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**HYDROGRAPHIC MEASUREMENTS COLLECTED ABOARD THE UNOLS
SHIP R/V Knorr, 13 APRIL - 3 MAY 2011: WESTERN BOUNDARY TIME
SERIES CRUISE KN-200-4 (AB1104)**

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Miami, Florida
October 2014

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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

Office of Oceanic and
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Abstract

This report summarizes the April 13 - May 3, 2011 cruise on the UNOLS ship R/V Knorr involving full-water-column CTD and lowered ADCP profiles, along with shipboard ADCP profiles, conducted within the Florida Straits and east of Abaco Island, Bahamas. At each station, 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 Profilers, 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 52 CTD-O2/LADCP stations were occupied. PIES/CPIES data were downloaded from 3 sites. There was a successful recovery and deployment of a PIES at the A2 site. Mooring operations include recovery and redeployment of 14 moorings with a mixture of current meters, Acoustic Doppler Current Profilers (ADCPs), and temperature/salinity recorders, and bottom landers instrumented with bottom pressure recorders. As part of NOAA contribution to the Global Surface Drifter Program, 8 surface velocity drifters equipped with sea-surface temperature sensors and 3 Argo floats 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, 39 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 (e.g. van Sebille et al., 2011). This program is unique in that it is not just a single time series site, but instead is a section from which transport can be directly calculated, of which very few are available in the ocean that approach a decade or more in length.

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

1. Monitoring of the DWBC for watermass and transport signatures related to changes in the strengths and regions of high latitude water mass formation in the North Atlantic. Monitoring watermass properties in the DWBC at key locations is one part of an effort to track decadal changes in large-scale watermass properties.
2. Serving as a western boundary endpoint of a subtropical Meridional Overturning Circulation (MOC) heat flux monitoring system designed to measure the interior dynamic height difference across the Atlantic basin and the associated baroclinic heat transport.
3. Monitoring the intensity of the Antilles current as an index (together with the Florida Current) of inter-annual variability in the strength of the subtropical gyre. Variations in the strength of the subtropical gyre in relation to the North Atlantic Oscillation

(NAO) has been proposed as an important mechanism in the atmosphere-ocean 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 2011 (Figure 1 - 3 and Table 2). The R/V Knorr departed Port Everglades, FL on 13 April 2011. A total of 52 LADCP/CTD/Rosette stations were occupied. Water samples (up to 23 for each station), LADCP, 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 thirteen subsurface moorings and redeployment of 14 subsurface moorings with a mixture of current meters, ADCP's, and temperature/salinity recorders. As part of NOAA's contribution to the Global Surface Drifter Program, nine surface velocity drifters equipped with sea-surface temperature sensors were deployed. The cruise ended in Port Everglades, FL on 3 May 2011.

The goals of cruise KN-200-4 were to:

1. Service 14 deep-sea moorings located off the eastern Bahamas along latitude 26.5°N, including 9 taut wire subsurface current meter/CTD moorings, and 5 "bottom-lander" moorings containing high-precision bottom pressure gauges.
2. Deploy 3 Pressure-Inverted Echo Sounders (PIES) and recover data from 3 PIES sites by underwater acoustic telemetry.
3. Conduct CTD (Conductivity-Temperature-Depth) and Lowered ADCP (Acoustic Doppler Current Profiler) sections across the Florida Current at 27°N, Northwest Providence Channel, and along the 26.5°N RAPID-MOCHA western boundary line east of Abaco, Bahamas.
4. Perform several additional deep water CTD casts to calibrate moored instrumentation, and
5. Deploy 8 satellite tracked surface drifters and 3 profiling Argo floats at chosen locations along the cruise track.

Table 1: Cruise participants of R/V Knorr.

| Name | Responsibility | Affiliation |
|-------------------------|-----------------|-----------------|
| Bill Johns | Chief Scientist | RSMAS/ U. Miami |
| Adam Houk | Scientist | RSMAS/ U. Miami |
| Mark Graham | Technician | RSMAS/ U. Miami |
| Robert Jones | Technician | RSMAS/ U. Miami |
| Erik van Sebille | Post-doc | RSMAS/ U. Miami |
| Greta Leber | Student | RSMAS/ U. Miami |
| Chris Meinen | Scientist | NOAA/AOML |
| Andrew Stefanick | Technician | NOAA/AOML |
| Pedro Pena | Technician | NOAA/AOML |
| Kyle Seaton | Technician | UM/CIMAS |
| Rigoberto Garcia | Scientist | UM/CIMAS |
| Eleanor Frajka-Williams | Scientist | NOC Southampton |
| Darren Rayner | Scientist | NOC Southampton |
| Rob McLachlan | Technician | NOC Southampton |
| Christian Crowe | Technician | NOC Southampton |
| Dave Childs | Technician | NOC Southampton |
| Stephen Whittle | Technician | NOC Southampton |
| Thomas Roberts | Technician | NOC Southampton |
| Chris Hughes | Student | NOC Southampton |
| Kyle McDermott | Intern | Mate |

Table 2: Abaco Cruise – CTD Cast Summary

| Station | Date | Time (GMT) | Latitude | Longitude | Depth |
|---------|----------|------------|----------|-----------|-------|
| 1 | 04/13/11 | 21:31:27 | 26.432N | 78.668W | 744 |
| 2 | 04/13/11 | 23:44:43 | 26.333N | 78.717W | 678 |
| 3 | 04/14/11 | 01:16:52 | 26.250N | 78.766W | 506 |
| 4 | 04/14/11 | 02:43:16 | 26.164N | 78.800W | 437 |
| 5 | 04/14/11 | 04:02:15 | 26.065N | 78.849W | 282 |
| 6 | 04/14/11 | 15:20:21 | 25.954N | 76.894W | 3554 |
| 7 | 04/14/11 | 19:34:39 | 25.955N | 76.894W | 3555 |
| 8 | 04/15/11 | 00:59:24 | 25.953N | 76.896W | 4087 |
| 9 | 04/15/11 | 05:04:10 | 25.956N | 76.898W | 3555 |
| 10 | 04/15/11 | 10:45:34 | 26.525N | 76.884W | 442 |
| 11 | 04/15/11 | 12:06:38 | 26.518N | 76.833W | 1079 |
| 12 | 04/15/11 | 14:36:55 | 26.501N | 76.742W | 3883 |
| 13 | 04/15/11 | 19:18:23 | 26.501N | 76.654W | 4643 |
| 14 | 04/15/11 | 23:48:15 | 26.499N | 76.565W | 4897 |
| 15 | 04/16/11 | 04:46:31 | 26.494N | 76.480W | 4888 |
| 16 | 04/16/11 | 09:39:18 | 26.494N | 76.349W | 4913 |
| 17 | 04/16/11 | 14:05:33 | 26.493N | 76.222W | 4875 |
| 18 | 04/16/11 | 18:29:07 | 26.491N | 76.096W | 4861 |
| 19 | 04/16/11 | 22:59:04 | 26.487N | 75.908W | 4807 |
| 20 | 04/17/11 | 05:00:19 | 26.503N | 75.704W | 4741 |
| 21 | 04/17/11 | 09:19:06 | 26.507N | 75.504W | 4743 |
| 22 | 04/17/11 | 13:41:11 | 26.506N | 75.300W | 4690 |
| 23 | 04/17/11 | 19:33:50 | 26.500N | 75.075W | 4660 |
| 24 | 04/18/11 | 00:04:24 | 26.501N | 74.792W | 4599 |
| 25 | 04/18/11 | 04:41:31 | 26.502N | 74.518W | 4537 |
| 26 | 04/18/11 | 09:55:31 | 26.506N | 74.230W | 4602 |
| 27 | 04/18/11 | 15:06:35 | 26.510N | 73.854W | 4787 |
| 28 | 04/18/11 | 20:26:53 | 26.506N | 73.482W | 4984 |
| 29 | 04/19/11 | 01:36:03 | 26.496N | 73.131W | 5115 |
| 30 | 04/19/11 | 07:06:29 | 26.501N | 72.769W | 5205 |
| 31 | 04/19/11 | 12:39:58 | 26.499N | 72.390W | 5247 |
| 32 | 04/19/11 | 18:30:36 | 26.514N | 71.993W | 5368 |
| 33 | 04/20/11 | 00:53:11 | 26.502N | 71.502W | 5503 |
| 34 | 04/20/11 | 07:27:26 | 26.504N | 71.003W | 5564 |
| 35 | 04/20/11 | 14:26:46 | 26.518N | 70.499W | 5574 |
| 36 | 04/20/11 | 21:11:23 | 26.545N | 70.526W | 5542 |
| 37 | 04/21/11 | 04:25:47 | 26.513N | 70.502W | 5535 |
| 38 | 04/24/11 | 02:07:14 | 26.486N | 75.818W | 4789 |
| 39 | 04/25/11 | 05:31:12 | 26.503N | 75.717W | 4740 |
| 40 | 04/26/11 | 05:02:28 | 26.500N | 76.088W | 4845 |
| 41 | 04/27/11 | 03:06:05 | 26.490N | 76.470W | 4889 |
| 42 | 04/29/11 | 00:06:17 | 26.497N | 76.649W | 4041 |
| 43 | 04/30/11 | 21:14:42 | 26.789N | 76.552W | 3485 |
| 44 | 05/02/11 | 13:02:44 | 27.001N | 79.199W | 458 |
| 45 | 05/02/11 | 14:08:38 | 27.005N | 79.283W | 597 |
| 46 | 05/02/11 | 15:27:04 | 27.008N | 79.381W | 672 |
| 47 | 05/02/11 | 16:54:56 | 27.017N | 79.495W | 732 |
| 48 | 05/02/11 | 18:30:26 | 27.027N | 79.607W | 660 |
| 49 | 05/02/11 | 19:55:55 | 27.029N | 79.686W | 493 |
| 50 | 05/02/11 | 21:21:03 | 27.018N | 79.779W | 362 |
| 51 | 05/02/11 | 22:34:18 | 27.015N | 79.866W | 230 |
| 52 | 05/02/11 | 23:30:04 | 27.011N | 79.932W | 117 |

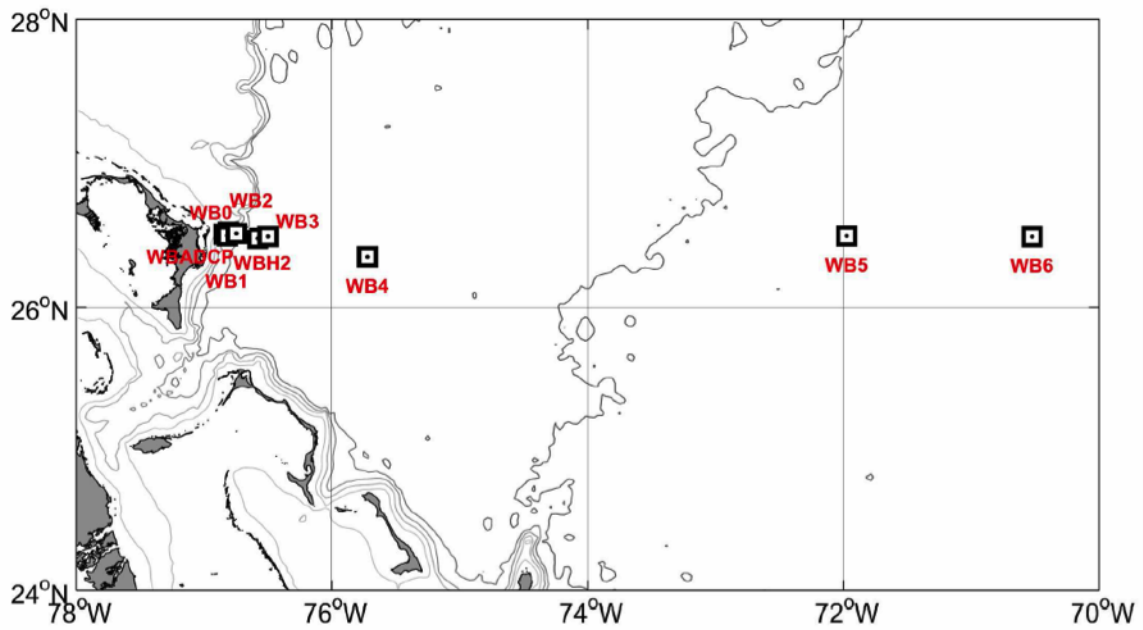


Figure 1: Abaco mooring station locations. Land masses are shaded gray with the Bahamas to the left.

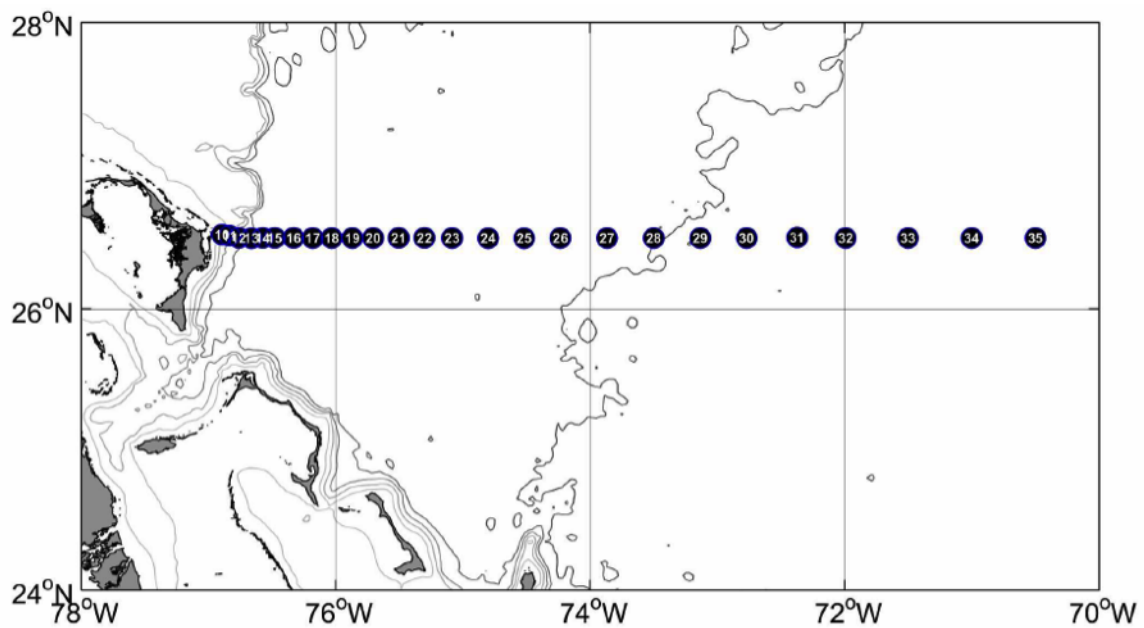


Figure 2: Abaco CTD station locations. Land masses are shaded gray with the Bahamas to the left.

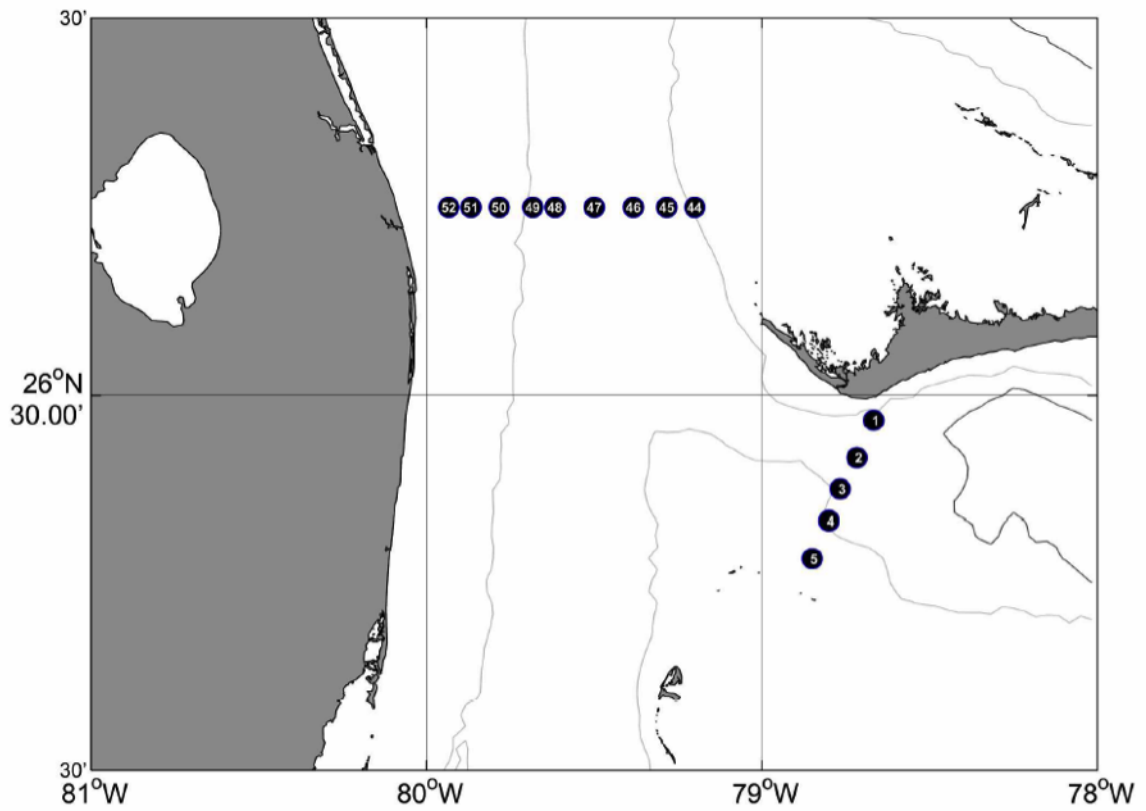


Figure 3: Florida Straits CTD station locations. Land masses are shaded gray with Florida on the left and the Bahamas on the right.

2 *Cruise Narrative*

The following section is a personal communication of Bill Johns.

The cruise departed from Port Everglades (Ft. Lauderdale), FL on April 13 at 0830 local time. The ship arrived in Freeport at 1410 local and anchored offshore to complete Bahamian clearance and immigration, which was finished by 1540 local. The CTD/LADCP section across Northwest Providence Channel (Stations 1 to 5) was accomplished without any problems, with both CTD and LADCP systems functioning well. The NOAA/AOML CTD/LADCP system was used, with NOAA's CTD frame interfaced to the Knorr's Seabird deck unit. A "chinese finger" wire clasp system with a safety strap was attached to the CTD cable just above the termination for added deployment security of the system. The LADCP system is a hybrid 150/300 kHz system, with a 300 kHz Workhorse ADCP looking upward from the CTD frame and a 150 kHz ADCP looking downward. A niskin bottle was removed to mount upward looking ADCP resulting in a maximum of 23 niskin bottles for water sampling. On this cruise we tested two new 150 kHz ADCPs, on loan from Woods Hole, that are designed specifically for deep water LADCP operations and were recently repaired by R.D. Instruments.

Once in deep water east of Abaco, 4 deep "cal-dip" CTD stations (Stations 6 to 9) were done to obtain in-situ calibration data for all the Seabird microcat instruments to be deployed on the moorings, and to test acoustic releases at depth prior to use. The first two cal-dip casts included only Seabird microcats and on these casts we also ran the LADCP system, which provided the first deep water tests of the new 150 kHz LADCP. The profiles from the LADCP system looked very good, similar in quality to what we had been obtained in the past with the AOML hybrid system in this region. On the 3rd of these cal-dip casts, with 4 UK releases included on the CTD and the LADCP system disabled, a minor delay was caused by neglecting to remove the 12 kHz pinger from the CTD frame. This required the CTD to be retrieved after 900m wire out and the cast restarted after removing it, in order to perform the release tests at depth.

Following this, the Abaco 26.5°N CTDO2/LADCP section was commenced on April 15th, and completed on April 20th (Stations 10 to 35). Nine surface drifters were launched along the section, at station 18 (2 drifters), station 25 (3 drifters), and station 29 (2 drifters). Argo floats were launched at stations 23, 32, and 35.

During the section, CTD cast 19 had to be hurried to completion by skipping all bottles above about 1000 m on the upcast, because of a vessel in distress nearby that we had to go assist. This turned out to be a 250ft+ Bolivian-flagged vessel that ran out of fuel and began firing flares. We stood off ready to assist until the U.S. Coast Guard arrived. During this break we replaced the primary temperature sensor on the CTD package, after noticing that there was a larger than normal temperature difference between the two sensors (off by about 0.002 at depth). The primary sensor was measuring higher than the secondary. We chose to replace the primary sensor because it also showed a high bias relative to all the freshly-calibrated microcats during the caldip casts, whereas the comparison with the

secondary was closer.

The problem with the CTD temperature sensor difference remained on subsequent casts; the new primary T sensor actually showed a slightly higher offset relative to the secondary (up to 0.003 at depth). A relatively large (up to 0.05 deg C) temperature bias, and conductivity bias, between the sensors also continued to occur on the upcast, with the values converging to their downcast offset during bottle stops. On station 23 we tried swapping out the pump for the primary sensors – no change. On station 24 we swapped out the secondary pump; still no affect. At this point it was decided not to swap out the secondary sensor since it compared well with the microcats, and it is likely more accurate than either of the primaries used. This also keeps one sensor pair in place for the whole section. It was later discovered, after completing the section, that this temperature offset in the thermocline was due to flow deflection off of the ADCP heads, as it did not occur during a cal-dip cast performed with the downward-looking ADCP removed. Unlike the old dual LADCP system, the downward looking 150 kHz unit could not be mounted in the center of the frame, and had to be mounted off center and closer to the CTD sensors. Evidently this proximity caused the upcast temperature and conductivity bias.

During casts 21 and 22, download problems began to occur with the WH150 LADCP (master), where the download would stop abruptly and freeze up. Otherwise, serial communications were still good. Hooking directly into the WH150 LADCP instead of through the star-cable solved the download problem, so it appeared to be a star cable problem. Unfortunately communications could not be re-established with the WH300 after reconnecting the star-cable back to the WH150, and so we had to swap in the spare AOML WH300 for station 23. We suspected a blown fuse on the WH300, but after opening it up and inspecting it, no problem was found, and the system began working again. We planned on replacing the star cable after cast 23, but the download began working reliably again on that and subsequent casts, and so the star cable was not replaced.

The last two planned CTD stations on the Abaco line were skipped, due to an advancing low pressure system from the east, and mooring work was commenced on April 20th, at site WB6. All planned mooring operations (Tables 4-7) were successfully completed between April 20 – May 1, working from east to west across the array. For most of the tall moorings (WB2, WBH2, WB3, WB4, and WB5), the approach was to recover the old mooring on one day, normally in the afternoon, and deploy the replacement mooring the next morning, with bottom lander recoveries and deployments fit in between. For the shorter moorings (WB-ADCP, WB0, WB1, and WB6), multiple mooring operations were usually conducted on each day. Few problems occurred. Among them was the failure of all of the new Novatech combination radio-strobe beacons used on the U.S. moorings, as well as the Argo locator beacons on moorings WB3 and WB5. The batteries were drained on the radio/strobe units, indicating that they never powered off when submerged, the reason for this is to be determined. The problem with the Argo locators was identified as a failure of the pressure switches to activate when they reached the surface. Also, Mooring WB3 came up very tangled and some segments had to be stopped off and recovered in reverse order. The mooring appeared to be laid out quite nicely downwind when it hit the surface, and we turned back

upwind after latching onto it after a short turn to the right. This turn was perhaps too tight and it is possible we dragged the mooring across itself and some of the loops got caught. One microcat on this mooring (at 250m) had clearly been the victim of a shark bite, with teeth scrapes evident and the sensor cover ripped off. Nevertheless it returned a full record.

During the evening breaks in the mooring work, operations consisted of PIES deployments and acoustic data telemetry (Table 3), and several additional CTD casts that either provided post-deployment CTD data for the PIEs sites and/or post-recovery cal-dip data for the microcats retrieved from all of the moorings (stations 36 to 43).

Because of the shortening of the Abaco CTD/LADCP section and the lack of any subsequent weather delay during the cruise or other operational problems, the cruise was nearly 2 days ahead of schedule at the end of the mooring work. The extra time was split between an extended shipboard ADCP survey of the region north of the Little Bahama Bank prior to beginning the Florida Straits CTD section, and moving up the ship's arrival schedule in port by one day (May 3rd instead of May 4th).

The final CTD/LADCP section across the Straits of Florida at 27°N was completed at 1920 local on May 2rd. The ship arrived at the Port Everglades sea buoy at approximately 0200 local May 3rd. Berthed by 0715. The cruise was nearly 100% successful: all planned activities except for the last two CTD stations on the Abaco CTD line were successfully accomplished.

3 *Inverted Echo-Sounder Operations*

NOAA maintains a line of pressure inverted echo sounders (PIES) along 26°30' N as part of its Western Boundary Time Series program. Some of the instruments are configured with an additional acoustic current meter, referred to as CPIES. The operations involving PIES/CPIES during the cruise are summarized in Table 3.

A summary of each of the telemetry session is provided below.

Table 3: Inverted echo-sounder locations and operation.

| IES Site | Type | Latitude | Longitude | Date | Operation |
|----------|-------|--------------|--------------|---------|------------|
| A | PIES | 026°30.95' N | 076°50.02' W | 4/30/11 | Telemetry |
| A2 | CPIES | 026°30.02' N | 076°44.61' W | 4/28/11 | Telemetry |
| B | PIES | 026°29.48' N | 076°28.16' W | 4/27/11 | Deployment |
| C | PIES | 026°30.1' N | 076°05.27' W | 4/26/11 | Deployment |
| D | PIES | 026°30.16' N | 075°42.33' W | 4/25/11 | Deployment |
| E | PIES | 026°30.0' N | 071°59.95' W | 4/22/11 | Telemetry |

4 Mooring Operations

Thirteen subsurface moorings were successfully recovered from the locations listed in Tables 4 and 5 and shown in Figure 1. These moorings contained a mixture of current meters, Acoustic Doppler Current Profilers (ADCPs), and temperature/salinity recorders. Sites with an "L" in their name represent bottom lander moorings which contained only precision bottom pressure sensors.

A total of 14 moorings (9 taut-wire moorings and 5 bottom landers) were deployed at the locations listed in Tables 6 and 7 and shown in Figure 1. Acoustic surveying of the on-bottom position of all moorings (except for some of the bottom landers) was successfully completed after each mooring deployment.

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

| Mooring Site | Mooring Number | Latitude (N) | Longitude (W) | Depth | Date of Recovery |
|--------------|----------------|--------------|---------------|-------|------------------|
| WB0 | M390 | 26° 30.41' | 76° 50.45' | 1004 | 04/29/2011 |
| WB3 | M391 | 26° 29.37' | 76° 30.02' | 4840 | 04/25/2011 |
| WB5 | M392 | 26° 30.16' | 71° 58.70' | 5294 | 04/21/2011 |
| WBL3 | M394 | 26° 29.42' | 76° 29.64' | 4843 | 04/25/2011 |
| WBL5 | M395 | 26° 30.05' | 71° 59.20' | 5240 | 04/21/2011 |

Table 5: Summary of U.K. mooring recovery operations.

| Mooring Site | Mooring Number | Latitude (N) | Longitude (W) | Depth | Date of Recovery |
|--------------|----------------|--------------|---------------|-------|------------------|
| WBADCP | N/A | 26° 31.50' | 76° 52.08' | 609 | 04/30/2011 |
| WB1 | N/A | 26° 29.97' | 76° 49.12' | 1394 | 04/29/2011 |
| WB2 | N/A | 26° 30.87' | 76° 44.79' | 3796 | 04/27/2011 |
| WBH2 | N/A | 26° 28.86 | 76° 34.74' | 4824 | 04/26/2011 |
| WBL4 | N/A | 26° 21.18' | 75° 43.32' | 4713 | 04/23/2011 |
| WB6 | N/A | 26° 29.65' | 70° 31.40' | 5491 | 04/20/2011 |
| WB2L5 | N/A | 26° 30.38' | 76° 44.63' | 3882 | 04/28/2011 |
| WB4L5 | N/A | 26° 21.26' | 75° 42.95' | 4713 | 04/24/2011 |

* mooring locations on bottom not surveyed after deployment

Table 6: Summary of U.S. mooring deployment operations.

| Mooring Site | Mooring Number | Latitude (N) | Longitude (W) | Depth | Date of Deployment |
|--------------|----------------|--------------|---------------|-------|--------------------|
| WB0 | M402 | 26° 30.39' | 76° 50.47' | 1005 | 04/30/2011 |
| WB3 | M403 | 26° 29.40' | 76° 29.87' | 4840 | 04/26/2011 |
| WB5 | M405 | 26° 29.48' | 71° 59.07' | 5298 | 04/22/2011 |
| WBL3 | M404 | 26° 29.09' | 76° 29.72' | 4843 | 04/25/2011 |
| WBL5* | M406 | 26° 30.06' | 71° 29.18' | 5295 | 04/22/2011 |

Table 7: Summary of U.K. mooring deployment operations.

| Mooring Site | Mooring Number | Latitude (N) | Longitude (W) | Depth | Date of Deployment |
|--------------|----------------|--------------|---------------|-------|--------------------|
| WBADCP* | N/A | 26° 31.50' | 76° 52.08' | 617 | 04/30/2011 |
| WB1 | N/A | 26° 30.19' | 76° 48.91' | 1375 | 04/29/2011 |
| WB2 | N/A | 26° 30.92' | 76° 44.57' | 3796 | 04/28/2011 |
| WBH2 | N/A | 26° 28.61' | 76° 37.32' | 4763 | 04/27/2011 |
| WB4 | N/A | 26° 29.21' | 75° 48.56' | 4745 | 04/24/2011 |
| WB6* | N/A | 26° 29.58' | 70° 31.53' | 5500 | 04/21/2011 |
| WBAL2* | N/A | 26° 31.57' | 76° 52.55' | 501 | 04/30/2011 |
| WB2L7 | N/A | 26° 30.43' | 76° 44.55' | 3882 | 04/28/2011 |
| WB4L7 | N/A | 26° 29.04' | 75° 48.62' | 4713 | 04/23/2011 |

5 *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 8.

Table 8: Equipment used during AB1104

| Instrument | SN | Stations | Use | Pre-Cruise Calibration | Comment |
|---|--------|----------|---------------|------------------------|-------------|
| Sea-Bird SBE 32 24-palce Carousel | 32 - | 1- 52 | | | |
| Water Sampler | | | | | |
| Sea-Bird SBE9plus CTD | 1035 | 1-52 | | 03/18/11 | |
| Paroscientific Digiquartz Pressure Sensor | 119631 | 1-52 | | 03/18/11 | |
| Sea-Bird SBE3plus Temperature Sensor | 4663 | 1- 19 | Primary | 02/17/11 | |
| Sea-Bird SBE3plus Temperature Sensor | 5171 | 20- 52 | Primary | 02/15/11 | |
| Sea-Bird SBE3plus Temperature Sensor | 2958 | 1- 52 | Secondary | 02/16/11 | |
| Sea-Bird SBE4C Conductivity Sensor | 3861 | 1- 52 | Primary | 02/25/11 | |
| Sea-Bird SBE4C Conductivity Sensor | 2980 | 1- 42 | Secondary | 02/15/11 | |
| Sea-Bird SBE4C Conductivity Sensor | 3854 | 43- 52 | Secondary | 03/11/11 | |
| Sea-Bird SBE43 Dissolved Oxygen Sensor | 2082 | 1- 52 | Primary | 03/16/11 | |
| Sea-Bird SBE43 Dissolved Oxygen Sensor | 1348 | 1-52 | Secondary | 02/26/11 | |
| Sea-Bird SBE5T Pump | 7268 | 1-22 | Primary | | |
| Sea-Bird SBE5T Pump | 7268 | 23-52 | Primary | | |
| Sea-Bird SBE5T Pump | 7267 | 1-23 | Secondary | | |
| Sea-Bird SBE5T Pump | 3953 | 24-52 | Secondary | | |
| Simrad 807 Altimeter | 980 | 1- 52 | Range - 280 m | | 2.928 scale |
| RDI LADCP - 150 kHz Broad Band (WHOI) | | | Downward | | |
| RDI LADCP - 150 kHz Broad Band (WHOI) | | | Downward | | |
| RDI LADCP - 300 kHz Workhorse (UM) | | 1- 22 | Upward | | |
| RDI LADCP - 300 kHz Workhorse (AOML) | | 23- 52 | Upward | | |

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

Three conductivity sensors were used during AB1104, serial numbers (s/n) 3861, 2980, and 3854. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington during February and March 2011. The coefficients shown in Table 9 were entered into Seasave using the configuration file.

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

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

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

Table 9: Calibration coefficients for the conductivity sensors.

| s/n 3861 | s/n 2980 | s/n 3854 |
|---------------------------------|---------------------------------|---------------------------------|
| February 25, 2011 | February 15, 2014 | March 11, 2011 |
| $g = -1.02461340\text{e}+01$ | $g = -1.00397788\text{e}+01$ | $g = -1.04192061\text{e}+01$ |
| $h = 1.36335330\text{e}+00$ | $h = 1.37167095\text{e}+00$ | $h = 1.58449935\text{e}+00$ |
| $i = -1.24254575\text{e}-03$ | $i = -5.28485306\text{e}-05$ | $i = -1.85132152\text{e}-03$ |
| $j = 1.58283501\text{e}-04$ | $j = 7.39871538\text{e}-05$ | $j = 2.37215775\text{e}-04$ |
| $CP_{cor} = -9.5700\text{e}-08$ | $CP_{cor} = -9.5700\text{e}-08$ | $CP_{cor} = -9.5700\text{e}-08$ |
| $CT_{cor} = 3.2500\text{e}-06$ | $CT_{cor} = 3.2500\text{e}-06$ | $CT_{cor} = 3.2500\text{e}-06$ |

5.2 Temperature

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

Three temperature sensors (SBE 3plus) were used during AB1104, serial numbers (s/n) 4663, 2958 and 5171. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington during February 2011. The following coefficients (Table 10) were entered into SEASAVE® using the configuration file. SEASAVE® automatically implements the equation below and converts between ITS-90 and IPTS-68 temperature scales as desired. The Temperature (ITS-90) is computed from g , h , i , j and f_0 and f is the instrument frequency (kHz) coefficients as follows:

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

Table 10: Calibration coefficients for the temperature sensors.

| s/n 4663 | s/n 2958 | s/n 5171 |
|-----------------------------|-----------------------------|-----------------------------|
| February 17, 2011 | February 16, 2011 | February 15, 2011 |
| $g = 4.38628753\text{e-}03$ | $g = 4.39502149\text{e-}03$ | $g = 4.39237658\text{e-}03$ |
| $h = 6.40580354\text{e-}04$ | $h = 6.73291801\text{e-}04$ | $h = 6.45406736\text{e-}04$ |
| $i = 2.13935781\text{e-}05$ | $i = 3.02713221\text{e-}05$ | $i = 2.29698970\text{e-}05$ |
| $j = 1.79166652\text{e-}06$ | $j = 2.84425418\text{e-}06$ | $j = 2.13709910\text{e-}06$ |
| $f_0 = 1000.0$ | $f_0 = 1000.0$ | $f_0 = 1000.0$ |

5.3 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 $172 \text{ kHz} \pm 50 \text{ ppm}/^\circ\text{C}$.

The pressure sensors utilized during AB1104 was s/n 1035. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington on March 2011. The

following coefficients (Table 11) were entered into SEASAVE® using the configuration file:
 Pressure coefficients are first formulated into:

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

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

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

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

Table 11: Calibration coefficients for the pressure sensor.

| s/n 1035 |
|------------------------|
| March 18, 2011 |
| $c_1 = -4.373825e+04$ |
| $c_2 = 4.277260e-01$ |
| $c_3 = 1.413200e-02$ |
| $d_1 = 3.420800e-02$ |
| $d_2 = 0.000000e+00$ |
| $t_1 = 2.988725e+01$ |
| $t_2 = -1.949980e-04$ |
| $t_3 = 4.187800e-06$ |
| $t_4 = 4.590370e-09$ |
| $t_5 = 0.000000e+00$ |
| Slope = 1.00001000 |
| Offset = -0.04860 |
| AD590M = 1.279900e-02 |
| AD590B = -9.386550e+00 |

5.4 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 2082 and 1348 were used during AB1104. The following oxygen coefficients (Table 12) were entered into SEASAVE® using the configuration file:

Table 12: Calibration coefficients for the dissolved oxygen sensors.

| s/n 2082 | s/n 1348 |
|------------------------------|------------------------------|
| March 16, 2011 | February 26, 2011 |
| Soc = 0.4104 | Soc = 0.5388 |
| Voffset = -0.5320 | Voffset = -0.5198 |
| Tau20 = 1.30 | Tau20 = 1.66 |
| A = -2.5651e-03 | A = -3.1314e-03 |
| B = 1.6857e-04 | B = 1.3614e-04 |
| C = 2.9053e-06 | C = -2.2679e-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:

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

where Soc , V_{offset} , tau , A , B , C , E and $p1$ are the calibration coefficients shown above and V is the instrument voltage (V). T , S and P are the temperature, salinity and pressure

measured by the CTD. K is the temperature in the absolute scale (K), $\delta v/\delta t$ is the oxygen voltage time derivative, $station$ is the station number, and $OXSAT$ is the oxygen saturation value calculated according to (Weiss, 1970):

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

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:

$$\begin{aligned} D &= 1 + H_1 * (e^{\left(\frac{P(i)}{H^2}\right)} - 1) \\ C &= e\left(-1 * \left(\frac{Time(i) - Time(i - 1))}{H3}\right)\right) \\ O_V(i) &= O_{volt}(i) + V_{offset} \\ O_{newvolts}(i) &= a * \frac{a}{D} \\ O_{finalvolts}(i) &= O_{newvolts}(i) - V_{offset} \end{aligned}$$

Where:

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

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

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

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

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

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

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

$H1$ = 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.

6 *Data Acquisition*

CTD/rosette casts were performed with a package consisting of a 24-place, 10-liter rosette frame, a 24-place water sampler (SBE32) and 24, 10-liter Bullister-style bottles. 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 an altimeter. The other underwater electronic components consisted of two RDI LADCPs. A total of 52 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.

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.

6.1 *Data Acquisition Procedure*

This report was written after the cruise was completed where no CTD procedures were recorded. On deck pressure was obtained from the cruise log book.

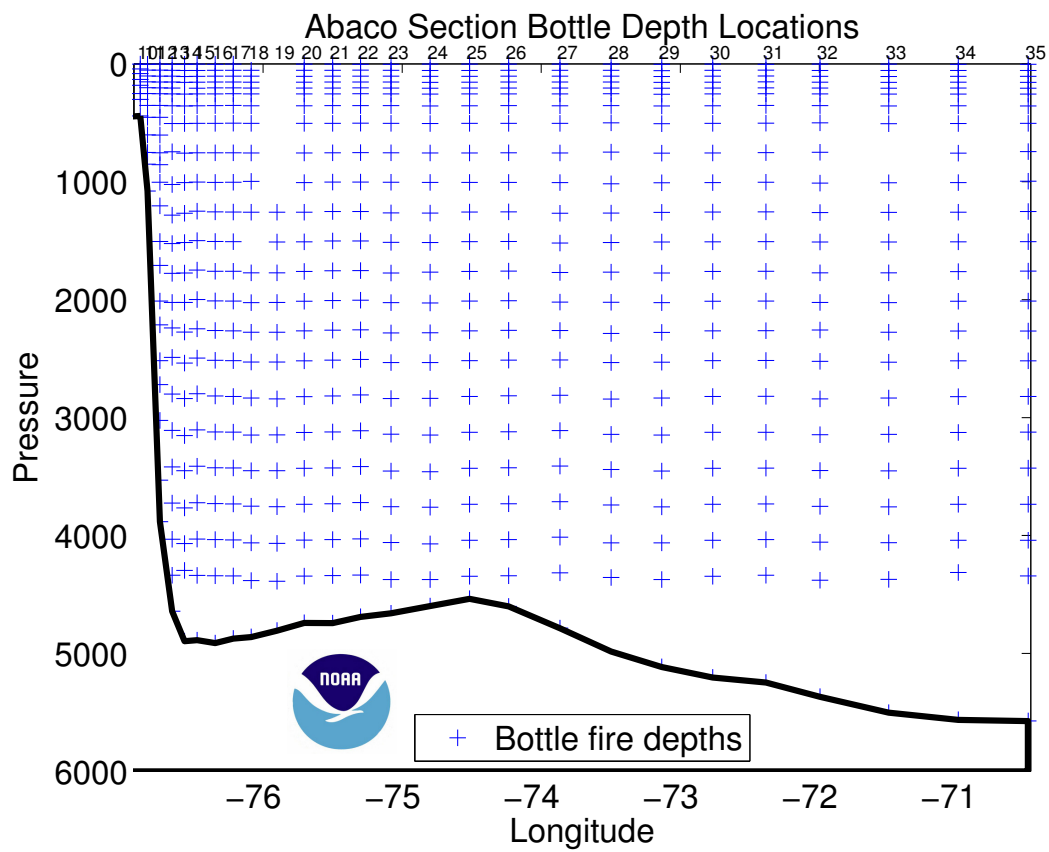


Figure 4: Bottle locations for 26.5°N Deep Western Boundary Current section east of Abaco Island.

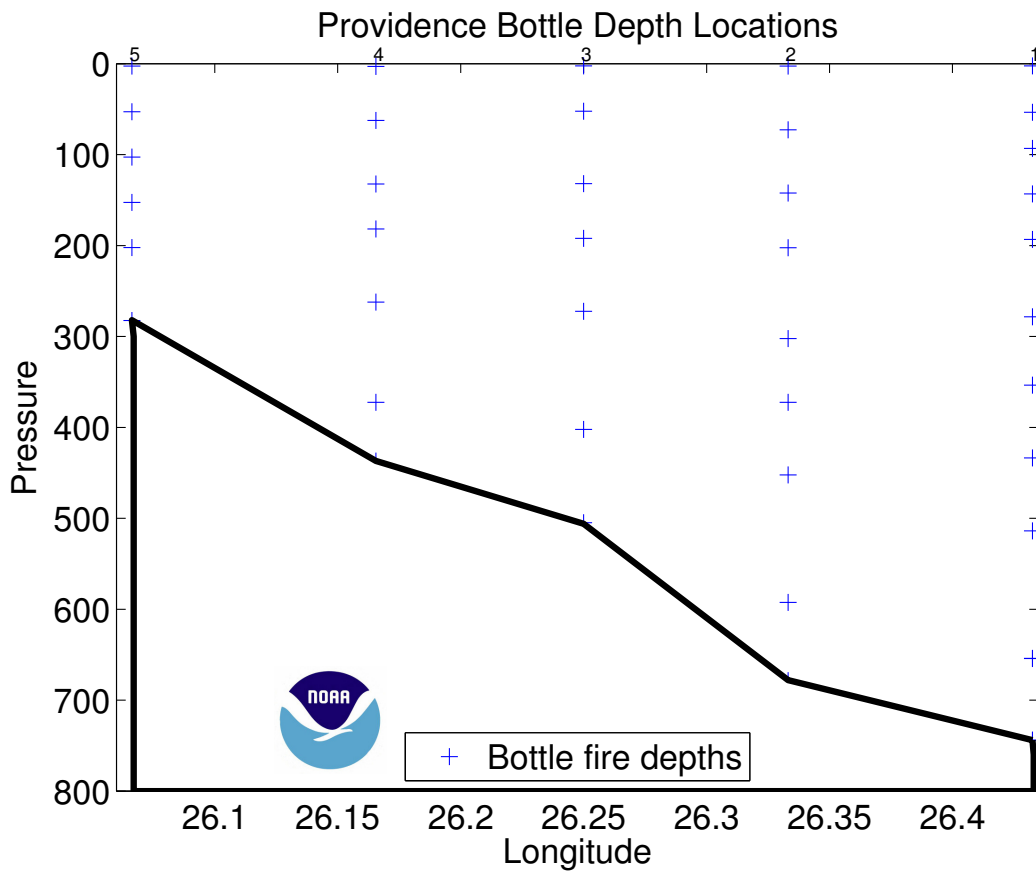


Figure 5: Bottle locations for along the Northwest Providence Channel section.

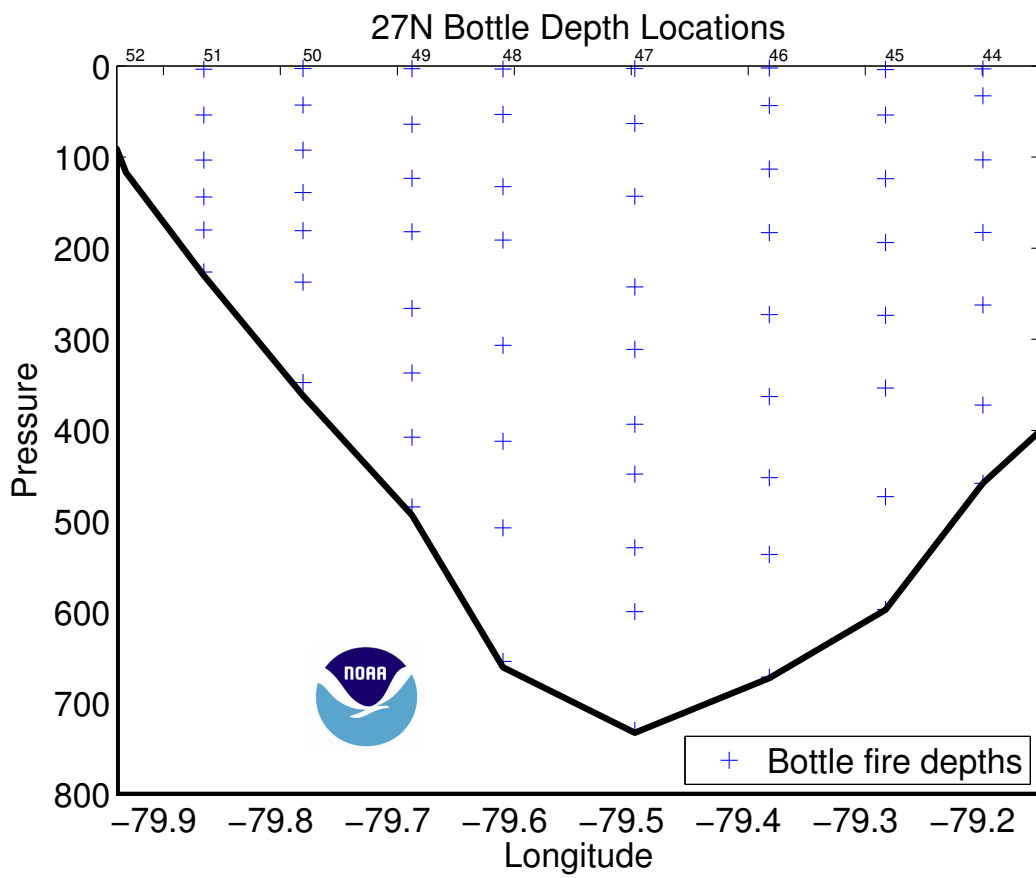


Figure 6: Bottle locations for 27°N section in the Florida Straits.

6.2 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using SEABIRD SBE Data Processing version 7.21h and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave 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.
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/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 52 casts were processed.

6.3 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 8.

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 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 several sensor combinations (not including pump replacements) used during the cruise.

6.3.1 Salinity Analysis

A single Guildline Autosol, model 8400B, was used for all salinity measurements. The salinometer readings were logged on a computer using Ocean Scientific International's logging hardware and software. The Autosol's water bath temperature was set to 24°C, which the Autosol is designed to automatically maintain. The salinometer was standardized for each group of samples analyzed using two bottles of standard seawater: one at the beginning and end of each set of measurements. The salinometer output was logged to a computer file. The software prompted the analyst to flush the instrument's cell and change samples when appropriate. For each calibration standard, the salinometer cell was initially flushed 6 times before a set of conductivity ratio reading was taken. For each sample, the salinometer cell was initially flushed at least 3 times before a set of conductivity ratio readings were taken.

IAPSO Standard Seawater Batch P-152 was used to standardize the casts (Table 13).

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

Table 13: Nominal values for the batches of IAPSO standard seawater.

| |
|------------------|
| P-152 |
| Use By: May 2013 |
| K15: 0.99981 |
| Salinity: 34.993 |

The offset between the initial standard seawater value and its reference value was applied to each sample. Then the difference (if any) between the initial and final vials of standard seawater was applied to each sample as a linear function of elapsed run time. The corrected salinity data was then incorporated into the cruise database.

The running standard calibration values are shown in Figure 7. Through the course of the 20 day cruise, the autosal standards changed by 0.0005 in conductivity ratio (about 0.1 in salinity). Stations 46-51 were flagged as 4 due to bad autosal runs.

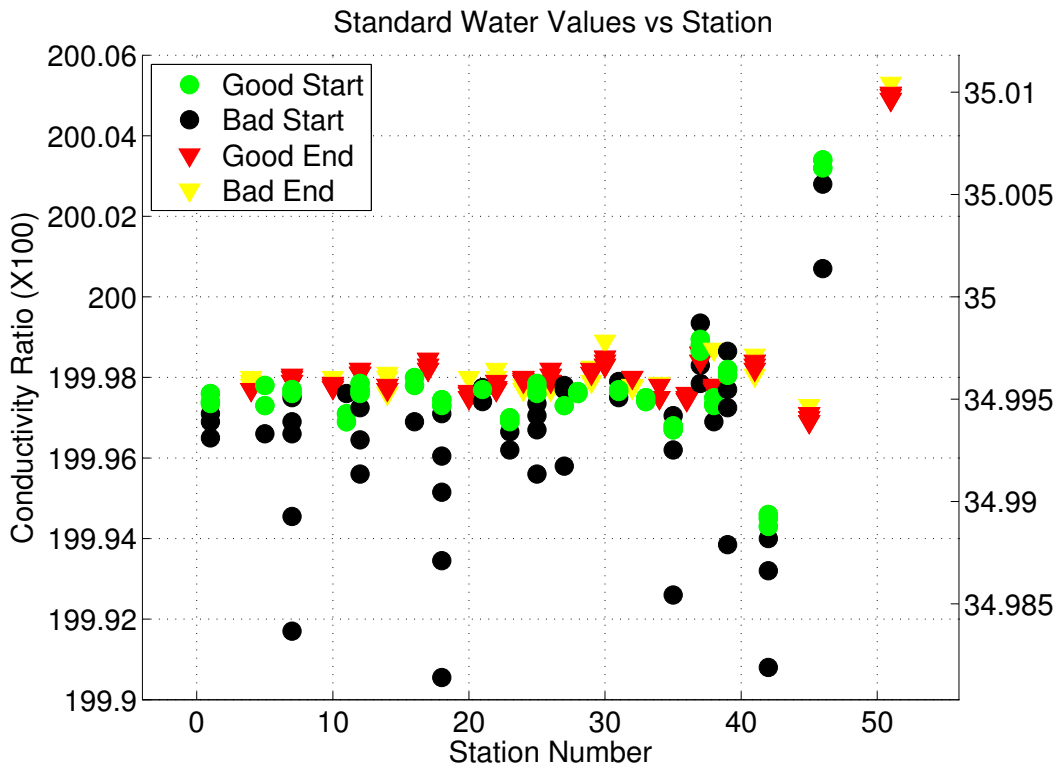


Figure 7: Standard vial calibrations throughout the cruise.

6.3.2 Oxygen Analysis

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

Dissolved oxygen samples were drawn from Niskin bottles into calibrated 125-150ml iodine titration flasks using silicon tubing. Bottles were rinsed three times and filled from the bottom, overflowing three volumes while taking care not to entrain any bubbles. The CTD temperatures were used to calculate $\mu\text{mol}/\text{kg}$ concentrations. 1ml of MnCl_2 and 1ml of NaOH/NaI were added immediately after drawing the sample was concluded using a ThermoScientific REPIPET II. The flasks were then stoppered and shaken well. Deionized water (DIW) was added to the neck of each flask to create a water seal. The total number of oxygen samples collected from the rosette was 627 including the duplicate samples, two taken at random every cast. The samples were stored in the lab in plastic totes at room temperature for 1.5 hours before analysis. The data was incorporated into the cruise database shortly after analysis. Thiosulfate normality was calculated from the laboratory temperature for each sample run.

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

The precision of the oxygen measurements during the cruise were estimated by using the duplicate samples. From the 30 duplicate samples (Table 14), which corresponds to 4.6% of the total samples collected during this cruise, the average residual for the duplicates was $-0.05 \mu\text{mol}/\text{kg}$ with a standard deviation of $0.34 \mu\text{mol}/\text{kg}$ (Figure 8). Not oxygens were collected during the mooring sensor calibration casts, stations 1-6 and 36-43.

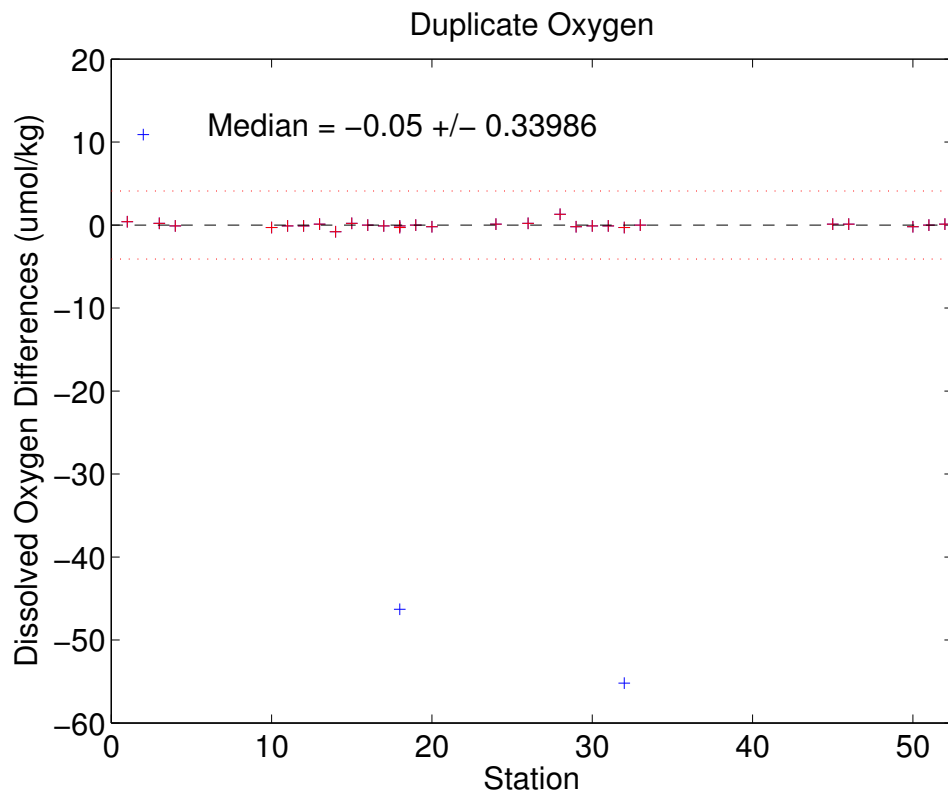


Figure 8: Oxygen residuals of the duplicate samples .

Table 14: Duplicate dissolved oxygen samples collected during the ABACO cruise (values in *umol/kg*).

| Station | Niskin | Oxygen1 | Oxygen2 | Differences |
|---------|--------|---------|---------|-------------|
| 1 | 4 | 147.8 | 148.2 | -0.400 |
| 2 | 2 | 153.6 | 164.5 | -10.900 |
| 3 | 4 | 192.5 | 192.7 | -0.200 |
| 4 | 2 | 180.9 | 180.8 | 0.100 |
| 10 | 5 | 213.6 | 213.3 | 0.300 |
| 11 | 9 | 202.9 | 202.8 | 0.100 |
| 12 | 8 | 270.7 | 270.6 | 0.100 |
| 13 | 2 | 273.0 | 273.1 | -0.100 |
| 14 | 12 | 266.4 | 265.6 | 0.800 |
| 15 | 6 | 275.9 | 276.1 | -0.200 |
| 16 | 8 | 270.9 | 270.9 | 0.000 |
| 17 | 14 | 201.6 | 201.5 | 0.100 |
| 18 | 6 | 276.2 | 275.9 | 0.300 |
| 18 | 13 | 246.8 | 246.7 | 0.100 |
| 19 | 9 | 270.6 | 270.6 | 0.000 |
| 20 | 14 | 192.0 | 191.8 | 0.200 |
| 24 | 18 | 204.2 | 204.3 | -0.100 |
| 26 | 13 | 244.1 | 244.3 | -0.200 |
| 28 | 2 | 271.4 | 272.7 | -1.300 |
| 29 | 17 | 201.8 | 201.6 | 0.200 |
| 30 | 2 | 271.4 | 271.3 | 0.100 |
| 31 | 20 | 210.6 | 210.5 | 0.100 |
| 32 | 9 | 269.3 | 269.0 | 0.300 |
| 32 | 14 | 200.0 | 144.8 | 55.200 |
| 33 | 6 | 273.5 | 273.5 | 0.000 |
| 45 | 4 | 159.0 | 159.1 | -0.100 |
| 46 | 4 | 128.7 | 128.8 | -0.100 |
| 50 | 2 | 135.5 | 135.3 | 0.200 |
| 51 | 2 | 131.1 | 131.1 | 0.000 |
| 52 | 2 | 131.7 | 131.8 | -0.100 |

7 *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.

Several sensor combinations were used during the cruise as listed in Table 8. Secondary TC pair T4258/C3854 was selected for final data reduction. Secondary oxygen sensor, s/n 1348, 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.

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

7.2 CTD Pressure

Pressure sensor calibration coefficients derived from the pre-cruise calibrations were applied to raw pressure data during each cast. Residual pressure offsets (the difference between the first and last submerged pressures) were examined to check for calibration shifts (see Figure 9 and Table 15). Pressure sensor, s/n 1035, was used during the cruise. On deck pressures before the start of each cast was recorded and is plotted in Figure 9. The on deck pressure before the cast was stable at 0.00 ± 0.089 dbar. No correction to the pressure sensor was applied.

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 (2.81 ± 0.52 dbar before and 2.77 ± 0.57 dbar after).

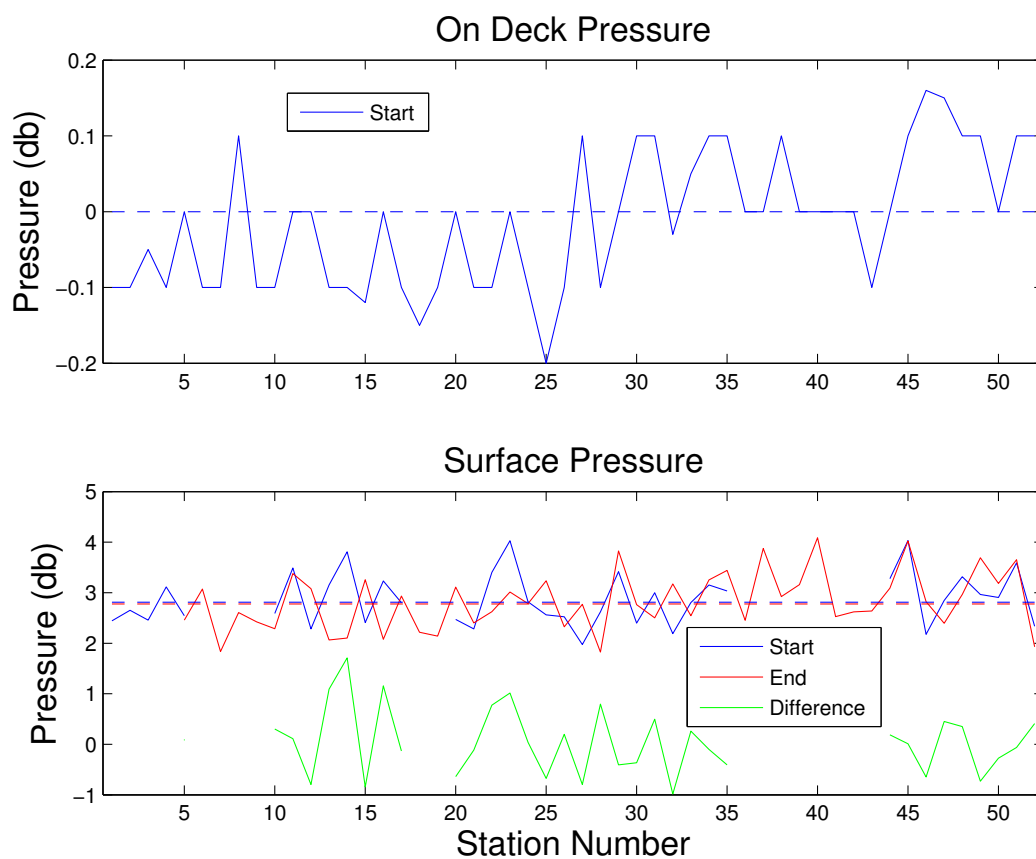


Figure 9: Pressure differences vs. station number. Top panel is the pressures measured on deck before the cast (blue). Bottom panel are the sea surface pressure values measured at the start of the downcast (blue), at the end of the upcast (red) and their respective difference (green).

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 | 3457 | -0.1000 | NaN | 2.4420 | NaN |
| 2 | 3457 | -0.1000 | NaN | 2.6530 | NaN |
| 3 | 3169 | -0.0500 | NaN | 2.4570 | NaN |
| 4 | 2329 | -0.1000 | NaN | 3.1140 | NaN |
| 5 | 2841 | 0.0000 | NaN | 2.5440 | 2.4580 |
| 6 | 4099 | -0.1000 | NaN | NaN | 3.0720 |
| 7 | 3115 | -0.1000 | NaN | NaN | 1.8350 |
| 8 | 3541 | 0.1000 | NaN | NaN | 2.6050 |
| 9 | 3798 | -0.1000 | NaN | NaN | 2.4210 |
| 10 | 3863 | -0.1000 | NaN | 2.5900 | 2.2870 |
| 11 | 3819 | 0.0000 | NaN | 3.4880 | 3.3770 |
| 12 | 3202 | 0.0000 | NaN | 2.2830 | 3.0790 |
| 13 | 4252 | -0.1000 | NaN | 3.1540 | 2.0630 |
| 14 | 3060 | -0.1000 | NaN | 3.8090 | 2.1010 |
| 15 | 2735 | -0.1200 | NaN | 2.4100 | 3.2550 |
| 16 | 4666 | 0.0000 | NaN | 3.2340 | 2.0770 |
| 17 | 4716 | -0.1000 | NaN | 2.8020 | 2.9350 |
| 18 | 2657 | -0.1500 | NaN | NaN | 2.2160 |
| 19 | 2813 | -0.1000 | NaN | NaN | 2.1400 |
| 20 | 2049 | 0.0000 | NaN | 2.4720 | 3.1110 |
| 21 | 3316 | -0.1000 | NaN | 2.2850 | 2.4000 |
| 22 | 4789 | -0.1000 | NaN | 3.4010 | 2.6250 |
| 23 | 2470 | 0.0000 | NaN | 4.0270 | 3.0130 |
| 24 | 2457 | -0.1000 | NaN | 2.8200 | 2.7830 |
| 25 | 2578 | -0.2000 | NaN | 2.5620 | 3.2360 |
| 26 | 5158 | -0.1000 | NaN | 2.5230 | 2.3250 |
| 27 | 5103 | 0.1000 | NaN | 1.9740 | 2.7710 |
| 28 | 3072 | -0.1000 | NaN | 2.6200 | 1.8240 |
| 29 | 2281 | 0.0000 | NaN | 3.4170 | 3.8260 |
| 30 | 4351 | 0.1000 | NaN | 2.3970 | 2.7640 |
| 31 | 4879 | 0.1000 | NaN | 2.9990 | 2.5030 |
| 32 | 2992 | -0.0300 | NaN | 2.1880 | 3.1730 |
| 33 | 2996 | 0.0500 | NaN | 2.8040 | 2.5450 |
| 34 | 4721 | 0.1000 | NaN | 3.1520 | 3.2520 |
| 35 | 4729 | 0.1000 | NaN | 3.0330 | 3.4400 |
| 36 | 2547 | 0.0000 | NaN | NaN | 2.4540 |
| 37 | 3317 | 0.0000 | NaN | NaN | 3.8750 |
| 38 | 2625 | 0.1000 | NaN | NaN | 2.9240 |
| 39 | 2899 | 0.0000 | NaN | NaN | 3.1590 |
| 40 | 2848 | 0.0000 | NaN | NaN | 4.0860 |
| 41 | 2964 | 0.0000 | NaN | NaN | 2.5280 |
| 42 | 4114 | 0.0000 | NaN | NaN | 2.6210 |
| 43 | 3297 | -0.1000 | NaN | NaN | 2.6380 |
| 44 | 2116 | 0.0000 | NaN | 3.2790 | 3.0910 |
| 45 | 3171 | 0.1000 | NaN | 4.0310 | 4.0200 |
| 46 | 2732 | 0.1600 | NaN | 2.1750 | 2.8220 |
| 47 | 2582 | 0.1500 | NaN | 2.8470 | 2.3940 |
| 48 | 4546 | 0.1000 | NaN | 3.3150 | 2.9650 |
| 49 | 5791 | 0.1000 | NaN | 2.9630 | 3.6920 |
| 50 | 4137 | 0.0000 | NaN | 2.9070 | 3.1820 |
| 51 | 4862 | 0.1000 | NaN | 3.5900 | 3.6540 |
| 52 | 4540 | 0.1000 | NaN | 2.3370 | 1.9280 |

7.3 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 10, which shows a median temperature difference between the two sensors of $0.0015\text{ }^{\circ}\text{C}$ and a standard deviation of $0.001\text{ }^{\circ}\text{C}$.

The pressure dependence between the two temperature sensors is show below in Figure 11. There is a discrepancy in the downcast versus upcast profile slopes due to the pressure dependence effect in the strong gradient of the thermocline. The primary temperature sensor, s/n 4663, was a temperature sensor on loan from Seabird, used to calibrate their temperature sensors, with no known pressure dependence. A pressure correction was then applied to the secondary sensor, s/n 2958, with $m = 4.0869\text{e-}07$ and $b = -4.1315\text{e-}04$.

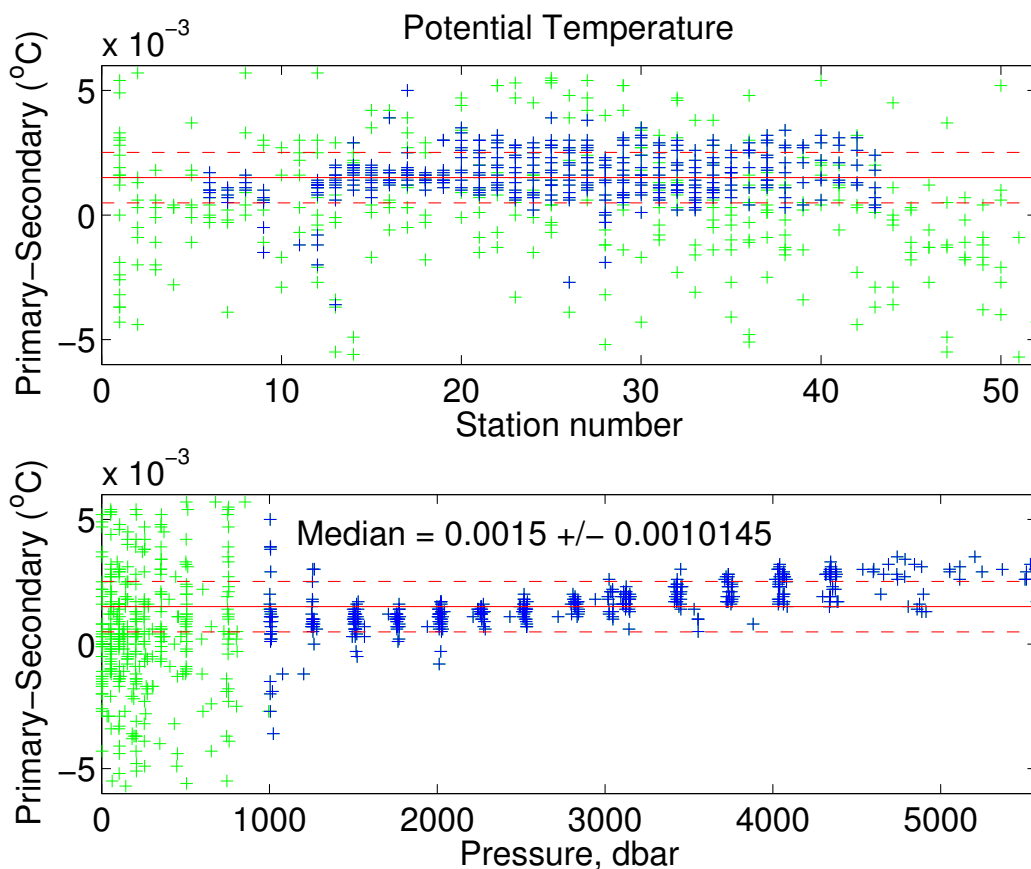


Figure 10: Temperature differences (after corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation (same for top and bottom).

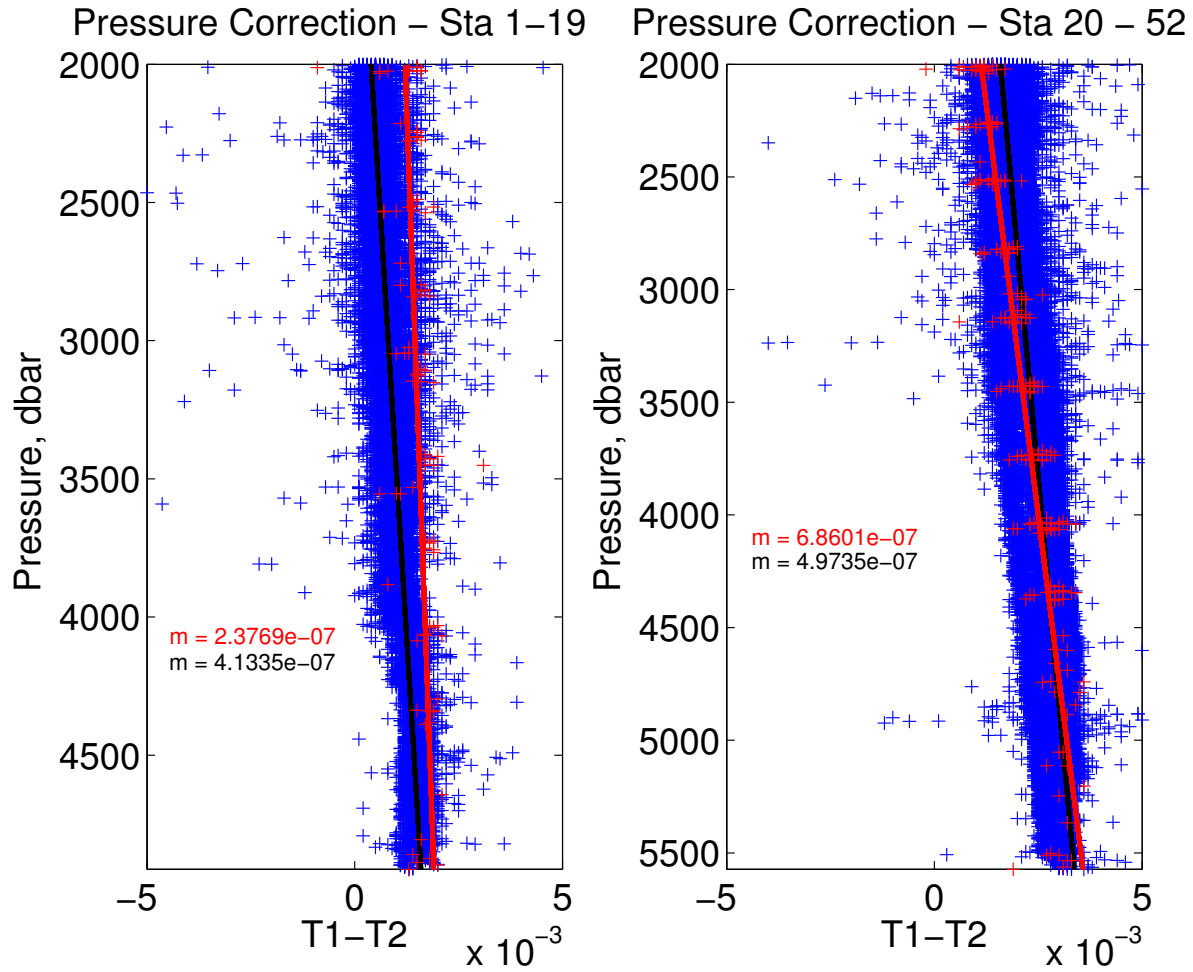


Figure 11: Pressure dependent correction for temperature differences of the downcast profile (blue) with slope fit (black) and the upcast with slope fit (red).

7.4 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. Several conductivity sensor sets were used throughout the cruise. There is a strong pressure dependence between the primary and secondary sensors. The pressure dependence between the two pairs of conductivity sensors can be seen in Figures 13. The sensors show a median difference of 0.00308 S/m and a standard deviation of 0.001 mS/m. Both sensors showed reasonable values for the residuals. The primary sensor wasn't chosen due to flushing problems caused by the ADCP. There was a strong pressure affect with the secondary sensor, but was linear. The pressure offsets can be seen in Table 16. The secondary sensors, s/n 2980 and s/n 3854, were used for all the final data values (Figure 14).

Table 16: Conductivity pressure offsets.

| Sensor s/n | Station | Offset |
|------------------|---------|---------|
| Primary - 3861 | 1 - 52 | -0.0001 |
| Secondary - 2980 | 1-42 | -0.0031 |
| Secondary - 3854 | 43 - 52 | -0.0029 |

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 713 data points (88.9 %) were used in the final calculations.

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

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

with

where C_{bottle} is bottle conductivity (S/m), C_{CTD} is pre-cruise calibrated CTD conductivity (S/m), m is the conductivity slope, b is the offset (S/m), 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

| s/n 2980 | s/n 3854 |
|-----------------------|-----------------------|
| $m=0.9998684$ | $m=1.0002494$ |
| $p_1=1.0533148e-05$ | $p_1=-1.434111e-03$ |
| $b=0.005057$ | $b=0.0567455$ |
| $pcor=2.43602678e-07$ | $pcor=-2.5778481e-08$ |

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 14 to Figure 18) show a residual of $-6.35 \cdot 10^{-5}$ psu ($-7.27 \cdot 10^{-5}$ psu for the data below 1000 dbar) and a standard deviation of 0.0026 psu (0.001 psu for the data below 1000 dbar). Also 71.2% of the residuals for the data are within the confidence limits determined by the WOCE (± 0.002 psu) and this number increases to 93.6% 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 19 and Figure 20). Water mass properties are very stable, specially for deeper layers of the ocean, that way by comparing these values we can have a very good estimative of the quality of these data.

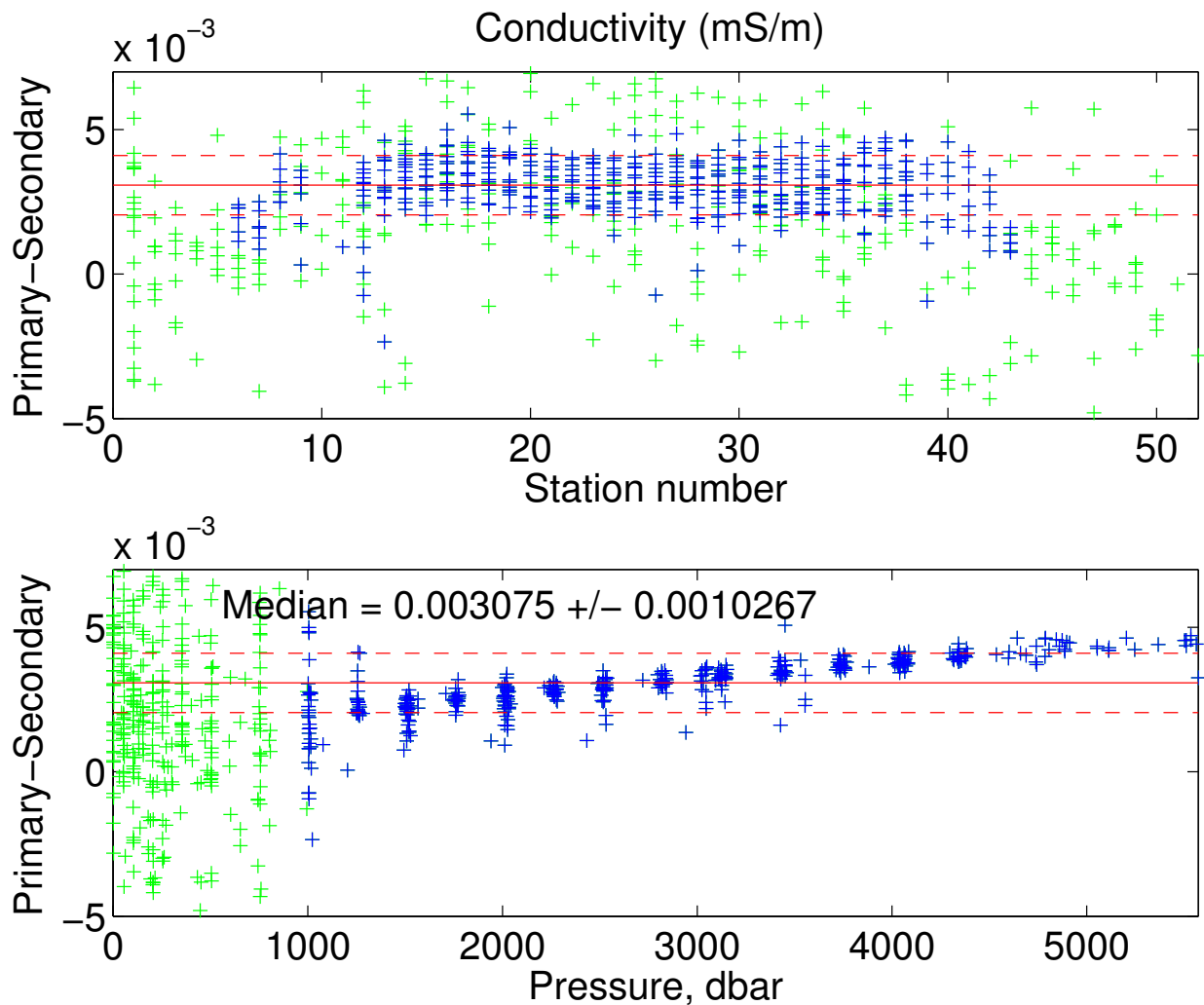


Figure 12: Conductivity (S/m) differences between sensors by station (top) and pressure (bottom). The red solid line represents the median with the red dashed representing the standard deviation.

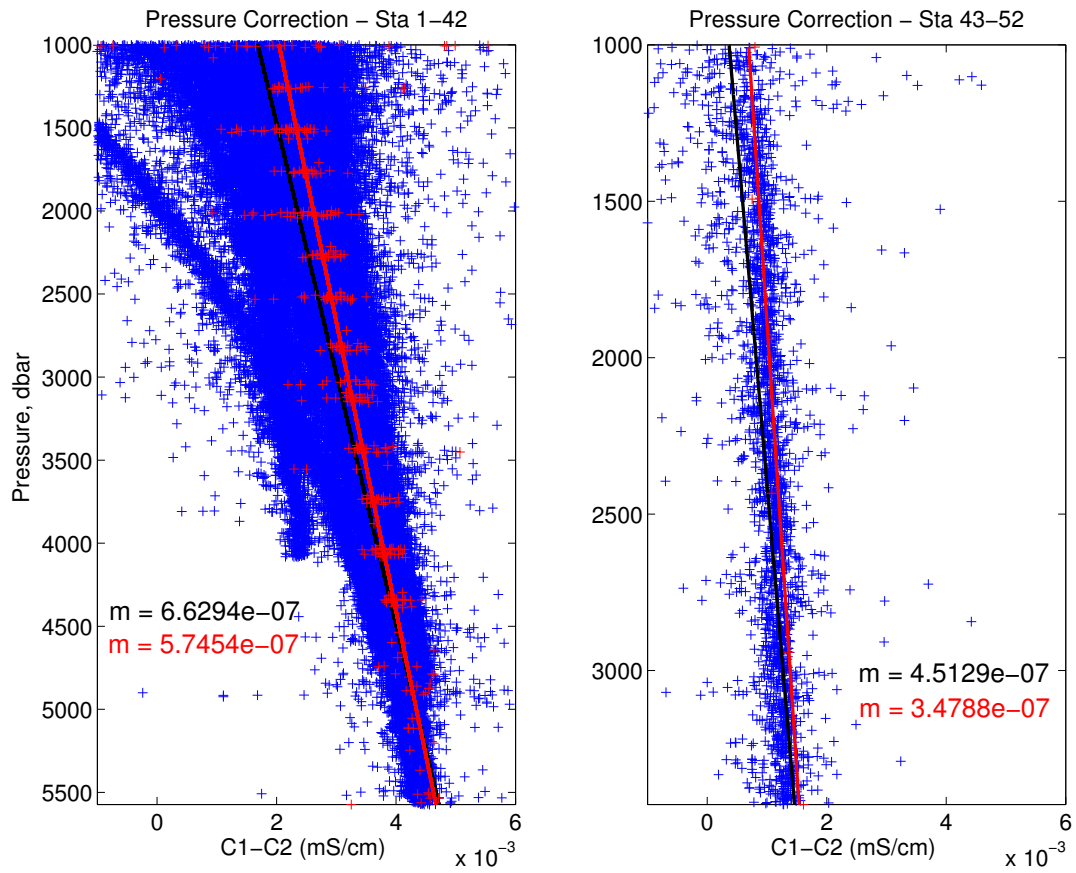


Figure 13: Pressure dependent correction for conductivity differences for stations 1-52 with the downcast profile (blue) with slope fit (black) and the upcast with slope fit (red).

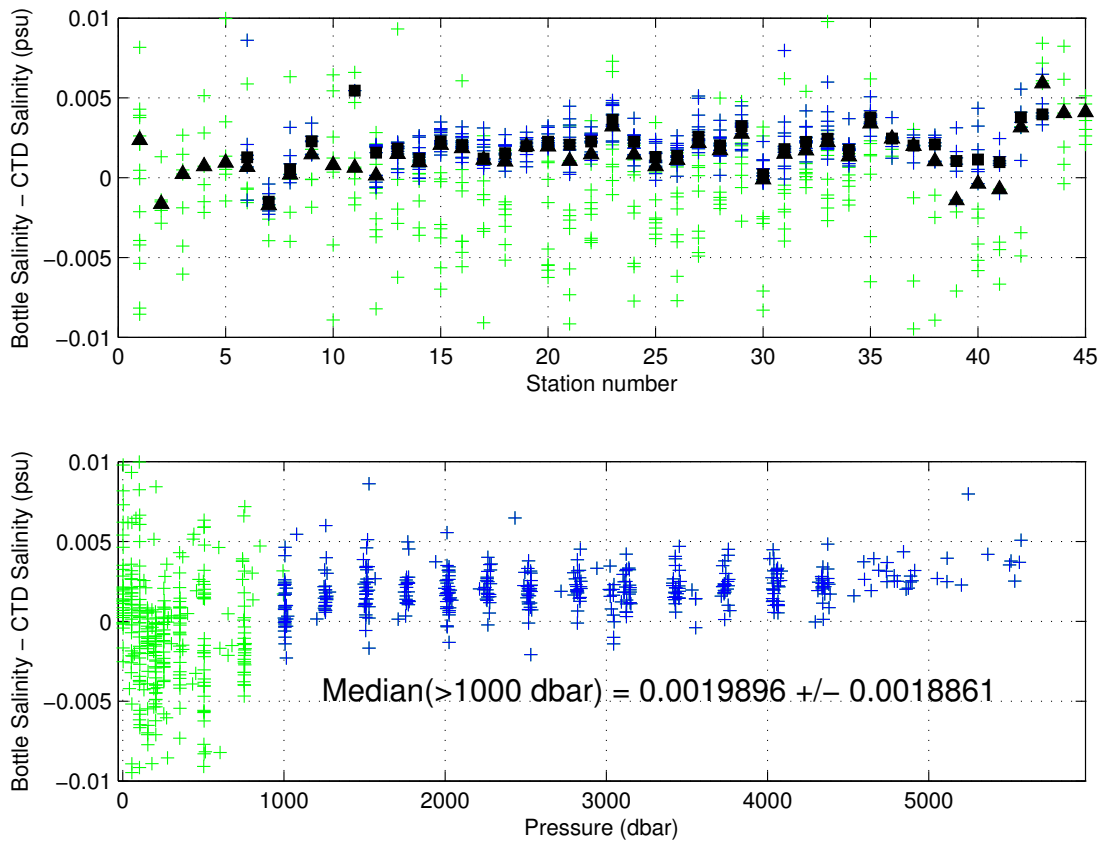


Figure 14: Bottle and uncalibrated secondary CTD salinity differences plotted against pressure. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.

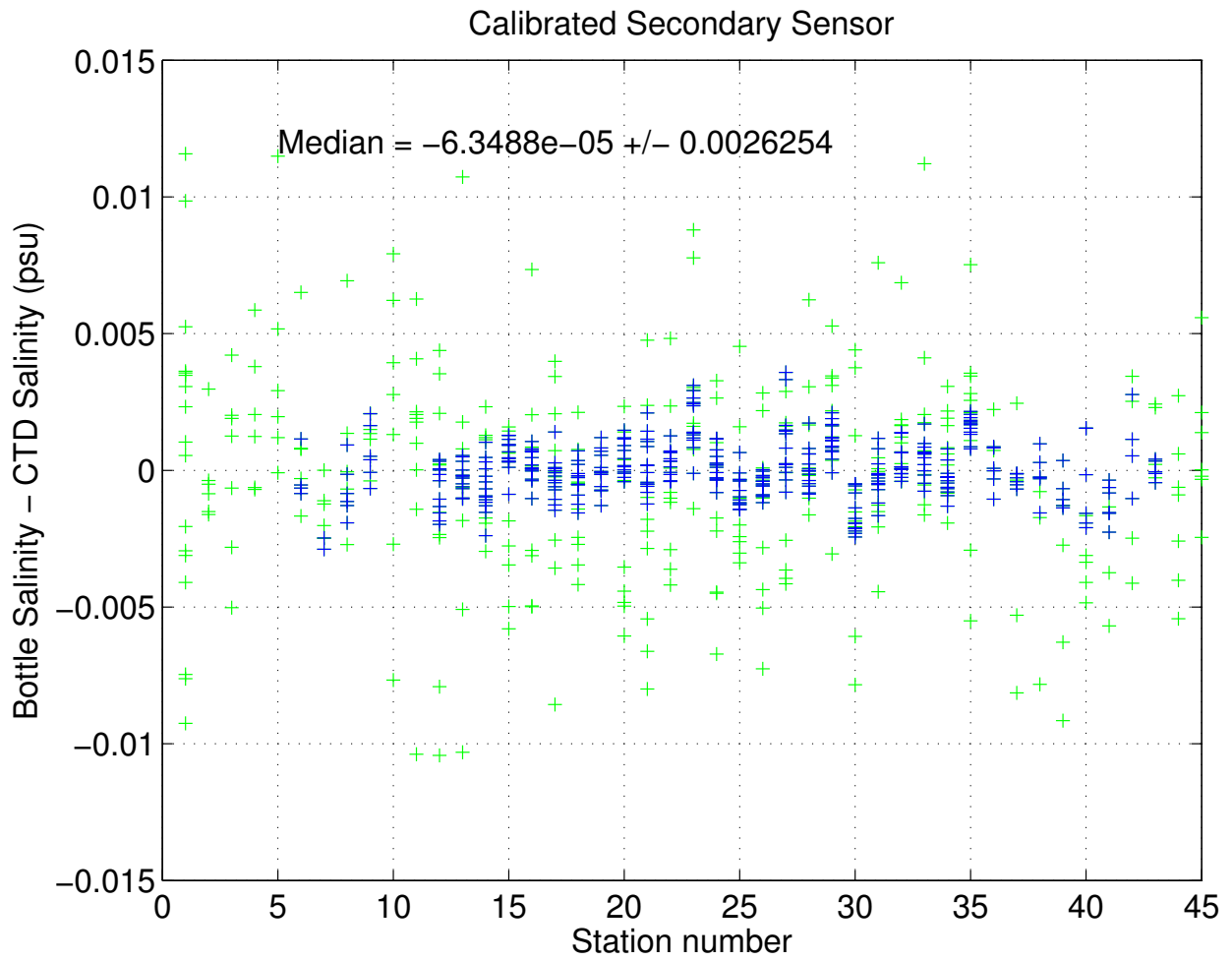


Figure 15: Bottle and calibrated secondary CTD salinity differences plotted vs. station.

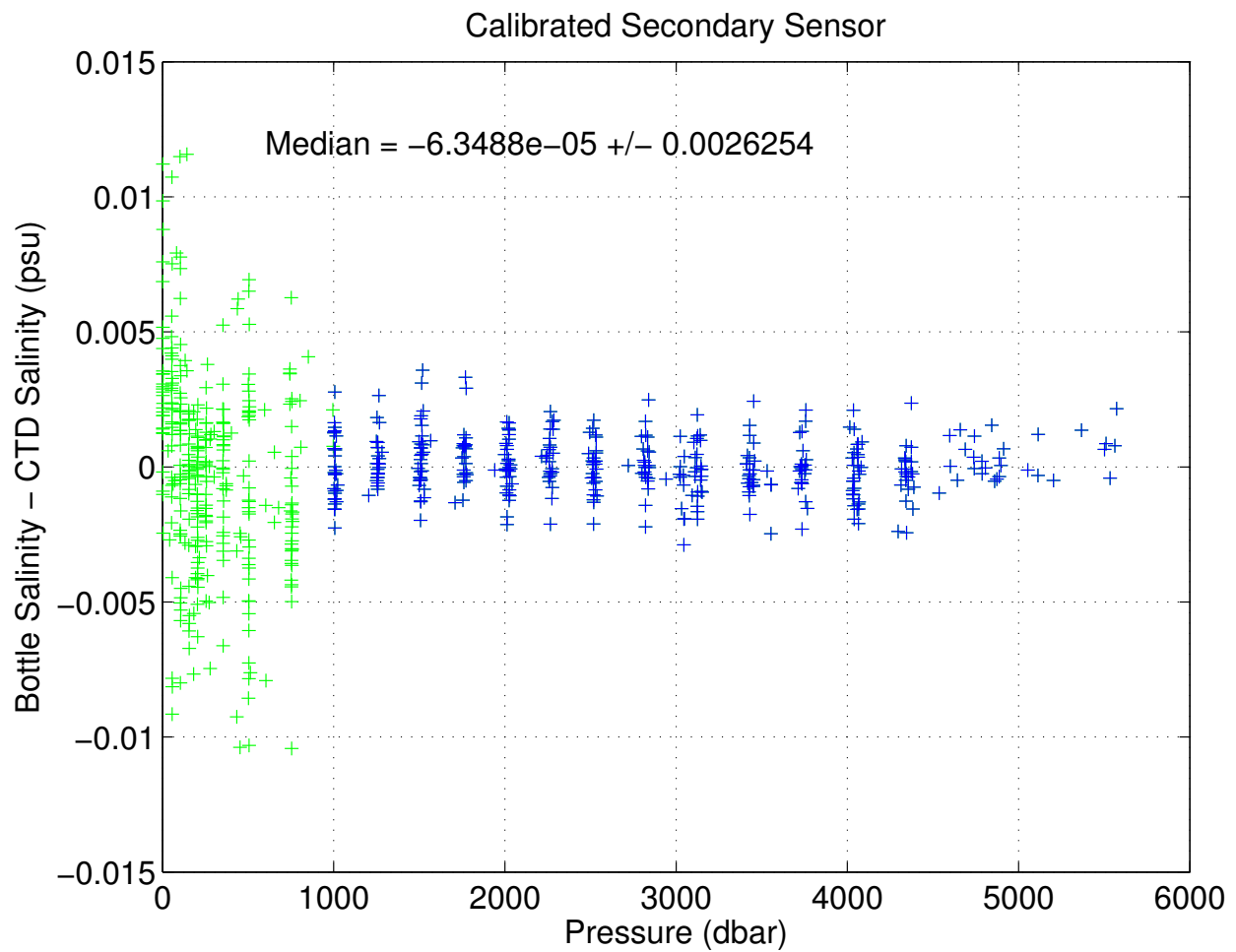


Figure 16: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure.

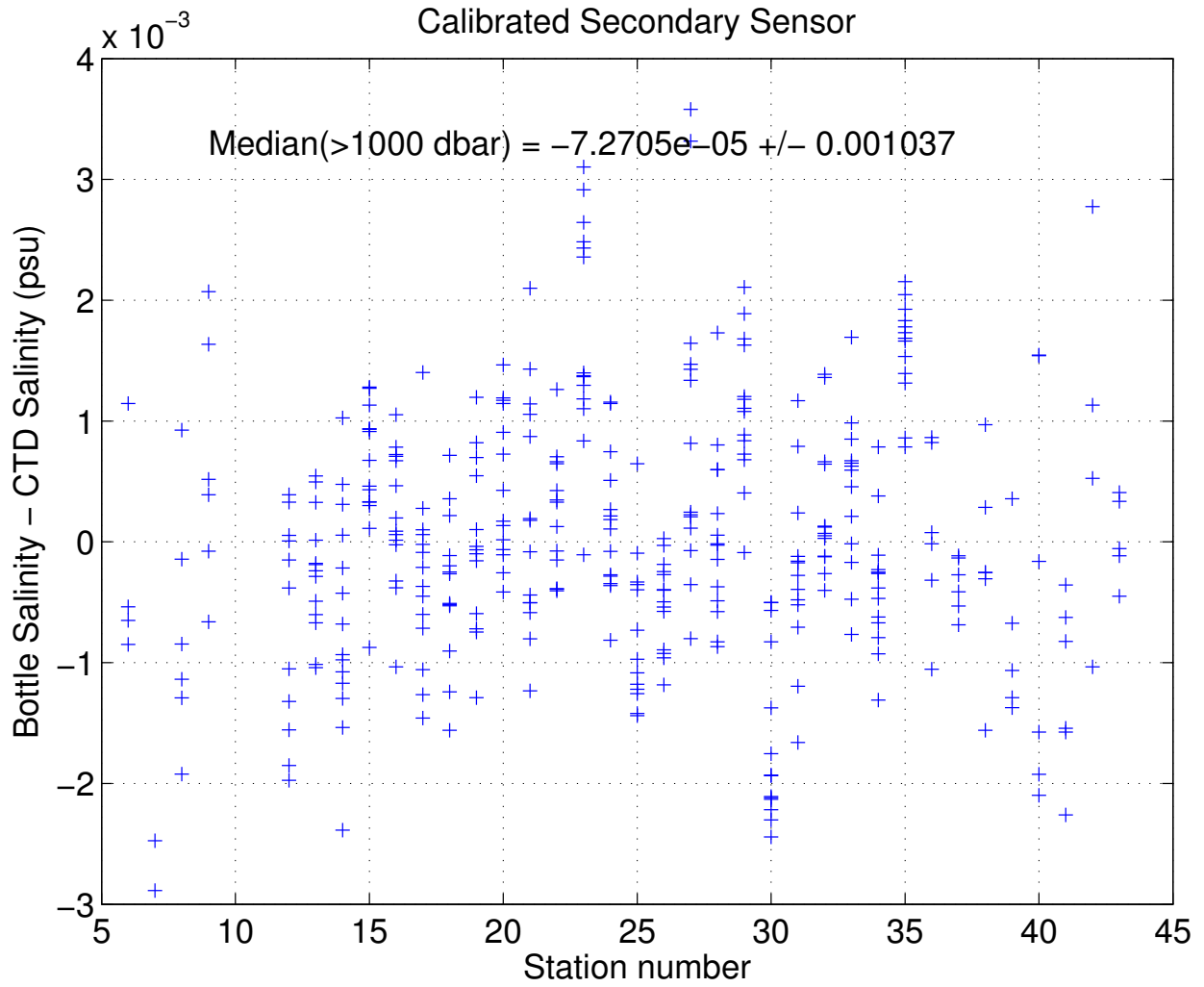


Figure 17: Bottle and calibrated secondary CTD salinity differences plotted vs. station below 1000 dbar.

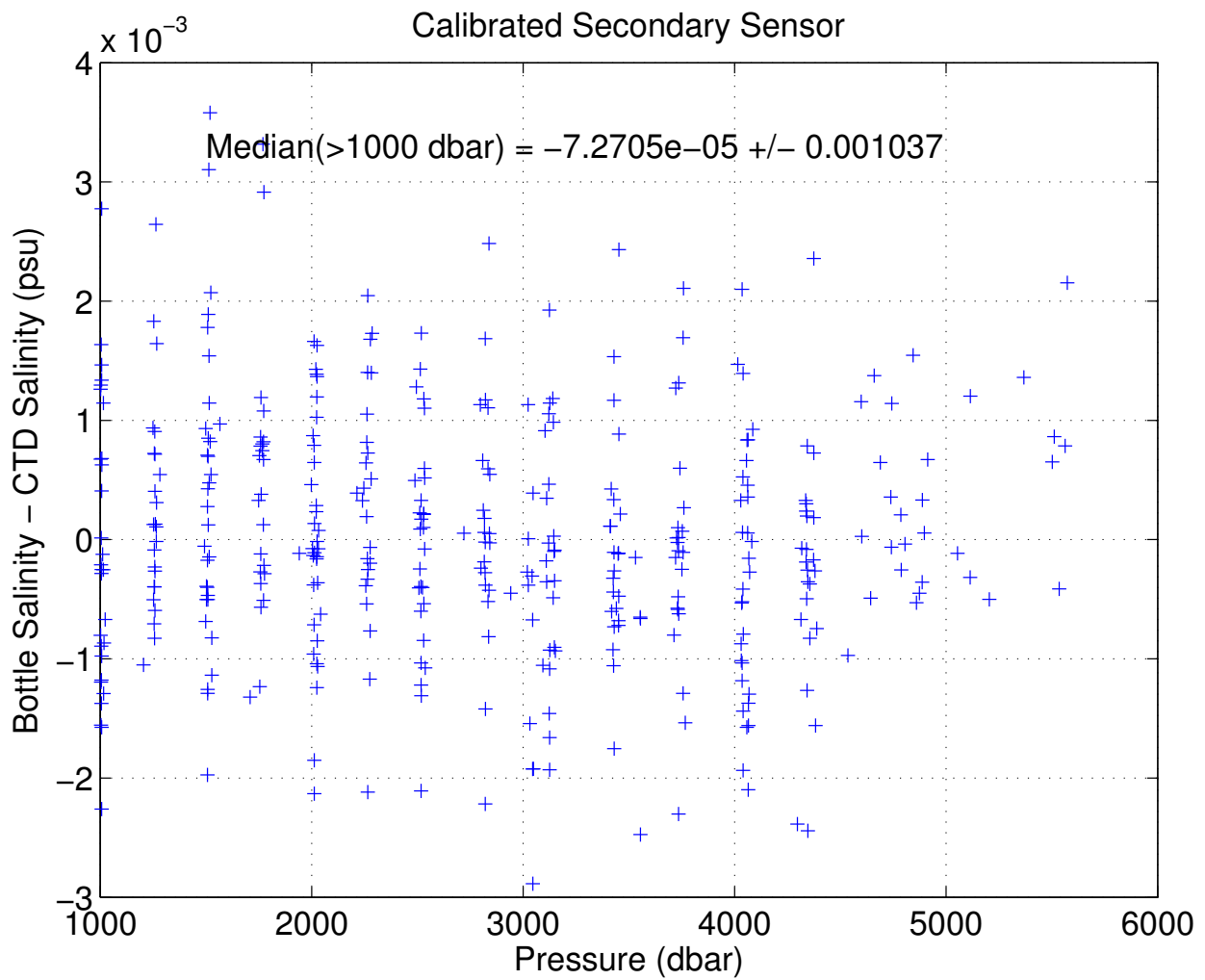


Figure 18: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure below 1000 dbar.

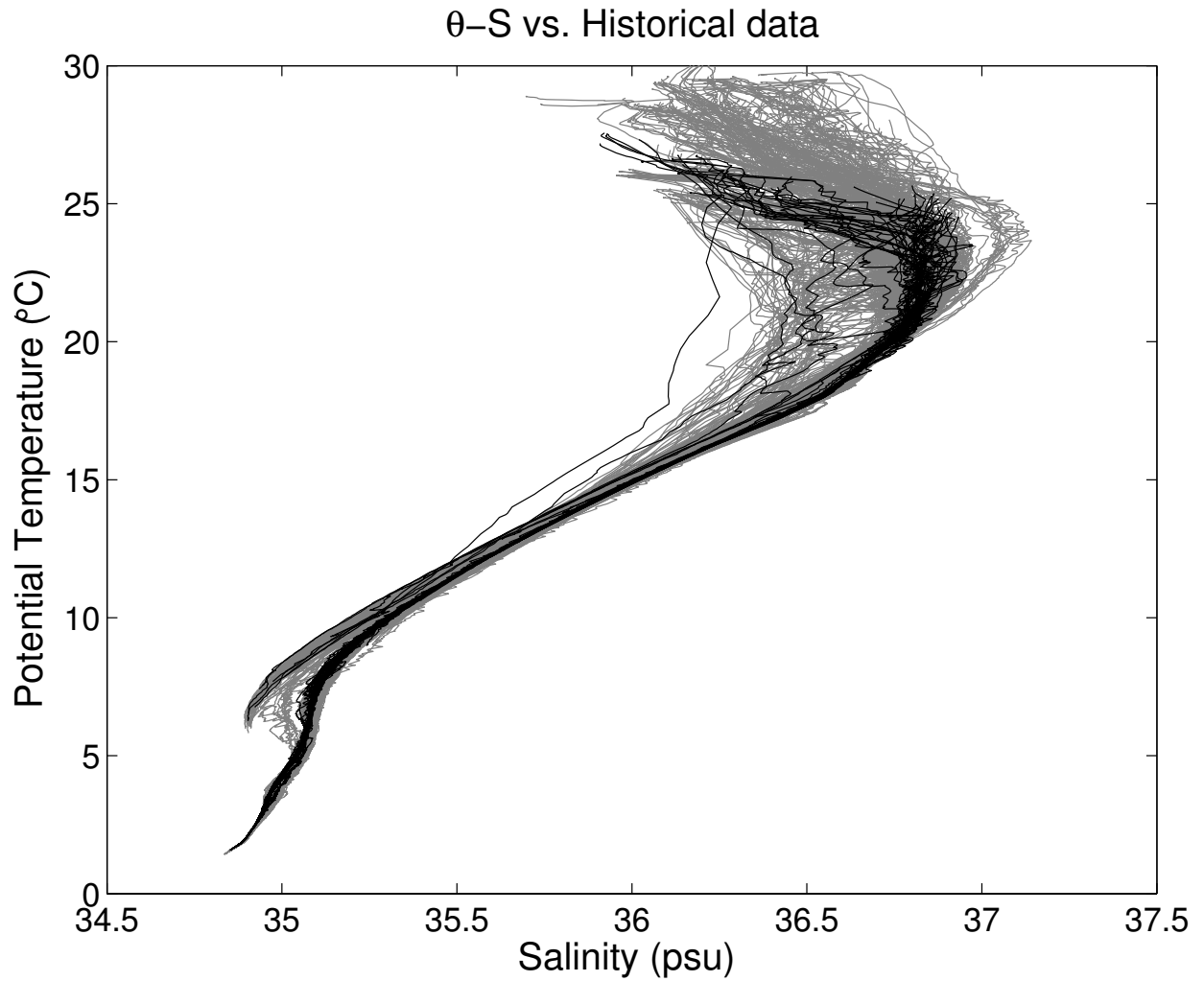


Figure 19: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

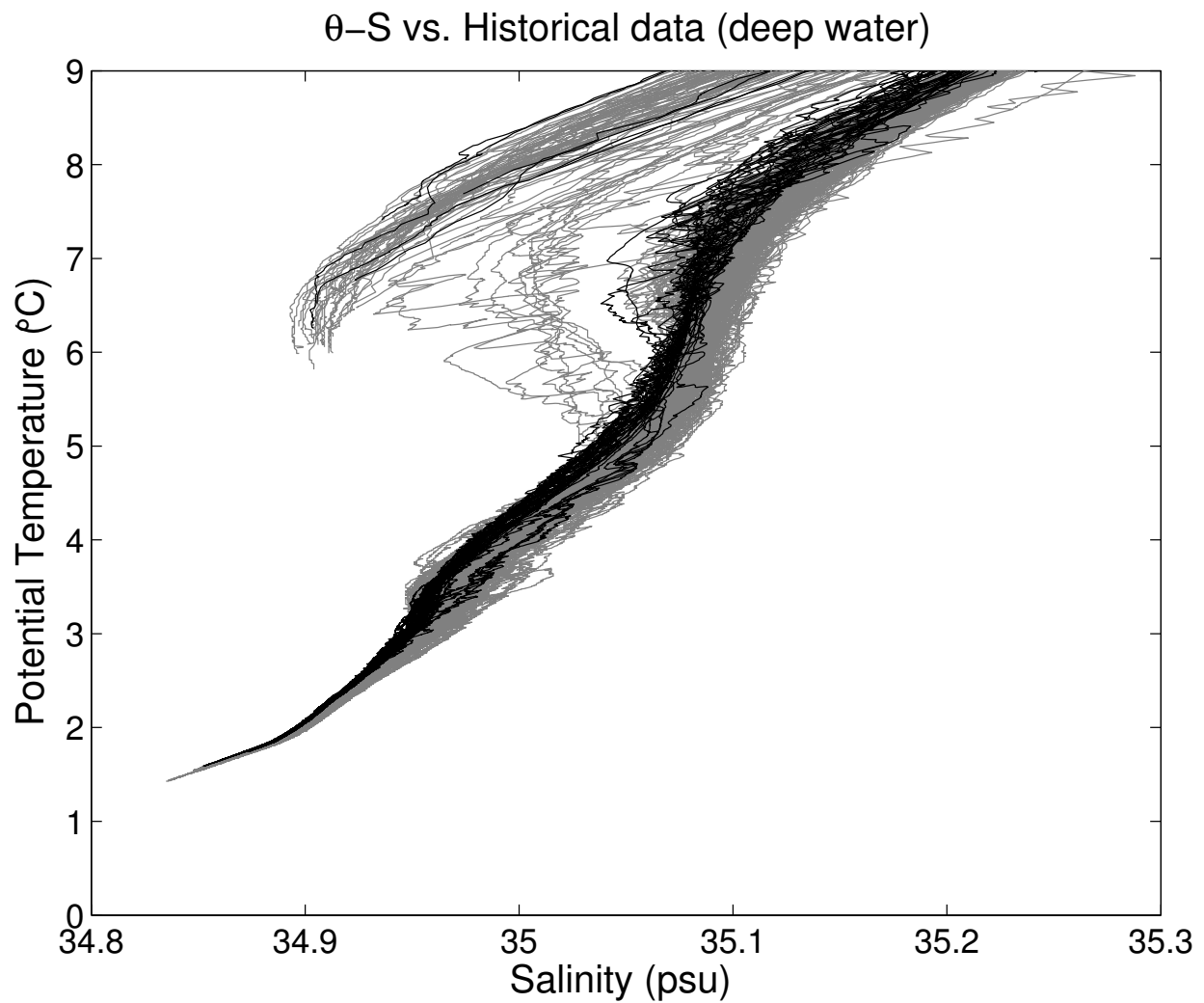


Figure 20: Potential Temperature - Salinity diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

7.5 Dissolved Oxygen

Two SBE43 dissolved O₂ (DO) sensors were used on this leg (Table 8). Due to a hysteresis problem with the oxygen sensors 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 2691 | | | |
|---------------------------|------------|-------------|------------|------------|
| | Sta 1-19 | Sta 20-26 | Sta 27-43 | 44-52 |
| <i>Soc</i> | 0.5552073 | 0.5606948 | 0.5659613 | 0.5482985 |
| <i>V_{offset}</i> | -0.5440344 | -0.4828044 | -0.4824470 | -0.5250512 |
| <i>tau</i> | 1.16 | 1.53 | 2.03 | 0.04 |
| <i>A</i> | -0.0011272 | -0.01268643 | -0.0153370 | -0.0017320 |
| <i>B</i> | -0.0000173 | 0.00079477 | 0.0009749 | 0.0000595 |
| <i>C</i> | 0.0000012 | -0.0000150 | -0.0000186 | 0.00000005 |
| <i>E</i> | 0.0392492 | 0.0355558 | 0.0347204 | 0.0486497 |
| <i>p1</i> | 0.0003414 | 0.0000022 | 0.0002362 | -0.0001727 |

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

A comparison between the primary and secondary sensors (Figure 21) was evaluated. The sensors show a median difference of 3.202 *umol/kg* and a standard deviation of 0.44

umol/kg. The secondary sensor was chosen (Figure 22) and the sensor shows a median difference of 13.62 *umol/kg* and a standard deviation of 2.98 *umol/kg* compare to the oxygen bottle data.

The coefficients for oxygen sensor, s/n 1348, were applied to all the stations. 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 633 data points (96.2%) 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 23 to Figure 26). The residual is -0.08 *umol/kg* (-0.05 *umol/kg* for the data below 1000 dbar) and the standard deviation 1.01 *umol/kg* (0.73 *umol/kg* for the data below 1000 dbar). Also 93.8% of the residuals for the data are within the confidence limits determined by the WOCE ($\pm 1\%$ of the dissolved oxygen measured) and this number increases to 100% if we consider only the data below 1000 dbar.

A final verification about the quality of the data, like in the salinity data, was made by comparing the results of this cruise with some historical data available at the location of the Abaco section and the other sections (Figure 27 & Figure 28). Again by investigating water mass properties, particularly for deeper layers of the ocean, we can have an estimative of the quality of these data.

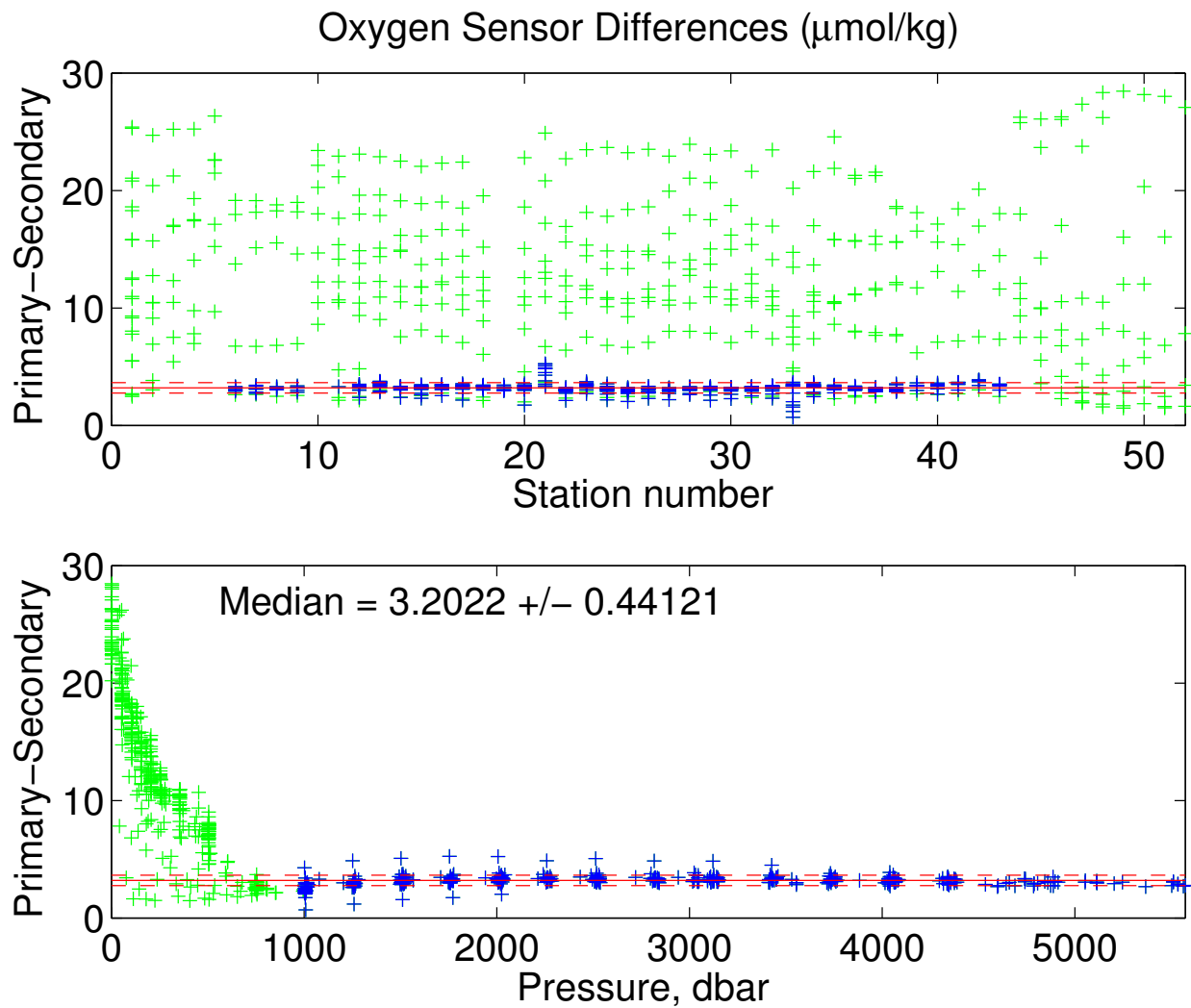


Figure 21: Dissolved oxygen differences between sensors by station (top) and by pressure (bottom). Sensor changes at station 15 and 24. The red solid line represents the median with the red dashed representing the standard deviation.

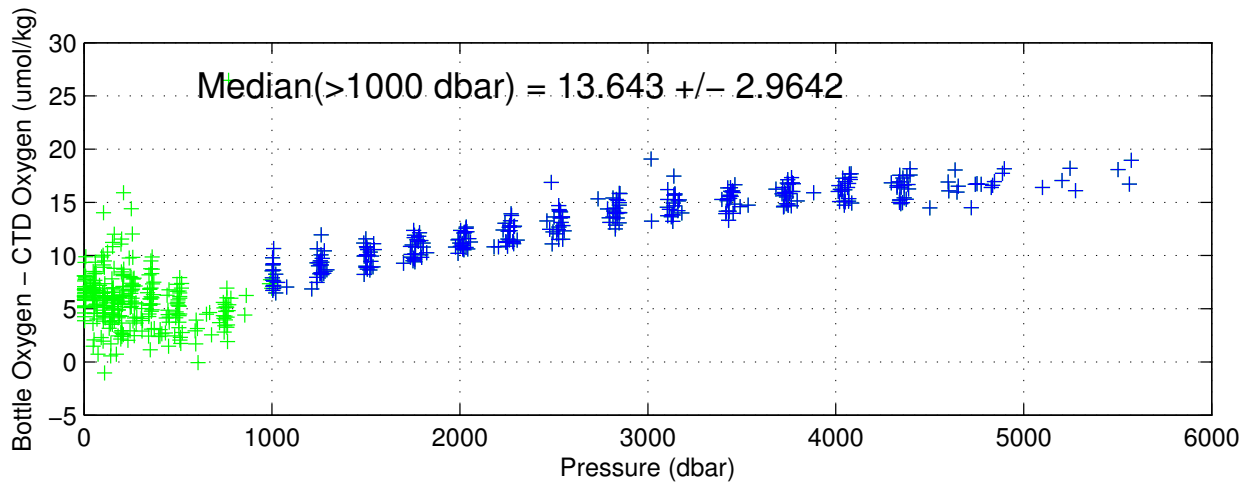
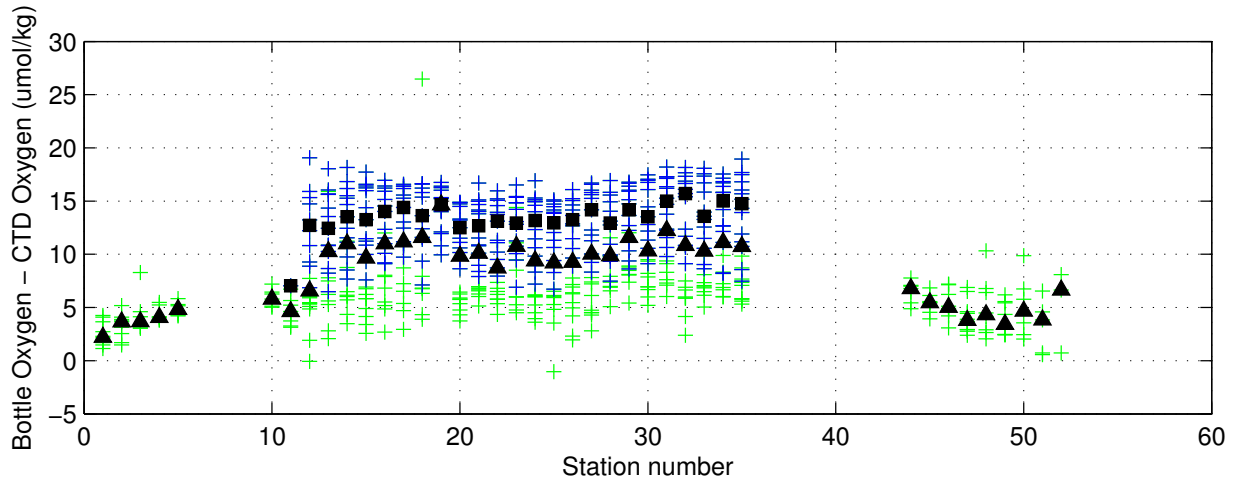


Figure 22: Bottle and uncalibrated secondary CTD oxygen differences plotted against station number. The green crosses represent all data points and the blue are the data points below 1000 dbar. The median was calculated using only the data below 1000 dbar.

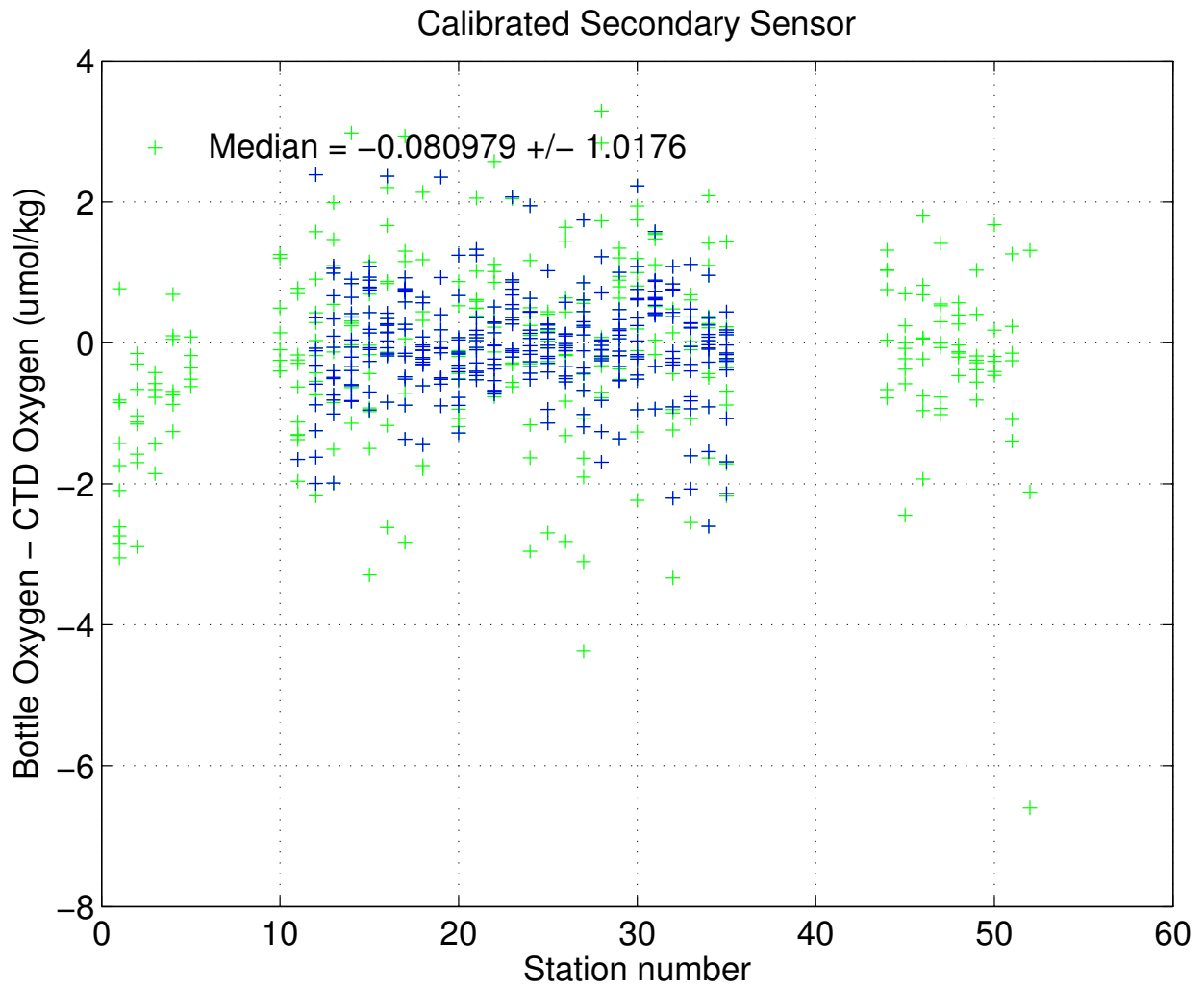


Figure 23: Bottle and calibrated secondary CTD oxygen differences plotted vs. station.

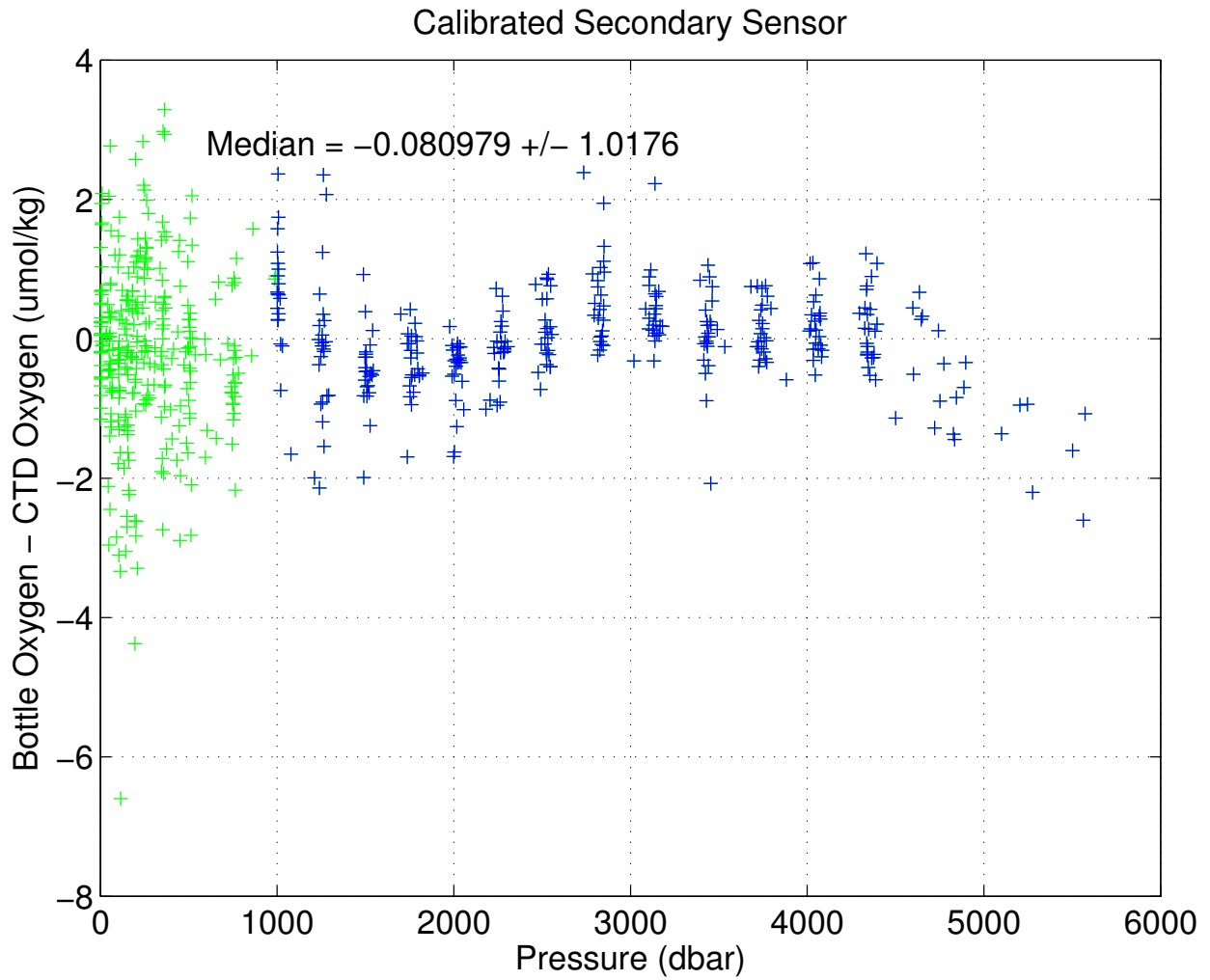


Figure 24: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure.

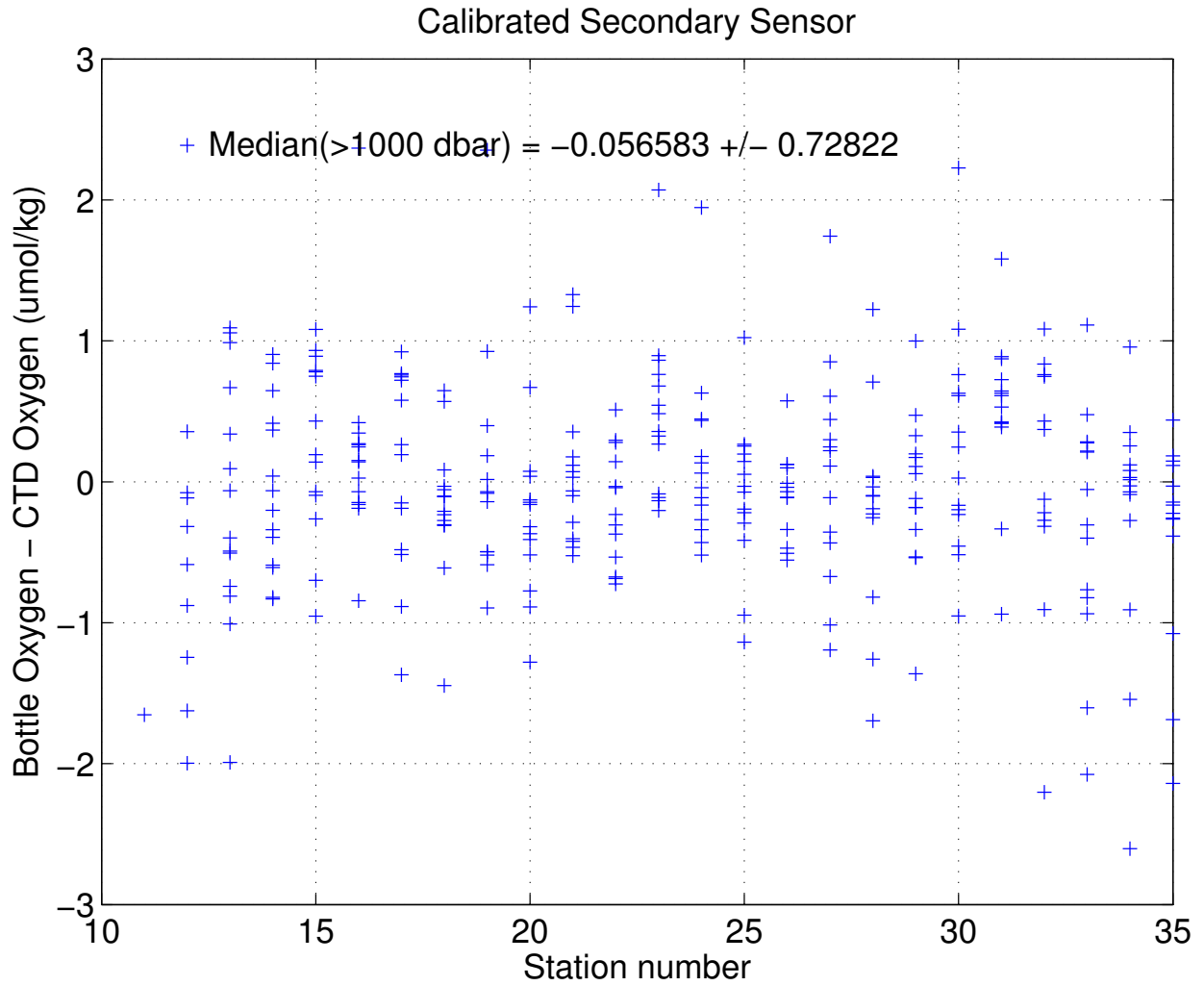


Figure 25: Bottle and calibrated secondary CTD oxygen differences plotted vs. station below 1000 dbar.

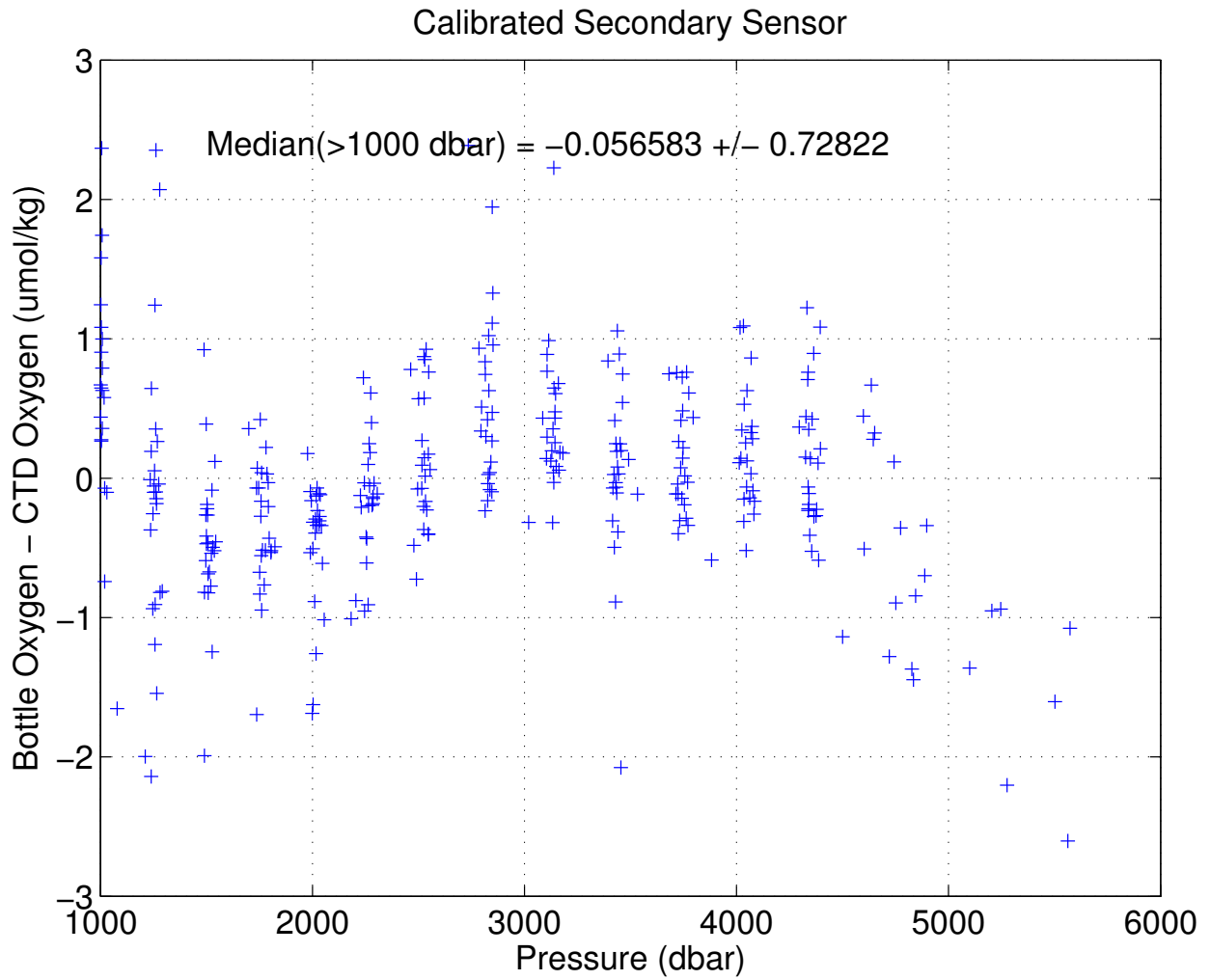


Figure 26: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure below 1000 dbar.

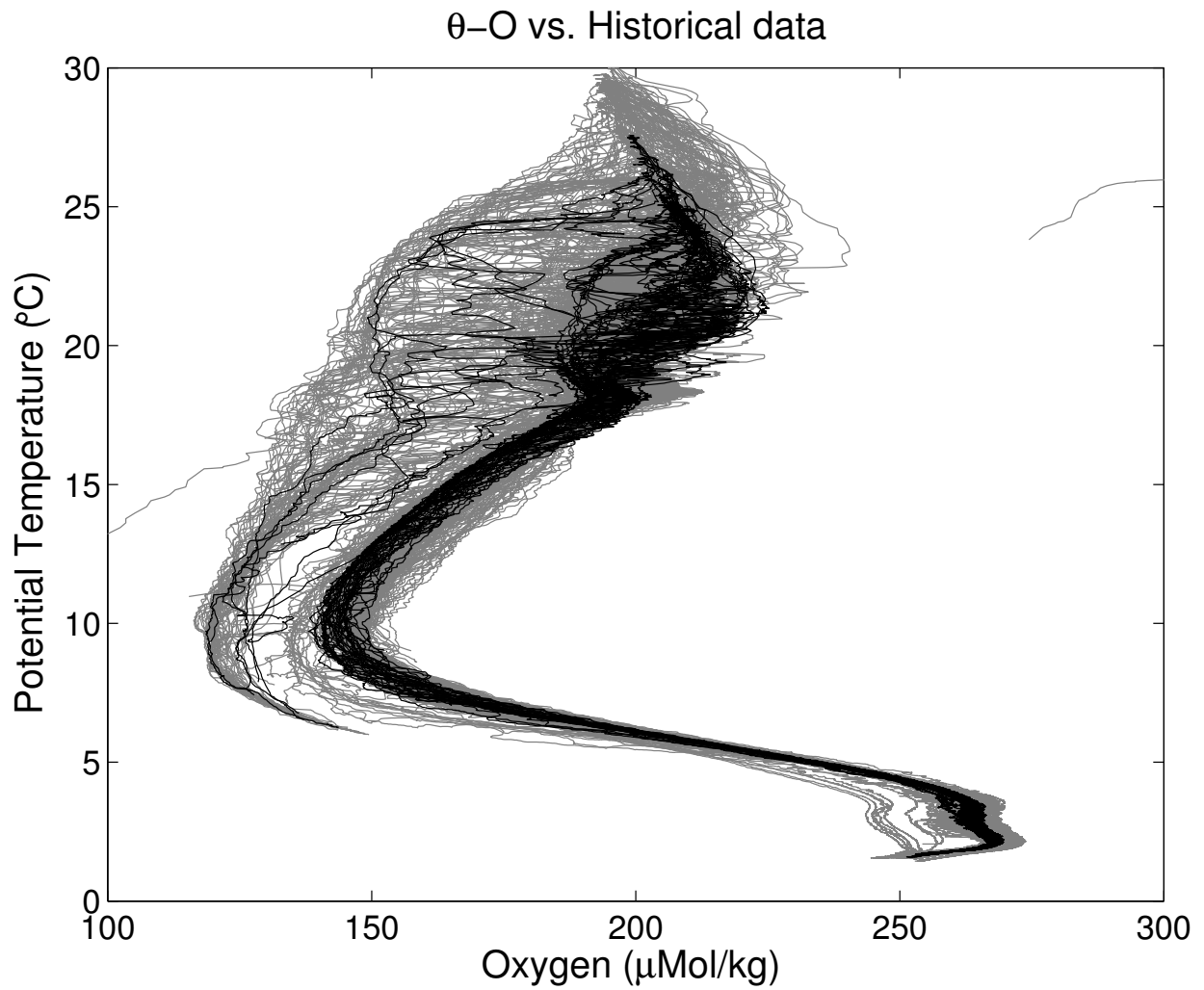


Figure 27: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

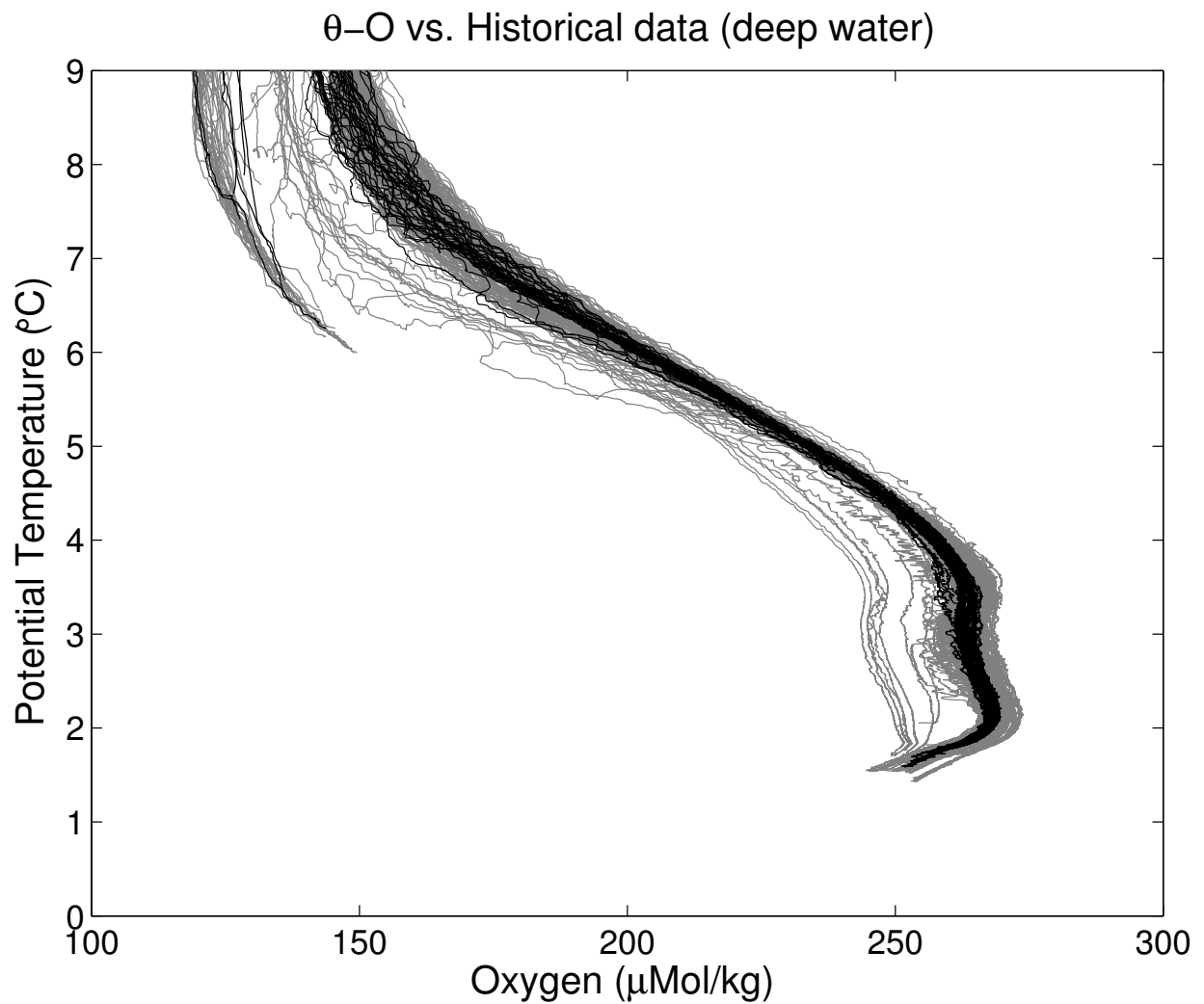


Figure 28: Potential Temperature - Oxygen diagram for all stations. The solid black lines are the data collected during this cruise; the solid gray lines are data from the historical database.

8 *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 29 to Figure 32). Nominal vertical exaggerations are 400:1 below 1000 dbar (lower panels) and 200:1 above 1000 dbar (upper panels). The Florida Current Section also uses longitude as the horizontal axis (Figure 33 to Figure 36). For the Northwest Providence Channel Sections latitude is used as horizontal axis (Figure 37 to Figure 40).

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).

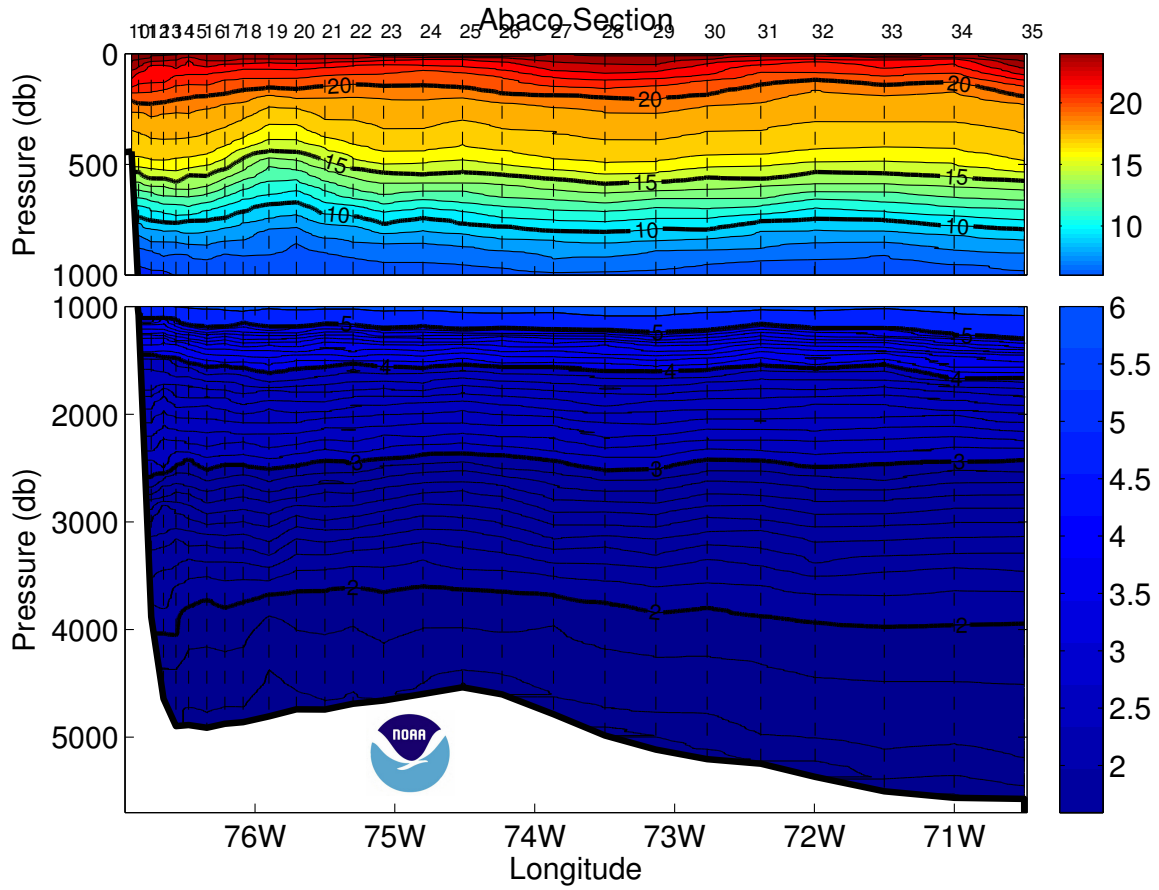


Figure 29: Potential Temperature ($^{\circ}\text{C}$) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

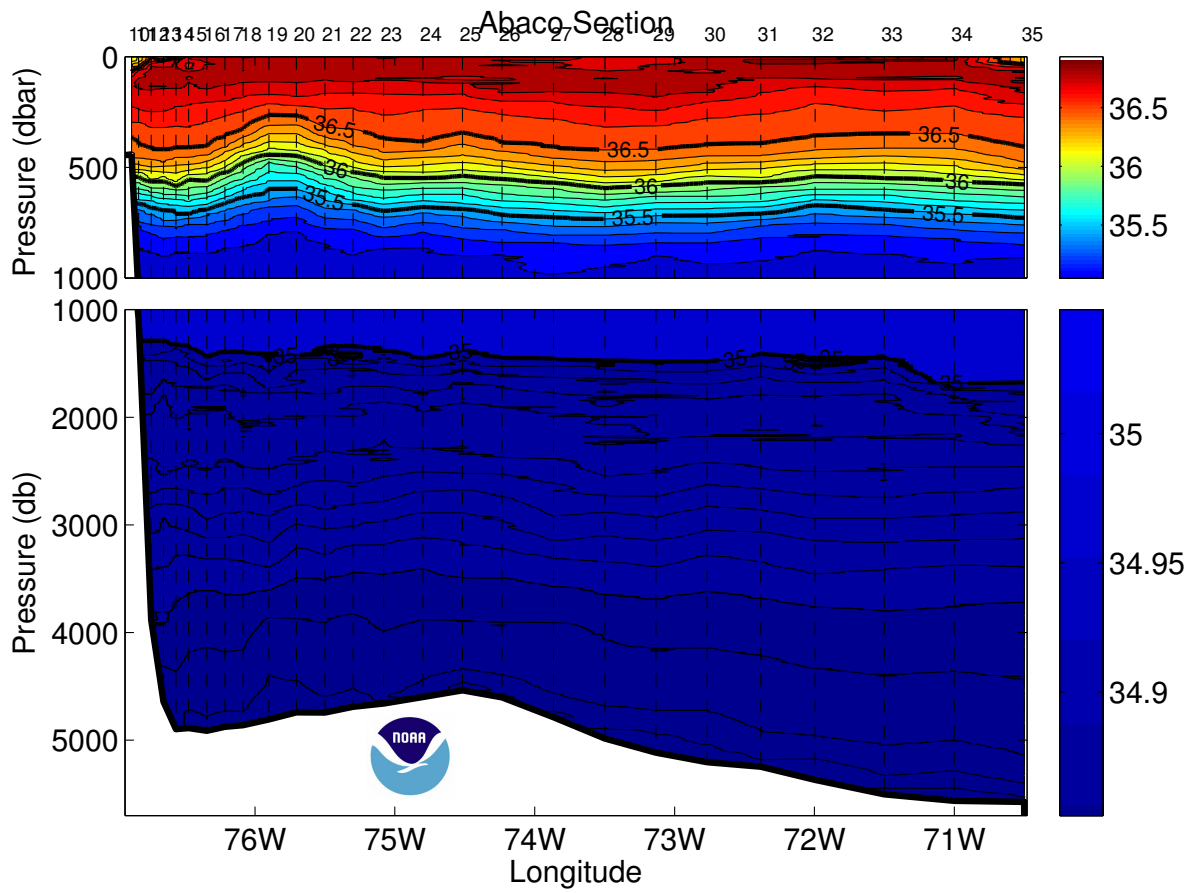


Figure 30: Salinity (PSS 78) section for the Abaco section. Dashed vertical lines are the CTD station locations.

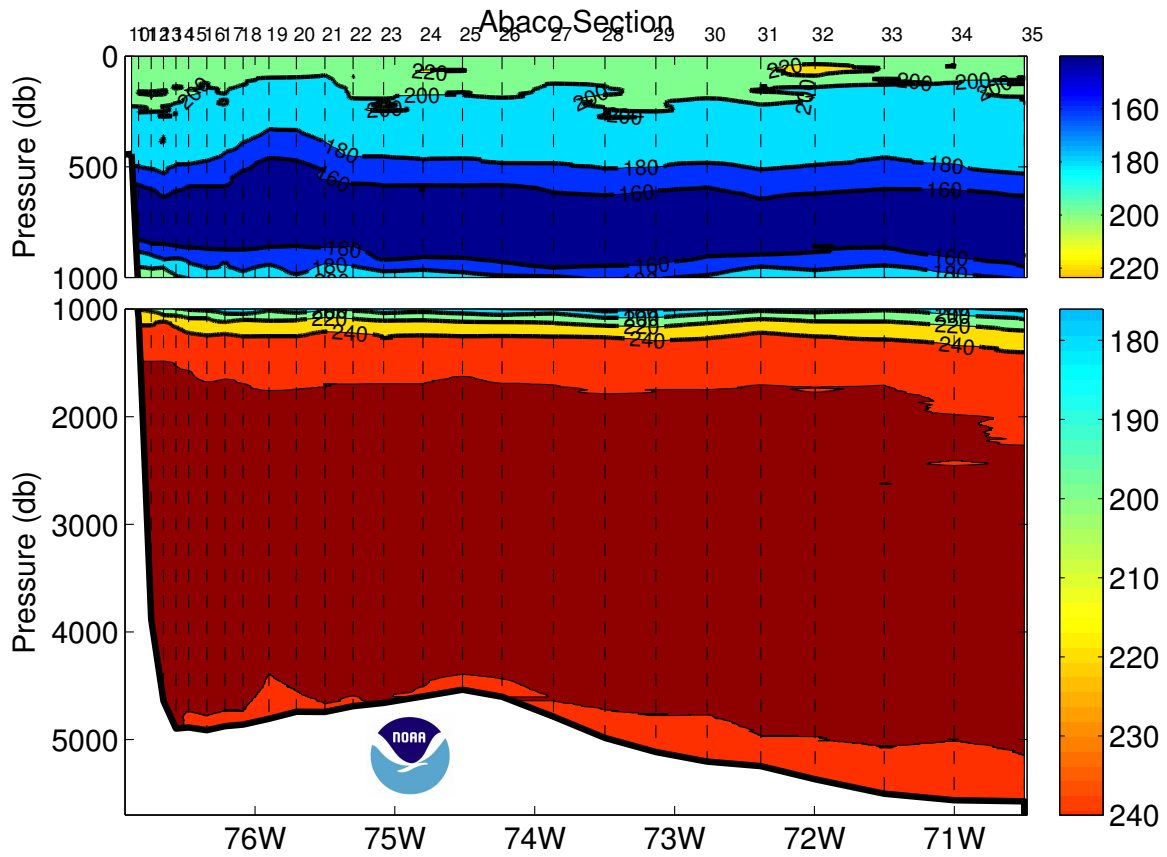


Figure 31: Dissolved Oxygen ($\mu\text{mol}/\text{kg}$) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

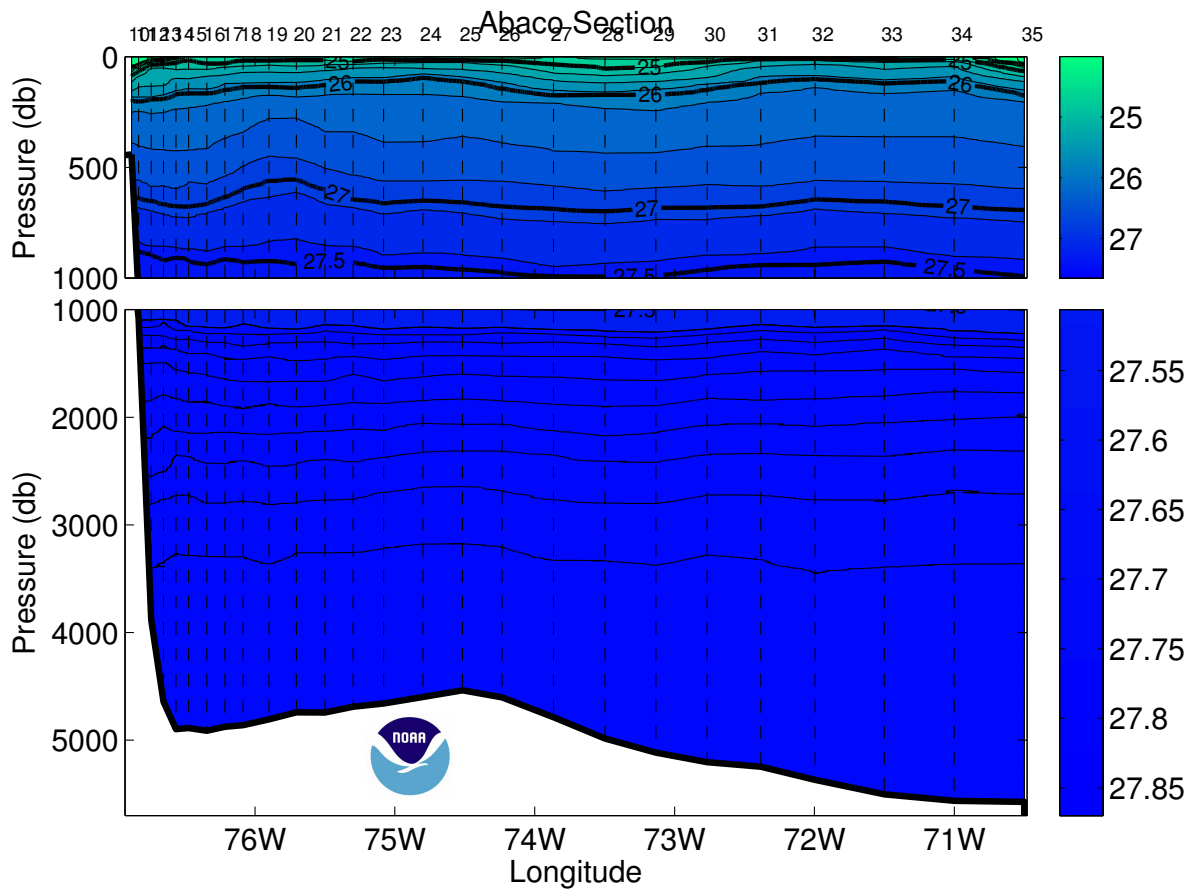


Figure 32: Neutral density (kg/m³) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

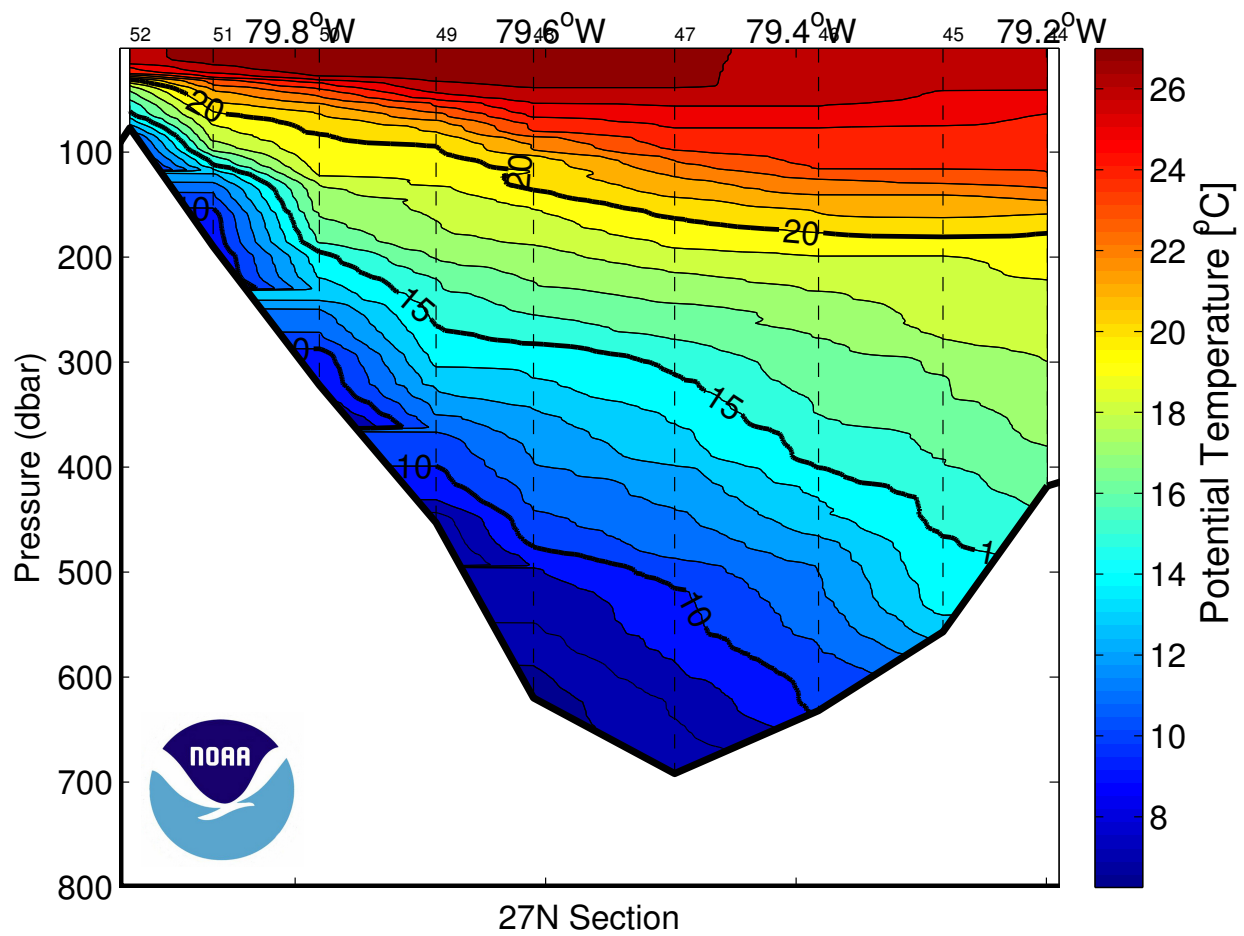


Figure 33: Potential Temperature (°C) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

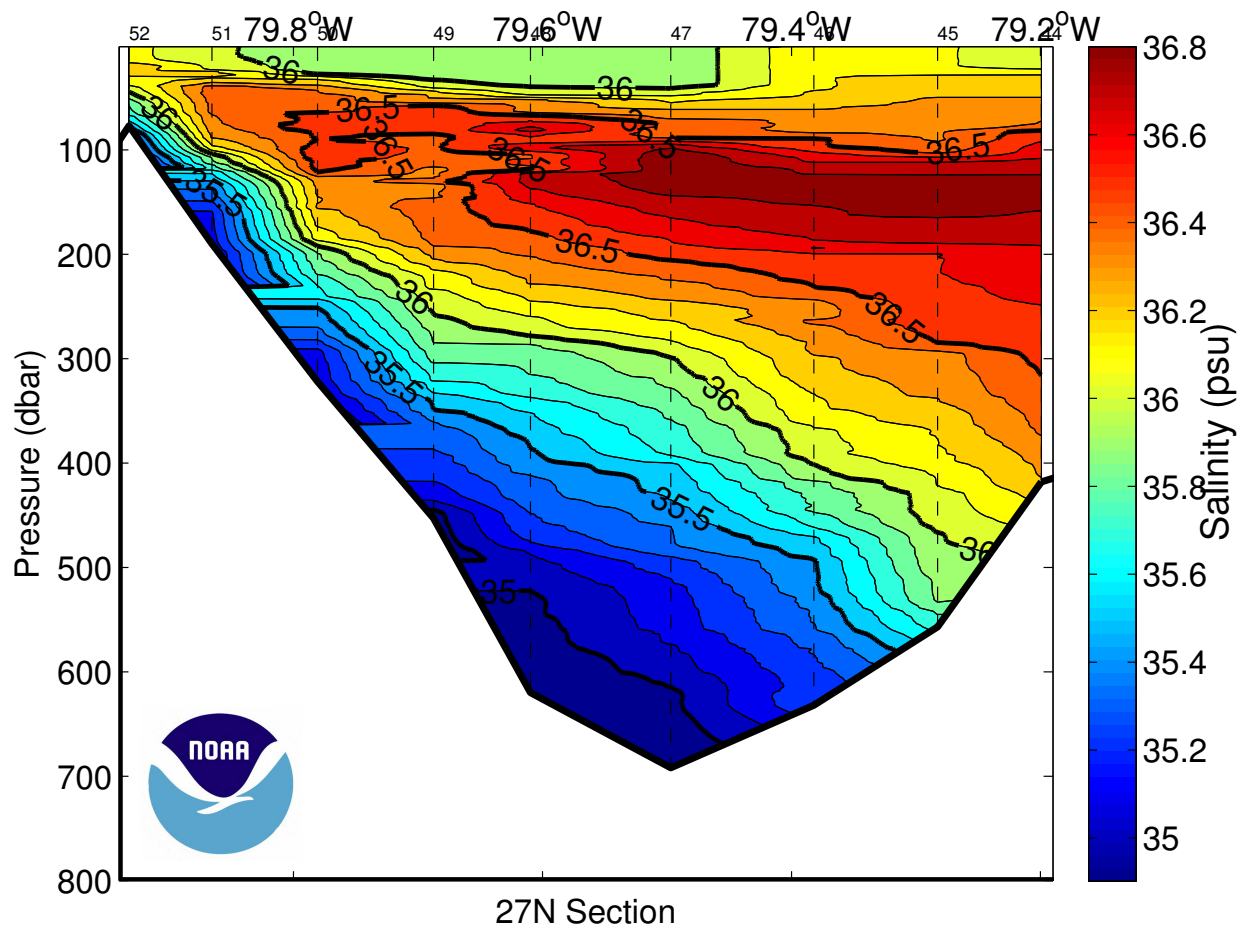


Figure 34: Salinity (PSS 78) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

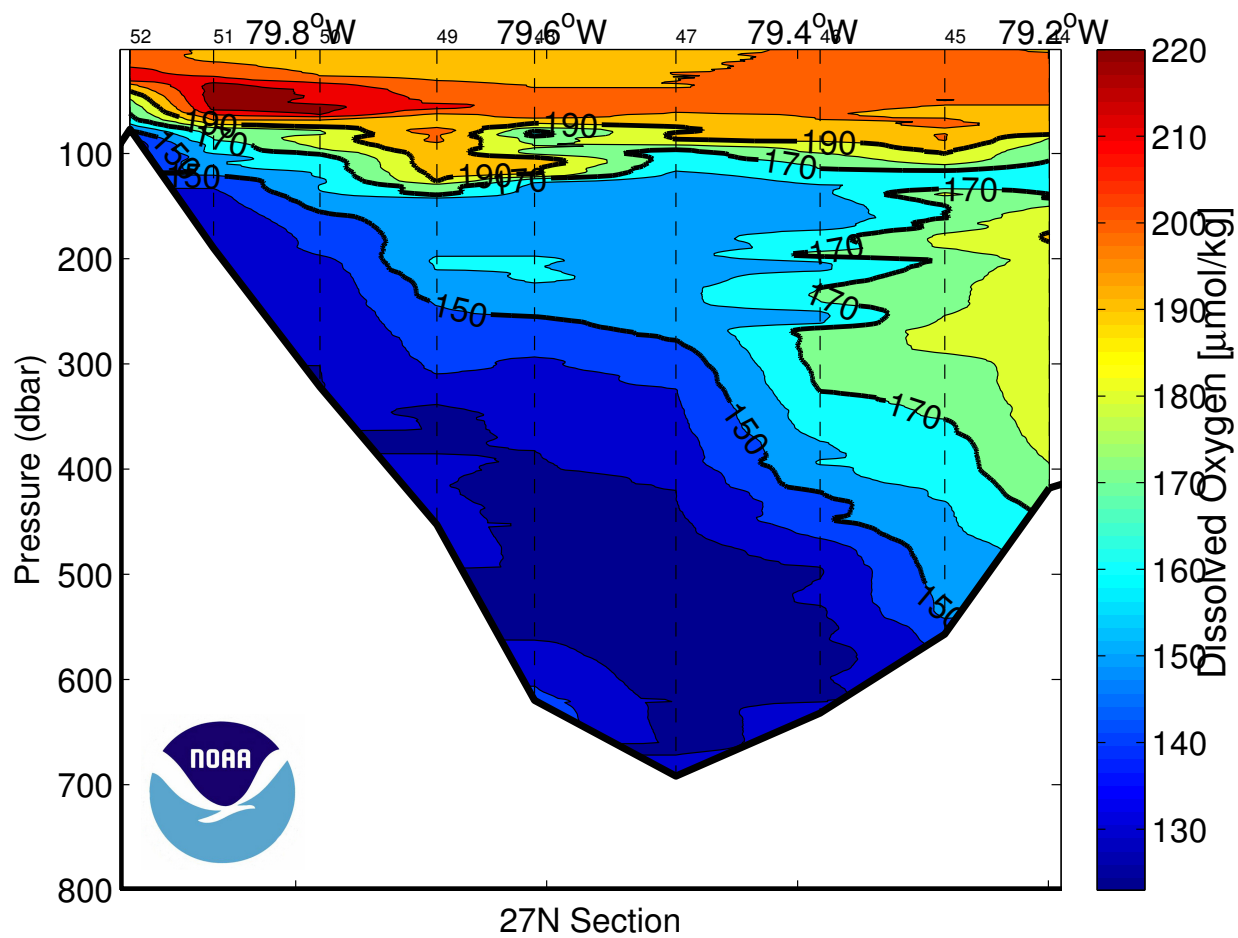


Figure 35: Dissolved Oxygen ($\mu\text{mol}/\text{kg}$) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

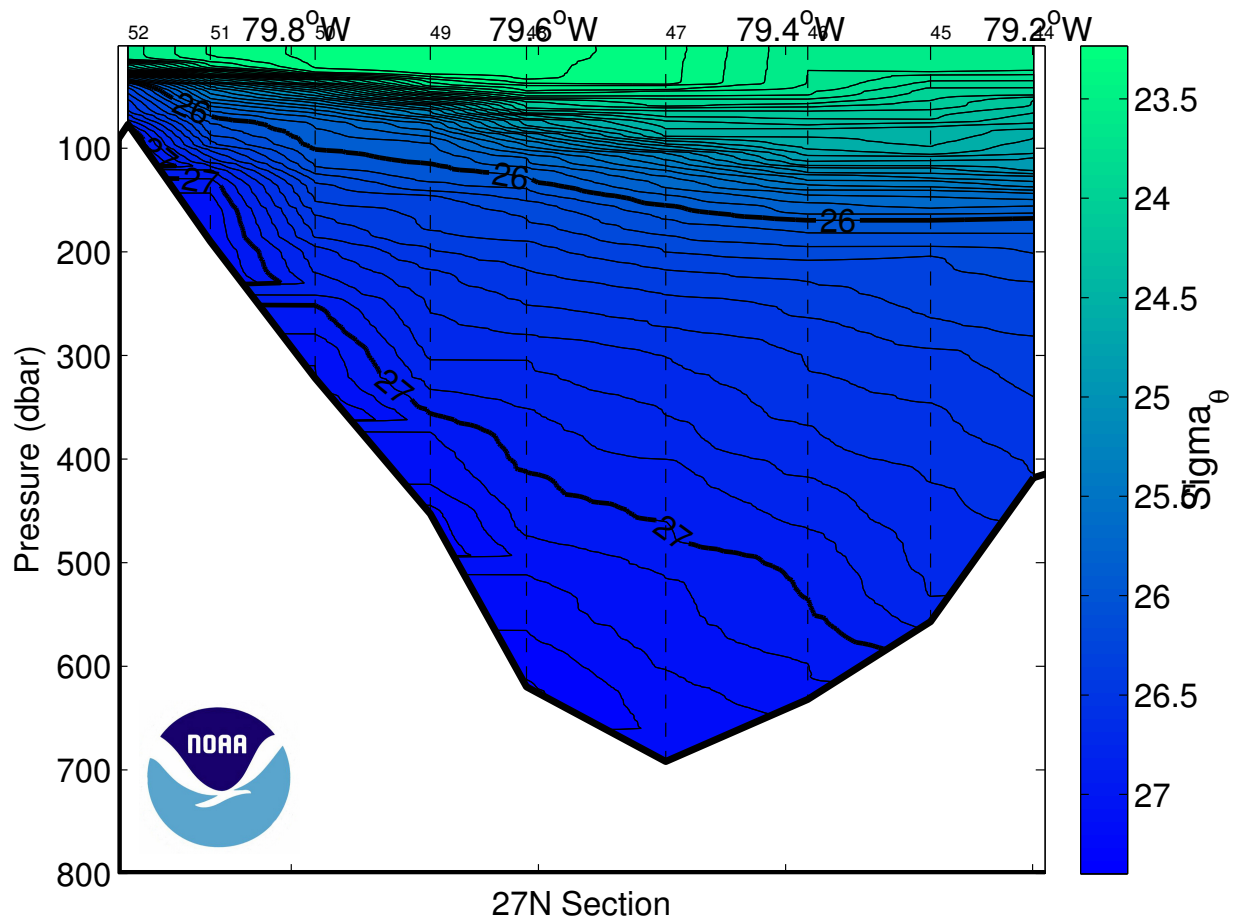


Figure 36: Neutral density (kg/m^3) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

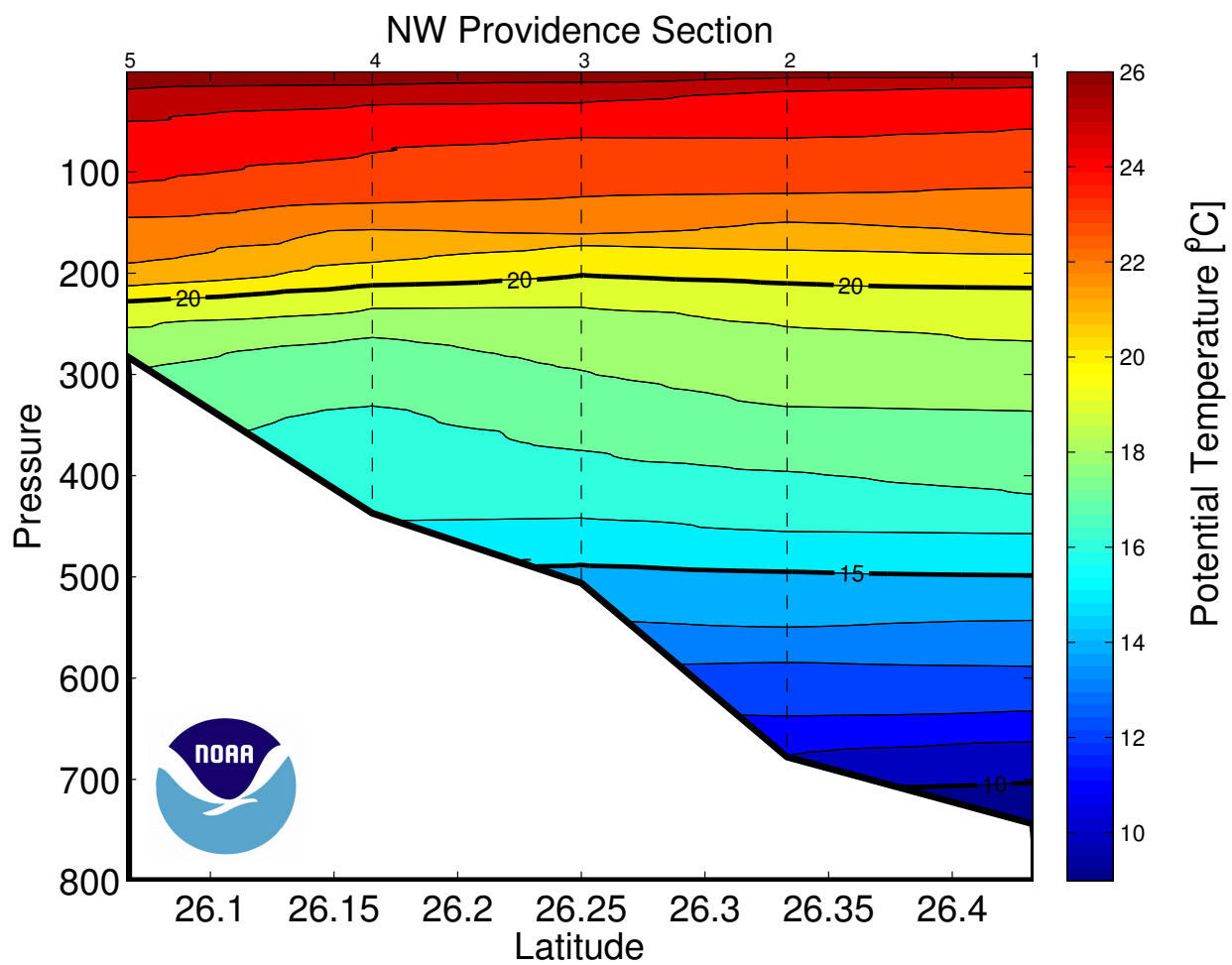


Figure 37: Potential Temperature (°C) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

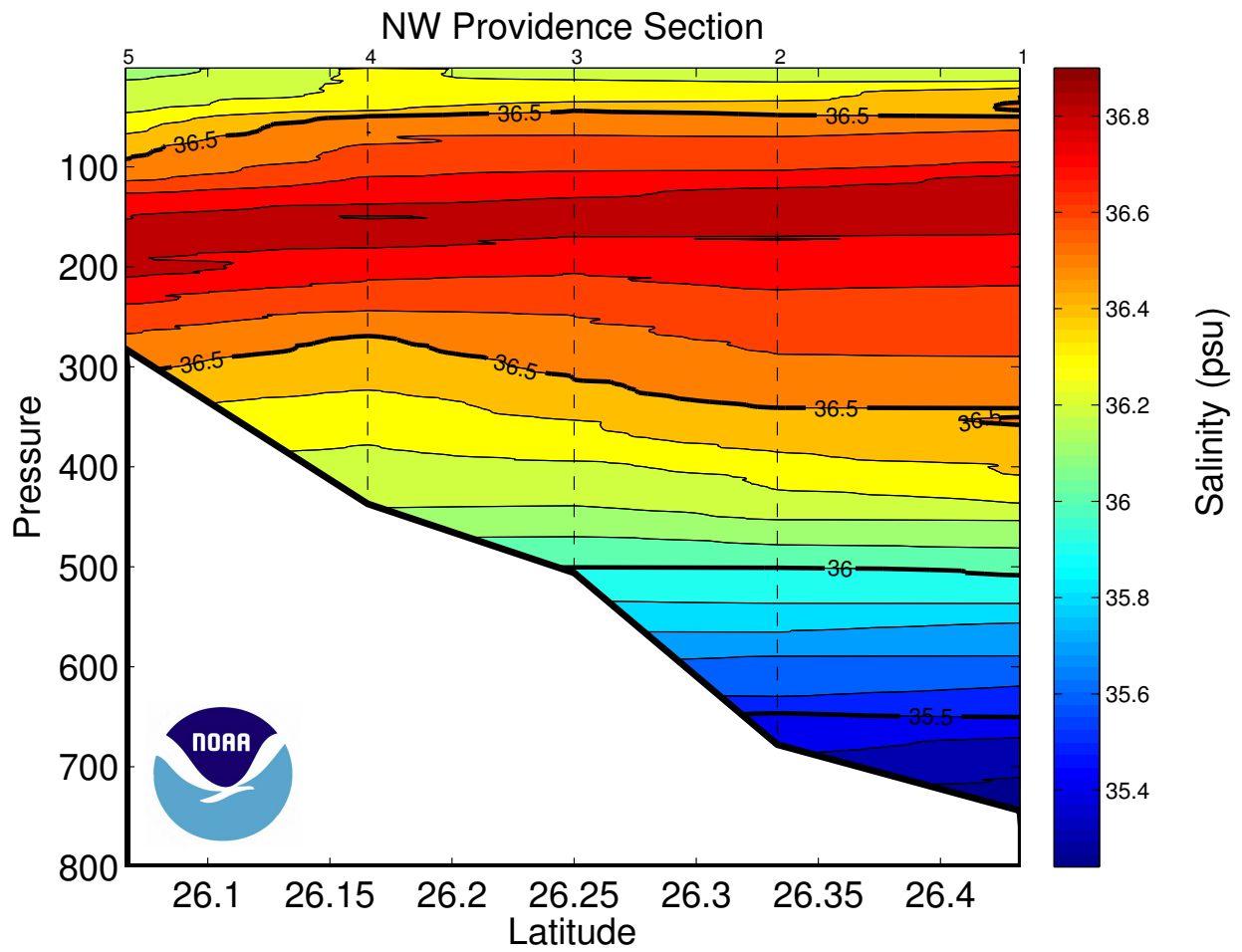


Figure 38: Salinity (PSS 78) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

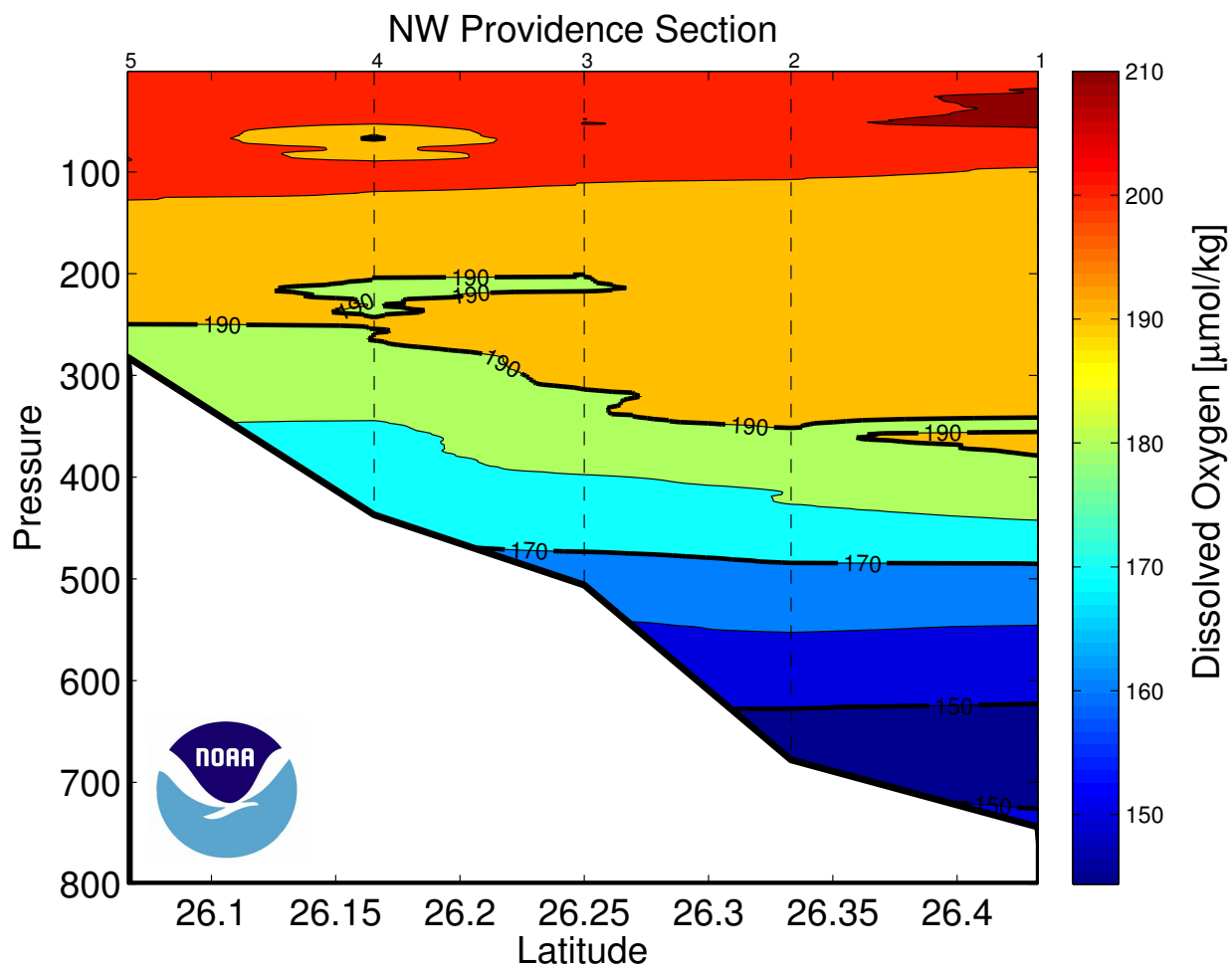


Figure 39: Dissolved Oxygen ($\mu\text{mol/kg}$) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

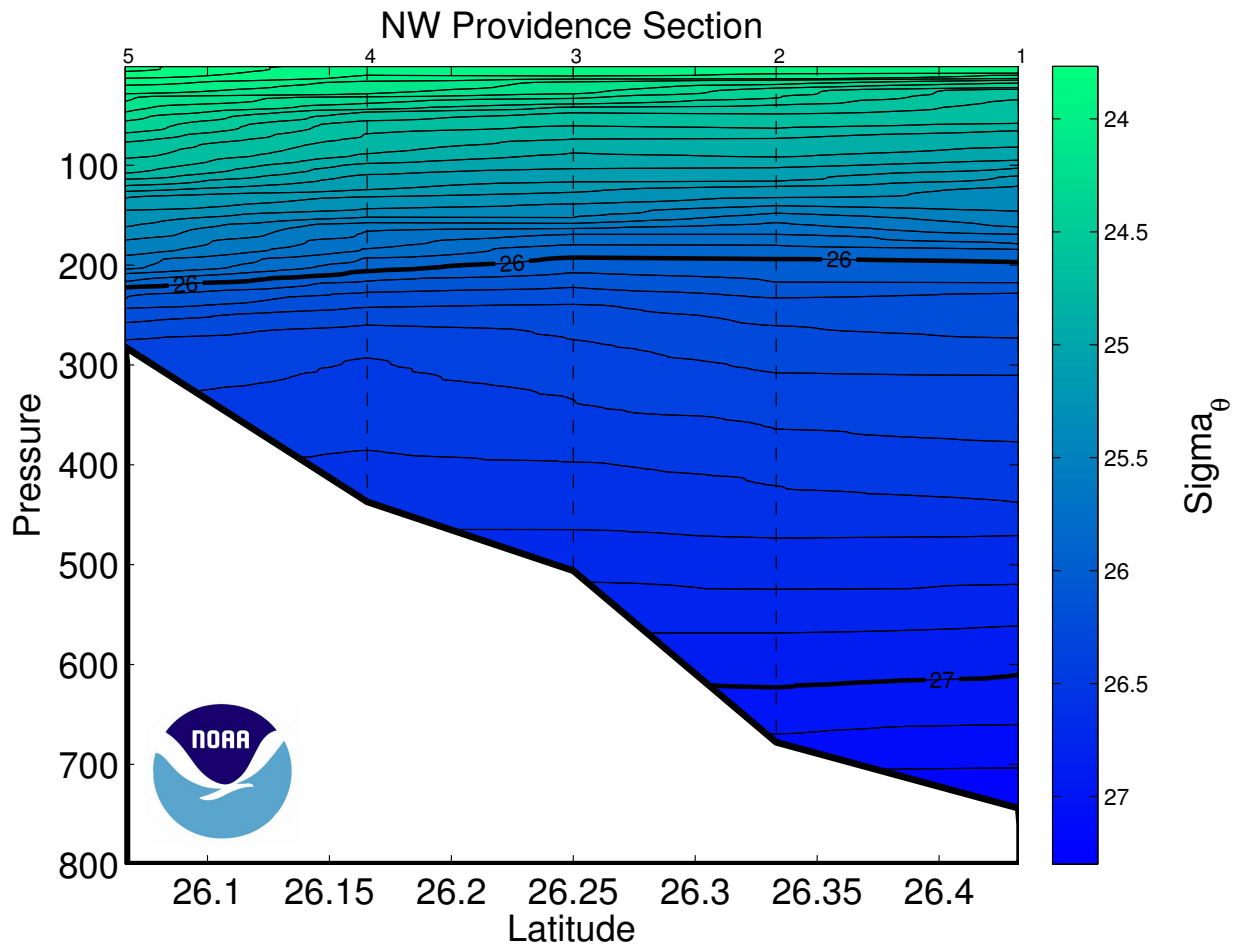


Figure 40: Neutral density (kg/m³) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

9 *Acknowledgements*

The successful completion of the cruise relied on dedicated assistance from many individuals on shore and on the UNOLS ship Endeavor. Funded investigators in the project and members of the Western Boundary Time Series, and the RAPID/MOC programs were instrumental in planning and executing the cruise. The participants in the cruise showed dedication and camaraderie during their 17 days at sea. Officers and crew of the Endeavor exhibited a high degree of professionalism and assistance to accomplish the mission and to make us feel at home during the voyage.

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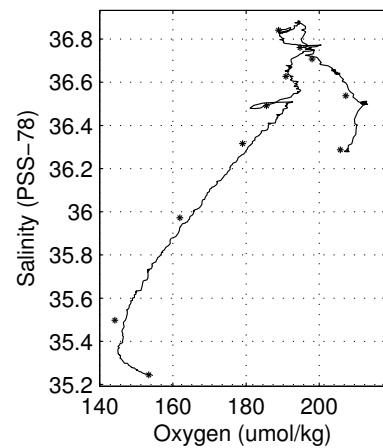
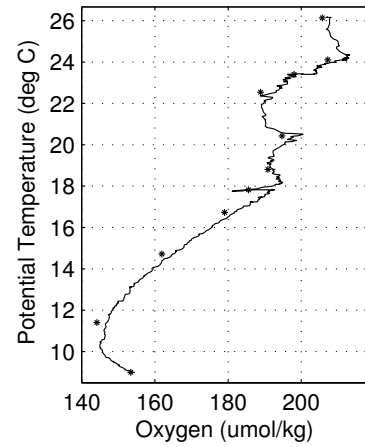
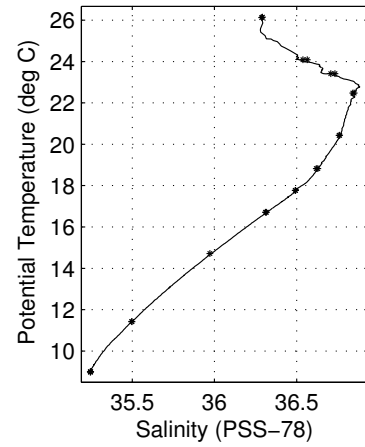
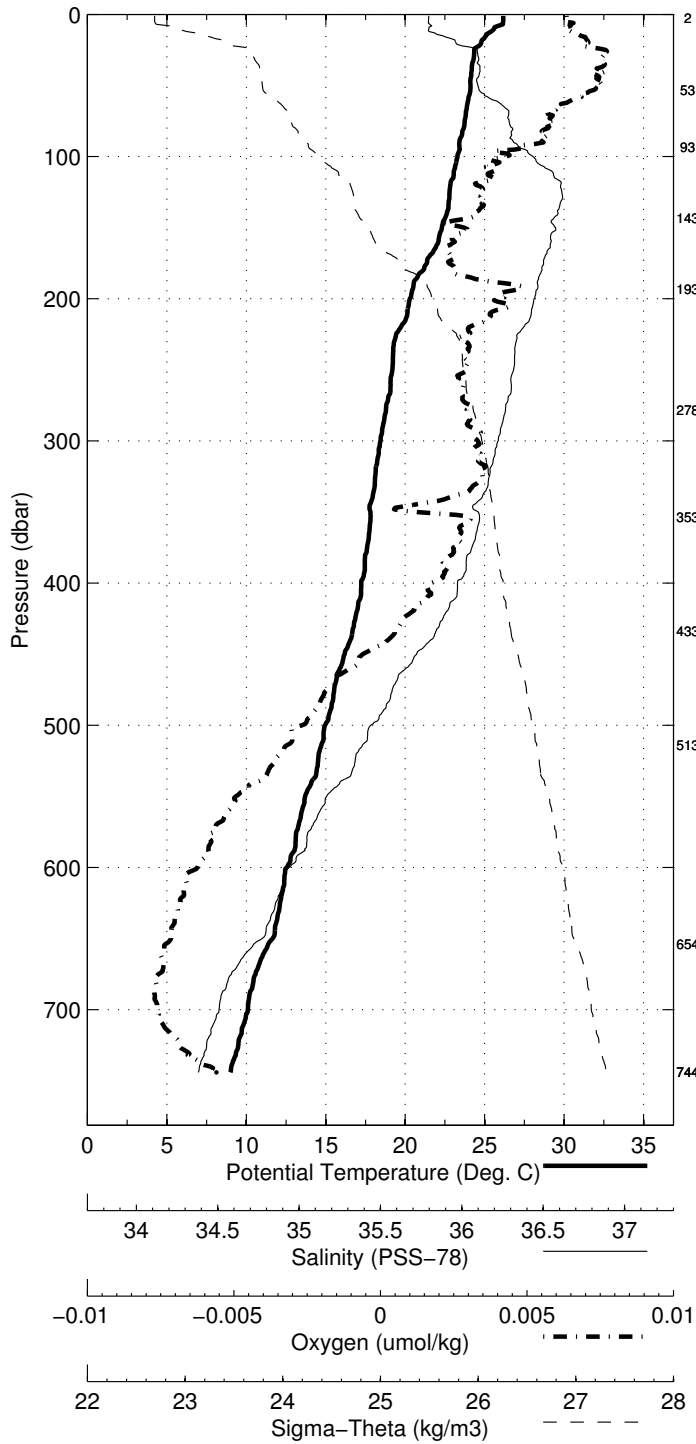
A Hydrographic - CTD Data

Abaco April-May 2011 R/V Knorr
 CTD Station 1 (CTD001)
 Latitude 26.432N Longitude 78.668W
 13-Apr-2011 21:11Z

| 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 | 26.170 | 26.170 | 36.280 | 207.1 | 0.004 | 23.946 |
| 10 | 25.602 | 25.599 | 36.281 | 206.9 | 0.039 | 24.125 |
| 20 | 24.784 | 24.780 | 36.402 | 210.4 | 0.075 | 24.469 |
| 30 | 24.334 | 24.327 | 36.504 | 212.5 | 0.108 | 24.683 |
| 50 | 24.116 | 24.105 | 36.502 | 212.0 | 0.173 | 24.747 |
| 75 | 23.763 | 23.747 | 36.643 | 204.6 | 0.250 | 24.961 |
| 100 | 23.309 | 23.288 | 36.750 | 198.1 | 0.323 | 25.178 |
| 125 | 22.817 | 22.791 | 36.880 | 194.4 | 0.391 | 25.421 |
| 150 | 22.337 | 22.306 | 36.852 | 191.7 | 0.455 | 25.539 |
| 200 | 20.334 | 20.297 | 36.756 | 197.0 | 0.569 | 26.022 |
| 250 | 19.236 | 19.190 | 36.663 | 192.0 | 0.666 | 26.243 |
| 300 | 18.494 | 18.441 | 36.593 | 193.8 | 0.756 | 26.382 |
| 400 | 17.302 | 17.234 | 36.410 | 186.6 | 0.925 | 26.541 |
| 500 | 15.021 | 14.944 | 36.019 | 167.2 | 1.079 | 26.770 |
| 600 | 12.614 | 12.532 | 35.650 | 151.5 | 1.213 | 26.990 |
| 700 | 10.176 | 10.092 | 35.335 | 145.5 | 1.327 | 27.198 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 744 | 1 | 9.087 | 9.003 | 35.247 | <i>NaN</i> |
| 744 | 2 | 9.077 | 8.993 | 35.245 | 153.4 |
| 744 | 3 | 9.067 | 8.983 | 35.246 | <i>NaN</i> |
| 654 | 4 | 11.504 | 11.419 | 35.498 | 144.1 |
| 654 | 5 | 11.515 | 11.430 | 35.497 | <i>NaN</i> |
| 514 | 6 | 14.794 | 15.371 | -999.000 | <i>NaN</i> |
| 514 | 7 | 14.796 | 14.717 | 35.972 | 161.9 |
| 434 | 8 | 16.786 | 16.714 | 36.316 | 179.0 |
| 434 | 9 | 16.784 | 16.712 | 36.309 | <i>NaN</i> |
| 354 | 10 | 17.829 | 17.768 | 36.491 | 185.6 |
| 354 | 11 | 17.829 | 17.768 | 36.493 | <i>NaN</i> |
| 278 | 12 | 18.871 | 18.821 | 36.628 | 190.9 |
| 278 | 13 | 18.870 | 18.820 | 36.619 | <i>NaN</i> |
| 193 | 14 | 20.476 | 20.439 | 36.761 | 194.7 |
| 193 | 15 | 20.459 | 20.423 | 36.758 | <i>NaN</i> |
| 143 | 16 | 22.509 | 22.480 | 36.841 | 188.9 |
| 143 | 17 | 22.506 | 22.477 | 36.849 | <i>NaN</i> |
| 93 | 18 | 23.436 | 23.417 | 36.708 | 198.0 |
| 93 | 19 | 23.436 | 23.416 | 36.732 | <i>NaN</i> |
| 53 | 20 | 24.096 | 24.085 | 36.538 | 207.3 |
| 53 | 21 | 24.097 | 24.086 | 36.564 | <i>NaN</i> |
| 2 | 22 | 26.133 | 26.132 | 36.287 | 205.8 |
| 2 | 23 | 26.143 | 26.142 | 36.291 | <i>NaN</i> |

Abaco April-May 2011 R/V Knorr
 CTD Station 1 (CTD001)
 Latitude 26.432 N Longitude 78.668 W
 13-Apr-2011 21:11 Z

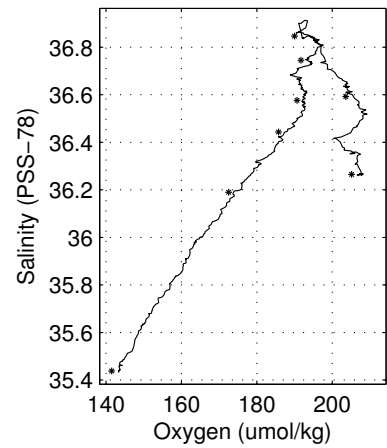
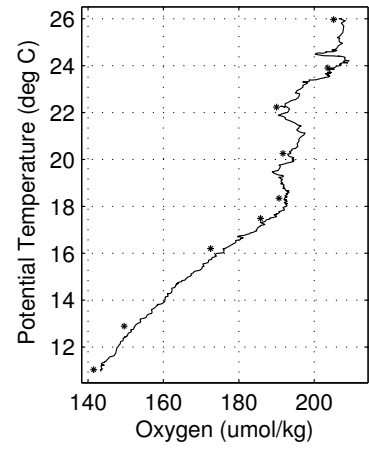
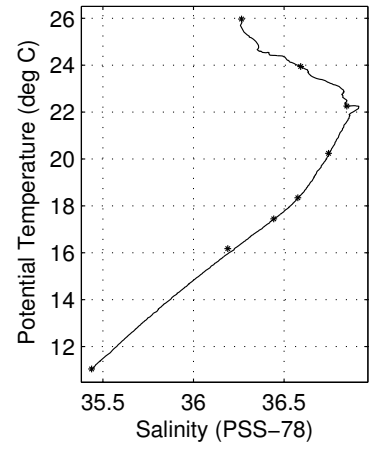
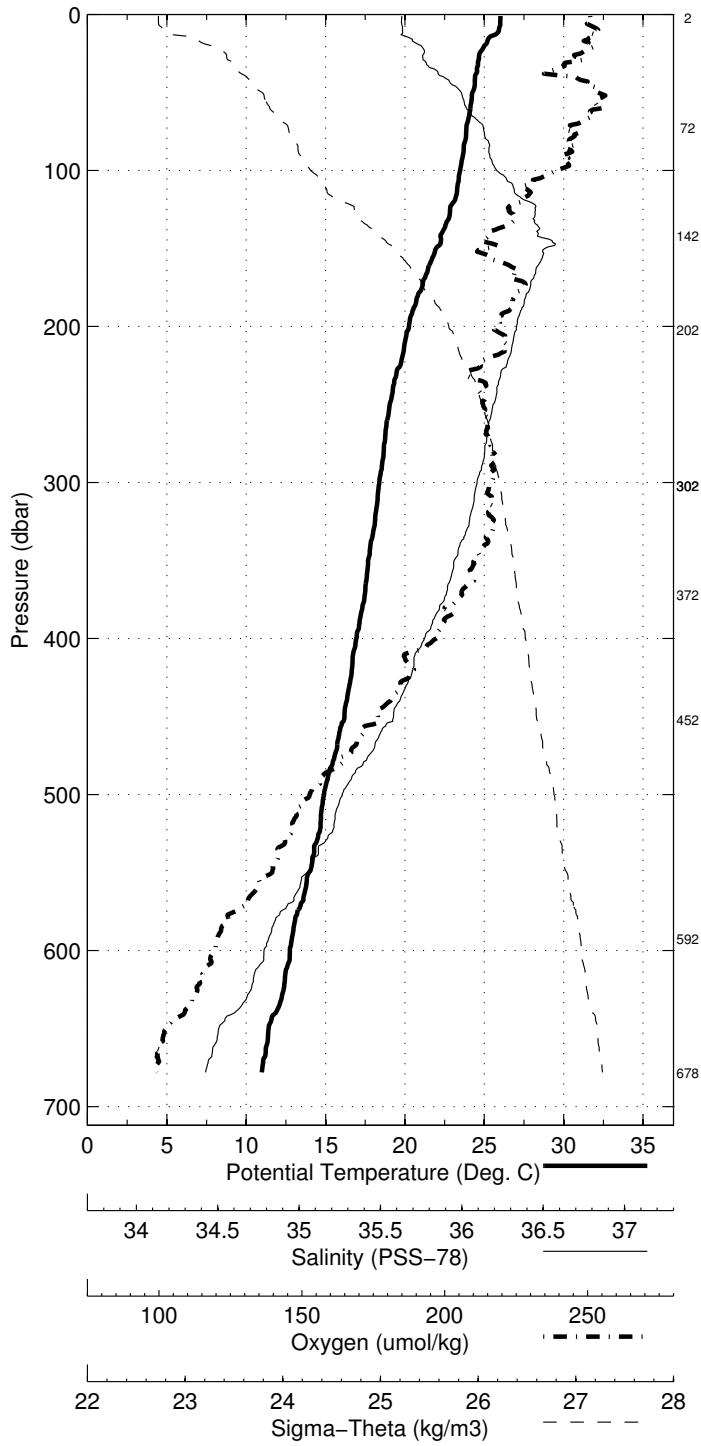


Abaco April-May 2011 R/V Knorr
 CTD Station 2 (CTD002)
 Latitude 26.333N Longitude 78.717W
 13-Apr-2011 23:26Z

| 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 | 26.010 | 26.010 | 36.263 | 207.1 | 0.004 | 23.984 |
| 10 | 25.924 | 25.922 | 36.266 | 208.2 | 0.039 | 24.013 |
| 20 | 25.013 | 25.008 | 36.344 | 206.7 | 0.076 | 24.355 |
| 30 | 24.604 | 24.597 | 36.363 | 205.0 | 0.111 | 24.494 |
| 50 | 24.255 | 24.244 | 36.515 | 208.2 | 0.178 | 24.715 |
| 75 | 23.874 | 23.858 | 36.611 | 204.5 | 0.257 | 24.904 |
| 100 | 23.502 | 23.481 | 36.665 | 202.7 | 0.332 | 25.056 |
| 125 | 22.871 | 22.845 | 36.829 | 195.2 | 0.403 | 25.366 |
| 150 | 21.992 | 21.962 | 36.869 | 191.7 | 0.466 | 25.650 |
| 200 | 20.282 | 20.244 | 36.749 | 193.5 | 0.576 | 26.031 |
| 250 | 19.079 | 19.033 | 36.650 | 191.3 | 0.673 | 26.274 |
| 300 | 18.436 | 18.383 | 36.582 | 192.4 | 0.763 | 26.388 |
| 400 | 17.006 | 16.939 | 36.360 | 184.5 | 0.930 | 26.573 |
| 500 | 14.977 | 14.900 | 36.011 | 165.8 | 1.082 | 26.774 |
| 600 | 12.833 | 12.750 | 35.680 | 151.8 | 1.217 | 26.970 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 678 | 1 | 11.129 | 11.042 | 35.438 | 141.5 |
| 593 | 2 | 12.962 | 13.677 | -999.000 | <i>NaN</i> |
| 452 | 3 | 16.253 | 16.180 | 36.190 | 172.5 |
| 372 | 4 | 17.512 | 17.448 | 36.443 | 185.8 |
| 302 | 5 | 18.402 | 18.348 | 36.576 | 190.7 |
| 302 | 6 | 18.401 | 18.691 | -999.000 | <i>NaN</i> |
| 202 | 7 | 20.279 | 20.241 | 36.745 | 191.7 |
| 142 | 8 | 22.284 | 22.255 | 36.847 | 190.0 |
| 73 | 9 | 23.958 | 23.942 | 36.592 | 203.6 |
| 3 | 10 | 25.966 | 25.966 | 36.265 | 205.2 |

Abaco April-May 2011 R/V Knorr
 CTD Station 2 (CTD002)
 Latitude 26.333 N Longitude 78.717 W
 13-Apr-2011 23:26 Z

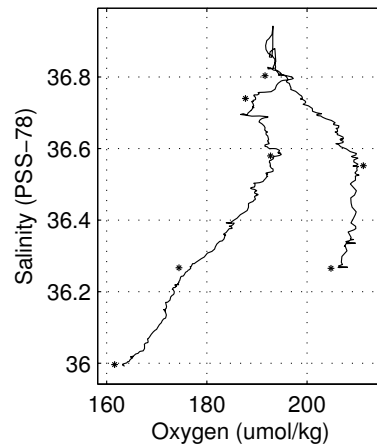
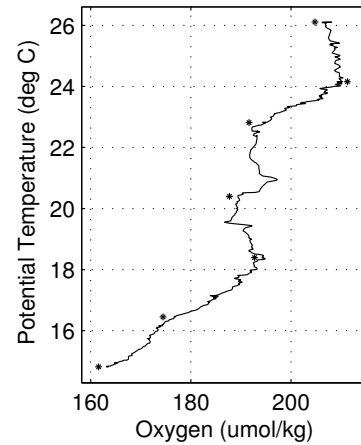
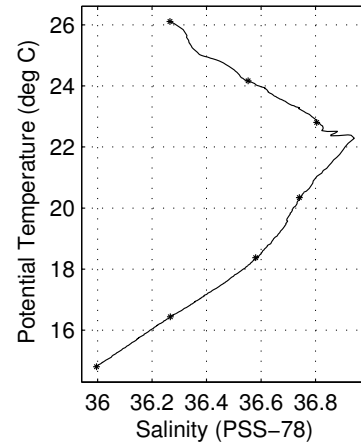
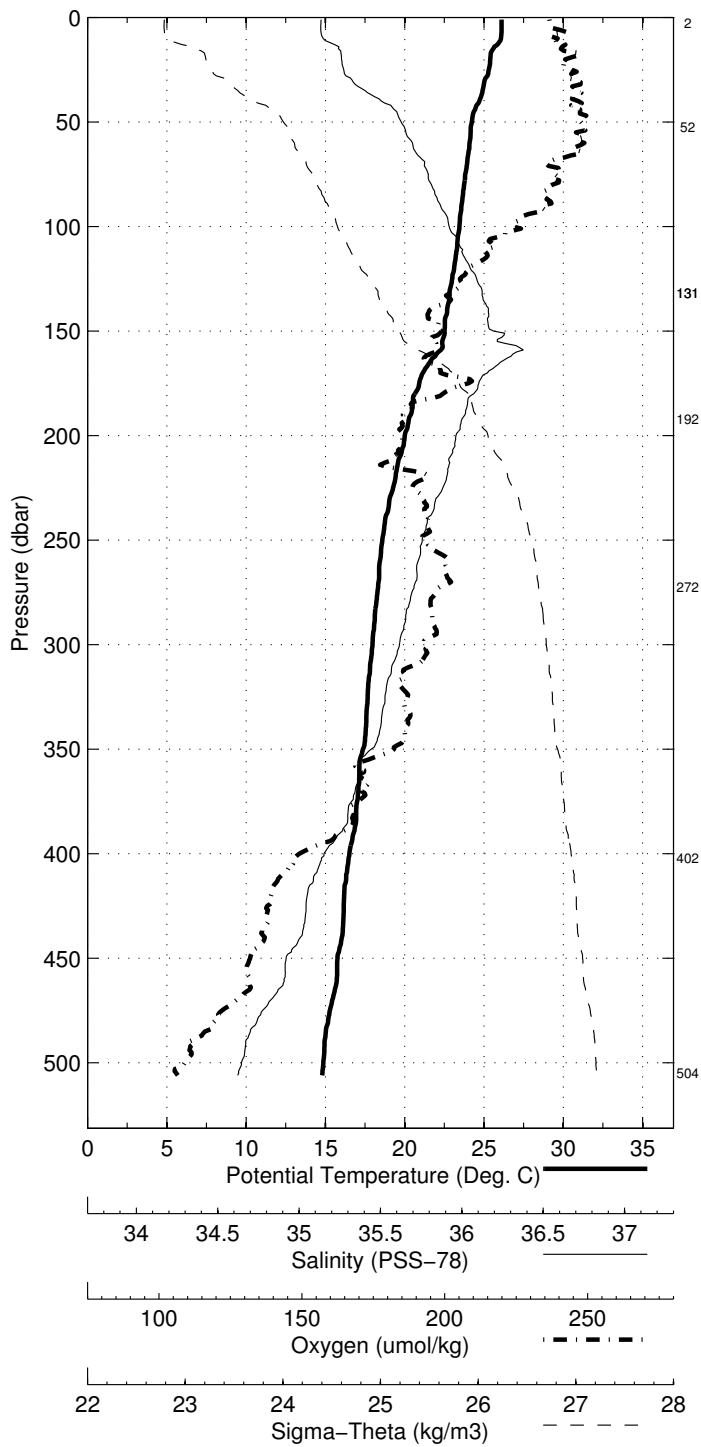


Abaco April-May 2011 R/V Knorr
 CTD Station 3 (CTD003)
 Latitude 26.250N Longitude 78.767W
 14-Apr-2011 01:03Z

| 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 | 26.106 | 26.106 | 36.269 | 206.2 | 0.004 | 23.958 |
| 10 | 26.067 | 26.065 | 36.276 | 207.1 | 0.039 | 23.976 |
| 20 | 25.404 | 25.399 | 36.337 | 208.0 | 0.077 | 24.229 |
| 30 | 25.046 | 25.039 | 36.373 | 209.4 | 0.114 | 24.367 |
| 50 | 24.241 | 24.230 | 36.536 | 209.8 | 0.181 | 24.736 |
| 75 | 23.826 | 23.810 | 36.626 | 206.8 | 0.260 | 24.930 |
| 100 | 23.470 | 23.449 | 36.696 | 202.0 | 0.334 | 25.089 |
| 125 | 23.015 | 22.990 | 36.787 | 195.9 | 0.404 | 25.293 |
| 150 | 22.536 | 22.506 | 36.844 | 193.8 | 0.470 | 25.475 |
| 200 | 20.045 | 20.007 | 36.718 | 189.2 | 0.581 | 26.071 |
| 250 | 18.637 | 18.592 | 36.606 | 191.8 | 0.675 | 26.354 |
| 300 | 18.023 | 17.971 | 36.530 | 191.9 | 0.761 | 26.452 |
| 400 | 16.573 | 16.507 | 36.278 | 177.5 | 0.923 | 26.613 |
| 500 | 14.946 | 14.869 | 36.004 | 164.3 | 1.073 | 26.775 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 505 | 1 | 14.882 | 14.805 | 35.996 | 161.6 |
| 402 | 2 | 16.507 | 16.441 | 36.267 | 174.5 |
| 272 | 3 | 18.425 | 18.377 | 36.580 | 192.7 |
| 192 | 4 | 20.378 | 20.342 | 36.740 | 187.7 |
| 132 | 5 | 22.831 | 22.803 | 36.804 | 191.6 |
| 132 | 6 | 22.830 | 22.929 | -999.000 | <i>NaN</i> |
| 52 | 7 | 24.175 | 24.164 | 36.552 | 211.3 |
| 2 | 8 | 26.108 | 26.107 | 36.265 | 204.8 |

Abaco April-May 2011 R/V Knorr
 CTD Station 3 (CTD003)
 Latitude 26.250 N Longitude 78.767 W
 14-Apr-2011 01:03 Z

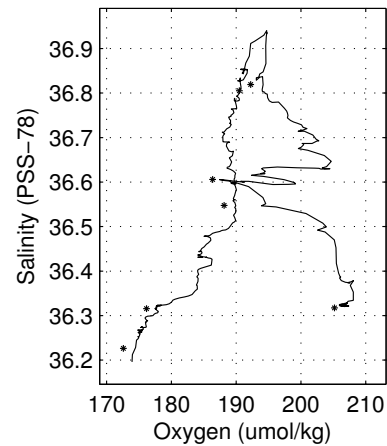
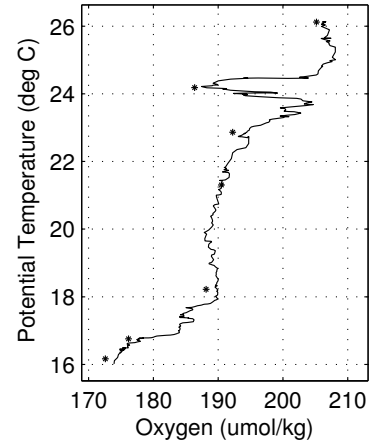
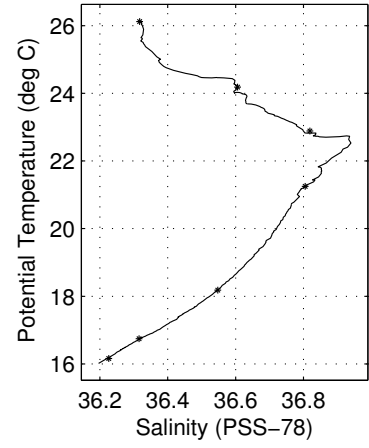
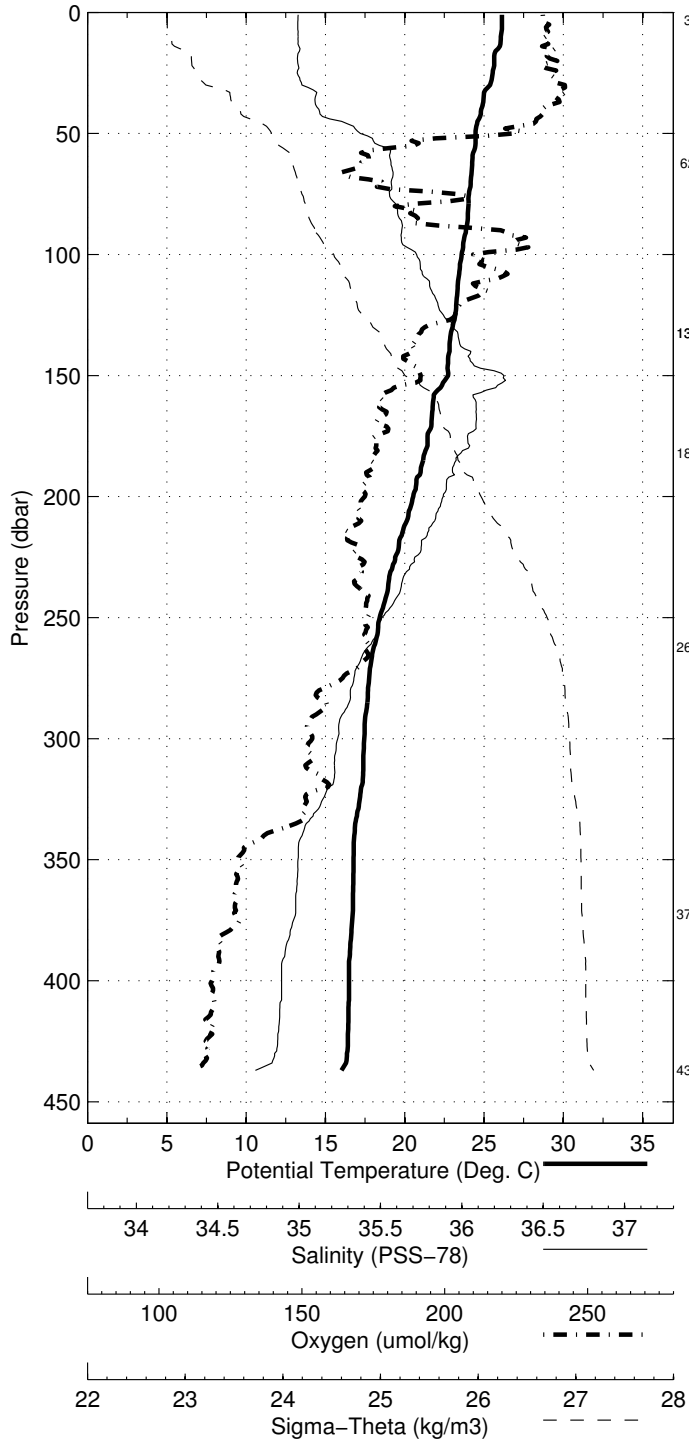


Abaco April-May 2011 R/V Knorr
 CTD Station 4 (CTD004)
 Latitude 26.165N Longitude 78.800W
 14-Apr-2011 02:30Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 26.130 | 26.130 | 36.323 | 206.0 | 0.004 | 23.991 |
| 10 | 26.058 | 26.056 | 36.323 | 206.3 | 0.039 | 24.015 |
| 20 | 25.645 | 25.641 | 36.321 | 207.4 | 0.077 | 24.143 |
| 30 | 25.390 | 25.383 | 36.334 | 208.1 | 0.115 | 24.232 |
| 50 | 24.473 | 24.462 | 36.508 | 203.4 | 0.184 | 24.645 |
| 75 | 24.066 | 24.050 | 36.595 | 198.1 | 0.264 | 24.834 |
| 100 | 23.604 | 23.583 | 36.675 | 199.6 | 0.341 | 25.034 |
| 125 | 23.205 | 23.179 | 36.755 | 197.9 | 0.413 | 25.213 |
| 150 | 22.761 | 22.731 | 36.936 | 194.7 | 0.480 | 25.481 |
| 200 | 20.571 | 20.533 | 36.755 | 189.6 | 0.594 | 25.958 |
| 250 | 18.462 | 18.418 | 36.572 | 189.8 | 0.690 | 26.372 |
| 300 | 17.497 | 17.446 | 36.441 | 184.7 | 0.773 | 26.512 |
| 400 | 16.553 | 16.488 | 36.274 | 175.5 | 0.931 | 26.614 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 437 | 1 | 16.233 | 16.162 | 36.226 | 172.6 |
| 372 | 2 | 16.807 | 16.745 | 36.315 | 176.2 |
| 262 | 3 | 18.230 | 18.184 | 36.547 | 188.1 |
| 182 | 4 | 21.286 | 21.250 | 36.805 | 190.5 |
| 132 | 5 | 22.913 | 22.886 | 36.819 | 192.2 |
| 132 | 6 | 22.912 | 23.010 | -999.000 | <i>NaN</i> |
| 62 | 7 | 24.195 | 24.182 | 36.606 | 186.4 |
| 3 | 8 | 26.124 | 26.123 | 36.317 | 205.2 |

Abaco April-May 2011 R/V Knorr
 CTD Station 4 (CTD004)
 Latitude 26.165 N Longitude 78.800 W
 14-Apr-2011 02:30 Z

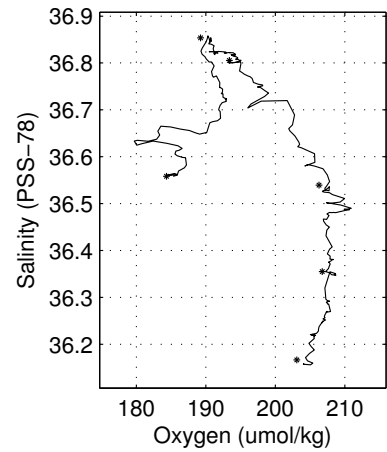
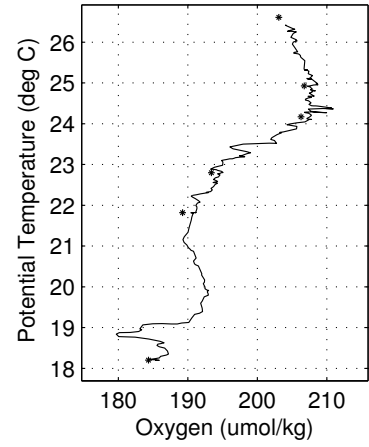
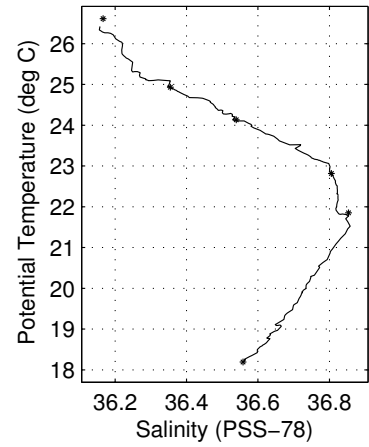
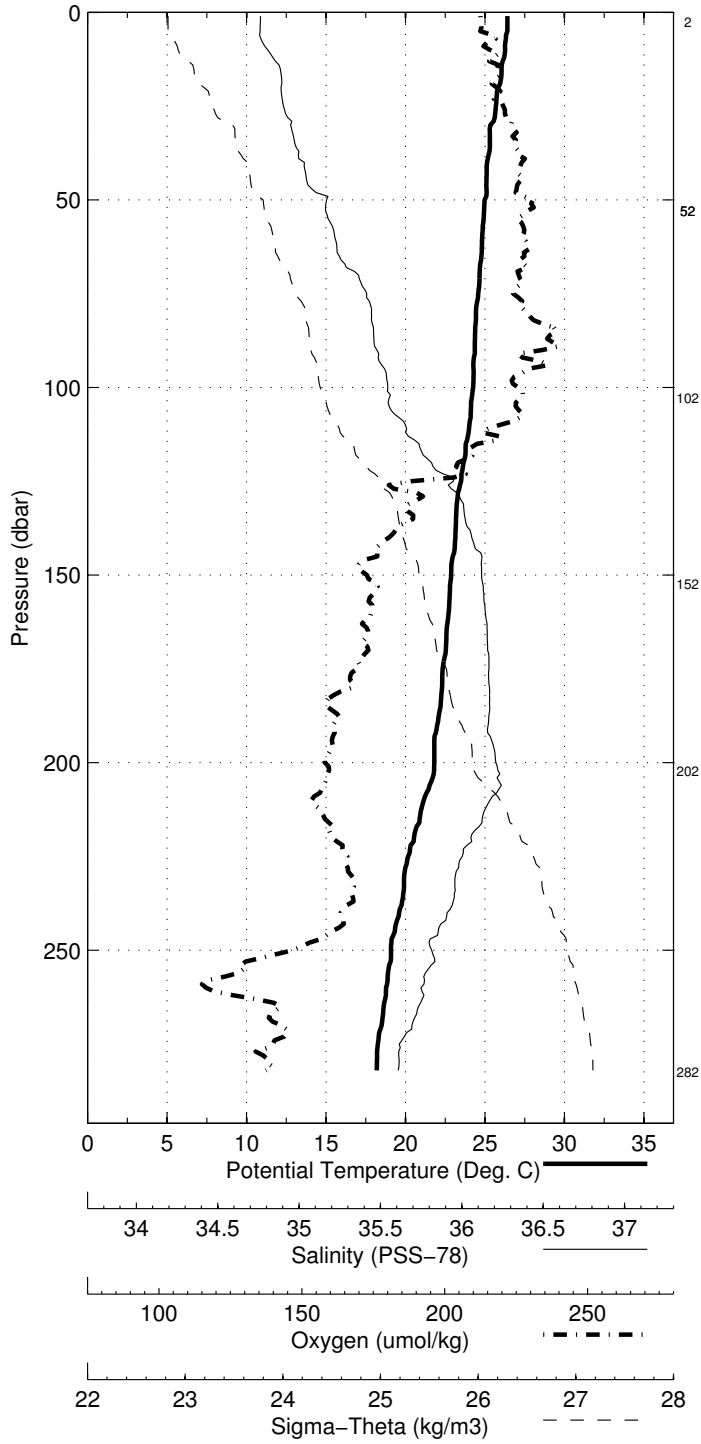


Abaco April-May 2011 R/V Knorr
 CTD Station 5 (CTD005)
 Latitude 26.066N Longitude 78.849W
 14-Apr-2011 03:51Z

| 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 | 26.416 | 26.415 | 36.159 | 204.0 | 0.004 | 23.777 |
| 10 | 26.269 | 26.266 | 36.180 | 204.9 | 0.041 | 23.840 |
| 20 | 25.853 | 25.849 | 36.218 | 205.5 | 0.081 | 24.000 |
| 30 | 25.349 | 25.343 | 36.246 | 206.7 | 0.119 | 24.178 |
| 50 | 24.993 | 24.982 | 36.350 | 208.7 | 0.193 | 24.368 |
| 75 | 24.596 | 24.580 | 36.467 | 206.9 | 0.280 | 24.578 |
| 100 | 24.277 | 24.256 | 36.529 | 207.4 | 0.363 | 24.723 |
| 125 | 23.524 | 23.498 | 36.719 | 198.0 | 0.440 | 25.092 |
| 150 | 22.903 | 22.873 | 36.801 | 194.1 | 0.510 | 25.337 |
| 200 | 21.856 | 21.816 | 36.843 | 190.5 | 0.637 | 25.671 |
| 250 | 19.132 | 19.087 | 36.656 | 187.7 | 0.741 | 26.265 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 283 | 1 | 18.242 | 18.193 | 36.558 | 184.3 |
| 202 | 2 | 21.890 | 21.850 | 36.854 | 189.2 |
| 153 | 3 | 22.847 | 22.816 | 36.805 | 193.4 |
| 103 | 4 | 24.155 | 24.133 | 36.539 | 206.3 |
| 53 | 5 | 24.942 | 24.931 | 36.355 | 206.8 |
| 53 | 6 | 24.944 | 24.979 | -999.000 | <i>NaN</i> |
| 3 | 7 | 26.612 | 26.611 | 36.167 | 203.1 |

Abaco April-May 2011 R/V Knorr
 CTD Station 5 (CTD005)
 Latitude 26.066 N Longitude 78.849 W
 14-Apr-2011 03:51 Z

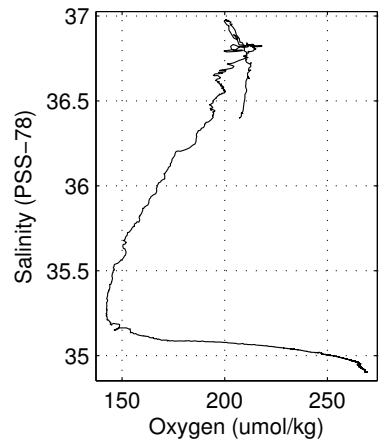
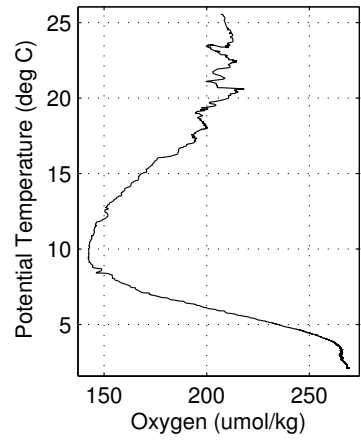
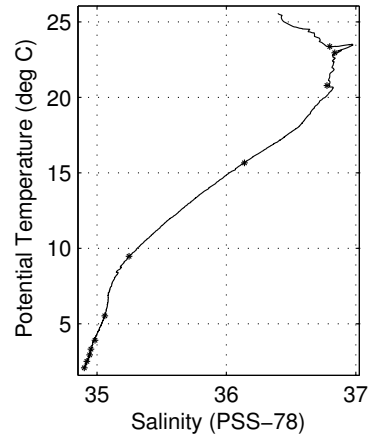
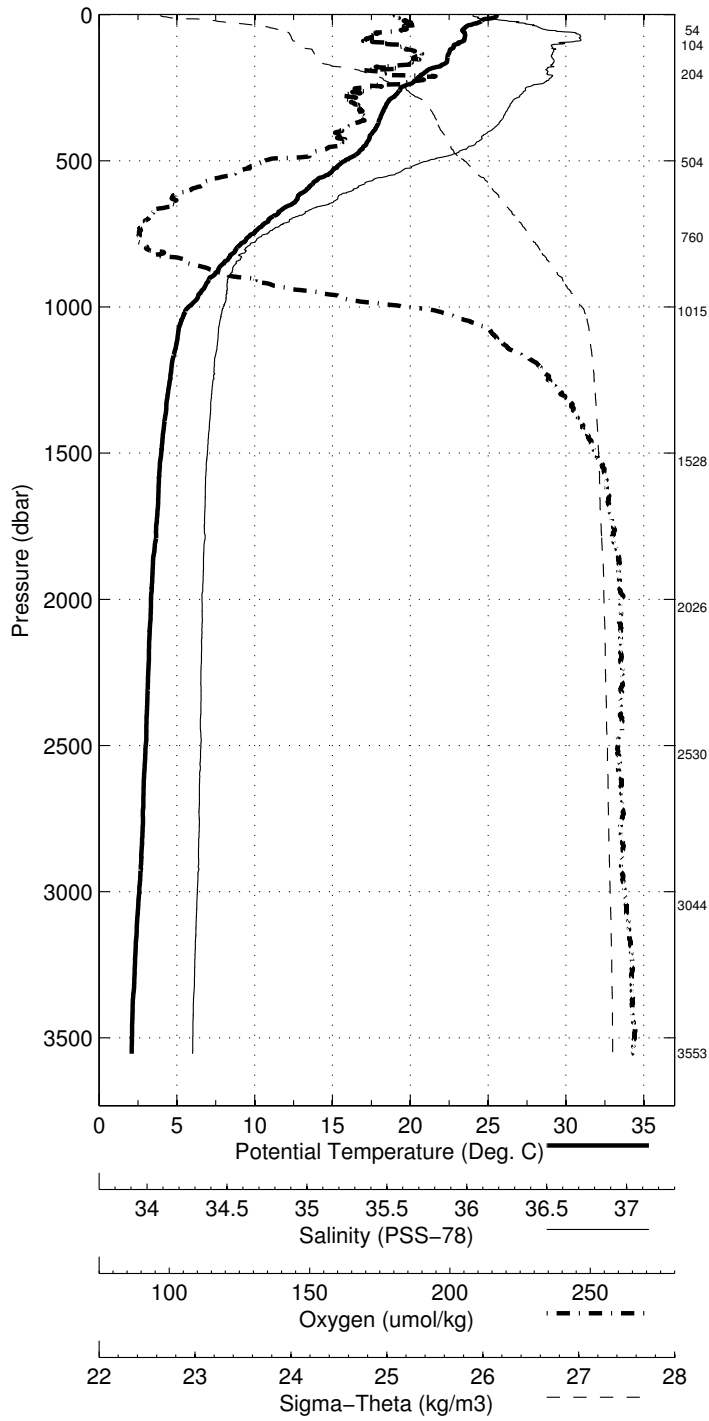


Abaco April-May 2011 R/V Knorr
 CTD Station 6 (CTD006)
 Latitude 25.954N Longitude 76.895W
 14-Apr-2011 14:08Z

| 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 | 25.553 | 25.553 | 36.402 | 207.2 | 0.004 | 24.231 |
| 10 | 25.422 | 25.420 | 36.430 | 208.3 | 0.037 | 24.293 |
| 20 | 24.593 | 24.589 | 36.564 | 210.7 | 0.071 | 24.649 |
| 30 | 24.290 | 24.283 | 36.679 | 212.4 | 0.103 | 24.828 |
| 50 | 23.395 | 23.384 | 36.780 | 210.8 | 0.161 | 25.172 |
| 75 | 23.526 | 23.510 | 36.975 | 200.6 | 0.230 | 25.283 |
| 100 | 23.093 | 23.072 | 36.881 | 205.0 | 0.297 | 25.340 |
| 125 | 22.555 | 22.529 | 36.831 | 212.9 | 0.363 | 25.459 |
| 150 | 22.406 | 22.376 | 36.826 | 212.5 | 0.426 | 25.499 |
| 200 | 20.921 | 20.882 | 36.796 | 204.8 | 0.546 | 25.894 |
| 250 | 19.430 | 19.384 | 36.683 | 199.5 | 0.648 | 26.209 |
| 300 | 18.598 | 18.545 | 36.608 | 196.6 | 0.740 | 26.367 |
| 400 | 17.683 | 17.614 | 36.485 | 193.7 | 0.911 | 26.505 |
| 500 | 15.886 | 15.806 | 36.159 | 174.5 | 1.072 | 26.684 |
| 600 | 13.411 | 13.325 | 35.761 | 155.7 | 1.213 | 26.916 |
| 700 | 11.000 | 10.912 | 35.426 | 144.7 | 1.335 | 27.123 |
| 800 | 8.918 | 8.828 | 35.185 | 144.3 | 1.437 | 27.291 |
| 900 | 7.189 | 7.099 | 35.090 | 169.2 | 1.523 | 27.476 |
| 1000 | 5.827 | 5.737 | 35.065 | 211.3 | 1.591 | 27.638 |
| 1100 | 5.149 | 5.054 | 35.038 | 233.5 | 1.646 | 27.699 |
| 1200 | 4.773 | 4.672 | 35.018 | 244.5 | 1.698 | 27.728 |
| 1300 | 4.514 | 4.406 | 35.003 | 250.3 | 1.747 | 27.745 |
| 1400 | 4.304 | 4.190 | 34.993 | 255.6 | 1.796 | 27.760 |
| 1500 | 4.119 | 3.997 | 34.981 | 259.3 | 1.844 | 27.771 |
| 1750 | 3.811 | 3.670 | 34.965 | 263.6 | 1.961 | 27.792 |
| 2000 | 3.500 | 3.340 | 34.952 | 265.9 | 2.076 | 27.815 |
| 2500 | 3.203 | 2.999 | 34.947 | 264.8 | 2.303 | 27.843 |
| 3000 | 2.830 | 2.583 | 34.928 | 266.3 | 2.528 | 27.865 |
| 3500 | 2.404 | 2.114 | 34.903 | 269.0 | 2.742 | 27.885 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 3554 | 2 | 2.389 | 2.094 | 34.902 | <i>NaN</i> |
| 3045 | 4 | 2.772 | 2.522 | 34.922 | <i>NaN</i> |
| 2531 | 6 | 3.157 | 2.951 | 34.943 | <i>NaN</i> |
| 2026 | 8 | 3.488 | 3.325 | 34.953 | <i>NaN</i> |
| 1529 | 10 | 4.041 | 3.918 | 34.985 | <i>NaN</i> |
| 1016 | 12 | 5.625 | 5.535 | 35.060 | <i>NaN</i> |
| 760 | 14 | 9.566 | 9.478 | 35.247 | <i>NaN</i> |
| 504 | 16 | 15.744 | 15.663 | 36.140 | <i>NaN</i> |
| 204 | 18 | 20.829 | 20.790 | 36.777 | <i>NaN</i> |
| 104 | 20 | 22.976 | 22.954 | 36.837 | <i>NaN</i> |
| 54 | 22 | 23.386 | 23.375 | 36.799 | <i>NaN</i> |

Abaco April-May 2011 R/V Knorr
 CTD Station 6 (CTD006)
 Latitude 25.954 N Longitude 76.895 W
 14-Apr-2011 14:08 Z

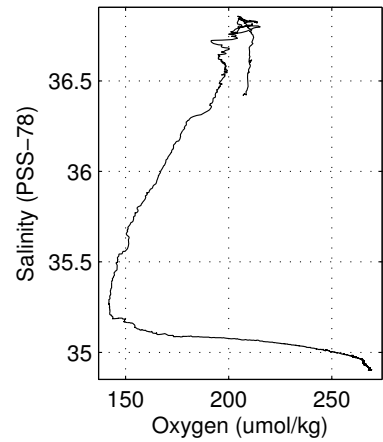
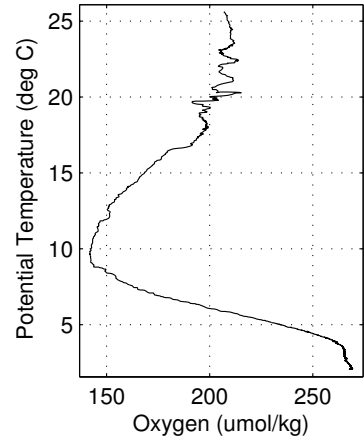
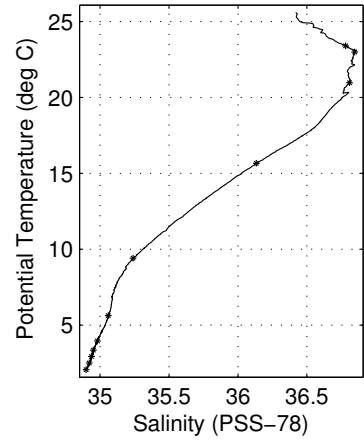
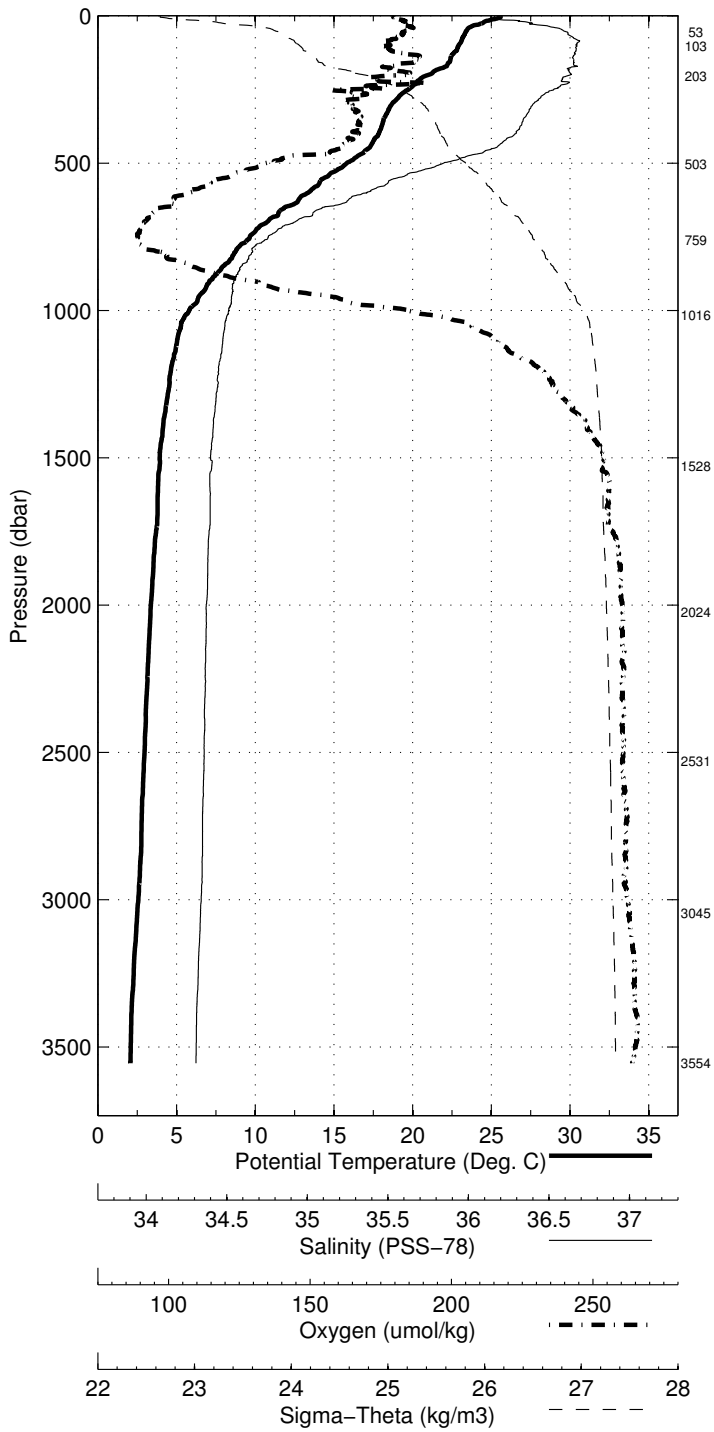


Abaco April-May 2011 R/V Knorr
 CTD Station 7 (CTD007)
 Latitude 25.955N Longitude 76.894W
 14-Apr-2011 18:26Z

| 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 | 25.591 | 25.591 | 36.422 | 207.1 | 0.004 | 24.234 |
| 10 | 25.284 | 25.282 | 36.424 | 208.2 | 0.037 | 24.331 |
| 20 | 24.575 | 24.570 | 36.578 | 210.4 | 0.071 | 24.665 |
| 30 | 24.173 | 24.166 | 36.635 | 210.3 | 0.103 | 24.830 |
| 50 | 23.443 | 23.433 | 36.773 | 210.1 | 0.161 | 25.153 |
| 75 | 23.200 | 23.184 | 36.826 | 208.2 | 0.230 | 25.265 |
| 100 | 22.950 | 22.929 | 36.838 | 206.3 | 0.297 | 25.349 |
| 125 | 22.651 | 22.625 | 36.830 | 208.6 | 0.363 | 25.431 |
| 150 | 22.434 | 22.404 | 36.827 | 213.7 | 0.427 | 25.492 |
| 200 | 21.053 | 21.014 | 36.808 | 210.9 | 0.548 | 25.867 |
| 250 | 19.776 | 19.729 | 36.724 | 193.2 | 0.651 | 26.149 |
| 300 | 18.729 | 18.675 | 36.618 | 195.9 | 0.744 | 26.342 |
| 400 | 17.918 | 17.848 | 36.530 | 198.0 | 0.917 | 26.482 |
| 500 | 15.894 | 15.814 | 36.162 | 174.4 | 1.079 | 26.685 |
| 600 | 13.470 | 13.384 | 35.770 | 154.9 | 1.220 | 26.911 |
| 700 | 10.831 | 10.743 | 35.403 | 143.6 | 1.340 | 27.136 |
| 800 | 8.844 | 8.755 | 35.190 | 147.2 | 1.440 | 27.306 |
| 900 | 7.181 | 7.091 | 35.094 | 171.2 | 1.525 | 27.480 |
| 1000 | 5.900 | 5.809 | 35.068 | 210.8 | 1.593 | 27.631 |
| 1100 | 5.138 | 5.044 | 35.038 | 233.4 | 1.648 | 27.700 |
| 1200 | 4.751 | 4.651 | 35.017 | 244.3 | 1.699 | 27.729 |
| 1300 | 4.506 | 4.399 | 35.003 | 250.3 | 1.749 | 27.746 |
| 1400 | 4.249 | 4.135 | 34.989 | 256.4 | 1.797 | 27.763 |
| 1500 | 4.052 | 3.932 | 34.976 | 260.4 | 1.844 | 27.774 |
| 1750 | 3.842 | 3.701 | 34.968 | 262.8 | 1.962 | 27.792 |
| 2000 | 3.527 | 3.367 | 34.954 | 265.3 | 2.077 | 27.813 |
| 2500 | 3.167 | 2.964 | 34.943 | 265.3 | 2.303 | 27.843 |
| 3000 | 2.820 | 2.573 | 34.928 | 266.5 | 2.527 | 27.866 |
| 3500 | 2.385 | 2.096 | 34.903 | 268.6 | 2.739 | 27.886 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 3554 | 2 | 2.369 | 2.074 | 34.899 | <i>NaN</i> |
| 3045 | 4 | 2.763 | 2.513 | 34.922 | <i>NaN</i> |
| 2531 | 6 | 3.142 | 2.936 | 34.939 | <i>NaN</i> |
| 2025 | 8 | 3.521 | 3.358 | 34.952 | <i>NaN</i> |
| 1528 | 10 | 4.086 | 3.962 | 34.982 | <i>NaN</i> |
| 1016 | 12 | 5.728 | 5.637 | 35.060 | <i>NaN</i> |
| 760 | 14 | 9.499 | 9.410 | 35.240 | <i>NaN</i> |
| 504 | 16 | 15.746 | 15.666 | 36.133 | <i>NaN</i> |
| 204 | 18 | 21.012 | 20.973 | 36.808 | <i>NaN</i> |
| 104 | 20 | 23.025 | 23.004 | 36.847 | <i>NaN</i> |
| 54 | 22 | 23.413 | 23.401 | 36.781 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 7 (CTD007)
 Latitude 25.955 N Longitude 76.894 W
 14–Apr–2011 18:26 Z

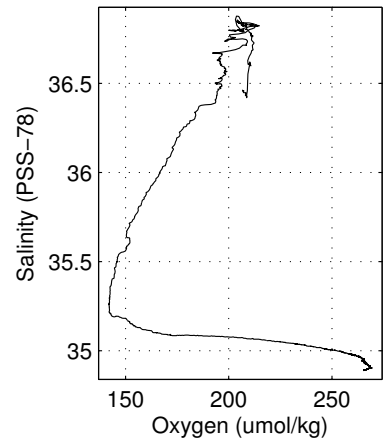
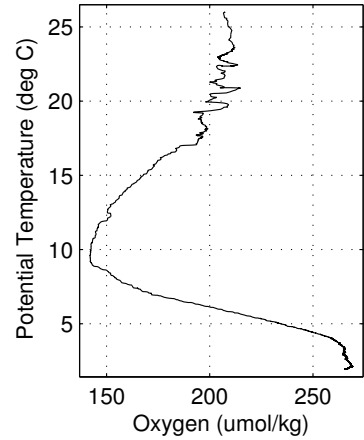
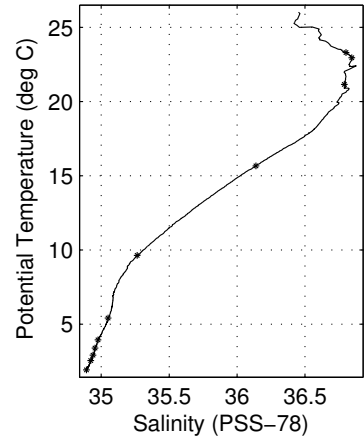
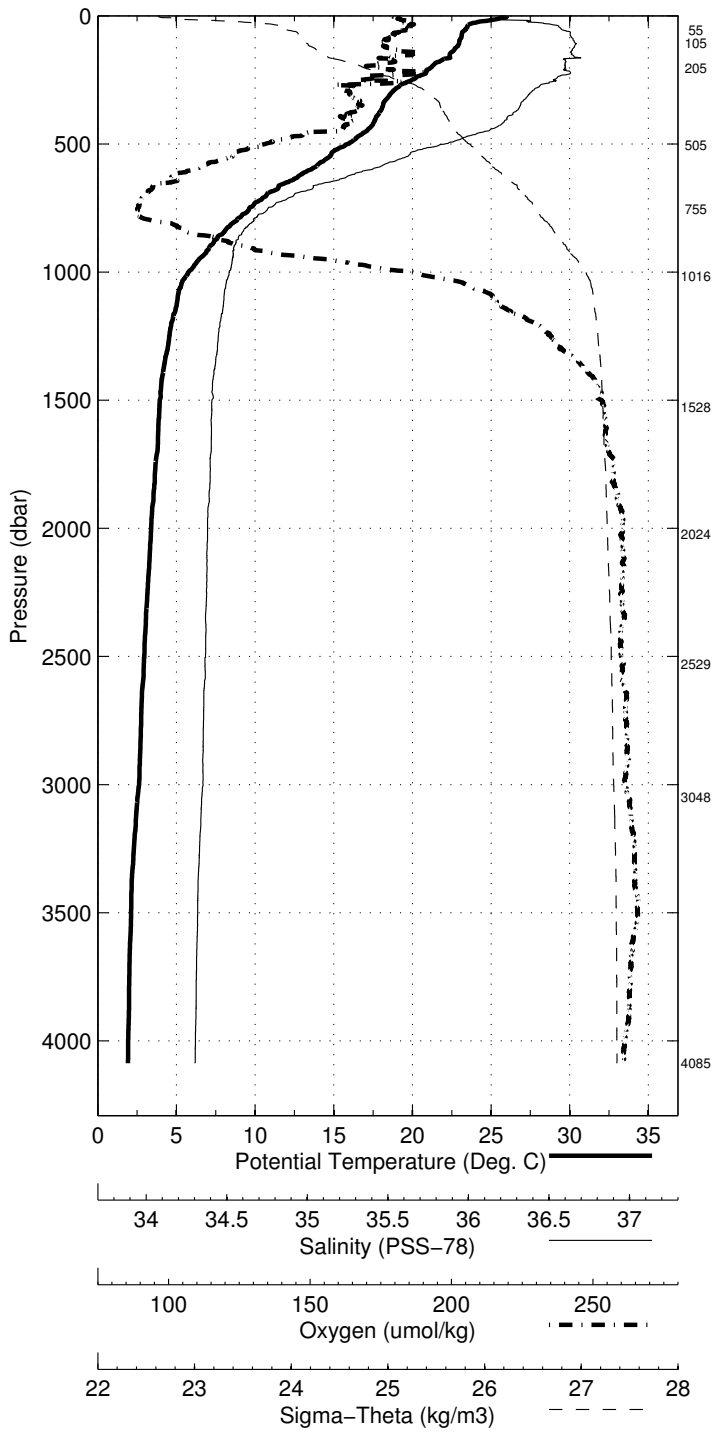


Abaco April-May 2011 R/V Knorr
 CTD Station 8 (CTD008)
 Latitude 25.954N Longitude 76.896W
 14-Apr-2011 23:32Z

| 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 | 26.000 | 26.000 | 36.455 | 206.9 | 0.004 | 24.132 |
| 10 | 25.529 | 25.527 | 36.439 | 208.2 | 0.037 | 24.267 |
| 20 | 24.675 | 24.670 | 36.607 | 210.5 | 0.072 | 24.657 |
| 30 | 23.761 | 23.754 | 36.688 | 211.8 | 0.103 | 24.993 |
| 50 | 23.409 | 23.398 | 36.776 | 210.6 | 0.160 | 25.164 |
| 75 | 23.151 | 23.136 | 36.823 | 207.0 | 0.229 | 25.277 |
| 100 | 22.997 | 22.976 | 36.843 | 204.6 | 0.296 | 25.339 |
| 125 | 22.771 | 22.746 | 36.840 | 205.3 | 0.363 | 25.404 |
| 150 | 22.406 | 22.376 | 36.828 | 210.7 | 0.427 | 25.501 |
| 200 | 21.255 | 21.216 | 36.799 | 201.8 | 0.548 | 25.805 |
| 250 | 20.006 | 19.959 | 36.735 | 198.4 | 0.655 | 26.097 |
| 300 | 18.720 | 18.666 | 36.618 | 195.9 | 0.748 | 26.344 |
| 400 | 17.732 | 17.663 | 36.496 | 194.3 | 0.920 | 26.502 |
| 500 | 15.979 | 15.899 | 36.176 | 174.4 | 1.082 | 26.676 |
| 600 | 13.635 | 13.548 | 35.800 | 156.1 | 1.224 | 26.900 |
| 700 | 10.803 | 10.716 | 35.400 | 143.5 | 1.344 | 27.138 |
| 800 | 8.908 | 8.818 | 35.194 | 146.0 | 1.445 | 27.299 |
| 900 | 7.224 | 7.134 | 35.092 | 169.9 | 1.529 | 27.472 |
| 1000 | 5.866 | 5.775 | 35.069 | 211.4 | 1.596 | 27.636 |
| 1100 | 5.174 | 5.079 | 35.040 | 232.2 | 1.652 | 27.697 |
| 1200 | 4.770 | 4.669 | 35.018 | 243.5 | 1.704 | 27.728 |
| 1300 | 4.546 | 4.438 | 35.006 | 249.2 | 1.753 | 27.744 |
| 1400 | 4.233 | 4.120 | 34.986 | 256.8 | 1.802 | 27.763 |
| 1500 | 4.059 | 3.938 | 34.977 | 260.0 | 1.849 | 27.775 |
| 1750 | 3.806 | 3.665 | 34.968 | 263.0 | 1.966 | 27.795 |
| 2000 | 3.552 | 3.391 | 34.955 | 264.9 | 2.082 | 27.812 |
| 2500 | 3.162 | 2.959 | 34.944 | 264.9 | 2.308 | 27.844 |
| 3000 | 2.870 | 2.622 | 34.931 | 265.7 | 2.531 | 27.865 |
| 3500 | 2.409 | 2.118 | 34.904 | 269.0 | 2.745 | 27.885 |
| 4000 | 2.272 | 1.930 | 34.892 | 265.8 | 2.957 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4086 | 2 | 2.273 | 1.921 | 34.891 | <i>NaN</i> |
| 3049 | 4 | 2.791 | 2.540 | 34.923 | <i>NaN</i> |
| 2529 | 6 | 3.118 | 2.913 | 34.939 | <i>NaN</i> |
| 2025 | 8 | 3.543 | 3.380 | 34.954 | <i>NaN</i> |
| 1528 | 10 | 4.060 | 3.936 | 34.976 | <i>NaN</i> |
| 1017 | 12 | 5.494 | 5.404 | 35.051 | <i>NaN</i> |
| 756 | 14 | 9.716 | 9.628 | 35.265 | <i>NaN</i> |
| 505 | 16 | 15.739 | 15.659 | 36.139 | <i>NaN</i> |
| 206 | 18 | 21.189 | 21.149 | 36.789 | <i>NaN</i> |
| 106 | 20 | 22.974 | 22.952 | 36.844 | <i>NaN</i> |
| 56 | 22 | 23.312 | 23.301 | 36.802 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 8 (CTD008)
 Latitude 25.954 N Longitude 76.896 W
 14–Apr–2011 23:32 Z

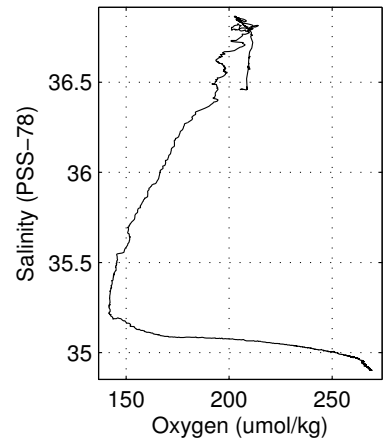
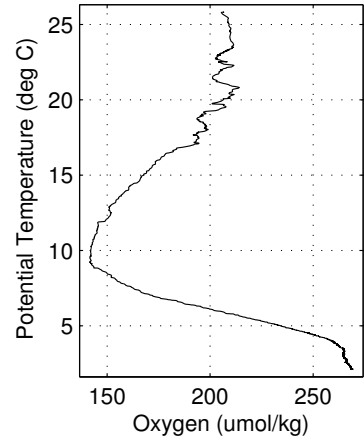
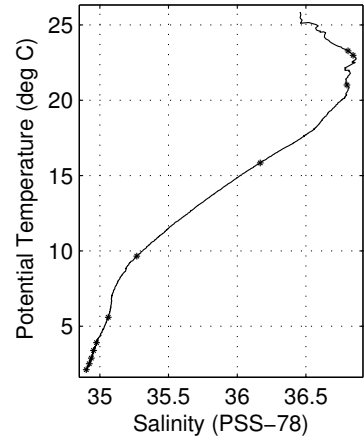
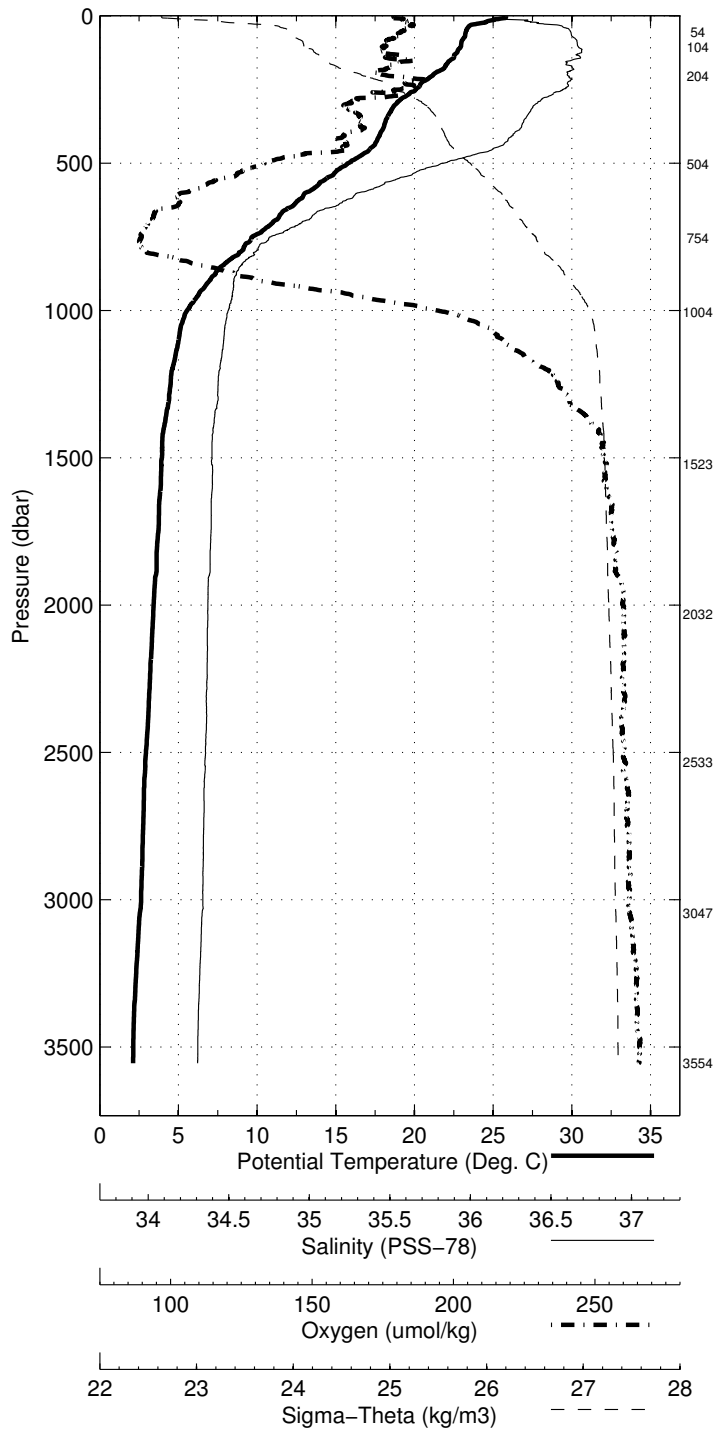


Abaco April-May 2011 R/V Knorr
 CTD Station 9 (CTD009)
 Latitude 25.955N Longitude 76.896W
 15-Apr-2011 03:50Z

| 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 | 25.812 | 25.811 | 36.461 | 206.2 | 0.004 | 24.195 |
| 10 | 25.421 | 25.419 | 36.461 | 208.9 | 0.037 | 24.317 |
| 20 | 24.585 | 24.581 | 36.605 | 209.6 | 0.071 | 24.683 |
| 30 | 23.641 | 23.635 | 36.721 | 211.5 | 0.102 | 25.053 |
| 50 | 23.314 | 23.304 | 36.803 | 209.0 | 0.158 | 25.213 |
| 75 | 23.157 | 23.142 | 36.827 | 206.2 | 0.227 | 25.279 |
| 100 | 22.983 | 22.963 | 36.843 | 203.8 | 0.293 | 25.343 |
| 125 | 22.721 | 22.695 | 36.863 | 202.7 | 0.359 | 25.436 |
| 150 | 22.320 | 22.290 | 36.815 | 211.5 | 0.423 | 25.515 |
| 200 | 21.223 | 21.184 | 36.790 | 203.8 | 0.544 | 25.807 |
| 250 | 20.117 | 20.071 | 36.766 | 207.8 | 0.649 | 26.091 |
| 300 | 18.855 | 18.802 | 36.627 | 194.0 | 0.745 | 26.316 |
| 400 | 17.879 | 17.810 | 36.516 | 194.4 | 0.918 | 26.481 |
| 500 | 15.858 | 15.778 | 36.157 | 173.5 | 1.081 | 26.689 |
| 600 | 13.179 | 13.094 | 35.726 | 152.8 | 1.222 | 26.936 |
| 700 | 11.096 | 11.007 | 35.435 | 144.2 | 1.342 | 27.113 |
| 800 | 9.063 | 8.973 | 35.199 | 143.2 | 1.445 | 27.279 |
| 900 | 7.042 | 6.953 | 35.087 | 172.5 | 1.528 | 27.494 |
| 1000 | 5.638 | 5.549 | 35.058 | 217.5 | 1.593 | 27.656 |
| 1100 | 5.100 | 5.006 | 35.035 | 234.2 | 1.646 | 27.702 |
| 1200 | 4.703 | 4.603 | 35.014 | 245.2 | 1.698 | 27.732 |
| 1300 | 4.516 | 4.408 | 35.007 | 250.8 | 1.747 | 27.748 |
| 1400 | 4.170 | 4.057 | 34.981 | 257.9 | 1.795 | 27.765 |
| 1500 | 4.069 | 3.948 | 34.975 | 259.3 | 1.842 | 27.772 |
| 1750 | 3.864 | 3.722 | 34.970 | 261.8 | 1.959 | 27.791 |
| 2000 | 3.578 | 3.417 | 34.954 | 264.6 | 2.076 | 27.809 |
| 2500 | 3.139 | 2.936 | 34.942 | 265.0 | 2.305 | 27.845 |
| 3000 | 2.869 | 2.621 | 34.928 | 266.1 | 2.528 | 27.862 |
| 3500 | 2.418 | 2.128 | 34.902 | 268.9 | 2.743 | 27.883 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 3555 | 2 | 2.413 | 2.117 | 34.901 | <i>NaN</i> |
| 3047 | 4 | 2.764 | 2.514 | 34.923 | <i>NaN</i> |
| 2534 | 6 | 3.083 | 2.878 | 34.938 | <i>NaN</i> |
| 2032 | 8 | 3.558 | 3.394 | 34.954 | <i>NaN</i> |
| 1523 | 10 | 4.035 | 3.913 | 34.976 | <i>NaN</i> |
| 1005 | 12 | 5.682 | 5.593 | 35.062 | <i>NaN</i> |
| 755 | 14 | 9.740 | 9.651 | 35.269 | <i>NaN</i> |
| 504 | 16 | 15.925 | 15.844 | 36.168 | <i>NaN</i> |
| 204 | 18 | 21.044 | 21.004 | 36.799 | <i>NaN</i> |
| 105 | 20 | 23.003 | 22.982 | 36.844 | <i>NaN</i> |
| 55 | 22 | 23.287 | 23.276 | 36.807 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 9 (CTD009)
 Latitude 25.955 N Longitude 76.896 W
 15–Apr–2011 03:50 Z

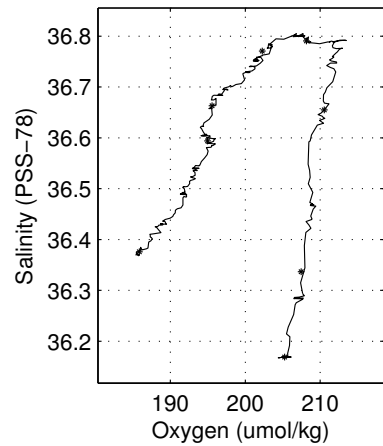
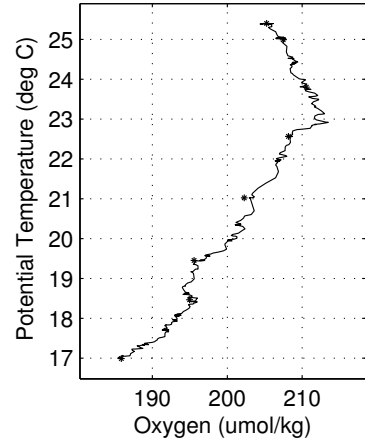
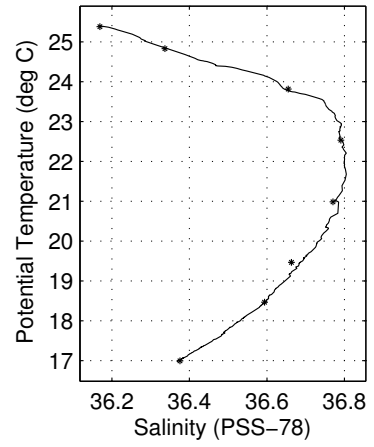
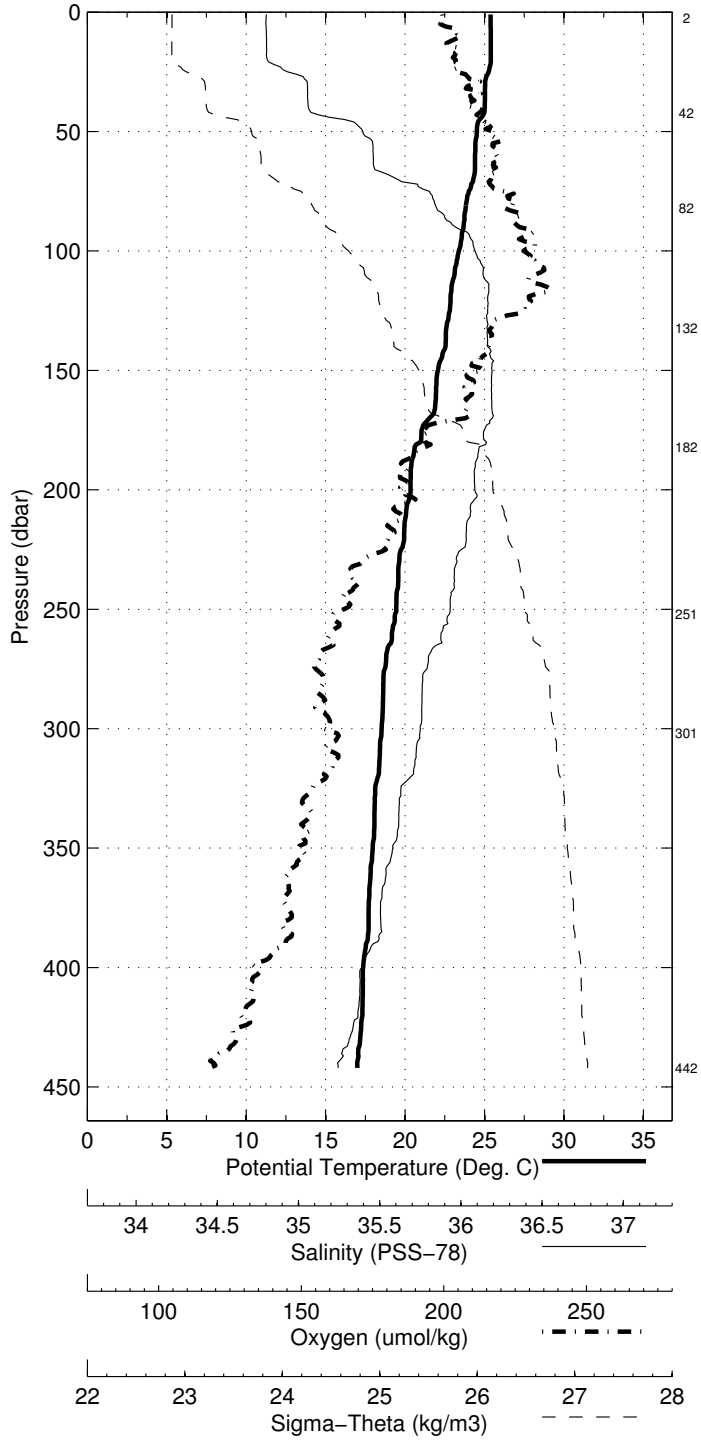


Abaco April-May 2011 R/V Knorr
 CTD Station 10 (CTD010)
 Latitude 26.525N Longitude 76.884W
 15-Apr-2011 10:32Z

| 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 | 25.388 | 25.388 | 36.169 | 204.6 | 0.004 | 24.105 |
| 10 | 25.399 | 25.397 | 36.169 | 206.1 | 0.038 | 24.103 |
| 20 | 25.399 | 25.395 | 36.171 | 205.7 | 0.076 | 24.105 |
| 30 | 25.045 | 25.038 | 36.284 | 207.4 | 0.113 | 24.300 |
| 50 | 24.525 | 24.515 | 36.439 | 208.8 | 0.184 | 24.577 |
| 75 | 24.023 | 24.007 | 36.625 | 209.6 | 0.266 | 24.870 |
| 100 | 23.405 | 23.385 | 36.753 | 211.2 | 0.341 | 25.152 |
| 125 | 22.836 | 22.811 | 36.788 | 211.2 | 0.409 | 25.345 |
| 150 | 22.096 | 22.065 | 36.801 | 207.9 | 0.474 | 25.568 |
| 200 | 20.382 | 20.344 | 36.753 | 201.2 | 0.587 | 26.007 |
| 250 | 19.485 | 19.439 | 36.683 | 196.4 | 0.685 | 26.194 |
| 300 | 18.579 | 18.525 | 36.600 | 194.8 | 0.776 | 26.366 |
| 400 | 17.427 | 17.359 | 36.436 | 189.3 | 0.946 | 26.530 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 442 | 1 | 17.068 | 16.993 | 36.376 | 185.9 |
| 302 | 2 | 18.520 | 18.466 | 36.594 | 195.0 |
| 252 | 3 | 19.510 | 19.464 | 36.663 | 195.6 |
| 182 | 4 | 21.018 | 20.983 | 36.771 | 202.3 |
| 132 | 5 | 22.558 | 22.531 | 36.791 | 208.2 |
| 82 | 6 | 23.831 | 23.814 | 36.655 | 210.5 |
| 42 | 7 | 24.838 | 24.829 | 36.337 | 207.5 |
| 3 | 8 | 25.384 | 25.383 | 36.169 | 205.3 |

Abaco April-May 2011 R/V Knorr
 CTD Station 10 (CTD010)
 Latitude 26.525 N Longitude 76.884 W
 15-Apr-2011 10:32 Z

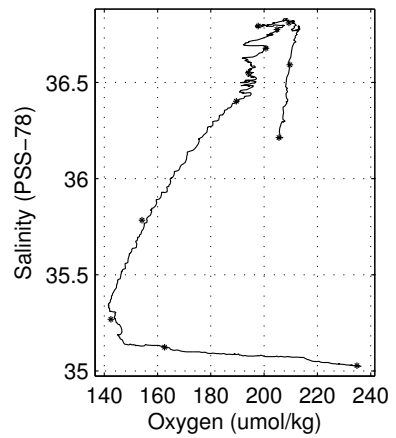
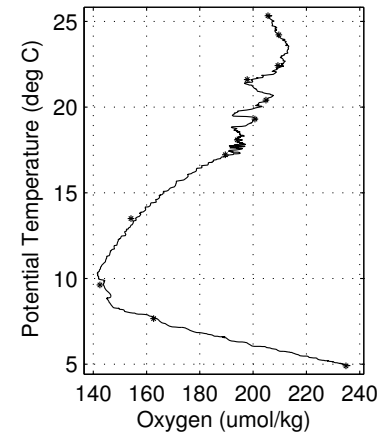
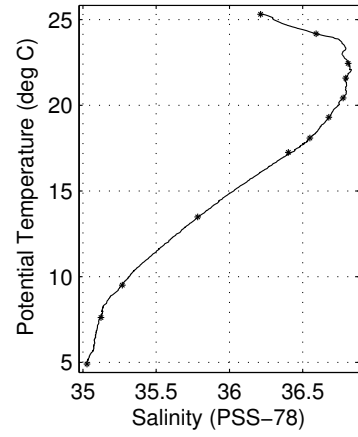
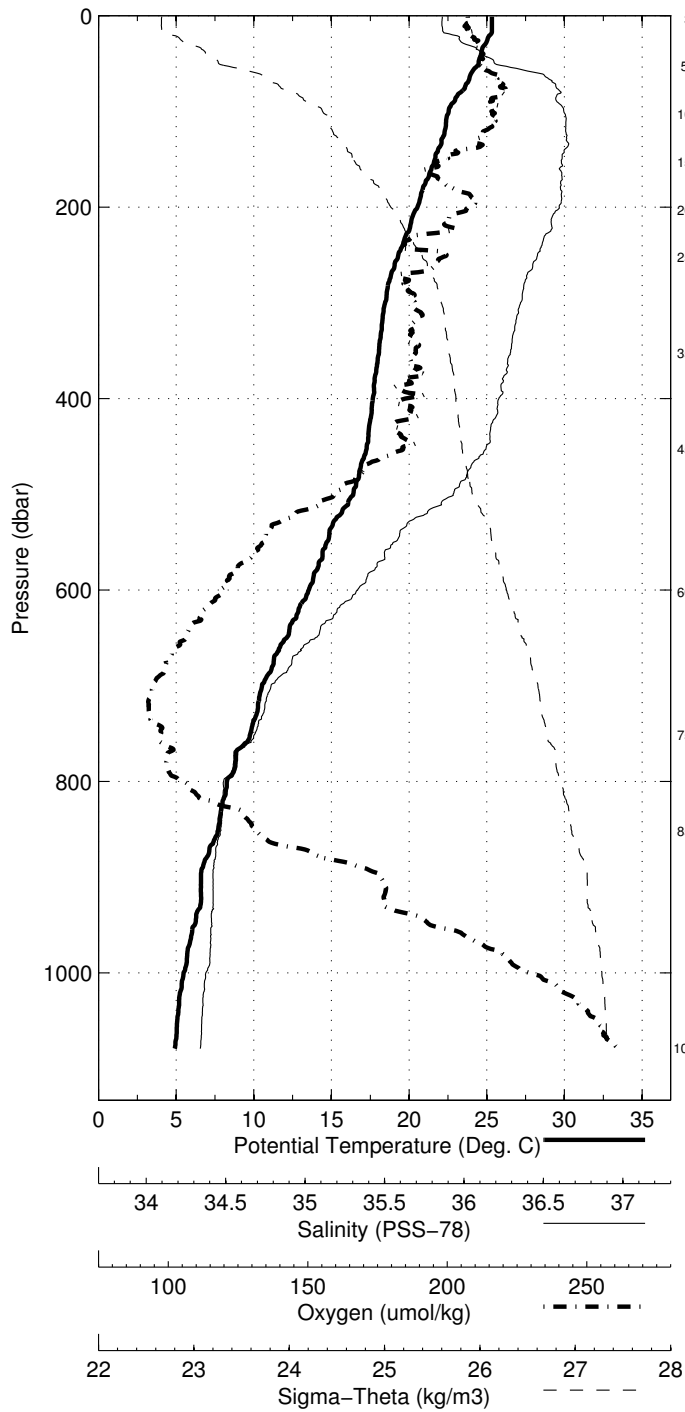


Abaco April-May 2011 R/V Knorr
 CTD Station 11 (CTD011)
 Latitude 26.517N Longitude 76.833W
 15-Apr-2011 11:42Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.327 | 25.327 | 36.212 | 205.7 | 0.004 | 24.157 |
| 10 | 25.329 | 25.327 | 36.209 | 205.2 | 0.038 | 24.155 |
| 20 | 25.233 | 25.228 | 36.262 | 205.8 | 0.075 | 24.226 |
| 30 | 24.901 | 24.894 | 36.329 | 207.1 | 0.111 | 24.378 |
| 50 | 24.488 | 24.478 | 36.469 | 208.8 | 0.179 | 24.611 |
| 75 | 23.609 | 23.593 | 36.771 | 212.3 | 0.256 | 25.103 |
| 100 | 22.566 | 22.545 | 36.808 | 210.5 | 0.323 | 25.437 |
| 125 | 22.271 | 22.246 | 36.824 | 209.0 | 0.386 | 25.535 |
| 150 | 21.694 | 21.664 | 36.799 | 201.1 | 0.447 | 25.680 |
| 200 | 20.577 | 20.539 | 36.786 | 205.7 | 0.558 | 25.980 |
| 250 | 19.348 | 19.302 | 36.679 | 201.5 | 0.657 | 26.226 |
| 300 | 18.506 | 18.453 | 36.595 | 195.1 | 0.747 | 26.381 |
| 400 | 17.731 | 17.662 | 36.489 | 193.1 | 0.918 | 26.497 |
| 500 | 16.485 | 16.403 | 36.265 | 178.9 | 1.082 | 26.627 |
| 600 | 13.625 | 13.538 | 35.796 | 156.1 | 1.225 | 26.900 |
| 700 | 10.613 | 10.526 | 35.371 | 142.4 | 1.345 | 27.150 |
| 800 | 8.352 | 8.266 | 35.138 | 148.5 | 1.445 | 27.342 |
| 900 | 6.686 | 6.600 | 35.086 | 188.5 | 1.524 | 27.542 |
| 1000 | 5.564 | 5.476 | 35.050 | 218.1 | 1.587 | 27.658 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 1079 | 1 | 4.989 | 4.898 | 35.027 | 234.8 |
| 851 | 2 | 7.702 | 7.614 | 35.123 | 162.6 |
| 752 | 3 | 9.589 | 9.501 | 35.269 | 142.5 |
| 603 | 4 | 13.570 | 13.483 | 35.784 | 154.2 |
| 453 | 5 | 17.326 | 17.249 | 36.402 | 189.6 |
| 353 | 6 | 18.150 | 18.088 | 36.549 | 194.1 |
| 253 | 7 | 19.352 | 19.306 | 36.678 | 200.6 |
| 203 | 8 | 20.469 | 20.431 | 36.776 | 204.8 |
| 153 | 9 | 21.614 | 21.584 | 36.794 | 197.8 |
| 103 | 10 | 22.460 | 22.439 | 36.810 | 209.3 |
| 53 | 11 | 24.187 | 24.176 | 36.592 | 209.6 |
| 3 | 12 | 25.308 | 25.307 | 36.213 | 205.5 |

Abaco April-May 2011 R/V Knorr
 CTD Station 11 (CTD011)
 Latitude 26.517 N Longitude 76.833 W
 15-Apr-2011 11:42 Z

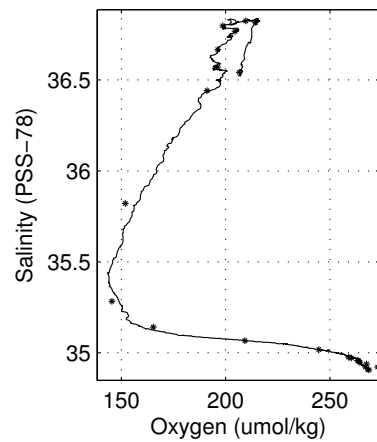
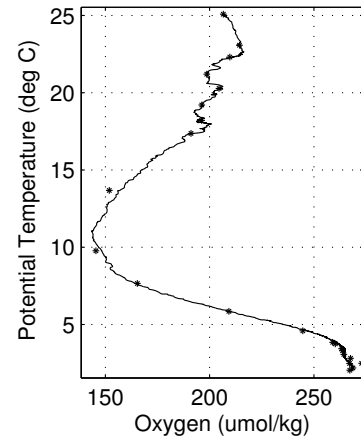
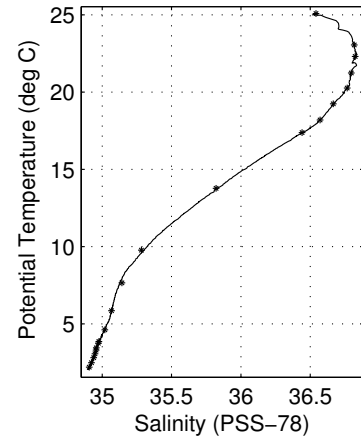
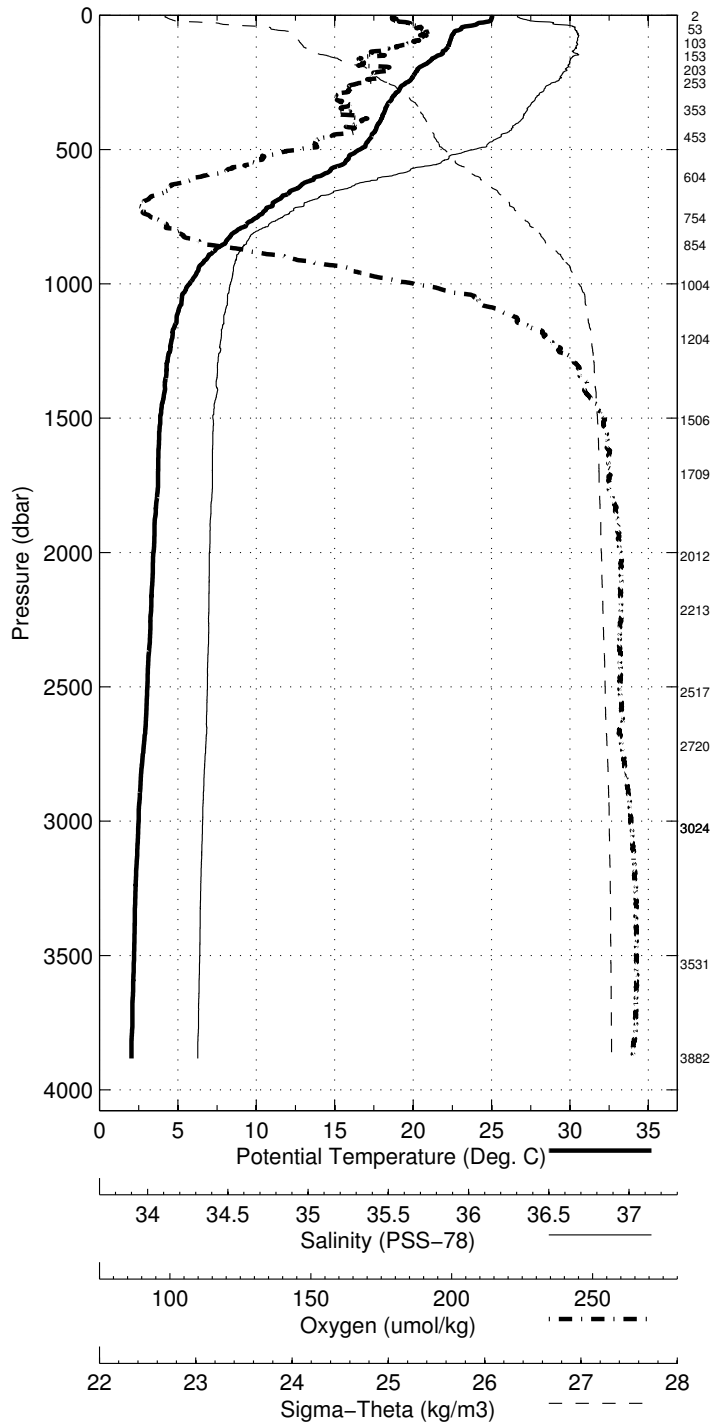


Abaco April-May 2011 R/V Knorr
 CTD Station 12 (CTD012)
 Latitude 26.501N Longitude 76.742W
 15-Apr-2011 13:26Z

| 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 | 25.033 | 25.033 | 36.524 | 207.0 | 0.003 | 24.483 |
| 10 | 25.007 | 25.005 | 36.533 | 207.6 | 0.034 | 24.499 |
| 20 | 24.961 | 24.957 | 36.585 | 208.0 | 0.068 | 24.553 |
| 30 | 24.138 | 24.132 | 36.703 | 211.7 | 0.101 | 24.892 |
| 50 | 23.087 | 23.076 | 36.815 | 214.9 | 0.158 | 25.289 |
| 75 | 22.498 | 22.483 | 36.835 | 214.6 | 0.222 | 25.476 |
| 100 | 22.359 | 22.339 | 36.824 | 212.4 | 0.285 | 25.508 |
| 125 | 22.133 | 22.108 | 36.817 | 205.7 | 0.347 | 25.569 |
| 150 | 21.611 | 21.582 | 36.815 | 205.1 | 0.408 | 25.715 |
| 200 | 20.312 | 20.274 | 36.766 | 204.5 | 0.517 | 26.036 |
| 250 | 19.642 | 19.595 | 36.709 | 200.7 | 0.617 | 26.173 |
| 300 | 18.792 | 18.739 | 36.623 | 192.7 | 0.710 | 26.330 |
| 400 | 17.914 | 17.845 | 36.528 | 198.4 | 0.884 | 26.482 |
| 500 | 16.680 | 16.597 | 36.301 | 183.6 | 1.049 | 26.609 |
| 600 | 14.071 | 13.982 | 35.870 | 159.2 | 1.199 | 26.863 |
| 700 | 11.140 | 11.051 | 35.439 | 143.7 | 1.323 | 27.108 |
| 800 | 8.896 | 8.806 | 35.209 | 153.3 | 1.426 | 27.313 |
| 900 | 7.006 | 6.917 | 35.095 | 180.0 | 1.509 | 27.505 |
| 1000 | 5.839 | 5.748 | 35.065 | 212.6 | 1.574 | 27.636 |
| 1100 | 5.140 | 5.045 | 35.038 | 234.5 | 1.628 | 27.700 |
| 1200 | 4.743 | 4.642 | 35.017 | 245.8 | 1.680 | 27.730 |
| 1300 | 4.399 | 4.293 | 34.998 | 253.5 | 1.729 | 27.753 |
| 1400 | 4.273 | 4.159 | 34.997 | 255.6 | 1.777 | 27.767 |
| 1500 | 3.993 | 3.873 | 34.974 | 260.5 | 1.823 | 27.779 |
| 1750 | 3.877 | 3.735 | 34.972 | 261.7 | 1.939 | 27.791 |
| 2000 | 3.603 | 3.442 | 34.957 | 264.6 | 2.056 | 27.809 |
| 2500 | 3.260 | 3.055 | 34.947 | 264.5 | 2.287 | 27.838 |
| 3000 | 2.743 | 2.498 | 34.922 | 267.2 | 2.511 | 27.868 |
| 3500 | 2.502 | 2.209 | 34.908 | 268.4 | 2.726 | 27.881 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 3882 | 1 | 2.368 | 7.896 | -999.000 | <i>NaN</i> |
| 3531 | 2 | 2.485 | 2.189 | 34.906 | 268.7 |
| 3024 | 3 | 2.729 | 2.482 | 34.922 | 272.9 |
| 3024 | 4 | 2.728 | 2.480 | 34.922 | 267.2 |
| 2720 | 5 | 3.031 | 2.808 | 34.938 | 267.5 |
| 2518 | 6 | 3.264 | 3.057 | 34.948 | 264.3 |
| 2214 | 7 | 3.484 | 3.304 | 34.956 | 263.8 |
| 2012 | 8 | 3.609 | 3.446 | 34.957 | 263.3 |
| 1709 | 9 | 3.878 | 3.740 | 34.972 | 260.3 |
| 1507 | 10 | 3.976 | 3.855 | 34.975 | 259.0 |
| 1205 | 11 | 4.716 | 4.616 | 35.018 | 244.7 |
| 1004 | 12 | 5.945 | 5.853 | 35.067 | 209.2 |
| 855 | 13 | 7.744 | 7.655 | 35.142 | 165.4 |
| 754 | 14 | 9.853 | 9.763 | 35.283 | 145.4 |
| 604 | 15 | 13.854 | 13.766 | 35.821 | 151.9 |
| 453 | 16 | 17.458 | 17.381 | 36.441 | 191.0 |
| 353 | 17 | 18.264 | 18.202 | 36.571 | 196.1 |
| 254 | 18 | 19.285 | 19.239 | 36.666 | 196.2 |
| 204 | 19 | 20.304 | 20.266 | 36.768 | 204.5 |
| 154 | 20 | 21.268 | 21.238 | 36.797 | 198.7 |
| 104 | 21 | 22.329 | 22.308 | 36.825 | 209.6 |
| 54 | 22 | 23.067 | 23.056 | 36.817 | 214.3 |
| 2 | 23 | 25.086 | 25.086 | 36.542 | 206.5 |

Abaco April-May 2011 R/V Knorr
 CTD Station 12 (CTD012)
 Latitude 26.501 N Longitude 76.742 W
 15-Apr-2011 13:26 Z

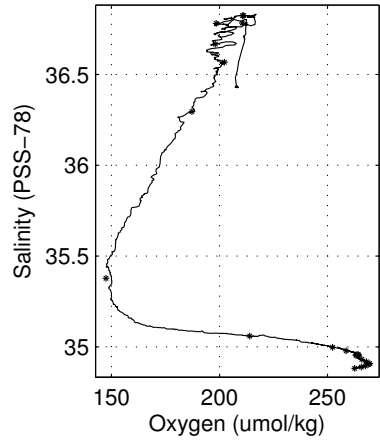
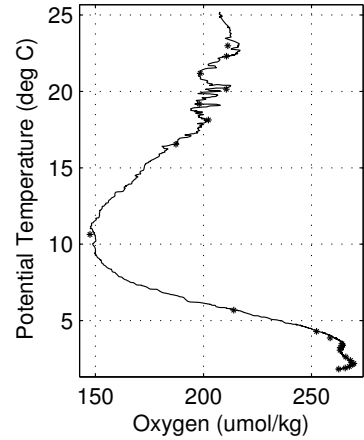
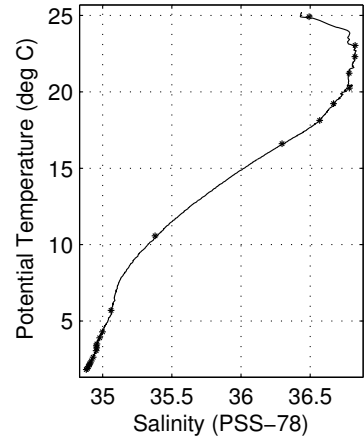
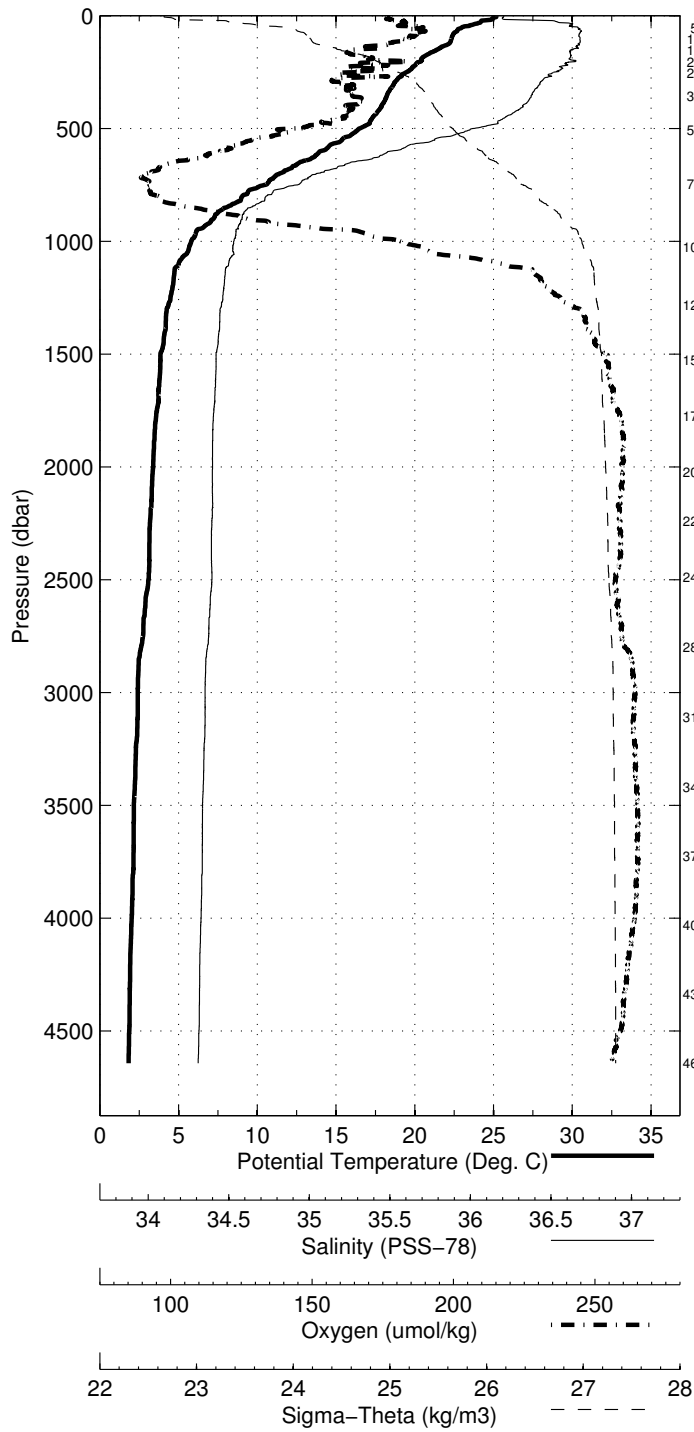


Abaco April-May 2011 R/V Knorr
 CTD Station 13 (CTD013)
 Latitude 26.501N Longitude 76.654W
 15-Apr-2011 17:54Z

| 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 | 25.179 | 25.179 | 36.437 | 207.5 | 0.004 | 24.373 |
| 10 | 24.944 | 24.942 | 36.429 | 208.7 | 0.035 | 24.439 |
| 20 | 24.422 | 24.418 | 36.633 | 210.3 | 0.069 | 24.753 |
| 30 | 24.166 | 24.159 | 36.721 | 212.2 | 0.100 | 24.897 |
| 50 | 23.025 | 23.015 | 36.812 | 216.1 | 0.157 | 25.304 |
| 75 | 22.516 | 22.501 | 36.824 | 214.9 | 0.223 | 25.462 |
| 100 | 22.354 | 22.334 | 36.824 | 212.4 | 0.286 | 25.510 |
| 125 | 22.156 | 22.131 | 36.817 | 207.1 | 0.348 | 25.562 |
| 150 | 21.435 | 21.405 | 36.788 | 199.3 | 0.407 | 25.744 |
| 200 | 20.438 | 20.400 | 36.795 | 210.5 | 0.515 | 26.024 |
| 250 | 19.498 | 19.452 | 36.691 | 199.7 | 0.614 | 26.197 |
| 300 | 18.734 | 18.680 | 36.620 | 196.1 | 0.706 | 26.342 |
| 400 | 17.963 | 17.893 | 36.534 | 198.0 | 0.880 | 26.474 |
| 500 | 16.544 | 16.462 | 36.277 | 183.9 | 1.045 | 26.623 |
| 600 | 14.100 | 14.011 | 35.862 | 166.9 | 1.194 | 26.851 |
| 700 | 11.485 | 11.394 | 35.484 | 148.5 | 1.322 | 27.080 |
| 800 | 9.128 | 9.037 | 35.227 | 152.0 | 1.427 | 27.290 |
| 900 | 7.309 | 7.218 | 35.104 | 173.4 | 1.512 | 27.470 |
| 1000 | 5.888 | 5.797 | 35.063 | 211.0 | 1.579 | 27.628 |
| 1100 | 5.097 | 5.003 | 35.037 | 235.6 | 1.635 | 27.704 |
| 1200 | 4.723 | 4.623 | 35.013 | 246.4 | 1.686 | 27.729 |
| 1300 | 4.350 | 4.245 | 34.994 | 254.5 | 1.735 | 27.756 |
| 1400 | 4.243 | 4.129 | 34.989 | 256.7 | 1.782 | 27.764 |
| 1500 | 3.970 | 3.850 | 34.974 | 261.1 | 1.830 | 27.781 |
| 1750 | 3.763 | 3.622 | 34.962 | 263.8 | 1.946 | 27.795 |
| 2000 | 3.547 | 3.386 | 34.955 | 264.7 | 2.060 | 27.813 |
| 2500 | 3.290 | 3.084 | 34.952 | 263.2 | 2.289 | 27.839 |
| 3000 | 2.655 | 2.412 | 34.918 | 268.0 | 2.508 | 27.872 |
| 3500 | 2.456 | 2.165 | 34.905 | 268.7 | 2.722 | 27.882 |
| 4000 | 2.367 | 2.022 | 34.897 | 268.0 | 2.941 | 27.887 |
| 4500 | 2.270 | 1.870 | 34.887 | 264.4 | 3.165 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4643 | 1 | 2.243 | 1.826 | 34.882 | 262.6 |
| 4338 | 2 | 2.283 | 1.902 | 34.889 | 265.6 |
| 4032 | 3 | 2.347 | 2.000 | 34.895 | 267.5 |
| 3725 | 4 | 2.464 | 2.148 | 34.905 | 269.1 |
| 3419 | 5 | 2.492 | 2.208 | 34.907 | 269.6 |
| 3109 | 6 | 2.649 | 2.395 | 34.918 | 268.0 |
| 2800 | 7 | 2.864 | 2.637 | 34.931 | 265.9 |
| 2489 | 8 | 3.270 | 3.066 | 34.953 | 263.2 |
| 2240 | 9 | 3.434 | 3.252 | 34.957 | 263.3 |
| 2024 | 10 | 3.543 | 3.380 | 34.955 | 264.4 |
| 1777 | 11 | 3.645 | 3.504 | 34.958 | 264.1 |
| 1524 | 12 | 4.026 | 3.903 | 34.978 | 258.6 |
| 1282 | 13 | 4.400 | 4.295 | 34.998 | 252.3 |
| 1024 | 14 | 5.795 | 5.703 | 35.060 | 214.0 |
| 746 | 15 | 10.669 | 10.576 | 35.378 | 147.5 |
| 505 | 16 | 16.692 | 16.609 | 36.296 | 187.2 |
| 355 | 17 | 18.196 | 18.133 | 36.569 | 202.3 |
| 255 | 18 | 19.276 | 19.229 | 36.668 | 198.0 |
| 205 | 19 | 20.287 | 20.248 | 36.783 | 210.5 |
| 154 | 20 | 21.253 | 21.223 | 36.782 | 198.5 |
| 104 | 21 | 22.329 | 22.309 | 36.824 | 210.6 |
| 55 | 22 | 23.051 | 23.040 | 36.825 | 211.3 |
| 3 | 23 | 24.919 | 24.918 | 36.492 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 13 (CTD013)
 Latitude 26.501 N Longitude 76.654 W
 15–Apr–2011 17:54 Z

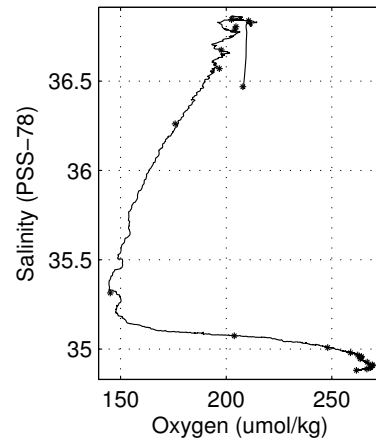
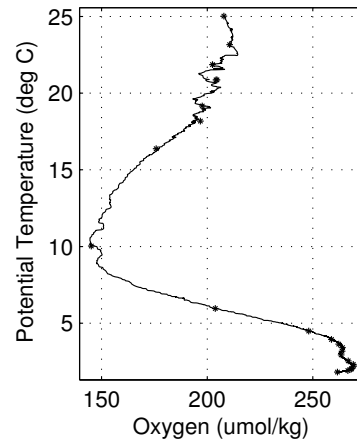
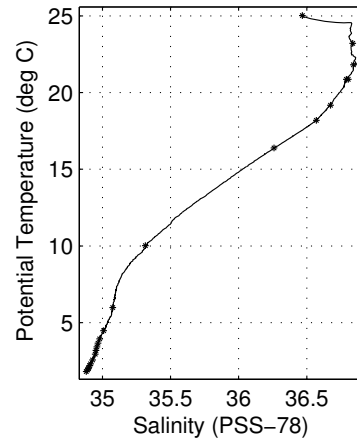
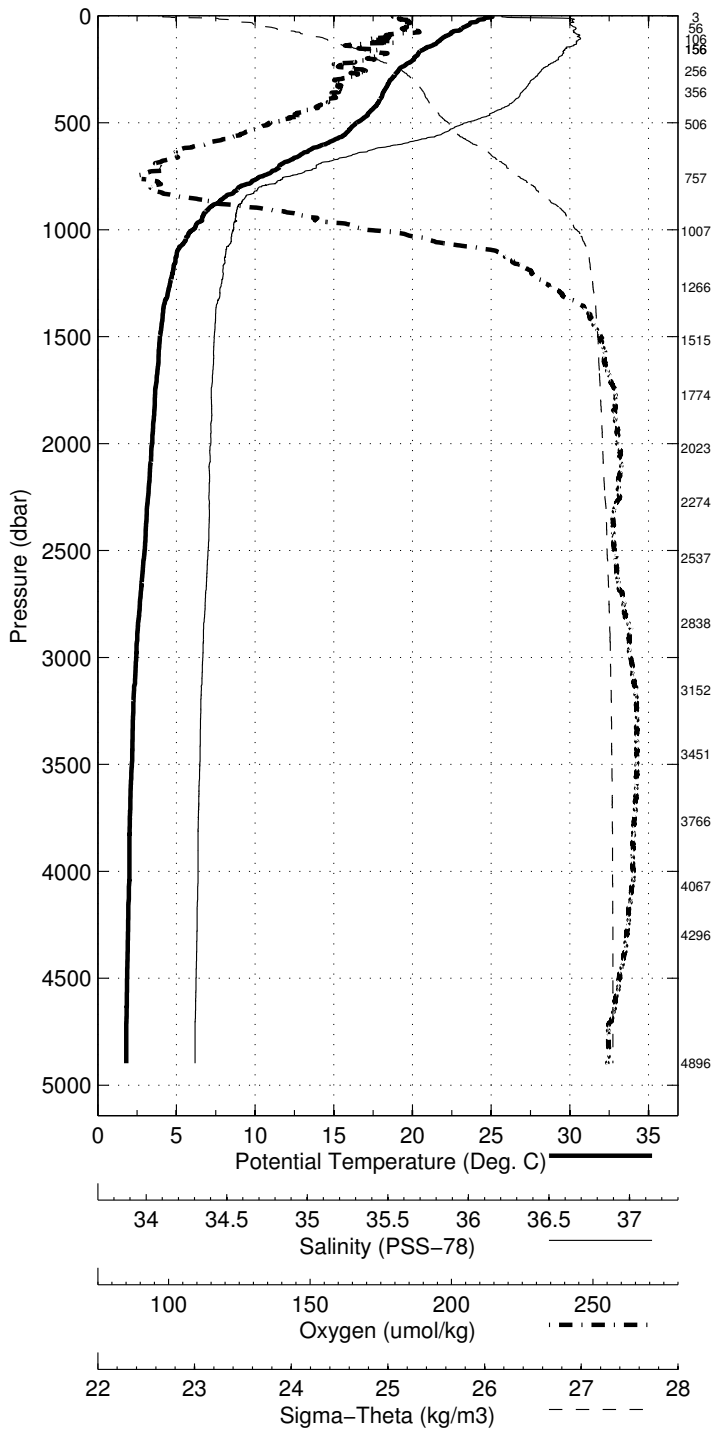


Abaco April-May 2011 R/V Knorr
 CTD Station 14 (CTD014)
 Latitude 26.500N Longitude 76.565W
 15-Apr-2011 22:17Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.076 | 25.076 | 36.459 | 207.9 | 0.003 | 24.421 |
| 10 | 24.572 | 24.570 | 36.714 | 209.5 | 0.034 | 24.769 |
| 20 | 24.172 | 24.168 | 36.819 | 211.9 | 0.065 | 24.969 |
| 30 | 23.878 | 23.872 | 36.829 | 211.9 | 0.094 | 25.065 |
| 50 | 23.377 | 23.366 | 36.824 | 211.4 | 0.151 | 25.211 |
| 75 | 22.597 | 22.582 | 36.828 | 214.4 | 0.218 | 25.442 |
| 100 | 22.005 | 21.985 | 36.857 | 206.1 | 0.280 | 25.634 |
| 125 | 21.581 | 21.556 | 36.841 | 208.2 | 0.338 | 25.742 |
| 150 | 20.919 | 20.890 | 36.791 | 200.1 | 0.394 | 25.888 |
| 200 | 20.133 | 20.095 | 36.749 | 201.6 | 0.497 | 26.071 |
| 250 | 19.193 | 19.148 | 36.665 | 199.4 | 0.594 | 26.256 |
| 300 | 18.646 | 18.593 | 36.611 | 193.3 | 0.685 | 26.357 |
| 400 | 17.934 | 17.865 | 36.519 | 192.0 | 0.858 | 26.470 |
| 500 | 16.534 | 16.452 | 36.274 | 177.2 | 1.023 | 26.623 |
| 600 | 14.570 | 14.479 | 35.943 | 161.2 | 1.175 | 26.814 |
| 700 | 11.632 | 11.541 | 35.504 | 149.0 | 1.303 | 27.068 |
| 800 | 9.066 | 8.976 | 35.212 | 147.9 | 1.411 | 27.289 |
| 900 | 7.159 | 7.069 | 35.099 | 175.1 | 1.496 | 27.487 |
| 1000 | 6.132 | 6.039 | 35.076 | 201.4 | 1.565 | 27.608 |
| 1100 | 5.145 | 5.051 | 35.040 | 233.6 | 1.622 | 27.701 |
| 1200 | 4.862 | 4.761 | 35.024 | 242.3 | 1.673 | 27.722 |
| 1300 | 4.543 | 4.435 | 35.009 | 250.0 | 1.724 | 27.747 |
| 1400 | 4.235 | 4.121 | 34.986 | 256.8 | 1.772 | 27.762 |
| 1500 | 4.066 | 3.945 | 34.979 | 259.3 | 1.819 | 27.775 |
| 1750 | 3.786 | 3.645 | 34.964 | 263.4 | 1.936 | 27.794 |
| 2000 | 3.610 | 3.448 | 34.962 | 263.7 | 2.052 | 27.812 |
| 2500 | 3.177 | 2.974 | 34.948 | 263.0 | 2.279 | 27.846 |
| 3000 | 2.684 | 2.440 | 34.921 | 266.8 | 2.496 | 27.872 |
| 3500 | 2.453 | 2.162 | 34.905 | 268.6 | 2.708 | 27.883 |
| 4000 | 2.351 | 2.007 | 34.896 | 267.8 | 2.923 | 27.888 |
| 4500 | 2.260 | 1.861 | 34.886 | 264.2 | 3.147 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4897 | 1 | 2.263 | 1.814 | 34.881 | 261.6 |
| 4296 | 2 | 2.292 | 1.916 | 34.888 | 266.6 |
| 4068 | 3 | 2.356 | 2.004 | 34.896 | 268.0 |
| 3767 | 4 | 2.359 | 2.041 | 34.897 | 268.3 |
| 3451 | 5 | 2.490 | 2.203 | 34.907 | 269.3 |
| 3152 | 6 | 2.570 | 2.313 | 34.913 | 269.1 |
| 2838 | 7 | 2.797 | 2.567 | 34.927 | 266.8 |
| 2537 | 8 | 3.154 | 2.947 | 34.946 | 263.4 |
| 2275 | 9 | 3.369 | 3.185 | 34.952 | 263.9 |
| 2023 | 10 | 3.578 | 3.415 | 34.959 | 264.0 |
| 1774 | 11 | 3.802 | 3.659 | 34.967 | 262.2 |
| 1515 | 12 | 4.072 | 3.949 | 34.980 | 258.8 |
| 1266 | 13 | 4.588 | 4.482 | 35.008 | 248.0 |
| 1007 | 14 | 6.080 | 5.987 | 35.075 | 203.8 |
| 757 | 15 | 10.115 | 10.024 | 35.314 | 145.2 |
| 507 | 16 | 16.480 | 16.397 | 36.260 | 175.8 |
| 356 | 17 | 18.255 | 18.193 | 36.570 | 196.7 |
| 256 | 18 | 19.227 | 19.181 | 36.674 | 197.6 |
| 157 | 19 | 20.897 | 20.867 | 36.790 | 204.1 |
| 157 | 20 | 20.895 | 20.865 | 36.804 | 204.6 |
| 107 | 21 | 21.835 | 21.814 | 36.843 | 202.5 |
| 57 | 22 | 23.223 | 23.211 | 36.837 | 210.6 |
| 4 | 23 | 25.029 | 25.028 | 36.468 | 207.8 |

Abaco April–May 2011 R/V Knorr
 CTD Station 14 (CTD014)
 Latitude 26.500 N Longitude 76.565 W
 15–Apr–2011 22:17 Z

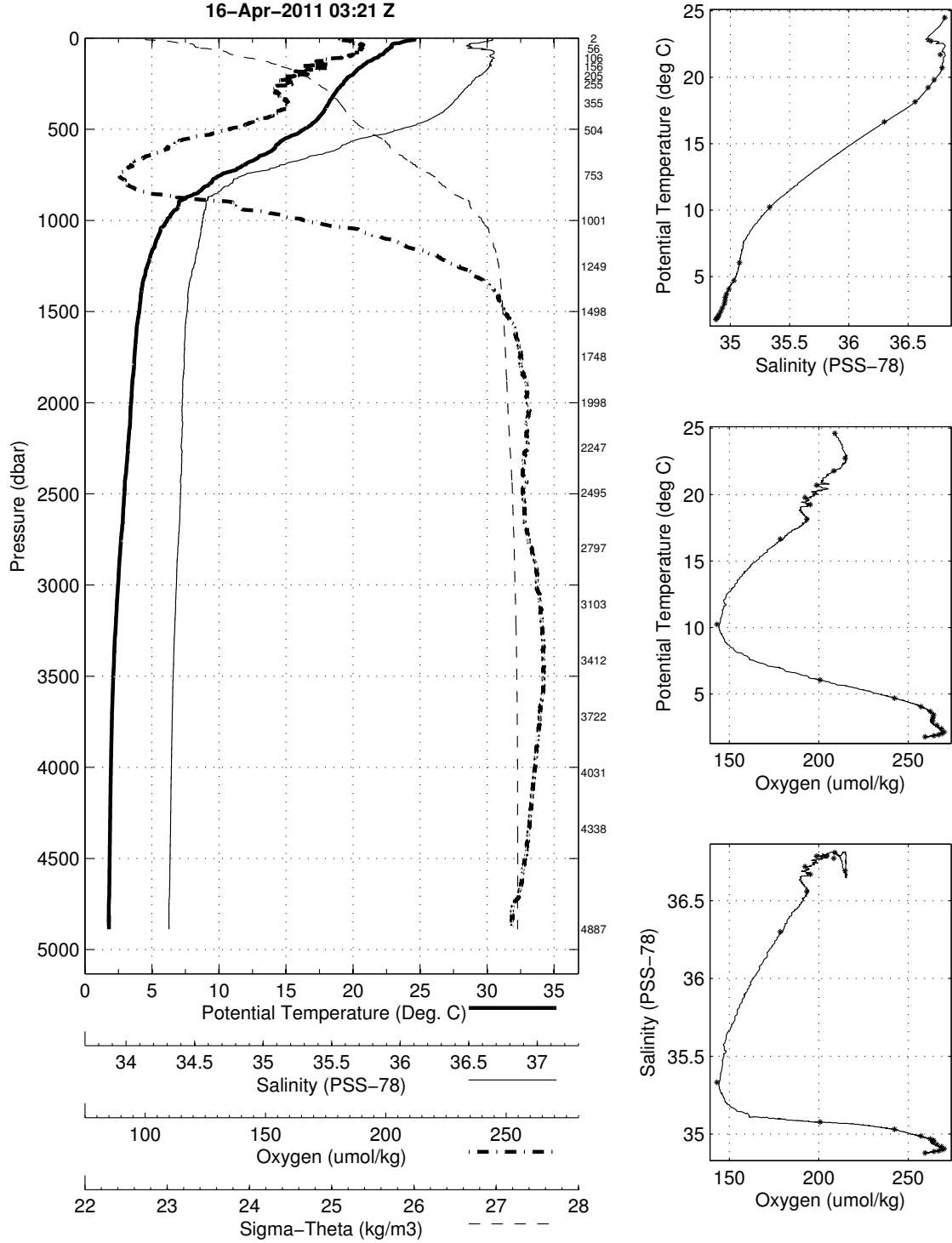


Abaco April-May 2011 R/V Knorr
 CTD Station 15 (CTD015)
 Latitude 26.498N Longitude 76.477W
 16-Apr-2011 03:21Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 24.598 | 24.598 | 36.805 | 208.9 | 0.003 | 24.829 |
| 10 | 24.526 | 24.524 | 36.805 | 209.4 | 0.031 | 24.851 |
| 20 | 23.769 | 23.764 | 36.755 | 213.2 | 0.061 | 25.041 |
| 30 | 23.025 | 23.019 | 36.670 | 215.0 | 0.089 | 25.196 |
| 50 | 22.896 | 22.885 | 36.682 | 214.7 | 0.144 | 25.243 |
| 75 | 22.378 | 22.363 | 36.814 | 213.7 | 0.210 | 25.494 |
| 100 | 21.961 | 21.941 | 36.791 | 211.6 | 0.271 | 25.596 |
| 125 | 21.295 | 21.271 | 36.795 | 203.4 | 0.330 | 25.787 |
| 150 | 20.802 | 20.774 | 36.788 | 200.3 | 0.384 | 25.918 |
| 200 | 20.040 | 20.002 | 36.742 | 196.5 | 0.487 | 26.091 |
| 250 | 19.331 | 19.285 | 36.678 | 192.9 | 0.582 | 26.230 |
| 300 | 18.723 | 18.669 | 36.619 | 189.9 | 0.674 | 26.344 |
| 400 | 17.911 | 17.841 | 36.516 | 190.9 | 0.847 | 26.473 |
| 500 | 16.422 | 16.340 | 36.256 | 176.8 | 1.012 | 26.635 |
| 600 | 14.286 | 14.196 | 35.899 | 158.6 | 1.158 | 26.840 |
| 700 | 11.863 | 11.770 | 35.536 | 148.0 | 1.288 | 27.050 |
| 800 | 9.381 | 9.288 | 35.244 | 146.6 | 1.395 | 27.262 |
| 900 | 7.097 | 7.008 | 35.098 | 177.4 | 1.482 | 27.495 |
| 1000 | 6.226 | 6.133 | 35.077 | 198.8 | 1.551 | 27.597 |
| 1100 | 5.484 | 5.386 | 35.062 | 222.3 | 1.610 | 27.678 |
| 1200 | 4.966 | 4.864 | 35.037 | 238.0 | 1.664 | 27.721 |
| 1300 | 4.610 | 4.501 | 35.014 | 247.8 | 1.714 | 27.743 |
| 1400 | 4.306 | 4.192 | 34.991 | 254.9 | 1.763 | 27.759 |
| 1500 | 4.175 | 4.053 | 34.986 | 257.1 | 1.810 | 27.769 |
| 1750 | 3.832 | 3.691 | 34.968 | 261.8 | 1.928 | 27.793 |
| 2000 | 3.604 | 3.442 | 34.958 | 264.1 | 2.045 | 27.809 |
| 2500 | 3.152 | 2.950 | 34.948 | 262.7 | 2.273 | 27.848 |
| 3000 | 2.714 | 2.469 | 34.922 | 266.9 | 2.491 | 27.870 |
| 3500 | 2.408 | 2.118 | 34.903 | 268.8 | 2.703 | 27.884 |
| 4000 | 2.282 | 1.940 | 34.892 | 266.4 | 2.916 | 27.890 |
| 4500 | 2.244 | 1.844 | 34.884 | 263.3 | 3.137 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4888 | 1 | 2.235 | 1.789 | 34.878 | 259.5 |
| 4339 | 2 | 2.252 | 1.872 | 34.887 | 264.4 |
| 4031 | 3 | 2.281 | 1.935 | 34.891 | 267.0 |
| 3722 | 4 | 2.342 | 2.029 | 34.899 | 268.9 |
| 3413 | 5 | 2.433 | 2.151 | 34.905 | 270.1 |
| 3104 | 6 | 2.649 | 2.395 | 34.919 | 268.5 |
| 2798 | 7 | 2.882 | 2.655 | 34.933 | 266.0 |
| 2495 | 8 | 3.169 | 2.966 | 34.950 | 263.6 |
| 2247 | 9 | 3.407 | 3.224 | 34.956 | 263.8 |
| 1999 | 10 | 3.611 | 3.449 | 34.958 | 264.3 |
| 1749 | 11 | 3.835 | 3.694 | 34.968 | 262.3 |
| 1499 | 12 | 4.177 | 4.055 | 34.987 | 257.2 |
| 1250 | 13 | 4.805 | 4.700 | 35.030 | 242.3 |
| 1002 | 14 | 6.151 | 6.058 | 35.077 | 200.8 |
| 754 | 15 | 10.330 | 10.238 | 35.332 | 143.1 |
| 505 | 16 | 16.727 | 16.643 | 36.300 | 178.5 |
| 355 | 17 | 18.206 | 18.144 | 36.560 | 193.3 |
| 255 | 18 | 19.274 | 19.228 | 36.669 | 195.3 |
| 206 | 19 | 19.834 | 19.796 | 36.720 | 192.3 |
| 156 | 20 | 20.747 | 20.717 | 36.788 | 198.7 |
| 106 | 21 | 21.720 | 21.699 | 36.773 | 208.4 |
| 56 | 22 | 22.732 | 22.721 | 36.694 | 214.8 |
| 2 | 23 | 24.477 | 24.476 | 36.810 | 209.0 |

Abaco April–May 2011 R/V Knorr
 CTD Station 15 (CTD015)
 Latitude 26.498 N Longitude 76.477 W
 16–Apr–2011 03:21 Z

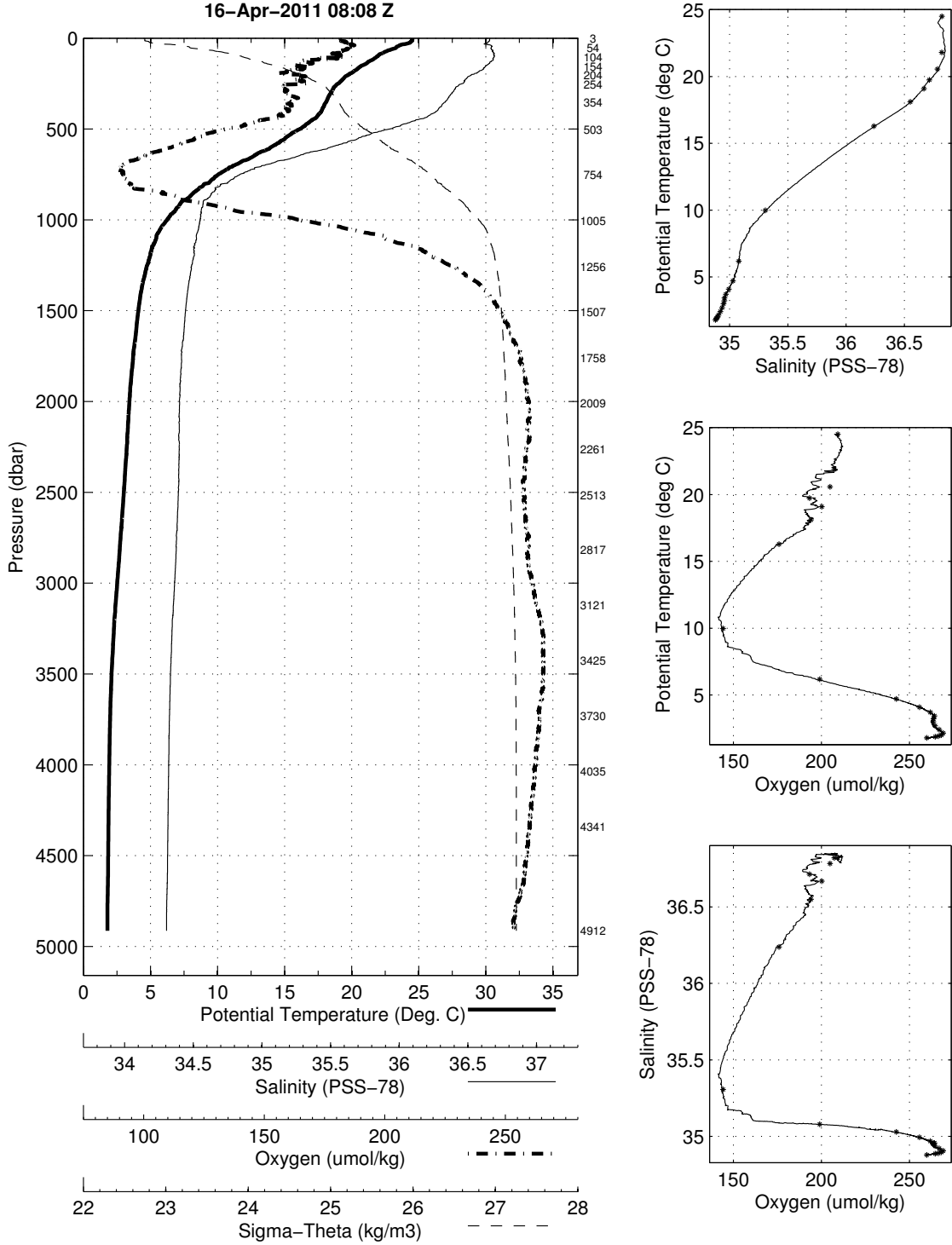


Abaco April-May 2011 R/V Knorr
 CTD Station 16 (CTD016)
 Latitude 26.497N Longitude 76.347W
 16-Apr-2011 08:08Z

| 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 | 24.522 | 24.522 | 36.823 | 207.8 | 0.003 | 24.865 |
| 10 | 24.524 | 24.522 | 36.822 | 208.3 | 0.031 | 24.864 |
| 20 | 24.394 | 24.389 | 36.813 | 209.6 | 0.061 | 24.898 |
| 30 | 24.091 | 24.084 | 36.791 | 210.2 | 0.092 | 24.973 |
| 50 | 23.331 | 23.321 | 36.832 | 210.5 | 0.148 | 25.230 |
| 75 | 22.484 | 22.469 | 36.841 | 207.3 | 0.214 | 25.484 |
| 100 | 21.914 | 21.894 | 36.849 | 208.8 | 0.275 | 25.654 |
| 125 | 21.401 | 21.377 | 36.835 | 196.7 | 0.333 | 25.788 |
| 150 | 20.799 | 20.771 | 36.803 | 194.9 | 0.388 | 25.930 |
| 200 | 19.792 | 19.755 | 36.713 | 194.0 | 0.490 | 26.134 |
| 250 | 19.041 | 18.995 | 36.658 | 197.3 | 0.584 | 26.290 |
| 300 | 18.502 | 18.448 | 36.596 | 192.6 | 0.673 | 26.382 |
| 400 | 17.820 | 17.750 | 36.505 | 192.6 | 0.844 | 26.487 |
| 500 | 16.226 | 16.145 | 36.222 | 173.9 | 1.007 | 26.654 |
| 600 | 14.069 | 13.980 | 35.864 | 157.7 | 1.153 | 26.859 |
| 700 | 11.326 | 11.235 | 35.467 | 142.9 | 1.278 | 27.096 |
| 800 | 9.240 | 9.148 | 35.226 | 145.2 | 1.384 | 27.271 |
| 900 | 7.428 | 7.336 | 35.098 | 164.6 | 1.471 | 27.448 |
| 1000 | 6.335 | 6.241 | 35.079 | 196.0 | 1.543 | 27.584 |
| 1100 | 5.537 | 5.439 | 35.058 | 221.3 | 1.603 | 27.669 |
| 1200 | 5.072 | 4.968 | 35.044 | 234.6 | 1.657 | 27.714 |
| 1300 | 4.704 | 4.595 | 35.021 | 245.1 | 1.709 | 27.739 |
| 1400 | 4.403 | 4.288 | 35.004 | 251.9 | 1.758 | 27.759 |
| 1500 | 4.223 | 4.100 | 34.992 | 255.6 | 1.806 | 27.769 |
| 1750 | 3.851 | 3.709 | 34.968 | 261.7 | 1.925 | 27.790 |
| 2000 | 3.596 | 3.435 | 34.956 | 264.1 | 2.041 | 27.808 |
| 2500 | 3.217 | 3.013 | 34.949 | 262.5 | 2.271 | 27.843 |
| 3000 | 2.764 | 2.518 | 34.926 | 265.3 | 2.493 | 27.869 |
| 3500 | 2.392 | 2.103 | 34.902 | 268.5 | 2.706 | 27.885 |
| 4000 | 2.273 | 1.931 | 34.891 | 266.1 | 2.918 | 27.890 |
| 4500 | 2.249 | 1.849 | 34.884 | 263.2 | 3.139 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4913 | 1 | 2.242 | 1.792 | 34.878 | 259.9 |
| 4341 | 2 | 2.254 | 1.874 | 34.887 | 264.6 |
| 4036 | 3 | 2.271 | 1.925 | 34.890 | 266.5 |
| 3730 | 4 | 2.312 | 1.999 | 34.896 | 268.1 |
| 3426 | 5 | 2.436 | 2.153 | 34.905 | 269.2 |
| 3122 | 6 | 2.670 | 2.414 | 34.921 | 267.0 |
| 2817 | 7 | 2.929 | 2.698 | 34.936 | 264.5 |
| 2514 | 8 | 3.203 | 2.998 | 34.949 | 263.6 |
| 2261 | 9 | 3.403 | 3.219 | 34.955 | 263.7 |
| 2010 | 10 | 3.597 | 3.434 | 34.956 | 264.3 |
| 1759 | 11 | 3.852 | 3.709 | 34.969 | 261.8 |
| 1507 | 12 | 4.217 | 4.094 | 34.993 | 255.7 |
| 1256 | 13 | 4.810 | 4.704 | 35.028 | 242.6 |
| 1005 | 14 | 6.279 | 6.184 | 35.079 | 199.0 |
| 755 | 15 | 10.079 | 9.988 | 35.306 | 144.1 |
| 504 | 16 | 16.370 | 16.288 | 36.239 | 175.9 |
| 354 | 17 | 18.167 | 18.105 | 36.550 | 194.1 |
| 254 | 18 | 19.143 | 19.097 | 36.668 | 200.1 |
| 204 | 19 | 19.785 | 19.747 | 36.715 | 193.2 |
| 154 | 20 | 20.584 | 20.555 | 36.784 | 204.9 |
| 104 | 21 | 21.823 | 21.802 | 36.821 | 207.3 |
| 54 | 22 | 22.822 | 22.863 | -999.000 | NaN |
| 3 | 23 | 24.506 | 24.505 | 36.822 | 209.3 |

Abaco April–May 2011 R/V Knorr
 CTD Station 16 (CTD016)
 Latitude 26.497 N Longitude 76.347 W
 16–Apr–2011 08:08 Z

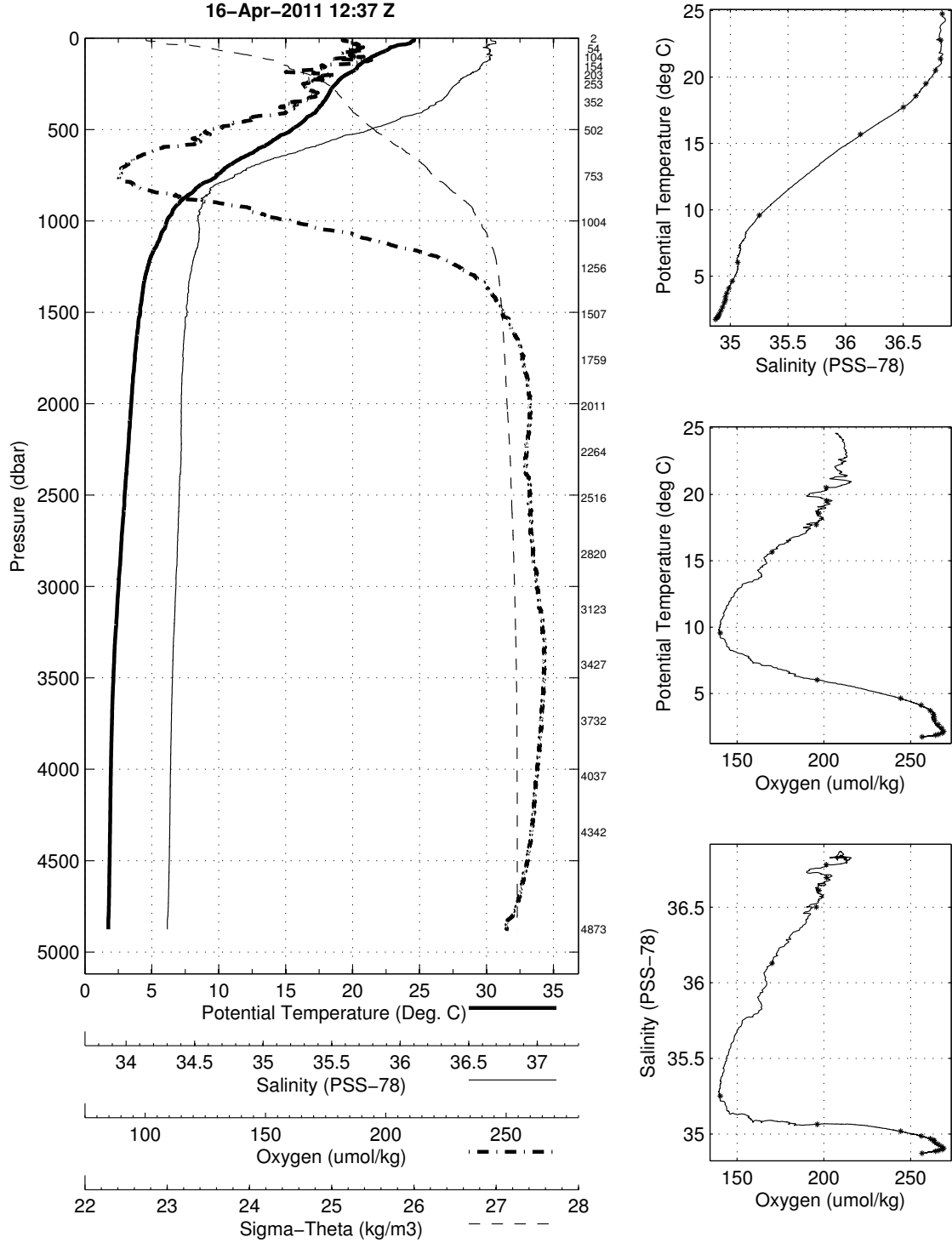


Abaco April-May 2011 R/V Knorr
 CTD Station 17 (CTD017)
 Latitude 26.498N Longitude 76.219W
 16-Apr-2011 12:37Z

| 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 | 24.593 | 24.593 | 36.836 | 206.8 | 0.003 | 24.853 |
| 10 | 24.590 | 24.588 | 36.835 | 207.5 | 0.031 | 24.854 |
| 20 | 24.372 | 24.368 | 36.864 | 209.4 | 0.061 | 24.943 |
| 30 | 24.150 | 24.144 | 36.857 | 210.6 | 0.091 | 25.005 |
| 50 | 22.836 | 22.826 | 36.795 | 213.4 | 0.147 | 25.346 |
| 75 | 22.294 | 22.279 | 36.828 | 210.3 | 0.211 | 25.529 |
| 100 | 21.531 | 21.511 | 36.827 | 209.9 | 0.270 | 25.744 |
| 125 | 20.906 | 20.882 | 36.816 | 214.7 | 0.325 | 25.910 |
| 150 | 20.467 | 20.439 | 36.778 | 200.7 | 0.378 | 26.001 |
| 200 | 19.558 | 19.521 | 36.705 | 204.7 | 0.478 | 26.189 |
| 250 | 18.793 | 18.748 | 36.629 | 195.1 | 0.569 | 26.331 |
| 300 | 18.302 | 18.249 | 36.578 | 199.4 | 0.656 | 26.419 |
| 400 | 17.330 | 17.262 | 36.422 | 190.4 | 0.823 | 26.543 |
| 500 | 15.554 | 15.475 | 36.105 | 167.3 | 0.979 | 26.718 |
| 600 | 13.181 | 13.096 | 35.732 | 152.8 | 1.118 | 26.941 |
| 700 | 10.757 | 10.670 | 35.388 | 141.6 | 1.237 | 27.137 |
| 800 | 8.767 | 8.678 | 35.167 | 144.1 | 1.340 | 27.300 |
| 900 | 7.183 | 7.093 | 35.090 | 169.4 | 1.424 | 27.477 |
| 1000 | 6.226 | 6.132 | 35.060 | 191.2 | 1.493 | 27.583 |
| 1100 | 5.673 | 5.574 | 35.064 | 215.1 | 1.555 | 27.657 |
| 1200 | 5.005 | 4.902 | 35.034 | 236.2 | 1.610 | 27.713 |
| 1300 | 4.627 | 4.518 | 35.011 | 246.9 | 1.661 | 27.739 |
| 1400 | 4.398 | 4.282 | 34.996 | 252.2 | 1.710 | 27.753 |
| 1500 | 4.255 | 4.132 | 34.993 | 254.9 | 1.759 | 27.767 |
| 1750 | 3.880 | 3.738 | 34.970 | 261.5 | 1.879 | 27.789 |
| 2000 | 3.620 | 3.459 | 34.957 | 263.5 | 1.996 | 27.807 |
| 2500 | 3.169 | 2.966 | 34.944 | 263.6 | 2.225 | 27.844 |
| 3000 | 2.756 | 2.511 | 34.925 | 265.7 | 2.446 | 27.869 |
| 3500 | 2.417 | 2.126 | 34.904 | 267.9 | 2.659 | 27.884 |
| 4000 | 2.281 | 1.939 | 34.892 | 266.0 | 2.872 | 27.890 |
| 4500 | 2.242 | 1.842 | 34.884 | 263.0 | 3.093 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4874 | 1 | 2.192 | 1.749 | 34.872 | 256.5 |
| 4343 | 2 | 2.256 | 1.874 | 34.886 | 264.3 |
| 4037 | 3 | 2.279 | 1.932 | 34.892 | 266.1 |
| 3732 | 4 | 2.339 | 2.025 | 34.898 | 268.3 |
| 3428 | 5 | 2.448 | 2.164 | 34.905 | 269.0 |
| 3124 | 6 | 2.670 | 2.413 | 34.918 | 267.8 |
| 2820 | 7 | 2.904 | 2.674 | 34.932 | 265.9 |
| 2517 | 8 | 3.204 | 2.998 | 34.947 | 263.8 |
| 2264 | 9 | 3.411 | 3.227 | 34.958 | 263.6 |
| 2011 | 10 | 3.619 | 3.456 | 34.959 | 263.1 |
| 1760 | 11 | 3.863 | 3.720 | 34.969 | 261.3 |
| 1508 | 12 | 4.224 | 4.101 | 34.987 | 256.1 |
| 1256 | 13 | 4.742 | 4.636 | 35.018 | 244.2 |
| 1005 | 14 | 6.140 | 6.046 | 35.064 | 196.1 |
| 754 | 15 | 9.677 | 9.589 | 35.251 | 140.4 |
| 502 | 16 | 15.759 | 15.679 | 36.129 | 170.2 |
| 353 | 17 | 17.785 | 17.724 | 36.501 | 195.6 |
| 254 | 18 | 18.633 | 18.587 | 36.611 | 197.2 |
| 204 | 19 | 19.541 | 19.503 | 36.695 | 201.5 |
| 154 | 20 | 20.529 | 20.499 | 36.780 | 201.4 |
| 104 | 21 | 21.389 | 21.369 | 36.823 | <i>NaN</i> |
| 55 | 22 | 22.794 | 22.783 | 36.826 | <i>NaN</i> |
| 3 | 23 | 24.760 | 24.759 | 36.838 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 17 (CTD017)
 Latitude 26.498 N Longitude 76.219 W
 16–Apr–2011 12:37 Z

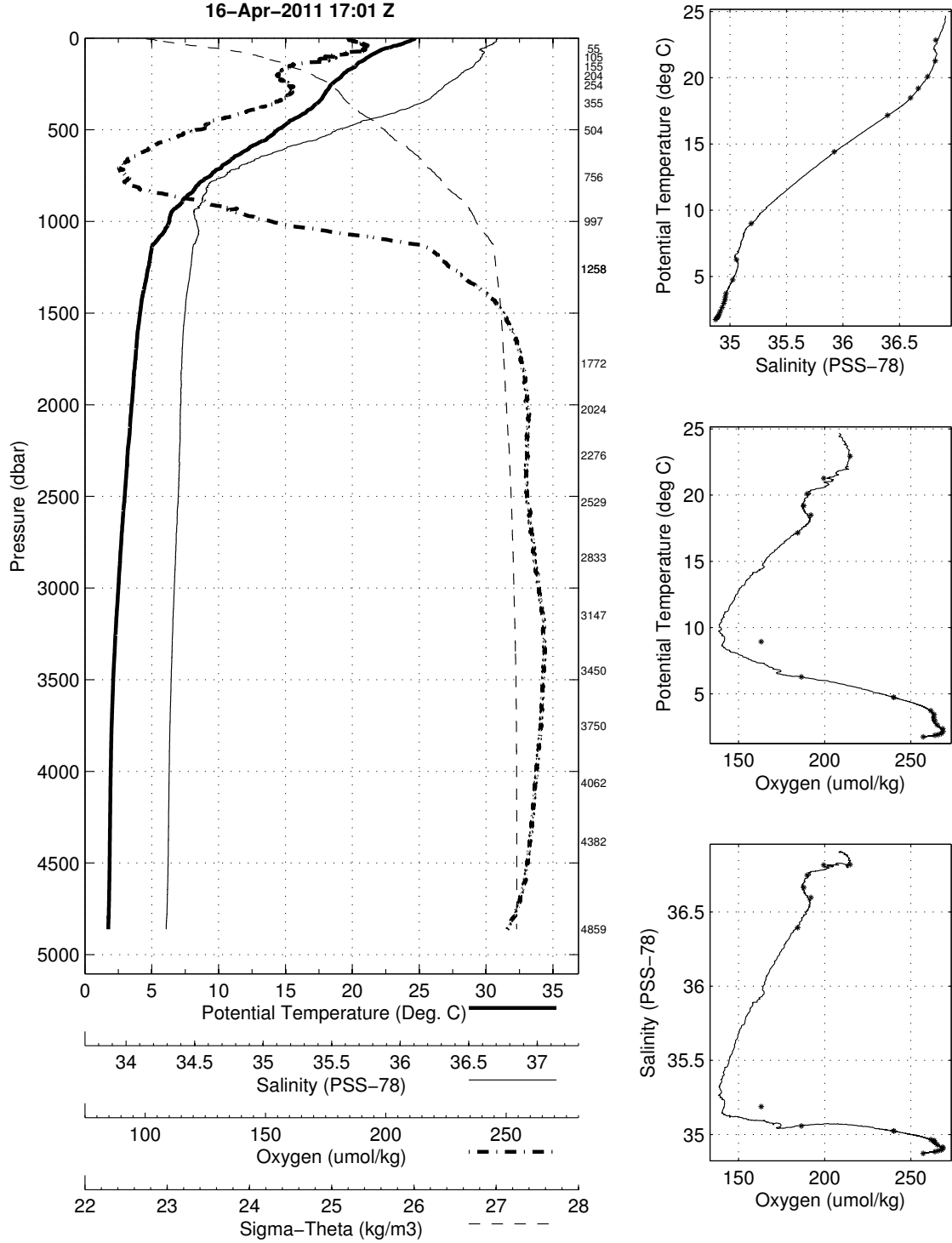


Abaco April-May 2011 R/V Knorr
 CTD Station 18 (CTD018)
 Latitude 26.495N Longitude 76.091W
 16-Apr-2011 17:01Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 24.661 | 24.661 | 36.907 | 208.4 | 0.003 | 24.887 |
| 10 | 24.429 | 24.427 | 36.902 | 208.5 | 0.030 | 24.954 |
| 20 | 24.106 | 24.102 | 36.898 | 210.6 | 0.060 | 25.049 |
| 30 | 23.826 | 23.820 | 36.888 | 211.2 | 0.089 | 25.125 |
| 50 | 22.870 | 22.860 | 36.836 | 214.6 | 0.143 | 25.368 |
| 75 | 21.879 | 21.865 | 36.829 | 209.6 | 0.205 | 25.646 |
| 100 | 21.286 | 21.267 | 36.815 | 201.4 | 0.262 | 25.803 |
| 125 | 20.748 | 20.724 | 36.794 | 201.6 | 0.316 | 25.936 |
| 150 | 20.298 | 20.269 | 36.765 | 190.9 | 0.368 | 26.037 |
| 200 | 19.321 | 19.285 | 36.681 | 186.8 | 0.464 | 26.233 |
| 250 | 18.525 | 18.481 | 36.600 | 190.1 | 0.554 | 26.377 |
| 300 | 18.031 | 17.979 | 36.535 | 191.3 | 0.639 | 26.454 |
| 400 | 16.645 | 16.579 | 36.294 | 177.4 | 0.802 | 26.608 |
| 500 | 14.468 | 14.393 | 35.924 | 162.4 | 0.949 | 26.818 |
| 600 | 12.383 | 12.302 | 35.612 | 147.9 | 1.080 | 27.006 |
| 700 | 10.307 | 10.221 | 35.324 | 138.9 | 1.192 | 27.167 |
| 800 | 8.565 | 8.477 | 35.135 | 141.9 | 1.291 | 27.307 |
| 900 | 7.275 | 7.185 | 35.087 | 165.6 | 1.375 | 27.461 |
| 1000 | 6.389 | 6.294 | 35.058 | 185.1 | 1.446 | 27.560 |
| 1100 | 5.523 | 5.426 | 35.057 | 220.5 | 1.509 | 27.670 |
| 1200 | 4.970 | 4.868 | 35.030 | 236.3 | 1.562 | 27.714 |
| 1300 | 4.728 | 4.618 | 35.017 | 243.3 | 1.613 | 27.732 |
| 1400 | 4.439 | 4.323 | 34.998 | 251.2 | 1.664 | 27.750 |
| 1500 | 4.241 | 4.118 | 34.988 | 255.5 | 1.713 | 27.764 |
| 1750 | 3.918 | 3.775 | 34.969 | 260.9 | 1.833 | 27.785 |
| 2000 | 3.652 | 3.489 | 34.961 | 262.9 | 1.951 | 27.807 |
| 2500 | 3.182 | 2.979 | 34.948 | 262.8 | 2.180 | 27.845 |
| 3000 | 2.741 | 2.496 | 34.922 | 266.5 | 2.400 | 27.868 |
| 3500 | 2.404 | 2.114 | 34.903 | 267.7 | 2.614 | 27.885 |
| 4000 | 2.269 | 1.927 | 34.891 | 265.7 | 2.826 | 27.890 |
| 4500 | 2.243 | 1.844 | 34.884 | 262.9 | 3.047 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4860 | 1 | 2.194 | 1.753 | 34.873 | 257.2 |
| 4382 | 2 | 2.251 | 1.866 | 34.885 | 264.0 |
| 4062 | 3 | 2.269 | 1.921 | 34.891 | 266.0 |
| 3751 | 4 | 2.324 | 2.009 | 34.897 | 267.8 |
| 3451 | 5 | 2.440 | 2.154 | 34.905 | 268.7 |
| 3148 | 6 | 2.625 | 2.367 | 34.915 | 268.6 |
| 2834 | 7 | 2.884 | 2.653 | 34.932 | 265.4 |
| 2530 | 8 | 3.174 | 2.967 | 34.946 | 264.0 |
| 2277 | 9 | 3.410 | 3.224 | 34.955 | 263.4 |
| 2025 | 10 | 3.613 | 3.449 | 34.959 | 263.6 |
| 1772 | 11 | 3.856 | 3.712 | 34.966 | 261.6 |
| 1259 | 12 | 4.850 | 4.743 | 35.024 | 240.1 |
| 1259 | 13 | 4.850 | 4.743 | 35.025 | 240.1 |
| 997 | 14 | 6.358 | 6.264 | 35.057 | 186.5 |
| 756 | 15 | 9.078 | 8.993 | 35.188 | 163.2 |
| 505 | 16 | 14.486 | 14.410 | 35.922 | <i>NaN</i> |
| 355 | 17 | 17.226 | 17.166 | 36.394 | 184.3 |
| 255 | 18 | 18.529 | 18.484 | 36.597 | 192.0 |
| 205 | 19 | 19.239 | 19.202 | 36.666 | 187.9 |
| 155 | 20 | 20.114 | 20.085 | 36.748 | 189.8 |
| 105 | 21 | 21.297 | 21.276 | 36.817 | 199.5 |
| 55 | 22 | 22.850 | 22.839 | 36.820 | 214.8 |

Abaco April–May 2011 R/V Knorr
 CTD Station 18 (CTD018)
 Latitude 26.495 N Longitude 76.091 W
 16–Apr–2011 17:01 Z

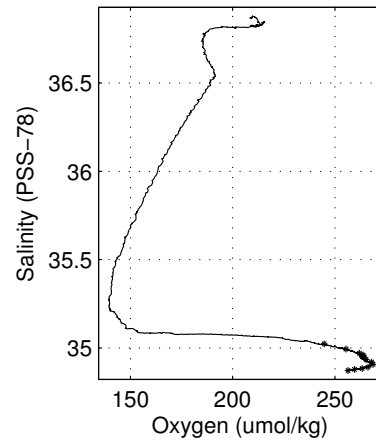
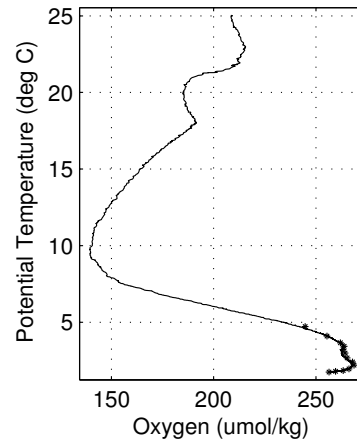
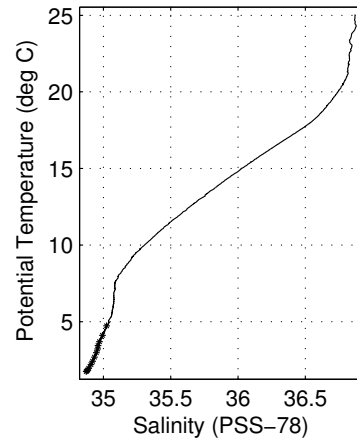
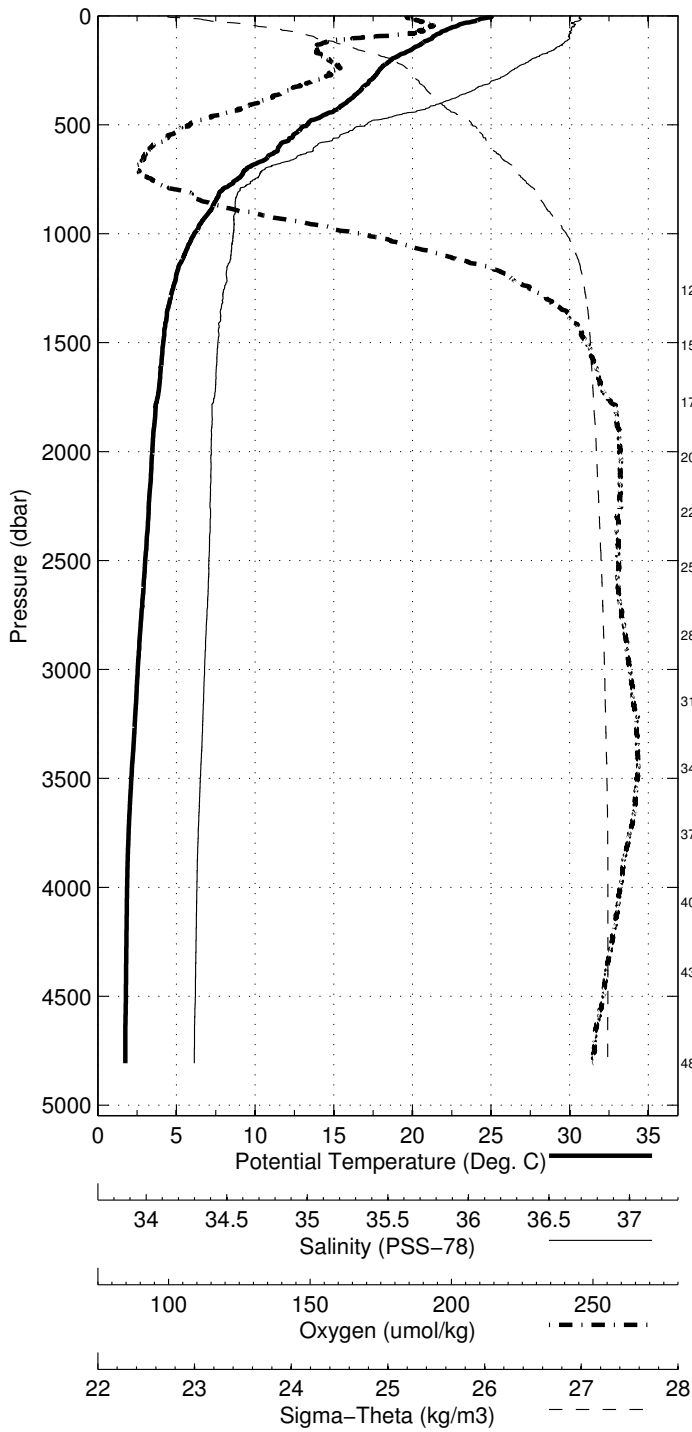


Abaco April-May 2011 R/V Knorr
 CTD Station 19 (CTD019)
 Latitude 26.493N Longitude 75.904W
 16-Apr-2011 21:32Z

| 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 | 25.038 | 25.038 | 36.870 | 208.4 | 0.003 | 24.744 |
| 10 | 24.678 | 24.676 | 36.867 | 208.7 | 0.032 | 24.852 |
| 20 | 24.127 | 24.123 | 36.871 | 211.0 | 0.061 | 25.022 |
| 30 | 23.602 | 23.595 | 36.842 | 213.2 | 0.090 | 25.156 |
| 50 | 22.703 | 22.693 | 36.841 | 214.9 | 0.143 | 25.419 |
| 75 | 21.833 | 21.818 | 36.820 | 211.7 | 0.205 | 25.653 |
| 100 | 21.308 | 21.289 | 36.817 | 197.4 | 0.262 | 25.799 |
| 125 | 20.675 | 20.651 | 36.788 | 187.0 | 0.316 | 25.951 |
| 150 | 20.066 | 20.038 | 36.744 | 185.2 | 0.367 | 26.083 |
| 200 | 18.740 | 18.704 | 36.622 | 188.8 | 0.460 | 26.338 |
| 250 | 17.921 | 17.878 | 36.519 | 190.0 | 0.544 | 26.467 |
| 300 | 17.296 | 17.246 | 36.411 | 184.2 | 0.626 | 26.539 |
| 400 | 15.839 | 15.775 | 36.156 | 170.5 | 0.780 | 26.689 |
| 500 | 13.380 | 13.309 | 35.762 | 153.0 | 0.917 | 26.920 |
| 600 | 11.600 | 11.522 | 35.500 | 143.3 | 1.038 | 27.068 |
| 700 | 9.564 | 9.483 | 35.240 | 139.7 | 1.146 | 27.227 |
| 800 | 7.988 | 7.904 | 35.110 | 150.2 | 1.239 | 27.375 |
| 900 | 7.160 | 7.070 | 35.086 | 168.2 | 1.319 | 27.477 |
| 1000 | 6.230 | 6.137 | 35.074 | 196.7 | 1.389 | 27.594 |
| 1100 | 5.585 | 5.487 | 35.062 | 218.0 | 1.449 | 27.667 |
| 1200 | 5.076 | 4.973 | 35.040 | 235.2 | 1.504 | 27.711 |
| 1300 | 4.724 | 4.615 | 35.021 | 244.4 | 1.555 | 27.736 |
| 1400 | 4.462 | 4.346 | 35.008 | 250.5 | 1.605 | 27.755 |
| 1500 | 4.280 | 4.157 | 34.994 | 254.8 | 1.654 | 27.765 |
| 1750 | 3.958 | 3.815 | 34.977 | 259.4 | 1.775 | 27.787 |
| 2000 | 3.628 | 3.466 | 34.961 | 263.1 | 1.892 | 27.809 |
| 2500 | 3.215 | 3.011 | 34.948 | 262.8 | 2.122 | 27.842 |
| 3000 | 2.783 | 2.537 | 34.925 | 265.9 | 2.345 | 27.867 |
| 3500 | 2.421 | 2.131 | 34.904 | 267.5 | 2.561 | 27.884 |
| 4000 | 2.200 | 1.860 | 34.886 | 263.4 | 2.771 | 27.891 |
| 4500 | 2.185 | 1.787 | 34.878 | 259.1 | 2.988 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4806 | 1 | 2.180 | 1.746 | 34.872 | 256.4 |
| 4389 | 2 | 2.182 | 1.798 | 34.878 | 259.7 |
| 4067 | 3 | 2.196 | 1.849 | 34.884 | 263.4 |
| 3756 | 4 | 2.269 | 1.955 | 34.891 | 266.2 |
| 3451 | 5 | 2.485 | 2.198 | 34.907 | 268.6 |
| 3146 | 6 | 2.673 | 2.415 | 34.919 | 267.9 |
| 2842 | 7 | 2.914 | 2.682 | 34.934 | 265.3 |
| 2529 | 8 | 3.186 | 2.979 | 34.947 | 264.2 |
| 2276 | 9 | 3.408 | 3.223 | 34.957 | 263.3 |
| 2024 | 10 | 3.601 | 3.437 | 34.960 | 263.8 |
| 1772 | 11 | 3.833 | 3.689 | 34.971 | 262.0 |
| 1510 | 12 | 4.233 | 4.109 | 34.993 | 255.4 |
| 1259 | 13 | 4.833 | 4.726 | 35.023 | 244.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 19 (CTD019)
 Latitude 26.493 N Longitude 75.904 W
 16–Apr–2011 21:32 Z

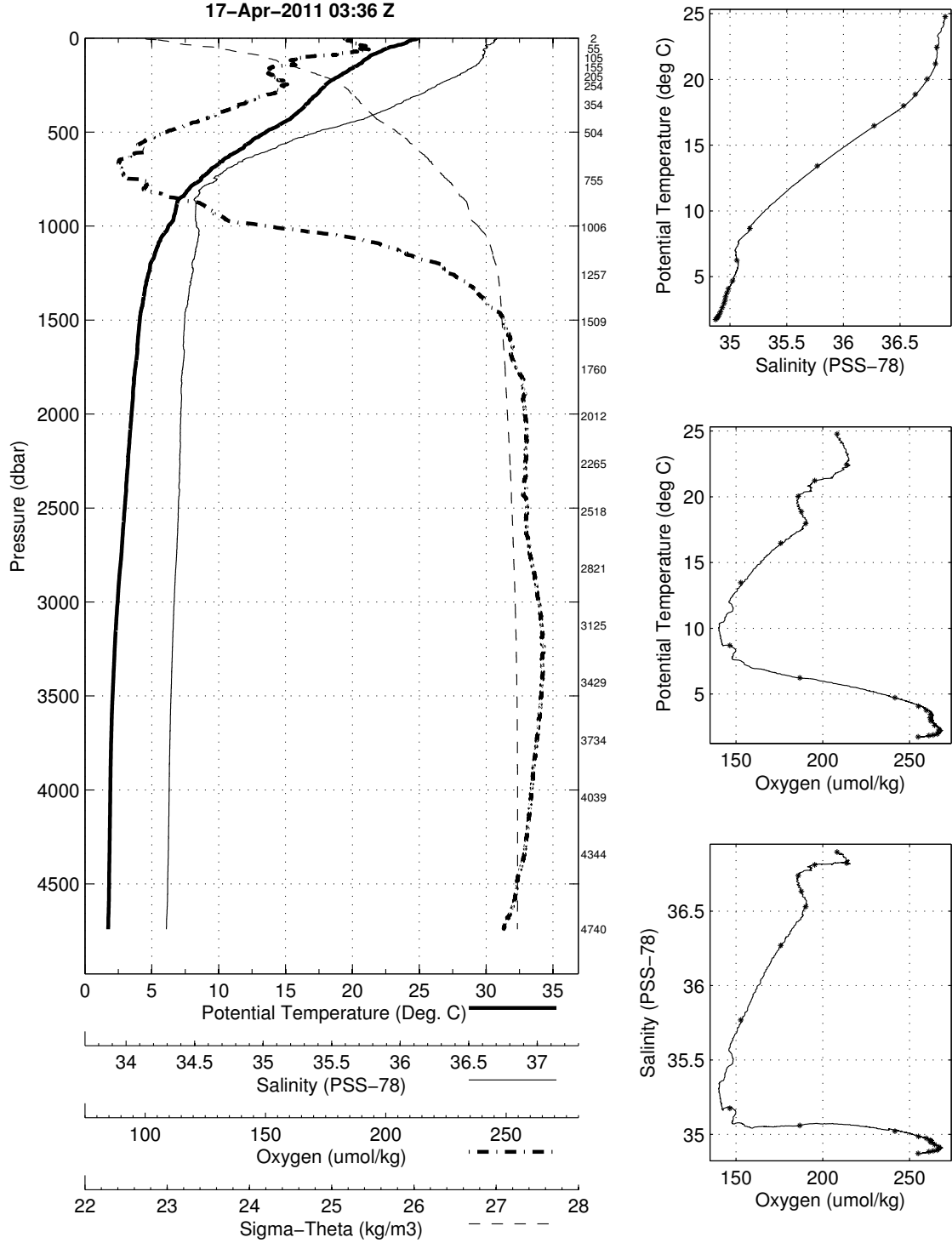


Abaco April-May 2011 R/V Knorr
 CTD Station 20 (CTD020)
 Latitude 26.503N Longitude 75.704W
 17-Apr-2011 03:36Z

| 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 | 24.822 | 24.821 | 36.901 | 208.3 | 0.003 | 24.833 |
| 10 | 24.443 | 24.441 | 36.885 | 210.2 | 0.031 | 24.937 |
| 20 | 24.105 | 24.101 | 36.881 | 210.0 | 0.060 | 25.036 |
| 30 | 23.861 | 23.855 | 36.862 | 212.2 | 0.089 | 25.096 |
| 50 | 22.735 | 22.725 | 36.840 | 214.9 | 0.144 | 25.409 |
| 75 | 22.004 | 21.989 | 36.827 | 210.8 | 0.206 | 25.610 |
| 100 | 21.266 | 21.247 | 36.815 | 196.0 | 0.263 | 25.808 |
| 125 | 20.802 | 20.778 | 36.796 | 192.9 | 0.317 | 25.923 |
| 150 | 20.255 | 20.227 | 36.763 | 188.0 | 0.369 | 26.046 |
| 200 | 19.096 | 19.060 | 36.658 | 186.9 | 0.465 | 26.274 |
| 250 | 18.011 | 17.968 | 36.534 | 189.6 | 0.551 | 26.455 |
| 300 | 17.387 | 17.336 | 36.428 | 185.0 | 0.633 | 26.530 |
| 400 | 15.885 | 15.821 | 36.165 | 170.3 | 0.787 | 26.685 |
| 500 | 13.593 | 13.521 | 35.792 | 154.1 | 0.927 | 26.900 |
| 600 | 11.542 | 11.464 | 35.496 | 148.3 | 1.048 | 27.076 |
| 700 | 9.494 | 9.413 | 35.239 | 141.1 | 1.153 | 27.238 |
| 800 | 7.896 | 7.812 | 35.086 | 147.8 | 1.244 | 27.369 |
| 900 | 6.911 | 6.823 | 35.052 | 166.8 | 1.323 | 27.485 |
| 1000 | 6.342 | 6.247 | 35.056 | 185.1 | 1.395 | 27.565 |
| 1100 | 5.578 | 5.480 | 35.060 | 219.5 | 1.456 | 27.665 |
| 1200 | 4.993 | 4.891 | 35.030 | 236.9 | 1.511 | 27.711 |
| 1300 | 4.699 | 4.590 | 35.022 | 245.3 | 1.562 | 27.739 |
| 1400 | 4.450 | 4.334 | 35.003 | 251.0 | 1.612 | 27.753 |
| 1500 | 4.222 | 4.099 | 34.984 | 256.3 | 1.661 | 27.763 |
| 1750 | 3.925 | 3.782 | 34.974 | 260.1 | 1.781 | 27.788 |
| 2000 | 3.651 | 3.489 | 34.962 | 263.0 | 1.899 | 27.808 |
| 2500 | 3.181 | 2.977 | 34.946 | 263.5 | 2.128 | 27.844 |
| 3000 | 2.689 | 2.445 | 34.920 | 266.8 | 2.347 | 27.871 |
| 3500 | 2.357 | 2.068 | 34.901 | 267.7 | 2.557 | 27.887 |
| 4000 | 2.239 | 1.898 | 34.889 | 264.6 | 2.766 | 27.891 |
| 4500 | 2.204 | 1.806 | 34.880 | 260.3 | 2.985 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4741 | 1 | 2.172 | 1.746 | 34.872 | 254.9 |
| 4345 | 2 | 2.220 | 1.840 | 34.884 | 261.1 |
| 4039 | 3 | 2.241 | 1.896 | 34.889 | 263.6 |
| 3735 | 4 | 2.279 | 1.967 | 34.894 | 266.0 |
| 3430 | 5 | 2.402 | 2.120 | 34.904 | 266.6 |
| 3126 | 6 | 2.581 | 2.327 | 34.916 | 267.0 |
| 2822 | 7 | 2.859 | 2.629 | 34.931 | 264.4 |
| 2518 | 8 | 3.159 | 2.954 | 34.946 | 262.2 |
| 2265 | 9 | 3.380 | 3.197 | 34.956 | 261.7 |
| 2013 | 10 | 3.632 | 3.469 | 34.961 | 262.0 |
| 1761 | 11 | 3.907 | 3.764 | 34.973 | 259.7 |
| 1509 | 12 | 4.209 | 4.085 | 34.986 | 255.1 |
| 1258 | 13 | 4.787 | 4.681 | 35.022 | 241.6 |
| 1007 | 14 | 6.337 | 6.242 | 35.060 | 186.8 |
| 755 | 15 | 8.753 | 8.669 | 35.175 | 146.5 |
| 505 | 16 | 13.494 | 13.421 | 35.769 | 152.8 |
| 355 | 17 | 16.529 | 16.471 | 36.270 | 175.8 |
| 255 | 18 | 18.033 | 17.989 | 36.530 | 190.2 |
| 205 | 19 | 18.898 | 18.861 | 36.634 | 187.7 |
| 155 | 20 | 20.059 | 20.030 | 36.739 | 185.9 |
| 106 | 21 | 21.205 | 21.184 | 36.811 | 195.4 |
| 55 | 22 | 22.456 | 22.445 | 36.824 | 213.7 |
| 2 | 23 | 24.769 | 24.768 | 36.898 | 208.2 |

Abaco April–May 2011 R/V Knorr
 CTD Station 20 (CTD020)
 Latitude 26.503 N Longitude 75.704 W
 17–Apr–2011 03:36 Z

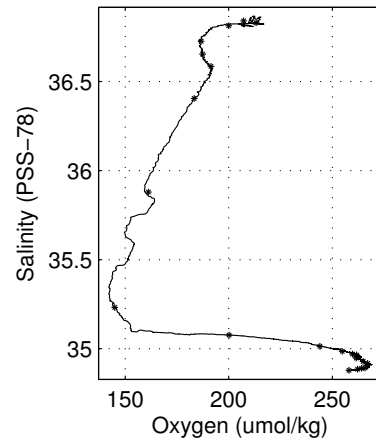
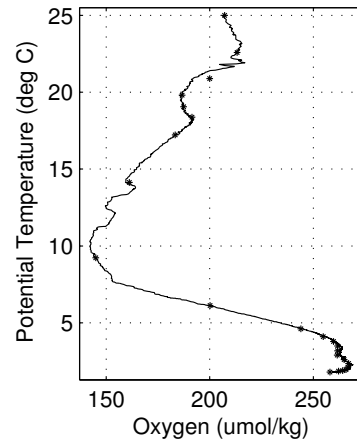
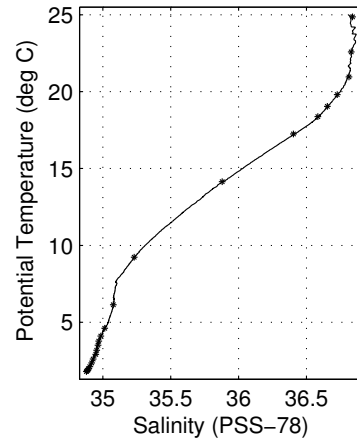
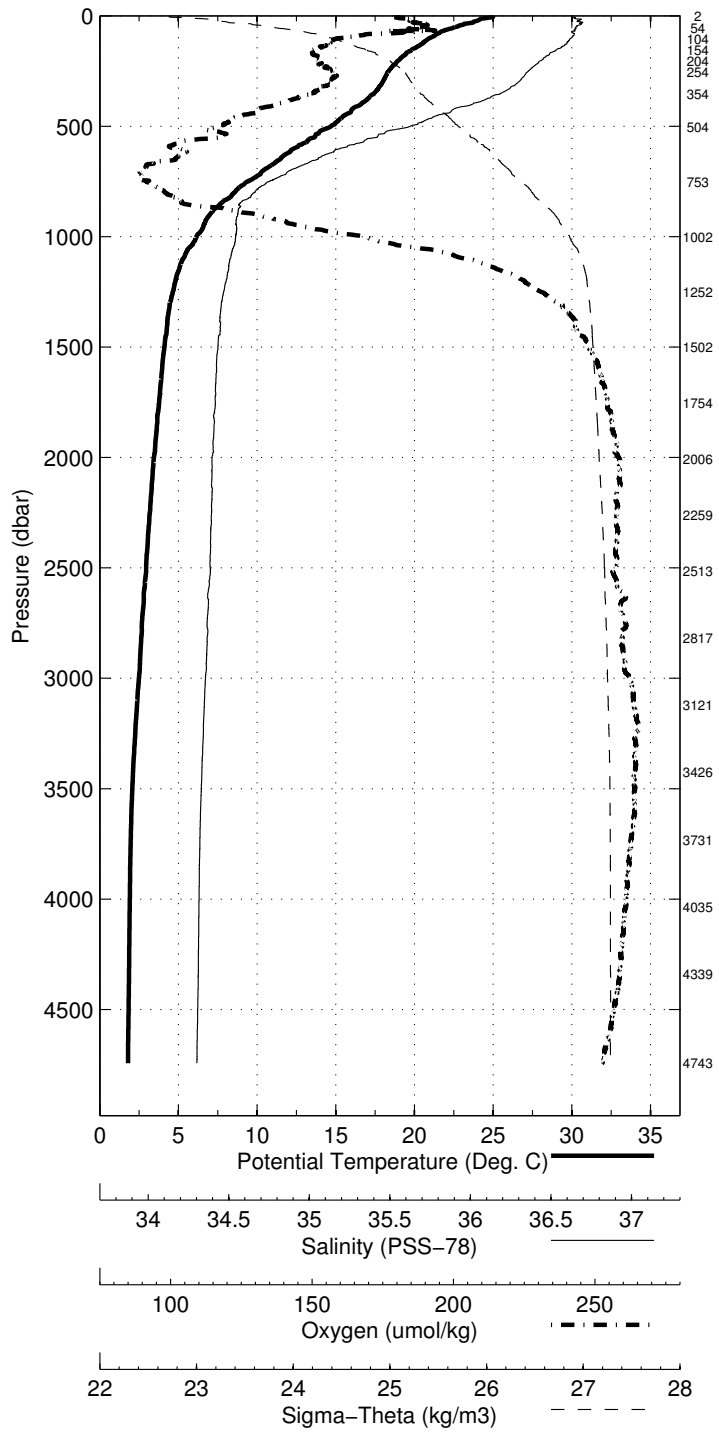


Abaco April-May 2011 R/V Knorr
 CTD Station 21 (CTD021)
 Latitude 26.503N Longitude 75.502W
 17-Apr-2011 07:53Z

| 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 | 25.000 | 24.999 | 36.809 | 207.1 | 0.003 | 24.709 |
| 10 | 24.581 | 24.579 | 36.827 | 207.7 | 0.032 | 24.851 |
| 20 | 24.089 | 24.085 | 36.851 | 210.8 | 0.062 | 25.018 |
| 30 | 23.739 | 23.733 | 36.866 | 211.8 | 0.090 | 25.134 |
| 50 | 22.639 | 22.629 | 36.832 | 212.4 | 0.144 | 25.431 |
| 75 | 21.640 | 21.625 | 36.814 | 209.8 | 0.204 | 25.703 |
| 100 | 21.004 | 20.985 | 36.806 | 193.7 | 0.260 | 25.874 |
| 125 | 20.547 | 20.523 | 36.784 | 190.2 | 0.312 | 25.983 |
| 150 | 19.909 | 19.881 | 36.736 | 186.9 | 0.363 | 26.118 |
| 200 | 19.061 | 19.024 | 36.657 | 187.2 | 0.456 | 26.282 |
| 250 | 18.402 | 18.358 | 36.587 | 191.2 | 0.544 | 26.399 |
| 300 | 18.027 | 17.975 | 36.535 | 190.8 | 0.629 | 26.455 |
| 400 | 16.669 | 16.603 | 36.299 | 177.3 | 0.792 | 26.606 |
| 500 | 14.767 | 14.691 | 35.977 | 162.0 | 0.940 | 26.794 |
| 600 | 12.433 | 12.351 | 35.617 | 151.7 | 1.071 | 27.001 |
| 700 | 10.480 | 10.394 | 35.361 | 142.4 | 1.185 | 27.166 |
| 800 | 8.662 | 8.574 | 35.177 | 148.5 | 1.283 | 27.324 |
| 900 | 7.079 | 6.990 | 35.089 | 172.2 | 1.366 | 27.491 |
| 1000 | 6.234 | 6.140 | 35.078 | 198.9 | 1.435 | 27.596 |
| 1100 | 5.388 | 5.291 | 35.050 | 224.8 | 1.494 | 27.680 |
| 1200 | 4.910 | 4.808 | 35.029 | 239.6 | 1.547 | 27.721 |
| 1300 | 4.562 | 4.454 | 35.004 | 248.5 | 1.598 | 27.741 |
| 1400 | 4.395 | 4.280 | 34.999 | 252.1 | 1.647 | 27.756 |
| 1500 | 4.224 | 4.101 | 34.987 | 256.0 | 1.695 | 27.765 |
| 1750 | 3.911 | 3.769 | 34.974 | 260.6 | 1.815 | 27.790 |
| 2000 | 3.600 | 3.439 | 34.957 | 263.6 | 1.933 | 27.809 |
| 2500 | 3.149 | 2.946 | 34.948 | 262.6 | 2.159 | 27.848 |
| 3000 | 2.731 | 2.486 | 34.923 | 266.4 | 2.377 | 27.869 |
| 3500 | 2.351 | 2.063 | 34.901 | 267.6 | 2.588 | 27.887 |
| 4000 | 2.248 | 1.907 | 34.890 | 265.4 | 2.798 | 27.891 |
| 4500 | 2.227 | 1.828 | 34.883 | 262.3 | 3.018 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4743 | 1 | 2.224 | 1.796 | 34.879 | 258.0 |
| 4340 | 2 | 2.238 | 1.858 | 34.885 | 262.2 |
| 4035 | 3 | 2.244 | 1.899 | 34.891 | 264.1 |
| 3731 | 4 | 2.273 | 1.961 | 34.893 | 265.8 |
| 3427 | 5 | 2.392 | 2.110 | 34.904 | 266.7 |
| 3122 | 6 | 2.615 | 2.360 | 34.918 | 267.1 |
| 2817 | 7 | 2.835 | 2.607 | 34.930 | 264.8 |
| 2513 | 8 | 3.114 | 2.911 | 34.948 | 261.5 |
| 2259 | 9 | 3.365 | 3.182 | 34.955 | 261.7 |
| 2007 | 10 | 3.667 | 3.504 | 34.965 | 261.7 |
| 1755 | 11 | 3.920 | 3.777 | 34.971 | 259.7 |
| 1503 | 12 | 4.220 | 4.097 | 34.986 | 254.7 |
| 1252 | 13 | 4.712 | 4.607 | 35.014 | 243.9 |
| 1002 | 14 | 6.227 | 6.133 | 35.077 | 200.2 |
| 754 | 15 | 9.322 | 9.236 | 35.231 | 144.9 |
| 504 | 16 | 14.223 | 14.148 | 35.879 | 161.2 |
| 354 | 17 | 17.304 | 17.244 | 36.404 | 183.3 |
| 254 | 18 | 18.416 | 18.372 | 36.584 | 191.4 |
| 205 | 19 | 19.078 | 19.041 | 36.653 | 187.4 |
| 155 | 20 | 19.829 | 19.800 | 36.726 | 186.6 |
| 105 | 21 | 20.979 | 20.959 | 36.812 | 199.9 |
| 55 | 22 | 22.596 | 22.585 | 36.829 | 213.2 |
| 2 | 23 | 24.861 | 24.860 | 36.839 | 207.2 |

Abaco April–May 2011 R/V Knorr
 CTD Station 21 (CTD021)
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 17–Apr–2011 07:53 Z

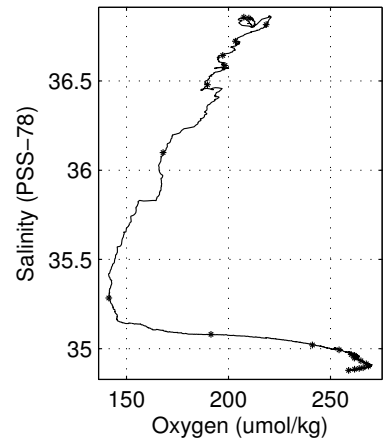
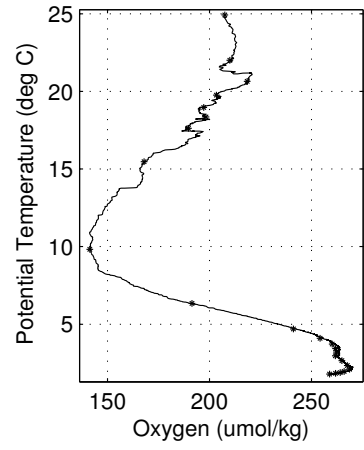
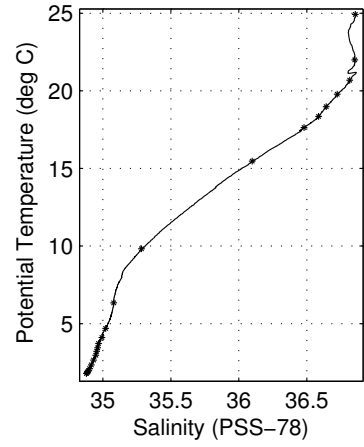
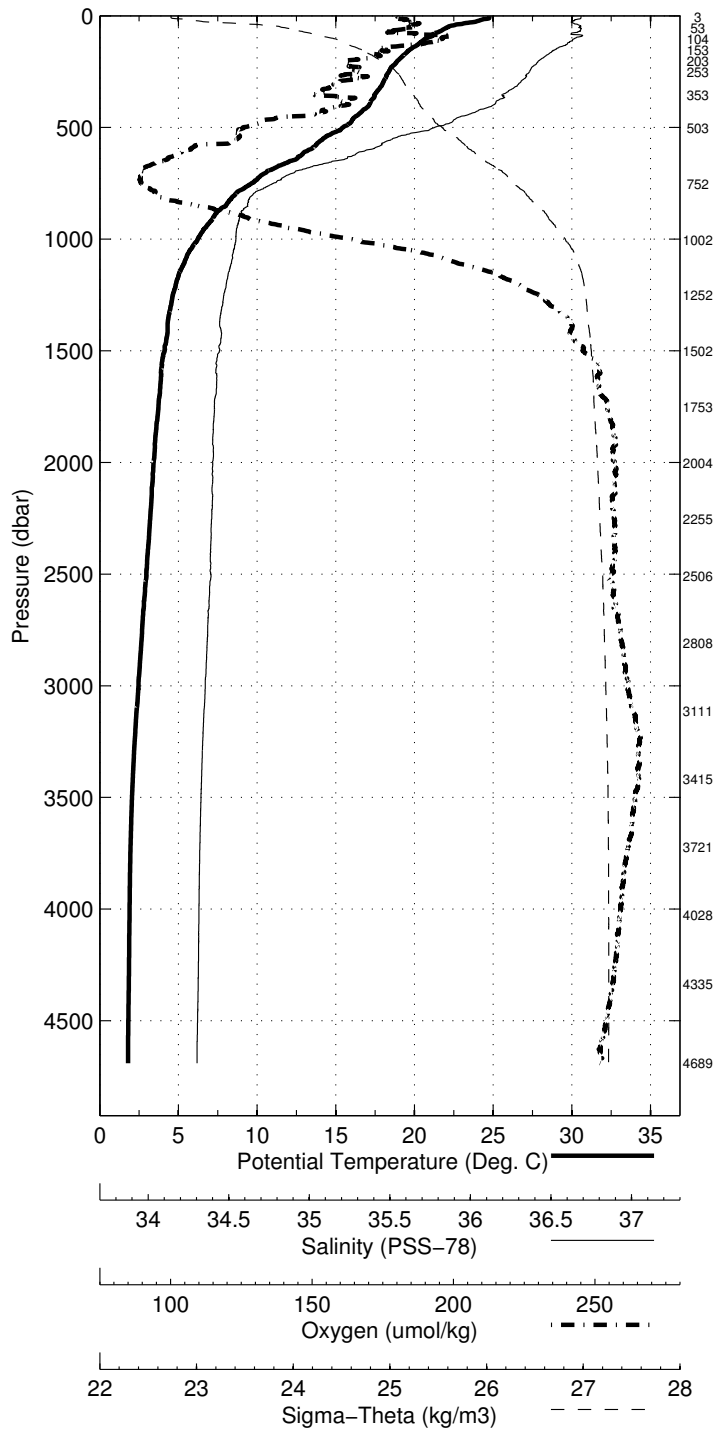


Abaco April-May 2011 R/V Knorr
 CTD Station 22 (CTD022)
 Latitude 26.505N Longitude 75.300W
 17-Apr-2011 12:13Z

| 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 | 24.765 | 24.764 | 36.856 | 207.6 | 0.003 | 24.816 |
| 10 | 24.759 | 24.757 | 36.854 | 207.4 | 0.031 | 24.818 |
| 20 | 24.164 | 24.160 | 36.823 | 210.5 | 0.062 | 24.974 |
| 30 | 23.538 | 23.531 | 36.809 | 212.8 | 0.091 | 25.151 |
| 50 | 22.160 | 22.150 | 36.852 | 211.8 | 0.142 | 25.584 |
| 75 | 21.430 | 21.415 | 36.827 | 205.1 | 0.200 | 25.771 |
| 100 | 20.808 | 20.789 | 36.827 | 219.0 | 0.254 | 25.943 |
| 125 | 20.292 | 20.269 | 36.784 | 214.0 | 0.305 | 26.052 |
| 150 | 19.756 | 19.729 | 36.723 | 203.9 | 0.354 | 26.149 |
| 200 | 18.981 | 18.945 | 36.641 | 195.0 | 0.447 | 26.290 |
| 250 | 18.416 | 18.372 | 36.589 | 197.6 | 0.535 | 26.397 |
| 300 | 18.049 | 17.997 | 36.540 | 192.6 | 0.619 | 26.453 |
| 400 | 17.167 | 17.099 | 36.401 | 194.5 | 0.784 | 26.566 |
| 500 | 15.528 | 15.449 | 36.100 | 168.0 | 0.939 | 26.720 |
| 600 | 13.361 | 13.275 | 35.756 | 154.2 | 1.077 | 26.923 |
| 700 | 10.686 | 10.599 | 35.382 | 142.9 | 1.197 | 27.145 |
| 800 | 8.686 | 8.598 | 35.166 | 145.3 | 1.298 | 27.312 |
| 900 | 7.318 | 7.227 | 35.100 | 168.4 | 1.382 | 27.465 |
| 1000 | 6.307 | 6.213 | 35.078 | 195.7 | 1.453 | 27.587 |
| 1100 | 5.494 | 5.396 | 35.056 | 221.9 | 1.512 | 27.672 |
| 1200 | 4.942 | 4.840 | 35.029 | 238.7 | 1.566 | 27.717 |
| 1300 | 4.611 | 4.503 | 35.008 | 247.2 | 1.617 | 27.738 |
| 1400 | 4.424 | 4.308 | 35.000 | 252.6 | 1.666 | 27.753 |
| 1500 | 4.239 | 4.116 | 34.995 | 255.4 | 1.715 | 27.770 |
| 1750 | 3.863 | 3.722 | 34.967 | 261.5 | 1.833 | 27.789 |
| 2000 | 3.575 | 3.414 | 34.959 | 263.6 | 1.950 | 27.813 |
| 2500 | 3.164 | 2.961 | 34.949 | 262.6 | 2.177 | 27.848 |
| 3000 | 2.699 | 2.455 | 34.921 | 266.8 | 2.395 | 27.871 |
| 3500 | 2.330 | 2.042 | 34.898 | 268.8 | 2.604 | 27.887 |
| 4000 | 2.233 | 1.893 | 34.888 | 265.0 | 2.813 | 27.891 |
| 4500 | 2.210 | 1.812 | 34.881 | 261.4 | 3.032 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4689 | 1 | 2.216 | 1.794 | 34.879 | 258.9 |
| 4336 | 2 | 2.225 | 1.845 | 34.885 | 261.8 |
| 4028 | 3 | 2.236 | 1.892 | 34.889 | 264.0 |
| 3721 | 4 | 2.267 | 1.956 | 34.893 | 266.0 |
| 3416 | 5 | 2.383 | 2.103 | 34.903 | 268.6 |
| 3111 | 6 | 2.601 | 2.347 | 34.916 | 267.5 |
| 2808 | 7 | 2.882 | 2.653 | 34.932 | 264.8 |
| 2507 | 8 | 3.174 | 2.970 | 34.948 | 261.7 |
| 2256 | 9 | 3.401 | 3.218 | 34.955 | 262.2 |
| 2004 | 10 | 3.606 | 3.444 | 34.962 | 261.7 |
| 1753 | 11 | 3.867 | 3.725 | 34.968 | 260.1 |
| 1503 | 12 | 4.227 | 4.104 | 34.993 | 254.1 |
| 1252 | 13 | 4.806 | 4.700 | 35.021 | 241.1 |
| 1002 | 14 | 6.436 | 6.340 | 35.080 | 191.4 |
| 752 | 15 | 9.910 | 9.820 | 35.284 | 141.4 |
| 504 | 16 | 15.554 | 15.474 | 36.099 | 167.9 |
| 354 | 17 | 17.691 | 17.630 | 36.480 | 189.7 |
| 254 | 18 | 18.396 | 18.351 | 36.587 | 198.3 |
| 204 | 19 | 19.014 | 18.978 | 36.643 | 197.2 |
| 154 | 20 | 19.810 | 19.781 | 36.723 | 203.4 |
| 104 | 21 | 20.702 | 20.682 | 36.816 | 218.4 |
| 54 | 22 | 22.006 | 21.995 | 36.852 | 209.9 |
| 3 | 23 | 24.918 | 24.917 | 36.857 | 207.5 |

Abaco April–May 2011 R/V Knorr
 CTD Station 22 (CTD022)
 Latitude 26.505 N Longitude 75.300 W
 17–Apr–2011 12:13 Z

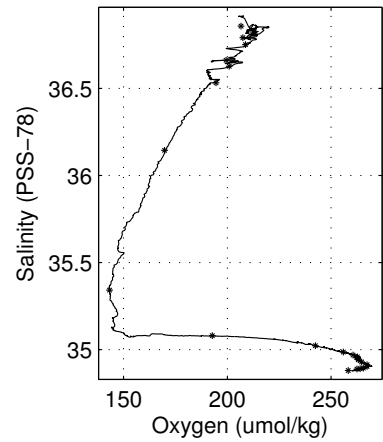
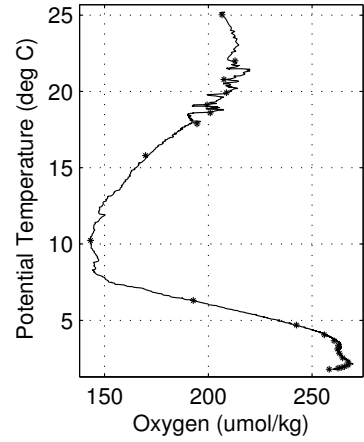
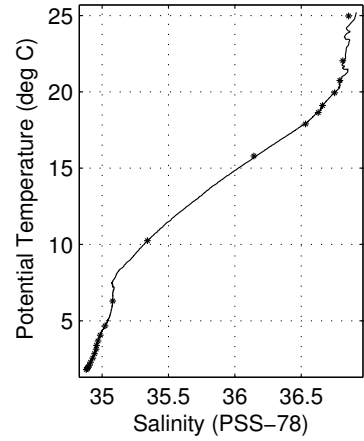
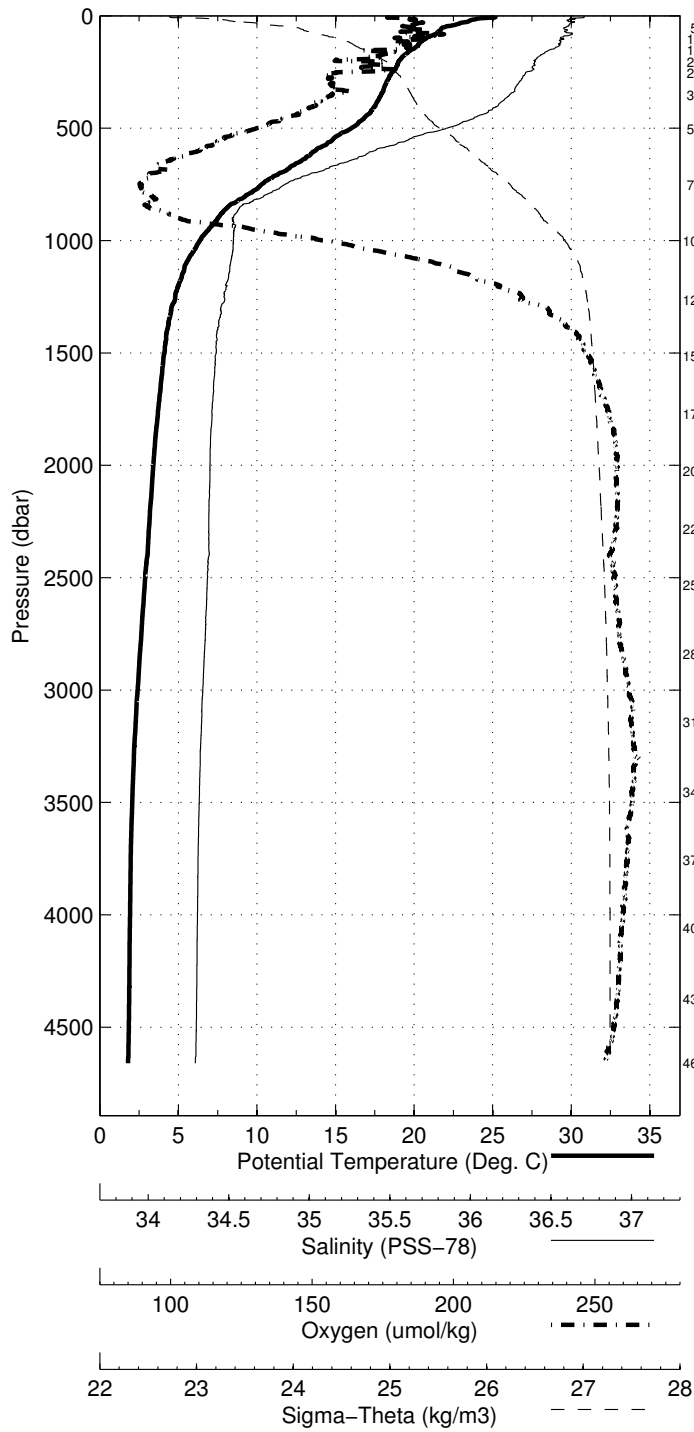


Abaco April-May 2011 R/V Knorr
 CTD Station 23 (CTD023)
 Latitude 26.501N Longitude 75.077W
 17-Apr-2011 18:11Z

| 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 | 25.187 | 25.186 | 36.916 | 207.3 | 0.003 | 24.733 |
| 10 | 24.336 | 24.334 | 36.858 | 210.1 | 0.032 | 24.948 |
| 20 | 23.573 | 23.569 | 36.824 | 213.0 | 0.061 | 25.151 |
| 30 | 23.049 | 23.043 | 36.854 | 214.7 | 0.088 | 25.328 |
| 50 | 21.951 | 21.941 | 36.821 | 212.6 | 0.138 | 25.619 |
| 75 | 21.487 | 21.472 | 36.824 | 210.2 | 0.196 | 25.753 |
| 100 | 20.787 | 20.768 | 36.791 | 208.9 | 0.251 | 25.921 |
| 125 | 20.306 | 20.283 | 36.780 | 211.3 | 0.302 | 26.044 |
| 150 | 19.886 | 19.858 | 36.739 | 207.7 | 0.351 | 26.126 |
| 200 | 19.072 | 19.036 | 36.654 | 192.3 | 0.445 | 26.276 |
| 250 | 18.648 | 18.604 | 36.611 | 194.8 | 0.534 | 26.354 |
| 300 | 18.275 | 18.223 | 36.572 | 191.7 | 0.621 | 26.421 |
| 400 | 17.609 | 17.541 | 36.464 | 187.5 | 0.790 | 26.507 |
| 500 | 16.079 | 15.998 | 36.196 | 172.6 | 0.951 | 26.669 |
| 600 | 13.802 | 13.714 | 35.818 | 158.0 | 1.094 | 26.879 |
| 700 | 11.518 | 11.426 | 35.486 | 145.9 | 1.220 | 27.076 |
| 800 | 9.369 | 9.276 | 35.238 | 146.0 | 1.327 | 27.259 |
| 900 | 7.585 | 7.492 | 35.072 | 152.7 | 1.417 | 27.405 |
| 1000 | 6.448 | 6.353 | 35.079 | 189.7 | 1.491 | 27.569 |
| 1100 | 5.608 | 5.510 | 35.064 | 217.7 | 1.553 | 27.665 |
| 1200 | 5.123 | 5.019 | 35.043 | 234.0 | 1.608 | 27.707 |
| 1300 | 4.667 | 4.558 | 35.013 | 246.2 | 1.660 | 27.736 |
| 1400 | 4.390 | 4.274 | 34.993 | 252.4 | 1.710 | 27.751 |
| 1500 | 4.233 | 4.110 | 34.988 | 255.3 | 1.759 | 27.765 |
| 1750 | 3.864 | 3.722 | 34.967 | 261.4 | 1.878 | 27.789 |
| 2000 | 3.564 | 3.403 | 34.956 | 263.4 | 1.995 | 27.811 |
| 2500 | 3.093 | 2.892 | 34.943 | 263.0 | 2.220 | 27.850 |
| 3000 | 2.650 | 2.407 | 34.918 | 266.6 | 2.436 | 27.872 |
| 3500 | 2.351 | 2.063 | 34.899 | 267.5 | 2.644 | 27.886 |
| 4000 | 2.265 | 1.924 | 34.890 | 265.2 | 2.855 | 27.890 |
| 4500 | 2.243 | 1.844 | 34.884 | 262.8 | 3.076 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4660 | 1 | 2.218 | 1.801 | 34.880 | 258.3 |
| 4374 | 2 | 2.254 | 1.869 | 34.888 | 262.5 |
| 4059 | 3 | 2.260 | 1.912 | 34.890 | 264.0 |
| 3756 | 4 | 2.286 | 1.971 | 34.894 | 265.6 |
| 3453 | 5 | 2.368 | 2.084 | 34.903 | 267.3 |
| 3140 | 6 | 2.531 | 2.276 | 34.912 | 267.3 |
| 2839 | 7 | 2.777 | 2.548 | 34.929 | 264.7 |
| 2533 | 8 | 3.048 | 2.844 | 34.942 | 263.2 |
| 2282 | 9 | 3.327 | 3.143 | 34.954 | 262.3 |
| 2025 | 10 | 3.540 | 3.377 | 34.958 | 262.7 |
| 1774 | 11 | 3.813 | 3.670 | 34.969 | 260.7 |
| 1514 | 12 | 4.171 | 4.048 | 34.986 | 255.9 |
| 1264 | 13 | 4.771 | 4.664 | 35.022 | 242.5 |
| 1004 | 14 | 6.390 | 6.295 | 35.079 | 192.8 |
| 754 | 15 | 10.343 | 10.251 | 35.341 | 143.2 |
| 504 | 16 | 15.873 | 15.792 | 36.144 | 169.8 |
| 354 | 17 | 17.962 | 17.900 | 36.532 | 194.6 |
| 255 | 18 | 18.686 | 18.640 | 36.628 | 200.9 |
| 205 | 19 | 19.140 | 19.103 | 36.661 | 199.4 |
| 155 | 20 | 19.965 | 19.936 | 36.752 | 208.7 |
| 105 | 21 | 20.759 | 20.739 | 36.791 | 207.5 |
| 55 | 22 | 22.050 | 22.039 | 36.814 | 212.9 |
| 4 | 23 | 24.979 | 24.978 | 36.857 | 206.6 |

Abaco April–May 2011 R/V Knorr
 CTD Station 23 (CTD023)
 Latitude 26.501 N Longitude 75.077 W
 17–Apr–2011 18:11 Z

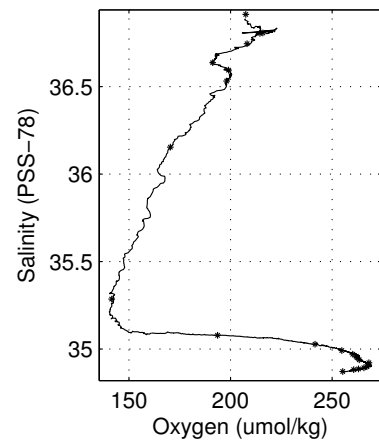
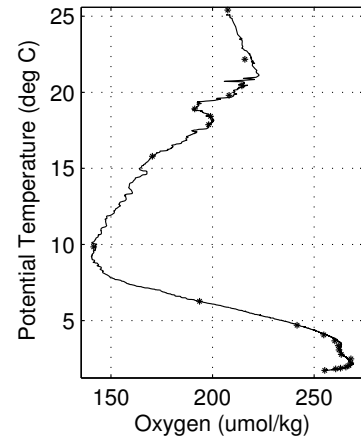
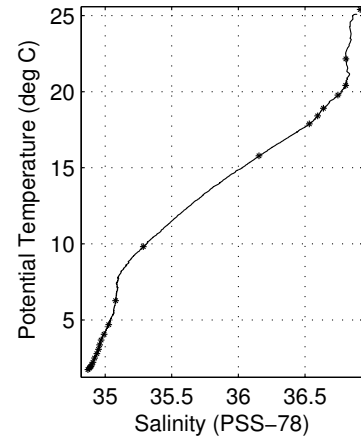
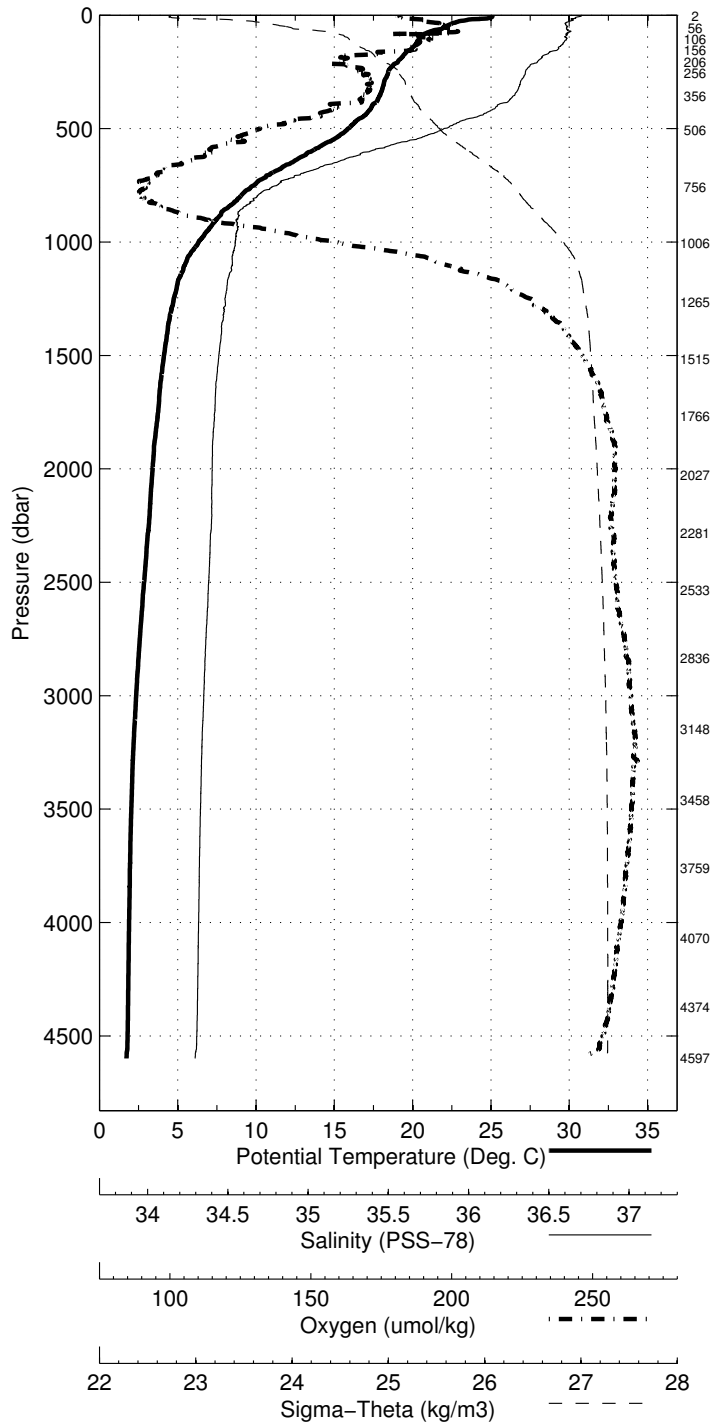


Abaco April-May 2011 R/V Knorr
 CTD Station 24 (CTD024)
 Latitude 26.501N Longitude 74.795W
 17-Apr-2011 22:42Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.093 | 25.093 | 36.889 | 207.1 | 0.003 | 24.741 |
| 10 | 24.983 | 24.980 | 36.856 | 208.6 | 0.032 | 24.751 |
| 20 | 23.519 | 23.515 | 36.837 | 214.5 | 0.062 | 25.177 |
| 30 | 22.831 | 22.825 | 36.818 | 215.3 | 0.089 | 25.364 |
| 50 | 22.093 | 22.083 | 36.817 | 219.7 | 0.139 | 25.576 |
| 75 | 21.006 | 20.991 | 36.825 | 221.4 | 0.197 | 25.886 |
| 100 | 20.480 | 20.462 | 36.812 | 215.0 | 0.248 | 26.021 |
| 125 | 20.263 | 20.239 | 36.793 | 212.5 | 0.298 | 26.067 |
| 150 | 19.904 | 19.876 | 36.767 | 211.9 | 0.347 | 26.143 |
| 200 | 19.145 | 19.109 | 36.665 | 192.7 | 0.441 | 26.266 |
| 250 | 18.480 | 18.436 | 36.596 | 197.7 | 0.529 | 26.386 |
| 300 | 18.217 | 18.164 | 36.569 | 200.3 | 0.615 | 26.434 |
| 400 | 17.484 | 17.416 | 36.450 | 192.1 | 0.783 | 26.527 |
| 500 | 15.946 | 15.866 | 36.170 | 171.8 | 0.942 | 26.679 |
| 600 | 13.631 | 13.544 | 35.784 | 160.1 | 1.086 | 26.889 |
| 700 | 10.992 | 10.904 | 35.422 | 145.2 | 1.208 | 27.122 |
| 800 | 9.078 | 8.987 | 35.194 | 141.2 | 1.311 | 27.272 |
| 900 | 7.577 | 7.485 | 35.093 | 157.4 | 1.399 | 27.423 |
| 1000 | 6.418 | 6.323 | 35.081 | 191.4 | 1.473 | 27.574 |
| 1100 | 5.556 | 5.457 | 35.065 | 219.5 | 1.534 | 27.672 |
| 1200 | 5.042 | 4.939 | 35.037 | 236.1 | 1.588 | 27.711 |
| 1300 | 4.686 | 4.577 | 35.020 | 245.0 | 1.640 | 27.740 |
| 1400 | 4.453 | 4.337 | 35.009 | 250.8 | 1.689 | 27.757 |
| 1500 | 4.243 | 4.120 | 34.994 | 254.8 | 1.737 | 27.769 |
| 1750 | 3.890 | 3.748 | 34.973 | 260.4 | 1.856 | 27.791 |
| 2000 | 3.554 | 3.393 | 34.959 | 263.4 | 1.972 | 27.815 |
| 2500 | 3.051 | 2.850 | 34.941 | 263.7 | 2.195 | 27.852 |
| 3000 | 2.585 | 2.344 | 34.915 | 267.5 | 2.407 | 27.876 |
| 3500 | 2.322 | 2.034 | 34.898 | 267.7 | 2.613 | 27.887 |
| 4000 | 2.236 | 1.895 | 34.888 | 264.9 | 2.822 | 27.891 |
| 4500 | 2.196 | 1.798 | 34.879 | 260.2 | 3.041 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4598 | 1 | 2.139 | 1.732 | 34.872 | 255.2 |
| 4374 | 2 | 2.212 | 1.829 | 34.882 | 260.6 |
| 4071 | 3 | 2.228 | 1.879 | 34.887 | 263.0 |
| 3760 | 4 | 2.262 | 1.947 | 34.893 | 265.6 |
| 3459 | 5 | 2.328 | 2.045 | 34.899 | 267.1 |
| 3148 | 6 | 2.469 | 2.214 | 34.908 | 268.0 |
| 2837 | 7 | 2.716 | 2.488 | 34.922 | 268.1 |
| 2534 | 8 | 2.989 | 2.786 | 34.938 | 263.4 |
| 2281 | 9 | 3.254 | 3.071 | 34.951 | 262.2 |
| 2028 | 10 | 3.519 | 3.356 | 34.959 | 261.9 |
| 1767 | 11 | 3.818 | 3.676 | 34.970 | 260.2 |
| 1516 | 12 | 4.185 | 4.061 | 34.992 | 254.7 |
| 1266 | 13 | 4.793 | 4.686 | 35.027 | 241.6 |
| 1006 | 14 | 6.359 | 6.264 | 35.079 | 193.6 |
| 756 | 15 | 9.903 | 9.813 | 35.286 | 141.5 |
| 506 | 16 | 15.862 | 15.781 | 36.155 | 170.4 |
| 357 | 17 | 17.941 | 17.879 | 36.532 | 198.1 |
| 256 | 18 | 18.461 | 18.416 | 36.595 | 199.0 |
| 206 | 19 | 18.953 | 18.915 | 36.638 | 191.2 |
| 156 | 20 | 19.807 | 19.778 | 36.746 | 208.2 |
| 106 | 21 | 20.432 | 20.412 | 36.805 | 214.4 |
| 57 | 22 | 22.168 | 22.157 | 36.807 | 215.9 |
| 3 | 23 | 25.405 | 25.404 | 36.914 | 207.5 |

Abaco April–May 2011 R/V Knorr
 CTD Station 24 (CTD024)
 Latitude 26.501 N Longitude 74.795 W
 17–Apr–2011 22:42 Z

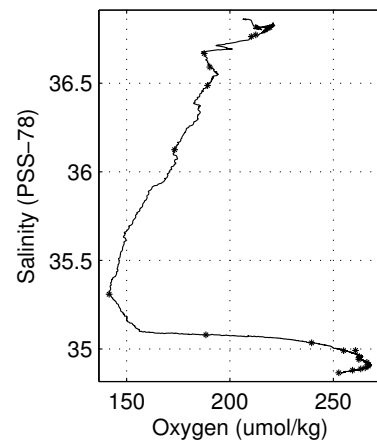
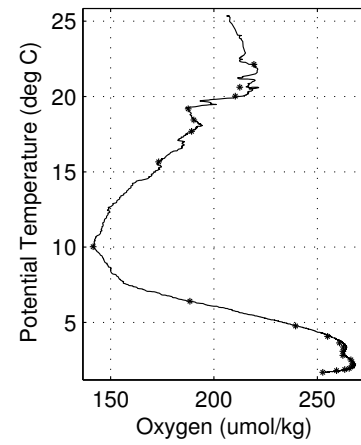
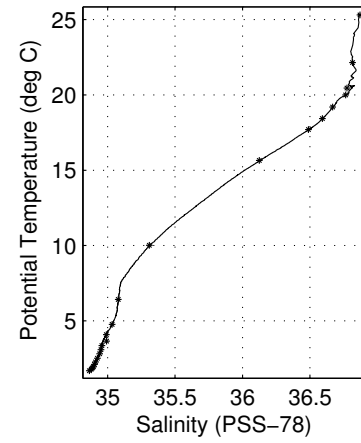
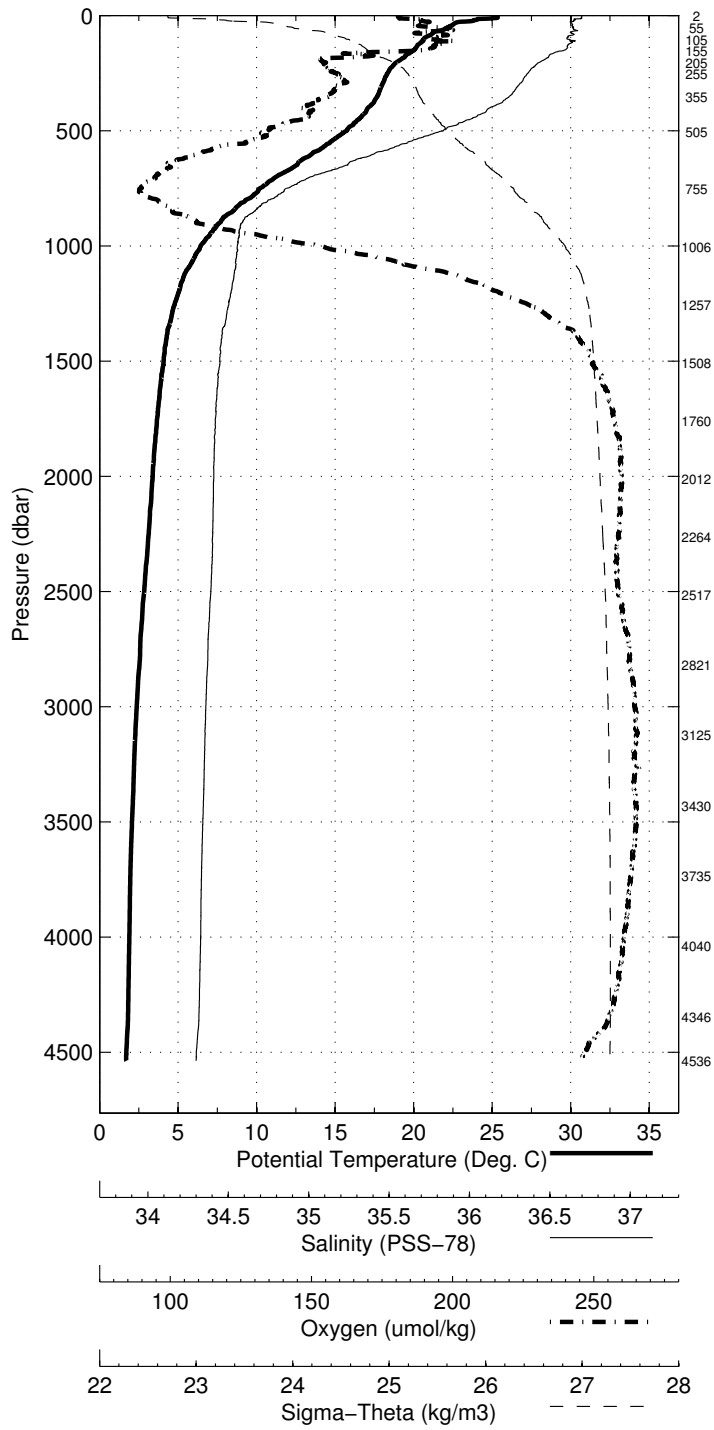


Abaco April-May 2011 R/V Knorr
 CTD Station 25 (CTD025)
 Latitude 26.501N Longitude 74.517W
 18-Apr-2011 03:21Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.344 | 25.344 | 36.864 | 206.7 | 0.003 | 24.645 |
| 10 | 25.339 | 25.337 | 36.861 | 207.1 | 0.033 | 24.645 |
| 20 | 23.873 | 23.869 | 36.826 | 212.3 | 0.063 | 25.064 |
| 30 | 22.731 | 22.725 | 36.806 | 214.4 | 0.091 | 25.384 |
| 50 | 22.218 | 22.208 | 36.821 | 216.1 | 0.141 | 25.543 |
| 75 | 21.269 | 21.254 | 36.810 | 212.1 | 0.200 | 25.802 |
| 100 | 20.674 | 20.655 | 36.786 | 215.9 | 0.253 | 25.948 |
| 125 | 20.341 | 20.318 | 36.795 | 216.4 | 0.304 | 26.047 |
| 150 | 20.049 | 20.021 | 36.773 | 213.8 | 0.354 | 26.109 |
| 200 | 19.013 | 18.977 | 36.650 | 188.3 | 0.448 | 26.288 |
| 250 | 18.385 | 18.341 | 36.584 | 191.6 | 0.535 | 26.401 |
| 300 | 18.046 | 17.994 | 36.539 | 192.0 | 0.620 | 26.453 |
| 400 | 17.169 | 17.101 | 36.388 | 182.4 | 0.786 | 26.556 |
| 500 | 15.824 | 15.744 | 36.145 | 174.0 | 0.942 | 26.688 |
| 600 | 13.614 | 13.528 | 35.788 | 156.3 | 1.085 | 26.896 |
| 700 | 11.330 | 11.239 | 35.461 | 145.7 | 1.209 | 27.090 |
| 800 | 9.390 | 9.298 | 35.241 | 146.1 | 1.316 | 27.259 |
| 900 | 7.720 | 7.626 | 35.102 | 156.1 | 1.406 | 27.409 |
| 1000 | 6.527 | 6.432 | 35.079 | 187.1 | 1.481 | 27.559 |
| 1100 | 5.696 | 5.597 | 35.068 | 214.5 | 1.544 | 27.658 |
| 1200 | 5.149 | 5.045 | 35.047 | 232.8 | 1.599 | 27.708 |
| 1300 | 4.706 | 4.597 | 35.024 | 245.0 | 1.651 | 27.740 |
| 1400 | 4.383 | 4.267 | 34.999 | 253.1 | 1.700 | 27.757 |
| 1500 | 4.191 | 4.069 | 34.987 | 256.4 | 1.748 | 27.769 |
| 1750 | 3.798 | 3.658 | 34.965 | 262.4 | 1.866 | 27.794 |
| 2000 | 3.539 | 3.378 | 34.957 | 263.8 | 1.981 | 27.815 |
| 2500 | 3.040 | 2.839 | 34.942 | 263.2 | 2.203 | 27.854 |
| 3000 | 2.604 | 2.362 | 34.916 | 267.5 | 2.415 | 27.875 |
| 3500 | 2.348 | 2.059 | 34.900 | 267.6 | 2.622 | 27.887 |
| 4000 | 2.234 | 1.893 | 34.889 | 264.4 | 2.832 | 27.891 |
| 4500 | 2.089 | 1.695 | 34.866 | 254.7 | 3.049 | 27.888 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4536 | 1 | 2.097 | 1.698 | 34.865 | 252.7 |
| 4346 | 2 | 2.189 | 1.809 | 34.880 | 259.3 |
| 4040 | 3 | 2.229 | 1.884 | 34.887 | 263.3 |
| 3735 | 4 | 2.269 | 1.957 | 34.894 | 265.4 |
| 3430 | 5 | 2.393 | 2.111 | 34.903 | 266.9 |
| 3126 | 6 | 2.525 | 2.271 | 34.911 | 267.2 |
| 2821 | 7 | 2.755 | 2.528 | 34.924 | 266.3 |
| 2517 | 8 | 3.022 | 2.820 | 34.940 | 262.4 |
| 2265 | 9 | 3.270 | 3.089 | 34.950 | 262.4 |
| 2012 | 10 | 3.528 | 3.366 | 34.957 | 262.6 |
| 1760 | 11 | 3.799 | 3.657 | 34.991 | 260.8 |
| 1508 | 12 | 4.217 | 4.094 | 34.990 | 255.0 |
| 1257 | 13 | 4.873 | 4.766 | 35.034 | 239.5 |
| 1006 | 14 | 6.522 | 6.425 | 35.079 | 188.3 |
| 755 | 15 | 10.104 | 10.013 | 35.309 | 141.6 |
| 505 | 16 | 15.726 | 15.646 | 36.125 | 173.2 |
| 355 | 17 | 17.756 | 17.694 | 36.488 | 189.2 |
| 255 | 18 | 18.478 | 18.432 | 36.591 | 190.3 |
| 205 | 19 | 19.234 | 19.196 | 36.668 | 187.6 |
| 156 | 20 | 20.020 | 19.991 | 36.764 | 210.3 |
| 106 | 21 | 20.477 | 20.457 | 36.773 | 212.5 |
| 56 | 22 | 22.153 | 22.142 | 36.815 | 219.3 |
| 3 | 23 | 25.304 | 25.304 | 36.871 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 25 (CTD025)
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 18–Apr–2011 03:21 Z

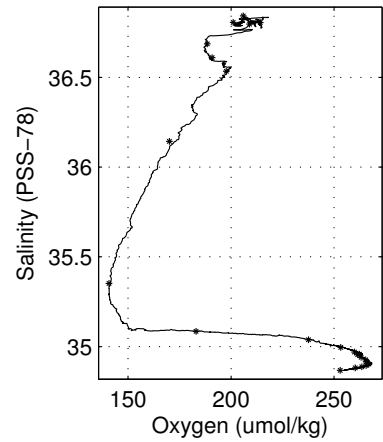
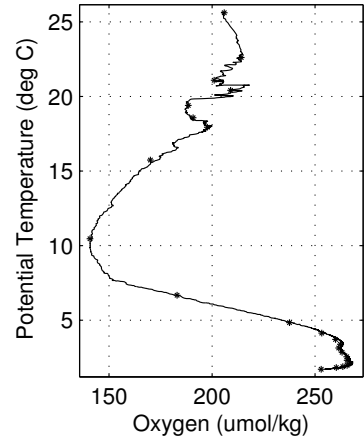
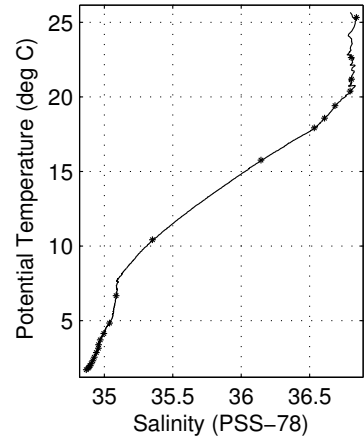
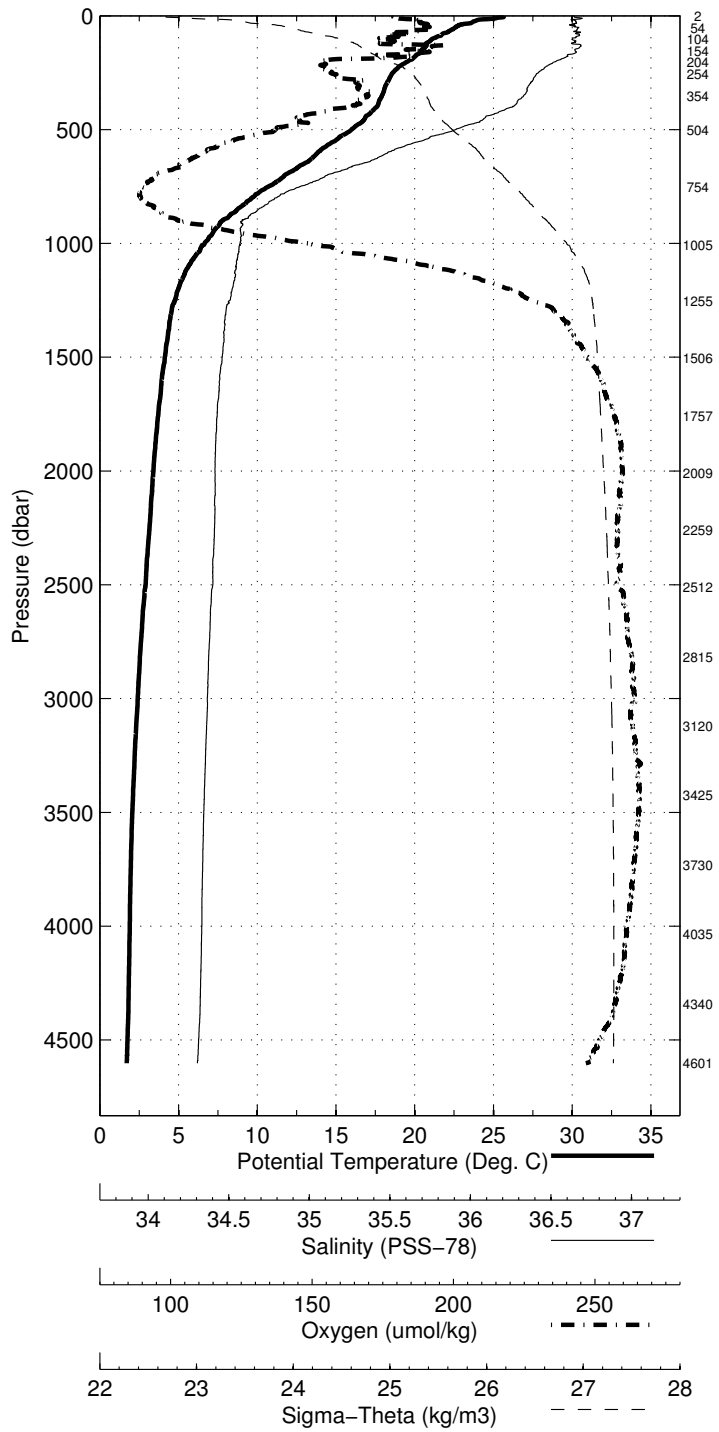


Abaco April-May 2011 R/V Knorr
 CTD Station 26 (CTD026)
 Latitude 26.502N Longitude 74.233W
 18-Apr-2011 08:29Z

| 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 | 25.654 | 25.654 | 36.801 | 204.8 | 0.003 | 24.501 |
| 10 | 25.186 | 25.184 | 36.836 | 206.5 | 0.034 | 24.673 |
| 20 | 23.931 | 23.926 | 36.801 | 212.0 | 0.064 | 25.028 |
| 30 | 23.628 | 23.622 | 36.810 | 212.0 | 0.093 | 25.125 |
| 50 | 22.625 | 22.615 | 36.818 | 213.8 | 0.147 | 25.425 |
| 75 | 21.947 | 21.932 | 36.810 | 208.9 | 0.209 | 25.613 |
| 100 | 21.160 | 21.141 | 36.791 | 203.7 | 0.266 | 25.819 |
| 125 | 20.779 | 20.755 | 36.819 | 205.9 | 0.320 | 25.946 |
| 150 | 20.467 | 20.439 | 36.802 | 209.7 | 0.372 | 26.020 |
| 200 | 19.610 | 19.573 | 36.705 | 188.0 | 0.471 | 26.176 |
| 250 | 18.668 | 18.623 | 36.616 | 189.5 | 0.562 | 26.353 |
| 300 | 18.249 | 18.196 | 36.570 | 196.3 | 0.648 | 26.426 |
| 400 | 17.662 | 17.593 | 36.483 | 194.0 | 0.817 | 26.509 |
| 500 | 16.062 | 15.981 | 36.190 | 174.3 | 0.977 | 26.668 |
| 600 | 13.928 | 13.840 | 35.843 | 156.8 | 1.121 | 26.873 |
| 700 | 11.846 | 11.753 | 35.534 | 144.8 | 1.250 | 27.052 |
| 800 | 9.733 | 9.638 | 35.268 | 141.2 | 1.360 | 27.223 |
| 900 | 7.895 | 7.800 | 35.100 | 150.6 | 1.454 | 27.383 |
| 1000 | 6.743 | 6.646 | 35.085 | 183.8 | 1.532 | 27.535 |
| 1100 | 5.732 | 5.633 | 35.066 | 214.6 | 1.597 | 27.651 |
| 1200 | 5.083 | 4.980 | 35.046 | 234.9 | 1.652 | 27.714 |
| 1300 | 4.664 | 4.555 | 35.014 | 246.5 | 1.703 | 27.737 |
| 1400 | 4.446 | 4.330 | 35.004 | 251.4 | 1.753 | 27.754 |
| 1500 | 4.253 | 4.130 | 34.995 | 254.9 | 1.801 | 27.768 |
| 1750 | 3.851 | 3.709 | 34.969 | 261.5 | 1.920 | 27.791 |
| 2000 | 3.567 | 3.406 | 34.958 | 263.7 | 2.036 | 27.813 |
| 2500 | 3.105 | 2.903 | 34.946 | 262.3 | 2.260 | 27.851 |
| 3000 | 2.649 | 2.406 | 34.919 | 266.8 | 2.474 | 27.873 |
| 3500 | 2.353 | 2.064 | 34.900 | 267.8 | 2.683 | 27.887 |
| 4000 | 2.244 | 1.903 | 34.890 | 264.8 | 2.893 | 27.891 |
| 4500 | 2.152 | 1.755 | 34.874 | 257.8 | 3.111 | 27.890 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4601 | 1 | 2.117 | 1.709 | 34.868 | 252.9 |
| 4341 | 2 | 2.202 | 1.823 | 34.881 | 260.3 |
| 4035 | 3 | 2.236 | 1.891 | 34.888 | 263.5 |
| 3730 | 4 | 2.288 | 1.976 | 34.895 | 265.6 |
| 3425 | 5 | 2.399 | 2.117 | 34.903 | 267.0 |
| 3121 | 6 | 2.567 | 2.313 | 34.915 | 265.6 |
| 2816 | 7 | 2.775 | 2.548 | 34.925 | 265.4 |
| 2512 | 8 | 3.058 | 2.856 | 34.941 | 263.2 |
| 2260 | 9 | 3.332 | 3.149 | 34.955 | 261.5 |
| 2009 | 10 | 3.548 | 3.386 | 34.958 | 262.3 |
| 1758 | 11 | 3.853 | 3.711 | 34.970 | 260.0 |
| 1507 | 12 | 4.264 | 4.140 | 34.995 | 253.3 |
| 1255 | 13 | 4.949 | 4.841 | 35.038 | 237.6 |
| 1005 | 14 | 6.769 | 6.671 | 35.085 | 183.1 |
| 755 | 15 | 10.514 | 10.421 | 35.352 | 140.8 |
| 505 | 16 | 15.837 | 15.757 | 36.144 | 170.1 |
| 355 | 17 | 17.987 | 17.926 | 36.534 | 197.7 |
| 255 | 18 | 18.624 | 18.579 | 36.610 | 190.8 |
| 205 | 19 | 19.445 | 19.408 | 36.686 | 188.5 |
| 155 | 20 | 20.416 | 20.387 | 36.797 | 209.0 |
| 105 | 21 | 21.203 | 21.183 | 36.807 | 201.0 |
| 55 | 22 | 22.642 | 22.630 | 36.805 | 214.2 |
| 3 | 23 | 25.329 | 25.328 | 36.842 | 206.0 |

Abaco April–May 2011 R/V Knorr
 CTD Station 26 (CTD026)
 Latitude 26.502 N Longitude 74.233 W
 18–Apr–2011 08:29 Z

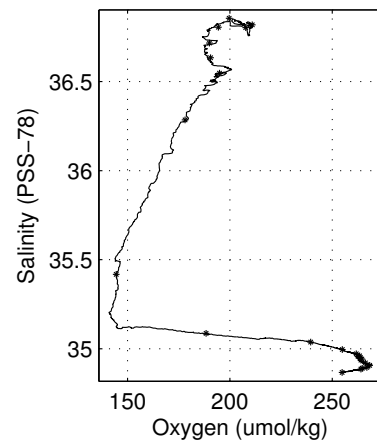
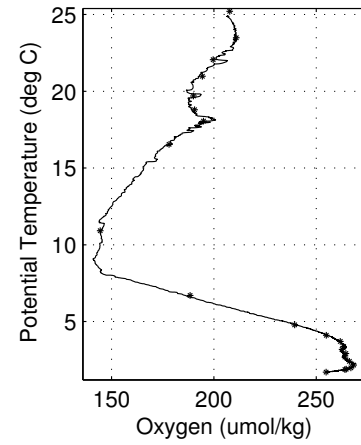
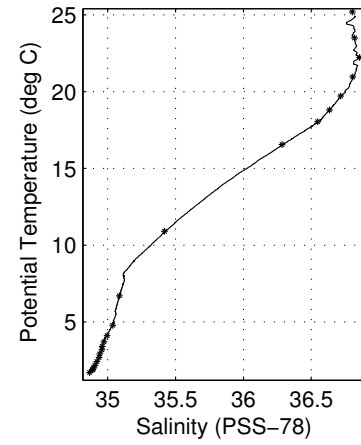
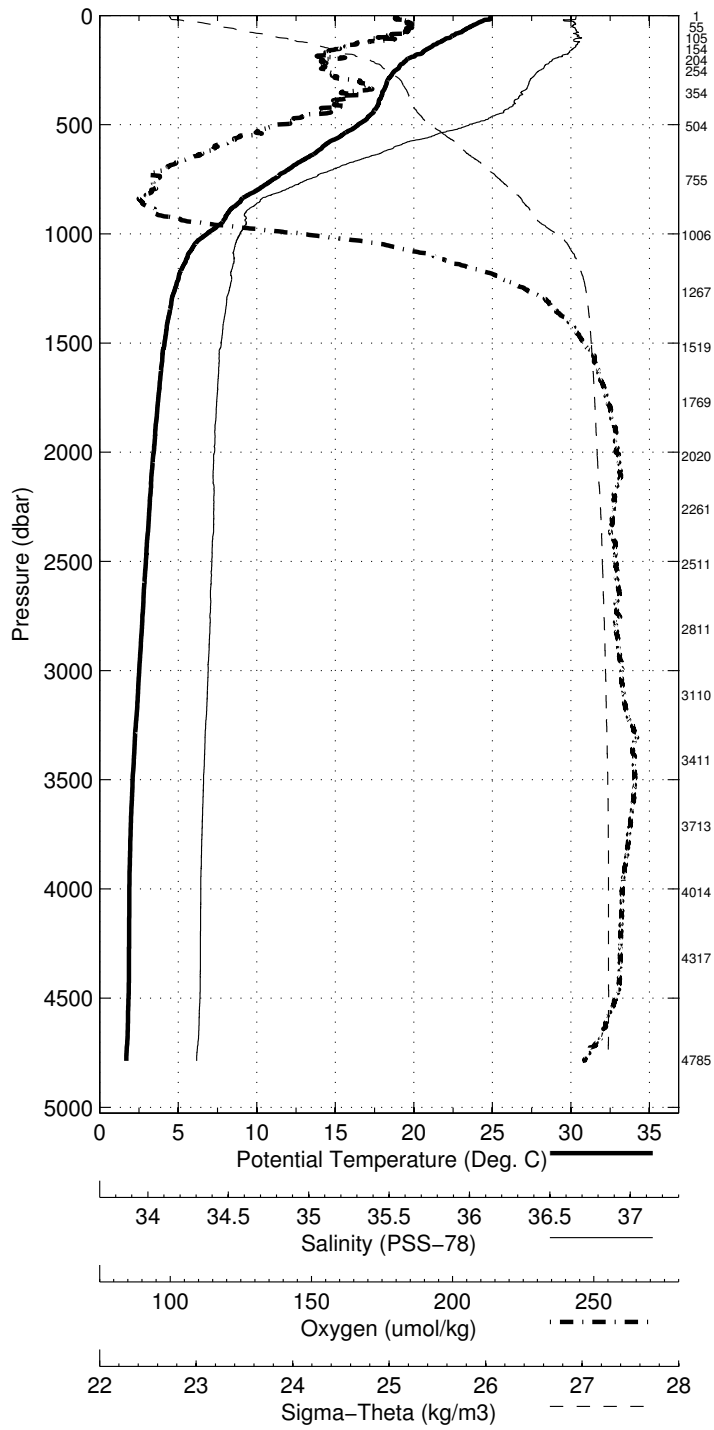


Abaco April-May 2011 R/V Knorr
 CTD Station 27 (CTD027)
 Latitude 26.506N Longitude 73.860W
 18-Apr-2011 13:36Z

| 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 | 24.899 | 24.899 | 36.824 | 206.7 | 0.003 | 24.752 |
| 10 | 24.878 | 24.876 | 36.823 | 207.1 | 0.032 | 24.757 |
| 20 | 24.507 | 24.503 | 36.759 | 208.8 | 0.064 | 24.822 |
| 30 | 24.215 | 24.208 | 36.815 | 209.7 | 0.094 | 24.954 |
| 50 | 23.643 | 23.632 | 36.802 | 210.7 | 0.153 | 25.116 |
| 75 | 23.085 | 23.070 | 36.829 | 209.8 | 0.222 | 25.301 |
| 100 | 22.344 | 22.324 | 36.840 | 202.2 | 0.286 | 25.525 |
| 125 | 21.549 | 21.524 | 36.834 | 196.8 | 0.346 | 25.746 |
| 150 | 20.972 | 20.943 | 36.810 | 192.2 | 0.402 | 25.888 |
| 200 | 19.607 | 19.570 | 36.705 | 188.0 | 0.504 | 26.177 |
| 250 | 18.901 | 18.856 | 36.639 | 188.8 | 0.597 | 26.311 |
| 300 | 18.363 | 18.310 | 36.585 | 197.5 | 0.685 | 26.409 |
| 400 | 17.839 | 17.769 | 36.505 | 191.0 | 0.855 | 26.483 |
| 500 | 16.538 | 16.456 | 36.273 | 176.1 | 1.020 | 26.621 |
| 600 | 14.297 | 14.207 | 35.890 | 161.1 | 1.169 | 26.831 |
| 700 | 12.228 | 12.133 | 35.586 | 147.9 | 1.301 | 27.019 |
| 800 | 10.124 | 10.028 | 35.323 | 144.2 | 1.414 | 27.199 |
| 900 | 8.317 | 8.220 | 35.122 | 144.7 | 1.511 | 27.337 |
| 1000 | 6.923 | 6.824 | 35.090 | 182.2 | 1.594 | 27.514 |
| 1100 | 5.709 | 5.610 | 35.058 | 216.5 | 1.659 | 27.648 |
| 1200 | 5.137 | 5.033 | 35.047 | 233.6 | 1.715 | 27.709 |
| 1300 | 4.700 | 4.591 | 35.023 | 245.3 | 1.766 | 27.740 |
| 1400 | 4.449 | 4.333 | 35.007 | 251.2 | 1.816 | 27.756 |
| 1500 | 4.253 | 4.130 | 34.993 | 255.0 | 1.865 | 27.767 |
| 1750 | 3.879 | 3.737 | 34.972 | 260.8 | 1.984 | 27.791 |
| 2000 | 3.607 | 3.445 | 34.959 | 263.2 | 2.101 | 27.810 |
| 2500 | 3.151 | 2.948 | 34.946 | 263.2 | 2.327 | 27.846 |
| 3000 | 2.766 | 2.520 | 34.927 | 264.6 | 2.547 | 27.870 |
| 3500 | 2.391 | 2.102 | 34.903 | 268.0 | 2.760 | 27.886 |
| 4000 | 2.234 | 1.893 | 34.888 | 264.8 | 2.971 | 27.890 |
| 4500 | 2.242 | 1.843 | 34.884 | 263.0 | 3.191 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4786 | 1 | 2.132 | 1.702 | 34.867 | 254.8 |
| 4317 | 2 | 2.249 | 1.872 | 34.886 | 263.9 |
| 4014 | 3 | 2.240 | 1.897 | 34.890 | 264.6 |
| 3713 | 4 | 2.298 | 1.987 | 34.895 | 266.9 |
| 3412 | 5 | 2.451 | 2.169 | 34.907 | 268.2 |
| 3111 | 6 | 2.667 | 2.412 | 34.921 | 266.2 |
| 2811 | 7 | 2.913 | 2.684 | 34.936 | 263.9 |
| 2511 | 8 | 3.113 | 2.910 | 34.942 | 264.4 |
| 2261 | 9 | 3.363 | 3.180 | 34.957 | 262.6 |
| 2020 | 10 | 3.557 | 3.394 | 34.960 | 263.4 |
| 1769 | 11 | 3.840 | 3.697 | 34.972 | 261.7 |
| 1519 | 12 | 4.231 | 4.106 | 34.996 | 254.9 |
| 1267 | 13 | 4.889 | 4.781 | 35.037 | 239.5 |
| 1007 | 14 | 6.790 | 6.691 | 35.086 | 188.3 |
| 756 | 15 | 10.999 | 10.903 | 35.417 | 144.4 |
| 505 | 16 | 16.637 | 16.554 | 36.285 | 178.1 |
| 355 | 17 | 18.105 | 18.043 | 36.548 | 194.8 |
| 255 | 18 | 18.854 | 18.808 | 36.634 | 190.5 |
| 205 | 19 | 19.761 | 19.723 | 36.716 | 189.9 |
| 154 | 20 | 20.995 | 20.966 | 36.805 | 194.4 |
| 105 | 21 | 22.244 | 22.223 | 36.856 | 199.6 |
| 55 | 22 | 23.507 | 23.496 | 36.819 | 210.9 |
| 2 | 23 | 25.203 | 25.203 | 36.803 | 207.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 27 (CTD027)
 Latitude 26.506 N Longitude 73.860 W
 18–Apr–2011 13:36 Z

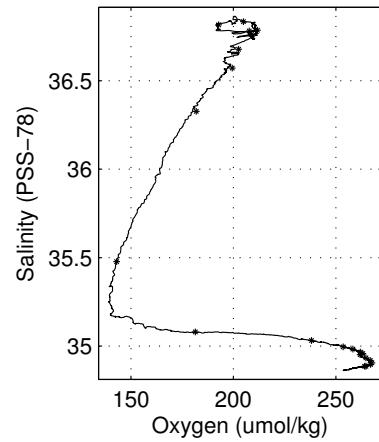
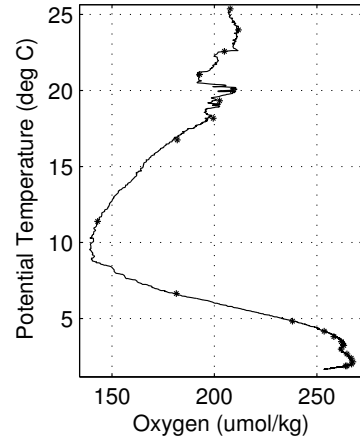
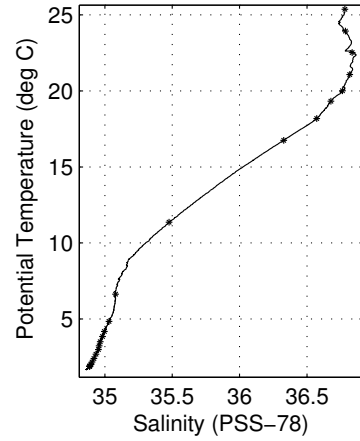
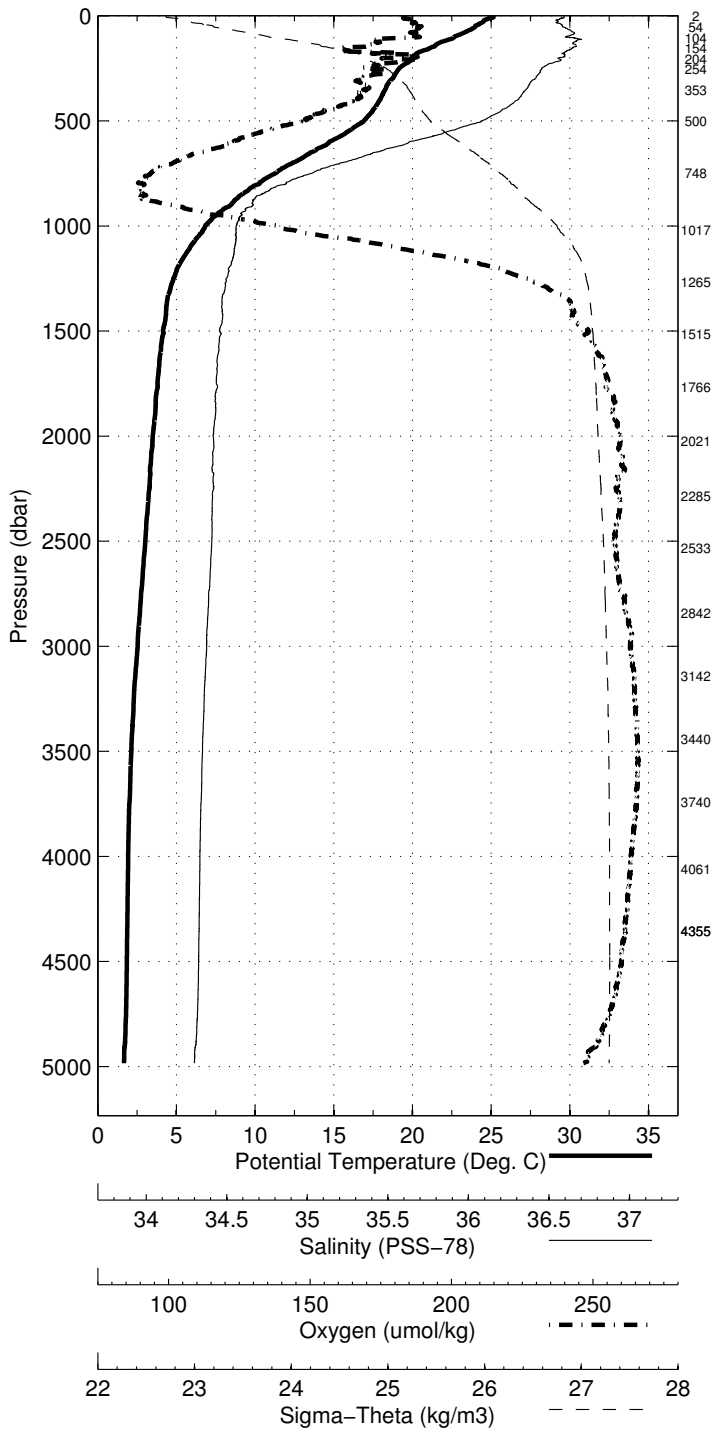


Abaco April-May 2011 R/V Knorr
 CTD Station 28 (CTD028)
 Latitude 26.504N Longitude 73.489W
 18-Apr-2011 18:58Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.150 | 25.150 | 36.777 | 206.8 | 0.003 | 24.639 |
| 10 | 25.009 | 25.007 | 36.776 | 207.1 | 0.033 | 24.682 |
| 20 | 24.556 | 24.552 | 36.734 | 209.7 | 0.065 | 24.789 |
| 30 | 24.471 | 24.464 | 36.740 | 209.6 | 0.096 | 24.820 |
| 50 | 23.997 | 23.986 | 36.768 | 212.0 | 0.157 | 24.985 |
| 75 | 23.420 | 23.404 | 36.818 | 210.2 | 0.230 | 25.195 |
| 100 | 22.662 | 22.641 | 36.784 | 211.4 | 0.297 | 25.391 |
| 125 | 21.831 | 21.806 | 36.828 | 200.2 | 0.360 | 25.662 |
| 150 | 21.240 | 21.211 | 36.825 | 192.7 | 0.417 | 25.826 |
| 200 | 20.021 | 19.983 | 36.749 | 203.3 | 0.520 | 26.101 |
| 250 | 19.197 | 19.152 | 36.662 | 198.2 | 0.617 | 26.253 |
| 300 | 18.764 | 18.710 | 36.625 | 195.7 | 0.708 | 26.338 |
| 400 | 18.013 | 17.943 | 36.537 | 195.5 | 0.882 | 26.464 |
| 500 | 16.988 | 16.904 | 36.351 | 180.6 | 1.049 | 26.575 |
| 600 | 14.795 | 14.703 | 35.973 | 164.3 | 1.203 | 26.788 |
| 700 | 12.445 | 12.349 | 35.618 | 148.4 | 1.338 | 27.001 |
| 800 | 10.345 | 10.247 | 35.335 | 141.0 | 1.454 | 27.171 |
| 900 | 8.554 | 8.455 | 35.166 | 148.3 | 1.553 | 27.335 |
| 1000 | 6.929 | 6.831 | 35.079 | 175.3 | 1.635 | 27.504 |
| 1100 | 5.974 | 5.873 | 35.070 | 205.3 | 1.703 | 27.624 |
| 1200 | 5.155 | 5.051 | 35.039 | 231.6 | 1.760 | 27.700 |
| 1300 | 4.721 | 4.611 | 35.021 | 244.4 | 1.812 | 27.736 |
| 1400 | 4.461 | 4.345 | 35.007 | 250.8 | 1.862 | 27.755 |
| 1500 | 4.270 | 4.147 | 34.993 | 254.5 | 1.911 | 27.765 |
| 1750 | 3.933 | 3.790 | 34.976 | 259.7 | 2.031 | 27.789 |
| 2000 | 3.646 | 3.484 | 34.959 | 263.1 | 2.149 | 27.806 |
| 2500 | 3.221 | 3.017 | 34.952 | 261.2 | 2.380 | 27.845 |
| 3000 | 2.773 | 2.528 | 34.925 | 265.6 | 2.601 | 27.868 |
| 3500 | 2.423 | 2.133 | 34.904 | 267.3 | 2.815 | 27.884 |
| 4000 | 2.271 | 1.929 | 34.890 | 265.5 | 3.028 | 27.889 |
| 4500 | 2.246 | 1.847 | 34.884 | 263.0 | 3.249 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4356 | 1 | 2.260 | 1.877 | 34.886 | 264.0 |
| 4356 | 2 | 2.261 | 1.878 | 34.886 | 264.7 |
| 4062 | 3 | 2.265 | 1.917 | 34.890 | <i>NaN</i> |
| 3741 | 4 | 2.317 | 2.003 | 34.897 | 266.9 |
| 3440 | 5 | 2.444 | 2.159 | 34.905 | 267.5 |
| 3142 | 6 | 2.651 | 2.394 | 34.918 | 266.8 |
| 2843 | 7 | 2.912 | 2.680 | 34.933 | 264.6 |
| 2534 | 8 | 3.196 | 2.990 | 34.952 | 261.8 |
| 2286 | 9 | 3.413 | 3.226 | 34.957 | 263.1 |
| 2021 | 10 | 3.668 | 3.504 | 34.965 | 261.9 |
| 1766 | 11 | 3.986 | 3.842 | 34.983 | 258.2 |
| 1516 | 12 | 4.298 | 4.173 | 34.996 | 253.6 |
| 1266 | 13 | 4.947 | 4.838 | 35.031 | 238.1 |
| 1018 | 14 | 6.728 | 6.629 | 35.080 | 181.4 |
| 749 | 15 | 11.465 | 11.368 | 35.477 | 143.0 |
| 501 | 16 | 16.830 | 16.747 | 36.327 | 181.9 |
| 354 | 17 | 18.246 | 18.184 | 36.572 | 199.4 |
| 254 | 18 | 19.366 | 19.320 | 36.678 | 202.5 |
| 205 | 19 | 20.056 | 20.018 | 36.763 | 208.8 |
| 155 | 20 | 21.107 | 21.077 | 36.817 | 192.8 |
| 105 | 21 | 22.552 | 22.531 | 36.835 | 204.9 |
| 55 | 22 | 23.944 | 23.932 | 36.786 | 211.7 |
| 3 | 23 | 25.376 | 25.375 | 36.782 | 207.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 28 (CTD028)
 Latitude 26.504 N Longitude 73.489 W
 18–Apr–2011 18:58 Z

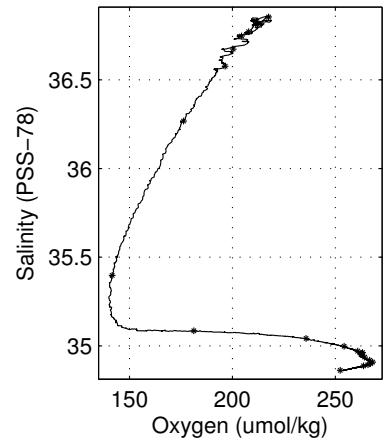
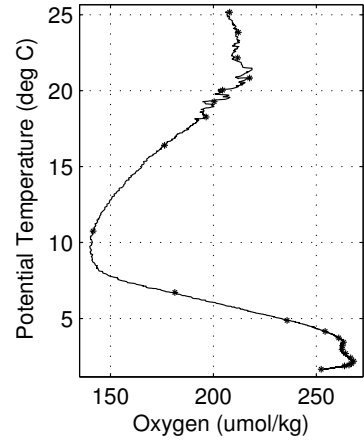
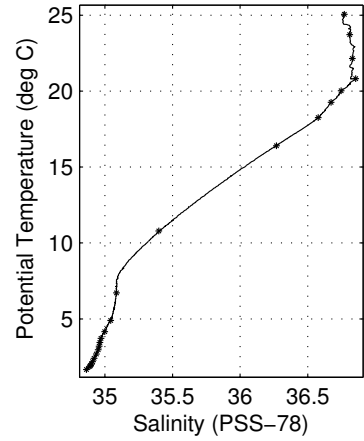
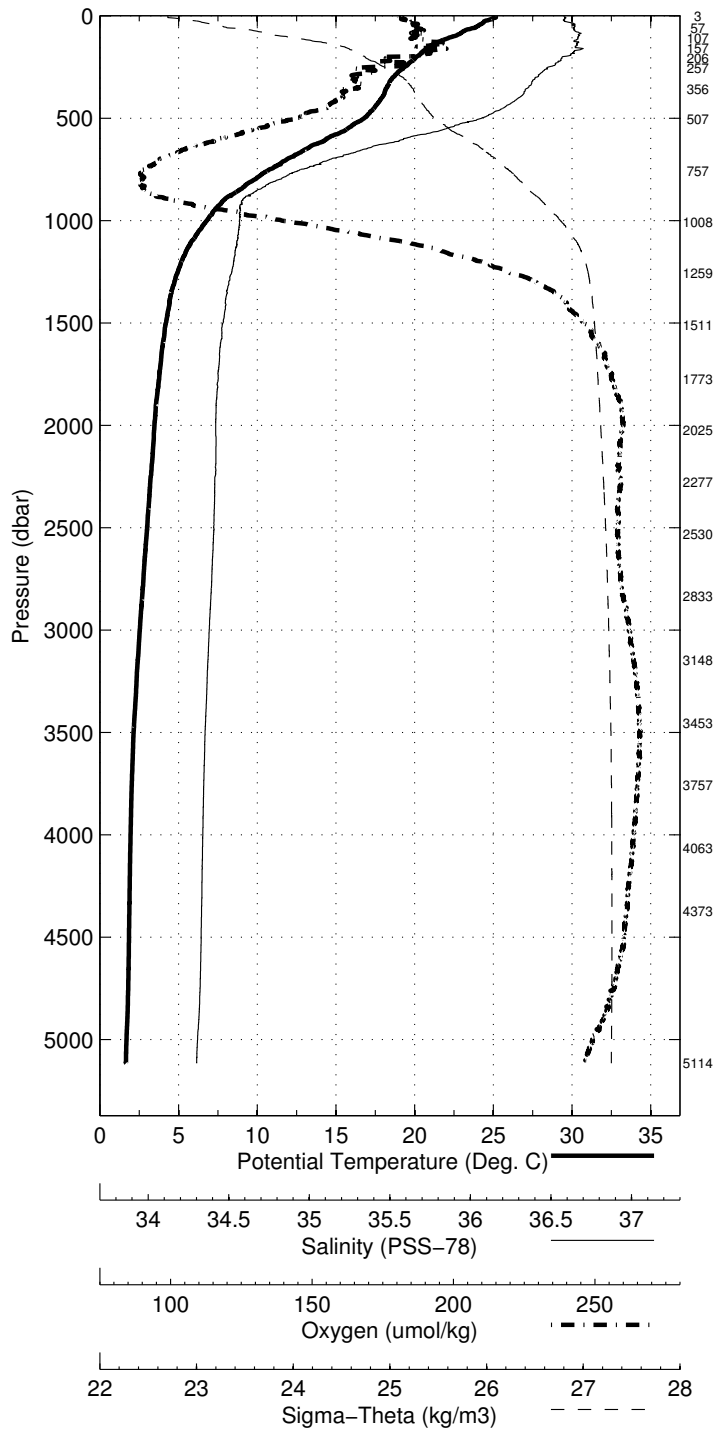


Abaco April-May 2011 R/V Knorr
 CTD Station 29 (CTD029)
 Latitude 26.497N Longitude 73.131W
 19-Apr-2011 00:06Z

| 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 | 25.165 | 25.165 | 36.765 | 206.0 | 0.003 | 24.625 |
| 10 | 25.124 | 25.122 | 36.770 | 206.8 | 0.033 | 24.642 |
| 20 | 24.730 | 24.725 | 36.757 | 207.5 | 0.065 | 24.753 |
| 30 | 24.401 | 24.395 | 36.776 | 209.2 | 0.097 | 24.868 |
| 50 | 24.033 | 24.022 | 36.817 | 211.6 | 0.157 | 25.011 |
| 75 | 23.126 | 23.111 | 36.819 | 210.6 | 0.228 | 25.282 |
| 100 | 22.518 | 22.497 | 36.835 | 209.5 | 0.294 | 25.472 |
| 125 | 21.620 | 21.595 | 36.810 | 214.1 | 0.354 | 25.708 |
| 150 | 20.918 | 20.889 | 36.818 | 210.7 | 0.410 | 25.909 |
| 200 | 20.126 | 20.089 | 36.751 | 203.5 | 0.513 | 26.075 |
| 250 | 19.383 | 19.337 | 36.680 | 199.2 | 0.611 | 26.219 |
| 300 | 18.668 | 18.615 | 36.614 | 195.0 | 0.702 | 26.354 |
| 400 | 17.974 | 17.905 | 36.525 | 191.6 | 0.876 | 26.464 |
| 500 | 16.892 | 16.808 | 36.333 | 179.7 | 1.043 | 26.584 |
| 600 | 14.497 | 14.407 | 35.931 | 160.3 | 1.195 | 26.820 |
| 700 | 11.991 | 11.897 | 35.557 | 145.3 | 1.326 | 27.041 |
| 800 | 9.920 | 9.824 | 35.286 | 140.8 | 1.437 | 27.206 |
| 900 | 7.993 | 7.897 | 35.102 | 148.4 | 1.533 | 27.369 |
| 1000 | 6.904 | 6.806 | 35.084 | 176.3 | 1.613 | 27.512 |
| 1100 | 5.933 | 5.832 | 35.070 | 206.3 | 1.680 | 27.630 |
| 1200 | 5.288 | 5.182 | 35.053 | 227.1 | 1.738 | 27.696 |
| 1300 | 4.846 | 4.736 | 35.028 | 241.0 | 1.791 | 27.728 |
| 1400 | 4.544 | 4.427 | 35.010 | 248.6 | 1.841 | 27.748 |
| 1500 | 4.325 | 4.201 | 34.998 | 253.1 | 1.891 | 27.763 |
| 1750 | 3.926 | 3.784 | 34.972 | 260.4 | 2.011 | 27.786 |
| 2000 | 3.631 | 3.469 | 34.960 | 263.2 | 2.129 | 27.809 |
| 2500 | 3.211 | 3.007 | 34.950 | 262.1 | 2.358 | 27.845 |
| 3000 | 2.783 | 2.537 | 34.927 | 264.7 | 2.580 | 27.868 |
| 3500 | 2.435 | 2.145 | 34.906 | 267.5 | 2.795 | 27.884 |
| 4000 | 2.297 | 1.955 | 34.894 | 266.0 | 3.009 | 27.890 |
| 4500 | 2.252 | 1.852 | 34.885 | 263.5 | 3.230 | 27.891 |
| 5000 | 2.154 | 1.696 | 34.867 | 255.5 | 3.462 | 27.889 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5114 | 1 | 2.133 | 1.662 | 34.863 | 252.4 |
| 4374 | 2 | 2.261 | 1.877 | 34.888 | 263.6 |
| 4063 | 3 | 2.290 | 1.941 | 34.894 | 265.9 |
| 3758 | 4 | 2.344 | 2.028 | 34.901 | 267.1 |
| 3453 | 5 | 2.472 | 2.185 | 34.909 | 268.1 |
| 3148 | 6 | 2.662 | 2.403 | 34.920 | 266.7 |
| 2834 | 7 | 2.920 | 2.688 | 34.937 | 264.2 |
| 2531 | 8 | 3.174 | 2.968 | 34.950 | 262.5 |
| 2277 | 9 | 3.389 | 3.204 | 34.958 | 262.7 |
| 2025 | 10 | 3.607 | 3.443 | 34.962 | 263.2 |
| 1773 | 11 | 3.866 | 3.722 | 34.971 | 260.9 |
| 1511 | 12 | 4.287 | 4.162 | 34.998 | 254.2 |
| 1259 | 13 | 5.011 | 4.902 | 35.042 | 235.8 |
| 1008 | 14 | 6.811 | 6.712 | 35.085 | 181.3 |
| 757 | 15 | 10.882 | 10.786 | 35.398 | 141.6 |
| 507 | 16 | 16.482 | 16.398 | 36.268 | 176.3 |
| 357 | 17 | 18.316 | 18.253 | 36.577 | 196.5 |
| 257 | 18 | 19.303 | 19.257 | 36.673 | 200.3 |
| 207 | 19 | 20.063 | 20.025 | 36.747 | 204.5 |
| 157 | 20 | 20.853 | 20.823 | 36.854 | 217.6 |
| 107 | 21 | 22.175 | 22.153 | 36.830 | 211.8 |
| 57 | 22 | 23.734 | 23.722 | 36.811 | 212.2 |
| 3 | 23 | 25.064 | 25.063 | 36.770 | 207.9 |

Abaco April–May 2011 R/V Knorr
 CTD Station 29 (CTD029)
 Latitude 26.497 N Longitude 73.131 W
 19–Apr–2011 00:06 Z

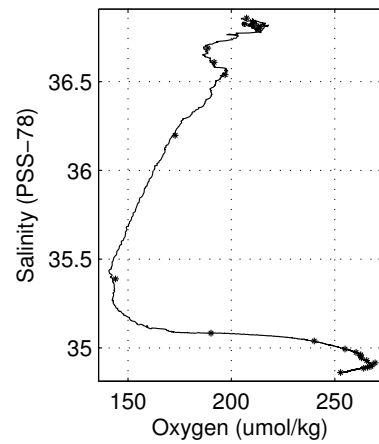
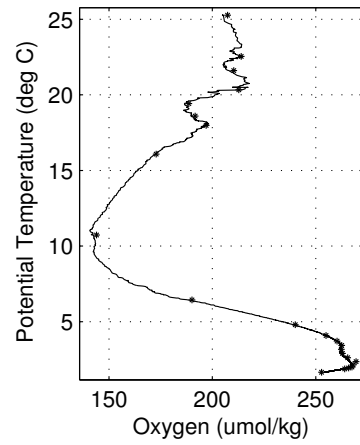
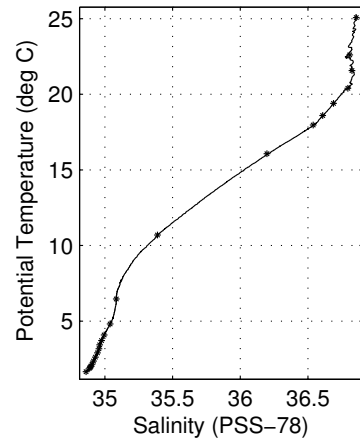
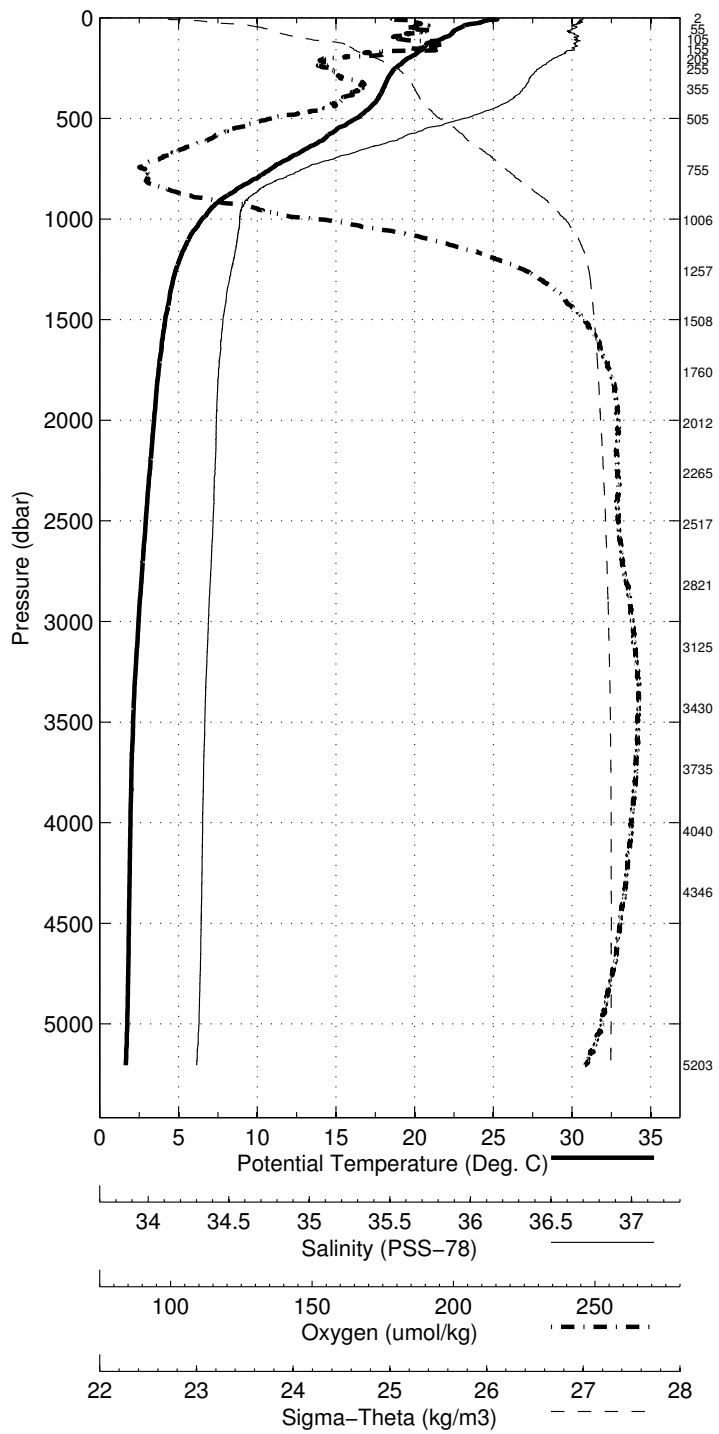


Abaco April-May 2011 R/V Knorr
 CTD Station 30 (CTD030)
 Latitude 26.501N Longitude 72.769W
 19-Apr-2011 05:34Z

| 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 | 25.268 | 25.268 | 36.855 | 204.7 | 0.003 | 24.662 |
| 10 | 24.859 | 24.857 | 36.851 | 205.9 | 0.033 | 24.784 |
| 20 | 24.336 | 24.332 | 36.846 | 211.0 | 0.063 | 24.940 |
| 30 | 23.580 | 23.574 | 36.826 | 211.9 | 0.092 | 25.151 |
| 50 | 22.888 | 22.877 | 36.820 | 208.5 | 0.147 | 25.350 |
| 75 | 22.432 | 22.417 | 36.798 | 211.7 | 0.211 | 25.467 |
| 100 | 21.855 | 21.835 | 36.825 | 205.6 | 0.273 | 25.652 |
| 125 | 20.869 | 20.845 | 36.817 | 216.0 | 0.329 | 25.920 |
| 150 | 20.534 | 20.506 | 36.800 | 210.4 | 0.381 | 26.000 |
| 200 | 19.641 | 19.605 | 36.711 | 189.5 | 0.481 | 26.172 |
| 250 | 18.846 | 18.801 | 36.632 | 189.9 | 0.574 | 26.320 |
| 300 | 18.363 | 18.310 | 36.581 | 191.7 | 0.661 | 26.406 |
| 400 | 17.769 | 17.700 | 36.498 | 192.6 | 0.831 | 26.494 |
| 500 | 16.364 | 16.282 | 36.245 | 174.3 | 0.994 | 26.640 |
| 600 | 14.373 | 14.282 | 35.910 | 158.8 | 1.141 | 26.831 |
| 700 | 12.106 | 12.012 | 35.570 | 145.9 | 1.272 | 27.030 |
| 800 | 9.943 | 9.847 | 35.297 | 143.0 | 1.384 | 27.210 |
| 900 | 7.851 | 7.756 | 35.124 | 157.9 | 1.477 | 27.408 |
| 1000 | 6.578 | 6.482 | 35.084 | 184.9 | 1.553 | 27.556 |
| 1100 | 5.753 | 5.654 | 35.071 | 214.3 | 1.616 | 27.653 |
| 1200 | 5.182 | 5.078 | 35.053 | 231.4 | 1.672 | 27.708 |
| 1300 | 4.774 | 4.664 | 35.031 | 242.4 | 1.724 | 27.739 |
| 1400 | 4.536 | 4.419 | 35.014 | 248.5 | 1.774 | 27.752 |
| 1500 | 4.277 | 4.153 | 34.998 | 253.9 | 1.823 | 27.768 |
| 1750 | 3.879 | 3.737 | 34.975 | 260.1 | 1.941 | 27.793 |
| 2000 | 3.612 | 3.450 | 34.964 | 262.3 | 2.058 | 27.813 |
| 2500 | 3.123 | 2.921 | 34.946 | 262.2 | 2.282 | 27.850 |
| 3000 | 2.707 | 2.462 | 34.922 | 265.8 | 2.500 | 27.871 |
| 3500 | 2.402 | 2.112 | 34.904 | 267.2 | 2.711 | 27.885 |
| 4000 | 2.286 | 1.944 | 34.893 | 265.6 | 2.924 | 27.890 |
| 4500 | 2.250 | 1.850 | 34.885 | 262.6 | 3.146 | 27.891 |
| 5000 | 2.210 | 1.751 | 34.874 | 258.1 | 3.377 | 27.890 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5204 | 1 | 2.141 | 1.658 | 34.861 | 252.8 |
| 4346 | 2 | 2.266 | 1.885 | 34.886 | 264.0 |
| 4041 | 3 | 2.289 | 1.942 | 34.891 | 265.9 |
| 3735 | 4 | 2.323 | 2.009 | 34.895 | 267.5 |
| 3430 | 5 | 2.427 | 2.144 | 34.904 | 268.1 |
| 3125 | 6 | 2.612 | 2.357 | 34.915 | 269.5 |
| 2821 | 7 | 2.849 | 2.620 | 34.929 | 265.5 |
| 2518 | 8 | 3.104 | 2.900 | 34.944 | 263.0 |
| 2265 | 9 | 3.356 | 3.173 | 34.955 | 262.4 |
| 2013 | 10 | 3.591 | 3.428 | 34.961 | 262.6 |
| 1761 | 11 | 3.859 | 3.716 | 34.975 | 260.4 |
| 1509 | 12 | 4.211 | 4.088 | 34.994 | 255.0 |
| 1257 | 13 | 4.913 | 4.805 | 35.039 | 240.1 |
| 1006 | 14 | 6.558 | 6.462 | 35.083 | 190.2 |
| 755 | 15 | 10.784 | 10.689 | 35.388 | 144.0 |
| 505 | 16 | 16.155 | 16.073 | 36.197 | 172.8 |
| 355 | 17 | 18.031 | 17.969 | 36.538 | 197.0 |
| 255 | 18 | 18.645 | 18.600 | 36.609 | 191.6 |
| 205 | 19 | 19.434 | 19.397 | 36.689 | 188.7 |
| 155 | 20 | 20.428 | 20.398 | 36.795 | 212.8 |
| 105 | 21 | 21.594 | 21.573 | 36.825 | 210.4 |
| 55 | 22 | 22.615 | 22.603 | 36.809 | 214.0 |
| 2 | 23 | 25.076 | 25.075 | 36.858 | 207.4 |

Abaco April–May 2011 R/V Knorr
 CTD Station 30 (CTD030)
 Latitude 26.501 N Longitude 72.769 W
 19–Apr–2011 05:34 Z

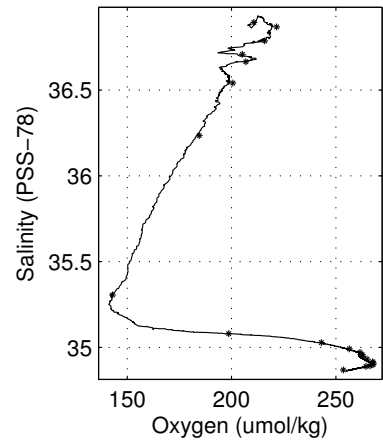
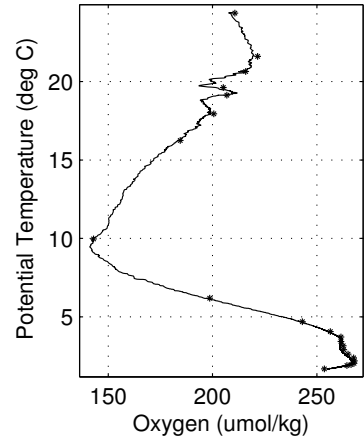
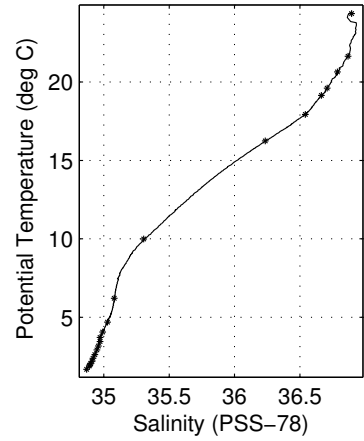
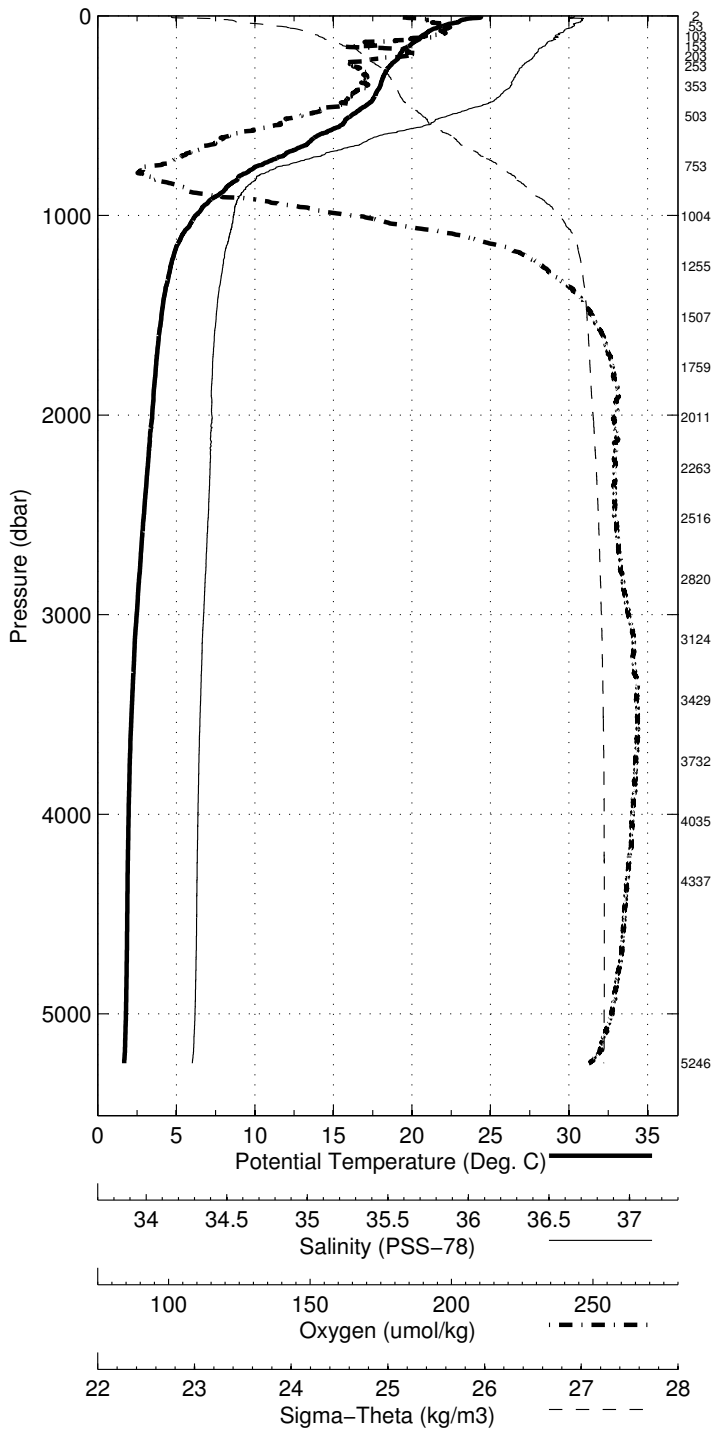


Abaco April-May 2011 R/V Knorr
 CTD Station 31 (CTD031)
 Latitude 26.497N Longitude 72.388W
 19-Apr-2011 11:05Z

| 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 | 24.405 | 24.405 | 36.887 | 208.7 | 0.003 | 24.949 |
| 10 | 24.285 | 24.283 | 36.869 | 208.9 | 0.030 | 24.972 |
| 20 | 23.205 | 23.201 | 36.924 | 214.6 | 0.057 | 25.335 |
| 30 | 23.012 | 23.005 | 36.920 | 215.3 | 0.083 | 25.389 |
| 50 | 22.034 | 22.024 | 36.885 | 218.7 | 0.133 | 25.644 |
| 75 | 21.119 | 21.105 | 36.830 | 217.4 | 0.189 | 25.859 |
| 100 | 20.676 | 20.657 | 36.785 | 213.3 | 0.242 | 25.947 |
| 125 | 20.323 | 20.299 | 36.769 | 205.9 | 0.293 | 26.032 |
| 150 | 19.913 | 19.885 | 36.732 | 200.3 | 0.343 | 26.114 |
| 200 | 19.239 | 19.203 | 36.673 | 209.1 | 0.436 | 26.248 |
| 250 | 18.646 | 18.601 | 36.610 | 196.0 | 0.526 | 26.354 |
| 300 | 18.261 | 18.208 | 36.574 | 198.9 | 0.613 | 26.426 |
| 400 | 17.725 | 17.656 | 36.493 | 195.4 | 0.782 | 26.502 |
| 500 | 16.208 | 16.127 | 36.217 | 182.5 | 0.944 | 26.655 |
| 600 | 14.073 | 13.984 | 35.854 | 164.3 | 1.092 | 26.851 |
| 700 | 11.923 | 11.830 | 35.550 | 152.3 | 1.221 | 27.049 |
| 800 | 9.182 | 9.091 | 35.213 | 143.0 | 1.328 | 27.271 |
| 900 | 7.728 | 7.634 | 35.119 | 160.7 | 1.418 | 27.422 |
| 1000 | 6.339 | 6.245 | 35.083 | 194.9 | 1.490 | 27.586 |
| 1100 | 5.455 | 5.358 | 35.060 | 222.7 | 1.550 | 27.680 |
| 1200 | 4.932 | 4.830 | 35.035 | 238.7 | 1.603 | 27.722 |
| 1300 | 4.624 | 4.515 | 35.018 | 246.2 | 1.653 | 27.745 |
| 1400 | 4.358 | 4.243 | 35.002 | 252.2 | 1.702 | 27.762 |
| 1500 | 4.179 | 4.057 | 34.991 | 255.5 | 1.749 | 27.773 |
| 1750 | 3.852 | 3.711 | 34.971 | 260.5 | 1.867 | 27.793 |
| 2000 | 3.627 | 3.465 | 34.967 | 261.6 | 1.983 | 27.815 |
| 2500 | 3.134 | 2.931 | 34.949 | 261.2 | 2.208 | 27.851 |
| 3000 | 2.720 | 2.475 | 34.924 | 264.8 | 2.426 | 27.871 |
| 3500 | 2.434 | 2.144 | 34.905 | 267.1 | 2.638 | 27.884 |
| 4000 | 2.304 | 1.962 | 34.894 | 265.8 | 2.853 | 27.890 |
| 4500 | 2.275 | 1.874 | 34.887 | 263.8 | 3.075 | 27.891 |
| 5000 | 2.251 | 1.790 | 34.878 | 260.4 | 3.309 | 27.890 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5247 | 1 | 2.169 | 1.679 | 34.869 | 253.6 |
| 4338 | 2 | 2.279 | 1.898 | 34.889 | 264.4 |
| 4035 | 3 | 2.303 | 1.956 | 34.893 | 266.4 |
| 3733 | 4 | 2.354 | 2.039 | 34.899 | 267.8 |
| 3429 | 5 | 2.478 | 2.194 | 34.909 | 268.0 |
| 3125 | 6 | 2.639 | 2.384 | 34.917 | 267.6 |
| 2820 | 7 | 2.853 | 2.624 | 34.932 | 264.9 |
| 2516 | 8 | 3.115 | 2.911 | 34.948 | 262.9 |
| 2264 | 9 | 3.349 | 3.166 | 34.958 | 262.6 |
| 2011 | 10 | 3.613 | 3.450 | 34.971 | 261.5 |
| 1759 | 11 | 3.853 | 3.711 | 34.971 | 261.5 |
| 1507 | 12 | 4.186 | 4.062 | 34.991 | 256.5 |
| 1256 | 13 | 4.797 | 4.691 | 35.028 | 243.1 |
| 1004 | 14 | 6.302 | 6.207 | 35.080 | 198.6 |
| 754 | 15 | 10.076 | 9.985 | 35.305 | 143.0 |
| 503 | 16 | 16.322 | 16.240 | 36.235 | 184.5 |
| 353 | 17 | 17.998 | 17.936 | 36.542 | 200.6 |
| 253 | 18 | 18.531 | 18.773 | -999.000 | <i>NaN</i> |
| 203 | 19 | 19.183 | 19.146 | 36.665 | 206.9 |
| 153 | 20 | 19.633 | 19.605 | 36.709 | 205.2 |
| 104 | 21 | 20.664 | 20.645 | 36.787 | 215.9 |
| 54 | 22 | 21.647 | 21.636 | 36.869 | 221.6 |
| 3 | 23 | 24.369 | 24.368 | 36.895 | 210.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 31 (CTD031)
 Latitude 26.497 N Longitude 72.388 W
 19–Apr–2011 11:05 Z

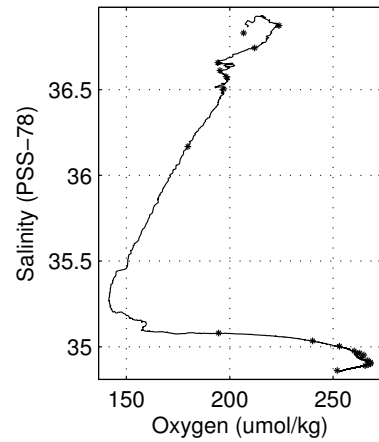
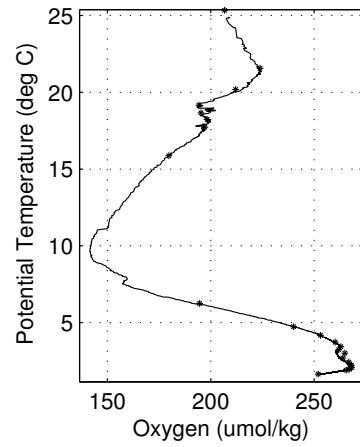
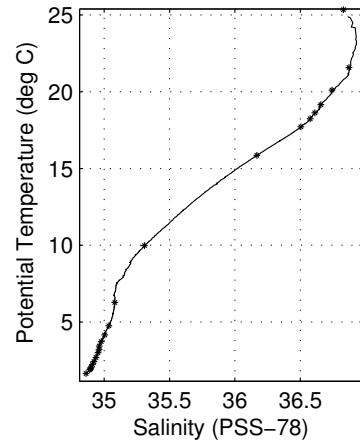
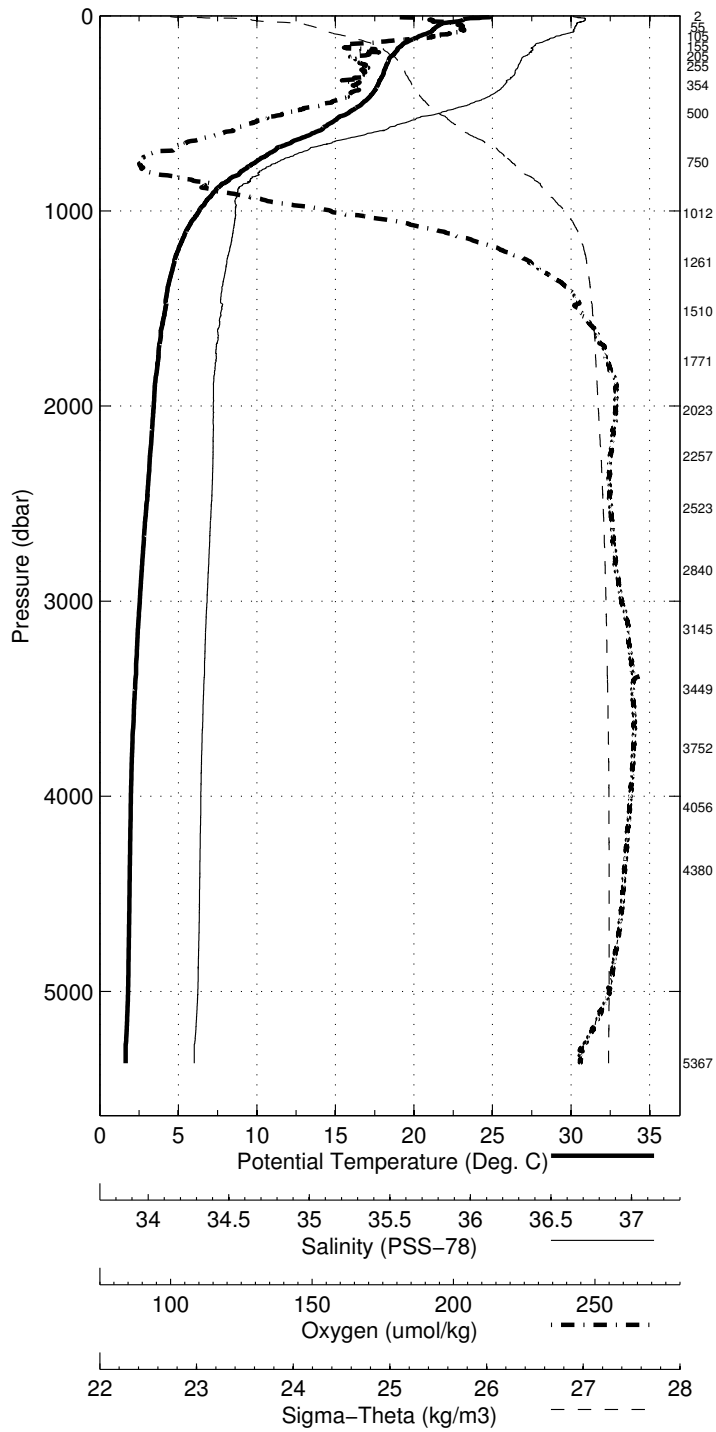


Abaco April-May 2011 R/V Knorr
 CTD Station 32 (CTD032)
 Latitude 26.510N Longitude 71.996W
 19-Apr-2011 16:58Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 24.884 | 24.883 | 36.867 | 208.4 | 0.003 | 24.789 |
| 10 | 24.201 | 24.199 | 36.900 | 212.0 | 0.031 | 25.021 |
| 20 | 23.141 | 23.137 | 36.929 | 215.6 | 0.058 | 25.358 |
| 30 | 22.627 | 22.621 | 36.910 | 217.8 | 0.083 | 25.493 |
| 50 | 21.582 | 21.572 | 36.881 | 223.5 | 0.130 | 25.768 |
| 75 | 21.184 | 21.170 | 36.866 | 223.9 | 0.184 | 25.869 |
| 100 | 20.522 | 20.503 | 36.802 | 218.1 | 0.237 | 26.002 |
| 125 | 19.787 | 19.763 | 36.725 | 207.2 | 0.286 | 26.141 |
| 150 | 19.282 | 19.255 | 36.665 | 194.5 | 0.333 | 26.228 |
| 200 | 18.704 | 18.669 | 36.624 | 199.4 | 0.422 | 26.348 |
| 250 | 18.300 | 18.256 | 36.578 | 198.8 | 0.508 | 26.417 |
| 300 | 18.097 | 18.045 | 36.555 | 198.7 | 0.592 | 26.453 |
| 400 | 17.415 | 17.347 | 36.444 | 194.9 | 0.758 | 26.539 |
| 500 | 15.855 | 15.775 | 36.153 | 179.0 | 0.916 | 26.687 |
| 600 | 13.729 | 13.641 | 35.800 | 163.0 | 1.059 | 26.881 |
| 700 | 10.999 | 10.910 | 35.428 | 145.0 | 1.181 | 27.125 |
| 800 | 9.079 | 8.988 | 35.204 | 143.9 | 1.284 | 27.280 |
| 900 | 7.417 | 7.326 | 35.091 | 161.3 | 1.370 | 27.445 |
| 1000 | 6.413 | 6.318 | 35.077 | 190.2 | 1.442 | 27.573 |
| 1100 | 5.613 | 5.514 | 35.067 | 217.2 | 1.504 | 27.667 |
| 1200 | 5.105 | 5.001 | 35.048 | 233.4 | 1.558 | 27.713 |
| 1300 | 4.735 | 4.625 | 35.026 | 243.4 | 1.610 | 27.739 |
| 1400 | 4.435 | 4.319 | 35.008 | 250.7 | 1.659 | 27.758 |
| 1500 | 4.304 | 4.180 | 35.006 | 252.8 | 1.707 | 27.772 |
| 1750 | 3.876 | 3.734 | 34.977 | 259.8 | 1.825 | 27.795 |
| 2000 | 3.593 | 3.432 | 34.961 | 262.5 | 1.941 | 27.813 |
| 2500 | 3.182 | 2.979 | 34.951 | 260.9 | 2.167 | 27.848 |
| 3000 | 2.795 | 2.549 | 34.928 | 263.9 | 2.387 | 27.868 |
| 3500 | 2.500 | 2.207 | 34.909 | 266.5 | 2.604 | 27.882 |
| 4000 | 2.322 | 1.979 | 34.895 | 266.2 | 2.821 | 27.889 |
| 4500 | 2.289 | 1.889 | 34.888 | 264.2 | 3.044 | 27.891 |
| 5000 | 2.260 | 1.799 | 34.879 | 260.7 | 3.279 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5367 | 1 | 2.156 | 1.652 | 34.862 | 252.0 |
| 4380 | 2 | 2.297 | 1.910 | 34.890 | 265.5 |
| 4056 | 3 | 2.322 | 1.972 | 34.895 | 267.0 |
| 3753 | 4 | 2.386 | 2.069 | 34.901 | 268.1 |
| 3450 | 5 | 2.521 | 2.233 | 34.910 | 268.0 |
| 3145 | 6 | 2.690 | 2.431 | 34.921 | 266.8 |
| 2841 | 7 | 2.930 | 2.698 | 34.937 | 263.8 |
| 2524 | 8 | 3.218 | 3.012 | 34.953 | 264.8 |
| 2257 | 9 | 3.417 | 3.233 | 34.961 | 261.9 |
| 2023 | 10 | 3.597 | 3.433 | 34.963 | 262.9 |
| 1772 | 11 | 3.869 | 3.725 | 34.976 | 260.2 |
| 1511 | 12 | 4.285 | 4.161 | 35.003 | 253.1 |
| 1261 | 13 | 4.864 | 4.756 | 35.035 | 240.0 |
| 1012 | 14 | 6.371 | 6.275 | 35.081 | 194.6 |
| 750 | 15 | 10.072 | 9.982 | 35.308 | <i>NaN</i> |
| 501 | 16 | 15.937 | 15.856 | 36.168 | 179.8 |
| 354 | 17 | 17.781 | 17.720 | 36.504 | 197.2 |
| 255 | 18 | 18.278 | 18.233 | 36.576 | 198.3 |
| 206 | 19 | 18.662 | 18.625 | 36.611 | 195.3 |
| 156 | 20 | 19.194 | 19.166 | 36.657 | 194.3 |
| 106 | 21 | 20.122 | 20.102 | 36.743 | 212.1 |
| 56 | 22 | 21.589 | 21.578 | 36.873 | 223.8 |
| 2 | 23 | 25.342 | 25.342 | 36.830 | 206.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 32 (CTD032)
 Latitude 26.510 N Longitude 71.996 W
 19–Apr–2011 16:58 Z

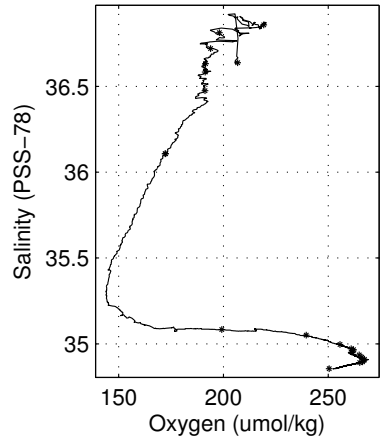
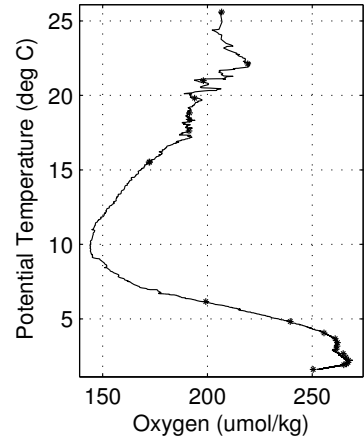
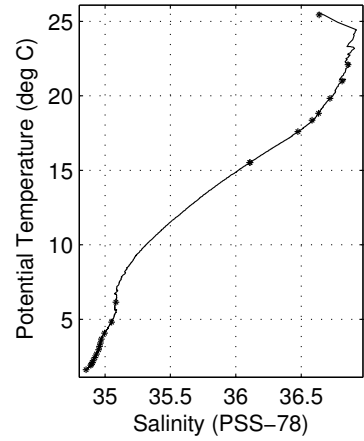
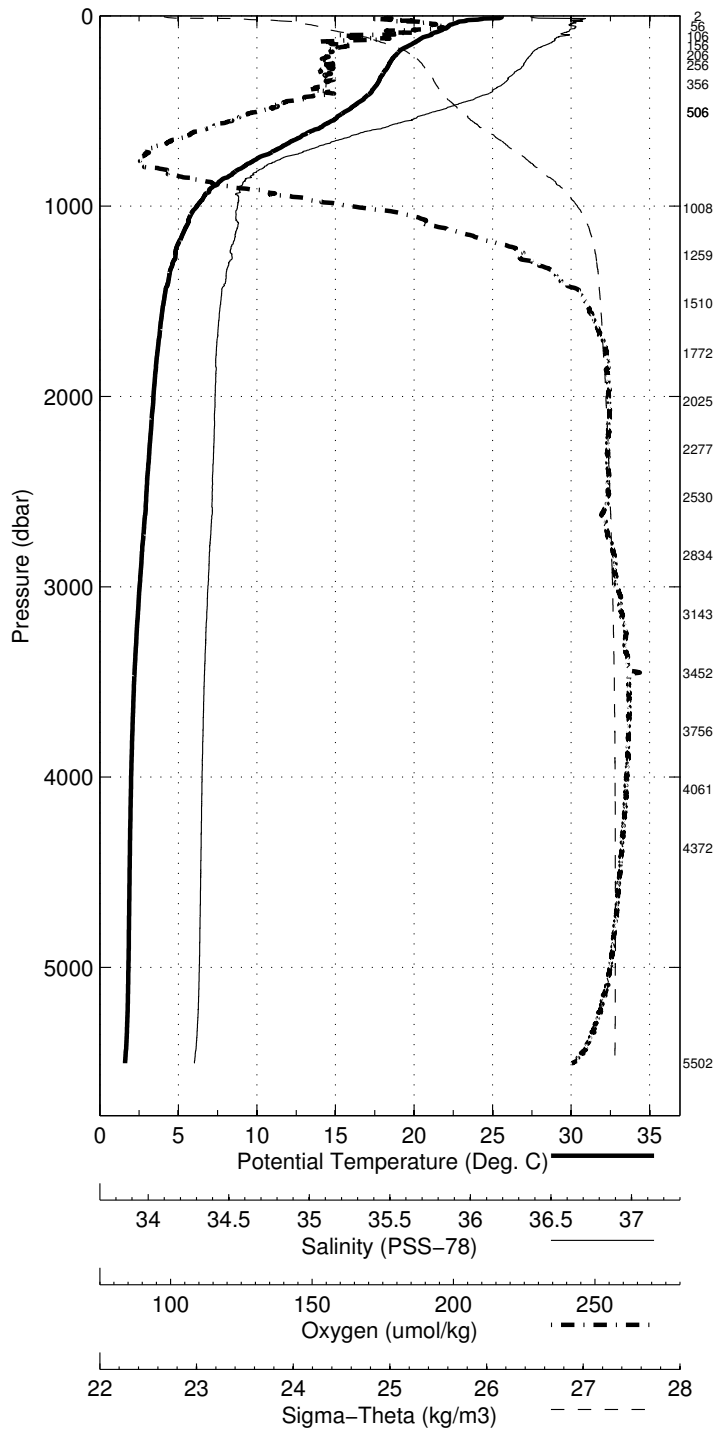


Abaco April-May 2011 R/V Knorr
 CTD Station 33 (CTD033)
 Latitude 26.502N Longitude 71.502W
 19-Apr-2011 23:16Z

| 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 | 25.597 | 25.597 | 36.634 | 205.7 | 0.004 | 24.393 |
| 10 | 25.504 | 25.502 | 36.657 | 206.2 | 0.035 | 24.440 |
| 20 | 24.066 | 24.062 | 36.905 | 206.9 | 0.066 | 25.066 |
| 30 | 22.902 | 22.896 | 36.877 | 212.7 | 0.093 | 25.388 |
| 50 | 22.247 | 22.237 | 36.840 | 218.1 | 0.143 | 25.550 |
| 75 | 21.802 | 21.787 | 36.840 | 213.2 | 0.203 | 25.677 |
| 100 | 21.125 | 21.106 | 36.839 | 198.9 | 0.259 | 25.866 |
| 125 | 20.358 | 20.334 | 36.759 | 204.2 | 0.311 | 26.015 |
| 150 | 19.855 | 19.828 | 36.721 | 194.6 | 0.361 | 26.121 |
| 200 | 18.935 | 18.899 | 36.637 | 190.7 | 0.454 | 26.299 |
| 250 | 18.471 | 18.426 | 36.597 | 192.4 | 0.542 | 26.389 |
| 300 | 18.105 | 18.053 | 36.546 | 191.1 | 0.627 | 26.444 |
| 400 | 17.366 | 17.298 | 36.429 | 190.9 | 0.793 | 26.539 |
| 500 | 15.764 | 15.685 | 36.136 | 173.6 | 0.951 | 26.694 |
| 600 | 13.710 | 13.623 | 35.793 | 159.3 | 1.094 | 26.880 |
| 700 | 11.399 | 11.308 | 35.473 | 146.5 | 1.219 | 27.087 |
| 800 | 9.114 | 9.023 | 35.217 | 148.6 | 1.323 | 27.285 |
| 900 | 7.261 | 7.171 | 35.089 | 167.5 | 1.409 | 27.465 |
| 1000 | 6.260 | 6.166 | 35.082 | 197.0 | 1.478 | 27.596 |
| 1100 | 5.649 | 5.550 | 35.085 | 217.0 | 1.538 | 27.677 |
| 1200 | 5.070 | 4.967 | 35.058 | 234.4 | 1.592 | 27.725 |
| 1300 | 4.747 | 4.637 | 35.037 | 243.6 | 1.642 | 27.747 |
| 1400 | 4.465 | 4.349 | 35.019 | 249.8 | 1.691 | 27.764 |
| 1500 | 4.192 | 4.070 | 34.994 | 255.5 | 1.739 | 27.774 |
| 1750 | 3.836 | 3.694 | 34.972 | 260.6 | 1.856 | 27.795 |
| 2000 | 3.574 | 3.413 | 34.964 | 261.4 | 1.971 | 27.817 |
| 2500 | 3.175 | 2.971 | 34.949 | 261.4 | 2.196 | 27.847 |
| 3000 | 2.775 | 2.529 | 34.926 | 263.7 | 2.417 | 27.868 |
| 3500 | 2.472 | 2.180 | 34.907 | 266.4 | 2.633 | 27.882 |
| 4000 | 2.336 | 1.992 | 34.895 | 265.9 | 2.850 | 27.888 |
| 4500 | 2.297 | 1.896 | 34.888 | 264.3 | 3.074 | 27.890 |
| 5000 | 2.283 | 1.821 | 34.881 | 261.7 | 3.310 | 27.890 |
| 5500 | 2.129 | 1.608 | 34.855 | 252.6 | 3.555 | 27.886 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5502 | 1 | 2.131 | 1.610 | 34.855 | 250.5 |
| 4373 | 2 | 2.306 | 1.920 | 34.890 | 265.1 |
| 4062 | 3 | 2.336 | 1.985 | 34.896 | 266.4 |
| 3757 | 4 | 2.405 | 2.087 | 34.903 | 267.2 |
| 3452 | 5 | 2.502 | 2.214 | 34.909 | 267.2 |
| 3143 | 6 | 2.689 | 2.430 | 34.922 | 266.1 |
| 2834 | 7 | 2.899 | 2.668 | 34.935 | 264.8 |
| 2530 | 8 | 3.163 | 2.957 | 34.951 | 261.4 |
| 2277 | 9 | 3.362 | 3.177 | 34.958 | 261.9 |
| 2025 | 10 | 3.570 | 3.406 | 34.965 | 262.0 |
| 1773 | 11 | 3.811 | 3.668 | 34.971 | 260.9 |
| 1511 | 12 | 4.196 | 4.073 | 34.997 | 255.6 |
| 1259 | 13 | 4.915 | 4.807 | 35.051 | 239.6 |
| 1008 | 14 | 6.243 | 6.148 | 35.083 | 199.2 |
| 507 | 15 | 15.603 | 15.523 | 36.107 | 172.5 |
| 507 | 16 | 15.604 | 15.524 | 36.108 | 172.2 |
| 357 | 17 | 17.668 | 17.606 | 36.475 | 191.2 |
| 257 | 18 | 18.406 | 18.361 | 36.584 | 191.3 |
| 207 | 19 | 18.861 | 18.824 | 36.633 | 191.5 |
| 157 | 20 | 19.857 | 19.828 | 36.720 | 193.9 |
| 107 | 21 | 21.022 | 21.001 | 36.813 | 198.1 |
| 57 | 22 | 22.107 | 22.096 | 36.859 | 219.3 |
| 3 | 23 | 25.441 | 25.440 | 36.637 | 206.8 |

Abaco April–May 2011 R/V Knorr
 CTD Station 33 (CTD033)
 Latitude 26.502 N Longitude 71.502 W
 19–Apr–2011 23:16 Z

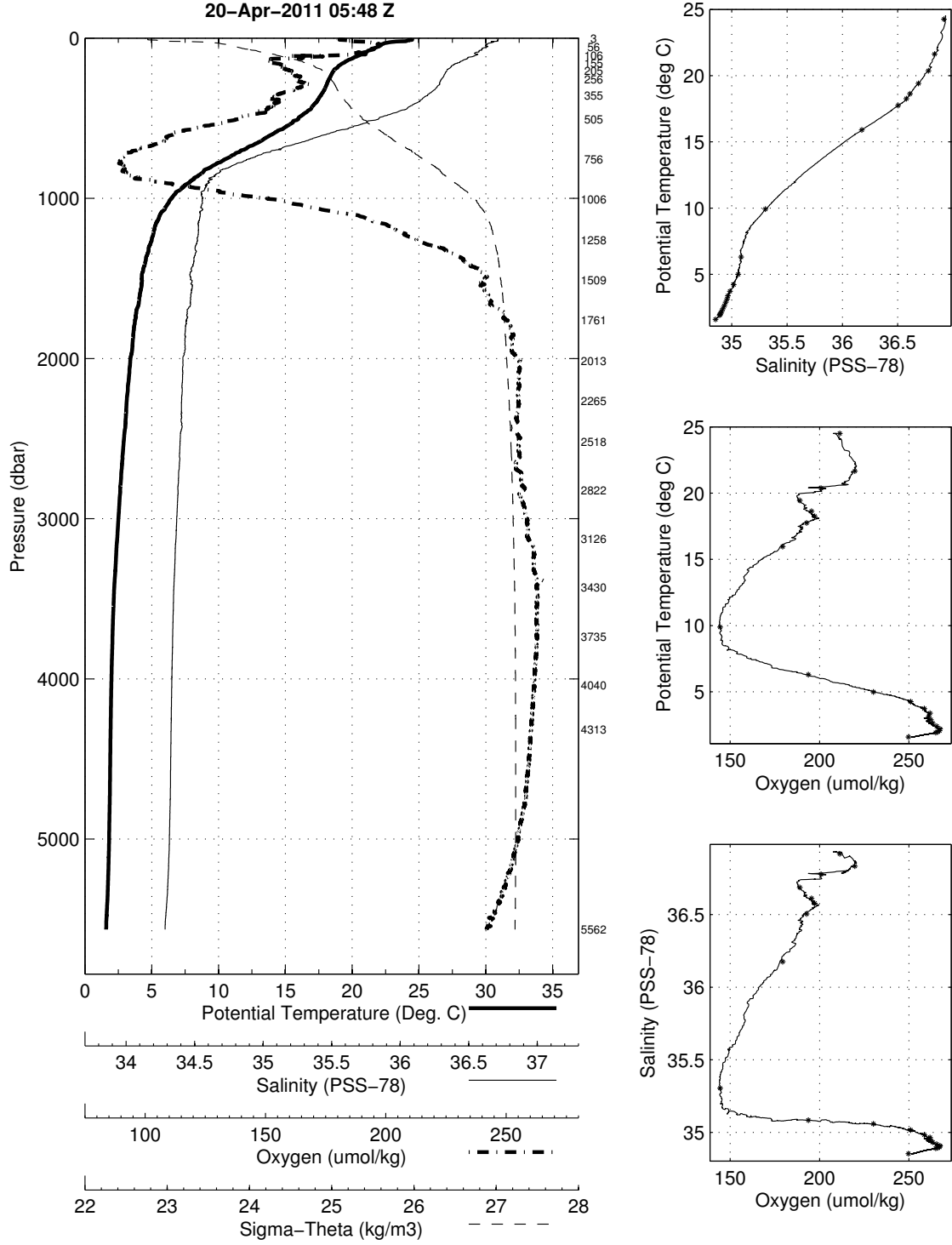


Abaco April-May 2011 R/V Knorr
 CTD Station 34 (CTD034)
 Latitude 26.502N Longitude 71.002W
 20-Apr-2011 05:48Z

| 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 | 24.502 | 24.502 | 36.933 | 208.0 | 0.003 | 24.954 |
| 10 | 24.502 | 24.500 | 36.933 | 208.4 | 0.030 | 24.955 |
| 20 | 23.545 | 23.541 | 36.914 | 212.7 | 0.059 | 25.228 |
| 30 | 22.497 | 22.491 | 36.881 | 218.7 | 0.084 | 25.508 |
| 50 | 21.941 | 21.931 | 36.862 | 219.6 | 0.133 | 25.653 |
| 75 | 21.389 | 21.374 | 36.829 | 217.8 | 0.190 | 25.784 |
| 100 | 20.684 | 20.665 | 36.795 | 214.0 | 0.244 | 25.952 |
| 125 | 20.086 | 20.063 | 36.744 | 197.5 | 0.294 | 26.076 |
| 150 | 19.488 | 19.460 | 36.694 | 188.1 | 0.342 | 26.197 |
| 200 | 18.686 | 18.650 | 36.614 | 193.5 | 0.432 | 26.345 |
| 250 | 18.347 | 18.303 | 36.583 | 197.1 | 0.518 | 26.409 |
| 300 | 18.087 | 18.035 | 36.554 | 197.8 | 0.603 | 26.454 |
| 400 | 17.387 | 17.319 | 36.433 | 190.7 | 0.769 | 26.538 |
| 500 | 16.072 | 15.991 | 36.190 | 178.8 | 0.928 | 26.665 |
| 600 | 14.118 | 14.029 | 35.862 | 160.0 | 1.074 | 26.847 |
| 700 | 11.813 | 11.720 | 35.538 | 148.9 | 1.203 | 27.061 |
| 800 | 9.601 | 9.507 | 35.265 | 144.2 | 1.313 | 27.243 |
| 900 | 7.949 | 7.854 | 35.130 | 155.8 | 1.405 | 27.398 |
| 1000 | 6.549 | 6.453 | 35.085 | 187.4 | 1.481 | 27.561 |
| 1100 | 5.728 | 5.628 | 35.072 | 212.0 | 1.544 | 27.657 |
| 1200 | 5.268 | 5.163 | 35.061 | 225.6 | 1.600 | 27.704 |
| 1300 | 4.911 | 4.799 | 35.041 | 236.6 | 1.653 | 27.731 |
| 1400 | 4.630 | 4.512 | 35.032 | 245.6 | 1.704 | 27.756 |
| 1500 | 4.383 | 4.259 | 35.015 | 251.1 | 1.753 | 27.770 |
| 1750 | 3.941 | 3.798 | 34.992 | 256.7 | 1.871 | 27.801 |
| 2000 | 3.566 | 3.405 | 34.964 | 261.2 | 1.986 | 27.818 |
| 2500 | 3.125 | 2.923 | 34.948 | 261.3 | 2.209 | 27.851 |
| 3000 | 2.747 | 2.502 | 34.926 | 263.6 | 2.427 | 27.870 |
| 3500 | 2.451 | 2.160 | 34.906 | 266.7 | 2.641 | 27.883 |
| 4000 | 2.329 | 1.986 | 34.895 | 265.8 | 2.857 | 27.889 |
| 4500 | 2.295 | 1.894 | 34.888 | 264.2 | 3.081 | 27.891 |
| 5000 | 2.270 | 1.809 | 34.880 | 261.0 | 3.316 | 27.891 |
| 5500 | 2.128 | 1.607 | 34.856 | 253.2 | 3.559 | 27.886 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5563 | 1 | 2.121 | 1.593 | 34.854 | 249.7 |
| 4313 | 2 | 2.302 | 1.923 | 34.890 | 265.0 |
| 4041 | 3 | 2.320 | 1.972 | 34.894 | 266.1 |
| 3736 | 4 | 2.379 | 2.064 | 34.900 | 267.2 |
| 3431 | 5 | 2.479 | 2.195 | 34.908 | 267.4 |
| 3127 | 6 | 2.660 | 2.404 | 34.919 | 265.6 |
| 2822 | 7 | 2.852 | 2.622 | 34.933 | 263.4 |
| 2519 | 8 | 3.098 | 2.895 | 34.946 | 262.3 |
| 2266 | 9 | 3.327 | 3.144 | 34.958 | 261.1 |
| 2014 | 10 | 3.549 | 3.387 | 34.965 | 261.8 |
| 1761 | 11 | 3.858 | 3.716 | 34.984 | 258.6 |
| 1509 | 12 | 4.348 | 4.222 | 35.017 | 251.0 |
| 1258 | 13 | 5.114 | 5.005 | 35.059 | 230.1 |
| 1007 | 14 | 6.402 | 6.307 | 35.084 | 193.8 |
| 757 | 15 | 10.012 | 9.922 | 35.304 | 144.4 |
| 506 | 16 | 15.987 | 15.906 | 36.175 | 179.3 |
| 356 | 17 | 17.808 | 17.746 | 36.504 | 192.8 |
| 256 | 18 | 18.307 | 18.262 | 36.578 | 197.3 |
| 206 | 19 | 18.669 | 18.633 | 36.612 | 195.5 |
| 155 | 20 | 19.446 | 19.418 | 36.686 | 188.9 |
| 106 | 21 | 20.386 | 20.366 | 36.778 | 200.9 |
| 56 | 22 | 21.640 | 21.629 | 36.833 | 219.8 |
| 3 | 23 | 24.269 | 24.268 | 36.918 | 211.3 |

Abaco April–May 2011 R/V Knorr
 CTD Station 34 (CTD034)
 Latitude 26.502 N Longitude 71.002 W
 20–Apr–2011 05:48 Z

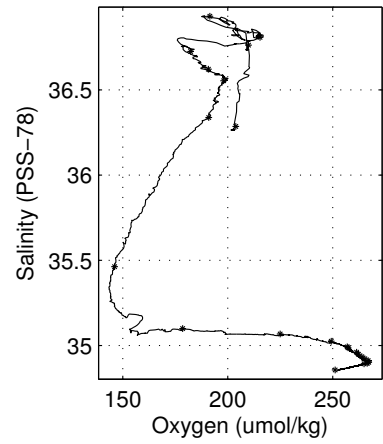
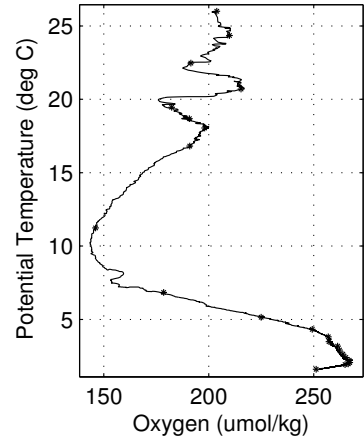
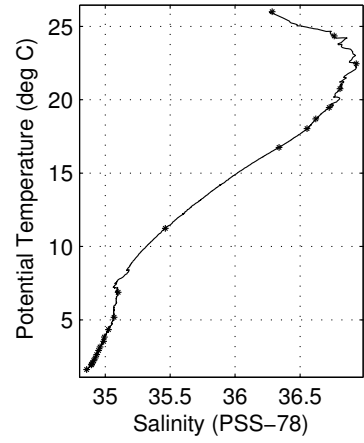
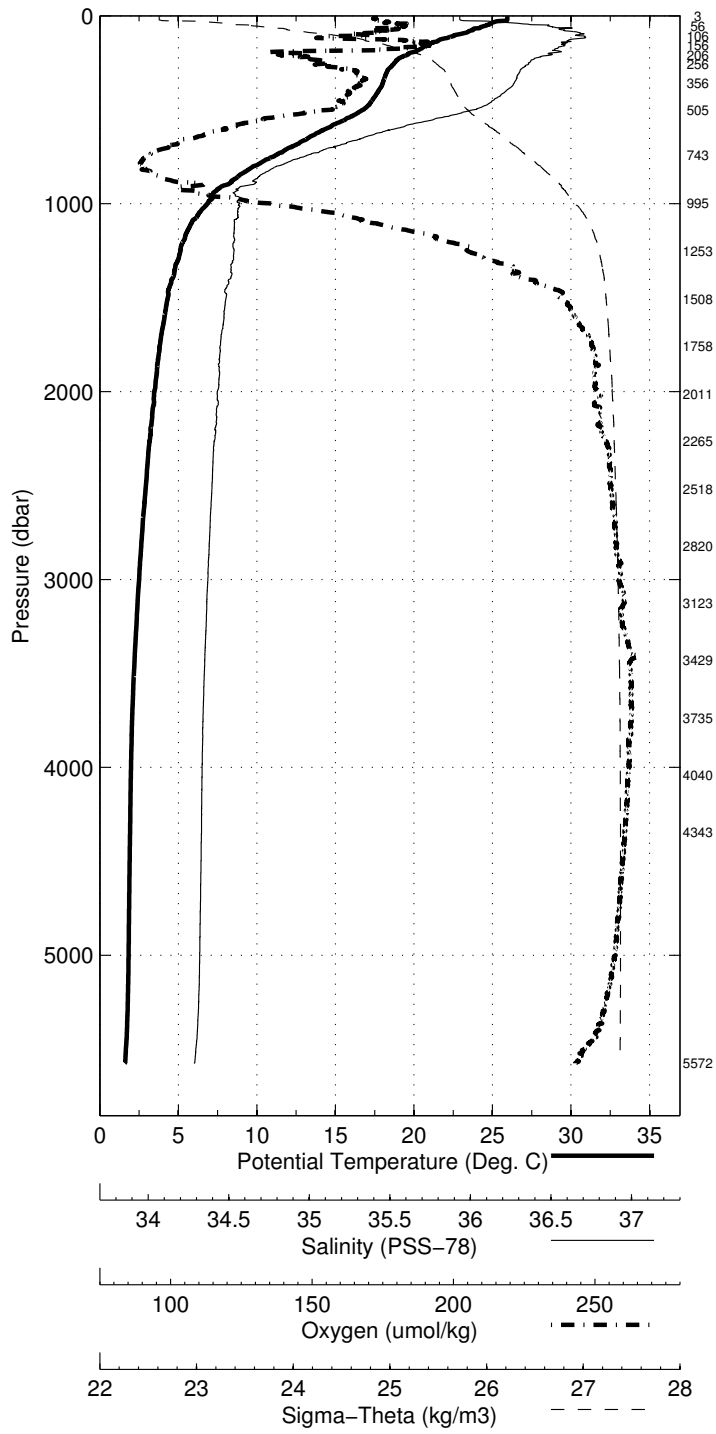


Abaco April-May 2011 R/V Knorr
 CTD Station 35 (CTD035)
 Latitude 26.514N Longitude 70.498W
 20-Apr-2011 12:44Z

| 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 | 25.951 | 25.951 | 36.266 | 202.4 | 0.004 | 24.004 |
| 10 | 25.951 | 25.948 | 36.265 | 202.4 | 0.039 | 24.004 |
| 20 | 25.956 | 25.951 | 36.265 | 202.4 | 0.078 | 24.004 |
| 30 | 25.235 | 25.229 | 36.435 | 205.4 | 0.116 | 24.356 |
| 50 | 24.650 | 24.639 | 36.738 | 208.5 | 0.183 | 24.765 |
| 75 | 23.790 | 23.774 | 36.823 | 205.6 | 0.259 | 25.089 |
| 100 | 22.803 | 22.782 | 36.901 | 198.9 | 0.327 | 25.439 |
| 125 | 21.752 | 21.727 | 36.862 | 202.1 | 0.388 | 25.710 |
| 150 | 20.966 | 20.937 | 36.812 | 215.5 | 0.445 | 25.892 |
| 200 | 19.703 | 19.666 | 36.737 | 183.9 | 0.547 | 26.176 |
| 250 | 18.807 | 18.763 | 36.633 | 188.6 | 0.639 | 26.331 |
| 300 | 18.324 | 18.271 | 36.583 | 197.5 | 0.726 | 26.417 |
| 400 | 17.810 | 17.741 | 36.510 | 195.4 | 0.896 | 26.494 |
| 500 | 16.841 | 16.758 | 36.344 | 191.4 | 1.061 | 26.604 |
| 600 | 14.523 | 14.432 | 35.927 | 164.9 | 1.213 | 26.811 |
| 700 | 12.235 | 12.140 | 35.590 | 150.5 | 1.345 | 27.020 |
| 800 | 9.874 | 9.779 | 35.292 | 144.2 | 1.458 | 27.218 |
| 900 | 8.147 | 8.051 | 35.152 | 159.2 | 1.553 | 27.385 |
| 1000 | 6.942 | 6.843 | 35.093 | 176.6 | 1.632 | 27.514 |
| 1100 | 5.961 | 5.860 | 35.068 | 200.9 | 1.699 | 27.624 |
| 1200 | 5.413 | 5.307 | 35.065 | 220.1 | 1.758 | 27.691 |
| 1300 | 5.081 | 4.968 | 35.061 | 230.8 | 1.812 | 27.727 |
| 1400 | 4.729 | 4.610 | 35.045 | 239.3 | 1.863 | 27.756 |
| 1500 | 4.454 | 4.328 | 35.022 | 248.8 | 1.912 | 27.769 |
| 1750 | 3.972 | 3.829 | 34.993 | 256.5 | 2.032 | 27.798 |
| 2000 | 3.629 | 3.467 | 34.976 | 258.6 | 2.147 | 27.821 |
| 2500 | 3.140 | 2.938 | 34.948 | 261.3 | 2.371 | 27.850 |
| 3000 | 2.747 | 2.502 | 34.926 | 263.4 | 2.589 | 27.870 |
| 3500 | 2.460 | 2.169 | 34.907 | 266.2 | 2.803 | 27.883 |
| 4000 | 2.329 | 1.985 | 34.895 | 265.8 | 3.019 | 27.889 |
| 4500 | 2.301 | 1.900 | 34.890 | 264.1 | 3.243 | 27.891 |
| 5000 | 2.293 | 1.831 | 34.882 | 262.4 | 3.478 | 27.891 |
| 5500 | 2.180 | 1.657 | 34.862 | 254.6 | 3.725 | 27.887 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5573 | 1 | 2.138 | 1.608 | 34.857 | 251.2 |
| 4344 | 2 | 2.309 | 1.927 | 34.893 | 264.9 |
| 4040 | 3 | 2.323 | 1.975 | 34.896 | 266.5 |
| 3735 | 4 | 2.377 | 2.062 | 34.902 | 267.2 |
| 3429 | 5 | 2.498 | 2.214 | 34.911 | 266.9 |
| 3124 | 6 | 2.660 | 2.404 | 34.923 | 265.3 |
| 2821 | 7 | 2.859 | 2.629 | 34.935 | 263.8 |
| 2518 | 8 | 3.116 | 2.912 | 34.949 | 262.3 |
| 2266 | 9 | 3.339 | 3.156 | 34.960 | 261.4 |
| 2012 | 10 | 3.691 | 3.527 | 34.987 | 257.3 |
| 1758 | 11 | 3.964 | 3.820 | 34.993 | 257.0 |
| 1509 | 12 | 4.456 | 4.329 | 35.025 | 249.3 |
| 1253 | 13 | 5.281 | 5.170 | 35.068 | 225.0 |
| 995 | 14 | 6.973 | 6.875 | 35.100 | 178.5 |
| 744 | 15 | 11.329 | 11.233 | 35.463 | 146.0 |
| 505 | 16 | 16.838 | 16.754 | 36.339 | 190.9 |
| 356 | 17 | 18.091 | 18.029 | 36.554 | 198.1 |
| 257 | 18 | 18.733 | 18.687 | 36.621 | 190.8 |
| 207 | 19 | 19.509 | 19.471 | 36.725 | 182.3 |
| 157 | 20 | 20.780 | 20.750 | 36.808 | 215.4 |
| 107 | 21 | 22.475 | 22.453 | 36.933 | 191.5 |
| 57 | 22 | 24.358 | 24.346 | 36.763 | 209.9 |
| 3 | 23 | 26.004 | 26.004 | 36.286 | 203.8 |

Abaco April–May 2011 R/V Knorr
 CTD Station 35 (CTD035)
 Latitude 26.514 N Longitude 70.498 W
 20–Apr–2011 12:44 Z

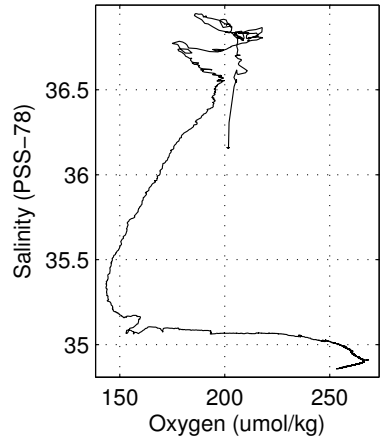
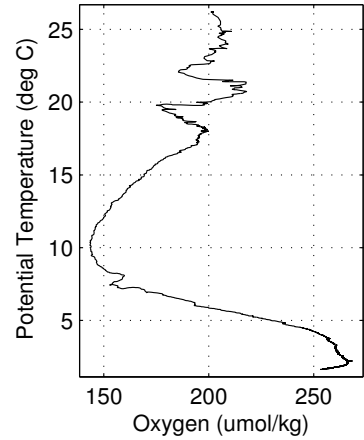
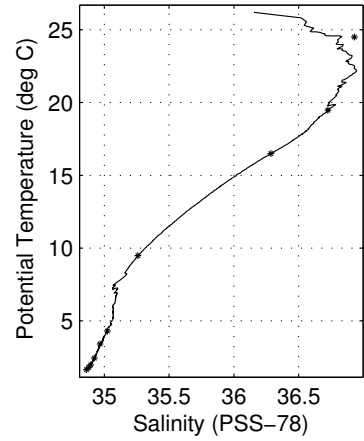
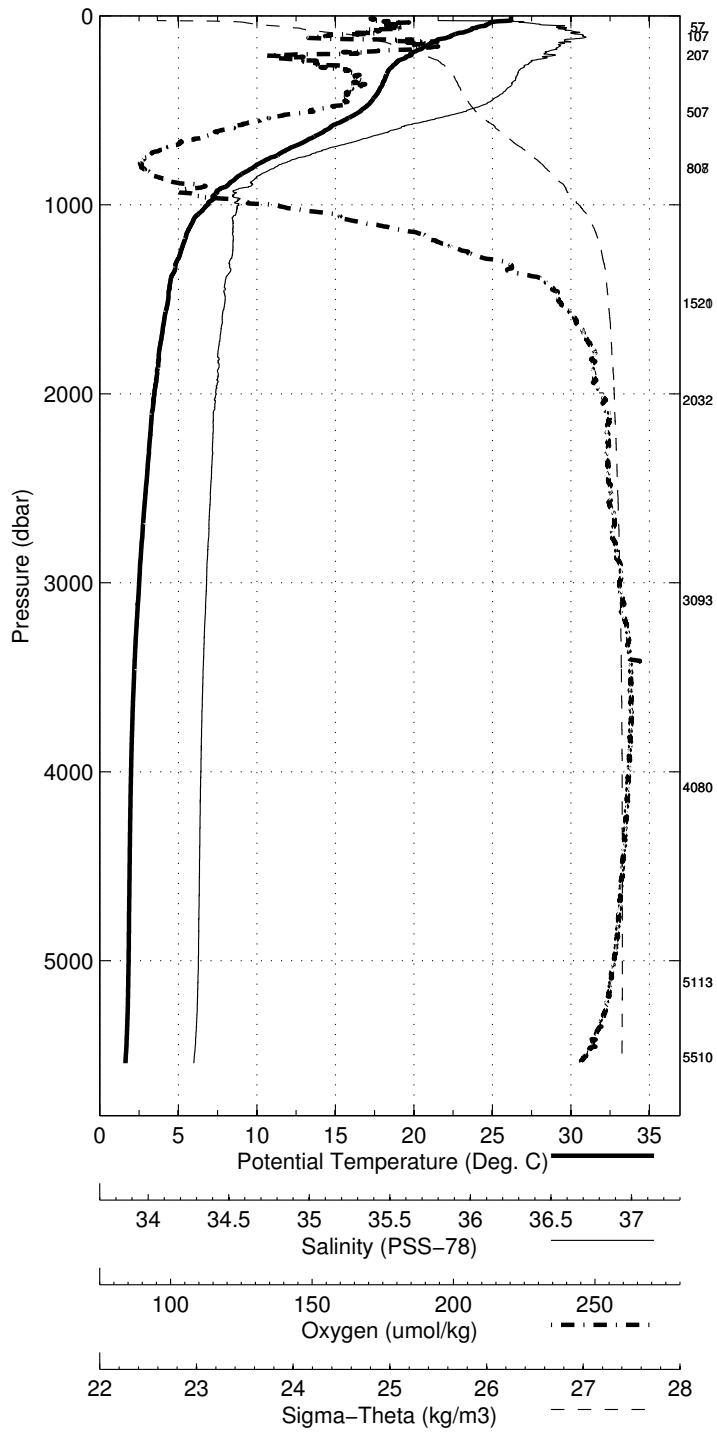


Abaco April-May 2011 R/V Knorr
 CTD Station 36 (CTD036)
 Latitude 26.538N Longitude 70.522W
 20-Apr-2011 19:32Z

| 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 | 26.197 | 26.196 | 36.161 | 201.1 | 0.004 | 23.848 |
| 10 | 26.199 | 26.197 | 36.159 | 201.8 | 0.040 | 23.847 |
| 20 | 26.201 | 26.197 | 36.160 | 202.0 | 0.081 | 23.847 |
| 30 | 25.223 | 25.217 | 36.572 | 204.4 | 0.119 | 24.463 |
| 50 | 24.593 | 24.582 | 36.757 | 205.7 | 0.185 | 24.797 |
| 75 | 23.611 | 23.595 | 36.835 | 202.1 | 0.259 | 25.152 |
| 100 | 22.549 | 22.529 | 36.929 | 191.0 | 0.326 | 25.534 |
| 125 | 21.560 | 21.535 | 36.837 | 202.4 | 0.385 | 25.745 |
| 150 | 21.004 | 20.975 | 36.808 | 212.3 | 0.441 | 25.878 |
| 200 | 19.854 | 19.817 | 36.727 | 198.0 | 0.544 | 26.128 |
| 250 | 18.925 | 18.880 | 36.647 | 187.4 | 0.637 | 26.312 |
| 300 | 18.360 | 18.307 | 36.585 | 196.3 | 0.725 | 26.410 |
| 400 | 17.825 | 17.756 | 36.514 | 195.8 | 0.896 | 26.493 |
| 500 | 16.723 | 16.640 | 36.313 | 186.2 | 1.060 | 26.608 |
| 600 | 14.595 | 14.504 | 35.937 | 165.1 | 1.212 | 26.803 |
| 700 | 12.197 | 12.102 | 35.577 | 150.1 | 1.345 | 27.018 |
| 800 | 9.902 | 9.806 | 35.293 | 143.9 | 1.457 | 27.214 |
| 900 | 8.209 | 8.112 | 35.164 | 159.8 | 1.552 | 27.385 |
| 1000 | 6.975 | 6.876 | 35.097 | 176.3 | 1.632 | 27.512 |
| 1100 | 5.951 | 5.849 | 35.067 | 200.3 | 1.698 | 27.625 |
| 1200 | 5.464 | 5.357 | 35.067 | 218.5 | 1.757 | 27.686 |
| 1300 | 5.008 | 4.896 | 35.048 | 234.5 | 1.811 | 27.726 |
| 1400 | 4.620 | 4.503 | 35.027 | 244.4 | 1.862 | 27.753 |
| 1500 | 4.482 | 4.356 | 35.025 | 248.1 | 1.911 | 27.768 |
| 1750 | 3.968 | 3.825 | 34.991 | 256.4 | 2.031 | 27.797 |
| 2000 | 3.647 | 3.485 | 34.978 | 258.8 | 2.147 | 27.821 |
| 2500 | 3.137 | 2.935 | 34.948 | 261.4 | 2.371 | 27.849 |
| 3000 | 2.751 | 2.506 | 34.926 | 263.4 | 2.589 | 27.870 |
| 3500 | 2.469 | 2.177 | 34.907 | 266.2 | 2.804 | 27.883 |
| 4000 | 2.334 | 1.990 | 34.896 | 265.7 | 3.020 | 27.889 |
| 4500 | 2.299 | 1.898 | 34.889 | 264.4 | 3.244 | 27.890 |
| 5000 | 2.294 | 1.832 | 34.883 | 262.1 | 3.479 | 27.891 |
| 5500 | 2.180 | 1.658 | 34.862 | 255.0 | 3.726 | 27.888 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5511 | 1 | 2.179 | 9.350 | -999.000 | NaN |
| 5511 | 2 | 2.179 | 1.655 | 34.862 | NaN |
| 5113 | 3 | 2.291 | 9.079 | -999.000 | NaN |
| 5113 | 4 | 2.291 | 1.814 | 34.880 | NaN |
| 4081 | 5 | 2.328 | 8.078 | -999.000 | NaN |
| 4081 | 6 | 2.328 | 1.975 | 34.895 | NaN |
| 3093 | 7 | 2.699 | 7.270 | -999.000 | NaN |
| 3093 | 8 | 2.699 | 2.445 | 34.922 | NaN |
| 2033 | 9 | 3.577 | 6.694 | -999.000 | NaN |
| 2033 | 10 | 3.577 | 3.412 | 34.967 | NaN |
| 1521 | 11 | 4.424 | 6.768 | -999.000 | NaN |
| 1521 | 12 | 4.424 | 4.297 | 35.023 | NaN |
| 808 | 13 | 9.579 | 10.675 | -999.000 | NaN |
| 808 | 14 | 9.579 | 9.484 | 35.259 | NaN |
| 507 | 15 | 16.572 | 17.098 | -999.000 | NaN |
| 507 | 16 | 16.572 | 16.489 | 36.285 | NaN |
| 207 | 17 | 19.517 | 19.705 | -999.000 | NaN |
| 207 | 18 | 19.515 | 19.477 | 36.727 | NaN |
| 107 | 19 | 22.328 | 22.411 | -999.000 | NaN |
| 107 | 20 | 22.330 | 22.413 | -999.000 | NaN |
| 58 | 21 | 24.508 | 24.547 | -999.000 | NaN |
| 58 | 22 | 24.509 | 24.497 | 36.931 | NaN |

Abaco April–May 2011 R/V Knorr
 CTD Station 36 (CTD036)
 Latitude 26.538 N Longitude 70.522 W
 20–Apr–2011 19:32 Z

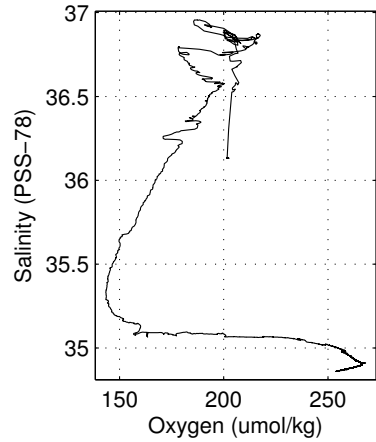
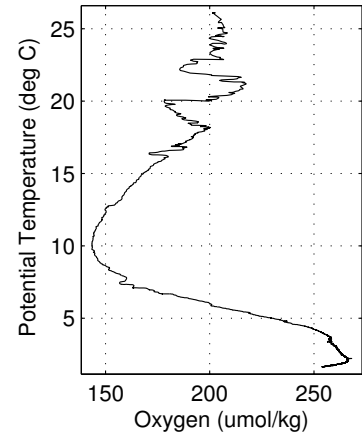
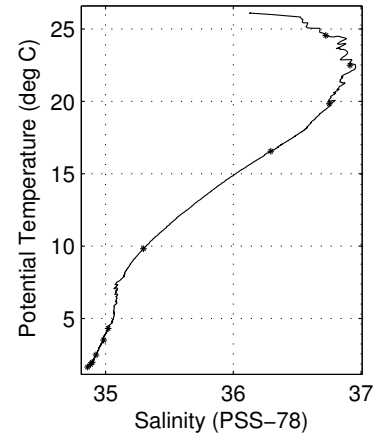
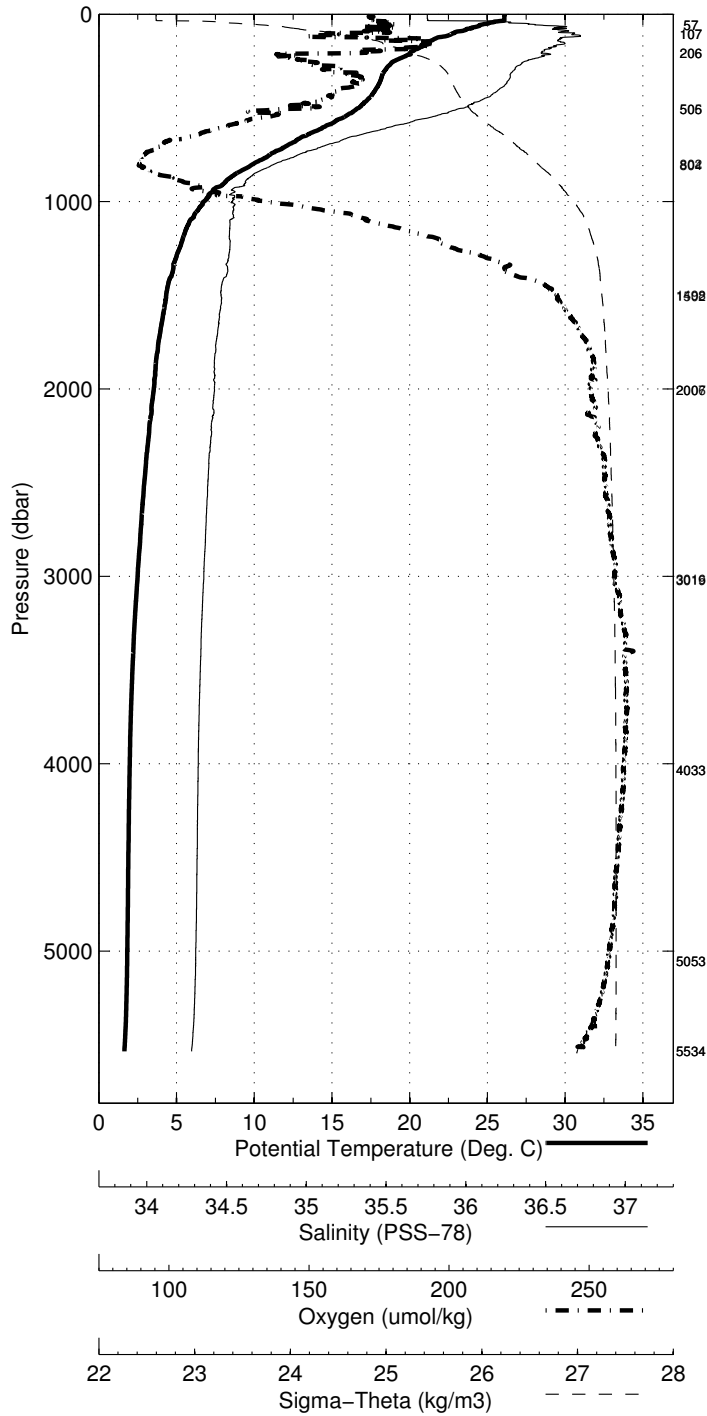


Abaco April-May 2011 R/V Knorr
 CTD Station 37 (CTD037)
 Latitude 26.507N Longitude 70.501W
 21-Apr-2011 02:27Z

| 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 | 26.099 | 26.099 | 36.132 | 201.2 | 0.004 | 23.856 |
| 10 | 26.095 | 26.092 | 36.131 | 201.5 | 0.040 | 23.858 |
| 20 | 26.102 | 26.097 | 36.131 | 202.2 | 0.081 | 23.857 |
| 30 | 26.101 | 26.095 | 36.133 | 202.0 | 0.121 | 23.859 |
| 50 | 25.056 | 25.045 | 36.674 | 205.8 | 0.194 | 24.593 |
| 75 | 24.007 | 23.991 | 36.881 | 201.3 | 0.271 | 25.069 |
| 100 | 22.913 | 22.892 | 36.926 | 192.3 | 0.340 | 25.426 |
| 125 | 21.802 | 21.777 | 36.855 | 200.8 | 0.402 | 25.691 |
| 150 | 21.314 | 21.284 | 36.870 | 215.7 | 0.459 | 25.840 |
| 200 | 20.122 | 20.085 | 36.748 | 198.8 | 0.565 | 26.073 |
| 250 | 19.046 | 19.000 | 36.664 | 184.2 | 0.660 | 26.293 |
| 300 | 18.465 | 18.412 | 36.598 | 190.7 | 0.749 | 26.393 |
| 400 | 17.892 | 17.823 | 36.520 | 194.1 | 0.920 | 26.481 |
| 500 | 16.804 | 16.721 | 36.329 | 187.6 | 1.086 | 26.601 |
| 600 | 14.644 | 14.553 | 35.942 | 165.0 | 1.238 | 26.796 |
| 700 | 12.235 | 12.140 | 35.582 | 149.2 | 1.371 | 27.015 |
| 800 | 10.015 | 9.919 | 35.306 | 143.7 | 1.484 | 27.205 |
| 900 | 8.179 | 8.083 | 35.150 | 155.8 | 1.578 | 27.379 |
| 1000 | 6.869 | 6.770 | 35.078 | 175.5 | 1.658 | 27.512 |
| 1100 | 5.962 | 5.861 | 35.066 | 200.6 | 1.725 | 27.623 |
| 1200 | 5.491 | 5.384 | 35.064 | 219.1 | 1.784 | 27.680 |
| 1300 | 5.083 | 4.970 | 35.060 | 231.0 | 1.838 | 27.727 |
| 1400 | 4.779 | 4.660 | 35.046 | 238.9 | 1.890 | 27.751 |
| 1500 | 4.452 | 4.327 | 35.018 | 248.8 | 1.940 | 27.766 |
| 1750 | 3.975 | 3.832 | 34.992 | 256.3 | 2.060 | 27.797 |
| 2000 | 3.698 | 3.535 | 34.983 | 257.4 | 2.176 | 27.820 |
| 2500 | 3.128 | 2.925 | 34.948 | 261.0 | 2.400 | 27.850 |
| 3000 | 2.738 | 2.493 | 34.926 | 263.3 | 2.618 | 27.871 |
| 3500 | 2.452 | 2.161 | 34.907 | 265.9 | 2.831 | 27.884 |
| 4000 | 2.331 | 1.987 | 34.896 | 265.5 | 3.047 | 27.889 |
| 4500 | 2.298 | 1.897 | 34.889 | 264.0 | 3.270 | 27.891 |
| 5000 | 2.291 | 1.829 | 34.882 | 262.0 | 3.506 | 27.891 |
| 5500 | 2.192 | 1.669 | 34.863 | 255.1 | 3.752 | 27.888 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 5534 | 1 | 2.171 | 9.365 | -999.000 | NaN |
| 5534 | 2 | 2.171 | 1.645 | 34.859 | NaN |
| 5054 | 3 | 2.293 | 9.025 | -999.000 | NaN |
| 5053 | 4 | 2.293 | 1.824 | 34.882 | NaN |
| 4033 | 5 | 2.328 | 8.027 | -999.000 | NaN |
| 4033 | 6 | 2.329 | 1.982 | 34.895 | NaN |
| 3017 | 7 | 2.734 | 7.207 | -999.000 | NaN |
| 3019 | 8 | 2.731 | 2.484 | 34.925 | NaN |
| 2007 | 9 | 3.675 | 6.748 | -999.000 | NaN |
| 2008 | 10 | 3.677 | 3.513 | 34.985 | NaN |
| 1502 | 11 | 4.440 | 6.757 | -999.000 | NaN |
| 1499 | 12 | 4.441 | 4.316 | 35.019 | NaN |
| 803 | 13 | 10.028 | 11.100 | -999.000 | NaN |
| 804 | 14 | 9.918 | 9.822 | 35.296 | NaN |
| 506 | 15 | 16.614 | 17.138 | -999.000 | NaN |
| 506 | 16 | 16.636 | 16.552 | 36.293 | NaN |
| 206 | 17 | 19.878 | 20.062 | -999.000 | NaN |
| 206 | 18 | 19.876 | 19.837 | 36.751 | NaN |
| 107 | 19 | 22.512 | 22.594 | -999.000 | NaN |
| 107 | 20 | 22.521 | 22.500 | 36.913 | NaN |
| 57 | 21 | 24.550 | 24.589 | -999.000 | NaN |
| 57 | 22 | 24.570 | 24.558 | 36.724 | NaN |

Abaco April-May 2011 R/V Knorr
 CTD Station 37 (CTD037)
 Latitude 26.507 N Longitude 70.501 W
 21-Apr-2011 02:27 Z

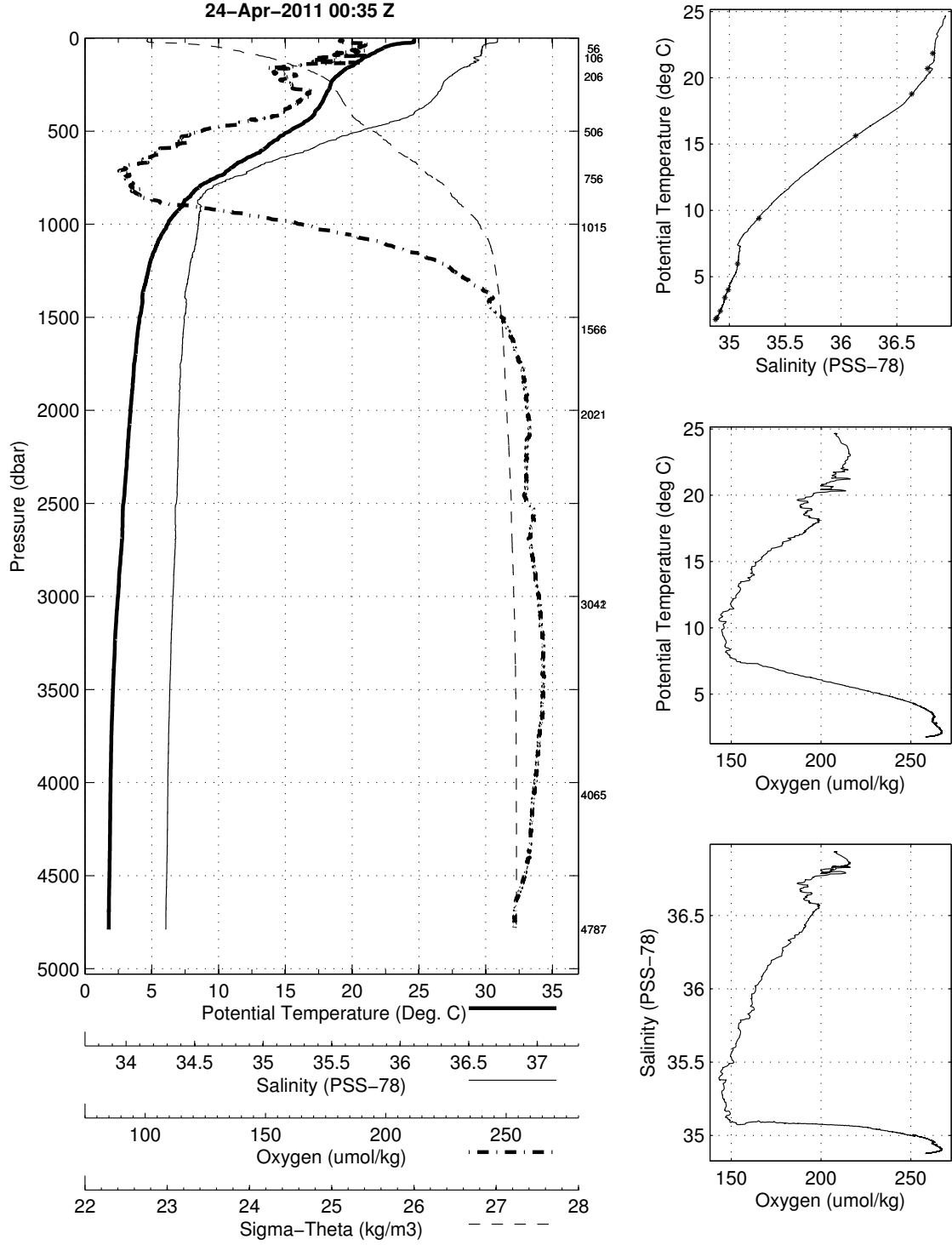


Abaco April-May 2011 R/V Knorr
 CTD Station 38 (CTD038)
 Latitude 26.486N Longitude 75.813W
 24-Apr-2011 00:35Z

| 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 | 24.640 | 24.640 | 36.936 | 208.0 | 0.003 | 24.915 |
| 10 | 24.648 | 24.646 | 36.934 | 208.6 | 0.030 | 24.912 |
| 20 | 24.625 | 24.620 | 36.931 | 208.5 | 0.061 | 24.918 |
| 30 | 23.461 | 23.455 | 36.869 | 215.3 | 0.090 | 25.219 |
| 50 | 22.415 | 22.405 | 36.840 | 213.5 | 0.142 | 25.501 |
| 75 | 21.779 | 21.765 | 36.833 | 211.3 | 0.202 | 25.677 |
| 100 | 21.044 | 21.025 | 36.805 | 204.9 | 0.258 | 25.862 |
| 125 | 20.459 | 20.435 | 36.787 | 201.6 | 0.310 | 26.009 |
| 150 | 20.022 | 19.994 | 36.763 | 195.4 | 0.361 | 26.109 |
| 200 | 19.000 | 18.964 | 36.654 | 194.4 | 0.453 | 26.295 |
| 250 | 18.425 | 18.381 | 36.594 | 193.3 | 0.540 | 26.398 |
| 300 | 18.118 | 18.066 | 36.563 | 198.0 | 0.626 | 26.454 |
| 400 | 17.276 | 17.208 | 36.419 | 190.9 | 0.791 | 26.554 |
| 500 | 15.421 | 15.342 | 36.085 | 167.0 | 0.947 | 26.733 |
| 600 | 13.430 | 13.344 | 35.766 | 154.4 | 1.084 | 26.916 |
| 700 | 10.978 | 10.890 | 35.424 | 145.1 | 1.205 | 27.126 |
| 800 | 8.668 | 8.580 | 35.170 | 146.6 | 1.306 | 27.319 |
| 900 | 7.396 | 7.305 | 35.094 | 163.9 | 1.390 | 27.450 |
| 1000 | 6.289 | 6.195 | 35.079 | 196.4 | 1.461 | 27.590 |
| 1100 | 5.538 | 5.440 | 35.062 | 220.3 | 1.521 | 27.672 |
| 1200 | 5.008 | 4.905 | 35.032 | 236.7 | 1.575 | 27.711 |
| 1300 | 4.690 | 4.581 | 35.014 | 245.3 | 1.627 | 27.734 |
| 1400 | 4.421 | 4.306 | 35.001 | 252.3 | 1.677 | 27.754 |
| 1500 | 4.216 | 4.093 | 34.990 | 255.0 | 1.725 | 27.768 |
| 1750 | 3.818 | 3.677 | 34.967 | 261.1 | 1.843 | 27.793 |
| 2000 | 3.571 | 3.409 | 34.959 | 262.9 | 1.959 | 27.813 |
| 2500 | 3.084 | 2.882 | 34.942 | 262.5 | 2.184 | 27.850 |
| 3000 | 2.719 | 2.475 | 34.921 | 266.0 | 2.403 | 27.869 |
| 3500 | 2.389 | 2.100 | 34.902 | 267.0 | 2.614 | 27.885 |
| 4000 | 2.263 | 1.921 | 34.890 | 264.9 | 2.826 | 27.889 |
| 4500 | 2.233 | 1.834 | 34.883 | 261.8 | 3.046 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4787 | 1 | 2.214 | 8.707 | -999.000 | <i>NaN</i> |
| 4787 | 2 | 2.214 | 1.780 | 34.876 | <i>NaN</i> |
| 4066 | 3 | 2.260 | 8.005 | -999.000 | <i>NaN</i> |
| 4066 | 4 | 2.260 | 1.911 | 34.888 | <i>NaN</i> |
| 3042 | 5 | 2.662 | 7.175 | -999.000 | <i>NaN</i> |
| 3042 | 6 | 2.662 | 2.414 | 34.918 | <i>NaN</i> |
| 2022 | 7 | 3.580 | 6.682 | -999.000 | <i>NaN</i> |
| 2022 | 8 | 3.580 | 3.417 | 34.960 | <i>NaN</i> |
| 1567 | 9 | 4.141 | 6.570 | -999.000 | <i>NaN</i> |
| 1567 | 10 | 4.141 | 4.013 | 34.990 | <i>NaN</i> |
| 1015 | 11 | 6.073 | 7.605 | -999.000 | <i>NaN</i> |
| 1015 | 12 | 6.073 | 5.979 | 35.073 | <i>NaN</i> |
| 756 | 13 | 9.505 | 10.537 | -999.000 | <i>NaN</i> |
| 756 | 14 | 9.497 | 9.409 | 35.265 | <i>NaN</i> |
| 506 | 15 | 15.707 | 16.253 | -999.000 | <i>NaN</i> |
| 506 | 16 | 15.707 | 15.626 | 36.130 | <i>NaN</i> |
| 206 | 17 | 18.823 | 19.017 | -999.000 | <i>NaN</i> |
| 206 | 18 | 18.823 | 18.787 | 36.632 | <i>NaN</i> |
| 106 | 19 | 20.715 | 20.805 | -999.000 | <i>NaN</i> |
| 106 | 20 | 20.715 | 20.695 | 36.774 | <i>NaN</i> |
| 56 | 21 | 21.861 | 21.906 | -999.000 | <i>NaN</i> |
| 57 | 22 | 21.858 | 21.847 | 36.820 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 38 (CTD038)
 Latitude 26.486 N Longitude 75.813 W
 24–Apr–2011 00:35 Z

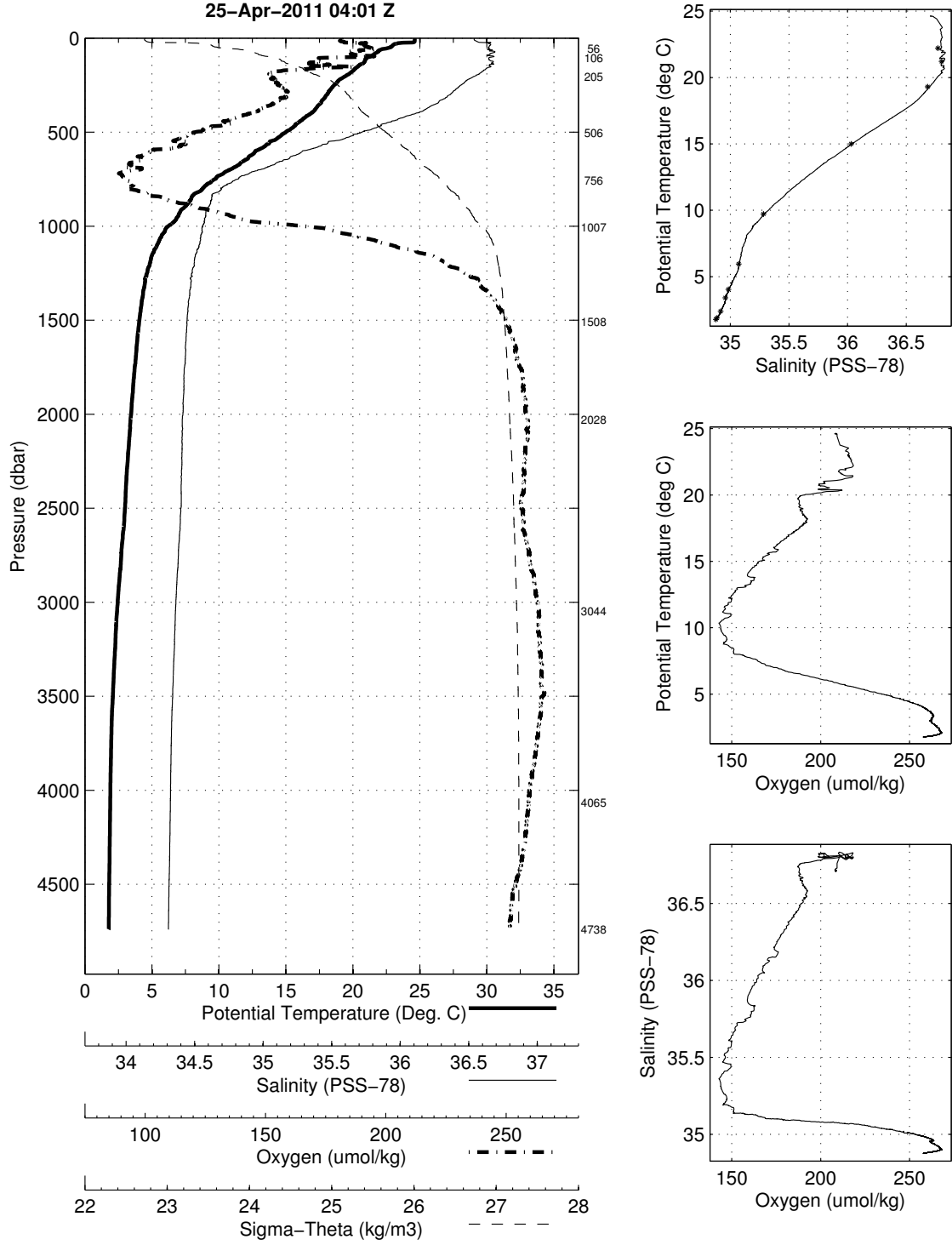


Abaco April-May 2011 R/V Knorr
 CTD Station 39 (CTD039)
 Latitude 26.503N Longitude 75.713W
 25-Apr-2011 04:01Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 24.627 | 24.626 | 36.710 | 208.4 | 0.003 | 24.748 |
| 10 | 24.626 | 24.624 | 36.709 | 208.0 | 0.032 | 24.748 |
| 20 | 24.597 | 24.593 | 36.731 | 209.2 | 0.064 | 24.774 |
| 30 | 23.227 | 23.220 | 36.802 | 215.5 | 0.093 | 25.237 |
| 50 | 22.727 | 22.717 | 36.795 | 216.7 | 0.146 | 25.377 |
| 75 | 21.845 | 21.830 | 36.831 | 210.4 | 0.207 | 25.658 |
| 100 | 21.251 | 21.232 | 36.816 | 213.7 | 0.265 | 25.813 |
| 125 | 20.887 | 20.863 | 36.822 | 202.5 | 0.319 | 25.920 |
| 150 | 20.413 | 20.385 | 36.809 | 208.0 | 0.371 | 26.039 |
| 200 | 19.524 | 19.487 | 36.719 | 187.9 | 0.468 | 26.209 |
| 250 | 18.631 | 18.587 | 36.628 | 189.7 | 0.558 | 26.372 |
| 300 | 18.137 | 18.085 | 36.567 | 191.9 | 0.644 | 26.452 |
| 400 | 16.924 | 16.857 | 36.358 | 181.3 | 0.807 | 26.591 |
| 500 | 15.059 | 14.981 | 36.035 | 165.2 | 0.958 | 26.774 |
| 600 | 12.810 | 12.726 | 35.679 | 152.1 | 1.092 | 26.974 |
| 700 | 10.872 | 10.784 | 35.423 | 148.3 | 1.210 | 27.144 |
| 800 | 8.878 | 8.789 | 35.193 | 145.1 | 1.310 | 27.303 |
| 900 | 7.505 | 7.413 | 35.113 | 165.9 | 1.395 | 27.449 |
| 1000 | 6.311 | 6.217 | 35.082 | 197.4 | 1.467 | 27.589 |
| 1100 | 5.473 | 5.375 | 35.061 | 223.0 | 1.527 | 27.679 |
| 1200 | 4.943 | 4.840 | 35.031 | 239.9 | 1.580 | 27.718 |
| 1300 | 4.579 | 4.471 | 35.011 | 248.9 | 1.630 | 27.744 |
| 1400 | 4.349 | 4.234 | 34.996 | 254.0 | 1.679 | 27.758 |
| 1500 | 4.190 | 4.067 | 34.988 | 256.9 | 1.727 | 27.770 |
| 1750 | 3.859 | 3.717 | 34.973 | 261.1 | 1.845 | 27.794 |
| 2000 | 3.612 | 3.450 | 34.963 | 262.8 | 1.961 | 27.813 |
| 2500 | 3.190 | 2.986 | 34.952 | 261.7 | 2.187 | 27.848 |
| 3000 | 2.688 | 2.444 | 34.921 | 266.3 | 2.406 | 27.872 |
| 3500 | 2.377 | 2.088 | 34.902 | 267.8 | 2.616 | 27.886 |
| 4000 | 2.241 | 1.900 | 34.889 | 263.9 | 2.826 | 27.891 |
| 4500 | 2.208 | 1.810 | 34.880 | 260.0 | 3.046 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4738 | 2 | 2.206 | 1.779 | 34.876 | <i>NaN</i> |
| 4065 | 4 | 2.236 | 1.888 | 34.887 | <i>NaN</i> |
| 3045 | 6 | 2.637 | 2.389 | 34.917 | <i>NaN</i> |
| 2029 | 8 | 3.573 | 3.409 | 34.958 | <i>NaN</i> |
| 1508 | 10 | 4.169 | 4.046 | 34.984 | <i>NaN</i> |
| 1007 | 12 | 6.051 | 5.958 | 35.072 | <i>NaN</i> |
| 757 | 14 | 9.807 | 9.717 | 35.282 | <i>NaN</i> |
| 506 | 16 | 15.082 | 15.004 | 36.030 | <i>NaN</i> |
| 206 | 18 | 19.336 | 19.298 | 36.683 | <i>NaN</i> |
| 106 | 20 | 21.234 | 21.213 | 36.803 | <i>NaN</i> |
| 56 | 22 | 22.212 | 22.201 | 36.771 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 39 (CTD039)
 Latitude 26.503 N Longitude 75.713 W
 25–Apr–2011 04:01 Z

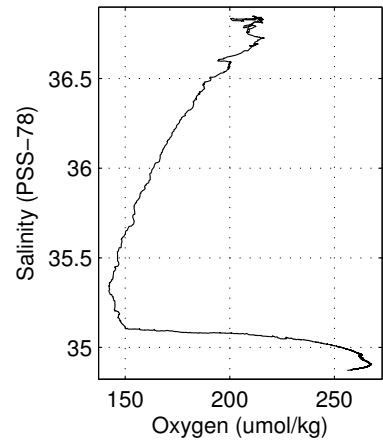
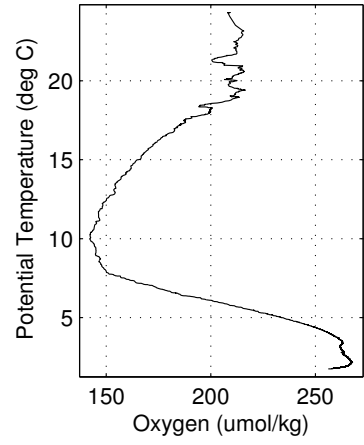
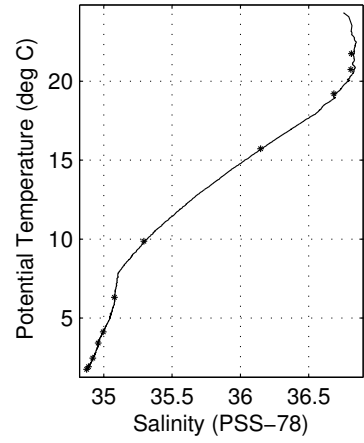
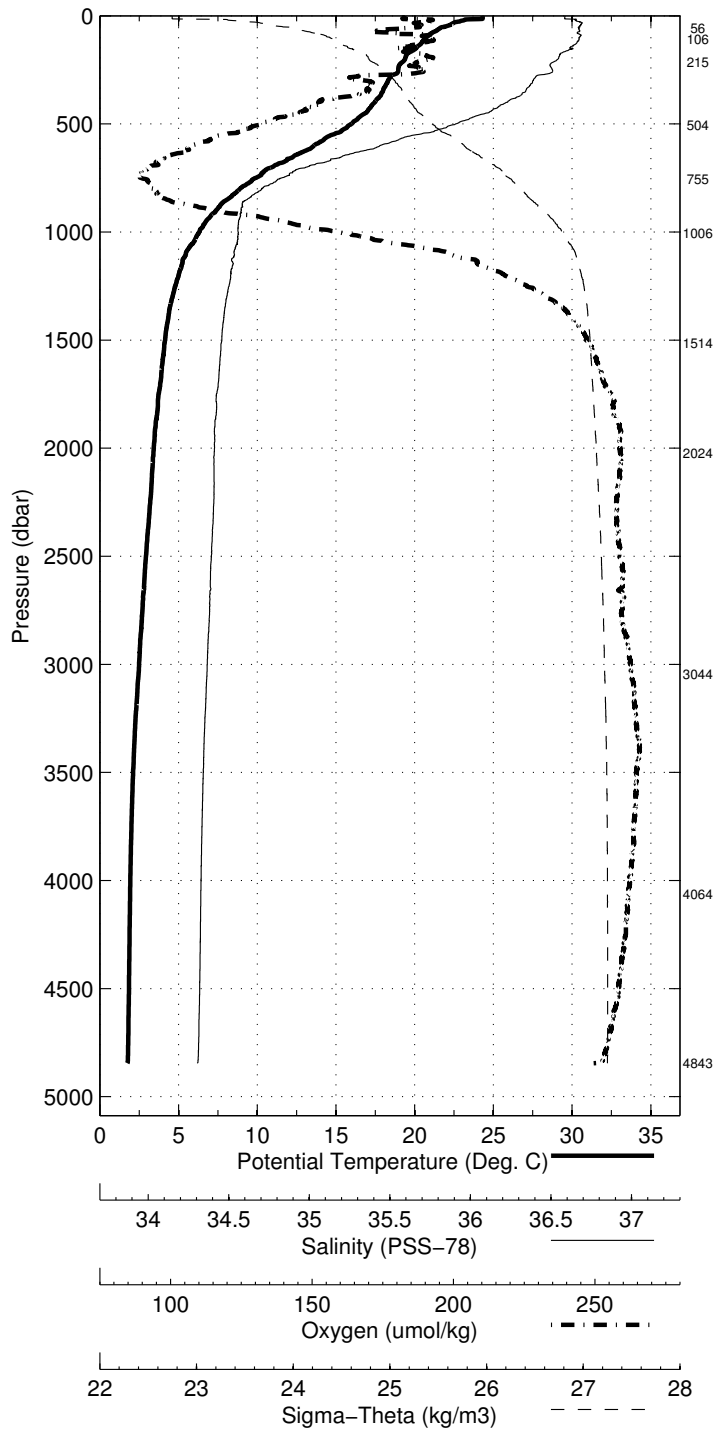


Abaco April-May 2011 R/V Knorr
 CTD Station 40 (CTD040)
 Latitude 26.501N Longitude 76.088W
 26-Apr-2011 03:35Z

| 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 | 24.323 | 24.323 | 36.759 | 208.2 | 0.003 | 24.877 |
| 10 | 24.325 | 24.322 | 36.757 | 208.2 | 0.031 | 24.876 |
| 20 | 23.157 | 23.153 | 36.812 | 215.2 | 0.060 | 25.264 |
| 30 | 22.559 | 22.553 | 36.840 | 212.4 | 0.086 | 25.459 |
| 50 | 21.912 | 21.902 | 36.830 | 212.1 | 0.135 | 25.637 |
| 75 | 21.206 | 21.192 | 36.823 | 201.3 | 0.191 | 25.830 |
| 100 | 20.729 | 20.709 | 36.829 | 214.5 | 0.244 | 25.967 |
| 125 | 20.469 | 20.445 | 36.819 | 213.4 | 0.295 | 26.031 |
| 150 | 20.115 | 20.087 | 36.784 | 206.6 | 0.345 | 26.100 |
| 200 | 19.421 | 19.384 | 36.722 | 215.0 | 0.439 | 26.238 |
| 250 | 19.003 | 18.958 | 36.694 | 212.1 | 0.530 | 26.327 |
| 300 | 18.355 | 18.302 | 36.594 | 198.8 | 0.618 | 26.418 |
| 400 | 17.529 | 17.460 | 36.463 | 187.3 | 0.786 | 26.526 |
| 500 | 16.057 | 15.977 | 36.197 | 172.5 | 0.945 | 26.675 |
| 600 | 13.685 | 13.598 | 35.810 | 155.3 | 1.088 | 26.898 |
| 700 | 11.023 | 10.934 | 35.432 | 145.2 | 1.211 | 27.124 |
| 800 | 8.989 | 8.899 | 35.204 | 145.8 | 1.313 | 27.295 |
| 900 | 7.471 | 7.380 | 35.098 | 161.3 | 1.400 | 27.443 |
| 1000 | 6.415 | 6.320 | 35.082 | 191.7 | 1.472 | 27.576 |
| 1100 | 5.566 | 5.468 | 35.061 | 220.5 | 1.533 | 27.668 |
| 1200 | 5.109 | 5.005 | 35.043 | 233.9 | 1.588 | 27.709 |
| 1300 | 4.728 | 4.618 | 35.023 | 244.6 | 1.640 | 27.737 |
| 1400 | 4.455 | 4.339 | 35.008 | 250.9 | 1.689 | 27.756 |
| 1500 | 4.273 | 4.150 | 34.998 | 254.3 | 1.738 | 27.769 |
| 1750 | 3.867 | 3.725 | 34.970 | 260.7 | 1.857 | 27.791 |
| 2000 | 3.590 | 3.429 | 34.960 | 262.8 | 1.974 | 27.813 |
| 2500 | 3.135 | 2.933 | 34.944 | 262.6 | 2.200 | 27.847 |
| 3000 | 2.740 | 2.495 | 34.923 | 265.4 | 2.419 | 27.869 |
| 3500 | 2.406 | 2.116 | 34.903 | 266.8 | 2.631 | 27.885 |
| 4000 | 2.280 | 1.938 | 34.891 | 265.2 | 2.844 | 27.890 |
| 4500 | 2.250 | 1.850 | 34.884 | 262.4 | 3.066 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4844 | 2 | 2.197 | 1.757 | 34.874 | <i>NaN</i> |
| 4065 | 4 | 2.272 | 1.922 | 34.888 | <i>NaN</i> |
| 3045 | 6 | 2.709 | 2.460 | 34.919 | <i>NaN</i> |
| 2024 | 8 | 3.583 | 3.420 | 34.959 | <i>NaN</i> |
| 1515 | 10 | 4.255 | 4.130 | 34.997 | <i>NaN</i> |
| 1007 | 12 | 6.410 | 6.315 | 35.078 | <i>NaN</i> |
| 755 | 14 | 9.959 | 9.869 | 35.294 | <i>NaN</i> |
| 505 | 16 | 15.806 | 15.725 | 36.147 | <i>NaN</i> |
| 216 | 18 | 19.247 | 19.208 | 36.684 | <i>NaN</i> |
| 107 | 20 | 20.765 | 20.745 | 36.808 | <i>NaN</i> |
| 57 | 22 | 21.756 | 21.745 | 36.812 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 40 (CTD040)
 Latitude 26.501 N Longitude 76.088 W
 26–Apr–2011 03:35 Z

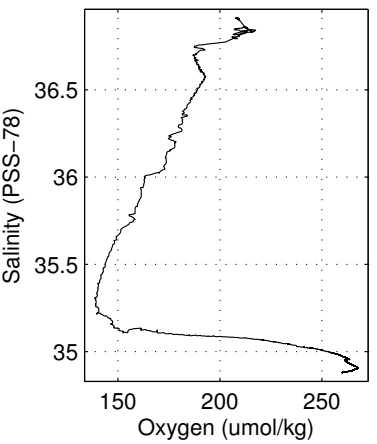
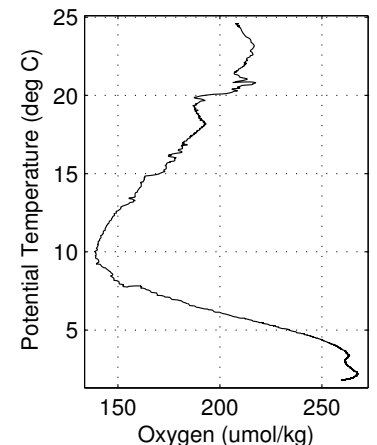
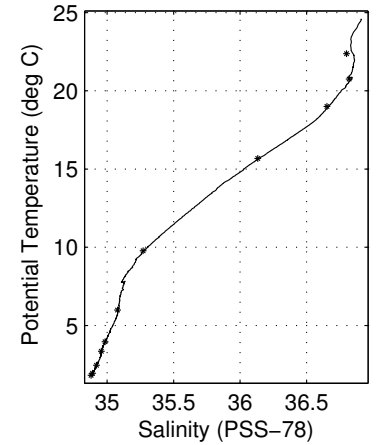
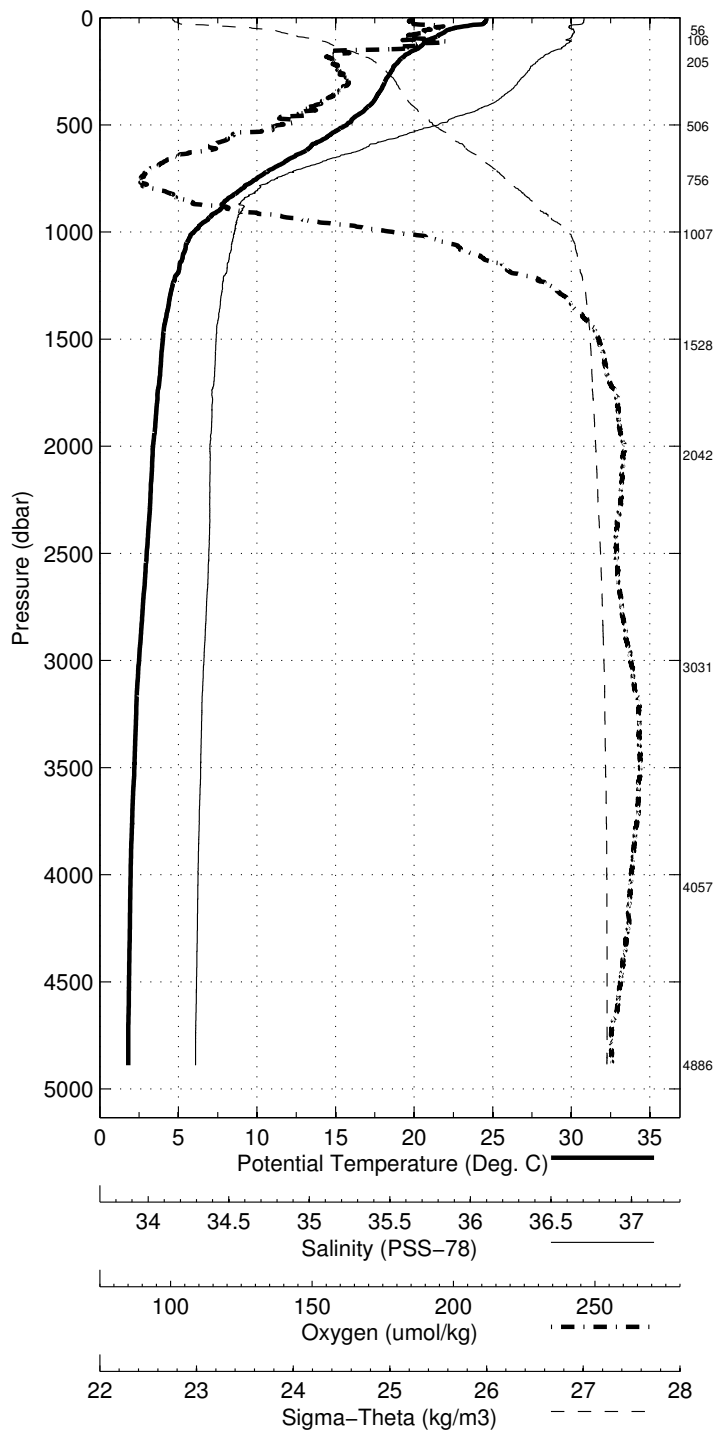


Abaco April-May 2011 R/V Knorr
 CTD Station 41 (CTD041)
 Latitude 26.491N Longitude 76.469W
 27-Apr-2011 01:37Z

| 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 | 24.600 | 24.600 | 36.912 | 208.6 | 0.003 | 24.909 |
| 10 | 24.598 | 24.595 | 36.912 | 209.0 | 0.030 | 24.910 |
| 20 | 24.517 | 24.513 | 36.910 | 208.7 | 0.061 | 24.934 |
| 30 | 24.340 | 24.333 | 36.895 | 209.9 | 0.091 | 24.977 |
| 50 | 22.475 | 22.465 | 36.843 | 214.7 | 0.145 | 25.486 |
| 75 | 21.726 | 21.711 | 36.852 | 209.8 | 0.204 | 25.708 |
| 100 | 21.027 | 21.008 | 36.827 | 212.8 | 0.260 | 25.884 |
| 125 | 20.571 | 20.547 | 36.815 | 209.0 | 0.312 | 26.000 |
| 150 | 20.072 | 20.044 | 36.764 | 194.8 | 0.362 | 26.096 |
| 200 | 19.089 | 19.053 | 36.670 | 189.1 | 0.456 | 26.285 |
| 250 | 18.587 | 18.543 | 36.617 | 189.6 | 0.544 | 26.374 |
| 300 | 18.171 | 18.119 | 36.565 | 192.3 | 0.630 | 26.442 |
| 400 | 17.369 | 17.301 | 36.431 | 185.4 | 0.797 | 26.541 |
| 500 | 15.793 | 15.713 | 36.148 | 174.8 | 0.953 | 26.697 |
| 600 | 13.539 | 13.453 | 35.786 | 155.5 | 1.094 | 26.909 |
| 700 | 11.170 | 11.080 | 35.444 | 142.2 | 1.216 | 27.107 |
| 800 | 9.071 | 8.980 | 35.205 | 143.2 | 1.321 | 27.282 |
| 900 | 7.663 | 7.570 | 35.122 | 164.2 | 1.408 | 27.433 |
| 1000 | 6.071 | 5.978 | 35.083 | 203.9 | 1.478 | 27.621 |
| 1100 | 5.402 | 5.305 | 35.059 | 224.4 | 1.535 | 27.686 |
| 1200 | 4.995 | 4.893 | 35.036 | 237.2 | 1.588 | 27.717 |
| 1300 | 4.571 | 4.463 | 35.013 | 247.9 | 1.639 | 27.746 |
| 1400 | 4.332 | 4.217 | 35.001 | 252.9 | 1.687 | 27.764 |
| 1500 | 4.141 | 4.019 | 34.988 | 256.8 | 1.735 | 27.774 |
| 1750 | 3.822 | 3.681 | 34.966 | 261.4 | 1.852 | 27.792 |
| 2000 | 3.544 | 3.384 | 34.956 | 263.4 | 1.968 | 27.813 |
| 2500 | 3.187 | 2.983 | 34.949 | 261.4 | 2.195 | 27.846 |
| 3000 | 2.745 | 2.500 | 34.924 | 264.8 | 2.415 | 27.869 |
| 3500 | 2.490 | 2.198 | 34.906 | 267.4 | 2.630 | 27.881 |
| 4000 | 2.304 | 1.961 | 34.893 | 265.0 | 2.846 | 27.889 |
| 4500 | 2.256 | 1.856 | 34.885 | 262.4 | 3.068 | 27.891 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4887 | 2 | 2.260 | 1.813 | 34.879 | <i>NaN</i> |
| 4057 | 4 | 2.295 | 1.946 | 34.891 | <i>NaN</i> |
| 3032 | 6 | 2.709 | 2.461 | 34.920 | <i>NaN</i> |
| 2042 | 8 | 3.522 | 3.358 | 34.956 | <i>NaN</i> |
| 1528 | 10 | 4.090 | 3.966 | 34.985 | <i>NaN</i> |
| 1007 | 12 | 6.079 | 5.986 | 35.079 | <i>NaN</i> |
| 757 | 14 | 9.863 | 9.774 | 35.271 | <i>NaN</i> |
| 506 | 16 | 15.761 | 15.680 | 36.133 | <i>NaN</i> |
| 206 | 18 | 19.035 | 18.998 | 36.653 | <i>NaN</i> |
| 106 | 20 | 20.776 | 20.755 | 36.820 | <i>NaN</i> |
| 56 | 22 | 22.392 | 22.381 | 36.800 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 41 (CTD041)
 Latitude 26.491 N Longitude 76.469 W
 27–Apr–2011 01:37 Z

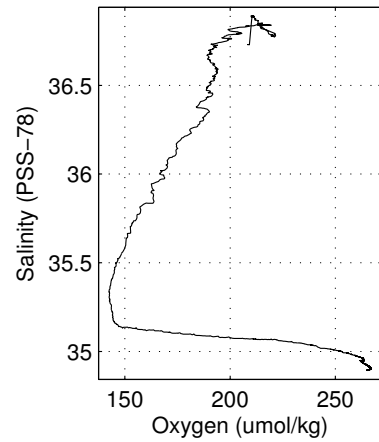
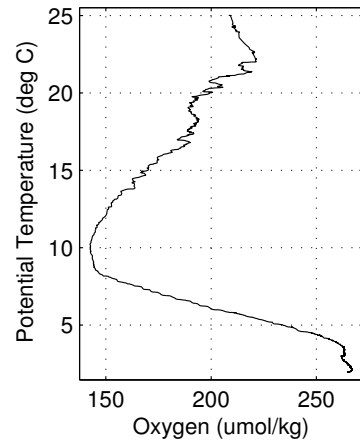
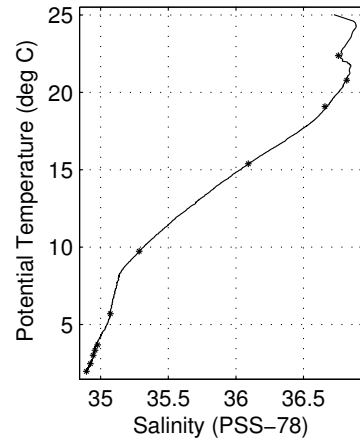
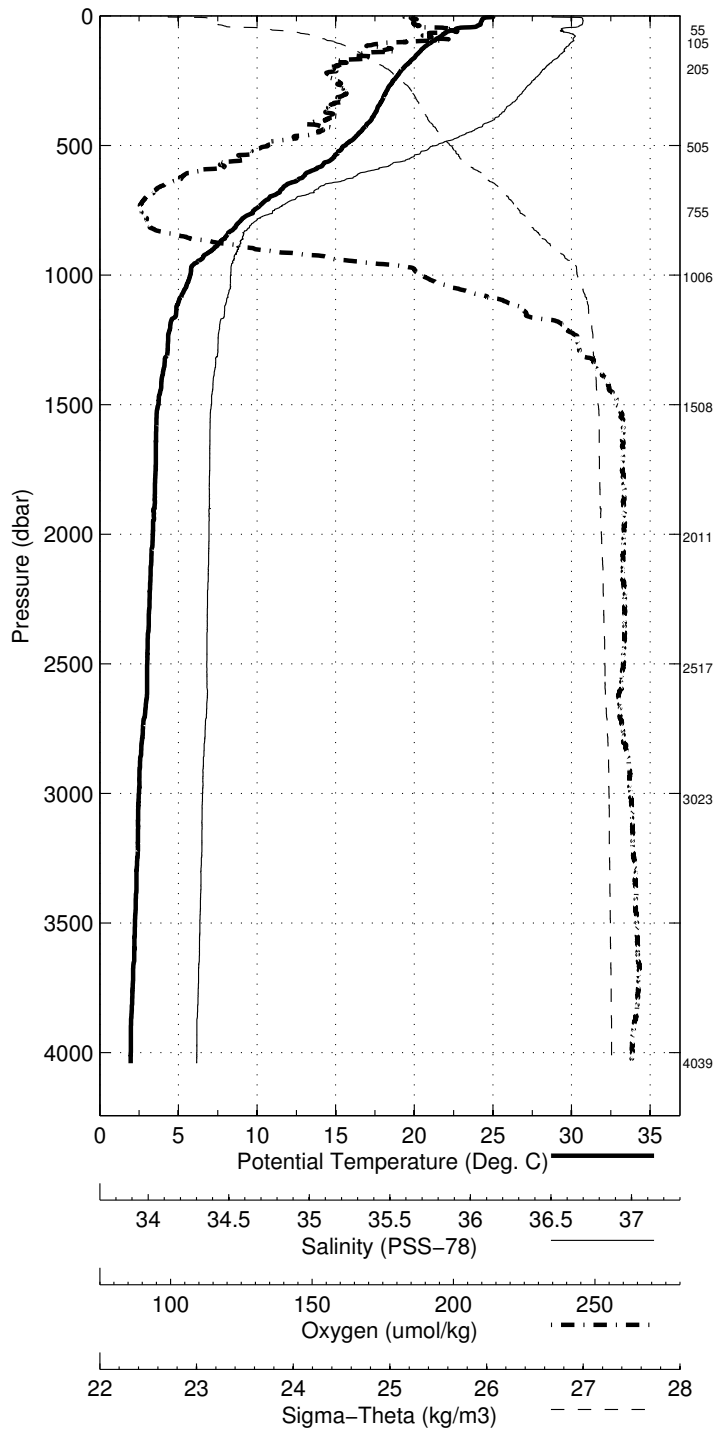


Abaco April-May 2011 R/V Knorr
 CTD Station 42 (CTD042)
 Latitude 26.497N Longitude 76.650W
 28-Apr-2011 22:48Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 25.017 | 25.016 | 36.731 | 208.4 | 0.003 | 24.645 |
| 10 | 24.377 | 24.375 | 36.888 | 210.5 | 0.032 | 24.959 |
| 20 | 24.276 | 24.272 | 36.890 | 209.9 | 0.061 | 24.992 |
| 30 | 24.230 | 24.224 | 36.888 | 210.8 | 0.091 | 25.004 |
| 50 | 22.647 | 22.637 | 36.778 | 220.7 | 0.148 | 25.388 |
| 75 | 21.800 | 21.786 | 36.844 | 213.5 | 0.209 | 25.680 |
| 100 | 21.137 | 21.117 | 36.834 | 207.3 | 0.265 | 25.858 |
| 125 | 20.566 | 20.542 | 36.797 | 204.6 | 0.318 | 25.988 |
| 150 | 20.184 | 20.156 | 36.771 | 197.1 | 0.369 | 26.072 |
| 200 | 19.387 | 19.351 | 36.697 | 190.6 | 0.465 | 26.228 |
| 250 | 18.695 | 18.651 | 36.631 | 190.6 | 0.555 | 26.358 |
| 300 | 18.223 | 18.170 | 36.574 | 193.9 | 0.641 | 26.436 |
| 400 | 17.356 | 17.288 | 36.432 | 189.0 | 0.807 | 26.545 |
| 500 | 15.689 | 15.610 | 36.132 | 174.2 | 0.964 | 26.708 |
| 600 | 13.468 | 13.382 | 35.774 | 156.7 | 1.106 | 26.915 |
| 700 | 10.885 | 10.797 | 35.412 | 144.0 | 1.226 | 27.133 |
| 800 | 8.869 | 8.780 | 35.183 | 144.5 | 1.328 | 27.297 |
| 900 | 7.310 | 7.219 | 35.107 | 171.2 | 1.413 | 27.472 |
| 1000 | 5.848 | 5.758 | 35.071 | 212.1 | 1.478 | 27.640 |
| 1100 | 5.126 | 5.031 | 35.048 | 233.2 | 1.533 | 27.709 |
| 1200 | 4.572 | 4.473 | 35.012 | 248.2 | 1.583 | 27.745 |
| 1300 | 4.407 | 4.301 | 35.002 | 252.3 | 1.631 | 27.756 |
| 1400 | 4.048 | 3.937 | 34.979 | 258.8 | 1.678 | 27.776 |
| 1500 | 3.841 | 3.722 | 34.970 | 261.3 | 1.723 | 27.791 |
| 1750 | 3.698 | 3.559 | 34.961 | 262.9 | 1.834 | 27.800 |
| 2000 | 3.537 | 3.376 | 34.957 | 263.2 | 1.948 | 27.815 |
| 2500 | 3.217 | 3.013 | 34.945 | 263.0 | 2.175 | 27.840 |
| 3000 | 2.734 | 2.489 | 34.925 | 264.9 | 2.397 | 27.871 |
| 3500 | 2.526 | 2.232 | 34.910 | 266.4 | 2.614 | 27.881 |
| 4000 | 2.312 | 1.969 | 34.894 | 265.2 | 2.831 | 27.889 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 4040 | 2 | 2.318 | 1.970 | 34.894 | <i>NaN</i> |
| 3024 | 4 | 2.715 | 2.468 | 34.924 | <i>NaN</i> |
| 2517 | 6 | 3.221 | 3.015 | 34.944 | <i>NaN</i> |
| 2012 | 8 | 3.498 | 3.337 | 34.958 | <i>NaN</i> |
| 1508 | 10 | 3.802 | 3.683 | 34.978 | <i>NaN</i> |
| 1007 | 12 | 5.785 | 5.694 | 35.071 | <i>NaN</i> |
| 756 | 14 | 9.828 | 9.739 | 35.285 | <i>NaN</i> |
| 505 | 16 | 15.473 | 15.393 | 36.092 | <i>NaN</i> |
| 205 | 18 | 19.125 | 19.088 | 36.659 | <i>NaN</i> |
| 106 | 20 | 20.808 | 20.787 | 36.820 | <i>NaN</i> |
| 56 | 22 | 22.389 | 22.378 | 36.757 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 42 (CTD042)
 Latitude 26.497 N Longitude 76.650 W
 28–Apr–2011 22:48 Z

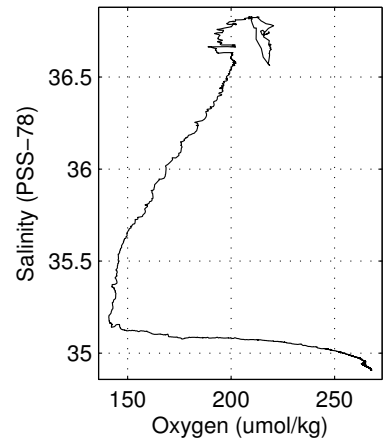
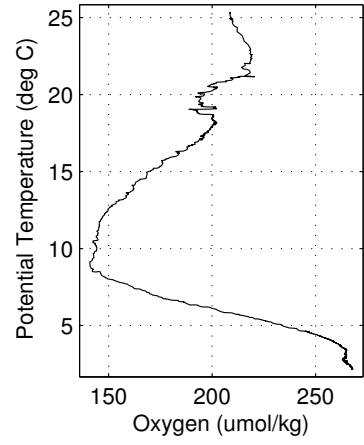
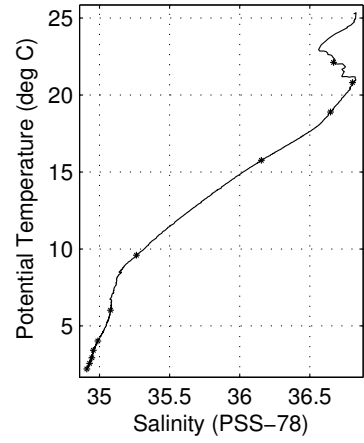
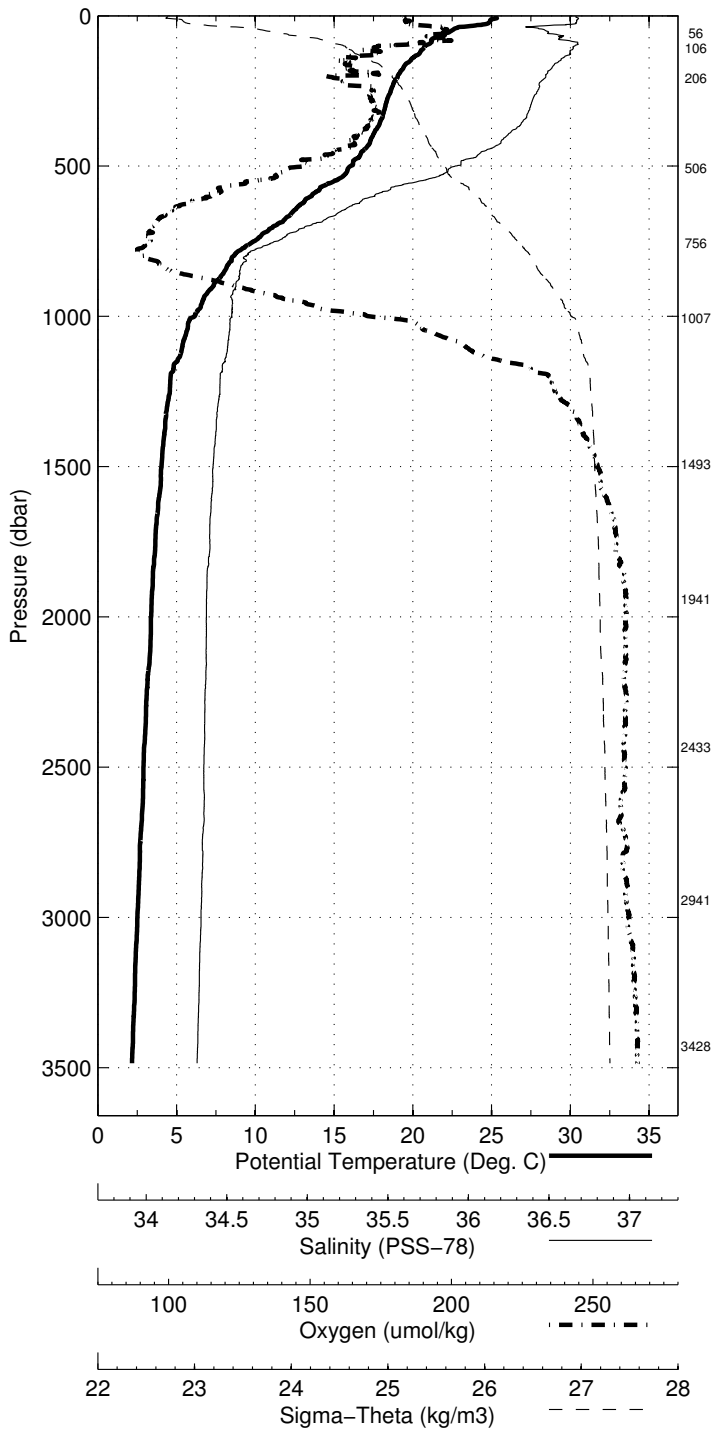


Abaco April-May 2011 R/V Knorr
 CTD Station 43 (CTD043)
 Latitude 26.789N Longitude 76.550W
 30-Apr-2011 20:09Z

| 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 | 25.276 | 25.276 | 36.817 | 208.5 | 0.003 | 24.630 |
| 10 | 25.140 | 25.138 | 36.827 | 208.7 | 0.033 | 24.681 |
| 20 | 24.891 | 24.886 | 36.820 | 209.1 | 0.065 | 24.752 |
| 30 | 24.383 | 24.376 | 36.767 | 212.2 | 0.097 | 24.867 |
| 50 | 22.463 | 22.453 | 36.666 | 218.9 | 0.152 | 25.355 |
| 75 | 21.298 | 21.283 | 36.731 | 216.8 | 0.214 | 25.735 |
| 100 | 20.818 | 20.799 | 36.810 | 201.9 | 0.269 | 25.928 |
| 125 | 20.449 | 20.426 | 36.784 | 202.3 | 0.321 | 26.009 |
| 150 | 19.859 | 19.831 | 36.733 | 193.0 | 0.370 | 26.129 |
| 200 | 19.079 | 19.043 | 36.664 | 189.0 | 0.463 | 26.283 |
| 250 | 18.648 | 18.604 | 36.623 | 200.8 | 0.552 | 26.364 |
| 300 | 18.311 | 18.258 | 36.587 | 201.4 | 0.638 | 26.424 |
| 400 | 17.517 | 17.449 | 36.467 | 196.2 | 0.806 | 26.532 |
| 500 | 16.119 | 16.038 | 36.207 | 183.4 | 0.966 | 26.668 |
| 600 | 13.654 | 13.567 | 35.804 | 159.6 | 1.110 | 26.899 |
| 700 | 11.248 | 11.158 | 35.456 | 144.6 | 1.233 | 27.102 |
| 800 | 8.685 | 8.597 | 35.150 | 142.2 | 1.336 | 27.300 |
| 900 | 7.400 | 7.309 | 35.104 | 165.8 | 1.422 | 27.457 |
| 1000 | 6.214 | 6.120 | 35.084 | 199.7 | 1.492 | 27.603 |
| 1100 | 5.466 | 5.369 | 35.062 | 224.1 | 1.550 | 27.680 |
| 1200 | 4.726 | 4.626 | 35.024 | 245.5 | 1.602 | 27.737 |
| 1300 | 4.502 | 4.395 | 35.011 | 250.7 | 1.651 | 27.753 |
| 1400 | 4.317 | 4.203 | 35.000 | 254.3 | 1.699 | 27.765 |
| 1500 | 4.162 | 4.040 | 34.988 | 257.5 | 1.747 | 27.772 |
| 1750 | 3.791 | 3.650 | 34.971 | 262.3 | 1.864 | 27.799 |
| 2000 | 3.537 | 3.377 | 34.954 | 264.9 | 1.978 | 27.813 |
| 2500 | 3.101 | 2.899 | 34.941 | 264.7 | 2.204 | 27.848 |
| 3000 | 2.756 | 2.511 | 34.927 | 265.6 | 2.422 | 27.871 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 3428 | 2 | 2.486 | 2.202 | 34.909 | <i>NaN</i> |
| 2942 | 4 | 2.814 | 2.573 | 34.930 | <i>NaN</i> |
| 2433 | 6 | 3.125 | 2.930 | 34.946 | <i>NaN</i> |
| 1941 | 8 | 3.578 | 3.422 | 34.957 | <i>NaN</i> |
| 1493 | 10 | 4.149 | 4.027 | 34.989 | <i>NaN</i> |
| 1007 | 12 | 6.111 | 6.017 | 35.078 | <i>NaN</i> |
| 757 | 14 | 9.687 | 9.598 | 35.264 | <i>NaN</i> |
| 506 | 16 | 15.843 | 15.762 | 36.155 | <i>NaN</i> |
| 206 | 18 | 18.938 | 18.901 | 36.648 | <i>NaN</i> |
| 106 | 20 | 20.834 | 20.814 | 36.805 | <i>NaN</i> |
| 56 | 22 | 22.131 | 22.120 | 36.668 | <i>NaN</i> |

Abaco April–May 2011 R/V Knorr
 CTD Station 43 (CTD043)
 Latitude 26.789 N Longitude 76.550 W
 30–Apr–2011 20:09 Z

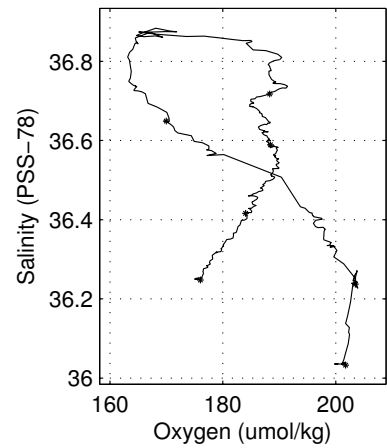
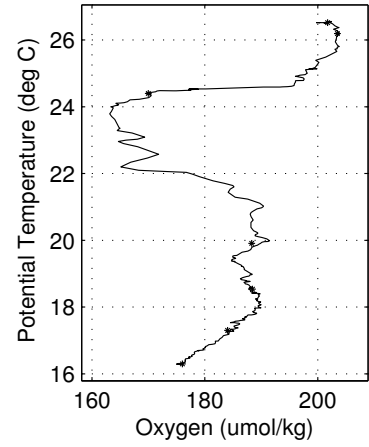
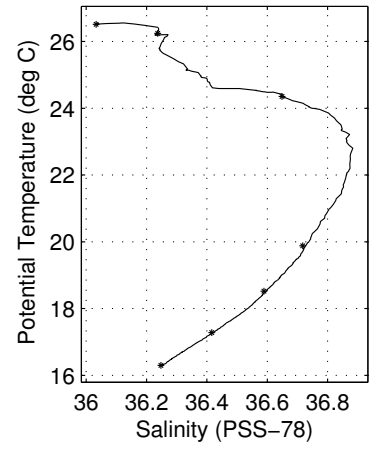
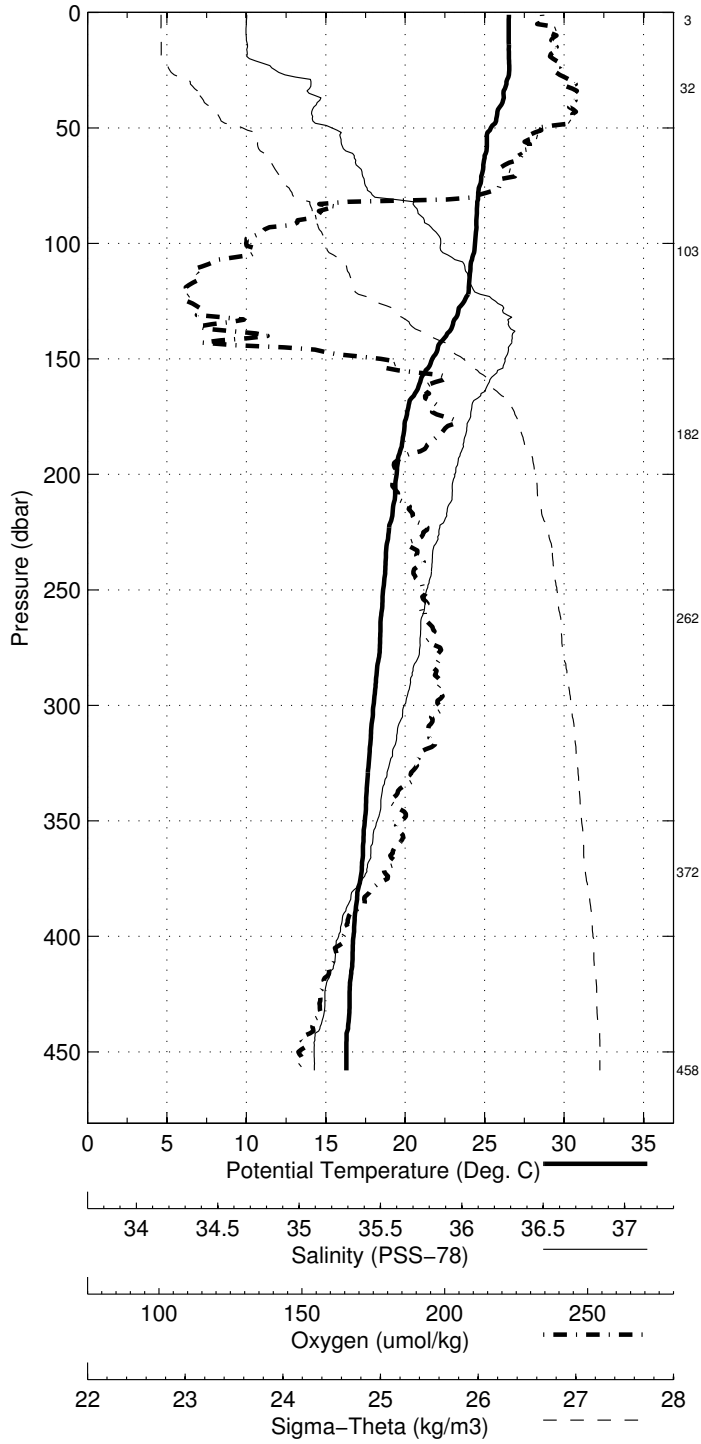


Abaco April-May 2011 R/V Knorr
 CTD Station 44 (CTD044)
 Latitude 27.000N Longitude 79.199W
 02-May-2011 12:50Z

| 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 | 26.522 | 26.522 | 36.037 | 200.3 | 0.004 | 23.652 |
| 10 | 26.521 | 26.518 | 36.035 | 201.8 | 0.042 | 23.651 |
| 20 | 26.532 | 26.527 | 36.046 | 201.4 | 0.085 | 23.656 |
| 30 | 26.383 | 26.376 | 36.240 | 203.5 | 0.126 | 23.851 |
| 50 | 25.405 | 25.394 | 36.306 | 199.6 | 0.205 | 24.208 |
| 75 | 24.708 | 24.692 | 36.411 | 195.8 | 0.294 | 24.502 |
| 100 | 24.420 | 24.399 | 36.649 | 169.6 | 0.377 | 24.771 |
| 125 | 23.739 | 23.713 | 36.822 | 163.5 | 0.453 | 25.107 |
| 150 | 21.729 | 21.699 | 36.852 | 183.6 | 0.518 | 25.710 |
| 200 | 19.495 | 19.458 | 36.694 | 185.5 | 0.620 | 26.198 |
| 250 | 18.653 | 18.608 | 36.604 | 188.1 | 0.711 | 26.348 |
| 300 | 18.050 | 17.998 | 36.534 | 189.6 | 0.798 | 26.448 |
| 400 | 16.817 | 16.750 | 36.327 | 179.7 | 0.961 | 26.593 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 458 | 2 | 16.375 | 16.300 | 36.248 | 176.0 |
| 372 | 4 | 17.342 | 17.279 | 36.416 | 184.0 |
| 262 | 6 | 18.564 | 18.518 | 36.589 | 188.4 |
| 183 | 8 | 19.913 | 19.879 | 36.718 | 188.3 |
| 103 | 10 | 24.377 | 24.355 | 36.649 | 170.0 |
| 33 | 12 | 26.251 | 26.244 | 36.237 | 203.4 |
| 3 | 14 | 26.514 | 26.513 | 36.033 | 201.7 |

Abaco April-May 2011 R/V Knorr
CTD Station 44 (CTD044)
Latitude 27.000 N Longitude 79.199 W
02-May-2011 12:50 Z

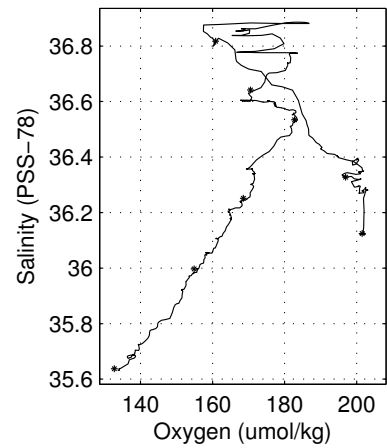
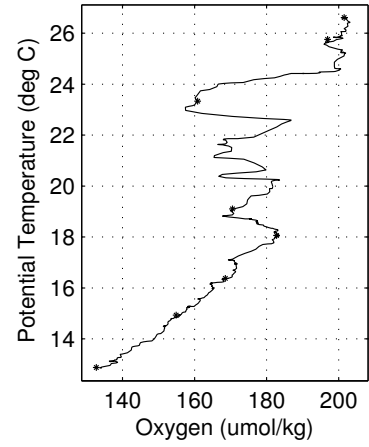
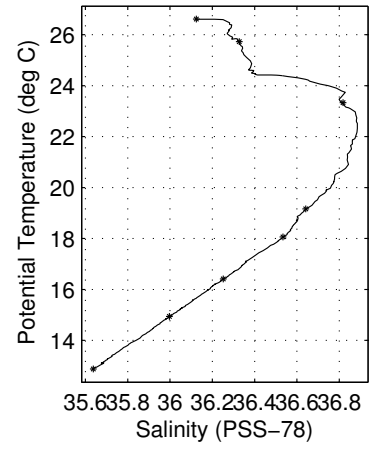
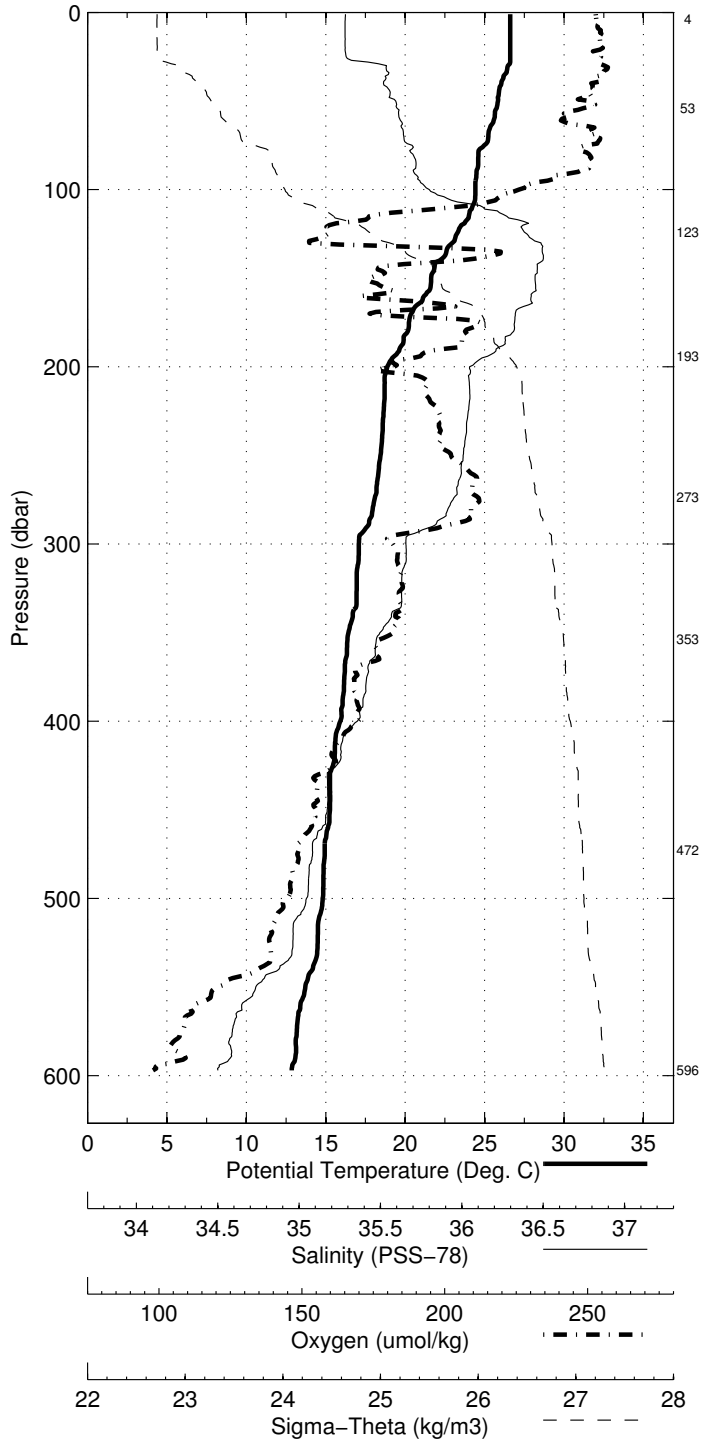


Abaco April-May 2011 R/V Knorr
 CTD Station 45 (CTD045)
 Latitude 27.003N Longitude 79.282W
 02-May-2011 13:54Z

| 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 | 26.615 | 26.614 | 36.124 | 201.3 | 0.004 | 23.688 |
| 10 | 26.615 | 26.613 | 36.123 | 202.0 | 0.042 | 23.687 |
| 20 | 26.613 | 26.608 | 36.123 | 202.4 | 0.084 | 23.689 |
| 30 | 26.478 | 26.471 | 36.282 | 202.6 | 0.126 | 23.852 |
| 50 | 25.852 | 25.841 | 36.318 | 200.3 | 0.205 | 24.078 |
| 75 | 24.990 | 24.974 | 36.380 | 199.6 | 0.298 | 24.393 |
| 100 | 24.445 | 24.424 | 36.446 | 189.6 | 0.383 | 24.610 |
| 125 | 23.271 | 23.245 | 36.822 | 160.3 | 0.460 | 25.245 |
| 150 | 21.666 | 21.637 | 36.854 | 166.7 | 0.523 | 25.729 |
| 200 | 18.900 | 18.864 | 36.601 | 170.5 | 0.625 | 26.281 |
| 250 | 18.488 | 18.444 | 36.577 | 179.2 | 0.714 | 26.369 |
| 300 | 17.134 | 17.083 | 36.357 | 170.3 | 0.798 | 26.536 |
| 400 | 15.978 | 15.913 | 36.169 | 164.9 | 0.953 | 26.668 |
| 500 | 14.879 | 14.802 | 35.974 | 154.1 | 1.098 | 26.767 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 597 | 2 | 12.957 | 12.873 | 35.638 | 132.7 |
| 473 | 4 | 15.011 | 14.938 | 35.997 | 154.9 |
| 353 | 6 | 16.469 | 16.411 | 36.252 | 168.5 |
| 274 | 8 | 18.106 | 18.058 | 36.534 | 182.8 |
| 194 | 10 | 19.195 | 19.160 | 36.642 | 170.5 |
| 124 | 12 | 23.362 | 23.336 | 36.818 | 160.8 |
| 54 | 14 | 25.741 | 25.729 | 36.328 | 197.0 |
| 4 | 16 | 26.621 | 26.620 | 36.124 | 201.5 |

Abaco April-May 2011 R/V Knorr
 CTD Station 45 (CTD045)
 Latitude 27.003 N Longitude 79.282 W
 02-May-2011 13:54 Z

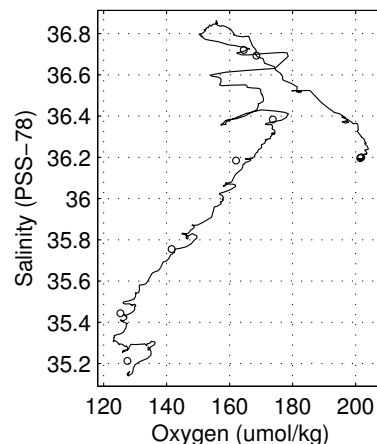
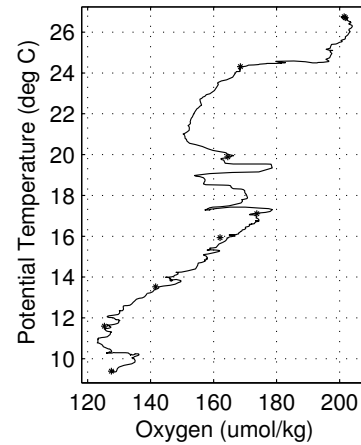
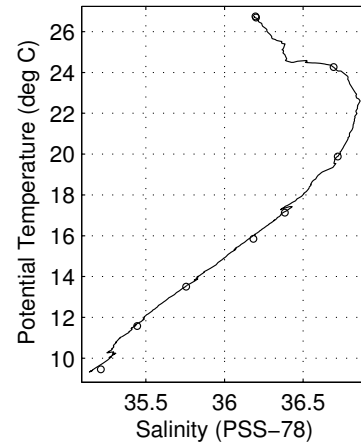
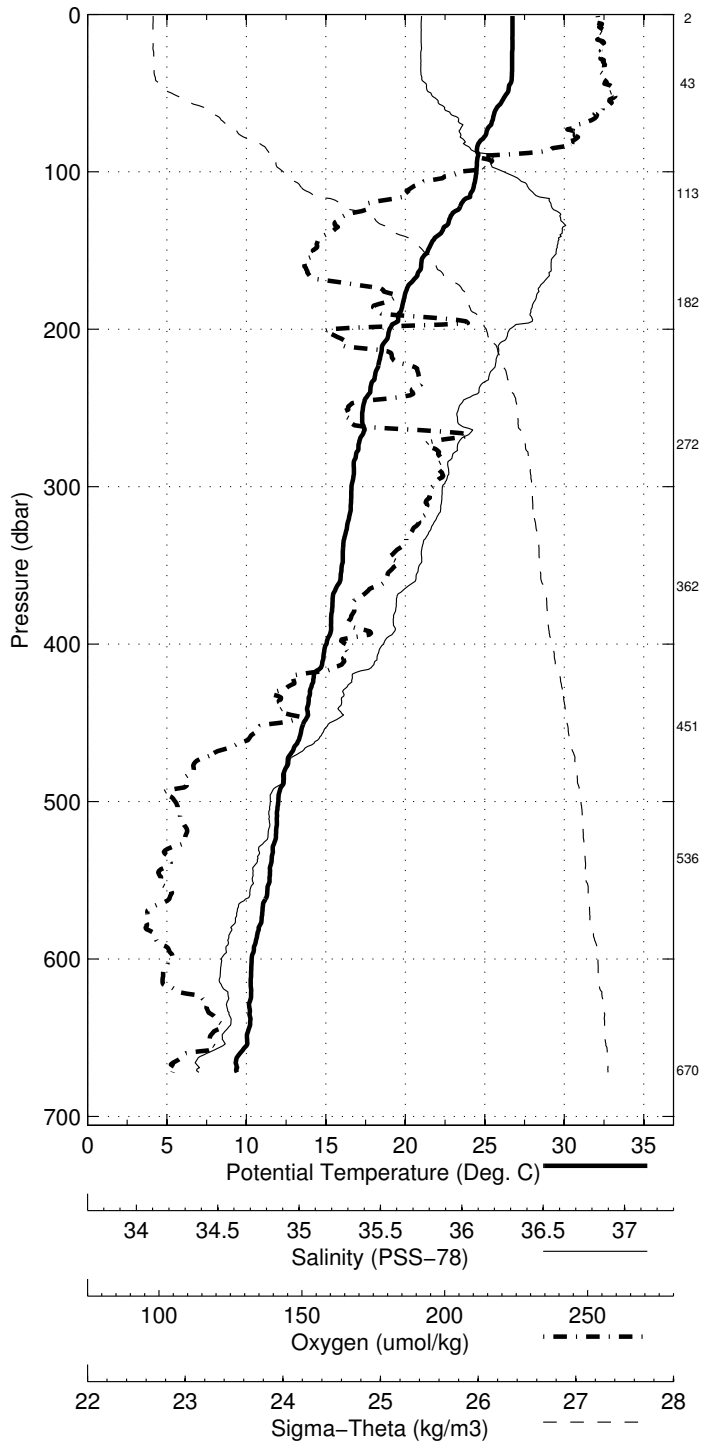


Abaco April-May 2011 R/V Knorr
 CTD Station 46 (CTD046)
 Latitude 27.005N Longitude 79.382W
 02-May-2011 15:10Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 26.738 | 26.737 | 36.192 | 201.0 | 0.004 | 23.700 |
| 10 | 26.740 | 26.738 | 36.191 | 202.1 | 0.042 | 23.699 |
| 20 | 26.742 | 26.738 | 36.192 | 201.4 | 0.084 | 23.700 |
| 30 | 26.720 | 26.714 | 36.189 | 201.9 | 0.126 | 23.706 |
| 50 | 26.416 | 26.404 | 36.236 | 202.9 | 0.209 | 23.839 |
| 75 | 25.118 | 25.101 | 36.370 | 197.8 | 0.304 | 24.346 |
| 100 | 24.488 | 24.467 | 36.575 | 176.9 | 0.389 | 24.694 |
| 125 | 23.160 | 23.134 | 36.822 | 160.3 | 0.466 | 25.277 |
| 150 | 21.450 | 21.421 | 36.819 | 151.9 | 0.528 | 25.763 |
| 200 | 19.034 | 18.998 | 36.602 | 154.8 | 0.630 | 26.247 |
| 250 | 17.375 | 17.332 | 36.365 | 158.0 | 0.716 | 26.483 |
| 300 | 16.657 | 16.608 | 36.290 | 172.5 | 0.795 | 26.598 |
| 400 | 15.094 | 15.033 | 36.017 | 157.5 | 0.943 | 26.749 |
| 500 | 12.071 | 12.004 | 35.491 | 128.2 | 1.074 | 26.969 |
| 600 | 10.397 | 10.324 | 35.262 | 127.3 | 1.191 | 27.100 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 671 | 2 | 9.530 | 9.452 | 35.213 | 127.5 |
| 536 | 4 | 11.643 | 11.573 | 35.444 | 125.4 |
| 452 | 6 | 13.569 | 13.505 | 35.755 | 141.6 |
| 363 | 8 | 15.908 | 15.850 | 36.184 | 162.1 |
| 273 | 10 | 17.174 | 17.128 | 36.383 | 173.7 |
| 183 | 12 | 19.918 | 19.883 | 36.720 | 164.5 |
| 113 | 14 | 24.291 | 24.267 | 36.694 | 168.5 |
| 43 | 16 | 26.701 | 26.691 | 36.200 | 201.8 |
| 2 | 18 | 26.751 | 26.750 | 36.197 | 201.4 |

Abaco April-May 2011 R/V Knorr
CTD Station 46 (CTD046)
Latitude 27.005 N Longitude 79.382 W
02-May-2011 15:10 Z

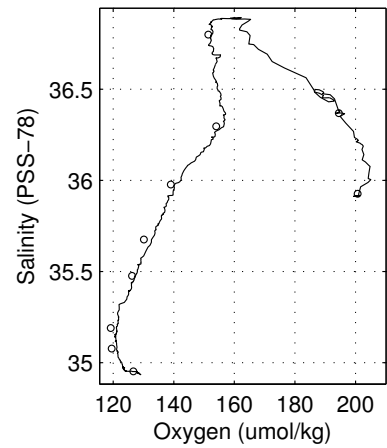
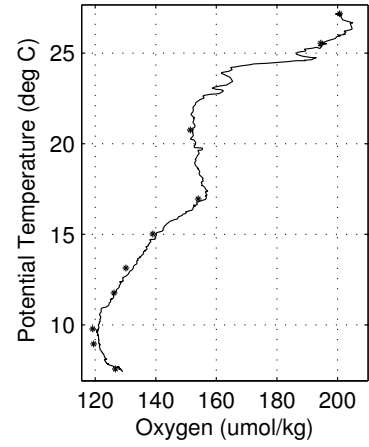
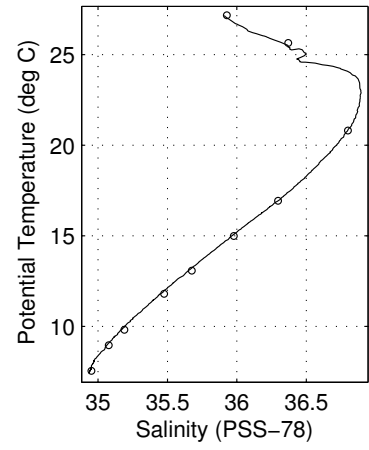
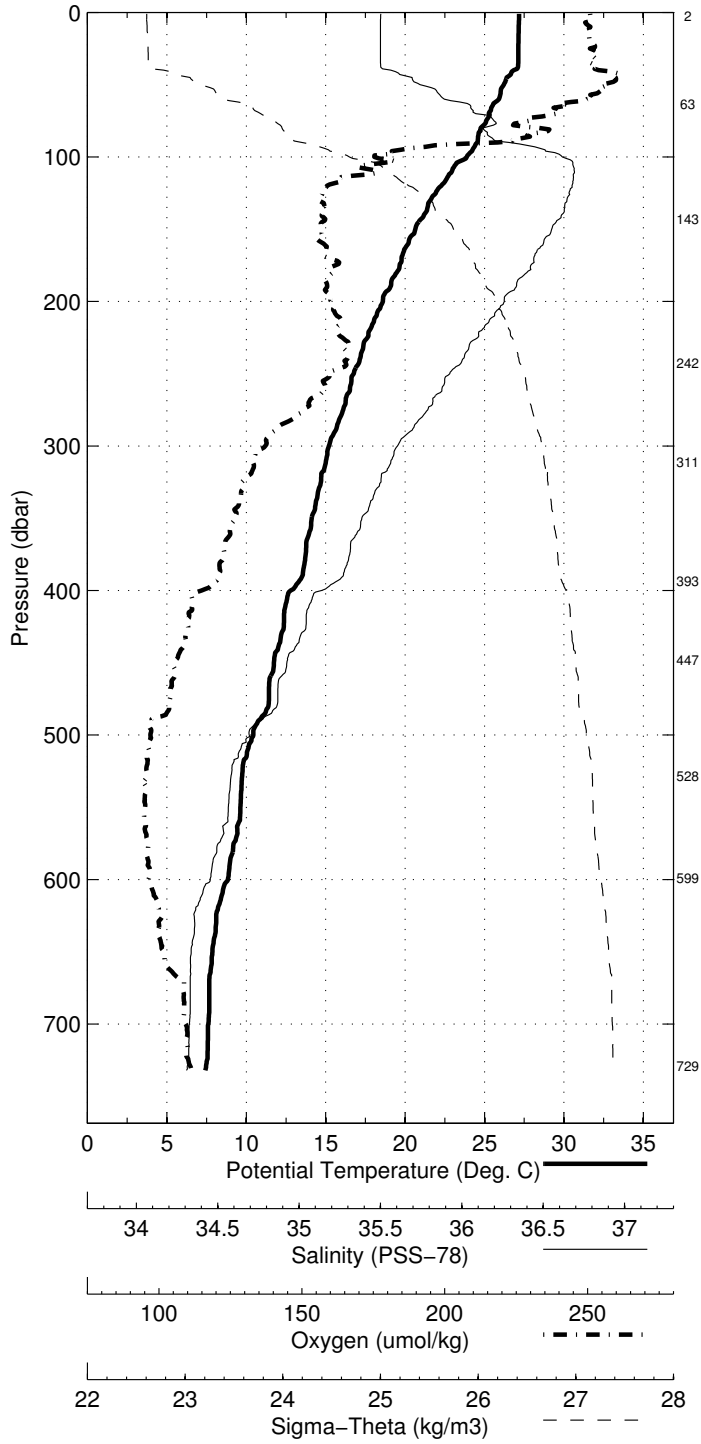


Abaco April-May 2011 R/V Knorr
 CTD Station 47 (CTD047)
 Latitude 27.011N Longitude 79.496W
 02-May-2011 16:37Z

| 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 | 27.171 | 27.171 | 35.914 | 200.2 | 0.005 | 23.352 |
| 10 | 27.157 | 27.155 | 35.913 | 200.3 | 0.045 | 23.356 |
| 20 | 27.139 | 27.134 | 35.912 | 200.6 | 0.090 | 23.362 |
| 30 | 27.136 | 27.129 | 35.913 | 200.6 | 0.136 | 23.364 |
| 50 | 26.229 | 26.218 | 36.112 | 202.2 | 0.223 | 23.804 |
| 75 | 25.119 | 25.103 | 36.487 | 189.3 | 0.318 | 24.434 |
| 100 | 23.900 | 23.879 | 36.832 | 161.7 | 0.400 | 25.065 |
| 125 | 21.953 | 21.928 | 36.866 | 152.4 | 0.465 | 25.657 |
| 150 | 20.669 | 20.640 | 36.778 | 152.1 | 0.520 | 25.946 |
| 200 | 18.634 | 18.599 | 36.540 | 154.0 | 0.617 | 26.301 |
| 250 | 16.800 | 16.759 | 36.263 | 153.5 | 0.700 | 26.542 |
| 300 | 15.246 | 15.200 | 35.998 | 142.2 | 0.776 | 26.698 |
| 400 | 12.849 | 12.794 | 35.615 | 130.8 | 0.911 | 26.911 |
| 500 | 10.501 | 10.440 | 35.249 | 121.7 | 1.030 | 27.070 |
| 600 | 8.912 | 8.846 | 35.051 | 121.4 | 1.135 | 27.183 |
| 700 | 7.676 | 7.605 | 34.946 | 128.0 | 1.228 | 27.290 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 729 | 2 | 7.620 | 7.546 | 34.953 | 126.6 |
| 599 | 4 | 9.023 | 8.956 | 35.077 | 119.5 |
| 529 | 6 | 9.875 | 9.813 | 35.190 | 119.2 |
| 448 | 8 | 11.861 | 11.802 | 35.476 | 126.2 |
| 393 | 10 | 13.135 | 13.080 | 35.676 | 130.1 |
| 311 | 12 | 15.042 | 14.994 | 35.977 | 139.0 |
| 243 | 14 | 16.980 | 16.939 | 36.297 | 154.0 |
| 143 | 16 | 20.841 | 20.814 | 36.800 | 151.4 |
| 63 | 18 | 25.658 | 25.644 | 36.369 | 194.5 |
| 3 | 20 | 27.177 | 27.176 | 35.927 | 200.7 |

Abaco April–May 2011 R/V Knorr
 CTD Station 47 (CTD047)
 Latitude 27.011 N Longitude 79.496 W
 02–May–2011 16:37 Z

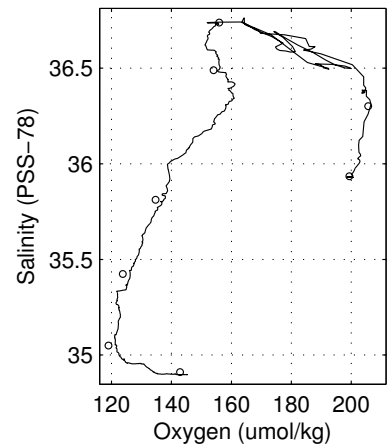
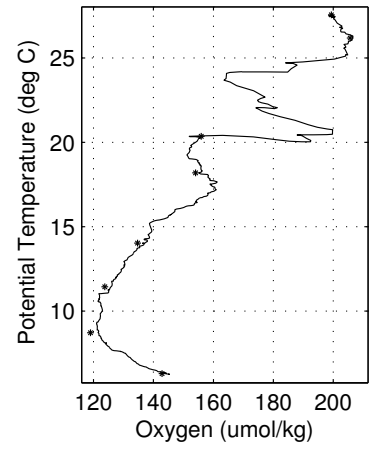
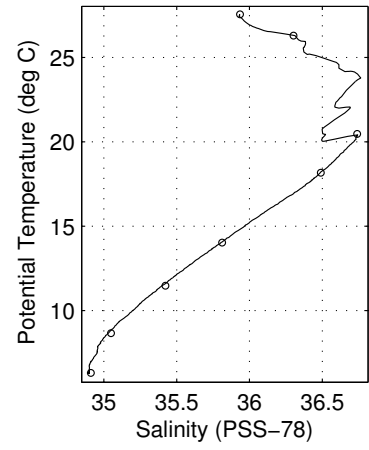
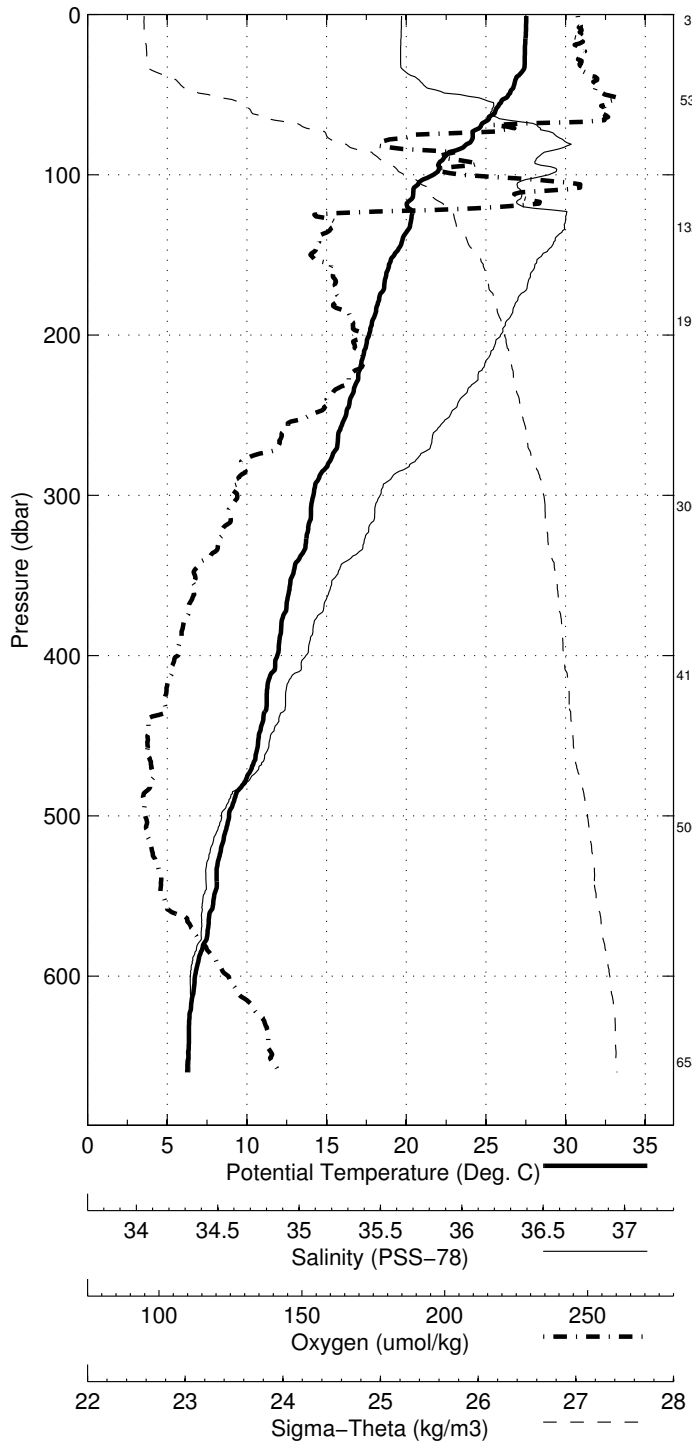


Abaco April-May 2011 R/V Knorr
 CTD Station 48 (CTD048)
 Latitude 27.020N Longitude 79.608W
 02-May-2011 18:12Z

| 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 | 27.524 | 27.524 | 35.934 | 199.4 | 0.005 | 23.252 |
| 10 | 27.516 | 27.514 | 35.932 | 200.0 | 0.046 | 23.254 |
| 20 | 27.453 | 27.448 | 35.929 | 199.6 | 0.092 | 23.273 |
| 30 | 27.439 | 27.432 | 35.929 | 200.0 | 0.138 | 23.279 |
| 50 | 26.433 | 26.421 | 36.219 | 204.2 | 0.226 | 23.821 |
| 75 | 24.187 | 24.171 | 36.683 | 169.7 | 0.316 | 24.865 |
| 100 | 21.722 | 21.702 | 36.653 | 178.5 | 0.385 | 25.558 |
| 125 | 20.380 | 20.357 | 36.739 | 151.9 | 0.440 | 25.993 |
| 150 | 19.277 | 19.250 | 36.621 | 151.1 | 0.489 | 26.196 |
| 200 | 17.696 | 17.662 | 36.417 | 161.2 | 0.577 | 26.442 |
| 250 | 16.259 | 16.219 | 36.171 | 151.0 | 0.656 | 26.598 |
| 300 | 14.215 | 14.170 | 35.829 | 138.0 | 0.727 | 26.791 |
| 400 | 11.960 | 11.907 | 35.466 | 127.3 | 0.853 | 26.969 |
| 500 | 8.940 | 8.885 | 35.053 | 121.4 | 0.963 | 27.178 |
| 600 | 6.804 | 6.747 | 34.901 | 136.4 | 1.053 | 27.375 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 654 | 2 | 6.364 | 6.304 | 34.911 | 142.9 |
| 507 | 4 | 8.712 | 8.657 | 35.049 | 119.0 |
| 412 | 6 | 11.526 | 11.473 | 35.424 | 123.8 |
| 307 | 8 | 14.071 | 14.026 | 35.812 | 134.7 |
| 191 | 10 | 18.198 | 18.164 | 36.489 | 154.0 |
| 132 | 12 | 20.495 | 20.470 | 36.739 | 155.9 |
| 53 | 14 | 26.299 | 26.287 | 36.301 | 205.7 |
| 3 | 16 | 27.546 | 27.545 | 35.935 | 199.4 |

Abaco April-May 2011 R/V Knorr
 CTD Station 48 (CTD048)
 Latitude 27.020 N Longitude 79.608 W
 02-May-2011 18:12 Z

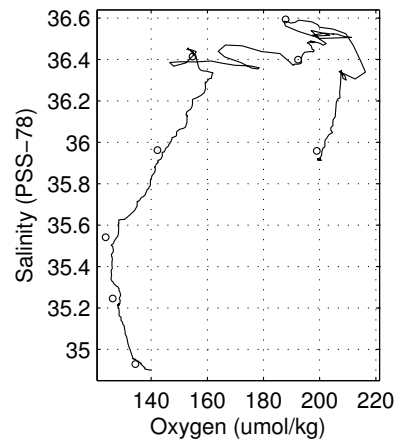
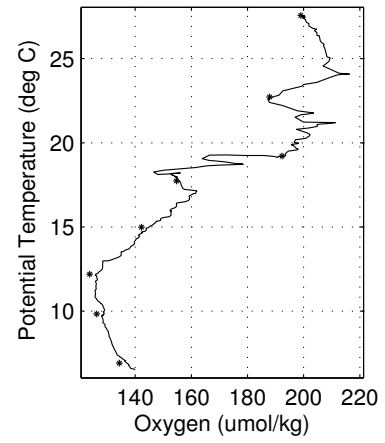
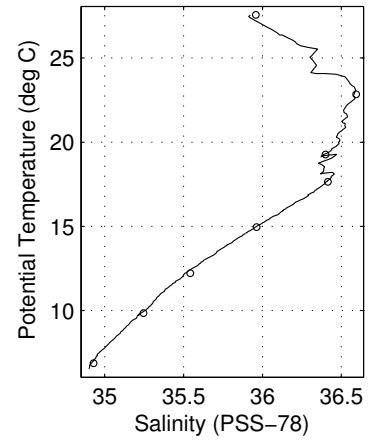
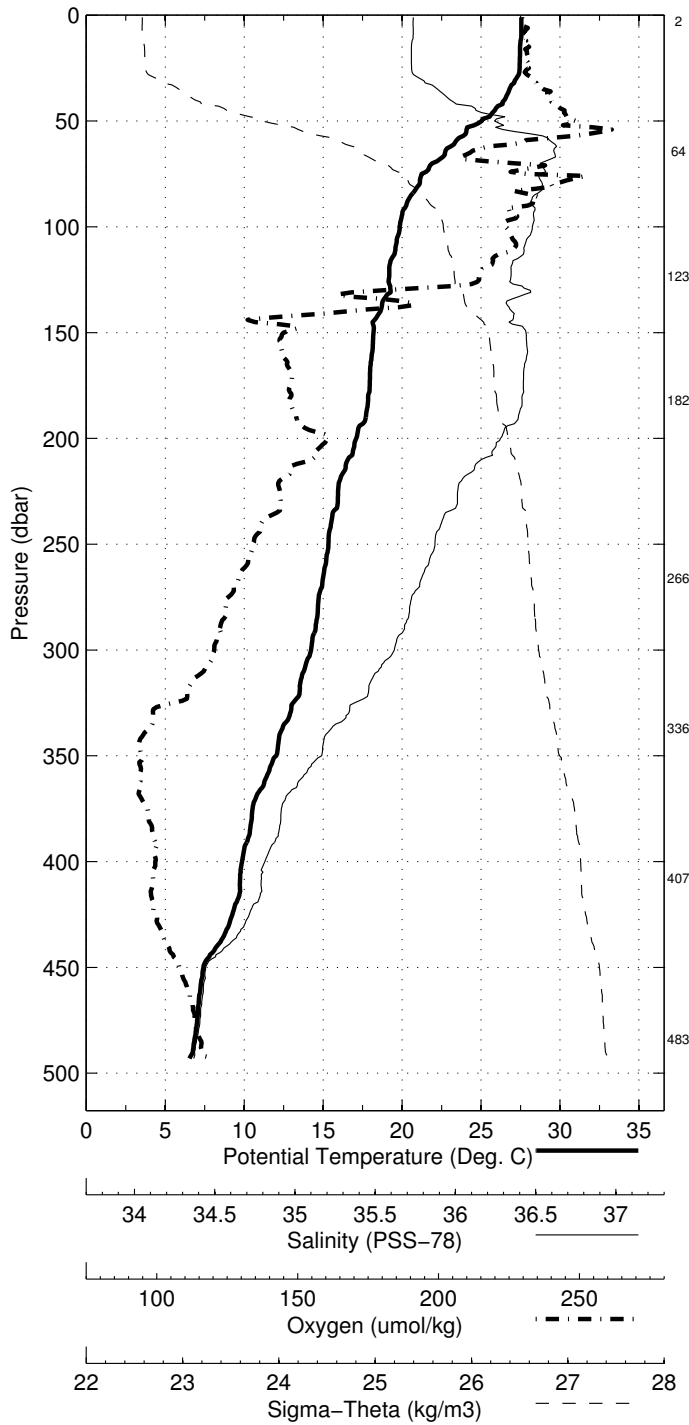


Abaco April-May 2011 R/V Knorr
 CTD Station 49 (CTD049)
 Latitude 27.023N Longitude 79.686W
 02-May-2011 19:41Z

| Pressure dbar | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ | DynHt $\text{m}^2\cdot\text{s}^{-2}$ | SigT $\text{kg}\cdot\text{m}^{-3}$ |
|------------------|--------------|----------------|--------------------|--|---|---------------------------------------|
| 1 | 27.554 | 27.554 | 35.922 | 199.1 | 0.005 | 23.234 |
| 10 | 27.551 | 27.548 | 35.921 | 199.5 | 0.046 | 23.235 |
| 20 | 27.465 | 27.461 | 35.914 | 200.4 | 0.093 | 23.258 |
| 30 | 27.231 | 27.224 | 35.954 | 200.8 | 0.139 | 23.364 |
| 50 | 25.063 | 25.052 | 36.301 | 209.4 | 0.221 | 24.309 |
| 75 | 21.245 | 21.231 | 36.502 | 199.9 | 0.293 | 25.574 |
| 100 | 19.870 | 19.851 | 36.477 | 196.0 | 0.349 | 25.928 |
| 125 | 19.180 | 19.158 | 36.375 | 190.9 | 0.401 | 26.032 |
| 150 | 18.213 | 18.187 | 36.447 | 153.4 | 0.448 | 26.334 |
| 200 | 17.130 | 17.096 | 36.329 | 161.7 | 0.532 | 26.512 |
| 250 | 15.374 | 15.335 | 36.023 | 147.6 | 0.606 | 26.686 |
| 300 | 14.287 | 14.242 | 35.834 | 140.2 | 0.676 | 26.780 |
| 400 | 9.904 | 9.857 | 35.231 | 128.9 | 0.792 | 27.157 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 484 | 2 | 6.913 | 6.867 | 34.929 | 134.3 |
| 408 | 4 | 9.889 | 9.842 | 35.246 | 126.3 |
| 337 | 6 | 12.264 | 12.219 | 35.542 | 123.8 |
| 266 | 8 | 14.989 | 14.949 | 35.963 | 142.2 |
| 182 | 10 | 17.675 | 17.644 | 36.415 | 154.7 |
| 123 | 12 | 19.285 | 19.263 | 36.399 | 192.3 |
| 64 | 14 | 22.861 | 22.848 | 36.594 | 187.9 |
| 3 | 16 | 27.562 | 27.562 | 35.959 | 199.0 |

Abaco April–May 2011 R/V Knorr
 CTD Station 49 (CTD049)
 Latitude 27.023 N Longitude 79.686 W
 02–May–2011 19:41 Z

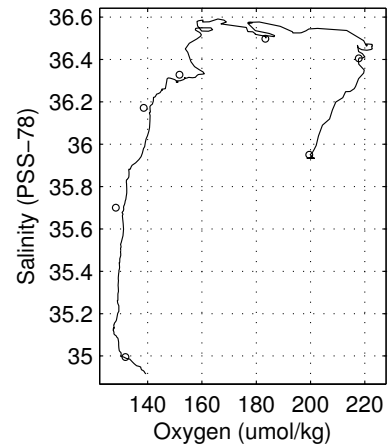
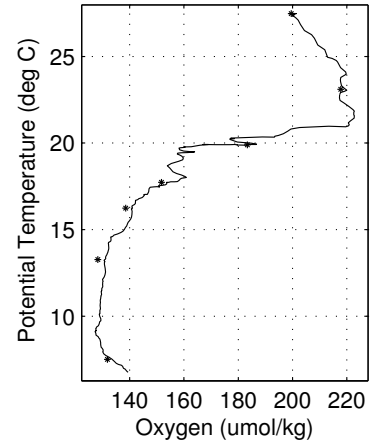
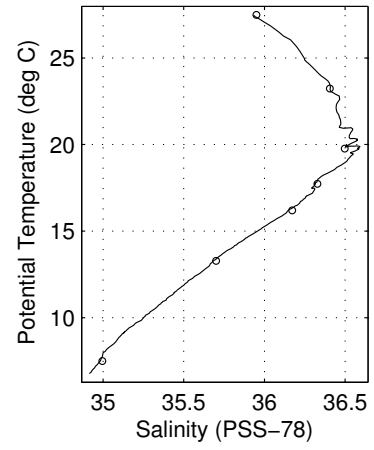
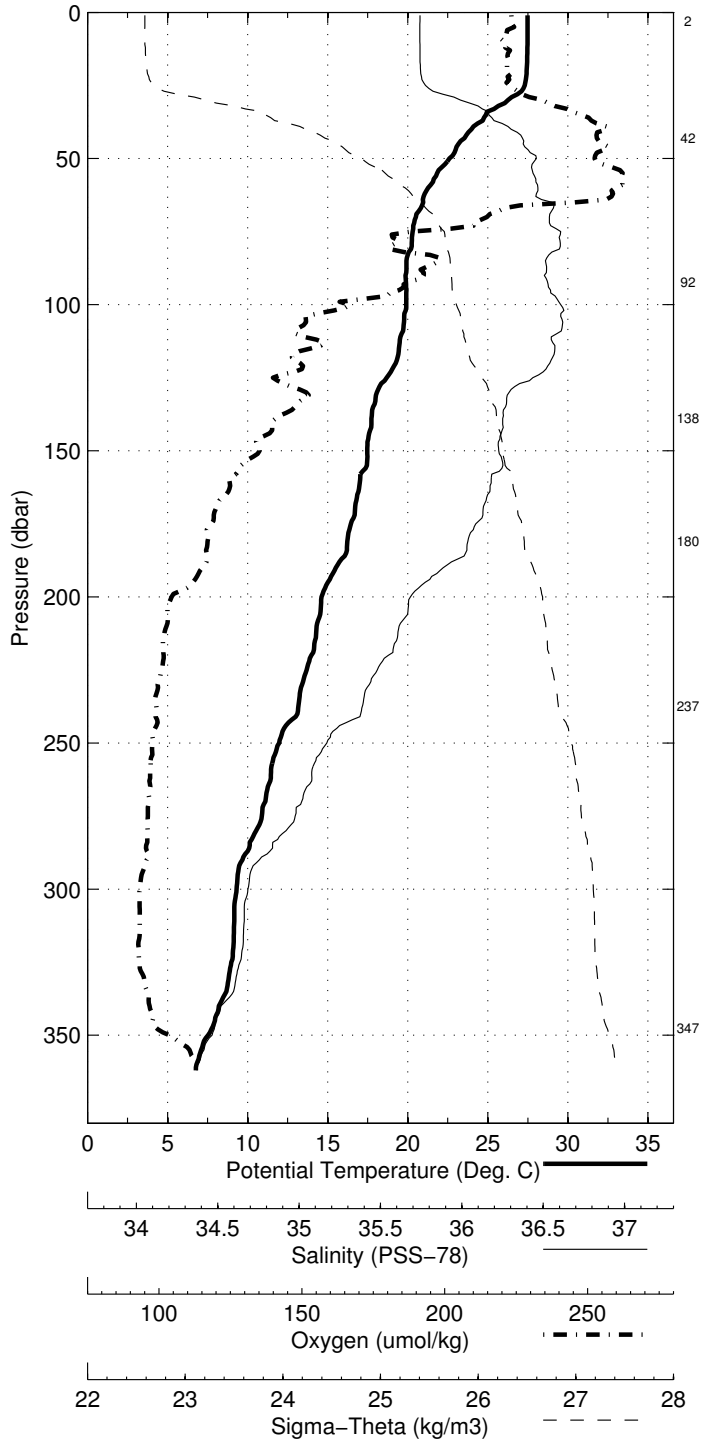


Abaco April-May 2011 R/V Knorr
 CTD Station 50 (CTD050)
 Latitude 27.013N Longitude 79.780W
 02-May-2011 21:09Z

| 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 | 27.483 | 27.483 | 35.935 | 200.8 | 0.005 | 23.267 |
| 10 | 27.485 | 27.483 | 35.934 | 199.5 | 0.046 | 23.266 |
| 20 | 27.430 | 27.425 | 35.938 | 200.5 | 0.092 | 23.287 |
| 30 | 26.268 | 26.261 | 36.120 | 207.0 | 0.136 | 23.796 |
| 50 | 22.614 | 22.604 | 36.466 | 217.3 | 0.203 | 25.161 |
| 75 | 20.324 | 20.310 | 36.577 | 181.2 | 0.263 | 25.882 |
| 100 | 19.931 | 19.913 | 36.577 | 169.0 | 0.315 | 25.988 |
| 125 | 18.709 | 18.687 | 36.450 | 153.8 | 0.364 | 26.210 |
| 150 | 17.497 | 17.471 | 36.294 | 151.2 | 0.408 | 26.394 |
| 200 | 14.649 | 14.619 | 35.890 | 133.8 | 0.484 | 26.742 |
| 250 | 12.000 | 11.967 | 35.509 | 130.0 | 0.547 | 26.991 |
| 300 | 9.338 | 9.304 | 35.149 | 127.6 | 0.599 | 27.185 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 347 | 2 | 7.529 | 7.495 | 34.995 | 131.8 |
| 237 | 4 | 13.317 | 13.283 | 35.700 | 128.3 |
| 181 | 6 | 16.231 | 16.202 | 36.171 | 138.5 |
| 139 | 8 | 17.751 | 17.727 | 36.328 | 151.7 |
| 92 | 10 | 19.779 | 19.762 | 36.498 | 183.3 |
| 43 | 12 | 23.242 | 23.233 | 36.406 | 217.8 |
| 3 | 14 | 27.485 | 27.485 | 35.950 | 199.6 |

Abaco April-May 2011 R/V Knorr
 CTD Station 50 (CTD050)
 Latitude 27.013 N Longitude 79.780 W
 02-May-2011 21:09 Z

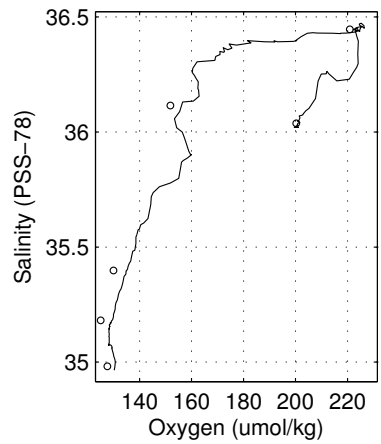
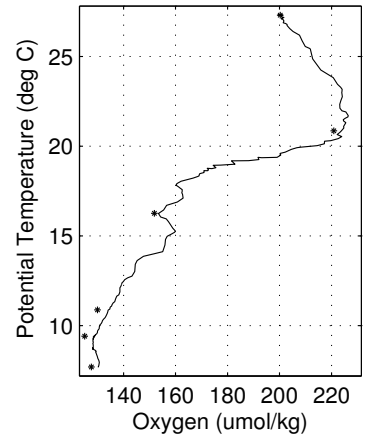
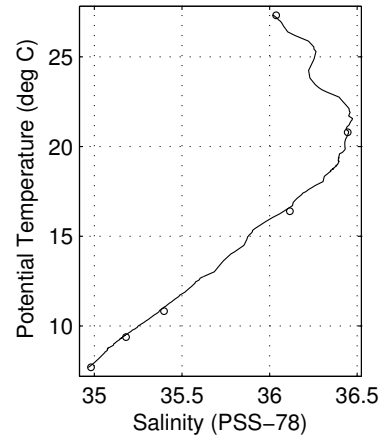
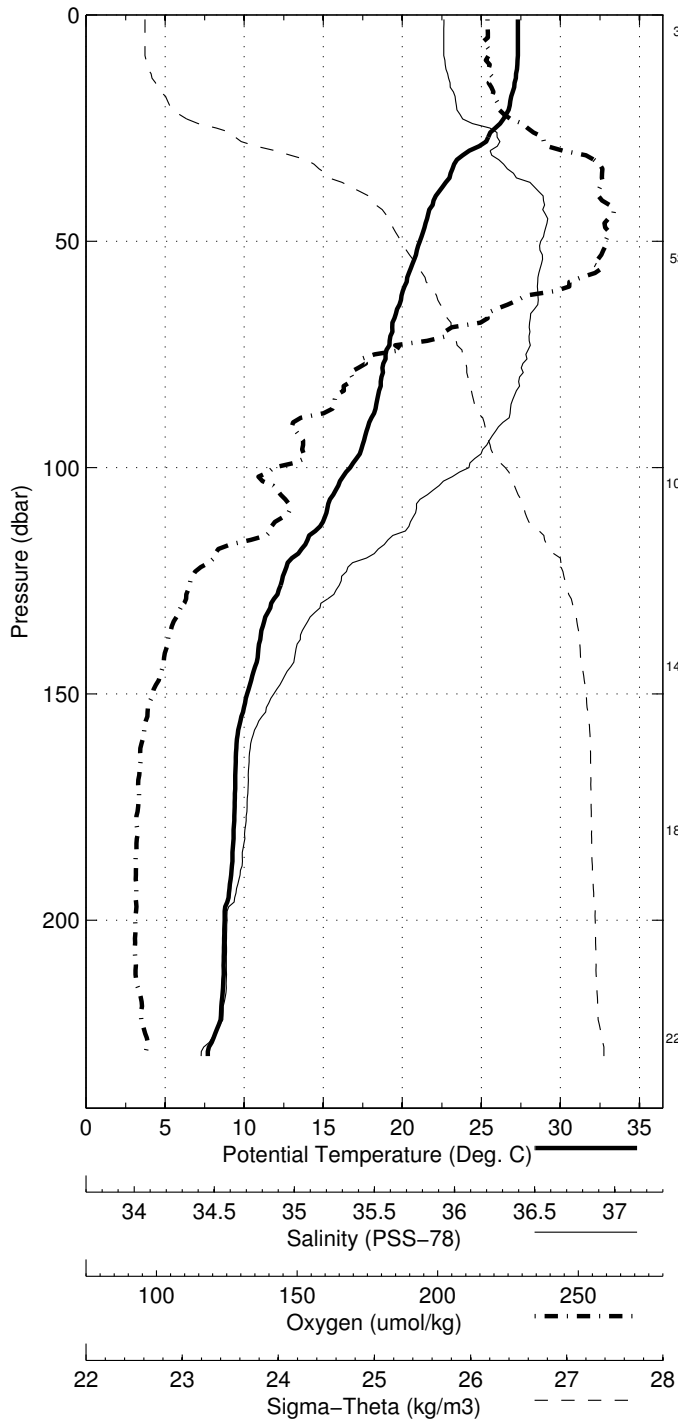


Abaco April-May 2011 R/V Knorr
 CTD Station 51 (CTD051)
 Latitude 27.012N Longitude 79.866W
 02-May-2011 22:23Z

| 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 | 27.315 | 27.314 | 36.022 | 200.4 | 0.004 | 23.386 |
| 10 | 27.294 | 27.291 | 36.025 | 200.1 | 0.045 | 23.397 |
| 20 | 26.794 | 26.790 | 36.076 | 202.9 | 0.089 | 23.595 |
| 30 | 24.250 | 24.244 | 36.222 | 215.9 | 0.128 | 24.494 |
| 50 | 21.113 | 21.104 | 36.442 | 224.7 | 0.183 | 25.564 |
| 75 | 18.958 | 18.945 | 36.378 | 177.3 | 0.237 | 26.089 |
| 100 | 16.722 | 16.706 | 36.131 | 156.5 | 0.282 | 26.453 |
| 125 | 12.406 | 12.390 | 35.575 | 139.4 | 0.316 | 26.960 |
| 150 | 10.200 | 10.182 | 35.281 | 131.6 | 0.341 | 27.140 |
| 200 | 8.782 | 8.761 | 35.078 | 128.1 | 0.387 | 27.218 |

| Pressure dbar | Niskin | Temp90 °C | PoTemp90 °C | Salinity PSS-78 | Oxygen $\mu\text{mol}\cdot\text{kg}^{-1}$ |
|------------------|--------|--------------|----------------|--------------------|--|
| 226 | 2 | 7.714 | 7.692 | 34.981 | 127.6 |
| 180 | 4 | 9.397 | 9.377 | 35.181 | 125.0 |
| 144 | 6 | 10.842 | 10.824 | 35.398 | 130.0 |
| 103 | 8 | 16.410 | 16.393 | 36.115 | 151.9 |
| 54 | 10 | 20.801 | 20.791 | 36.446 | 220.8 |
| 4 | 12 | 27.311 | 27.310 | 36.038 | 200.2 |

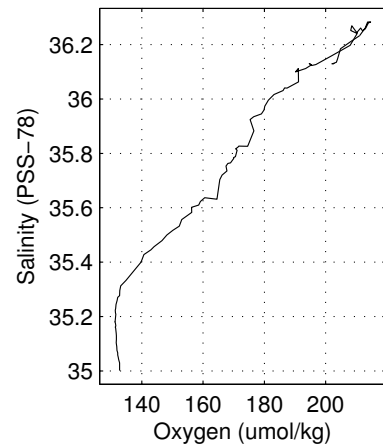
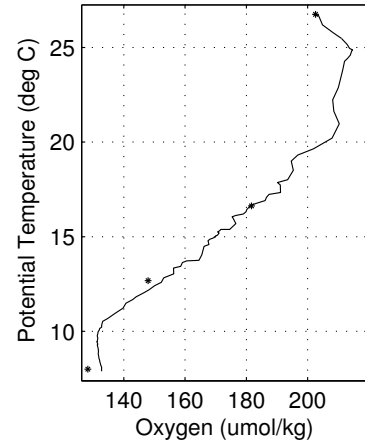
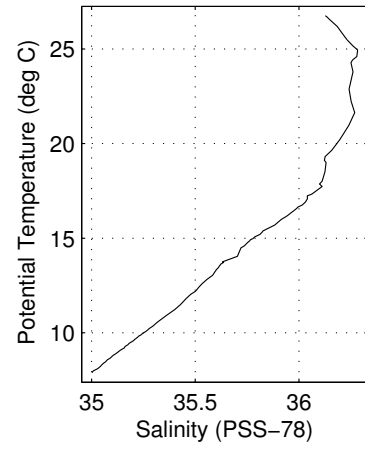
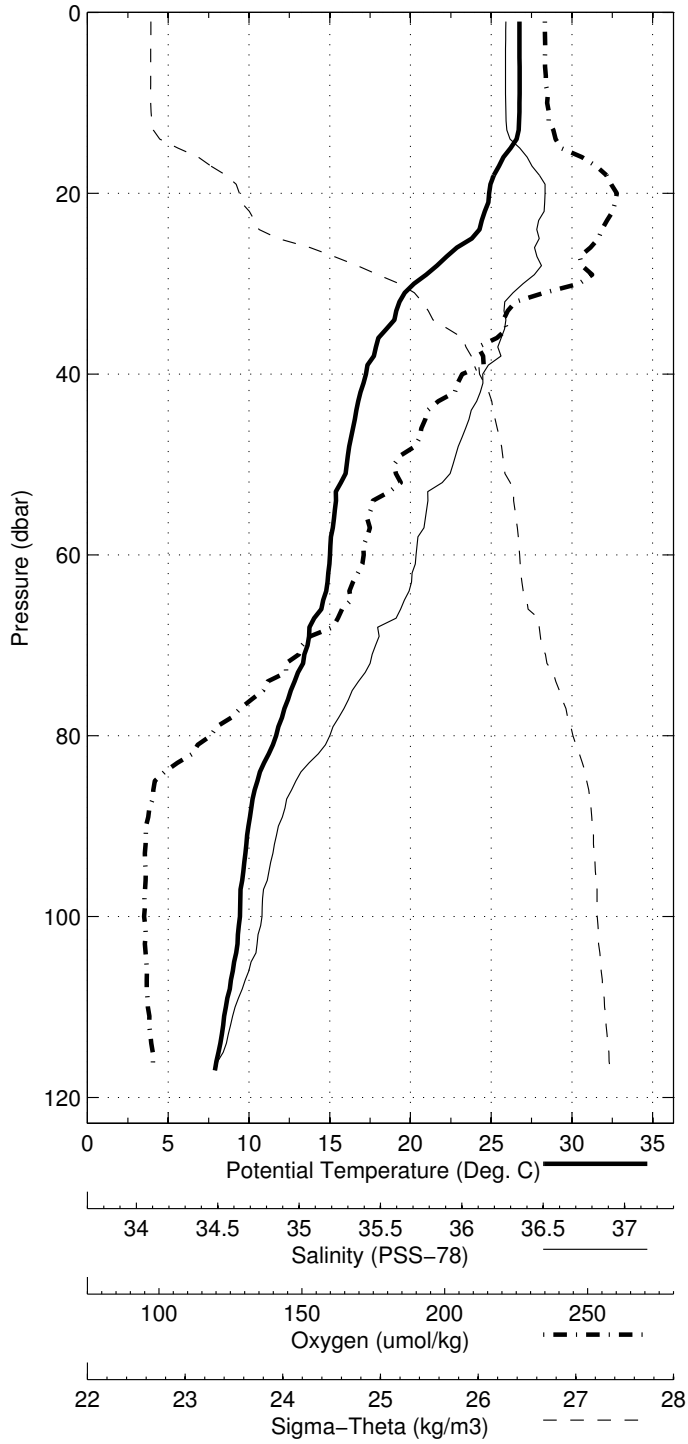
Abaco April–May 2011 R/V Knorr
 CTD Station 51 (CTD051)
 Latitude 27.012 N Longitude 79.866 W
 02–May–2011 22:23 Z



Abaco April-May 2011 R/V Knorr
 CTD Station 52 (CTD052)
 Latitude 27.009N Longitude 79.932W
 02-May-2011 23:22Z

| 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 | 26.754 | 26.754 | 36.130 | 202.0 | 0.004 | 23.648 |
| 10 | 26.756 | 26.754 | 36.130 | 202.4 | 0.042 | 23.648 |
| 20 | 24.879 | 24.875 | 36.283 | 214.7 | 0.082 | 24.350 |
| 30 | 20.223 | 20.217 | 36.198 | 208.0 | 0.113 | 25.618 |
| 50 | 16.060 | 16.052 | 35.924 | 175.4 | 0.149 | 26.447 |
| 75 | 12.597 | 12.587 | 35.532 | 152.2 | 0.184 | 26.888 |
| 100 | 9.453 | 9.442 | 35.181 | 131.2 | 0.208 | 27.188 |

Abaco April-May 2011 R/V Knorr
 CTD Station 52 (CTD052)
 Latitude 27.009 N Longitude 79.932 W
 02-May-2011 23:22 Z



B WOCE Summary File

Table 17: Abaco Cruise – WOCE Summary File

| SHIP/CRS EXPOCODE | WOCE SECT | STN | CAST | CAST TYPE | CAST DATE | UTC TIME | EVENT CODE | LAT | LONG | NAV | UNC DPH | HT-ABV BTM | WIRE OUT | MAX PRS | NO BTLS | PARA- METERS | COMMENTS |
|----------------------|--------------|-----|------|--------------|--------------|-------------|---------------|---------|---------|-----|------------|---------------|-------------|------------|------------|-----------------|----------|
| WBTSKN | AB1104 | 1 | 1 | ROS | 04/13/2011 | 21:11 | BE | 26.433N | 78.668W | GPS | | | | | | | |
| WBTSKN | AB1104 | 1 | 1 | ROS | 04/13/2011 | 21:30 | BO | 26.432N | 78.668W | GPS | 738 | 27 | 740 | 744 | 23 | 1,2 | |
| WBTSKN | AB1104 | 1 | 1 | ROS | 04/13/2011 | 22:00 | EN | 26.431N | 78.668W | GPS | | | | | | | |
| WBTSKN | AB1104 | 2 | 1 | ROS | 04/13/2011 | 23:26 | BE | 26.333N | 78.706W | GPS | | | | | | | |
| WBTSKN | AB1104 | 2 | 1 | ROS | 04/13/2011 | 23:43 | BO | 26.333N | 78.717W | GPS | 673 | 20 | 675 | 678 | 10 | 1,2 | |
| WBTSKN | AB1104 | 2 | 1 | ROS | 04/14/2011 | 00:08 | EN | 26.333N | 78.717W | GPS | | | | | | | |
| WBTSKN | AB1104 | 3 | 1 | ROS | 04/14/2011 | 01:03 | BE | 26.250N | 78.767W | GPS | | | | | | | |
| WBTSKN | AB1104 | 3 | 1 | ROS | 04/14/2011 | 01:15 | BO | 26.250N | 78.766W | GPS | 501 | 21 | 505 | 506 | 8 | 1,2 | |
| WBTSKN | AB1104 | 3 | 1 | ROS | 04/14/2011 | 01:38 | EN | 26.248N | 78.768W | GPS | | | | | | | |
| WBTSKN | AB1104 | 4 | 1 | ROS | 04/14/2011 | 02:30 | BO | 26.165N | 78.800W | GPS | | | | | | | |
| WBTSKN | AB1104 | 4 | 1 | ROS | 04/14/2011 | 02:41 | BE | 26.164N | 78.800W | GPS | 434 | 24 | 435 | 437 | 8 | 1,2 | |
| WBTSKN | AB1104 | 4 | 1 | ROS | 04/14/2011 | 03:01 | EN | 26.161N | 78.800W | GPS | | | | | | | |
| WBTSKN | AB1104 | 5 | 1 | ROS | 04/14/2011 | 03:51 | BE | 26.066N | 78.849W | GPS | | | | | | | |
| WBTSKN | AB1104 | 5 | 1 | ROS | 04/14/2011 | 04:00 | BO | 26.065N | 78.849W | GPS | 281 | 21 | 280 | 282 | 7 | 1,2 | |
| WBTSKN | AB1104 | 5 | 1 | ROS | 04/14/2011 | 04:13 | EN | 26.064N | 78.848W | GPS | | | | | | | |
| WBTSKN | AB1104 | 6 | 1 | ROS | 04/14/2011 | 14:08 | BE | 25.954N | 76.895W | GPS | | | | | | | |
| WBTSKN | AB1104 | 6 | 1 | ROS | 04/14/2011 | 15:18 | BO | 25.954N | 76.894W | GPS | 754 | 236 | 3525 | 3554 | 11 | 1,2 | |
| WBTSKN | AB1104 | 6 | 1 | ROS | 04/14/2011 | 17:20 | EN | 25.955N | 76.893W | GPS | | | | | | | |
| WBTSKN | AB1104 | 7 | 1 | ROS | 04/14/2011 | 18:26 | BE | 25.955N | 76.894W | GPS | | | | | | | |
| WBTSKN | AB1104 | 7 | 1 | ROS | 04/14/2011 | 19:33 | BO | 25.955N | 76.894W | GPS | 1007 | 242 | 3526 | 3555 | 11 | 1,2 | |
| WBTSKN | AB1104 | 7 | 1 | ROS | 04/14/2011 | 21:33 | EN | 25.953N | 76.896W | GPS | | | | | | | |
| WBTSKN | AB1104 | 8 | 1 | ROS | 04/14/2011 | 23:32 | BE | 25.954N | 76.895W | GPS | | | | | | | |
| WBTSKN | AB1104 | 8 | 1 | ROS | 04/15/2011 | 00:58 | BO | 25.954N | 76.896W | GPS | 3007 | 244 | 4050 | 4087 | 11 | 1,2 | |
| WBTSKN | AB1104 | 8 | 1 | ROS | 04/15/2011 | 03:10 | EN | 25.953N | 76.896W | GPS | | | | | | | |
| WBTSKN | AB1104 | 9 | 1 | ROS | 04/15/2011 | 03:51 | BE | 25.954N | 76.895W | GPS | | | | | | | |
| WBTSKN | AB1104 | 9 | 1 | ROS | 04/15/2011 | 05:02 | BO | 25.956N | 76.898W | GPS | 2502 | 246 | 3525 | 3555 | 11 | 1,2 | |
| WBTSKN | AB1104 | 9 | 1 | ROS | 04/15/2011 | 07:01 | EN | 25.965N | 76.899W | GPS | | | | | | | |
| WBTSKN | AB1104 | 10 | 1 | ROS | 04/15/2011 | 10:32 | BE | 26.525N | 76.884W | GPS | | | | | | | |
| WBTSKN | AB1104 | 10 | 1 | ROS | 04/15/2011 | 10:44 | BO | 26.525N | 76.884W | GPS | 439 | 25 | NaN | 442 | 8 | 1,2 | |
| WBTSKN | AB1104 | 10 | 1 | ROS | 04/15/2011 | 11:01 | EN | 26.526N | 76.885W | GPS | | | | | | | |
| WBTSKN | AB1104 | 11 | 1 | ROS | 04/15/2011 | 11:42 | BE | 26.517N | 76.832W | GPS | | | | | | | |
| WBTSKN | AB1104 | 11 | 1 | ROS | 04/15/2011 | 12:05 | BO | 26.518N | 76.833W | GPS | 1069 | 23 | 1075 | 1079 | 12 | 1,2 | |
| WBTSKN | AB1104 | 11 | 1 | ROS | 04/15/2011 | 12:39 | EN | 26.521N | 76.834W | GPS | | | | | | | |
| WBTSKN | AB1104 | 12 | 1 | ROS | 04/15/2011 | 13:27 | BE | 26.499N | 76.743W | GPS | | | | | | | |
| WBTSKN | AB1104 | 12 | 1 | ROS | 04/15/2011 | 14:35 | BO | 26.501N | 76.742W | GPS | 3822 | 32 | 3845 | 3883 | 23 | 1,2 | |
| WBTSKN | AB1104 | 12 | 1 | ROS | 04/15/2011 | 16:14 | EN | 26.500N | 76.740W | GPS | | | | | | | |
| WBTSKN | AB1104 | 13 | 1 | ROS | 04/15/2011 | 17:54 | BE | 26.501N | 76.654W | GPS | | | | | | | |
| WBTSKN | AB1104 | 13 | 1 | ROS | 04/15/2011 | 19:16 | BO | 26.501N | 76.654W | GPS | 4563 | 20 | 4600 | 4643 | 23 | 1,2 | |
| WBTSKN | AB1104 | 13 | 1 | ROS | 04/15/2011 | 21:04 | EN | 26.503N | 76.654W | GPS | | | | | | | |
| WBTSKN | AB1104 | 14 | 1 | ROS | 04/15/2011 | 22:17 | BE | 26.500N | 76.565W | GPS | | | | | | | |
| WBTSKN | AB1104 | 14 | 1 | ROS | 04/15/2011 | 23:46 | BO | 26.500N | 76.565W | GPS | 4810 | 22 | 4880 | 4897 | 23 | 1,2 | |
| WBTSKN | AB1104 | 14 | 1 | ROS | 04/16/2011 | 02:05 | EN | 26.494N | 76.568W | GPS | | | | | | | |
| WBTSKN | AB1104 | 15 | 1 | ROS | 04/16/2011 | 03:21 | BE | 26.501N | 76.475W | GPS | | | | | | | |
| WBTSKN | AB1104 | 15 | 1 | ROS | 04/16/2011 | 04:45 | BO | 26.494N | 76.480W | GPS | 4801 | 37 | 4835 | 4888 | 23 | 1,2 | |
| WBTSKN | AB1104 | 15 | 1 | ROS | 04/16/2011 | 06:40 | EN | 26.491N | 76.486W | GPS | | | | | | | |
| WBTSKN | AB1104 | 16 | 1 | ROS | 04/16/2011 | 08:08 | BE | 26.500N | 76.345W | GPS | | | | | | | |
| WBTSKN | AB1104 | 16 | 1 | ROS | 04/16/2011 | 09:37 | BO | 26.494N | 76.349W | GPS | 4825 | 36 | 4860 | 4913 | 23 | 1,2 | |
| WBTSKN | AB1104 | 16 | 1 | ROS | 04/16/2011 | 11:26 | EN | 26.485N | 76.356W | GPS | | | | | | | |
| WBTSKN | AB1104 | 17 | 1 | ROS | 04/16/2011 | 12:37 | BE | 26.504N | 76.170W | GPS | | | | | | | |
| WBTSKN | AB1104 | 17 | 1 | ROS | 04/16/2011 | 14:04 | BO | 26.493N | 76.222W | GPS | 4787 | 24 | 4820 | 4875 | 23 | 1,2 | |
| WBTSKN | AB1104 | 17 | 1 | ROS | 04/16/2011 | 15:56 | EN | 26.483N | 76.228W | GPS | | | | | | | |
| WBTSKN | AB1104 | 18 | 1 | ROS | 04/16/2011 | 17:01 | BE | 26.499N | 76.086W | GPS | | | | | | | |
| WBTSKN | AB1104 | 18 | 1 | ROS | 04/16/2011 | 18:27 | BO | 26.491N | 76.096W | GPS | 4774 | 26 | 4810 | 4861 | 22 | 1,2 | |
| WBTSKN | AB1104 | 18 | 1 | ROS | 04/16/2011 | 20:11 | EN | 26.476N | 76.099W | GPS | | | | | | | |
| WBTSKN | AB1104 | 19 | 1 | ROS | 04/16/2011 | 21:32 | BE | 26.499N | 75.900W | GPS | | | | | | | |
| WBTSKN | AB1104 | 19 | 1 | ROS | 04/16/2011 | 22:57 | BO | 26.487N | 75.908W | GPS | 4721 | 23 | 4750 | 4807 | 13 | 1,2 | |
| WBTSKN | AB1104 | 19 | 1 | ROS | 04/17/2011 | 00:35 | EN | 26.473N | 75.913W | GPS | | | | | | | |
| WBTSKN | AB1104 | 20 | 1 | ROS | 04/17/2011 | 03:36 | BE | 26.501N | 75.704W | GPS | | | | | | | |
| WBTSKN | AB1104 | 20 | 1 | ROS | 04/17/2011 | 04:58 | BO | 26.503N | 75.704W | GPS | 4658 | 31 | 4690 | 4741 | 23 | 1,2 | |
| WBTSKN | AB1104 | 20 | 1 | ROS | 04/17/2011 | 06:38 | EN | 26.500N | 75.706W | GPS | | | | | | | |
| WBTSKN | AB1104 | 21 | 1 | ROS | 04/17/2011 | 07:53 | BE | 26.501N | 75.501W | GPS | | | | | | | |
| WBTSKN | AB1104 | 21 | 1 | ROS | 04/17/2011 | 09:17 | BO | 26.507N | 75.504W | GPS | 4660 | 24 | 4695 | 4743 | 23 | 1,2 | |

| | | | | | | | | | | | | | | | | |
|--------|--------|----|---|-----|------------|-------|----|---------|---------|-----|------|-----|------|------|----|-----|
| WBTSKN | AB1104 | 21 | 1 | ROS | 04/17/2011 | 11:01 | EN | 26.518N | 75.506W | GPS | 4608 | 29 | 4644 | 4690 | 23 | 1,2 |
| WBTSKN | AB1104 | 22 | 1 | ROS | 04/17/2011 | 12:14 | BE | 26.501N | 75.299W | GPS | | | | | | |
| WBTSKN | AB1104 | 22 | 1 | ROS | 04/17/2011 | 13:39 | BO | 26.506N | 75.300W | GPS | | | | | | |
| WBTSKN | AB1104 | 22 | 1 | ROS | 04/17/2011 | 15:21 | EN | 26.512N | 75.295W | GPS | | | | | | |
| WBTSKN | AB1104 | 23 | 1 | ROS | 04/17/2011 | 18:11 | BE | 26.501N | 75.081W | GPS | | | | | | |
| WBTSKN | AB1104 | 23 | 1 | ROS | 04/17/2011 | 19:32 | BO | 26.500N | 75.075W | GPS | 4579 | 27 | 4630 | 4660 | 23 | 1,2 |
| WBTSKN | AB1104 | 23 | 1 | ROS | 04/17/2011 | 21:15 | EN | 26.498N | 75.073W | GPS | | | | | | |
| WBTSKN | AB1104 | 24 | 1 | ROS | 04/17/2011 | 22:42 | BE | 26.500N | 74.754W | GPS | | | | | | |
| WBTSKN | AB1104 | 24 | 1 | ROS | 04/18/2011 | 00:02 | BO | 26.501N | 74.792W | GPS | 4519 | 21 | 4570 | 4599 | 23 | 1,2 |
| WBTSKN | AB1104 | 24 | 1 | ROS | 04/18/2011 | 01:51 | EN | 26.500N | 74.791W | GPS | | | | | | |
| WBTSKN | AB1104 | 25 | 1 | ROS | 04/18/2011 | 03:21 | BE | 26.500N | 74.516W | GPS | | | | | | |
| WBTSKN | AB1104 | 25 | 1 | ROS | 04/18/2011 | 04:40 | BO | 26.502N | 74.518W | GPS | 4459 | 32 | 4486 | 4537 | 23 | 1,2 |
| WBTSKN | AB1104 | 25 | 1 | ROS | 04/18/2011 | 06:24 | EN | 26.502N | 74.519W | GPS | | | | | | |
| WBTSKN | AB1104 | 26 | 1 | ROS | 04/18/2011 | 08:29 | BE | 26.498N | 74.234W | GPS | | | | | | |
| WBTSKN | AB1104 | 26 | 1 | ROS | 04/18/2011 | 09:54 | BO | 26.506N | 74.230W | GPS | 4522 | 28 | 4555 | 4602 | 23 | 1,2 |
| WBTSKN | AB1104 | 26 | 1 | ROS | 04/18/2011 | 11:40 | EN | 26.517N | 74.223W | GPS | | | | | | |
| WBTSKN | AB1104 | 27 | 1 | ROS | 04/18/2011 | 13:36 | BE | 26.499N | 73.865W | GPS | | | | | | |
| WBTSKN | AB1104 | 27 | 1 | ROS | 04/18/2011 | 15:05 | BO | 26.510N | 73.854W | GPS | 4702 | 27 | 4760 | 4787 | 23 | 1,2 |
| WBTSKN | AB1104 | 27 | 1 | ROS | 04/18/2011 | 16:53 | EN | 26.517N | 73.844W | GPS | | | | | | |
| WBTSKN | AB1104 | 28 | 1 | ROS | 04/18/2011 | 18:58 | BE | 26.502N | 73.497W | GPS | | | | | | |
| WBTSKN | AB1104 | 28 | 1 | ROS | 04/18/2011 | 20:25 | BO | 26.506N | 73.482W | GPS | 4283 | 230 | 4970 | 4984 | 23 | 1,2 |
| WBTSKN | AB1104 | 28 | 1 | ROS | 04/18/2011 | 22:20 | EN | 26.505N | 73.464W | GPS | | | | | | |
| WBTSKN | AB1104 | 29 | 1 | ROS | 04/19/2011 | 00:07 | BE | 26.500N | 73.133W | GPS | | | | | | |
| WBTSKN | AB1104 | 29 | 1 | ROS | 04/19/2011 | 01:34 | BO | 26.496N | 73.131W | GPS | 5021 | 24 | 5050 | 5115 | 23 | 1,2 |
| WBTSKN | AB1104 | 29 | 1 | ROS | 04/19/2011 | 03:29 | EN | 26.492N | 73.129W | GPS | | | | | | |
| WBTSKN | AB1104 | 30 | 1 | ROS | 04/19/2011 | 05:34 | BE | 26.501N | 72.767W | GPS | | | | | | |
| WBTSKN | AB1104 | 30 | 1 | ROS | 04/19/2011 | 07:05 | BO | 26.501N | 72.769W | GPS | 5108 | 28 | 5140 | 5205 | 23 | 1,2 |
| WBTSKN | AB1104 | 30 | 1 | ROS | 04/19/2011 | 08:57 | EN | 26.504N | 72.771W | GPS | | | | | | |
| WBTSKN | AB1104 | 31 | 1 | ROS | 04/19/2011 | 11:05 | BE | 26.499N | 72.384W | GPS | | | | | | |
| WBTSKN | AB1104 | 31 | 1 | ROS | 04/19/2011 | 12:38 | BO | 26.499N | 72.390W | GPS | 5149 | 25 | 5190 | 5247 | 23 | 1,2 |
| WBTSKN | AB1104 | 31 | 1 | ROS | 04/19/2011 | 14:34 | EN | 26.502N | 72.394W | GPS | | | | | | |
| WBTSKN | AB1104 | 32 | 1 | ROS | 04/19/2011 | 16:58 | BE | 26.502N | 71.995W | GPS | | | | | | |
| WBTSKN | AB1104 | 32 | 1 | ROS | 04/19/2011 | 18:29 | BO | 26.514N | 71.993W | GPS | 5266 | 20 | 5310 | 5368 | 23 | 1,2 |
| WBTSKN | AB1104 | 32 | 1 | ROS | 04/19/2011 | 20:22 | EN | 26.524N | 71.987W | GPS | | | | | | |
| WBTSKN | AB1104 | 33 | 1 | ROS | 04/19/2011 | 23:16 | BE | 26.501N | 71.501W | GPS | | | | | | |
| WBTSKN | AB1104 | 33 | 1 | ROS | 04/20/2011 | 00:51 | BO | 26.502N | 71.502W | GPS | 5397 | 25 | 5430 | 5503 | 23 | 1,2 |
| WBTSKN | AB1104 | 33 | 1 | ROS | 04/20/2011 | 02:52 | EN | 26.502N | 71.502W | GPS | | | | | | |
| WBTSKN | AB1104 | 34 | 1 | ROS | 04/20/2011 | 05:49 | BE | 26.501N | 71.001W | GPS | | | | | | |
| WBTSKN | AB1104 | 34 | 1 | ROS | 04/20/2011 | 07:25 | BO | 26.504N | 71.003W | GPS | 5456 | 30 | 5490 | 5564 | 23 | 1,2 |
| WBTSKN | AB1104 | 34 | 1 | ROS | 04/20/2011 | 09:25 | EN | 26.509N | 71.004W | GPS | | | | | | |
| WBTSKN | AB1104 | 35 | 1 | ROS | 04/20/2011 | 12:44 | BE | 26.503N | 70.498W | GPS | | | | | | |
| WBTSKN | AB1104 | 35 | 1 | ROS | 04/20/2011 | 14:25 | BO | 26.518N | 70.499W | GPS | 5465 | 24 | 5515 | 5574 | 23 | 1,2 |
| WBTSKN | AB1104 | 35 | 1 | ROS | 04/20/2011 | 16:24 | EN | 26.524N | 70.500W | GPS | | | | | | |
| WBTSKN | AB1104 | 36 | 1 | ROS | 04/20/2011 | 19:32 | BE | 26.527N | 70.523W | GPS | | | | | | |
| WBTSKN | AB1104 | 36 | 1 | ROS | 04/20/2011 | 21:09 | BO | 26.545N | 70.526W | GPS | 5405 | 78 | 5510 | 5542 | 22 | 1,2 |
| WBTSKN | AB1104 | 36 | 1 | ROS | 04/21/2011 | 00:07 | EN | 26.566N | 70.531W | GPS | | | | | | |
| WBTSKN | AB1104 | 37 | 1 | ROS | 04/21/2011 | 02:28 | BE | 26.501N | 70.501W | GPS | | | | | | |
| WBTSKN | AB1104 | 37 | 1 | ROS | 04/21/2011 | 04:24 | BO | 26.512N | 70.502W | GPS | 5428 | 59 | 5470 | 5535 | 22 | 1,2 |
| WBTSKN | AB1104 | 37 | 1 | ROS | 04/21/2011 | 06:58 | EN | 26.536N | 70.504W | GPS | | | | | | |
| WBTSKN | AB1104 | 38 | 1 | ROS | 04/24/2011 | 00:35 | BE | 26.486N | 75.808W | GPS | | | | | | |
| WBTSKN | AB1104 | 38 | 1 | ROS | 04/24/2011 | 02:05 | BO | 26.486N | 75.818W | GPS | 4703 | 31 | 4740 | 4789 | 22 | 1,2 |
| WBTSKN | AB1104 | 38 | 1 | ROS | 04/24/2011 | 04:28 | EN | 26.485N | 75.835W | GPS | | | | | | |
| WBTSKN | AB1104 | 39 | 1 | ROS | 04/25/2011 | 04:01 | BE | 26.503N | 75.707W | GPS | | | | | | |
| WBTSKN | AB1104 | 39 | 1 | ROS | 04/25/2011 | 05:29 | BO | 26.503N | 75.717W | GPS | 4656 | 36 | 4685 | 4740 | 11 | 1,2 |
| WBTSKN | AB1104 | 39 | 1 | ROS | 04/25/2011 | 07:48 | EN | 26.503N | 75.733W | GPS | | | | | | |
| WBTSKN | AB1104 | 40 | 1 | ROS | 04/26/2011 | 03:35 | BE | 26.502N | 76.088W | GPS | | | | | | |
| WBTSKN | AB1104 | 40 | 1 | ROS | 04/26/2011 | 05:01 | BO | 26.500N | 76.088W | GPS | 4758 | 42 | 4790 | 4845 | 11 | 1,2 |
| WBTSKN | AB1104 | 40 | 1 | ROS | 04/26/2011 | 06:35 | EN | 26.497N | 76.089W | GPS | | | | | | |
| WBTSKN | AB1104 | 41 | 1 | ROS | 04/27/2011 | 01:37 | BE | 26.491N | 76.469W | GPS | | | | | | |
| WBTSKN | AB1104 | 41 | 1 | ROS | 04/27/2011 | 03:04 | BO | 26.490N | 76.470W | GPS | 4800 | 36 | 4860 | 4889 | 11 | 1,2 |
| WBTSKN | AB1104 | 41 | 1 | ROS | 04/27/2011 | 05:31 | EN | 26.488N | 76.468W | GPS | | | | | | |
| WBTSKN | AB1104 | 42 | 1 | ROS | 04/28/2011 | 22:48 | BE | 26.498N | 76.654W | GPS | | | | | | |
| WBTSKN | AB1104 | 42 | 1 | ROS | 04/29/2011 | 00:04 | BO | 26.497N | 76.649W | GPS | 2982 | 242 | 4000 | 4041 | 11 | 1,2 |
| WBTSKN | AB1104 | 42 | 1 | ROS | 04/29/2011 | 02:16 | EN | 26.496N | 76.645W | GPS | | | | | | |
| WBTSKN | AB1104 | 43 | 1 | ROS | 04/30/2011 | 20:09 | BE | 26.790N | 76.544W | GPS | | | | | | |
| WBTSKN | AB1104 | 43 | 1 | ROS | 04/30/2011 | 21:13 | BO | 26.789N | 76.552W | GPS | 1920 | 227 | 3500 | 3485 | 11 | 1,2 |

| | | | | | | | | | | | | | | | | |
|--------|--------|----|---|-----|------------|-------|----|---------|---------|-----|-----|----|-----|-----|----|-----|
| WBTSKN | AB1104 | 43 | 1 | ROS | 04/30/2011 | 23:19 | EN | 26.789N | 76.561W | GPS | 455 | 19 | 455 | 458 | 7 | 1,2 |
| WBTSKN | AB1104 | 44 | 1 | ROS | 05/02/2011 | 12:50 | BE | 26.998N | 79.199W | GPS | | | | | | |
| WBTSKN | AB1104 | 44 | 1 | ROS | 05/02/2011 | 13:01 | BO | 27.001N | 79.199W | GPS | 455 | 19 | 455 | 458 | 7 | 1,2 |
| WBTSKN | AB1104 | 44 | 1 | ROS | 05/02/2011 | 13:18 | EN | 27.005N | 79.199W | GPS | | | | | | |
| WBTSKN | AB1104 | 45 | 1 | ROS | 05/02/2011 | 13:54 | BE | 27.000N | 79.235W | GPS | | | | | | |
| WBTSKN | AB1104 | 45 | 1 | ROS | 05/02/2011 | 14:07 | BO | 27.004N | 79.282W | GPS | 592 | 20 | 595 | 597 | 8 | 1,2 |
| WBTSKN | AB1104 | 45 | 1 | ROS | 05/02/2011 | 14:26 | EN | 27.011N | 79.283W | GPS | | | | | | |
| WBTSKN | AB1104 | 46 | 1 | ROS | 05/02/2011 | 15:10 | BE | 27.001N | 79.373W | GPS | | | | | | |
| WBTSKN | AB1104 | 46 | 1 | ROS | 05/02/2011 | 15:25 | BO | 27.007N | 79.382W | GPS | 665 | 26 | 675 | 672 | 9 | 1,2 |
| WBTSKN | AB1104 | 46 | 1 | ROS | 05/02/2011 | 15:49 | EN | 27.018N | 79.381W | GPS | | | | | | |
| WBTSKN | AB1104 | 47 | 1 | ROS | 05/02/2011 | 16:38 | BE | 27.004N | 79.497W | GPS | | | | | | |
| WBTSKN | AB1104 | 47 | 1 | ROS | 05/02/2011 | 16:53 | BO | 27.016N | 79.495W | GPS | 723 | 25 | 786 | 732 | 10 | 1,2 |
| WBTSKN | AB1104 | 47 | 1 | ROS | 05/02/2011 | 17:18 | EN | 27.031N | 79.491W | GPS | | | | | | |
| WBTSKN | AB1104 | 48 | 1 | ROS | 05/02/2011 | 18:12 | BO | 27.009N | 79.610W | GPS | 648 | 33 | 715 | 660 | 8 | 1,2 |
| WBTSKN | AB1104 | 48 | 1 | ROS | 05/02/2011 | 18:28 | BO | 27.026N | 79.607W | GPS | | | | | | |
| WBTSKN | AB1104 | 48 | 1 | ROS | 05/02/2011 | 18:51 | EN | 27.046N | 79.606W | GPS | | | | | | |
| WBTSKN | AB1104 | 49 | 1 | ROS | 05/02/2011 | 19:41 | BE | 27.013N | 79.687W | GPS | | | | | | |
| WBTSKN | AB1104 | 49 | 1 | ROS | 05/02/2011 | 19:54 | BO | 27.027N | 79.687W | GPS | 480 | 43 | 525 | 493 | 8 | 1,2 |
| WBTSKN | AB1104 | 49 | 1 | ROS | 05/02/2011 | 20:14 | EN | 27.046N | 79.683W | GPS | | | | | | |
| WBTSKN | AB1104 | 50 | 1 | ROS | 05/02/2011 | 21:09 | BE | 27.006N | 79.781W | GPS | | | | | | |
| WBTSKN | AB1104 | 50 | 1 | ROS | 05/02/2011 | 21:19 | BO | 27.016N | 79.780W | GPS | 345 | 47 | 400 | 362 | 7 | 1,2 |
| WBTSKN | AB1104 | 50 | 1 | ROS | 05/02/2011 | 21:35 | EN | 27.033N | 79.777W | GPS | | | | | | |
| WBTSKN | AB1104 | 51 | 1 | ROS | 05/02/2011 | 22:23 | BE | 27.006N | 79.866W | GPS | | | | | | |
| WBTSKN | AB1104 | 51 | 1 | ROS | 05/02/2011 | 22:32 | BO | 27.014N | 79.866W | GPS | 225 | 41 | 255 | 230 | 6 | 1,2 |
| WBTSKN | AB1104 | 51 | 1 | ROS | 05/02/2011 | 22:44 | EN | 27.024N | 79.865W | GPS | | | | | | |
| WBTSKN | AB1104 | 52 | 1 | ROS | 05/02/2011 | 23:22 | BE | 27.005N | 79.932W | GPS | | | | | | |
| WBTSKN | AB1104 | 52 | 1 | ROS | 05/02/2011 | 23:28 | BO | 27.010N | 79.932W | GPS | 114 | 36 | 125 | 117 | 4 | 1,2 |
| WBTSKN | AB1104 | 52 | 1 | ROS | 05/02/2011 | 23:36 | EN | 27.016N | 79.931W | GPS | | | | | | |

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

C WOCE Bottle Summary File

Table 18: Florida Current Cruise – WOCE Bottle Summary File

| SHIP/CRS | WOCE SECT | STN | CAST | BTL# | BTL# | UTC TIME | LAT | LOE | DEPTH | CTD PRS | CTD TMP | CTD SAL | SAL FLAG | BTL SAL | SAL FLAG | CTD OXY | CTD OXY | BTL OXY | OXY FLAG |
|----------|-----------|-----|------|------|------|----------|---------|---------|-------|---------|---------|---------|----------|---------|----------|---------|---------|---------|----------|
| WBTSKN | AB1104 | 1 | 1 | 1 | 2 | 20110413 | 26.432N | 78.668W | 738 | 744 | 9.091 | 35.244 | 2 | 35.247 | 2 | 152.6 | 2 | 153.4 | 9 |
| WBTSKN | AB1104 | 1 | 1 | 2 | 2 | 20110413 | 26.432N | 78.668W | 738 | 744 | 9.079 | 35.243 | 2 | 35.245 | 2 | 152.6 | 2 | 153.4 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 3 | 2 | 20110413 | 26.432N | 78.668W | 738 | 744 | 9.079 | 35.243 | 2 | 35.246 | 2 | 152.6 | 2 | 153.4 | 9 |
| WBTSKN | AB1104 | 1 | 1 | 4 | 2 | 20110413 | 26.432N | 78.668W | 649 | 654 | 11.506 | 35.497 | 2 | 35.498 | 2 | 145.5 | 2 | 144.1 | 6 |
| WBTSKN | AB1104 | 1 | 1 | 5 | 2 | 20110413 | 26.432N | 78.668W | 649 | 654 | 11.519 | 35.499 | 2 | 35.497 | 2 | 145.5 | 2 | 144.1 | 6 |
| WBTSKN | AB1104 | 1 | 1 | 6 | 2 | 20110413 | 26.432N | 78.668W | 510 | 514 | 14.791 | 35.980 | 2 | 35.980 | 2 | 164.0 | 2 | 161.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 7 | 2 | 20110413 | 26.432N | 78.668W | 510 | 514 | 14.790 | 35.980 | 2 | 35.972 | 2 | 164.0 | 2 | 161.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 8 | 2 | 20110413 | 26.432N | 78.668W | 430 | 434 | 16.790 | 36.319 | 2 | 36.316 | 2 | 180.8 | 2 | 179.0 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 9 | 2 | 20110413 | 26.432N | 78.668W | 430 | 434 | 16.784 | 36.319 | 2 | 36.309 | 2 | 180.8 | 2 | 179.0 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 10 | 2 | 20110413 | 26.432N | 78.668W | 351 | 354 | 17.826 | 36.488 | 2 | 36.491 | 2 | 188.3 | 2 | 185.6 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 11 | 2 | 20110413 | 26.432N | 78.668W | 351 | 354 | 17.826 | 36.488 | 2 | 36.493 | 2 | 188.3 | 2 | 185.6 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 12 | 2 | 20110413 | 26.432N | 78.668W | 276 | 278 | 18.870 | 36.627 | 2 | 36.628 | 2 | 191.7 | 2 | 190.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 13 | 2 | 20110413 | 26.432N | 78.668W | 276 | 278 | 18.868 | 36.627 | 2 | 36.619 | 2 | 191.7 | 2 | 190.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 14 | 2 | 20110413 | 26.432N | 78.668W | 192 | 193 | 20.480 | 36.764 | 2 | 36.761 | 2 | 197.3 | 2 | 194.7 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 15 | 2 | 20110413 | 26.432N | 78.668W | 192 | 193 | 20.466 | 36.762 | 2 | 36.758 | 2 | 197.3 | 2 | 194.7 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 16 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.507 | 36.838 | 2 | 36.841 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 17 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 18 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 19 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 20 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 21 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 22 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 23 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 1 | 1 | 24 | 2 | 20110413 | 26.431N | 78.668W | 142 | 143 | 22.503 | 36.838 | 2 | 36.849 | 2 | 191.9 | 2 | 188.9 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 1 | 2 | 20110413 | 26.333N | 78.717W | 673 | 678 | 11.123 | 35.440 | 2 | 35.438 | 2 | 141.8 | 2 | 141.5 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 2 | 2 | 20110413 | 26.333N | 78.717W | 588 | 593 | 12.968 | 35.699 | 2 | 35.699 | 2 | 141.8 | 2 | 141.5 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 3 | 2 | 20110413 | 26.333N | 78.717W | 588 | 593 | 12.968 | 35.699 | 2 | 35.699 | 2 | 141.8 | 2 | 141.5 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 4 | 2 | 20110413 | 26.333N | 78.717W | 449 | 453 | 16.258 | 36.226 | 2 | 36.190 | 4 | 175.4 | 2 | 172.5 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 5 | 2 | 20110413 | 26.333N | 78.717W | 370 | 372 | 17.512 | 36.444 | 2 | 36.443 | 2 | 187.4 | 2 | 185.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 6 | 2 | 20110413 | 26.333N | 78.717W | 300 | 302 | 18.401 | 36.576 | 2 | 36.576 | 2 | 191.3 | 2 | 190.7 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 7 | 2 | 20110413 | 26.333N | 78.717W | 300 | 302 | 18.402 | 36.578 | 2 | 36.576 | 2 | 191.3 | 2 | 190.7 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 8 | 2 | 20110414 | 26.333N | 78.717W | 201 | 202 | 20.280 | 36.747 | 2 | 36.745 | 2 | 192.7 | 2 | 191.7 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 9 | 2 | 20110414 | 26.333N | 78.717W | 141 | 142 | 22.283 | 36.837 | 2 | 36.847 | 2 | 191.2 | 2 | 190.0 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 10 | 2 | 20110414 | 26.333N | 78.717W | 72 | 73 | 23.956 | 36.593 | 2 | 36.592 | 2 | 203.8 | 2 | 203.6 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 11 | 2 | 20110414 | 26.333N | 78.717W | 3 | 3 | 25.968 | 36.262 | 2 | 36.265 | 2 | 206.3 | 2 | 205.2 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 12 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 13 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 14 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 15 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 16 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 17 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 18 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 19 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 20 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 21 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 22 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 23 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 2 | 1 | 24 | 2 | 20110414 | 26.333N | 78.717W | 2 | 2 | 26.135 | 36.280 | 2 | 36.287 | 2 | 206.6 | 2 | 205.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 1 | 2 | 20110414 | 26.250N | 78.766W | 501 | 505 | 14.892 | 35.994 | 2 | 35.996 | 2 | 162.0 | 2 | 161.6 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 2 | 2 | 20110414 | 26.250N | 78.766W | 399 | 402 | 16.505 | 36.266 | 2 | 36.267 | 2 | 175.9 | 2 | 174.5 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 3 | 2 | 20110414 | 26.249N | 78.767W | 270 | 272 | 18.427 | 36.585 | 2 | 36.580 | 2 | 193.4 | 2 | 192.7 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 4 | 2 | 20110414 | 26.249N | 78.767W | 191 | 192 | 20.380 | 36.741 | 2 | 36.740 | 2 | 188.5 | 2 | 187.7 | 6 |
| WBTSKN | AB1104 | 3 | 1 | 5 | 2 | 20110414 | 26.249N | 78.767W | 131 | 132 | 22.830 | 36.807 | 2 | 36.804 | 2 | 193.5 | 2 | 191.6 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 6 | 2 | 20110414 | 26.249N | 78.767W | 131 | 132 | 22.831 | 36.808 | 2 | 36.804 | 2 | 193.5 | 2 | 191.6 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 7 | 2 | 20110414 | 26.248N | 78.767W | 52 | 52 | 24.175 | 36.548 | 2 | 36.552 | 2 | 208.5 | 2 | 211.3 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 8 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 9 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 10 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 11 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 12 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 13 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 14 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 15 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 16 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 17 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 18 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 19 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 20 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | 2 | 204.8 | 2 |
| WBTSKN | AB1104 | 3 | 1 | 21 | 2 | 20110414 | 26.248N | 78.767W | 2 | 2 | 26.108 | 36.264 | 2 | 36.265 | 2 | 205.4 | | | |

| | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|----------|-----------|------|----------|----------|---|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 11 | 1 | 21 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 11 | 1 | 22 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 11 | 1 | 23 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 11 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 12 | 1 | 1 | 2 | 20110415 | 1438 | 76.742W | 3822 | 3.267 | 34.895 | 2 | 267.2 | 2 | 267.2 | 2 | 267.2 |
| WBTSKN | AB1104 | 12 | 1 | 2 | 2 | 20110415 | 1445 | 76.741W | 3531 | 2.483 | 34.907 | 2 | 267.8 | 2 | 267.8 | 2 | 267.8 |
| WBTSKN | AB1104 | 12 | 1 | 3 | 2 | 20110415 | 1457 | 76.741W | 2983 | 3024 | 34.922 | 2 | 272.9 | 2 | 272.9 | 2 | 272.9 |
| WBTSKN | AB1104 | 12 | 1 | 4 | 2 | 20110415 | 1457 | 76.741W | 2983 | 2.726 | 34.922 | 2 | 267.5 | 2 | 267.5 | 2 | 267.5 |
| WBTSKN | AB1104 | 12 | 1 | 5 | 2 | 20110415 | 1504 | 76.741W | 2685 | 2720 | 34.938 | 2 | 265.2 | 2 | 265.2 | 2 | 265.2 |
| WBTSKN | AB1104 | 12 | 1 | 6 | 2 | 20110415 | 1508 | 76.741W | 2486 | 3.263 | 34.947 | 2 | 264.4 | 2 | 264.4 | 2 | 264.4 |
| WBTSKN | AB1104 | 12 | 1 | 7 | 2 | 20110415 | 1514 | 76.741W | 2188 | 2.518 | 34.947 | 2 | 264.3 | 2 | 264.3 | 2 | 264.3 |
| WBTSKN | AB1104 | 12 | 1 | 8 | 2 | 20110415 | 1518 | 76.741W | 2188 | 3.483 | 34.955 | 2 | 264.6 | 2 | 264.6 | 2 | 264.6 |
| WBTSKN | AB1104 | 12 | 1 | 9 | 2 | 20110415 | 1519 | 76.741W | 1989 | 2012 | 34.957 | 2 | 265.0 | 2 | 265.0 | 2 | 265.0 |
| WBTSKN | AB1104 | 12 | 1 | 10 | 2 | 20110415 | 1525 | 76.741W | 1691 | 1709 | 34.973 | 2 | 259.9 | 2 | 259.9 | 2 | 259.9 |
| WBTSKN | AB1104 | 12 | 1 | 11 | 2 | 20110415 | 1530 | 76.740W | 1492 | 3.975 | 34.977 | 2 | 260.2 | 2 | 260.2 | 2 | 260.2 |
| WBTSKN | AB1104 | 12 | 1 | 12 | 2 | 20110415 | 1537 | 76.740W | 1193 | 4.717 | 35.019 | 2 | 246.7 | 2 | 246.7 | 2 | 246.7 |
| WBTSKN | AB1104 | 12 | 1 | 13 | 2 | 20110415 | 1541 | 76.741W | 996 | 1004 | 35.068 | 2 | 208.2 | 2 | 208.2 | 2 | 208.2 |
| WBTSKN | AB1104 | 12 | 1 | 14 | 2 | 20110415 | 1545 | 76.741W | 848 | 855 | 7.738 | 4 | 163.8 | 2 | 163.8 | 2 | 163.8 |
| WBTSKN | AB1104 | 12 | 1 | 15 | 2 | 20110415 | 1548 | 76.741W | 748 | 754 | 9.827 | 2 | 147.6 | 2 | 147.6 | 2 | 147.6 |
| WBTSKN | AB1104 | 12 | 1 | 16 | 2 | 20110415 | 1551 | 76.741W | 599 | 604 | 13.857 | 2 | 158.7 | 2 | 158.7 | 2 | 158.7 |
| WBTSKN | AB1104 | 12 | 1 | 17 | 2 | 20110415 | 1555 | 76.740W | 450 | 453 | 17.457 | 2 | 192.3 | 2 | 192.3 | 2 | 192.3 |
| WBTSKN | AB1104 | 12 | 1 | 18 | 2 | 20110415 | 1559 | 76.740W | 351 | 353 | 18.263 | 2 | 195.8 | 2 | 195.8 | 2 | 195.8 |
| WBTSKN | AB1104 | 12 | 1 | 19 | 2 | 20110415 | 1601 | 76.740W | 252 | 254 | 19.285 | 2 | 196.4 | 2 | 196.4 | 2 | 196.4 |
| WBTSKN | AB1104 | 12 | 1 | 20 | 2 | 20110415 | 1604 | 76.740W | 202 | 204 | 20.305 | 2 | 204.9 | 2 | 204.9 | 2 | 204.9 |
| WBTSKN | AB1104 | 12 | 1 | 21 | 2 | 20110415 | 1606 | 76.740W | 153 | 154 | 21.268 | 2 | 198.7 | 2 | 198.7 | 2 | 198.7 |
| WBTSKN | AB1104 | 12 | 1 | 22 | 2 | 20110415 | 1608 | 76.740W | 103 | 104 | 22.326 | 2 | 210.2 | 2 | 210.2 | 2 | 210.2 |
| WBTSKN | AB1104 | 12 | 1 | 23 | 2 | 20110415 | 1612 | 76.740W | 53 | 54 | 23.069 | 2 | 214.3 | 2 | 214.3 | 2 | 214.3 |
| WBTSKN | AB1104 | 12 | 1 | 24 | 2 | 20110415 | 1614 | 76.740W | 2 | 2 | 25.084 | 2 | 207.1 | 2 | 207.1 | 2 | 207.1 |
| WBTSKN | AB1104 | 12 | 1 | 25 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 13 | 1 | 1 | 2 | 20110415 | 1918 | 76.654W | 4563 | 2.241 | 34.882 | 2 | 261.9 | 2 | 261.9 | 2 | 261.9 |
| WBTSKN | AB1104 | 13 | 1 | 2 | 2 | 20110415 | 1925 | 76.654W | 4338 | 2.282 | 34.889 | 2 | 265.6 | 2 | 265.6 | 2 | 265.6 |
| WBTSKN | AB1104 | 13 | 1 | 3 | 2 | 20110415 | 1931 | 76.654W | 3968 | 4.032 | 34.896 | 2 | 266.4 | 2 | 266.4 | 2 | 266.4 |
| WBTSKN | AB1104 | 13 | 1 | 4 | 2 | 20110415 | 1937 | 76.654W | 3668 | 3725 | 34.905 | 2 | 269.5 | 2 | 269.5 | 2 | 269.5 |
| WBTSKN | AB1104 | 13 | 1 | 5 | 2 | 20110415 | 1943 | 76.654W | 3369 | 3419 | 2.490 | 2 | 268.5 | 2 | 268.5 | 2 | 268.5 |
| WBTSKN | AB1104 | 13 | 1 | 6 | 2 | 20110415 | 1949 | 76.654W | 3067 | 3109 | 2.647 | 2 | 267.0 | 2 | 267.0 | 2 | 267.0 |
| WBTSKN | AB1104 | 13 | 1 | 7 | 2 | 20110415 | 1956 | 76.654W | 2764 | 2800 | 2.863 | 2 | 265.6 | 2 | 265.6 | 2 | 265.6 |
| WBTSKN | AB1104 | 13 | 1 | 8 | 2 | 20110415 | 2005 | 76.654W | 2458 | 2489 | 3.269 | 2 | 263.1 | 2 | 263.1 | 2 | 263.1 |
| WBTSKN | AB1104 | 13 | 1 | 9 | 2 | 20110415 | 2010 | 76.654W | 2214 | 2240 | 3.432 | 2 | 264.3 | 2 | 264.3 | 2 | 264.3 |
| WBTSKN | AB1104 | 13 | 1 | 10 | 2 | 20110415 | 2015 | 76.654W | 2001 | 2024 | 3.541 | 2 | 265.0 | 2 | 265.0 | 2 | 265.0 |
| WBTSKN | AB1104 | 13 | 1 | 11 | 2 | 20110415 | 2020 | 76.654W | 1758 | 1777 | 3.644 | 2 | 264.5 | 2 | 264.5 | 2 | 264.5 |
| WBTSKN | AB1104 | 13 | 1 | 12 | 2 | 20110415 | 2026 | 76.654W | 1509 | 1524 | 4.025 | 2 | 260.6 | 2 | 260.6 | 2 | 260.6 |
| WBTSKN | AB1104 | 13 | 1 | 13 | 2 | 20110415 | 2031 | 76.654W | 1270 | 1282 | 4.399 | 2 | 253.1 | 2 | 253.1 | 2 | 253.1 |
| WBTSKN | AB1104 | 13 | 1 | 14 | 2 | 20110415 | 2037 | 76.654W | 1014 | 1024 | 5.799 | 2 | 214.0 | 2 | 214.0 | 2 | 214.0 |
| WBTSKN | AB1104 | 13 | 1 | 15 | 2 | 20110415 | 2043 | 76.654W | 740 | 746 | 10.674 | 4 | 149.0 | 2 | 149.0 | 2 | 149.0 |
| WBTSKN | AB1104 | 13 | 1 | 16 | 2 | 20110415 | 2048 | 76.654W | 502 | 505 | 16.677 | 2 | 187.2 | 2 | 187.2 | 2 | 187.2 |
| WBTSKN | AB1104 | 13 | 1 | 17 | 2 | 20110415 | 2052 | 76.654W | 353 | 355 | 18.196 | 2 | 200.8 | 2 | 200.8 | 2 | 200.8 |
| WBTSKN | AB1104 | 13 | 1 | 18 | 2 | 20110415 | 2054 | 76.654W | 253 | 255 | 19.273 | 2 | 196.0 | 2 | 196.0 | 2 | 196.0 |
| WBTSKN | AB1104 | 13 | 1 | 19 | 2 | 20110415 | 2056 | 76.654W | 203 | 205 | 20.291 | 2 | 205.3 | 2 | 205.3 | 2 | 205.3 |
| WBTSKN | AB1104 | 13 | 1 | 20 | 2 | 20110415 | 2058 | 76.654W | 153 | 154 | 21.221 | 2 | 197.9 | 2 | 197.9 | 2 | 197.9 |
| WBTSKN | AB1104 | 13 | 1 | 21 | 2 | 20110415 | 2100 | 76.654W | 103 | 104 | 22.333 | 2 | 211.5 | 2 | 211.5 | 2 | 211.5 |
| WBTSKN | AB1104 | 13 | 1 | 22 | 2 | 20110415 | 2102 | 76.654W | 55 | 55 | 23.051 | 2 | 216.1 | 2 | 216.1 | 2 | 216.1 |
| WBTSKN | AB1104 | 13 | 1 | 23 | 2 | 20110415 | 2105 | 76.654W | 3 | 3 | 24.918 | 4 | 99.0 | 9 | 99.0 | 9 | 99.0 |
| WBTSKN | AB1104 | 13 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 14 | 1 | 1 | 2 | 20110415 | 2348 | 76.565W | 4810 | 4897 | 2.261 | 2 | 261.9 | 2 | 261.9 | 2 | 261.9 |
| WBTSKN | AB1104 | 14 | 1 | 2 | 2 | 20110416 | 0000 | 76.566W | 4226 | 4296 | 2.290 | 2 | 266.2 | 2 | 266.2 | 2 | 266.2 |
| WBTSKN | AB1104 | 14 | 1 | 3 | 2 | 20110416 | 0005 | 76.566W | 4003 | 4068 | 2.353 | 2 | 268.0 | 2 | 268.0 | 2 | 268.0 |
| WBTSKN | AB1104 | 14 | 1 | 4 | 2 | 20110416 | 0012 | 76.566W | 3709 | 3767 | 2.357 | 2 | 267.9 | 2 | 267.9 | 2 | 267.9 |
| WBTSKN | AB1104 | 14 | 1 | 5 | 2 | 20110416 | 0019 | 76.566W | 3401 | 3451 | 2.488 | 2 | 268.4 | 2 | 268.4 | 2 | 268.4 |
| WBTSKN | AB1104 | 14 | 1 | 6 | 2 | 20110416 | 0025 | 76.566W | 3108 | 3152 | 2.568 | 2 | 269.1 | 2 | 269.1 | 2 | 269.1 |
| WBTSKN | AB1104 | 14 | 1 | 7 | 2 | 20110416 | 0032 | 76.566W | 2801 | 2838 | 2.795 | 2 | 266.7 | 2 | 266.7 | 2 | 266.7 |
| WBTSKN | AB1104 | 14 | 1 | 8 | 2 | 20110416 | 0100 | 76.567W | 2506 | 2537 | 3.152 | 2 | 263.4 | 2 | 263.4 | 2 | 263.4 |
| WBTSKN | AB1104 | 14 | 1 | 9 | 2 | 20110416 | 0106 | 76.567W | 2248 | 2275 | 3.368 | 2 | 263.9 | 2 | 263.9 | 2 | 263.9 |
| WBTSKN | AB1104 | 14 | 1 | 10 | 2 | 20110416 | 0112 | 76.567W | 2000 | 2023 | 3.576 | 2 | 264.0 | 2 | 264.0 | 2 | 264.0 |
| WBTSKN | AB1104 | 14 | 1 | 11 | 2 | 20110416 | 0117 | 76.567W | 1755 | 1774 | 3.800 | 2 | 263.0 | 2 | 263.0 | 2 | 263.0 |
| WBTSKN | AB1104 | 14 | 1 | 12 | 2 | 20110416 | 0123 | 76.567W | 1500 | 1515 | 4.070 | 2 | 259.4 | 2 | 259.4 | 2 | 259.4 |
| WBTSKN | AB1104 | 14 | 1 | 13 | 2 | 20110416 | 0129 | 76.567W | 1254 | 1266 | 4.587 | 2 | 248.0 | 2 | 248.0 | 2 | 248.0 |
| WBTSKN | AB1104 | 14 | 1 | 14 | 2 | 20110416 | 0135 | 76.567W | 998 | 1007 | 6.078 | 2 | 203.8 | 2 | 203.8 | 2 | 203.8 |

| | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|----------|----------|----------|------|------|----------|----------|---|----------|---|----------|---|--------|---|---|
| WBTSKN | AB1104 | 14 | 1 | 15 | 2 | 20110416 | 0140 | 26.495N | 76.567W | 751 | 757 | 10.095 | 35.316 | 2 | 35.314 | 2 | 145.8 | 2 | 145.2 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 16 | 2 | 20110416 | 0146 | 26.494N | 76.568W | 503 | 507 | 16.486 | 36.263 | 2 | 36.260 | 2 | 177.0 | 2 | 175.8 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 17 | 2 | 20110416 | 0150 | 26.494N | 76.568W | 354 | 356 | 18.253 | 36.569 | 2 | 36.570 | 2 | 193.7 | 2 | 196.7 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 18 | 2 | 20110416 | 0152 | 26.494N | 76.568W | 255 | 256 | 19.232 | 36.673 | 2 | 36.674 | 2 | 197.6 | 2 | 197.6 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 19 | 2 | 20110416 | 0157 | 26.494N | 76.568W | 156 | 157 | 20.889 | 36.790 | 2 | 36.790 | 2 | 199.0 | 2 | 204.1 | 4 | 4 |
| WBTSKN | AB1104 | 14 | 1 | 20 | 2 | 20110416 | 0157 | 26.494N | 76.568W | 156 | 157 | 20.892 | 36.794 | 2 | 36.804 | 4 | 200.6 | 2 | 204.6 | 4 | 4 |
| WBTSKN | AB1104 | 14 | 1 | 21 | 2 | 20110416 | 0200 | 26.494N | 76.568W | 106 | 107 | 21.832 | 36.841 | 2 | 36.843 | 2 | 202.2 | 2 | 202.5 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 22 | 2 | 20110416 | 0202 | 26.494N | 76.568W | 56 | 57 | 23.221 | 36.836 | 2 | 36.837 | 2 | 210.3 | 2 | 210.6 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 23 | 2 | 20110416 | 0205 | 26.494N | 76.568W | 4 | 4 | 25.027 | 36.442 | 2 | 36.468 | 4 | 207.6 | 2 | 207.8 | 2 | 2 |
| WBTSKN | AB1104 | 14 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000 | -999.000 | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | 9 |
| WBTSKN | AB1104 | 15 | 1 | 1 | 2 | 20110416 | 0448 | 26.494N | 76.480W | 4801 | 4888 | 2.234 | 34.878 | 2 | 34.878 | 2 | 260.2 | 2 | 259.5 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 2 | 2 | 20110416 | 0506 | 26.492N | 76.482W | 4267 | 4339 | 34.897 | 34.887 | 2 | 34.887 | 2 | 264.3 | 2 | 264.4 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 3 | 2 | 20110416 | 0512 | 26.491N | 76.483W | 3967 | 4031 | 2.279 | 34.891 | 2 | 34.891 | 2 | 265.9 | 2 | 267.0 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 4 | 2 | 20110416 | 0518 | 26.491N | 76.483W | 3666 | 3722 | 2.340 | 34.898 | 2 | 34.899 | 2 | 268.2 | 2 | 268.9 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 5 | 2 | 20110416 | 0524 | 26.491N | 76.483W | 3363 | 3413 | 2.431 | 34.905 | 2 | 34.905 | 2 | 269.2 | 2 | 270.1 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 6 | 2 | 20110416 | 0530 | 26.492N | 76.484W | 3061 | 3104 | 2.647 | 34.918 | 2 | 34.919 | 2 | 268.1 | 2 | 268.5 | 6 | 6 |
| WBTSKN | AB1104 | 15 | 1 | 7 | 2 | 20110416 | 0536 | 26.492N | 76.484W | 2761 | 2798 | 2.881 | 34.932 | 2 | 34.933 | 2 | 265.1 | 2 | 266.0 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 8 | 2 | 20110416 | 0542 | 26.492N | 76.484W | 2464 | 2495 | 3.167 | 34.948 | 2 | 34.950 | 2 | 262.8 | 2 | 263.6 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 9 | 2 | 20110416 | 0547 | 26.491N | 76.484W | 2221 | 2247 | 3.405 | 34.955 | 2 | 34.956 | 2 | 264.7 | 2 | 263.8 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 10 | 2 | 20110416 | 0553 | 26.491N | 76.485W | 1976 | 1999 | 3.609 | 34.958 | 2 | 34.958 | 2 | 264.3 | 2 | 264.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 11 | 2 | 20110416 | 0558 | 26.491N | 76.485W | 1730 | 1749 | 3.834 | 34.967 | 2 | 34.968 | 2 | 262.4 | 2 | 262.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 12 | 2 | 20110416 | 0603 | 26.491N | 76.485W | 1484 | 1499 | 4.176 | 34.986 | 2 | 34.987 | 2 | 257.4 | 2 | 257.2 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 13 | 2 | 20110416 | 0608 | 26.491N | 76.485W | 1238 | 1250 | 4.805 | 35.030 | 2 | 35.030 | 2 | 242.1 | 2 | 242.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 14 | 2 | 20110416 | 0613 | 26.491N | 76.485W | 993 | 1002 | 6.149 | 35.077 | 2 | 35.077 | 2 | 200.0 | 2 | 200.8 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 15 | 2 | 20110416 | 0618 | 26.491N | 76.485W | 747 | 754 | 10.326 | 35.332 | 2 | 35.332 | 2 | 144.0 | 2 | 143.1 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 16 | 2 | 20110416 | 0623 | 26.492N | 76.486W | 501 | 505 | 16.720 | 36.305 | 2 | 36.300 | 2 | 180.0 | 2 | 178.5 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 17 | 2 | 20110416 | 0627 | 26.492N | 76.486W | 353 | 355 | 18.206 | 36.559 | 2 | 36.560 | 2 | 194.3 | 2 | 193.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 18 | 2 | 20110416 | 0630 | 26.492N | 76.486W | 254 | 255 | 19.268 | 36.672 | 2 | 36.669 | 2 | 194.1 | 2 | 195.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 19 | 2 | 20110416 | 0631 | 26.492N | 76.486W | 205 | 206 | 19.830 | 36.722 | 2 | 36.720 | 2 | 195.6 | 2 | 192.3 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 20 | 2 | 20110416 | 0633 | 26.492N | 76.486W | 155 | 156 | 20.757 | 36.793 | 2 | 36.788 | 2 | 198.9 | 2 | 198.7 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 21 | 2 | 20110416 | 0635 | 26.492N | 76.486W | 106 | 106 | 21.719 | 36.771 | 2 | 36.773 | 2 | 205.2 | 2 | 208.4 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 22 | 2 | 20110416 | 0637 | 26.492N | 76.486W | 56 | 56 | 22.717 | 36.682 | 2 | 36.694 | 4 | 214.8 | 2 | 214.8 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 23 | 2 | 20110416 | 0640 | 26.491N | 76.486W | 2 | 2 | 24.479 | 36.809 | 2 | 36.810 | 2 | 208.3 | 2 | 209.0 | 2 | 2 |
| WBTSKN | AB1104 | 15 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000 | -999.000 | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | 9 |
| WBTSKN | AB1104 | 16 | 1 | 1 | 2 | 20110416 | 0939 | 26.494N | 76.349W | 4825 | 4913 | 2.240 | 34.878 | 2 | 34.878 | 2 | 260.7 | 2 | 259.9 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 2 | 2 | 20110416 | 0950 | 26.493N | 76.350W | 4269 | 4341 | 2.253 | 34.887 | 2 | 34.887 | 2 | 264.5 | 2 | 264.6 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 3 | 2 | 20110416 | 0956 | 26.492N | 76.350W | 3971 | 4036 | 2.639 | 34.891 | 2 | 34.890 | 2 | 266.1 | 2 | 266.5 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 4 | 2 | 20110416 | 1002 | 26.492N | 76.351W | 3674 | 3730 | 2.310 | 34.896 | 2 | 34.896 | 2 | 267.9 | 2 | 268.1 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 5 | 2 | 20110416 | 1009 | 26.491N | 76.351W | 3376 | 3426 | 2.434 | 34.905 | 2 | 34.905 | 2 | 269.2 | 2 | 269.2 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 6 | 2 | 20110416 | 1015 | 26.491N | 76.352W | 3078 | 3122 | 2.669 | 34.921 | 2 | 34.921 | 2 | 266.8 | 2 | 267.0 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 7 | 2 | 20110416 | 1021 | 26.490N | 76.352W | 2780 | 2817 | 2.927 | 34.936 | 2 | 34.936 | 2 | 264.1 | 2 | 264.5 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 8 | 2 | 20110416 | 1027 | 26.490N | 76.353W | 2482 | 2514 | 3.201 | 34.949 | 2 | 34.949 | 2 | 263.3 | 2 | 263.6 | 6 | 6 |
| WBTSKN | AB1104 | 16 | 1 | 9 | 2 | 20110416 | 1032 | 26.489N | 76.353W | 2234 | 2261 | 3.401 | 34.954 | 2 | 34.955 | 2 | 263.7 | 2 | 263.7 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 10 | 2 | 20110416 | 1038 | 26.489N | 76.354W | 1987 | 2010 | 3.595 | 34.956 | 2 | 34.956 | 2 | 264.4 | 2 | 264.3 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 11 | 2 | 20110416 | 1043 | 26.488N | 76.354W | 1740 | 1759 | 3.850 | 34.968 | 2 | 34.969 | 2 | 261.9 | 2 | 261.8 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 12 | 2 | 20110416 | 1049 | 26.488N | 76.354W | 1492 | 1507 | 4.216 | 34.993 | 2 | 34.993 | 2 | 255.9 | 2 | 255.7 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 13 | 2 | 20110416 | 1054 | 26.488N | 76.355W | 1244 | 1256 | 4.808 | 35.028 | 2 | 35.028 | 2 | 242.7 | 2 | 242.6 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 14 | 2 | 20110416 | 1059 | 26.487N | 76.355W | 996 | 1005 | 6.275 | 35.079 | 2 | 35.079 | 2 | 196.6 | 2 | 199.0 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 15 | 2 | 20110416 | 1104 | 26.487N | 76.355W | 748 | 755 | 10.070 | 35.311 | 2 | 35.306 | 2 | 143.2 | 2 | 144.1 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 16 | 2 | 20110416 | 1110 | 26.486N | 76.355W | 500 | 504 | 16.366 | 36.243 | 2 | 36.239 | 2 | 176.0 | 2 | 175.9 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 17 | 2 | 20110416 | 1113 | 26.486N | 76.355W | 351 | 354 | 18.163 | 36.553 | 2 | 36.550 | 2 | 193.2 | 2 | 194.1 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 18 | 2 | 20110416 | 1116 | 26.486N | 76.355W | 252 | 254 | 19.142 | 36.668 | 2 | 36.668 | 2 | 197.9 | 2 | 200.1 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 19 | 2 | 20110416 | 1118 | 26.486N | 76.355W | 203 | 204 | 19.783 | 36.717 | 2 | 36.715 | 2 | 195.9 | 2 | 193.2 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 20 | 2 | 20110416 | 1120 | 26.486N | 76.356W | 153 | 154 | 20.585 | 36.783 | 2 | 36.784 | 2 | 198.5 | 2 | 204.9 | 4 | 4 |
| WBTSKN | AB1104 | 16 | 1 | 21 | 2 | 20110416 | 1122 | 26.486N | 76.356W | 104 | 104 | 21.823 | 36.821 | 2 | 36.821 | 2 | 208.5 | 2 | 207.3 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 22 | 2 | 20110416 | 1124 | 26.485N | 76.356W | 54 | 54 | 22.821 | 36.708 | 2 | 36.708 | 9 | -999.000 | 9 | -999.0 | 9 | 9 |
| WBTSKN | AB1104 | 16 | 1 | 23 | 2 | 20110416 | 1126 | 26.485N | 76.356W | 3 | 3 | 24.505 | 36.820 | 2 | 36.822 | 2 | 207.6 | 2 | 209.3 | 2 | 2 |
| WBTSKN | AB1104 | 16 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000 | -999.000 | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | 9 |
| WBTSKN | AB1104 | 17 | 1 | 1 | 2 | 20110416 | 1406 | 26.493N | 76.222W | 4787 | 4874 | 2.190 | 34.873 | 2 | 34.872 | 2 | 257.9 | 2 | 256.5 | 2 | 2 |
| WBTSKN | AB1104 | 17 | 1 | 2 | 2 | 20110416 | 1417 | 26.492N | 76.223W | 4271 | 4343 | 2.254 | 34.887 | 2 | 34.886 | 2 | 264.3 | 2 | 264.3 | 2 | 2 |
| WBTSKN | AB1104 | 17 | 1 | 3 | 2 | 20110416 | 1423 | 26.491N | 76.223W | 3973 | 4037 | 2.277 | 34.891 | 2 | 34.892 | 2 | 266.2 | 2 | 266.1 | 2 | 2 |
| WBTSKN | AB1104 | 17 | 1 | 4 | 2 | 20110416 | 1430 | 26.490N | 76.224W | 3676 | 3732 | 2.337 | 34.898 | 2 | 34.898 | 2 | 268.3 | 2 | 268.3 | 2 | 2 |
| WBTSKN | AB1104 | 17 | 1 | 5 | 2 | 20110416 | 1436 | 26.490N | 76.224W | 3378 | 3428 | 2.446 | 34.906 | 2 | 34.905 | 2 | 268.8 | 2 | 269.0 | 2 | 2 |
| WBTSKN | AB1104 | 17 | 1 | 6 | 2 | 20110416 | 1442 | 26.490N | 76.224W | 3081 | 3124 | 2.668 | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|----|---|----------|----------|-----------|-----------|------|------|----------|----------|---|----------|---|----------|---|----------|---|----------|
| WBTSKN | AB1104 | 17 | 1 | 1 | 9 | 2 | 20110416 | 1501 | 26.488N | 76.225W | 2237 | 2264 | 3.410 | 34.957 | 2 | 34.958 | 2 | 262.8 | 2 | 263.6 | 2 | 263.6 |
| WBTSKN | AB1104 | 17 | 1 | 10 | 10 | 1 | 20110416 | 1507 | 26.488N | 76.225W | 1989 | 2011 | 3.618 | 34.959 | 2 | 34.959 | 2 | 264.0 | 2 | 263.1 | 2 | 263.1 |
| WBTSKN | AB1104 | 17 | 1 | 11 | 11 | 2 | 20110416 | 1513 | 26.488N | 76.226W | 1741 | 1760 | 3.862 | 34.969 | 2 | 34.969 | 2 | 261.3 | 2 | 261.3 | 2 | 261.3 |
| WBTSKN | AB1104 | 17 | 1 | 12 | 12 | 2 | 20110416 | 1518 | 26.487N | 76.226W | 1492 | 1508 | 4.223 | 34.987 | 2 | 34.987 | 2 | 265.2 | 2 | 256.1 | 2 | 256.1 |
| WBTSKN | AB1104 | 17 | 1 | 13 | 13 | 2 | 20110416 | 1524 | 26.486N | 76.226W | 1244 | 1256 | 4.739 | 35.018 | 2 | 35.018 | 2 | 244.2 | 2 | 244.2 | 2 | 244.2 |
| WBTSKN | AB1104 | 17 | 1 | 14 | 14 | 2 | 20110416 | 1529 | 26.486N | 76.227W | 996 | 1005 | 5.135 | 35.064 | 2 | 35.064 | 2 | 195.6 | 2 | 196.1 | 2 | 196.1 |
| WBTSKN | AB1104 | 17 | 1 | 15 | 15 | 2 | 20110416 | 1535 | 26.485N | 76.227W | 747 | 754 | 5.669 | 35.251 | 2 | 35.251 | 2 | 139.2 | 2 | 140.4 | 2 | 140.4 |
| WBTSKN | AB1104 | 17 | 1 | 16 | 16 | 2 | 20110416 | 1540 | 26.485N | 76.227W | 499 | 502 | 15.756 | 36.138 | 2 | 36.138 | 2 | 170.9 | 2 | 170.2 | 2 | 170.2 |
| WBTSKN | AB1104 | 17 | 1 | 17 | 17 | 2 | 20110416 | 1543 | 26.484N | 76.228W | 350 | 353 | 17.784 | 36.503 | 2 | 36.501 | 2 | 192.7 | 2 | 195.6 | 2 | 195.6 |
| WBTSKN | AB1104 | 17 | 1 | 18 | 18 | 2 | 20110416 | 1546 | 26.484N | 76.228W | 252 | 254 | 18.631 | 36.610 | 2 | 36.611 | 2 | 195.9 | 2 | 197.2 | 2 | 197.2 |
| WBTSKN | AB1104 | 17 | 1 | 19 | 19 | 2 | 20110416 | 1548 | 26.484N | 76.228W | 202 | 204 | 19.537 | 36.695 | 2 | 36.695 | 2 | 204.4 | 2 | 201.5 | 2 | 201.5 |
| WBTSKN | AB1104 | 17 | 1 | 20 | 20 | 2 | 20110416 | 1549 | 26.484N | 76.228W | 153 | 154 | 20.528 | 36.780 | 2 | 36.780 | 2 | 201.3 | 2 | 201.4 | 2 | 201.4 |
| WBTSKN | AB1104 | 17 | 1 | 21 | 21 | 2 | 20110416 | 1551 | 26.484N | 76.228W | 104 | 104 | 21.386 | 36.821 | 2 | 36.823 | 2 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 17 | 1 | 22 | 22 | 2 | 20110416 | 1553 | 26.483N | 76.228W | 55 | 55 | 22.793 | 36.826 | 2 | 36.826 | 2 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 17 | 1 | 23 | 23 | 2 | 20110416 | 1556 | 26.483N | 76.228W | 3 | 3 | 24.760 | 36.835 | 2 | 36.838 | 2 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 17 | 1 | 24 | 24 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 18 | 1 | 1 | 1 | 2 | 20110416 | 1828 | 26.491N | 76.096W | 4774 | 4860 | 2.193 | 34.873 | 2 | 34.873 | 2 | 258.7 | 2 | 257.2 | 2 | 257.2 |
| WBTSKN | AB1104 | 18 | 1 | 2 | 2 | 2 | 20110416 | 1837 | 26.489N | 76.096W | 4309 | 4382 | 2.250 | 34.886 | 2 | 34.885 | 2 | 264.0 | 2 | 264.0 | 2 | 264.0 |
| WBTSKN | AB1104 | 18 | 1 | 3 | 3 | 2 | 20110416 | 1844 | 26.489N | 76.097W | 3997 | 4062 | 2.268 | 34.891 | 2 | 34.891 | 2 | 266.3 | 2 | 266.0 | 2 | 266.0 |
| WBTSKN | AB1104 | 18 | 1 | 4 | 4 | 2 | 20110416 | 1850 | 26.488N | 76.097W | 3694 | 3751 | 2.323 | 34.897 | 2 | 34.897 | 2 | 267.8 | 2 | 267.8 | 2 | 267.8 |
| WBTSKN | AB1104 | 18 | 1 | 5 | 5 | 2 | 20110416 | 1856 | 26.487N | 76.097W | 3400 | 3451 | 2.438 | 34.905 | 2 | 34.905 | 2 | 268.8 | 2 | 268.7 | 2 | 268.7 |
| WBTSKN | AB1104 | 18 | 1 | 6 | 6 | 2 | 20110416 | 1902 | 26.487N | 76.097W | 3104 | 3148 | 2.623 | 34.916 | 2 | 34.915 | 2 | 268.5 | 2 | 268.6 | 2 | 268.6 |
| WBTSKN | AB1104 | 18 | 1 | 7 | 7 | 2 | 20110416 | 1908 | 26.486N | 76.098W | 2796 | 2834 | 2.882 | 34.932 | 2 | 34.932 | 2 | 265.6 | 2 | 265.4 | 2 | 265.4 |
| WBTSKN | AB1104 | 18 | 1 | 8 | 8 | 2 | 20110416 | 1914 | 26.485N | 76.098W | 2498 | 2530 | 3.172 | 34.946 | 2 | 34.946 | 2 | 263.5 | 2 | 264.0 | 2 | 264.0 |
| WBTSKN | AB1104 | 18 | 1 | 9 | 9 | 2 | 20110416 | 1919 | 26.484N | 76.098W | 2250 | 2277 | 3.408 | 34.955 | 2 | 34.955 | 2 | 263.4 | 2 | 263.4 | 2 | 263.4 |
| WBTSKN | AB1104 | 18 | 1 | 10 | 10 | 2 | 20110416 | 1924 | 26.483N | 76.098W | 2002 | 2025 | 3.612 | 34.961 | 2 | 34.959 | 2 | 264.2 | 2 | 263.6 | 2 | 263.6 |
| WBTSKN | AB1104 | 18 | 1 | 11 | 11 | 2 | 20110416 | 1929 | 26.482N | 76.098W | 1753 | 1772 | 3.854 | 34.967 | 2 | 34.966 | 2 | 261.7 | 2 | 261.6 | 2 | 261.6 |
| WBTSKN | AB1104 | 18 | 1 | 12 | 12 | 2 | 20110416 | 1940 | 26.481N | 76.099W | 1247 | 1259 | 4.849 | 35.024 | 2 | 35.024 | 2 | 240.2 | 2 | 240.1 | 2 | 240.1 |
| WBTSKN | AB1104 | 18 | 1 | 13 | 13 | 2 | 20110416 | 1940 | 26.481N | 76.099W | 1247 | 1259 | 4.849 | 35.024 | 2 | 35.025 | 2 | 240.2 | 2 | 240.2 | 2 | 240.1 |
| WBTSKN | AB1104 | 18 | 1 | 14 | 14 | 2 | 20110416 | 1946 | 26.480N | 76.099W | 988 | 997 | 6.357 | 35.057 | 2 | 35.057 | 2 | 185.8 | 2 | 186.5 | 2 | 186.5 |
| WBTSKN | AB1104 | 18 | 1 | 15 | 15 | 2 | 20110416 | 1951 | 26.479N | 76.099W | 750 | 756 | 9.080 | 35.191 | 2 | 35.188 | 2 | 143.5 | 2 | 163.2 | 2 | 163.2 |
| WBTSKN | AB1104 | 18 | 1 | 16 | 16 | 2 | 20110416 | 1956 | 26.478N | 76.099W | 501 | 505 | 14.473 | 35.924 | 2 | 35.922 | 2 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 18 | 1 | 17 | 17 | 2 | 20110416 | 2000 | 26.478N | 76.099W | 353 | 355 | 17.226 | 36.398 | 2 | 36.394 | 2 | 183.9 | 2 | 184.3 | 2 | 184.3 |
| WBTSKN | AB1104 | 18 | 1 | 18 | 18 | 2 | 20110416 | 2002 | 26.477N | 76.099W | 253 | 255 | 18.527 | 36.599 | 2 | 36.597 | 2 | 189.9 | 2 | 192.0 | 2 | 192.0 |
| WBTSKN | AB1104 | 18 | 1 | 19 | 19 | 2 | 20110416 | 2004 | 26.477N | 76.099W | 203 | 205 | 19.238 | 36.670 | 2 | 36.666 | 2 | 186.7 | 2 | 187.9 | 2 | 187.9 |
| WBTSKN | AB1104 | 18 | 1 | 20 | 20 | 2 | 20110416 | 2005 | 26.477N | 76.099W | 154 | 155 | 20.114 | 36.749 | 2 | 36.748 | 2 | 191.6 | 2 | 189.8 | 2 | 189.8 |
| WBTSKN | AB1104 | 18 | 1 | 21 | 21 | 2 | 20110416 | 2007 | 26.476N | 76.099W | 104 | 105 | 21.294 | 36.817 | 2 | 36.817 | 2 | 214.8 | 2 | 219.5 | 2 | 219.5 |
| WBTSKN | AB1104 | 18 | 1 | 22 | 22 | 2 | 20110416 | 2010 | 26.476N | 76.099W | 55 | 55 | 22.848 | 36.818 | 2 | 36.820 | 2 | 214.8 | 2 | 214.8 | 2 | 214.8 |
| WBTSKN | AB1104 | 18 | 1 | 23 | 23 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 18 | 1 | 24 | 24 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 1 | 1 | 2 | 20110416 | 2259 | 26.487N | 75.908W | 4721 | 4806 | 2.178 | 34.872 | 2 | 34.872 | 2 | 257.3 | 2 | 256.4 | 2 | 256.4 |
| WBTSKN | AB1104 | 19 | 1 | 2 | 2 | 2 | 20110416 | 2307 | 26.486N | 75.908W | 4315 | 4389 | 2.180 | 34.879 | 2 | 34.878 | 2 | 260.2 | 2 | 259.7 | 2 | 259.7 |
| WBTSKN | AB1104 | 19 | 1 | 3 | 3 | 2 | 20110416 | 2313 | 26.485N | 75.908W | 4002 | 4067 | 2.194 | 34.885 | 2 | 34.884 | 2 | 263.4 | 2 | 263.4 | 2 | 263.4 |
| WBTSKN | AB1104 | 19 | 1 | 4 | 4 | 2 | 20110416 | 2320 | 26.483N | 75.909W | 3699 | 3756 | 2.267 | 34.891 | 2 | 34.891 | 2 | 266.2 | 2 | 266.2 | 2 | 266.2 |
| WBTSKN | AB1104 | 19 | 1 | 5 | 5 | 2 | 20110416 | 2326 | 26.483N | 75.909W | 3401 | 3451 | 2.482 | 34.908 | 2 | 34.907 | 2 | 269.1 | 2 | 268.6 | 2 | 268.6 |
| WBTSKN | AB1104 | 19 | 1 | 6 | 6 | 2 | 20110416 | 2332 | 26.482N | 75.909W | 3103 | 3146 | 2.672 | 34.919 | 2 | 34.919 | 2 | 267.7 | 2 | 267.9 | 2 | 267.9 |
| WBTSKN | AB1104 | 19 | 1 | 7 | 7 | 2 | 20110416 | 2338 | 26.481N | 75.910W | 2805 | 2842 | 2.913 | 34.934 | 2 | 34.934 | 2 | 265.3 | 2 | 265.3 | 2 | 265.3 |
| WBTSKN | AB1104 | 19 | 1 | 8 | 8 | 2 | 20110416 | 2345 | 26.480N | 75.910W | 2497 | 2529 | 3.184 | 34.947 | 2 | 34.947 | 2 | 263.3 | 2 | 264.2 | 2 | 264.2 |
| WBTSKN | AB1104 | 19 | 1 | 9 | 9 | 2 | 20110416 | 2350 | 26.478N | 75.910W | 2249 | 2276 | 3.407 | 34.957 | 2 | 34.957 | 2 | 262.9 | 2 | 263.3 | 2 | 263.3 |
| WBTSKN | AB1104 | 19 | 1 | 10 | 10 | 2 | 20110416 | 2355 | 26.478N | 75.911W | 2001 | 2024 | 3.599 | 34.959 | 2 | 34.959 | 2 | 263.8 | 2 | 263.8 | 2 | 263.8 |
| WBTSKN | AB1104 | 19 | 1 | 11 | 11 | 2 | 20110417 | 0001 | 26.477N | 75.911W | 1753 | 1772 | 3.831 | 34.970 | 2 | 34.971 | 2 | 262.5 | 2 | 262.0 | 2 | 262.0 |
| WBTSKN | AB1104 | 19 | 1 | 12 | 12 | 2 | 20110417 | 0007 | 26.477N | 75.912W | 1495 | 1510 | 4.231 | 34.993 | 2 | 34.993 | 2 | 255.9 | 2 | 255.4 | 2 | 255.4 |
| WBTSKN | AB1104 | 19 | 1 | 13 | 13 | 2 | 20110417 | 0013 | 26.476N | 75.912W | 1247 | 1259 | 4.830 | 35.024 | 2 | 35.023 | 2 | 242.4 | 2 | 244.7 | 2 | 244.7 |
| WBTSKN | AB1104 | 19 | 1 | 14 | 14 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 15 | 15 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 16 | 16 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 17 | 17 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 18 | 18 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 19 | 19 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 19 | 1 | 20 | 20 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999. | | | | | | |

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|--------|--------|----|---|----|---|----------|------|-----------|-----------|------|------|----------|----------|---|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 20 | 1 | 3 | 2 | 20110417 | 0513 | 26.503N | 75.704W | 3975 | 4039 | 2.238 | 34.889 | 2 | 34.889 | 2 | 264.1 | 2 | 263.6 |
| WBTSKN | AB1104 | 20 | 1 | 4 | 2 | 20110417 | 0519 | 26.502N | 75.704W | 3678 | 3735 | 2.277 | 34.894 | 2 | 34.894 | 2 | 265.9 | 2 | 266.0 |
| WBTSKN | AB1104 | 20 | 1 | 5 | 2 | 20110417 | 0525 | 26.502N | 75.704W | 3380 | 3430 | 2.400 | 34.904 | 2 | 34.904 | 2 | 267.5 | 2 | 266.6 |
| WBTSKN | AB1104 | 20 | 1 | 6 | 2 | 20110417 | 0531 | 26.502N | 75.704W | 2785 | 2822 | 2.579 | 34.915 | 2 | 34.916 | 2 | 267.3 | 2 | 267.0 |
| WBTSKN | AB1104 | 20 | 1 | 7 | 2 | 20110417 | 0537 | 26.502N | 75.704W | 2785 | 2822 | 2.857 | 34.930 | 2 | 34.931 | 2 | 264.6 | 2 | 264.4 |
| WBTSKN | AB1104 | 20 | 1 | 8 | 2 | 20110417 | 0543 | 26.502N | 75.705W | 2487 | 2518 | 3.157 | 34.946 | 2 | 34.946 | 2 | 262.6 | 2 | 262.2 |
| WBTSKN | AB1104 | 20 | 1 | 9 | 2 | 20110417 | 0548 | 26.502N | 75.705W | 2238 | 2265 | 3.379 | 34.955 | 2 | 34.956 | 2 | 261.7 | 2 | 261.7 |
| WBTSKN | AB1104 | 20 | 1 | 10 | 2 | 20110417 | 0553 | 26.501N | 75.705W | 1990 | 2013 | 3.631 | 34.961 | 2 | 34.961 | 2 | 262.1 | 2 | 262.0 |
| WBTSKN | AB1104 | 20 | 1 | 11 | 2 | 20110417 | 0557 | 26.501N | 75.705W | 1742 | 1761 | 3.906 | 34.972 | 2 | 34.973 | 2 | 259.6 | 2 | 259.7 |
| WBTSKN | AB1104 | 20 | 1 | 12 | 2 | 20110417 | 0602 | 26.501N | 75.705W | 1494 | 1509 | 4.208 | 34.985 | 2 | 34.986 | 2 | 255.9 | 2 | 255.1 |
| WBTSKN | AB1104 | 20 | 1 | 13 | 2 | 20110417 | 0607 | 26.501N | 75.705W | 1246 | 1258 | 4.786 | 35.021 | 2 | 35.022 | 2 | 240.4 | 2 | 241.6 |
| WBTSKN | AB1104 | 20 | 1 | 14 | 2 | 20110417 | 0612 | 26.500N | 75.706W | 998 | 1007 | 5.075 | 35.058 | 2 | 35.060 | 2 | 186.1 | 2 | 186.8 |
| WBTSKN | AB1104 | 20 | 1 | 15 | 2 | 20110417 | 0617 | 26.500N | 75.706W | 749 | 755 | 5.335 | 35.174 | 2 | 35.175 | 2 | 147.4 | 2 | 146.5 |
| WBTSKN | AB1104 | 20 | 1 | 16 | 2 | 20110417 | 0622 | 26.500N | 75.706W | 501 | 505 | 5.622 | 35.275 | 2 | 35.276 | 2 | 153.9 | 2 | 152.8 |
| WBTSKN | AB1104 | 20 | 1 | 17 | 2 | 20110417 | 0626 | 26.500N | 75.706W | 352 | 355 | 5.865 | 36.275 | 2 | 36.276 | 2 | 176.3 | 2 | 175.8 |
| WBTSKN | AB1104 | 20 | 1 | 18 | 2 | 20110417 | 0628 | 26.500N | 75.706W | 253 | 255 | 6.098 | 36.535 | 2 | 36.536 | 2 | 189.3 | 2 | 190.2 |
| WBTSKN | AB1104 | 20 | 1 | 19 | 2 | 20110417 | 0630 | 26.500N | 75.706W | 204 | 205 | 6.275 | 36.637 | 2 | 36.638 | 2 | 187.1 | 2 | 187.7 |
| WBTSKN | AB1104 | 20 | 1 | 20 | 2 | 20110417 | 0631 | 26.500N | 75.706W | 154 | 155 | 6.445 | 36.744 | 2 | 36.745 | 2 | 186.0 | 2 | 185.9 |
| WBTSKN | AB1104 | 20 | 1 | 21 | 2 | 20110417 | 0633 | 26.500N | 75.706W | 105 | 106 | 6.605 | 36.811 | 2 | 36.812 | 2 | 195.9 | 2 | 195.4 |
| WBTSKN | AB1104 | 20 | 1 | 22 | 2 | 20110417 | 0635 | 26.500N | 75.706W | 55 | 55 | 6.755 | 36.821 | 2 | 36.822 | 2 | 214.8 | 2 | 213.7 |
| WBTSKN | AB1104 | 20 | 1 | 23 | 2 | 20110417 | 0638 | 26.500N | 75.706W | 2 | 2 | 6.905 | 36.896 | 2 | 36.897 | 2 | 208.4 | 2 | 208.2 |
| WBTSKN | AB1104 | 20 | 1 | 24 | 2 | 20110417 | 0640 | 26.500N | 75.706W | 2 | 2 | 7.055 | 36.941 | 2 | 36.942 | 2 | 209.9 | 2 | 209.7 |
| WBTSKN | AB1104 | 21 | 1 | 1 | 2 | 20110417 | 0920 | -999.000W | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 21 | 1 | 2 | 2 | 20110417 | 0927 | 26.507N | 75.504W | 4660 | 4743 | 2.221 | 34.878 | 2 | 34.879 | 2 | 257.9 | 2 | 258.0 |
| WBTSKN | AB1104 | 21 | 1 | 3 | 2 | 20110417 | 0934 | 26.508N | 75.504W | 4268 | 4340 | 2.235 | 34.885 | 2 | 34.885 | 2 | 262.2 | 2 | 262.2 |
| WBTSKN | AB1104 | 21 | 1 | 4 | 2 | 20110417 | 0940 | 26.508N | 75.504W | 3971 | 4035 | 2.241 | 34.891 | 2 | 34.891 | 2 | 264.1 | 2 | 264.1 |
| WBTSKN | AB1104 | 21 | 1 | 5 | 2 | 20110417 | 0946 | 26.509N | 75.505W | 3674 | 3731 | 2.271 | 34.894 | 2 | 34.893 | 2 | 266.1 | 2 | 265.8 |
| WBTSKN | AB1104 | 21 | 1 | 6 | 2 | 20110417 | 0951 | 26.509N | 75.505W | 3377 | 3427 | 2.389 | 34.904 | 2 | 34.904 | 2 | 266.7 | 2 | 266.7 |
| WBTSKN | AB1104 | 21 | 1 | 7 | 2 | 20110417 | 0957 | 26.510N | 75.505W | 3078 | 3122 | 2.613 | 34.917 | 2 | 34.918 | 2 | 266.7 | 2 | 267.1 |
| WBTSKN | AB1104 | 21 | 1 | 8 | 2 | 20110417 | 1003 | 26.510N | 75.505W | 2780 | 2817 | 2.833 | 34.930 | 2 | 34.930 | 2 | 263.5 | 2 | 264.8 |
| WBTSKN | AB1104 | 21 | 1 | 9 | 2 | 20110417 | 1009 | 26.511N | 75.506W | 2482 | 2513 | 3.112 | 34.947 | 2 | 34.948 | 2 | 261.9 | 2 | 261.5 |
| WBTSKN | AB1104 | 21 | 1 | 10 | 2 | 20110417 | 1014 | 26.512N | 75.506W | 2233 | 2259 | 3.366 | 34.955 | 2 | 34.955 | 2 | 262.1 | 2 | 261.7 |
| WBTSKN | AB1104 | 21 | 1 | 11 | 2 | 20110417 | 1019 | 26.512N | 75.506W | 1984 | 2007 | 3.666 | 34.964 | 2 | 34.965 | 2 | 261.5 | 2 | 261.7 |
| WBTSKN | AB1104 | 21 | 1 | 12 | 2 | 20110417 | 1024 | 26.513N | 75.506W | 1736 | 1755 | 3.919 | 34.972 | 2 | 34.971 | 2 | 259.6 | 2 | 259.7 |
| WBTSKN | AB1104 | 21 | 1 | 13 | 2 | 20110417 | 1029 | 26.514N | 75.506W | 1488 | 1503 | 4.219 | 34.986 | 2 | 34.986 | 2 | 255.2 | 2 | 254.7 |
| WBTSKN | AB1104 | 21 | 1 | 14 | 2 | 20110417 | 1034 | 26.514N | 75.506W | 994 | 1002 | 4.711 | 35.014 | 2 | 35.014 | 2 | 244.0 | 2 | 243.9 |
| WBTSKN | AB1104 | 21 | 1 | 15 | 2 | 20110417 | 1040 | 26.515N | 75.506W | 748 | 754 | 5.021 | 35.078 | 2 | 35.077 | 2 | 198.9 | 2 | 200.2 |
| WBTSKN | AB1104 | 21 | 1 | 16 | 2 | 20110417 | 1045 | 26.516N | 75.506W | 500 | 504 | 5.323 | 35.234 | 2 | 35.231 | 2 | 145.0 | 2 | 144.9 |
| WBTSKN | AB1104 | 21 | 1 | 17 | 2 | 20110417 | 1048 | 26.516N | 75.506W | 352 | 354 | 5.611 | 35.879 | 2 | 35.879 | 2 | 159.1 | 2 | 161.2 |
| WBTSKN | AB1104 | 21 | 1 | 18 | 2 | 20110417 | 1051 | 26.516N | 75.506W | 252 | 254 | 5.899 | 36.411 | 2 | 36.404 | 2 | 182.7 | 2 | 183.3 |
| WBTSKN | AB1104 | 21 | 1 | 19 | 2 | 20110417 | 1053 | 26.517N | 75.506W | 203 | 205 | 6.187 | 36.584 | 2 | 36.584 | 2 | 190.4 | 2 | 191.4 |
| WBTSKN | AB1104 | 21 | 1 | 20 | 2 | 20110417 | 1054 | 26.517N | 75.506W | 153 | 155 | 6.475 | 36.656 | 2 | 36.656 | 2 | 186.9 | 2 | 187.4 |
| WBTSKN | AB1104 | 21 | 1 | 21 | 2 | 20110417 | 1056 | 26.517N | 75.506W | 104 | 105 | 6.762 | 36.726 | 2 | 36.726 | 2 | 186.0 | 2 | 186.6 |
| WBTSKN | AB1104 | 21 | 1 | 22 | 2 | 20110417 | 1058 | 26.517N | 75.506W | 54 | 55 | 7.050 | 36.820 | 2 | 36.812 | 2 | 193.0 | 2 | 199.9 |
| WBTSKN | AB1104 | 21 | 1 | 23 | 2 | 20110417 | 1101 | 26.518N | 75.506W | 2 | 2 | 7.339 | 36.829 | 2 | 36.829 | 2 | 212.8 | 2 | 213.2 |
| WBTSKN | AB1104 | 21 | 1 | 24 | 2 | 20110417 | 1109 | -999.000W | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 22 | 1 | 1 | 2 | 20110417 | 1341 | 26.506N | 75.300W | 4608 | 4689 | 2.213 | 34.878 | 2 | 34.879 | 2 | 258.6 | 2 | 258.9 |
| WBTSKN | AB1104 | 22 | 1 | 2 | 2 | 20110417 | 1349 | 26.507N | 75.300W | 4264 | 4336 | 2.222 | 34.884 | 2 | 34.885 | 2 | 262.0 | 2 | 261.8 |
| WBTSKN | AB1104 | 22 | 1 | 3 | 2 | 20110417 | 1354 | 26.507N | 75.299W | 3964 | 4028 | 2.233 | 34.888 | 2 | 34.888 | 2 | 263.9 | 2 | 264.0 |
| WBTSKN | AB1104 | 22 | 1 | 4 | 2 | 20110417 | 1401 | 26.507N | 75.299W | 3665 | 3721 | 2.264 | 34.893 | 2 | 34.893 | 2 | 266.0 | 2 | 266.0 |
| WBTSKN | AB1104 | 22 | 1 | 5 | 2 | 20110417 | 1406 | 26.507N | 75.299W | 3366 | 3416 | 2.381 | 34.902 | 2 | 34.903 | 2 | 268.9 | 2 | 268.6 |
| WBTSKN | AB1104 | 22 | 1 | 6 | 2 | 20110417 | 1412 | 26.507N | 75.299W | 3068 | 3111 | 2.599 | 34.915 | 2 | 34.916 | 2 | 267.2 | 2 | 267.5 |
| WBTSKN | AB1104 | 22 | 1 | 7 | 2 | 20110417 | 1418 | 26.507N | 75.298W | 2772 | 2808 | 2.880 | 34.931 | 2 | 34.932 | 2 | 264.3 | 2 | 264.8 |
| WBTSKN | AB1104 | 22 | 1 | 8 | 2 | 20110417 | 1424 | 26.508N | 75.298W | 2476 | 2507 | 3.173 | 34.949 | 2 | 34.948 | 2 | 262.4 | 2 | 261.7 |
| WBTSKN | AB1104 | 22 | 1 | 9 | 2 | 20110417 | 1429 | 26.508N | 75.298W | 2229 | 2256 | 3.400 | 34.956 | 2 | 34.955 | 2 | 262.2 | 2 | 262.2 |
| WBTSKN | AB1104 | 22 | 1 | 10 | 2 | 20110417 | 1435 | 26.508N | 75.297W | 1982 | 2004 | 3.605 | 34.962 | 2 | 34.962 | 2 | 261.7 | 2 | 261.7 |
| WBTSKN | AB1104 | 22 | 1 | 11 | 2 | 20110417 | 1440 | 26.508N | 75.297W | 1734 | 1753 | 3.866 | 34.967 | 2 | 34.968 | 2 | 260.7 | 2 | 260.1 |
| WBTSKN | AB1104 | 22 | 1 | 12 | 2 | 20110417 | 1445 | 26.508N | 75.296W | 1488 | 1503 | 4.226 | 34.994 | 2 | 34.994 | 2 | 254.8 | 2 | 254.1 |
| WBTSKN | AB1104 | 22 | 1 | 13 | 2 | 20110417 | 1450 | 26.508N | 75.296W | 1240 | 1252 | 4.505 | 35.021 | 2 | 35.021 | 2 | 241.5 | 2 | 241.1 |
| WBTSKN | AB1104 | 22 | 1 | 14 | 2 | 20110417 | 1455 | 26.509N | 75.296W | 993 | 1002 | 4.834 | 35.079 | 2 | 35.079 | 2 | 190.6 | 2 | 191.4 |
| WBTSKN | AB1104 | 22 | 1 | 15 | 2 | 20110417 | 1500 | 26.509N | 75.295W | 746 | 752 | 5.165 | 35.288 | 2 | 35.284 | 2 | 142.1 | 2 | 141.4 |
| WBTSKN | AB1104 | 22 | 1 | 16 | 2 | 20110417 | 1505 | 26.510N | 75.295W | 500 | 504 | 5.466 | 36.103 | 2 | 36.099 | 2 | 167.6 | 2 | 167.9 |
| WBTSKN | AB1104 | 22 | 1 | 17 | 2 | 20110417 | 1508 | 26.510N | 75.295W | 351 | 354 | 5.764 | 36.480 | 2 | 36.480 | 2 | 188.7 | 2 | 189.7 |
| WBTSKN | AB1104 | 22 | 1 | 18 | 2 | 20110417 | 1511 | 26.511N | 75.295W | 252 | 254 | 6.052 | 36.587 | 2 | 36.587 | 2 | 197.2 | 2 | 198.3 |
| WBTSKN | AB1104 | 22 | 1 | 19 | 2 | 20110417 | 1513 | 26.511N | 75.295W | 202 | 204 | 6.340 | 36.644 | 2 | 36.643 | 2 | 194.6 | 2 | 197.2 |
| WBTSKN | AB1104 | 22 | 1 | 20 | 2 | 20110417 | 1515 | 26.511N | 75.295W | 153 | 154 | 6.628 | 36.726 | 2 | 36.723 | 2 | 203.2 | 2 | 203.4 |

| | | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|-----------|----------|-----------|-----------|------|------|----------|----------|---|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 22 | 1 | 21 | 2 | 20110417 | 1516 | 26.512N | 75.295W | 103 | 104 | 20.702 | 36.817 | 2 | 36.816 | 2 | 218.6 | 2 | 218.4 |
| WBTSKN | AB1104 | 22 | 1 | 22 | 2 | 20110417 | 1519 | 26.512N | 75.295W | 53 | 54 | 22.001 | 36.847 | 2 | 36.852 | 2 | 210.6 | 2 | 209.9 |
| WBTSKN | AB1104 | 22 | 1 | 23 | 2 | 20110417 | 1521 | 26.512N | 75.295W | 3 | 3 | 24.919 | 36.857 | 2 | 36.857 | 2 | 207.5 | 2 | 207.5 |
| WBTSKN | AB1104 | 22 | 1 | 24 | 2 | -999.000N | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 23 | 1 | 1 | 2 | 20110417 | 1933 | 26.500N | 75.075W | 4579 | 4660 | 2.216 | 34.879 | 2 | 34.880 | 2 | 258.0 | 2 | 258.3 |
| WBTSKN | AB1104 | 23 | 1 | 2 | 2 | 20110417 | 1939 | 26.500N | 75.075W | 4301 | 4374 | 2.251 | 34.886 | 2 | 34.888 | 2 | 261.6 | 2 | 262.5 |
| WBTSKN | AB1104 | 23 | 1 | 3 | 2 | 20110417 | 1946 | 26.499N | 75.075W | 4059 | 4098 | 2.257 | 34.890 | 2 | 34.894 | 2 | 263.2 | 2 | 264.0 |
| WBTSKN | AB1104 | 23 | 1 | 4 | 2 | 20110417 | 1952 | 26.499N | 75.075W | 3698 | 3756 | 2.283 | 34.894 | 2 | 34.894 | 2 | 265.1 | 2 | 265.6 |
| WBTSKN | AB1104 | 23 | 1 | 5 | 2 | 20110417 | 1958 | 26.499N | 75.075W | 3403 | 3453 | 2.366 | 34.901 | 2 | 34.903 | 2 | 266.8 | 2 | 267.3 |
| WBTSKN | AB1104 | 23 | 1 | 6 | 2 | 20110417 | 2004 | 26.499N | 75.074W | 3097 | 3140 | 2.529 | 34.911 | 2 | 34.912 | 2 | 266.7 | 2 | 267.3 |
| WBTSKN | AB1104 | 23 | 1 | 7 | 2 | 20110417 | 2011 | 26.499N | 75.074W | 2801 | 2839 | 2.775 | 34.927 | 2 | 34.929 | 2 | 264.5 | 2 | 264.7 |
| WBTSKN | AB1104 | 23 | 1 | 8 | 2 | 20110417 | 2017 | 26.499N | 75.074W | 2551 | 2583 | 3.047 | 34.941 | 2 | 34.942 | 2 | 262.4 | 2 | 263.2 |
| WBTSKN | AB1104 | 23 | 1 | 9 | 2 | 20110417 | 2022 | 26.499N | 75.074W | 2255 | 2332 | 3.326 | 34.954 | 2 | 34.954 | 2 | 262.3 | 2 | 262.3 |
| WBTSKN | AB1104 | 23 | 1 | 10 | 2 | 20110417 | 2027 | 26.499N | 75.074W | 2002 | 2025 | 3.539 | 34.966 | 2 | 34.958 | 2 | 262.8 | 2 | 262.7 |
| WBTSKN | AB1104 | 23 | 1 | 11 | 2 | 20110417 | 2032 | 26.499N | 75.074W | 1755 | 1774 | 3.813 | 34.966 | 2 | 34.969 | 2 | 260.9 | 2 | 260.7 |
| WBTSKN | AB1104 | 23 | 1 | 12 | 2 | 20110417 | 2038 | 26.498N | 75.074W | 1498 | 1514 | 4.171 | 34.983 | 2 | 34.986 | 2 | 256.0 | 2 | 255.9 |
| WBTSKN | AB1104 | 23 | 1 | 13 | 2 | 20110417 | 2043 | 26.498N | 75.074W | 1252 | 1264 | 4.770 | 35.020 | 2 | 35.022 | 2 | 240.4 | 2 | 242.5 |
| WBTSKN | AB1104 | 23 | 1 | 14 | 2 | 20110417 | 2048 | 26.498N | 75.074W | 995 | 1004 | 6.389 | 35.078 | 2 | 35.079 | 2 | 192.4 | 2 | 192.8 |
| WBTSKN | AB1104 | 23 | 1 | 15 | 2 | 20110417 | 2053 | 26.498N | 75.074W | 748 | 754 | 10.343 | 35.341 | 2 | 35.341 | 2 | 143.5 | 2 | 143.2 |
| WBTSKN | AB1104 | 23 | 1 | 16 | 2 | 20110417 | 2058 | 26.498N | 75.074W | 500 | 504 | 15.862 | 36.159 | 2 | 36.144 | 4 | 170.4 | 2 | 169.8 |
| WBTSKN | AB1104 | 23 | 1 | 17 | 2 | 20110417 | 2101 | 26.498N | 75.074W | 352 | 354 | 17.957 | 36.530 | 2 | 36.532 | 2 | 190.9 | 2 | 194.6 |
| WBTSKN | AB1104 | 23 | 1 | 18 | 2 | 20110417 | 2105 | 26.498N | 75.074W | 253 | 255 | 18.685 | 36.625 | 2 | 36.628 | 2 | 197.4 | 2 | 200.9 |
| WBTSKN | AB1104 | 23 | 1 | 19 | 2 | 20110417 | 2106 | 26.498N | 75.074W | 203 | 205 | 19.152 | 36.660 | 2 | 36.661 | 2 | 198.1 | 2 | 199.4 |
| WBTSKN | AB1104 | 23 | 1 | 20 | 2 | 20110417 | 2108 | 26.498N | 75.074W | 153 | 155 | 19.951 | 36.750 | 2 | 36.752 | 2 | 208.9 | 2 | 208.7 |
| WBTSKN | AB1104 | 23 | 1 | 21 | 2 | 20110417 | 2110 | 26.498N | 75.074W | 104 | 105 | 20.762 | 36.783 | 2 | 36.791 | 2 | 207.8 | 2 | 207.5 |
| WBTSKN | AB1104 | 23 | 1 | 22 | 2 | 20110417 | 2113 | 26.498N | 75.073W | 54 | 55 | 22.045 | 36.811 | 2 | 36.814 | 2 | 210.8 | 2 | 212.9 |
| WBTSKN | AB1104 | 23 | 1 | 23 | 2 | 20110417 | 2115 | 26.498N | 75.073W | 4 | 4 | 25.016 | 36.848 | 2 | 36.857 | 2 | 207.2 | 2 | 206.6 |
| WBTSKN | AB1104 | 23 | 1 | 24 | 2 | -999.000N | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 24 | 1 | 1 | 2 | 20110418 | 0005 | 26.501N | 74.791W | 4519 | 4598 | 2.136 | 34.870 | 2 | 34.872 | 2 | 254.7 | 2 | 255.2 |
| WBTSKN | AB1104 | 24 | 1 | 2 | 2 | 20110418 | 0010 | 26.501N | 74.791W | 4301 | 4374 | 2.209 | 34.882 | 2 | 34.882 | 2 | 260.9 | 2 | 260.6 |
| WBTSKN | AB1104 | 24 | 1 | 3 | 2 | 20110418 | 0016 | 26.502N | 74.791W | 4006 | 4071 | 2.225 | 34.887 | 2 | 34.887 | 2 | 263.1 | 2 | 263.0 |
| WBTSKN | AB1104 | 24 | 1 | 4 | 2 | 20110418 | 0023 | 26.501N | 74.791W | 3702 | 3760 | 2.259 | 34.893 | 2 | 34.893 | 2 | 265.2 | 2 | 265.6 |
| WBTSKN | AB1104 | 24 | 1 | 5 | 2 | 20110418 | 0029 | 26.502N | 74.791W | 3408 | 3459 | 2.326 | 34.899 | 2 | 34.899 | 2 | 266.9 | 2 | 267.1 |
| WBTSKN | AB1104 | 24 | 1 | 6 | 2 | 20110418 | 0036 | 26.502N | 74.791W | 3105 | 3148 | 2.466 | 34.909 | 2 | 34.908 | 2 | 267.8 | 2 | 268.0 |
| WBTSKN | AB1104 | 24 | 1 | 7 | 2 | 20110418 | 0042 | 26.502N | 74.791W | 2799 | 2837 | 2.714 | 34.923 | 2 | 34.922 | 2 | 267.2 | 2 | 268.1 |
| WBTSKN | AB1104 | 24 | 1 | 8 | 2 | 20110418 | 0048 | 26.502N | 74.791W | 2502 | 2534 | 2.987 | 34.938 | 2 | 34.938 | 2 | 263.3 | 2 | 263.4 |
| WBTSKN | AB1104 | 24 | 1 | 9 | 2 | 20110418 | 0053 | 26.502N | 74.791W | 2254 | 2281 | 3.253 | 34.951 | 2 | 34.951 | 2 | 262.3 | 2 | 262.2 |
| WBTSKN | AB1104 | 24 | 1 | 10 | 2 | 20110418 | 0059 | 26.501N | 74.791W | 2005 | 2028 | 3.518 | 34.959 | 2 | 34.959 | 2 | 261.9 | 2 | 261.9 |
| WBTSKN | AB1104 | 24 | 1 | 11 | 2 | 20110418 | 0105 | 26.501N | 74.791W | 1748 | 1767 | 3.818 | 34.970 | 2 | 34.970 | 2 | 260.6 | 2 | 260.2 |
| WBTSKN | AB1104 | 24 | 1 | 12 | 2 | 20110418 | 0110 | 26.501N | 74.791W | 1500 | 1516 | 4.184 | 34.991 | 2 | 34.992 | 2 | 255.2 | 2 | 254.7 |
| WBTSKN | AB1104 | 24 | 1 | 13 | 2 | 20110418 | 0116 | 26.501N | 74.791W | 1254 | 1266 | 4.792 | 35.027 | 2 | 35.027 | 2 | 241.6 | 2 | 241.6 |
| WBTSKN | AB1104 | 24 | 1 | 14 | 2 | 20110418 | 0121 | 26.501N | 74.791W | 997 | 1006 | 6.359 | 35.079 | 2 | 35.079 | 2 | 193.6 | 2 | 193.6 |
| WBTSKN | AB1104 | 24 | 1 | 15 | 2 | 20110418 | 0127 | 26.501N | 74.791W | 750 | 756 | 9.902 | 35.288 | 2 | 35.286 | 2 | 142.6 | 2 | 141.5 |
| WBTSKN | AB1104 | 24 | 1 | 16 | 2 | 20110418 | 0132 | 26.500N | 74.791W | 502 | 506 | 15.861 | 36.156 | 2 | 36.155 | 2 | 170.4 | 2 | 170.4 |
| WBTSKN | AB1104 | 24 | 1 | 17 | 2 | 20110418 | 0136 | 26.500N | 74.791W | 354 | 357 | 17.940 | 36.531 | 2 | 36.532 | 2 | 197.6 | 2 | 198.1 |
| WBTSKN | AB1104 | 24 | 1 | 18 | 2 | 20110418 | 0140 | 26.500N | 74.791W | 254 | 256 | 18.459 | 36.594 | 2 | 36.595 | 2 | 197.8 | 2 | 199.0 |
| WBTSKN | AB1104 | 24 | 1 | 19 | 2 | 20110418 | 0142 | 26.500N | 74.791W | 205 | 206 | 18.954 | 36.642 | 2 | 36.638 | 2 | 190.8 | 2 | 191.2 |
| WBTSKN | AB1104 | 24 | 1 | 20 | 2 | 20110418 | 0146 | 26.500N | 74.791W | 156 | 156 | 19.803 | 36.753 | 2 | 36.746 | 2 | 209.8 | 2 | 208.2 |
| WBTSKN | AB1104 | 24 | 1 | 21 | 2 | 20110418 | 0149 | 26.500N | 74.791W | 106 | 106 | 20.430 | 36.810 | 2 | 36.805 | 2 | 214.7 | 2 | 214.4 |
| WBTSKN | AB1104 | 24 | 1 | 22 | 2 | 20110418 | 0151 | 26.500N | 74.791W | 56 | 57 | 22.166 | 36.804 | 2 | 36.807 | 2 | 215.9 | 2 | 215.9 |
| WBTSKN | AB1104 | 24 | 1 | 23 | 2 | -999.000N | -999.000 | -999.000N | -999.000W | -999 | -999 | 25.405 | 36.914 | 2 | 36.914 | 2 | 207.2 | 2 | 207.5 |
| WBTSKN | AB1104 | 24 | 1 | 24 | 2 | -999.000N | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 25 | 1 | 1 | 2 | 20110418 | 0442 | 26.502N | 74.518W | 4459 | 4536 | 2.094 | 34.866 | 2 | 34.865 | 2 | 253.8 | 2 | 252.7 |
| WBTSKN | AB1104 | 25 | 1 | 2 | 2 | 20110418 | 0446 | 26.502N | 74.518W | 4274 | 4346 | 2.186 | 34.880 | 2 | 34.880 | 2 | 259.5 | 2 | 259.3 |
| WBTSKN | AB1104 | 25 | 1 | 3 | 2 | 20110418 | 0452 | 26.502N | 74.518W | 3976 | 4040 | 2.227 | 34.889 | 2 | 34.889 | 2 | 263.0 | 2 | 263.3 |
| WBTSKN | AB1104 | 25 | 1 | 4 | 2 | 20110418 | 0458 | 26.502N | 74.518W | 3678 | 3735 | 2.267 | 34.894 | 2 | 34.894 | 2 | 265.3 | 2 | 265.4 |
| WBTSKN | AB1104 | 25 | 1 | 5 | 2 | 20110418 | 0504 | 26.502N | 74.518W | 3380 | 3430 | 2.390 | 34.903 | 2 | 34.903 | 2 | 266.9 | 2 | 266.9 |
| WBTSKN | AB1104 | 25 | 1 | 6 | 2 | 20110418 | 0510 | 26.502N | 74.519W | 3082 | 3126 | 2.522 | 34.912 | 2 | 34.911 | 2 | 267.0 | 2 | 267.2 |
| WBTSKN | AB1104 | 25 | 1 | 7 | 2 | 20110418 | 0516 | 26.502N | 74.519W | 2784 | 2821 | 2.753 | 34.925 | 2 | 34.924 | 2 | 265.3 | 2 | 266.3 |
| WBTSKN | AB1104 | 25 | 1 | 8 | 2 | 20110418 | 0522 | 26.502N | 74.519W | 2486 | 2517 | 3.021 | 34.941 | 2 | 34.940 | 2 | 262.5 | 2 | 262.4 |
| WBTSKN | AB1104 | 25 | 1 | 9 | 2 | 20110418 | 0529 | 26.502N | 74.519W | 2238 | 2265 | 3.269 | 34.950 | 2 | 34.950 | 2 | 262.4 | 2 | 262.4 |
| WBTSKN | AB1104 | 25 | 1 | 10 | 2 | 20110418 | 0534 | 26.502N | 74.519W | 1990 | 2012 | 3.527 | 34.956 | 2 | 34.957 | 2 | 262.9 | 2 | 262.6 |
| WBTSKN | AB1104 | 25 | 1 | 11 | 2 | 20110418 | 0539 | 26.502N | 74.519W | 1741 | 1760 | 3.799 | 34.964 | 2 | 34.991 | 4 | 261.7 | 2 | 260.8 |
| WBTSKN | AB1104 | 25 | 1 | 12 | 2 | 20110418 | 0545 | 26.502N | 74.519W | 1493 | 1508 | 4.216 | 34.992 | 2 | 34.990 | 2 | 255.4 | 2 | 255.0 |
| WBTSKN | AB1104 | 25 | 1 | 13 | 2 | 20110418 | 0550 | 26.502N | 74.519W | 1245 | 1257 | 4.872 | 35.034 | 2 | 35.034 | 2 | 239.4 | 2 | 239.5 |
| WBTSKN | AB1104 | 25 | 1 | 14 | 2 | 20110418 | 0555 | 26.502N | 74.519W | 997 | 1006 | 6.518 | 35.081 | 2 | 35.079 | 2 | 188.0 | 2 | 188.3 |

Table with columns: WBTSKN, AB1104, 25, 1, 15, 2, 20110418, 0601, 26.502N, 74.519W, 749, 755, 10.098, 35.312, 2, 35.309, 141.8, 2, 141.6, 2. Rows include various identifiers and numerical values.

| | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|----------|-----------|-----------|------|------|----------|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 31 | 1 | 3 | 2 | 20110419 | 1302 | 26.499N | 72.390W | 3971 | 4035 | 2.301 | 34.893 | 2 | 265.8 | 2 | 266.4 |
| WBTSKN | AB1104 | 31 | 1 | 4 | 2 | 20110419 | 1316 | 26.499N | 72.390W | 3676 | 3733 | 2.351 | 34.899 | 2 | 267.1 | 2 | 267.8 |
| WBTSKN | AB1104 | 31 | 1 | 5 | 2 | 20110419 | 1309 | 26.499N | 72.390W | 3380 | 3429 | 2.476 | 34.909 | 2 | 267.6 | 2 | 268.0 |
| WBTSKN | AB1104 | 31 | 1 | 6 | 2 | 20110419 | 1322 | 26.499N | 72.390W | 3082 | 3125 | 2.638 | 34.917 | 2 | 268.8 | 2 | 269.6 |
| WBTSKN | AB1104 | 31 | 1 | 7 | 2 | 20110419 | 1328 | 26.500N | 72.390W | 2783 | 2820 | 2.851 | 34.932 | 2 | 264.9 | 2 | 264.9 |
| WBTSKN | AB1104 | 31 | 1 | 8 | 2 | 20110419 | 1334 | 26.500N | 72.391W | 2485 | 2516 | 3.114 | 34.948 | 2 | 262.0 | 2 | 262.9 |
| WBTSKN | AB1104 | 31 | 1 | 9 | 2 | 20110419 | 1339 | 26.500N | 72.391W | 2237 | 2264 | 3.348 | 34.958 | 2 | 262.0 | 2 | 262.6 |
| WBTSKN | AB1104 | 31 | 1 | 10 | 2 | 20110419 | 1344 | 26.500N | 72.391W | 1989 | 2011 | 3.612 | 34.971 | 2 | 261.9 | 2 | 261.5 |
| WBTSKN | AB1104 | 31 | 1 | 11 | 2 | 20110419 | 1350 | 26.500N | 72.391W | 1740 | 1759 | 3.853 | 34.971 | 2 | 261.1 | 2 | 261.5 |
| WBTSKN | AB1104 | 31 | 1 | 12 | 2 | 20110419 | 1355 | 26.501N | 72.391W | 1492 | 1507 | 4.185 | 34.991 | 2 | 256.1 | 2 | 256.5 |
| WBTSKN | AB1104 | 31 | 1 | 13 | 2 | 20110419 | 1400 | 26.501N | 72.392W | 1244 | 1256 | 4.796 | 35.029 | 2 | 242.4 | 2 | 243.1 |
| WBTSKN | AB1104 | 31 | 1 | 14 | 2 | 20110419 | 1406 | 26.501N | 72.392W | 995 | 1004 | 6.301 | 35.081 | 2 | 197.0 | 2 | 198.6 |
| WBTSKN | AB1104 | 31 | 1 | 15 | 2 | 20110419 | 1411 | 26.502N | 72.392W | 747 | 754 | 10.076 | 35.310 | 2 | 143.0 | 2 | 143.0 |
| WBTSKN | AB1104 | 31 | 1 | 16 | 2 | 20110419 | 1416 | 26.502N | 72.393W | 499 | 503 | 16.319 | 36.237 | 2 | 183.4 | 2 | 184.5 |
| WBTSKN | AB1104 | 31 | 1 | 17 | 2 | 20110419 | 1420 | 26.502N | 72.393W | 351 | 353 | 17.996 | 36.542 | 2 | 199.1 | 2 | 200.6 |
| WBTSKN | AB1104 | 31 | 1 | 18 | 2 | 20110419 | 1423 | 26.502N | 72.393W | 252 | 253 | 18.529 | 36.599 | 2 | 183.4 | 2 | 183.4 |
| WBTSKN | AB1104 | 31 | 1 | 19 | 2 | 20110419 | 1427 | 26.502N | 72.393W | 202 | 203 | 19.182 | 36.667 | 2 | 206.8 | 2 | 206.9 |
| WBTSKN | AB1104 | 31 | 1 | 20 | 2 | 20110419 | 1427 | 26.502N | 72.393W | 152 | 153 | 19.634 | 36.709 | 2 | 199.3 | 2 | 205.2 |
| WBTSKN | AB1104 | 31 | 1 | 21 | 2 | 20110419 | 1429 | 26.502N | 72.394W | 103 | 104 | 20.664 | 36.787 | 2 | 214.4 | 2 | 215.9 |
| WBTSKN | AB1104 | 31 | 1 | 22 | 2 | 20110419 | 1431 | 26.502N | 72.394W | 53 | 54 | 21.648 | 36.871 | 2 | 220.0 | 2 | 221.6 |
| WBTSKN | AB1104 | 31 | 1 | 23 | 2 | 20110419 | 1434 | 26.502N | 72.394W | 3 | 3 | 24.367 | 36.888 | 2 | 210.2 | 2 | 210.7 |
| WBTSKN | AB1104 | 31 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000W | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 32 | 1 | 1 | 2 | 20110419 | 1830 | 26.514N | 71.993W | 5266 | 5367 | 2.153 | 34.862 | 2 | 254.2 | 2 | 252.0 |
| WBTSKN | AB1104 | 32 | 1 | 2 | 2 | 20110419 | 1847 | 26.515N | 71.992W | 4307 | 4380 | 2.294 | 34.890 | 2 | 264.4 | 2 | 266.5 |
| WBTSKN | AB1104 | 32 | 1 | 3 | 2 | 20110419 | 1854 | 26.515N | 71.992W | 3392 | 3456 | 2.319 | 34.895 | 2 | 266.6 | 2 | 267.0 |
| WBTSKN | AB1104 | 32 | 1 | 4 | 2 | 20110419 | 1900 | 26.515N | 71.991W | 3695 | 3753 | 2.384 | 34.901 | 2 | 267.4 | 2 | 268.1 |
| WBTSKN | AB1104 | 32 | 1 | 5 | 2 | 20110419 | 1905 | 26.515N | 71.991W | 3399 | 3450 | 2.518 | 34.910 | 2 | 267.3 | 2 | 268.0 |
| WBTSKN | AB1104 | 32 | 1 | 6 | 2 | 20110419 | 1912 | 26.516N | 71.990W | 3101 | 3145 | 2.689 | 34.921 | 2 | 266.3 | 2 | 266.8 |
| WBTSKN | AB1104 | 32 | 1 | 7 | 2 | 20110419 | 1918 | 26.516N | 71.990W | 2803 | 2841 | 2.929 | 34.937 | 2 | 263.0 | 2 | 263.8 |
| WBTSKN | AB1104 | 32 | 1 | 8 | 2 | 20110419 | 1924 | 26.517N | 71.990W | 2492 | 2524 | 3.217 | 34.953 | 2 | 261.1 | 2 | 264.8 |
| WBTSKN | AB1104 | 32 | 1 | 9 | 2 | 20110419 | 1929 | 26.518N | 71.989W | 2231 | 2257 | 3.416 | 34.961 | 2 | 262.0 | 2 | 261.9 |
| WBTSKN | AB1104 | 32 | 1 | 10 | 2 | 20110419 | 1934 | 26.519N | 71.989W | 2000 | 2023 | 3.596 | 34.963 | 2 | 263.2 | 2 | 262.9 |
| WBTSKN | AB1104 | 32 | 1 | 11 | 2 | 20110419 | 1939 | 26.519N | 71.988W | 1753 | 1772 | 3.868 | 34.976 | 2 | 260.4 | 2 | 260.2 |
| WBTSKN | AB1104 | 32 | 1 | 12 | 2 | 20110419 | 1945 | 26.520N | 71.988W | 1496 | 1511 | 4.284 | 35.003 | 2 | 253.3 | 2 | 253.1 |
| WBTSKN | AB1104 | 32 | 1 | 13 | 2 | 20110419 | 1950 | 26.520N | 71.988W | 1249 | 1261 | 4.863 | 35.035 | 2 | 241.0 | 2 | 240.0 |
| WBTSKN | AB1104 | 32 | 1 | 14 | 2 | 20110419 | 1955 | 26.521N | 71.987W | 1003 | 1012 | 6.370 | 35.081 | 2 | 191.6 | 2 | 194.6 |
| WBTSKN | AB1104 | 32 | 1 | 15 | 2 | 20110419 | 2001 | 26.522N | 71.987W | 744 | 750 | 10.071 | 35.308 | 2 | 179.8 | 2 | -999.0 |
| WBTSKN | AB1104 | 32 | 1 | 16 | 2 | 20110419 | 2006 | 26.522N | 71.986W | 497 | 501 | 15.936 | 36.168 | 2 | 179.3 | 2 | 179.8 |
| WBTSKN | AB1104 | 32 | 1 | 17 | 2 | 20110419 | 2010 | 26.523N | 71.986W | 352 | 354 | 17.779 | 36.503 | 2 | 197.0 | 2 | 197.2 |
| WBTSKN | AB1104 | 32 | 1 | 18 | 2 | 20110419 | 2012 | 26.523N | 71.986W | 254 | 255 | 18.280 | 36.574 | 2 | 199.2 | 2 | 198.3 |
| WBTSKN | AB1104 | 32 | 1 | 19 | 2 | 20110419 | 2014 | 26.523N | 71.986W | 204 | 206 | 18.661 | 36.610 | 2 | 199.2 | 2 | 195.3 |
| WBTSKN | AB1104 | 32 | 1 | 20 | 2 | 20110419 | 2016 | 26.523N | 71.986W | 155 | 156 | 19.191 | 36.657 | 2 | 195.5 | 2 | 194.3 |
| WBTSKN | AB1104 | 32 | 1 | 21 | 2 | 20110419 | 2017 | 26.524N | 71.986W | 105 | 106 | 20.118 | 36.742 | 2 | 215.4 | 2 | 212.1 |
| WBTSKN | AB1104 | 32 | 1 | 22 | 2 | 20110419 | 2020 | 26.524N | 71.987W | 55 | 56 | 21.545 | 36.872 | 2 | 224.3 | 2 | 223.8 |
| WBTSKN | AB1104 | 32 | 1 | 23 | 2 | 20110419 | 2023 | 26.524N | 71.987W | 2 | 2 | 25.337 | 36.830 | 2 | 207.7 | 2 | 206.7 |
| WBTSKN | AB1104 | 32 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000W | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 33 | 1 | 1 | 2 | 20110420 | 0054 | 26.502N | 71.502W | 5397 | 5502 | 2.128 | 34.855 | 2 | 252.1 | 2 | 250.5 |
| WBTSKN | AB1104 | 33 | 1 | 2 | 2 | 20110420 | 0114 | 26.502N | 71.502W | 4300 | 4373 | 2.304 | 34.890 | 2 | 264.9 | 2 | 265.1 |
| WBTSKN | AB1104 | 33 | 1 | 3 | 2 | 20110420 | 0120 | 26.502N | 71.502W | 3997 | 4062 | 2.334 | 34.895 | 2 | 266.4 | 2 | 266.4 |
| WBTSKN | AB1104 | 33 | 1 | 4 | 2 | 20110420 | 0126 | 26.502N | 71.502W | 3699 | 3757 | 2.403 | 34.903 | 2 | 266.9 | 2 | 267.2 |
| WBTSKN | AB1104 | 33 | 1 | 5 | 2 | 20110420 | 0133 | 26.501N | 71.502W | 3402 | 3452 | 2.500 | 34.909 | 2 | 269.3 | 2 | 267.2 |
| WBTSKN | AB1104 | 33 | 1 | 6 | 2 | 20110420 | 0139 | 26.502N | 71.502W | 3099 | 3143 | 2.688 | 34.921 | 2 | 265.6 | 2 | 266.1 |
| WBTSKN | AB1104 | 33 | 1 | 7 | 2 | 20110420 | 0145 | 26.502N | 71.502W | 2797 | 2834 | 2.898 | 34.934 | 2 | 263.7 | 2 | 264.8 |
| WBTSKN | AB1104 | 33 | 1 | 8 | 2 | 20110420 | 0153 | 26.502N | 71.502W | 2499 | 2530 | 3.162 | 34.951 | 2 | 261.8 | 2 | 261.4 |
| WBTSKN | AB1104 | 33 | 1 | 9 | 2 | 20110420 | 0158 | 26.501N | 71.502W | 2250 | 2277 | 3.361 | 34.959 | 2 | 262.0 | 2 | 261.9 |
| WBTSKN | AB1104 | 33 | 1 | 10 | 2 | 20110420 | 0203 | 26.501N | 71.502W | 2002 | 2025 | 3.569 | 34.965 | 2 | 262.3 | 2 | 262.0 |
| WBTSKN | AB1104 | 33 | 1 | 11 | 2 | 20110420 | 0209 | 26.501N | 71.502W | 1754 | 1773 | 3.810 | 34.971 | 2 | 261.7 | 2 | 260.9 |
| WBTSKN | AB1104 | 33 | 1 | 12 | 2 | 20110420 | 0214 | 26.501N | 71.502W | 1496 | 1511 | 4.196 | 34.997 | 2 | 256.4 | 2 | 255.6 |
| WBTSKN | AB1104 | 33 | 1 | 13 | 2 | 20110420 | 0219 | 26.501N | 71.502W | 1247 | 1259 | 4.914 | 35.045 | 4 | 240.5 | 2 | 239.6 |
| WBTSKN | AB1104 | 33 | 1 | 14 | 2 | 20110420 | 0225 | 26.501N | 71.502W | 999 | 1008 | 6.242 | 35.082 | 2 | 198.9 | 2 | 199.2 |
| WBTSKN | AB1104 | 33 | 1 | 15 | 2 | 20110420 | 0235 | 26.501N | 71.502W | 503 | 507 | 15.593 | 36.105 | 2 | 172.1 | 2 | 172.5 |
| WBTSKN | AB1104 | 33 | 1 | 16 | 2 | 20110420 | 0235 | 26.501N | 71.502W | 503 | 507 | 15.598 | 36.108 | 2 | 172.2 | 2 | 172.2 |
| WBTSKN | AB1104 | 33 | 1 | 17 | 2 | 20110420 | 0239 | 26.501N | 71.502W | 354 | 357 | 17.661 | 36.476 | 2 | 190.6 | 2 | 191.2 |
| WBTSKN | AB1104 | 33 | 1 | 18 | 2 | 20110420 | 0241 | 26.501N | 71.502W | 255 | 257 | 18.402 | 36.584 | 2 | 191.4 | 2 | 191.3 |
| WBTSKN | AB1104 | 33 | 1 | 19 | 2 | 20110420 | 0243 | 26.501N | 71.502W | 205 | 207 | 18.864 | 36.632 | 2 | 191.5 | 2 | 191.5 |
| WBTSKN | AB1104 | 33 | 1 | 20 | 2 | 20110420 | 0245 | 26.501N | 71.502W | 155 | 157 | 19.843 | 36.720 | 2 | 196.5 | 2 | 193.9 |

| | | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|----------|-----------|-----------|------|------|----------|----------|---|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 36 | 1 | 15 | 2 | 20110420 | 2339 | 26.560N | 70.531W | 504 | 507 | 16.571 | 36.283 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 16 | 2 | 20110420 | 2339 | 26.560N | 70.531W | 504 | 507 | 16.571 | 36.283 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 17 | 2 | 20110420 | 2350 | 26.562N | 70.532W | 206 | 207 | 19.522 | 36.715 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 18 | 2 | 20110420 | 2350 | 26.562N | 70.532W | 206 | 207 | 19.520 | 36.727 | 4 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 19 | 2 | 20110420 | 2358 | 26.564N | 70.532W | 107 | 107 | 22.324 | 36.935 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 20 | 2 | 20110420 | 2358 | 26.564N | 70.532W | 107 | 107 | 22.325 | 36.935 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 21 | 2 | 20110421 | 0005 | 26.566N | 70.531W | 57 | 58 | 24.509 | 36.833 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 22 | 2 | 20110421 | 0005 | 26.566N | 70.531W | 57 | 58 | 24.510 | 36.833 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 23 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 36 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 1 | 2 | 20110421 | 0423 | 26.512N | 70.502W | 5428 | 5534 | 2.168 | 34.857 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 2 | 2 | 20110421 | 0423 | 26.512N | 70.502W | 5428 | 5534 | 2.168 | 34.857 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 3 | 2 | 20110421 | 0438 | 26.513N | 70.502W | 5534 | 5554 | 2.168 | 34.859 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 4 | 2 | 20110421 | 0438 | 26.513N | 70.502W | 4962 | 5053 | 2.290 | 34.879 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 5 | 2 | 20110421 | 0459 | 26.515N | 70.502W | 4033 | 4033 | 2.326 | 34.882 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 6 | 2 | 20110421 | 0503 | 26.516N | 70.502W | 3969 | 4033 | 2.326 | 34.896 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 7 | 2 | 20110421 | 0522 | 26.518N | 70.503W | 2976 | 3017 | 2.732 | 34.923 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 8 | 2 | 20110421 | 0526 | 26.518N | 70.503W | 2978 | 3019 | 2.729 | 34.925 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 9 | 2 | 20110421 | 0544 | 26.520N | 70.504W | 1984 | 2007 | 3.673 | 34.982 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 10 | 2 | 20110421 | 0548 | 26.521N | 70.504W | 1985 | 2008 | 3.676 | 34.985 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 11 | 2 | 20110421 | 0558 | 26.522N | 70.505W | 1487 | 1502 | 4.439 | 35.019 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 12 | 2 | 20110421 | 0602 | 26.523N | 70.505W | 1484 | 1489 | 4.440 | 35.020 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 13 | 2 | 20110421 | 0615 | 26.526N | 70.505W | 796 | 803 | 10.028 | 35.305 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 14 | 2 | 20110421 | 0619 | 26.527N | 70.505W | 797 | 804 | 9.920 | 35.296 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 15 | 2 | 20110421 | 0626 | 26.528N | 70.505W | 502 | 506 | 16.613 | 36.285 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 16 | 2 | 20110421 | 0630 | 26.529N | 70.505W | 502 | 506 | 16.636 | 36.290 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 17 | 2 | 20110421 | 0636 | 26.530N | 70.505W | 205 | 206 | 19.877 | 36.753 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 18 | 2 | 20110421 | 0641 | 26.531N | 70.505W | 205 | 206 | 19.875 | 36.751 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 19 | 2 | 20110421 | 0644 | 26.532N | 70.506W | 106 | 107 | 22.512 | 36.942 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 20 | 2 | 20110421 | 0648 | 26.533N | 70.506W | 106 | 107 | 22.522 | 36.919 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 21 | 2 | 20110421 | 0652 | 26.534N | 70.504W | 57 | 57 | 24.543 | 36.748 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 22 | 2 | 20110421 | 0656 | 26.535N | 70.504W | 57 | 57 | 24.568 | 36.732 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 23 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 37 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 1 | 2 | 20110424 | 0206 | 26.486N | 75.818W | 4703 | 4787 | 2.210 | 34.874 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 2 | 2 | 20110424 | 0206 | 26.486N | 75.818W | 4703 | 4787 | 2.210 | 34.876 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 3 | 2 | 20110424 | 0224 | 26.487N | 75.820W | 4001 | 4066 | 2.257 | 34.887 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 4 | 2 | 20110424 | 0227 | 26.486N | 75.820W | 4001 | 4066 | 2.257 | 34.890 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 5 | 2 | 20110424 | 0244 | 26.486N | 75.821W | 3000 | 3042 | 2.659 | 34.916 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 6 | 2 | 20110424 | 0247 | 26.486N | 75.821W | 3000 | 3042 | 2.659 | 34.919 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 7 | 2 | 20110424 | 0310 | 26.487N | 75.823W | 1999 | 2022 | 3.578 | 34.958 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 8 | 2 | 20110424 | 0310 | 26.487N | 75.823W | 1999 | 2022 | 3.578 | 34.959 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 9 | 2 | 20110424 | 0324 | 26.487N | 75.825W | 1550 | 1567 | 4.141 | 34.987 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 10 | 2 | 20110424 | 0324 | 26.487N | 75.825W | 1551 | 1567 | 4.141 | 34.989 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 11 | 2 | 20110424 | 0339 | 26.487N | 75.826W | 1006 | 1015 | 6.072 | 35.072 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 12 | 2 | 20110424 | 0339 | 26.487N | 75.826W | 1006 | 1015 | 6.072 | 35.073 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 13 | 2 | 20110424 | 0350 | 26.487N | 75.827W | 750 | 756 | 9.527 | 35.253 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 14 | 2 | 20110424 | 0350 | 26.487N | 75.827W | 750 | 756 | 9.527 | 35.253 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 15 | 2 | 20110424 | 0400 | 26.487N | 75.829W | 502 | 506 | 15.705 | 36.131 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 16 | 2 | 20110424 | 0400 | 26.487N | 75.829W | 502 | 506 | 15.706 | 36.130 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 17 | 2 | 20110424 | 0411 | 26.486N | 75.832W | 205 | 206 | 18.825 | 36.635 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 18 | 2 | 20110424 | 0411 | 26.486N | 75.832W | 205 | 206 | 18.825 | 36.634 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 19 | 2 | 20110424 | 0419 | 26.486N | 75.833W | 106 | 106 | 20.716 | 36.787 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 20 | 2 | 20110424 | 0419 | 26.486N | 75.833W | 106 | 106 | 20.716 | 36.780 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 21 | 2 | 20110424 | 0426 | 26.485N | 75.834W | 56 | 56 | 21.862 | 36.829 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 22 | 2 | 20110424 | 0426 | 26.485N | 75.835W | 56 | 57 | 21.859 | 36.827 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 23 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 38 | 1 | 24 | 2 | -999.000 | -999.000 | -999.000N | -999.000W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 1 | 2 | 20110425 | 0530 | 26.503N | 75.717W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 2 | 2 | 20110425 | 0547 | 26.503N | 75.718W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 3 | 2 | 20110425 | 0609 | 26.503N | 75.719W | 4656 | 4738 | 2.203 | 34.876 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 4 | 2 | 20110425 | 0632 | 26.503N | 75.721W | 4000 | 4065 | 2.234 | 34.888 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 5 | 2 | 20110425 | 0646 | 26.503N | 75.722W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 6 | 2 | 20110425 | 0700 | 26.503N | 75.724W | 3003 | 3045 | 2.635 | 34.918 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 7 | 2 | 20110425 | 0710 | 26.503N | 75.725W | -999 | -999 | -999.000 | -999.000 | 0 | -999.000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 8 | 2 | 20110425 | 0720 | 26.503N | 75.727W | 2006 | 2029 | 3.572 | 34.958 | 2 | -999.000 | 9 | -999.0 | 9 | -999.0 |

| | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|---|----------|----------|-----------|-----------|------|----------|---|----------|---|--------|---|--------|
| WBTSKN | AB1104 | 39 | 1 | 1 | 2 | 2 | 20110425 | 0731 | 26.503N | 75.730W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 10 | 2 | 2 | 20110425 | 0738 | 26.503N | 75.731W | 1508 | 4.167 | 2 | 34.986 | 2 | 34.984 | 2 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 11 | 2 | 2 | 20110425 | 0746 | 26.503N | 75.733W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 12 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 998 | 1007 | 2 | 35.072 | 4 | 35.072 | 4 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 13 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 14 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 750 | 757 | 2 | 35.282 | 2 | 35.282 | 2 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 15 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 16 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 502 | 506 | 2 | 36.032 | 2 | 36.030 | 2 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 17 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 18 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 205 | 206 | 2 | 36.683 | 2 | 36.683 | 2 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 19 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 20 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 105 | 106 | 2 | 36.804 | 4 | 36.803 | 4 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 21 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 22 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 56 | 56 | 2 | 36.771 | 2 | 36.771 | 2 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 23 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 39 | 1 | 24 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 1 | 2 | 2 | 20110426 | 0502 | 26.500N | 76.088W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 2 | 2 | 2 | 20110426 | 0516 | 26.500N | 76.088W | 4844 | 2.194 | 2 | 34.873 | 2 | 34.874 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 3 | 2 | 2 | 20110426 | 0534 | 26.499N | 76.088W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 4 | 2 | 2 | 20110426 | 0552 | 26.498N | 76.089W | 4000 | 4065 | 2 | 34.888 | 2 | 34.888 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 5 | 2 | 2 | 20110426 | 0602 | 26.498N | 76.089W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 6 | 2 | 2 | 20110426 | 0612 | 26.497N | 76.089W | 3003 | 3045 | 2 | 34.921 | 2 | 34.919 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 7 | 2 | 2 | 20110426 | 0617 | 26.497N | 76.089W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 8 | 2 | 2 | 20110426 | 0622 | 26.497N | 76.089W | 2001 | 2024 | 2 | 34.960 | 2 | 34.959 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 9 | 2 | 2 | 20110426 | 0628 | 26.497N | 76.089W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 10 | 2 | 2 | 20110426 | 0631 | 26.497N | 76.089W | 1500 | 1515 | 2 | 34.995 | 2 | 34.997 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 11 | 2 | 2 | 20110426 | 0633 | 26.497N | 76.089W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 12 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 998 | 1007 | 2 | 35.078 | 2 | 35.078 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 13 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 14 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 749 | 755 | 2 | 35.294 | 2 | 35.294 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 15 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 16 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 501 | 505 | 2 | 36.147 | 2 | 36.147 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 17 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 18 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 214 | 216 | 2 | 36.684 | 2 | 36.684 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 19 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 20 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 106 | 107 | 2 | 36.808 | 2 | 36.808 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 21 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 22 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 56 | 57 | 2 | 36.812 | 2 | 36.812 | 2 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 23 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 40 | 1 | 24 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 1 | 2 | 2 | 20110427 | 0310 | 26.490N | 76.470W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 2 | 2 | 2 | 20110427 | 0330 | 26.490N | 76.470W | 4800 | 4887 | 2 | 34.880 | 2 | 34.879 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 3 | 2 | 2 | 20110427 | 0353 | 26.490N | 76.470W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 4 | 2 | 2 | 20110427 | 0415 | 26.489N | 76.470W | 3993 | 4057 | 2 | 34.892 | 2 | 34.891 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 5 | 2 | 2 | 20110427 | 0429 | 26.488N | 76.470W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 6 | 2 | 2 | 20110427 | 0444 | 26.487N | 76.470W | 2990 | 3032 | 2 | 34.922 | 2 | 34.920 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 7 | 2 | 2 | 20110427 | 0454 | 26.487N | 76.469W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 8 | 2 | 2 | 20110427 | 0504 | 26.487N | 76.469W | 2019 | 2042 | 2 | 34.956 | 2 | 34.956 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 9 | 2 | 2 | 20110427 | 0514 | 26.487N | 76.469W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 10 | 2 | 2 | 20110427 | 0522 | 26.487N | 76.469W | 1513 | 1528 | 2 | 34.986 | 2 | 34.985 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 11 | 2 | 2 | 20110427 | 0529 | 26.488N | 76.468W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 12 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 998 | 1007 | 2 | 35.079 | 2 | 35.079 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 13 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 14 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 751 | 757 | 2 | 35.272 | 2 | 35.271 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 15 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 16 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 502 | 506 | 2 | 36.137 | 2 | 36.133 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 17 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 18 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 205 | 206 | 2 | 36.653 | 2 | 36.653 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 19 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 20 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 105 | 106 | 2 | 36.820 | 2 | 36.820 | 2 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 21 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 22 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | 56 | 56 | 2 | 36.804 | 4 | 36.804 | 4 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 23 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 41 | 1 | 24 | 2 | 2 | -999,000 | -999,000 | -999,000N | -999,000W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 42 | 1 | 1 | 2 | 2 | 20110429 | 0007 | 26.497N | 76.649W | -999 | -999,000 | 9 | -999,000 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 42 | 1 | 2 | 2 | 2 | 20110429 | 0029 | 26.497N | 76.649W | 3975 | 4040 | 2 | 34.894 | 2 | 34.894 | 2 | -999.0 |

| | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|-----------|---------|-----------|--------|----------|----------|--------|----------|--------|--------|---|
| WBTSKN | AB1104 | 42 | 1 | 3 | 2 | 20110429 | 0044 | 26.497N | 76.648W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 4 | 2 | 20110429 | 0058 | 26.497N | 76.648W | 3024 | 2.712 | 34.923 | 2 | 34.924 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 5 | 2 | 20110429 | 0112 | 26.497N | 76.648W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 6 | 2 | 20110429 | 0126 | 26.498N | 76.648W | 2517 | 3.219 | 34.945 | 2 | 34.944 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 7 | 2 | 20110429 | 0136 | 26.498N | 76.648W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 8 | 2 | 20110429 | 0146 | 26.498N | 76.648W | 2012 | 3.497 | 34.952 | 2 | 34.958 | 4 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 9 | 2 | 20110429 | 0157 | 26.497N | 76.647W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 10 | 2 | 20110429 | 0206 | 26.497N | 76.646W | 1508 | 3.801 | 34.966 | 2 | 34.978 | 4 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 11 | 2 | 20110429 | 0213 | 26.496N | 76.645W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 12 | 2 | -999.000 | -999.000 | 998 | -999.000W | 1007 | 5.783 | 35.068 | 2 | 35.071 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 13 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 14 | 2 | -999.000 | -999.000 | 749 | 9.831 | 35.282 | 35.282 | 2 | 35.285 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 42 | 1 | 15 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 16 | 2 | -999.000 | -999.000 | 501 | 15.472 | 36.089 | 36.092 | 2 | 36.092 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 42 | 1 | 17 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 18 | 2 | -999.000 | -999.000N | 204 | 19.125 | 36.663 | 36.663 | 2 | 36.659 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 42 | 1 | 19 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 20 | 2 | -999.000 | -999.000 | 105 | 20.812 | 36.823 | 36.823 | 2 | 36.820 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 42 | 1 | 21 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 22 | 2 | -999.000 | -999.000 | 55 | 22.386 | 36.755 | 36.757 | 4 | 36.757 | 4 | -999.0 | 9 | |
| WBTSKN | AB1104 | 42 | 1 | 23 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 42 | 1 | 24 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 1 | 2 | 20110430 | 2121 | 26.789N | 76.553W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 2 | 2 | 20110430 | 2134 | 26.790N | 76.554W | 3378 | 2.484 | 34.909 | 2 | 34.909 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 3 | 2 | 20110430 | 2148 | 26.790N | 76.554W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 4 | 2 | 20110430 | 2203 | 26.791N | 76.555W | 2902 | 2.812 | 34.931 | 2 | 34.930 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 5 | 2 | 20110430 | 2217 | 26.790N | 76.556W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 6 | 2 | 20110430 | 2232 | 26.790N | 76.557W | 2403 | 3.124 | 34.940 | 2 | 34.946 | 4 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 7 | 2 | 20110430 | 2242 | 26.789N | 76.558W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 8 | 2 | 20110430 | 2251 | 26.789N | 76.559W | 1920 | 3.757 | 34.957 | 2 | 34.957 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 9 | 2 | 20110430 | 2302 | 26.790N | 76.560W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 10 | 2 | 20110430 | 2310 | 26.789N | 76.560W | 1478 | 4.148 | 34.989 | 2 | 34.989 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 11 | 2 | 20110430 | 2317 | 26.789N | 76.561W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 12 | 2 | -999.000 | -999.000 | 998 | -999.000W | 1007 | 6.110 | 35.078 | 2 | 35.078 | 2 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 13 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 14 | 2 | -999.000 | -999.000 | 751 | 9.686 | 35.261 | 35.264 | 2 | 35.264 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 43 | 1 | 15 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 16 | 2 | -999.000 | -999.000 | 502 | 15.843 | 36.154 | 36.155 | 2 | 36.155 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 43 | 1 | 17 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 18 | 2 | -999.000 | -999.000 | 205 | 18.942 | 36.646 | 36.648 | 2 | 36.648 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 43 | 1 | 19 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 20 | 2 | -999.000 | -999.000 | 105 | 20.837 | 36.805 | 36.805 | 2 | 36.805 | 2 | -999.0 | 9 | |
| WBTSKN | AB1104 | 43 | 1 | 21 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 22 | 2 | -999.000 | -999.000N | 56 | 22.129 | 36.658 | 36.668 | 4 | 36.668 | 4 | -999.0 | 9 | |
| WBTSKN | AB1104 | 43 | 1 | 23 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 43 | 1 | 24 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 1 | 2 | 20110502 | 1303 | 27.002N | 79.199W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 2 | 2 | 20110502 | 1306 | 27.002N | 79.199W | 458 | 16.374 | 36.250 | 2 | 36.248 | 2 | 175.3 | 2 |
| WBTSKN | AB1104 | 44 | 1 | 3 | 2 | 20110502 | 1308 | 27.003N | 79.199W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 4 | 2 | 20110502 | 1311 | 27.004N | 79.199W | 370 | 17.337 | 36.417 | 2 | 36.416 | 2 | 184.0 | 2 |
| WBTSKN | AB1104 | 44 | 1 | 5 | 2 | 20110502 | 1313 | 27.004N | 79.199W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 6 | 2 | 20110502 | 1316 | 27.005N | 79.199W | 260 | 26.254 | 36.593 | 2 | 36.589 | 2 | 187.1 | 2 |
| WBTSKN | AB1104 | 44 | 1 | 7 | 2 | 20110502 | 1318 | 27.005N | 79.199W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 8 | 2 | -999.000 | -999.000N | 181 | 19.917 | 36.723 | 36.718 | 2 | 36.718 | 2 | 188.3 | 2 | |
| WBTSKN | AB1104 | 44 | 1 | 9 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 10 | 2 | -999.000 | -999.000N | 102 | 24.377 | 36.646 | 36.649 | 2 | 36.649 | 2 | 170.0 | 2 | |
| WBTSKN | AB1104 | 44 | 1 | 11 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 12 | 2 | -999.000 | -999.000N | 33 | 26.254 | 36.236 | 36.237 | 2 | 36.237 | 2 | 203.4 | 2 | |
| WBTSKN | AB1104 | 44 | 1 | 13 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 14 | 2 | -999.000 | -999.000N | 3 | 26.514 | 36.034 | 36.033 | 2 | 36.033 | 2 | 201.7 | 2 | |
| WBTSKN | AB1104 | 44 | 1 | 15 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 16 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 17 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 18 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 19 | 2 | -999.000 | -999.000 | -999 | -999.000W | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |
| WBTSKN | AB1104 | 44 | 1 | 20 | 2 | -999.000 | -999.000N | -999 | -999.000N | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 |

| | | | | | | | | | | | | | | | | | | | |
|--------|--------|----|---|----|---|----------|-----------|----------|------|-----------|-----------|-----|----------|---|----------|---|----------|---|----------|
| WBTSKN | AB1104 | 44 | 1 | 21 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 44 | 1 | 22 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 44 | 1 | 23 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000 | -999.000 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 44 | 1 | 24 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 | 9 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 1 | 2 | 20110502 | 1409 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 2 | 2 | 20110502 | 1412 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 3 | 2 | 20110502 | 1415 | -999.000 | -999 | -999.000 | -999.000 | 592 | 35.638 | 2 | 133.0 | 2 | 132.7 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 4 | 2 | 20110502 | 1417 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 5 | 2 | 20110502 | 1419 | -999.000 | -999 | -999.000 | -999.000 | 469 | 35.997 | 2 | 155.3 | 2 | 154.9 | 6 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 6 | 2 | 20110502 | 1421 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 7 | 2 | 20110502 | 1424 | -999.000 | -999 | -999.000 | -999.000 | 351 | 36.252 | 2 | 168.5 | 2 | 168.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 8 | 2 | 20110502 | 1426 | -999.000 | -999 | -999.000 | -999.000 | 272 | 36.534 | 2 | 182.5 | 2 | 182.8 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 9 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 10 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 193 | 36.642 | 2 | 171.1 | 2 | 170.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 11 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 12 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 123 | 36.802 | 2 | 160.8 | 2 | 160.8 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 13 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 14 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 54 | 36.328 | 2 | 199.4 | 2 | 197.0 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 15 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 16 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 4 | 36.124 | 2 | 201.6 | 2 | 201.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 45 | 1 | 17 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 18 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 19 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 20 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 21 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 22 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 23 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 45 | 1 | 24 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 1 | 2 | 20110502 | 1527 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 2 | 2 | 20110502 | 1531 | -999.000 | -999 | -999.000 | -999.000 | 27 | 35.169 | 2 | 126.7 | 2 | 127.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 3 | 2 | 20110502 | 1534 | -999.000 | -999 | -999.000 | -999.000 | 665 | 35.213 | 4 | 126.7 | 2 | 127.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 4 | 2 | 20110502 | 1536 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 5 | 2 | 20110502 | 1539 | -999.000 | -999 | -999.000 | -999.000 | 532 | 35.444 | 4 | 125.6 | 2 | 125.4 | 6 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 6 | 2 | 20110502 | 1542 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 7 | 2 | 20110502 | 1544 | -999.000 | -999 | -999.000 | -999.000 | 448 | 35.755 | 4 | 142.6 | 2 | 141.6 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 8 | 2 | 20110502 | 1547 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 9 | 2 | 20110502 | 1549 | -999.000 | -999 | -999.000 | -999.000 | 360 | 36.184 | 4 | 164.0 | 2 | 162.1 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 10 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 271 | 36.383 | 4 | 171.9 | 2 | 173.7 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 11 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 12 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 182 | 36.720 | 4 | 163.8 | 2 | 164.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 13 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 14 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 112 | 36.683 | 4 | 169.3 | 2 | 168.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 15 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 16 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 43 | 36.200 | 4 | 201.7 | 2 | 201.8 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 17 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 2 | 36.197 | 4 | 201.4 | 2 | 201.4 | 2 | -999.0 |
| WBTSKN | AB1104 | 46 | 1 | 18 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 46 | 1 | 19 | 2 | 20110502 | 1655 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 1 | 2 | 20110502 | 1659 | -999.000 | -999 | -999.000 | -999.000 | 723 | 34.953 | 4 | 126.7 | 2 | 126.6 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 2 | 2 | 20110502 | 1701 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 3 | 2 | 20110502 | 1704 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 4 | 2 | 20110502 | 1707 | -999.000 | -999 | -999.000 | -999.000 | 594 | 35.077 | 4 | 119.5 | 2 | 119.5 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 5 | 2 | 20110502 | 1706 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 6 | 2 | 20110502 | 1708 | -999.000 | -999 | -999.000 | -999.000 | 529 | 35.190 | 4 | 119.2 | 2 | 119.2 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 7 | 2 | 20110502 | 1710 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 8 | 2 | 20110502 | 1713 | -999.000 | -999 | -999.000 | -999.000 | 444 | 35.476 | 4 | 124.8 | 2 | 126.2 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 9 | 2 | 20110502 | 1716 | -999.000 | -999 | -999.000 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 10 | 2 | 20110502 | 1718 | -999.000 | -999 | -999.000 | -999.000 | 390 | 35.676 | 4 | 131.1 | 2 | 130.1 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 11 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 12 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 309 | 35.977 | 4 | 138.5 | 2 | 139.0 | 2 | -999.0 |
| WBTSKN | AB1104 | 47 | 1 | 13 | 2 | -999.000 | -999.000N | -999 | -999 | -999.000N | -999.000N | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 | 9 | -999.000 |
| WBTSKN | AB1104 | 47 | 1 | 14 | 2 | -999.000 | -999.000W | -999 | -999 | -999.000W | -999.000W | 241 | 36.297 | 4 | 154.9 | 2 | 154.0 | 2 | -999.0 |

