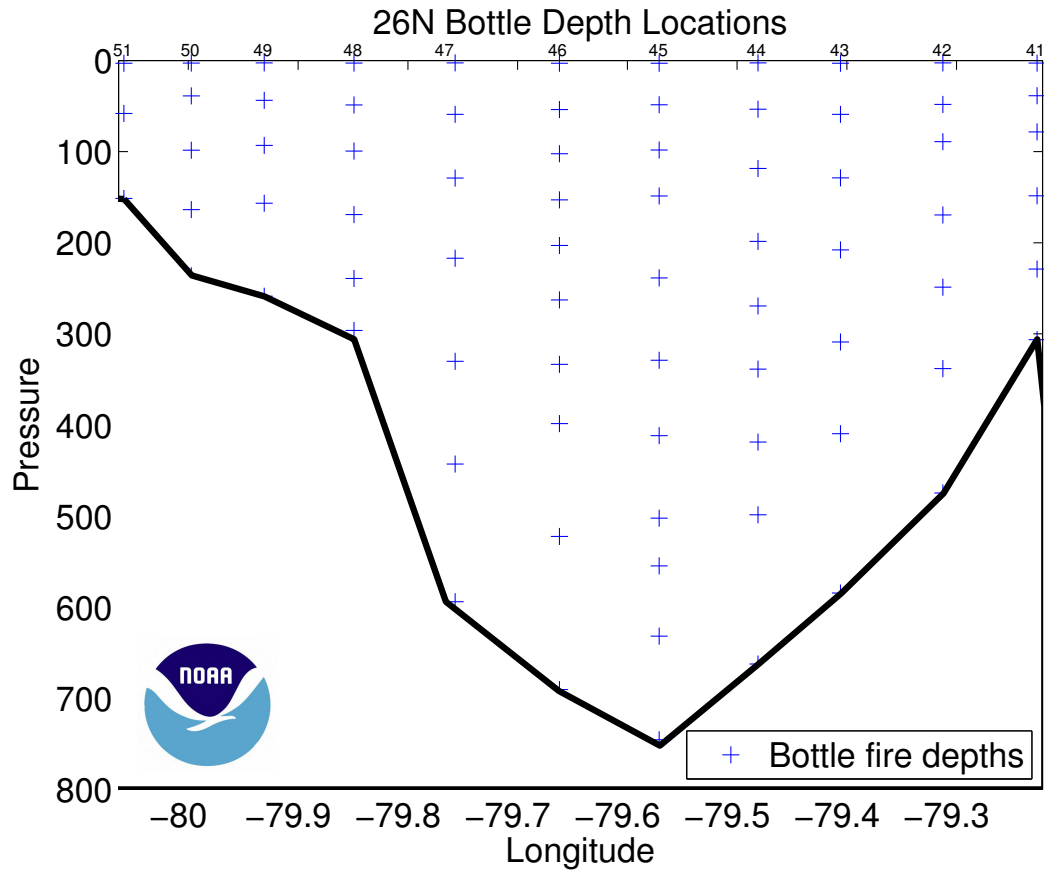


Figure 4: Bottle locations for 26°N section in the Florida Straits.

Figure of the 27N line

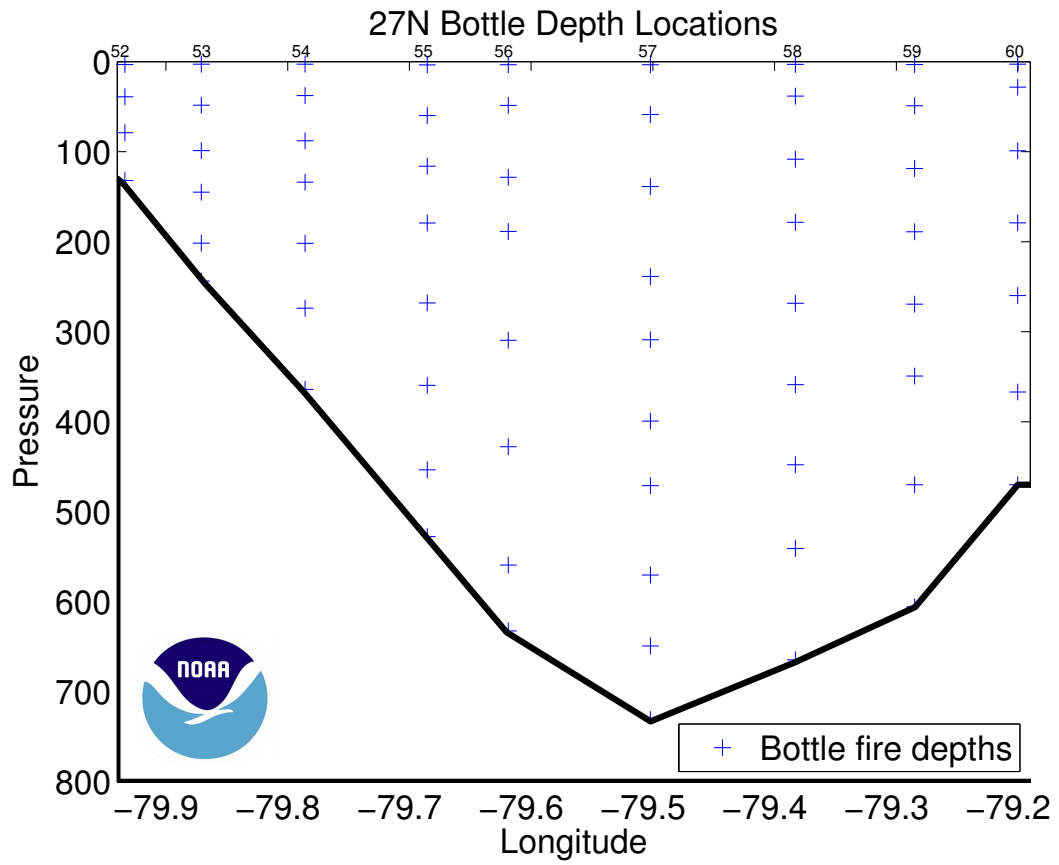


Figure 5: Bottle locations for 27°N section in the Florida Straits.

7.3 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using the SEABIRD SBE Data Processing package and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave (version 7.18c) on the Windows workstation were copied onto the CTD processing laptop, and processed to a 1-dbar series and a 1-second time series. Bottle trip values were extracted and a 1-decibar (dbar) down cast pressure series created.

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

1. DATCNV converts raw data into engineering units and creates a .ROS bottle file. Both down and up casts were processed for scan, elapsed time(s), depth, pressure, t0 ITS-90 C, t1 ITS-90 C, c0 S/cm, c1 S/cm, salinity (PSU), salinity 2 (PSU), oxygen voltage V, oxygen 2 voltage V, altimeter, optical sensor, oxygen umol/kg, oxygen 2 umol/kg, oxygen mll/l, oxygen 2 ml/l, oxygen dv/dt, oxygen dv/dt 2, latitude, and longitude. 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. Secondary conductivity and oxygen were automatically advanced by 0.073 seconds. The primary conductivity was further aligned subtracting -0.007 and the secondary -0.014. The primary oxygen used 1.066 and the secondary 1.059.
3. 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.
4. 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).

5. 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.
6. CELLTM uses a recursive filter to remove conductivity cell thermal mass effects from measured conductivity. In areas with steep temperature gradients the thermal mass correction is on the order of 0.005 PSS-78. In other areas the correction is negligible. The value used for the thermal anomaly amplitude (alpha) was 0.03°C . The value used for the thermal anomaly time constant ($1/\text{beta}$) was 7.0°C .
7. 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.
8. DERIVE uses 1 dbar averaged pressure, temperature, and conductivity to compute primary and secondary salinities. Oxygen voltage is used to calculate oxygen concentrations.
9. BINAvg averages the data into 1 dbar bins. Each bin is centered on an integer pressure value, e.g., the 1 dbar bin averages scans where pressure is between 0.5 dbar and 1.5 dbar. There is no surface bin. The number of points averaged in each bin is included in the data file.
10. STRIP removes the computed oxygen variable.
11. TRANS converts the binary data file into ASCII format.
12. SPLIT separates the cast into upcast and downcast values.

Package slowdowns and reversals owing to ship roll can move mixed water in tow to in front of the CTD sensors and create artificial density inversions and other artifacts. In addition to Seasoft module LOOPEDIT, a program computes values of density locally referenced between every 1 dbar of pressure to compute N^2 and linearly interpolates temperature, conductivity, and oxygen voltage over those records where N^2 is less than or equal to $-1 \times 10^{-5} \text{ s}^{-2}$. These data were retained but flagged as questionable in the final WOCE formatted files.

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

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 60 casts were processed.

7.4 CTD Calibration Procedures

Laboratory calibrations of the CTD pressure, temperature, conductivity, and oxygen sensors were all performed at SBE. The calibration dates are listed in Table 7.

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 T/C and secondary DO2 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.

There were two sensor combinations (not including pump replacements) used during the cruise (Table 7).

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 case of samples was analyzed, or every 24 samples.

Two different batches of the Ocean Scientific (OSIL) standard seawater (P147 and P149) were used in this cruise (Table 12).

The running standard calibration values are shown in Figure 6. Through the course of the cruise, the autosal standards changed by 0.00028 in conductivity ratio (about 0.005 in salinity), which is calculated from using two different standard waters. The precision of the salinity measurements during the cruise were estimated by using the duplicate samples. From the 63 duplicate samples (Table 13), which corresponds to 6.9% of the total samples collected during this cruise, the average residual for the duplicates was $9.0 \cdot 10^{-5}$ PSU with and standard deviation of 0.0004 PSU (Figure 6).

Table 12: Nominal values for the batches of IAPSO standard seawater.

P-147	P-149
Stations: 1-12,23-60	Stations: 13-22
Use By: June 2006	Use By: October 2007
K15: 0.99982	K15: 0.99984
Salinity: 34.993	Salinity: 34.994

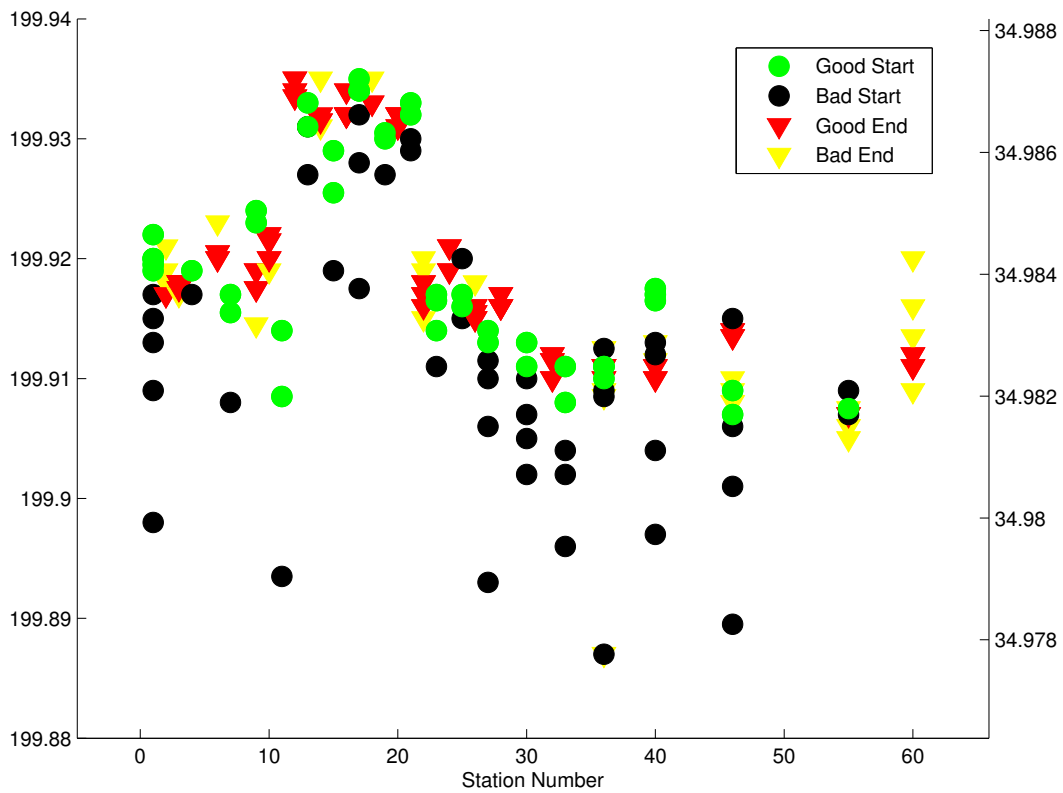


Figure 6: Standard vial calibrations throughout the cruise.

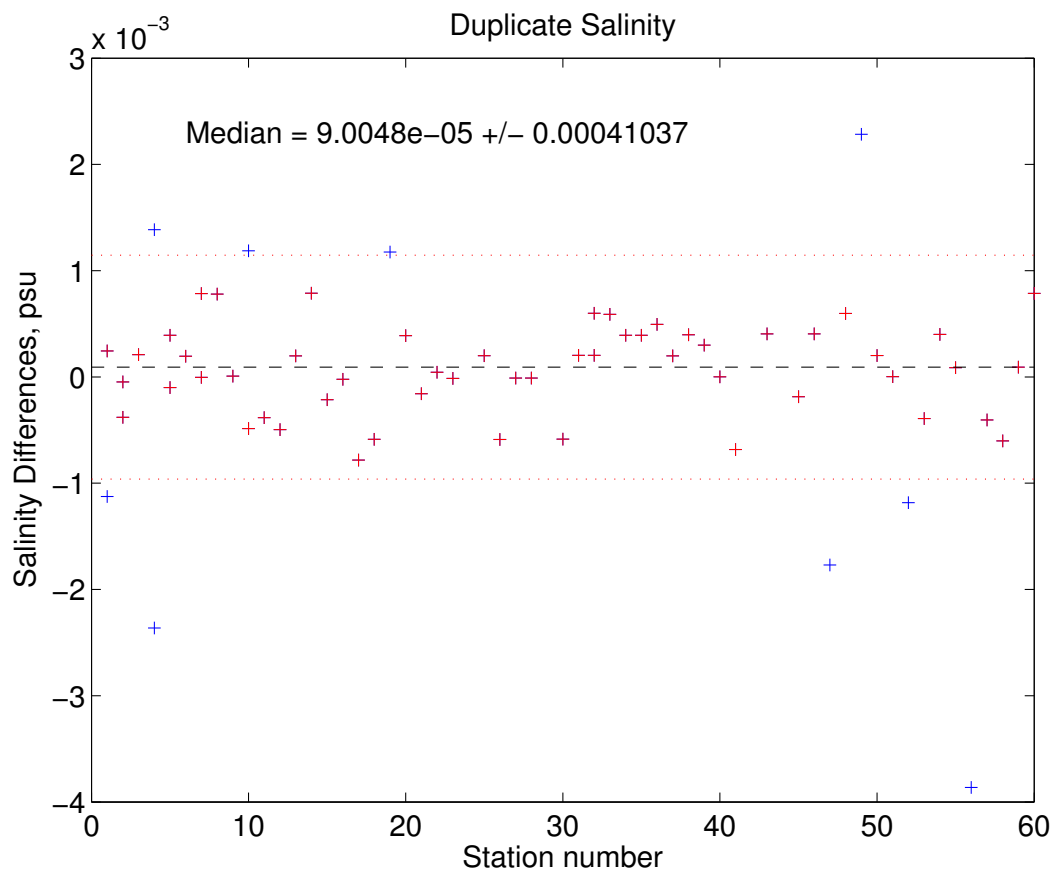


Figure 7: Salinity residuals of the duplicate samples.

Table 13: Duplicate salinity samples collected during the ABACO cruise.

Station	Niskin	Salinity1	Salinity2	Differences
1	4	36.751	36.751	-0.000
1	6	36.241	36.240	0.001
2	3	35.121	35.121	0.000
2	5	35.721	35.720	0.000
3	18	36.657	36.657	-0.000
4	5	34.913	34.911	0.002
4	19	36.700	36.701	-0.001
5	2	34.891	34.891	0.000
5	8	34.948	34.949	-0.000
6	3	34.896	34.896	-0.000
7	8	34.955	34.955	0.000
7	14	35.059	35.060	-0.001
8	10	34.967	34.968	-0.001
9	7	34.941	34.941	-0.000
10	7	34.939	34.940	-0.001
10	14	35.140	35.140	0.000
11	9	34.965	34.964	0.000
12	17	36.583	36.583	0.000
13	5	34.901	34.902	-0.000
14	5	34.902	34.902	-0.001
15	8	34.950	34.949	0.000
16	7	34.928	34.928	0.000
17	6	34.914	34.913	0.001
18	8	34.943	34.942	0.001
19	3	34.892	34.893	-0.001
20	8	34.949	34.950	-0.000
21	8	34.952	34.952	0.000
22	3	34.893	34.893	-0.000
23	6	34.930	34.930	0.000
25	11	35.021	35.021	-0.000
26	14	35.074	35.073	0.001
27	4	34.901	34.901	0.000
28	2	34.889	34.889	0.000
30	22	35.017	35.017	0.001
31	4	34.896	34.896	-0.000
32	10	34.948	34.949	-0.000
32	14	34.960	34.961	-0.001
33	6	34.911	34.911	-0.001
34	2	34.896	34.897	-0.000
35	22	34.972	34.972	-0.000
36	10	36.554	36.555	-0.000
37	4	35.793	35.793	-0.000
38	2	36.030	36.030	-0.000
39	6	36.620	36.620	-0.000
40	10	36.441	36.441	-0.000
41	12	36.336	36.335	0.001
43	2	35.320	35.320	-0.000
45	2	34.907	34.907	0.000
46	4	34.990	34.991	-0.000
47	6	35.287	35.286	0.002
48	6	36.375	36.376	-0.001
49	6	36.461	36.463	-0.002
50	4	35.821	35.821	-0.000
51	2	36.014	36.014	-0.000
52	4	36.194	36.193	0.001
53	6	36.009	36.009	0.000
54	8	36.391	36.391	-0.000
55	4	35.094	35.094	-0.000
56	8	35.866	35.862	0.004
57	10	35.694	35.694	0.000
58	12	36.700	36.700	0.001
59	6	36.461	36.461	-0.000
60	10	36.707	36.708	-0.001

The older standard water, batch P-147, showed a large offset compared to the primary sensor of approximately 0.0034 psu for stations 1-12 and 23-60 (Figure 8). The offset for the newer standard water, batch P-149, used for stations 13-22 was 0.0002 psu which also agreed well with historical data. Therefore an offset correction of 0.0032 psu was applied to the salinity samples run using the P-147 standard water. Correcting the offset of older standard water is a known issue where Bacon *et al.* estimate an offset of 0.001/year. The offset that was applied to the salinity values for stations 1-12 and 23-60 removed the offset in the residuals between the bottle salinity and the sensor salinity. This improved the median residual from 0.0024 ± 0.002 to 0.0005 ± 0.0007 . The corrected residual values can be seen in figure 13.

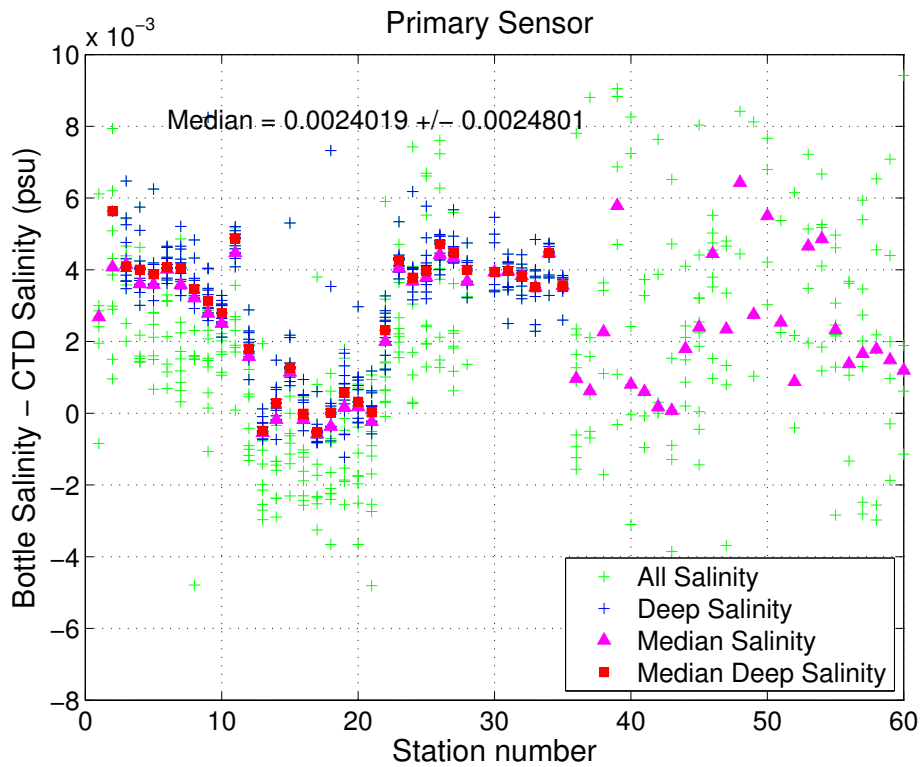


Figure 8: Salinity residuals of the duplicate samples.

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 $\pm 4.46 \text{ } \mu\text{mol/kg}$ (Friederich, et al., 1991).

The precision of the oxygen measurements during the cruise were estimated by using the duplicate samples. From the 63 duplicate samples (Table 14), which corresponds to 7.45% of the total samples collected during this cruise, the average residual for the duplicates was $0.0 \text{ } \mu\text{mol/kg}$ with a standard deviation of $\pm 0.14 \text{ } \mu\text{mol/kg}$ (Figure 9). No oxygens were collected during the mooring sensor calibration casts.

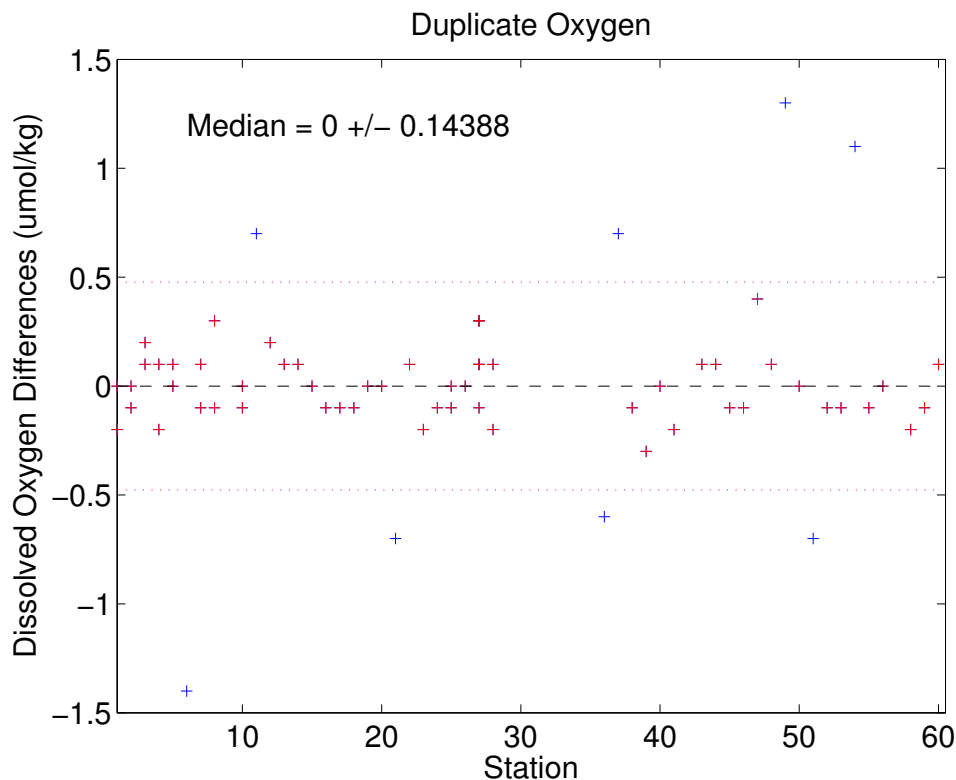


Figure 9: Oxygen residuals of the duplicate samples .

Table 14: Duplicate dissolved oxygen samples collected during the ABACO cruise (values in $\mu\text{mol}/\text{kg}$).

Station	Niskin	Oxygen1	Oxygen2	Differences
1	3	193.7	193.7	0.000
1	6	209.6	209.4	0.200
2	2	236.5	236.4	0.100
2	4	148.5	148.5	0.000
3	18	190.9	191.0	-0.100
3	21	218.1	218.3	-0.200
4	2	269.3	269.1	0.200
4	23	213.6	213.7	-0.100
5	1	265.6	265.7	-0.100
5	9	269.8	269.8	0.000
6	1	265.9	264.5	1.400
7	1	264.5	264.6	-0.100
7	18	216.3	216.2	0.100
8	2	269.8	270.1	-0.300
8	16	215.0	214.9	0.100
10	4	274.5	274.5	0.000
10	8	269.9	269.8	0.100
11	15	165.8	166.5	-0.700
12	3	272.1	272.3	-0.200
13	4	273.9	274.0	-0.100
14	5	274.7	274.8	-0.100
15	9	270.1	270.1	0.000
16	2	268.2	268.1	0.100
17	10	269.8	269.7	0.100
18	5	274.5	274.4	0.100
19	7	271.5	271.5	0.000
20	16	189.0	189.0	0.000
21	4	273.8	273.1	0.700
22	17	201.8	201.9	-0.100
23	1	257.0	256.8	0.200
24	4	274.1	274.0	0.100
24	18	218.1	218.0	0.100
25	6	271.6	271.5	0.100
25	23	216.7	216.7	0.000
26	15	147.6	147.6	0.000
27	1	255.3	255.6	-0.300
27	2	267.9	268.2	-0.300
27	3	270.9	270.8	0.100
28	4	273.1	272.9	0.200
28	19	201.3	201.4	-0.100
36	10	198.1	197.5	0.600
37	4	160.1	160.8	-0.700
38	10	210.3	210.2	0.100
39	4	190.8	190.5	0.300
40	4	185.6	185.6	0.000
41	6	198.5	198.3	0.200
43	2	127.2	127.3	-0.100
44	12	148.2	148.3	-0.100
45	2	147.8	147.7	0.100
46	10	150.3	150.2	0.100
47	8	143.6	144.0	-0.400
48	8	218.5	218.6	-0.100
49	2	121.1	122.4	-1.300
50	6	150.2	150.2	0.000
51	2	133.5	132.8	0.700
52	2	131.6	131.5	0.100
53	6	136.3	136.2	0.100
54	4	125.5	126.6	-1.100
55	8	131.0	130.9	0.100
56	2	139.2	139.2	0.000
58	16	207.9	207.7	0.200
59	8	192.5	192.4	0.100
60	12	208.2	208.3	-0.100

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.

Two sensor combinations were used during the cruise as listed in Table 7. Primary TC pair T5140/C1374 was selected for final data reduction. Secondary oxygen sensor, s/n 1666, was used for the final data reduction. 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.

8.1 *CTD Data Processing*

By using the post cruise sensors calibrations; time drifts were estimated for the temperature and conductivity sensors (for estimated time drifts see the appropriate sections below). The processing module sequence used at sea is done again to include the time drifts as well the pressure correction. After this step the following Matlab scripts based on PMEL programs are applied to the CTD data:

- 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 oxygen current and oxygen temperature data, as well as removing spikes from the primary conductivity sensor. 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 $N^2 \leq -1.0 \text{ e } -05 \text{ s}^{-2}$.

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 (the difference between the first and last submerged pressures) were examined to check for calibration shifts (see Figure 10 and Table 15). Pressure sensor, s/n 0957, was used during the cruise. On deck pressures before the start of each cast was recorded and is plotted in Figure 10. The on deck pressure before the cast was 1.6 ± 0.11 dbar. No on deck pressure after the cast was recorded. A pressure correction of 1.6 dbar was applied to the pressure sensor.

Near surface pressure values (which is taken as the near-surface pressure at the markscan and the last fired bottle pressure) showed little variability over the cruise besides a few stations that were started or ended deeper (4.5 ± 0.47 dbar before and 4.5 ± 0.39 dbar after).

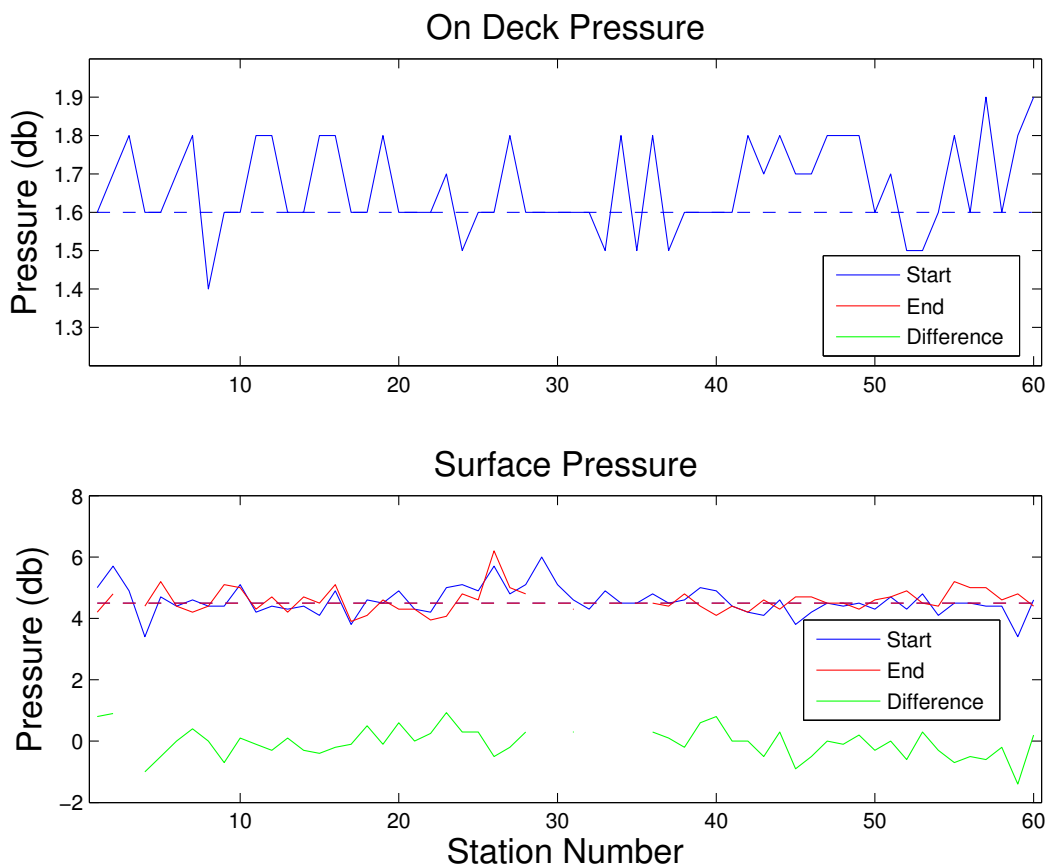


Figure 10: Pressure differences vs. station number. Top panel is the pressures measured on deck before the cast (blue). Bottom panel are the sea surface pressure values measured at the start of the downcast (blue), at the end of the upcast (red) and their respective difference (green).

Table 15: 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	35649	1.6000	-999	5.0000	4.2000
2	6506	1.7000	-999	5.7000	4.8000
3	7870	1.8000	-999	4.9000	-999
4	13445	1.6000	-999	3.4000	4.4000
5	8743	1.6000	-999	4.7000	5.2000
6	6233	1.7000	-999	4.4000	4.4000
7	6709	1.8000	-999	4.6000	4.2000
8	6204	1.4000	-999	4.4000	4.4000
9	10565	1.6000	-999	4.4000	5.1000
10	10056	1.6000	-999	5.1000	5.0000
11	6342	1.8000	-999	4.2000	4.3000
12	7019	1.8000	-999	4.4000	4.7000
13	8642	1.6000	-999	4.3000	4.2000
14	9698	1.6000	-999	4.4000	4.7000
15	5881	1.8000	-999	4.1000	4.5000
16	7270	1.8000	-999	4.9000	5.1000
17	11326	1.6000	-999	3.8000	3.9000
18	7122	1.6000	-999	4.6000	4.1000
19	11953	1.8000	-999	4.5000	4.6000
20	8061	1.6000	-999	4.9000	4.3000
21	11260	1.6000	-999	4.3000	4.3000
22	11295	1.6000	-999	4.2000	3.9500
23	11074	1.7000	-999	5.0000	4.0700
24	5095	1.5000	-999	5.1000	4.8000
25	11274	1.6000	-999	4.9000	4.6000
26	9146	1.6000	-999	5.7000	6.2000
27	6377	1.8000	-999	4.8000	5.0000
28	20356	1.6000	-999	5.1000	4.8000
29	4478	1.6000	-999	6.0000	-999
30	6159	1.6000	-999	5.1000	-999
31	7373	1.6000	-999	4.6000	4.3000
32	805	1.6000	-999	4.3000	-999
33	5491	1.5000	-999	4.9000	-999
34	19330	1.8000	-999	4.5000	-999
35	7247	1.5000	-999	4.5000	-999
36	7188	1.8000	-999	4.8000	4.5000
37	6288	1.5000	-999	4.5000	4.4000
38	7013	1.6000	-999	4.6000	4.8000
39	22532	1.6000	-999	5.0000	4.4000
40	13433	1.6000	-999	4.9000	4.1000
41	6188	1.6000	-999	4.4000	4.4000
42	6755	1.8000	-999	4.2000	4.2000
43	7211	1.7000	-999	4.1000	4.6000
44	9253	1.8000	-999	4.6000	4.3000
45	13168	1.7000	-999	3.8000	4.7000
46	9327	1.7000	-999	4.2000	4.7000
47	20648	1.8000	-999	4.5000	4.5000
48	5517	1.8000	-999	4.4000	4.5000
49	6077	1.8000	-999	4.5000	4.3000
50	6934	1.6000	-999	4.3000	4.6000
51	10022	1.7000	-999	4.7000	4.7000
52	12084	1.5000	-999	4.3000	4.9000
53	14268	1.5000	-999	4.8000	4.5000
54	7657	1.6000	-999	4.1000	4.4000
55	5681	1.8000	-999	4.5000	5.2000
56	6358	1.6000	-999	4.5000	5.0000
57	7056	1.9000	-999	4.4000	5.0000
58	13628	1.6000	-999	4.4000	4.6000
59	7173	1.8000	-999	3.4000	4.8000
60	4324	1.9000	-999	4.6000	4.4000

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 tabulating the difference 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 $0.0009\text{ }^{\circ}\text{C}$ and a standard deviation of $0.0006\text{ }^{\circ}\text{C}$.

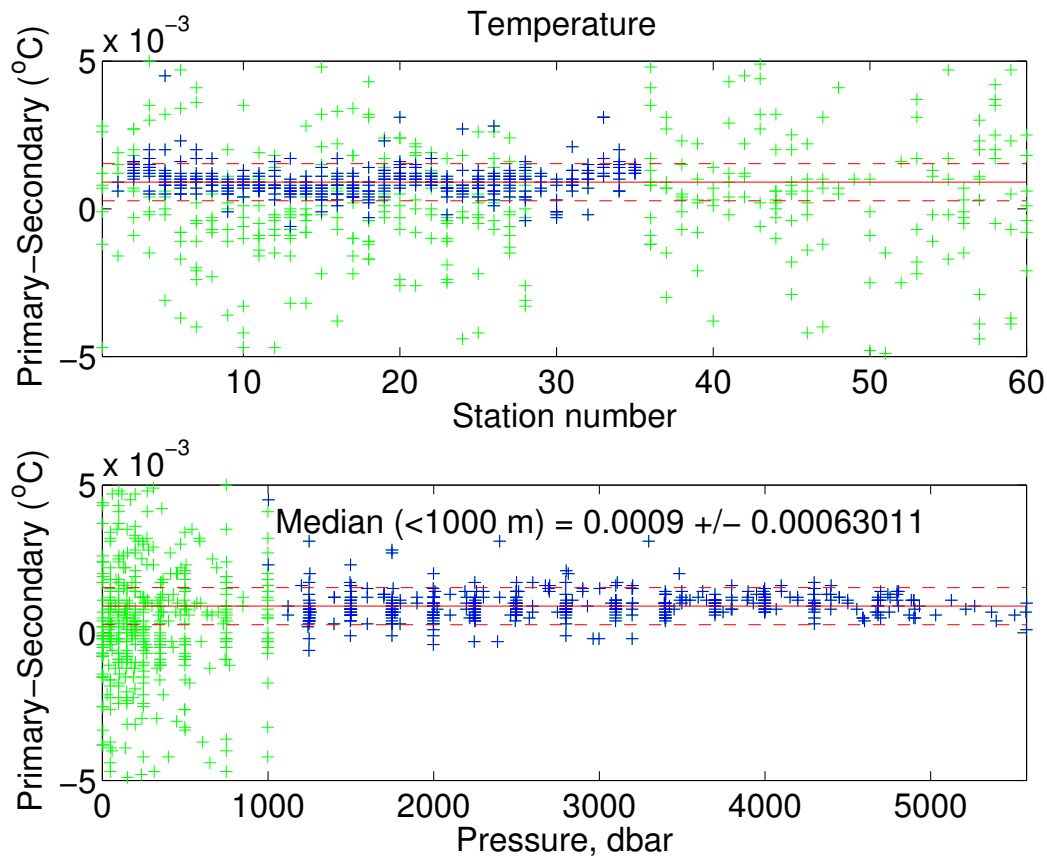


Figure 11: Temperature differences (after corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard 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 0.0014 mS/cm and a standard deviation of 0.0014 mS/cm. There was an undiagnosed sensor drift in the secondary sensor starting at station 21 (Figure 12). This was confirmed by looking at sensor comparisons with the bottle salts data. The uncalibrated primary sensor comparison with the bottle salinities was good (Figure 13). Therefore the primary sensor was used for all the final data values.

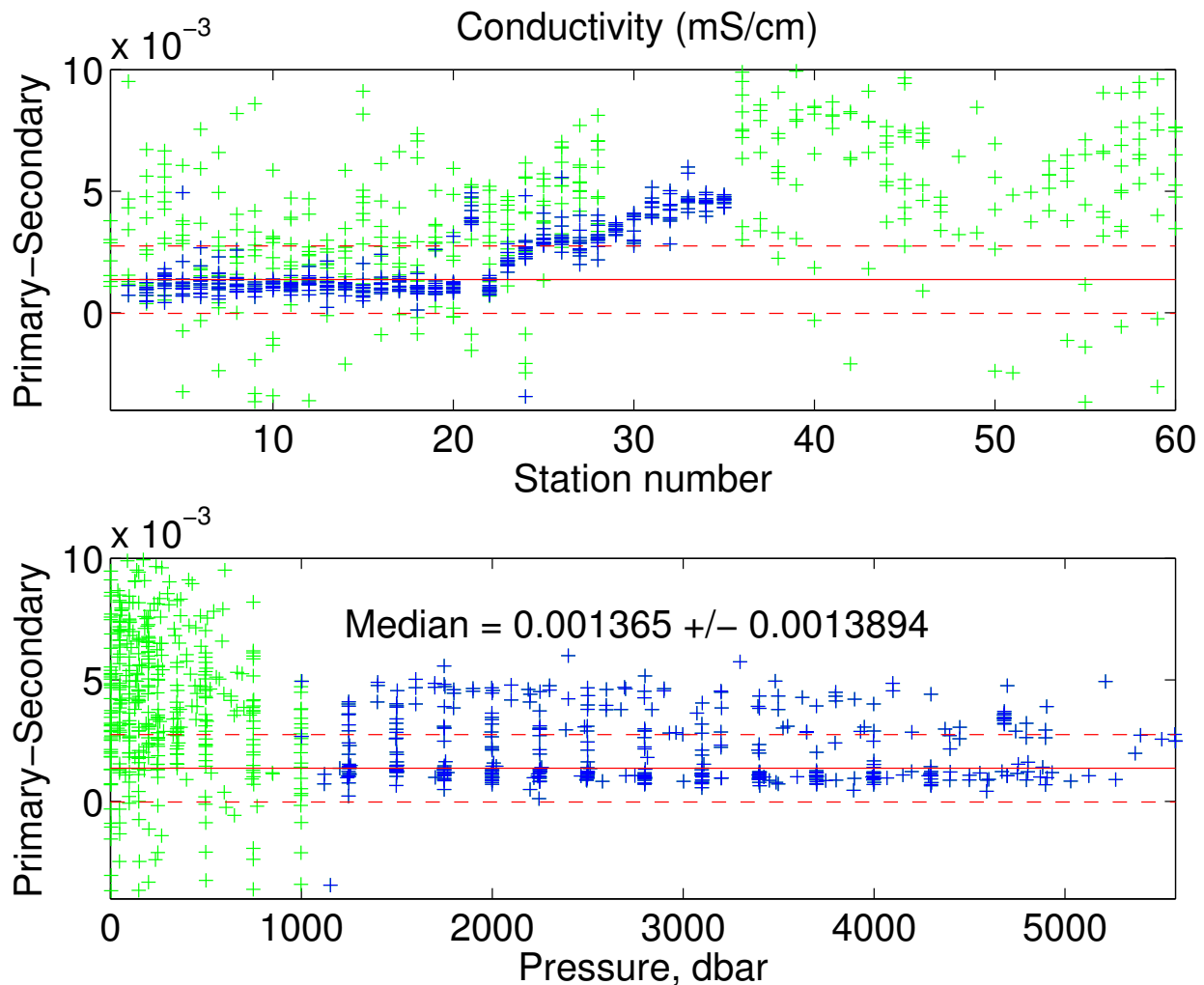


Figure 12: Conductivity (mS/cm) differences between sensors by station (top) and pressure (bottom). The red solid line represents the median with the red dashed representing the standard deviation.

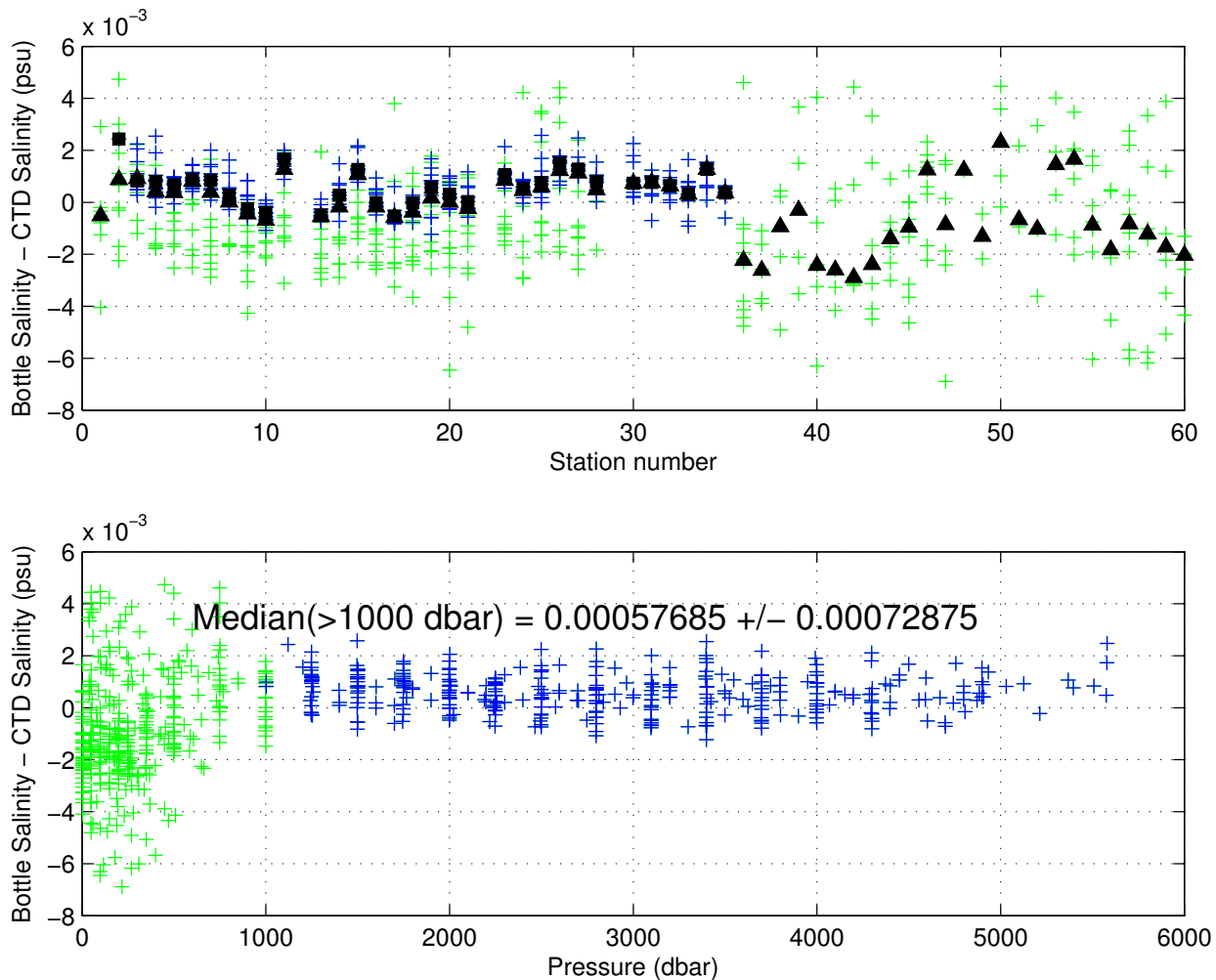


Figure 13: Bottle and uncalibrated primary CTD salinity differences plotted against pressure. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.

Despite the large variability of the data in the upper 1000 m, the bottle values are kept in the database and used for the final calibration. However, the bottle data below 1000 m is weighted more heavily to calculate the new conductivity coefficients. The AOML/CTDCAL Toolbox automatically applies a quality control to the data based on comparison with a normal distribution. After these procedures 718 data points (85.7 %) were used in the final calculations.

An initial calibration was done using just the P-149 standard water used to run the salinity samples for stations 13-22 to determine the new conductivity coefficients (Table 16), which were applied to all the stations using the offset corrected P-147 salinity samples that were applied to stations 1-12 and 23 - 60. The calibrations were good (Figures 14 & 15), but the calibrations using both the P-149 and the offset corrected P-147 salinity samples to derive the new conductivity coefficients were an order of magnitude better when looking at

the bottle to sensor differences. Therefore, the conductivity coefficients using both batches of salinity samples was used. Only the deep stations on the Abaco line, stations 3-35, were used to derive the conductivity coefficients, but were used to calibrate all stations.

Table 16: Using only P-149

s/n 2980
Sta 1-60
$m=0.9998566$
$p_1=0$
$b=0.0052599$
$pcor=-1.3654452e-07$

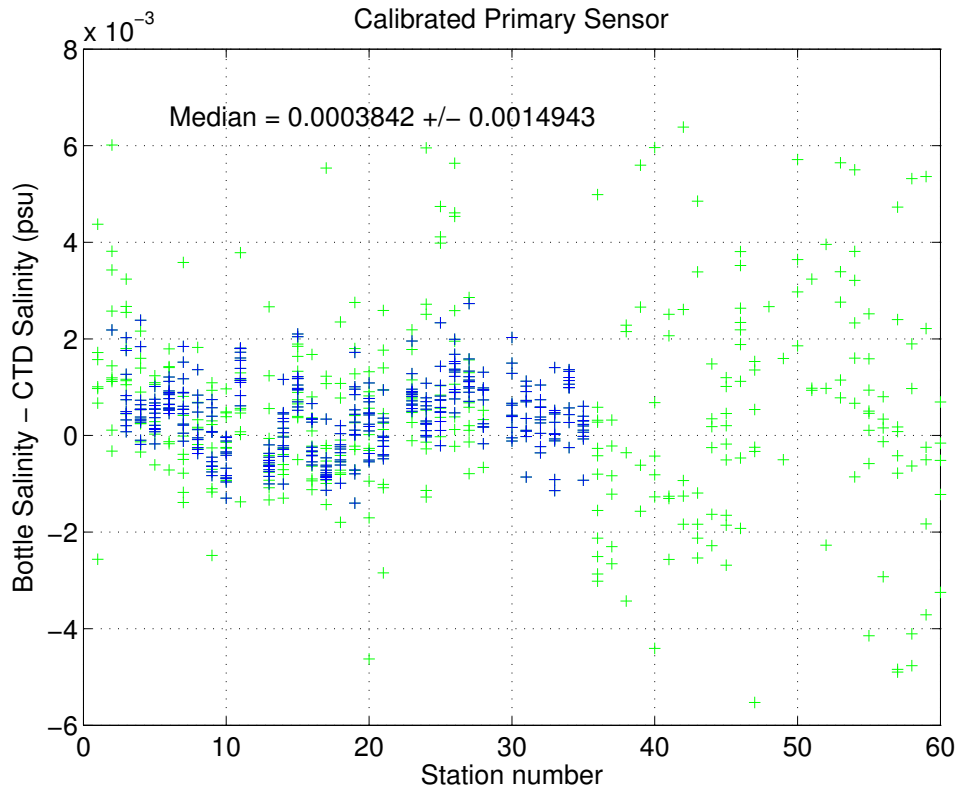


Figure 14: Bottle and calibrated primary CTD salinity differences plotted vs. station. Calibration check only using P-149.

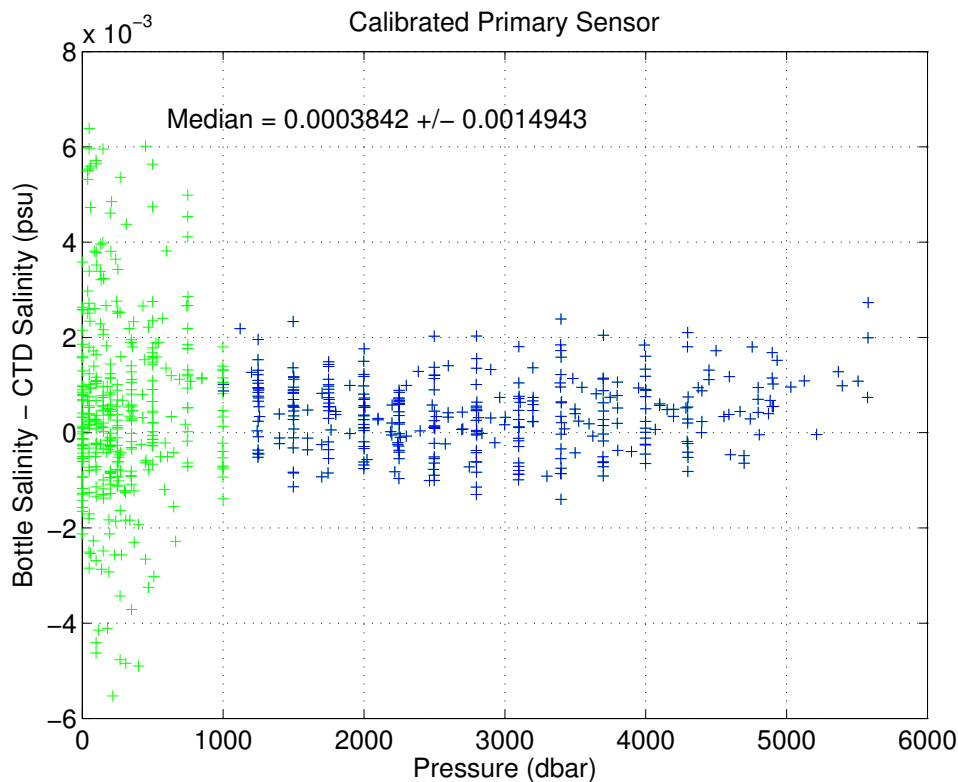


Figure 15: Bottle and calibrated primary CTD salinity differences plotted vs. pressure. Calibration check only using P-149.

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

Table 17: Using only P-149 & P-147

s/n 2980
Sta 1-60
m=0.9998772
p ₁ =0
b=0.0047914
pcor=-9.2088619e-08

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.

The coefficients estimated by the equation above were then applied to the CTD conductivities and the final results (Figure 16 to Figure 19) show a residual of $-3.75 \cdot 10^{-5}$ psu ($2.21 \cdot 10^{-5}$ psu for the data below 1000 dbar) and a standard deviation of 0.0015 psu (0.0007 psu for the data below 1000 dbar). Also 87.2% of the residuals for the data are within the confidence limits determined by the WOCE (± 0.002 psu) and this number increases to 99.7% 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 20 and Figure 21). 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.

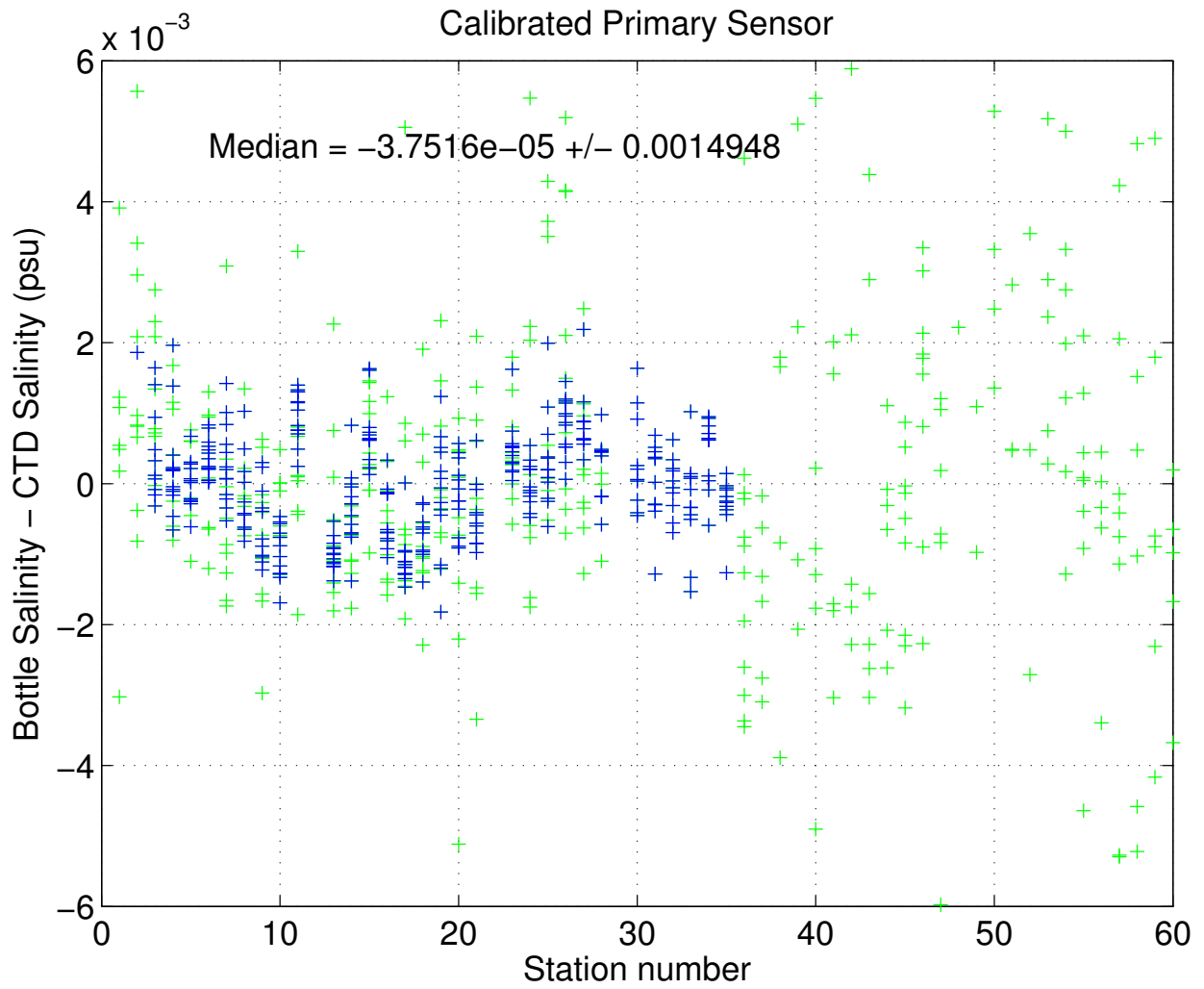


Figure 16: Final bottle and calibrated primary CTD salinity differences plotted vs. station.

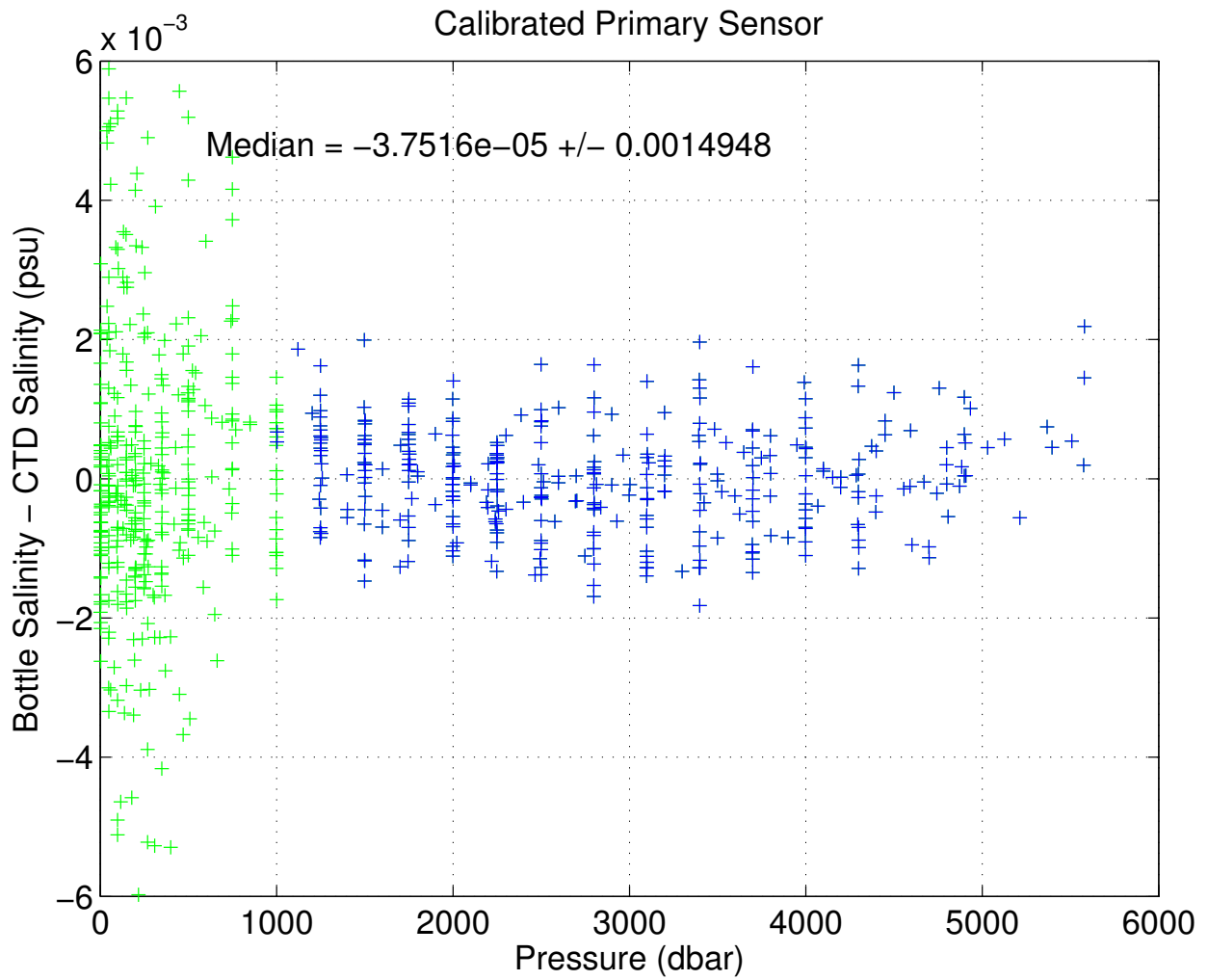


Figure 17: Final bottle and calibrated primary CTD salinity differences plotted vs. pressure.

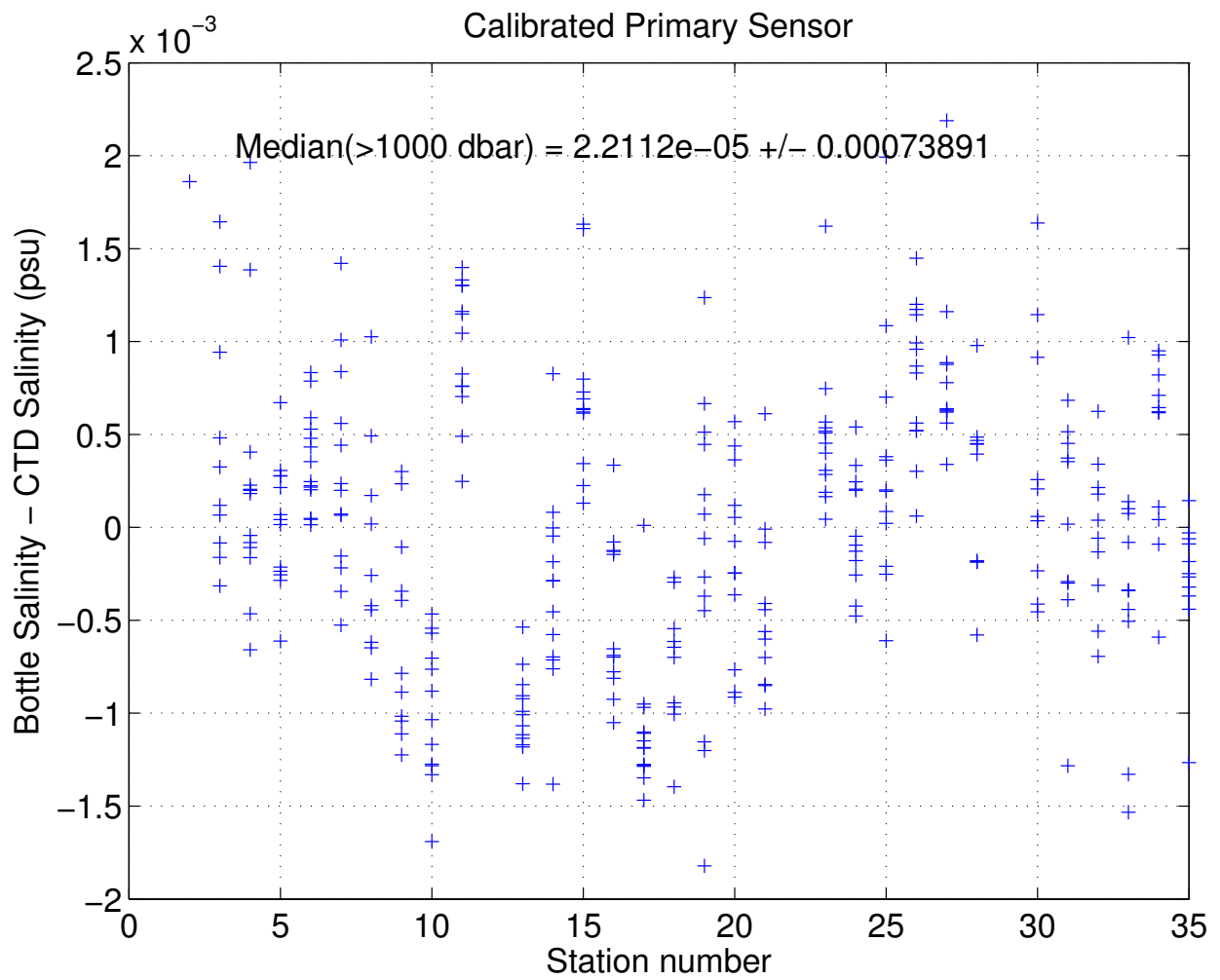


Figure 18: Final bottle and calibrated primary CTD salinity differences plotted vs. station below 1000 dbar.

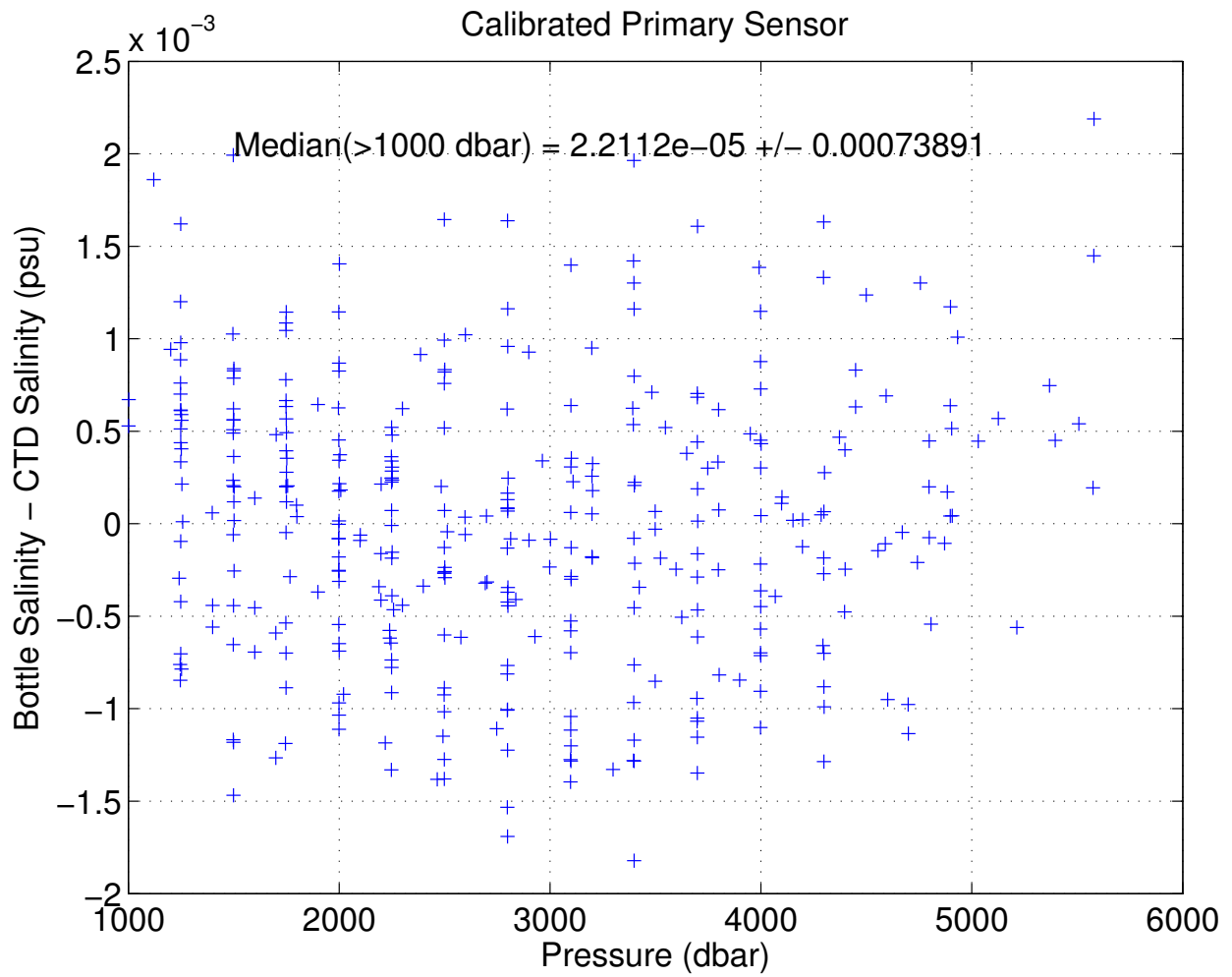


Figure 19: Final bottle and calibrated primary CTD salinity differences plotted vs. pressure below 1000 dbar.

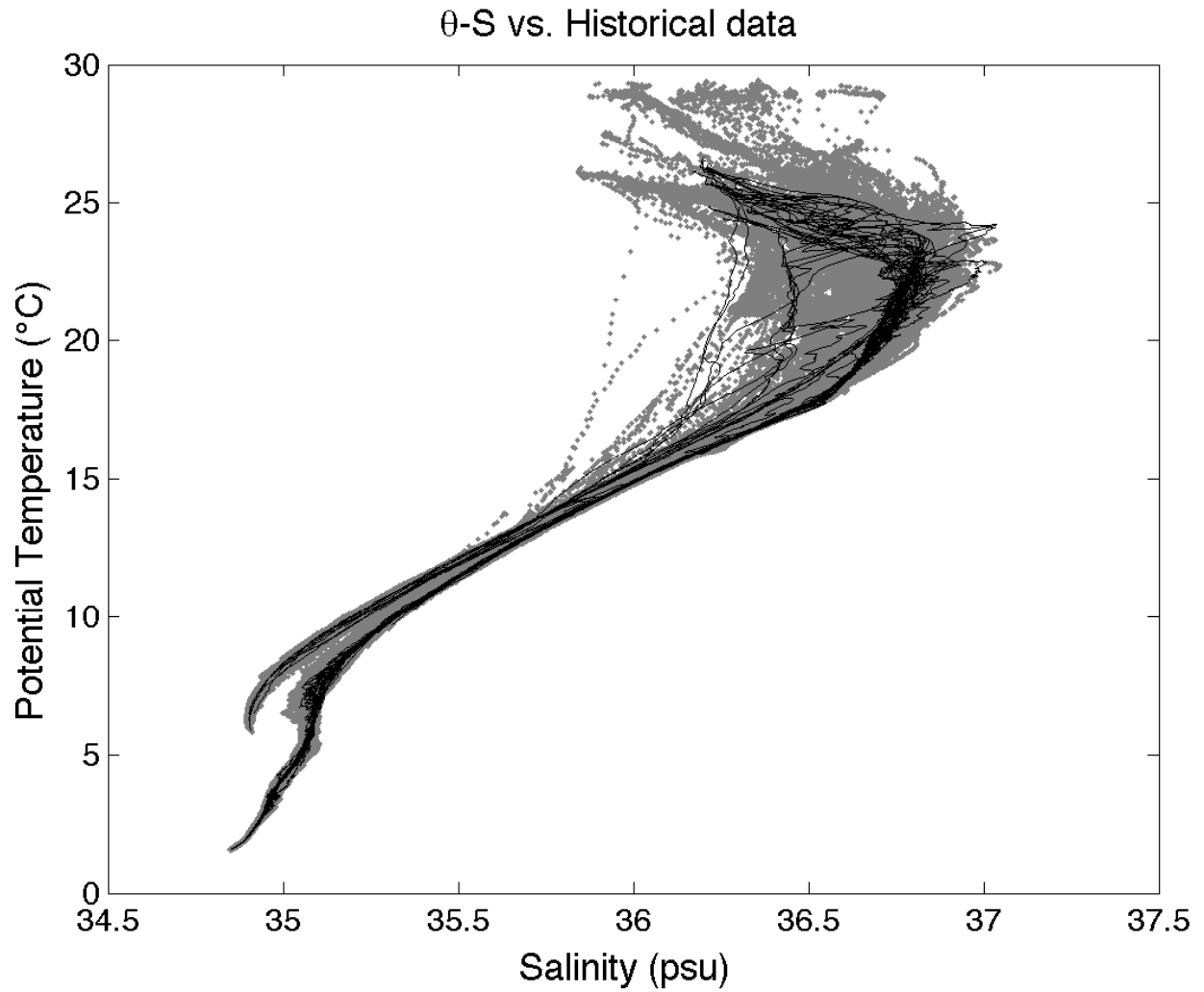


Figure 20: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

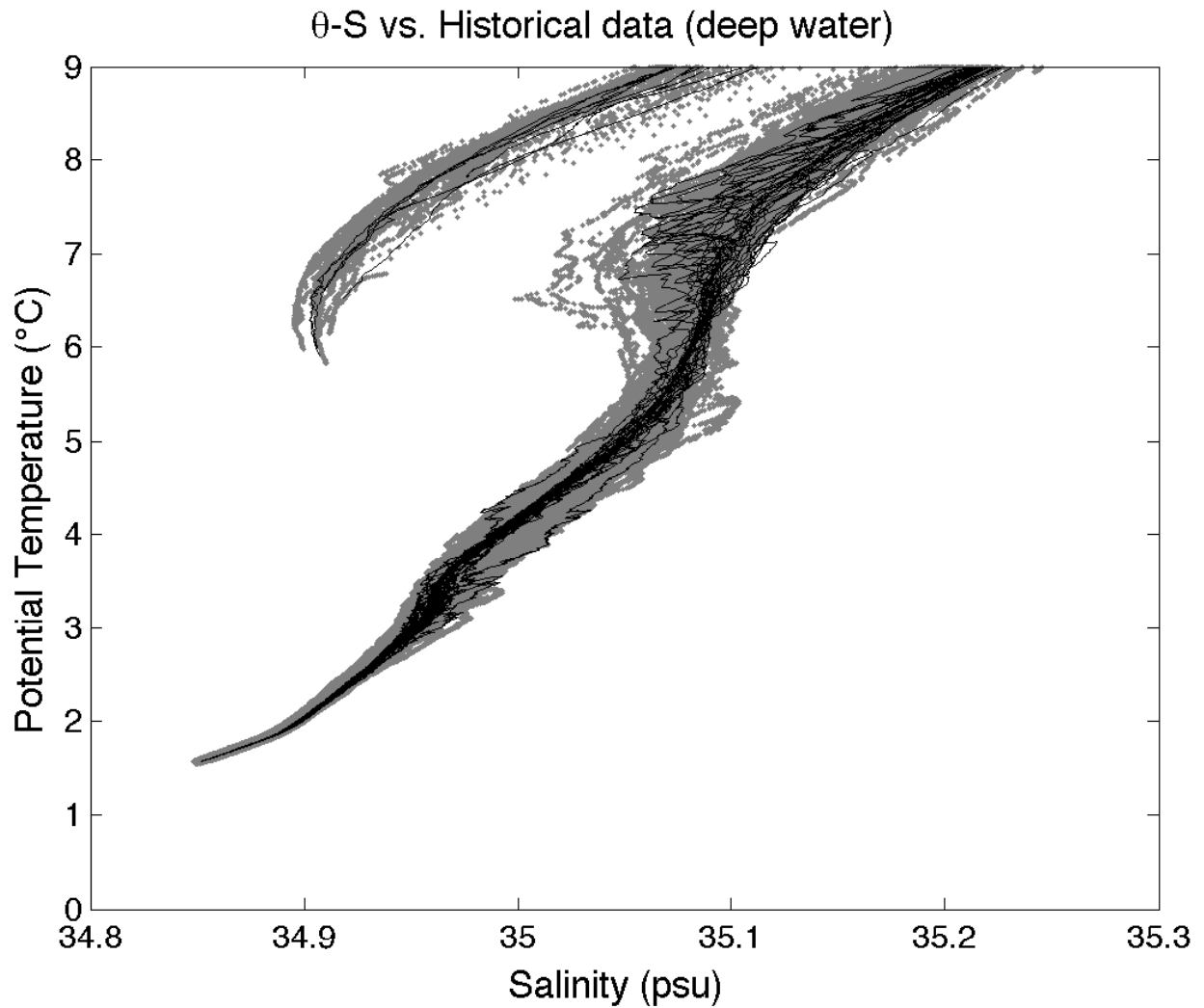


Figure 21: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

8.5 Dissolved Oxygen

Three SBE43 dissolved O₂ (DO) sensors were used on this leg (Table 7). The DO sensors were calibrated to dissolved O₂ check samples by matching the up cast bottle trips to down cast CTD data along neutral density surfaces, calculating CTD dissolved O₂, 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 Matlab® sub-routine called `oxfit.m` from the AOML CTD/CAL TOOLBOX performs a non-linear least squares regression using the Gauss-Newton algorithm with Levenberg-Marquardt modifications for global convergence. 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:

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

with

	S/N 1348	
	Sta 1-5	Sta 6-60
<i>Soc</i>	0.4931192	0.4939912
<i>V_{offset}</i>	-0.4926252	-0.5363004
<i>tau</i>	1.35	1.47
<i>A</i>	-0.0078898	0.0009279
<i>B</i>	0.0006608	0.0000664
<i>C</i>	-0.0000130	-0.0000016
<i>E</i>	0.0351938	0.0375161
<i>p1</i>	0	0.0000287

where *Soc*, *tau*, *V_{offset}*, *A*, *B*, *C*, *E* and *p1* are the calibration coefficients shown above and *V* is the instrument voltage (*V*). *T*, *S* and *P* are the temperature, salinity and pressure measured by the CTD. *K* is the temperature in the absolute scale, *station* is the station number, and *OXSAT* is the oxygen saturation. Stations 1-5 were used to derive the oxygen coefficients used to calibrate stations 1-5 and stations 6-35 were used to derive the oxygen coefficients used to calibration stations 6-60.

A comparison between the primary and secondary sensors (Figure 22) was evaluated. The sensors show a median difference of 0.58 *umol/kg* and a standard deviation of 0.81

umol/kg. The secondary sensor was chosen (Figure 23) and the uncalibrated sensor shows a median difference of 8.26 *umol/kg* and a standard deviation of 1.42 *umol/kg* compare to the oxygen bottle data.

Also, analogous to the conductivity, AOML/CTDCAL Toolbox automatically applies a quality control to the data based on comparison with a normal distribution. After these procedures 723 data points (92.57%) 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 24 to Figure 27). The residual is -0.008 *umol/kg* (-0.03 *umol/kg* for the data below 1000 dbar) and the standard deviation 0.87 *umol/kg* (0.71 *umol/kg* for the data below 1000 dbar). Also 99.9% of the residuals for the data are within the confidence limits determined by the WOCE ($\pm 1\%$ of the dissolved oxygen measured) and this increases to 100 % if we only consider 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 28 & Figure 29). Again by investigating water mass properties, particularly for deeper layers of the ocean, we can have an estimative of the quality of these data.

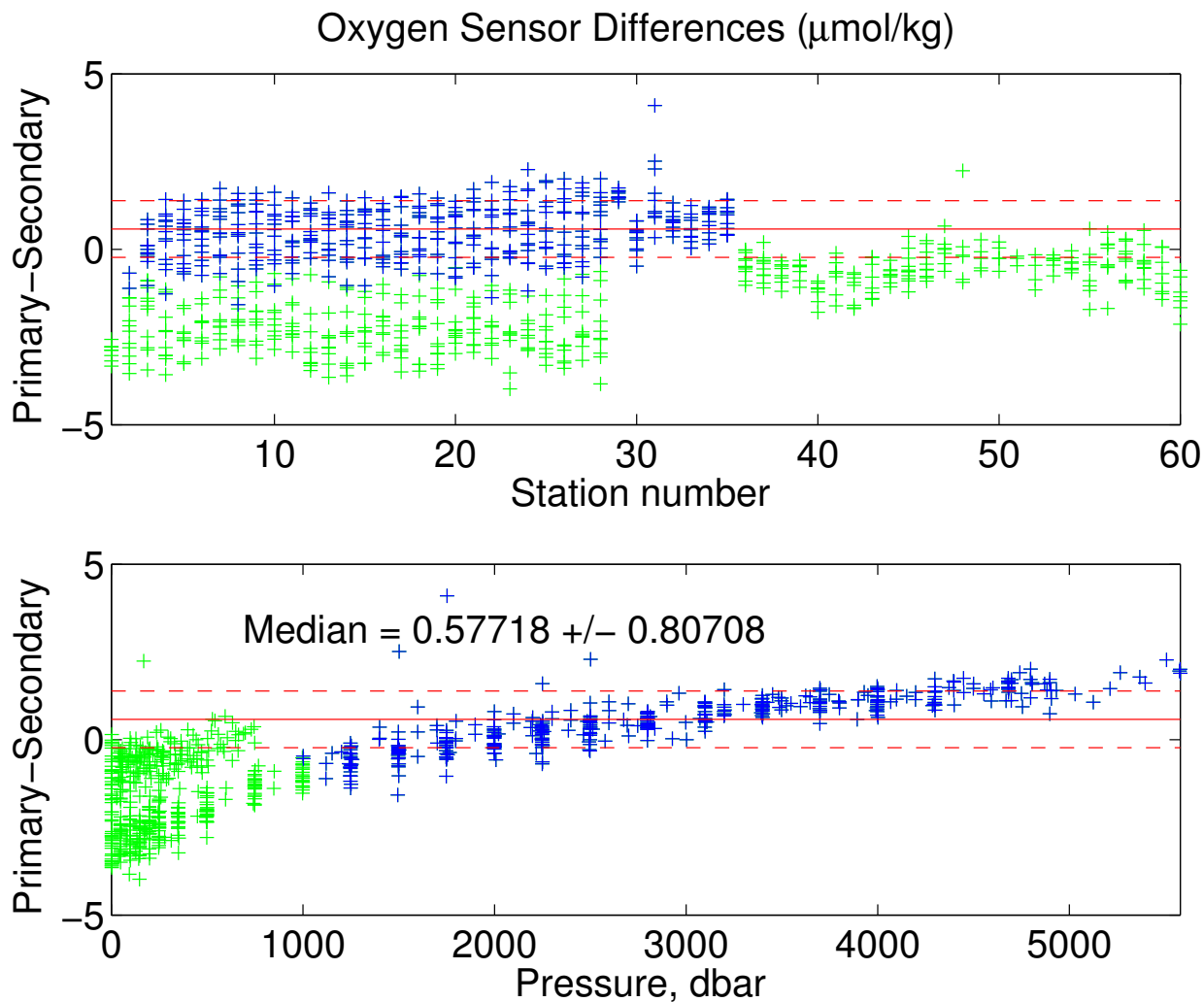


Figure 22: Dissolved oxygen differences between sensors by station (top) and by pressure (bottom). Sensor changes at station 15 and 24. The red solid line represents the median with the red dashed representing the standard deviation.

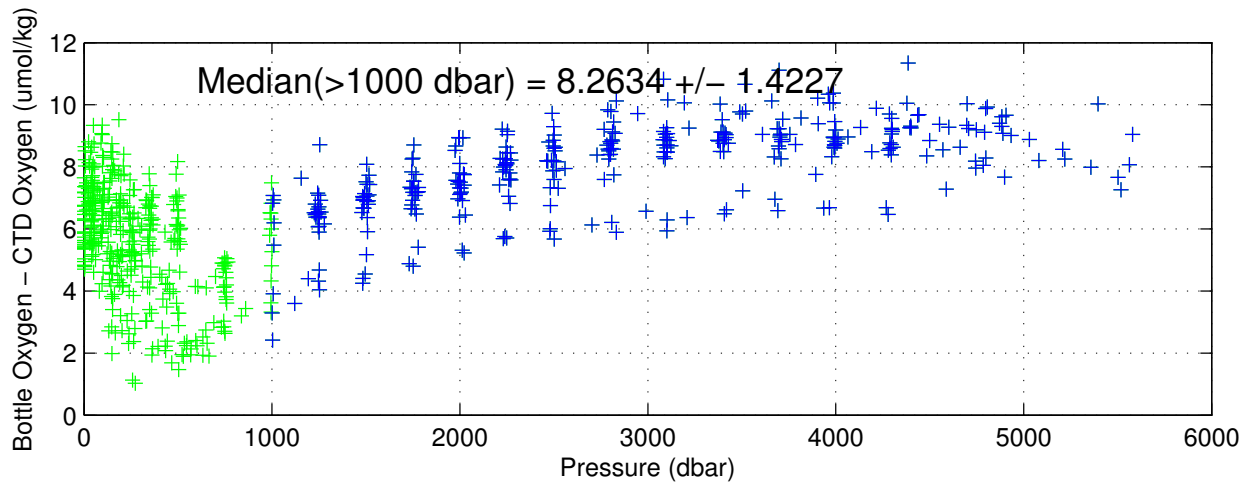
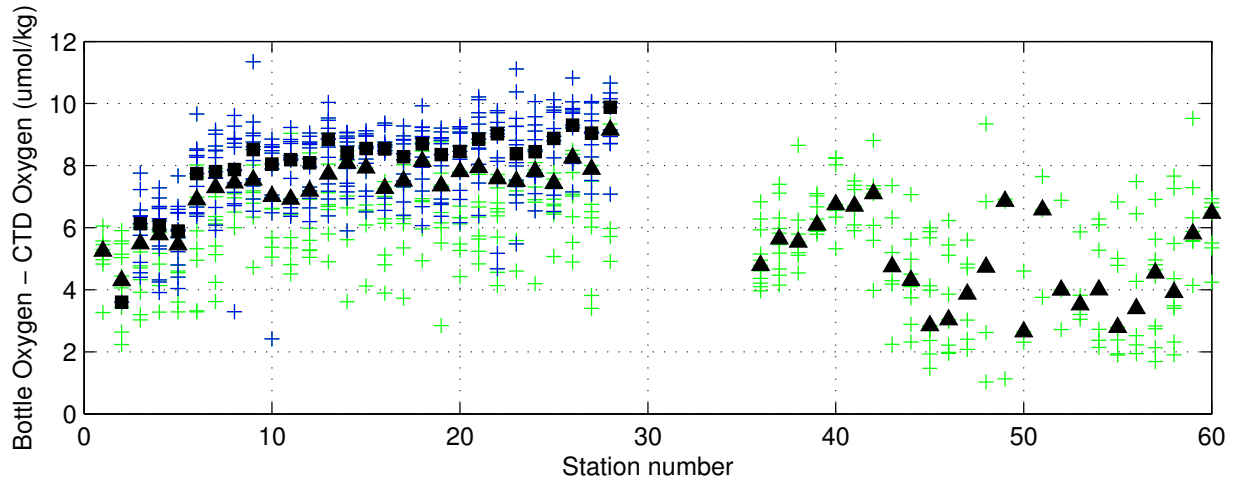


Figure 23: Bottle and uncalibrated secondary CTD oxygen differences plotted against station number. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.

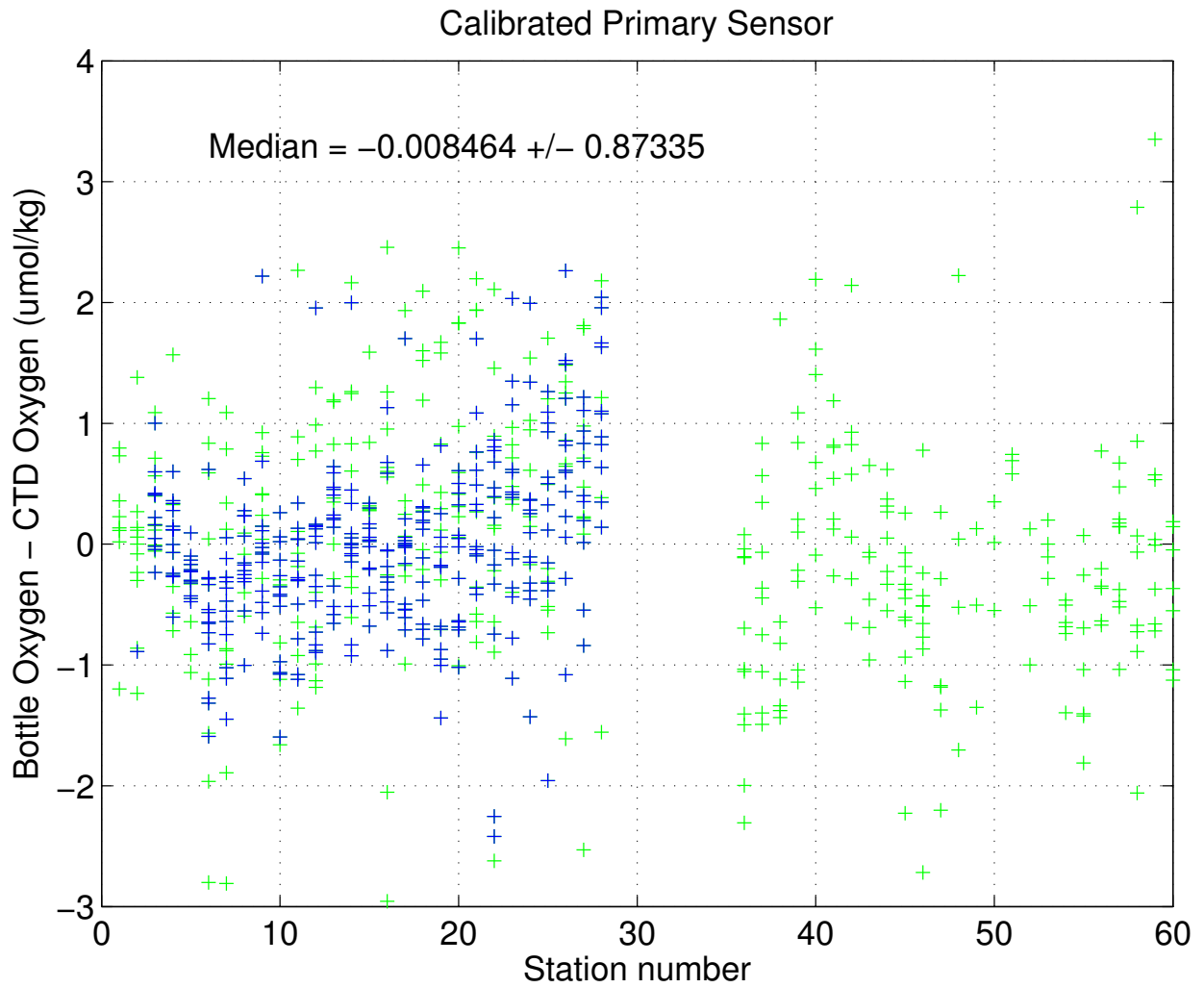


Figure 24: Bottle and calibrated secondary CTD oxygen differences plotted vs. station.

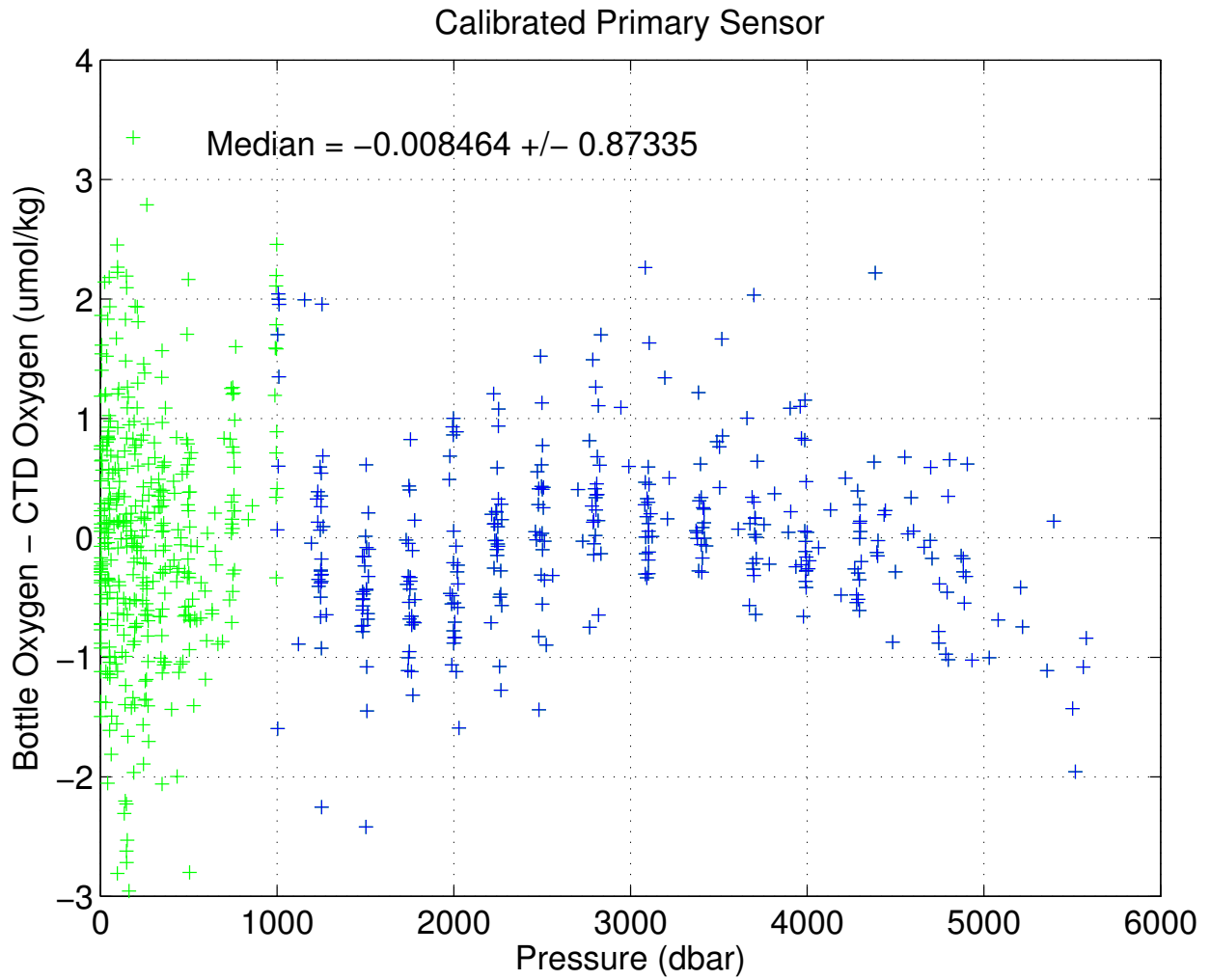


Figure 25: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure.

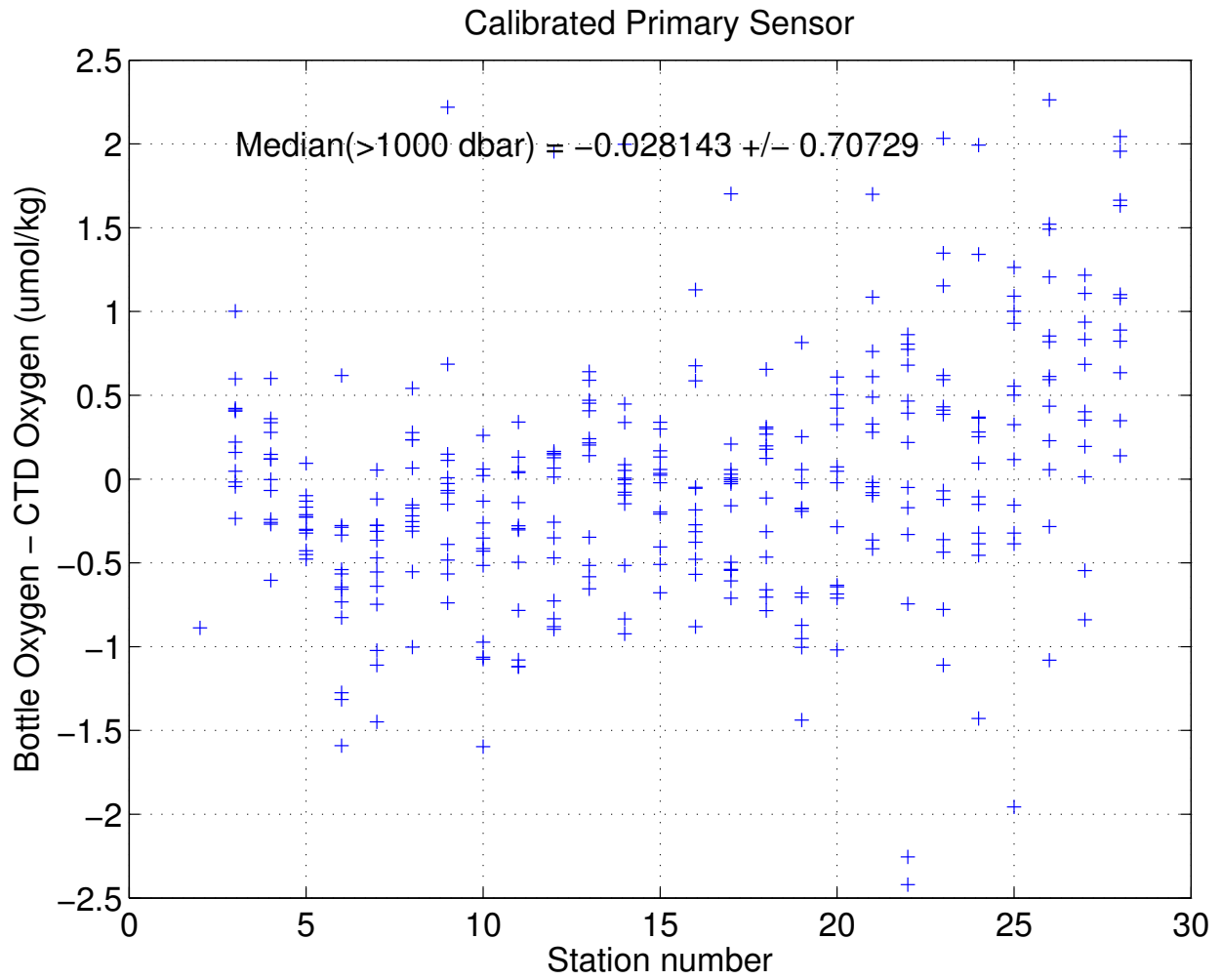


Figure 26: Bottle and calibrated secondary CTD oxygen differences plotted vs. station below 1000 dbar.

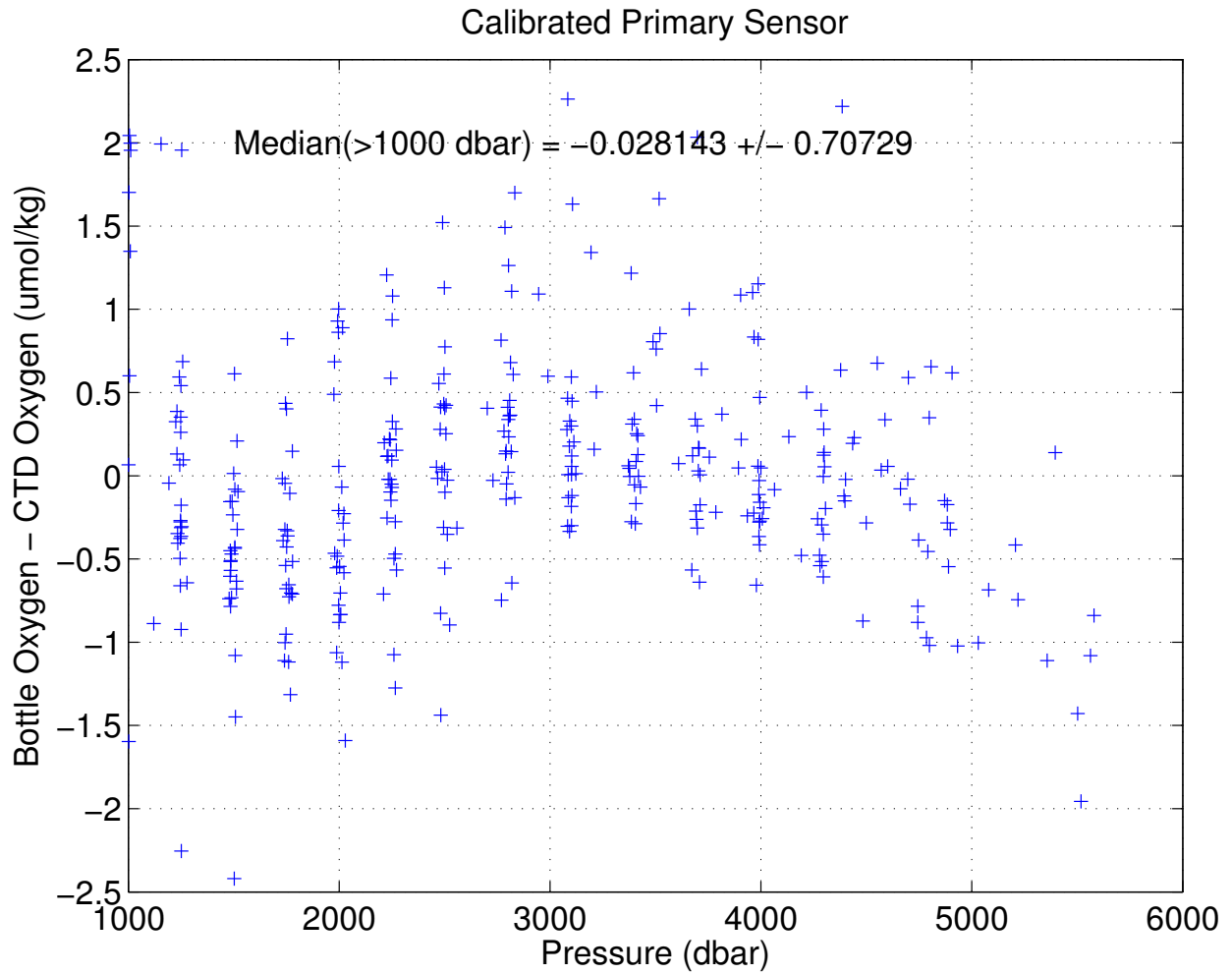


Figure 27: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure below 1000 dbar.

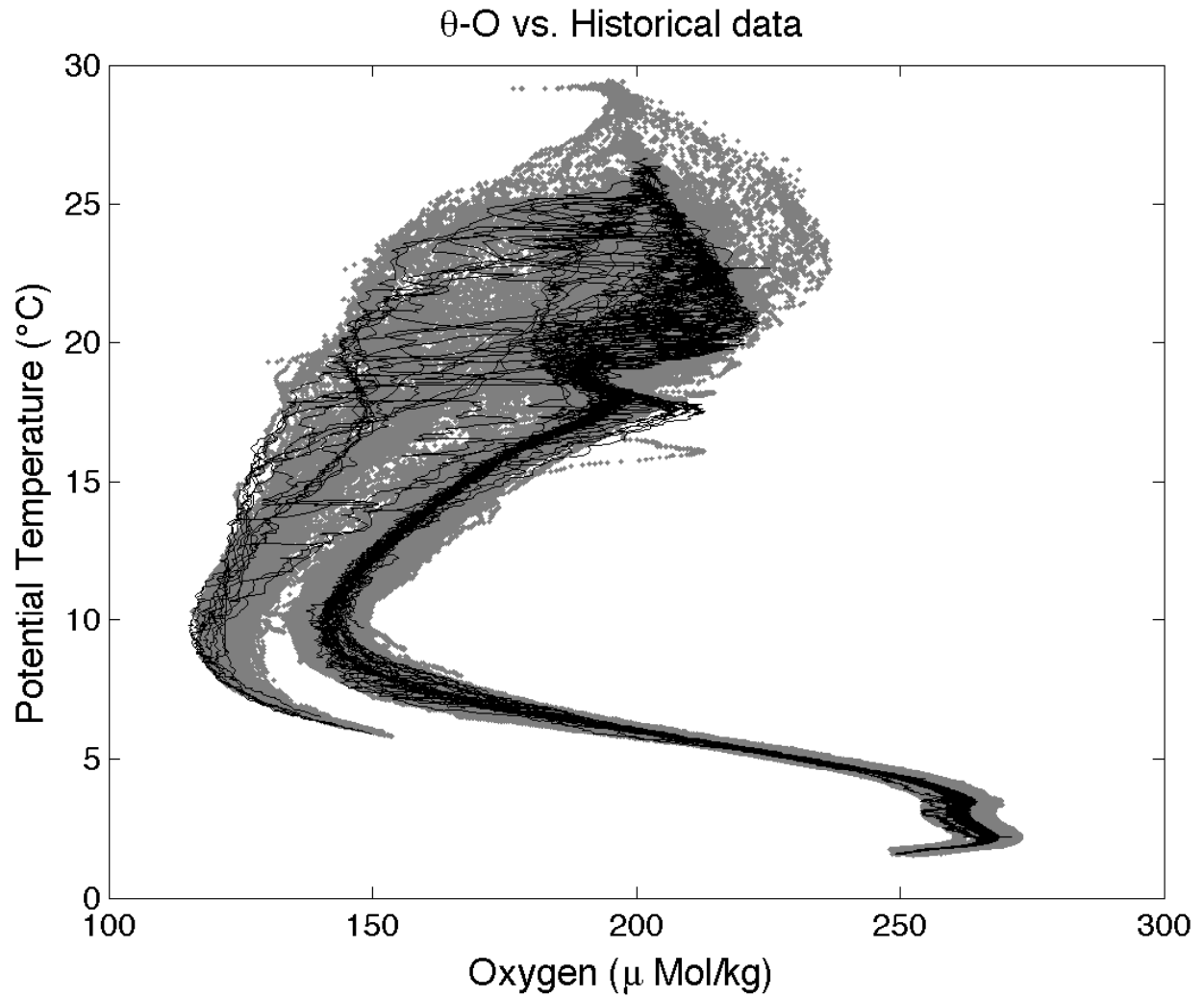


Figure 28: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

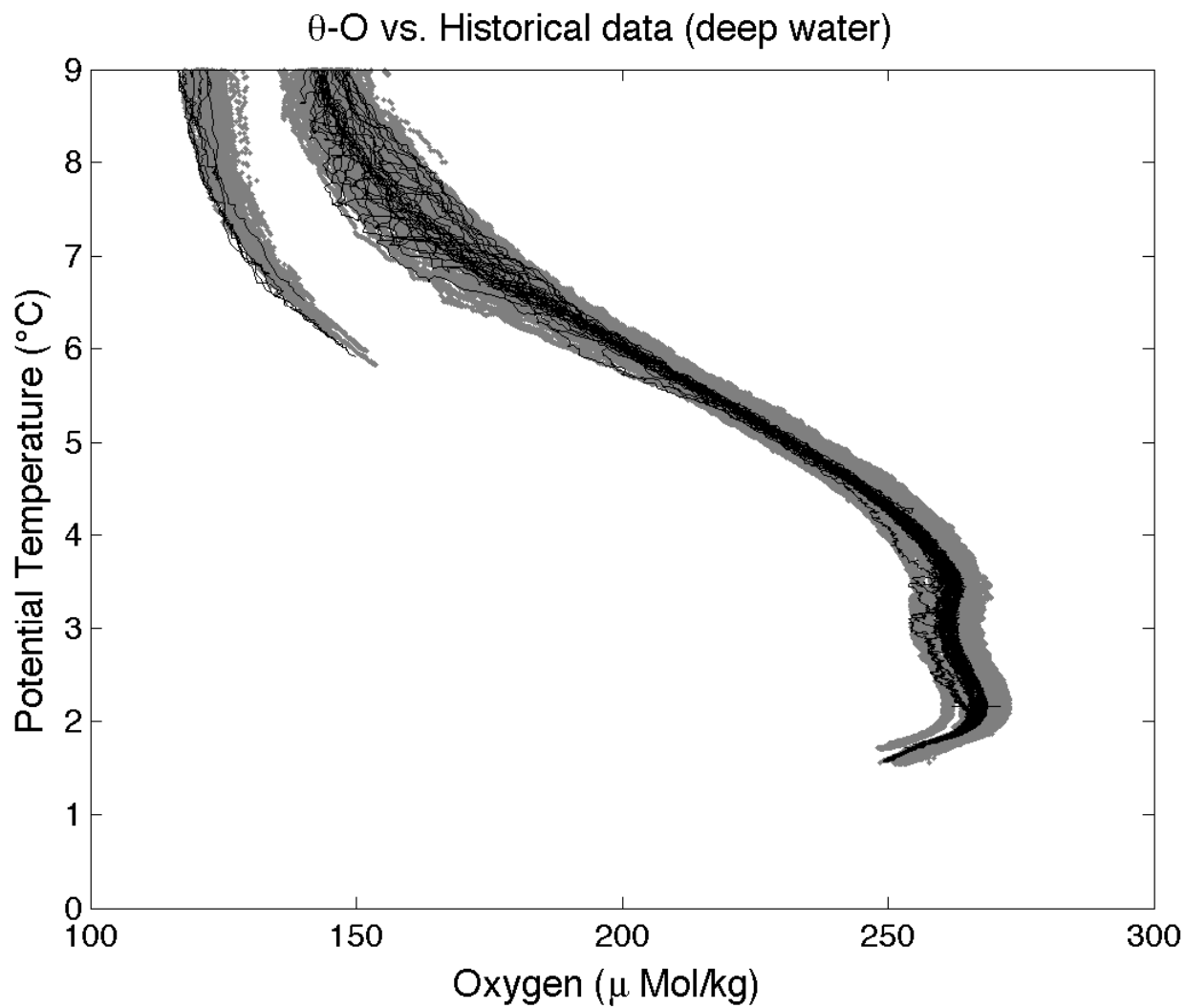


Figure 29: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

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 30 to Figure 33). Nominal vertical exaggerations are 400:1 below 1000 dbar (lower panels) and 200:1 above 1000 dbar (upper panels). For the Northwest Providence Channel Sections latitude is used as horizontal axis (Figure 42 to Figure 45).

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).

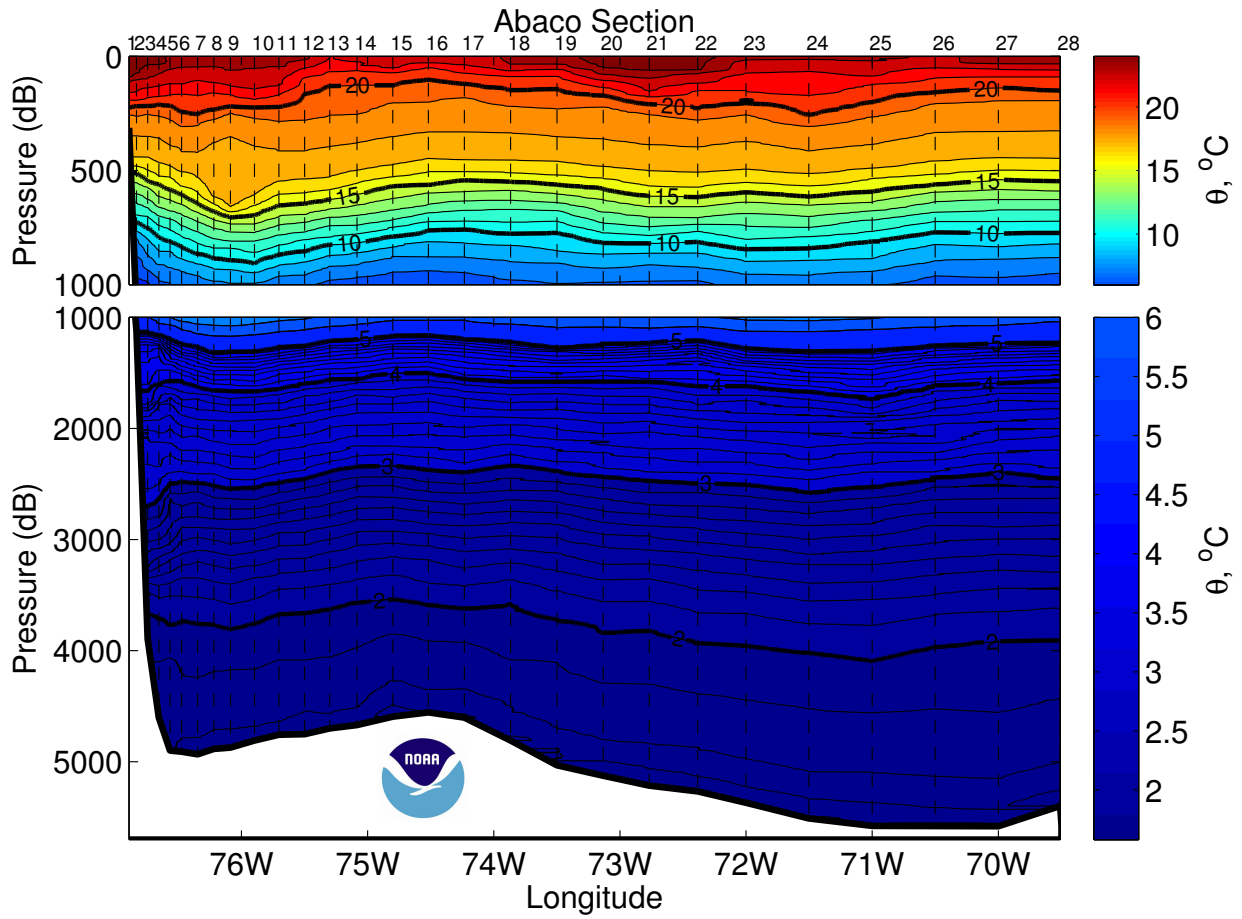


Figure 30: Potential Temperature ($^{\circ}\text{C}$) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

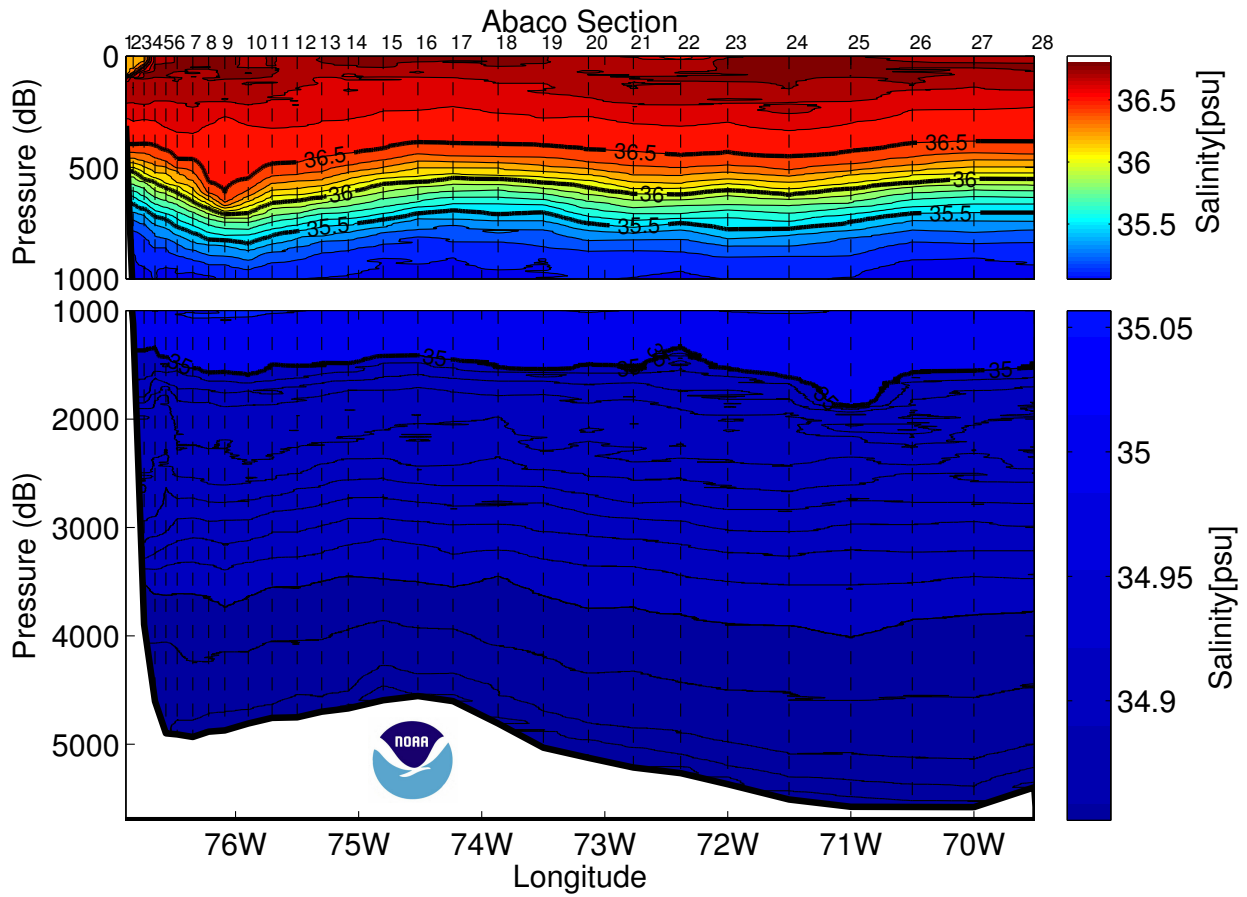


Figure 31: Salinity (PSS 78) section for the Abaco section. Dashed vertical lines are the CTD station locations.

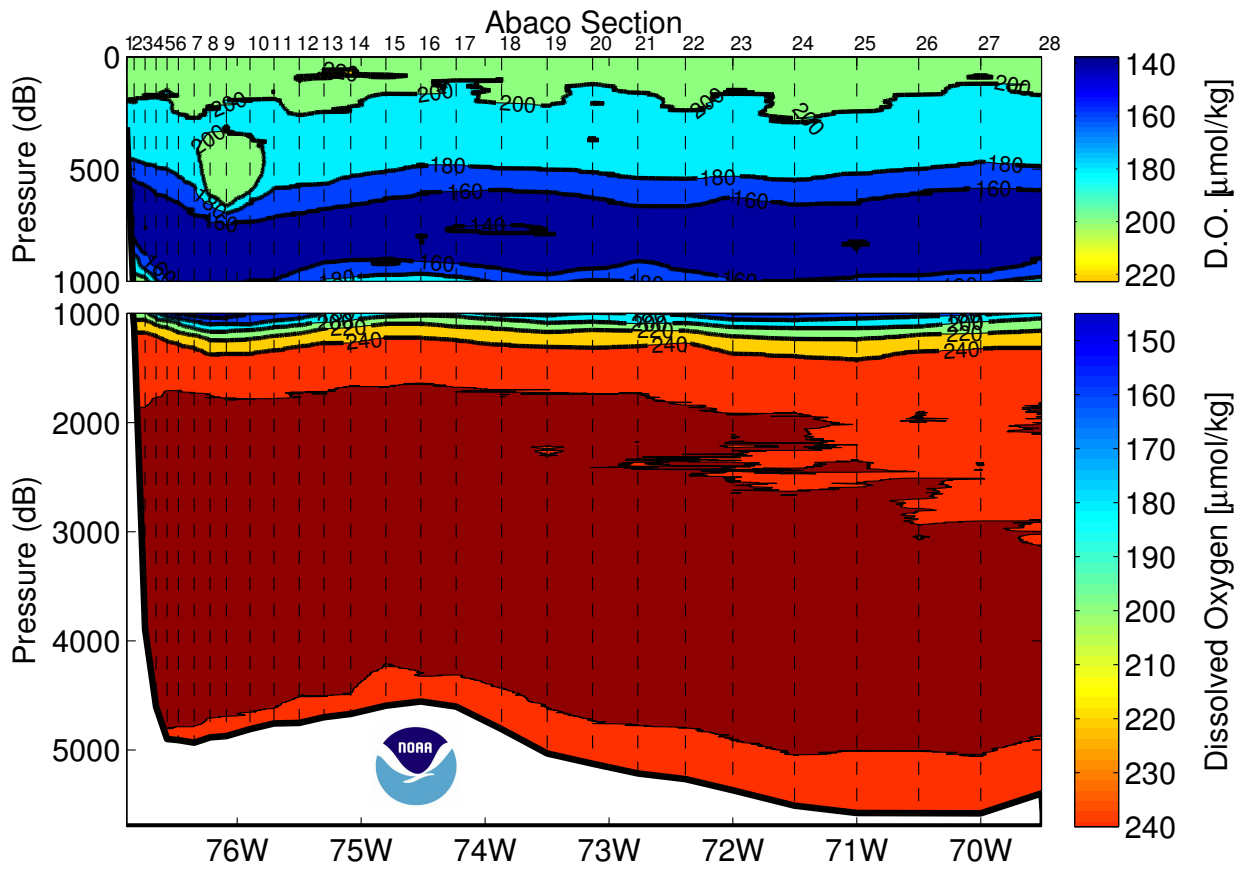


Figure 32: Dissolved Oxygen ($\mu\text{mol/kg}$) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

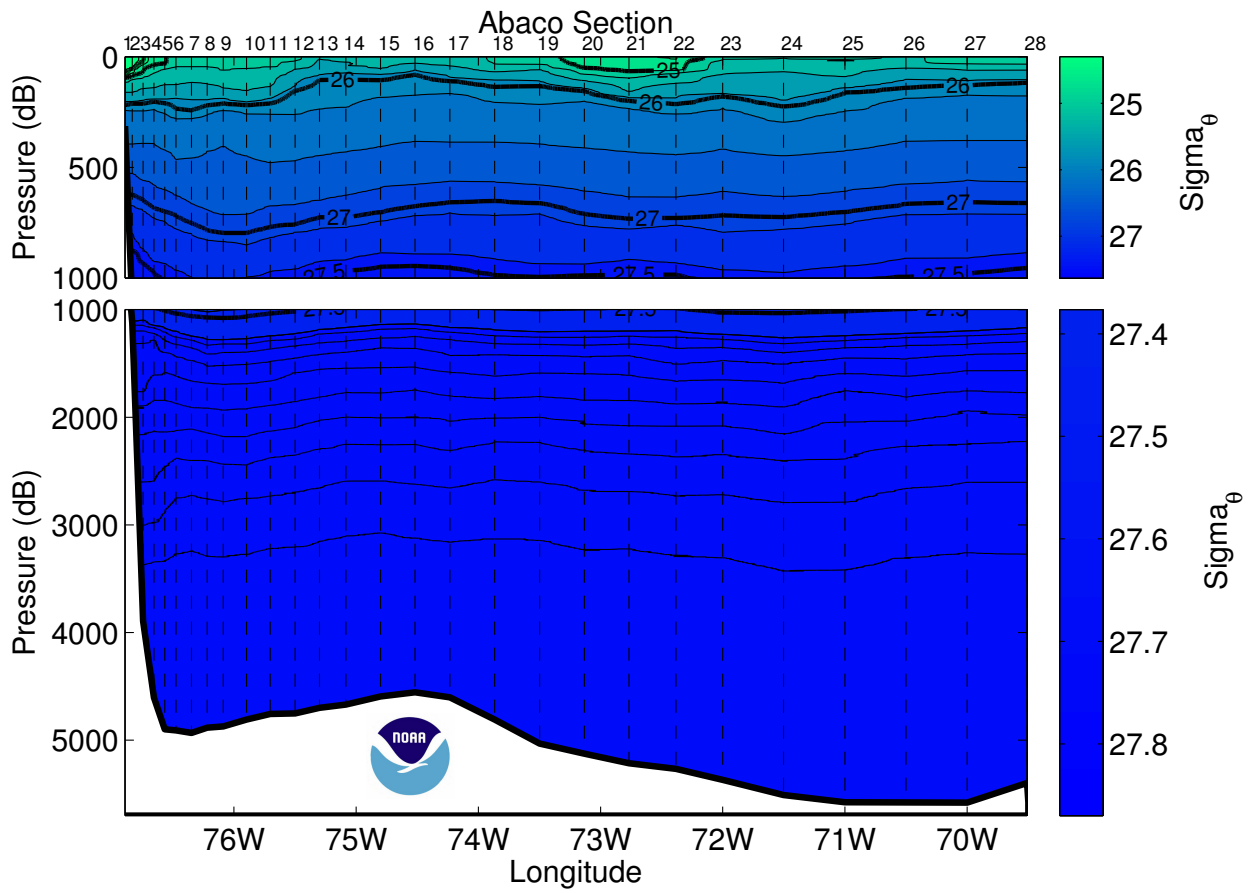


Figure 33: Neutral density (kg/m³) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

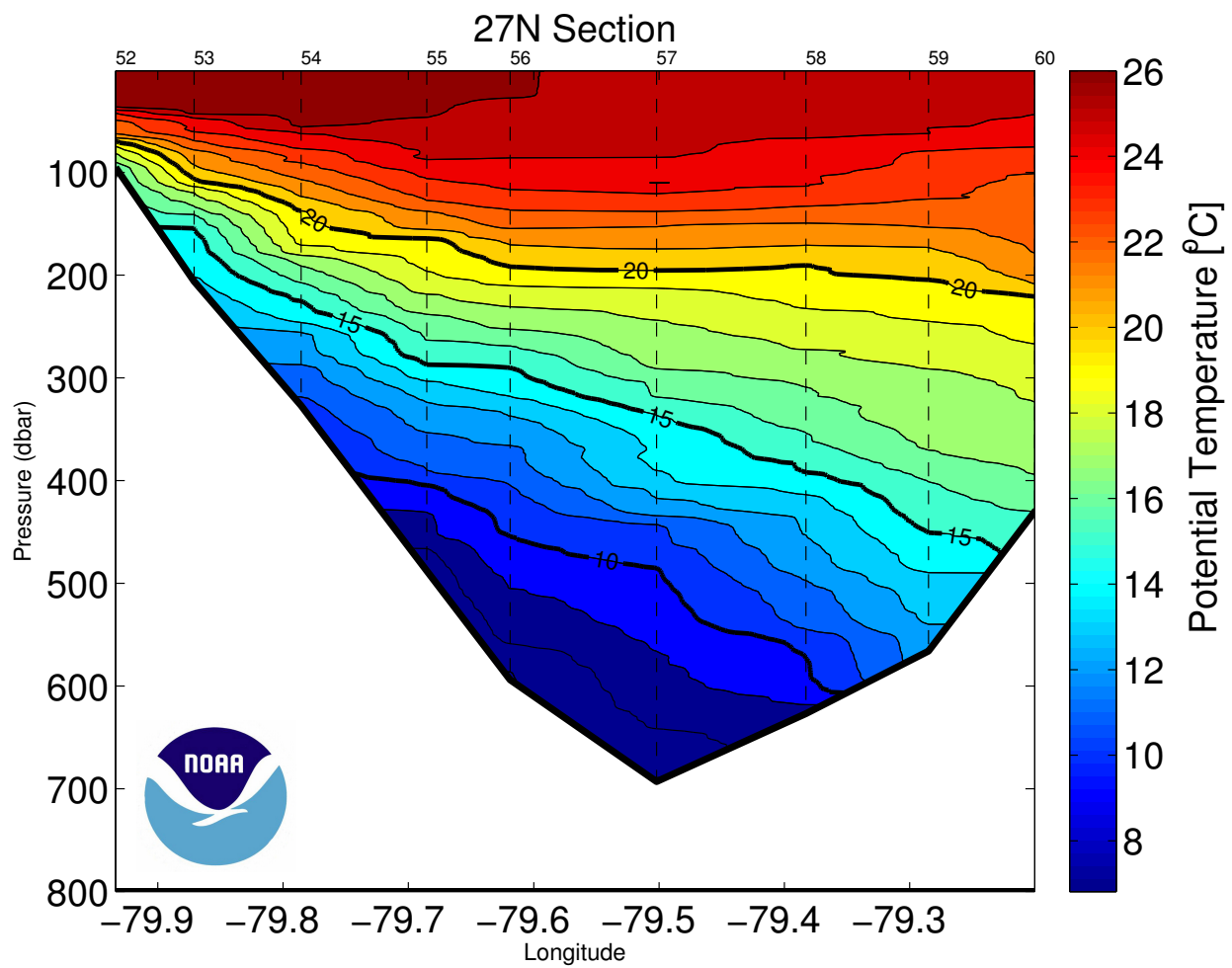


Figure 34: Potential Temperature ($^{\circ}\text{C}$) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

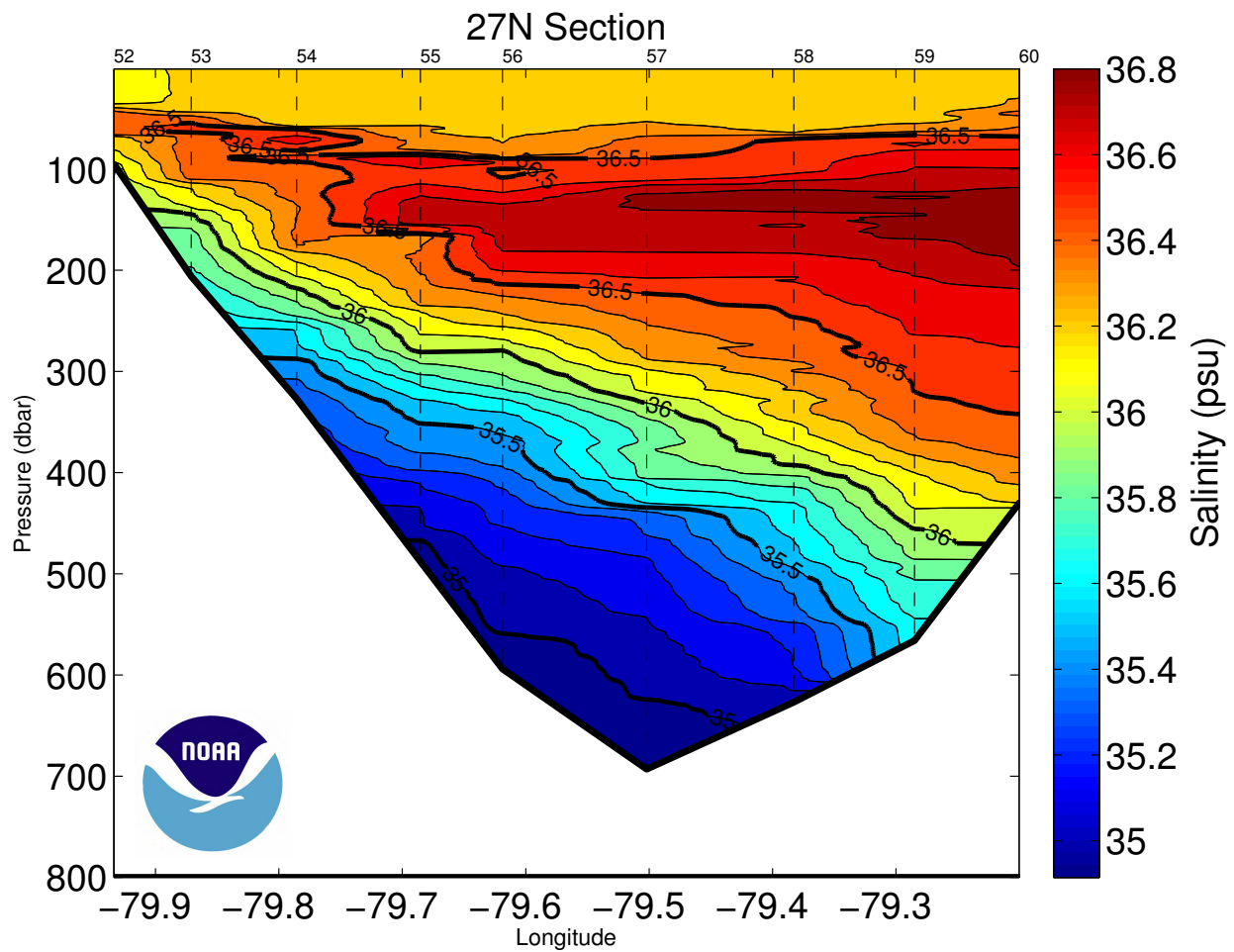


Figure 35: Salinity (PSS 78) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

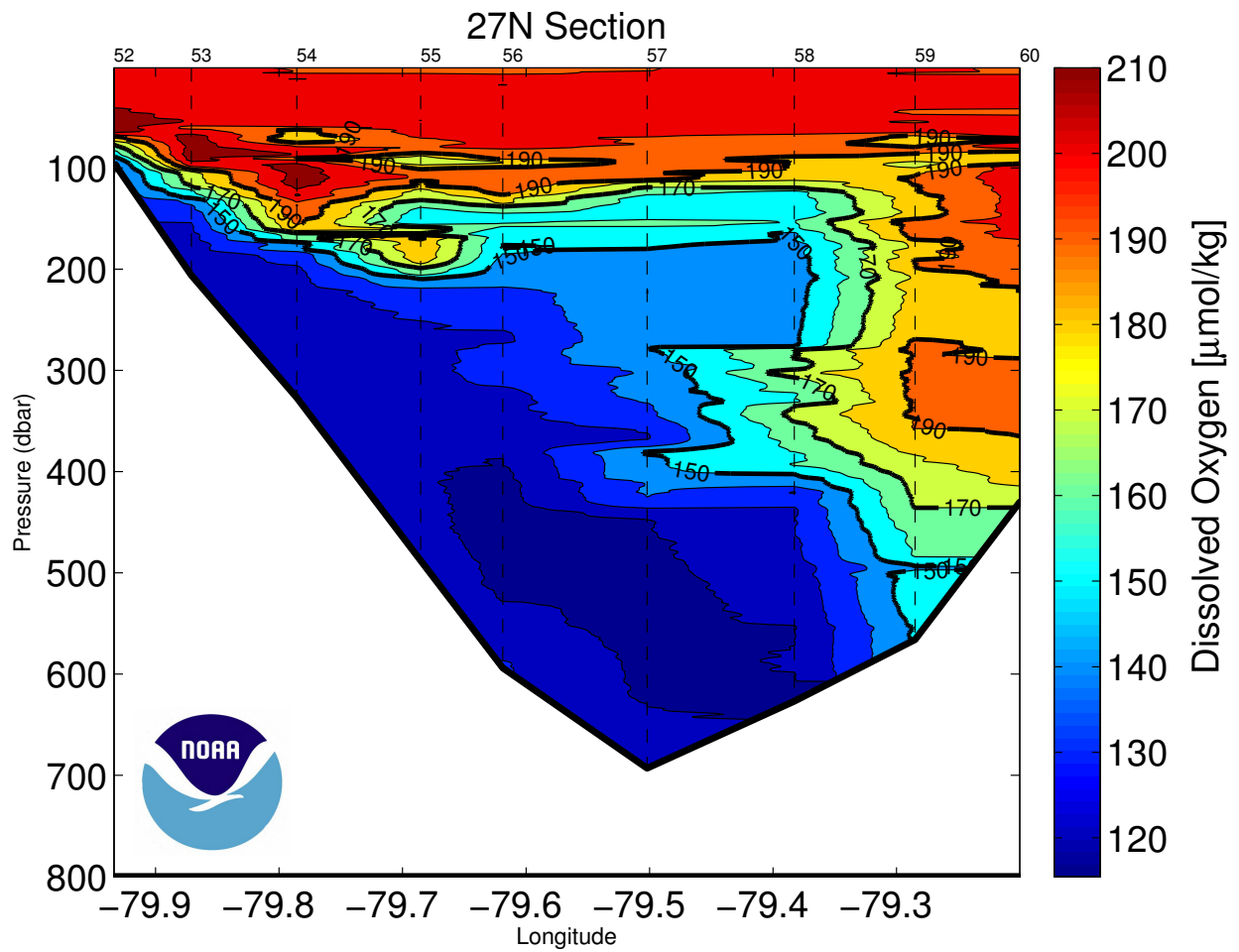


Figure 36: Dissolved Oxygen ($\mu\text{mol/kg}$) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

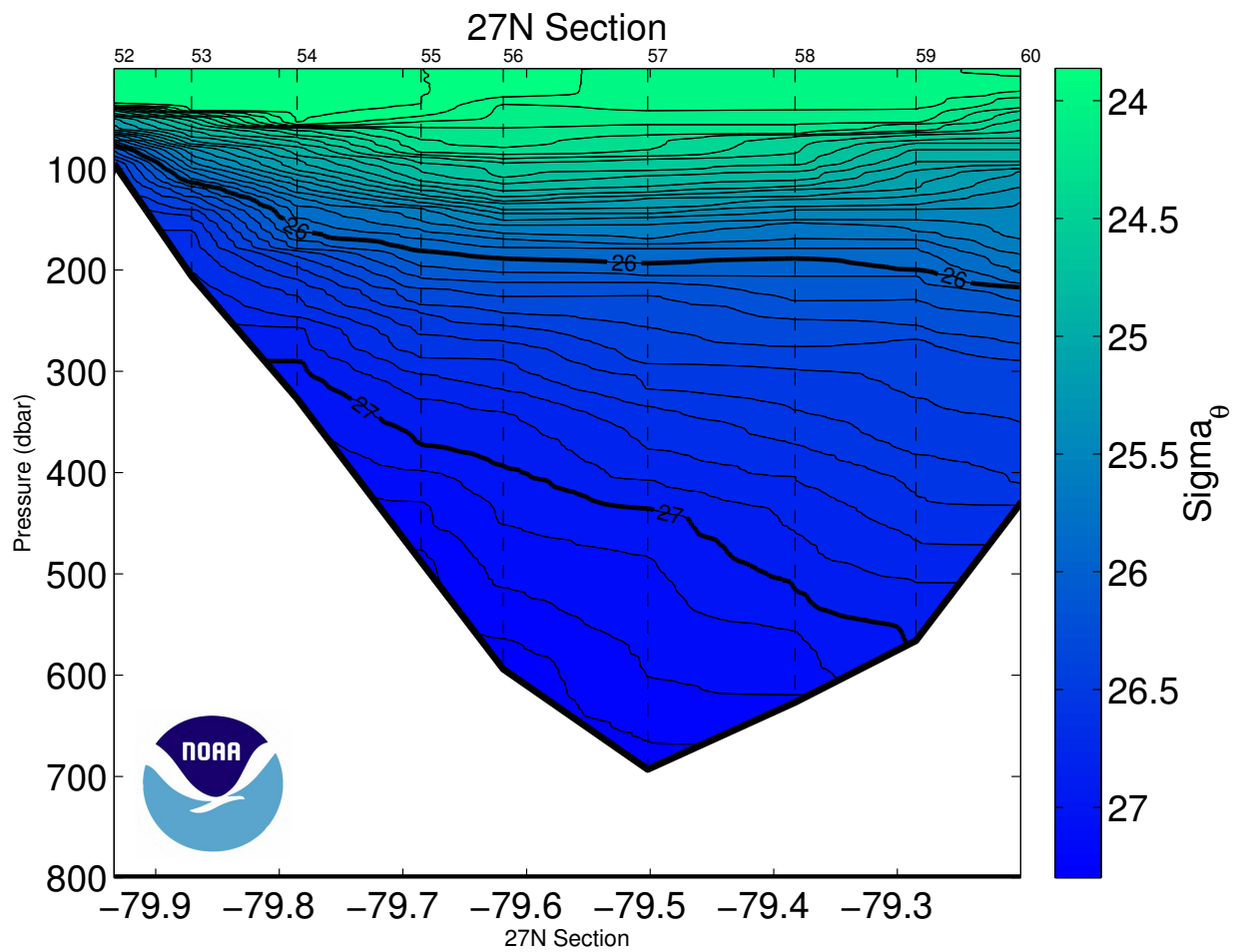


Figure 37: Neutral density (kg/m^3) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

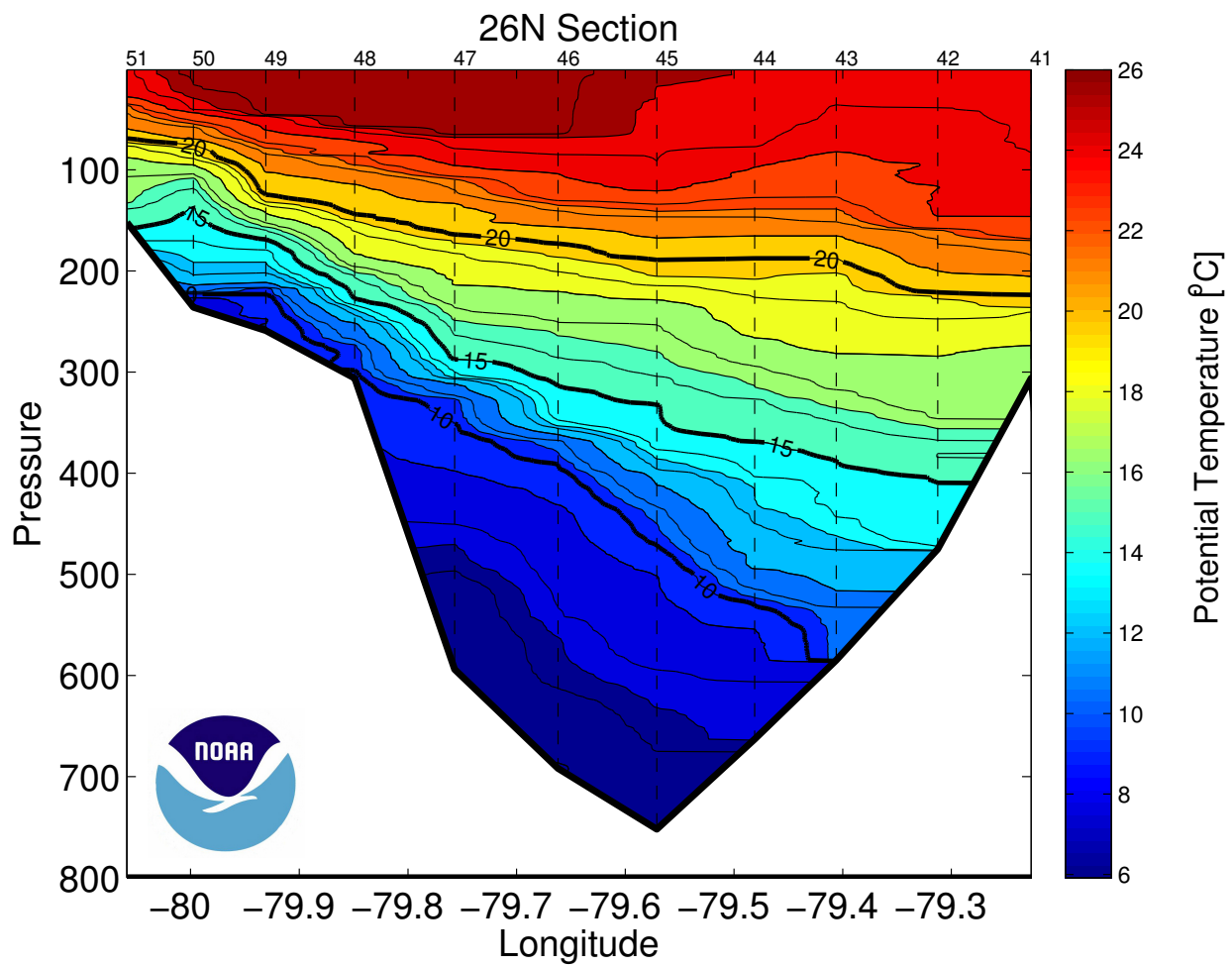


Figure 38: Potential Temperature ($^{\circ}\text{C}$) section for the Florida Current South section. Contour intervals are 1°C . Dashed vertical lines are the CTD station locations.

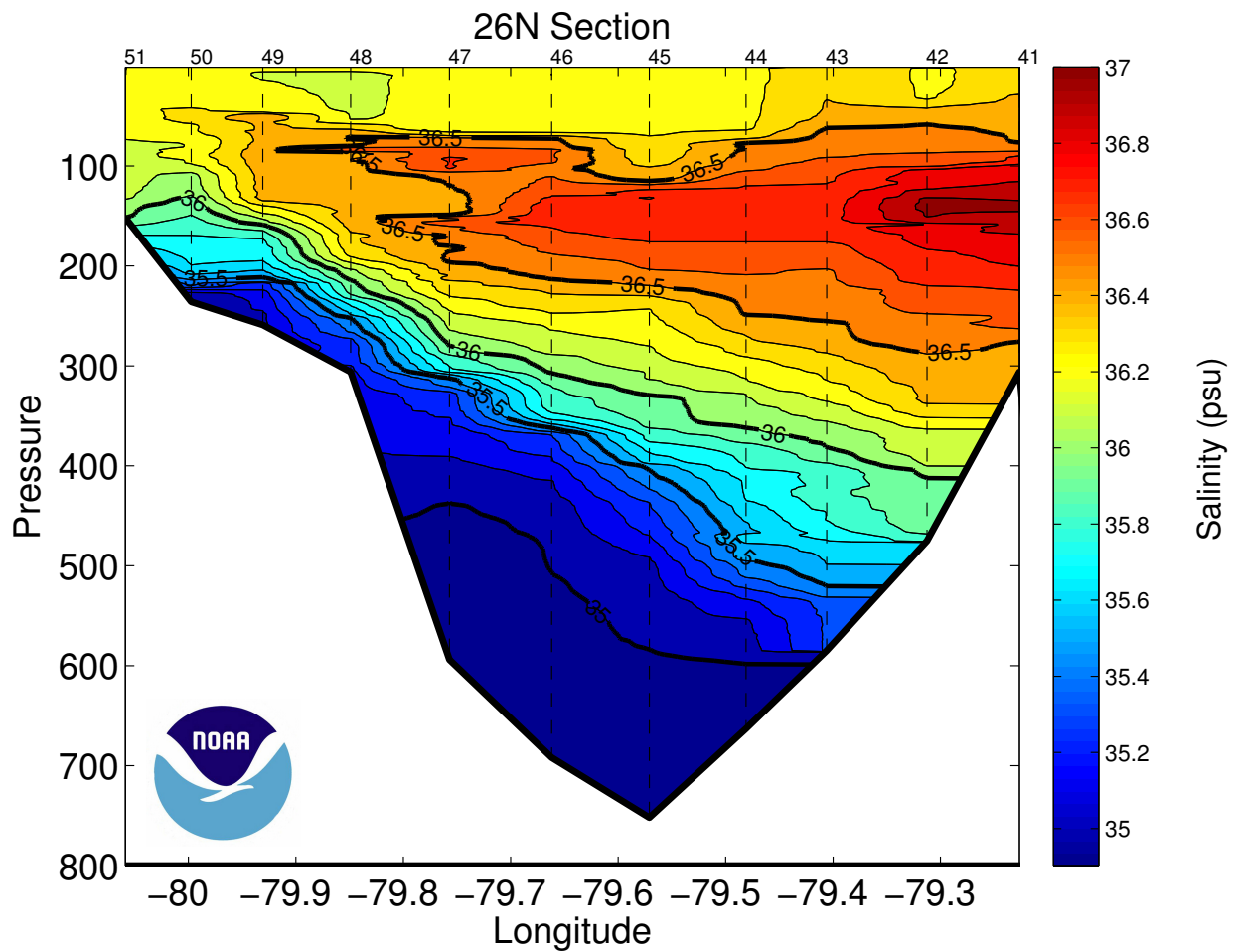


Figure 39: Salinity (PSS 78) section for the Florida Current South section. Contour intervals are 0.1. Dashed vertical lines are the CTD station locations.

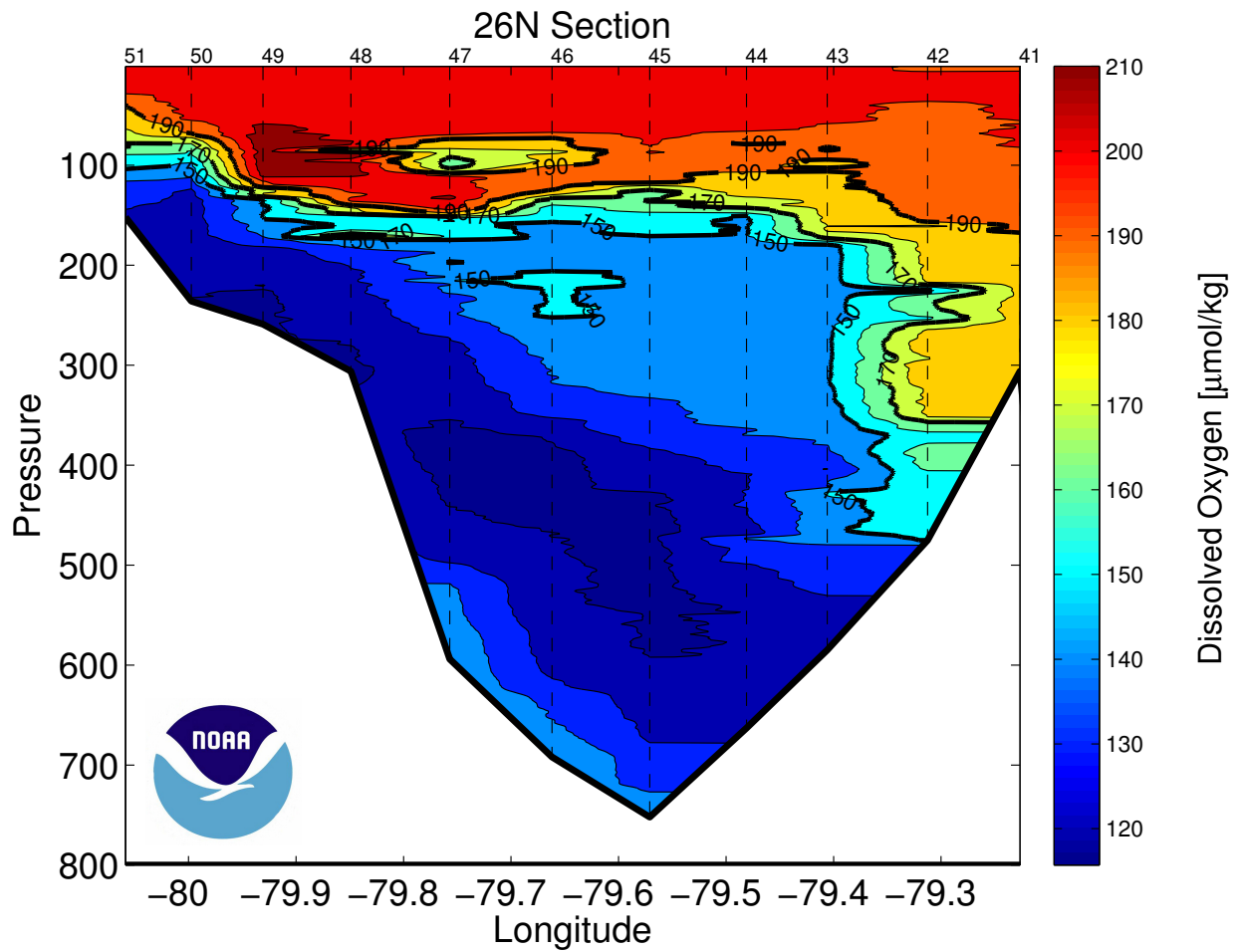


Figure 40: Dissolved Oxygen ($\mu\text{mol/kg}$) section for the Florida Current South section. Contour intervals are $\approx 20 \mu\text{mol/kg}$. Dashed vertical lines are the CTD station locations.

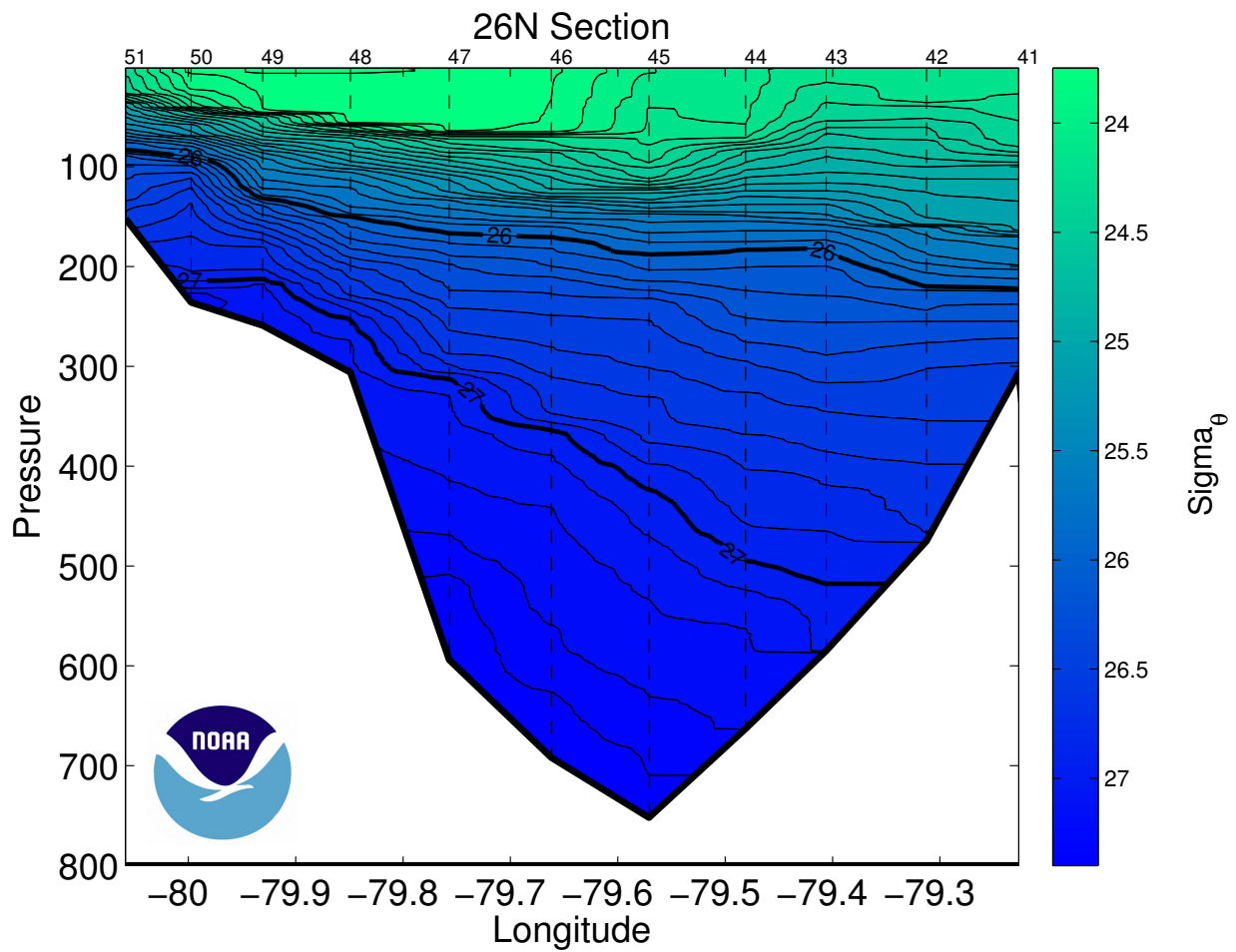


Figure 41: Neutral density (kg/m³) section for the Florida Current South section. Contour intervals are 0.1 kg/m³. Dashed vertical lines are the CTD station locations.

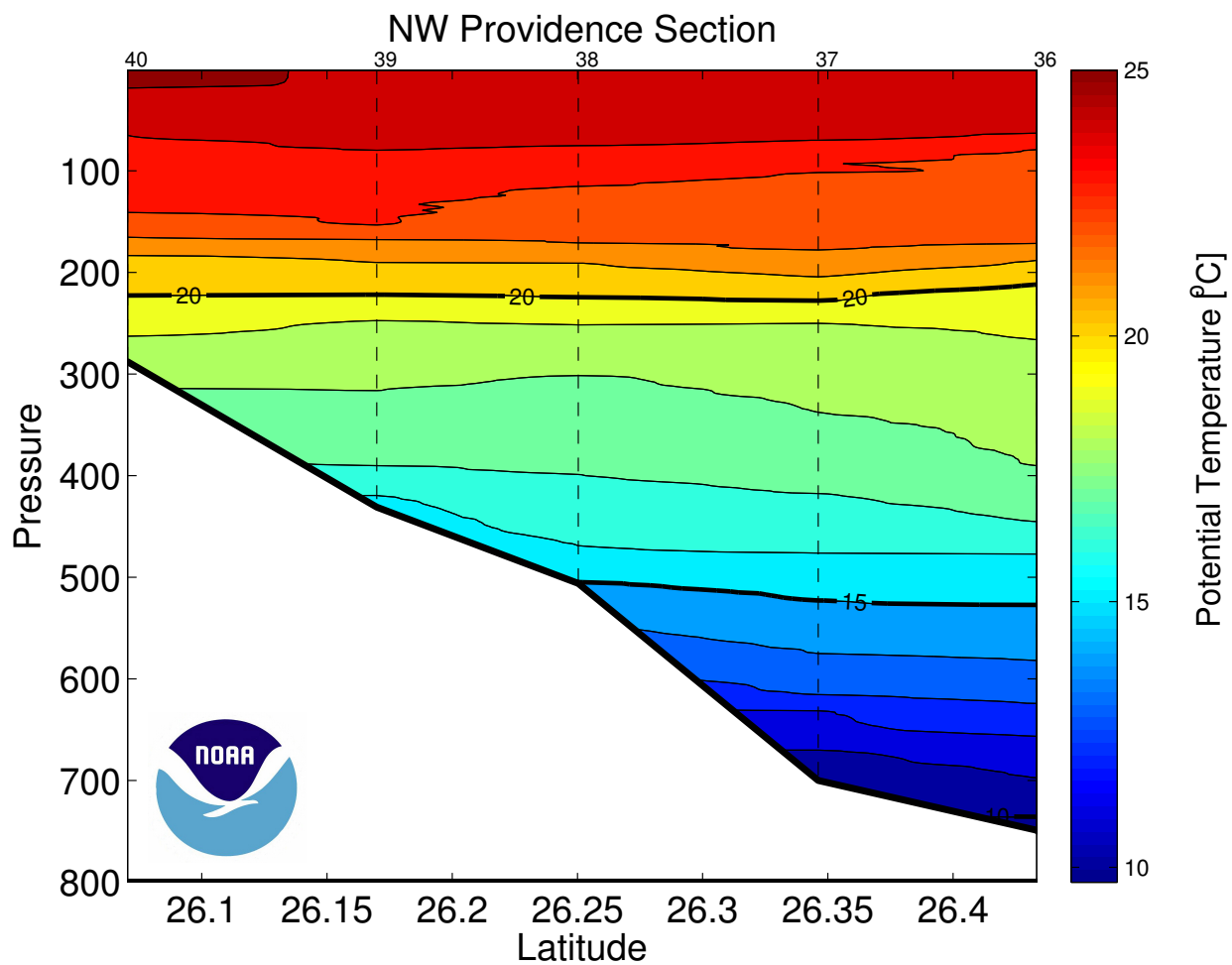


Figure 42: Potential Temperature ($^{\circ}\text{C}$) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

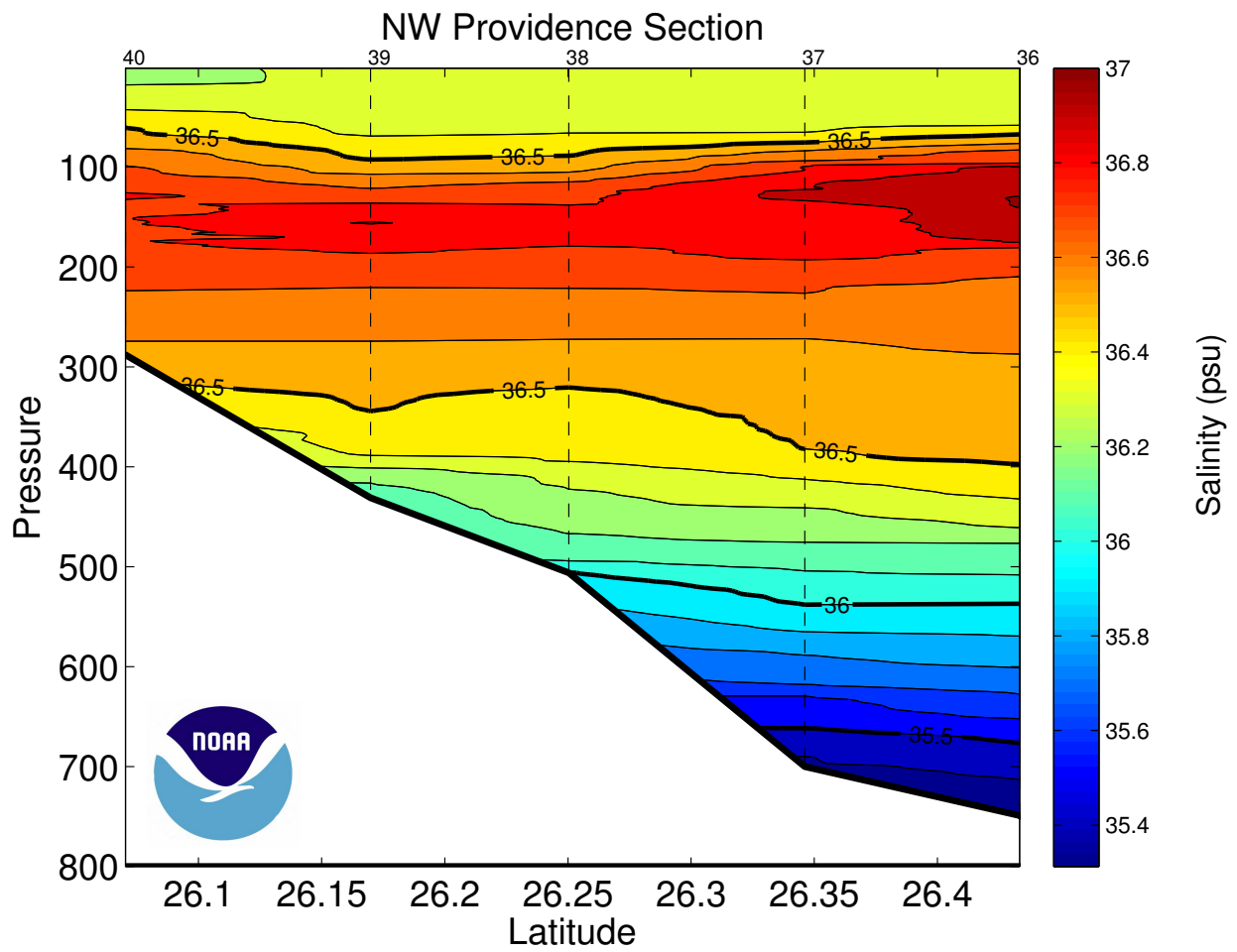


Figure 43: Salinity (PSS 78) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

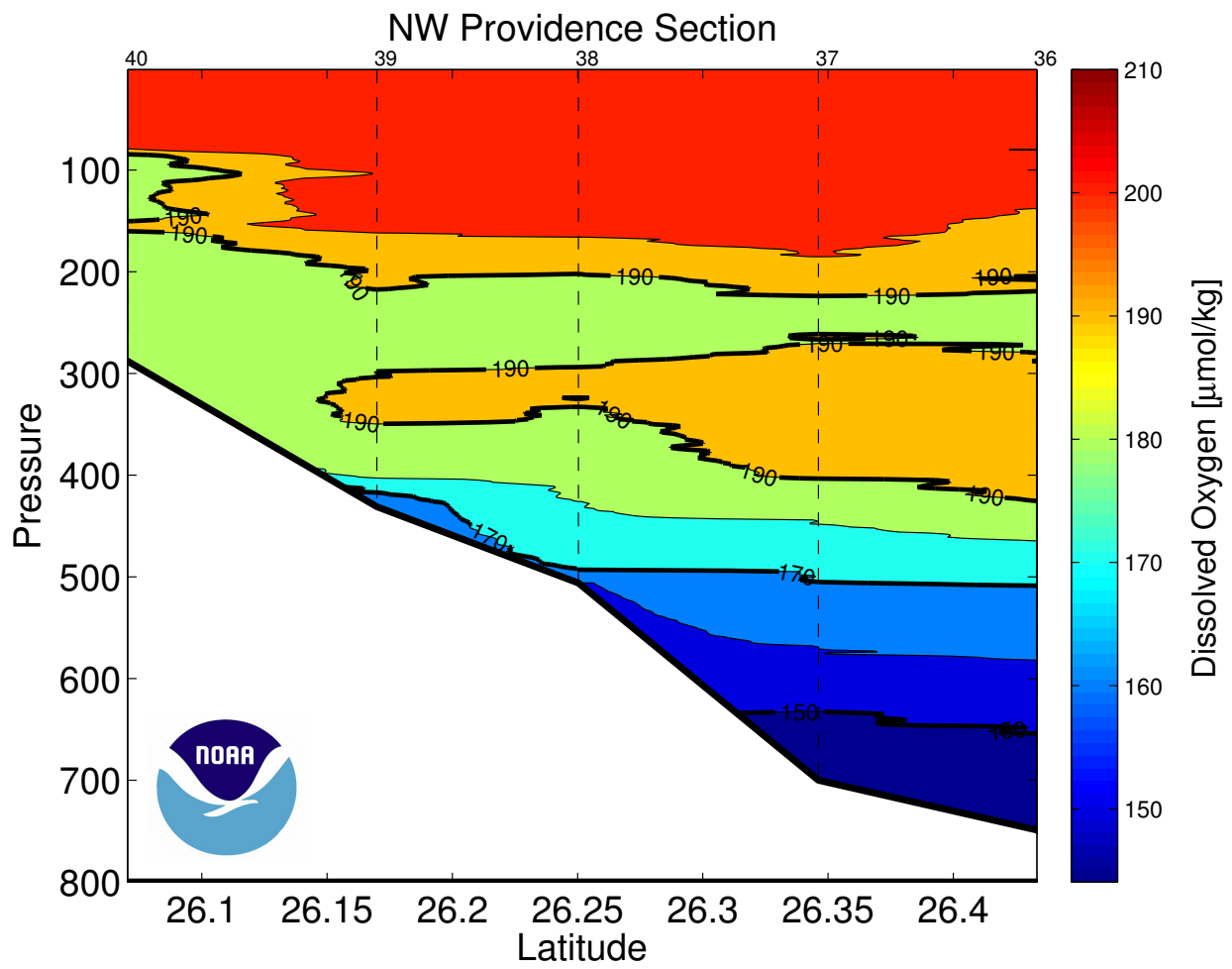


Figure 44: Dissolved Oxygen ($\mu\text{mol/kg}$) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

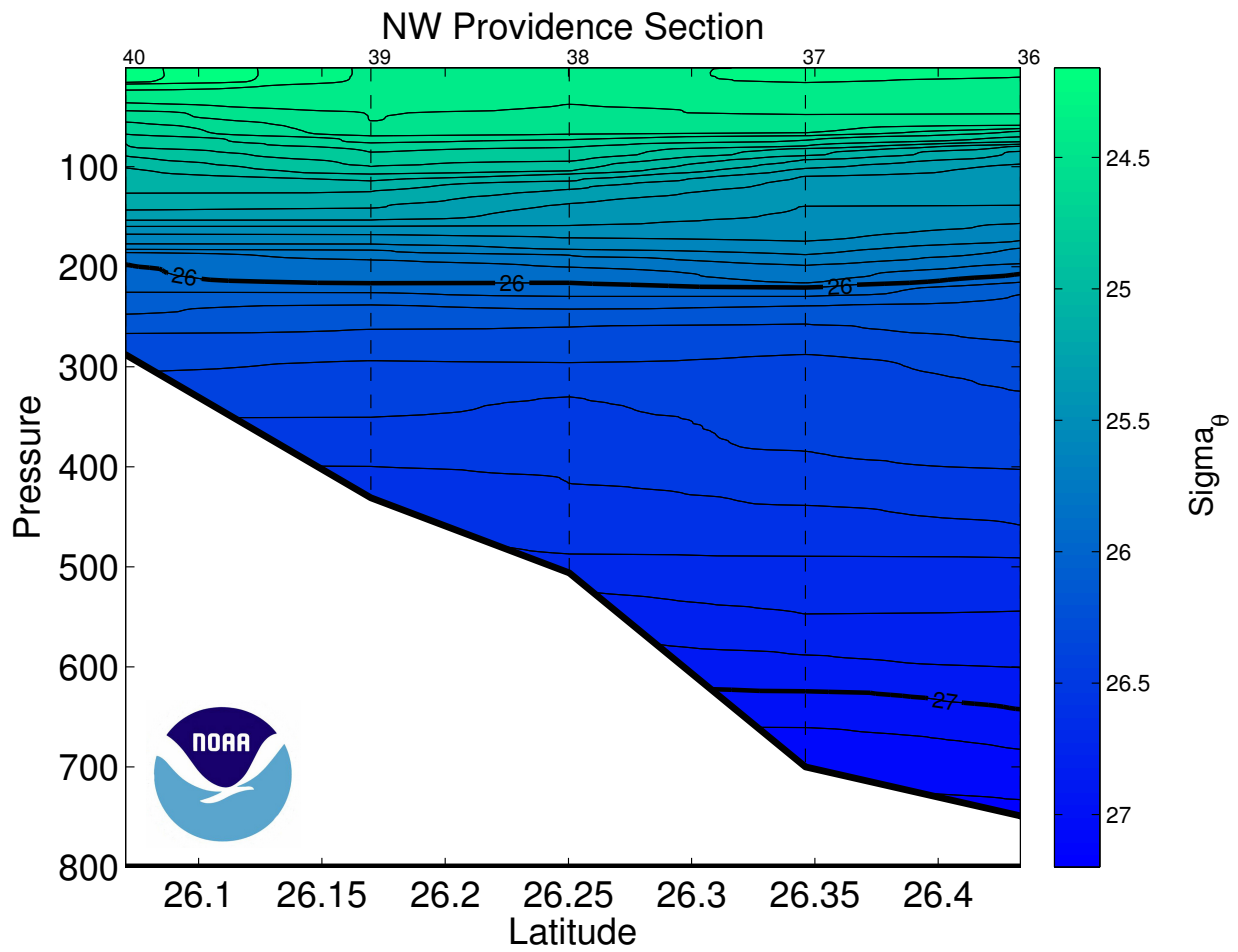


Figure 45: Neutral density (kg/m³) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

10 Acknowledgements

The successful completion of the cruise relied on dedicated assistance from many individuals on shore and on the NOAA ship Ronald H Brown. 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 the cruise. Officers and crew of the Ronald H Brown exhibited a high degree of professionalism and assistance to accomplish the mission and to make us feel at home during the voyage.

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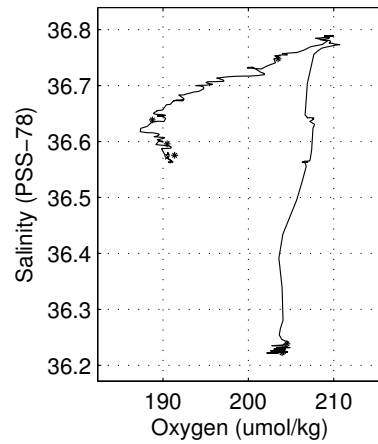
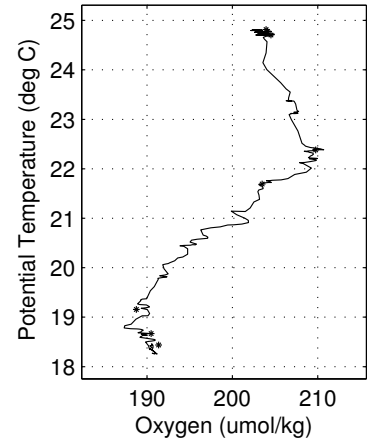
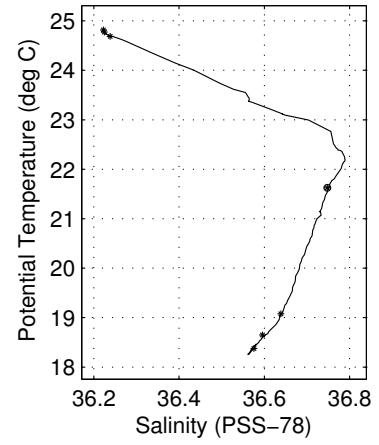
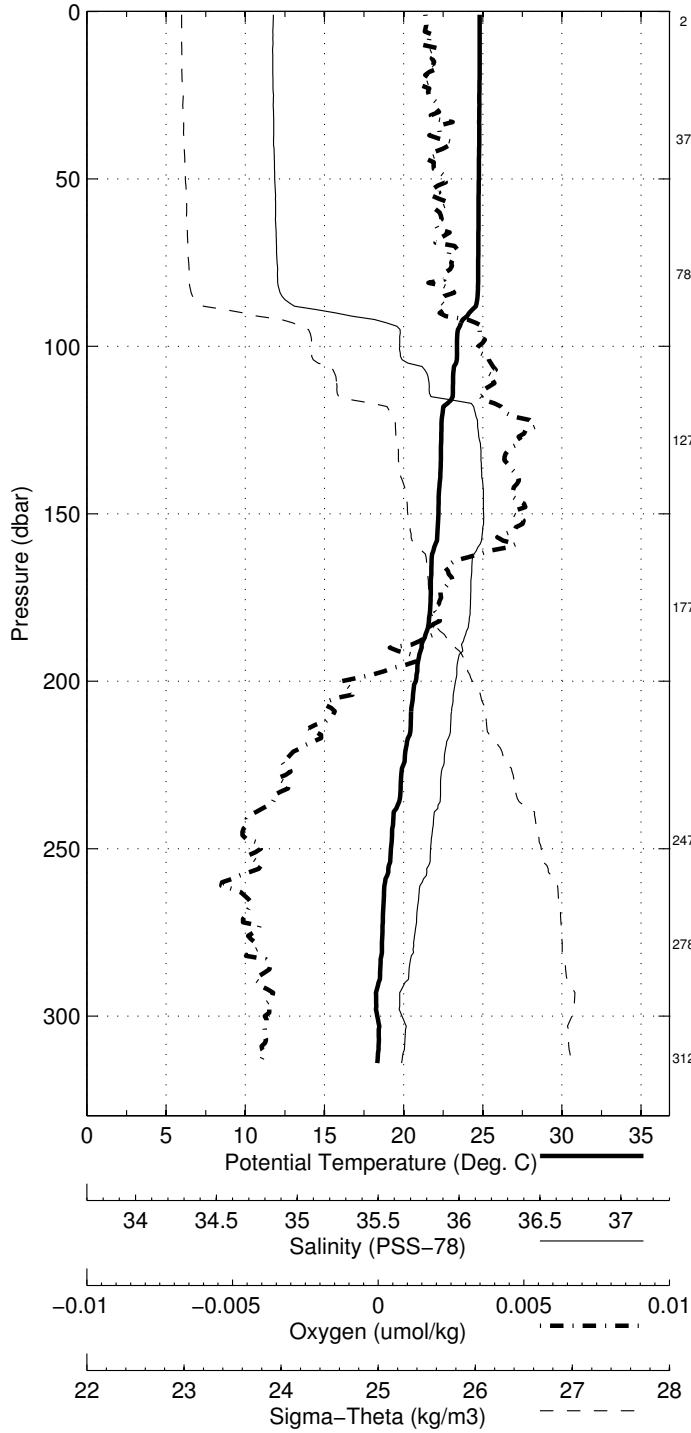
A Hydrographic - CTD Data

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 1 (CTD001)
 Latitude 26.525N Longitude 76.892W
 18-Apr-2009 15:05Z

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	24.809	24.808	36.223	202.5	0.004	24.324
10	24.808	24.806	36.222	202.3	0.036	24.324
20	24.803	24.798	36.222	202.9	0.072	24.326
30	24.788	24.782	36.223	203.5	0.108	24.333
50	24.764	24.754	36.227	203.8	0.180	24.344
75	24.728	24.712	36.233	204.4	0.270	24.361
100	23.395	23.374	36.563	206.5	0.353	25.010
125	22.411	22.386	36.774	210.0	0.423	25.457
150	22.232	22.202	36.789	209.0	0.487	25.521
200	20.804	20.766	36.713	196.3	0.606	25.863
250	19.250	19.204	36.647	190.3	0.708	26.227
300	18.391	18.338	36.569	190.6	0.797	26.390

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
313	1	18.432	18.377	36.576	191.4
279	2	18.700	18.651	36.596	190.5
248	3	19.121	19.077	36.639	188.7
178	4	21.659	21.624	36.748	203.5
128	5	22.424	22.522	-999.000	-999.0
79	6	24.704	24.688	36.238	204.5
38	7	24.781	24.773	36.225	204.1
3	8	24.816	24.815	36.222	203.9

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 1 (CTD001)
 Latitude 26.525 N Longitude 76.892 W
 18-Apr-2009 15:05 Z

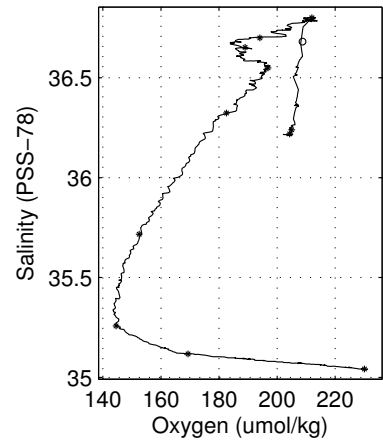
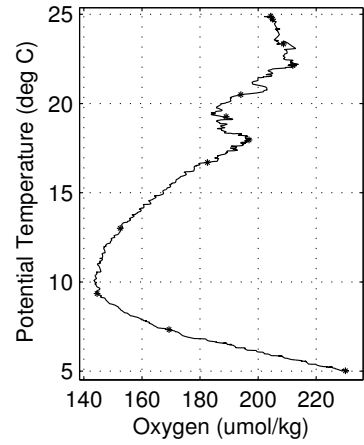
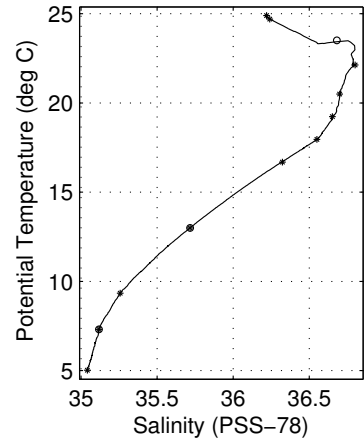
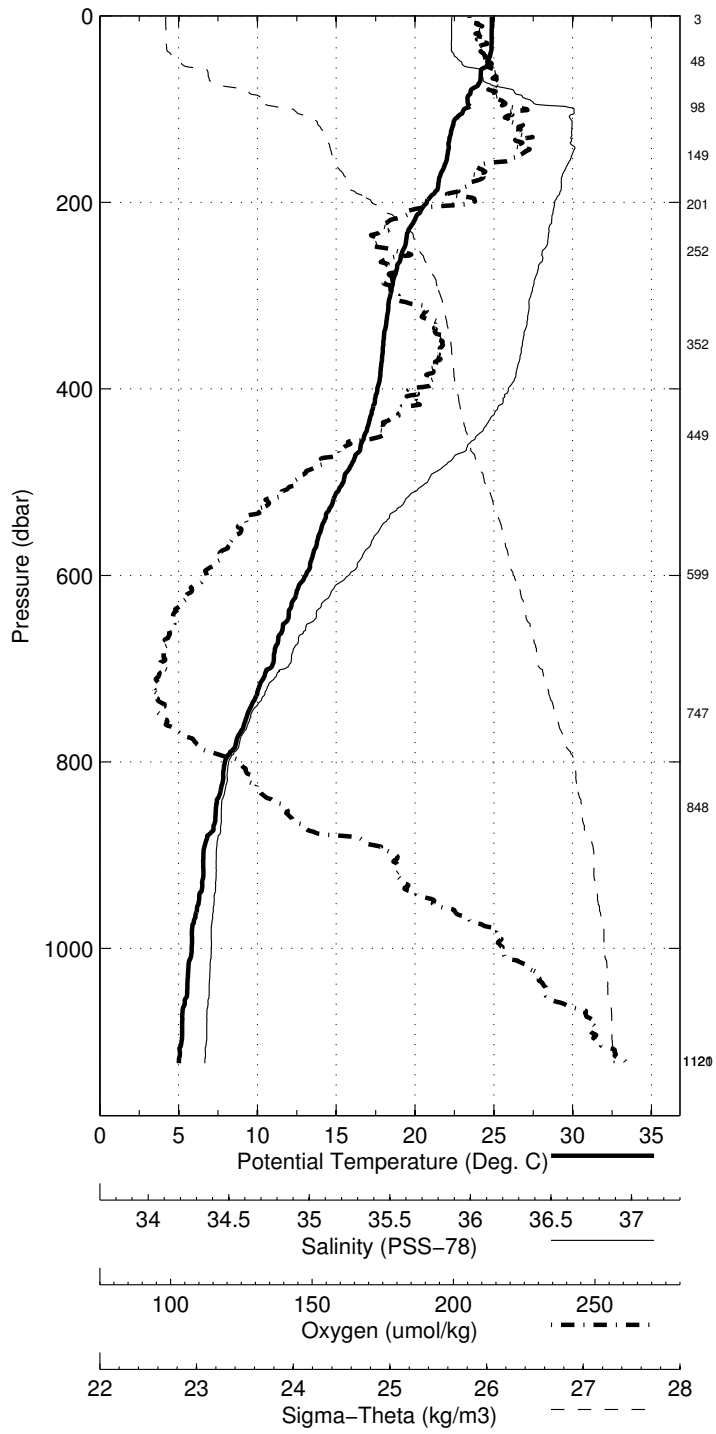


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 2 (CTD002)
 Latitude 26.517N Longitude 76.832W
 18-Apr-2009 17:11Z

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	24.875	24.875	36.217	202.0	0.004	24.300
10	24.873	24.870	36.216	204.0	0.036	24.300
20	24.869	24.864	36.215	203.8	0.072	24.301
30	24.861	24.854	36.215	205.4	0.109	24.304
50	24.614	24.603	36.264	206.0	0.180	24.418
75	23.988	23.972	36.416	207.1	0.264	24.722
100	23.128	23.108	36.799	212.7	0.339	25.268
125	22.305	22.279	36.787	211.8	0.404	25.497
150	22.072	22.042	36.788	211.7	0.466	25.565
200	20.787	20.749	36.707	202.6	0.585	25.863
250	19.324	19.279	36.657	187.4	0.685	26.216
300	18.481	18.428	36.594	188.9	0.776	26.386
400	17.681	17.612	36.487	191.0	0.945	26.507
500	15.530	15.451	36.101	169.5	1.104	26.720
600	13.153	13.068	35.726	153.3	1.241	26.942
700	10.853	10.765	35.422	145.5	1.358	27.147
800	8.020	7.935	35.154	159.4	1.454	27.404
900	6.657	6.571	35.095	188.5	1.530	27.552
1000	5.918	5.827	35.071	208.1	1.594	27.631
1100	5.275	5.180	35.048	225.8	1.650	27.692

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
1121	1	5.111	6.844	-999.000	-999.0
1121	2	5.113	5.016	35.042	230.1
848	3	7.393	7.308	35.118	169.3
747	4	9.423	9.337	35.257	144.6
599	5	13.078	12.994	35.717	152.5
449	6	16.764	16.689	36.324	182.5
353	7	18.024	17.963	36.550	196.9
252	8	19.283	19.237	36.652	188.9
202	9	20.537	20.498	36.700	194.1
149	10	22.158	22.128	36.801	212.0
98	11	23.530	23.509	36.681	208.8
49	12	24.710	24.699	36.240	205.0
3	13	24.899	24.898	36.219	204.3

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 2 (CTD002)
 Latitude 26.517 N Longitude 76.832 W
 18-Apr-2009 17:11 Z

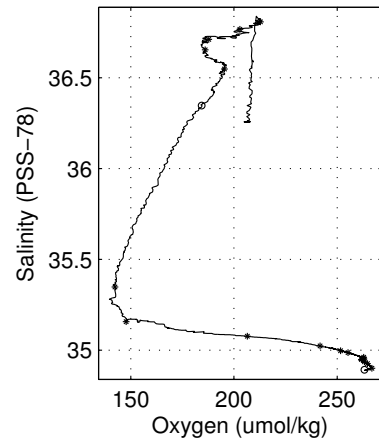
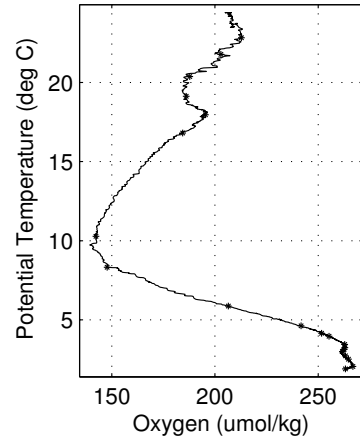
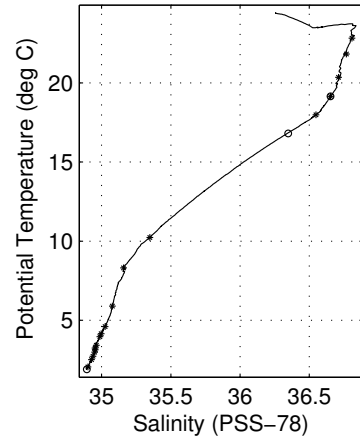
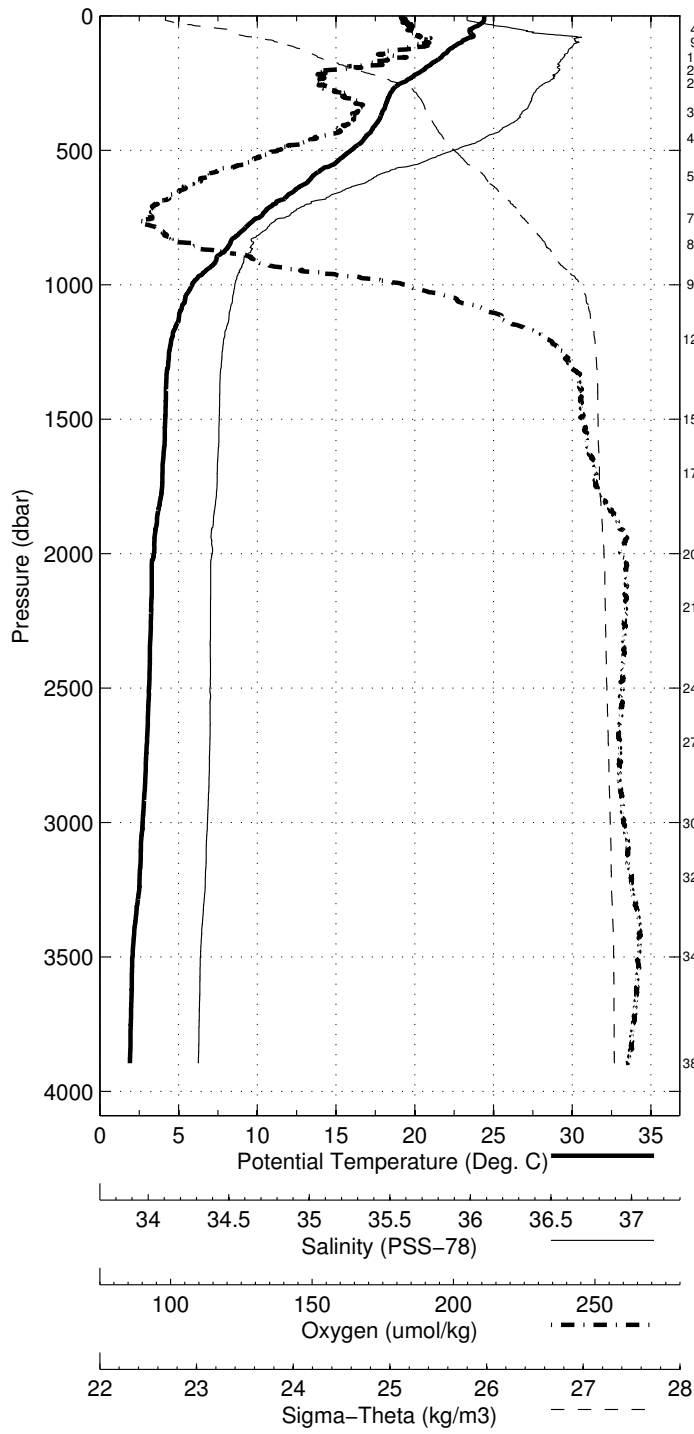


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 3 (CTD003)
 Latitude 26.500N Longitude 76.743W
 18-Apr-2009 20:45Z

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	24.410	24.409	36.258	205.3	0.003	24.472
10	24.417	24.414	36.257	206.8	0.035	24.469
20	24.374	24.370	36.275	207.4	0.069	24.497
30	24.189	24.183	36.350	207.1	0.103	24.610
50	23.500	23.489	36.523	208.5	0.166	24.946
75	23.734	23.718	36.779	209.9	0.241	25.073
100	22.922	22.902	36.813	213.1	0.310	25.338
125	22.219	22.194	36.773	207.2	0.375	25.511
150	21.765	21.736	36.751	204.7	0.437	25.624
200	20.618	20.580	36.727	189.5	0.551	25.924
250	19.178	19.133	36.651	185.9	0.651	26.250
300	18.417	18.364	36.588	191.0	0.740	26.398
400	17.639	17.570	36.481	193.0	0.910	26.513
500	16.028	15.947	36.185	174.4	1.070	26.672
600	13.542	13.455	35.785	156.6	1.213	26.908
700	11.166	11.077	35.450	144.1	1.336	27.112
800	9.129	9.038	35.224	144.9	1.440	27.287
900	7.507	7.415	35.123	167.8	1.526	27.457
1000	5.969	5.878	35.076	207.0	1.596	27.629
1100	5.171	5.076	35.049	228.0	1.651	27.705
1200	4.669	4.569	35.021	242.3	1.702	27.741
1300	4.442	4.336	35.007	249.1	1.750	27.756
1400	4.317	4.202	34.999	252.1	1.798	27.764
1500	4.277	4.154	34.996	252.1	1.846	27.767
1750	4.102	3.958	34.985	255.5	1.968	27.779
2000	3.596	3.434	34.961	261.8	2.086	27.812
2500	3.323	3.117	34.950	262.1	2.317	27.834
3000	2.977	2.726	34.937	262.4	2.549	27.860
3500	2.363	2.074	34.902	266.3	2.770	27.887

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
3893	1	2.236	1.907	34.893	263.2
3498	2	2.353	2.064	34.901	266.8
3202	3	2.792	2.525	34.926	264.6
3002	4	2.982	2.732	34.937	263.2
2701	5	3.220	2.995	34.949	261.7
2498	6	3.350	3.144	34.953	262.6
2198	7	3.428	3.250	34.952	262.9
2002	8	3.594	3.432	34.961	262.8
1702	9	4.113	3.973	34.987	255.2
1501	10	4.281	4.158	34.997	251.6
1201	11	4.709	4.609	35.024	241.7
1000	12	5.993	5.901	35.077	206.5
850	13	8.403	8.311	35.158	147.8
750	14	10.332	10.240	35.349	142.3
596	15	13.793	14.489	-999.000	-999.0
454	16	16.878	16.803	36.347	184.3
356	17	18.045	17.983	36.548	195.3
252	18	19.201	19.155	36.653	186.1
201	19	20.387	20.349	36.712	187.7
152	20	21.859	21.829	36.767	202.8
99	21	22.842	22.822	36.807	212.8
50	22	23.766	23.801	-999.000	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 3 (CTD003)
 Latitude 26.500 N Longitude 76.743 W
 18-Apr-2009 20:45 Z

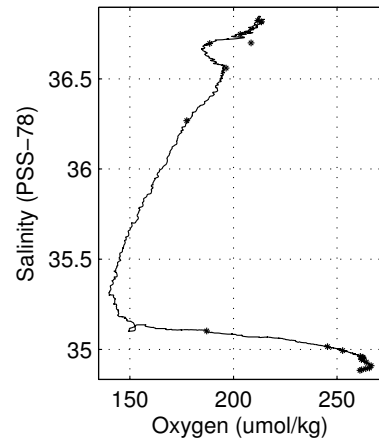
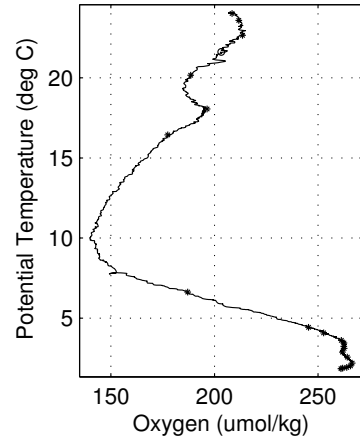
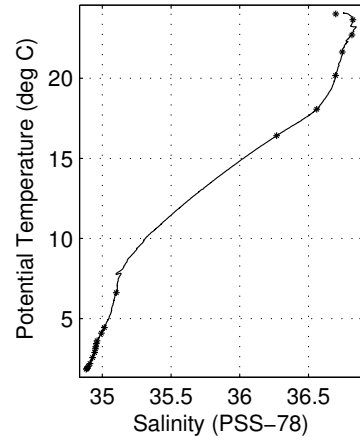
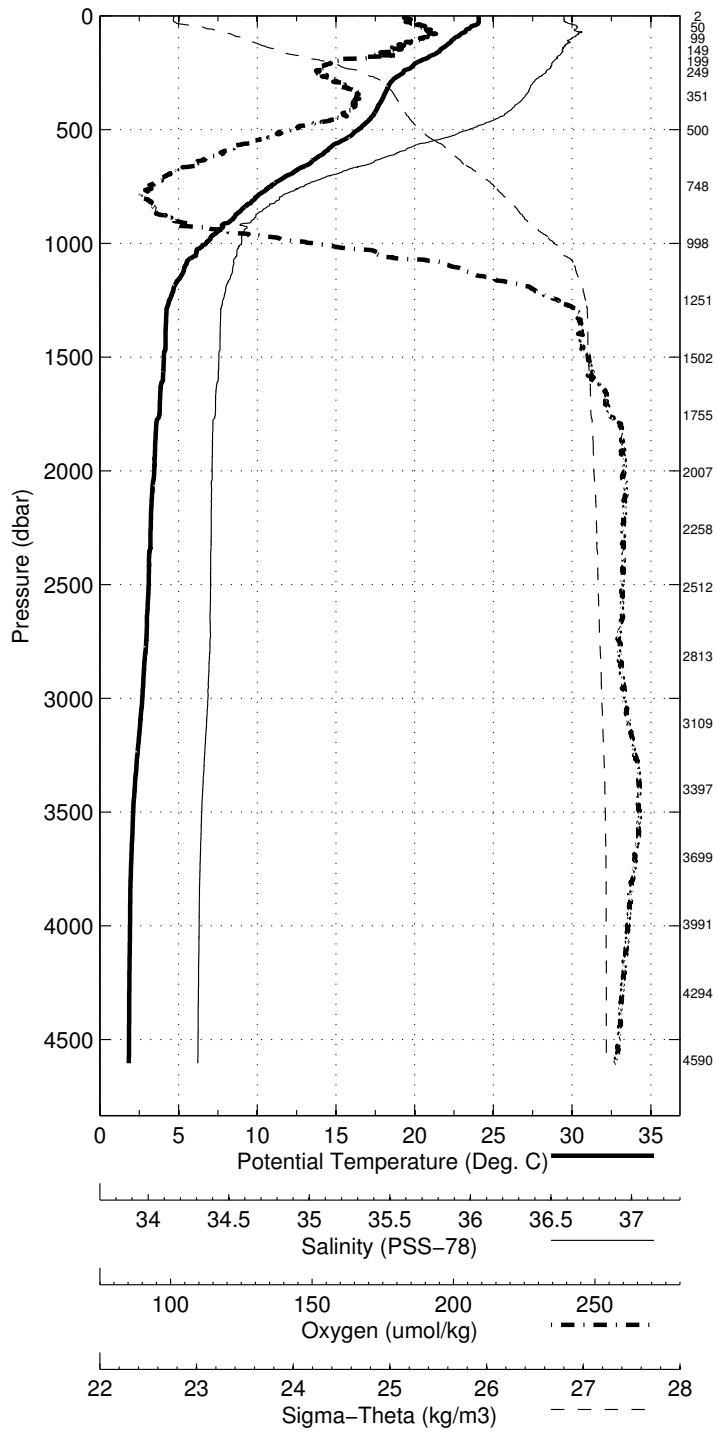


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 4 (CTD004)
 Latitude 26.506N Longitude 76.654W
 19-Apr-2009 01:25Z

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	24.062	24.062	36.757	207.7	0.003	24.954
10	24.066	24.064	36.755	207.0	0.030	24.952
20	24.075	24.070	36.756	209.1	0.060	24.951
30	24.058	24.051	36.771	208.8	0.090	24.968
50	23.574	23.564	36.824	212.2	0.148	25.153
75	23.078	23.063	36.833	212.0	0.217	25.306
100	22.520	22.499	36.793	211.2	0.283	25.439
125	22.116	22.090	36.765	206.9	0.346	25.534
150	21.638	21.608	36.746	204.8	0.407	25.655
200	20.322	20.284	36.701	189.2	0.521	25.984
250	19.312	19.267	36.661	185.1	0.620	26.223
300	18.456	18.403	36.592	191.6	0.710	26.391
400	17.739	17.670	36.502	194.3	0.880	26.504
500	16.503	16.421	36.269	178.4	1.043	26.627
600	14.374	14.284	35.912	160.4	1.192	26.831
700	12.050	11.956	35.568	147.0	1.323	27.039
800	9.979	9.883	35.302	140.2	1.434	27.208
900	8.398	8.300	35.158	148.6	1.531	27.352
1000	6.850	6.752	35.108	184.4	1.610	27.538
1100	5.518	5.421	35.065	218.6	1.673	27.677
1200	4.781	4.680	35.027	239.1	1.726	27.733
1300	4.337	4.232	35.002	251.0	1.774	27.763
1400	4.288	4.174	34.998	251.6	1.821	27.766
1500	4.192	4.069	34.992	253.7	1.869	27.773
1750	3.933	3.790	34.974	258.7	1.988	27.787
2000	3.619	3.458	34.957	262.8	2.104	27.807
2500	3.313	3.107	34.949	262.4	2.335	27.835
3000	2.949	2.699	34.936	262.5	2.565	27.861
3500	2.412	2.122	34.904	266.5	2.784	27.885
4000	2.260	1.919	34.891	263.6	2.995	27.891
4500	2.252	1.853	34.886	261.2	3.215	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4590	1	2.251	1.841	34.884	261.0
4294	2	2.249	1.874	34.887	261.9
3991	3	2.265	1.925	34.893	263.8
3700	4	2.327	2.018	34.898	265.6
3398	5	2.473	2.192	34.910	266.5
3109	6	2.826	2.568	34.929	264.1
2813	7	3.111	2.877	34.944	261.8
2513	8	3.319	3.112	34.950	262.6
2258	9	3.426	3.242	34.953	262.4
2007	10	3.602	3.439	34.956	262.5
1756	11	3.758	3.618	34.961	261.2
1503	12	4.210	4.088	34.993	252.7
1251	13	4.545	4.442	35.015	245.4
999	14	6.718	6.621	35.102	187.0
749	15	11.154	12.116	-999.000	-999.0
500	16	16.497	16.415	36.268	177.5
351	17	18.126	18.064	36.560	196.4
250	18	19.226	19.456	-999.000	-999.0
199	19	20.216	20.179	36.697	188.5
150	20	21.673	21.643	36.746	203.3
99	21	22.720	22.700	36.816	213.6
50	22	23.663	23.652	36.824	211.8
3	23	24.014	24.014	36.699	208.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 4 (CTD004)
 Latitude 26.506 N Longitude 76.654 W
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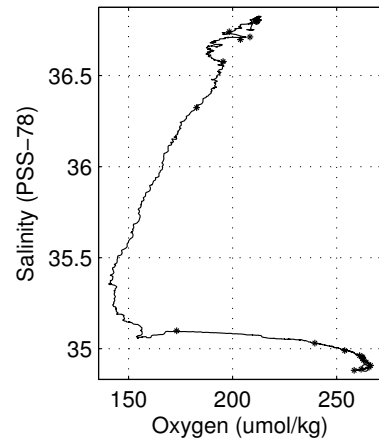
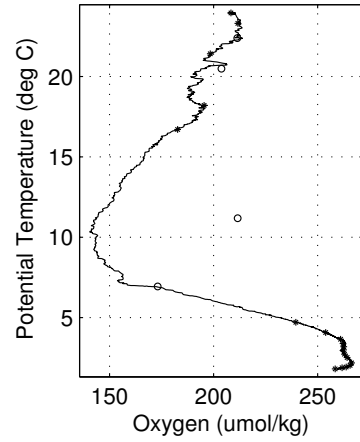
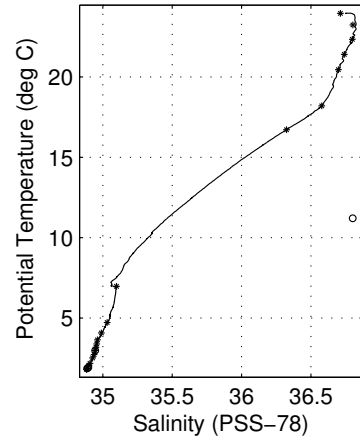
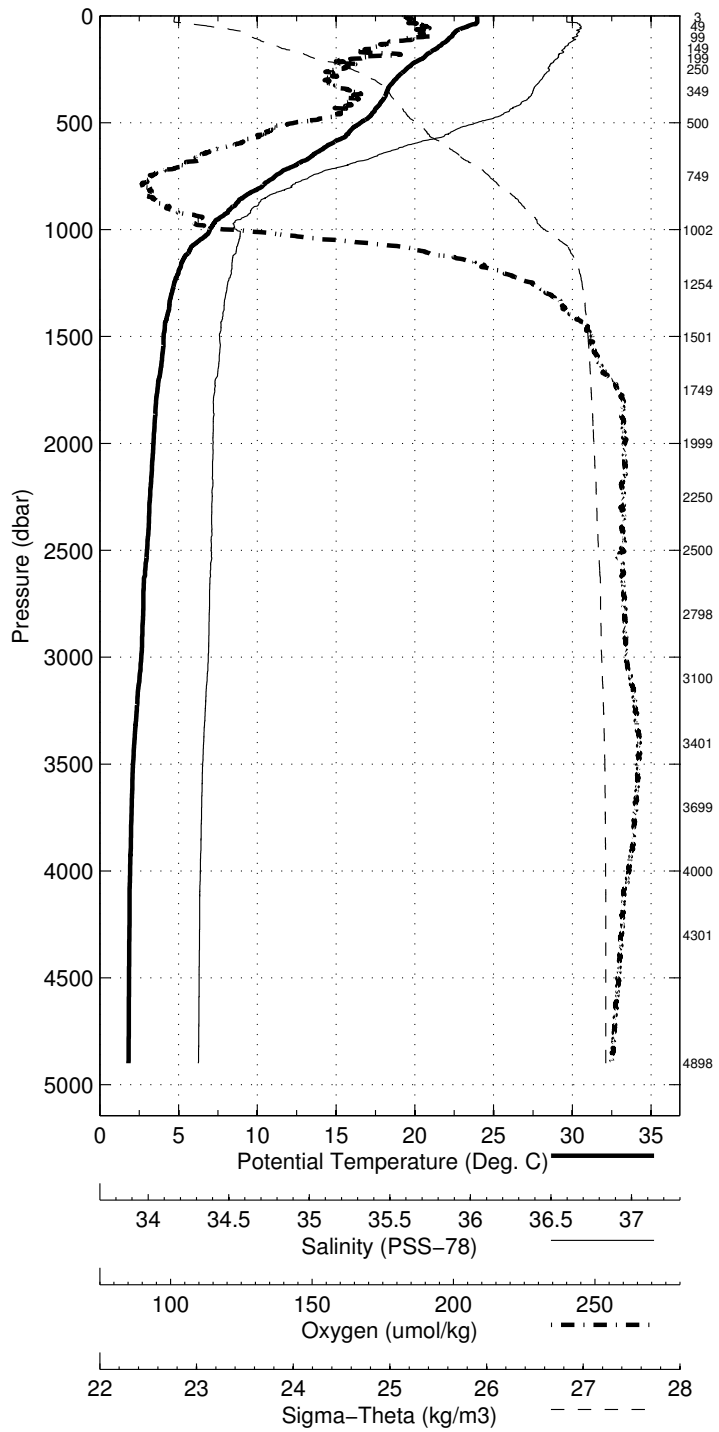


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 5 (CTD005)
 Latitude 26.499N Longitude 76.565W
 19-Apr-2009 06:25Z

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	23.945	23.945	36.754	207.1	0.003	24.986
10	23.959	23.957	36.751	208.0	0.030	24.981
20	23.967	23.963	36.752	209.6	0.059	24.979
30	23.968	23.962	36.760	208.6	0.089	24.986
50	23.317	23.307	36.825	212.2	0.146	25.229
75	22.584	22.569	36.813	211.7	0.212	25.434
100	22.286	22.266	36.790	211.2	0.276	25.503
125	21.900	21.875	36.768	202.9	0.338	25.597
150	21.468	21.439	36.742	199.1	0.397	25.700
200	20.520	20.482	36.702	194.8	0.509	25.931
250	19.489	19.443	36.663	189.9	0.610	26.178
300	18.763	18.710	36.620	187.3	0.703	26.334
400	17.963	17.894	36.531	193.4	0.877	26.472
500	16.636	16.554	36.294	179.5	1.042	26.614
600	14.733	14.642	35.967	164.9	1.195	26.797
700	12.506	12.409	35.633	151.9	1.329	27.002
800	10.382	10.284	35.358	141.6	1.443	27.182
900	8.434	8.336	35.156	147.2	1.541	27.345
1000	7.084	6.984	35.075	163.3	1.624	27.480
1100	5.781	5.681	35.074	211.8	1.691	27.651
1200	5.099	4.995	35.049	232.4	1.746	27.715
1300	4.660	4.551	35.021	243.4	1.797	27.743
1400	4.405	4.290	35.007	250.0	1.846	27.761
1500	4.172	4.050	34.990	254.8	1.894	27.773
1750	3.798	3.657	34.964	261.4	2.012	27.793
2000	3.567	3.406	34.957	262.9	2.127	27.812
2500	3.196	2.992	34.946	262.3	2.355	27.842
3000	2.879	2.631	34.932	263.5	2.578	27.864
3500	2.398	2.109	34.904	266.3	2.794	27.886
4000	2.264	1.923	34.891	263.9	3.006	27.891
4500	2.255	1.855	34.885	261.2	3.226	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4898	1	2.263	1.814	34.881	258.4
4301	2	2.250	1.874	34.888	261.7
4001	3	2.272	1.930	34.895	263.7
3700	4	2.338	2.028	34.898	265.6
3402	5	2.463	2.182	34.908	266.3
3100	6	2.774	2.517	34.926	264.1
2799	7	2.959	2.730	34.936	262.9
2501	8	3.189	2.986	34.945	262.5
2251	9	3.365	3.183	34.951	262.5
1999	10	3.549	3.389	34.956	262.2
1750	11	3.782	3.641	34.962	261.0
1501	12	4.191	4.068	34.990	253.9
1254	13	4.823	4.717	35.031	239.5
1002	14	7.072	6.972	35.098	173.0
750	15	11.299	11.201	36.802	211.6
500	16	16.803	16.720	36.325	182.6
350	17	18.265	18.203	36.578	195.4
251	18	19.433	19.661	-999.000	-999.0
200	19	20.484	20.446	36.698	203.7
150	20	21.423	21.394	36.741	198.4
99	21	22.360	22.340	36.798	211.3
50	22	23.241	23.231	36.802	211.7
4	23	23.956	23.955	36.712	208.3

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 5 (CTD005)
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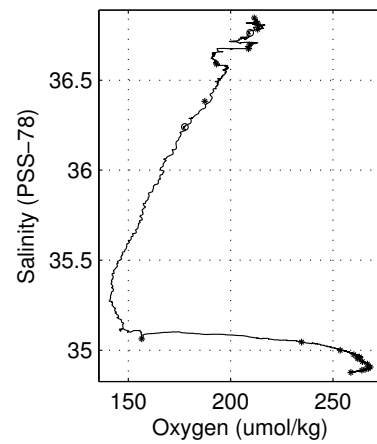
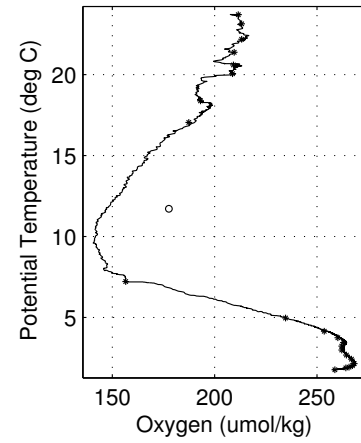
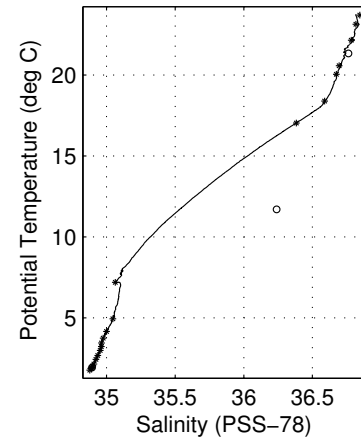
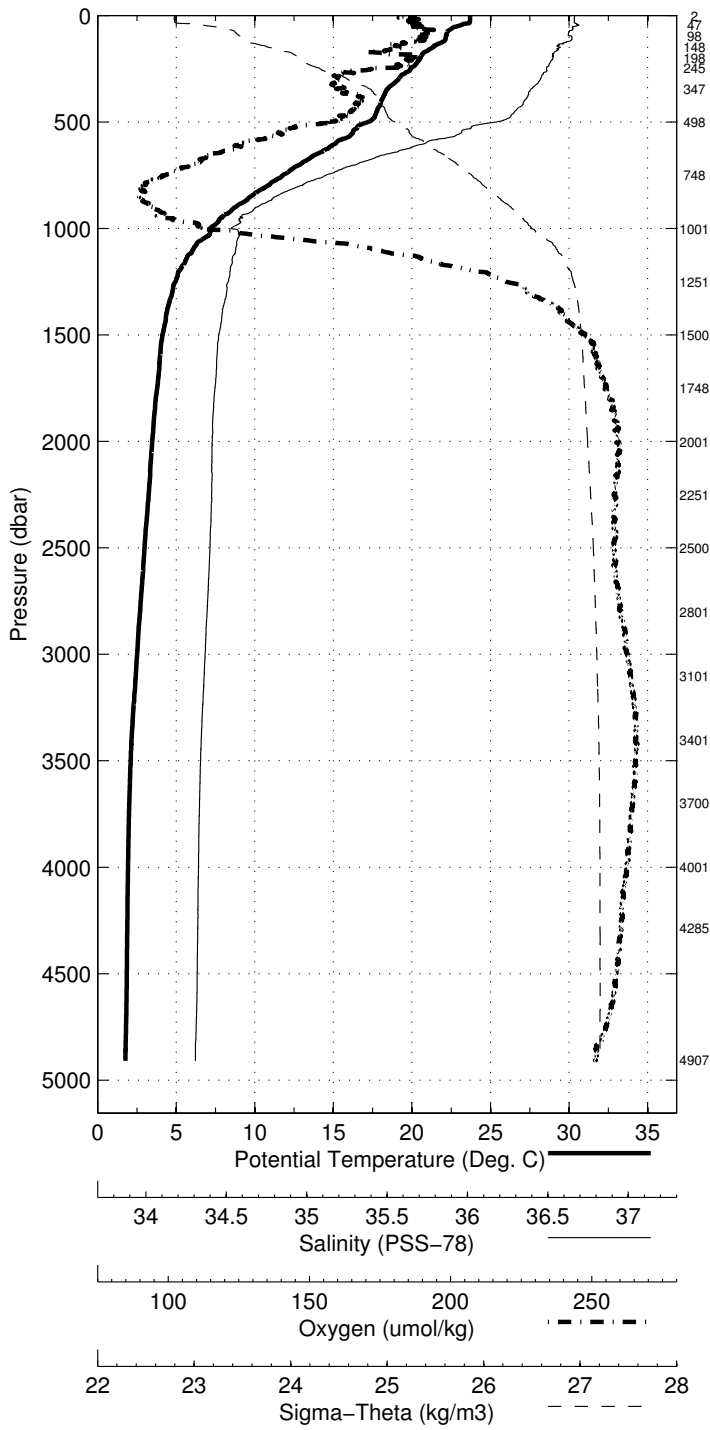


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 6 (CTD006)
 Latitude 26.502N Longitude 76.474W
 19-Apr-2009 12:07Z

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	23.700	23.700	36.819	208.8	0.003	25.108
10	23.703	23.701	36.817	207.6	0.028	25.107
20	23.704	23.700	36.817	210.4	0.057	25.107
30	23.699	23.693	36.817	210.5	0.086	25.109
50	22.907	22.897	36.823	213.6	0.141	25.347
75	22.295	22.280	36.792	215.3	0.204	25.500
100	22.191	22.171	36.803	213.0	0.267	25.540
125	21.956	21.931	36.776	210.1	0.328	25.588
150	21.378	21.349	36.745	209.5	0.388	25.727
200	20.572	20.534	36.707	211.3	0.498	25.921
250	19.973	19.926	36.675	200.1	0.604	26.060
300	19.200	19.146	36.643	192.3	0.702	26.240
400	18.121	18.051	36.561	198.1	0.879	26.456
500	17.300	17.215	36.417	190.0	1.049	26.551
600	15.251	15.157	36.053	168.4	1.206	26.749
700	12.981	12.882	35.699	155.0	1.345	26.959
800	10.905	10.804	35.412	142.5	1.465	27.132
900	8.856	8.755	35.194	145.1	1.569	27.309
1000	7.271	7.170	35.062	156.6	1.656	27.444
1100	6.152	6.049	35.082	202.1	1.727	27.612
1200	5.277	5.172	35.055	227.5	1.787	27.699
1300	4.860	4.749	35.037	240.5	1.839	27.733
1400	4.495	4.378	35.013	249.7	1.889	27.756
1500	4.251	4.128	34.996	255.6	1.938	27.770
1750	3.933	3.791	34.977	260.8	2.057	27.790
2000	3.638	3.476	34.963	263.9	2.174	27.810
2500	3.191	2.988	34.952	262.9	2.403	27.848
3000	2.758	2.512	34.927	266.2	2.623	27.870
3500	2.394	2.104	34.903	268.3	2.835	27.886
4000	2.276	1.935	34.893	266.1	3.047	27.891
4500	2.256	1.856	34.886	263.2	3.268	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4907	1	2.224	1.776	34.877	258.7
4286	2	2.262	1.888	34.889	264.0
4001	3	2.280	1.938	34.893	265.6
3701	4	2.331	2.021	34.898	267.2
3401	5	2.434	2.154	34.906	268.1
3101	6	2.691	2.436	34.923	266.8
2802	7	2.909	2.680	34.936	264.3
2501	8	3.203	2.999	34.953	262.0
2251	9	3.418	3.235	34.961	262.0
2001	10	3.613	3.451	34.962	262.9
1748	11	3.891	3.749	34.974	260.2
1500	12	4.285	4.162	35.000	253.5
1252	13	5.060	4.952	35.045	234.6
1002	14	7.304	7.202	35.063	156.5
749	15	11.804	11.704	36.240	177.6
499	16	17.117	17.033	36.383	187.3
347	17	18.446	18.384	36.590	193.1
245	18	20.083	20.037	36.675	208.7
199	19	20.604	20.566	36.696	209.2
149	20	21.362	21.333	36.763	209.5
98	21	22.161	22.141	36.783	213.2
48	22	23.145	23.135	36.817	213.1
3	23	23.700	23.700	36.845	211.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 6 (CTD006)
 Latitude 26.502 N Longitude 76.474 W
 19-Apr-2009 12:07 Z

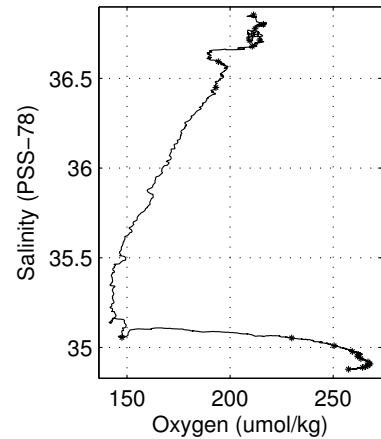
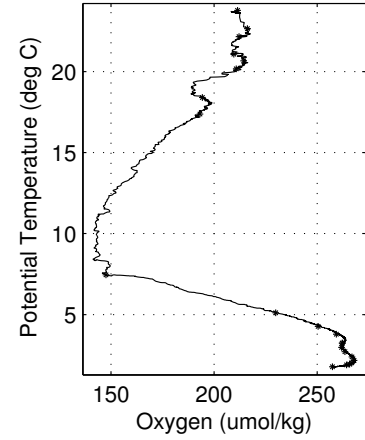
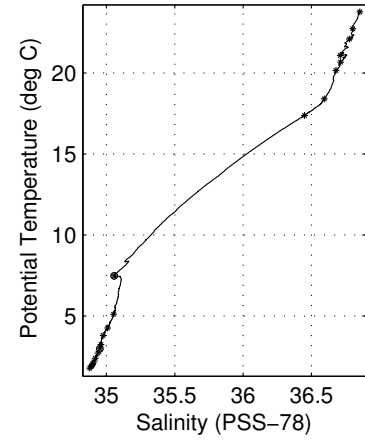
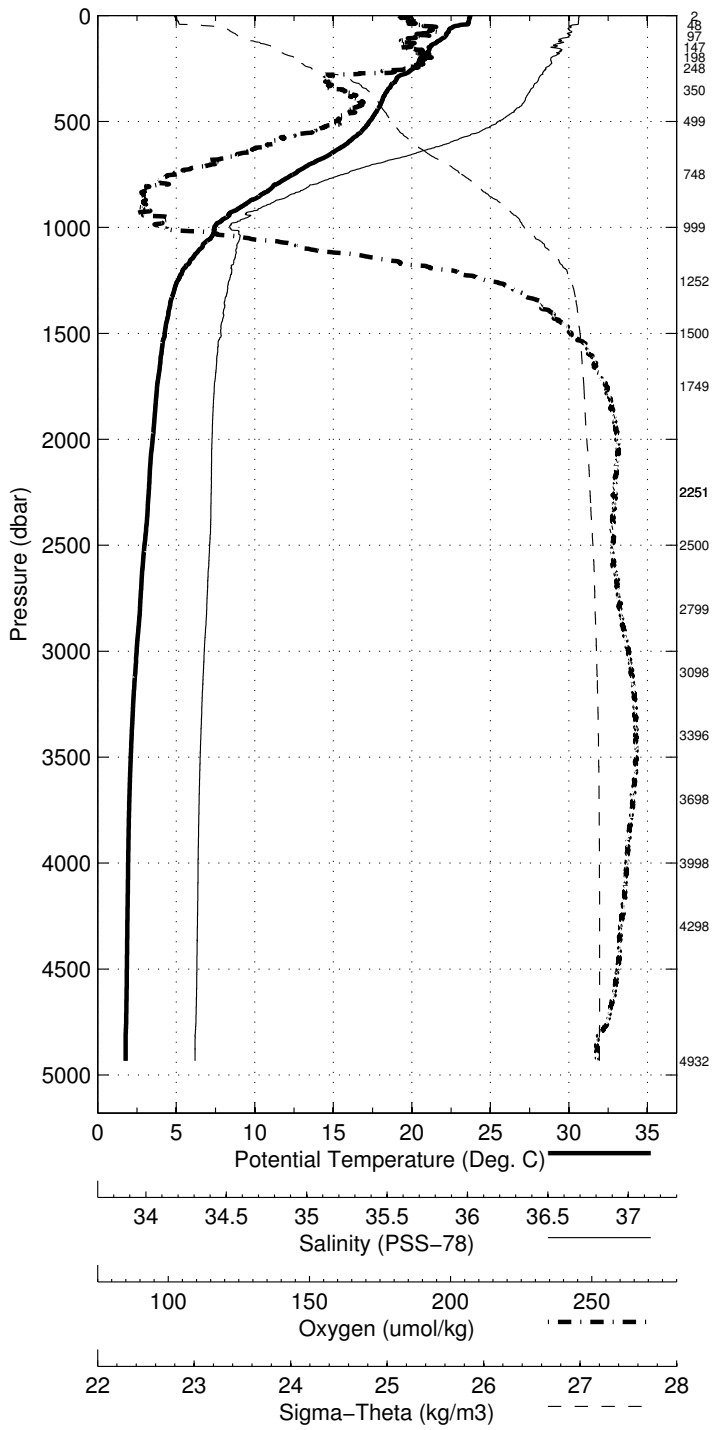


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 7 (CTD007)
 Latitude 26.495N Longitude 76.347W
 19-Apr-2009 17:22Z

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	23.706	23.705	36.848	208.0	0.003	25.129
10	23.674	23.672	36.847	209.7	0.028	25.138
20	23.651	23.647	36.846	210.7	0.056	25.145
30	23.623	23.617	36.845	211.6	0.085	25.153
50	22.770	22.759	36.797	214.2	0.140	25.367
75	22.363	22.348	36.809	216.2	0.203	25.494
100	22.125	22.105	36.792	212.7	0.266	25.551
125	21.637	21.612	36.758	208.4	0.326	25.663
150	21.095	21.065	36.703	210.1	0.384	25.773
200	20.572	20.533	36.704	214.9	0.496	25.919
250	20.137	20.090	36.678	209.9	0.602	26.018
300	19.075	19.021	36.640	189.4	0.700	26.270
400	18.201	18.131	36.572	197.2	0.878	26.444
500	17.391	17.305	36.433	190.7	1.048	26.541
600	16.033	15.936	36.184	175.9	1.211	26.674
700	13.663	13.561	35.805	161.0	1.358	26.902
800	11.316	11.212	35.467	146.4	1.484	27.100
900	9.308	9.204	35.231	142.6	1.592	27.266
1000	7.538	7.435	35.057	147.6	1.683	27.402
1100	6.668	6.561	35.090	184.3	1.761	27.550
1200	5.524	5.416	35.066	219.9	1.825	27.678
1300	4.971	4.860	35.043	237.7	1.879	27.726
1400	4.628	4.510	35.023	246.8	1.930	27.749
1500	4.401	4.276	35.010	251.7	1.980	27.765
1750	3.928	3.785	34.976	260.9	2.101	27.790
2000	3.665	3.503	34.964	263.4	2.219	27.809
2500	3.182	2.979	34.952	262.4	2.447	27.849
3000	2.725	2.481	34.925	266.4	2.666	27.871
3500	2.398	2.108	34.904	268.3	2.877	27.886
4000	2.284	1.942	34.893	265.9	3.090	27.890
4500	2.260	1.860	34.886	263.8	3.311	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4933	1	2.233	1.781	34.878	257.4
4298	2	2.267	1.890	34.889	264.2
3998	3	2.286	1.944	34.893	265.7
3698	4	2.323	2.013	34.898	266.8
3396	5	2.451	2.171	34.909	267.9
3098	6	2.646	2.393	34.919	266.9
2800	7	2.945	2.716	34.938	263.5
2500	8	3.182	2.978	34.952	261.8
2251	9	3.421	3.238	34.960	262.1
2251	10	3.421	3.238	34.960	262.3
1750	11	3.940	3.797	34.977	259.3
1501	12	4.382	4.257	35.009	250.4
1252	13	5.219	5.109	35.053	229.8
999	14	7.582	7.478	35.056	147.6
749	15	12.398	13.314	-999.000	-999.0
500	16	17.467	17.382	36.449	193.2
350	17	18.461	18.399	36.593	194.3
249	18	20.208	20.161	36.680	210.8
199	19	20.706	20.668	36.714	214.3
148	20	21.115	21.087	36.711	209.6
98	21	22.121	22.101	36.777	212.1
48	22	22.734	22.725	36.802	216.1
2	23	23.776	23.776	36.854	211.4

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 7 (CTD007)
 Latitude 26.495 N Longitude 76.347 W
 19-Apr-2009 17:22 Z

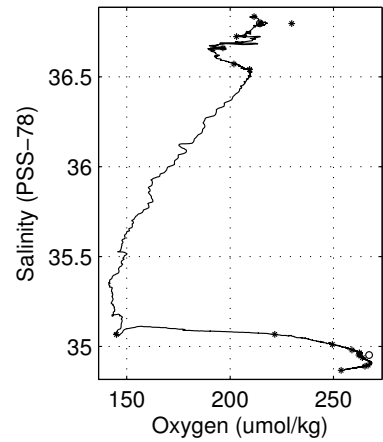
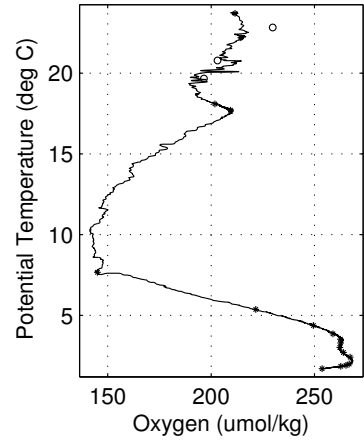
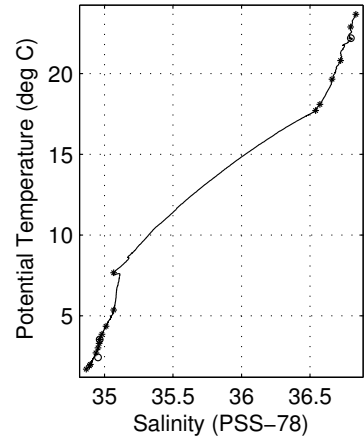
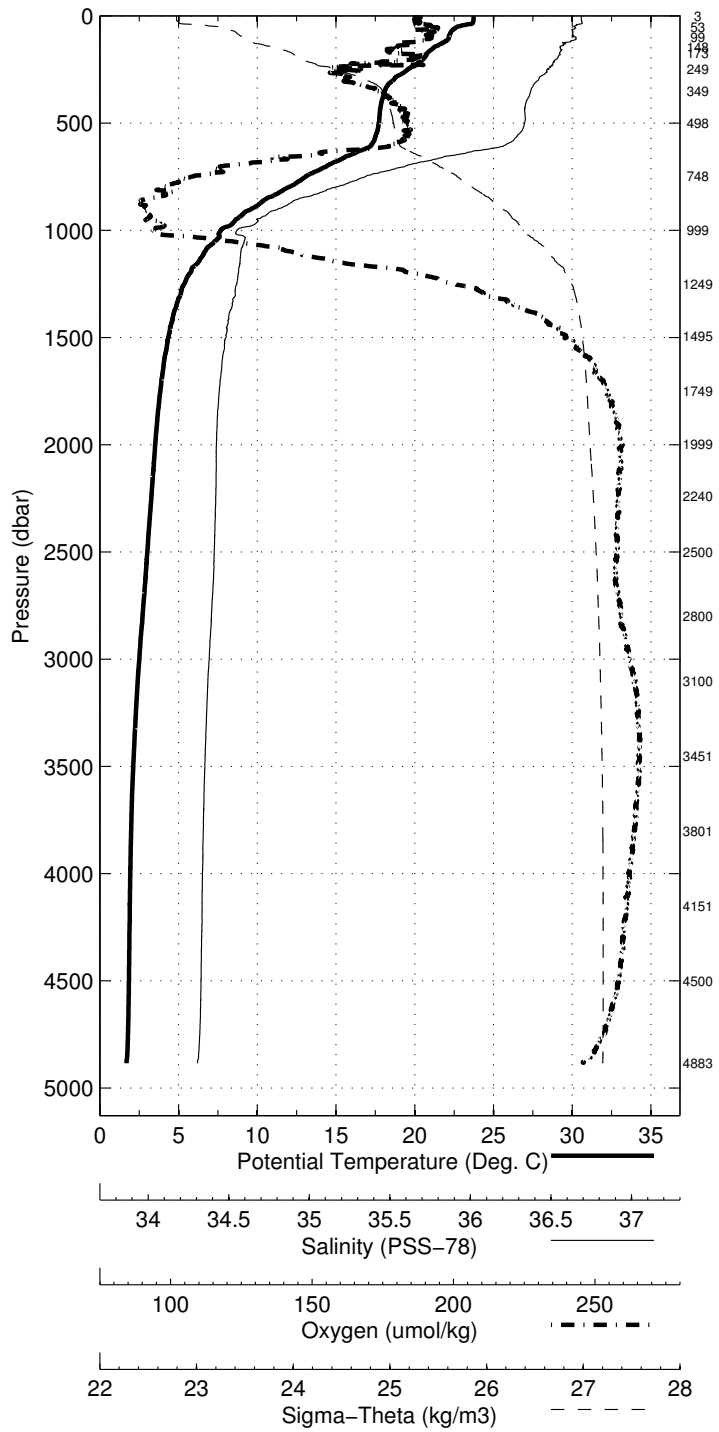


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 8 (CTD008)
 Latitude 26.499N Longitude 76.218W
 19-Apr-2009 22:53Z

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	23.736	23.736	36.834	211.4	0.003	25.109
10	23.738	23.736	36.832	210.4	0.028	25.108
20	23.739	23.735	36.833	211.6	0.057	25.108
30	23.702	23.696	36.837	211.5	0.085	25.123
50	22.730	22.720	36.793	213.7	0.141	25.376
75	22.316	22.301	36.788	216.2	0.204	25.492
100	22.206	22.186	36.806	215.2	0.267	25.538
125	21.802	21.778	36.743	208.0	0.328	25.606
150	21.212	21.183	36.728	205.3	0.387	25.759
200	20.605	20.567	36.708	211.1	0.497	25.913
250	19.590	19.543	36.660	190.5	0.601	26.150
300	18.695	18.642	36.612	192.5	0.694	26.346
400	17.962	17.892	36.551	205.9	0.865	26.488
500	17.804	17.717	36.542	209.6	1.034	26.524
600	17.369	17.266	36.448	205.0	1.203	26.562
700	14.524	14.418	35.933	162.6	1.360	26.819
800	12.065	11.957	35.569	147.6	1.493	27.040
900	9.714	9.607	35.280	143.0	1.606	27.237
1000	7.785	7.680	35.069	145.0	1.701	27.376
1100	6.780	6.672	35.090	180.0	1.781	27.535
1200	5.822	5.712	35.077	209.9	1.847	27.650
1300	5.241	5.126	35.061	229.2	1.904	27.709
1400	4.767	4.648	35.027	242.8	1.957	27.737
1500	4.483	4.357	35.013	249.7	2.008	27.758
1750	3.983	3.840	34.979	260.1	2.130	27.786
2000	3.679	3.516	34.964	263.8	2.249	27.807
2500	3.218	3.014	34.953	262.5	2.479	27.846
3000	2.751	2.506	34.927	265.6	2.699	27.871
3500	2.414	2.124	34.905	268.2	2.912	27.886
4000	2.275	1.933	34.893	265.5	3.124	27.891
4500	2.247	1.848	34.885	262.9	3.345	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4884	1	2.143	1.700	34.867	253.6
4501	2	2.247	8.449	-999.000	-999.0
4152	3	2.265	1.906	34.890	265.2
3802	4	2.315	1.994	34.896	266.8
3451	5	2.442	7.472	-999.000	-999.0
3101	6	2.678	2.423	34.953	267.2
2801	7	2.937	2.709	34.938	263.9
2501	8	3.226	3.022	34.953	262.2
2240	9	3.472	3.289	34.960	262.6
2000	10	3.696	3.533	34.964	262.5
1750	11	4.001	3.857	34.981	258.9
1496	12	4.484	4.359	35.011	249.4
1249	13	5.476	5.364	35.067	221.6
1000	14	7.772	7.667	35.067	145.0
749	15	13.308	14.191	-999.000	-999.0
499	16	17.795	17.708	36.541	209.4
349	17	18.156	18.095	36.572	201.9
249	18	19.699	19.653	36.660	196.5
173	19	20.835	20.802	36.724	203.0
148	20	21.280	21.403	-999.000	-999.0
100	21	22.204	22.184	36.798	214.3
53	22	22.892	22.881	36.797	229.8
3	23	23.671	23.670	36.835	211.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 8 (CTD008)
 Latitude 26.499 N Longitude 76.218 W
 19-Apr-2009 22:53 Z

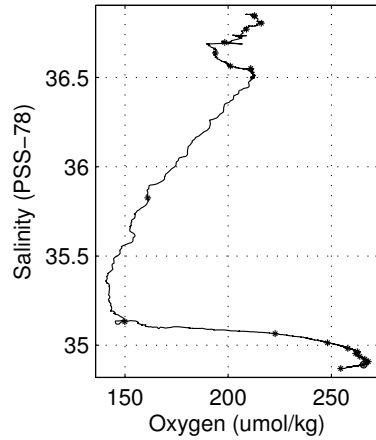
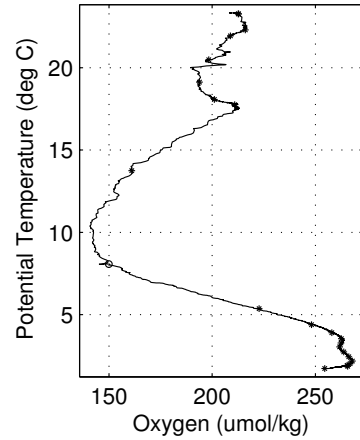
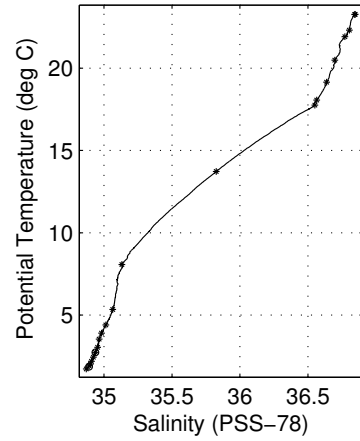
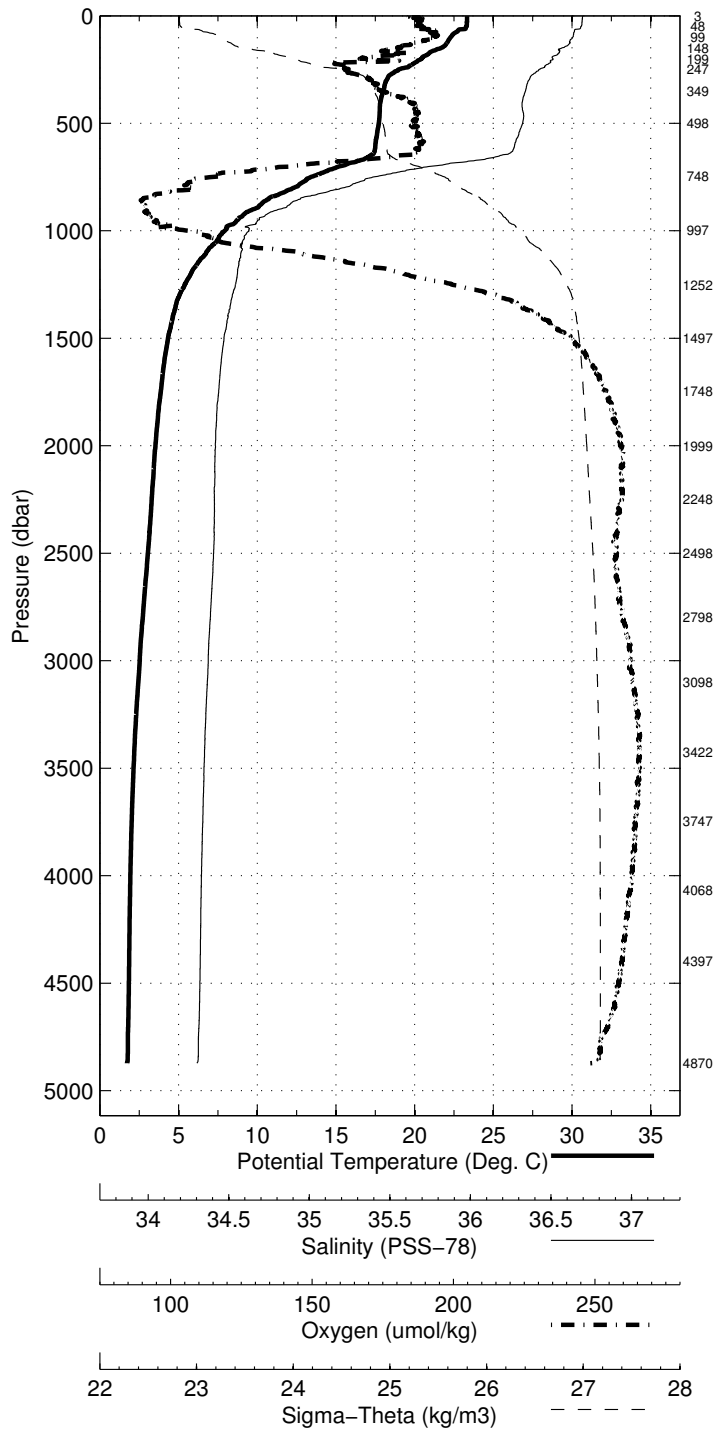


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 9 (CTD009)
 Latitude 26.500N Longitude 76.087W
 20-Apr-2009 04:03Z

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	23.335	23.335	36.855	209.1	0.003	25.243
10	23.332	23.330	36.853	210.4	0.027	25.244
20	23.337	23.333	36.852	211.3	0.054	25.242
30	23.332	23.325	36.851	211.9	0.082	25.243
50	23.300	23.289	36.847	212.2	0.136	25.251
75	22.678	22.663	36.812	216.2	0.203	25.406
100	22.300	22.280	36.802	215.6	0.267	25.509
125	22.078	22.053	36.790	210.2	0.329	25.563
150	21.701	21.672	36.747	207.2	0.390	25.638
200	20.459	20.421	36.701	196.7	0.502	25.947
250	19.002	18.957	36.629	193.6	0.602	26.278
300	18.267	18.214	36.577	199.9	0.690	26.427
400	17.900	17.830	36.544	209.7	0.858	26.497
500	17.814	17.728	36.545	210.0	1.026	26.524
600	17.610	17.507	36.504	212.8	1.196	26.547
700	15.319	15.208	36.067	180.2	1.362	26.749
800	12.406	12.296	35.620	154.6	1.500	27.014
900	9.843	9.736	35.292	142.3	1.614	27.225
1000	8.050	7.943	35.138	153.1	1.709	27.391
1100	6.882	6.773	35.097	181.2	1.790	27.527
1200	5.894	5.783	35.078	207.9	1.857	27.642
1300	5.167	5.054	35.052	231.5	1.915	27.710
1400	4.759	4.640	35.030	243.6	1.967	27.741
1500	4.455	4.330	35.009	250.7	2.018	27.758
1750	4.015	3.872	34.982	259.2	2.140	27.785
2000	3.695	3.532	34.964	263.2	2.259	27.806
2500	3.257	3.052	34.955	262.1	2.491	27.845
3000	2.781	2.535	34.928	265.5	2.713	27.870
3500	2.433	2.142	34.906	267.8	2.927	27.885
4000	2.282	1.940	34.893	265.8	3.140	27.891
4500	2.245	1.846	34.885	262.7	3.361	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4871	1	2.165	1.723	34.870	254.6
4398	2	2.251	1.864	34.891	265.7
4068	3	2.275	1.925	34.891	265.4
3748	4	2.339	2.023	34.900	266.9
3423	5	2.471	2.188	34.909	267.9
3098	6	2.698	2.444	34.922	266.2
2799	7	2.966	2.737	34.938	263.8
2498	8	3.241	3.037	34.954	261.8
2248	9	3.467	6.882	-999.000	-999.0
1999	10	3.707	3.544	34.964	262.6
1748	11	4.042	3.898	34.982	258.0
1497	12	4.526	4.400	35.014	248.1
1253	13	5.458	5.346	35.065	222.7
997	14	8.177	8.070	35.132	149.9
748	15	13.840	13.730	35.825	161.1
499	16	17.845	17.758	36.550	210.9
349	17	18.125	18.064	36.564	201.1
248	18	19.198	19.153	36.637	193.8
200	19	20.522	20.484	36.697	198.4
149	20	21.944	21.914	36.771	208.9
100	21	22.330	22.310	36.804	216.1
48	22	23.280	23.270	36.846	212.8
3	23	23.269	23.268	36.844	212.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 9 (CTD009)
 Latitude 26.500 N Longitude 76.087 W
 20-Apr-2009 04:03 Z



Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 10 (CTD010)
 Latitude 26.499N Longitude 75.897W
 20-Apr-2009 09:06Z

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	23.238	23.238	36.772	210.7	0.003	25.209
10	23.242	23.240	36.770	212.4	0.028	25.206
20	23.245	23.241	36.770	211.7	0.055	25.206
30	23.238	23.232	36.768	213.0	0.083	25.208
50	23.179	23.168	36.757	213.1	0.138	25.218
75	22.470	22.455	36.799	212.6	0.203	25.456
100	22.300	22.279	36.805	214.4	0.266	25.511
125	22.204	22.179	36.805	213.6	0.328	25.539
150	21.976	21.946	36.778	206.5	0.390	25.585
200	20.817	20.778	36.722	193.5	0.508	25.866
250	19.601	19.555	36.682	186.2	0.611	26.163
300	18.673	18.620	36.611	191.9	0.703	26.351
400	18.045	17.975	36.560	203.1	0.876	26.474
500	17.789	17.703	36.537	207.3	1.045	26.524
600	17.181	17.080	36.406	200.5	1.213	26.575
700	15.024	14.915	36.013	166.1	1.372	26.772
800	12.393	12.283	35.614	150.0	1.510	27.011
900	10.229	10.119	35.334	141.6	1.627	27.192
1000	7.975	7.868	35.144	161.1	1.725	27.407
1100	6.725	6.617	35.091	179.8	1.803	27.543
1200	5.787	5.677	35.076	210.2	1.867	27.654
1300	5.149	5.035	35.053	231.5	1.924	27.713
1400	4.759	4.640	35.031	242.7	1.976	27.741
1500	4.469	4.344	35.012	249.6	2.027	27.759
1750	3.993	3.849	34.980	259.4	2.149	27.786
2000	3.696	3.533	34.965	262.9	2.268	27.806
2500	3.240	3.035	34.951	262.2	2.500	27.843
3000	2.754	2.508	34.926	265.6	2.721	27.870
3500	2.410	2.120	34.904	268.2	2.934	27.885
4000	2.276	1.934	34.893	265.5	3.146	27.891
4500	2.240	1.841	34.885	262.0	3.366	27.892

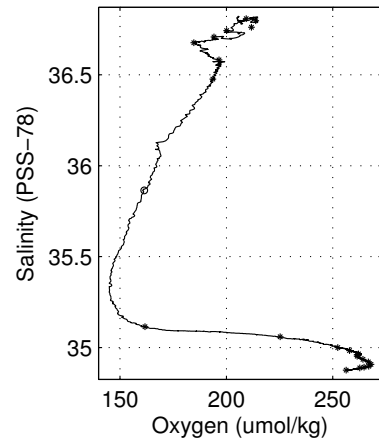
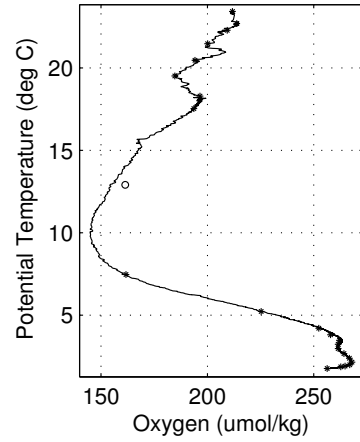
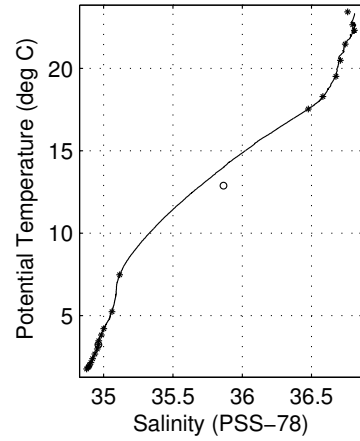
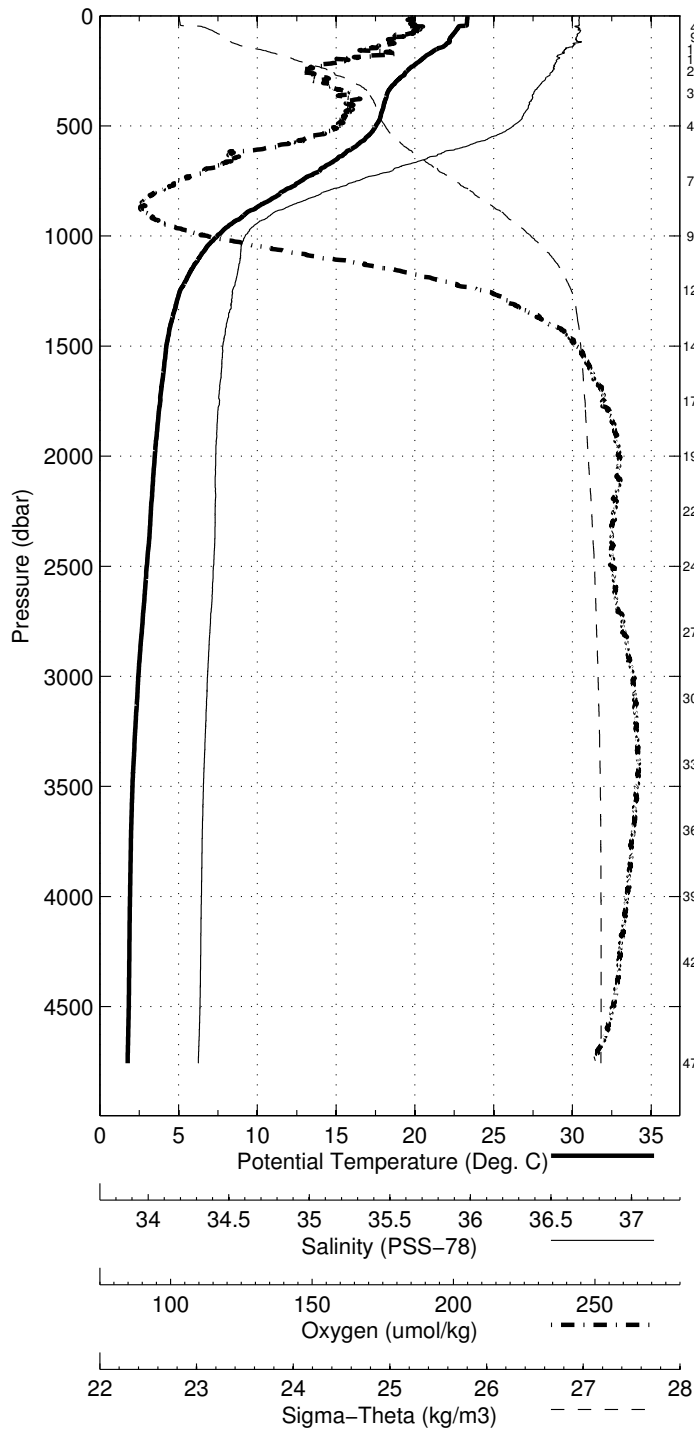
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4806	1	2.212	1.777	34.876	256.8
4299	2	2.255	1.879	34.887	263.4
3998	3	2.277	1.936	34.892	265.2
3699	4	2.336	2.026	34.899	267.1
3398	5	2.462	2.182	34.907	267.9
3099	6	2.674	2.420	34.920	266.4
2798	7	2.932	2.703	34.935	263.8
2498	8	3.223	3.019	34.949	262.5
2247	9	3.491	3.307	34.962	261.2
1999	10	3.704	3.541	34.964	262.1
1748	11	4.001	3.858	35.016	246.8
1498	12	4.455	4.330	35.010	249.1
1249	13	5.433	5.322	35.065	222.1
999	14	7.934	7.828	35.137	159.9
748	15	13.727	14.594	-999.000	-999.0
500	16	17.787	17.701	36.535	207.1
351	17	18.251	18.189	36.580	199.1
250	18	19.499	19.726	-999.000	-999.0
198	19	20.651	20.613	36.710	196.0
148	20	21.857	21.827	36.767	203.7
99	21	22.298	22.278	36.795	210.9
48	22	23.231	23.221	36.781	212.2
3	23	23.269	23.269	36.779	212.0

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 11 (CTD011)
 Latitude 26.499N Longitude 75.703W
 20-Apr-2009 14:22Z

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	23.337	23.336	36.812	211.7	0.003	25.210
10	23.340	23.338	36.811	210.8	0.028	25.209
20	23.318	23.314	36.809	212.6	0.055	25.215
30	23.312	23.306	36.810	211.8	0.083	25.218
50	22.782	22.771	36.793	214.5	0.137	25.360
75	22.555	22.540	36.813	213.3	0.202	25.442
100	22.265	22.245	36.794	208.3	0.265	25.512
125	22.061	22.036	36.781	207.7	0.327	25.561
150	21.459	21.430	36.743	200.4	0.388	25.702
200	20.444	20.406	36.696	196.3	0.499	25.947
250	19.560	19.514	36.675	186.1	0.600	26.169
300	18.846	18.792	36.623	190.0	0.694	26.316
400	18.116	18.046	36.559	196.1	0.869	26.455
500	17.612	17.526	36.475	193.2	1.040	26.520
600	16.175	16.078	36.208	176.0	1.204	26.659
700	14.113	14.009	35.867	160.7	1.354	26.855
800	11.648	11.542	35.513	148.9	1.483	27.075
900	9.348	9.243	35.250	146.6	1.593	27.274
1000	7.552	7.449	35.114	161.5	1.682	27.445
1100	6.410	6.305	35.090	189.5	1.756	27.584
1200	5.590	5.482	35.068	218.4	1.818	27.671
1300	4.997	4.884	35.045	236.4	1.872	27.725
1400	4.611	4.493	35.018	245.8	1.924	27.747
1500	4.343	4.219	34.999	253.0	1.973	27.763
1750	3.979	3.836	34.983	259.1	2.094	27.790
2000	3.651	3.488	34.964	263.1	2.212	27.810
2500	3.181	2.978	34.953	261.4	2.440	27.849
3000	2.686	2.442	34.922	266.6	2.658	27.873
3500	2.361	2.072	34.901	267.0	2.868	27.887
4000	2.259	1.918	34.891	265.2	3.079	27.891
4500	2.235	1.836	34.884	261.5	3.299	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4756	1	2.194	1.765	34.876	256.3
4297	2	2.245	1.869	34.888	262.7
3998	3	2.262	1.921	34.893	264.7
3698	4	2.303	1.994	34.897	266.9
3398	5	2.434	2.155	34.908	267.9
3099	6	2.638	2.385	34.921	266.7
2800	7	2.897	2.669	34.936	264.1
2499	8	3.179	2.976	34.953	261.4
2250	9	3.416	3.233	34.961	261.4
1999	10	3.639	3.477	34.965	262.0
1748	11	3.968	3.825	34.984	257.8
1498	12	4.338	4.214	35.000	252.3
1248	13	5.355	5.244	35.059	225.3
999	14	7.578	7.475	35.115	161.8
750	15	12.994	12.888	35.864	161.4
500	16	17.619	17.533	36.476	193.7
350	17	18.356	18.294	36.582	196.5
249	18	19.556	19.510	36.676	184.7
199	19	20.527	20.490	36.708	194.2
149	20	21.500	21.470	36.743	200.2
99	21	22.331	22.311	36.809	209.4
49	22	22.659	22.649	36.798	213.8
3	23	23.422	23.422	36.761	211.8

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 11 (CTD011)
 Latitude 26.499 N Longitude 75.703 W
 20-Apr-2009 14:22 Z

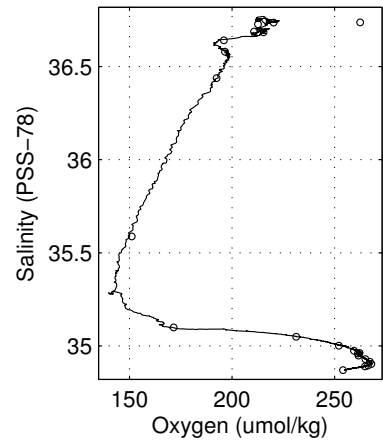
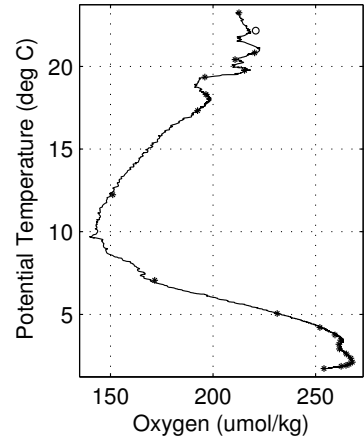
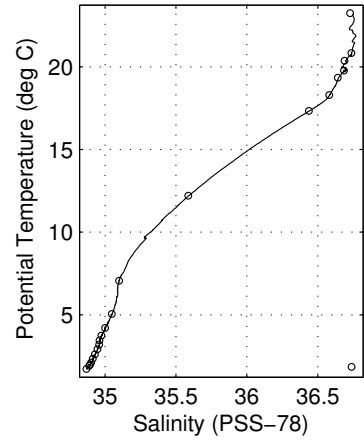
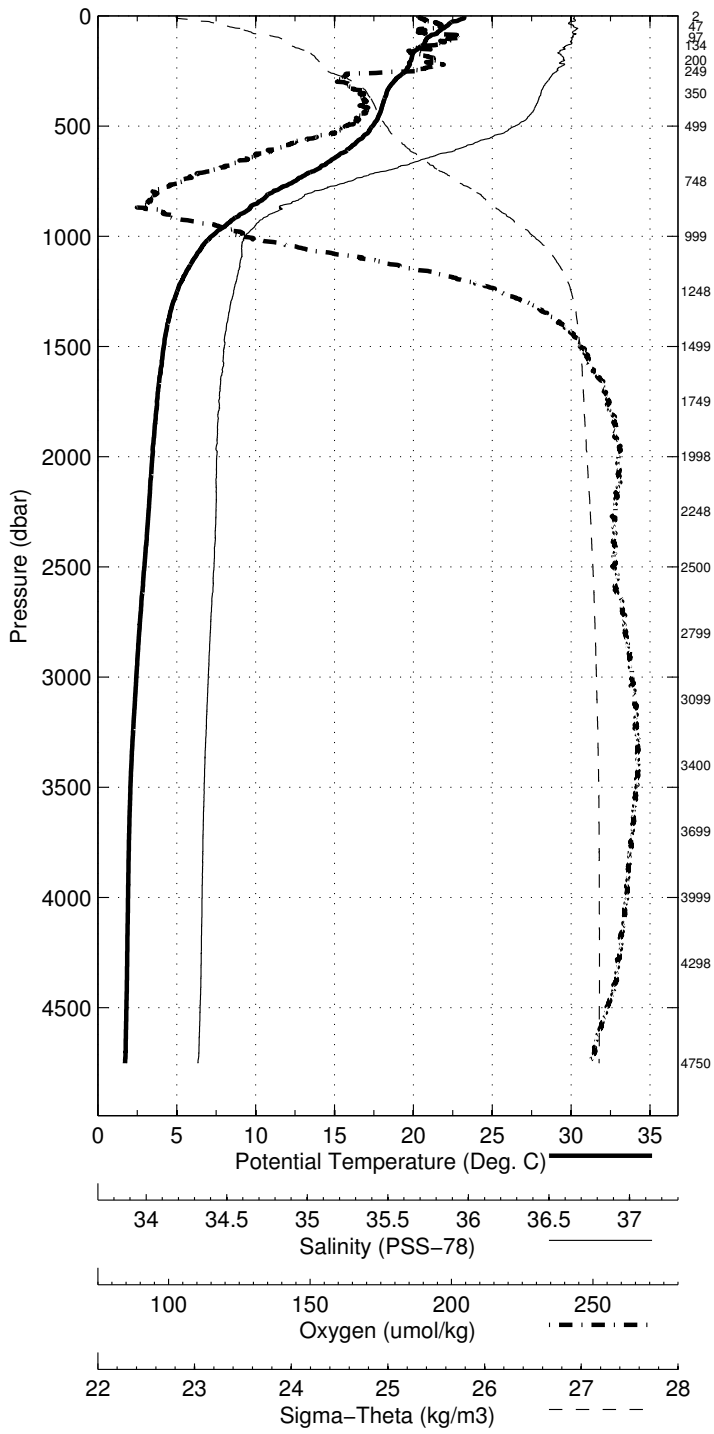


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 12 (CTD012)
 Latitude 26.499N Longitude 75.499W
 20-Apr-2009 19:53Z

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	23.235	23.235	36.752	211.7	0.003	25.195
10	23.233	23.231	36.751	212.4	0.028	25.195
20	22.875	22.871	36.757	214.0	0.055	25.304
30	22.406	22.400	36.727	216.6	0.081	25.417
50	22.047	22.037	36.748	217.3	0.131	25.536
75	21.546	21.531	36.743	211.7	0.191	25.674
100	20.890	20.870	36.739	221.9	0.247	25.854
125	20.750	20.727	36.737	217.8	0.301	25.892
150	20.330	20.302	36.706	212.7	0.354	25.983
200	19.903	19.866	36.702	215.4	0.455	26.096
250	19.583	19.537	36.665	212.4	0.553	26.155
300	18.793	18.740	36.615	191.8	0.647	26.323
400	18.130	18.060	36.563	198.3	0.822	26.455
500	17.499	17.413	36.456	193.2	0.992	26.533
600	16.060	15.963	36.184	175.7	1.155	26.667
700	13.905	13.802	35.824	159.8	1.304	26.866
800	11.179	11.076	35.444	144.4	1.431	27.107
900	9.135	9.032	35.231	147.0	1.537	27.294
1000	7.310	7.209	35.104	166.3	1.624	27.471
1100	6.216	6.113	35.085	196.9	1.695	27.606
1200	5.448	5.341	35.063	223.1	1.754	27.685
1300	4.876	4.765	35.034	239.8	1.808	27.730
1400	4.524	4.407	35.013	248.6	1.859	27.753
1500	4.304	4.180	35.002	253.1	1.908	27.769
1750	3.888	3.746	34.975	260.5	2.026	27.793
2000	3.622	3.460	34.964	262.9	2.143	27.813
2500	3.157	2.954	34.951	261.6	2.369	27.850
3000	2.683	2.439	34.922	266.6	2.586	27.873
3500	2.355	2.066	34.901	267.6	2.795	27.887
4000	2.257	1.916	34.891	264.9	3.005	27.891
4500	2.209	1.810	34.881	260.0	3.225	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4750	1	2.152	1.725	34.869	254.1
4299	2	2.233	1.845	36.738	262.5
4000	3	2.255	1.913	34.889	264.8
3699	4	2.293	1.984	34.894	266.3
3401	5	2.393	2.114	34.902	267.9
3099	6	2.595	2.343	34.914	267.3
2799	7	2.828	2.602	34.929	265.0
2500	8	3.127	2.925	34.947	261.6
2249	9	3.377	3.195	34.958	261.4
1999	10	3.612	3.450	34.962	262.2
1750	11	3.885	3.743	34.974	259.5
1500	12	4.327	4.203	35.001	252.1
1249	13	5.166	5.057	35.048	231.3
999	14	7.162	7.062	35.099	171.6
748	15	12.309	12.207	35.587	151.1
500	16	17.416	17.330	36.438	192.5
351	17	18.358	18.296	36.580	196.6
250	18	19.383	19.337	36.642	196.1
200	19	19.813	19.776	36.684	215.4
134	20	20.396	20.370	36.688	210.7
97	21	20.848	20.829	36.737	220.3
48	22	22.151	22.188	-999.000	-999.0
3	23	23.247	23.247	36.728	212.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 12 (CTD012)
 Latitude 26.499 N Longitude 75.499 W
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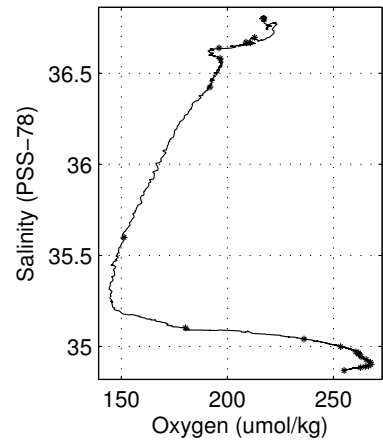
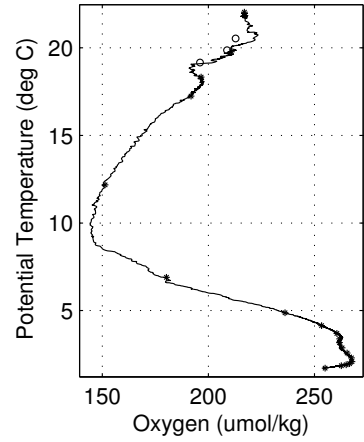
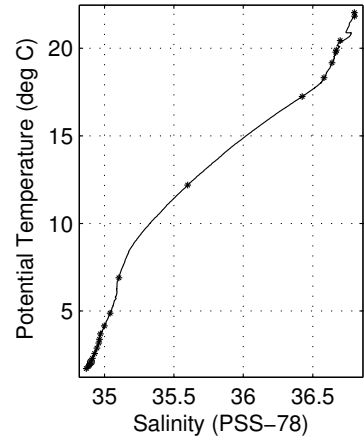
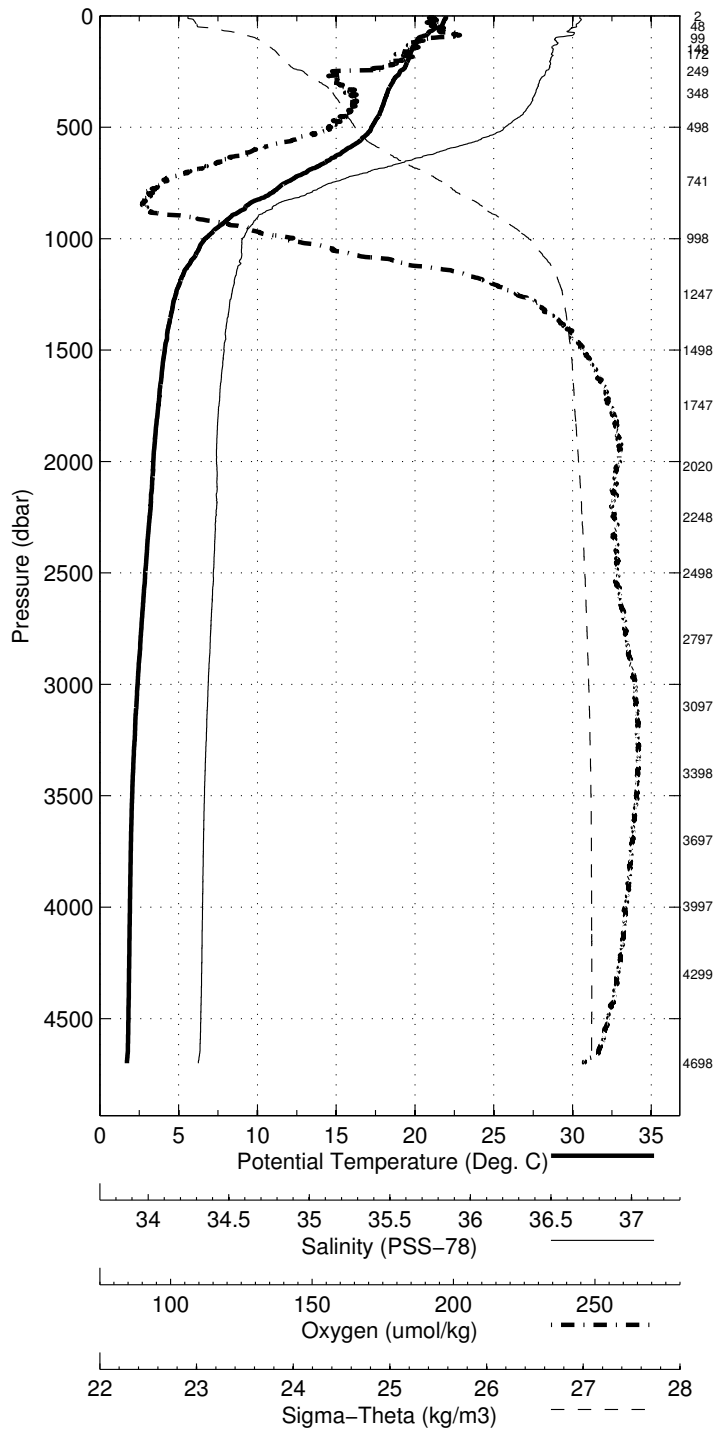


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 13 (CTD013)
 Latitude 26.500N Longitude 75.300W
 21-Apr-2009 01:48Z

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	21.965	21.964	36.807	217.3	0.002	25.602
10	21.966	21.964	36.805	216.0	0.024	25.600
20	21.864	21.860	36.810	215.9	0.047	25.634
30	21.808	21.802	36.800	215.2	0.071	25.642
50	21.715	21.705	36.787	218.3	0.118	25.659
75	20.906	20.892	36.777	221.5	0.173	25.877
100	20.245	20.227	36.681	215.6	0.226	25.984
125	20.100	20.077	36.692	211.5	0.277	26.032
150	19.858	19.830	36.670	210.9	0.327	26.081
200	19.586	19.549	36.656	209.2	0.425	26.144
250	19.096	19.051	36.632	191.9	0.520	26.256
300	18.621	18.568	36.598	192.7	0.611	26.354
400	18.047	17.977	36.551	196.7	0.784	26.467
500	17.338	17.253	36.426	191.5	0.952	26.548
600	15.732	15.636	36.127	172.9	1.114	26.699
700	13.226	13.127	35.732	156.0	1.257	26.934
800	10.870	10.769	35.418	146.5	1.378	27.143
900	8.443	8.345	35.173	156.0	1.478	27.357
1000	6.802	6.705	35.093	180.6	1.557	27.533
1100	5.891	5.790	35.078	207.9	1.623	27.641
1200	5.180	5.075	35.052	231.3	1.679	27.707
1300	4.747	4.637	35.027	243.3	1.730	27.739
1400	4.459	4.343	35.011	249.8	1.780	27.758
1500	4.247	4.124	35.000	254.4	1.828	27.774
1750	3.863	3.721	34.974	260.7	1.946	27.794
2000	3.555	3.394	34.961	262.8	2.061	27.817
2500	3.080	2.879	34.945	262.6	2.284	27.853
3000	2.640	2.398	34.920	266.9	2.498	27.875
3500	2.342	2.053	34.900	267.0	2.705	27.887
4000	2.250	1.909	34.890	264.4	2.915	27.891
4500	2.212	1.814	34.882	260.2	3.135	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4699	1	2.139	1.719	34.869	255.0
4300	2	2.228	1.852	34.885	262.6
3998	3	2.251	1.910	34.890	264.9
3697	4	2.281	1.973	34.894	266.5
3399	5	2.369	2.091	34.901	267.6
3098	6	2.550	2.299	34.913	267.3
2798	7	2.801	2.575	34.929	265.3
2499	8	3.083	2.882	34.944	263.0
2248	9	3.354	3.172	34.958	261.7
2021	10	3.553	3.390	34.964	261.8
1747	11	3.837	3.696	34.971	260.5
1499	12	4.269	4.146	34.999	253.3
1247	13	4.983	4.876	35.041	236.1
998	14	6.997	6.898	35.103	180.2
741	15	12.283	12.182	35.599	151.3
499	16	17.331	17.246	36.424	191.8
349	17	18.385	18.324	36.581	196.5
249	18	19.219	19.174	36.639	196.1
173	19	19.804	19.772	36.666	210.8
149	20	19.920	19.892	36.670	208.8
99	21	20.452	20.434	36.697	212.8
48	22	21.839	21.829	36.801	217.2
2	23	22.032	22.031	36.800	217.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 13 (CTD013)
 Latitude 26.500 N Longitude 75.300 W
 21-Apr-2009 01:48 Z

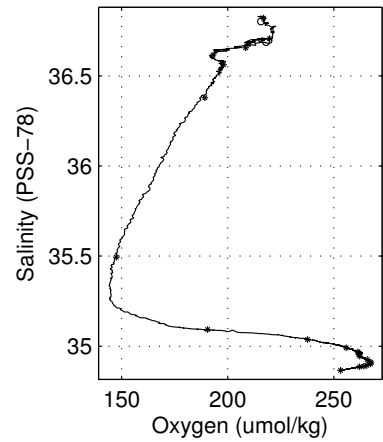
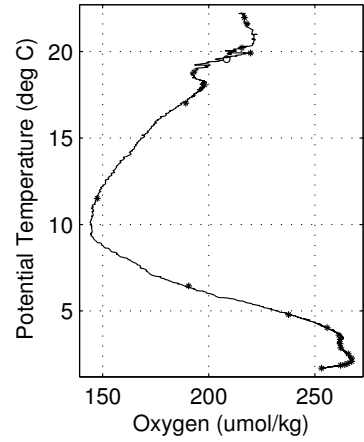
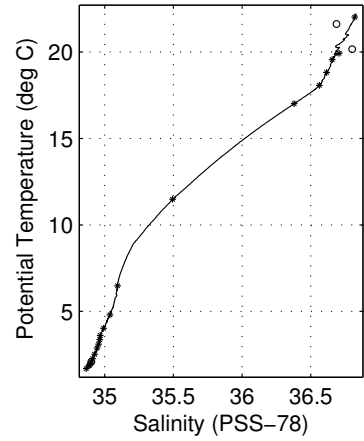
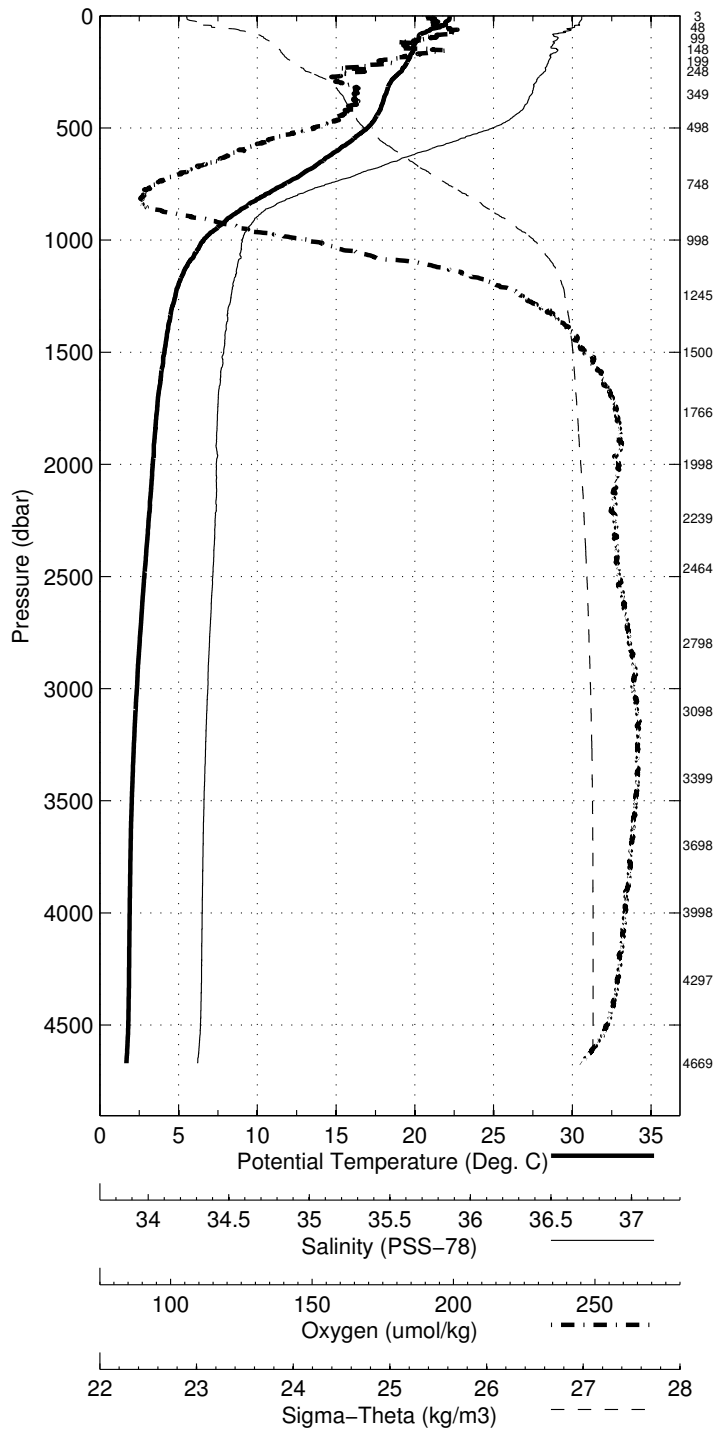


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 14 (CTD014)
 Latitude 26.500N Longitude 75.083W
 21-Apr-2009 06:35Z

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	22.215	22.214	36.831	215.2	0.002	25.549
10	22.206	22.204	36.829	214.5	0.024	25.551
20	22.145	22.141	36.825	216.2	0.049	25.566
30	21.958	21.952	36.816	216.5	0.072	25.612
50	21.615	21.605	36.793	218.9	0.119	25.692
75	20.647	20.632	36.736	221.1	0.174	25.916
100	20.273	20.254	36.707	216.4	0.226	25.997
125	20.022	19.999	36.685	211.0	0.276	26.048
150	19.943	19.915	36.702	216.8	0.326	26.083
200	19.593	19.556	36.661	203.2	0.424	26.146
250	19.135	19.090	36.637	198.9	0.519	26.250
300	18.483	18.430	36.591	194.1	0.609	26.383
400	17.959	17.889	36.538	196.3	0.780	26.478
500	17.070	16.985	36.374	187.0	0.948	26.573
600	15.218	15.124	36.041	169.5	1.104	26.747
700	13.051	12.952	35.702	154.0	1.244	26.947
800	10.584	10.485	35.377	144.8	1.363	27.162
900	8.329	8.232	35.166	157.5	1.462	27.369
1000	6.686	6.590	35.093	185.8	1.540	27.549
1100	5.746	5.646	35.072	212.7	1.603	27.655
1200	5.090	4.986	35.046	232.2	1.658	27.713
1300	4.696	4.587	35.023	243.5	1.710	27.741
1400	4.439	4.324	35.012	250.1	1.759	27.761
1500	4.227	4.104	34.999	254.6	1.807	27.775
1750	3.783	3.642	34.969	261.9	1.923	27.798
2000	3.516	3.355	34.961	262.5	2.037	27.820
2500	3.029	2.828	34.943	262.7	2.257	27.855
3000	2.597	2.355	34.918	266.0	2.467	27.877
3500	2.317	2.030	34.899	266.7	2.673	27.888
4000	2.236	1.896	34.889	264.1	2.882	27.891
4500	2.203	1.804	34.880	259.6	3.100	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4670	1	2.107	1.692	34.866	253.1
4298	2	2.227	1.852	34.885	262.1
3999	3	2.238	1.897	34.889	264.1
3699	4	2.265	1.957	34.894	265.5
3399	5	2.359	2.081	34.902	267.3
3098	6	2.514	2.264	34.912	267.3
2799	7	2.745	2.520	34.926	265.7
2465	8	3.071	2.874	34.945	262.2
2240	9	3.282	3.103	34.955	261.8
1999	10	3.520	3.360	34.963	261.9
1767	11	3.742	3.600	34.968	261.3
1501	12	4.145	4.023	34.992	255.8
1246	13	4.901	4.795	35.037	237.6
999	14	6.579	6.483	35.093	190.5
749	15	11.582	11.484	35.494	147.4
498	16	17.096	17.013	36.379	189.2
350	17	18.137	18.076	36.562	198.0
248	18	18.863	18.818	36.616	193.0
200	19	19.594	19.557	36.656	208.4
148	20	19.953	19.925	36.707	219.7
99	21	20.182	20.164	36.802	215.6
49	22	21.627	21.617	36.687	218.0
3	23	22.016	22.016	36.821	216.7

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 14 (CTD014)
 Latitude 26.500 N Longitude 75.083 W
 21-Apr-2009 06:35 Z



Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 15 (CTD015)
 Latitude 26.500N Longitude 74.800W
 21-Apr-2009 11:55Z

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	22.253	22.253	36.822	213.9	0.002	25.531
10	22.254	22.252	36.820	214.4	0.024	25.530
20	22.256	22.252	36.821	215.5	0.049	25.530
30	22.258	22.252	36.821	214.9	0.073	25.531
50	22.178	22.168	36.819	215.1	0.123	25.553
75	20.913	20.898	36.724	213.5	0.180	25.835
100	20.291	20.272	36.686	213.9	0.233	25.976
125	20.052	20.028	36.694	214.1	0.283	26.047
150	19.879	19.851	36.685	211.9	0.333	26.087
200	19.091	19.055	36.639	188.1	0.429	26.261
250	18.524	18.479	36.598	188.7	0.517	26.377
300	18.237	18.184	36.575	198.5	0.603	26.433
400	17.814	17.745	36.512	196.1	0.772	26.494
500	16.662	16.579	36.298	182.6	0.937	26.612
600	14.514	14.423	35.929	164.8	1.087	26.814
700	12.551	12.454	35.634	152.1	1.221	26.993
800	9.819	9.724	35.284	144.0	1.334	27.221
900	7.595	7.502	35.112	160.5	1.426	27.435
1000	6.401	6.306	35.084	191.0	1.499	27.579
1100	5.518	5.420	35.068	220.7	1.559	27.679
1200	4.949	4.847	35.042	236.6	1.612	27.727
1300	4.571	4.463	35.017	247.6	1.662	27.750
1400	4.353	4.238	35.004	251.9	1.710	27.764
1500	4.128	4.006	34.989	256.5	1.757	27.777
1750	3.781	3.640	34.969	262.0	1.874	27.798
2000	3.523	3.363	34.961	263.1	1.987	27.819
2500	3.024	2.824	34.943	262.6	2.207	27.856
3000	2.563	2.322	34.916	267.1	2.417	27.878
3500	2.311	2.023	34.899	266.5	2.622	27.889
4000	2.203	1.863	34.887	262.5	2.829	27.892
4500	2.085	1.691	34.867	253.3	3.045	27.889

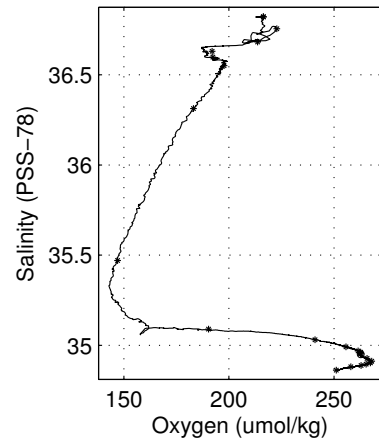
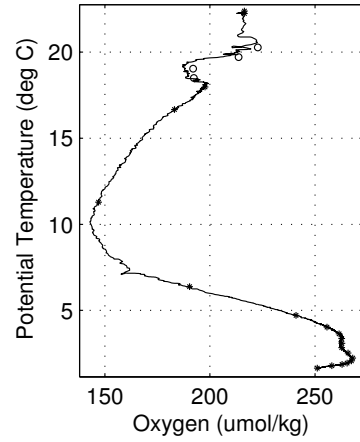
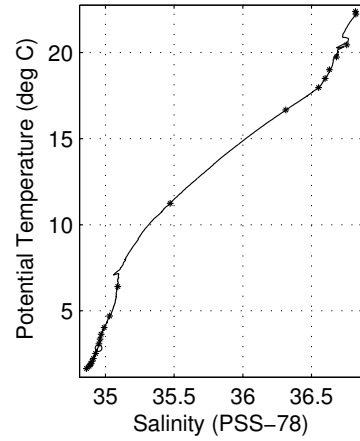
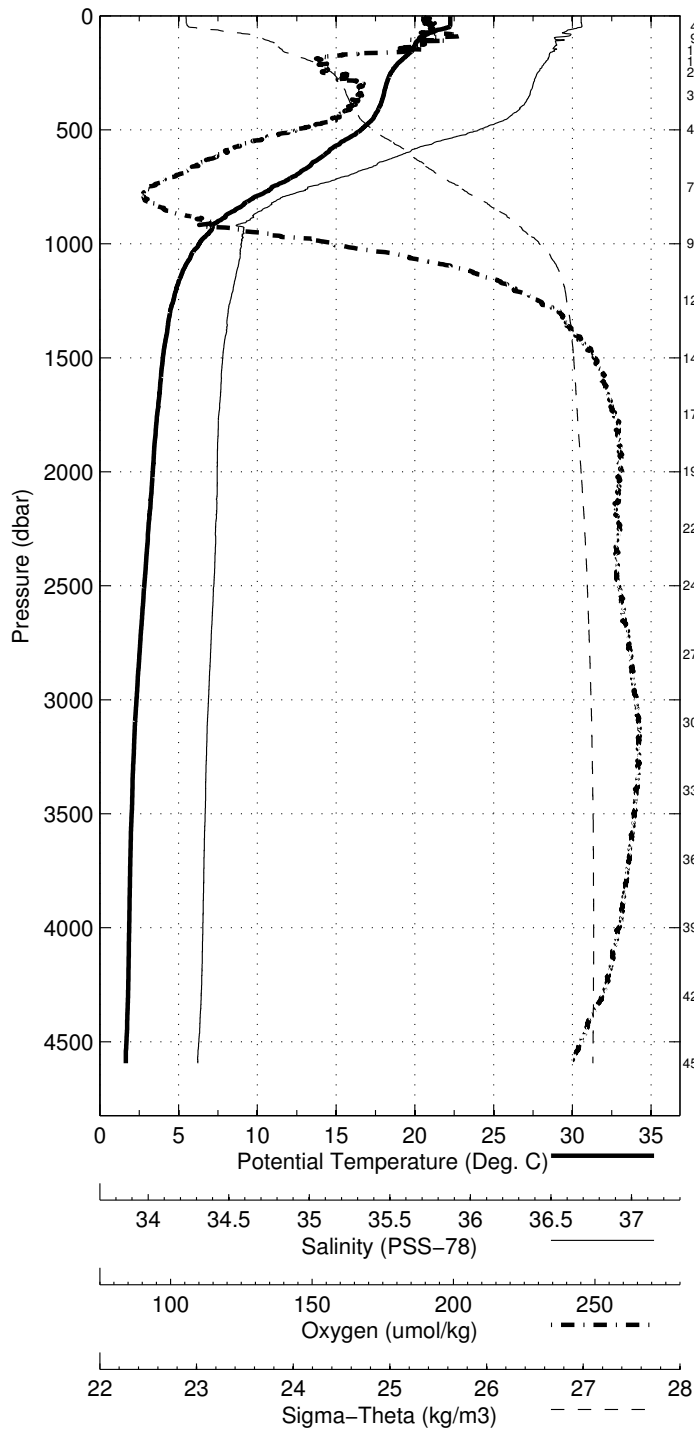
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4594	1	2.050	1.646	34.862	251.1
4298	2	2.160	1.787	34.880	258.0
3999	3	2.207	1.867	34.888	262.9
3699	4	2.243	1.936	34.895	265.3
3399	5	2.347	2.069	34.902	267.3
3099	6	2.486	2.236	34.911	267.9
2798	7	2.756	2.531	34.928	265.7
2498	8	3.041	2.840	34.950	262.7
2249	9	3.270	3.090	34.953	262.8
1999	10	3.523	3.363	34.961	262.7
1749	11	3.778	3.637	34.969	261.4
1499	12	4.152	4.030	34.991	255.7
1249	13	4.810	4.704	35.031	241.0
999	14	6.508	6.413	35.090	190.4
749	15	11.337	11.240	35.470	147.0
498	16	16.744	16.661	36.313	183.1
347	17	18.026	17.966	36.551	197.7
248	18	18.534	18.491	36.598	192.3
199	19	19.040	19.004	36.630	192.0
149	20	19.769	19.742	36.682	213.6
98	21	20.460	20.442	36.756	222.8
47	22	22.237	22.227	36.823	216.4
3	23	22.384	22.383	36.820	216.4

Abaco April - May 2009 R/V Ronald H Brown

CTD Station 15 (CTD015)

Latitude 26.500 N Longitude 74.800 W

21-Apr-2009 11:55 Z

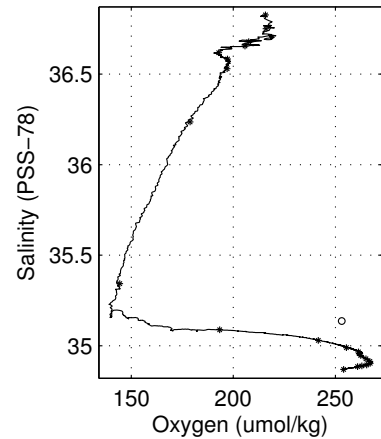
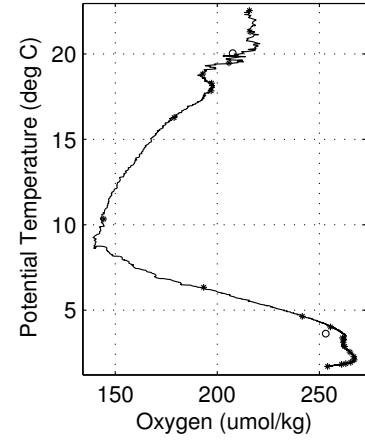
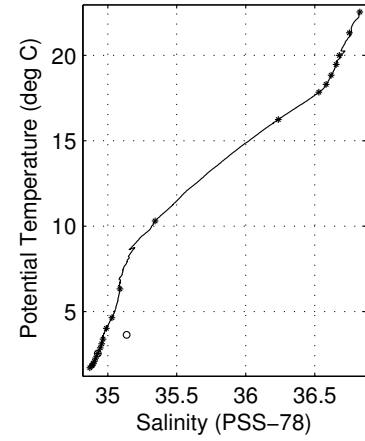
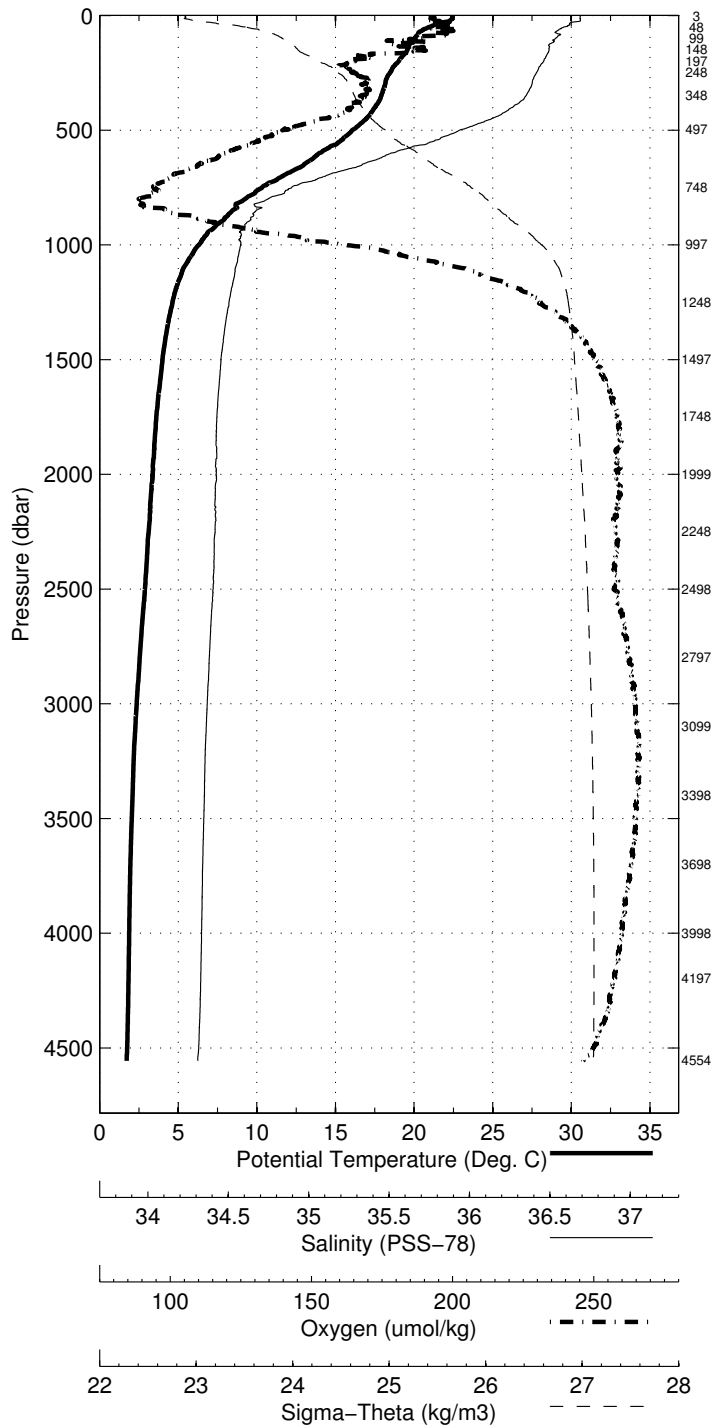


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 16 (CTD016)
 Latitude 26.500N Longitude 74.517W
 21-Apr-2009 17:38Z

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	22.447	22.447	36.820	214.8	0.002	25.474
10	22.446	22.444	36.819	215.1	0.025	25.474
20	22.317	22.312	36.820	213.5	0.050	25.512
30	21.799	21.794	36.773	217.1	0.074	25.624
50	20.973	20.963	36.738	216.2	0.120	25.828
75	20.285	20.271	36.693	215.1	0.172	25.981
100	20.040	20.021	36.693	211.6	0.223	26.049
125	19.729	19.706	36.663	204.7	0.272	26.109
150	19.601	19.573	36.661	210.0	0.320	26.142
200	19.052	19.015	36.633	194.4	0.414	26.266
250	18.504	18.460	36.596	194.2	0.502	26.379
300	18.208	18.156	36.573	196.3	0.588	26.438
400	17.591	17.523	36.475	193.9	0.755	26.520
500	16.136	16.055	36.202	176.0	0.916	26.660
600	14.046	13.958	35.854	161.5	1.063	26.856
700	11.742	11.649	35.520	147.4	1.192	27.060
800	9.346	9.254	35.228	139.1	1.299	27.256
900	7.769	7.675	35.122	158.2	1.389	27.418
1000	6.404	6.309	35.089	192.4	1.462	27.583
1100	5.430	5.333	35.062	221.9	1.522	27.685
1200	4.919	4.817	35.039	237.6	1.575	27.728
1300	4.582	4.474	35.019	246.7	1.625	27.750
1400	4.313	4.198	35.001	252.9	1.673	27.766
1500	4.122	4.000	34.988	256.9	1.720	27.776
1750	3.744	3.604	34.967	262.0	1.836	27.800
2000	3.538	3.377	34.964	262.2	1.949	27.821
2500	3.083	2.882	34.948	261.2	2.170	27.854
3000	2.602	2.360	34.918	266.3	2.382	27.876
3500	2.331	2.043	34.900	266.6	2.588	27.888
4000	2.221	1.880	34.889	263.0	2.796	27.892
4500	2.146	1.750	34.874	255.9	3.014	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4555	1	2.120	1.718	34.869	254.0
4197	2	2.200	1.837	34.884	260.9
3998	3	2.222	1.881	34.888	263.0
3698	4	2.266	1.958	34.894	265.3
3398	5	2.373	2.095	34.903	267.1
3100	6	2.526	2.276	34.913	266.9
2798	7	2.781	2.556	34.928	265.0
2498	8	3.080	2.878	34.946	262.4
2249	9	3.304	3.123	34.957	261.7
2000	10	3.551	3.390	34.966	261.3
1749	11	3.779	3.638	35.137	253.2
1498	12	4.144	4.022	34.989	255.4
1249	13	4.747	4.643	35.030	241.6
997	14	6.429	6.334	35.088	193.3
748	15	10.404	10.313	35.343	144.4
497	16	16.330	16.249	36.236	178.8
348	17	17.907	17.846	36.529	197.0
248	18	18.348	18.304	36.583	197.1
197	19	18.873	18.838	36.619	192.8
149	20	19.497	19.470	36.656	205.7
99	21	20.020	20.001	36.679	207.5
49	22	21.335	21.325	36.751	216.0
3	23	22.541	22.540	36.827	215.7

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 16 (CTD016)
 Latitude 26.500 N Longitude 74.517 W
 21-Apr-2009 17:38 Z

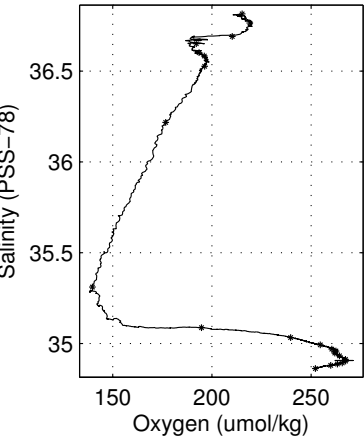
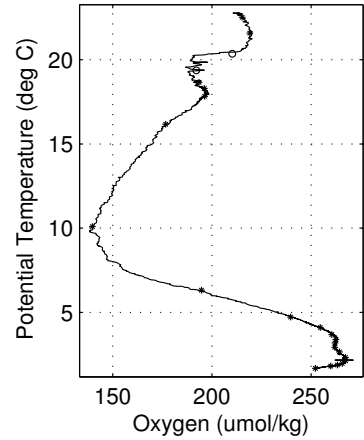
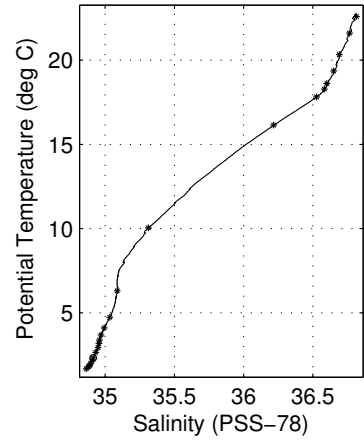
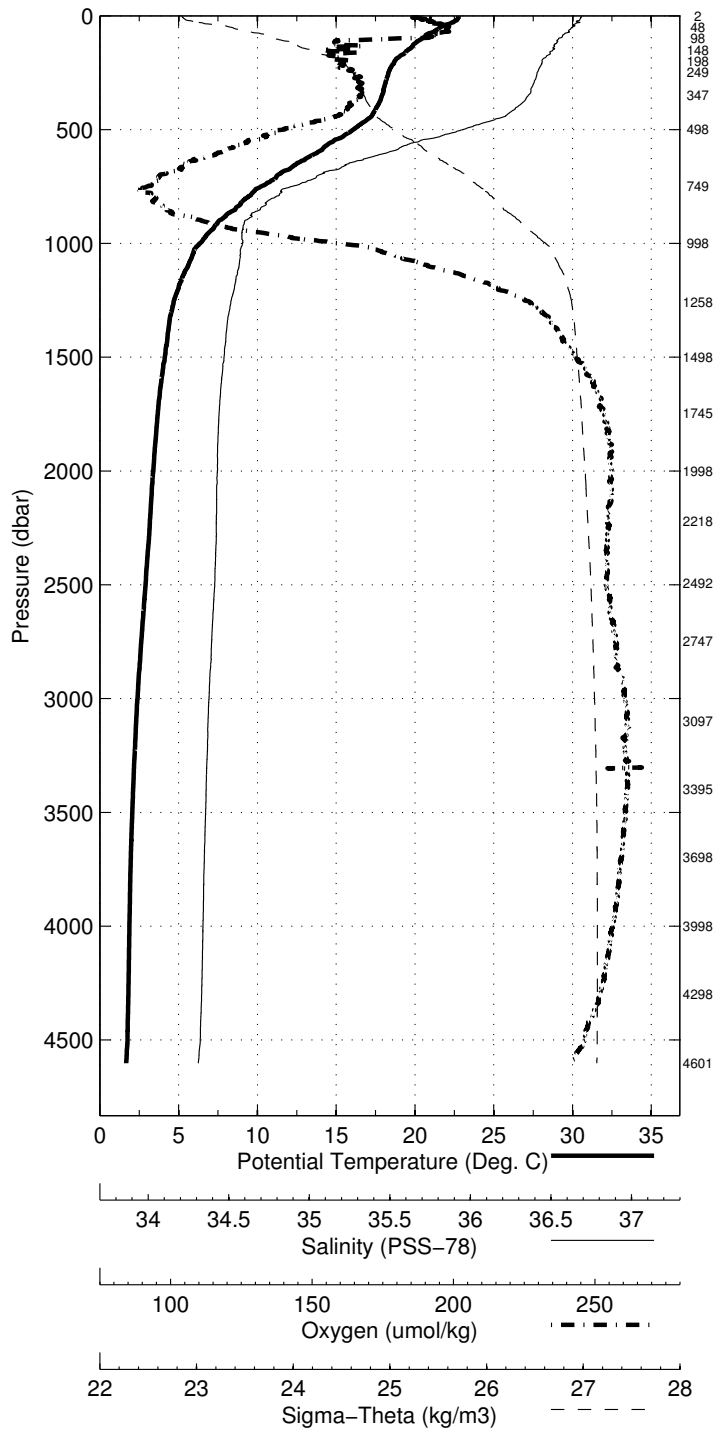


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 17 (CTD017)
 Latitude 26.500N Longitude 74.233W
 21-Apr-2009 23:14Z

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	22.775	22.775	36.812	212.9	0.003	25.374
10	22.741	22.739	36.808	213.7	0.026	25.381
20	22.641	22.637	36.801	213.1	0.052	25.405
30	22.355	22.349	36.798	216.7	0.077	25.486
50	21.617	21.607	36.764	220.0	0.125	25.670
75	21.000	20.986	36.735	217.5	0.182	25.820
100	20.459	20.440	36.696	205.1	0.236	25.938
125	19.941	19.918	36.674	190.2	0.286	26.062
150	19.576	19.548	36.667	187.4	0.335	26.153
200	18.736	18.701	36.612	191.8	0.427	26.331
250	18.356	18.312	36.587	195.4	0.514	26.410
300	18.155	18.103	36.568	197.2	0.598	26.448
400	17.656	17.588	36.487	193.9	0.766	26.513
500	16.160	16.079	36.208	176.6	0.928	26.659
600	13.909	13.821	35.830	159.8	1.073	26.867
700	11.368	11.278	35.475	144.2	1.198	27.094
800	9.419	9.327	35.248	143.1	1.304	27.259
900	7.662	7.569	35.101	155.0	1.395	27.418
1000	6.441	6.346	35.090	192.1	1.469	27.579
1100	5.698	5.599	35.072	214.7	1.530	27.660
1200	5.096	4.992	35.048	233.3	1.584	27.714
1300	4.653	4.544	35.021	244.8	1.635	27.744
1400	4.423	4.307	35.006	249.1	1.684	27.758
1500	4.247	4.124	34.996	253.9	1.733	27.770
1750	3.815	3.674	34.970	261.3	1.850	27.796
2000	3.556	3.395	34.962	262.9	1.965	27.817
2500	3.106	2.904	34.948	261.8	2.188	27.852
3000	2.634	2.392	34.919	266.6	2.402	27.875
3500	2.349	2.060	34.902	266.7	2.610	27.888
4000	2.216	1.875	34.889	263.4	2.818	27.892
4500	2.152	1.756	34.875	256.1	3.035	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4602	1	2.079	1.673	34.863	252.2
4299	2	2.187	1.813	34.881	259.9
3998	3	2.216	1.876	34.887	263.3
3698	4	2.274	1.966	34.894	265.7
3396	5	2.405	2.126	34.904	267.3
3097	6	2.567	2.316	34.914	267.2
2748	7	2.877	2.655	34.932	264.2
2493	8	3.131	2.930	34.948	261.9
2219	9	3.366	3.187	34.955	262.0
1999	10	3.539	3.378	34.959	262.4
1745	11	3.822	3.682	34.970	260.5
1499	12	4.221	4.098	34.993	254.6
1258	13	4.836	4.729	35.033	239.7
998	14	6.401	6.307	35.087	194.7
749	15	10.138	10.047	35.311	139.8
499	16	16.227	16.146	36.217	176.7
347	17	17.883	17.823	36.526	196.3
249	18	18.329	18.285	36.582	196.1
199	19	18.651	18.615	36.601	193.5
149	20	19.387	19.360	36.650	192.1
99	21	20.355	20.336	36.691	210.2
48	22	21.616	21.606	36.764	219.1
2	23	22.591	22.591	36.815	215.2

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 17 (CTD017)
 Latitude 26.500 N Longitude 74.233 W
 21-Apr-2009 23:14 Z

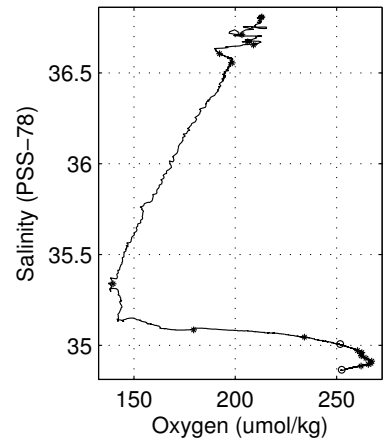
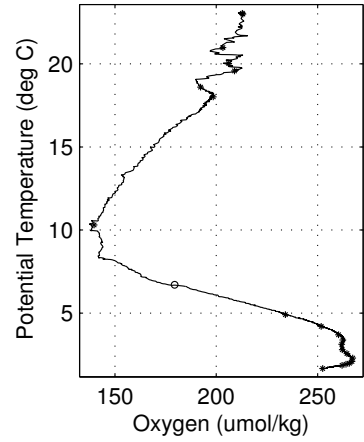
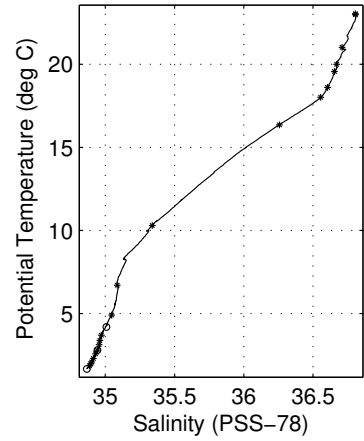
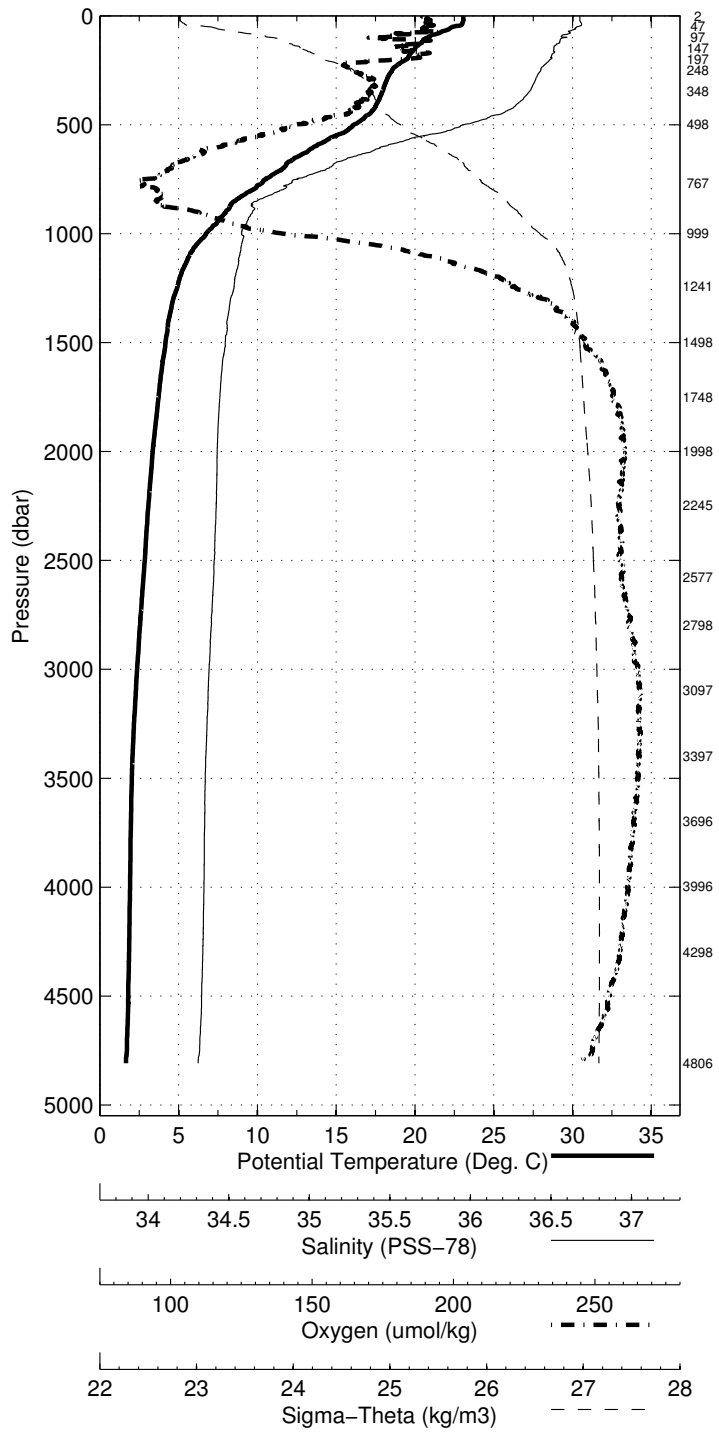


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 18 (CTD018)
 Latitude 26.500N Longitude 73.867W
 22-Apr-2009 05:15Z

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	23.065	23.065	36.805	210.8	0.003	25.285
10	23.067	23.065	36.804	210.9	0.027	25.283
20	23.066	23.062	36.804	211.9	0.054	25.284
30	23.041	23.035	36.809	211.6	0.080	25.296
50	22.410	22.400	36.789	211.3	0.133	25.464
75	21.679	21.664	36.753	212.8	0.195	25.645
100	20.831	20.812	36.727	197.2	0.251	25.861
125	20.422	20.399	36.699	209.9	0.304	25.952
150	20.025	19.997	36.672	204.6	0.355	26.038
200	19.515	19.478	36.655	203.6	0.454	26.163
250	18.598	18.554	36.605	192.2	0.544	26.363
300	18.229	18.177	36.575	198.3	0.630	26.435
400	17.677	17.608	36.492	193.9	0.798	26.513
500	16.188	16.107	36.211	178.2	0.960	26.655
600	13.714	13.626	35.802	159.0	1.106	26.886
700	11.745	11.653	35.527	146.1	1.230	27.065
800	9.733	9.639	35.284	142.4	1.340	27.236
900	8.088	7.992	35.140	152.7	1.433	27.385
1000	6.848	6.750	35.084	174.9	1.512	27.520
1100	5.799	5.699	35.074	211.3	1.577	27.650
1200	5.186	5.082	35.050	230.6	1.633	27.705
1300	4.763	4.654	35.027	242.1	1.685	27.737
1400	4.467	4.351	35.010	249.8	1.735	27.756
1500	4.289	4.166	35.001	253.0	1.783	27.769
1750	3.870	3.728	34.973	260.5	1.902	27.793
2000	3.517	3.357	34.959	263.2	2.018	27.819
2500	3.053	2.852	34.944	261.9	2.237	27.854
3000	2.606	2.364	34.918	266.7	2.449	27.876
3500	2.321	2.033	34.899	266.5	2.655	27.888
4000	2.260	1.919	34.892	264.0	2.864	27.892
4500	2.198	1.800	34.880	259.0	3.083	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4807	1	2.093	1.662	34.866	252.6
4298	2	2.233	1.858	34.886	262.1
3996	3	2.259	7.929	-999.000	-999.0
3697	4	2.285	1.977	34.895	265.7
3397	5	2.361	2.083	34.901	267.0
3097	6	2.546	2.295	34.913	267.3
2798	7	2.793	2.568	34.929	264.5
2577	8	3.002	2.795	34.943	262.2
2246	9	3.300	3.120	34.955	261.9
1999	10	3.543	3.383	34.960	262.5
1748	11	3.836	3.694	34.971	260.4
1498	12	4.315	4.192	35.008	251.8
1242	13	5.018	4.911	35.045	234.1
999	14	6.796	6.699	35.086	179.5
768	15	10.390	10.296	35.339	139.7
499	16	16.433	16.351	36.258	-999.0
348	17	18.077	18.016	36.556	198.4
249	18	18.653	18.609	36.606	192.2
198	19	19.597	19.560	36.655	208.9
148	20	20.030	20.003	36.672	206.1
98	21	21.043	21.024	36.711	203.3
48	22	22.999	22.990	36.808	213.1
2	23	23.045	23.045	36.806	212.8

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 18 (CTD018)
 Latitude 26.500 N Longitude 73.867 W
 22-Apr-2009 05:15 Z

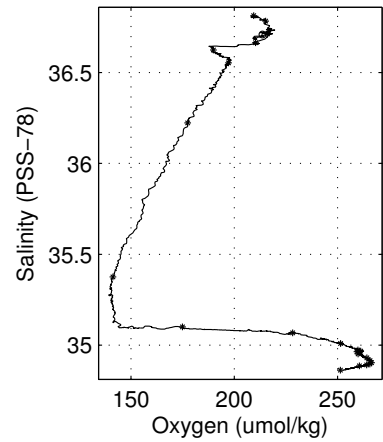
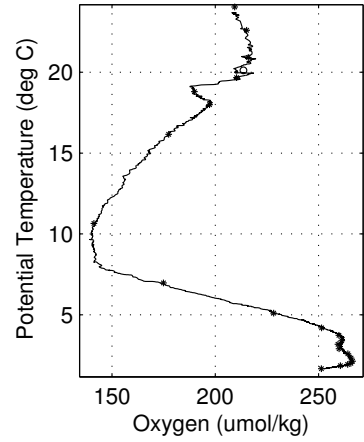
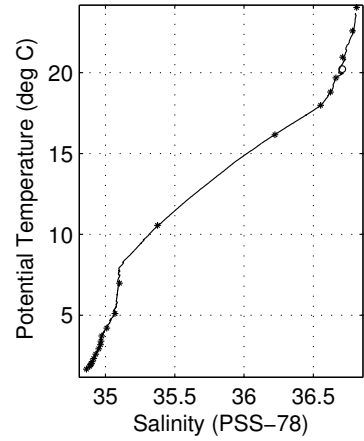
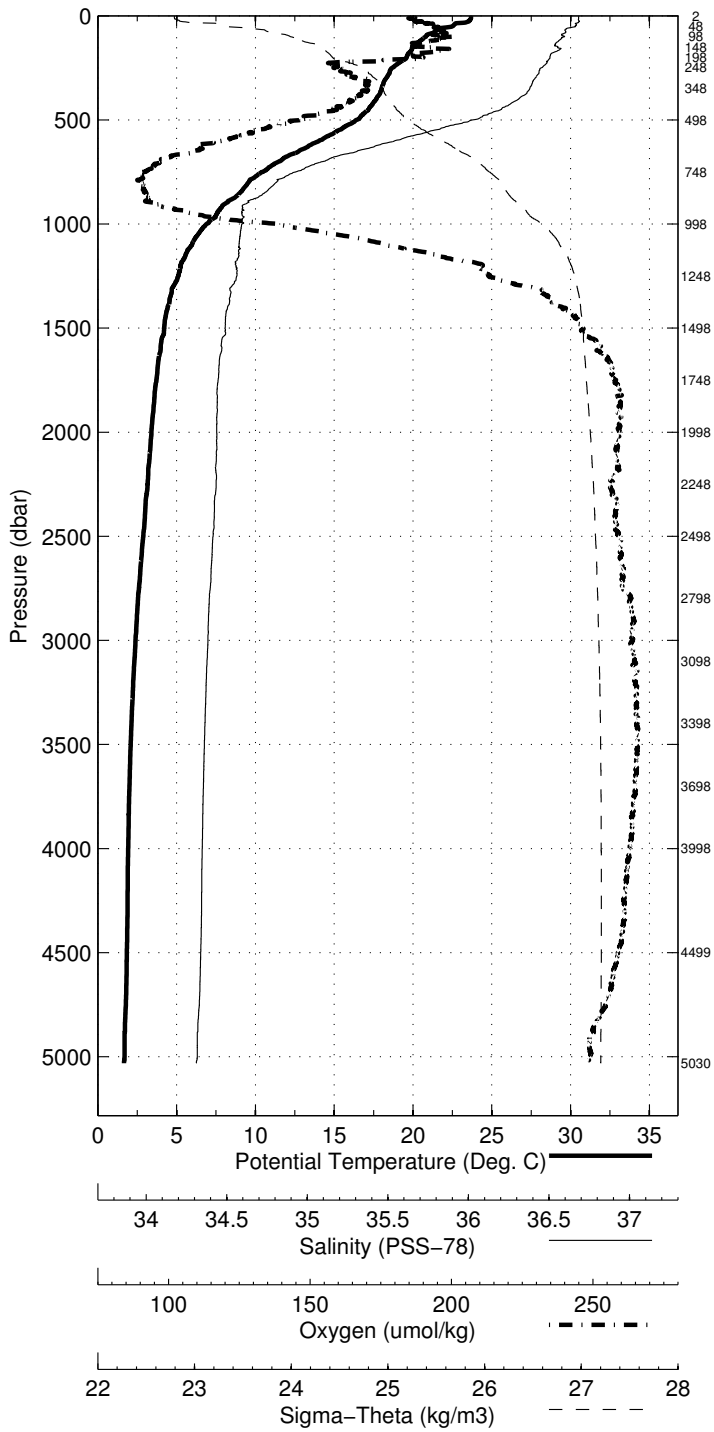


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 19 (CTD019)
 Latitude 26.501N Longitude 73.498W
 22-Apr-2009 10:49Z

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	23.682	23.682	36.806	208.7	0.003	25.104
10	23.683	23.681	36.805	209.7	0.029	25.103
20	23.605	23.600	36.804	208.6	0.057	25.126
30	23.412	23.406	36.804	211.3	0.085	25.184
50	22.517	22.507	36.788	214.5	0.138	25.433
75	21.410	21.396	36.739	216.9	0.197	25.709
100	20.850	20.831	36.733	219.5	0.253	25.860
125	20.411	20.387	36.698	212.5	0.306	25.954
150	19.992	19.964	36.700	213.4	0.357	26.068
200	19.630	19.593	36.659	211.9	0.455	26.135
250	18.713	18.669	36.614	189.2	0.548	26.340
300	18.344	18.291	36.583	195.5	0.636	26.412
400	17.741	17.672	36.501	194.8	0.805	26.503
500	16.485	16.403	36.265	180.6	0.968	26.627
600	14.127	14.038	35.871	160.9	1.116	26.853
700	11.591	11.500	35.507	145.3	1.243	27.078
800	9.646	9.552	35.268	140.8	1.350	27.238
900	8.232	8.135	35.122	143.7	1.446	27.349
1000	6.997	6.898	35.095	175.5	1.529	27.508
1100	6.075	5.973	35.080	202.8	1.596	27.619
1200	5.356	5.250	35.064	227.0	1.654	27.697
1300	4.886	4.774	35.041	238.0	1.708	27.734
1400	4.546	4.429	35.021	247.2	1.758	27.757
1500	4.330	4.206	35.008	252.4	1.806	27.771
1750	3.863	3.722	34.973	260.8	1.925	27.794
2000	3.562	3.401	34.966	261.6	2.039	27.820
2500	3.083	2.881	34.948	261.6	2.261	27.854
3000	2.635	2.392	34.922	264.9	2.473	27.876
3500	2.375	2.086	34.904	266.3	2.681	27.888
4000	2.268	1.927	34.893	264.1	2.892	27.892
4500	2.241	1.842	34.885	261.3	3.113	27.892
5000	2.156	1.698	34.867	254.3	3.343	27.889

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5030	1	2.121	1.661	34.863	251.3
4499	2	2.243	1.844	34.886	260.5
3999	3	2.266	1.925	34.892	264.0
3699	4	2.312	2.003	34.897	265.6
3399	5	2.407	2.128	34.904	266.4
3099	6	2.569	2.317	34.916	265.7
2799	7	2.810	2.584	34.930	264.1
2498	8	3.121	2.919	34.952	259.9
2248	9	3.357	3.175	34.964	259.4
1998	10	3.561	3.400	34.967	261.1
1749	11	3.860	3.719	34.974	259.8
1498	12	4.323	4.199	35.010	251.4
1249	13	5.208	5.098	35.068	228.3
999	14	7.080	6.980	35.101	174.9
749	15	10.650	10.557	35.376	141.3
499	16	16.247	16.166	36.223	177.5
349	17	18.048	17.987	36.553	197.2
249	18	18.850	18.806	36.624	189.9
199	19	19.715	19.679	36.663	210.3
149	20	20.253	20.225	36.709	213.6
99	21	20.978	20.959	36.712	215.9
49	22	22.596	22.586	36.783	215.1
3	23	24.043	24.042	36.813	209.4

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 19 (CTD019)
 Latitude 26.501 N Longitude 73.498 W
 22-Apr-2009 10:49 Z

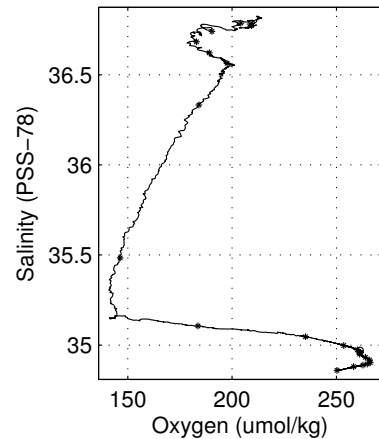
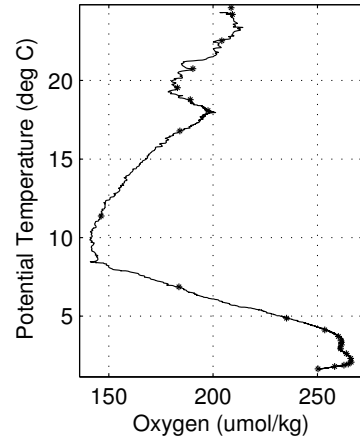
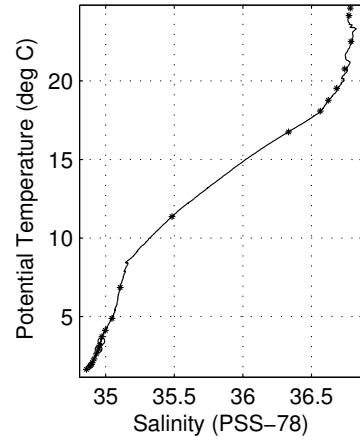
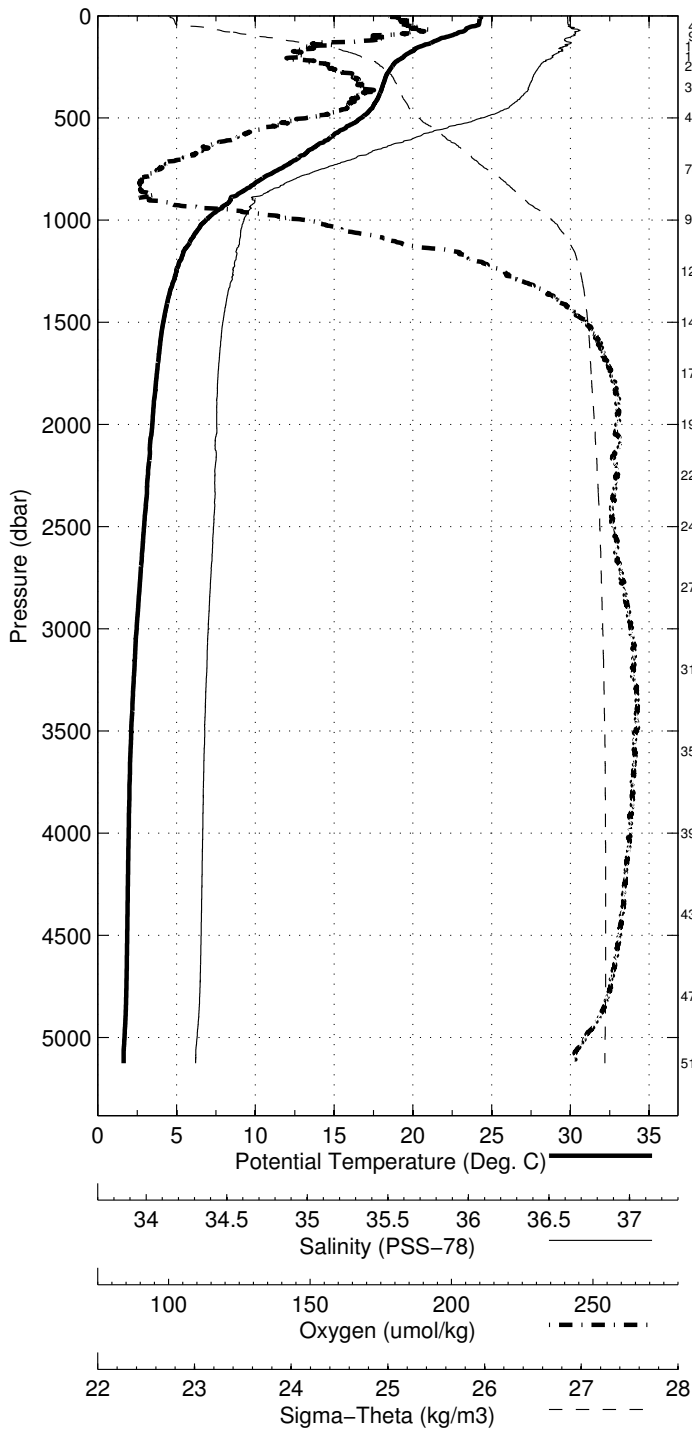


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 20 (CTD020)
 Latitude 26.500N Longitude 73.133W
 22-Apr-2009 17:12Z

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	24.322	24.321	36.762	204.4	0.003	24.880
10	24.292	24.290	36.762	207.1	0.031	24.889
20	24.241	24.236	36.762	208.0	0.061	24.905
30	24.224	24.218	36.762	207.2	0.092	24.911
50	23.971	23.961	36.766	209.9	0.152	24.990
75	23.244	23.228	36.814	213.1	0.223	25.244
100	22.314	22.294	36.782	202.5	0.288	25.489
125	21.366	21.341	36.754	196.2	0.349	25.736
150	20.503	20.474	36.744	183.1	0.403	25.966
200	19.455	19.419	36.684	181.9	0.502	26.200
250	18.701	18.656	36.615	189.1	0.593	26.344
300	18.315	18.262	36.583	195.2	0.680	26.420
400	17.864	17.794	36.521	195.2	0.850	26.488
500	16.796	16.713	36.323	183.5	1.015	26.598
600	14.779	14.688	35.972	164.9	1.168	26.790
700	12.760	12.663	35.666	152.6	1.303	26.977
800	10.466	10.367	35.363	141.2	1.420	27.172
900	8.504	8.405	35.150	143.9	1.520	27.330
1000	6.962	6.863	35.106	183.3	1.602	27.522
1100	5.987	5.885	35.084	204.5	1.668	27.634
1200	5.304	5.199	35.061	225.9	1.726	27.700
1300	4.906	4.795	35.040	237.8	1.778	27.731
1400	4.539	4.422	35.016	247.6	1.829	27.754
1500	4.273	4.150	34.998	253.4	1.878	27.769
1750	3.893	3.751	34.975	260.3	1.996	27.792
2000	3.618	3.457	34.968	261.5	2.113	27.816
2500	3.136	2.933	34.951	260.7	2.337	27.852
3000	2.708	2.464	34.924	265.0	2.554	27.872
3500	2.412	2.121	34.906	266.6	2.765	27.887
4000	2.301	1.958	34.896	264.7	2.978	27.892
4500	2.267	1.867	34.888	262.2	3.199	27.892
5000	2.152	1.695	34.867	253.9	3.431	27.889

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5126	1	2.112	1.640	34.860	250.2
4798	2	2.236	1.801	34.880	258.2
4399	3	2.271	1.883	34.889	262.7
3999	4	2.301	1.958	34.896	264.7
3597	5	2.369	2.070	34.903	266.2
3199	6	2.566	2.304	34.916	265.9
2798	7	2.851	2.624	34.932	263.8
2499	8	3.128	2.926	34.950	261.0
2249	9	3.356	3.175	34.957	261.4
1998	10	3.599	3.437	34.970	261.2
1750	11	3.858	3.717	34.974	260.0
1499	12	4.250	4.127	34.997	253.5
1248	13	4.992	4.885	35.046	235.2
997	14	6.959	6.860	35.106	183.6
749	15	11.465	11.367	35.484	146.3
498	16	16.840	16.757	36.332	184.1
348	17	18.141	18.080	36.564	197.6
248	18	18.814	18.770	36.622	189.0
198	19	19.564	19.527	36.683	182.9
149	20	20.787	20.758	36.741	190.3
98	21	22.523	22.503	36.787	204.2
50	22	24.173	24.162	36.773	209.3
3	23	24.632	24.631	36.781	208.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 20 (CTD020)
 Latitude 26.500 N Longitude 73.133 W
 22-Apr-2009 17:12 Z

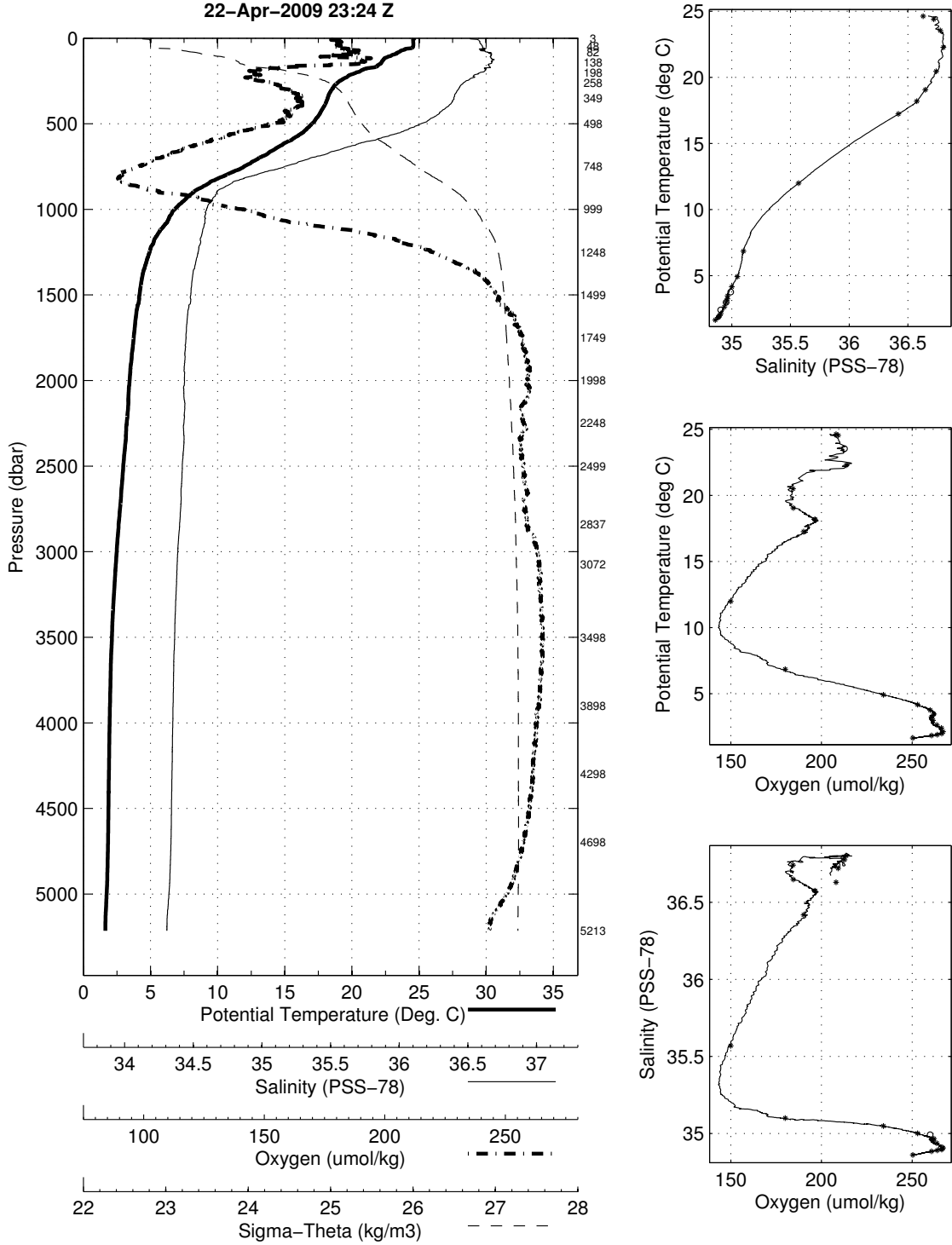


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 21 (CTD021)
 Latitude 26.498N Longitude 72.767W
 22-Apr-2009 23:24Z

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	24.638	24.638	36.676	205.1	0.003	24.719
10	24.559	24.557	36.722	205.0	0.032	24.778
20	24.570	24.565	36.732	207.8	0.064	24.783
30	24.578	24.571	36.734	207.3	0.095	24.783
50	24.566	24.555	36.750	206.3	0.159	24.800
75	23.649	23.634	36.758	211.8	0.234	25.082
100	22.970	22.949	36.798	205.0	0.304	25.313
125	22.388	22.363	36.819	213.6	0.369	25.497
150	22.143	22.113	36.792	213.0	0.432	25.548
200	20.356	20.318	36.735	182.8	0.546	26.001
250	19.126	19.081	36.650	185.4	0.644	26.262
300	18.548	18.495	36.602	192.7	0.734	26.376
400	17.986	17.916	36.541	195.6	0.906	26.474
500	17.098	17.014	36.380	188.4	1.073	26.571
600	15.438	15.343	36.078	170.2	1.232	26.727
700	13.158	13.059	35.717	155.2	1.373	26.937
800	10.681	10.581	35.386	144.3	1.495	27.152
900	8.274	8.177	35.158	155.1	1.593	27.371
1000	6.898	6.800	35.097	179.9	1.673	27.523
1100	6.047	5.945	35.081	202.2	1.740	27.624
1200	5.303	5.198	35.061	226.4	1.798	27.700
1300	4.827	4.716	35.035	239.7	1.850	27.735
1400	4.482	4.366	35.013	249.0	1.900	27.757
1500	4.302	4.178	35.003	252.8	1.948	27.770
1750	3.890	3.748	34.974	260.1	2.067	27.792
2000	3.605	3.443	34.965	262.4	2.184	27.815
2500	3.172	2.969	34.952	261.0	2.410	27.850
3000	2.732	2.487	34.925	265.0	2.628	27.872
3500	2.416	2.126	34.906	266.1	2.839	27.886
4000	2.299	1.956	34.895	264.5	3.052	27.891
4500	2.268	1.868	34.888	262.6	3.274	27.892
5000	2.191	1.732	34.872	255.7	3.506	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5213	1	2.128	1.644	34.860	250.4
4698	2	2.259	1.836	34.884	260.7
4298	3	2.277	1.901	34.890	263.8
3899	4	2.309	1.978	34.896	266.4
3499	5	2.417	2.127	34.906	267.1
3072	6	2.651	2.401	34.906	266.2
2837	7	2.865	2.634	34.937	263.7
2499	8	3.176	2.973	34.952	261.5
2249	9	3.421	3.238	34.963	260.7
1998	10	3.630	3.469	34.966	262.0
1749	11	3.896	3.754	34.991	260.0
1499	12	4.282	4.159	35.000	253.0
1249	13	5.032	4.924	35.048	234.2
999	14	6.943	6.844	35.099	179.9
749	15	12.095	11.994	35.569	149.9
499	16	17.321	17.236	36.419	190.2
349	17	18.254	18.192	36.575	196.4
259	18	19.107	19.060	36.648	184.5
199	19	20.494	20.457	36.741	184.3
139	20	22.298	22.270	36.802	213.6
83	21	23.565	23.547	36.776	212.7
48	22	24.409	24.398	36.721	209.2
3	23	24.633	24.632	36.630	208.1

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 21 (CTD021)
 Latitude 26.498 N Longitude 72.767 W
 22-Apr-2009 23:24 Z

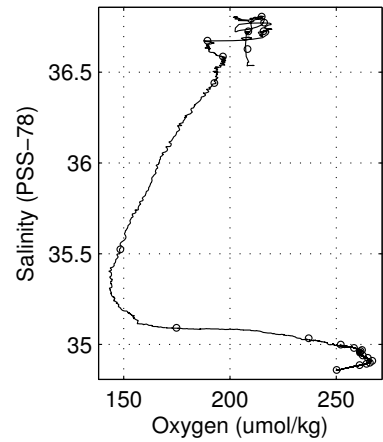
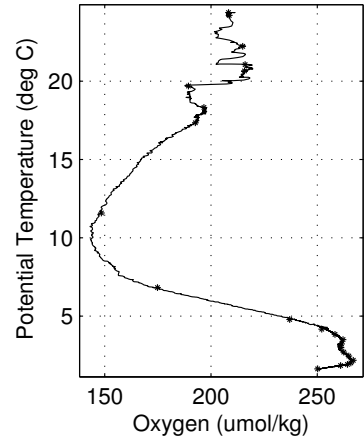
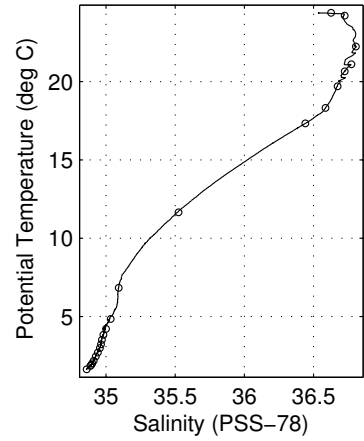
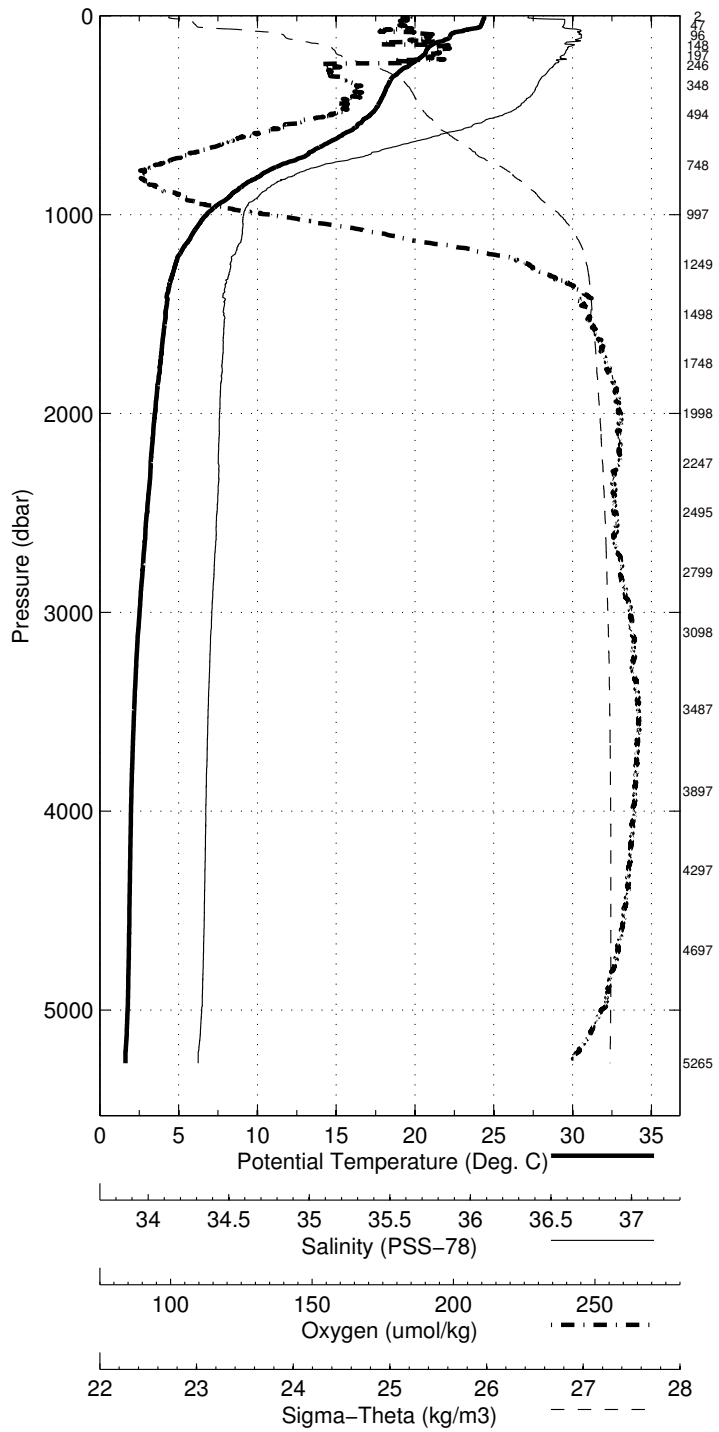


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 22 (CTD022)
 Latitude 26.500N Longitude 72.383W
 23-Apr-2009 05:20Z

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	24.393	24.393	36.538	210.2	0.003	24.689
10	24.390	24.388	36.536	208.2	0.032	24.689
20	24.323	24.319	36.723	208.9	0.064	24.851
30	24.291	24.284	36.723	207.8	0.095	24.861
50	24.190	24.179	36.717	207.8	0.157	24.888
75	23.067	23.051	36.805	201.9	0.230	25.288
100	22.259	22.239	36.807	215.1	0.294	25.524
125	21.858	21.834	36.803	211.7	0.355	25.636
150	21.035	21.006	36.761	218.5	0.413	25.834
200	20.510	20.472	36.707	215.1	0.522	25.938
250	19.684	19.637	36.667	190.8	0.624	26.130
300	18.776	18.722	36.619	190.2	0.718	26.331
400	18.050	17.980	36.552	197.3	0.892	26.466
500	17.238	17.153	36.407	189.6	1.061	26.558
600	15.486	15.391	36.086	170.0	1.219	26.722
700	13.248	13.148	35.723	155.0	1.361	26.923
800	10.339	10.241	35.348	144.1	1.480	27.182
900	8.441	8.343	35.172	152.4	1.577	27.357
1000	6.901	6.802	35.090	175.7	1.658	27.517
1100	5.954	5.853	35.082	204.0	1.724	27.636
1200	5.162	5.058	35.043	230.1	1.781	27.703
1300	4.732	4.623	35.015	243.6	1.833	27.730
1400	4.386	4.270	34.985	253.1	1.884	27.746
1500	4.290	4.167	34.988	254.5	1.933	27.759
1750	3.981	3.838	34.980	258.7	2.054	27.787
2000	3.656	3.493	34.966	261.9	2.172	27.811
2500	3.197	2.993	34.953	260.6	2.400	27.848
3000	2.763	2.518	34.927	264.4	2.619	27.870
3500	2.467	2.175	34.908	266.1	2.833	27.884
4000	2.325	1.981	34.897	265.4	3.049	27.890
4500	2.279	1.879	34.889	262.8	3.271	27.892
5000	2.223	1.763	34.876	257.0	3.504	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5266	1	2.112	1.622	34.859	250.1
4697	2	2.265	1.841	34.886	260.9
4298	3	2.295	1.918	34.893	264.2
3897	4	2.340	2.008	34.900	265.8
3487	5	2.469	2.179	34.910	267.0
3098	6	2.700	2.445	34.926	264.8
2799	7	2.925	2.697	34.940	262.5
2496	8	3.192	2.989	34.955	261.1
2248	9	3.410	3.227	34.963	261.4
1998	10	3.667	3.505	34.969	262.1
1748	11	3.970	3.827	34.981	258.3
1498	12	4.338	4.214	34.999	252.1
1249	13	4.946	4.840	35.034	237.0
998	14	6.929	6.830	35.092	174.8
748	15	11.757	11.658	35.525	148.4
495	16	17.416	17.331	36.441	192.6
348	17	18.381	18.320	36.587	196.7
247	18	19.755	19.709	36.674	189.4
198	19	20.693	20.655	36.726	215.8
149	20	21.136	21.107	36.774	216.0
96	21	22.259	22.240	36.807	214.9
48	22	24.230	24.220	36.725	208.6
2	23	24.398	24.398	36.628	208.3

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 22 (CTD022)
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 23-Apr-2009 05:20 Z

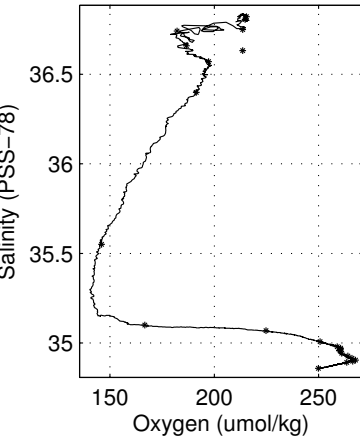
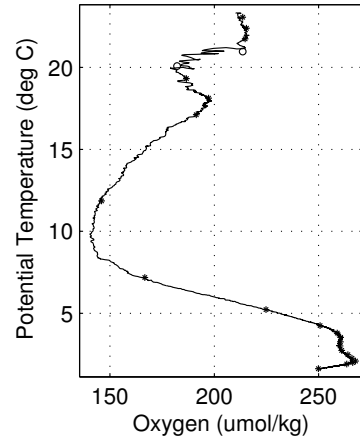
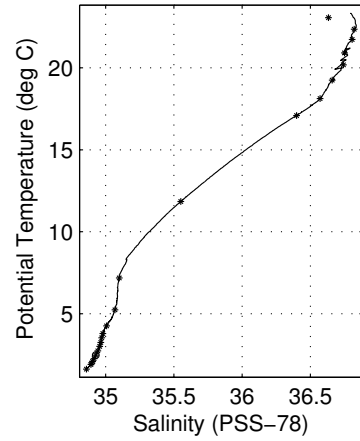
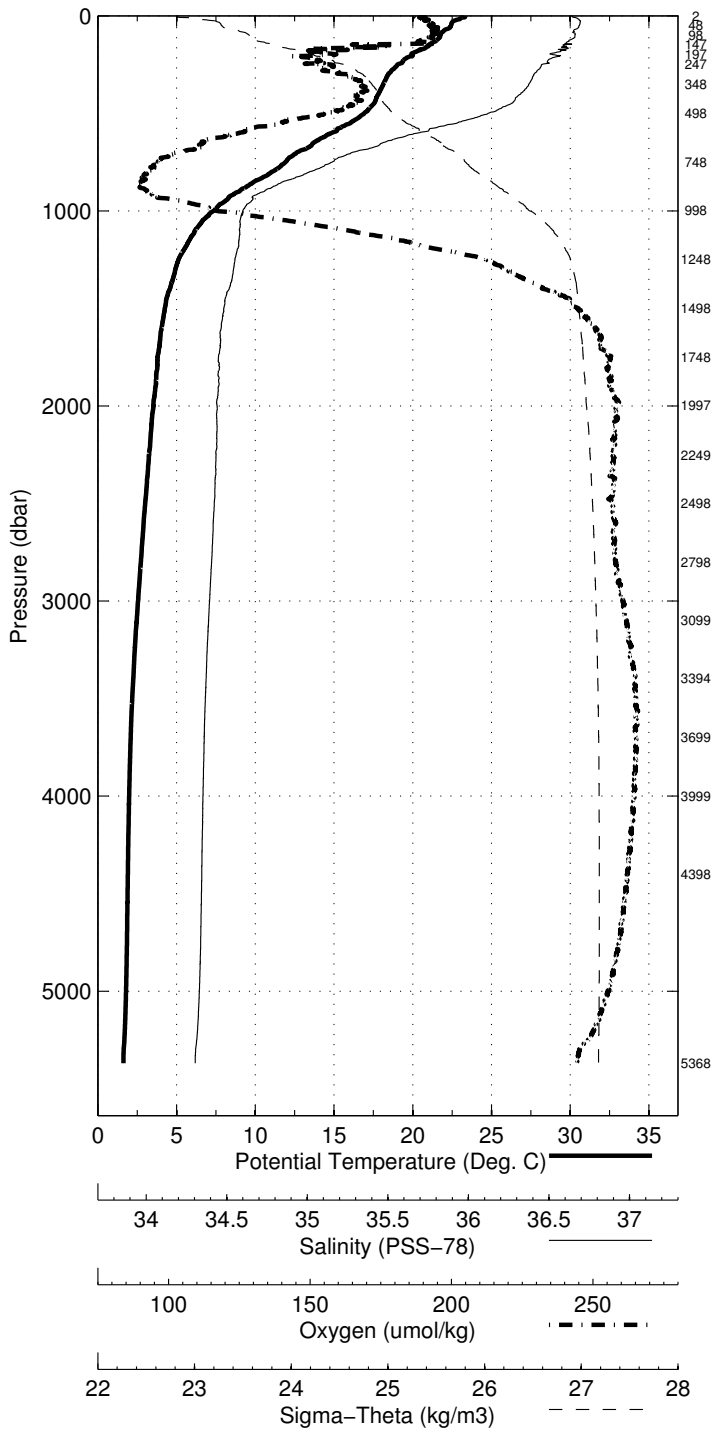


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 23 (CTD023)
 Latitude 26.500N Longitude 72.000W
 23-Apr-2009 11:13Z

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	23.328	23.327	36.795	210.2	0.003	25.200
10	23.069	23.067	36.813	211.7	0.027	25.290
20	22.834	22.830	36.829	212.8	0.054	25.371
30	22.552	22.546	36.835	213.7	0.079	25.457
50	22.437	22.427	36.830	215.7	0.130	25.487
75	21.996	21.981	36.801	215.4	0.191	25.592
100	21.767	21.747	36.807	214.5	0.251	25.663
125	21.539	21.514	36.778	211.6	0.310	25.706
150	21.026	20.997	36.746	200.8	0.367	25.824
200	19.992	19.955	36.705	186.7	0.472	26.075
250	19.068	19.023	36.637	189.1	0.568	26.267
300	18.489	18.436	36.597	193.5	0.658	26.386
400	17.904	17.835	36.529	195.1	0.829	26.485
500	16.985	16.901	36.361	187.1	0.995	26.583
600	14.957	14.865	36.006	165.9	1.150	26.778
700	12.740	12.642	35.664	150.3	1.286	26.980
800	11.155	11.052	35.444	142.9	1.408	27.112
900	9.101	8.998	35.213	142.4	1.513	27.285
1000	7.453	7.350	35.102	160.4	1.601	27.450
1100	6.280	6.176	35.087	193.3	1.673	27.599
1200	5.572	5.465	35.073	217.1	1.734	27.678
1300	5.033	4.921	35.055	233.8	1.788	27.728
1400	4.692	4.573	35.032	242.4	1.839	27.750
1500	4.382	4.258	35.005	251.3	1.889	27.763
1750	3.937	3.795	34.978	259.1	2.010	27.790
2000	3.694	3.531	34.971	261.3	2.128	27.811
2500	3.211	3.007	34.956	260.1	2.355	27.849
3000	2.802	2.555	34.932	262.6	2.576	27.871
3500	2.474	2.182	34.910	265.8	2.791	27.885
4000	2.333	1.989	34.898	265.2	3.006	27.891
4500	2.291	1.890	34.890	263.2	3.229	27.893
5000	2.252	1.791	34.879	258.8	3.463	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5368	1	2.130	1.626	34.859	249.9
4399	2	2.297	1.908	34.892	263.5
4000	3	2.337	1.993	34.898	266.4
3699	4	2.401	2.089	34.905	267.7
3395	5	2.538	2.256	34.915	266.0
3099	6	2.726	2.471	34.927	264.0
2798	7	2.964	2.735	34.943	261.1
2499	8	3.215	3.011	34.957	260.3
2249	9	3.433	3.250	34.965	260.5
1998	10	3.695	3.532	34.971	260.6
1749	11	3.939	3.796	34.979	258.9
1498	12	4.381	4.257	35.007	250.7
1248	13	5.346	5.236	35.068	224.8
999	14	7.282	7.181	35.100	166.7
749	15	11.944	11.844	35.551	146.0
499	16	17.177	17.093	36.399	191.3
349	17	18.187	18.126	36.571	197.3
247	18	19.298	19.253	36.660	186.6
198	19	20.218	20.181	36.742	182.2
148	20	20.937	20.909	36.749	213.6
98	21	21.748	21.729	36.806	214.8
48	22	22.370	22.360	36.821	215.4
3	23	23.055	23.054	36.632	213.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 23 (CTD023)
 Latitude 26.500 N Longitude 72.000 W
 23-Apr-2009 11:13 Z

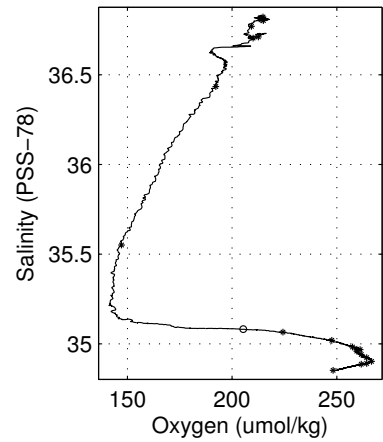
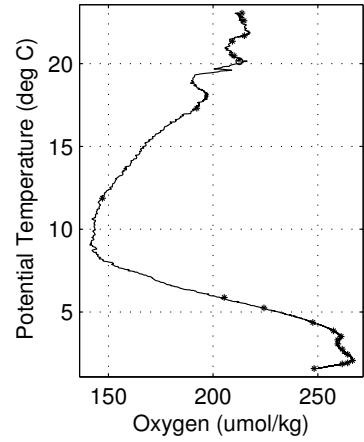
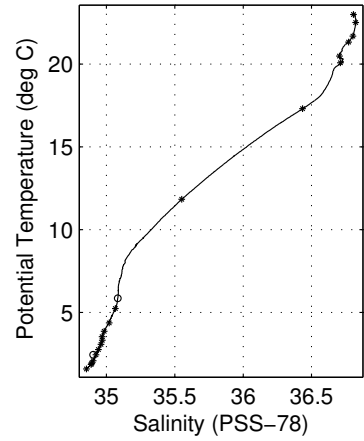
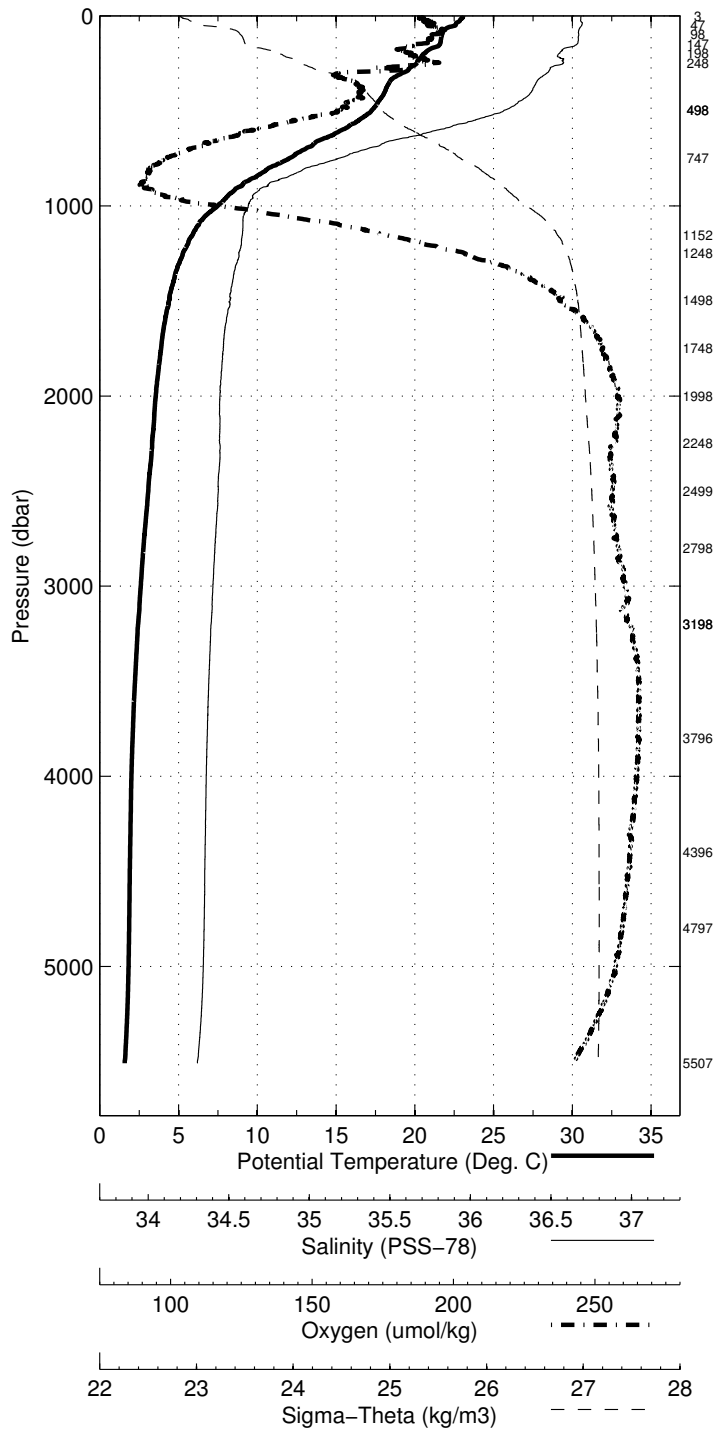


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 24 (CTD024)
 Latitude 26.500N Longitude 71.501W
 23-Apr-2009 18:39Z

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	23.061	23.061	36.821	211.7	0.003	25.298
10	23.027	23.025	36.819	212.4	0.027	25.307
20	22.890	22.886	36.818	212.5	0.053	25.347
30	22.812	22.806	36.820	213.4	0.079	25.371
50	22.587	22.577	36.824	214.6	0.131	25.440
75	21.864	21.849	36.809	217.7	0.192	25.635
100	21.745	21.725	36.808	214.4	0.251	25.670
125	21.680	21.655	36.806	214.3	0.309	25.688
150	21.616	21.586	36.799	210.5	0.368	25.702
200	20.602	20.564	36.706	207.6	0.480	25.912
250	20.169	20.122	36.728	214.7	0.586	26.048
300	19.283	19.228	36.647	191.2	0.685	26.221
400	18.168	18.098	36.566	196.0	0.863	26.448
500	17.322	17.237	36.423	190.8	1.032	26.550
600	15.477	15.383	36.089	169.1	1.191	26.727
700	13.161	13.061	35.724	153.4	1.332	26.942
800	10.820	10.719	35.409	143.8	1.453	27.145
900	8.908	8.807	35.195	144.3	1.557	27.302
1000	7.578	7.474	35.113	160.6	1.645	27.441
1100	6.375	6.271	35.086	191.3	1.718	27.585
1200	5.707	5.598	35.079	212.3	1.780	27.666
1300	5.160	5.047	35.055	229.3	1.836	27.713
1400	4.786	4.666	35.033	240.4	1.889	27.740
1500	4.520	4.394	35.020	246.5	1.940	27.760
1750	4.030	3.886	34.985	257.2	2.062	27.786
2000	3.719	3.555	34.969	261.2	2.181	27.807
2500	3.281	3.076	34.960	259.2	2.412	27.846
3000	2.846	2.598	34.932	262.8	2.636	27.867
3500	2.527	2.234	34.911	266.3	2.855	27.881
4000	2.350	2.006	34.898	265.8	3.072	27.889
4500	2.304	1.903	34.890	263.8	3.297	27.892
5000	2.286	1.823	34.883	260.6	3.532	27.892
5500	2.105	1.585	34.853	249.7	3.776	27.886

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5508	1	2.106	1.585	34.853	248.3
4797	2	2.299	1.861	34.887	261.7
4397	3	2.313	1.924	34.892	264.3
3797	4	2.398	2.075	34.903	266.6
3199	5	2.702	2.437	34.903	-999.0
3199	6	2.703	2.438	34.924	264.3
2798	7	2.985	2.755	34.941	261.7
2499	8	3.275	3.070	34.960	259.6
2248	9	3.502	3.318	34.970	259.6
1999	10	3.692	3.529	34.968	261.1
1748	11	4.001	3.857	34.983	257.5
1498	12	4.491	4.366	35.020	247.6
1248	13	5.349	5.238	35.066	224.3
1153	14	5.955	5.849	35.083	205.3
748	15	11.937	11.837	35.551	147.1
499	16	17.390	17.305	36.435	192.2
499	17	17.392	17.889	-999.000	-999.0
249	18	20.124	20.077	36.712	212.5
199	19	20.520	20.483	36.705	210.1
148	20	21.352	21.323	36.771	209.2
98	21	21.704	21.685	36.802	215.0
47	22	22.518	22.508	36.823	214.7
3	23	22.997	22.996	36.807	213.8

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 24 (CTD024)
 Latitude 26.500 N Longitude 71.501 W
 23-Apr-2009 18:39 Z

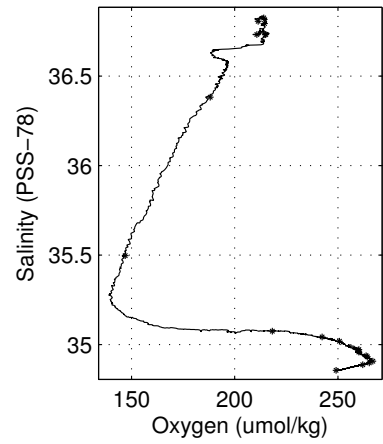
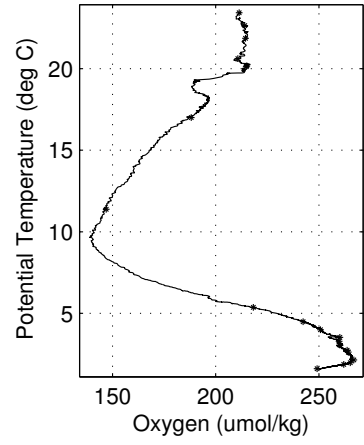
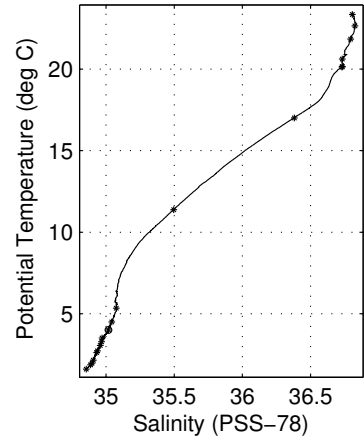
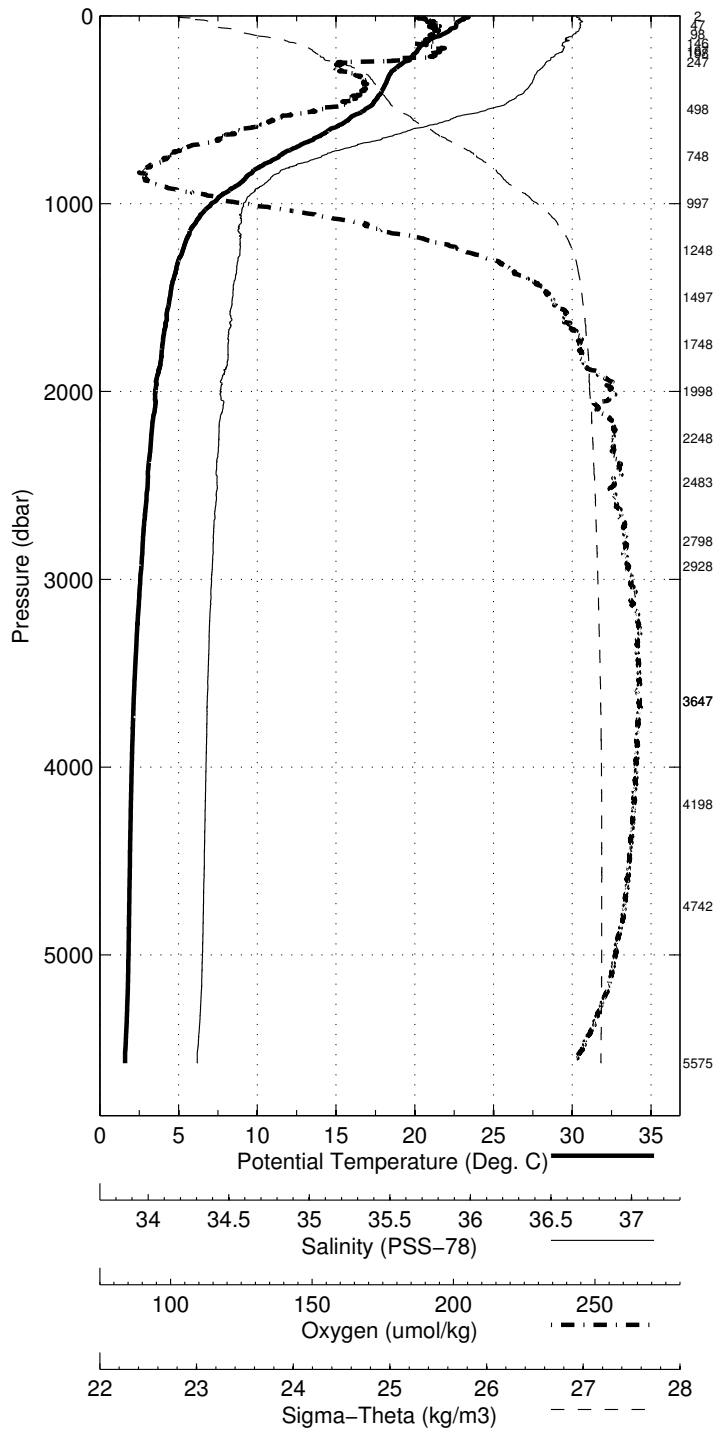


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 25 (CTD025)
 Latitude 26.500N Longitude 71.000W
 24-Apr-2009 01:43Z

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	23.428	23.428	36.805	211.5	0.003	25.178
10	23.267	23.265	36.815	210.5	0.028	25.233
20	23.063	23.059	36.821	211.5	0.055	25.298
30	22.812	22.806	36.835	213.5	0.081	25.382
50	22.645	22.635	36.825	213.8	0.132	25.424
75	22.254	22.239	36.818	214.6	0.195	25.532
100	21.761	21.742	36.788	213.1	0.256	25.650
125	21.026	21.001	36.751	212.1	0.313	25.827
150	20.514	20.486	36.732	210.1	0.367	25.953
200	20.055	20.018	36.710	213.2	0.470	26.062
250	19.305	19.260	36.646	191.6	0.569	26.213
300	18.560	18.507	36.601	192.1	0.660	26.372
400	17.976	17.906	36.539	196.0	0.832	26.475
500	16.912	16.828	36.344	184.1	0.999	26.588
600	14.771	14.679	35.969	165.4	1.153	26.790
700	12.577	12.481	35.642	151.0	1.288	26.994
800	10.354	10.256	35.351	141.9	1.404	27.181
900	8.862	8.761	35.195	143.4	1.505	27.309
1000	7.173	7.073	35.092	166.1	1.590	27.481
1100	6.197	6.093	35.082	195.2	1.660	27.605
1200	5.569	5.461	35.076	214.0	1.720	27.680
1300	5.119	5.005	35.065	229.2	1.775	27.726
1400	4.814	4.694	35.051	237.8	1.827	27.751
1500	4.571	4.444	35.037	243.5	1.877	27.768
1750	4.122	3.977	35.014	250.9	1.998	27.800
2000	3.679	3.517	34.974	259.5	2.115	27.815
2500	3.238	3.033	34.958	259.7	2.342	27.848
3000	2.817	2.570	34.929	264.4	2.564	27.867
3500	2.525	2.232	34.911	266.0	2.783	27.882
4000	2.367	2.023	34.900	265.3	3.001	27.890
4500	2.312	1.911	34.892	263.5	3.225	27.892
5000	2.284	1.822	34.883	260.0	3.460	27.892
5500	2.147	1.625	34.858	251.6	3.705	27.887

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5575	1	2.136	1.605	34.855	249.2
4742	2	2.297	1.866	34.887	262.1
4198	3	2.334	1.968	34.897	265.2
3648	4	2.453	2.146	34.907	267.0
3648	5	2.453	7.707	-999.000	-999.0
2929	6	2.864	2.624	34.932	264.2
2798	7	2.952	2.723	34.937	263.7
2484	8	3.252	3.049	34.957	260.2
2248	9	3.464	3.280	34.968	259.8
1999	10	3.678	3.515	34.972	260.2
1748	11	4.147	4.002	35.018	250.7
1498	12	4.616	4.489	35.042	242.4
1248	13	5.456	5.344	35.075	218.3
998	14	7.186	8.639	-999.000	-999.0
749	15	11.477	11.379	35.497	146.9
499	16	17.089	17.005	36.382	188.1
248	17	19.506	19.731	-999.000	-999.0
198	18	20.158	20.121	36.731	214.8
187	19	20.196	20.161	36.733	215.1
146	20	20.645	20.618	36.732	210.7
99	21	21.866	21.846	36.794	214.4
48	22	22.661	22.651	36.826	214.1
3	23	23.352	23.352	36.807	211.4

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 25 (CTD025)
 Latitude 26.500 N Longitude 71.000 W
 24-Apr-2009 01:43 Z



Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 26 (CTD026)
 Latitude 26.501N Longitude 70.502W
 24-Apr-2009 08:59Z

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	22.683	22.683	36.788	210.8	0.003	25.382
10	22.681	22.679	36.788	212.1	0.026	25.384
20	22.680	22.676	36.790	213.4	0.052	25.385
30	22.611	22.605	36.811	212.7	0.078	25.422
50	22.000	21.990	36.806	215.3	0.127	25.594
75	21.221	21.207	36.814	215.3	0.184	25.818
100	20.937	20.918	36.811	215.3	0.238	25.896
125	20.706	20.683	36.804	216.7	0.291	25.955
150	20.152	20.124	36.706	210.9	0.342	26.031
200	19.240	19.203	36.660	182.2	0.439	26.238
250	18.505	18.461	36.595	193.5	0.528	26.379
300	18.226	18.173	36.574	195.7	0.614	26.435
400	17.656	17.588	36.487	192.8	0.782	26.514
500	16.433	16.351	36.256	179.5	0.944	26.632
600	13.997	13.908	35.848	160.3	1.092	26.862
700	11.653	11.561	35.515	144.6	1.218	27.073
800	9.447	9.354	35.252	141.6	1.325	27.258
900	8.035	7.940	35.129	151.2	1.417	27.385
1000	6.837	6.739	35.068	167.3	1.496	27.509
1100	5.967	5.866	35.065	195.3	1.563	27.621
1200	5.439	5.333	35.068	220.4	1.622	27.690
1300	4.912	4.801	35.042	236.3	1.675	27.732
1400	4.653	4.534	35.030	243.4	1.726	27.752
1500	4.350	4.226	35.005	249.7	1.776	27.766
1750	3.946	3.803	34.986	257.2	1.895	27.795
2000	3.635	3.472	34.971	259.8	2.011	27.817
2500	3.149	2.947	34.952	258.8	2.236	27.851
3000	2.756	2.511	34.929	260.4	2.453	27.872
3500	2.490	2.198	34.910	264.2	2.668	27.884
4000	2.336	1.992	34.897	264.6	2.884	27.890
4500	2.304	1.903	34.891	262.8	3.108	27.892
5000	2.289	1.827	34.883	260.1	3.343	27.892
5500	2.178	1.656	34.862	252.9	3.588	27.888

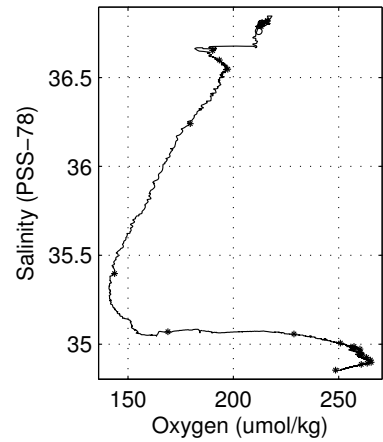
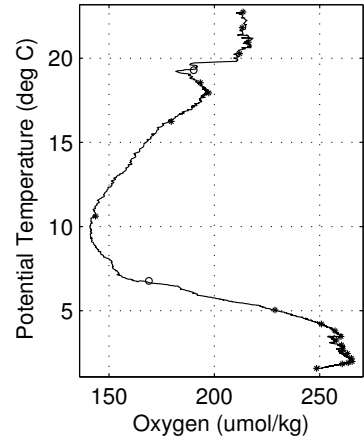
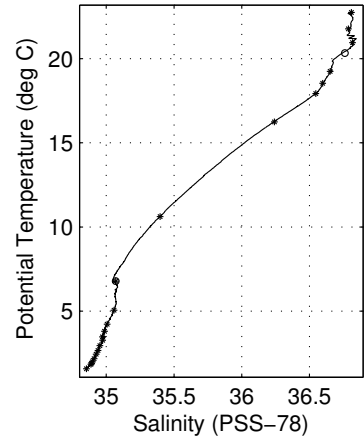
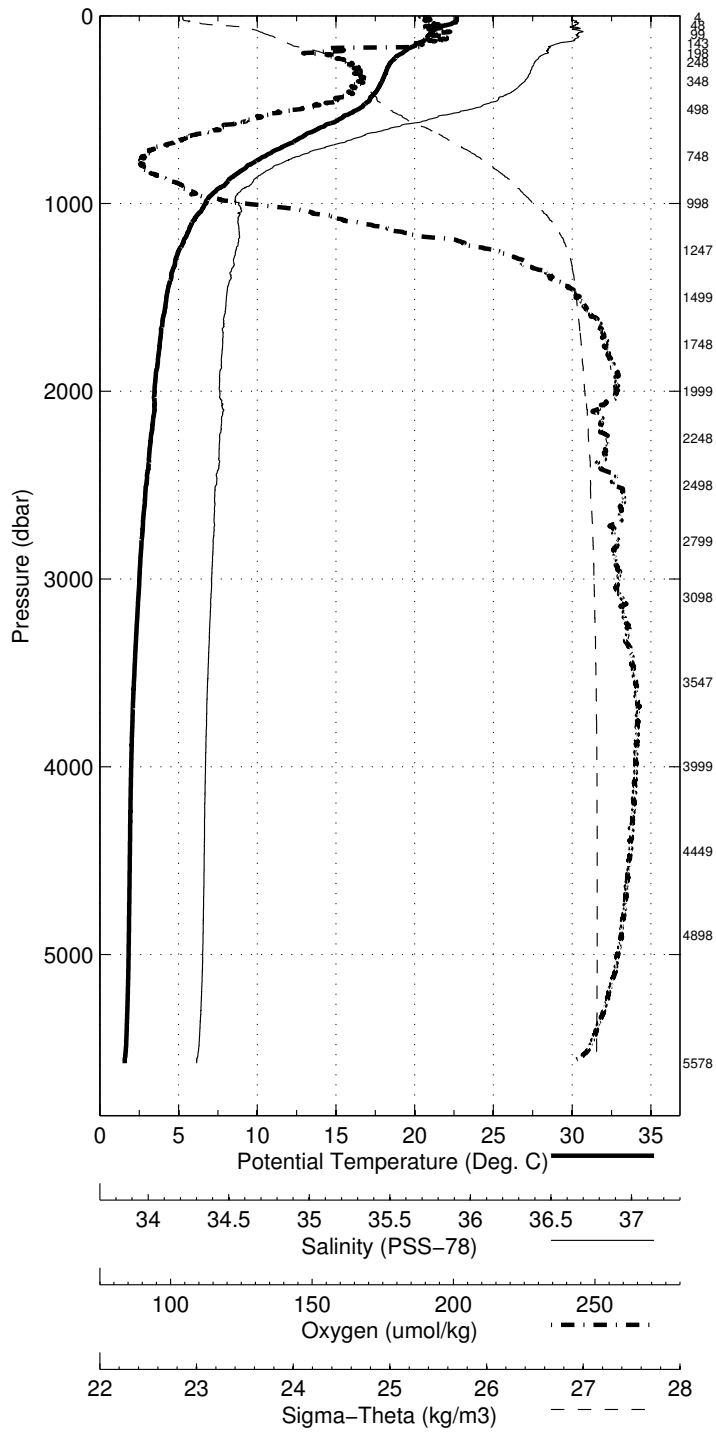
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5578	1	2.111	1.580	34.854	248.5
4899	2	2.297	1.847	34.886	260.7
4449	3	2.308	1.913	34.892	263.5
3999	4	2.339	1.996	34.898	265.4
3548	5	2.483	2.186	34.910	265.0
3098	6	2.707	2.453	34.925	263.2
2799	7	2.891	2.663	34.939	261.1
2499	8	3.161	2.958	34.953	260.3
2249	9	3.458	3.274	34.973	257.9
1999	10	3.640	3.478	34.972	260.1
1749	11	3.954	3.811	34.988	257.2
1499	12	4.351	4.227	35.006	250.8
1248	13	5.174	5.065	35.058	228.8
998	14	6.889	6.791	35.070	169.0
749	15	10.716	10.622	35.398	143.7
499	16	16.330	16.248	36.241	179.6
348	17	17.994	17.933	36.547	197.4
249	18	18.579	18.535	36.598	193.4
199	19	19.281	19.244	36.652	190.2
143	20	20.361	20.334	36.761	212.1
99	21	20.974	20.955	36.818	216.1
49	22	21.782	21.772	36.787	213.2
4	23	22.748	22.747	36.810	213.7

Abaco April - May 2009 R/V Ronald H Brown

CTD Station 26 (CTD026)

Latitude 26.501 N Longitude 70.502 W

24-Apr-2009 08:59 Z

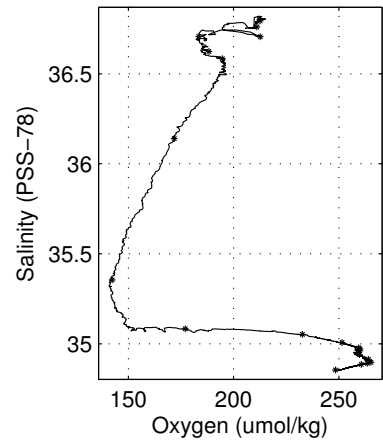
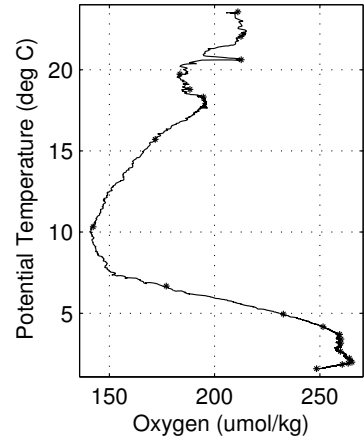
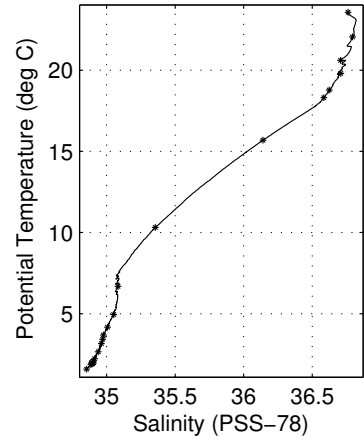
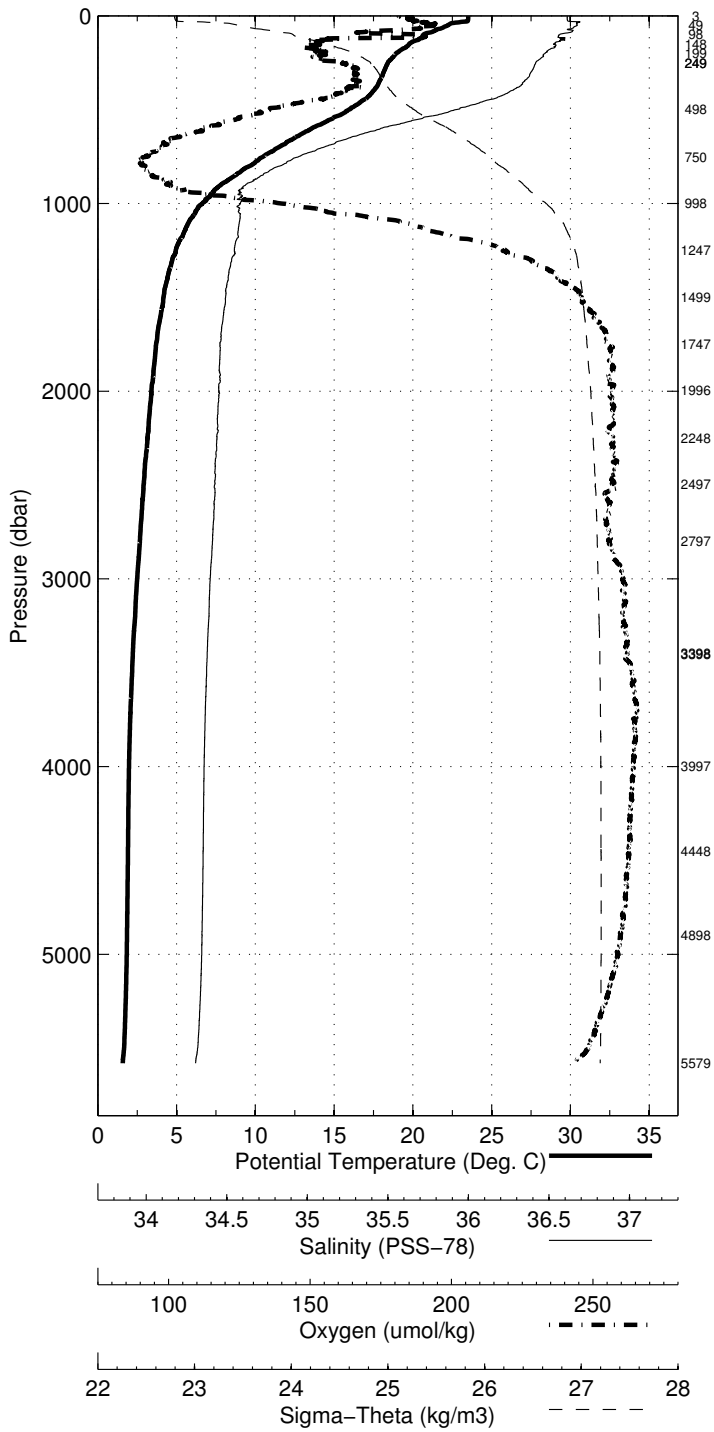


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 27 (CTD027)
 Latitude 26.500N Longitude 70.000W
 24-Apr-2009 15:57Z

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	23.517	23.516	36.755	205.8	0.003	25.114
10	23.512	23.510	36.754	208.1	0.028	25.115
20	23.506	23.502	36.755	209.6	0.057	25.118
30	23.413	23.406	36.773	209.7	0.085	25.160
50	22.236	22.226	36.805	214.5	0.136	25.526
75	21.484	21.470	36.763	206.4	0.196	25.707
100	20.702	20.683	36.713	210.1	0.251	25.885
125	20.400	20.376	36.729	190.7	0.305	25.980
150	19.788	19.760	36.684	186.9	0.355	26.110
200	18.982	18.946	36.641	184.7	0.448	26.290
250	18.455	18.411	36.593	193.2	0.536	26.390
300	18.195	18.142	36.568	195.0	0.622	26.438
400	17.544	17.475	36.465	192.2	0.789	26.524
500	16.005	15.925	36.182	174.1	0.949	26.675
600	13.653	13.566	35.800	156.4	1.093	26.897
700	11.590	11.498	35.509	147.1	1.217	27.080
800	9.738	9.644	35.284	142.5	1.325	27.235
900	7.907	7.812	35.109	148.0	1.418	27.388
1000	6.736	6.638	35.081	176.5	1.496	27.533
1100	5.861	5.761	35.077	207.1	1.561	27.644
1200	5.281	5.176	35.059	225.6	1.618	27.701
1300	4.833	4.723	35.037	238.9	1.670	27.737
1400	4.537	4.420	35.020	245.8	1.720	27.757
1500	4.292	4.168	35.006	251.5	1.769	27.773
1750	3.836	3.695	34.977	258.9	1.886	27.799
2000	3.561	3.400	34.971	259.3	2.000	27.824
2500	3.100	2.899	34.949	259.1	2.222	27.854
3000	2.739	2.494	34.927	261.8	2.438	27.872
3500	2.469	2.177	34.909	264.1	2.651	27.884
4000	2.322	1.978	34.896	264.5	2.866	27.890
4500	2.310	1.909	34.891	263.1	3.090	27.892
5000	2.300	1.837	34.884	260.4	3.326	27.892
5500	2.186	1.663	34.863	253.2	3.571	27.888

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5579	1	2.115	1.584	34.855	248.4
4898	2	2.304	1.854	34.886	260.7
4449	3	2.312	1.916	34.892	263.5
3998	4	2.329	1.986	34.898	265.3
3398	5	2.511	7.469	-999.000	-999.0
3399	6	2.510	2.228	34.914	264.0
2797	7	2.884	2.656	34.939	259.8
2497	8	3.148	6.920	-999.000	-999.0
2248	9	3.334	3.153	34.962	260.0
1996	10	3.577	3.416	34.972	260.1
1748	11	3.829	3.688	34.977	259.4
1500	12	4.293	4.170	35.007	251.5
1248	13	5.059	4.952	35.052	232.7
999	14	6.784	6.687	35.083	177.0
750	15	10.407	10.315	35.356	142.2
499	16	15.769	15.689	36.141	171.8
250	17	18.358	18.598	-999.000	-999.0
250	18	18.360	18.316	36.584	194.7
199	19	18.815	18.779	36.624	188.2
148	20	19.828	19.801	36.708	183.5
98	21	20.629	20.610	36.706	212.6
49	22	22.072	22.062	36.793	212.6
4	23	23.572	23.571	36.761	211.0

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 27 (CTD027)
 Latitude 26.500 N Longitude 70.000 W
 24-Apr-2009 15:57 Z

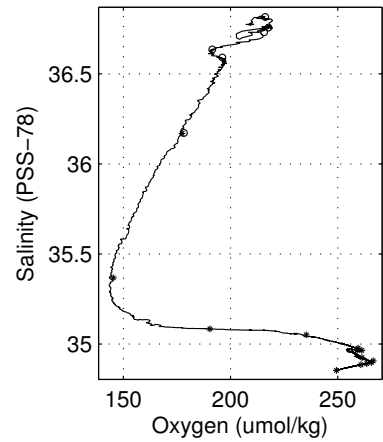
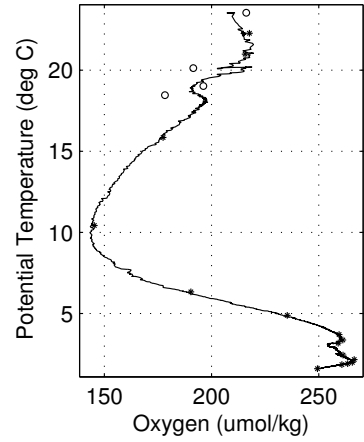
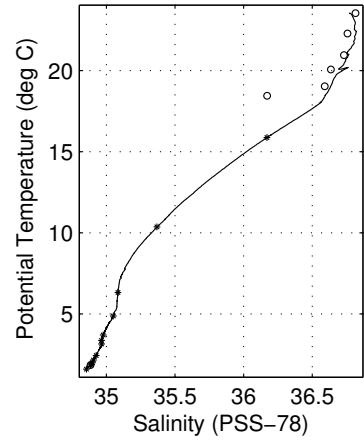
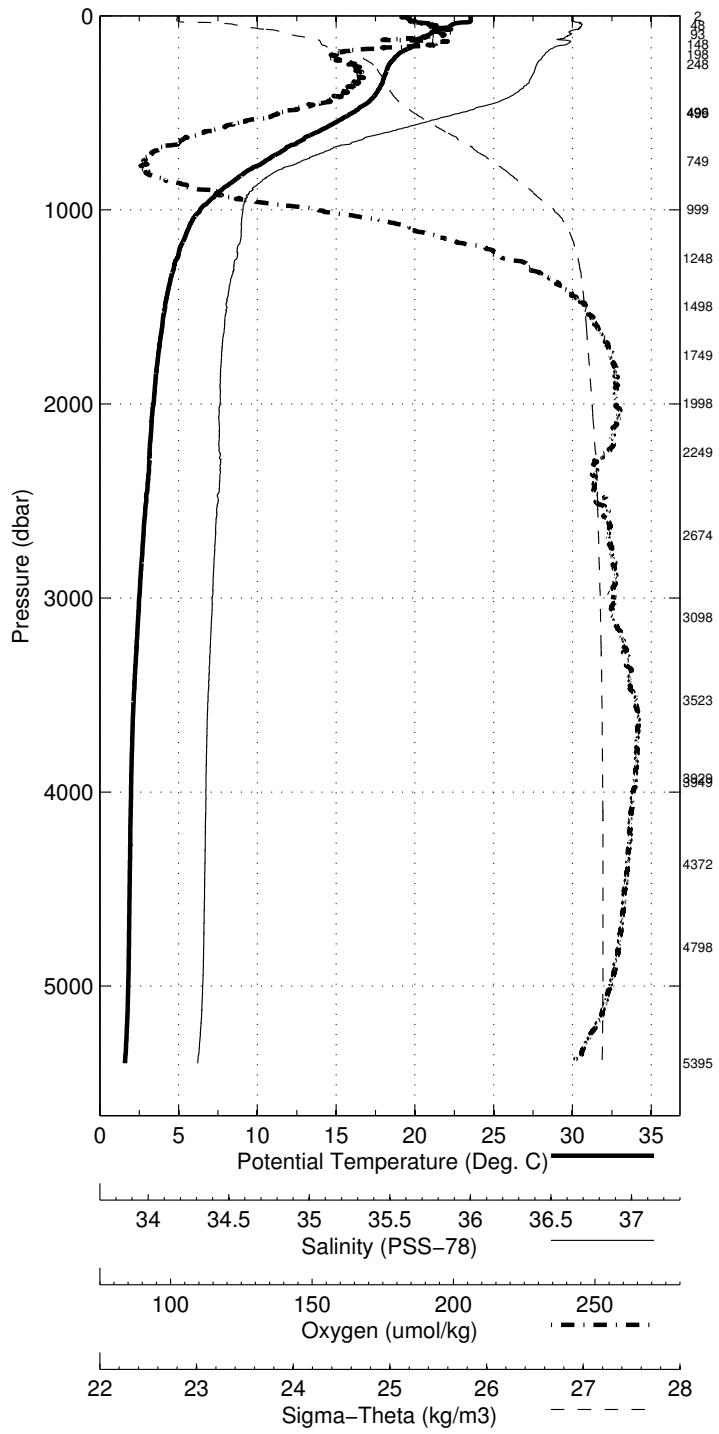


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 28 (CTD028)
 Latitude 26.500N Longitude 69.502W
 24-Apr-2009 22:59Z

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	23.546	23.545	36.775	209.3	0.003	25.121
10	23.531	23.529	36.774	209.4	0.028	25.125
20	23.550	23.546	36.773	209.2	0.057	25.119
30	23.514	23.507	36.781	209.0	0.085	25.136
50	22.286	22.276	36.816	215.3	0.137	25.520
75	21.290	21.275	36.768	217.9	0.196	25.765
100	20.811	20.792	36.752	217.8	0.251	25.885
125	20.174	20.150	36.737	205.4	0.303	26.047
150	20.085	20.057	36.731	213.7	0.353	26.067
200	18.964	18.928	36.629	190.4	0.448	26.285
250	18.419	18.375	36.588	194.4	0.536	26.395
300	18.173	18.121	36.569	197.3	0.621	26.444
400	17.601	17.532	36.477	191.9	0.789	26.520
500	16.110	16.029	36.198	178.1	0.949	26.663
600	13.863	13.775	35.826	159.0	1.094	26.873
700	11.602	11.511	35.504	146.6	1.220	27.074
800	9.439	9.347	35.258	144.8	1.327	27.263
900	7.800	7.706	35.134	162.0	1.416	27.423
1000	6.462	6.367	35.086	186.9	1.491	27.573
1100	5.698	5.599	35.078	209.5	1.552	27.665
1200	5.178	5.073	35.057	228.0	1.607	27.712
1300	4.811	4.701	35.039	238.7	1.658	27.741
1400	4.489	4.373	35.015	247.2	1.708	27.758
1500	4.273	4.150	35.005	252.2	1.756	27.774
1750	3.850	3.709	34.977	258.9	1.874	27.798
2000	3.567	3.406	34.969	259.6	1.988	27.822
2500	3.152	2.949	34.960	255.5	2.209	27.858
3000	2.741	2.496	34.929	260.3	2.425	27.873
3500	2.453	2.162	34.908	264.8	2.639	27.885
4000	2.322	1.979	34.896	264.1	2.854	27.890
4500	2.291	1.890	34.890	262.3	3.077	27.892
5000	2.262	1.801	34.880	258.4	3.311	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
5396	1	2.102	1.595	34.855	249.3
4798	2	2.283	1.846	34.885	260.7
4373	3	2.296	1.911	34.892	263.5
3949	4	2.327	1.989	34.897	265.6
3929	5	2.327	7.913	-999.000	-999.0
3524	6	2.447	2.153	34.907	266.5
3098	7	2.685	2.431	34.925	261.2
2674	8	2.981	6.999	-999.000	-999.0
2250	9	3.327	3.145	34.965	259.0
1998	10	3.529	3.368	34.965	261.1
1749	11	3.845	3.703	34.977	259.4
1499	12	4.225	6.553	-999.000	-999.0
1249	13	4.974	4.866	35.051	235.3
999	14	6.417	6.322	35.084	190.4
749	15	10.464	10.372	35.368	145.4
499	16	15.960	15.880	36.169	177.4
497	17	15.979	16.509	-999.000	-999.0
249	18	18.494	18.450	36.171	178.3
199	19	19.074	19.038	36.591	196.2
149	20	20.106	20.078	36.635	191.5
94	21	20.978	20.960	36.731	215.6
48	22	22.308	22.298	36.756	217.6
3	23	23.547	23.547	36.815	216.2

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 28 (CTD028)
 Latitude 26.500 N Longitude 69.502 W
 24-Apr-2009 22:59 Z

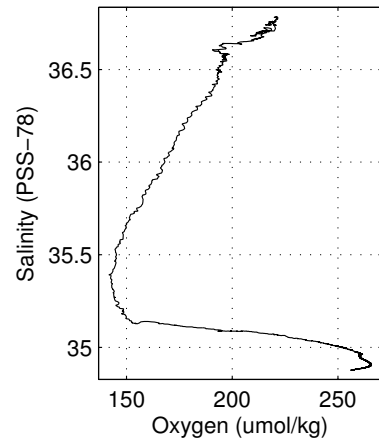
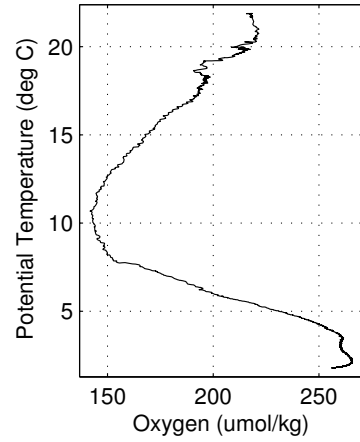
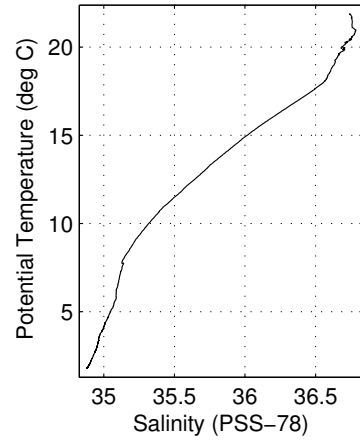
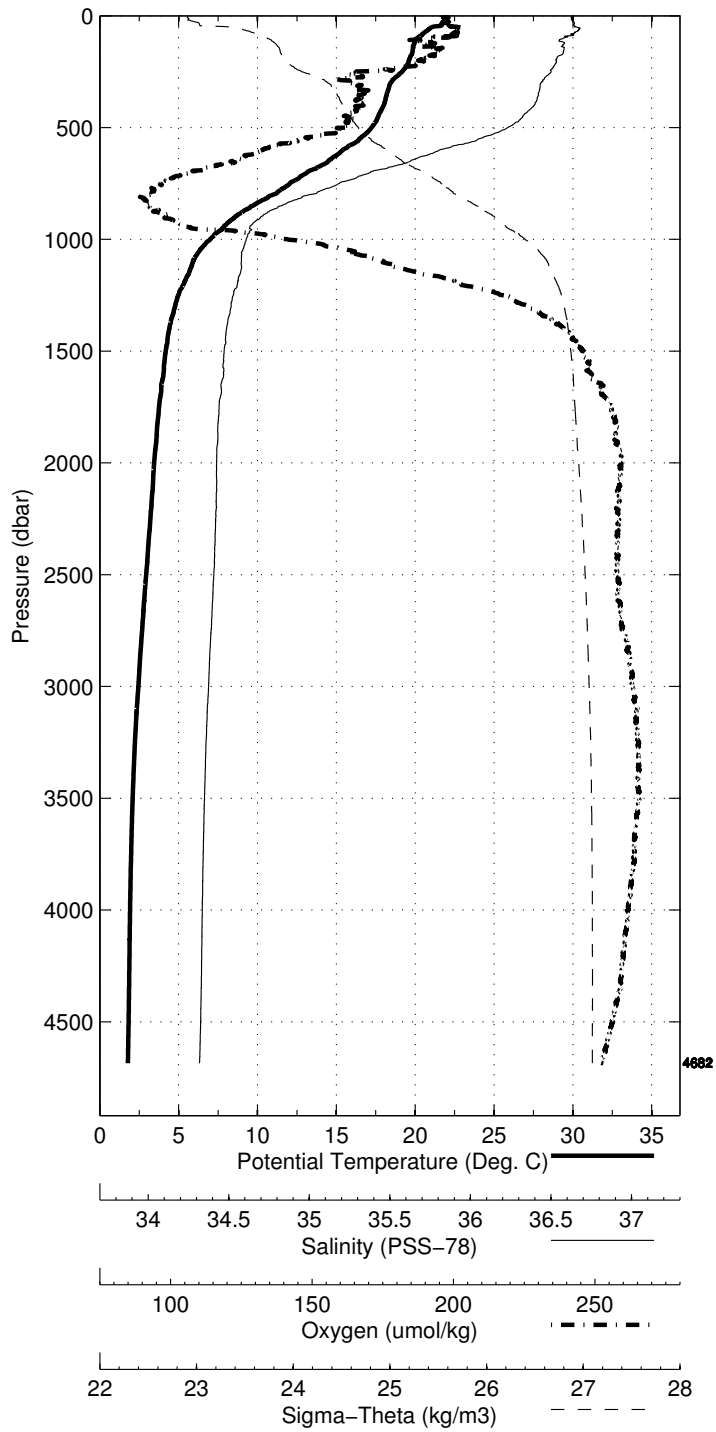


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 29 (CTD029)
 Latitude 26.375N Longitude 75.706W
 27-Apr-2009 01:56Z

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	21.886	21.886	36.742	216.6	0.002	25.574
10	21.878	21.876	36.742	217.2	0.024	25.577
20	21.847	21.843	36.748	217.9	0.048	25.591
30	21.719	21.713	36.756	217.5	0.072	25.634
50	21.095	21.086	36.765	220.4	0.118	25.815
75	20.592	20.578	36.760	220.7	0.171	25.950
100	20.125	20.107	36.701	213.1	0.222	26.032
125	19.965	19.942	36.706	213.3	0.272	26.079
150	19.878	19.850	36.705	217.5	0.321	26.103
200	19.642	19.605	36.667	210.8	0.419	26.138
250	19.231	19.186	36.641	195.4	0.515	26.228
300	18.506	18.453	36.590	194.1	0.605	26.377
400	18.064	17.994	36.555	197.2	0.778	26.465
500	17.306	17.221	36.422	192.9	0.947	26.553
600	15.486	15.391	36.081	172.1	1.106	26.719
700	13.264	13.164	35.735	154.0	1.250	26.929
800	11.070	10.968	35.427	144.2	1.373	27.114
900	8.662	8.562	35.184	148.2	1.476	27.332
1000	7.088	6.989	35.110	178.4	1.559	27.507
1100	6.008	5.906	35.087	202.3	1.625	27.634
1200	5.433	5.326	35.067	221.5	1.684	27.690
1300	4.889	4.778	35.036	237.9	1.737	27.730
1400	4.522	4.406	35.013	247.2	1.788	27.753
1500	4.303	4.179	35.001	251.9	1.837	27.768
1750	3.895	3.753	34.976	258.6	1.956	27.792
2000	3.606	3.445	34.963	261.2	2.072	27.813
2500	3.145	2.942	34.949	260.4	2.298	27.850
3000	2.688	2.444	34.923	264.0	2.515	27.873
3500	2.374	2.085	34.902	265.6	2.724	27.887
4000	2.259	1.918	34.891	262.9	2.935	27.891
4500	2.224	1.825	34.883	259.3	3.155	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4682	2	2.202	8.593	-999.000	-999.0
4682	4	2.201	8.593	-999.000	-999.0
4682	6	2.201	8.593	-999.000	-999.0
4682	8	2.202	8.593	-999.000	-999.0
4682	10	2.202	8.593	-999.000	-999.0
4683	12	2.202	8.594	-999.000	-999.0
4682	14	2.201	8.593	-999.000	-999.0
4682	16	2.202	8.593	-999.000	-999.0
4682	18	2.202	8.594	-999.000	-999.0
4682	20	2.202	8.594	-999.000	-999.0
4682	22	2.202	8.594	-999.000	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 29 (CTD029)
 Latitude 26.375 N Longitude 75.706 W
 27-Apr-2009 01:56 Z

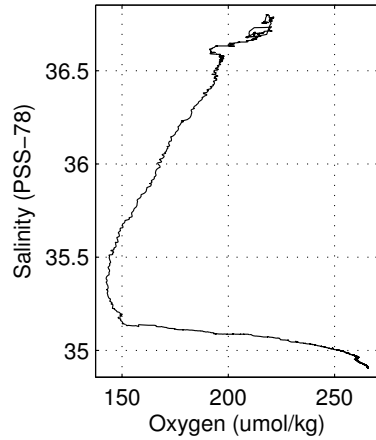
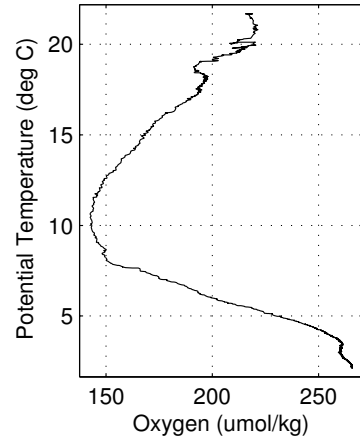
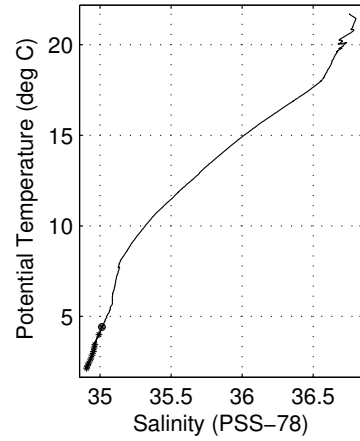
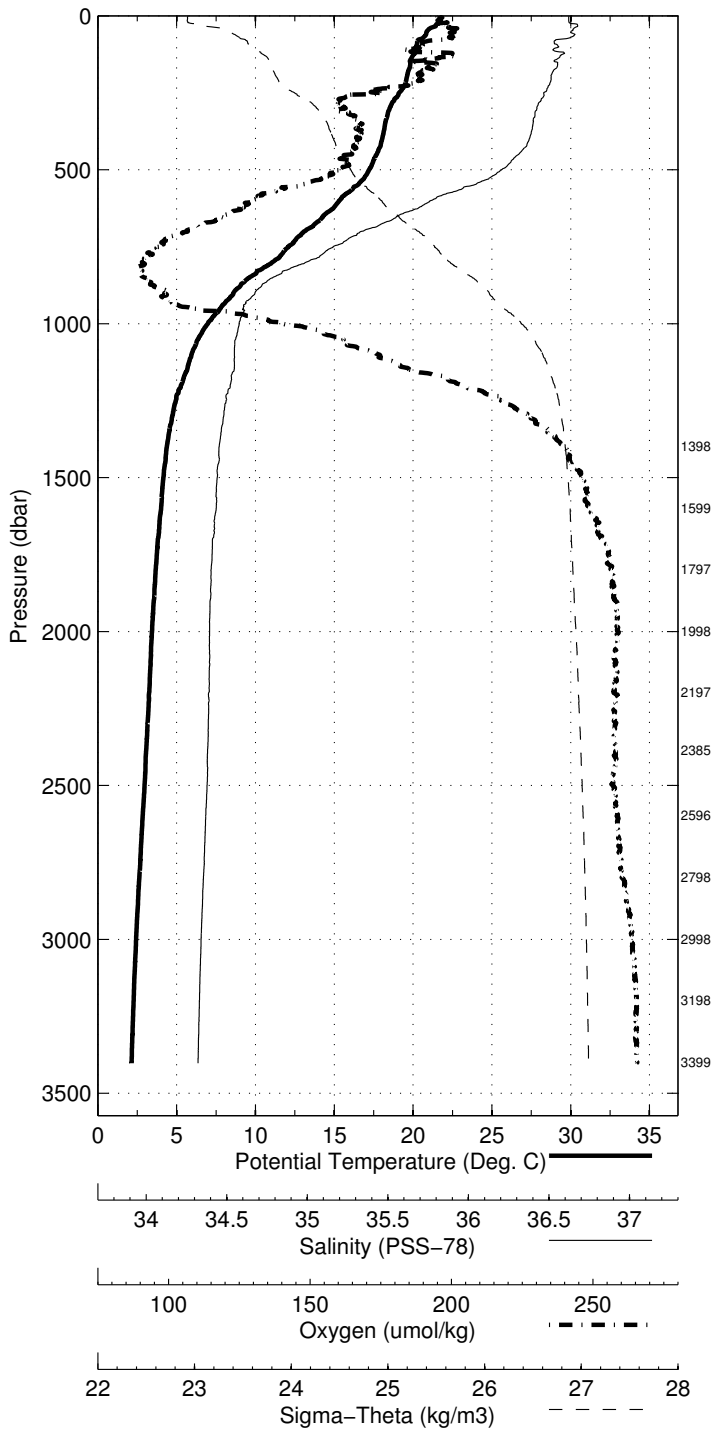


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 30 (CTD030)
 Latitude 26.375N Longitude 75.706W
 27-Apr-2009 05:39Z

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	21.686	21.686	36.758	216.5	0.002	25.642
10	21.689	21.687	36.757	217.3	0.023	25.641
20	21.690	21.686	36.758	218.1	0.047	25.642
30	21.453	21.447	36.800	218.4	0.070	25.742
50	20.880	20.870	36.768	219.6	0.114	25.877
75	20.538	20.524	36.734	219.2	0.166	25.944
100	20.236	20.217	36.706	212.9	0.218	26.006
125	20.080	20.057	36.725	219.6	0.268	26.063
150	19.844	19.816	36.696	211.6	0.317	26.105
200	19.635	19.598	36.668	213.2	0.415	26.141
250	19.155	19.110	36.631	201.6	0.511	26.240
300	18.584	18.531	36.598	193.8	0.601	26.363
400	18.103	18.033	36.559	197.2	0.775	26.459
500	17.297	17.213	36.421	192.9	0.944	26.554
600	15.407	15.313	36.068	170.9	1.103	26.726
700	13.200	13.100	35.723	154.8	1.246	26.933
800	11.182	11.080	35.446	143.5	1.369	27.109
900	8.712	8.612	35.190	149.0	1.472	27.329
1000	7.076	6.977	35.111	178.6	1.555	27.509
1100	6.047	5.945	35.087	202.0	1.622	27.629
1200	5.380	5.274	35.065	223.0	1.680	27.695
1300	4.841	4.731	35.034	238.4	1.733	27.733
1400	4.495	4.378	35.011	247.4	1.783	27.754
1500	4.280	4.157	35.001	251.9	1.832	27.771
1750	3.881	3.740	34.976	258.7	1.951	27.794
2000	3.602	3.440	34.963	261.1	2.067	27.814
2500	3.169	2.966	34.950	260.0	2.293	27.849
3000	2.671	2.427	34.921	264.8	2.510	27.873

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
3400	2	2.420	2.140	34.905	-999.0
3199	4	2.531	2.270	34.913	-999.0
2998	6	2.674	2.430	34.921	-999.0
2798	8	2.869	2.641	34.935	-999.0
2597	10	3.067	2.857	34.944	-999.0
2386	12	3.254	3.061	34.954	-999.0
2198	14	3.427	3.249	34.958	-999.0
1998	16	3.603	3.442	34.964	-999.0
1798	18	3.808	6.585	-999.000	-999.0
1600	20	4.123	3.993	34.992	-999.0
1398	22	4.532	4.415	35.014	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 30 (CTD030)
 Latitude 26.375 N Longitude 75.706 W
 27-Apr-2009 05:39 Z

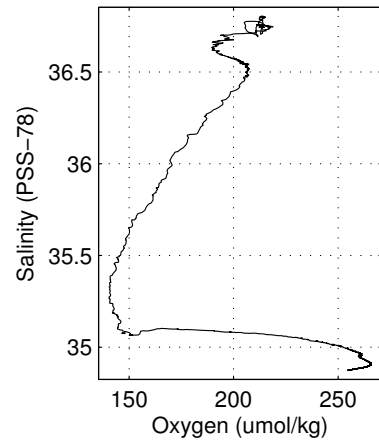
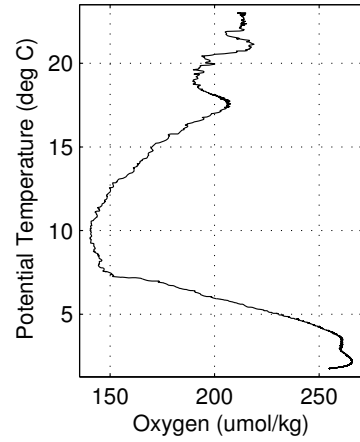
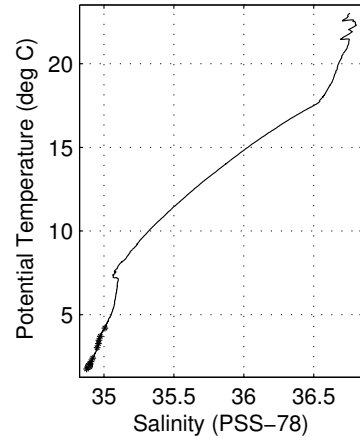
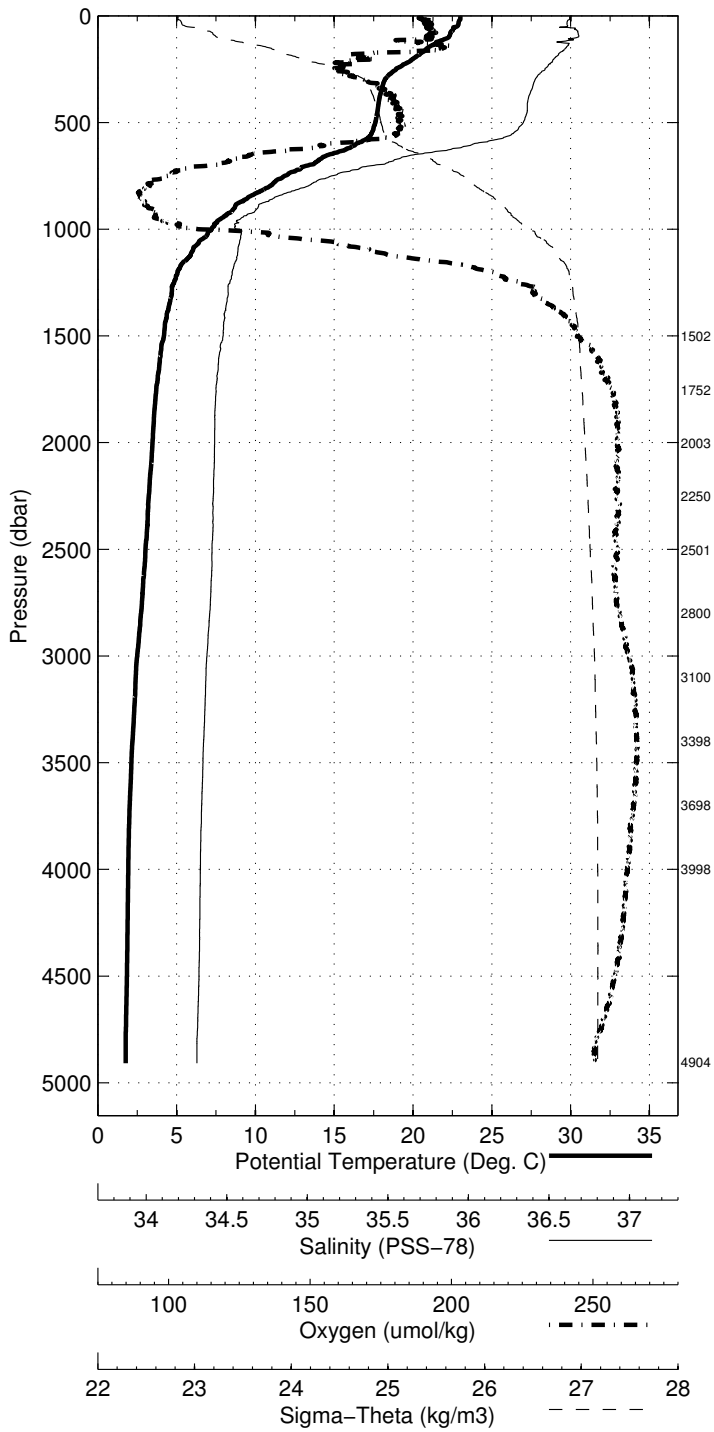


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 31 (CTD031)
 Latitude 26.493N Longitude 76.472W
 28-Apr-2009 06:25Z

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	23.007	23.007	36.758	211.1	0.003	25.265
10	23.005	23.003	36.756	210.9	0.027	25.266
20	22.948	22.944	36.749	213.2	0.054	25.277
30	22.902	22.896	36.743	212.8	0.081	25.287
50	22.787	22.777	36.741	213.6	0.135	25.320
75	22.421	22.405	36.797	214.0	0.199	25.469
100	22.286	22.266	36.797	212.9	0.262	25.509
125	21.484	21.460	36.712	210.8	0.323	25.671
150	20.956	20.927	36.738	217.1	0.380	25.838
200	20.049	20.011	36.679	195.7	0.487	26.040
250	18.973	18.928	36.632	190.1	0.584	26.288
300	18.252	18.200	36.581	197.5	0.671	26.434
400	17.908	17.838	36.545	204.7	0.840	26.496
500	17.697	17.611	36.523	207.0	1.007	26.535
600	16.491	16.392	36.272	187.3	1.174	26.636
700	13.472	13.371	35.772	158.8	1.321	26.915
800	10.982	10.880	35.428	143.8	1.442	27.131
900	8.778	8.677	35.182	143.0	1.544	27.313
1000	7.320	7.218	35.087	155.6	1.632	27.457
1100	6.135	6.032	35.082	198.7	1.702	27.614
1200	5.157	5.053	35.053	229.4	1.759	27.711
1300	4.806	4.696	35.033	240.0	1.811	27.736
1400	4.488	4.372	35.013	247.3	1.861	27.757
1500	4.320	4.196	35.007	250.8	1.909	27.771
1750	3.848	3.707	34.971	259.8	2.028	27.793
2000	3.631	3.469	34.964	260.9	2.144	27.812
2500	3.225	3.021	34.951	260.5	2.374	27.844
3000	2.746	2.501	34.925	263.8	2.596	27.870
3500	2.426	2.135	34.906	265.6	2.809	27.885
4000	2.274	1.932	34.892	263.3	3.021	27.891
4500	2.245	1.846	34.885	260.2	3.242	27.892

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4904	2	2.211	1.763	34.875	-999.0
3998	4	2.275	1.934	34.893	-999.0
3698	6	2.341	2.031	34.900	-999.0
3399	8	2.475	2.195	34.907	-999.0
3100	10	2.658	2.404	34.920	-999.0
2801	12	3.013	7.185	-999.000	-999.0
2502	14	3.230	3.026	34.950	-999.0
2250	16	3.458	3.275	34.960	-999.0
2004	18	3.643	3.480	34.964	-999.0
1752	20	3.849	3.707	34.973	-999.0
1502	22	4.321	4.197	35.007	-999.0

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 31 (CTD031)
 Latitude 26.493 N Longitude 76.472 W
 28-Apr-2009 06:25 Z

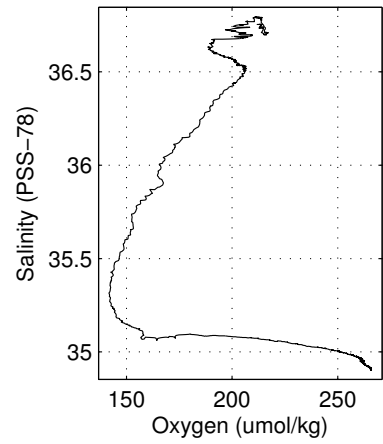
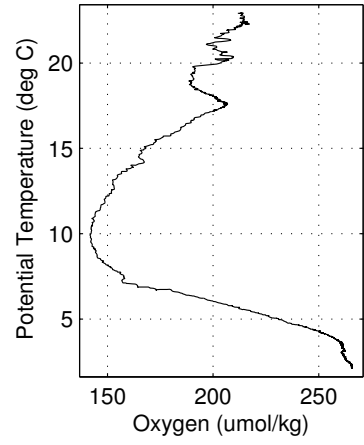
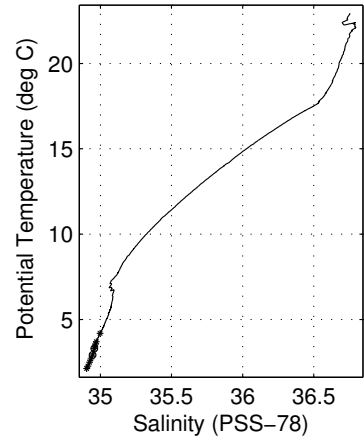
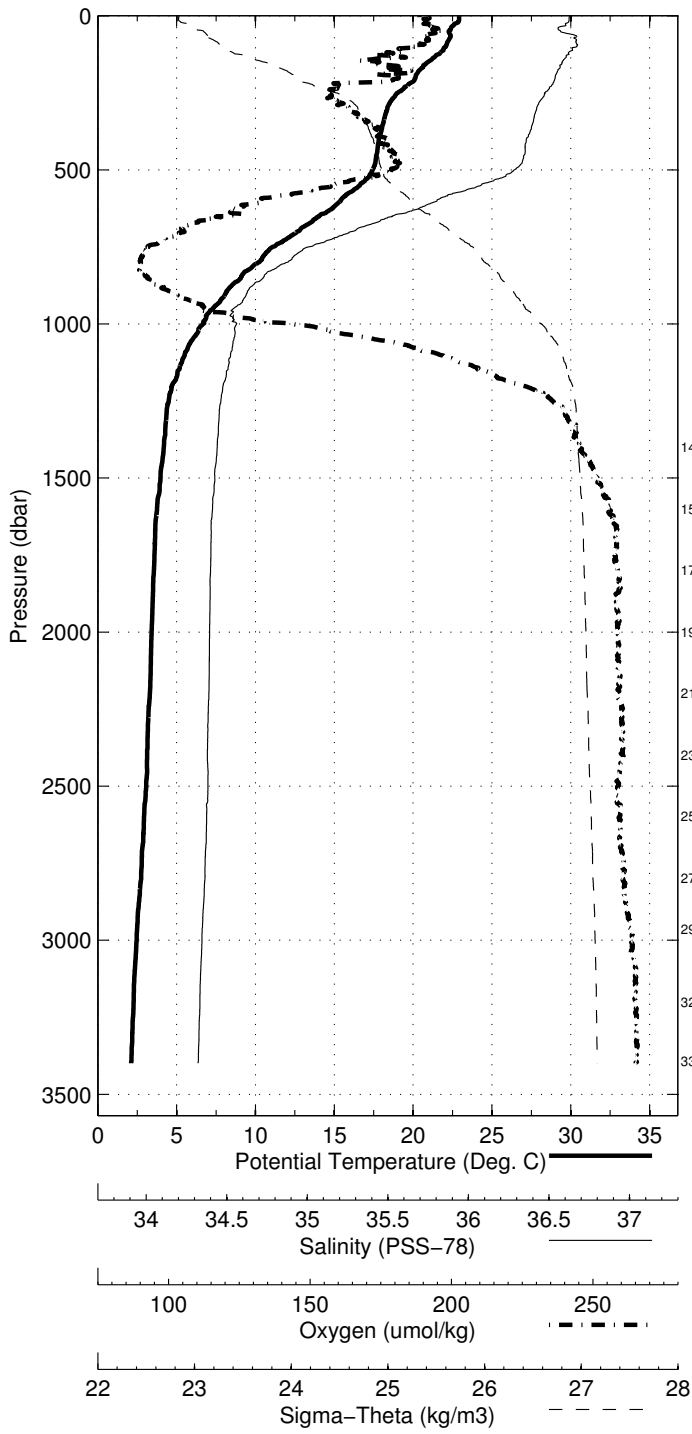


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 32 (CTD032)
 Latitude 26.453N Longitude 76.630W
 29-Apr-2009 00:24Z

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	22.914	22.914	36.755	211.7	0.003	25.291
10	22.920	22.918	36.754	212.7	0.027	25.288
20	22.868	22.864	36.751	214.0	0.054	25.302
30	22.590	22.584	36.736	214.3	0.080	25.371
50	22.277	22.267	36.711	216.2	0.131	25.443
75	22.315	22.300	36.786	213.8	0.195	25.490
100	22.093	22.074	36.793	211.1	0.257	25.560
125	21.613	21.589	36.753	203.8	0.317	25.666
150	20.980	20.951	36.720	201.8	0.375	25.817
200	20.191	20.153	36.684	205.6	0.481	26.006
250	19.059	19.014	36.634	190.7	0.580	26.267
300	18.421	18.368	36.592	194.0	0.669	26.400
400	17.895	17.825	36.541	202.4	0.839	26.496
500	17.509	17.423	36.481	204.8	1.006	26.549
600	15.505	15.410	36.095	172.8	1.166	26.725
700	12.773	12.676	35.671	153.2	1.305	26.978
800	10.284	10.187	35.346	142.5	1.420	27.190
900	8.224	8.127	35.148	150.4	1.516	27.371
1000	6.774	6.676	35.095	180.3	1.596	27.538
1100	5.608	5.509	35.065	216.7	1.658	27.666
1200	4.798	4.697	35.027	237.4	1.712	27.732
1300	4.451	4.344	35.008	248.3	1.761	27.756
1400	4.301	4.187	34.999	251.1	1.808	27.765
1500	4.101	3.980	34.987	256.1	1.856	27.778
1750	3.731	3.591	34.967	260.2	1.970	27.802
2000	3.573	3.412	34.960	261.4	2.084	27.814
2500	3.269	3.064	34.952	261.1	2.314	27.841
3000	2.707	2.463	34.923	264.8	2.536	27.872

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
3392	2	2.400	2.121	34.904	-999.0
3202	4	2.529	2.267	34.912	-999.0
2963	6	2.735	2.494	34.925	-999.0
2798	8	2.919	2.691	34.934	-999.0
2597	10	3.132	2.920	34.945	-999.0
2399	12	3.325	6.951	-999.000	-999.0
2199	14	3.476	3.298	34.957	-999.0
2000	16	3.586	3.424	34.961	-999.0
1800	18	3.707	3.562	34.966	-999.0
1599	20	3.826	3.699	34.971	-999.0
1400	22	4.299	4.184	34.998	-999.0

Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 32 (CTD032)
 Latitude 26.453 N Longitude 76.630 W
 29-Apr-2009 00:24 Z

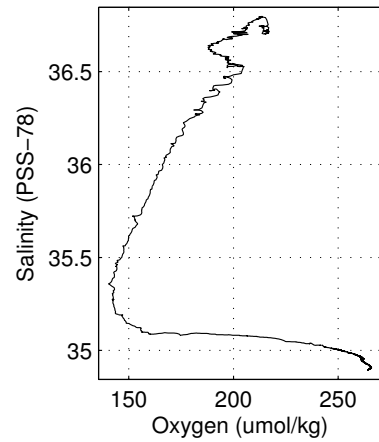
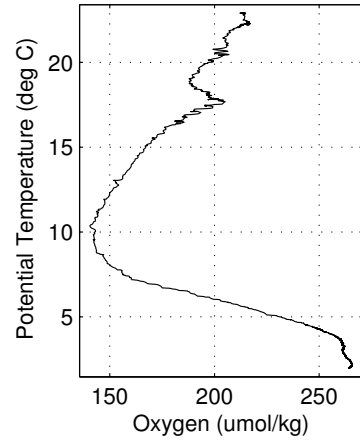
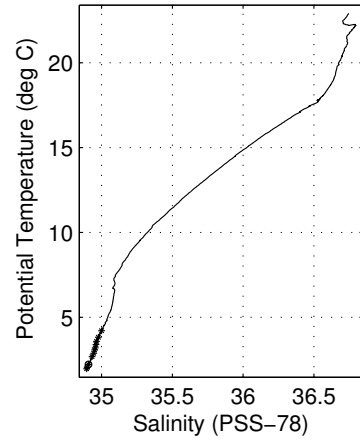
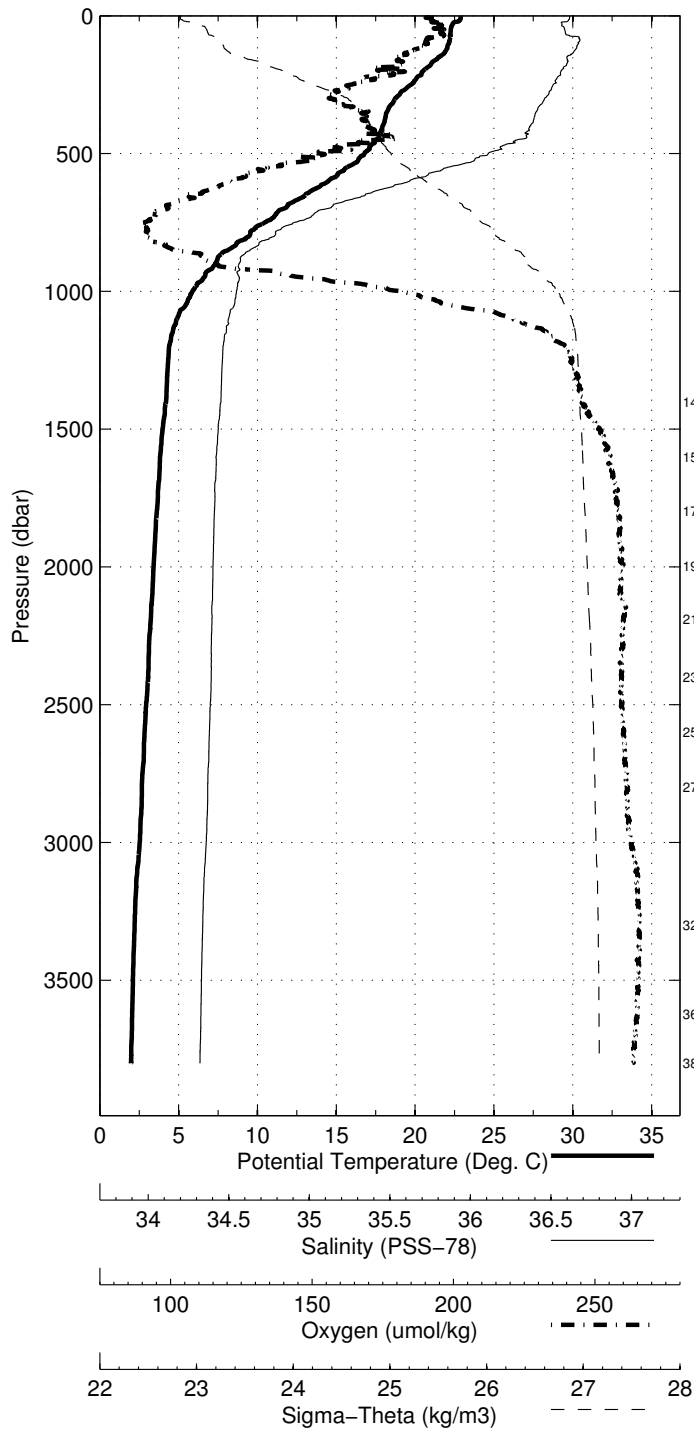


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 33 (CTD033)
 Latitude 26.469N Longitude 76.727W
 30-Apr-2009 05:25Z

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	22.898	22.898	36.746	214.1	0.003	25.289
10	22.896	22.894	36.744	213.2	0.027	25.288
20	22.757	22.753	36.734	214.2	0.053	25.321
30	22.393	22.387	36.707	216.7	0.079	25.405
50	22.274	22.264	36.721	216.5	0.130	25.451
75	22.269	22.254	36.779	215.9	0.194	25.498
100	22.167	22.147	36.790	212.7	0.256	25.537
125	21.986	21.961	36.771	208.9	0.318	25.575
150	21.510	21.480	36.732	204.8	0.378	25.680
200	20.540	20.502	36.702	200.8	0.491	25.926
250	19.788	19.741	36.663	193.3	0.595	26.099
300	18.793	18.739	36.620	188.1	0.689	26.327
400	18.009	17.939	36.546	197.1	0.863	26.472
500	16.854	16.770	36.337	186.0	1.029	26.596
600	14.597	14.506	35.945	163.1	1.182	26.809
700	11.747	11.655	35.530	147.7	1.311	27.067
800	9.572	9.478	35.267	142.3	1.418	27.249
900	7.413	7.322	35.090	159.4	1.505	27.444
1000	5.954	5.863	35.078	206.5	1.574	27.632
1100	4.968	4.875	35.038	234.2	1.629	27.720
1200	4.493	4.395	35.011	246.6	1.677	27.752
1300	4.381	4.275	35.004	250.3	1.725	27.760
1400	4.322	4.207	35.000	251.5	1.772	27.764
1500	4.103	3.982	34.987	255.5	1.820	27.777
1750	3.821	3.680	34.971	260.0	1.936	27.796
2000	3.570	3.409	34.960	261.2	2.051	27.815
2500	3.138	2.936	34.947	261.3	2.277	27.849
3000	2.776	2.531	34.926	263.8	2.496	27.869
3500	2.390	2.100	34.903	265.5	2.707	27.886

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
3800	2	2.288	1.968	34.894	-999.0
3624	4	2.361	2.059	34.899	-999.0
3298	6	2.487	2.217	34.908	-999.0
2798	8	2.910	2.683	34.933	-999.0
2598	10	3.096	2.885	34.945	-999.0
2399	13	3.272	3.077	34.951	-999.0
2189	14	3.378	3.202	34.955	-999.0
1997	16	3.560	3.399	34.960	-999.0
1798	18	3.731	3.587	34.965	-999.0
1600	20	3.958	3.830	34.978	-999.0
1400	22	4.327	4.212	35.000	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 33 (CTD033)
 Latitude 26.469 N Longitude 76.727 W
 30-Apr-2009 05:25 Z

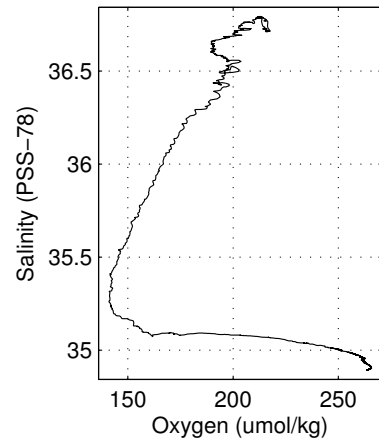
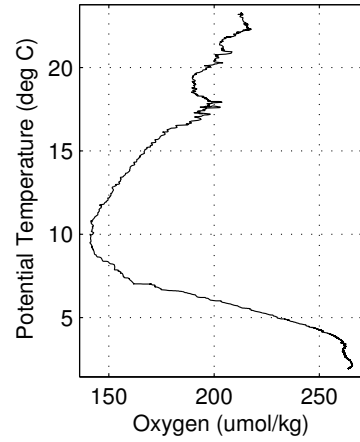
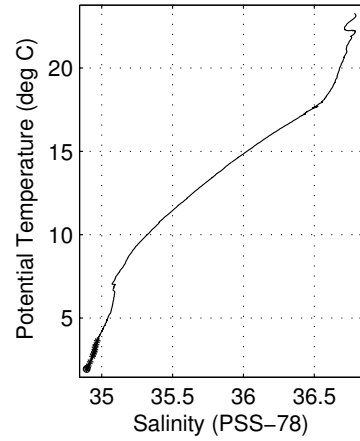
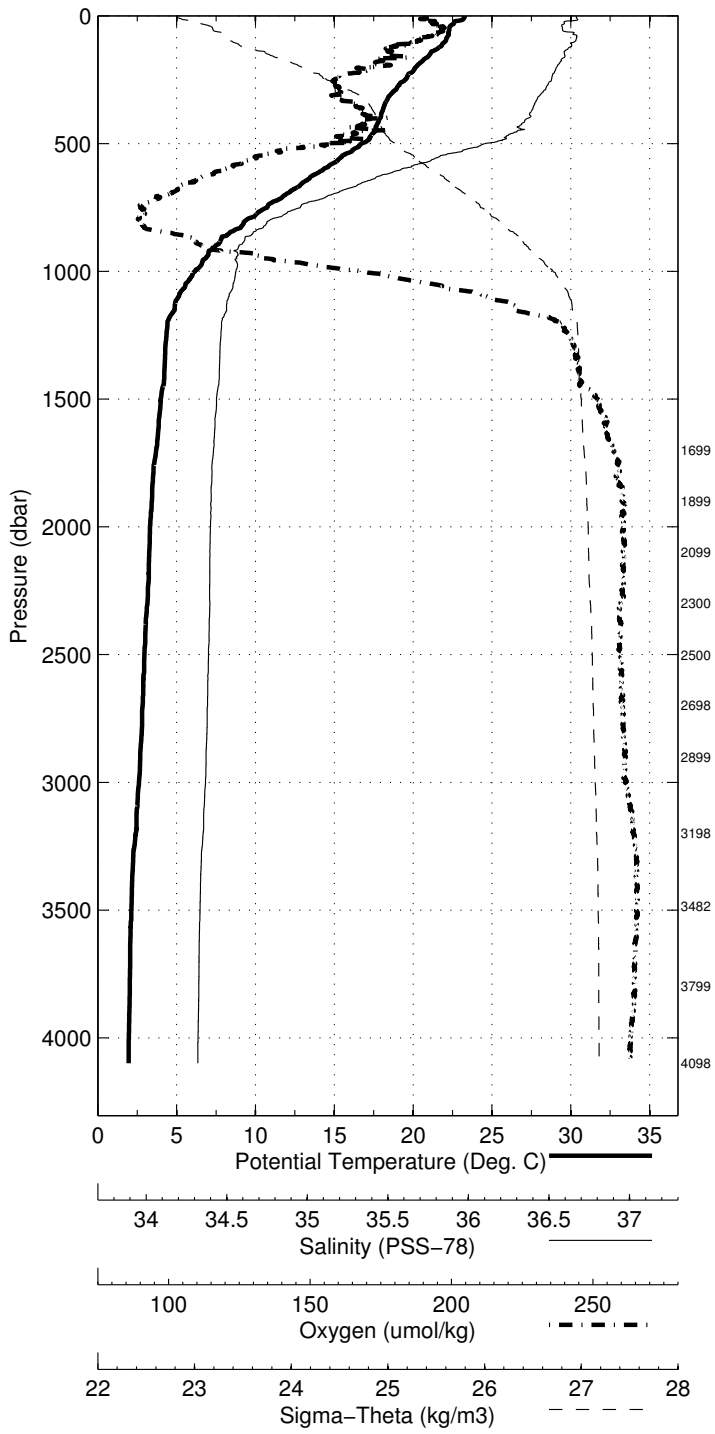


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 34 (CTD034)
 Latitude 26.463N Longitude 76.711W
 30-Apr-2009 21:45Z

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	23.275	23.275	36.787	212.8	0.003	25.209
10	23.216	23.214	36.790	213.7	0.027	25.229
20	22.742	22.738	36.743	214.0	0.054	25.332
30	22.592	22.586	36.726	214.5	0.081	25.363
50	22.312	22.302	36.716	216.0	0.132	25.437
75	22.269	22.254	36.784	214.5	0.195	25.502
100	22.047	22.027	36.778	210.8	0.257	25.562
125	21.635	21.611	36.747	204.0	0.318	25.656
150	21.105	21.075	36.727	204.5	0.375	25.788
200	20.221	20.184	36.688	199.7	0.484	26.001
250	19.548	19.502	36.661	190.1	0.584	26.161
300	18.746	18.692	36.616	191.6	0.677	26.336
400	17.979	17.909	36.547	202.7	0.850	26.480
500	16.803	16.720	36.329	188.7	1.016	26.602
600	14.416	14.326	35.912	162.2	1.168	26.822
700	12.006	11.913	35.562	148.2	1.297	27.043
800	9.487	9.394	35.252	141.6	1.407	27.251
900	7.574	7.481	35.099	157.0	1.496	27.428
1000	6.260	6.167	35.084	196.7	1.568	27.597
1100	5.204	5.109	35.047	228.2	1.626	27.700
1200	4.515	4.417	35.012	246.6	1.676	27.751
1300	4.387	4.281	35.004	249.9	1.724	27.760
1400	4.330	4.215	35.000	251.1	1.771	27.764
1500	4.114	3.993	34.987	255.7	1.819	27.776
1750	3.720	3.580	34.965	260.5	1.935	27.801
2000	3.468	3.309	34.956	262.0	2.048	27.821
2500	3.158	2.955	34.946	261.2	2.273	27.846
3000	2.857	2.609	34.931	262.7	2.497	27.866
3500	2.419	2.129	34.904	265.4	2.712	27.884
4000	2.307	1.964	34.894	263.8	2.926	27.890

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4098	2	2.310	1.956	34.893	-999.0
3800	4	2.348	2.027	34.898	-999.0
3482	6	2.420	2.131	34.905	-999.0
3198	8	2.644	2.381	34.919	-999.0
2899	10	2.950	2.710	34.936	-999.0
2699	13	3.069	2.848	34.941	-999.0
2500	14	3.173	2.970	34.947	-999.0
2300	16	3.295	3.109	34.952	-999.0
2099	18	3.428	3.260	34.953	-999.0
1899	20	3.557	3.406	34.960	-999.0
1700	22	3.779	3.643	34.968	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 34 (CTD034)
 Latitude 26.463 N Longitude 76.711 W
 30-Apr-2009 21:45 Z

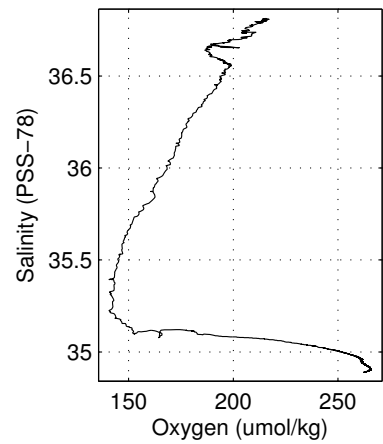
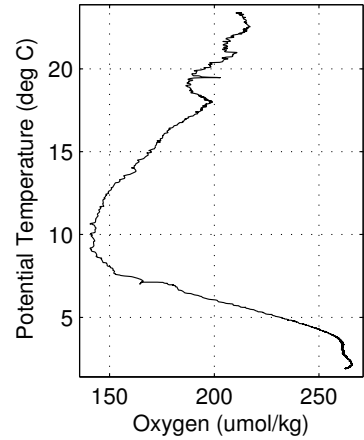
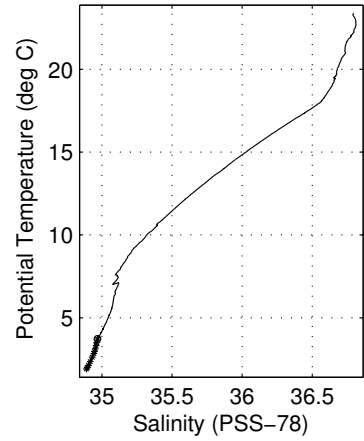
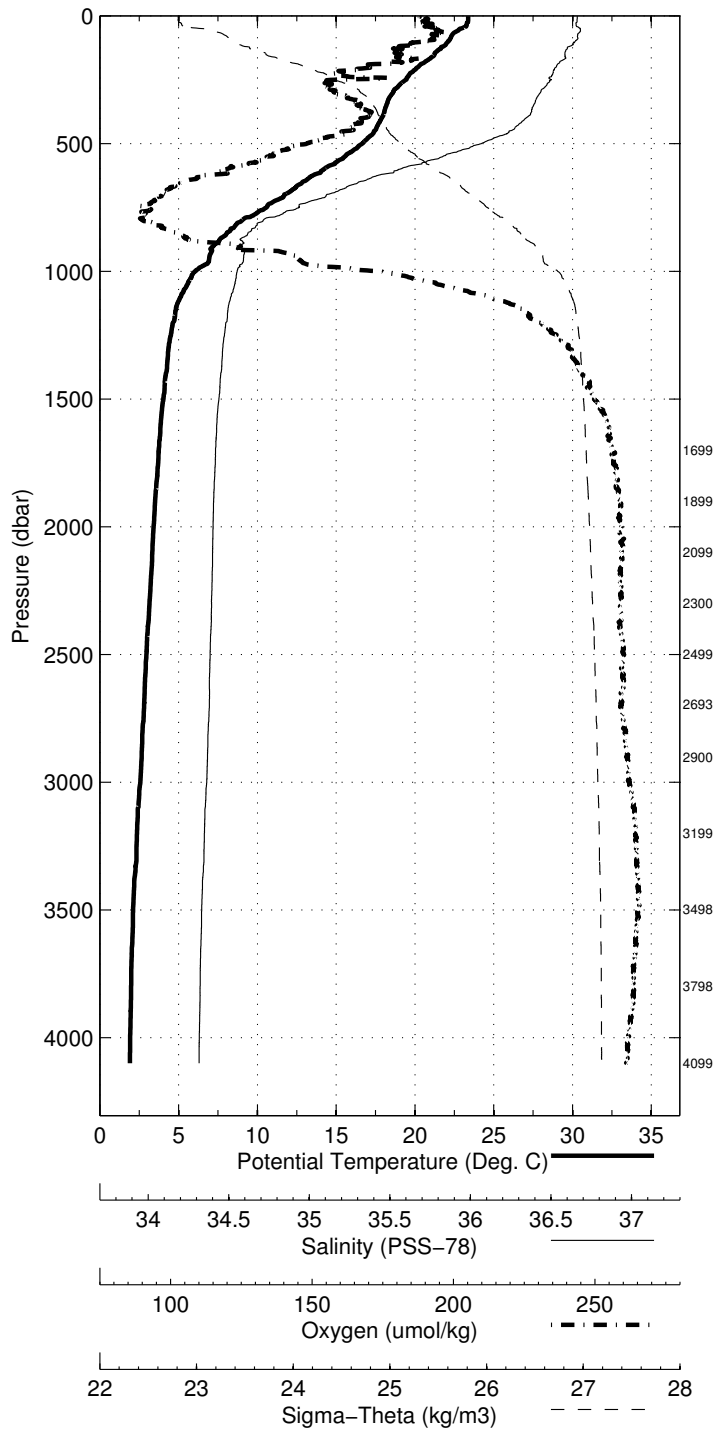


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 35 (CTD035)
 Latitude 26.369N Longitude 76.746W
 01-May-2009 02:19Z

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	23.377	23.377	36.797	210.7	0.003	25.187
10	23.377	23.375	36.796	212.6	0.028	25.187
20	23.374	23.370	36.795	212.7	0.055	25.188
30	23.299	23.293	36.790	213.1	0.083	25.206
50	22.892	22.882	36.812	215.3	0.138	25.343
75	22.378	22.363	36.799	214.7	0.202	25.482
100	22.139	22.119	36.787	213.0	0.265	25.543
125	21.677	21.652	36.746	205.5	0.326	25.643
150	21.274	21.245	36.734	206.2	0.384	25.747
200	20.247	20.210	36.690	198.0	0.494	25.995
250	19.495	19.450	36.666	190.2	0.593	26.179
300	18.673	18.619	36.611	189.4	0.685	26.351
400	17.953	17.884	36.537	196.3	0.858	26.479
500	16.742	16.659	36.313	182.4	1.023	26.604
600	14.321	14.231	35.903	162.5	1.174	26.836
700	11.797	11.704	35.533	147.0	1.302	27.060
800	9.131	9.040	35.214	141.3	1.410	27.279
900	7.321	7.230	35.101	165.8	1.496	27.466
1000	6.152	6.059	35.082	200.3	1.567	27.610
1100	5.228	5.133	35.050	227.7	1.624	27.700
1200	4.740	4.640	35.025	240.4	1.675	27.737
1300	4.465	4.358	35.010	247.9	1.724	27.756
1400	4.307	4.192	35.000	251.7	1.772	27.766
1500	4.154	4.032	34.990	254.5	1.819	27.775
1750	3.845	3.704	34.972	259.6	1.936	27.795
2000	3.575	3.414	34.961	261.4	2.051	27.814
2500	3.160	2.957	34.946	262.0	2.278	27.846
3000	2.818	2.571	34.929	263.4	2.500	27.867
3500	2.402	2.112	34.903	265.7	2.714	27.885
4000	2.266	1.924	34.891	263.0	2.927	27.891

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
4099	2	2.267	1.914	34.890	-999.0
3798	4	2.309	1.989	34.895	-999.0
3499	6	2.419	2.129	34.904	-999.0
3199	8	2.616	2.353	34.916	-999.0
2900	10	2.856	2.619	34.931	-999.0
2693	13	3.063	2.843	34.943	-999.0
2499	14	3.174	2.971	34.947	-999.0
2300	16	3.318	3.132	34.953	-999.0
2100	18	3.499	3.330	34.959	-999.0
1899	20	3.649	3.496	34.963	-999.0
1700	22	3.862	3.726	34.969	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 35 (CTD035)
 Latitude 26.369 N Longitude 76.746 W
 01-May-2009 02:19 Z

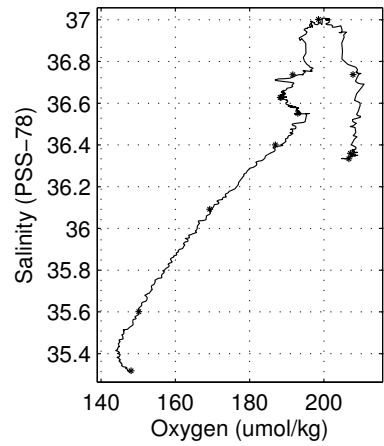
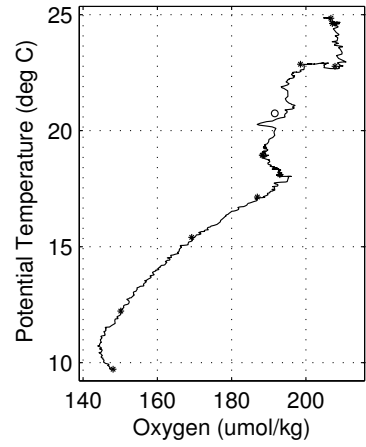
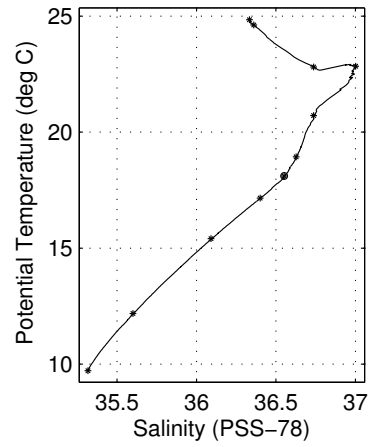
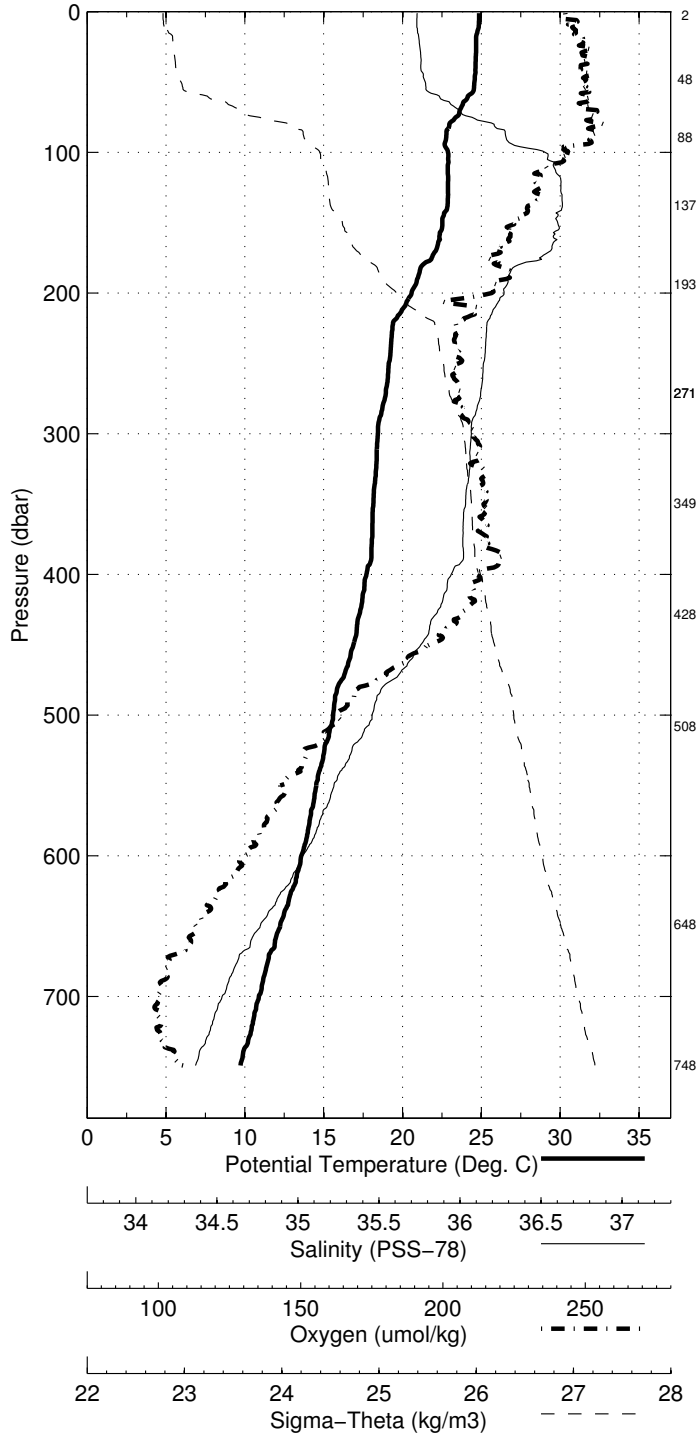


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 36 (CTD036)
 Latitude 26.433N Longitude 78.667W
 01-May-2009 21:33Z

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	24.858	24.858	36.336	205.1	0.004	24.395
10	24.837	24.835	36.335	206.8	0.035	24.401
20	24.674	24.669	36.345	207.7	0.070	24.459
30	24.663	24.657	36.352	207.6	0.105	24.468
50	24.568	24.558	36.373	207.7	0.174	24.514
75	23.389	23.373	36.589	209.8	0.255	25.031
100	22.907	22.887	36.927	205.3	0.322	25.429
125	22.904	22.879	37.000	201.5	0.386	25.486
150	22.556	22.525	36.985	197.4	0.449	25.577
200	20.615	20.577	36.738	194.2	0.565	25.933
250	19.168	19.122	36.642	189.2	0.663	26.245
300	18.490	18.437	36.587	191.2	0.753	26.379
400	17.775	17.706	36.493	191.8	0.926	26.489
500	15.677	15.598	36.129	171.3	1.085	26.709
600	13.669	13.582	35.806	157.4	1.226	26.898
700	10.978	10.889	35.435	144.9	1.348	27.135

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
749	2	9.803	9.714	35.318	148.1
649	4	12.269	12.181	35.601	150.1
508	6	15.485	15.405	36.091	169.3
428	8	17.227	17.155	36.400	186.9
350	10	18.169	18.108	36.551	193.0
271	12	18.986	18.937	36.627	188.4
271	13	18.983	18.934	36.627	188.3
194	14	20.749	20.712	36.736	191.6
138	16	22.865	22.837	37.001	198.5
89	18	22.823	22.805	36.737	207.8
48	20	24.626	24.616	36.360	207.1
3	22	24.848	24.847	36.334	206.8

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 36 (CTD036)
 Latitude 26.433 N Longitude 78.667 W
 01-May-2009 21:33 Z

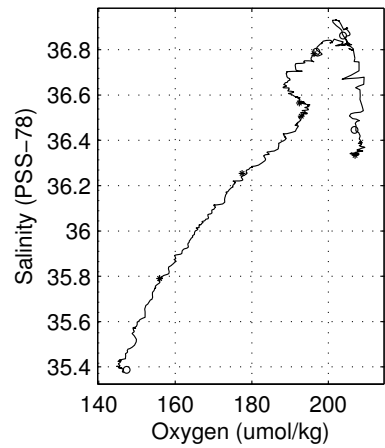
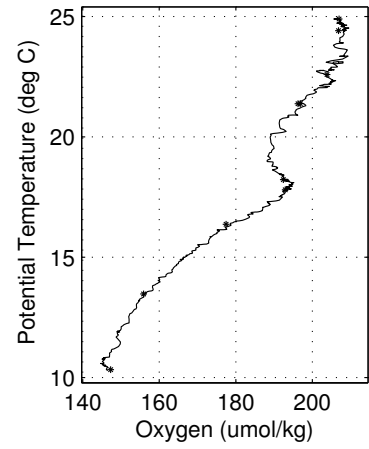
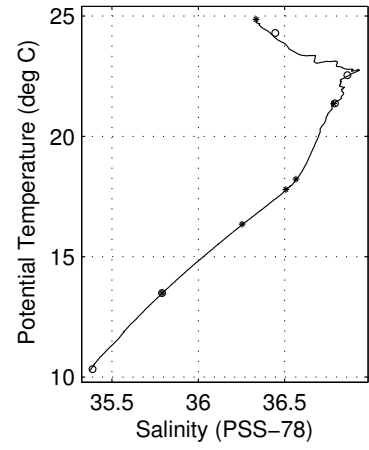
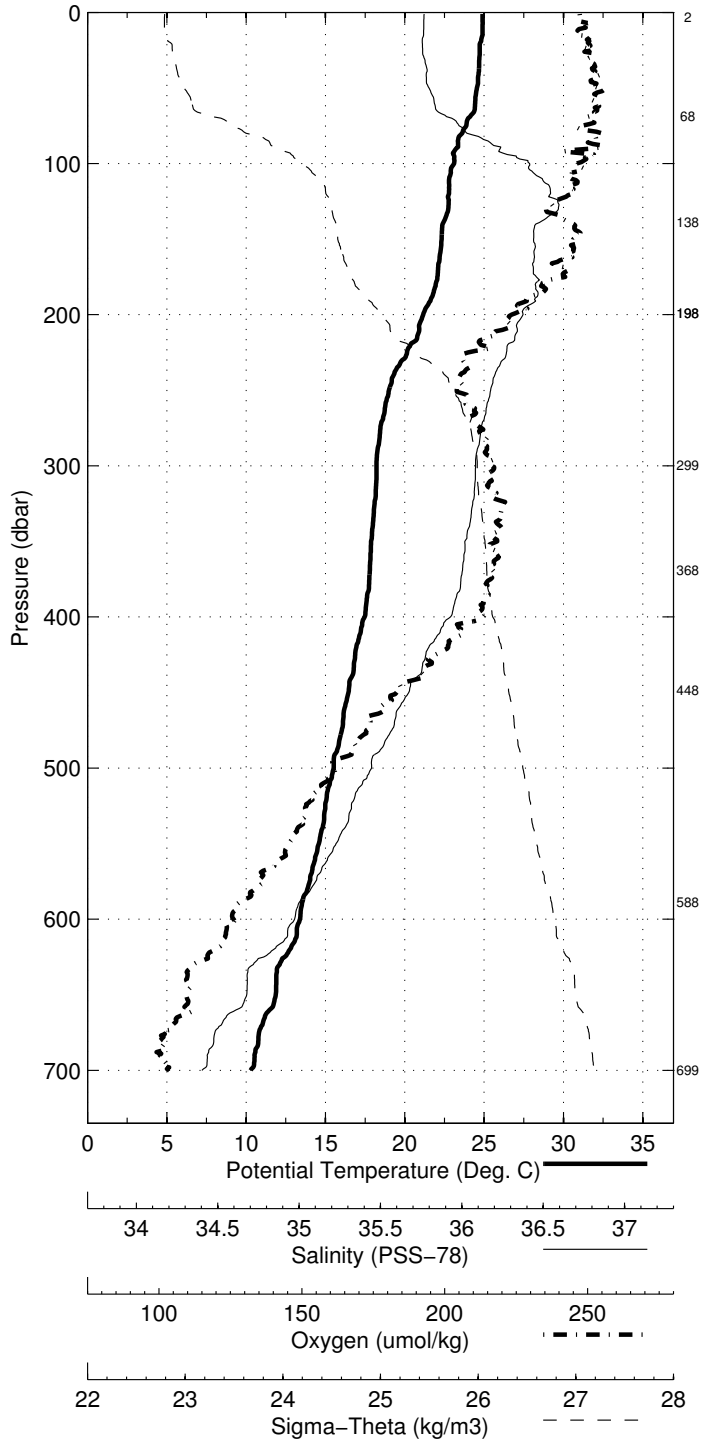


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 37 (CTD037)
 Latitude 26.346N Longitude 78.711W
 01-May-2009 23:38Z

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	24.907	24.907	36.344	206.0	0.004	24.386
10	24.907	24.905	36.342	206.8	0.035	24.385
20	24.766	24.762	36.336	207.1	0.071	24.424
30	24.709	24.702	36.343	207.3	0.106	24.447
50	24.552	24.542	36.365	208.7	0.175	24.513
75	23.895	23.879	36.496	206.3	0.258	24.811
100	23.126	23.105	36.804	205.5	0.331	25.272
125	22.785	22.759	36.927	202.8	0.396	25.466
150	22.352	22.322	36.822	205.0	0.460	25.512
200	21.195	21.157	36.776	196.1	0.581	25.803
250	19.050	19.005	36.634	188.2	0.684	26.270
300	18.273	18.220	36.568	193.3	0.772	26.419
400	17.542	17.473	36.459	192.0	0.941	26.520
500	15.598	15.519	36.114	170.0	1.098	26.715
600	13.480	13.394	35.778	155.8	1.238	26.915
700	10.367	10.282	35.373	146.5	1.354	27.195

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
700	2	10.414	10.328	35.387	147.3
589	4	13.573	13.488	35.790	155.9
449	6	16.426	16.353	36.254	177.5
369	8	17.859	17.795	36.507	192.9
300	10	18.279	18.226	36.565	192.4
199	12	21.407	21.368	36.791	196.8
199	13	21.405	21.367	36.783	196.2
139	14	22.576	22.547	36.863	203.8
69	16	24.317	24.302	36.446	206.8
3	18	24.865	24.865	36.334	207.0

Abaco April – May 2009 R/V Ronald H Brown
CTD Station 37 (CTD037)
Latitude 26.346 N Longitude 78.711 W
01-May-2009 23:38 Z

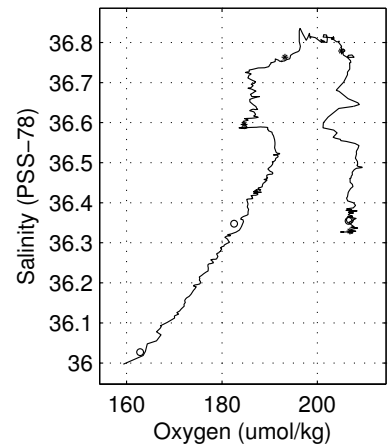
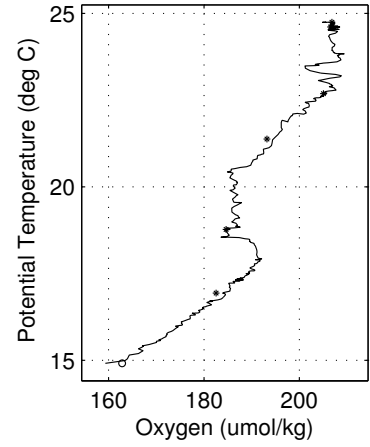
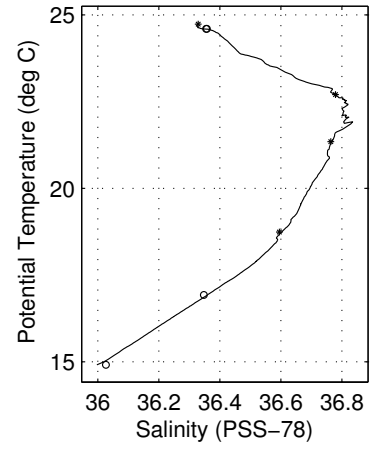
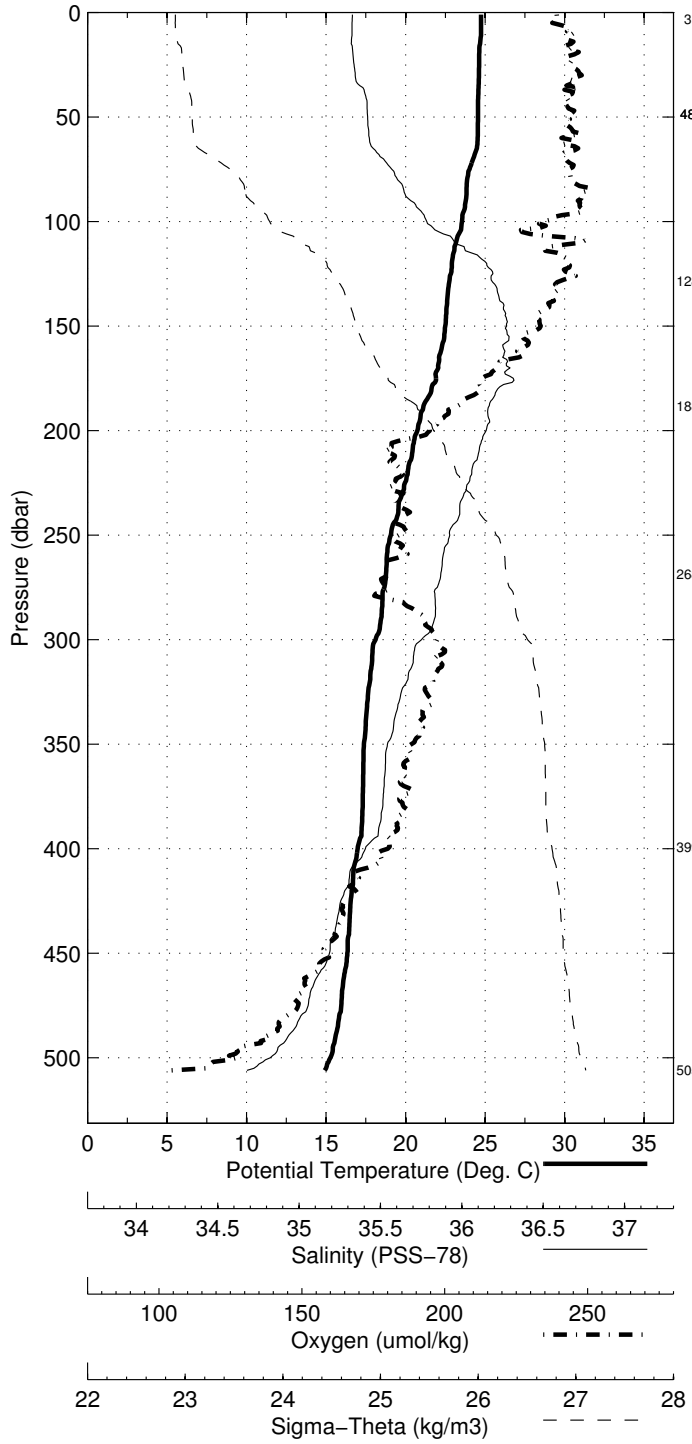


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 38 (CTD038)
 Latitude 26.250N Longitude 78.767W
 02-May-2009 01:43Z

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	24.745	24.745	36.328	205.4	0.003	24.423
10	24.743	24.741	36.327	207.4	0.035	24.423
20	24.631	24.627	36.330	207.6	0.070	24.460
30	24.615	24.608	36.337	208.4	0.105	24.471
50	24.558	24.548	36.376	206.7	0.173	24.519
75	24.033	24.017	36.451	206.9	0.258	24.735
100	23.561	23.540	36.561	203.8	0.336	24.960
125	22.877	22.851	36.769	207.3	0.407	25.319
150	22.524	22.493	36.812	203.5	0.473	25.455
200	20.779	20.740	36.747	190.3	0.592	25.896
250	19.118	19.072	36.634	186.5	0.693	26.252
300	18.157	18.104	36.545	191.1	0.783	26.430
400	17.053	16.985	36.369	185.2	0.947	26.569
500	15.351	15.273	36.070	167.2	1.101	26.737

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
506	2	14.990	14.912	36.027	162.8
399	4	16.994	16.927	36.348	182.5
269	6	18.784	18.736	36.595	184.6
188	8	21.380	21.343	36.763	193.2
129	10	22.730	22.703	36.779	205.0
49	12	24.606	24.596	36.355	206.5
49	13	24.606	24.596	36.357	206.8
3	14	24.732	24.732	36.329	206.8

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 38 (CTD038)
 Latitude 26.250 N Longitude 78.767 W
 02-May-2009 01:43 Z

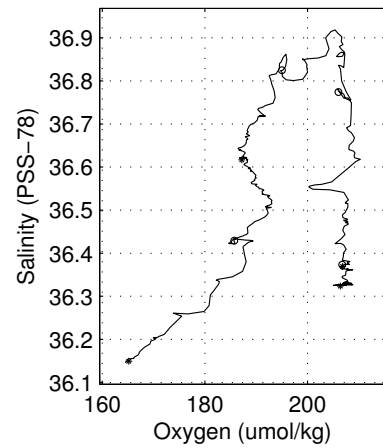
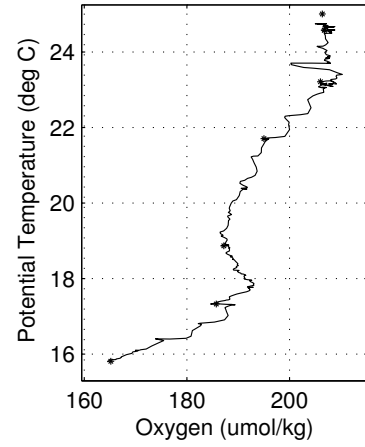
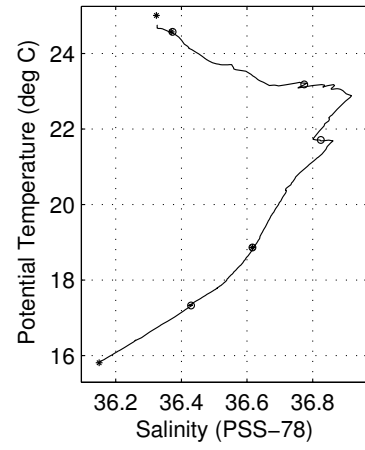
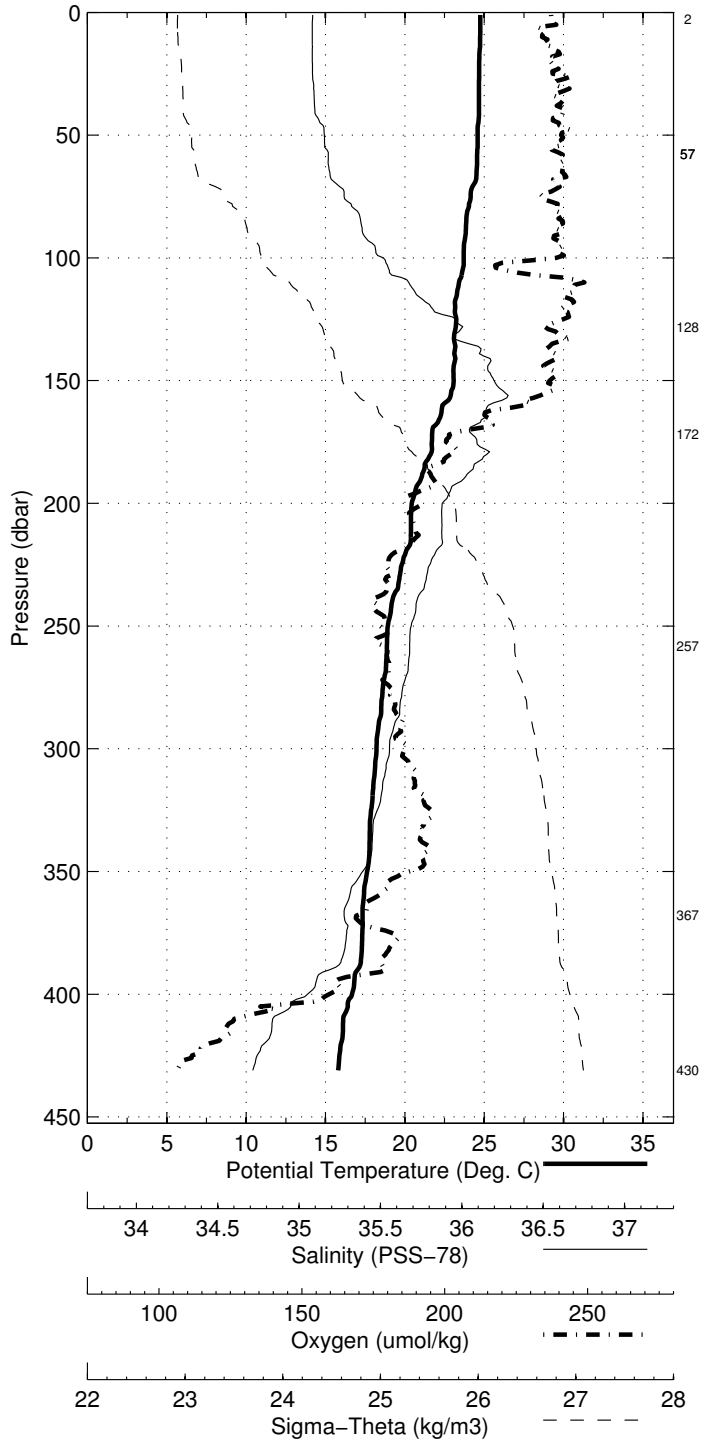


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 39 (CTD039)
 Latitude 26.166N Longitude 78.800W
 02-May-2009 03:06Z

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	24.752	24.751	36.327	206.5	0.004	24.420
10	24.744	24.742	36.326	205.5	0.035	24.422
20	24.687	24.683	36.326	206.5	0.070	24.440
30	24.671	24.664	36.330	207.4	0.105	24.449
50	24.593	24.582	36.362	207.7	0.174	24.498
75	24.162	24.146	36.422	205.6	0.260	24.675
100	23.722	23.701	36.541	207.1	0.339	24.898
125	23.264	23.238	36.760	207.9	0.412	25.200
150	23.101	23.070	36.876	206.4	0.481	25.337
200	20.470	20.432	36.719	191.7	0.600	25.958
250	18.970	18.925	36.625	187.4	0.699	26.283
300	18.264	18.212	36.559	190.0	0.788	26.414
400	16.728	16.662	36.311	181.6	0.953	26.601

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
431	2	15.878	15.809	36.149	165.2
368	4	17.389	17.327	36.429	185.7
258	6	18.911	18.865	36.617	187.2
172	8	21.745	21.711	36.825	195.0
128	10	23.212	23.185	36.774	206.0
58	12	24.590	24.577	36.373	206.7
58	13	24.590	24.578	36.369	206.8
3	14	25.009	25.008	36.324	206.4

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 39 (CTD039)
 Latitude 26.166 N Longitude 78.800 W
 02-May-2009 03:06 Z

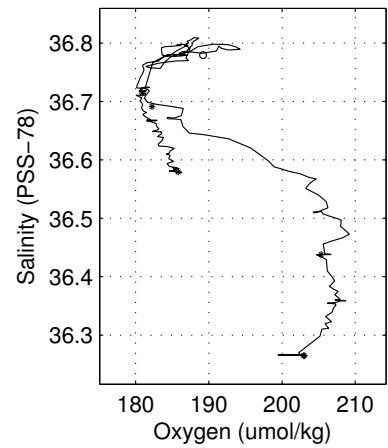
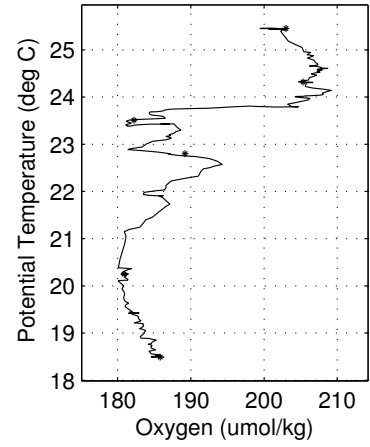
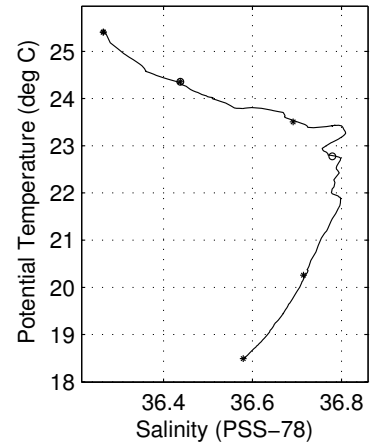
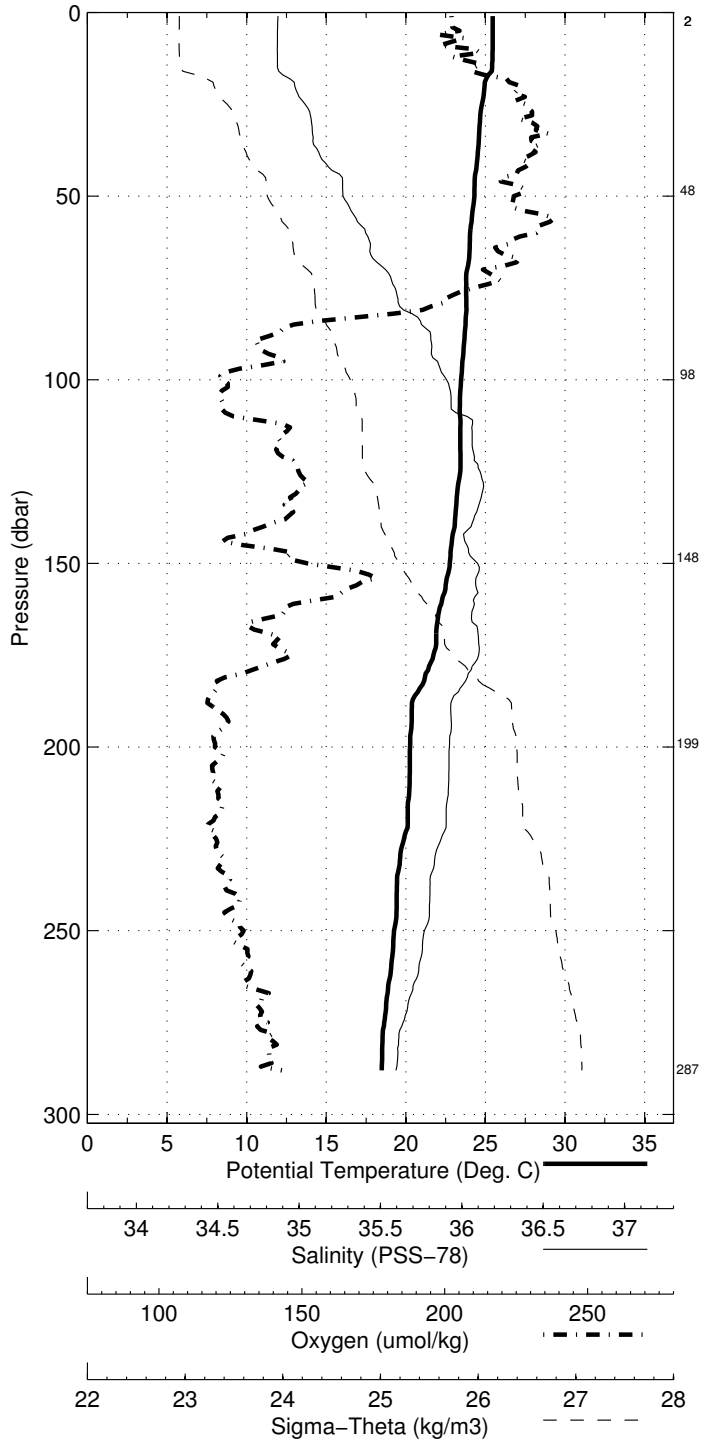


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 40 (CTD040)
 Latitude 26.067N Longitude 78.849W
 02-May-2009 05:08Z

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	25.453	25.453	36.268	200.6	0.004	24.160
10	25.456	25.454	36.266	202.6	0.038	24.159
20	24.950	24.946	36.312	206.4	0.074	24.349
30	24.653	24.646	36.356	207.4	0.110	24.474
50	24.315	24.304	36.439	205.8	0.177	24.640
75	23.806	23.791	36.576	202.4	0.257	24.898
100	23.493	23.472	36.712	181.4	0.332	25.094
125	23.449	23.423	36.800	187.8	0.403	25.176
150	22.793	22.762	36.794	188.5	0.472	25.364
200	20.303	20.266	36.719	180.8	0.589	26.003
250	19.307	19.261	36.653	183.2	0.689	26.218

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
288	2	18.541	18.490	36.579	185.8
199	4	20.295	20.257	36.714	180.9
148	6	22.805	22.774	36.779	189.2
98	8	23.527	23.507	36.691	182.2
48	10	24.367	24.357	36.438	205.3
3	12	25.407	25.407	36.265	203.0
3	13	25.410	25.409	36.265	203.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 40 (CTD040)
 Latitude 26.067 N Longitude 78.849 W
 02-May-2009 05:08 Z

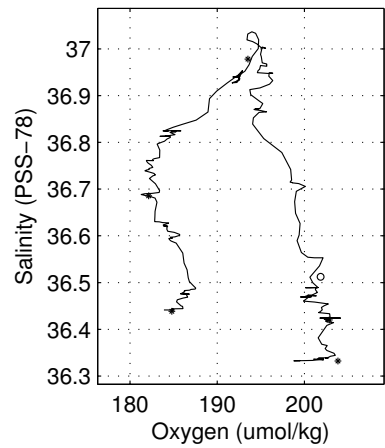
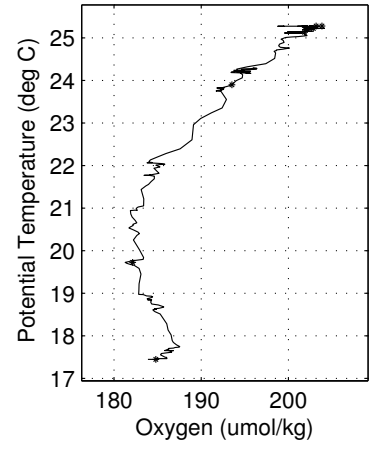
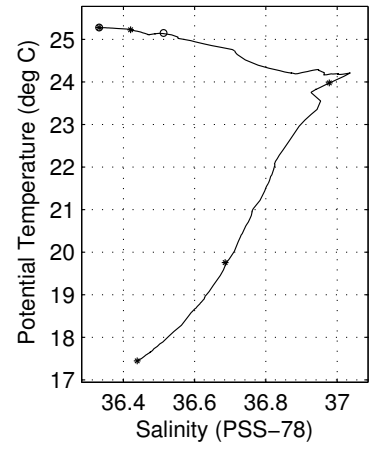
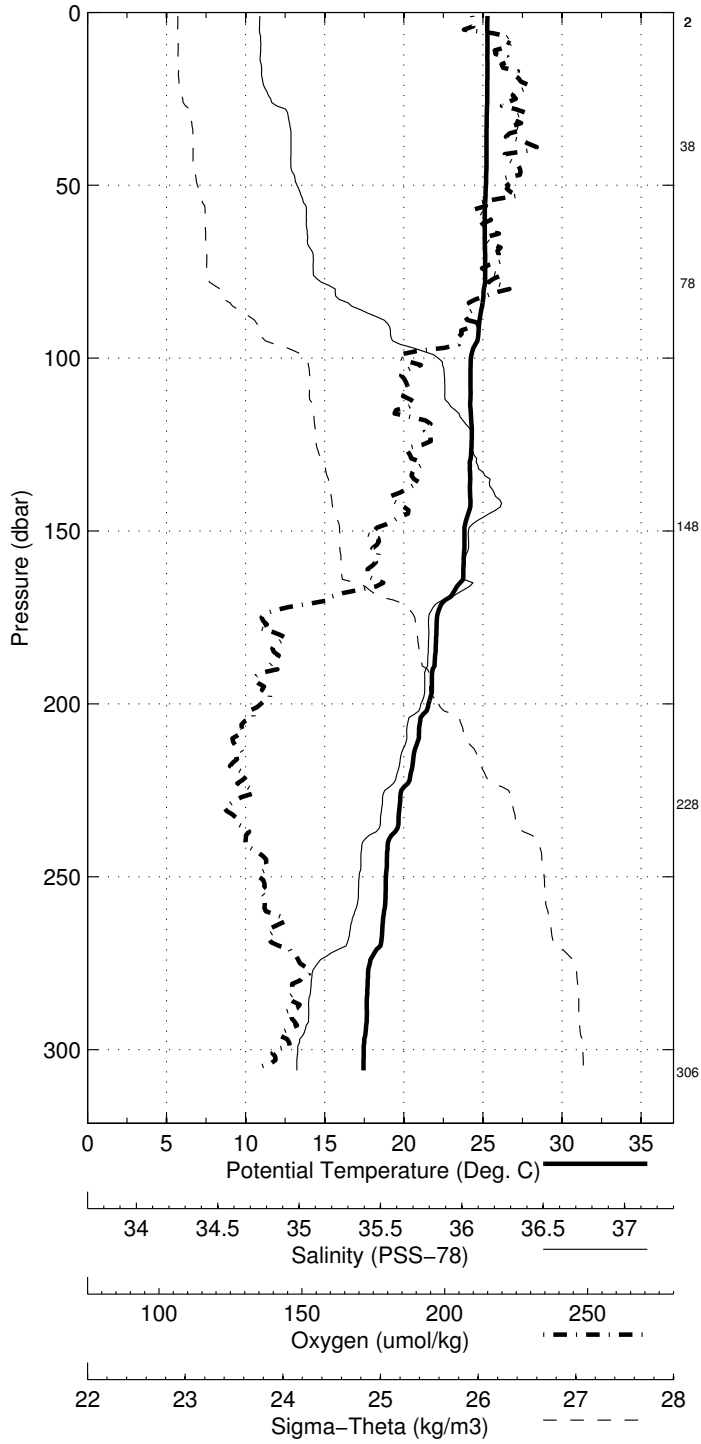


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 41 (CTD041)
 Latitude 26.058N Longitude 79.227W
 02-May-2009 08:48Z

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	25.275	25.275	36.334	199.4	0.004	24.265
10	25.278	25.276	36.336	201.9	0.036	24.267
20	25.279	25.274	36.342	203.0	0.073	24.272
30	25.245	25.238	36.416	202.5	0.109	24.339
50	25.198	25.187	36.442	202.1	0.181	24.374
75	25.152	25.135	36.489	200.6	0.269	24.426
100	24.258	24.236	36.852	194.1	0.352	24.974
125	24.305	24.279	36.947	195.8	0.427	25.033
150	23.859	23.827	36.940	192.2	0.500	25.163
200	21.599	21.560	36.802	184.0	0.629	25.712
250	18.910	18.865	36.623	183.8	0.731	26.297
300	17.515	17.463	36.444	185.0	0.816	26.511

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
306	2	17.501	17.449	36.439	184.8
229	4	19.797	19.755	36.686	182.1
149	6	24.008	23.977	36.978	193.5
78	8	25.170	25.153	36.513	201.9
39	10	25.237	25.228	36.420	202.9
3	12	25.280	25.279	36.332	203.9
3	13	25.279	25.280	-999.000	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 41 (CTD041)
 Latitude 26.058 N Longitude 79.227 W
 02-May-2009 08:48 Z

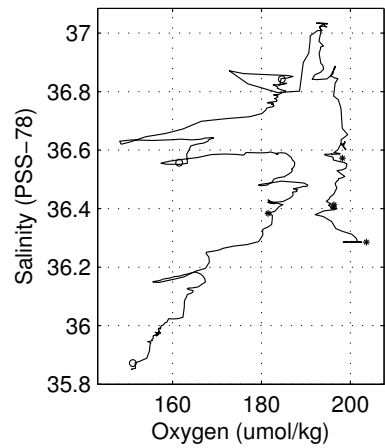
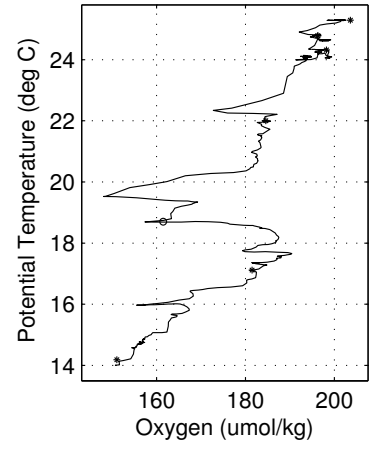
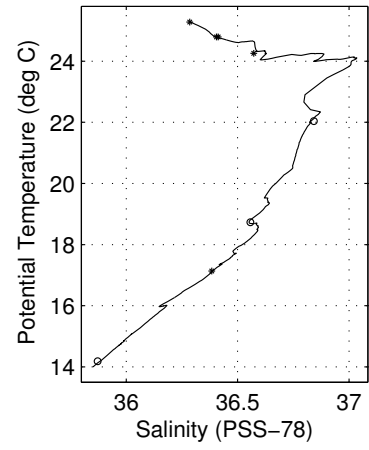
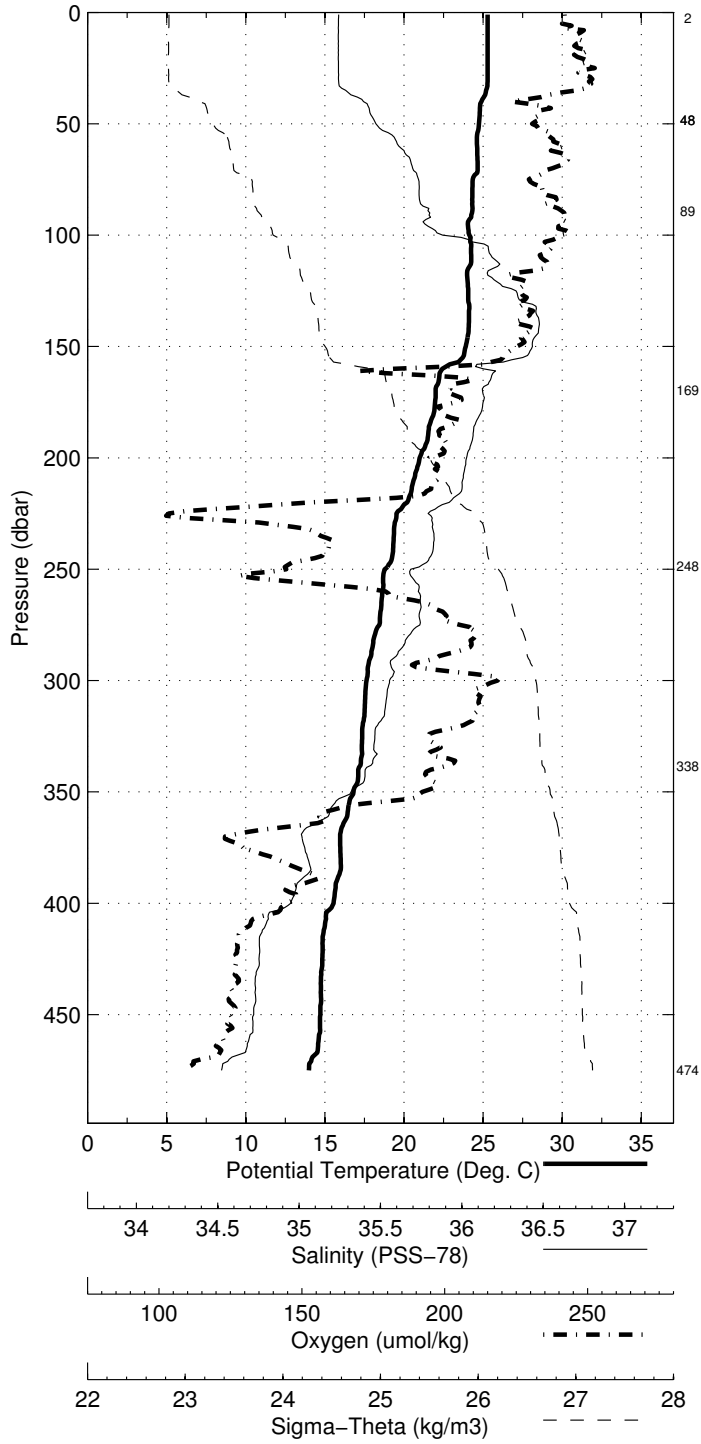


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 42 (CTD042)
 Latitude 26.051N Longitude 79.312W
 02-May-2009 09:57Z

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	25.286	25.286	36.287	198.7	0.004	24.226
10	25.293	25.291	36.285	200.2	0.037	24.224
20	25.297	25.292	36.285	200.4	0.074	24.223
30	25.299	25.292	36.286	202.2	0.111	24.224
50	24.757	24.746	36.425	194.6	0.182	24.496
75	24.365	24.349	36.584	194.2	0.266	24.737
100	24.152	24.131	36.674	198.2	0.345	24.870
125	24.092	24.066	36.948	193.3	0.420	25.097
150	23.939	23.907	37.009	192.6	0.492	25.191
200	21.038	20.999	36.763	181.5	0.616	25.837
250	18.841	18.796	36.555	163.3	0.717	26.263
300	17.683	17.631	36.476	190.2	0.803	26.494
400	15.613	15.550	36.107	163.3	0.960	26.703

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
475	2	14.254	14.184	35.872	151.0
338	4	17.194	17.137	36.384	181.5
249	6	18.776	18.732	36.557	161.5
170	8	22.074	22.040	36.842	184.6
89	10	24.280	24.261	36.572	198.2
48	12	24.803	24.793	36.405	196.2
48	13	24.803	24.792	36.413	196.3
3	14	25.284	25.283	36.285	203.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 42 (CTD042)
 Latitude 26.051 N Longitude 79.312 W
 02-May-2009 09:57 Z

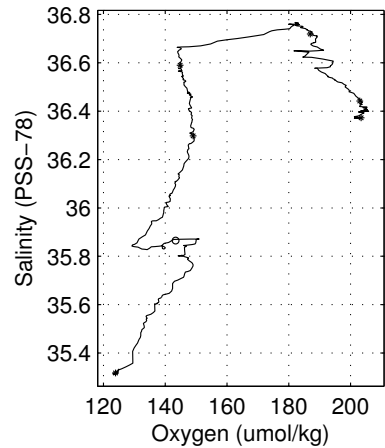
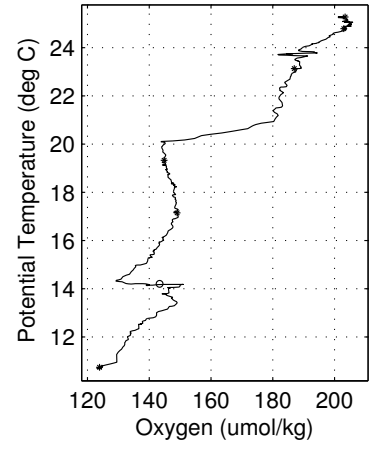
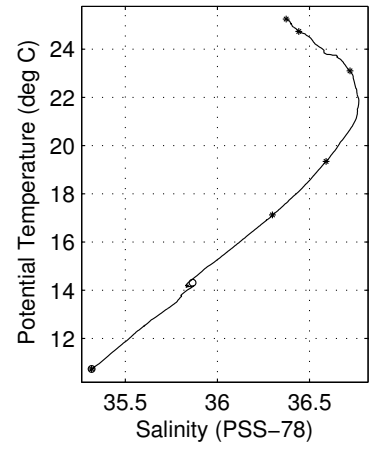
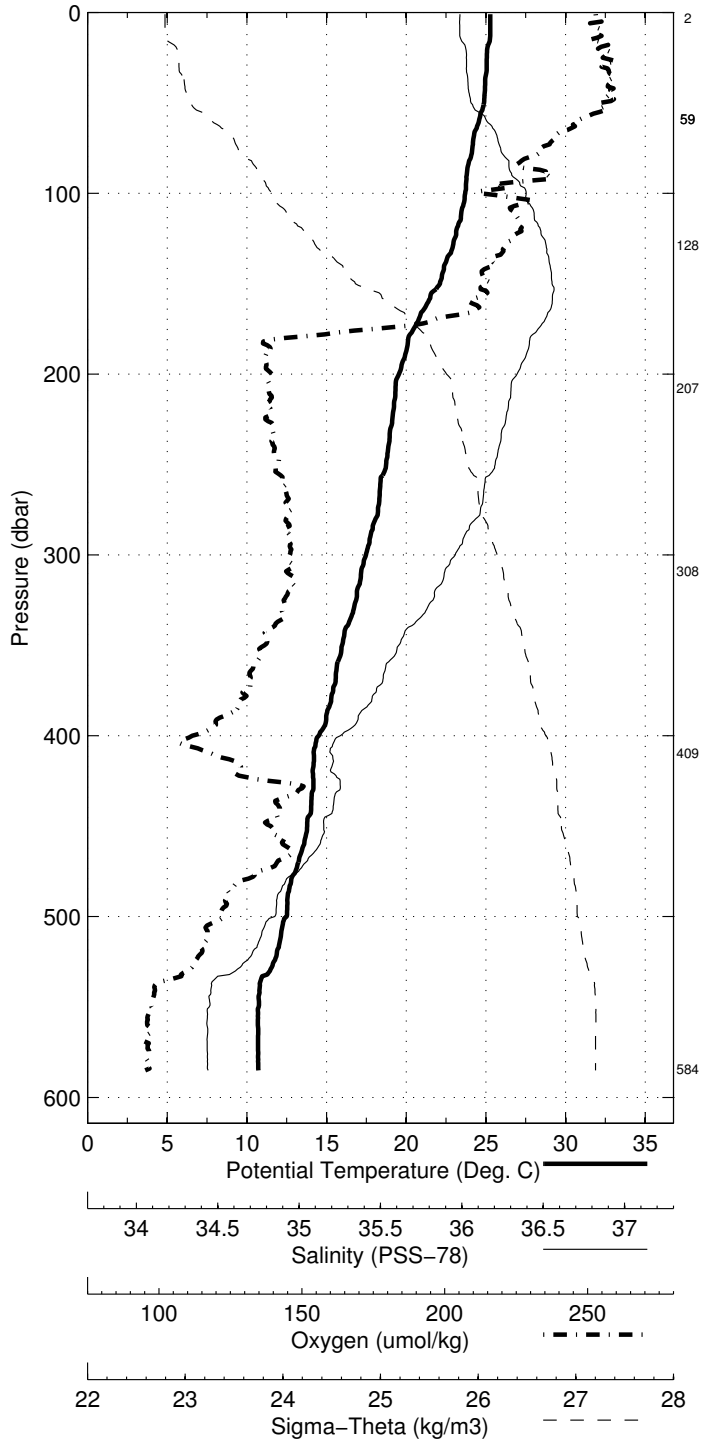


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 43 (CTD043)
 Latitude 26.040N Longitude 79.405W
 02-May-2009 11:19Z

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	25.277	25.276	36.373	202.2	0.004	24.294
10	25.277	25.275	36.372	202.8	0.036	24.294
20	25.093	25.089	36.397	202.6	0.072	24.370
30	25.057	25.051	36.400	203.3	0.108	24.384
50	24.890	24.879	36.419	203.0	0.178	24.451
75	24.170	24.154	36.543	192.6	0.261	24.764
100	23.719	23.698	36.650	181.9	0.339	24.981
125	23.061	23.035	36.724	187.4	0.411	25.232
150	22.143	22.113	36.758	183.2	0.477	25.523
200	19.581	19.544	36.612	145.4	0.585	26.112
250	18.784	18.739	36.520	146.0	0.681	26.250
300	17.530	17.479	36.353	148.5	0.769	26.437
400	14.562	14.502	35.871	131.5	0.924	26.753
500	12.561	12.492	35.597	136.6	1.055	26.957

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
584	2	10.812	10.739	35.317	123.9
410	4	14.373	14.312	35.865	143.4
309	6	17.176	17.124	36.298	149.1
208	8	19.381	19.343	36.590	144.8
129	10	23.128	23.101	36.719	187.0
59	12	24.743	24.730	36.442	203.0
59	13	24.746	24.785	-999.000	-999.0
3	14	25.253	25.252	36.373	203.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 43 (CTD043)
 Latitude 26.040 N Longitude 79.405 W
 02-May-2009 11:19 Z

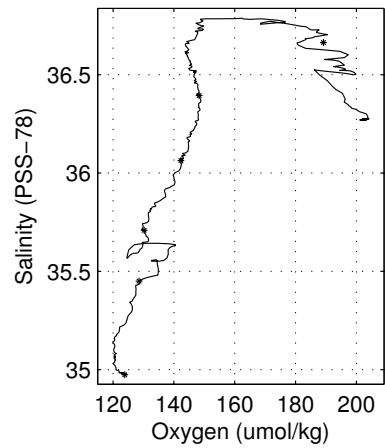
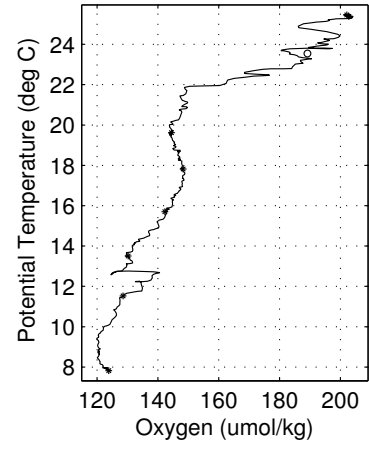
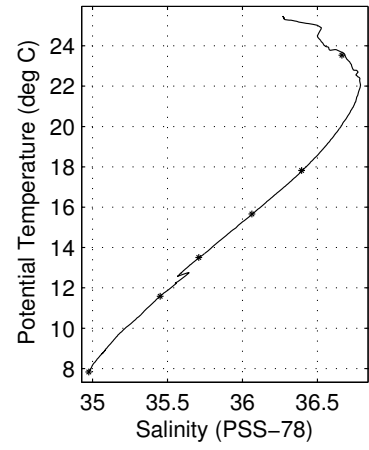
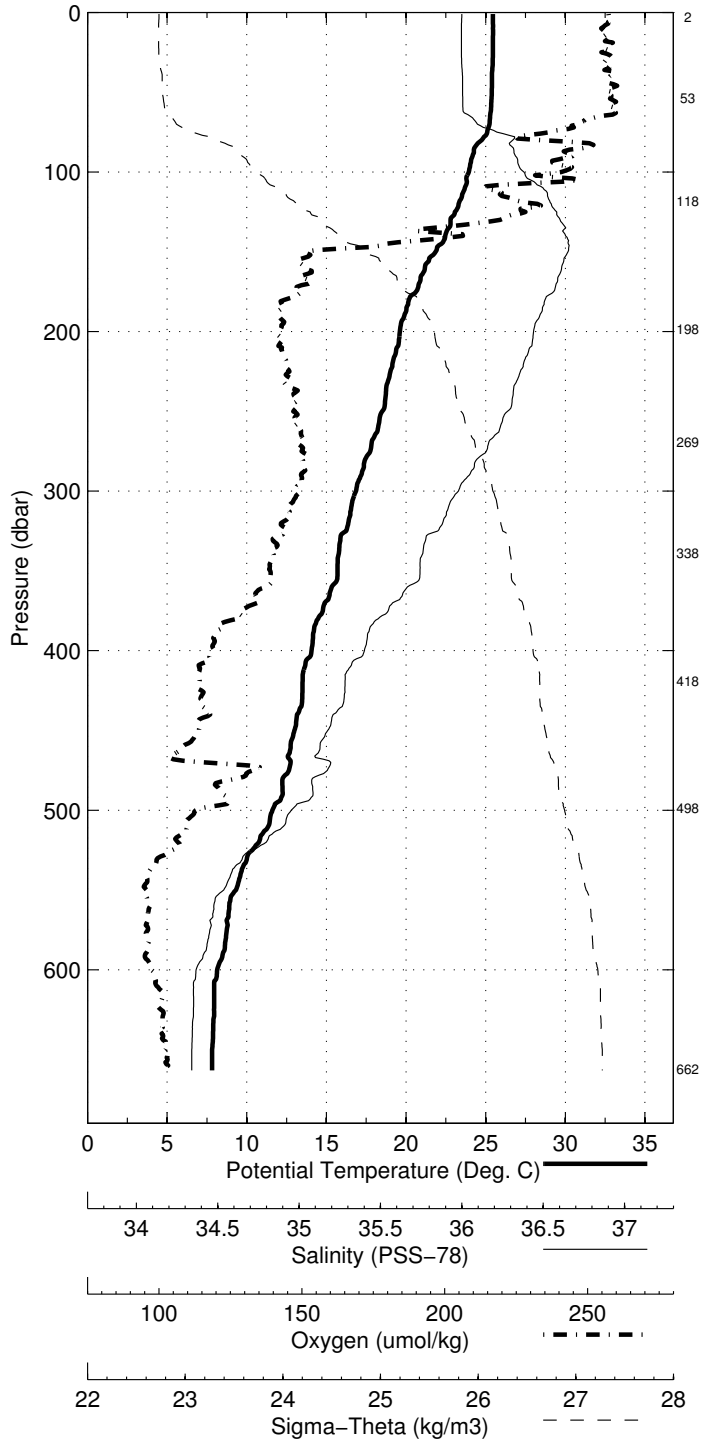


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 44 (CTD044)
 Latitude 26.038N Longitude 79.481W
 02-May-2009 12:48Z

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	25.456	25.456	36.272	202.6	0.004	24.163
10	25.461	25.459	36.270	201.2	0.037	24.160
20	25.462	25.458	36.270	202.5	0.075	24.161
30	25.453	25.446	36.271	202.0	0.113	24.165
50	25.397	25.386	36.276	203.4	0.188	24.187
75	25.117	25.100	36.440	192.2	0.280	24.399
100	23.965	23.944	36.570	194.2	0.362	24.847
125	23.086	23.060	36.728	187.8	0.436	25.227
150	21.891	21.861	36.782	148.7	0.501	25.611
200	19.645	19.608	36.616	144.0	0.609	26.099
250	18.544	18.500	36.490	146.5	0.704	26.289
300	16.911	16.861	36.256	147.4	0.790	26.512
400	14.129	14.070	35.805	132.3	0.939	26.794
500	11.668	11.603	35.453	129.1	1.066	27.017
600	8.204	8.141	34.997	121.2	1.169	27.250

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
662	2	7.899	7.830	34.974	123.8
499	4	11.647	11.582	35.450	128.5
419	6	13.562	13.502	35.709	130.2
339	8	15.718	15.665	36.063	142.3
269	10	17.864	17.817	36.394	148.3
198	12	19.689	19.868	-999.000	-999.0
118	14	23.557	23.532	36.663	189.2
54	16	25.393	25.427	-999.000	-999.0
3	18	25.462	25.464	-999.000	-999.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 44 (CTD044)
 Latitude 26.038 N Longitude 79.481 W
 02-May-2009 12:48 Z

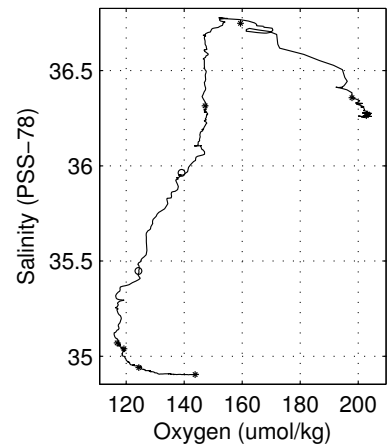
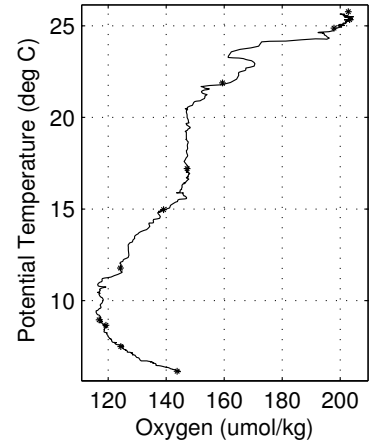
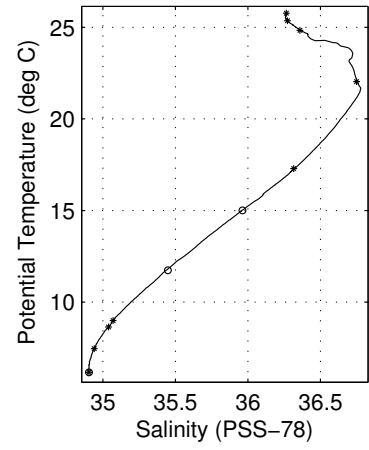
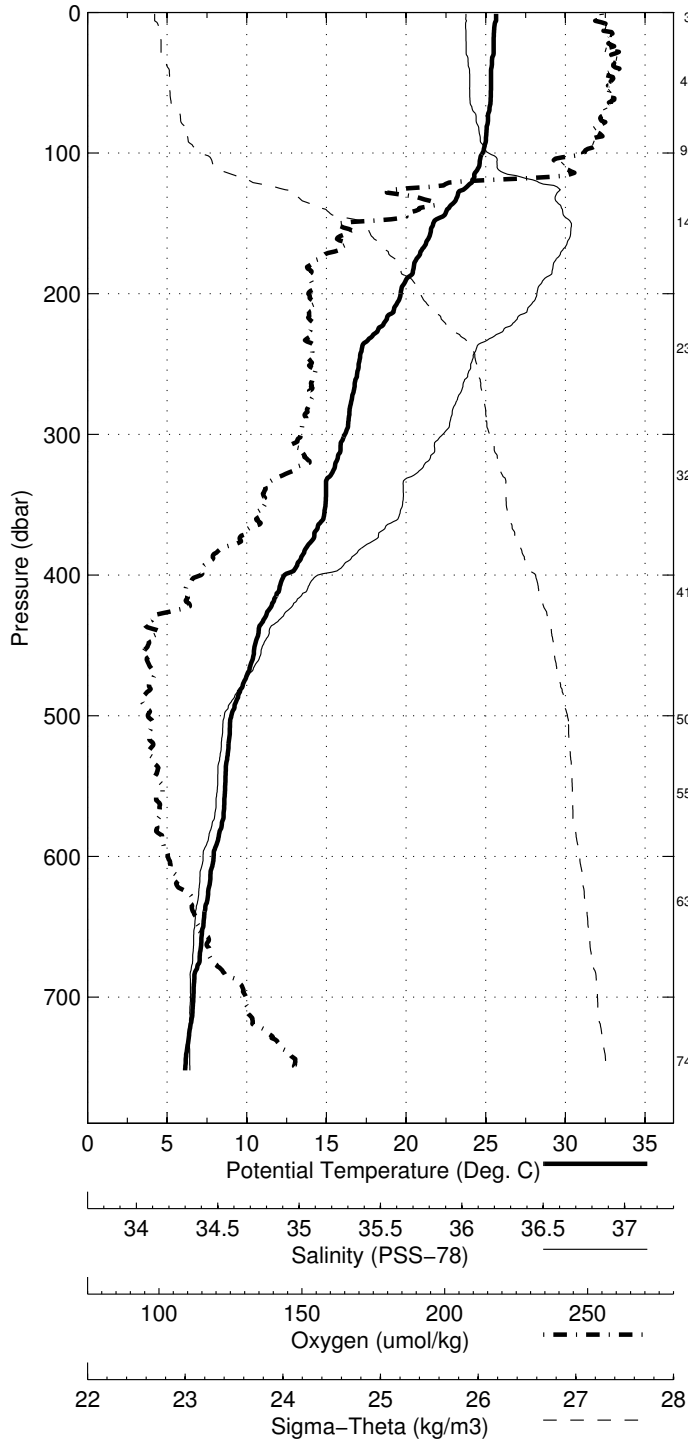


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 45 (CTD045)
 Latitude 26.045N Longitude 79.570W
 02-May-2009 15:04Z

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	25.643	25.643	36.260	201.3	0.004	24.096
10	25.545	25.543	36.258	201.6	0.038	24.125
20	25.496	25.492	36.260	203.3	0.076	24.142
30	25.492	25.485	36.261	203.0	0.114	24.145
50	25.340	25.329	36.278	203.7	0.188	24.206
75	25.156	25.140	36.309	201.0	0.281	24.288
100	24.823	24.801	36.370	197.8	0.371	24.438
125	23.740	23.714	36.714	165.4	0.454	25.025
150	21.724	21.694	36.777	152.5	0.522	25.655
200	19.691	19.654	36.607	146.8	0.631	26.080
250	17.059	17.017	36.283	147.3	0.720	26.495
300	16.209	16.160	36.146	145.4	0.799	26.593
400	12.414	12.360	35.533	126.9	0.941	26.933
500	9.086	9.030	35.074	117.0	1.051	27.172
600	7.980	7.918	34.970	120.7	1.147	27.263
700	6.710	6.644	34.908	135.2	1.232	27.395

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
746	2	6.234	6.166	34.904	143.8
632	4	7.528	7.465	34.940	124.4
555	6	8.706	8.645	35.039	119.3
502	8	9.051	8.995	35.070	116.9
412	10	11.797	11.743	35.448	124.2
329	12	15.061	15.011	35.963	139.1
239	14	17.326	17.286	36.315	147.2
149	16	22.070	22.041	36.749	159.4
98	18	24.857	24.836	36.358	197.9
49	20	25.368	25.358	36.272	203.3
3	22	25.770	25.769	36.264	202.8

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 45 (CTD045)
 Latitude 26.045 N Longitude 79.570 W
 02-May-2009 15:04 Z

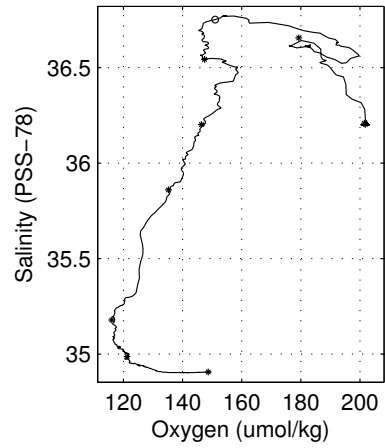
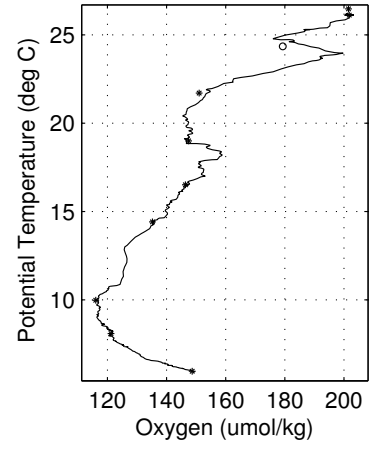
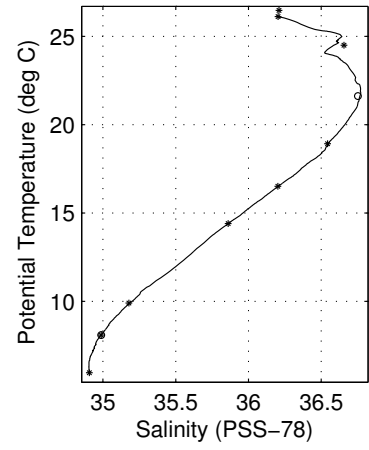
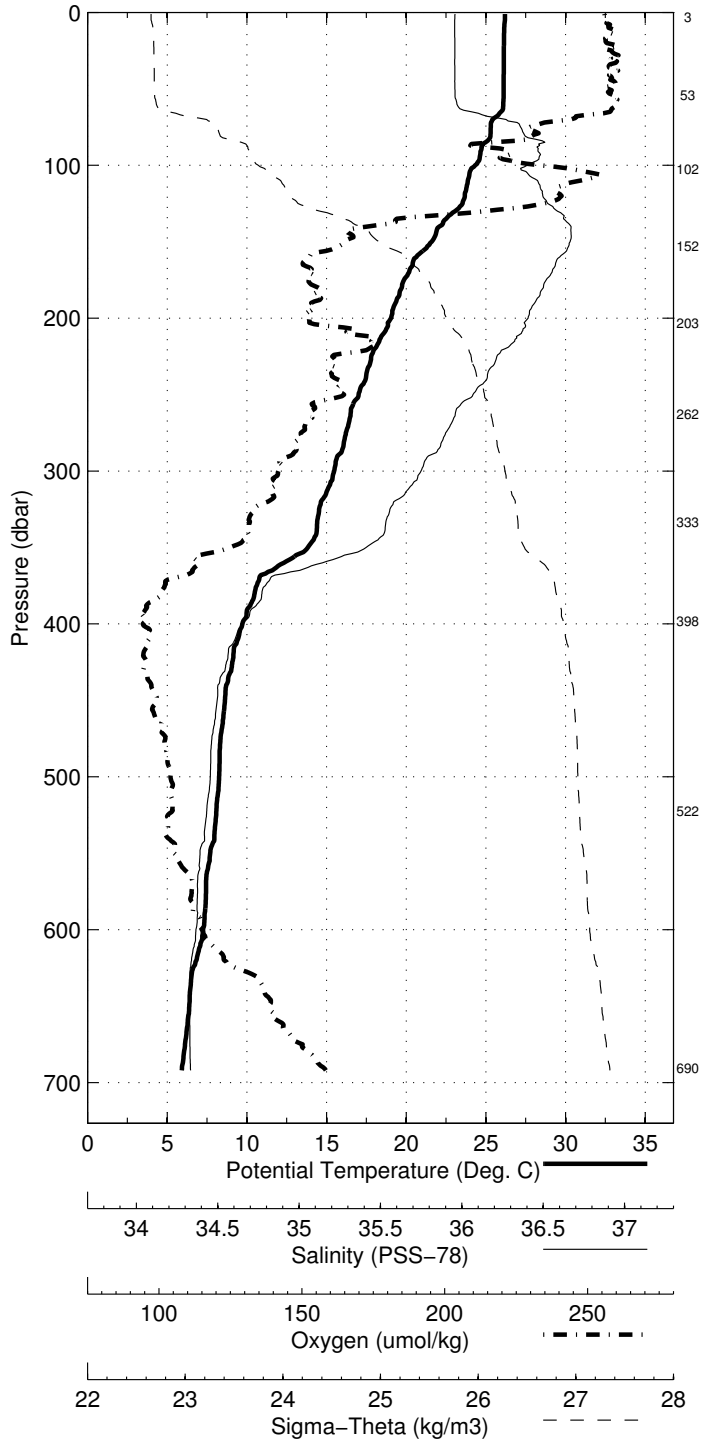


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 46 (CTD046)
 Latitude 26.041N Longitude 79.662W
 02-May-2009 17:00Z

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	26.203	26.203	36.202	200.6	0.004	23.877
10	26.159	26.156	36.200	201.3	0.040	23.890
20	26.139	26.135	36.201	200.9	0.080	23.897
30	26.134	26.127	36.201	201.7	0.120	23.900
50	26.128	26.117	36.201	201.2	0.201	23.903
75	25.325	25.308	36.523	186.9	0.297	24.398
100	24.351	24.330	36.555	188.7	0.382	24.720
125	23.560	23.533	36.655	189.4	0.459	25.034
150	21.626	21.597	36.765	153.1	0.524	25.673
200	19.086	19.049	36.559	146.7	0.626	26.201
250	17.051	17.009	36.289	153.0	0.713	26.502
300	15.522	15.475	36.035	141.0	0.789	26.664
400	9.767	9.720	35.160	116.3	0.915	27.125
500	8.312	8.260	35.004	121.4	1.010	27.237
600	7.316	7.257	34.933	127.1	1.099	27.330

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
691	2	6.020	5.958	34.906	148.6
522	4	8.142	8.088	34.987	121.2
399	6	9.950	9.903	35.178	116.1
333	8	14.455	14.405	35.860	135.2
263	10	16.560	16.517	36.202	146.4
203	12	18.960	18.923	36.544	147.4
153	14	21.652	21.622	36.752	151.0
102	16	24.520	24.498	36.656	179.3
54	18	26.136	26.123	36.203	201.8
3	20	26.476	26.475	36.209	201.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 46 (CTD046)
 Latitude 26.041 N Longitude 79.662 W
 02-May-2009 17:00 Z

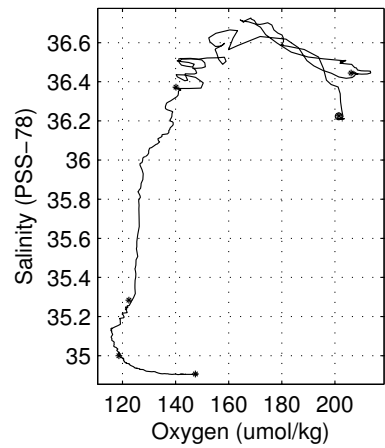
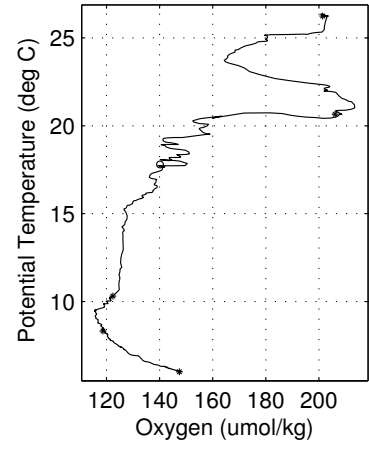
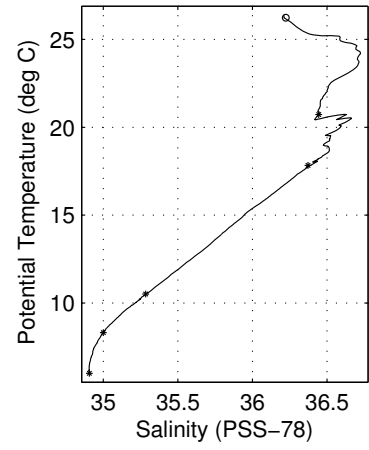
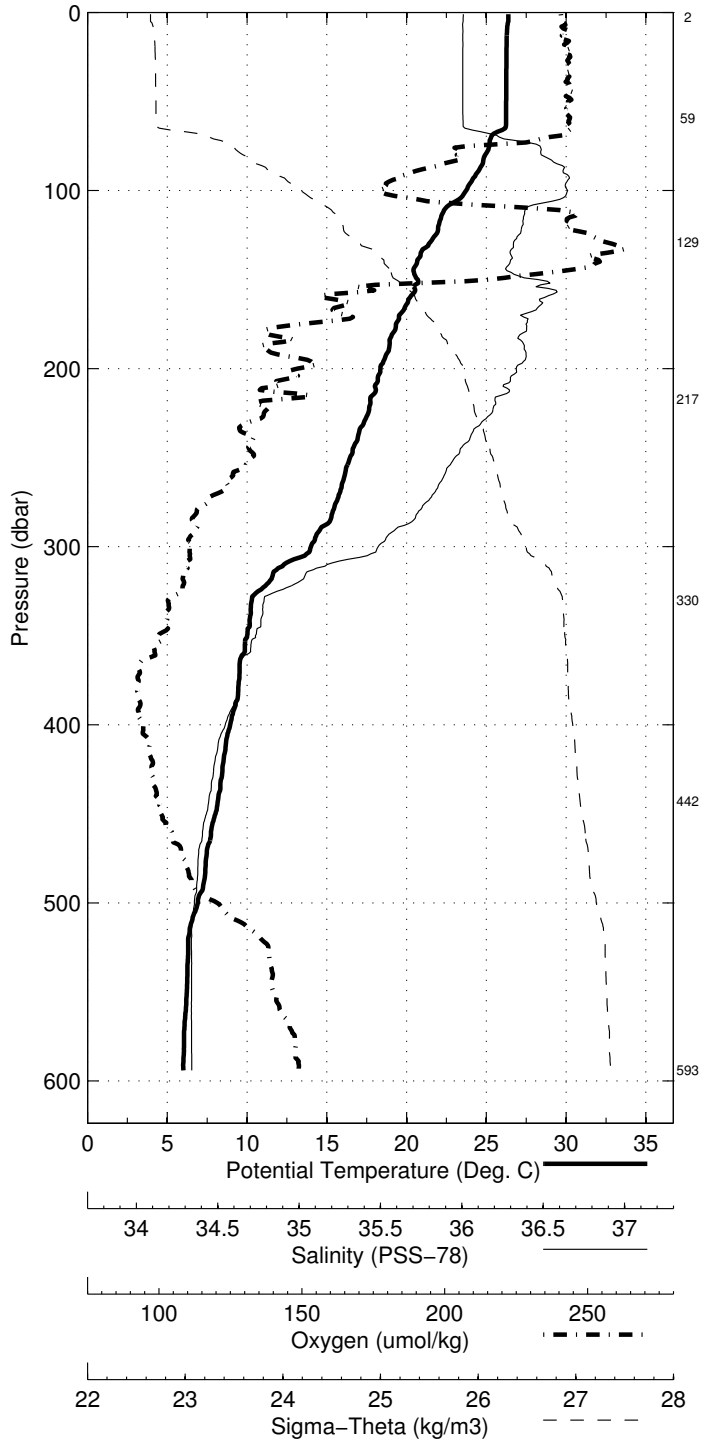


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 47 (CTD047)
 Latitude 26.044N Longitude 79.765W
 02-May-2009 18:44Z

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	26.383	26.382	36.214	200.8	0.004	23.829
10	26.302	26.300	36.211	202.2	0.041	23.853
20	26.269	26.264	36.211	203.0	0.081	23.865
30	26.261	26.254	36.211	202.8	0.121	23.868
50	26.253	26.242	36.211	202.3	0.202	23.871
75	25.197	25.180	36.582	182.0	0.299	24.482
100	23.751	23.730	36.716	164.3	0.380	25.021
125	21.833	21.808	36.479	207.0	0.449	25.396
150	20.723	20.695	36.574	186.3	0.509	25.776
200	18.396	18.361	36.469	147.8	0.609	26.307
250	16.486	16.446	36.172	138.6	0.693	26.546
300	14.045	14.001	35.804	126.4	0.766	26.809
400	8.990	8.946	35.068	116.8	0.871	27.180
500	6.957	6.910	34.919	131.7	0.959	27.367

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
594	2	6.055	6.002	34.907	147.4
443	4	8.360	8.313	35.000	118.7
330	6	10.553	10.513	35.284	122.4
217	8	17.866	17.829	36.373	140.1
129	10	20.746	20.721	36.445	206.1
59	12	26.247	26.234	36.224	201.4
3	14	26.925	26.924	36.226	201.4

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 47 (CTD047)
 Latitude 26.044 N Longitude 79.765 W
 02-May-2009 18:44 Z



Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 48 (CTD048)
 Latitude 26.042N Longitude 79.849W
 02-May-2009 20:25Z

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	26.613	26.613	36.202	201.3	0.004	23.747
10	26.331	26.328	36.192	202.8	0.041	23.830
20	26.289	26.285	36.193	202.1	0.082	23.844
30	26.279	26.273	36.193	202.6	0.122	23.848
50	26.263	26.252	36.195	203.3	0.204	23.856
75	23.587	23.572	36.476	208.7	0.293	24.887
100	22.006	21.986	36.459	214.9	0.365	25.331
125	20.545	20.521	36.441	202.4	0.426	25.722
150	19.552	19.525	36.463	162.3	0.482	26.004
200	16.593	16.560	36.157	130.4	0.574	26.508
250	12.419	12.385	35.571	124.1	0.643	26.958
300	9.944	9.909	35.196	119.0	0.695	27.120

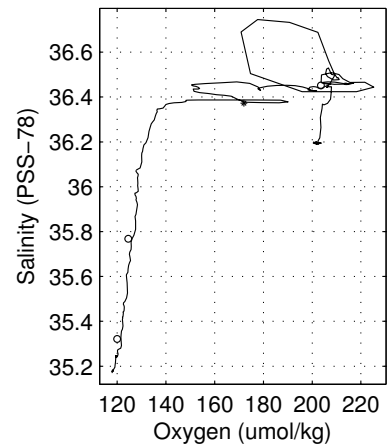
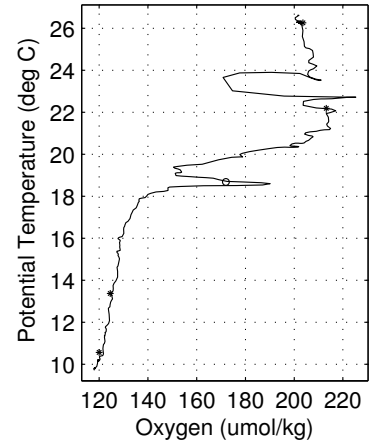
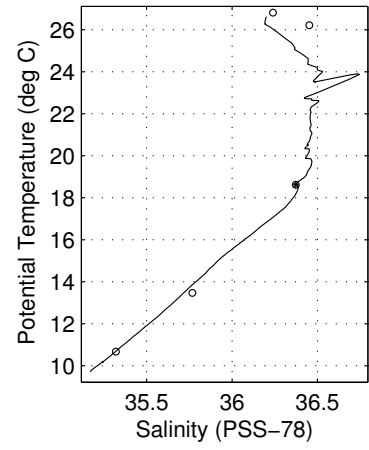
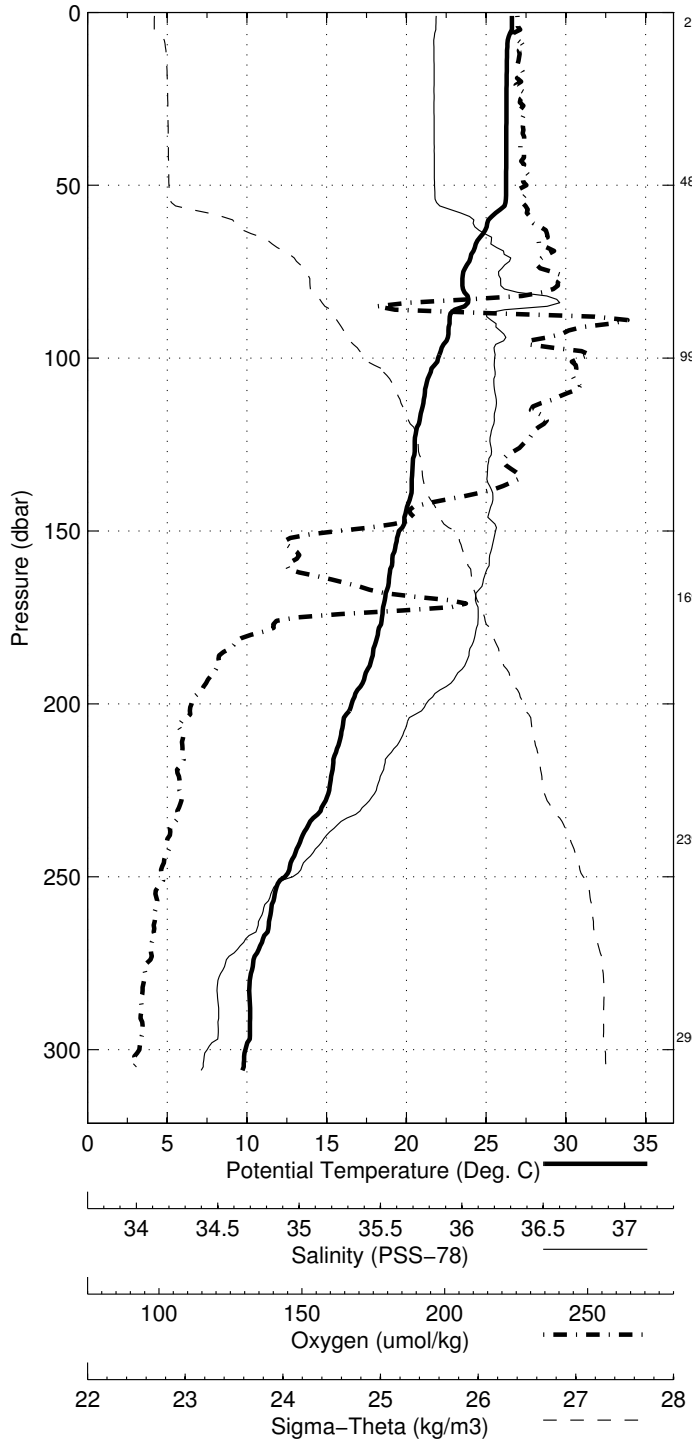
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
296	2	10.709	10.673	35.321	120.0
239	4	13.502	13.468	35.768	124.6
169	6	18.647	18.617	36.373	172.0
99	8	22.134	22.212	-999.000	-999.0
49	10	26.224	26.213	36.452	203.5
3	12	26.809	26.808	36.240	-999.0

Abaco April – May 2009 R/V Ronald H Brown

CTD Station 48 (CTD048)

Latitude 26.042 N Longitude 79.849 W

02-May-2009 20:25 Z

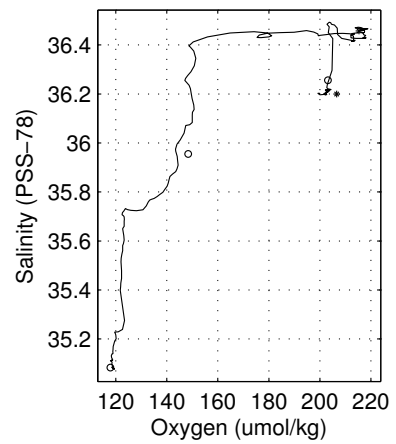
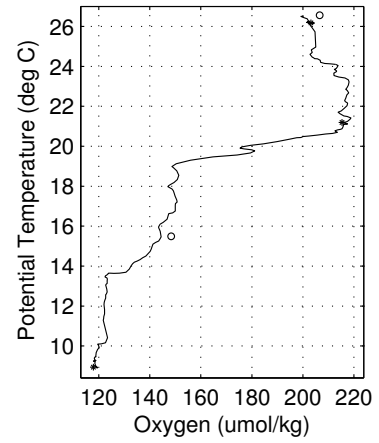
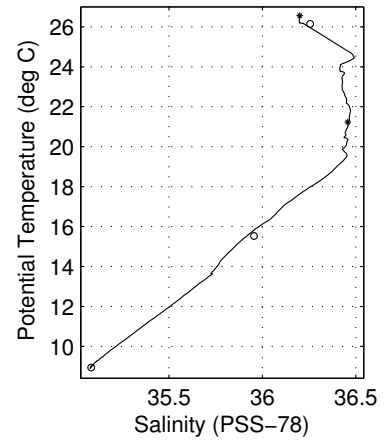
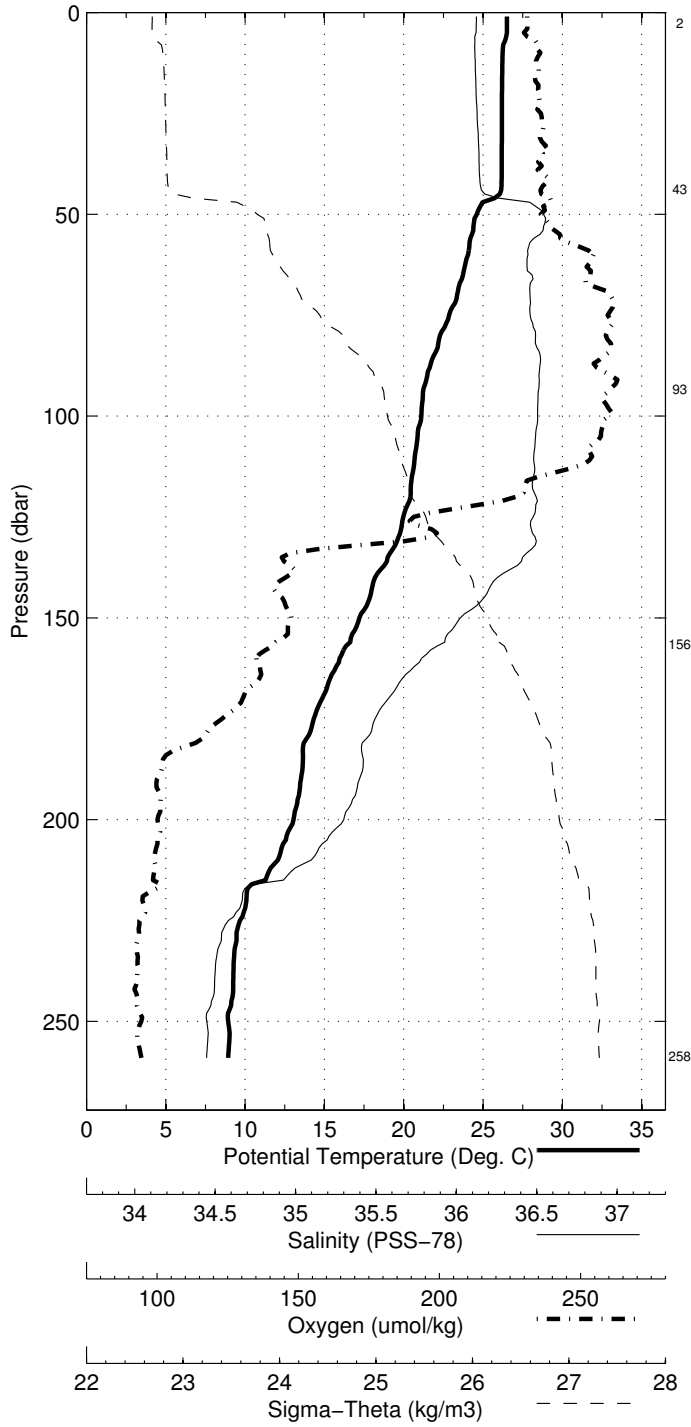


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 49 (CTD049)
 Latitude 26.043N Longitude 79.931W
 02-May-2009 21:37Z

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	26.503	26.503	36.204	199.9	0.004	23.784
10	26.233	26.230	36.198	202.7	0.041	23.865
20	26.197	26.193	36.203	202.6	0.081	23.880
30	26.194	26.188	36.211	202.7	0.121	23.889
50	24.615	24.604	36.484	202.8	0.199	24.584
75	22.868	22.853	36.428	216.8	0.278	25.060
100	21.125	21.105	36.460	217.0	0.344	25.577
125	19.996	19.973	36.441	176.2	0.402	25.869
150	17.228	17.203	36.137	150.7	0.450	26.338
200	13.080	13.052	35.650	122.7	0.520	26.886
250	8.964	8.937	35.079	119.3	0.570	27.190

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
259	2	8.968	8.940	35.083	117.9
157	4	15.551	15.526	35.955	148.4
93	6	21.249	21.231	36.457	215.3
44	8	26.157	26.147	36.256	203.1
3	10	26.562	26.561	36.200	206.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 49 (CTD049)
 Latitude 26.043 N Longitude 79.931 W
 02-May-2009 21:37 Z

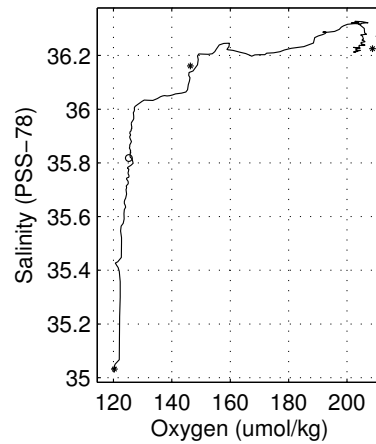
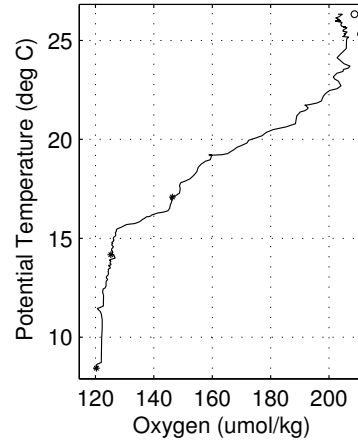
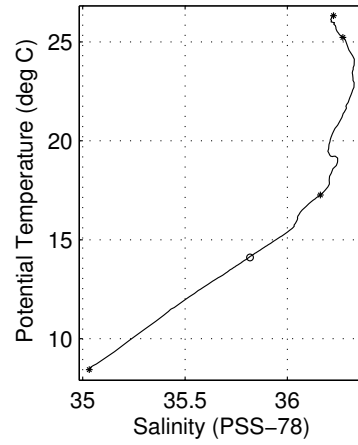
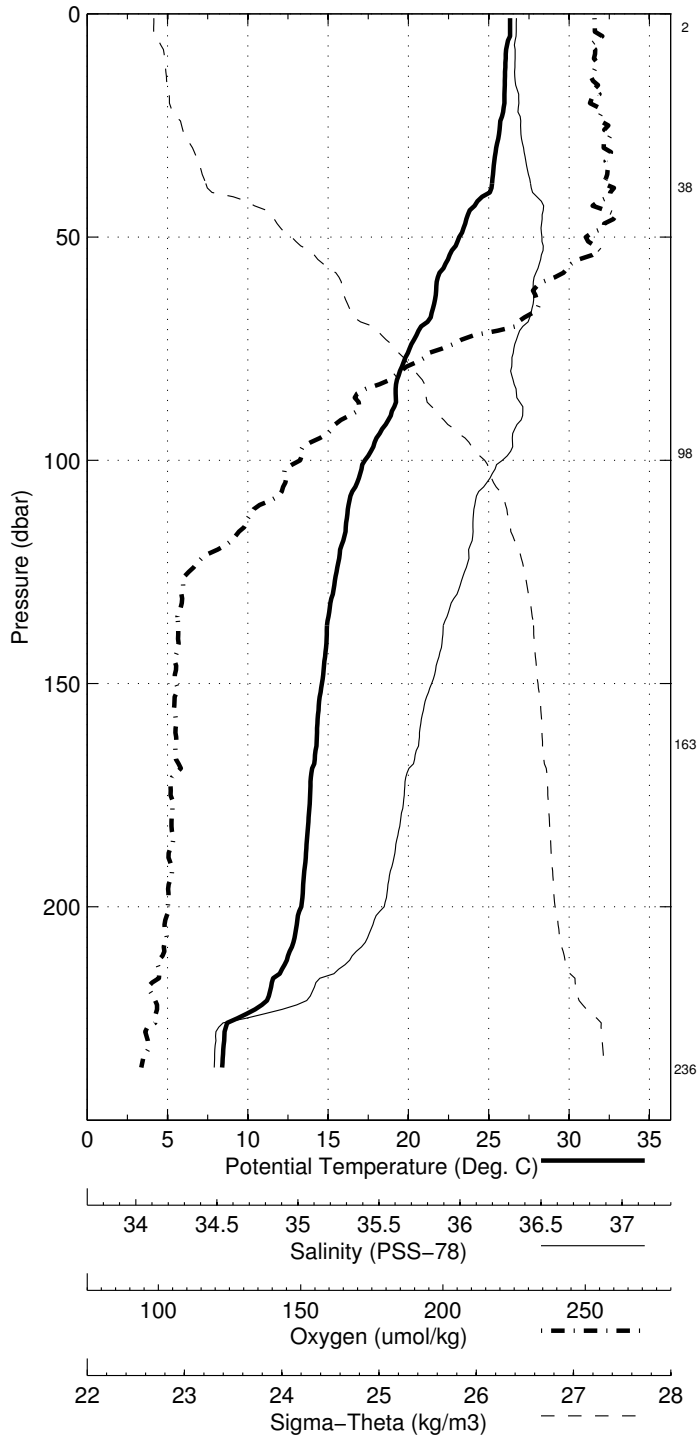


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 50 (CTD050)
 Latitude 26.040N Longitude 79.997W
 02-May-2009 22:36Z

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	26.323	26.323	36.221	203.1	0.004	23.853
10	26.057	26.055	36.215	203.0	0.040	23.933
20	25.974	25.970	36.230	202.3	0.080	23.971
30	25.467	25.460	36.248	204.8	0.118	24.144
50	23.167	23.157	36.321	201.5	0.188	24.890
75	20.080	20.066	36.210	174.9	0.255	25.668
100	17.303	17.286	36.166	148.8	0.306	26.340
125	15.539	15.520	36.016	128.2	0.345	26.640
150	14.640	14.617	35.887	125.9	0.379	26.740
200	13.359	13.331	35.701	124.3	0.443	26.868

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
236	2	8.465	8.441	35.032	120.3
164	4	14.134	14.110	35.818	125.2
98	6	17.276	17.260	36.161	146.3
39	8	25.232	25.223	36.272	211.0
3	10	26.328	26.327	36.225	208.7

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 50 (CTD050)
 Latitude 26.040 N Longitude 79.997 W
 02–May–2009 22:36 Z

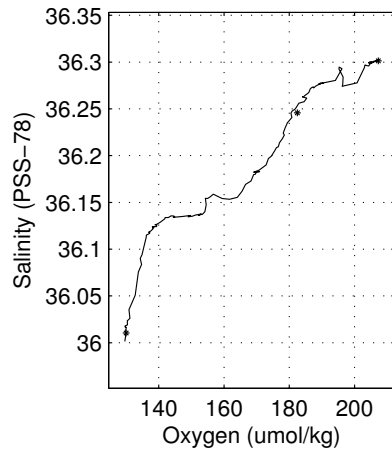
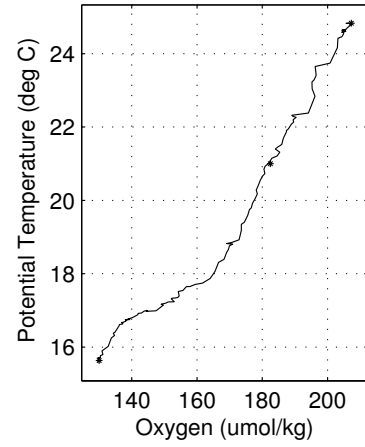
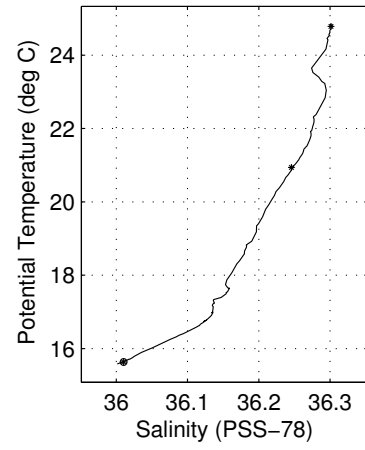
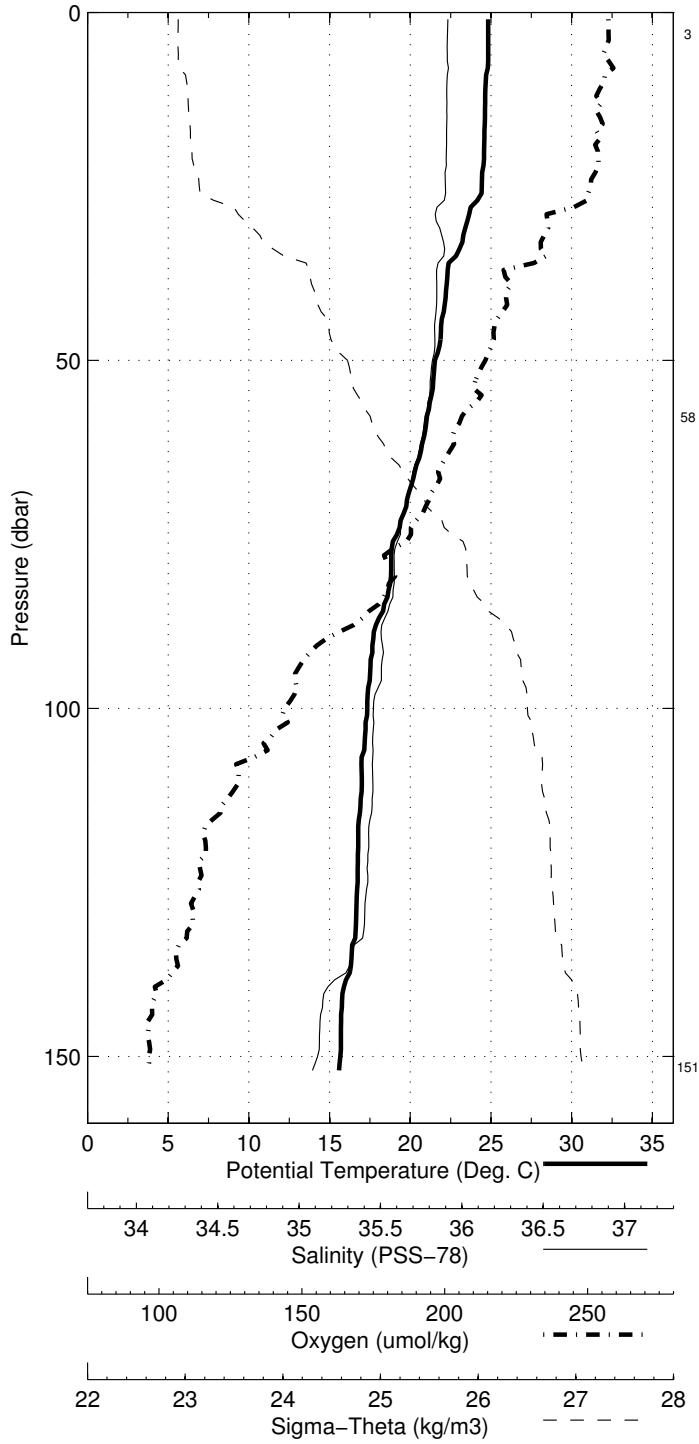


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 51 (CTD051)
 Latitude 26.042N Longitude 80.059W
 02-May-2009 23:54Z

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	24.830	24.830	36.302	206.5	0.004	24.377
10	24.672	24.670	36.300	205.7	0.035	24.424
20	24.575	24.570	36.299	204.8	0.070	24.454
30	23.534	23.528	36.276	196.4	0.104	24.748
50	21.539	21.529	36.268	186.0	0.161	25.313
75	19.194	19.180	36.197	173.6	0.222	25.890
100	17.352	17.335	36.137	152.5	0.270	26.306
125	16.766	16.745	36.124	138.0	0.311	26.438
150	15.688	15.664	36.013	129.9	0.350	26.604

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
151	2	15.658	15.634	36.010	130.0
58	4	20.950	20.939	36.246	182.5
3	6	24.785	24.784	36.301	207.2

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 51 (CTD051)
 Latitude 26.042 N Longitude 80.059 W
 02-May-2009 23:54 Z

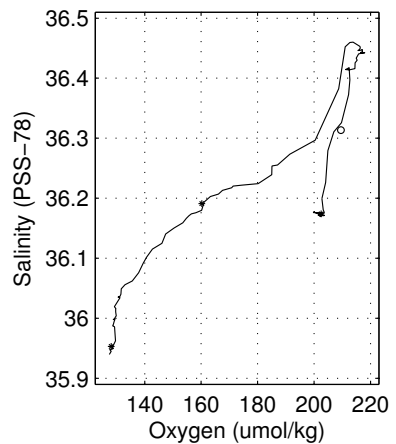
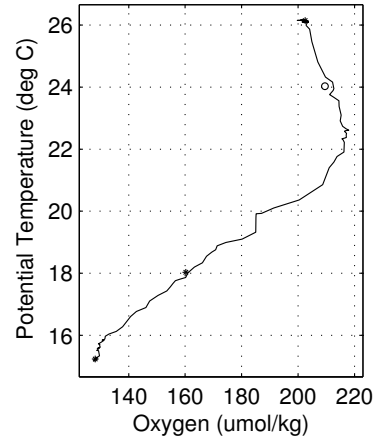
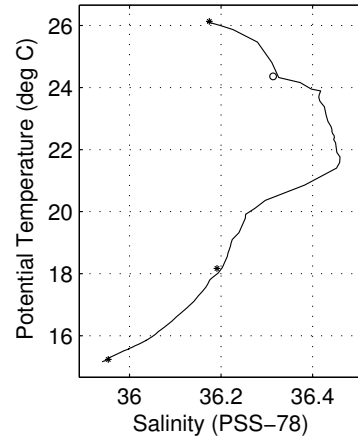
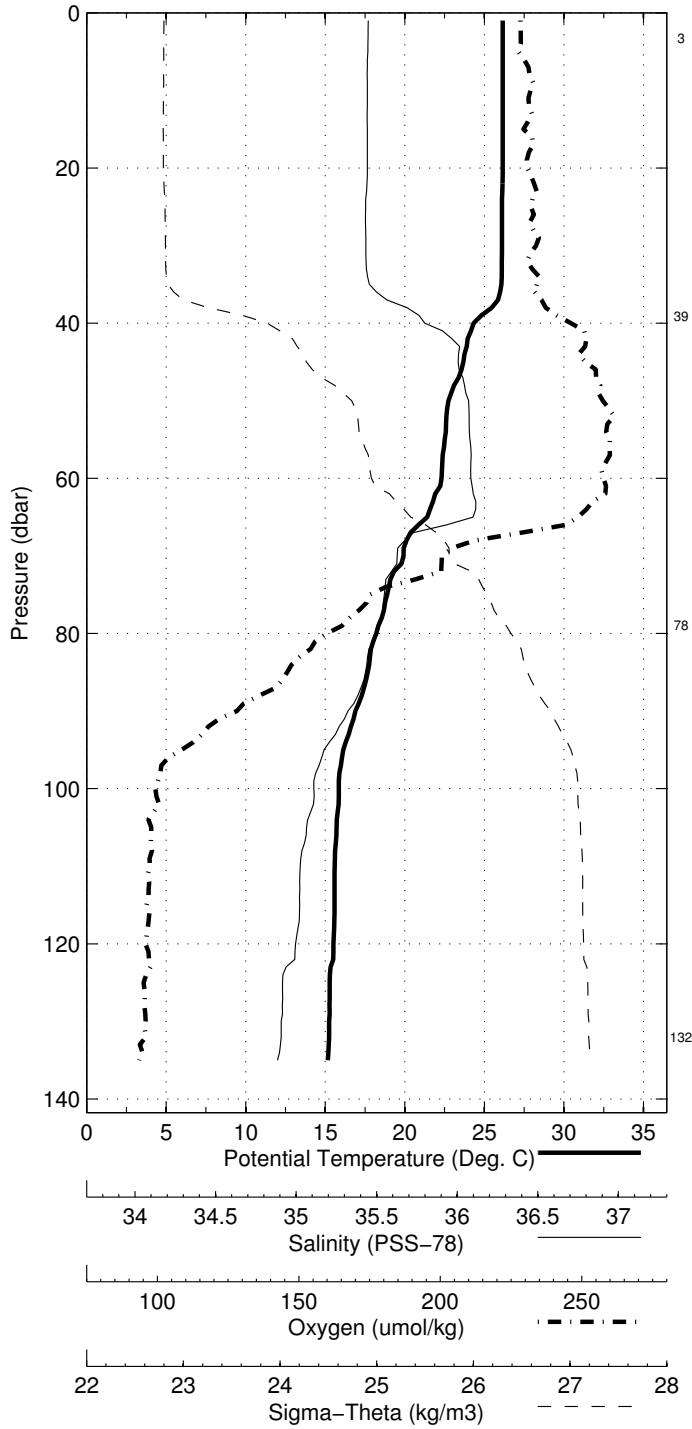


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 52 (CTD052)
 Latitude 26.992N Longitude 79.935W
 03-May-2009 06:27Z

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	26.149	26.149	36.178	200.1	0.004	23.876
10	26.151	26.149	36.175	202.0	0.040	23.874
20	26.156	26.152	36.175	201.4	0.081	23.873
30	26.108	26.101	36.172	203.1	0.121	23.886
50	22.747	22.737	36.441	215.8	0.191	25.103
75	18.898	18.884	36.220	171.4	0.254	25.984
100	15.863	15.847	36.035	130.6	0.297	26.579
125	15.300	15.280	35.953	128.3	0.333	26.645

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
132	2	15.256	15.235	35.953	128.1
79	4	18.183	18.169	36.191	160.2
39	6	24.366	24.358	36.314	209.5
3	8	26.131	26.131	36.174	202.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 52 (CTD052)
 Latitude 26.992 N Longitude 79.935 W
 03-May-2009 06:27 Z

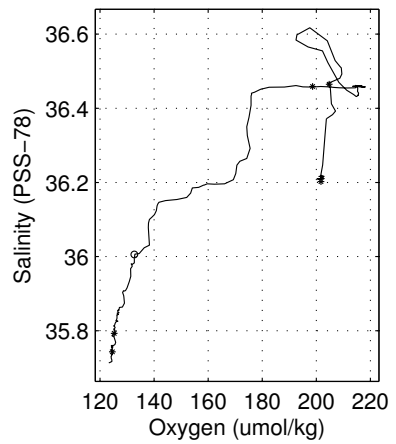
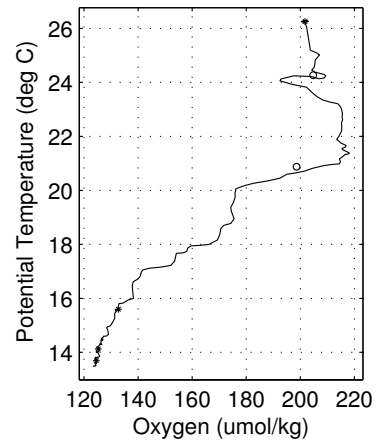
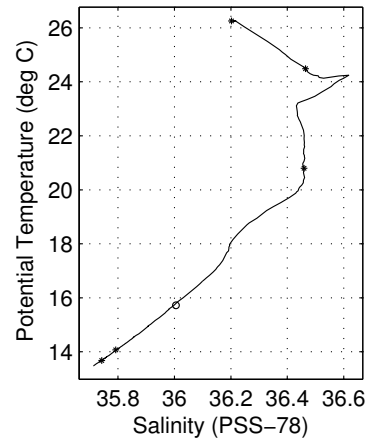
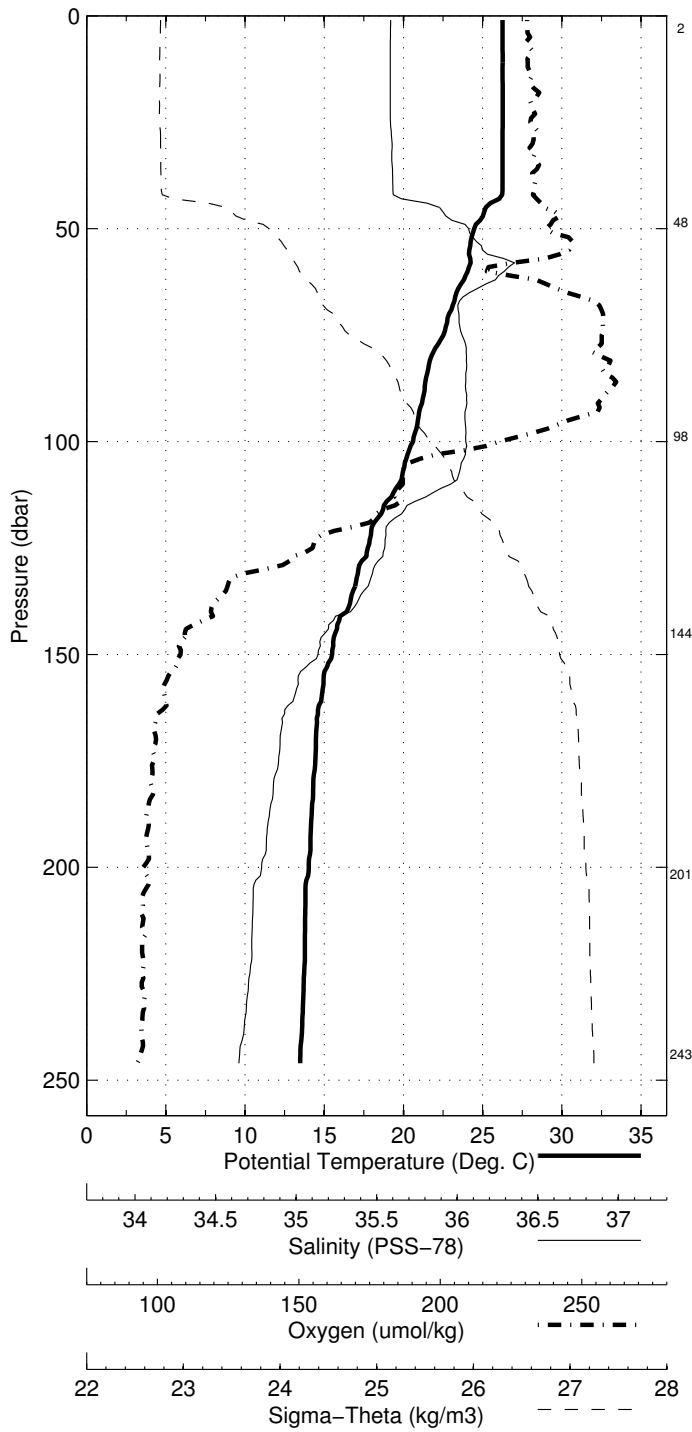


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 53 (CTD053)
 Latitude 26.996N Longitude 79.868W
 03-May-2009 07:34Z

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	26.249	26.249	36.211	200.5	0.004	23.869
10	26.265	26.263	36.210	200.6	0.040	23.864
20	26.272	26.267	36.210	201.1	0.081	23.862
30	26.266	26.259	36.216	201.5	0.121	23.870
50	24.471	24.460	36.467	204.2	0.198	24.615
75	22.536	22.521	36.446	215.3	0.275	25.169
100	20.618	20.599	36.458	195.0	0.337	25.714
125	17.760	17.738	36.192	158.0	0.388	26.250
150	15.522	15.498	35.973	131.8	0.429	26.611
200	14.049	14.020	35.788	124.5	0.496	26.792

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
244	2	13.714	13.679	35.743	124.6
202	4	14.101	14.071	35.793	125.2
145	6	15.747	15.724	36.006	132.7
99	8	20.818	20.799	36.459	198.6
48	10	24.498	24.487	36.465	204.7
3	12	26.254	26.254	36.202	201.7

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 53 (CTD053)
 Latitude 26.996 N Longitude 79.868 W
 03-May-2009 07:34 Z

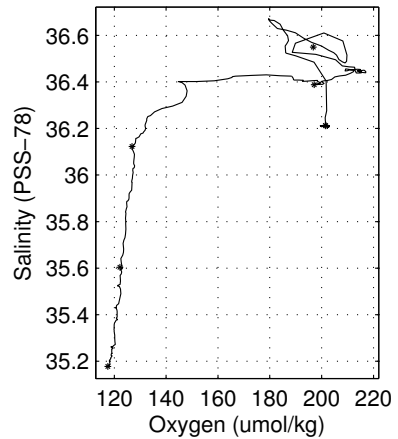
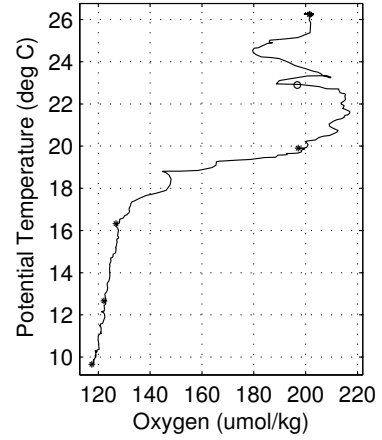
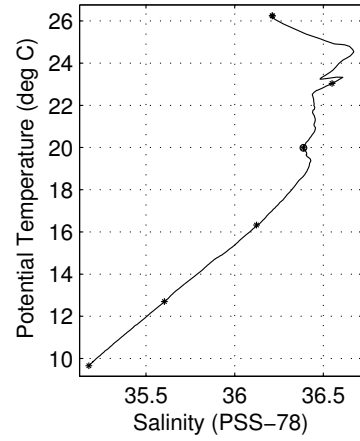
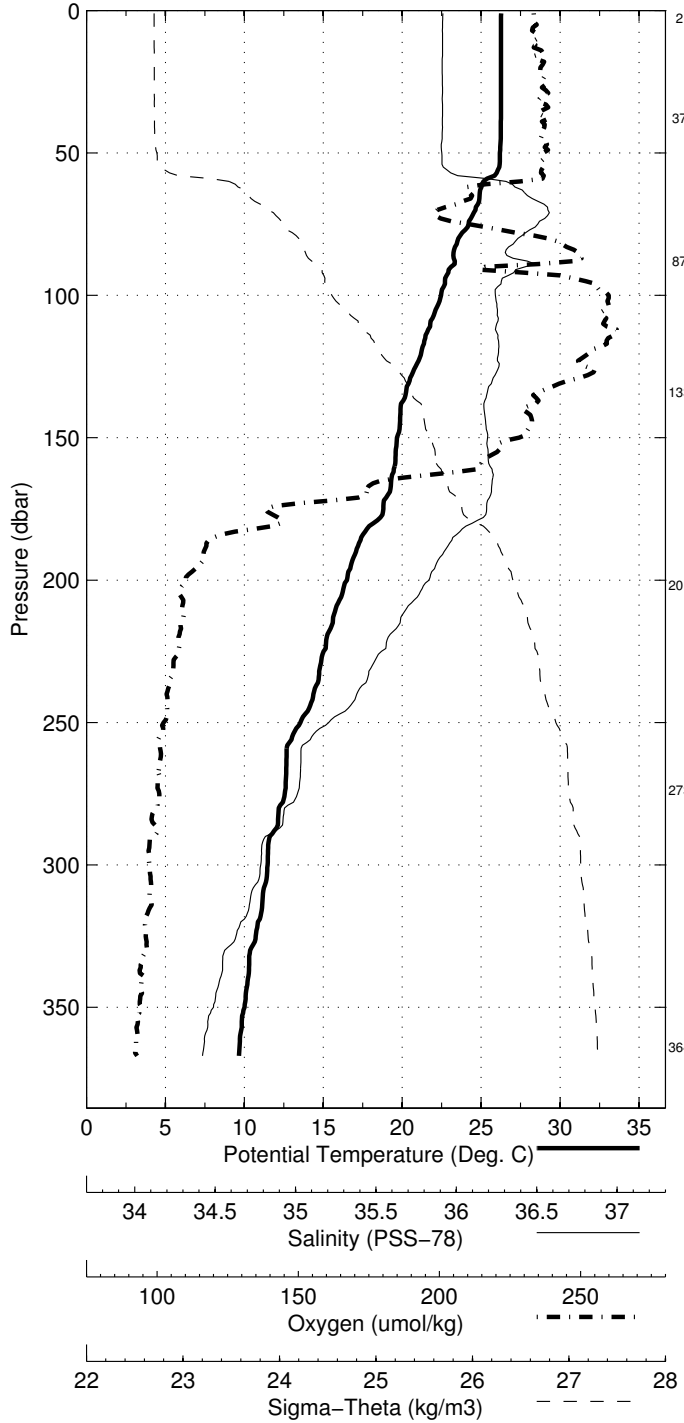


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 54 (CTD054)
 Latitude 26.991N Longitude 79.787W
 03-May-2009 08:49Z

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	26.263	26.263	36.212	199.9	0.004	23.866
10	26.264	26.262	36.211	200.5	0.040	23.865
20	26.259	26.254	36.210	201.3	0.081	23.867
30	26.262	26.255	36.211	201.7	0.121	23.867
50	26.200	26.188	36.208	201.9	0.202	23.886
75	24.218	24.202	36.622	186.4	0.291	24.809
100	22.482	22.462	36.439	215.3	0.365	25.181
125	20.868	20.844	36.454	210.7	0.429	25.644
150	19.698	19.671	36.406	196.9	0.485	25.921
200	16.528	16.495	36.153	128.3	0.579	26.519
250	13.586	13.550	35.720	123.7	0.650	26.838
300	11.508	11.470	35.428	120.8	0.709	27.022

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
364	2	9.698	9.656	35.178	117.5
274	4	12.739	12.701	35.604	122.2
202	6	16.356	16.323	36.123	126.8
134	8	20.013	19.988	36.388	197.1
88	10	23.058	23.040	36.549	196.8
38	12	26.244	26.236	36.213	201.4
3	14	26.244	26.243	36.211	201.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 54 (CTD054)
 Latitude 26.991 N Longitude 79.787 W
 03-May-2009 08:49 Z

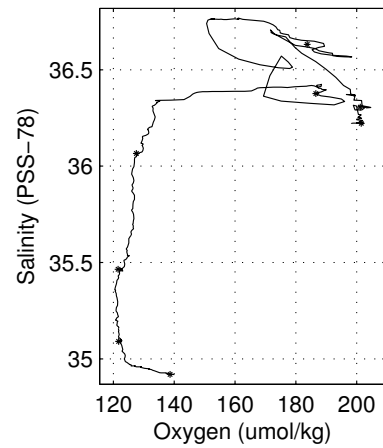
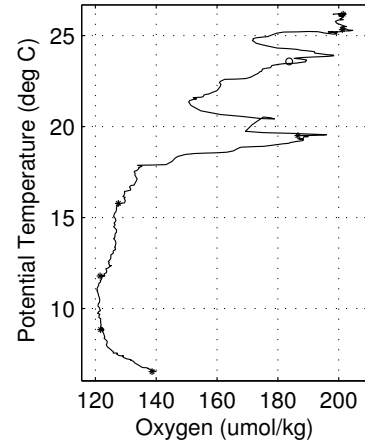
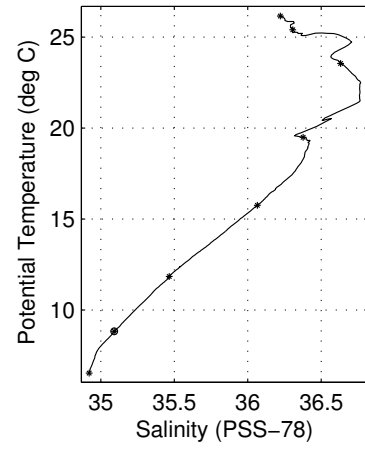
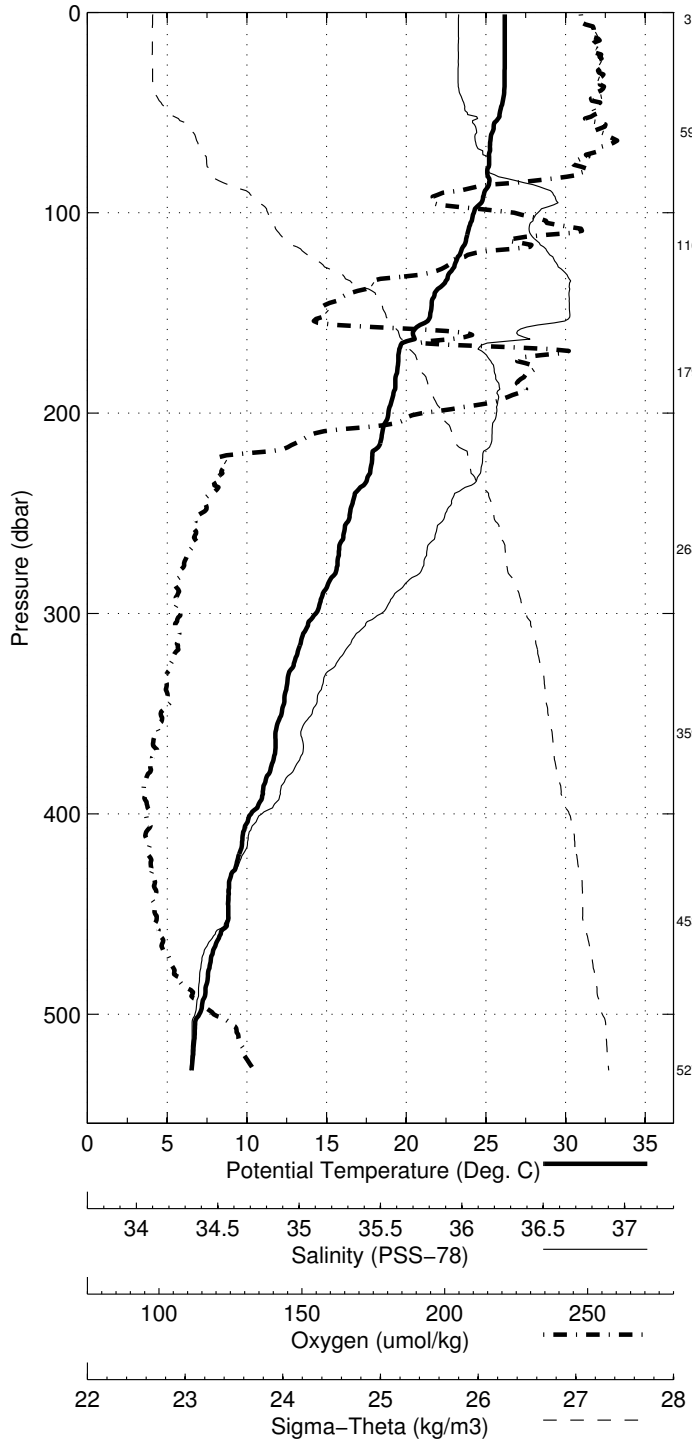


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 55 (CTD055)
 Latitude 26.990N Longitude 79.686W
 03-May-2009 10:04Z

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	26.183	26.183	36.224	198.2	0.004	23.899
10	26.188	26.185	36.223	201.5	0.040	23.898
20	26.194	26.189	36.223	200.6	0.080	23.897
30	26.185	26.178	36.221	201.4	0.120	23.899
50	25.889	25.878	36.266	201.5	0.200	24.027
75	25.217	25.201	36.372	196.6	0.293	24.317
100	24.263	24.242	36.610	186.3	0.378	24.788
125	23.119	23.093	36.699	174.8	0.454	25.195
150	21.549	21.520	36.764	153.2	0.517	25.694
200	18.914	18.878	36.408	170.0	0.624	26.129
250	16.508	16.467	36.160	130.6	0.712	26.532
300	14.374	14.329	35.849	126.9	0.785	26.773
400	10.313	10.265	35.267	121.0	0.904	27.114
500	7.065	7.017	34.941	132.8	0.996	27.370

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
528	2	6.582	6.533	34.920	138.6
454	4	8.881	8.832	35.091	121.7
360	6	11.884	11.836	35.465	121.5
268	8	15.798	15.756	36.066	127.6
179	10	19.525	19.492	36.377	186.6
116	12	23.575	23.551	36.632	183.7
60	14	25.419	25.406	36.307	201.2
4	16	26.162	26.162	36.222	201.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 55 (CTD055)
 Latitude 26.990 N Longitude 79.686 W
 03-May-2009 10:04 Z

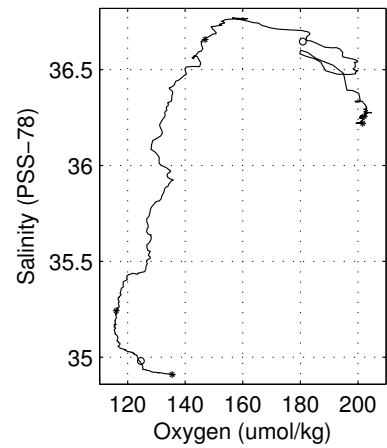
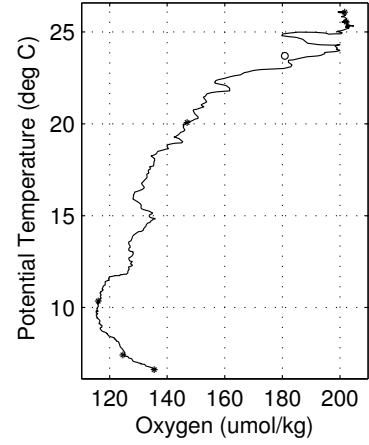
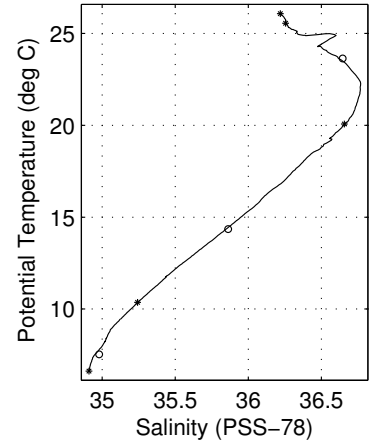
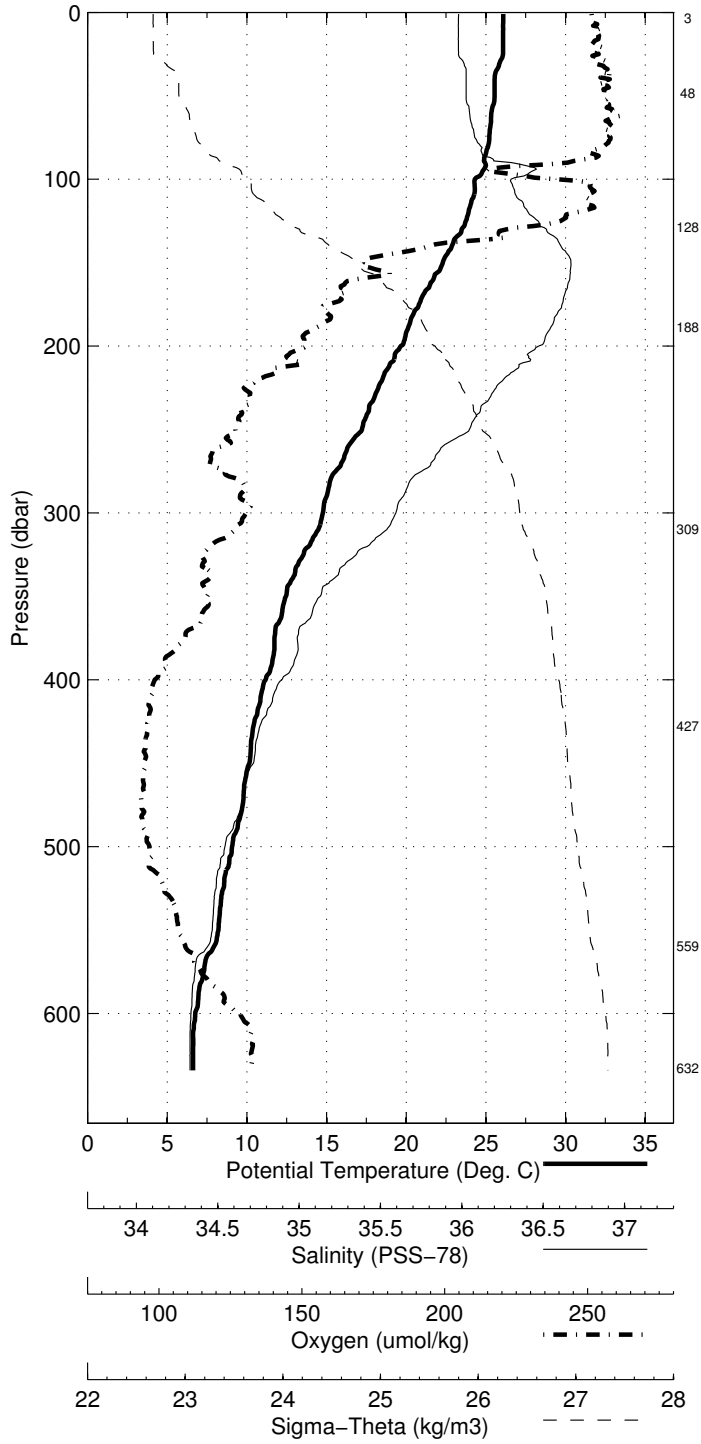


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 56 (CTD056)
 Latitude 27.000N Longitude 79.620W
 03-May-2009 11:23Z

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	26.087	26.087	36.221	199.4	0.004	23.928
10	26.087	26.085	36.220	200.7	0.040	23.927
20	26.083	26.078	36.220	200.6	0.079	23.929
30	25.879	25.872	36.245	201.2	0.119	24.013
50	25.556	25.545	36.257	202.2	0.195	24.124
75	25.232	25.215	36.300	203.0	0.289	24.258
100	24.327	24.305	36.476	192.8	0.377	24.668
125	23.768	23.742	36.609	193.6	0.457	24.937
150	22.327	22.297	36.769	156.7	0.527	25.478
200	19.701	19.664	36.611	146.1	0.638	26.080
250	17.265	17.223	36.274	132.9	0.729	26.439
300	14.819	14.773	35.914	134.9	0.804	26.727
400	11.222	11.171	35.358	117.8	0.928	27.023
500	9.132	9.077	35.079	116.8	1.034	27.168
600	6.822	6.765	34.914	133.9	1.124	27.383

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
632	2	6.681	6.621	34.910	135.5
559	4	7.585	7.529	34.980	124.6
428	6	10.407	10.356	35.242	116.1
309	8	14.398	14.352	35.862	-999.0
189	10	20.110	20.074	36.657	146.9
128	12	23.671	23.644	36.646	180.8
49	14	25.566	25.555	36.256	202.1
3	16	26.082	26.081	36.219	201.6

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 56 (CTD056)
 Latitude 27.000 N Longitude 79.620 W
 03-May-2009 11:23 Z

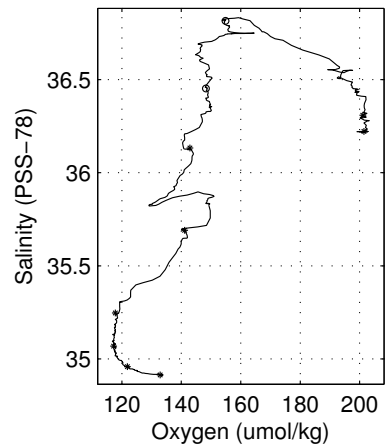
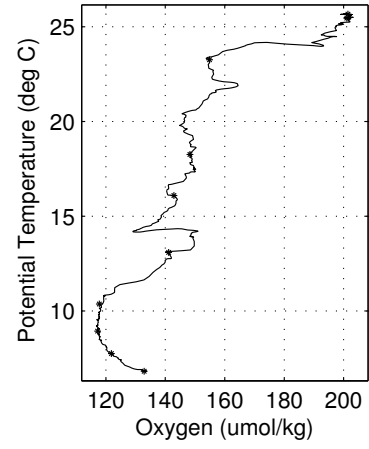
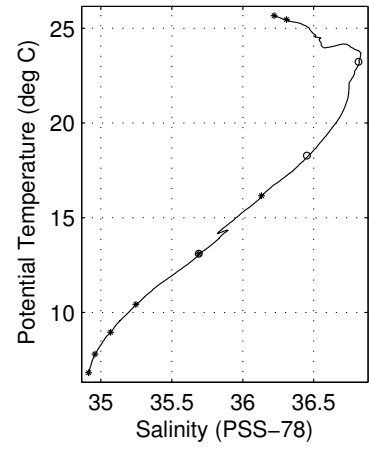
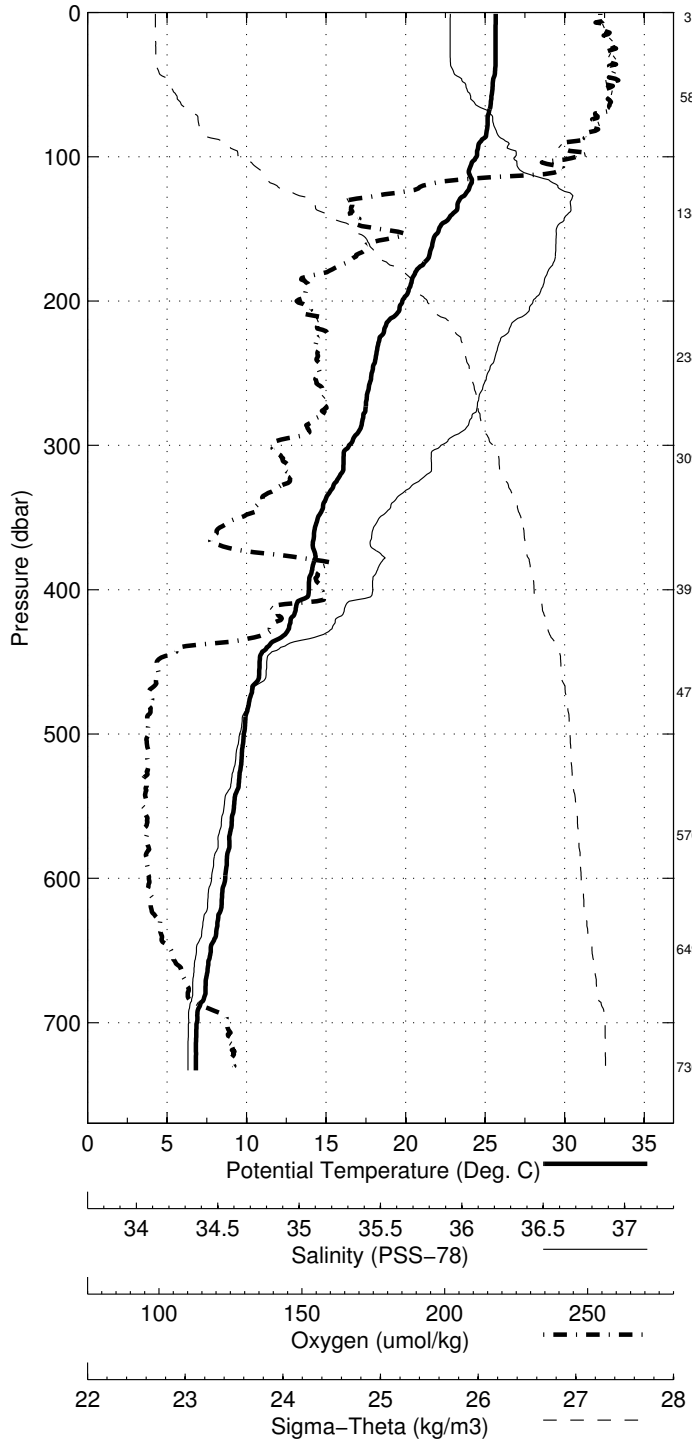


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 57 (CTD057)
 Latitude 26.983N Longitude 79.502W
 03-May-2009 13:26Z

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	25.658	25.658	36.222	199.9	0.004	24.062
10	25.658	25.655	36.220	200.1	0.038	24.062
20	25.655	25.651	36.220	201.5	0.077	24.063
30	25.656	25.650	36.221	201.8	0.115	24.064
50	25.482	25.470	36.299	201.1	0.192	24.178
75	25.174	25.158	36.432	199.2	0.284	24.376
100	24.476	24.454	36.544	195.6	0.370	24.674
125	23.839	23.813	36.816	163.1	0.448	25.073
150	22.129	22.099	36.749	159.8	0.516	25.520
200	19.825	19.788	36.633	144.8	0.629	26.064
250	17.905	17.862	36.407	149.1	0.720	26.384
300	16.491	16.442	36.175	141.1	0.804	26.549
400	13.971	13.913	35.835	149.2	0.946	26.851
500	9.882	9.823	35.172	117.7	1.060	27.116
600	8.720	8.655	35.032	118.0	1.162	27.198
700	6.944	6.876	34.918	132.1	1.253	27.372

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
731	2	6.885	6.815	34.914	132.9
649	4	7.869	7.802	34.959	121.9
570	6	9.014	8.951	35.069	117.2
471	8	10.485	10.428	35.247	117.8
399	10	13.159	13.103	35.691	141.1
309	12	16.214	16.164	36.132	142.9
239	14	18.322	18.280	36.452	148.3
139	16	23.261	23.232	36.815	154.9
59	18	25.471	25.458	36.309	201.0
3	20	25.666	25.665	36.221	201.5

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 57 (CTD057)
 Latitude 26.983 N Longitude 79.502 W
 03-May-2009 13:26 Z

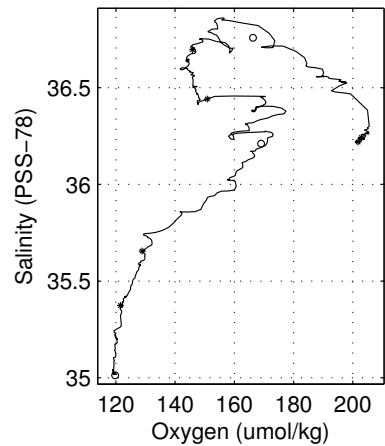
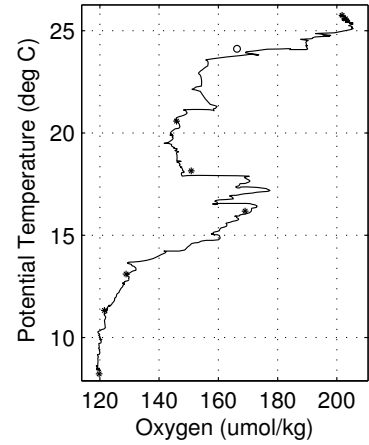
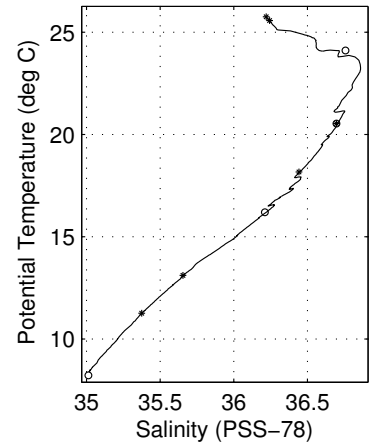
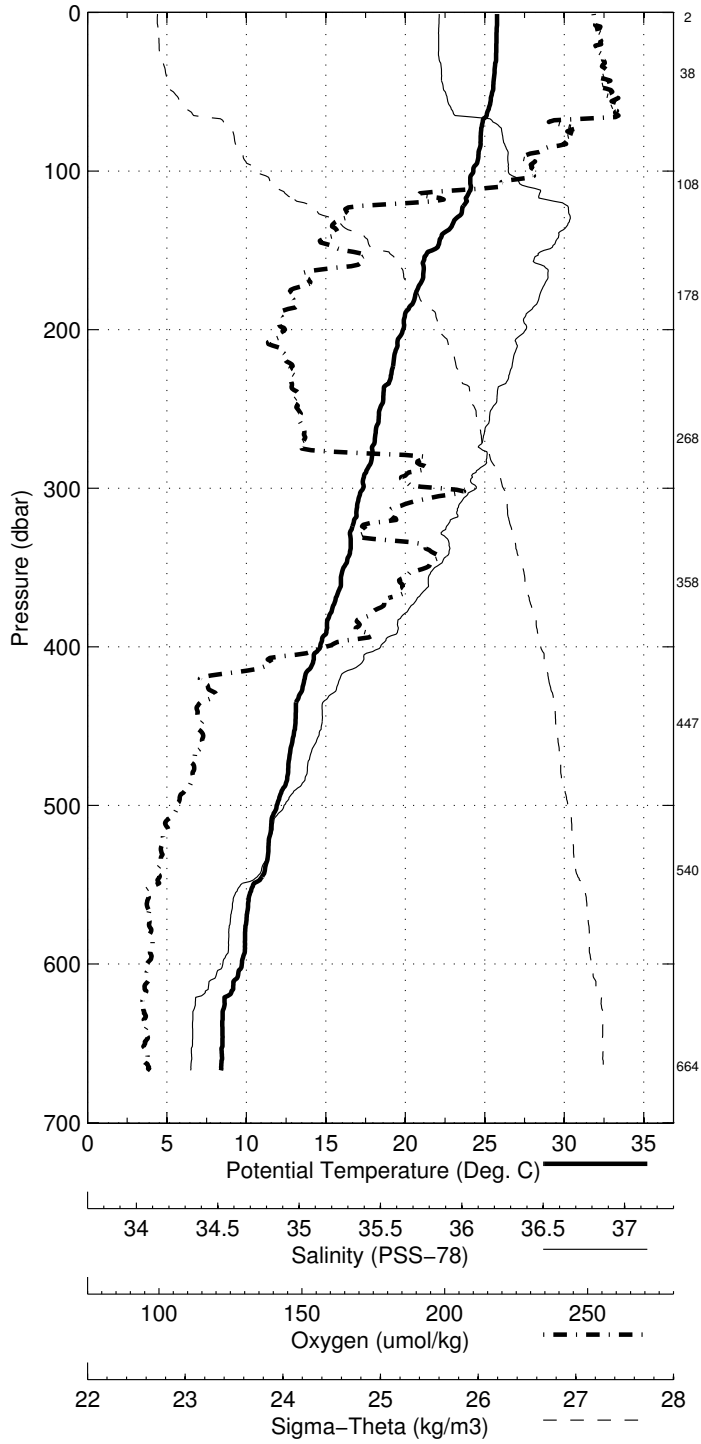


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 58 (CTD058)
 Latitude 26.977N Longitude 79.383W
 03-May-2009 15:11Z

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	25.769	25.769	36.224	201.0	0.004	24.030
10	25.746	25.744	36.221	202.1	0.039	24.035
20	25.727	25.723	36.221	202.3	0.077	24.042
30	25.710	25.704	36.224	202.7	0.116	24.050
50	25.484	25.473	36.253	204.4	0.193	24.143
75	24.775	24.759	36.527	196.2	0.283	24.570
100	24.289	24.267	36.559	189.6	0.366	24.742
125	23.593	23.566	36.851	155.9	0.443	25.173
150	21.702	21.672	36.732	155.6	0.508	25.627
200	19.892	19.855	36.644	144.8	0.617	26.055
250	18.436	18.392	36.478	147.1	0.712	26.307
300	17.394	17.343	36.404	173.1	0.799	26.509
400	14.700	14.639	35.940	152.1	0.949	26.776
500	11.966	11.900	35.470	125.0	1.079	26.974
600	9.781	9.711	35.174	119.6	1.191	27.137

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
665	2	8.300	8.230	35.013	119.7
541	4	11.331	11.262	35.375	121.5
448	6	13.181	13.118	35.656	128.8
359	8	16.261	16.203	36.211	169.0
268	10	18.220	18.173	36.442	150.8
179	12	20.570	20.536	36.697	145.9
108	14	24.130	24.107	36.758	166.3
38	16	25.587	25.578	36.243	202.9
3	18	25.754	25.754	36.220	201.8

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 58 (CTD058)
 Latitude 26.977 N Longitude 79.383 W
 03-May-2009 15:11 Z

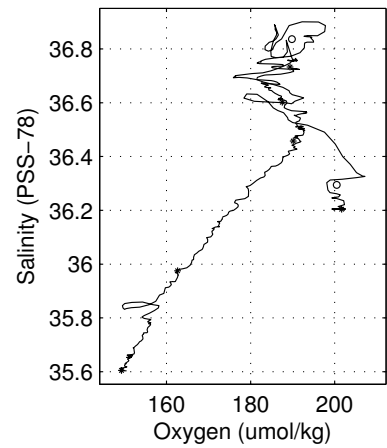
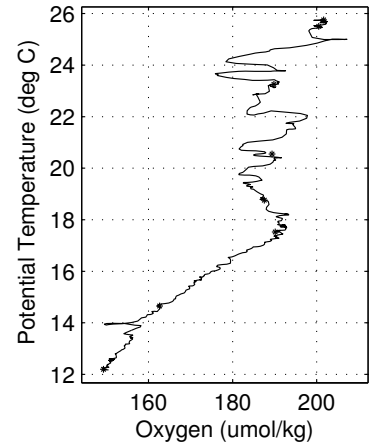
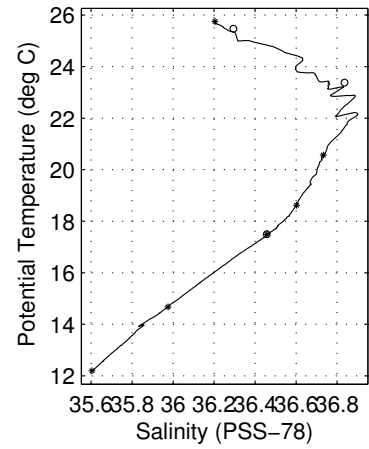
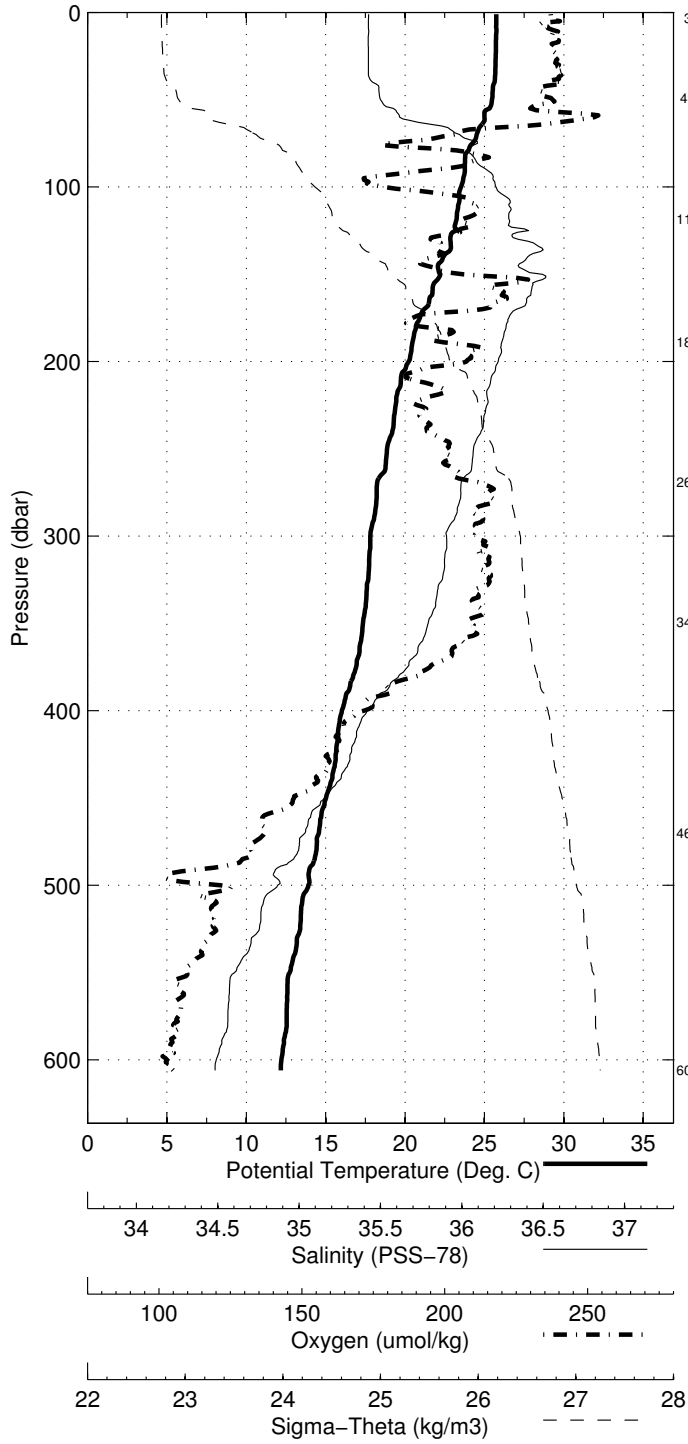


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 59 (CTD059)
 Latitude 26.991N Longitude 79.285W
 03-May-2009 16:51Z

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	25.743	25.742	36.206	200.8	0.004	24.024
10	25.757	25.755	36.206	201.1	0.039	24.020
20	25.726	25.722	36.205	201.3	0.078	24.030
30	25.703	25.697	36.205	201.9	0.116	24.037
50	25.488	25.476	36.253	201.1	0.193	24.142
75	24.258	24.242	36.633	179.1	0.280	24.806
100	23.548	23.527	36.705	178.5	0.356	25.073
125	23.235	23.209	36.832	188.5	0.427	25.263
150	22.256	22.226	36.887	189.2	0.491	25.589
200	20.271	20.234	36.713	189.6	0.603	26.007
250	18.907	18.862	36.617	186.9	0.699	26.293
300	17.860	17.808	36.511	190.7	0.785	26.478
400	16.084	16.019	36.200	176.0	0.946	26.667
500	13.982	13.908	35.849	156.8	1.088	26.863
600	12.292	12.211	35.608	149.7	1.213	27.021

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
606	2	12.277	12.195	35.605	149.3
470	4	14.749	14.677	35.976	162.6
349	6	17.555	17.495	36.457	190.2
269	8	18.671	18.623	36.602	187.5
189	10	20.605	20.569	36.733	189.4
119	12	23.407	23.383	36.837	189.8
49	14	25.482	25.471	36.295	200.5
3	16	25.756	25.756	36.204	201.7

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 59 (CTD059)
 Latitude 26.991 N Longitude 79.285 W
 03-May-2009 16:51 Z

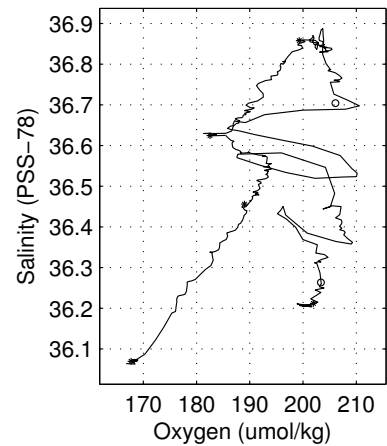
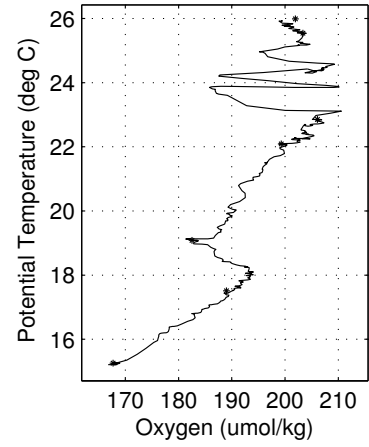
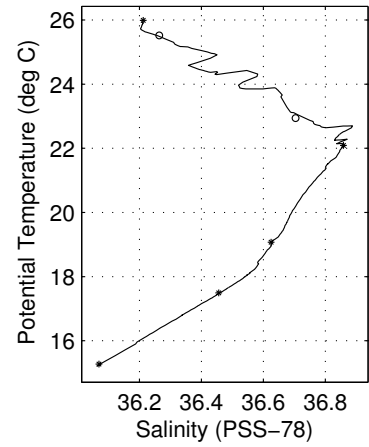
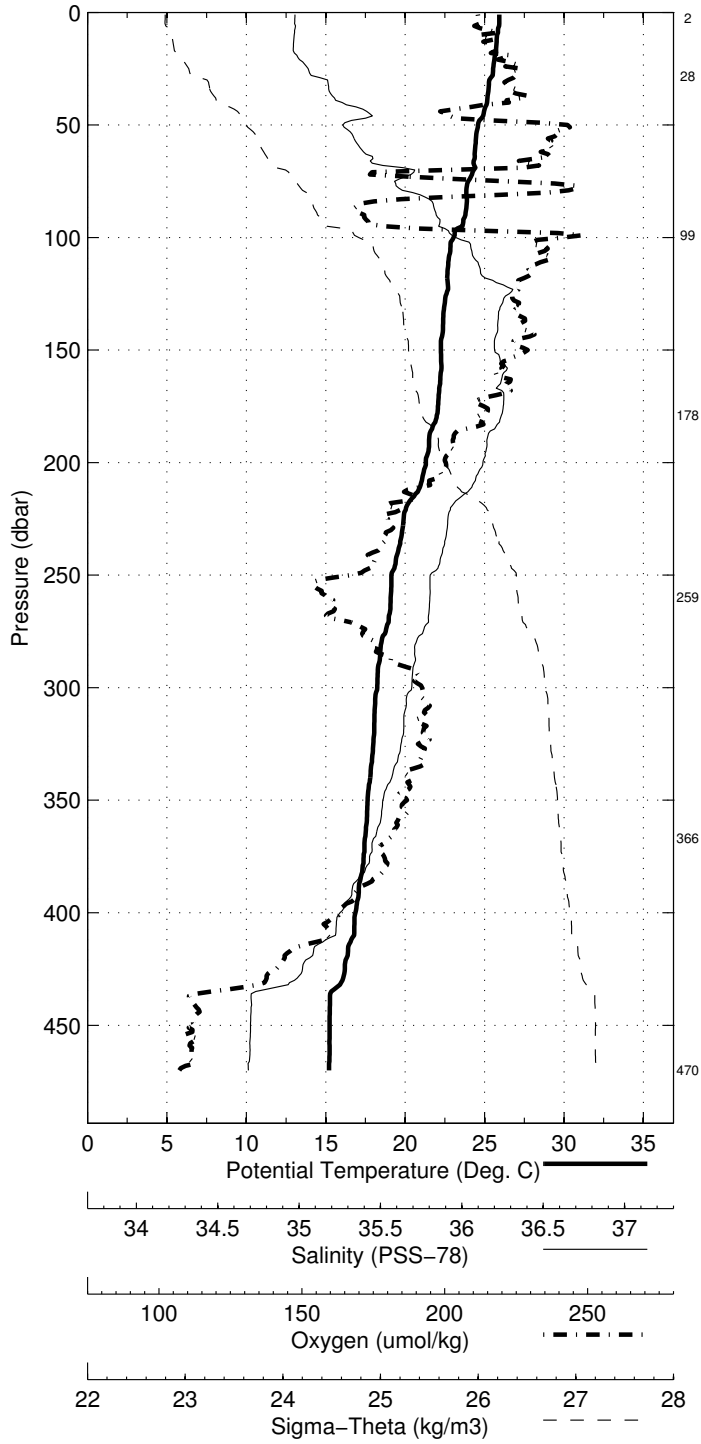


Abaco April - May 2009 R/V Ronald H Brown
 CTD Station 60 (CTD060)
 Latitude 26.995N Longitude 79.200W
 03-May-2009 18:13Z

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	25.926	25.926	36.209	199.3	0.004	23.969
10	25.790	25.788	36.207	199.4	0.039	24.010
20	25.636	25.631	36.219	202.2	0.078	24.068
30	25.309	25.303	36.311	202.6	0.116	24.239
50	24.599	24.588	36.358	209.0	0.187	24.493
75	23.982	23.966	36.520	202.3	0.270	24.802
100	23.067	23.047	36.711	208.5	0.346	25.218
125	22.626	22.601	36.876	203.2	0.412	25.473
150	22.281	22.251	36.831	204.7	0.475	25.538
200	21.337	21.298	36.794	195.8	0.596	25.778
250	19.178	19.133	36.630	185.5	0.699	26.234
300	18.291	18.238	36.573	193.2	0.789	26.418
400	16.928	16.862	36.349	184.3	0.955	26.583

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$
470	2	15.344	15.271	36.069	167.7
367	4	17.553	17.490	36.456	189.0
260	6	19.119	19.072	36.625	182.5
179	8	22.126	22.091	36.858	199.3
99	10	22.959	22.939	36.704	206.1
28	12	25.527	25.521	36.264	203.3
3	14	25.989	25.989	36.212	202.0

Abaco April – May 2009 R/V Ronald H Brown
 CTD Station 60 (CTD060)
 Latitude 26.995 N Longitude 79.200 W
 03-May-2009 18:13 Z



B WOCE Summary File

Table 18: Abaco Cruise – WOCE Summary File

SHIP/CHS EXPOCODE	WOCE SECT	STN	CAST TYPE	CAST DATE	UTC TIME	EVENT CODE	LAT	LOX	NAV	UNC DPH	HT-ABV BTM	WIRE OUT	MAX PRS	NO BTLS	PARA- METERS	COMMENTS
WBTSRHH	AB0904	1	ROS	04/18/2009	15:05	BE	26.528N	76.892W	GPS	310	23	303	314	8	1,2	nisk 1 leaker
WBTSRHH	AB0904	1	ROS	04/18/2009	15:38	BO	26.525N	76.892W	GPS							
WBTSRHH	AB0904	1	ROS	04/18/2009	16:05	EN	26.525N	76.892W	GPS							
WBTSRHH	AB0904	2	ROS	04/18/2009	17:12	BE	26.517N	76.832W	GPS							
WBTSRHH	AB0904	2	ROS	04/18/2009	17:41	BO	26.517N	76.832W	GPS	1111	16	1106	1123	13	1,2	
WBTSRHH	AB0904	2	ROS	04/18/2009	18:37	EN	26.517N	76.832W	GPS							
WBTSRHH	AB0904	3	ROS	04/18/2009	20:46	BE	26.499N	76.743W	GPS							
WBTSRHH	AB0904	3	ROS	04/18/2009	21:58	BO	26.500N	76.743W	GPS	3832	19	3777	3895	22	1,2	nisk 15, 23 did not close (DNC), nisk 22
WBTSRHH	AB0904	3	ROS	04/19/2009	00:07	EN	26.502N	76.746W	GPS							
WBTSRHH	AB0904	4	ROS	04/19/2009	01:26	BE	26.500N	76.655W	GPS							
WBTSRHH	AB0904	4	ROS	04/19/2009	02:54	BO	26.513N	76.652W	GPS	4511	31	-999	4604	23	1,2	nisk 15, 18 DNC
WBTSRHH	AB0904	4	ROS	04/19/2009	05:15	EN	26.524N	76.650W	GPS							
WBTSRHH	AB0904	5	ROS	04/19/2009	06:25	BE	26.496N	76.565W	GPS							
WBTSRHH	AB0904	5	ROS	04/19/2009	07:53	BO	26.500N	76.565W	GPS	4811	21	4768	4899	23	1,2	nisk 18 fired on deck
WBTSRHH	AB0904	5	ROS	04/19/2009	10:17	EN	26.510N	76.566W	GPS							
WBTSRHH	AB0904	6	ROS	04/19/2009	12:07	BE	26.497N	76.429W	GPS							
WBTSRHH	AB0904	6	ROS	04/19/2009	13:34	BO	26.504N	76.474W	GPS	4820	22	4785	4909	23	1,2	
WBTSRHH	AB0904	6	ROS	04/19/2009	15:57	EN	26.513N	76.474W	GPS							
WBTSRHH	AB0904	7	ROS	04/19/2009	17:22	BE	26.492N	76.347W	GPS							
WBTSRHH	AB0904	7	ROS	04/19/2009	18:48	BO	26.496N	76.347W	GPS	4844	18	4790	4933	23	1,2	nisk 15 DNC
WBTSRHH	AB0904	7	ROS	04/19/2009	21:09	EN	26.503N	76.347W	GPS							
WBTSRHH	AB0904	8	ROS	04/19/2009	22:53	BE	26.496N	76.218W	GPS							
WBTSRHH	AB0904	8	ROS	04/20/2009	00:24	BO	26.501N	76.218W	GPS	4797	17	4750	4884	23	1,2	nisk 5, 15, 20 DNC
WBTSRHH	AB0904	8	ROS	04/20/2009	02:46	EN	26.504N	76.218W	GPS							
WBTSRHH	AB0904	9	ROS	04/20/2009	04:03	BE	26.500N	76.087W	GPS							
WBTSRHH	AB0904	9	ROS	04/20/2009	05:33	BO	26.500N	76.087W	GPS	4785	17	4718	4872	23	1,2	
WBTSRHH	AB0904	9	ROS	04/20/2009	07:52	EN	26.500N	76.087W	GPS							
WBTSRHH	AB0904	10	ROS	04/20/2009	09:06	BE	26.499N	75.897W	GPS							
WBTSRHH	AB0904	10	ROS	04/20/2009	10:34	BO	26.499N	75.897W	GPS	4722	20	4654	4808	23	1,2	nisk 15, 18 DNC
WBTSRHH	AB0904	10	ROS	04/20/2009	12:54	EN	26.499N	75.897W	GPS							
WBTSRHH	AB0904	11	ROS	04/20/2009	14:22	BE	26.499N	75.703W	GPS							
WBTSRHH	AB0904	11	ROS	04/20/2009	15:49	BO	26.500N	75.703W	GPS	4673	18	4606	4757	23	1,2	
WBTSRHH	AB0904	11	ROS	04/20/2009	18:33	EN	26.500N	75.703W	GPS							
WBTSRHH	AB0904	12	ROS	04/20/2009	19:54	BE	26.498N	75.454W	GPS							
WBTSRHH	AB0904	12	ROS	04/20/2009	21:18	BO	26.499N	75.500W	GPS	4667	18	4600	4752	23	1,2	
WBTSRHH	AB0904	12	ROS	04/21/2009	00:07	EN	26.499N	75.500W	GPS							
WBTSRHH	AB0904	13	ROS	04/21/2009	01:48	BE	26.500N	75.300W	GPS							
WBTSRHH	AB0904	13	ROS	04/21/2009	03:13	BO	26.500N	75.300W	GPS	4617	18	4700	4700	23	1,2	
WBTSRHH	AB0904	13	ROS	04/21/2009	05:20	EN	26.500N	75.300W	GPS							
WBTSRHH	AB0904	14	ROS	04/21/2009	06:35	BE	26.500N	75.084W	GPS							
WBTSRHH	AB0904	14	ROS	04/21/2009	07:59	BO	26.500N	75.083W	GPS	4589	17	4671	4670	23	1,2	
WBTSRHH	AB0904	14	ROS	04/21/2009	10:13	EN	26.500N	75.083W	GPS							
WBTSRHH	AB0904	15	ROS	04/21/2009	11:55	BE	26.500N	74.800W	GPS							
WBTSRHH	AB0904	15	ROS	04/21/2009	13:18	BO	26.500N	74.800W	GPS	4515	19	4595	4594	23	1,2	nisk 22, 23 vent cap open
WBTSRHH	AB0904	15	ROS	04/21/2009	16:01	EN	26.500N	74.800W	GPS							
WBTSRHH	AB0904	16	ROS	04/21/2009	17:38	BE	26.500N	74.517W	GPS							
WBTSRHH	AB0904	16	ROS	04/21/2009	19:00	BO	26.500N	74.517W	GPS	4477	19	4413	4556	23	1,2	
WBTSRHH	AB0904	16	ROS	04/21/2009	21:43	EN	26.500N	74.517W	GPS							
WBTSRHH	AB0904	17	ROS	04/21/2009	23:14	BE	26.500N	74.233W	GPS							
WBTSRHH	AB0904	17	ROS	04/22/2009	00:39	BO	26.500N	74.233W	GPS	4523	19	4458	4602	23	1,2	
WBTSRHH	AB0904	17	ROS	04/22/2009	03:18	EN	26.500N	74.233W	GPS							
WBTSRHH	AB0904	18	ROS	04/22/2009	05:15	BE	26.500N	73.867W	GPS							
WBTSRHH	AB0904	18	ROS	04/22/2009	06:39	BO	26.500N	73.867W	GPS	4722	2	4655	4808	23	1,2	
WBTSRHH	AB0904	18	ROS	04/22/2009	08:54	EN	26.500N	73.867W	GPS							
WBTSRHH	AB0904	18	ROS	04/22/2009	10:50	BE	26.500N	73.498W	GPS							
WBTSRHH	AB0904	19	ROS	04/22/2009	12:26	BO	26.501N	73.498W	GPS	4939	19	4868	5031	23	1,2	
WBTSRHH	AB0904	19	ROS	04/22/2009	15:23	EN	26.501N	73.498W	GPS							
WBTSRHH	AB0904	20	ROS	04/22/2009	17:12	BE	26.501N	73.132W	GPS							
WBTSRHH	AB0904	20	ROS	04/22/2009	18:44	BO	26.500N	73.133W	GPS	5032	20	4959	5126	23	1,2	
WBTSRHH	AB0904	20	ROS	04/22/2009	21:36	EN	26.500N	73.133W	GPS							
WBTSRHH	AB0904	21	ROS	04/22/2009	23:25	BE	26.498N	72.767W	GPS							
WBTSRHH	AB0904	21	ROS	04/23/2009	01:00	BO	26.498N	72.767W	GPS	5117	18	5044	5214	23	1,2	

WBTSRHB	AB0904	21	1	ROS	04/23/2009	03:21	EN	26.498N	72.767W	GPS	5168	17	5095	5267	23	1,2			
WBTSRHB	AB0904	22	1	ROS	04/23/2009	05:20	BE	26.500N	72.384W	GPS									
WBTSRHB	AB0904	22	1	ROS	04/23/2009	06:57	BO	26.500N	72.383W	GPS									
WBTSRHB	AB0904	22	1	ROS	04/23/2009	09:10	EN	26.500N	72.383W	GPS									
WBTSRHB	AB0904	23	1	ROS	04/23/2009	11:13	BE	26.500N	72.000W	GPS	5267	20	5192	5369	23	1,2			
WBTSRHB	AB0904	23	1	ROS	04/23/2009	12:52	BO	26.500N	72.000W	GPS									
WBTSRHB	AB0904	23	1	ROS	04/23/2009	15:56	EN	26.500N	72.000W	GPS									
WBTSRHB	AB0904	24	1	ROS	04/23/2009	18:39	BE	26.500N	71.503W	GPS	5402	21	5326	5509	23	1,2			
WBTSRHB	AB0904	24	1	ROS	04/23/2009	20:15	BO	26.500N	71.500W	GPS									
WBTSRHB	AB0904	24	1	ROS	04/23/2009	23:05	EN	26.500N	71.500W	GPS									
WBTSRHB	AB0904	25	1	ROS	04/24/2009	01:43	BE	26.500N	71.000W	GPS									nisk 25 leaker
WBTSRHB	AB0904	25	1	ROS	04/24/2009	03:23	BO	26.500N	71.000W	GPS	5468	19	5392	5576	23	1,2			
WBTSRHB	AB0904	25	1	ROS	04/24/2009	06:24	EN	26.500N	71.000W	GPS									nisk 27 DNC
WBTSRHB	AB0904	26	1	ROS	04/24/2009	08:59	BO	26.501N	70.501W	GPS	5471	20	5395	5579	23	1,2			
WBTSRHB	AB0904	26	1	ROS	04/24/2009	10:40	BO	26.501N	70.502W	GPS									nisk 8, 12 DNC
WBTSRHB	AB0904	26	1	ROS	04/24/2009	13:13	EN	26.501N	70.502W	GPS									
WBTSRHB	AB0904	27	1	ROS	04/24/2009	15:57	BE	26.500N	70.000W	GPS									
WBTSRHB	AB0904	27	1	ROS	04/24/2009	17:33	BO	26.500N	70.000W	GPS	5472	20	5395	5580	23	1,2			
WBTSRHB	AB0904	27	1	ROS	04/24/2009	20:22	EN	26.500N	70.000W	GPS									
WBTSRHB	AB0904	28	1	ROS	04/24/2009	22:59	BE	26.500N	69.508W	GPS									
WBTSRHB	AB0904	28	1	ROS	04/25/2009	00:48	BO	26.500N	69.502W	GPS	5294	25	5219	5397	23	1,2			
WBTSRHB	AB0904	28	1	ROS	04/25/2009	03:16	EN	26.500N	69.502W	GPS									
WBTSRHB	AB0904	29	1	ROS	04/27/2009	01:56	BE	26.375N	75.706W	GPS									
WBTSRHB	AB0904	29	1	ROS	04/27/2009	03:43	BO	26.375N	75.706W	GPS	4601	99	4535	4685	11	1,2			Acounstic release test, no bottles fired
WBTSRHB	AB0904	29	1	ROS	04/27/2009	05:13	EN	26.375N	75.706W	GPS									
WBTSRHB	AB0904	30	1	ROS	04/27/2009	05:39	BO	26.375N	75.706W	GPS									
WBTSRHB	AB0904	30	1	ROS	04/27/2009	06:43	BO	26.375N	75.706W	GPS	3351	409	3309	3402	11	1,2			
WBTSRHB	AB0904	30	1	ROS	04/27/2009	08:35	EN	26.375N	75.706W	GPS									
WBTSRHB	AB0904	31	1	ROS	04/28/2009	06:26	BE	26.493N	76.472W	GPS									
WBTSRHB	AB0904	31	1	ROS	04/28/2009	07:53	BO	26.493N	76.472W	GPS	4817	21	4784	4908	11	1,2			
WBTSRHB	AB0904	31	1	ROS	04/28/2009	10:15	EN	26.493N	76.472W	GPS									
WBTSRHB	AB0904	32	1	ROS	04/29/2009	00:25	BE	26.452N	76.630W	GPS									
WBTSRHB	AB0904	32	1	ROS	04/29/2009	01:22	BO	26.455N	76.630W	GPS	3343	379	3340	3399	11	1,2			nisk 12 DNC
WBTSRHB	AB0904	32	1	ROS	04/29/2009	03:30	EN	26.463N	76.630W	GPS									
WBTSRHB	AB0904	33	1	ROS	04/30/2009	05:25	BE	26.467N	76.681W	GPS									
WBTSRHB	AB0904	33	1	ROS	04/30/2009	06:41	BO	26.473N	76.727W	GPS	3570	301	3800	3801	11	1,2			
WBTSRHB	AB0904	33	1	ROS	04/30/2009	08:45	EN	26.484N	76.727W	GPS									
WBTSRHB	AB0904	34	1	ROS	04/30/2009	21:45	BE	26.461N	76.711W	GPS									
WBTSRHB	AB0904	34	1	ROS	04/30/2009	23:08	BO	26.466N	76.711W	GPS	4032	47	3981	4099	11	1,2			
WBTSRHB	AB0904	34	1	ROS	05/01/2009	01:19	EN	26.478N	76.712W	GPS									
WBTSRHB	AB0904	35	1	ROS	05/01/2009	02:20	BE	26.366N	76.746W	GPS									
WBTSRHB	AB0904	35	1	ROS	05/01/2009	03:37	BO	26.372N	76.746W	GPS	2468	400	3986	4100	11	1,2			
WBTSRHB	AB0904	35	1	ROS	05/01/2009	05:44	EN	26.380N	76.746W	GPS									
WBTSRHB	AB0904	36	1	ROS	05/01/2009	21:33	BE	26.433N	78.667W	GPS	743	19	730	749	12	1,2			
WBTSRHB	AB0904	36	1	ROS	05/01/2009	21:53	BO	26.433N	78.667W	GPS									
WBTSRHB	AB0904	36	1	ROS	05/01/2009	22:33	EN	26.433N	78.667W	GPS									
WBTSRHB	AB0904	37	1	ROS	05/01/2009	23:38	BE	26.346N	78.711W	GPS									
WBTSRHB	AB0904	37	1	ROS	05/01/2009	23:56	BO	26.346N	78.711W	GPS	694	19	682	700	10	1,2			
WBTSRHB	AB0904	37	1	ROS	05/02/2009	00:26	EN	26.346N	78.711W	GPS									
WBTSRHB	AB0904	38	1	ROS	05/02/2009	01:43	BE	26.250N	78.767W	GPS	502	19	492	506	8	1,2			
WBTSRHB	AB0904	38	1	ROS	05/02/2009	01:58	BO	26.250N	78.767W	GPS									
WBTSRHB	AB0904	38	1	ROS	05/02/2009	02:23	EN	26.250N	78.767W	GPS									
WBTSRHB	AB0904	39	1	ROS	05/02/2009	03:06	BE	26.168N	78.800W	GPS									
WBTSRHB	AB0904	39	1	ROS	05/02/2009	03:29	BO	26.166N	78.800W	GPS	428	28	419	431	8	1,2			
WBTSRHB	AB0904	39	1	ROS	05/02/2009	03:52	EN	26.166N	78.800W	GPS									
WBTSRHB	AB0904	40	1	ROS	05/02/2009	05:08	BE	26.069N	78.849W	GPS									
WBTSRHB	AB0904	40	1	ROS	05/02/2009	05:25	BO	26.067N	78.849W	GPS	286	19	279	288	7	1,2			
WBTSRHB	AB0904	40	1	ROS	05/02/2009	05:42	EN	26.067N	78.849W	GPS									
WBTSRHB	AB0904	41	1	ROS	05/02/2009	08:48	BE	26.058N	79.179W	GPS									
WBTSRHB	AB0904	41	1	ROS	05/02/2009	08:59	BO	26.058N	79.226W	GPS	304	17	298	306	7	1,2			
WBTSRHB	AB0904	41	1	ROS	05/02/2009	09:17	EN	26.058N	79.226W	GPS									
WBTSRHB	AB0904	42	1	ROS	05/02/2009	09:57	BE	26.051N	79.313W	GPS									
WBTSRHB	AB0904	42	1	ROS	05/02/2009	10:11	BO	26.051N	79.312W	GPS	471	18	463	475	8	1,2			
WBTSRHB	AB0904	42	1	ROS	05/02/2009	10:39	EN	26.058N	79.307W	GPS									
WBTSRHB	AB0904	43	1	ROS	05/02/2009	11:19	BE	26.036N	79.406W	GPS									
WBTSRHB	AB0904	43	1	ROS	05/02/2009	11:37	BO	26.043N	79.405W	GPS	580	20	571	585	8	1,2			

C WOCE Bottle Summary File

Table 19: Florida Current 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	BTL OXY	OXY FLAG
WBTSRHB	AB0904	1	1	1	2	20090418	1539	26.525N	76.892W	310	313	18.432	36.572	2	36.576	2	190.6	2	191.4	2
WBTSRHB	AB0904	1	1	2	2	20090418	1544	26.525N	76.892W	277	279	18.700	36.599	2	36.596	2	190.1	2	190.5	2
WBTSRHB	AB0904	1	1	3	2	20090418	1548	26.525N	76.892W	246	248	19.121	36.638	2	36.639	2	189.9	2	188.7	6
WBTSRHB	AB0904	1	1	4	2	20090418	1551	26.525N	76.892W	177	178	21.659	36.747	2	36.748	6	203.5	2	203.5	2
WBTSRHB	AB0904	1	1	5	2	20090418	1555	26.525N	76.892W	127	128	22.424	36.775	2	36.775	2	209.6	2	209.8	2
WBTSRHB	AB0904	1	1	6	2	20090418	1558	26.525N	76.892W	78	79	24.704	36.237	2	36.238	2	204.5	2	204.5	6
WBTSRHB	AB0904	1	1	7	2	20090418	1601	26.525N	76.892W	38	38	24.781	36.225	2	36.225	2	204.4	2	204.1	2
WBTSRHB	AB0904	1	1	8	2	20090418	1605	26.525N	76.892W	3	3	24.816	36.221	2	36.222	2	203.7	2	203.9	2
WBTSRHB	AB0904	1	1	9	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	10	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	11	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	12	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	13	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	14	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	15	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	16	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	17	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	18	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	19	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	20	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	21	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	22	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	23	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	1	1	24	2	20090418	1605	26.525N	76.892W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	1	2	20090418	1742	26.517N	76.832W	1110	1121	5.111	35.039	2	35.042	2	231.0	2	230.1	6
WBTSRHB	AB0904	2	1	2	2	20090418	1743	26.517N	76.832W	1111	1121	5.111	35.039	2	35.042	2	231.0	2	230.1	6
WBTSRHB	AB0904	2	1	3	2	20090418	1751	26.517N	76.832W	841	848	7.393	35.117	2	35.118	6	169.1	2	169.3	2
WBTSRHB	AB0904	2	1	4	2	20090418	1755	26.517N	76.832W	741	747	9.423	35.257	2	35.257	2	144.9	2	144.6	6
WBTSRHB	AB0904	2	1	5	2	20090418	1801	26.517N	76.832W	594	599	13.078	35.714	2	35.717	6	153.4	2	152.5	2
WBTSRHB	AB0904	2	1	6	2	20090418	1806	26.517N	76.832W	446	449	16.764	36.318	2	36.324	2	182.5	2	182.5	2
WBTSRHB	AB0904	2	1	7	2	20090418	1811	26.517N	76.832W	350	353	18.024	36.549	2	36.550	2	196.8	2	196.9	2
WBTSRHB	AB0904	2	1	8	2	20090418	1815	26.517N	76.832W	250	252	19.283	36.649	2	36.652	2	187.6	2	188.9	2
WBTSRHB	AB0904	2	1	9	2	20090418	1819	26.517N	76.832W	200	202	20.537	36.699	2	36.700	2	194.1	2	194.1	2
WBTSRHB	AB0904	2	1	10	2	20090418	1823	26.517N	76.832W	148	149	22.158	36.801	2	36.801	2	213.2	2	212.0	2
WBTSRHB	AB0904	2	1	11	2	20090418	1826	26.517N	76.832W	97	98	23.530	36.723	2	36.681	4	208.8	2	208.8	2
WBTSRHB	AB0904	2	1	12	2	20090418	1830	26.517N	76.832W	49	49	24.710	36.241	2	36.240	2	204.9	2	205.0	2
WBTSRHB	AB0904	2	1	13	2	20090418	1835	26.517N	76.832W	3	3	24.899	36.217	2	36.219	2	204.3	2	204.3	2
WBTSRHB	AB0904	2	1	14	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	15	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	16	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	17	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	18	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	19	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	20	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	21	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	22	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	23	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	2	1	24	2	20090418	1835	26.517N	76.832W	999	999	999.000	999.000	9	999.000	9	999.0	9	999.0	9
WBTSRHB	AB0904	3	1	1	2	20090418	2201	26.500N	76.743W	3833	3893	2.236	34.889	2	34.893	4	263.1	2	263.2	2
WBTSRHB	AB0904	3	1	2	2	20090418	2212	26.500N	76.743W	3447	3498	2.353	34.901	2	34.901	2	266.3	2	266.8	2
WBTSRHB	AB0904	3	1	3	2	20090418	2220	26.500N	76.743W	3157	3202	2.792	34.926	2	34.926	2	264.5	2	264.6	2
WBTSRHB	AB0904	3	1	4	2	20090418	2226	26.500N	76.743W	2962	3002	2.982	34.937	2	34.937	2	262.6	2	263.2	2
WBTSRHB	AB0904	3	1	5	2	20090418	2233	26.500N	76.743W	2666	2701	3.220	34.950	2	34.949	2	261.7	2	261.7	2
WBTSRHB	AB0904	3	1	6	2	20090418	2239	26.500N	76.743W	2467	2498	3.350	34.952	2	34.953	2	262.2	2	262.6	2
WBTSRHB	AB0904	3	1	7	2	20090418	2247	26.500N	76.743W	2173	2198	3.428	34.952	2	34.952	2	262.9	2	262.9	2
WBTSRHB	AB0904	3	1	8	2	20090418	2253	26.500N	76.743W	1979	2002	3.594	34.960	2	34.961	2	261.8	2	262.8	2
WBTSRHB	AB0904	3	1	9	2	20090418	2300	26.500N	76.743W	1684	1702	4.113	34.987	2	34.987	2	255.2	2	255.2	2
WBTSRHB	AB0904	3	1	10	2	20090418	2306	26.500N	76.743W	1486	1501	4.281	34.997	2	34.997	2	251.6	2	251.6	2
WBTSRHB	AB0904	3	1	11	2	20090418	2314	26.500N	76.743W	1190	1201	4.709	35.024	2	35.024	2	241.7	2	241.7	2
WBTSRHB	AB0904	3	1	12	2	20090418	2319	26.500N	76.743W	991	1000	5.993	35.077	2	35.077	2	205.8	2	206.5	2
WBTSRHB	AB0904	3	1	13	2	20090418	2324	26.500N	76.743W	843	850	8.403	35.157	2	35.158	2	147.8	2	147.8	2
WBTSRHB	AB0904	3	1	14	2	20090418	2329	26.500N	76.743W	744	750	10.332	35.346	2	35.349	2	142.2	2	142.3	2

WBTSRHH	AB0904	3	1	15	2	20090418	2334	26.500N	76.744W	592	596	13.793	35.822	2	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	3	1	16	2	20090418	2339	26.500N	76.744W	450	454	16.878	36.339	2	36.347	4	184.4	2	184.3
WBTSRHH	AB0904	3	1	17	2	20090418	2343	26.500N	76.745W	354	356	18.045	36.546	2	36.548	2	194.9	2	194.9
WBTSRHH	AB0904	3	1	18	2	20090418	2348	26.500N	76.745W	250	252	19.201	36.651	2	36.653	6	185.9	2	186.1
WBTSRHH	AB0904	3	1	19	2	20090418	2351	26.501N	76.746W	200	201	20.387	36.712	2	36.712	2	186.6	2	187.7
WBTSRHH	AB0904	3	1	20	2	20090418	2355	26.501N	76.746W	151	152	21.589	36.764	2	36.767	2	182.8	2	202.8
WBTSRHH	AB0904	3	1	21	2	20090418	2359	26.501N	76.746W	98	99	22.842	36.807	2	36.807	2	212.2	2	212.8
WBTSRHH	AB0904	3	1	22	2	20090419	0004	26.502N	76.746W	49	50	23.766	36.851	2	36.851	2	212.2	2	212.8
WBTSRHH	AB0904	3	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	3	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	4	1	1	2	20090419	0259	26.514N	76.651W	4511	4590	2.251	34.884	2	34.884	2	260.7	2	261.0
WBTSRHH	AB0904	4	1	2	2	20090419	0306	26.516N	76.650W	4224	4294	2.249	34.887	2	34.887	2	262.2	2	262.2
WBTSRHH	AB0904	4	1	3	2	20090419	0313	26.518N	76.650W	3928	3991	2.265	34.893	2	34.893	2	263.8	2	263.8
WBTSRHH	AB0904	4	1	4	2	20090419	0320	26.519N	76.649W	3644	3700	2.327	34.898	2	34.898	2	265.5	2	265.5
WBTSRHH	AB0904	4	1	5	2	20090419	0326	26.520N	76.649W	3349	3398	2.473	34.908	2	34.910	2	266.5	2	266.5
WBTSRHH	AB0904	4	1	6	2	20090419	0334	26.521N	76.650W	3066	3109	2.826	34.929	2	34.929	2	264.0	2	264.1
WBTSRHH	AB0904	4	1	7	2	20090419	0343	26.521N	76.650W	2776	2813	3.111	34.944	2	34.944	2	261.4	2	261.8
WBTSRHH	AB0904	4	1	8	2	20090419	0351	26.521N	76.650W	2482	2513	3.319	34.950	2	34.950	2	262.6	2	262.6
WBTSRHH	AB0904	4	1	9	2	20090419	0359	26.521N	76.650W	2232	2258	3.426	34.954	2	34.953	2	262.4	2	262.4
WBTSRHH	AB0904	4	1	10	2	20090419	0406	26.521N	76.650W	1985	2007	3.602	34.956	2	34.956	2	262.3	2	262.3
WBTSRHH	AB0904	4	1	11	2	20090419	0413	26.521N	76.650W	1737	1756	3.758	34.961	2	34.961	2	261.1	2	261.2
WBTSRHH	AB0904	4	1	12	2	20090419	0420	26.521N	76.650W	1488	1503	4.210	34.983	2	34.983	2	253.3	2	253.7
WBTSRHH	AB0904	4	1	13	2	20090419	0426	26.521N	76.650W	1240	1251	4.545	35.015	2	35.015	2	245.7	2	245.4
WBTSRHH	AB0904	4	1	14	2	20090419	0433	26.521N	76.650W	990	999	6.718	35.101	2	35.102	2	186.4	2	187.0
WBTSRHH	AB0904	4	1	15	2	20090419	0440	26.521N	76.650W	742	749	11.154	35.446	2	35.446	2	189.0	2	189.0
WBTSRHH	AB0904	4	1	16	2	20090419	0447	26.522N	76.650W	496	500	16.497	36.267	2	36.268	2	178.0	2	177.5
WBTSRHH	AB0904	4	1	17	2	20090419	0453	26.522N	76.650W	349	351	18.126	36.561	2	36.560	2	194.8	2	196.4
WBTSRHH	AB0904	4	1	18	2	20090419	0457	26.523N	76.650W	248	250	19.226	36.658	2	36.658	2	208.5	2	208.5
WBTSRHH	AB0904	4	1	19	2	20090419	0500	26.523N	76.650W	198	199	20.216	36.697	2	36.697	2	189.2	2	188.5
WBTSRHH	AB0904	4	1	20	2	20090419	0504	26.523N	76.650W	149	150	21.673	36.745	2	36.746	2	200.1	2	200.3
WBTSRHH	AB0904	4	1	21	2	20090419	0507	26.524N	76.650W	98	99	22.720	36.816	2	36.816	2	213.6	2	213.6
WBTSRHH	AB0904	4	1	22	2	20090419	0512	26.524N	76.650W	50	50	23.663	36.824	2	36.824	2	212.1	2	211.8
WBTSRHH	AB0904	4	1	23	2	20090419	0515	26.524N	76.650W	3	3	24.014	36.699	2	36.699	2	208.5	2	208.5
WBTSRHH	AB0904	4	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	5	1	1	2	20090419	0756	26.500N	76.565W	4811	4898	2.263	34.881	2	34.881	2	258.8	2	258.4
WBTSRHH	AB0904	5	1	2	2	20090419	0808	26.500N	76.565W	4330	4301	2.250	34.888	2	34.888	6	262.2	2	261.7
WBTSRHH	AB0904	5	1	3	2	20090419	0816	26.500N	76.565W	3938	4001	2.272	34.892	2	34.892	2	263.7	2	263.7
WBTSRHH	AB0904	5	1	4	2	20090419	0824	26.500N	76.565W	3644	3700	2.368	34.899	2	34.898	2	265.8	2	265.6
WBTSRHH	AB0904	5	1	5	2	20090419	0831	26.500N	76.565W	3352	3402	2.463	34.908	2	34.908	2	266.4	2	266.3
WBTSRHH	AB0904	5	1	6	2	20090419	0839	26.500N	76.565W	3057	3100	2.774	34.926	2	34.926	2	264.4	2	264.1
WBTSRHH	AB0904	5	1	7	2	20090419	0846	26.500N	76.565W	2762	2799	2.959	34.936	2	34.936	2	263.0	2	262.9
WBTSRHH	AB0904	5	1	8	2	20090419	0853	26.500N	76.565W	2469	2501	3.189	34.946	2	34.946	6	262.5	2	262.5
WBTSRHH	AB0904	5	1	9	2	20090419	0900	26.500N	76.565W	2224	2251	3.365	34.951	2	34.951	2	262.4	2	262.5
WBTSRHH	AB0904	5	1	10	2	20090419	0907	26.501N	76.565W	1977	1999	3.549	34.956	2	34.956	2	262.2	2	262.2
WBTSRHH	AB0904	5	1	11	2	20090419	0914	26.501N	76.565W	1731	1750	3.782	34.961	2	34.961	2	261.5	2	261.0
WBTSRHH	AB0904	5	1	12	2	20090419	0920	26.502N	76.565W	1486	1501	4.191	34.990	2	34.990	2	254.3	2	253.9
WBTSRHH	AB0904	5	1	13	2	20090419	0927	26.502N	76.565W	1242	1254	4.823	35.031	2	35.031	2	239.8	2	239.5
WBTSRHH	AB0904	5	1	14	2	20090419	0934	26.503N	76.565W	993	1002	7.072	35.097	2	35.098	2	166.2	2	173.0
WBTSRHH	AB0904	5	1	15	2	20090419	0941	26.504N	76.565W	743	750	11.299	35.465	2	36.802	4	140.6	2	211.6
WBTSRHH	AB0904	5	1	16	2	20090419	0948	26.505N	76.565W	496	500	16.803	36.325	2	36.325	2	183.0	2	182.6
WBTSRHH	AB0904	5	1	17	2	20090419	0953	26.506N	76.565W	347	350	18.265	36.577	2	36.578	2	196.5	2	195.4
WBTSRHH	AB0904	5	1	18	2	20090419	0957	26.507N	76.565W	249	251	19.433	36.651	2	36.651	2	203.7	2	203.7
WBTSRHH	AB0904	5	1	19	2	20090419	1000	26.507N	76.565W	198	200	20.484	36.698	2	36.698	2	199.0	2	198.4
WBTSRHH	AB0904	5	1	20	2	20090419	1004	26.508N	76.565W	149	150	21.423	36.741	2	36.741	2	208.1	2	211.3
WBTSRHH	AB0904	5	1	21	2	20090419	1008	26.509N	76.566W	99	99	22.360	36.798	2	36.798	2	212.6	2	211.7
WBTSRHH	AB0904	5	1	22	2	20090419	1011	26.509N	76.566W	49	50	23.241	36.802	2	36.802	2	208.3	2	208.3
WBTSRHH	AB0904	5	1	23	2	20090419	1016	26.510N	76.566W	4	4	23.956	36.713	2	36.712	2	208.5	2	208.3
WBTSRHH	AB0904	5	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	6	1	1	2	20090419	1337	26.504N	76.474W	4820	4907	2.224	34.877	2	34.877	2	258.1	2	258.7
WBTSRHH	AB0904	6	1	2	2	20090419	1351	26.505N	76.474W	4215	4286	2.262	34.889	2	34.889	2	264.6	2	264.0
WBTSRHH	AB0904	6	1	3	2	20090419	1358	26.505N	76.474W	3938	4001	2.280	34.893	2	34.893	6	266.3	2	265.6
WBTSRHH	AB0904	6	1	4	2	20090419	1406	26.505N	76.474W	3645	3701	2.331	34.898	2	34.898	2	267.8	2	267.2
WBTSRHH	AB0904	6	1	5	2	20090419	1414	26.505N	76.474W	3352	3401	2.434	34.906	2	34.906	2	268.4	2	268.1
WBTSRHH	AB0904	6	1	6	2	20090419	1421	26.505N	76.474W	3058	3101	2.691	34.922	2	34.923	2	267.1	2	266.8
WBTSRHH	AB0904	6	1	7	2	20090419	1429	26.505N	76.474W	2765	2802	2.909	34.936	2	34.936	2	265.0	2	264.3
WBTSRHH	AB0904	6	1	8	2	20090419	1437	26.505N	76.474W	2470	2501	3.203	34.952	2	34.953	2	262.0	2	262.0

WBTSRHH	AB0904	6	1	9	2	20090419	1444	26.505N	76.474W	2224	2251	3.418	34.961	2	34.961	263.3	2	263.0	2	
WBTSRHH	AB0904	6	1	10	2	20090419	1450	26.505N	76.474W	1979	2001	3.613	34.962	2	34.962	264.5	2	262.9	2	
WBTSRHH	AB0904	6	1	11	2	20090419	1457	26.505N	76.474W	1730	1748	3.891	34.974	2	34.974	261.5	2	260.2	2	
WBTSRHH	AB0904	6	1	12	2	20090419	1504	26.506N	76.474W	1485	1500	4.285	34.999	2	35.000	264.2	2	253.5	2	
WBTSRHH	AB0904	6	1	13	2	20090419	1510	26.506N	76.474W	1240	1252	5.060	35.044	2	35.045	263.6	2	234.6	2	
WBTSRHH	AB0904	6	1	14	2	20090419	1517	26.507N	76.474W	993	1002	7.304	35.062	2	35.063	156.8	2	156.5	2	
WBTSRHH	AB0904	6	1	15	2	20090419	1521	26.508N	76.474W	742	749	11.804	35.532	2	36.240	143.5	2	177.6	4	
WBTSRHH	AB0904	6	1	16	2	20090419	1534	26.509N	76.474W	495	499	17.117	36.382	2	36.383	190.1	2	187.3	2	
WBTSRHH	AB0904	6	1	17	2	20090419	1536	26.509N	76.474W	345	347	18.446	36.589	2	36.590	192.5	2	193.1	2	
WBTSRHH	AB0904	6	1	18	2	20090419	1540	26.510N	76.474W	243	245	20.083	36.675	2	36.675	210.2	2	208.7	2	
WBTSRHH	AB0904	6	1	19	2	20090419	1543	26.511N	76.474W	197	199	20.604	36.696	2	36.696	211.1	2	209.2	2	
WBTSRHH	AB0904	6	1	20	2	20090419	1546	26.511N	76.474W	148	149	21.362	36.732	2	36.733	208.7	2	209.5	2	
WBTSRHH	AB0904	6	1	21	2	20090419	1549	26.512N	76.474W	97	98	22.161	36.784	2	36.784	214.3	2	213.2	2	
WBTSRHH	AB0904	6	1	22	2	20090419	1553	26.512N	76.474W	48	48	23.145	36.815	2	36.817	210.3	2	211.1	2	
WBTSRHH	AB0904	6	1	23	2	20090419	1556	26.513N	76.474W	3	3	23.700	36.846	2	36.845	210.3	2	211.5	2	
WBTSRHH	AB0904	6	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999.000	-999	-999.000	-999.000	-999.000	9	-999.000	258.4	2	257.4	6
WBTSRHH	AB0904	7	1	1	2	20090419	1852	26.496N	76.347W	4844	4933	2.233	34.877	2	34.878	264.2	2	264.2	2	
WBTSRHH	AB0904	7	1	2	2	20090419	1904	26.496N	76.347W	4227	4298	2.267	34.889	2	34.889	266.1	2	265.7	2	
WBTSRHH	AB0904	7	1	3	2	20090419	1912	26.496N	76.347W	3935	3998	2.323	34.893	2	34.893	267.4	2	266.8	2	
WBTSRHH	AB0904	7	1	4	2	20090419	1919	26.496N	76.347W	3642	3698	2.323	34.898	2	34.898	267.4	2	266.8	2	
WBTSRHH	AB0904	7	1	5	2	20090419	1927	26.497N	76.347W	3347	3396	2.451	34.907	2	34.909	268.2	2	267.9	2	
WBTSRHH	AB0904	7	1	6	2	20090419	1934	26.497N	76.347W	3055	3098	2.646	34.920	2	34.919	267.0	2	266.9	2	
WBTSRHH	AB0904	7	1	7	2	20090419	1941	26.497N	76.347W	2763	2800	2.945	34.938	2	34.938	264.2	2	263.5	2	
WBTSRHH	AB0904	7	1	8	2	20090419	1949	26.498N	76.347W	2469	2500	3.182	34.952	6	34.952	262.4	2	261.8	2	
WBTSRHH	AB0904	7	1	9	2	20090419	1957	26.498N	76.347W	2224	2251	3.421	34.960	2	34.960	262.6	2	262.1	2	
WBTSRHH	AB0904	7	1	10	2	20090419	1957	26.498N	76.347W	2224	2251	3.421	34.960	2	34.960	262.6	2	262.1	2	
WBTSRHH	AB0904	7	1	11	2	20090419	2008	26.499N	76.347W	1731	1750	3.940	34.977	2	34.977	260.4	2	259.3	2	
WBTSRHH	AB0904	7	1	12	2	20090419	2015	26.499N	76.347W	1485	1501	4.382	35.008	2	35.009	251.9	2	250.4	2	
WBTSRHH	AB0904	7	1	13	2	20090419	2022	26.500N	76.347W	1240	1252	5.219	35.052	2	35.053	230.1	2	229.8	2	
WBTSRHH	AB0904	7	1	14	2	20090419	2029	26.500N	76.347W	990	999	7.582	35.058	6	35.056	147.2	2	147.6	2	
WBTSRHH	AB0904	7	1	15	2	20090419	2036	26.501N	76.347W	743	749	12.398	35.612	2	35.612	192.4	2	193.2	2	
WBTSRHH	AB0904	7	1	16	2	20090419	2043	26.501N	76.347W	496	500	17.467	36.449	2	36.449	192.4	2	192.4	2	
WBTSRHH	AB0904	7	1	17	2	20090419	2048	26.501N	76.347W	347	350	18.461	36.593	2	36.593	194.1	2	194.3	2	
WBTSRHH	AB0904	7	1	18	2	20090419	2052	26.501N	76.347W	247	249	20.208	36.680	2	36.680	212.7	2	210.8	6	
WBTSRHH	AB0904	7	1	19	2	20090419	2055	26.502N	76.347W	197	199	20.706	36.715	2	36.714	215.2	2	214.3	2	
WBTSRHH	AB0904	7	1	20	2	20090419	2059	26.502N	76.347W	147	148	21.115	36.712	2	36.711	208.5	2	209.6	2	
WBTSRHH	AB0904	7	1	21	2	20090419	2102	26.502N	76.347W	97	98	22.121	36.779	2	36.777	214.9	2	212.1	2	
WBTSRHH	AB0904	7	1	22	2	20090419	2105	26.503N	76.347W	48	48	22.734	36.803	2	36.802	217.1	2	216.1	2	
WBTSRHH	AB0904	7	1	23	2	20090419	2109	26.503N	76.347W	2	2	23.776	36.851	2	36.854	212.3	2	211.4	2	
WBTSRHH	AB0904	7	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999.000	-999	-999.000	-999.000	-999.000	9	-999.000	253.6	2	253.6	2
WBTSRHH	AB0904	8	1	1	2	20090420	0025	26.501N	76.218W	4797	4884	2.143	34.867	2	34.867	262.8	2	262.6	6	
WBTSRHH	AB0904	8	1	2	2	20090420	0034	26.501N	76.218W	4425	4501	2.247	34.885	2	-999.000	265.2	2	265.2	2	
WBTSRHH	AB0904	8	1	3	2	20090420	0042	26.501N	76.218W	4085	4152	2.265	34.890	2	34.890	267.0	2	266.8	2	
WBTSRHH	AB0904	8	1	4	2	20090420	0051	26.501N	76.218W	3743	3802	2.315	34.897	2	34.896	265.0	2	266.8	2	
WBTSRHH	AB0904	8	1	5	2	20090420	0059	26.501N	76.218W	3401	3451	2.442	34.906	2	-999.000	267.2	2	-999.0	9	
WBTSRHH	AB0904	8	1	6	2	20090420	0107	26.501N	76.218W	3058	3101	2.678	34.921	2	34.953	266.9	2	267.2	2	
WBTSRHH	AB0904	8	1	7	2	20090420	0115	26.501N	76.218W	2764	2801	2.937	34.938	2	34.938	263.7	2	263.9	2	
WBTSRHH	AB0904	8	1	8	2	20090420	0122	26.501N	76.218W	2469	2501	3.226	34.953	2	34.953	262.2	2	262.2	2	
WBTSRHH	AB0904	8	1	9	2	20090420	0129	26.501N	76.218W	2214	2240	3.472	34.961	2	34.960	262.8	2	262.6	2	
WBTSRHH	AB0904	8	1	10	2	20090420	0135	26.501N	76.218W	1977	2000	3.696	34.965	2	34.964	263.1	2	262.5	2	
WBTSRHH	AB0904	8	1	11	2	20090420	0142	26.501N	76.218W	1731	1750	4.001	34.981	2	34.980	259.9	2	258.9	2	
WBTSRHH	AB0904	8	1	12	2	20090420	0149	26.501N	76.218W	1481	1496	4.484	35.010	2	35.011	249.5	2	249.4	2	
WBTSRHH	AB0904	8	1	13	2	20090420	0156	26.501N	76.218W	1237	1249	5.476	35.068	2	35.067	221.0	2	221.6	2	
WBTSRHH	AB0904	8	1	14	2	20090420	0203	26.502N	76.218W	991	1000	7.772	35.067	2	35.067	145.0	2	145.0	2	
WBTSRHH	AB0904	8	1	15	2	20090420	0210	26.502N	76.218W	743	749	13.308	35.746	2	35.746	209.3	2	209.0	9	
WBTSRHH	AB0904	8	1	16	2	20090420	0216	26.502N	76.218W	495	499	17.795	36.542	2	36.541	209.3	2	209.4	6	
WBTSRHH	AB0904	8	1	17	2	20090420	0222	26.503N	76.218W	347	349	18.156	36.572	2	36.572	202.5	2	201.9	2	
WBTSRHH	AB0904	8	1	18	2	20090420	0226	26.503N	76.218W	247	249	19.699	36.660	2	36.660	187.5	2	196.5	4	
WBTSRHH	AB0904	8	1	19	2	20090420	0230	26.503N	76.218W	172	173	20.835	36.722	2	36.724	200.3	2	203.0	4	
WBTSRHH	AB0904	8	1	20	2	20090420	0233	26.503N	76.218W	147	148	21.280	36.725	2	-999.000	203.0	2	-999.0	9	
WBTSRHH	AB0904	8	1	21	2	20090420	0236	26.503N	76.218W	99	100	22.204	36.798	4	36.798	214.4	2	214.3	2	
WBTSRHH	AB0904	8	1	22	2	20090420	0241	26.504N	76.218W	53	53	22.892	36.797	2	36.797	207.8	2	229.8	4	
WBTSRHH	AB0904	8	1	23	2	20090420	0246	26.504N	76.218W	3	3	23.671	36.835	2	36.835	212.0	2	211.6	2	
WBTSRHH	AB0904	8	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999.000	-999	-999.000	-999.000	-999.000	9	-999.000	254.6	2	254.6	2
WBTSRHH	AB0904	9	1	1	2	20090420	0535	26.500N	76.087W	4785	4871	2.165	34.870	2	34.870	254.7	2	254.6	2	
WBTSRHH	AB0904	9	1	2	2	20090420	0546	26.500N	76.087W	4324	4398	2.251	34.886	2	34.891	263.5	2	265.7	2	

WBTSRHH	AB0904	9	1	3	2	20090420	0554	26.500N	76.087W	4003	4068	2.275	34.892	2	34.891	2	265.5	2	265.4
WBTSRHH	AB0904	9	1	4	2	20090420	0601	26.500N	76.087W	3691	3748	2.339	34.900	2	34.900	2	266.7	2	266.9
WBTSRHH	AB0904	9	1	5	2	20090420	0609	26.500N	76.087W	3373	3423	2.471	34.909	2	34.909	2	268.0	2	267.9
WBTSRHH	AB0904	9	1	6	2	20090420	0617	26.500N	76.087W	3055	3098	2.698	34.923	2	34.922	2	268.2	2	266.2
WBTSRHH	AB0904	9	1	7	2	20090420	0621	26.500N	76.087W	2762	2799	2.966	34.939	6	34.938	2	263.6	2	263.8
WBTSRHH	AB0904	9	1	8	2	20090420	0631	26.500N	76.087W	2467	2498	3.241	34.955	2	34.954	2	261.8	2	261.8
WBTSRHH	AB0904	9	1	9	2	20090420	0638	26.500N	76.087W	2222	2248	3.467	34.960	2	-999.000	2	263.0	2	262.4
WBTSRHH	AB0904	9	1	10	2	20090420	0644	26.500N	76.087W	1977	1999	3.707	34.965	2	34.964	2	263.1	2	262.6
WBTSRHH	AB0904	9	1	11	2	20090420	0651	26.500N	76.087W	1730	1748	4.042	34.983	2	34.982	2	258.4	2	258.0
WBTSRHH	AB0904	9	1	12	2	20090420	0658	26.500N	76.087W	1482	1497	4.526	35.014	2	35.014	2	248.9	2	248.1
WBTSRHH	AB0904	9	1	13	2	20090420	0705	26.500N	76.087W	1241	1253	5.458	35.065	2	35.065	2	222.0	2	222.7
WBTSRHH	AB0904	9	1	14	2	20090420	0711	26.500N	76.087W	988	997	8.177	35.133	2	35.132	2	142.6	2	149.9
WBTSRHH	AB0904	9	1	15	2	20090420	0718	26.500N	76.087W	742	748	13.840	35.825	2	35.825	2	161.0	2	161.1
WBTSRHH	AB0904	9	1	16	2	20090420	0725	26.500N	76.087W	495	499	17.845	36.550	2	36.550	2	211.2	2	210.9
WBTSRHH	AB0904	9	1	17	2	20090420	0730	26.500N	76.087W	346	349	18.125	36.564	2	36.564	2	200.7	2	201.1
WBTSRHH	AB0904	9	1	18	2	20090420	0734	26.500N	76.087W	246	248	19.198	36.638	2	36.637	2	193.7	2	193.8
WBTSRHH	AB0904	9	1	19	2	20090420	0737	26.500N	76.087W	198	200	20.522	36.698	2	36.697	2	197.6	2	198.4
WBTSRHH	AB0904	9	1	20	2	20090420	0740	26.500N	76.087W	148	149	21.944	36.774	2	36.771	2	208.1	2	208.9
WBTSRHH	AB0904	9	1	21	2	20090420	0744	26.500N	76.087W	99	100	22.330	36.804	2	36.804	2	215.2	2	216.1
WBTSRHH	AB0904	9	1	22	2	20090420	0748	26.500N	76.087W	48	48	23.280	36.846	2	36.846	2	212.4	2	212.8
WBTSRHH	AB0904	9	1	23	2	20090420	0752	26.500N	76.087W	3	3	23.269	36.846	2	36.844	2	212.4	2	212.6
WBTSRHH	AB0904	9	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	10	1	1	2	20090420	1037	26.499N	75.897W	4722	4806	2.212	34.877	2	34.876	2	257.8	2	256.8
WBTSRHH	AB0904	10	1	2	2	20090420	1048	26.499N	75.897W	4228	4299	2.255	34.888	2	34.888	2	263.4	2	263.4
WBTSRHH	AB0904	10	1	3	2	20090420	1056	26.499N	75.897W	3935	3998	2.277	34.893	2	34.892	2	265.6	2	265.2
WBTSRHH	AB0904	10	1	4	2	20090420	1103	26.499N	75.897W	3643	3699	2.336	34.899	2	34.899	2	267.3	2	267.1
WBTSRHH	AB0904	10	1	5	2	20090420	1111	26.499N	75.897W	3349	3398	2.462	34.908	2	34.907	2	267.9	2	267.9
WBTSRHH	AB0904	10	1	6	2	20090420	1118	26.499N	75.897W	3056	3099	2.674	34.922	2	34.920	2	266.5	2	266.4
WBTSRHH	AB0904	10	1	7	2	20090420	1125	26.499N	75.897W	2762	2798	2.932	34.937	2	34.935	2	263.7	2	263.8
WBTSRHH	AB0904	10	1	8	2	20090420	1133	26.499N	75.897W	2467	2498	3.223	34.950	2	34.949	2	262.9	2	262.5
WBTSRHH	AB0904	10	1	9	2	20090420	1139	26.499N	75.897W	2221	2247	3.491	34.963	2	34.962	2	263.2	2	261.2
WBTSRHH	AB0904	10	1	10	2	20090420	1146	26.499N	75.897W	1977	1999	3.704	34.965	2	34.964	2	262.3	2	262.1
WBTSRHH	AB0904	10	1	11	2	20090420	1153	26.499N	75.897W	1729	1748	4.001	34.980	2	35.016	4	251.3	2	246.8
WBTSRHH	AB0904	10	1	12	2	20090420	1200	26.499N	75.897W	1483	1498	4.455	35.011	2	35.010	2	249.5	2	249.1
WBTSRHH	AB0904	10	1	13	2	20090420	1206	26.499N	75.897W	1237	1249	5.433	35.066	2	35.065	2	221.9	2	222.1
WBTSRHH	AB0904	10	1	14	2	20090420	1213	26.499N	75.897W	990	999	7.934	35.138	6	35.137	6	161.5	2	159.9
WBTSRHH	AB0904	10	1	15	2	20090420	1219	26.499N	75.897W	742	748	13.727	35.809	2	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	10	1	16	2	20090420	1226	26.499N	75.897W	496	500	17.787	36.535	2	36.535	2	207.1	2	207.1
WBTSRHH	AB0904	10	1	17	2	20090420	1231	26.499N	75.897W	349	351	18.251	36.580	2	36.580	2	200.4	2	199.1
WBTSRHH	AB0904	10	1	18	2	20090420	1235	26.499N	75.897W	248	250	19.499	36.671	2	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	10	1	19	2	20090420	1238	26.499N	75.897W	197	198	20.651	36.710	2	36.710	2	186.3	2	196.0
WBTSRHH	AB0904	10	1	20	2	20090420	1242	26.499N	75.897W	147	148	21.857	36.766	2	36.767	2	205.3	2	203.7
WBTSRHH	AB0904	10	1	21	2	20090420	1245	26.499N	75.897W	98	99	22.298	36.795	2	36.795	2	207.9	2	210.9
WBTSRHH	AB0904	10	1	22	2	20090420	1248	26.499N	75.897W	48	48	23.231	36.781	2	36.781	2	212.5	2	212.2
WBTSRHH	AB0904	10	1	23	2	20090420	1253	26.499N	75.897W	3	3	23.269	36.779	2	36.779	2	213.1	2	212.0
WBTSRHH	AB0904	10	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	11	1	1	2	20090420	1552	26.500N	75.703W	4673	4756	2.194	34.875	2	34.876	2	257.0	2	256.3
WBTSRHH	AB0904	11	1	2	2	20090420	1601	26.500N	75.703W	4226	4297	2.245	34.887	2	34.888	2	263.0	2	262.7
WBTSRHH	AB0904	11	1	3	2	20090420	1612	26.500N	75.703W	3935	3998	2.262	34.891	2	34.893	2	265.0	2	264.7
WBTSRHH	AB0904	11	1	4	2	20090420	1619	26.500N	75.703W	3642	3698	2.303	34.897	2	34.897	2	266.5	2	266.9
WBTSRHH	AB0904	11	1	5	2	20090420	1630	26.500N	75.703W	3349	3398	2.434	34.906	2	34.908	2	267.9	2	267.9
WBTSRHH	AB0904	11	1	6	2	20090420	1640	26.500N	75.703W	3056	3099	2.638	34.919	2	34.921	2	267.0	2	266.7
WBTSRHH	AB0904	11	1	7	2	20090420	1650	26.500N	75.703W	2763	2800	2.897	34.934	2	34.936	2	264.3	2	264.1
WBTSRHH	AB0904	11	1	8	2	20090420	1701	26.500N	75.703W	2468	2499	3.179	34.952	2	34.953	2	261.4	2	261.4
WBTSRHH	AB0904	11	1	9	2	20090420	1710	26.500N	75.703W	2223	2250	3.416	34.961	6	34.961	6	261.4	2	261.4
WBTSRHH	AB0904	11	1	10	2	20090420	1720	26.500N	75.703W	1976	1999	3.639	34.964	2	34.965	2	263.1	2	262.0
WBTSRHH	AB0904	11	1	11	2	20090420	1739	26.500N	75.703W	1730	1748	3.968	34.983	2	34.984	2	257.8	2	257.8
WBTSRHH	AB0904	11	1	12	2	20090420	1746	26.500N	75.703W	1483	1498	4.338	35.000	2	35.000	2	253.4	2	252.3
WBTSRHH	AB0904	11	1	13	2	20090420	1746	26.500N	75.703W	1236	1248	5.355	35.059	2	35.059	2	225.1	2	225.3
WBTSRHH	AB0904	11	1	14	2	20090420	1752	26.500N	75.703W	990	999	7.578	35.115	2	35.115	2	160.9	2	161.8
WBTSRHH	AB0904	11	1	15	2	20090420	1759	26.500N	75.703W	743	750	12.994	35.698	2	35.698	4	150.0	2	161.4
WBTSRHH	AB0904	11	1	16	2	20090420	1805	26.500N	75.703W	496	500	17.619	36.477	2	36.476	2	194.3	2	193.7
WBTSRHH	AB0904	11	1	17	2	20090420	1810	26.500N	75.703W	347	350	18.356	36.582	2	36.582	2	196.4	2	196.5
WBTSRHH	AB0904	11	1	18	2	20090420	1814	26.500N	75.703W	247	249	19.556	36.677	2	36.676	2	186.0	2	184.7
WBTSRHH	AB0904	11	1	19	2	20090420	1821	26.500N	75.703W	198	199	20.527	36.707	2	36.708	2	193.5	2	194.2
WBTSRHH	AB0904	11	1	20	2	20090420	1821	26.500N	75.703W	148	149	21.500	36.745	2	36.743	2	200.2	2	200.2

WBTSRHH	AB0904	11	1	21	2	20090420	1825	26.500N	75.703W	98	99	22.331	36.806	2	36.809	2	207.1	2	209.4
WBTSRHH	AB0904	11	1	22	2	20090420	1828	26.500N	75.703W	49	49	22.659	36.798	2	36.798	2	214.0	2	213.8
WBTSRHH	AB0904	11	1	23	2	20090420	1832	26.500N	75.703W	3	3	23.422	36.760	2	36.761	2	212.7	2	211.8
WBTSRHH	AB0904	11	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	12	1	1	2	20090420	2134	26.499N	75.500W	4667	4750	2.152	34.870	2	34.869	3	255.0	2	254.1
WBTSRHH	AB0904	12	1	2	2	20090420	2135	26.499N	75.500W	4228	4299	2.233	34.886	2	34.886	2	262.8	2	262.5
WBTSRHH	AB0904	12	1	3	2	20090420	2145	26.499N	75.500W	3936	4000	2.255	34.890	2	34.890	3	264.8	2	264.8
WBTSRHH	AB0904	12	1	4	2	20090420	2152	26.499N	75.500W	3643	3699	2.293	34.895	2	34.894	2	265.1	2	266.3
WBTSRHH	AB0904	12	1	5	2	20090420	2203	26.499N	75.500W	3351	3401	2.393	34.903	2	34.902	2	267.8	2	267.9
WBTSRHH	AB0904	12	1	6	2	20090420	2213	26.499N	75.500W	3057	3099	2.395	34.916	2	34.914	2	267.2	2	267.3
WBTSRHH	AB0904	12	1	7	2	20090420	2223	26.499N	75.500W	2762	2799	2.828	34.930	2	34.929	2	264.9	2	265.0
WBTSRHH	AB0904	12	1	8	2	20090420	2234	26.499N	75.500W	2469	2500	3.127	34.950	2	34.947	3	262.5	2	261.6
WBTSRHH	AB0904	12	1	9	2	20090420	2243	26.499N	75.500W	2222	2249	3.377	34.959	2	34.958	2	261.3	2	261.4
WBTSRHH	AB0904	12	1	10	2	20090420	2253	26.499N	75.500W	1976	1999	3.612	34.963	2	34.962	2	263.0	2	262.2
WBTSRHH	AB0904	12	1	11	2	20090420	2303	26.499N	75.500W	1731	1750	3.885	34.975	2	34.974	2	263.0	2	259.5
WBTSRHH	AB0904	12	1	12	2	20090420	2311	26.499N	75.500W	1484	1500	4.327	35.003	2	35.001	3	252.6	2	252.1
WBTSRHH	AB0904	12	1	13	2	20090420	2321	26.499N	75.500W	1237	1249	5.166	35.050	2	35.048	2	231.2	2	231.3
WBTSRHH	AB0904	12	1	14	2	20090420	2328	26.499N	75.500W	990	999	7.162	35.101	2	35.099	3	169.6	2	171.6
WBTSRHH	AB0904	12	1	15	2	20090420	2335	26.499N	75.500W	742	748	12.309	35.590	2	35.587	2	150.1	2	151.1
WBTSRHH	AB0904	12	1	16	2	20090420	2341	26.499N	75.500W	496	500	17.416	36.440	2	36.438	3	193.2	2	192.5
WBTSRHH	AB0904	12	1	17	2	20090420	2346	26.499N	75.500W	348	351	18.358	36.584	2	36.580	3	197.7	2	196.6
WBTSRHH	AB0904	12	1	18	2	20090420	2351	26.499N	75.500W	248	250	19.383	36.646	2	36.642	3	197.3	2	196.1
WBTSRHH	AB0904	12	1	19	2	20090420	2353	26.499N	75.500W	199	200	19.813	36.688	2	36.684	3	214.1	2	215.4
WBTSRHH	AB0904	12	1	20	2	20090420	2356	26.499N	75.500W	133	134	20.396	36.689	2	36.688	3	211.7	2	210.7
WBTSRHH	AB0904	12	1	21	2	20090420	2359	26.499N	75.500W	96	97	20.848	36.741	2	36.737	2	220.7	2	220.3
WBTSRHH	AB0904	12	1	22	2	20090421	0003	26.499N	75.500W	48	48	22.151	36.743	2	-999.000	2	209.7	2	220.9
WBTSRHH	AB0904	12	1	23	2	20090421	0007	26.499N	75.500W	3	3	23.247	36.732	2	36.728	3	211.9	2	212.6
WBTSRHH	AB0904	12	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	13	1	1	2	20090421	0315	26.500N	75.300W	4617	4699	2.139	34.870	2	34.869	2	264.4	2	255.0
WBTSRHH	AB0904	13	1	2	2	20090421	0325	26.500N	75.300W	4229	4300	2.228	34.886	2	34.885	2	262.4	2	262.6
WBTSRHH	AB0904	13	1	3	2	20090421	0332	26.500N	75.300W	3934	3998	2.251	34.890	2	34.890	2	264.4	2	264.9
WBTSRHH	AB0904	13	1	4	2	20090421	0338	26.500N	75.300W	3641	3697	2.281	34.895	2	34.894	2	265.9	2	266.5
WBTSRHH	AB0904	13	1	5	2	20090421	0345	26.500N	75.300W	3350	3399	2.369	34.903	2	34.901	6	267.4	2	267.6
WBTSRHH	AB0904	13	1	6	2	20090421	0352	26.500N	75.300W	3055	3098	2.550	34.914	2	34.913	2	267.1	2	267.3
WBTSRHH	AB0904	13	1	7	2	20090421	0359	26.500N	75.300W	2761	2798	2.801	34.930	2	34.929	2	264.9	2	265.3
WBTSRHH	AB0904	13	1	8	2	20090421	0406	26.500N	75.300W	2468	2499	3.083	34.946	2	34.944	2	262.6	2	263.0
WBTSRHH	AB0904	13	1	9	2	20090421	0412	26.500N	75.300W	2222	2248	3.354	34.959	2	34.958	2	261.5	2	261.7
WBTSRHH	AB0904	13	1	10	2	20090421	0418	26.500N	75.300W	1998	2021	3.553	34.965	2	34.964	2	262.4	2	261.8
WBTSRHH	AB0904	13	1	11	2	20090421	0424	26.500N	75.300W	1728	1747	3.837	34.971	2	34.971	2	261.1	2	260.5
WBTSRHH	AB0904	13	1	12	2	20090421	0430	26.500N	75.300W	1484	1499	4.269	35.000	2	34.999	2	253.8	2	253.3
WBTSRHH	AB0904	13	1	13	2	20090421	0437	26.500N	75.300W	1235	1247	4.983	35.042	2	35.041	2	236.4	2	236.1
WBTSRHH	AB0904	13	1	14	2	20090421	0443	26.500N	75.300W	989	998	6.997	35.104	2	35.103	2	179.0	2	180.2
WBTSRHH	AB0904	13	1	15	2	20090421	0450	26.500N	75.300W	735	741	12.283	35.597	2	35.599	2	150.5	2	151.3
WBTSRHH	AB0904	13	1	16	2	20090421	0456	26.500N	75.300W	495	499	17.331	36.424	2	36.424	2	191.4	2	191.8
WBTSRHH	AB0904	13	1	17	2	20090421	0501	26.500N	75.300W	346	349	18.385	36.583	2	36.581	2	196.2	2	196.5
WBTSRHH	AB0904	13	1	18	2	20090421	0504	26.500N	75.300W	247	249	19.219	36.640	2	36.639	2	195.7	2	196.1
WBTSRHH	AB0904	13	1	19	2	20090421	0508	26.500N	75.300W	172	173	19.804	36.667	2	36.666	2	209.6	2	210.8
WBTSRHH	AB0904	13	1	20	2	20090421	0510	26.500N	75.300W	148	149	19.920	36.670	2	36.670	2	205.7	2	208.8
WBTSRHH	AB0904	13	1	21	2	20090421	0513	26.500N	75.300W	98	99	20.452	36.699	2	36.697	2	213.9	2	212.8
WBTSRHH	AB0904	13	1	22	2	20090421	0517	26.500N	75.300W	48	48	21.839	36.801	2	36.801	2	217.2	2	217.2
WBTSRHH	AB0904	13	1	23	2	20090421	0520	26.500N	75.300W	2	2	22.032	36.802	2	36.800	2	217.2	2	217.0
WBTSRHH	AB0904	13	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0
WBTSRHH	AB0904	14	1	1	2	20090421	0802	26.500N	75.083W	4589	4670	2.107	34.866	2	34.866	2	253.2	2	253.1
WBTSRHH	AB0904	14	1	2	2	20090421	0811	26.500N	75.083W	4227	4298	2.227	34.886	2	34.885	2	262.1	2	262.1
WBTSRHH	AB0904	14	1	3	2	20090421	0818	26.500N	75.083W	3935	3999	2.265	34.889	2	34.889	2	264.2	2	264.1
WBTSRHH	AB0904	14	1	4	2	20090421	0825	26.500N	75.083W	3643	3699	2.265	34.894	2	34.894	2	265.5	2	265.5
WBTSRHH	AB0904	14	1	5	2	20090421	0833	26.500N	75.083W	3350	3399	2.359	34.902	2	34.902	6	267.3	2	267.3
WBTSRHH	AB0904	14	1	6	2	20090421	0840	26.500N	75.083W	3056	3098	2.514	34.913	2	34.912	2	266.9	2	267.3
WBTSRHH	AB0904	14	1	7	2	20090421	0848	26.500N	75.083W	2762	2799	2.745	34.926	2	34.926	2	265.4	2	265.7
WBTSRHH	AB0904	14	1	8	2	20090421	0852	26.500N	75.083W	2434	2465	3.071	34.946	2	34.945	2	262.0	2	262.2
WBTSRHH	AB0904	14	1	9	2	20090421	0856	26.500N	75.083W	2213	2240	3.282	34.956	2	34.955	2	261.8	2	261.8
WBTSRHH	AB0904	14	1	10	2	20090421	0908	26.500N	75.083W	1976	1999	3.520	34.963	2	34.963	2	262.7	2	262.7
WBTSRHH	AB0904	14	1	11	2	20090421	0914	26.500N	75.083W	1748	1767	3.742	34.968	2	34.968	2	261.9	2	261.3
WBTSRHH	AB0904	14	1	12	2	20090421	0921	26.500N	75.083W	1485	1501	4.145	34.991	2	34.992	2	255.9	2	255.8
WBTSRHH	AB0904	14	1	13	2	20090421	0927	26.500N	75.083W	1234	1246	4.901	35.038	2	35.037	2	238.5	2	237.6
WBTSRHH	AB0904	14	1	14	2	20090421	0933	26.500N	75.083W	990	999	6.579	35.094	2	35.093	2	188.5	2	190.5

WBTSRHH	AB0904	14	1	15	2	20090421	0940	26.500N	75.083W	742	749	11.582	35.495	2	35.494	2	147.7	2	147.4	2
WBTSRHH	AB0904	14	1	16	2	20090421	0946	26.500N	75.083W	494	498	17.096	36.379	2	36.379	2	187.0	2	189.2	2
WBTSRHH	AB0904	14	1	17	2	20090421	0951	26.500N	75.083W	347	350	18.137	36.563	2	36.562	2	193.6	2	198.0	2
WBTSRHH	AB0904	14	1	18	2	20090421	0956	26.500N	75.083W	347	248	18.863	36.616	2	36.616	2	193.6	2	193.0	2
WBTSRHH	AB0904	14	1	19	2	20090421	0959	26.500N	75.083W	198	200	19.594	36.657	2	36.656	2	197.1	2	208.4	4
WBTSRHH	AB0904	14	1	20	2	20090421	1002	26.500N	75.083W	147	148	19.953	36.709	2	36.707	2	218.4	2	219.7	2
WBTSRHH	AB0904	14	1	21	2	20090421	1005	26.500N	75.083W	98	99	20.182	36.688	2	36.682	4	214.3	2	215.6	2
WBTSRHH	AB0904	14	1	22	2	20090421	1009	26.500N	75.083W	48	49	21.627	36.794	2	36.807	4	217.2	2	218.0	2
WBTSRHH	AB0904	14	1	23	2	20090421	1012	26.500N	75.083W	3	3	22.016	36.822	2	36.821	2	217.1	2	216.7	2
WBTSRHH	AB0904	14	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	15	1	1	2	20090421	1322	26.500N	74.800W	4515	4594	2.050	34.861	2	34.862	2	251.1	2	251.1	2
WBTSRHH	AB0904	15	1	2	2	20090421	1329	26.500N	74.800W	4227	4298	2.160	34.879	2	34.880	2	258.0	2	258.0	2
WBTSRHH	AB0904	15	1	3	2	20090421	1340	26.500N	74.800W	3935	3999	2.207	34.888	2	34.888	2	262.8	2	262.9	2
WBTSRHH	AB0904	15	1	4	2	20090421	1347	26.500N	74.800W	3643	3699	2.243	34.893	2	34.895	2	265.1	2	265.3	2
WBTSRHH	AB0904	15	1	5	2	20090421	1358	26.500N	74.800W	3349	3399	2.347	34.902	2	34.902	2	267.0	2	267.3	2
WBTSRHH	AB0904	15	1	6	2	20090421	1408	26.500N	74.800W	3056	3099	2.486	34.911	2	34.911	2	267.6	2	267.9	2
WBTSRHH	AB0904	15	1	7	2	20090421	1419	26.500N	74.800W	2761	2798	2.756	34.928	2	34.928	2	265.6	2	265.7	2
WBTSRHH	AB0904	15	1	8	2	20090421	1429	26.500N	74.800W	2467	2498	3.041	34.944	2	34.944	4	262.7	2	262.7	2
WBTSRHH	AB0904	15	1	9	2	20090421	1439	26.500N	74.800W	2222	2249	3.270	34.953	2	34.953	2	262.8	2	262.8	6
WBTSRHH	AB0904	15	1	10	2	20090421	1449	26.500N	74.800W	1976	1999	3.523	34.961	2	34.961	2	262.9	2	262.7	2
WBTSRHH	AB0904	15	1	11	2	20090421	1459	26.500N	74.800W	1730	1749	3.778	34.968	2	34.969	2	262.1	2	261.4	2
WBTSRHH	AB0904	15	1	12	2	20090421	1508	26.500N	74.800W	1484	1499	4.152	34.980	2	34.991	2	256.2	2	255.7	2
WBTSRHH	AB0904	15	1	13	2	20090421	1515	26.500N	74.800W	1237	1249	4.810	35.030	2	35.031	2	241.4	2	241.0	2
WBTSRHH	AB0904	15	1	14	2	20090421	1522	26.500N	74.800W	990	999	6.508	35.089	2	35.090	2	188.8	2	190.4	2
WBTSRHH	AB0904	15	1	15	2	20090421	1528	26.500N	74.800W	743	749	11.337	35.469	2	35.470	2	146.7	2	147.0	2
WBTSRHH	AB0904	15	1	16	2	20090421	1535	26.500N	74.800W	494	498	16.744	36.313	2	36.313	2	182.9	2	183.1	2
WBTSRHH	AB0904	15	1	17	2	20090421	1540	26.500N	74.800W	344	347	18.026	36.549	2	36.551	2	197.4	2	197.7	2
WBTSRHH	AB0904	15	1	18	2	20090421	1544	26.500N	74.800W	246	248	18.534	36.598	2	36.598	2	182.5	2	192.3	4
WBTSRHH	AB0904	15	1	19	2	20090421	1547	26.500N	74.800W	197	199	19.040	36.630	2	36.630	2	182.0	2	192.0	4
WBTSRHH	AB0904	15	1	20	2	20090421	1550	26.500N	74.800W	148	149	19.769	36.681	2	36.682	2	188.1	2	213.6	4
WBTSRHH	AB0904	15	1	21	2	20090421	1554	26.500N	74.800W	98	98	20.460	36.755	2	36.756	2	206.2	2	222.8	4
WBTSRHH	AB0904	15	1	22	2	20090421	1557	26.500N	74.800W	47	47	22.237	36.823	2	36.823	2	215.5	2	216.4	2
WBTSRHH	AB0904	15	1	23	2	20090421	1601	26.500N	74.800W	3	3	22.384	36.821	2	36.820	2	216.1	2	216.4	2
WBTSRHH	AB0904	15	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	16	1	1	2	20090421	1904	26.500N	74.517W	4477	4555	2.120	34.869	2	34.869	2	253.3	2	254.0	2
WBTSRHH	AB0904	16	1	2	2	20090421	1913	26.500N	74.517W	4129	4197	2.222	34.884	2	34.884	2	261.4	2	260.9	6
WBTSRHH	AB0904	16	1	3	2	20090421	1921	26.500N	74.517W	3935	3998	2.222	34.889	2	34.888	2	263.2	2	263.0	2
WBTSRHH	AB0904	16	1	4	2	20090421	1929	26.500N	74.517W	3642	3698	2.266	34.895	2	34.894	2	265.6	2	265.3	2
WBTSRHH	AB0904	16	1	5	2	20090421	1939	26.500N	74.517W	3349	3398	2.373	34.903	2	34.903	2	267.1	2	267.1	2
WBTSRHH	AB0904	16	1	6	2	20090421	1949	26.500N	74.517W	3057	3100	2.526	34.913	2	34.913	2	267.0	2	266.9	2
WBTSRHH	AB0904	16	1	7	2	20090421	2000	26.500N	74.517W	2761	2798	2.781	34.929	2	34.928	6	265.1	2	265.0	2
WBTSRHH	AB0904	16	1	8	2	20090421	2011	26.500N	74.517W	2467	2498	3.080	34.947	2	34.946	2	261.3	2	262.4	2
WBTSRHH	AB0904	16	1	9	2	20090421	2020	26.500N	74.517W	2222	2249	3.304	34.957	2	34.957	2	261.7	2	261.7	2
WBTSRHH	AB0904	16	1	10	2	20090421	2031	26.500N	74.517W	1977	2000	3.551	34.967	2	34.966	2	262.2	2	261.3	2
WBTSRHH	AB0904	16	1	11	2	20090421	2040	26.500N	74.517W	1730	1749	3.779	34.968	2	35.137	4	253.9	2	253.2	4
WBTSRHH	AB0904	16	1	12	2	20090421	2050	26.500N	74.517W	1483	1498	4.144	34.990	2	34.989	2	256.0	2	255.4	2
WBTSRHH	AB0904	16	1	13	2	20090421	2056	26.500N	74.517W	1237	1249	4.747	35.029	2	35.030	2	242.0	2	241.6	2
WBTSRHH	AB0904	16	1	14	2	20090421	2103	26.500N	74.517W	988	997	6.429	35.088	2	35.088	2	190.8	2	193.3	2
WBTSRHH	AB0904	16	1	15	2	20090421	2109	26.500N	74.517W	742	748	10.404	35.344	2	35.344	2	143.1	2	144.4	2
WBTSRHH	AB0904	16	1	16	2	20090421	2116	26.500N	74.517W	493	497	16.330	36.234	2	36.236	2	178.8	2	178.8	2
WBTSRHH	AB0904	16	1	17	2	20090421	2121	26.500N	74.517W	346	348	17.907	36.531	2	36.529	2	196.3	2	197.0	2
WBTSRHH	AB0904	16	1	18	2	20090421	2125	26.500N	74.517W	246	248	18.348	36.585	2	36.583	2	196.1	2	197.1	2
WBTSRHH	AB0904	16	1	19	2	20090421	2128	26.500N	74.517W	196	197	18.873	36.620	2	36.619	2	202.7	2	202.8	2
WBTSRHH	AB0904	16	1	20	2	20090421	2131	26.500N	74.517W	148	149	19.497	36.656	2	36.656	2	198.2	2	205.7	4
WBTSRHH	AB0904	16	1	21	2	20090421	2134	26.500N	74.517W	99	99	20.020	36.679	2	36.679	2	205.3	2	207.5	4
WBTSRHH	AB0904	16	1	22	2	20090421	2138	26.500N	74.517W	48	49	21.335	36.751	2	36.751	2	218.1	2	216.0	2
WBTSRHH	AB0904	16	1	23	2	20090421	2142	26.500N	74.517W	3	3	22.541	36.827	2	36.827	2	215.7	2	215.7	2
WBTSRHH	AB0904	16	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	17	1	1	2	20090422	0042	26.500N	74.233W	4523	4602	2.079	34.864	2	34.863	2	252.1	2	252.2	2
WBTSRHH	AB0904	17	1	2	2	20090422	0049	26.500N	74.233W	4228	4299	2.187	34.882	2	34.881	2	260.5	2	259.9	2
WBTSRHH	AB0904	17	1	3	2	20090422	0059	26.500N	74.233W	3935	3998	2.216	34.888	2	34.887	2	263.3	2	263.3	2
WBTSRHH	AB0904	17	1	4	2	20090422	0106	26.500N	74.233W	3347	3396	2.274	34.894	2	34.894	2	265.7	2	265.7	2
WBTSRHH	AB0904	17	1	5	2	20090422	0116	26.500N	74.233W	3347	3396	2.405	34.905	2	34.904	2	267.3	2	267.3	2
WBTSRHH	AB0904	17	1	6	2	20090422	0127	26.500N	74.233W	3054	3097	2.567	34.915	2	34.914	6	267.2	2	267.2	2
WBTSRHH	AB0904	17	1	7	2	20090422	0138	26.500N	74.233W	2712	2748	2.877	34.934	2	34.932	2	264.3	2	264.2	2
WBTSRHH	AB0904	17	1	8	2	20090422														

WBTSRHB	AB0904	17	1	1	9	2	20090422	0158	26.500N	74.233W	2192	2219	3.366	34.956	2	34.955	2	262.7	2	262.0
WBTSRHB	AB0904	17	1	10	10	2	20090422	0207	26.500N	74.233W	1976	1999	3.539	34.960	2	34.959	2	263.0	2	262.4
WBTSRHB	AB0904	17	1	11	11	2	20090422	0217	26.500N	74.233W	1727	1745	3.822	34.971	2	34.970	2	261.0	2	260.5
WBTSRHB	AB0904	17	1	12	12	2	20090422	0226	26.500N	74.233W	1246	1499	4.221	34.994	2	34.993	2	264.4	2	254.6
WBTSRHB	AB0904	17	1	13	13	2	20090422	0233	26.500N	74.233W	989	998	4.836	35.033	2	35.033	2	240.2	2	239.7
WBTSRHB	AB0904	17	1	14	14	2	20090422	0240	26.500N	74.233W	989	998	4.836	35.033	2	35.033	2	240.2	2	239.7
WBTSRHB	AB0904	17	1	15	15	2	20090422	0246	26.500N	74.233W	743	749	10.138	35.311	2	35.311	2	193.0	2	194.7
WBTSRHB	AB0904	17	1	16	16	2	20090422	0252	26.500N	74.233W	495	499	16.227	36.218	2	36.217	2	176.9	2	139.8
WBTSRHB	AB0904	17	1	17	17	2	20090422	0257	26.500N	74.233W	345	347	17.883	36.527	2	36.526	2	196.6	2	176.7
WBTSRHB	AB0904	17	1	18	18	2	20090422	0301	26.500N	74.233W	247	249	18.329	36.584	2	36.582	2	196.6	2	196.3
WBTSRHB	AB0904	17	1	19	19	2	20090422	0304	26.500N	74.233W	198	199	18.651	36.602	2	36.601	2	191.6	2	196.1
WBTSRHB	AB0904	17	1	20	20	2	20090422	0307	26.500N	74.233W	148	149	19.387	36.652	2	36.650	2	189.4	2	193.5
WBTSRHB	AB0904	17	1	21	21	2	20090422	0310	26.500N	74.233W	98	99	20.355	36.691	2	36.690	2	193.7	2	192.1
WBTSRHB	AB0904	17	1	22	22	2	20090422	0314	26.500N	74.233W	48	48	21.616	36.759	2	36.754	2	220.1	2	210.2
WBTSRHB	AB0904	17	1	23	23	2	20090422	0318	26.500N	74.233W	48	48	21.616	36.759	2	36.754	2	220.1	2	219.1
WBTSRHB	AB0904	17	1	24	24	2	-999.000	0318	-999.000N	-999.000W	2	2	22.591	36.816	2	36.815	2	215.0	2	215.2
WBTSRHB	AB0904	18	1	1	1	2	20090422	0643	26.500N	73.867W	4722	-999	-999.000	-999.000N	9	-999.000	9	-999.0	9	-999.0
WBTSRHB	AB0904	18	1	2	2	2	20090422	0653	26.500N	73.867W	4227	4807	2.093	34.862	2	34.866	4	251.9	2	252.6
WBTSRHB	AB0904	18	1	3	3	2	20090422	0704	26.500N	73.867W	3933	4298	2.233	34.887	2	34.886	2	262.0	2	262.1
WBTSRHB	AB0904	18	1	4	4	2	20090422	0711	26.500N	73.867W	3641	3996	2.259	34.892	2	-999.000	9	264.1	2	264.0
WBTSRHB	AB0904	18	1	5	5	2	20090422	0718	26.500N	73.867W	3348	3697	2.285	34.896	2	34.895	2	265.4	2	265.7
WBTSRHB	AB0904	18	1	6	6	2	20090422	0725	26.500N	73.867W	3055	3397	2.361	34.902	2	34.901	2	266.7	2	267.0
WBTSRHB	AB0904	18	1	7	7	2	20090422	0732	26.500N	73.867W	2761	3097	2.546	34.914	2	34.913	2	267.2	2	267.3
WBTSRHB	AB0904	18	1	8	8	2	20090422	0739	26.500N	73.867W	2545	2798	2.793	34.930	2	34.929	2	264.3	2	264.5
WBTSRHB	AB0904	18	1	9	9	2	20090422	0746	26.500N	73.867W	2219	2577	3.002	34.943	6	34.943	6	262.2	2	262.2
WBTSRHB	AB0904	18	1	10	10	2	20090422	0753	26.500N	73.867W	1976	2246	3.300	34.955	2	34.955	2	261.7	2	261.9
WBTSRHB	AB0904	18	1	11	11	2	20090422	0759	26.500N	73.867W	1730	1999	3.543	34.960	2	34.960	2	263.0	2	263.0
WBTSRHB	AB0904	18	1	12	12	2	20090422	0805	26.500N	73.867W	1483	1748	3.836	34.972	2	34.971	2	261.1	2	260.4
WBTSRHB	AB0904	18	1	13	13	2	20090422	0811	26.500N	73.867W	1230	1498	4.315	35.000	2	35.008	4	252.6	2	251.8
WBTSRHB	AB0904	18	1	14	14	2	20090422	0817	26.500N	73.867W	990	1242	5.018	35.045	2	35.045	2	234.1	2	234.1
WBTSRHB	AB0904	18	1	15	15	2	20090422	0823	26.500N	73.867W	761	999	6.796	35.087	2	35.086	2	171.9	2	171.9
WBTSRHB	AB0904	18	1	16	16	2	20090422	0830	26.500N	73.867W	495	768	10.390	35.338	2	35.338	2	138.1	2	139.7
WBTSRHB	AB0904	18	1	17	17	2	20090422	0835	26.500N	73.867W	346	499	16.433	36.256	2	36.258	2	-999.0	9	-999.0
WBTSRHB	AB0904	18	1	18	18	2	20090422	0839	26.500N	73.867W	247	348	18.077	36.557	2	36.556	2	198.0	2	198.4
WBTSRHB	AB0904	18	1	19	19	2	20090422	0842	26.500N	73.867W	196	249	18.653	36.607	2	36.606	2	192.4	2	192.2
WBTSRHB	AB0904	18	1	20	20	2	20090422	0845	26.500N	73.867W	147	198	19.597	36.655	2	36.655	2	209.0	2	208.9
WBTSRHB	AB0904	18	1	21	21	2	20090422	0848	26.500N	73.867W	97	148	20.030	36.672	2	36.672	2	204.0	2	206.1
WBTSRHB	AB0904	18	1	22	22	2	20090422	0852	26.500N	73.867W	47	98	21.043	36.712	2	36.711	2	203.0	2	203.3
WBTSRHB	AB0904	18	1	23	23	2	20090422	0854	26.500N	73.867W	2	48	22.999	36.810	2	36.808	2	211.6	2	213.1
WBTSRHB	AB0904	18	1	24	24	2	-999.000	0854	-999.000N	-999.000W	2	2	23.045	36.807	2	36.806	2	211.6	2	212.8
WBTSRHB	AB0904	19	1	1	1	2	20090422	1232	26.501N	73.498W	4939	-999	-999.000	-999.000N	9	-999.000	9	-999.0	9	-999.0
WBTSRHB	AB0904	19	1	2	2	2	20090422	1243	26.501N	73.498W	4423	5030	2.121	34.862	2	34.863	2	252.3	2	251.3
WBTSRHB	AB0904	19	1	3	3	2	20090422	1257	26.501N	73.498W	3936	4499	2.243	34.885	2	34.886	2	261.4	2	260.5
WBTSRHB	AB0904	19	1	4	4	2	20090422	1305	26.501N	73.498W	3643	3999	2.266	34.893	2	34.892	2	264.2	2	264.0
WBTSRHB	AB0904	19	1	5	5	2	20090422	1316	26.501N	73.498W	3350	3699	2.312	34.898	2	34.897	2	265.8	2	265.6
WBTSRHB	AB0904	19	1	6	6	2	20090422	1326	26.501N	73.498W	3056	3399	2.407	34.906	2	34.904	2	266.1	2	266.4
WBTSRHB	AB0904	19	1	7	7	2	20090422	1337	26.501N	73.498W	2762	3099	2.569	34.917	2	34.916	2	265.6	2	265.7
WBTSRHB	AB0904	19	1	8	8	2	20090422	1347	26.501N	73.498W	2467	2799	2.810	34.931	2	34.930	2	263.3	2	264.1
WBTSRHB	AB0904	19	1	9	9	2	20090422	1357	26.501N	73.498W	2222	2498	3.121	34.952	2	34.952	2	261.3	2	259.9
WBTSRHB	AB0904	19	1	10	10	2	20090422	1407	26.501N	73.498W	1976	2248	3.357	34.964	2	34.964	2	259.4	2	259.4
WBTSRHB	AB0904	19	1	11	11	2	20090422	1417	26.501N	73.498W	1730	1998	3.561	34.967	2	34.967	2	261.8	2	261.1
WBTSRHB	AB0904	19	1	12	12	2	20090422	1428	26.501N	73.498W	1483	1749	3.860	34.973	2	34.974	2	260.7	2	259.8
WBTSRHB	AB0904	19	1	13	13	2	20090422	1434	26.501N	73.498W	1237	1498	4.323	35.010	2	35.010	2	252.1	2	251.4
WBTSRHB	AB0904	19	1	14	14	2	20090422	1441	26.501N	73.498W	990	1249	5.208	35.068	2	35.068	2	228.3	2	228.3
WBTSRHB	AB0904	19	1	15	15	2	20090422	1448	26.501N	73.498W	743	999	7.080	35.100	2	35.101	2	173.9	2	174.9
WBTSRHB	AB0904	19	1	16	16	2	20090422	1455	26.501N	73.498W	495	749	10.650	35.376	2	35.376	2	142.0	2	141.3
WBTSRHB	AB0904	19	1	17	17	2	20090422	1500	26.501N	73.498W	346	499	16.247	36.221	2	36.223	2	177.5	2	177.5
WBTSRHB	AB0904	19	1	18	18	2	20090422	1504	26.501N	73.498W	247	349	18.048	36.552	2	36.552	2	197.5	2	197.2
WBTSRHB	AB0904	19	1	19	19	2	20090422	1507	26.501N	73.498W	198	249	18.850	36.624	2	36.624	2	189.5	2	189.9
WBTSRHB	AB0904	19	1	20	20	2	20090422	1511	26.501N	73.498W	148	199	19.715	36.664	2	36.663	2	209.5	2	210.3
WBTSRHB	AB0904	19	1	21	21	2	20090422	1514	26.501N	73.498W	98	149	20.253	36.717	2	36.709	4	213.2	2	213.6
WBTSRHB	AB0904	19	1	22	22	2	20090422	1518	26.501N	73.498W	48	99	20.978	36.713	2	36.712	2	214.8	2	215.9
WBTSRHB	AB0904	19	1	23	23	2	20090422	1522	26.501N	73.498W	3	49	22.596	36.784	2	36.783	2	214.8	2	215.1
WBTSRHB	AB0904	19	1	24	24	2	-999.000	1522	-999.000N	-999.000W	3	3	24.043	36.813	2	36.813	2	209.2	2	209.4
WBTSRHB	AB0904	20	1	1	1	2	20090422	1849	-999.000	-999.000N	-999	-999	-999.000	-999.000N	9	-999.000	9	-999.0	9	-999.0
WBTSRHB	AB0904	20																		

WBTSRHB	AB0904	20	1	3	2	20090422	1909	26.500N	73.133W	4326	4399	2.271	34.889	2	262.7	2	262.7	
WBTSRHB	AB0904	20	1	4	2	20090422	1918	26.500N	73.133W	3935	3999	2.301	34.896	2	264.7	2	264.7	
WBTSRHB	AB0904	20	1	5	2	20090422	1929	26.500N	73.133W	3544	3597	2.369	34.903	2	266.1	2	266.1	
WBTSRHB	AB0904	20	1	6	2	20090422	1942	26.500N	73.133W	3155	3199	2.566	34.916	2	265.9	2	265.9	
WBTSRHB	AB0904	20	1	7	2	20090422	1954	26.500N	73.133W	2762	2798	2.851	34.932	2	263.8	2	263.8	
WBTSRHB	AB0904	20	1	8	2	20090422	2004	26.500N	73.133W	2468	2499	3.128	34.950	6	260.6	2	261.0	
WBTSRHB	AB0904	20	1	9	2	20090422	2014	26.500N	73.133W	2222	2249	3.356	34.958	2	261.1	2	261.4	
WBTSRHB	AB0904	20	1	10	2	20090422	2024	26.500N	73.133W	1975	1998	3.599	34.967	2	261.5	2	261.2	
WBTSRHB	AB0904	20	1	11	2	20090422	2034	26.500N	73.133W	1731	1750	3.858	34.974	2	260.7	2	260.0	
WBTSRHB	AB0904	20	1	12	2	20090422	2044	26.500N	73.133W	1484	1499	4.292	34.997	2	264.1	2	253.5	
WBTSRHB	AB0904	20	1	13	2	20090422	2050	26.500N	73.133W	1236	1248	4.950	35.046	2	235.2	2	235.2	
WBTSRHB	AB0904	20	1	14	2	20090422	2057	26.500N	73.133W	988	997	5.659	35.106	2	183.6	2	183.6	
WBTSRHB	AB0904	20	1	15	2	20090422	2103	26.500N	73.133W	743	749	6.465	35.484	2	146.3	2	146.3	
WBTSRHB	AB0904	20	1	16	2	20090422	2110	26.500N	73.133W	494	498	7.491	35.484	2	183.9	2	184.1	
WBTSRHB	AB0904	20	1	17	2	20090422	2115	26.500N	73.133W	345	348	8.141	36.564	2	198.6	2	197.6	
WBTSRHB	AB0904	20	1	18	2	20090422	2119	26.500N	73.133W	247	248	8.814	36.623	2	188.7	2	189.0	
WBTSRHB	AB0904	20	1	19	2	20090422	2122	26.500N	73.133W	197	198	9.564	36.684	2	181.9	2	182.9	
WBTSRHB	AB0904	20	1	20	2	20090422	2125	26.500N	73.133W	148	149	10.278	36.741	2	188.4	2	190.3	
WBTSRHB	AB0904	20	1	21	2	20090422	2128	26.500N	73.133W	97	98	11.032	36.792	2	201.8	2	204.2	
WBTSRHB	AB0904	20	1	22	2	20090422	2132	26.500N	73.133W	49	50	11.786	36.775	2	207.5	2	209.3	
WBTSRHB	AB0904	20	1	23	2	20090422	2135	26.500N	73.133W	3	3	12.540	36.773	2	208.6	2	208.6	
WBTSRHB	AB0904	20	1	24	2	20090422	-999.000	-999.000N	-999.000W	-999.000	-999	-999	24.632	36.781	2	208.6	2	-999.0
WBTSRHB	AB0904	21	1	1	2	20090423	0103	26.498N	72.767W	5117	5213	2.128	34.860	2	250.8	2	250.4	
WBTSRHB	AB0904	21	1	2	2	20090423	0113	26.498N	72.767W	4617	4698	2.259	34.885	2	260.7	2	260.7	
WBTSRHB	AB0904	21	1	3	2	20090423	0122	26.498N	72.767W	4228	4298	2.277	34.891	2	263.6	2	263.8	
WBTSRHB	AB0904	21	1	4	2	20090423	0131	26.498N	72.767W	3838	3899	2.309	34.897	2	265.3	2	266.4	
WBTSRHB	AB0904	21	1	5	2	20090423	0140	26.498N	72.767W	3447	3499	2.417	34.907	2	266.3	2	267.1	
WBTSRHB	AB0904	21	1	6	2	20090423	0149	26.498N	72.767W	3030	3072	2.651	34.920	2	265.9	2	266.2	
WBTSRHB	AB0904	21	1	7	2	20090423	0158	26.498N	72.767W	2800	2837	2.865	34.937	2	262.0	2	263.7	
WBTSRHB	AB0904	21	1	8	2	20090423	0205	26.498N	72.767W	2468	2499	3.176	34.953	6	249.2	2	261.5	
WBTSRHB	AB0904	21	1	9	2	20090423	0212	26.498N	72.767W	2222	2249	3.421	34.963	2	260.8	2	260.7	
WBTSRHB	AB0904	21	1	10	2	20090423	0218	26.498N	72.767W	1976	1998	3.630	34.966	2	261.5	2	262.0	
WBTSRHB	AB0904	21	1	11	2	20090423	0224	26.498N	72.767W	1730	1749	3.896	34.973	4	260.0	2	260.0	
WBTSRHB	AB0904	21	1	12	2	20090423	0231	26.498N	72.767W	1484	1499	4.282	35.001	2	253.1	2	253.0	
WBTSRHB	AB0904	21	1	13	2	20090423	0238	26.498N	72.767W	1237	1249	4.932	35.047	2	234.2	2	234.2	
WBTSRHB	AB0904	21	1	14	2	20090423	0244	26.498N	72.767W	990	999	5.693	35.099	2	179.9	2	179.9	
WBTSRHB	AB0904	21	1	15	2	20090423	0250	26.498N	72.767W	743	749	6.493	35.568	2	149.9	2	149.9	
WBTSRHB	AB0904	21	1	16	2	20090423	0257	26.498N	72.767W	495	499	7.321	36.419	2	190.7	2	190.2	
WBTSRHB	AB0904	21	1	17	2	20090423	0301	26.498N	72.767W	347	349	8.254	36.576	2	196.1	2	196.4	
WBTSRHB	AB0904	21	1	18	2	20090423	0305	26.498N	72.767W	257	259	9.107	36.650	2	185.1	2	184.5	
WBTSRHB	AB0904	21	1	19	2	20090423	0308	26.498N	72.767W	198	199	10.494	36.743	2	182.4	2	184.3	
WBTSRHB	AB0904	21	1	20	2	20090423	0311	26.498N	72.767W	138	139	11.298	36.803	2	214.5	2	213.6	
WBTSRHB	AB0904	21	1	21	2	20090423	0314	26.498N	72.767W	82	83	12.565	36.775	2	202.7	2	212.7	
WBTSRHB	AB0904	21	1	22	2	20090423	0317	26.498N	72.767W	48	48	13.409	36.725	2	207.3	2	209.2	
WBTSRHB	AB0904	21	1	23	2	20090423	0321	26.498N	72.767W	3	3	14.263	36.628	2	208.4	2	208.1	
WBTSRHB	AB0904	21	1	24	2	20090423	-999.000	-999.000N	-999.000W	-999.000	-999	-999	24.633	36.630	2	208.1	2	-999.0
WBTSRHB	AB0904	22	1	1	2	20090423	0658	26.500N	72.383W	5168	5266	2.112	34.857	2	250.1	2	250.1	
WBTSRHB	AB0904	22	1	2	2	20090423	0709	26.500N	72.383W	4616	4697	2.265	34.885	2	261.1	2	260.9	
WBTSRHB	AB0904	22	1	3	2	20090423	0717	26.500N	72.383W	4227	4298	2.295	34.892	2	263.8	2	264.2	
WBTSRHB	AB0904	22	1	4	2	20090423	0726	26.500N	72.383W	3836	3897	2.340	34.898	3	265.6	2	265.8	
WBTSRHB	AB0904	22	1	5	2	20090423	0735	26.500N	72.383W	3436	3487	2.469	34.908	2	266.2	2	267.0	
WBTSRHB	AB0904	22	1	6	2	20090423	0743	26.500N	72.383W	3056	3098	2.700	34.923	2	264.4	2	264.8	
WBTSRHB	AB0904	22	1	7	2	20090423	0750	26.500N	72.383W	2762	2799	2.925	34.938	2	261.8	2	262.5	
WBTSRHB	AB0904	22	1	8	2	20090423	0757	26.500N	72.383W	2465	2496	3.192	34.953	2	260.4	2	261.1	
WBTSRHB	AB0904	22	1	9	2	20090423	0803	26.500N	72.383W	2221	2248	3.410	34.960	2	261.5	2	261.4	
WBTSRHB	AB0904	22	1	10	2	20090423	0809	26.500N	72.383W	1976	1998	3.667	34.967	2	261.2	2	262.1	
WBTSRHB	AB0904	22	1	11	2	20090423	0815	26.500N	72.383W	1729	1748	3.970	34.978	2	258.3	2	258.3	
WBTSRHB	AB0904	22	1	12	2	20090423	0821	26.500N	72.383W	1483	1498	4.338	34.997	2	254.5	2	252.1	
WBTSRHB	AB0904	22	1	13	2	20090423	0828	26.500N	72.383W	1237	1249	4.946	35.031	2	239.3	2	237.0	
WBTSRHB	AB0904	22	1	14	2	20090423	0834	26.500N	72.383W	989	998	5.629	35.089	2	172.7	2	174.8	
WBTSRHB	AB0904	22	1	15	2	20090423	0840	26.500N	72.383W	742	748	6.429	35.519	2	148.4	2	148.4	
WBTSRHB	AB0904	22	1	16	2	20090423	0846	26.500N	72.383W	491	495	7.146	36.440	2	193.2	2	192.6	
WBTSRHB	AB0904	22	1	17	2	20090423	0851	26.500N	72.383W	346	348	8.181	36.587	2	196.7	2	196.7	
WBTSRHB	AB0904	22	1	18	2	20090423	0854	26.500N	72.383W	245	247	9.175	36.673	2	187.9	2	189.4	
WBTSRHB	AB0904	22	1	19	2	20090423	0857	26.500N	72.383W	197	198	10.033	36.725	2	216.7	2	215.8	
WBTSRHB	AB0904	22	1	20	2	20090423	0900	26.500N	72.383W	148	149	11.136	36.773	2	218.6	2	216.0	

WBTSRHH	AB0904	22	1	21	2	20090423	0903	26.500N	72.383W	96	96	22.259	36.807	2	36.807	3	214.8	2	214.9	2
WBTSRHH	AB0904	22	1	22	2	20090423	0907	26.500N	72.383W	47	48	24.230	36.725	2	36.725	3	207.7	2	208.6	2
WBTSRHH	AB0904	22	1	23	2	20090423	0910	26.500N	72.383W	2	2	24.398	36.628	2	36.628	3	208.5	2	208.3	2
WBTSRHH	AB0904	22	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	23	1	1	2	20090423	1257	26.500N	72.000W	5267	5368	2.130	34.858	2	34.858	2	251.0	2	249.9	6
WBTSRHH	AB0904	23	1	2	2	20090423	1321	26.500N	72.000W	4325	4399	2.297	34.892	2	34.892	2	263.6	2	263.5	2
WBTSRHH	AB0904	23	1	3	2	20090423	1333	26.500N	72.000W	3936	4000	2.337	34.898	2	34.898	2	265.2	2	266.4	2
WBTSRHH	AB0904	23	1	4	2	20090423	1340	26.500N	72.000W	3643	3699	2.401	34.905	2	34.905	2	265.7	2	267.7	2
WBTSRHH	AB0904	23	1	5	2	20090423	1351	26.500N	72.000W	3346	3395	2.538	34.914	2	34.915	2	265.4	2	266.0	2
WBTSRHH	AB0904	23	1	6	2	20090423	1402	26.500N	72.000W	3057	3099	2.726	34.927	2	34.927	6	263.4	2	264.0	2
WBTSRHH	AB0904	23	1	7	2	20090423	1412	26.500N	72.000W	2762	2798	2.964	34.943	2	34.943	2	260.7	2	261.1	2
WBTSRHH	AB0904	23	1	8	2	20090423	1423	26.500N	72.000W	2468	2499	3.215	34.956	2	34.957	2	259.8	2	260.3	2
WBTSRHH	AB0904	23	1	9	2	20090423	1433	26.500N	72.000W	2223	2249	3.433	34.964	2	34.965	2	260.5	2	260.5	2
WBTSRHH	AB0904	23	1	10	2	20090423	1442	26.500N	72.000W	1975	1998	3.695	34.971	2	34.971	2	261.3	2	260.6	2
WBTSRHH	AB0904	23	1	11	2	20090423	1452	26.500N	72.000W	1730	1749	3.939	34.978	2	34.979	2	259.3	2	258.9	2
WBTSRHH	AB0904	23	1	12	2	20090423	1502	26.500N	72.000W	1483	1498	4.381	35.007	2	35.007	2	251.2	2	250.7	2
WBTSRHH	AB0904	23	1	13	2	20090423	1509	26.500N	72.000W	1237	1248	5.346	35.067	2	35.068	2	224.4	2	224.8	2
WBTSRHH	AB0904	23	1	14	2	20090423	1515	26.500N	72.000W	990	999	7.282	35.099	2	35.100	2	165.4	2	166.7	2
WBTSRHH	AB0904	23	1	15	2	20090423	1522	26.500N	72.000W	743	749	11.944	35.549	2	35.551	2	145.2	2	146.0	2
WBTSRHH	AB0904	23	1	16	2	20090423	1529	26.500N	72.000W	495	499	17.177	36.398	2	36.399	2	190.5	2	191.3	2
WBTSRHH	AB0904	23	1	17	2	20090423	1534	26.500N	72.000W	346	349	18.187	36.571	2	36.571	2	196.3	2	197.3	2
WBTSRHH	AB0904	23	1	18	2	20090423	1538	26.500N	72.000W	246	247	19.298	36.660	2	36.660	2	187.0	2	186.6	2
WBTSRHH	AB0904	23	1	19	2	20090423	1542	26.500N	72.000W	196	198	20.218	36.742	2	36.742	2	180.6	2	182.2	4
WBTSRHH	AB0904	23	1	20	2	20090423	1548	26.500N	72.000W	147	148	20.937	36.749	2	36.749	2	192.2	2	213.6	4
WBTSRHH	AB0904	23	1	21	2	20090423	1548	26.500N	72.000W	97	98	21.748	36.807	2	36.806	2	214.4	2	214.8	4
WBTSRHH	AB0904	23	1	22	2	20090423	1552	26.500N	72.000W	48	48	22.370	36.821	2	36.821	2	215.1	2	215.4	2
WBTSRHH	AB0904	23	1	23	2	20090423	1555	26.500N	72.000W	2	3	23.055	36.632	2	36.632	2	213.1	2	213.6	2
WBTSRHH	AB0904	23	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	24	1	1	2	20090423	2017	26.500N	71.500W	5402	5508	2.106	34.853	2	34.853	2	249.7	2	248.3	2
WBTSRHH	AB0904	24	1	2	2	20090423	2105	26.500N	71.500W	4713	4797	2.299	34.887	2	34.887	2	262.2	2	261.7	2
WBTSRHH	AB0904	24	1	3	2	20090423	2114	26.500N	71.500W	4323	4397	2.313	34.892	2	34.892	2	264.3	2	264.3	2
WBTSRHH	AB0904	24	1	4	2	20090423	2126	26.500N	71.500W	3738	3797	2.398	34.903	2	34.903	2	266.2	2	266.6	6
WBTSRHH	AB0904	24	1	5	2	20090423	2137	26.500N	71.500W	3154	3199	2.702	34.923	2	34.923	4	266.2	2	266.6	6
WBTSRHH	AB0904	24	1	6	2	20090423	2138	26.500N	71.500W	3154	3199	2.703	34.924	2	34.924	2	263.0	2	264.3	2
WBTSRHH	AB0904	24	1	7	2	20090423	2147	26.500N	71.500W	2762	2798	2.985	34.941	2	34.941	2	261.7	2	261.7	2
WBTSRHH	AB0904	24	1	8	2	20090423	2155	26.500N	71.500W	2468	2499	3.275	34.960	2	34.960	2	259.3	2	259.6	2
WBTSRHH	AB0904	24	1	9	2	20090423	2201	26.500N	71.500W	2222	2248	3.502	34.970	2	34.970	2	259.3	2	259.6	2
WBTSRHH	AB0904	24	1	10	2	20090423	2207	26.500N	71.500W	1976	1999	3.692	34.968	2	34.968	2	261.5	2	261.1	2
WBTSRHH	AB0904	24	1	11	2	20090423	2213	26.500N	71.500W	1730	1748	4.001	34.983	2	34.983	2	257.6	2	257.5	2
WBTSRHH	AB0904	24	1	12	2	20090423	2219	26.500N	71.500W	1483	1498	4.491	35.020	2	35.020	2	247.9	2	247.6	2
WBTSRHH	AB0904	24	1	13	2	20090423	2225	26.500N	71.500W	1237	1248	5.349	35.066	2	35.066	2	224.3	2	224.3	2
WBTSRHH	AB0904	24	1	14	2	20090423	2227	26.500N	71.500W	1142	1153	5.955	35.080	2	35.083	4	203.3	2	205.3	2
WBTSRHH	AB0904	24	1	15	2	20090423	2237	26.500N	71.500W	742	748	11.937	35.551	2	35.551	2	146.9	2	147.1	2
WBTSRHH	AB0904	24	1	16	2	20090423	2243	26.500N	71.500W	495	499	17.390	36.435	2	36.435	2	191.6	2	192.2	2
WBTSRHH	AB0904	24	1	17	2	20090423	2243	26.500N	71.500W	495	499	17.392	36.437	2	36.437	9	-999.000	9	-999.0	9
WBTSRHH	AB0904	24	1	18	2	20090423	2249	26.500N	71.500W	247	249	20.124	36.710	2	36.712	2	208.8	2	212.5	4
WBTSRHH	AB0904	24	1	19	2	20090423	2252	26.500N	71.500W	197	199	20.520	36.706	2	36.705	2	210.2	2	210.1	2
WBTSRHH	AB0904	24	1	20	2	20090423	2255	26.500N	71.500W	147	148	21.352	36.765	2	36.771	2	208.3	2	209.2	2
WBTSRHH	AB0904	24	1	21	2	20090423	2258	26.500N	71.500W	98	98	21.704	36.804	2	36.802	2	214.8	2	215.0	2
WBTSRHH	AB0904	24	1	22	2	20090423	2301	26.500N	71.500W	47	47	22.518	36.821	2	36.823	2	213.7	2	214.7	2
WBTSRHH	AB0904	24	1	23	2	20090423	2305	26.500N	71.500W	3	3	22.997	36.808	2	36.807	2	212.2	2	213.8	2
WBTSRHH	AB0904	24	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	25	1	1	2	20090424	0326	26.500N	71.000W	5468	5575	2.136	34.855	2	34.855	2	251.1	2	249.2	2
WBTSRHH	AB0904	25	1	2	2	20090424	0425	26.500N	71.000W	4659	4742	2.297	34.887	2	34.887	2	262.5	2	262.1	2
WBTSRHH	AB0904	25	1	3	2	20090424	0436	26.500N	71.000W	4130	4198	2.436	34.897	2	34.897	2	264.7	2	265.2	2
WBTSRHH	AB0904	25	1	4	2	20090424	0447	26.500N	71.000W	3593	3648	2.453	34.907	2	34.907	2	266.0	2	267.0	2
WBTSRHH	AB0904	25	1	5	2	20090424	0447	26.500N	71.000W	3593	3648	2.453	34.906	2	34.906	9	-999.000	9	-999.0	9
WBTSRHH	AB0904	25	1	6	2	20090424	0501	26.500N	71.000W	2889	2929	2.864	34.933	2	34.932	2	263.1	2	264.2	6
WBTSRHH	AB0904	25	1	7	2	20090424	0505	26.500N	71.000W	2762	2798	2.982	34.937	2	34.937	2	262.4	2	263.7	2
WBTSRHH	AB0904	25	1	8	2	20090424	0513	26.500N	71.000W	2453	2484	3.252	34.957	2	34.957	2	259.6	2	260.2	2
WBTSRHH	AB0904	25	1	9	2	20090424	0519	26.500N	71.000W	2221	2248	3.464	34.968	2	34.968	2	259.8	2	259.8	2
WBTSRHH	AB0904	25	1	10	2	20090424	0526	26.500N	71.000W	1976	1999	3.678	34.972	2	34.972	2	260.2	2	260.2	2
WBTSRHH	AB0904	25	1	11	2	20090424	0531	26.500N	71.000W	1729	1748	4.147	35.017	2	35.018	6	251.1	2	250.7	2
WBTSRHH	AB0904	25	1	12	2	20090424	0538	26.500N	71.000W	1483	1498	4.616	35.040	2	35.042	2	242.5	2	242.4	2
WBTSRHH	AB0904	25	1	13	2	20090424	0544	26.500N	71.000W	1236	1248	5.466	35.074	2	35.075	2	217.9	2	218.3	2
WBTSRHH	AB0904	25	1	14	2	20														

WBTSRHH	AB0904	25	1	15	2	20090424	0556	26.500N	71.000W	742	749	11.477	35.493	2	35.497	2	145.7	2	146.9	2
WBTSRHH	AB0904	25	1	16	2	20090424	0602	26.500N	71.000W	495	499	17.089	36.378	2	36.382	2	186.4	2	188.1	2
WBTSRHH	AB0904	25	1	17	2	20090424	0609	26.500N	71.000W	246	248	19.506	36.655	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	25	1	18	2	20090424	0612	26.500N	71.000W	197	198	20.158	36.731	2	36.731	2	215.3	2	214.8	2
WBTSRHH	AB0904	25	1	19	2	20090424	0612	26.500N	71.000W	186	187	20.196	36.733	2	36.733	2	215.4	2	215.1	2
WBTSRHH	AB0904	25	1	20	2	20090424	0615	26.500N	71.000W	145	146	20.645	36.729	2	36.732	2	211.3	2	210.7	2
WBTSRHH	AB0904	25	1	21	2	20090424	0617	26.500N	71.000W	98	99	21.866	36.793	2	36.794	2	215.1	2	214.4	2
WBTSRHH	AB0904	25	1	22	2	20090424	0621	26.500N	71.000W	47	48	22.661	36.826	2	36.826	2	213.6	2	214.1	2
WBTSRHH	AB0904	25	1	23	2	20090424	0625	26.500N	71.000W	3	3	23.352	36.807	2	36.807	2	211.6	2	211.4	2
WBTSRHH	AB0904	25	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	26	1	1	2	20090424	1042	26.501N	70.502W	5471	5578	2.111	34.854	2	34.854	2	249.6	2	248.5	2
WBTSRHH	AB0904	26	1	2	2	20090424	1056	26.501N	70.502W	4811	4899	2.297	34.885	2	34.885	2	261.0	2	260.7	2
WBTSRHH	AB0904	26	1	3	2	20090424	1106	26.501N	70.502W	4374	4449	2.308	34.892	2	34.892	2	263.3	2	263.5	2
WBTSRHH	AB0904	26	1	4	2	20090424	1115	26.501N	70.502W	3936	3999	2.339	34.898	2	34.898	2	264.4	2	265.4	2
WBTSRHH	AB0904	26	1	5	2	20090424	1125	26.501N	70.502W	3495	3548	2.483	34.910	2	34.910	2	264.6	2	265.4	2
WBTSRHH	AB0904	26	1	6	2	20090424	1135	26.501N	70.502W	3056	3098	2.707	34.925	2	34.925	2	260.9	2	263.2	2
WBTSRHH	AB0904	26	1	7	2	20090424	1142	26.501N	70.502W	2763	2799	2.891	34.938	2	34.938	2	259.6	2	261.1	2
WBTSRHH	AB0904	26	1	8	2	20090424	1150	26.501N	70.502W	2468	2499	3.161	34.952	2	34.953	2	260.3	2	260.3	2
WBTSRHH	AB0904	26	1	9	2	20090424	1157	26.501N	70.502W	2222	2249	3.458	34.973	2	34.973	2	256.0	2	257.9	2
WBTSRHH	AB0904	26	1	10	2	20090424	1203	26.501N	70.502W	1977	1999	3.640	34.971	2	34.972	2	260.7	2	260.1	2
WBTSRHH	AB0904	26	1	11	2	20090424	1210	26.501N	70.502W	1730	1749	3.954	34.986	2	34.988	2	256.8	2	257.2	2
WBTSRHH	AB0904	26	1	12	2	20090424	1217	26.501N	70.502W	1484	1499	4.351	35.005	2	35.006	2	250.2	2	250.8	2
WBTSRHH	AB0904	26	1	13	2	20090424	1223	26.501N	70.502W	1236	1248	5.174	35.056	2	35.058	2	228.2	2	228.8	2
WBTSRHH	AB0904	26	1	14	2	20090424	1230	26.501N	70.502W	989	998	6.889	35.069	2	35.070	6	160.4	2	169.0	4
WBTSRHH	AB0904	26	1	15	2	20090424	1236	26.501N	70.502W	742	749	10.716	35.393	2	35.398	2	142.4	2	143.7	6
WBTSRHH	AB0904	26	1	16	2	20090424	1243	26.501N	70.502W	495	499	16.330	36.241	2	36.241	2	179.0	2	179.6	2
WBTSRHH	AB0904	26	1	17	2	20090424	1248	26.501N	70.502W	346	348	17.994	36.546	2	36.547	2	196.0	2	197.4	2
WBTSRHH	AB0904	26	1	18	2	20090424	1253	26.501N	70.502W	247	249	18.579	36.598	2	36.598	2	192.5	2	193.4	2
WBTSRHH	AB0904	26	1	19	2	20090424	1256	26.501N	70.502W	197	199	19.281	36.648	2	36.652	2	179.5	2	190.2	4
WBTSRHH	AB0904	26	1	20	2	20090424	1300	26.501N	70.502W	142	143	20.361	36.749	2	36.761	4	210.6	2	212.1	2
WBTSRHH	AB0904	26	1	21	2	20090424	1307	26.501N	70.502W	98	99	20.974	36.818	2	36.818	2	214.9	2	216.1	2
WBTSRHH	AB0904	26	1	22	2	20090424	1303	26.501N	70.502W	48	49	21.782	36.785	2	36.787	2	214.8	2	213.2	2
WBTSRHH	AB0904	26	1	23	2	20090424	1311	26.501N	70.502W	4	4	22.748	36.811	2	36.810	2	213.0	2	213.7	2
WBTSRHH	AB0904	26	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	27	1	1	2	20090424	1736	26.500N	70.000W	5472	5579	2.115	34.853	2	34.855	2	249.3	2	248.4	6
WBTSRHH	AB0904	27	1	2	2	20090424	1813	26.500N	70.000W	4811	4898	2.304	34.886	2	34.886	2	261.2	2	260.7	6
WBTSRHH	AB0904	27	1	3	2	20090424	1822	26.500N	70.000W	4374	4449	2.312	34.892	2	34.892	2	263.3	2	263.5	6
WBTSRHH	AB0904	27	1	4	2	20090424	1832	26.500N	70.000W	3935	3998	2.329	34.897	2	34.898	6	264.5	2	265.3	2
WBTSRHH	AB0904	27	1	5	2	20090424	1844	26.500N	70.000W	3349	3398	2.511	34.912	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	27	1	6	2	20090424	1844	26.500N	70.000W	3350	3399	2.510	34.913	2	34.914	2	262.8	2	264.0	2
WBTSRHH	AB0904	27	1	7	2	20090424	1856	26.500N	70.000W	2760	2797	2.884	34.939	2	34.939	2	258.7	2	259.8	2
WBTSRHH	AB0904	27	1	8	2	20090424	1904	26.500N	70.000W	2466	2497	3.148	34.953	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	27	1	9	2	20090424	1910	26.500N	70.000W	2222	2248	3.334	34.962	2	34.962	2	259.0	2	260.0	2
WBTSRHH	AB0904	27	1	10	2	20090424	1917	26.500N	70.000W	1974	1996	3.577	34.971	2	34.972	2	259.4	2	260.1	2
WBTSRHH	AB0904	27	1	11	2	20090424	1923	26.500N	70.000W	1729	1748	3.829	34.976	2	34.977	2	259.0	2	259.4	2
WBTSRHH	AB0904	27	1	12	2	20090424	1930	26.500N	70.000W	1485	1500	4.293	35.006	2	35.007	2	251.5	2	251.5	2
WBTSRHH	AB0904	27	1	13	2	20090424	1937	26.500N	70.000W	1236	1248	5.059	35.051	2	35.052	2	232.3	2	232.7	2
WBTSRHH	AB0904	27	1	14	2	20090424	1944	26.500N	70.000W	990	999	6.784	35.082	2	35.083	2	175.2	2	177.0	2
WBTSRHH	AB0904	27	1	15	2	20090424	1950	26.500N	70.000W	744	750	10.407	35.353	2	35.356	2	142.2	2	142.2	2
WBTSRHH	AB0904	27	1	16	2	20090424	1957	26.500N	70.000W	495	499	15.769	36.141	2	36.141	2	171.1	2	171.8	2
WBTSRHH	AB0904	27	1	17	2	20090424	2003	26.500N	70.000W	248	250	18.358	36.585	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	27	1	18	2	20090424	2004	26.500N	70.000W	248	250	18.360	36.584	2	36.584	2	194.4	2	194.7	2
WBTSRHH	AB0904	27	1	19	2	20090424	2007	26.500N	70.000W	198	199	18.815	36.624	2	36.624	2	186.4	2	188.2	2
WBTSRHH	AB0904	27	1	20	2	20090424	2010	26.500N	70.000W	147	148	19.828	36.708	2	36.708	2	186.0	2	183.5	2
WBTSRHH	AB0904	27	1	21	2	20090424	2014	26.500N	70.000W	97	98	20.629	36.706	2	36.706	2	212.1	2	212.6	2
WBTSRHH	AB0904	27	1	22	2	20090424	2017	26.500N	70.000W	49	49	22.072	36.795	2	36.795	2	211.6	2	212.6	2
WBTSRHH	AB0904	27	1	23	2	20090424	2021	26.500N	70.000W	4	4	23.572	36.762	2	36.761	2	210.9	2	211.0	2
WBTSRHH	AB0904	27	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	28	1	1	2	20090425	0047	26.500N	69.502W	5294	5396	2.102	34.854	2	34.855	2	249.2	2	249.3	2
WBTSRHH	AB0904	28	1	2	2	20090425	0114	26.500N	69.502W	4714	4798	2.283	34.885	6	34.885	6	260.4	2	260.7	2
WBTSRHH	AB0904	28	1	3	2	20090425	0123	26.500N	69.502W	4300	4373	2.296	34.891	2	34.892	2	262.8	2	263.5	2
WBTSRHH	AB0904	28	1	4	2	20090425	0134	26.500N	69.502W	3887	3949	2.327	34.897	2	34.897	2	264.5	2	265.6	6
WBTSRHH	AB0904	28	1	5	2	20090425	0134	26.500N	69.502W	3868	3929	2.327	34.896	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHH	AB0904	28	1	6	2	20090425	0143	26.500N	69.502W	3472	3524	2.447	34.907	2	34.907	2	264.8	2	266.5	2
WBTSRHH	AB0904	28	1	7	2	20090425	0151	26.500N	69.502W	3056	3098	2.685	34.926	2	34.925	2	259.6	2	261.2	2
WBTSRHH	AB0904	28	1	8	2	2009042														

WBTSRHB	AB0904	28	1	9	2	20090425	0209	26.500N	69.502W	2223	3.327	34.965	2	34.965	2	257.9	2	259.0	2
WBTSRHB	AB0904	28	1	10	2	20090425	0215	26.500N	69.502W	1976	1998	34.965	2	34.965	2	260.2	2	261.1	2
WBTSRHB	AB0904	28	1	11	2	20090425	0221	26.500N	69.502W	1731	1749	34.977	2	34.977	2	258.6	2	259.4	2
WBTSRHB	AB0904	28	1	12	2	20090425	0228	26.500N	69.502W	1484	1499	35.000	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	28	1	13	2	20090425	0234	26.500N	69.502W	1237	1249	35.050	2	35.051	2	233.3	2	235.3	2
WBTSRHB	AB0904	28	1	14	2	20090425	0240	26.500N	69.502W	990	999	35.084	2	35.084	2	188.3	2	190.4	2
WBTSRHB	AB0904	28	1	15	2	20090425	0246	26.500N	69.502W	743	749	35.368	2	35.368	2	144.1	2	145.4	2
WBTSRHB	AB0904	28	1	16	2	20090425	0253	26.500N	69.502W	496	499	36.170	2	36.169	2	177.0	2	177.4	2
WBTSRHB	AB0904	28	1	17	2	20090425	0253	26.500N	69.502W	493	497	36.173	2	36.173	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	28	1	18	2	20090425	0259	26.500N	69.502W	198	249	36.392	2	36.392	2	187.8	2	188.3	2
WBTSRHB	AB0904	28	1	19	2	20090427	0302	26.500N	69.502W	198	199	36.637	2	36.591	4	185.7	2	196.2	4
WBTSRHB	AB0904	28	1	20	2	20090425	0305	26.500N	69.502W	148	149	36.733	2	36.635	4	201.2	2	215.6	4
WBTSRHB	AB0904	28	1	21	2	20090425	0308	26.500N	69.502W	93	94	36.731	4	36.731	4	217.1	2	215.6	2
WBTSRHB	AB0904	28	1	22	2	20090425	0312	26.500N	69.502W	48	48	36.817	2	36.756	4	215.5	2	217.6	2
WBTSRHB	AB0904	28	1	23	2	20090425	0316	26.500N	69.502W	3	3	36.771	2	36.815	4	204.1	2	216.2	4
WBTSRHB	AB0904	28	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	1	2	20090427	0354	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	2	2	20090427	0354	26.375N	75.706W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	3	2	20090427	0354	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	4	2	20090427	0354	26.375N	75.706W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	5	2	20090427	0354	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	6	2	20090427	0354	26.375N	75.706W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	7	2	20090427	0355	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	8	2	20090427	0355	26.375N	75.706W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	9	2	20090427	0355	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	10	2	20090427	0355	26.375N	75.706W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	11	2	20090427	0355	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	12	2	-999.000	-999.000	-999.000N	-999.000W	4601	4683	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	14	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	16	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	18	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	20	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	22	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	29	1	24	2	-999.000	-999.000	-999.000N	-999.000W	4601	4682	34.877	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	1	2	20090427	0645	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	2	2	20090427	0654	26.375N	75.706W	3351	3400	34.905	2	34.905	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	3	2	20090427	0702	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	4	2	20090427	0711	26.375N	75.706W	3154	3199	34.912	2	34.913	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	5	2	20090427	0719	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	6	2	20090427	0727	26.375N	75.706W	2957	2998	34.921	2	34.921	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	7	2	20090427	0735	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	8	2	20090427	0744	26.375N	75.706W	2762	2798	34.933	2	34.933	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	9	2	20090427	0753	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	10	2	20090427	0802	26.375N	75.706W	2564	2597	34.944	2	34.944	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	11	2	20090427	0810	26.375N	75.706W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	12	2	-999.000	-999.000	-999.000N	-999.000W	2357	2386	34.953	2	34.954	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	13	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	14	2	-999.000	-999.000	-999.000N	-999.000W	2172	2198	34.959	2	34.958	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	15	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	16	2	-999.000	-999.000	-999.000N	-999.000W	1976	1998	34.963	2	34.964	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	17	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	18	2	-999.000	-999.000	-999.000N	-999.000W	1778	1798	34.969	2	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	19	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	20	2	-999.000	-999.000	-999.000N	-999.000W	1583	1600	34.993	2	34.992	2	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	21	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	22	2	-999.000	-999.000	-999.000N	-999.000W	1384	1398	35.014	6	35.014	6	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	23	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	30	1	24	2	-999.000	-999.000	-999.000N	-999.000W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	31	1	1	2	20090428	0759	26.493N	76.472W	-999	-999	-999.000	9	-999.000	9	-999.0	9	-999.0	9
WBTSRHB	AB0904	31	1	2	2	20090428	0819	26.493N	76.472W	4817	4904	34.875	2	34.875	2	-999.0	9	-999.0	9

WBTSRHH	AB0904	42	1	3	2	20090502	1022	26.054N	79.309W	-999	-999,000	-999,000	9	-999,000	9	-999.0	-999.0	9	-999.0
WBTSRHH	AB0904	42	1	4	2	20090502	1026	26.055N	79.309W	336	17.194	36.387	2	36.384	2	181.8	181.5	2	-999.0
WBTSRHH	AB0904	42	1	5	2	20090502	1030	26.056N	79.308W	-999	-999,000	-999,000	9	-999,000	9	153.0	161.5	4	-999.0
WBTSRHH	AB0904	42	1	6	2	20090502	1034	26.057N	79.307W	247	18.776	36.548	2	36.557	4	153.0	161.5	4	-999.0
WBTSRHH	AB0904	42	1	7	2	20090502	1038	26.057N	79.307W	-999	-999,000	-999,000	9	-999,000	9	184.5	184.6	2	-999.0
WBTSRHH	AB0904	42	1	8	2	20090502	1038	26.058N	79.306W	168	22.074	36.830	2	36.842	4	184.5	184.6	2	-999.0
WBTSRHH	AB0904	42	1	9	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	197.6	198.2	2	-999.0
WBTSRHH	AB0904	42	1	10	2	20090502	1038	26.058N	79.306W	88	24.280	36.570	2	36.572	2	197.6	198.2	2	-999.0
WBTSRHH	AB0904	42	1	11	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	195.4	196.2	2	-999.0
WBTSRHH	AB0904	42	1	12	2	20090502	1038	26.058N	79.306W	48	24.803	36.407	2	36.405	2	195.4	196.2	2	-999.0
WBTSRHH	AB0904	42	1	13	2	20090502	1038	26.058N	79.306W	48	24.803	36.407	2	36.405	2	195.4	196.2	2	-999.0
WBTSRHH	AB0904	42	1	14	2	20090502	1038	26.058N	79.306W	3	25.284	36.287	2	36.285	2	201.4	203.6	2	-999.0
WBTSRHH	AB0904	42	1	15	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	16	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	17	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	18	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	19	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	20	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	21	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	22	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	23	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	42	1	24	2	20090502	1038	26.058N	79.306W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	1	2	20090502	1139	26.043N	79.404W	-999	-999,000	-999,000	9	-999,000	9	124.6	123.9	6	-999.0
WBTSRHH	AB0904	43	1	2	2	20090502	1145	26.046N	79.404W	580	10.812	35.319	6	35.317	6	124.6	123.9	6	-999.0
WBTSRHH	AB0904	43	1	3	2	20090502	1149	26.048N	79.404W	-999	-999,000	-999,000	9	-999,000	9	134.9	143.4	4	-999.0
WBTSRHH	AB0904	43	1	4	2	20090502	1154	26.049N	79.404W	407	14.373	35.872	2	35.865	4	134.9	143.4	4	-999.0
WBTSRHH	AB0904	43	1	5	2	20090502	1158	26.051N	79.403W	-999	-999,000	-999,000	9	-999,000	9	149.2	148.1	2	-999.0
WBTSRHH	AB0904	43	1	6	2	20090502	1203	26.053N	79.403W	307	17.176	36.300	2	36.298	2	149.2	148.1	2	-999.0
WBTSRHH	AB0904	43	1	7	2	20090502	1203	26.053N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	8	2	20090502	1208	26.055N	79.403W	206	19.381	36.585	2	36.590	2	144.8	144.8	2	-999.0
WBTSRHH	AB0904	43	1	9	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	10	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	11	2	20090502	1208	26.055N	79.403W	128	23.128	36.716	2	36.719	2	187.9	187.0	2	-999.0
WBTSRHH	AB0904	43	1	12	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	13	2	20090502	1208	26.055N	79.403W	59	24.743	36.445	2	36.442	2	203.5	203.0	2	-999.0
WBTSRHH	AB0904	43	1	14	2	20090502	1208	26.055N	79.403W	59	24.746	36.445	2	36.442	2	203.5	203.0	2	-999.0
WBTSRHH	AB0904	43	1	15	2	20090502	1208	26.055N	79.403W	3	25.253	36.375	2	36.373	2	202.8	203.5	2	-999.0
WBTSRHH	AB0904	43	1	16	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	17	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	18	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	19	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	20	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	21	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	22	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	23	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	43	1	24	2	20090502	1208	26.055N	79.403W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	1	2	20090502	1310	26.040N	79.481W	-999	-999,000	-999,000	9	-999,000	9	124.0	123.8	2	-999.0
WBTSRHH	AB0904	44	1	2	2	20090502	1315	26.041N	79.481W	657	7.899	34.977	2	34.974	2	124.0	123.8	2	-999.0
WBTSRHH	AB0904	44	1	3	2	20090502	1319	26.042N	79.481W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	4	2	20090502	1324	26.043N	79.481W	495	11.647	35.449	2	35.450	2	128.5	128.5	2	-999.0
WBTSRHH	AB0904	44	1	5	2	20090502	1327	26.045N	79.481W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	6	2	20090502	1331	26.046N	79.481W	416	13.562	35.709	2	35.709	2	129.8	130.2	2	-999.0
WBTSRHH	AB0904	44	1	7	2	20090502	1335	26.047N	79.481W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	8	2	20090502	1339	26.048N	79.480W	336	15.718	36.063	2	36.063	2	142.3	142.3	2	-999.0
WBTSRHH	AB0904	44	1	9	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	10	2	20090502	1344	26.050N	79.480W	268	17.864	36.396	2	36.394	2	147.7	148.3	2	-999.0
WBTSRHH	AB0904	44	1	11	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	12	2	20090502	1344	26.050N	79.480W	197	19.689	36.619	2	36.619	2	144.2	144.5	6	-999.0
WBTSRHH	AB0904	44	1	13	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	14	2	20090502	1344	26.050N	79.480W	118	23.557	36.664	2	36.663	2	177.4	189.2	4	-999.0
WBTSRHH	AB0904	44	1	15	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	16	2	20090502	1344	26.050N	79.480W	53	25.393	36.277	2	36.277	2	202.5	202.8	2	-999.0
WBTSRHH	AB0904	44	1	17	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	18	2	20090502	1344	26.050N	79.480W	3	25.462	36.271	2	36.271	2	202.7	202.1	2	-999.0
WBTSRHH	AB0904	44	1	19	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0
WBTSRHH	AB0904	44	1	20	2	20090502	1344	26.050N	79.480W	-999	-999,000	-999,000	9	-999,000	9	999.0	999.0	9	-999.0

WBTSRHB	AB0904	53	1	3	2	20090503	0758	27.002N	79.869W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	4	2	20090503	0801	27.004N	79.869W	200	202	14,101	35,792	2	35,793	2	125.2	2	125.2
WBTSRHB	AB0904	53	1	5	2	20090503	0804	27.006N	79.869W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	6	2	20090503	0808	27.009N	79.869W	144	145	15,747	35,996	2	36,006	4	132.5	2	132.7
WBTSRHB	AB0904	53	1	7	2	20090503	0899	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	8	2	20090503	0900	-999,000N	-999,000W	98	99	20,818	36,454	2	36,459	2	199.6	4	198.6
WBTSRHB	AB0904	53	1	9	2	20090503	0901	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	10	2	20090503	0902	-999,000N	-999,000W	48	48	24,498	36,462	2	36,465	2	202.1	2	204.7
WBTSRHB	AB0904	53	1	11	2	20090503	0903	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	12	2	20090503	0904	-999,000N	-999,000W	3	3	26,254	36,202	2	36,202	2	202.0	2	201.7
WBTSRHB	AB0904	53	1	13	2	20090503	0905	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	14	2	20090503	0906	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	15	2	20090503	0907	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	16	2	20090503	0908	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	17	2	20090503	0909	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	18	2	20090503	0910	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	19	2	20090503	0911	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	53	1	20	2	20090503	0912	-999,000N	-999,000W	361	364	9,698	35,176	2	35,178	2	118.0	2	117.5
WBTSRHB	AB0904	54	1	3	2	20090503	0913	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	4	2	20090503	0914	-999,000N	-999,000W	272	274	12,739	35,603	2	35,604	2	122.9	2	122.2
WBTSRHB	AB0904	54	1	5	2	20090503	0915	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	6	2	20090503	0916	-999,000N	-999,000W	200	202	16,356	36,124	2	36,123	2	127.6	2	126.8
WBTSRHB	AB0904	54	1	7	2	20090503	0917	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	8	2	20090503	0918	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	9	2	20090503	0919	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	10	2	20090503	0920	-999,000N	-999,000W	133	134	20,013	36,385	2	36,388	6	198.5	2	197.1
WBTSRHB	AB0904	54	1	11	2	20090503	0921	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	12	2	20090503	0922	-999,000N	-999,000W	87	88	23,058	36,546	2	36,549	2	193.1	2	196.8
WBTSRHB	AB0904	54	1	13	2	20090503	0923	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	14	2	20090503	0924	-999,000N	-999,000W	37	38	26,244	36,208	2	36,213	2	202.1	2	201.4
WBTSRHB	AB0904	54	1	15	2	20090503	0925	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	16	2	20090503	0926	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	17	2	20090503	0927	-999,000N	-999,000W	3	3	26,244	36,211	2	36,211	2	201.6	2	201.6
WBTSRHB	AB0904	54	1	18	2	20090503	0928	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	19	2	20090503	0929	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	20	2	20090503	0930	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	21	2	20090503	0931	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	22	2	20090503	0932	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	23	2	20090503	0933	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	54	1	24	2	20090503	0934	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	1	2	20090503	1021	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	2	2	20090503	1022	-999,000N	-999,000W	524	528	6,582	34,919	2	34,920	2	140.0	2	138.6
WBTSRHB	AB0904	55	1	3	2	20090503	1030	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	4	2	20090503	1034	-999,000N	-999,000W	450	454	8,881	35,092	2	35,091	6	121.9	2	121.7
WBTSRHB	AB0904	55	1	5	2	20090503	1038	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	6	2	20090503	1041	-999,000N	-999,000W	357	360	11,884	35,465	2	35,465	2	122.6	2	121.5
WBTSRHB	AB0904	55	1	7	2	20090503	1045	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	8	2	20090503	1050	-999,000N	-999,000W	266	268	15,798	36,063	2	36,066	2	128.2	2	127.6
WBTSRHB	AB0904	55	1	9	2	20090503	1050	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	10	2	20090503	1034	-999,000N	-999,000W	178	179	19,525	36,377	2	36,377	2	188.0	2	186.6
WBTSRHB	AB0904	55	1	11	2	20090503	1038	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	12	2	20090503	1041	-999,000N	-999,000W	115	116	23,575	36,637	2	36,632	2	182.9	2	183.7
WBTSRHB	AB0904	55	1	13	2	20090503	1045	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	14	2	20090503	1050	-999,000N	-999,000W	59	60	25,419	36,306	2	36,307	2	203.0	2	201.2
WBTSRHB	AB0904	55	1	15	2	20090503	1050	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	16	2	20090503	1034	-999,000N	-999,000W	3	4	26,162	36,223	2	36,222	2	201.4	2	201.5
WBTSRHB	AB0904	55	1	17	2	20090503	1038	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	18	2	20090503	1041	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	19	2	20090503	1045	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0
WBTSRHB	AB0904	55	1	20	2	20090503	1050	-999,000N	-999,000W	-999	-999	-999,000	-999,000	9	-999,000	9	-999.0	9	-999.0

