NOAA Data Report, OAR AOML-##

HYDROGRAPHIC MEASUREMENTS COLLECTED ABOARD THE NOAA SHIP RONALD H. BROWN, 9 MARCH - 28 MARCH 2006: WESTERN BOUNDARY TIME SERIES CRUISE RB-06-02 (AB0603)

James A. Hooper V
Molly O. Baringer

Atlantic Oceanographic and Meteorological Laboratory
Miami, Florida
March 2012

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James A. Hooper V
University of Miami / Cooperative Institute for Marine and Atmospheric Studies
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The findings and conclusion on this report are those of the authors and do not necessarily represent the views of the funding agency.

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Abstract

Summaries of CTD/O2 measurements and hydrographic data acquired on an oceanographic research cruise during the spring of 2006 aboard the NOAA Ship Ronald H. Brown are presented. Data acquisition and processing systems are described and calibration procedures are documented. Station location, CTD/O2 data listings, and profiles are included for each station.

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, over 20 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 scheduled to end in 2014, however continuation funding to extend the program beyond 2014 is likely. 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 total of 72 CTDO2/LADCP stations were conducted during the cruise (Table 2). At each station, profiles of temperature, salinity (conductivity), and dissolved oxygen concentration were collected from the surface to within approximately 20 m of the bottom, using a Sea-Bird SBE-911plus CTD system. Water samples for calibration of the salinity and dissolved oxygen profiles were collected using a 24-bottle Rosette system containing 10 liter Niskin bottles. Current profiles were also measured using a paired downward-looking 150 kHz Broadband and upward-looking 300 kHz Workhorse Acoustic Doppler Current Profiling "hybrid" system (LADCP).

Some of the CTDO2 casts were used to perform calibration checks on the temperature, salinity, and pressure measurements obtained from various types of moored instruments (including SBE Microcats, Interocean S4 and Aanderaa RCM current meters) after their recovery or prior to deployment. During these casts, the outer rack of Niskin bottles was removed from the Rosette to accommodate the moored instruments and the CTD package was lowered to typically 3000 m with 5-minute waits at each bottle stops upon the package retrieval. These casts were not part of the regular CTDO2 /LADCP hydrographic sampling performed on the cruise. Some CTD stations were used for the sole purpose of calibrating the moored Inverted Echo Sounders. At all these calibration stations no discrete oxygen samples were obtained.

Table 1: Cruise participants of Ronald H. Brown Cruise AB0603, March 9 –March 28, 2006.

Name	Affiliation	Nationality
Molly O. Baringer	NOAA/AOML	USA
Lisa Beal	UM/RSMAS	United Kingdom
Robert Roddy	NOAA/AOML	USA
Carlos Fonseca	UM/CIMAS	Brazil
Rigoberto Garcia	UM/CIMAS	Cuba
Tania Casal	UM/Student	Portugal
Dallas Murphy	volunteer	USA
Michael Beal	volunteer	United Kingdom
Shari Yvon-Lewis	Texas A&M	USA
Julia O'Hern	Texas A&M	USA
Vince Rosato	NOAA Teacher at Sea	USA
Kim Pratt	NOAA Teacher at Sea	USA
Stuart Cunningham	NOC/Southampton	United Kingdom
Darren Rayner	NOC/Southampton	United Kingdom
Jochem Marotzke	MPI	Germany
Michelle DeVoy	SOES	United Kingdom
Katy Fraser	SOES	United Kingdom
Hao Zuo	SOES	China
Daniel Comben	NOC/Southampton	United Kingdom
Colin Hutton	NOC/Southampton	United Kingdom
Christian Crowe	NOC/Southampton	United Kingdom
Stephen Whittle	NOC/Southampton	United Kingdom
David Childs	NOC/Southampton	United Kingdom
Ian Waddington	NOC/Southampton	United Kingdom

Table 2: Abaco Cruise – CTD Cast Summary

Station	Latitude	Longitude	Depth
1	26.503N	69.501W	5424
2	26.499N	70.001W	5587
3	26.499N	70.500W	5577
4	26.501N	71.000W	5577
5	26.500N	71.501W	5515
6	26.502N	72.009W	5368
7	26.500N	72.384W	5260
8	26.499N	72.768W	5216
9	26.503N	73.149W	5127
10	26.499N	73.533W	5015
11	26.499N	73.916W	4766
12	26.500N	71.231W	4604
13	26.501N	74.515W	4559
14	26.499N	74.799W	4603
15	26.499N	75.082W	4670
16	26.500N	75.300W	4702
17	26.500N	75.500W	4753
18	26.499N	75.703W	4760
19	26.504N	75.867W	4803
20	26.500N	75.999W	4861
21	26.499N	76.096W	4873
22	26.501N	76.216W	4880
23	26.500N	76.349W	4918
24	26.500N	76.466W	4912
25	26.500N	76.550W	4907
26	26.507N	76.633W	4693
27	26.500N	76.717W	4146
28	26.500N	76.766W	3620
29	26.515N	76.832W	1108
30	26.516N	76.899W	597
31	26.517N	76.934W	24
32	26.516N	76.984W	1083
33	26.500N	76.468W	4914
34	26.500N	76.468W	2998
35	26.500N	75.705W	4757
36	26.500N	76.029W	3000
37	26.501N	76.612W	3043
38	26.500N	76.094W	4876
39	26.500N	76.096W	2999
40	26.499N	76.467W	4916
41	26.433N	78.667W	751
42	26.332N	78.716W	686
43	26.249N	78.767W	525
44	26.167N	78.800W	442
45	26.064N	78.847W	285
46	26.049N	79.229W	302
47	26.051N	79.311W	471
48	26.051N	79.397W	576
49	26.048N	79.480W	664
50	26.045N	79.567W	756
51	26.044N	79.663W	693
52	26.035N	79.747W	610
53	26.041N	79.848W	313
54	26.041N	79.936W	251
55	26.034N	79.999W	232
56	26.050N	80.065W	122
57	26.999N	79.933W	133
58	27.000N	79.869W	242
59	26.996N	79.785W	370
60	26.993N	79.685W	525
61	26.991N	79.617W	638
62	26.986N	79.501W	746
63	26.992N	79.384W	649
64	26.994N	79.284W	603
65	26.994N	79.200W	481
66	26.996N	79.615W	640
67	26.991N	79.617W	644
68	26.993N	79.617W	627
69	26.003N	79.633W	634
70	27.003N	79.615W	634
71	26.995N	79.617W	637
72	26.992N	79.617W	636

2 Cruise Narrative

The general plan of operations for the cruise was to proceed from Bridgetown to 69.5°W. We then began the CTD section along 26.5°N working from east to west. Upon completion of the CTD section, five days of mooring work was completed, generally working from east to west towards Abaco Island. During the mooring operations there were a total of seven CTD profiles collected at night to facilitate calibration of the sensors on the moorings. Upon completion of the mooring work, the ship completed three short CTD sections in the Northwest Providence Channel, 26°N and 27°N in the Straits of Florida.

3 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. The serial data from the underwater unit is sent to the deck unit in RS-232 NRZ format. The deck unit decodes the serial data and sends it to a personal computer for display and storage in a disk file using Sea-Bird Seasave software.

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

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

The SBE 9plus underwater unit is configured with dual standard modular temperature (SBE 3 plus) and conductivity (SBE 4) sensors, which are mounted near the lower end cap. The conductivity cell entrance is co-planar with the tip of the temperature sensor probe. The pressure sensor is mounted inside the underwater unit main housing. A centrifugal pump module flushes water through sensor tubing at a constant rate independent of the CTD's motion to improve dynamic performance. Dual dissolved oxygen sensors (SBE 43) are added to the pumped sensor configuration following the temperature-conductivity (TC) pair.

3.1 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 ± 0.0003 S·m^{-1}/month and resolution of 0.00004 S·m^{-1} at 24 scans per second.

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

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

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

3.2 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 temperature from -5 to 35°C. The output frequency is inversely proportional to the square root of the thermistor resistance, which controls the output of a patented Wien Bridge circuit. The thermistor resistance is exponentially related to temperature. The SBE 3 thermometer has a typical accuracy/stability of ± 0.004°C per year and resolution of 0.0003°C at 24 samples per second. The SBE 3 thermometer has a fast response time of 0.070 seconds.

Temperature (ITS-90) is computed according to:

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

where g, h, i, j and f_0 are the calibration coefficients above and f is the instrument frequency (kHz). SEASAVE® automatically implements this equation and converts between ITS-90 and IPTS-68 temperature scales as desired.

3.3 Pressure

The Paroscientific series 4000 Digiquartz high pressure transducer uses a quartz crystal resonator whose frequency of oscillation varies with pressure induced stress measuring changes in pressure as small as 0.01 parts per million with an absolute range of 0 to 10,000 psia (0 to 6885 dbar). Repeatability, hysteresis and pressure conformance are 0.002% of full-scale.

The nominal pressure frequency (0 to full scale) is 34 to 38 kHz. The nominal temperature frequency is 172 kHz ± 50 ppm/°C.

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.

3.4 Dissolved Oxygen

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

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

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

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

Dissolved oxygen concentration is calculated according to:

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

where Soc, V_{offset}, A, B, C and E 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) and $OXSAT$ is the oxygen saturation value calculated according to:

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

where θ is the absolute temperature (K); and

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

SEASAVE® automatically implements this equation.

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

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

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

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

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

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

Where:

i = indexing variable (must be a continuous time series to work; can be performed on bin averaged data), where i = 1:end (end is largest data index point plus 1).
$P(i)$ = pressure (decibars) at index point i .
$Time(i)$ = time (seconds) from start of index point i.

$O_{volt}(i)$ = SBE 43 oxygen voltage output directly from sensor, with no calibration or hysteresis corrections, at index point i.
V_{offset} = correction for an electronic offset that is applied to voltage output of sensor. V_{offset} correction is always negative (see factory calibration sheet for this coefficient). V_{offset} is added to raw voltages prior to hysteresis correction. At end of hysteresis corrections, V_{offset} is removed prior to data conversion using SBE 43 calibration equation (see $O_{finalvolts}(i)$).
$O_V(i)$ = dissolved oxygen voltage value with V_{offset} correction (made prior to hysteresis correction) at index point i.
D and C are temporary variables used to simplify expression in processing loop.
$H1$ = amplitude of hysteresis correction function. Default = -0.033, range = -0.02 to -0.05 (varies from sensor to sensor).
$H2$ = function constant or curvature function for hysteresis. Default = 5000.
$H3$ = time constant for hysteresis (seconds). Default = 1450, range = 1200 to 2000 (varies from sensor to sensor).
$O_{newvolts}(i)$ = hysteresis-corrected oxygen value at index point i.
$O_{finalvolts}(i)$ = hysteresis-corrected oxygen value at index point i with V_{offset} removed.

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

4 Data Acquisition

CTD/O2 measurements were made using a SBE 9plus CTD with dual sensor configuration. Underwater electronic components consisted of a Sea-Bird Electronics (SBE) 9 plus CTD with dual pumps and the following sensors: dual temperature (SBE3), dual conductivity (SBE4), dual dissolved oxygen (SBE43), and a Simrad 807 altimeter. The CTDs supplied a standard Sea-Bird format data stream at a data rate of 24 frames/second. The other underwater electronic components consisted of RDI LADCP's, and various pingers. The SBE9plus CTD was connected to the SBE32 24-place pylon providing for single-conductor sea cable operation. Power to the SBE9plus CTD, SBE32 pylon, auxiliary sensors, and altimeter was provided through the sea cable from the SBE11plus deck unit in the computer lab. The rosette system was suspended from a UNOLS-standard three-conductor 0.322" electro-mechanical sea cable. A single sea cable termination for each winch served the entire cruise.

The CTD was mounted vertically in to the bottom center of the 24-position frame. All SBE4 conductivity and SBE3 temperature sensors and their respective pumps were mounted vertically as recommended by SBE. One Niskin bottle was removed to accommodate the upward looking ADCP, resulting in a maximum of 23 water sample depths. The CTD was outfitted with dual pumps. Primary temperature, conductivity, and dissolved oxygen were plumbed on one pump circuit and secondary temperature and conductivity on the other. Pump exhausts were attached to outside corners of the CTD frame and directed downward. The sets were placed as mirror images to each other mounted low in the CTD main housing

with the intakes approximately 6-8 inches apart. The TC pairs were monitored for calibration drift and shifts by examining the differences between the two pairs on each CTD and comparing CTD salinity values with bottle salinity measurements. The altimeter was mounted on the inside of a support strut adjacent to the bottom frame ring. The LADCP's were vertically mounted with one 150 kHz transducer pointing down, the other 300 kHz transducer pointing up.

The CTD data acquisition system consisted of an SBE-11plus (V1) deck unit and a networked generic PC workstation running Windows 2000. SBE Seasave software was used for data acquisition and to close bottles on the rosette.

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

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

The deck watch leader directed the winch operator to raise the package, the squirt boom and rosette were extended outboard, and the package quickly lowered into the water and submerged to 20 meters of wire out. No tag-lines were necessary for either deployments or recoveries during this cruise. The CTD sensor pumps were configured with a 60 second startup delay. The CTD console operator waited for the CTD sensor pumps to turn on, waited an additional 60 seconds for sensors to stabilize (all together about 2 minutes), then directed the winch operator to bring the package close to the surface, pause for typically 10 seconds, hitting "Mark Scan" and begin the descent. The profiling rate was no more than 30 m/min to 50 m, no more than 45 m/min to 200 m, and no more than 60 m/min deeper than 200 m depending on sea cable tension and the sea state.

The console watch monitored the progress of the deployment and quality of the CTD data through interactive graphics and operational displays. Additionally, the watch created a sample log for the deployment that would be later used to record the correspondence between rosette bottles and analytical samples taken. The altimeter channel, CTD pressure, wire-out and bathymetric depth were all monitored to determine the distance of the package from the bottom, usually allowing a safe approach to within 20 m.

On the up cast, the winch operator was directed to stop at each bottle trip depth. The CTD console operator waited 30 seconds before tripping a bottle using a "point and click" graphical trip button. The data acquisition system responded with trip confirmation messages and the corresponding CTD data in a rosette bottle trip window on the display. All tripping attempts were noted on the console log. The console watch then directed the winch operator to raise the package up to the next bottle trip location. After the last bottle was

tripped, the console watch directed the deck watch to bring the rosette on deck. Once on deck, the console watch terminated the data acquisition, turned off the deck unit, and assisted with rosette sampling.

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

4.1 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using SEABIRD SBE Data Processing and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave on the Windows 2000 workstation were copied onto the CTD-PROC workstation, and processed to a 1-dbar series and a 1-second time series. Bottle trip values were extracted and a 1-decibar (dbar) down cast pressure series created.

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

1. DATCNV converts raw data into engineering units and creates a .ROS bottle file. Both down and up casts were processed for scan, elapsed time(s), pressure, t0 ITS-90 C, t1 ITS-90 C, c0 mS/cm, c1 mS/cm, and oxygen voltage V, oxy voltage 2, altimeter, optical sensor, oxygen umol/kg and oxygen 2 umol/kg. Optical sensor data were not carried through the processing stream. MARKSCAN was used to determine the number of scans acquired on deck and while priming the system to exclude these scans from processing.

2. ALIGNCTD aligns temperature, conductivity, and oxygen measurements in time relative to pressure to ensure that derived parameters are made using measurements from the same parcel of water. Primary conductivity were automatically advanced by 0.063 seconds.

3. BOTTLESUM creates a summary of the bottle data. Bottle position, date, and time were output automatically. Pressure, temperature, conductivity, salinity, oxygen volt-

age and preliminary oxygen values were averaged over a 2 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.

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 x 10^{-5} 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.

4.1.1 Salinity Analysis

A single Guildline Autosal located in salinity analysis room, was used for all salinity measurements. The salinometer readings were logged on a computer using Ocean Scientific International's logging hardware and software. The Autosal's water bath temperature was set to 24°C, which the Autosal is designed to automatically maintain. The laboratory's temperature was also set and maintained to just below 24°C, to help further stabilize reading values and improve accuracy. Salinity analyses were performed after samples had equilibrated to laboratory temperature, usually at least 24 hours after collection. The salinometer was standardized for each group of samples analyzed (usually 2 casts and up to 50 samples) 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 sample, the salinometer cell was initially flushed at least 3 times before a set of conductivity ratio readings were taken.

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. The offset between the initial standard seawater value and its reference value was applied to each sample. Then the difference (if any) between the initial and final vials of standard seawater was applied to each sample as a linear function of elapsed run time. The corrected salinity data was then incorporated into the cruise database. When duplicate measurements were deemed to have been collected and run properly, they were averaged and submitted with a quality flag of 6.

5 Post-Cruise Calibrations

Post cruise sensor calibrations were done at Sea-Bird Electronics, Inc. to check for sensor time drifts. Secondary temperature, conductivity and dissolved oxygen sensors served as calibration checks for the reported primary sensors.

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

5.1 CTD Data Processing

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 SEASOFT module LOOPEDIT, PMEL program DELOOP computed values of density locally referenced between every 1 dbar of pressure to compute N^2 = (- g/p) (dp/dz) and linearly interpolated measured parameters over those records where $N^2 \leq$ -1.0 e -05 s^{-2}.

5.2 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. On deck pressures before and after each cast was recorded and monitored. An offset is then applied before the final calibration of the data is completed.

5.3 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 was examined by tabulating the difference between the two different temperature sensors over a range of pressures (bottle trip locations) for each cast. The secondary sensor was used for the final data values.

5.4 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.

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. In this way the function to be minimized is

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

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 data below a specified depth, in this case 1000 dbar.

The coefficients estimated by the equation above were then applied to the secondary CTD conductivities and the final results (Figure 1 to Figure 4) show a residual of 2.0 · 10-4 psu (7.9 · 10-5 psu for the data below 1000 dbar) and a standard deviation of 0.002 psu (0.0014 psu for the data below 1000dbar). Also 66.0% of the residuals for the data are within the confidence limits determined by the WOCE (± 0.002 psu) and this number increase to 84.0% if we consider only the data below 1000 dbar.

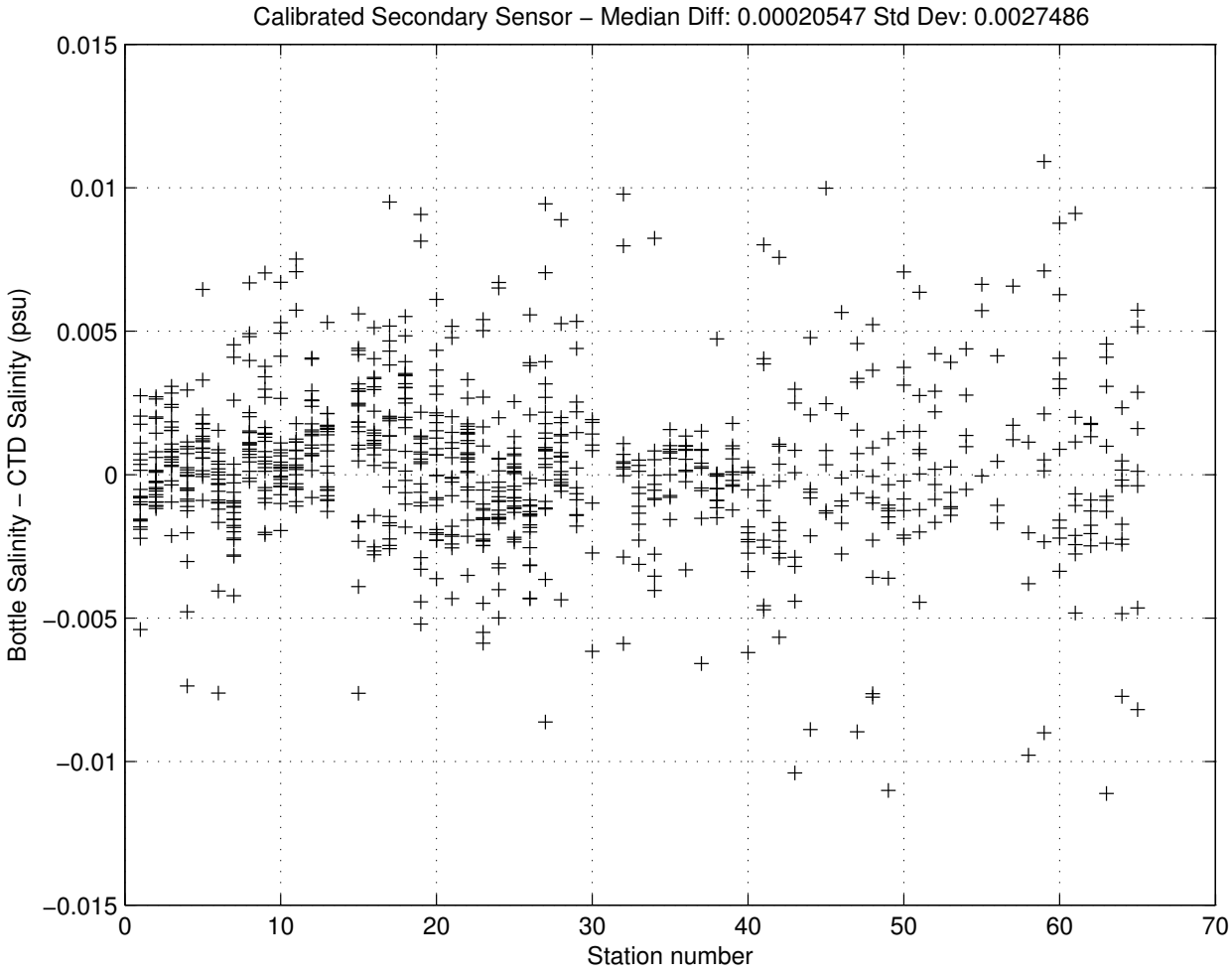

Figure 1: Bottle and calibrated secondary CTD salinity differences plotted vs. station.

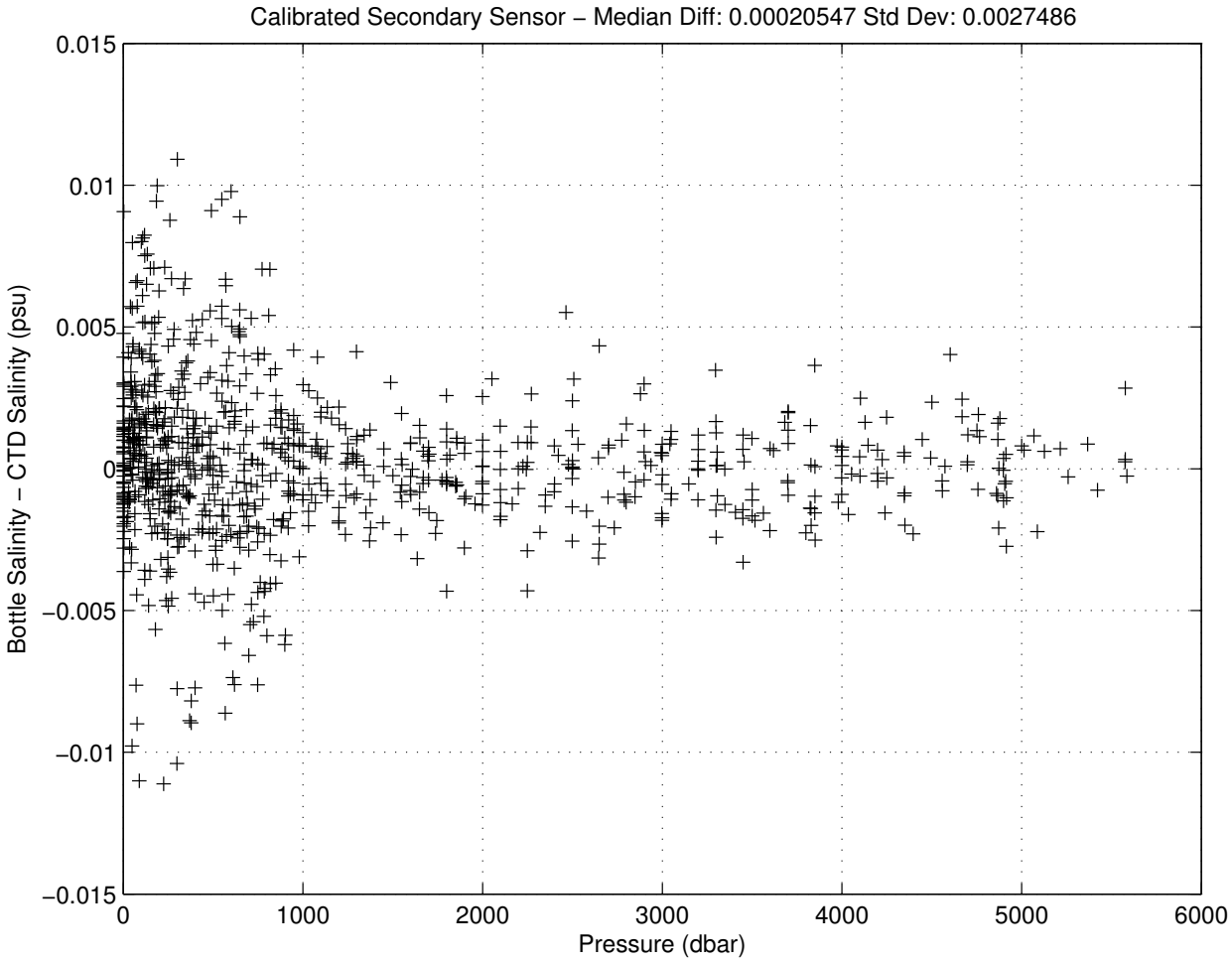

Figure 2: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure.

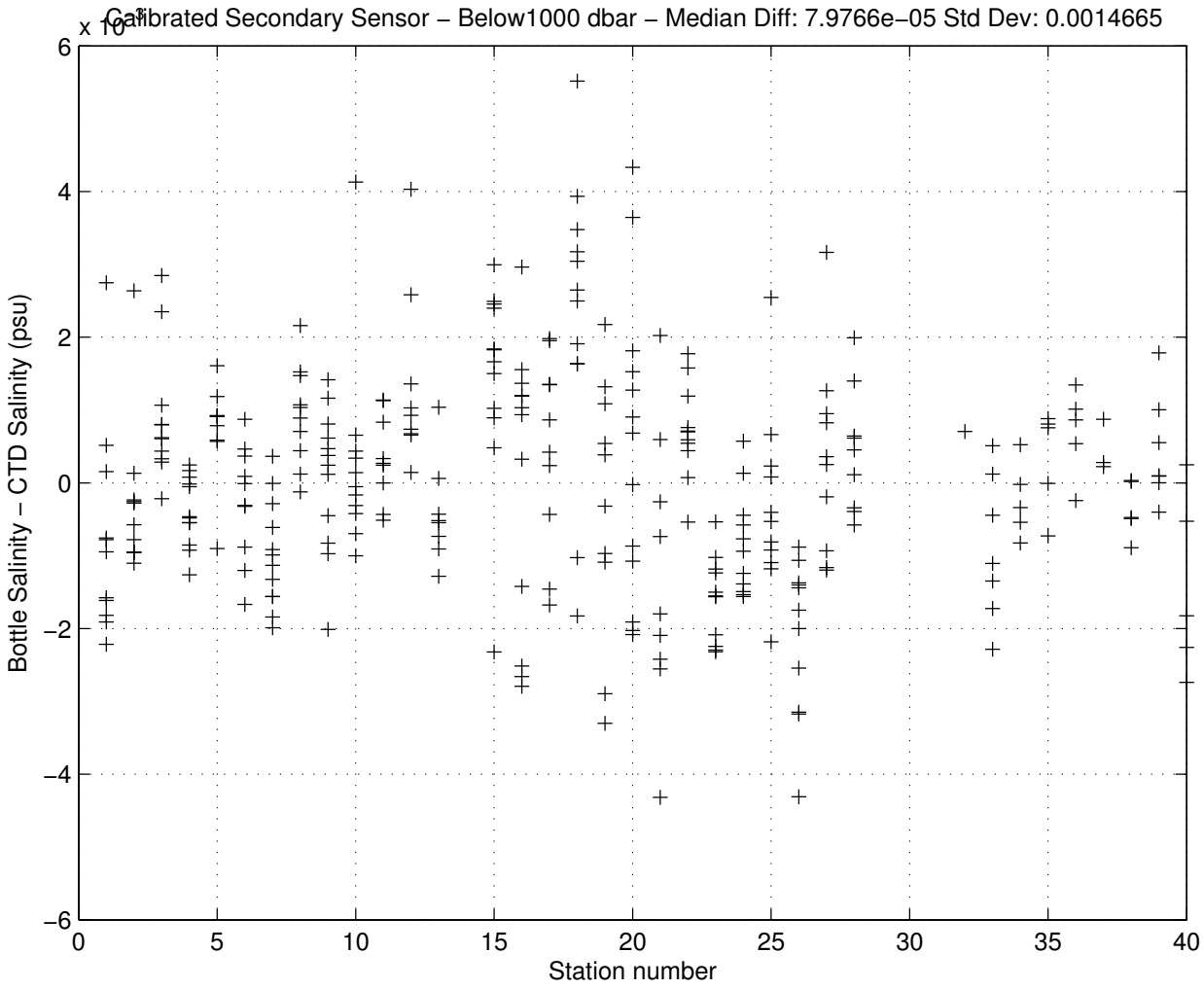

Figure 3: Bottle and calibrated secondary CTD salinity differences plotted vs. station below 1000 dbar.

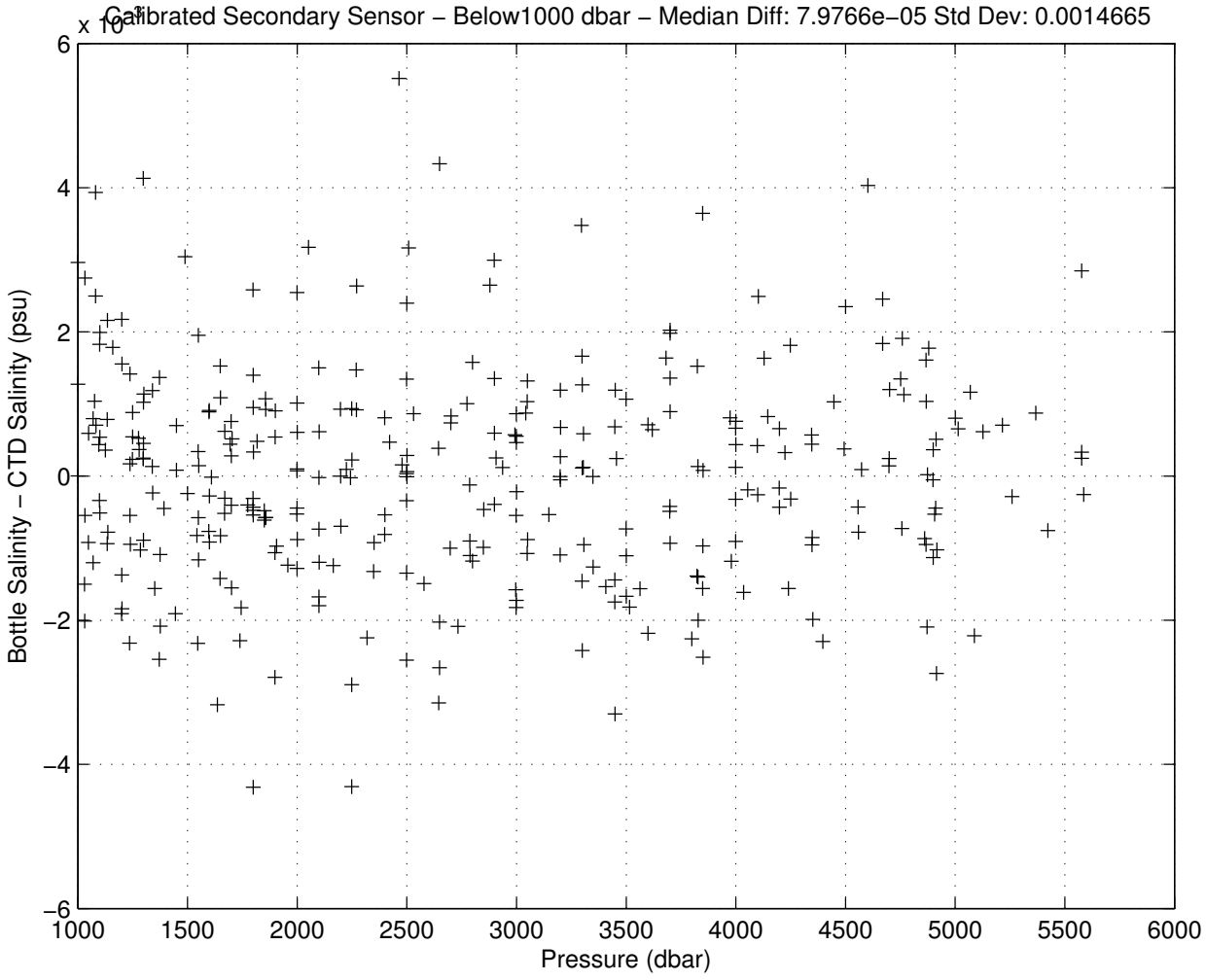

Figure 4: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure below 1000 dbar.

5.5 Dissolved Oxygen

Two SBE43 dissolved O_2 (DO) sensors were used on this leg. Both sensors tracked each other very well, with no noted problems. 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 O_2, and then minimizing the residuals using a non-linear least-squares fitting procedure. The fitting determined calibration coefficients for the sensor model conversion equation and proceeded in a series of steps. Each sensor was fit in a separate sequence. The first step was to determine the time constants for the exponential terms in the model. These time constants are sensor-specific but applicable to an entire cruise. Once the time constants had been determined, casts were fit individually to O_2 check sample data. The resulting calibration coefficients were then smoothed and held constant during a refit to determine sensor slope and offset. The two sensors used on this cruise were substantially off from full bottle titrations (not shown). Post cruise processing and analysis will be required for all oxygen sampling.

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 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:

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

where Soc, 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, sta is the station number and $OXSAT$ is the oxygen saturation. The secondary sensor was used for the final data values.

By minimizing the differences between the oxygen samples and the CTD oxygen estimated from the equation described in this section, new coefficients were calculated and then applied to the secondary CTD original data (Figure 5 to Figure 8). The residual is 0.07 $umol/kg$ (-0.03 $umol/kg$ for the data below 1000 dbar) and the standard deviation 2.4 $umol/kg$ (2.16 $umol/kg$ for the data below 1000 dbar). Also 90.0% of the residuals for the data are within the confidence limits determined by the WOCE (± 1% of the dissolved oxygen measured) and this number increase to 92.0% if we consider only the data below

1000 dbar.

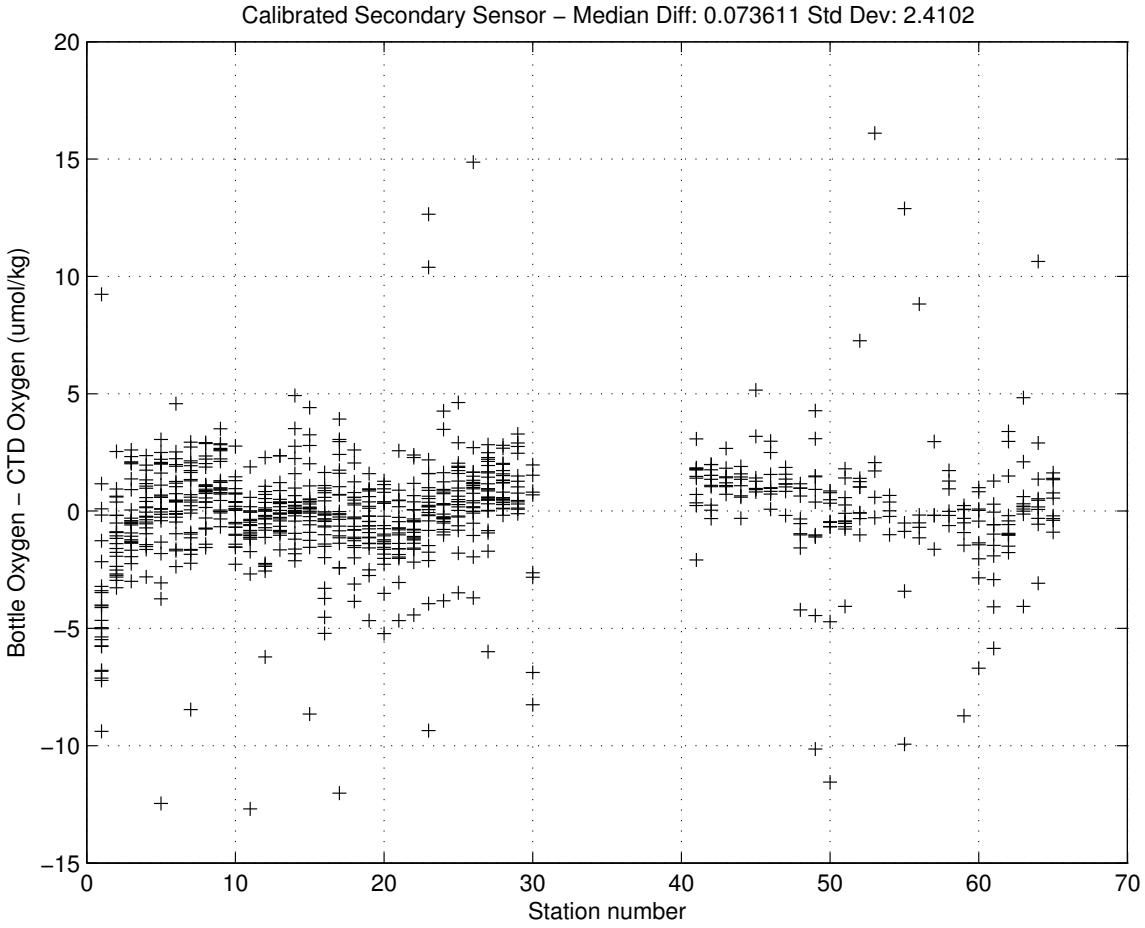

Figure 5: Bottle and calibrated secondary CTD oxygen differences plotted vs. station.

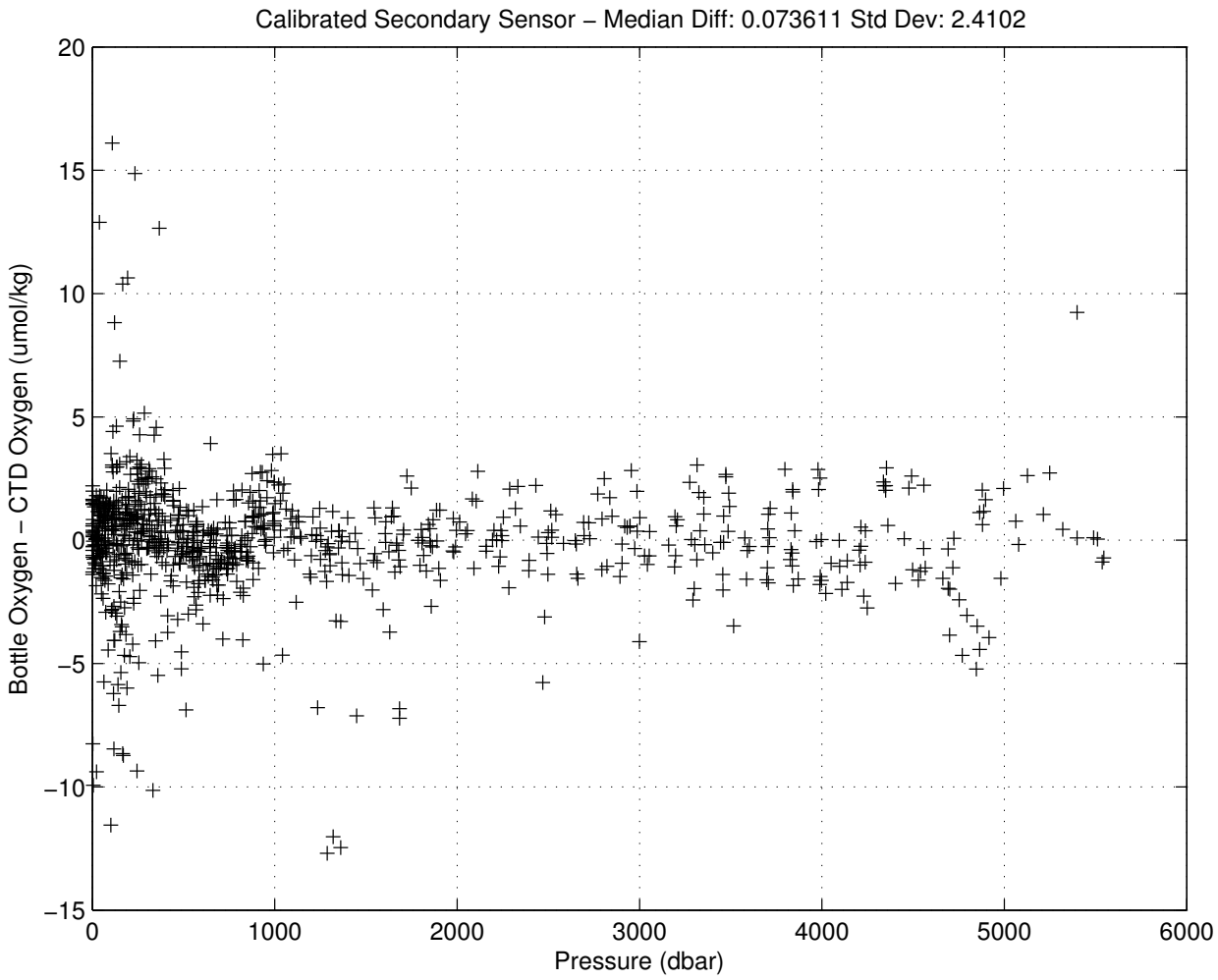

Figure 6: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure.

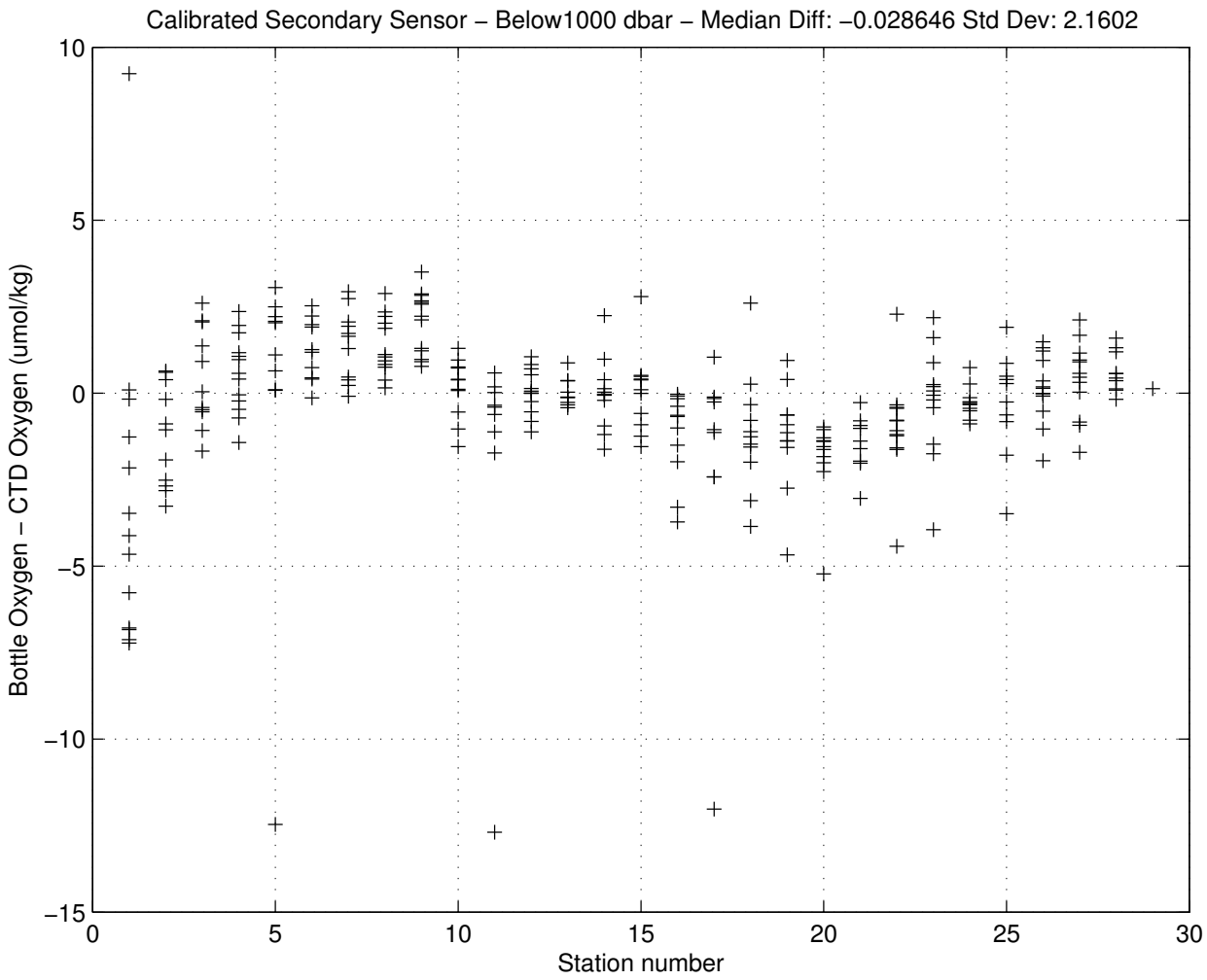

Figure 7: Bottle and calibrated secondary CTD oxygen differences plotted vs. station below 1000 dbar.

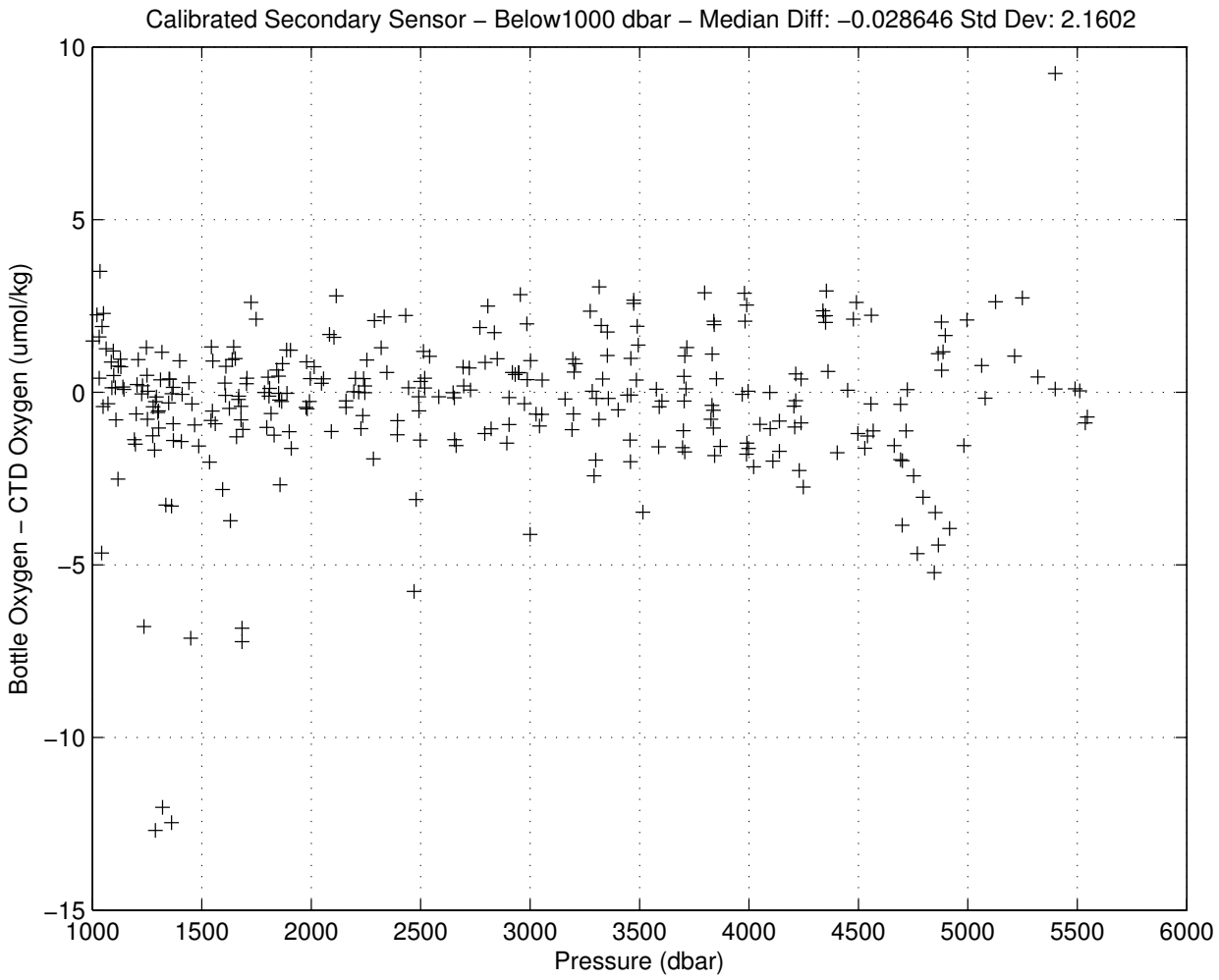

Figure 8: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure below 1000 dbar.

6 Acknowledgements

The successful completion of the cruise relied on dedicated assistance from many individuals on shore and on the NOAA ship Ronald H. Brown. Funded investigators in the project and members of the Western Boundary Time Series, and the RAPID/MOC programs were instrumental in planning and executing the cruise. The participants in the cruise showed dedication and camaraderie during their 20 days at sea. Officers and crew of the Ronald H. Brown exhibited a high degree of professionalism and assistance to accomplish the mission and to make us feel at home during the voyage.

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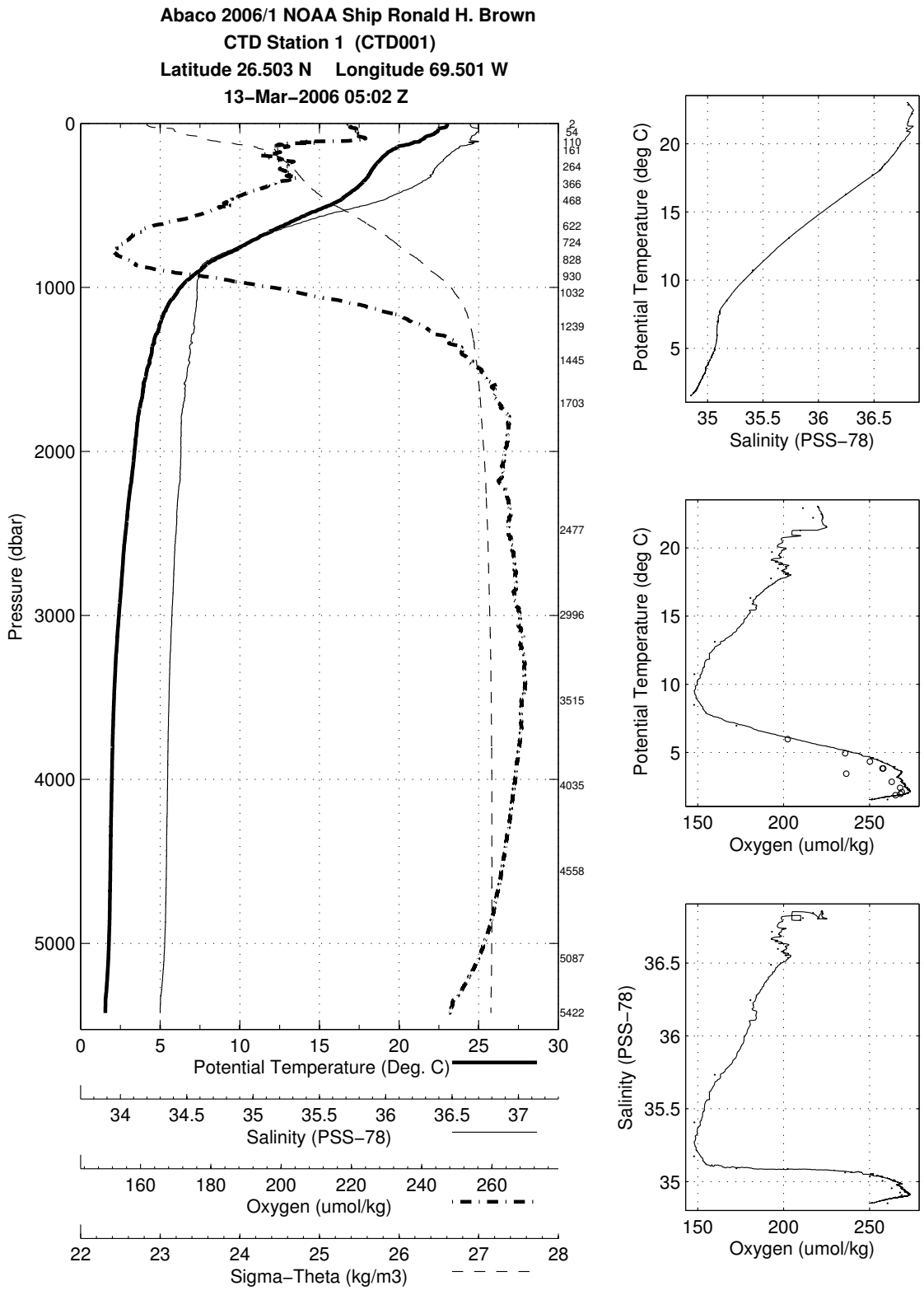
8 Hydrographic - CTD Data

On the following pages each CTD profile is displayed along with the water sample salinity and oxygen values. CTD values at a list of standard depths is provided for each station. Lastly, each Niskin bottle stop location is listed with the corresponding CTD values.

Abaco March 2006 R/V Brown
CTD Station 1 (CTD001)
Latitude 26.503N Longitude 69.501W
13-Mar-2006 05:02Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.026	23.026	36.804	219.5	0.003	25.295
10	23.031	23.029	36.802	219.9	0.027	25.293
20	22.973	22.969	36.809	220.5	0.053	25.315
30	22.531	22.525	36.851	221.9	0.079	25.476
50	22.411	22.400	36.853	222.5	0.129	25.513
75	21.854	21.839	36.816	222.7	0.190	25.644
100	21.442	21.422	36.804	223.1	0.248	25.751
125	20.719	20.695	36.815	198.8	0.303	25.960
150	19.857	19.829	36.731	199.4	0.352	26.128
200	19.078	19.042	36.656	196.1	0.445	26.277
250	18.595	18.551	36.605	201.7	0.534	26.363
300	18.245	18.192	36.568	200.9	0.621	26.426
400	17.324	17.256	36.415	192.5	0.788	26.539
500	15.728	15.648	36.142	183.7	0.945	26.707
600	13.295	13.209	35.750	165.2	1.084	26.932
700	11.214	11.124	35.469	152.9	1.204	27.118
800	9.171	9.080	35.227	149.1	1.308	27.283
900	7.576	7.483	35.108	163.9	1.395	27.435
1000	6.364	6.269	35.085	196.3	1.467	27.585
1100	5.628	5.530	35.081	221.5	1.527	27.676
1200	5.173	5.069	35.067	238.1	1.581	27.721
1300	4.793	4.683	35.050	249.6	1.632	27.751
1400	4.584	4.467	35.043	254.4	1.681	27.770
1500	4.299	4.175	35.024	260.4	1.728	27.786
1750	3.821	3.680	34.992	267.7	1.843	27.813
2000	3.548	3.387	34.983	267.7	1.954	27.834
2500	3.023	2.823	34.953	268.6	2.169	27.864
3000	2.654	2.411	34.926	271.9	2.378	27.879
3500	2.397	2.107	34.909	273.2	2.586	27.890
4000	2.307	1.964	34.899	270.6	2.797	27.894
4500	2.280	1.880	34.893	266.8	3.018	27.895
5000	2.240	1.780	34.881	261.1	3.250	27.894

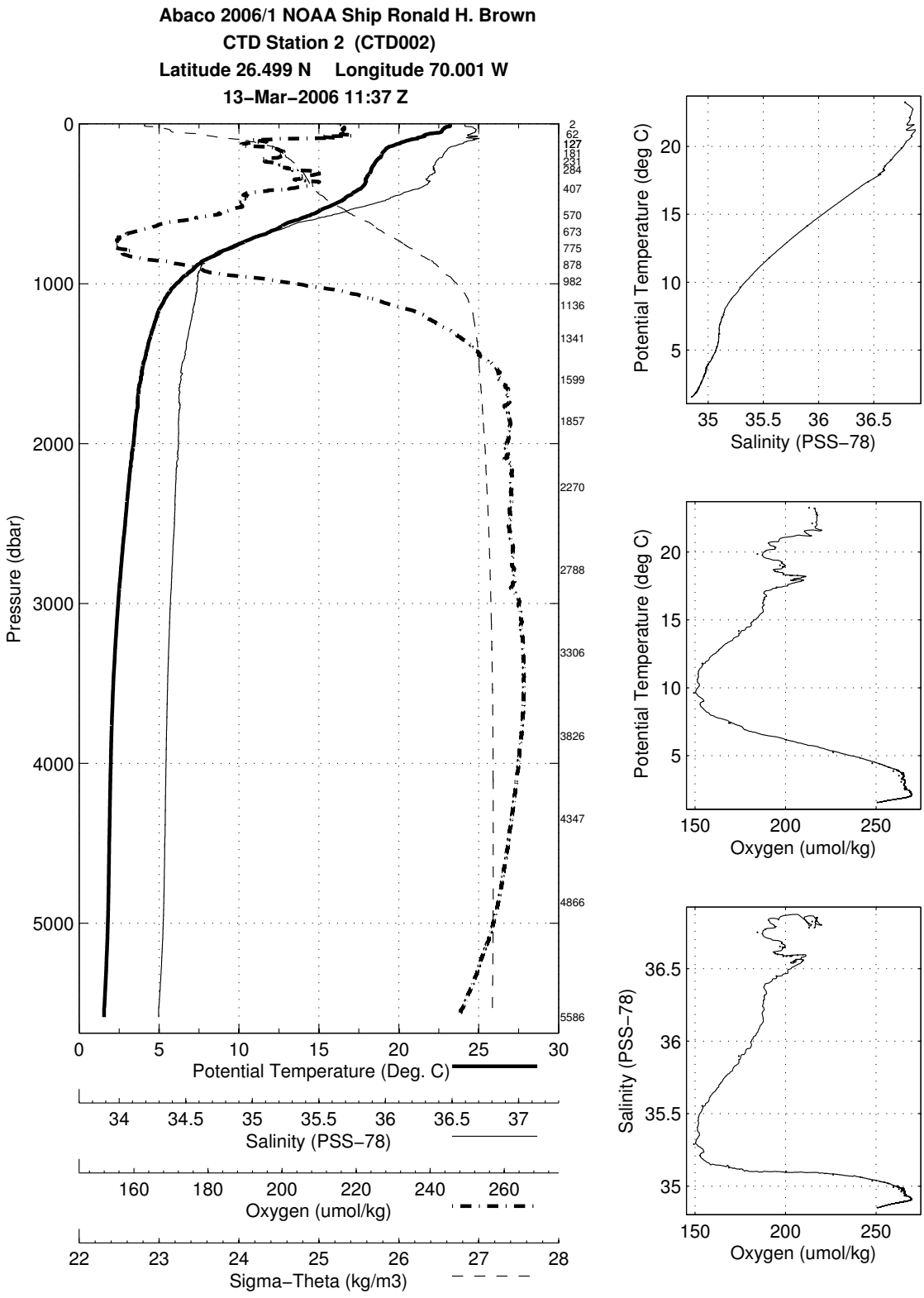
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5423	1	2.064	1.555	34.851	260.5
5088	2	2.217	1.746	34.875	259.0
4559	3	2.280	1.873	34.891	265.1
4035	4	2.307	1.961	34.898	268.1
3516	5	2.390	2.099	34.907	268.8
2997	6	2.652	2.409	34.925	267.8
2478	7	3.054	2.855	34.955	262.9
1703	9	3.963	3.824	35.005	257.6
1445	10	4.469	4.349	35.035	250.2
1239	11	5.041	4.934	35.063	235.8
1033	12	6.066	5.970	35.087	202.4
931	13	7.037	6.945	35.091	172.6
828	15	8.594	8.503	35.173	147.9
725	16	10.817	10.726	35.407	148.1
622	17	13.183	13.094	35.733	160.0
469	18	16.364	16.287	36.245	180.7
366	19	17.778	17.715	36.488	192.7
264	20	18.546	18.499	36.596	196.7
161	21	19.718	19.688	36.715	193.2
110	22	21.143	21.122	36.794	209.8
54	23	22.221	22.210	36.845	217.1
3	24	22.851	22.850	36.809	211.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 1 (CTD001)
Latitude 26.503 N Longitude 69.501 W
13−Mar−2006 05:02 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 2 (CTD002)
Latitude 26.499N Longitude 70.001W
13-Mar-2006 11:37Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.208	23.208	36.784	215.9	0.003	25.227
10	23.215	23.213	36.783	216.0	0.027	25.225
20	22.948	22.943	36.831	216.8	0.054	25.340
30	22.822	22.816	36.847	217.1	0.081	25.389
50	22.677	22.667	36.849	217.5	0.132	25.433
75	21.562	21.547	36.806	218.9	0.192	25.718
100	20.750	20.731	36.847	191.7	0.246	25.975
125	20.007	19.984	36.765	187.8	0.296	26.113
150	19.302	19.274	36.683	198.2	0.343	26.237
200	18.938	18.902	36.646	199.3	0.433	26.305
250	18.526	18.481	36.597	198.2	0.521	26.375
300	18.283	18.230	36.593	209.7	0.607	26.435
400	17.736	17.667	36.504	203.2	0.775	26.507
500	16.102	16.021	36.207	187.6	0.936	26.672
600	13.780	13.692	35.827	171.9	1.080	26.891
700	11.329	11.239	35.479	152.1	1.203	27.105
800	8.998	8.908	35.223	153.0	1.305	27.308
900	7.309	7.218	35.117	174.4	1.389	27.480
1000	6.177	6.084	35.094	203.3	1.457	27.616
1100	5.430	5.333	35.084	226.6	1.514	27.703
1200	4.968	4.866	35.064	240.9	1.565	27.741
1300	4.657	4.548	35.043	248.7	1.614	27.761
1400	4.394	4.279	35.028	254.5	1.661	27.779
1500	4.134	4.013	35.002	260.4	1.708	27.786
1750	3.796	3.655	34.983	264.9	1.821	27.809
2000	3.560	3.399	34.978	264.6	1.933	27.830
2500	3.078	2.877	34.953	265.4	2.151	27.859
3000	2.682	2.438	34.927	268.0	2.363	27.877
3500	2.425	2.135	34.910	269.6	2.573	27.889
4000	2.320	1.977	34.900	268.0	2.785	27.894
4500	2.280	1.879	34.892	265.1	3.007	27.895
5000	2.253	1.792	34.882	260.6	3.240	27.894
5500	2.107	1.587	34.857	252.5	3.481	27.889

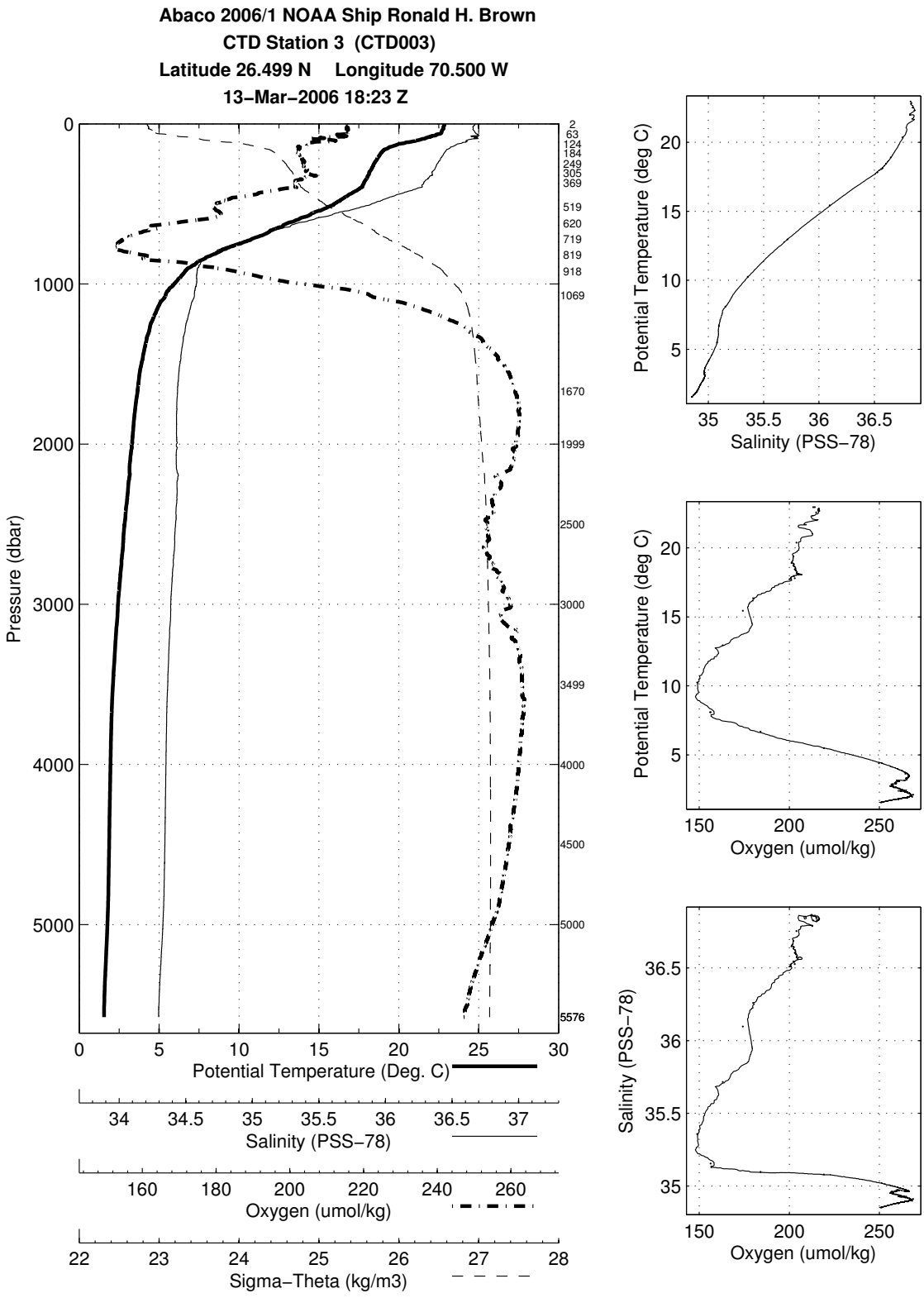
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3827	4	2.334	2.010	34.903	269.0
4348	3	2.289	1.906	34.894	266.2
4867	2	2.267	1.822	34.885	262.7
5586	1	2.089	1.559	34.852	250.9
3307	5	2.486	2.214	34.914	269.2
2789	6	2.810	2.585	34.935	265.7
2271	7	3.250	3.068	34.962	263.9
1857	8	3.684	3.535	34.980	262.6
1599	9	3.986	3.857	34.994	259.5
1341	10	4.558	4.446	35.037	247.9
1136	11	5.352	5.252	35.080	226.3
983	12	6.290	6.198	35.101	200.3
879	13	7.516	7.426	35.129	168.8
776	15	9.708	9.617	35.290	149.4
673	16	11.896	11.806	35.553	154.0
570	17	14.238	14.153	35.897	174.2
407	18	17.469	17.399	36.449	195.0
284	19	18.318	18.268	36.594	206.6
232	20	18.586	18.544	36.599	195.5
182	21	19.033	19.000	36.653	196.9
128	22	19.909	19.885	36.750	184.5
128	22	19.909	19.885	36.751	184.5
62	23	22.127	22.115	36.825	214.7
2	24	23.257	23.257	36.783	213.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 2 (CTD002)
Latitude 26.499 N Longitude 70.001 W
13−Mar−2006 11:37 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 3 (CTD003)
Latitude 26.499N Longitude 70.500W
13-Mar-2006 18:23Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.857	22.857	36.841	216.1	0.003	25.372
10	22.845	22.843	36.836	216.6	0.026	25.372
20	22.805	22.801	36.830	216.2	0.052	25.380
30	22.808	22.801	36.832	216.0	0.078	25.381
50	22.688	22.678	36.841	216.6	0.129	25.424
75	22.106	22.091	36.827	212.8	0.192	25.581
100	21.330	21.310	36.799	211.4	0.250	25.778
125	20.063	20.039	36.735	205.5	0.303	26.075
150	19.383	19.356	36.686	202.2	0.351	26.218
200	18.800	18.764	36.638	202.6	0.440	26.334
250	18.488	18.444	36.605	203.6	0.527	26.390
300	18.218	18.165	36.573	204.0	0.613	26.436
400	17.653	17.585	36.483	200.1	0.781	26.511
500	16.033	15.953	36.190	177.9	0.941	26.675
600	13.700	13.613	35.813	172.4	1.084	26.897
700	11.379	11.289	35.483	152.9	1.207	27.099
800	8.820	8.731	35.209	152.1	1.310	27.325
900	6.910	6.822	35.099	178.1	1.390	27.521
1000	6.027	5.935	35.090	203.5	1.455	27.632
1100	5.309	5.213	35.067	228.0	1.511	27.703
1200	4.792	4.691	35.038	243.6	1.562	27.741
1300	4.467	4.360	35.017	252.0	1.610	27.761
1400	4.204	4.091	34.998	257.8	1.657	27.775
1500	4.010	3.889	34.985	261.6	1.703	27.786
1750	3.675	3.536	34.966	266.3	1.816	27.807
2000	3.451	3.292	34.964	264.9	1.927	27.829
2500	3.042	2.841	34.958	257.1	2.141	27.867
3000	2.672	2.429	34.928	263.8	2.351	27.879
3500	2.403	2.113	34.909	267.3	2.560	27.890
4000	2.301	1.959	34.898	266.2	2.771	27.893
4500	2.275	1.874	34.891	263.4	2.992	27.895
5000	2.228	1.768	34.879	258.5	3.224	27.893
5500	2.086	1.567	34.854	251.2	3.463	27.888

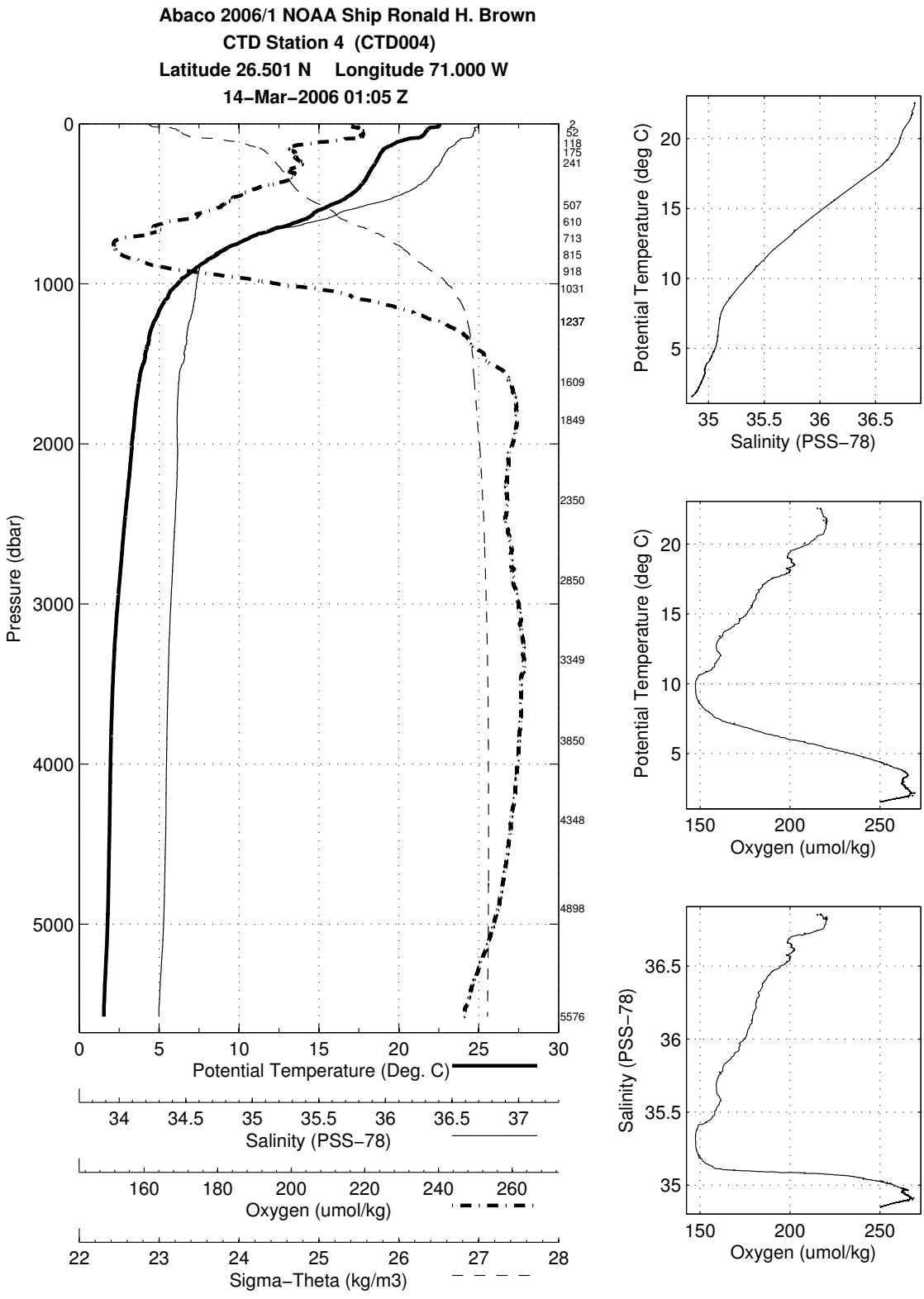
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5577	1	2.087	1.558	34.855	251.1
5001	2	2.229	1.769	34.880	260.5
4500	3	2.276	1.875	34.894	265.5
4000	4	2.304	1.961	34.899	268.2
3499	5	2.410	2.120	34.911	268.6
3000	6	2.674	2.430	34.928	264.8
2500	7	3.059	2.858	34.961	256.7
2000	8	3.468	3.308	34.965	265.0
1670	9	3.764	3.631	34.971	264.4
1070	11	5.587	5.492	35.080	219.2
919	12	6.777	6.687	35.097	184.0
520	17	15.510	15.428	36.097	174.2
621	16	13.047	12.960	35.715	163.1
719	15	10.337	10.249	35.357	148.9
819	13	8.179	8.092	35.155	156.3
370	18	17.893	17.829	36.527	203.0
305	19	18.118	18.065	36.562	204.7
249	20	18.497	18.453	36.604	203.0
64	23	22.527	22.514	36.846	214.9
125	22	20.380	20.357	36.754	204.0
5577	1	2.087	1.558	34.852	251.1
2	24	22.949	22.948	36.827	213.3
185	21	18.939	18.906	36.648	201.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 3 (CTD003)
Latitude 26.499 N Longitude 70.500 W
13−Mar−2006 18:23 Z
Pressure (dbar)
0
1000
2000
3000
4000
5000
2
63
124
184
249
305
369
519
620
719
819
918
1069
1670
1999
2500
3000
3499
4000
4500
5000
5576
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
20
15
10
5
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
20
15
10
5
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
36.5
36
35.5
35
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 4 (CTD004)
Latitude 26.501N Longitude 71.000W
14-Mar-2006 01:05Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.548	22.547	36.857	216.9	0.002	25.473
10	22.533	22.531	36.854	217.2	0.025	25.476
20	22.360	22.356	36.852	217.7	0.050	25.524
30	21.879	21.873	36.831	220.1	0.074	25.646
50	21.690	21.680	36.827	220.3	0.120	25.697
75	21.518	21.503	36.821	220.4	0.177	25.742
100	20.394	20.376	36.737	213.9	0.232	25.987
125	19.733	19.709	36.714	204.6	0.281	26.147
150	19.221	19.194	36.675	198.9	0.328	26.252
200	18.826	18.790	36.638	200.7	0.417	26.327
250	18.547	18.503	36.611	202.4	0.504	26.380
300	18.223	18.171	36.567	198.9	0.590	26.430
400	17.593	17.524	36.461	189.8	0.758	26.509
500	16.033	15.952	36.190	179.9	0.919	26.674
600	14.049	13.961	35.863	167.1	1.063	26.863
700	10.994	10.905	35.442	155.0	1.187	27.137
800	8.917	8.827	35.214	148.8	1.287	27.314
900	7.400	7.309	35.105	163.0	1.373	27.458
1000	6.241	6.147	35.085	195.4	1.443	27.601
1100	5.488	5.390	35.073	221.0	1.501	27.687
1200	4.969	4.867	35.052	238.0	1.553	27.732
1300	4.548	4.440	35.027	248.9	1.602	27.761
1400	4.352	4.237	35.015	253.9	1.650	27.773
1500	4.117	3.996	34.998	257.7	1.696	27.785
1750	3.691	3.552	34.967	265.1	1.810	27.806
2000	3.453	3.293	34.965	264.1	1.921	27.830
2500	3.030	2.829	34.951	262.1	2.138	27.861
3000	2.650	2.407	34.925	265.9	2.348	27.878
3500	2.393	2.104	34.908	266.6	2.556	27.890
4000	2.303	1.960	34.898	265.6	2.767	27.893
4500	2.279	1.878	34.892	263.1	2.988	27.895
5000	2.236	1.775	34.880	258.7	3.221	27.893
5500	2.076	1.557	34.852	251.0	3.460	27.887

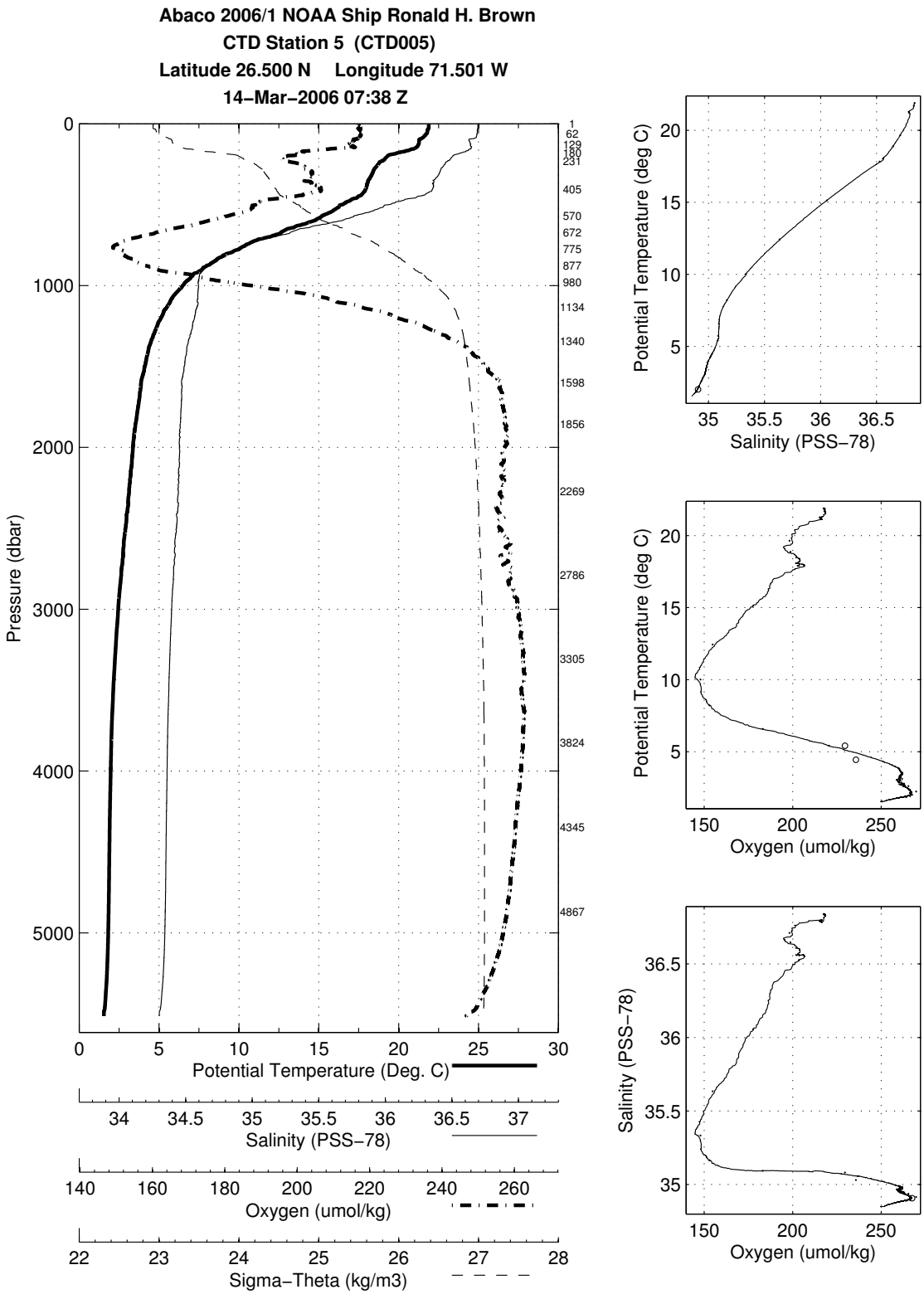
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5576	1	2.078	1.549	34.851	250.6
4898	2	2.254	1.805	34.883	261.0
4348	3	2.290	1.907	34.894	265.8
3850	4	2.318	1.992	34.901	268.1
3349	5	2.452	2.177	34.911	268.6
2850	6	2.767	2.537	34.933	265.4
2350	7	3.178	2.990	34.957	263.2
1850	8	3.599	3.452	34.965	265.4
1609	9	3.844	3.715	34.974	263.3
1238	11	4.837	4.732	35.043	240.9
1238	11	4.837	4.732	35.044	240.9
1032	12	5.943	5.849	35.083	208.0
919	13	7.237	7.145	35.102	169.0
816	15	8.686	8.596	35.188	149.5
713	16	10.958	10.868	35.429	153.4
610	17	13.519	13.431	35.772	160.9
508	18	15.673	15.592	36.129	178.8
242	20	18.513	18.470	36.605	202.1
175	21	18.938	18.907	36.645	200.8
119	22	20.090	20.068	36.723	208.2
52	23	21.706	21.695	36.824	218.7
3	24	22.546	22.545	36.850	215.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 4 (CTD004)
Latitude 26.501 N Longitude 71.000 W
14−Mar−2006 01:05 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 5 (CTD005)
Latitude 26.500N Longitude 71.501W
14-Mar-2006 07:38Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	21.887	21.887	36.841	217.8	0.002	25.649
10	21.887	21.886	36.838	217.9	0.023	25.648
20	21.891	21.887	36.838	218.4	0.047	25.647
30	21.885	21.879	36.838	218.0	0.070	25.650
50	21.804	21.794	36.835	218.3	0.117	25.671
75	21.624	21.609	36.830	218.3	0.175	25.719
100	21.298	21.278	36.781	216.5	0.232	25.774
125	21.272	21.248	36.791	215.7	0.288	25.790
150	21.066	21.037	36.796	213.3	0.344	25.851
200	19.341	19.305	36.681	196.4	0.445	26.228
250	18.774	18.729	36.633	200.6	0.536	26.339
300	18.444	18.391	36.600	203.7	0.623	26.400
400	18.028	17.958	36.557	206.2	0.794	26.476
500	16.519	16.437	36.279	187.0	0.960	26.630
600	14.739	14.648	35.975	173.0	1.111	26.801
700	11.915	11.821	35.554	152.5	1.241	27.054
800	9.438	9.346	35.264	148.2	1.348	27.268
900	7.777	7.683	35.126	158.1	1.437	27.420
1000	6.578	6.481	35.094	186.1	1.511	27.564
1100	5.789	5.689	35.086	211.2	1.574	27.660
1200	5.230	5.125	35.070	229.0	1.629	27.716
1300	4.783	4.672	35.045	242.1	1.680	27.749
1400	4.453	4.337	35.021	250.9	1.728	27.767
1500	4.224	4.101	35.005	255.6	1.776	27.780
1750	3.834	3.693	34.987	260.6	1.891	27.807
2000	3.533	3.372	34.977	261.1	2.003	27.831
2500	3.106	2.904	34.958	260.0	2.221	27.860
3000	2.690	2.446	34.927	265.1	2.434	27.876
3500	2.427	2.136	34.909	266.2	2.645	27.888
4000	2.318	1.975	34.898	266.0	2.858	27.892
4500	2.292	1.891	34.892	263.7	3.080	27.894
5000	2.281	1.819	34.884	260.7	3.314	27.893
5500	2.062	1.544	34.850	250.1	3.557	27.886

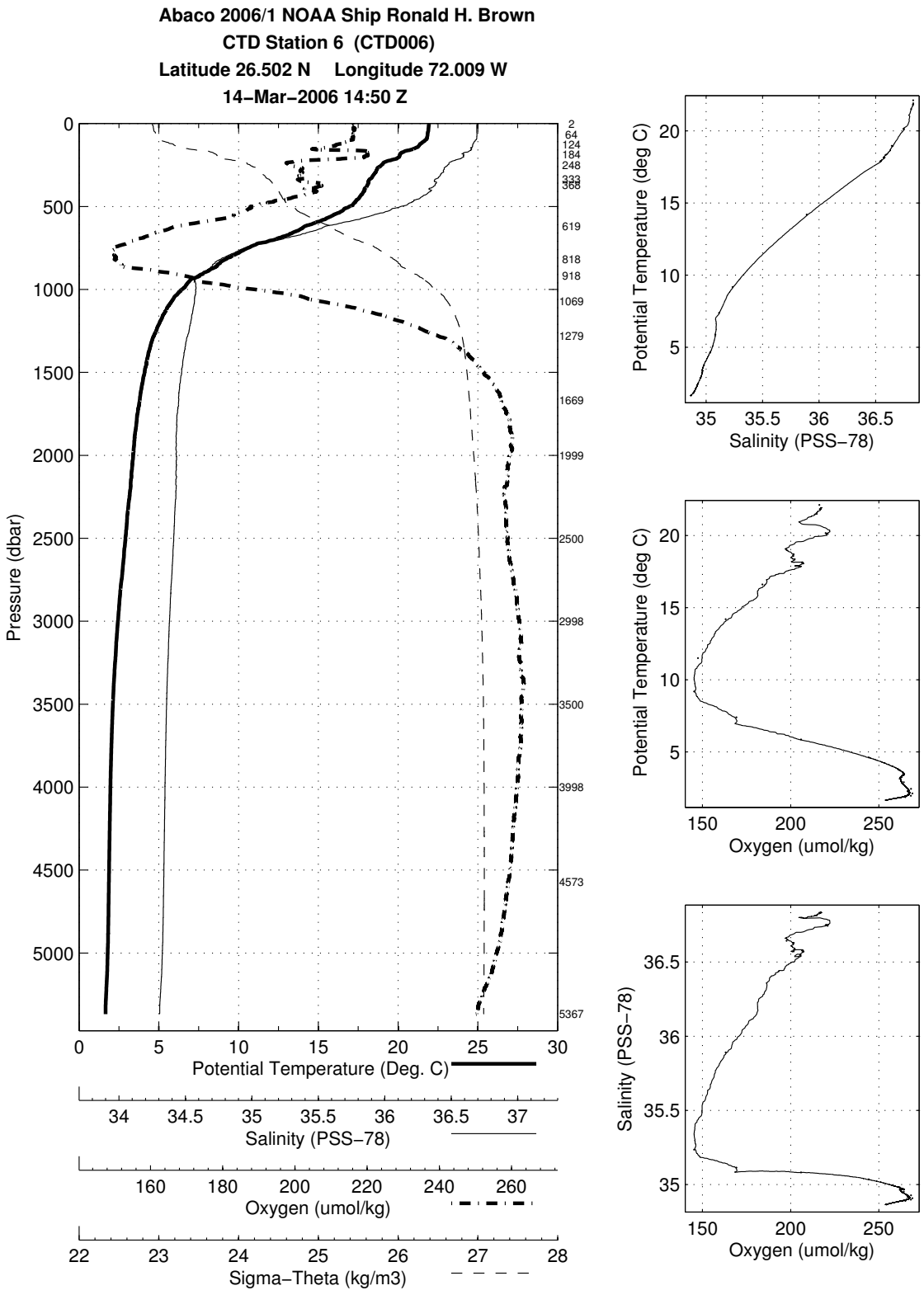
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3825	4	2.333	2.009	34.907	267.5
4868	2	2.289	1.843	34.889	264.1
4345	3	2.293	1.911	34.894	266.3
3305	5	2.511	2.239	34.916	269.7
2787	6	2.841	2.615	34.937	265.3
2270	7	3.297	3.114	34.969	261.9
1856	8	3.703	3.553	34.983	261.9
1599	9	4.013	3.883	34.991	274.8
1341	10	4.564	4.452	35.030	235.7
1134	11	5.510	5.409	35.082	229.5
981	12	6.671	6.576	35.093	183.0
878	13	8.302	8.207	35.164	152.9
775	15	10.111	10.018	35.334	147.9
673	16	12.515	12.422	35.634	154.7
570	17	15.217	15.128	36.056	177.6
406	18	17.894	17.824	36.527	203.5
232	20	18.928	18.886	36.647	198.8
180	21	19.687	19.654	36.711	198.2
130	22	21.237	21.211	36.791	215.5
63	23	21.707	21.695	36.833	218.0
2	24	21.889	21.888	36.840	217.4


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 5 (CTD005)
Latitude 26.500 N Longitude 71.501 W
14−Mar−2006 07:38 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 6 (CTD006)
Latitude 26.502N Longitude 72.009W
14-Mar-2006 14:50Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	21.934	21.934	36.835	217.0	0.002	25.631
10	21.931	21.929	36.833	217.3	0.023	25.632
20	21.915	21.911	36.833	217.4	0.047	25.636
30	21.909	21.903	36.833	217.3	0.071	25.639
50	21.884	21.874	36.833	217.0	0.118	25.647
75	21.851	21.836	36.834	216.9	0.176	25.658
100	21.714	21.694	36.825	215.8	0.235	25.691
125	21.381	21.357	36.808	212.4	0.293	25.773
150	21.073	21.044	36.800	206.8	0.349	25.853
200	20.121	20.083	36.751	220.2	0.452	26.076
250	18.998	18.952	36.653	197.9	0.547	26.297
300	18.584	18.531	36.613	200.7	0.635	26.375
400	17.969	17.900	36.545	202.8	0.807	26.481
500	17.022	16.938	36.360	186.3	0.974	26.574
600	14.820	14.728	35.987	169.8	1.129	26.793
700	12.340	12.244	35.610	152.8	1.263	27.016
800	9.643	9.549	35.278	146.0	1.372	27.246
900	7.930	7.835	35.145	162.3	1.464	27.412
1000	6.528	6.432	35.089	187.7	1.538	27.566
1100	5.700	5.601	35.077	214.5	1.600	27.664
1200	5.157	5.053	35.058	232.2	1.655	27.715
1300	4.709	4.599	35.031	244.8	1.706	27.746
1400	4.438	4.322	35.015	251.4	1.755	27.764
1500	4.229	4.106	35.001	255.8	1.803	27.776
1750	3.797	3.657	34.973	262.8	1.919	27.800
2000	3.553	3.393	34.969	263.6	2.033	27.823
2500	3.110	2.908	34.952	262.8	2.254	27.855
3000	2.681	2.437	34.926	266.4	2.468	27.876
3500	2.411	2.121	34.908	267.3	2.677	27.888
4000	2.309	1.966	34.898	265.7	2.890	27.893
4500	2.283	1.883	34.891	263.6	3.111	27.894
5000	2.256	1.794	34.882	259.6	3.344	27.893

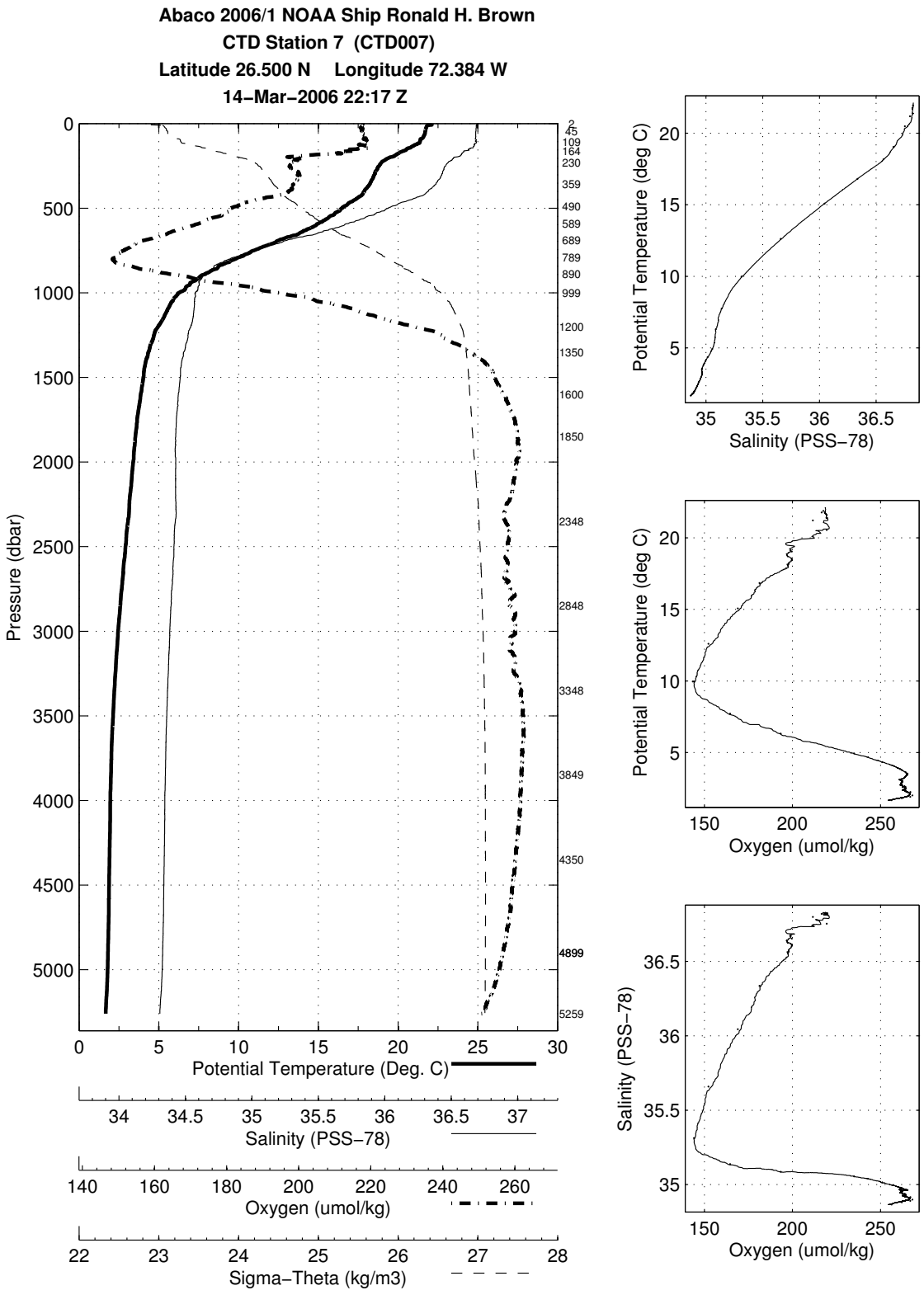
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5368	1	2.168	1.663	34.865	254.3
4573	2	2.281	1.872	34.890	265.0
3999	3	2.310	1.967	34.898	268.1
3501	4	2.419	2.128	34.907	268.9
2999	5	2.697	2.453	34.927	268.2
2500	6	3.106	2.904	34.952	264.1
2000	7	3.547	3.386	34.969	263.9
1669	8	3.881	3.747	34.981	261.8
1280	9	4.735	4.627	35.035	244.2
1069	10	5.980	5.882	35.082	205.9
919	11	7.470	7.376	35.114	169.3
819	12	9.279	9.185	35.235	145.3
619	15	14.298	14.205	35.890	163.2
369	17	18.227	18.163	36.579	206.5
334	18	18.394	18.335	36.588	202.3
249	20	19.013	18.968	36.643	197.7
185	21	20.197	20.162	36.749	219.8
124	22	21.539	21.515	36.815	214.7
2	24	22.122	22.121	36.833	216.2
64	23	21.820	21.808	36.830	216.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 6 (CTD006)
Latitude 26.502 N Longitude 72.009 W
14−Mar−2006 14:50 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 7 (CTD007)
Latitude 26.500N Longitude 72.384W
14-Mar-2006 22:17Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.103	22.102	36.829	218.6	0.002	25.579
10	21.877	21.875	36.828	218.6	0.024	25.643
20	21.782	21.778	36.825	218.4	0.047	25.668
30	21.741	21.735	36.824	218.6	0.070	25.679
50	21.700	21.690	36.822	218.8	0.117	25.690
75	21.624	21.609	36.822	219.4	0.174	25.713
100	21.402	21.383	36.824	219.8	0.231	25.778
125	21.103	21.079	36.815	217.5	0.287	25.855
150	20.559	20.530	36.778	217.1	0.341	25.977
200	19.503	19.466	36.686	198.5	0.440	26.190
250	18.863	18.819	36.636	197.0	0.532	26.319
300	18.578	18.525	36.612	199.8	0.620	26.375
400	17.962	17.893	36.528	196.6	0.793	26.470
500	16.560	16.478	36.279	179.4	0.959	26.621
600	14.953	14.861	36.007	168.4	1.111	26.780
700	12.425	12.329	35.624	151.5	1.246	27.010
800	9.898	9.803	35.299	144.2	1.358	27.219
900	7.736	7.642	35.133	165.0	1.450	27.431
1000	6.344	6.250	35.085	193.7	1.523	27.587
1100	5.652	5.553	35.077	216.5	1.583	27.670
1200	5.062	4.959	35.058	234.1	1.637	27.726
1300	4.612	4.503	35.029	246.4	1.687	27.755
1400	4.315	4.200	35.003	254.6	1.735	27.767
1500	4.154	4.032	34.992	257.9	1.782	27.777
1750	3.783	3.643	34.969	264.0	1.899	27.798
2000	3.556	3.395	34.964	264.6	2.013	27.819
2500	3.111	2.909	34.953	262.1	2.234	27.856
3000	2.689	2.445	34.927	264.2	2.448	27.877
3500	2.424	2.133	34.909	266.6	2.659	27.888
4000	2.303	1.960	34.897	265.8	2.871	27.892
4500	2.283	1.882	34.891	263.5	3.093	27.893
5000	2.254	1.793	34.881	259.5	3.326	27.893

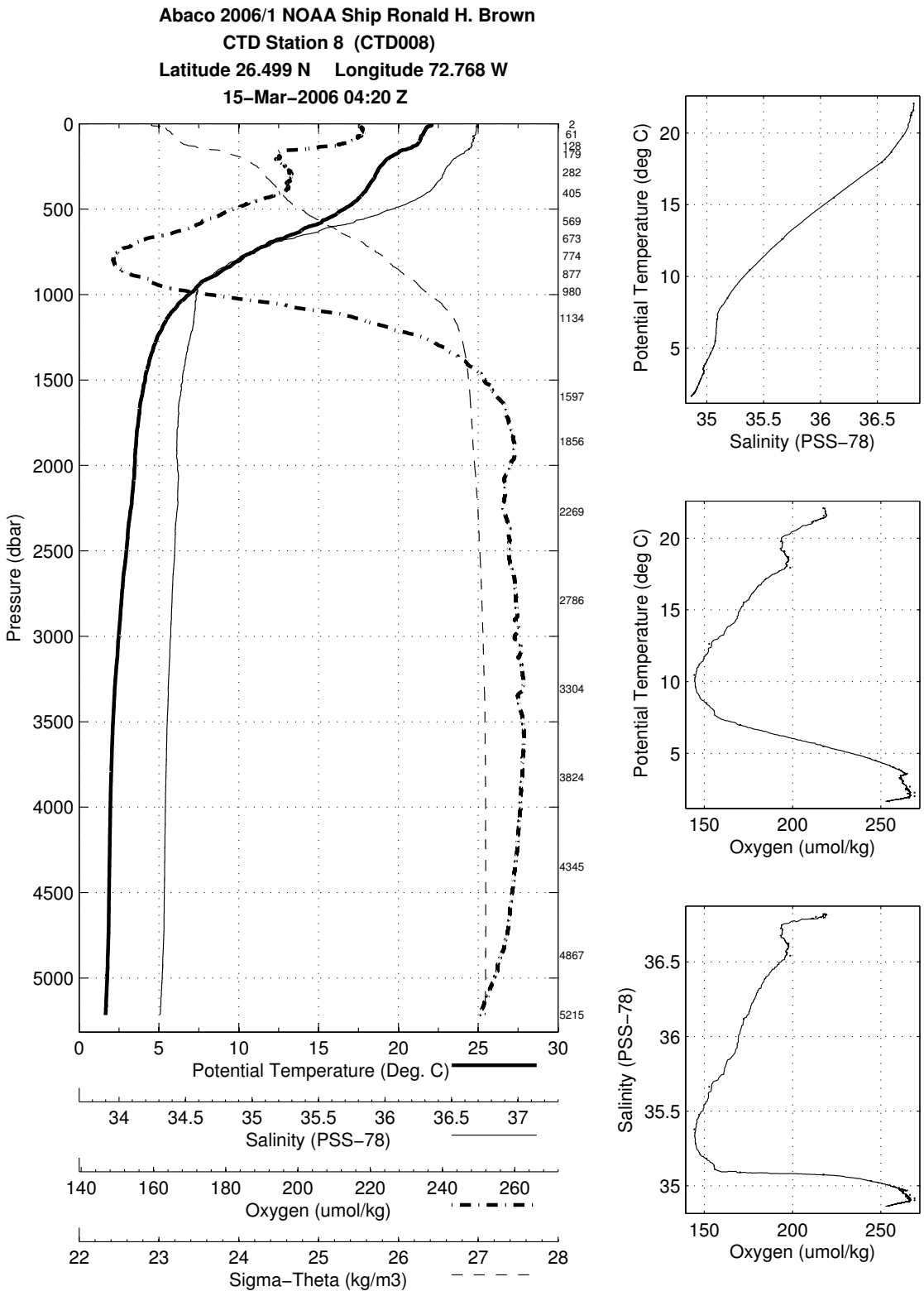
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5259	1	2.163	1.672	34.866	256.3
4899	2	2.260	1.811	34.883	262.0
4351	3	2.288	1.905	34.891	266.8
3849	4	2.331	2.005	34.899	268.1
3348	5	2.511	2.235	34.915	266.9
2849	6	2.829	2.597	34.936	264.1
2349	7	3.308	3.117	34.965	261.9
1850	8	3.682	3.533	34.964	265.3
1600	9	3.982	3.852	34.979	261.0
1350	10	4.470	4.358	35.015	251.0
1201	11	5.033	4.929	35.055	234.9
1000	12	6.399	6.304	35.086	193.4
891	13	7.845	7.752	35.138	164.6
789	15	10.084	9.989	35.313	144.1
689	16	12.716	12.620	35.659	152.3
589	17	15.167	15.075	36.045	169.0
4899	2	2.260	1.811	34.882	262.0
490	18	16.895	16.813	36.336	181.3
360	19	18.242	18.179	36.565	197.9
230	20	19.085	19.043	36.653	199.6
164	21	20.520	20.489	36.753	219.5
109	22	21.209	21.188	36.799	211.6
46	23	21.775	21.766	36.819	216.5
2	24	21.946	21.946	36.826	217.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 7 (CTD007)
Latitude 26.500 N Longitude 72.384 W
14−Mar−2006 22:17 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 8 (CTD008)
Latitude 26.499N Longitude 72.768W
15-Mar-2006 04:20Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.088	22.088	36.823	218.0	0.002	25.579
10	22.087	22.085	36.821	218.0	0.024	25.578
20	21.811	21.807	36.820	218.6	0.048	25.656
30	21.722	21.717	36.819	219.0	0.071	25.680
50	21.607	21.597	36.816	219.2	0.117	25.712
75	21.452	21.437	36.804	217.4	0.174	25.747
100	21.368	21.348	36.801	215.7	0.231	25.770
125	21.152	21.128	36.792	210.8	0.287	25.823
150	20.545	20.517	36.776	201.1	0.340	25.978
200	19.466	19.429	36.692	193.9	0.438	26.203
250	18.902	18.857	36.638	195.7	0.530	26.310
300	18.615	18.562	36.612	197.3	0.619	26.366
400	17.946	17.876	36.522	195.5	0.793	26.469
500	16.676	16.593	36.300	180.2	0.959	26.609
600	14.554	14.463	35.943	168.7	1.111	26.817
700	11.992	11.898	35.564	151.1	1.242	27.046
800	10.147	10.050	35.332	144.6	1.353	27.203
900	8.337	8.239	35.160	153.2	1.450	27.363
1000	6.982	6.883	35.090	173.1	1.530	27.506
1100	5.912	5.811	35.078	207.6	1.597	27.639
1200	5.294	5.188	35.065	227.5	1.654	27.704
1300	4.800	4.690	35.037	241.9	1.706	27.740
1400	4.487	4.370	35.019	249.8	1.755	27.761
1500	4.263	4.140	35.004	255.1	1.803	27.774
1750	3.841	3.699	34.974	262.2	1.920	27.797
2000	3.651	3.488	34.973	262.6	2.036	27.817
2500	3.161	2.958	34.955	262.2	2.261	27.853
3000	2.727	2.482	34.930	264.1	2.477	27.875
3500	2.417	2.127	34.908	266.4	2.688	27.888
4000	2.300	1.958	34.896	265.8	2.900	27.892
4500	2.277	1.877	34.890	263.3	3.122	27.894
5000	2.219	1.759	34.877	258.1	3.354	27.892

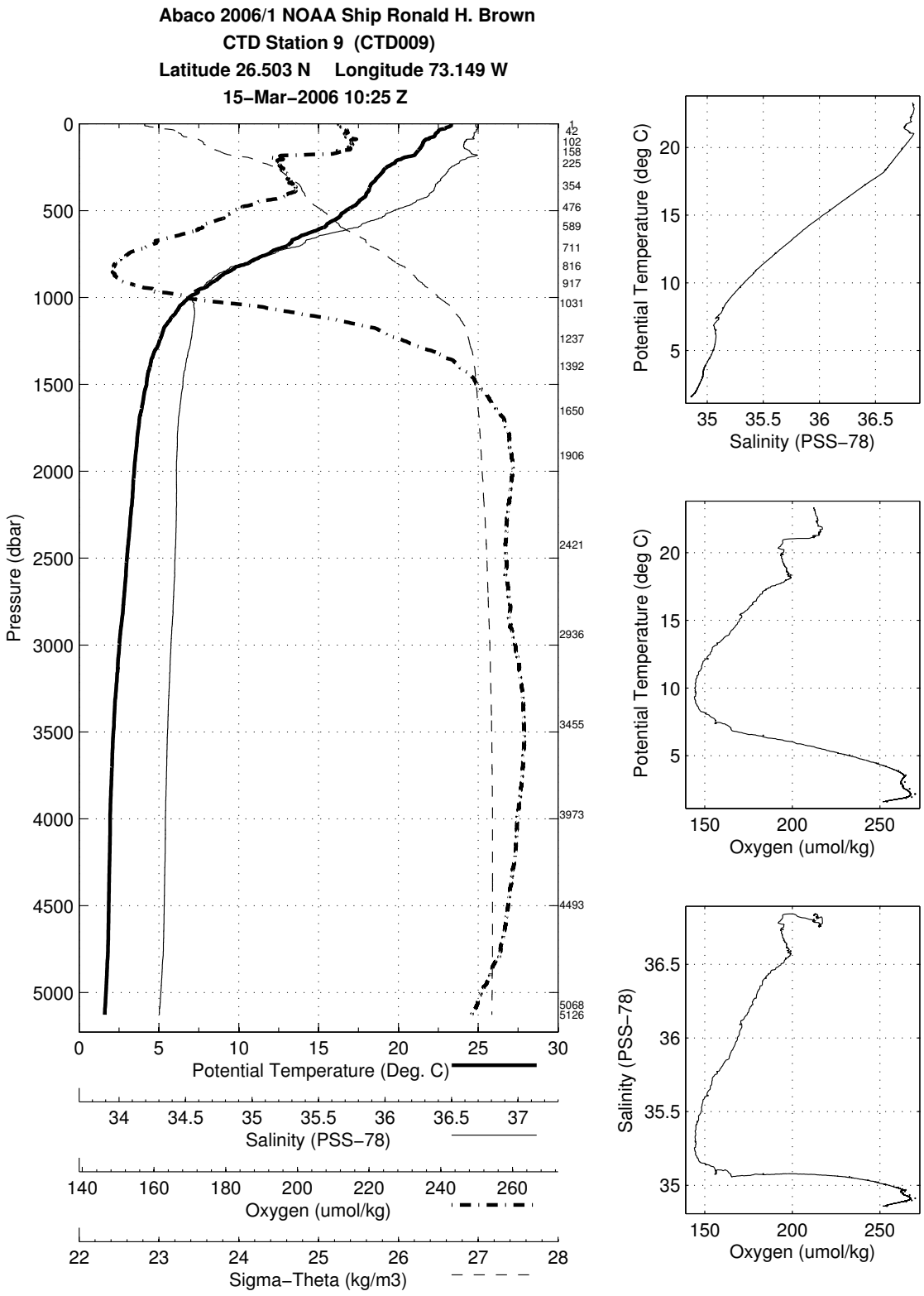
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5216	1	2.141	1.657	34.864	254.7
4868	2	2.243	1.799	34.883	261.3
4346	3	2.280	1.898	34.893	266.1
3825	4	2.337	2.013	34.902	269.0
3305	5	2.529	2.257	34.916	269.0
2786	6	2.899	2.673	34.939	266.4
2269	7	3.432	3.246	34.972	261.7
1856	8	3.723	3.573	34.969	264.8
1598	9	4.021	3.892	34.986	260.2
1135	11	5.610	5.508	35.076	217.5
980	12	7.109	7.011	35.090	170.3
877	13	8.594	8.497	35.182	151.3
775	15	10.546	10.450	35.378	144.3
673	16	12.707	12.614	35.663	152.8
569	17	15.576	15.486	36.118	172.3
406	18	18.019	17.948	36.541	198.6
283	19	18.713	18.663	36.623	197.7
179	21	19.813	19.779	36.725	193.4
129	22	21.262	21.237	36.801	213.2
62	23	21.587	21.575	36.818	217.7
2	24	22.065	22.065	36.820	217.4


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 8 (CTD008)
Latitude 26.499 N Longitude 72.768 W
15−Mar−2006 04:20 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 9 (CTD009)
Latitude 26.503N Longitude 73.149W
15-Mar-2006 10:25Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.311	23.310	36.834	211.9	0.003	25.234
10	23.307	23.305	36.832	212.2	0.027	25.235
20	23.077	23.073	36.835	212.9	0.054	25.305
30	22.845	22.839	36.844	213.3	0.081	25.380
50	22.443	22.433	36.827	214.6	0.131	25.484
75	22.242	22.227	36.818	214.2	0.193	25.536
100	21.637	21.618	36.769	216.0	0.253	25.670
125	21.507	21.482	36.756	215.6	0.312	25.698
150	21.303	21.273	36.783	215.1	0.369	25.777
200	20.277	20.239	36.773	194.6	0.478	26.051
250	19.335	19.289	36.680	194.6	0.576	26.231
300	18.843	18.789	36.633	196.6	0.668	26.324
400	18.073	18.003	36.545	197.1	0.843	26.455
500	16.793	16.709	36.318	180.5	1.011	26.596
600	15.301	15.207	36.067	170.9	1.166	26.749
700	13.174	13.075	35.741	155.2	1.303	26.952
800	10.766	10.665	35.410	145.1	1.423	27.156
900	8.670	8.570	35.177	146.4	1.523	27.325
1000	6.969	6.870	35.056	165.5	1.607	27.481
1100	6.044	5.942	35.078	201.8	1.675	27.622
1200	5.339	5.233	35.062	225.6	1.733	27.697
1300	4.883	4.772	35.041	238.5	1.786	27.734
1400	4.548	4.431	35.021	248.0	1.836	27.756
1500	4.351	4.227	35.006	253.2	1.885	27.767
1750	3.860	3.719	34.974	262.2	2.004	27.794
2000	3.611	3.449	34.964	264.2	2.119	27.814
2500	3.200	2.997	34.956	262.0	2.346	27.850
3000	2.760	2.514	34.930	264.9	2.566	27.873
3500	2.441	2.150	34.909	267.5	2.779	27.887
4000	2.286	1.943	34.896	265.4	2.992	27.893
4500	2.259	1.859	34.889	262.7	3.213	27.894
5000	2.138	1.681	34.867	254.7	3.443	27.890

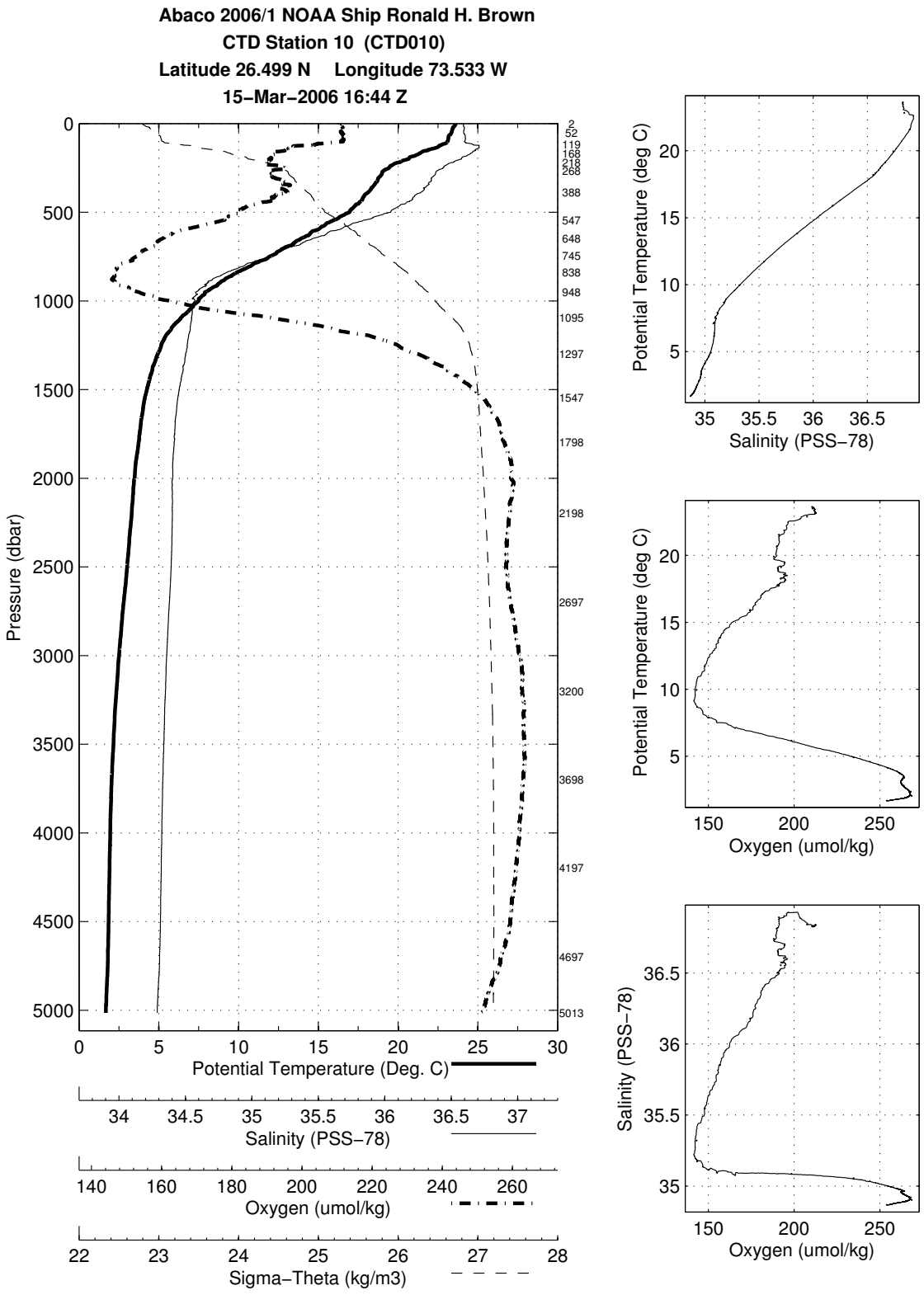
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5127	1	2.081	1.610	34.858	254.0
5069	2	2.108	1.643	34.864	254.4
4494	3	2.260	1.861	34.889	265.0
3973	4	2.284	1.945	34.897	268.2
3455	5	2.465	2.178	34.912	270.1
2936	6	2.799	2.559	34.933	266.9
2421	7	3.253	3.057	34.959	264.2
1906	8	3.717	3.563	34.968	264.8
1650	9	4.031	3.896	34.984	260.5
1392	10	4.553	4.437	35.021	248.9
1237	11	5.155	5.048	35.057	232.6
1031	12	6.622	6.523	35.077	183.4
918	13	8.239	8.140	35.141	150.7
816	15	9.782	9.685	35.296	144.8
711	16	12.291	12.194	35.609	151.8
590	17	15.458	15.365	36.092	170.2
477	18	17.325	17.244	36.407	184.9
354	19	18.407	18.344	36.590	199.0
226	20	19.930	19.888	36.737	194.6
159	21	21.156	21.125	36.804	212.3
103	22	21.523	21.503	36.760	215.2
42	23	22.230	22.221	36.813	214.1
2	24	23.143	23.143	36.839	212.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 9 (CTD009)
Latitude 26.503 N Longitude 73.149 W
15−Mar−2006 10:25 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 10 (CTD010)
Latitude 26.499N Longitude 73.533W
15-Mar-2006 16:44Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.610	23.610	36.828	211.2	0.003	25.142
10	23.566	23.564	36.826	211.1	0.028	25.154
20	23.446	23.442	36.832	211.9	0.056	25.195
30	23.414	23.408	36.832	211.9	0.084	25.205
50	23.363	23.352	36.828	211.7	0.139	25.218
75	23.176	23.160	36.838	212.9	0.207	25.282
100	23.132	23.111	36.835	212.2	0.275	25.294
125	22.588	22.563	36.925	197.8	0.341	25.521
150	21.905	21.875	36.902	193.9	0.402	25.699
200	20.695	20.657	36.814	189.5	0.512	25.969
250	19.459	19.413	36.695	194.7	0.611	26.210
300	18.904	18.850	36.631	190.7	0.703	26.307
400	18.007	17.937	36.524	192.1	0.881	26.456
500	17.044	16.959	36.361	180.6	1.049	26.569
600	14.980	14.888	36.018	163.1	1.202	26.782
700	12.994	12.896	35.708	152.9	1.339	26.963
800	10.928	10.827	35.428	143.7	1.460	27.140
900	8.884	8.783	35.186	143.0	1.563	27.298
1000	7.593	7.489	35.108	159.5	1.651	27.434
1100	6.459	6.354	35.088	191.4	1.726	27.576
1200	5.536	5.428	35.068	220.9	1.788	27.678
1300	5.041	4.929	35.049	235.3	1.843	27.722
1400	4.686	4.567	35.032	244.6	1.894	27.750
1500	4.375	4.251	35.008	252.3	1.944	27.766
1750	3.944	3.801	34.980	260.9	2.063	27.791
2000	3.639	3.477	34.966	263.6	2.181	27.813
2500	3.218	3.014	34.957	262.1	2.408	27.849
3000	2.753	2.508	34.928	266.2	2.627	27.872
3500	2.446	2.155	34.910	267.6	2.840	27.887
4000	2.298	1.955	34.897	266.2	3.053	27.893
4500	2.254	1.855	34.888	263.4	3.273	27.894
5000	2.143	1.686	34.868	254.9	3.503	27.890

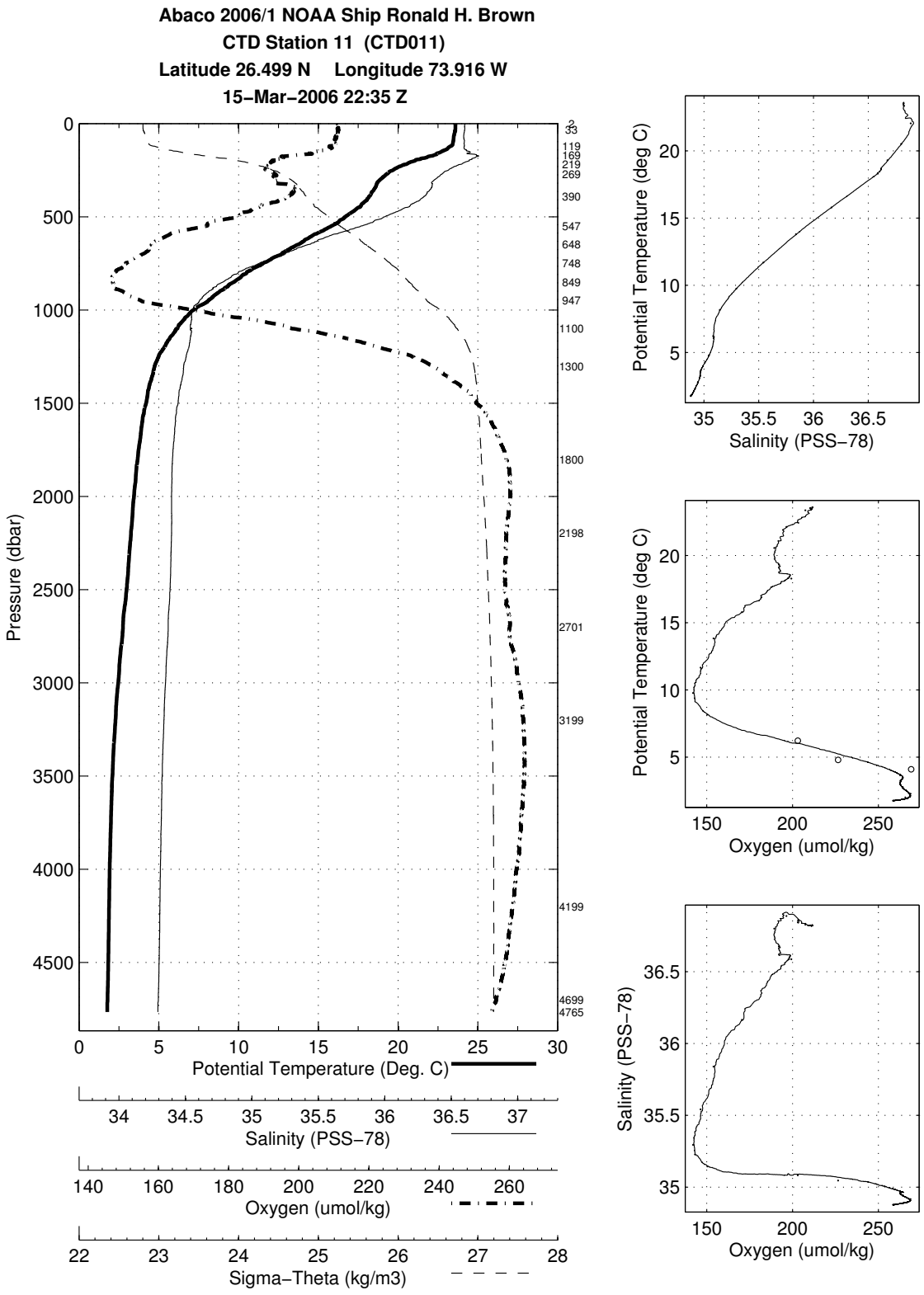
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5014	1	2.145	1.686	34.868	254.1
4698	2	2.226	1.804	34.883	260.4
4198	3	2.270	1.906	34.893	265.2
3699	4	2.348	2.038	34.902	268.5
3200	5	2.607	2.344	34.920	268.0
2698	6	3.028	2.807	34.945	264.0
2199	7	3.475	3.297	34.963	263.3
1799	8	3.868	3.722	34.976	261.9
1548	9	4.250	4.122	35.000	254.7
1298	10	5.038	4.925	35.055	234.8
1096	11	6.263	6.160	35.085	198.5
948	12	8.000	7.900	35.114	150.0
839	13	10.069	9.968	35.320	143.1
745	15	11.825	11.726	35.547	148.0
648	16	13.921	13.825	35.852	156.9
548	17	15.983	15.895	36.180	174.3
389	18	18.274	18.206	36.555	192.2
268	19	19.179	19.130	36.667	192.3
219	20	19.965	19.925	36.741	188.2
169	21	21.618	21.584	36.892	191.2
119	22	22.858	22.834	36.842	207.5
53	23	23.508	23.497	36.829	210.8
3	24	23.617	23.616	36.828	210.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 10 (CTD010)
Latitude 26.499 N Longitude 73.533 W
15−Mar−2006 16:44 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 11 (CTD011)
Latitude 26.499N Longitude 73.916W
15-Mar-2006 22:35Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.596	23.596	36.826	211.4	0.003	25.145
10	23.595	23.593	36.824	211.5	0.028	25.144
20	23.599	23.595	36.824	211.6	0.056	25.143
30	23.595	23.589	36.825	211.7	0.085	25.146
50	23.553	23.543	36.820	211.5	0.141	25.156
75	23.503	23.488	36.818	210.9	0.211	25.171
100	23.469	23.448	36.822	211.1	0.282	25.185
125	23.255	23.229	36.820	208.9	0.352	25.248
150	22.756	22.725	36.854	204.8	0.420	25.420
200	21.082	21.043	36.852	191.8	0.539	25.892
250	19.723	19.677	36.720	189.8	0.642	26.160
300	18.941	18.887	36.635	192.8	0.736	26.301
400	18.180	18.110	36.553	195.5	0.913	26.435
500	16.775	16.691	36.316	180.7	1.082	26.599
600	14.738	14.647	35.973	159.5	1.234	26.800
700	12.805	12.708	35.686	151.8	1.369	26.983
800	10.608	10.508	35.387	143.1	1.486	27.165
900	8.917	8.816	35.200	145.8	1.588	27.305
1000	7.287	7.186	35.099	167.1	1.676	27.470
1100	6.251	6.147	35.095	197.7	1.746	27.608
1200	5.456	5.349	35.074	223.9	1.806	27.693
1300	4.855	4.744	35.041	240.4	1.858	27.738
1400	4.546	4.429	35.023	248.6	1.908	27.758
1500	4.328	4.204	35.005	253.9	1.957	27.769
1750	3.871	3.729	34.973	262.2	2.076	27.793
2000	3.599	3.438	34.964	264.3	2.192	27.815
2500	3.183	2.979	34.955	262.8	2.417	27.851
3000	2.702	2.458	34.926	266.8	2.633	27.874
3500	2.382	2.092	34.905	268.6	2.843	27.888
4000	2.261	1.920	34.893	266.2	3.053	27.893
4500	2.229	1.830	34.885	262.7	3.273	27.893

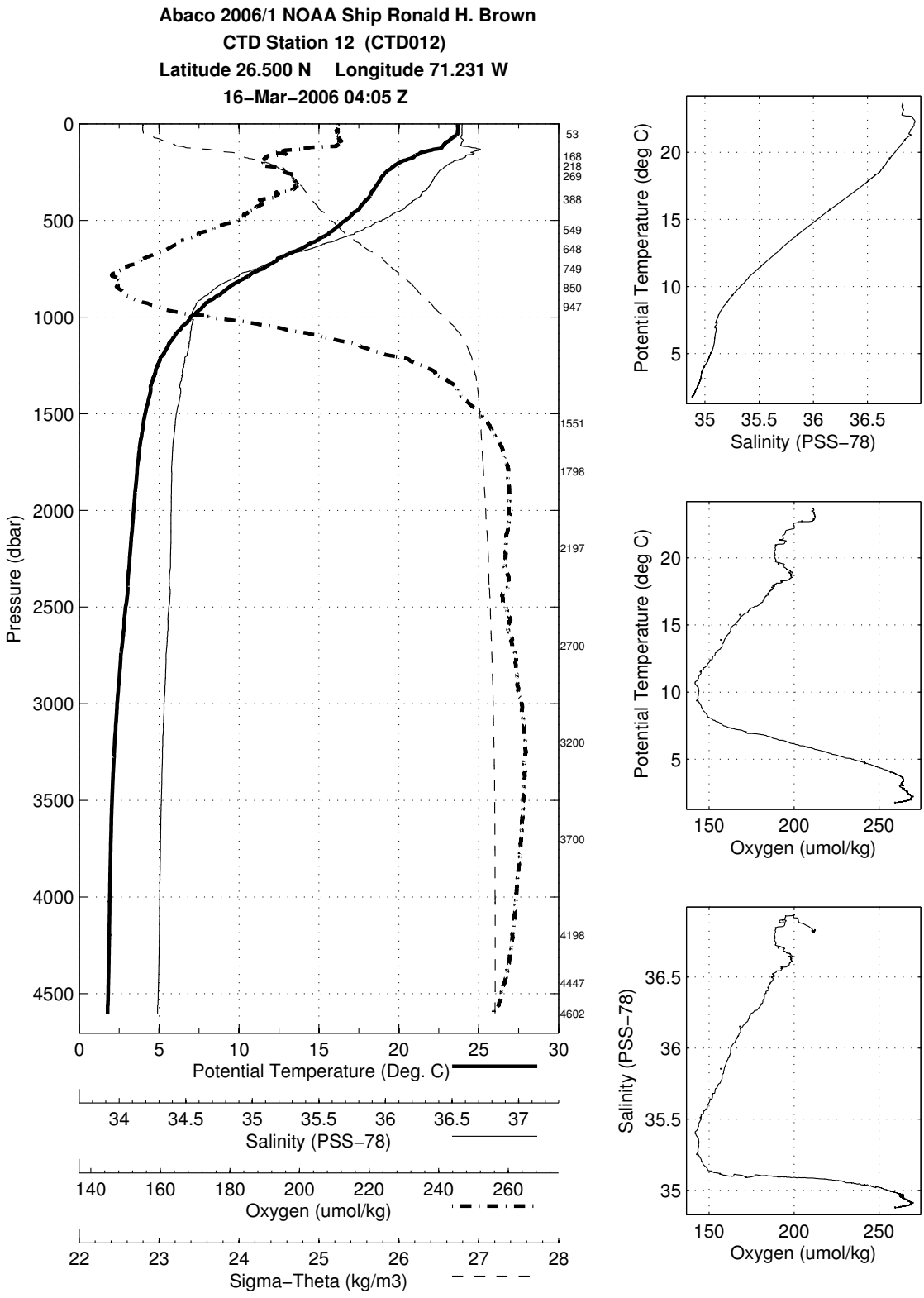
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4766	1	2.198	1.768	34.878	258.5
4699	2	2.210	1.787	34.880	259.2
4199	3	2.243	1.879	34.889	264.5
3200	5	2.545	2.284	34.916	268.7
2701	6	2.970	2.751	34.943	264.3
2199	7	3.433	3.255	34.964	262.8
1800	8	3.795	3.649	34.970	262.6
1301	10	4.908	4.797	35.046	226.6
1100	11	6.326	6.222	35.083	203.1
948	12	8.276	8.173	35.144	150.4
849	13	9.851	9.750	35.295	142.0
749	15	11.792	11.693	35.542	146.4
649	16	13.898	13.802	35.839	154.0
548	17	15.876	15.788	36.164	170.5
390	18	18.370	18.301	36.586	199.3
269	19	19.346	19.297	36.675	192.0
220	20	20.557	20.515	36.799	189.4
170	21	22.074	22.040	36.888	196.4
119	22	23.369	23.344	36.827	207.4
34	23	23.542	23.535	36.822	210.3
2	24	23.525	23.525	36.822	210.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 11 (CTD011)
Latitude 26.499 N Longitude 73.916 W
15−Mar−2006 22:35 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
2
33
119
169
219
269
390
547
648
748
849
947
1100
1300
1800
2198
2701
3199
4199
4699
4765
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
140 160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 12 (CTD012)
Latitude 26.500N Longitude 71.231W
16-Mar-2006 04:05Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.696	23.695	36.825	211.4	0.003	25.115
10	23.691	23.689	36.824	211.3	0.028	25.115
20	23.699	23.695	36.824	211.2	0.057	25.114
30	23.702	23.696	36.823	211.3	0.085	25.113
50	23.690	23.680	36.824	211.3	0.142	25.118
75	23.304	23.289	36.820	211.7	0.213	25.231
100	22.938	22.917	36.821	211.5	0.281	25.339
125	22.672	22.647	36.913	202.3	0.346	25.487
150	21.378	21.348	36.890	191.2	0.405	25.838
200	20.089	20.052	36.757	188.4	0.511	26.089
250	19.261	19.216	36.674	195.4	0.607	26.246
300	18.802	18.748	36.630	198.7	0.698	26.332
400	17.964	17.894	36.509	187.7	0.874	26.455
500	16.754	16.670	36.312	180.6	1.040	26.600
600	15.020	14.927	36.024	163.9	1.194	26.778
700	12.501	12.405	35.642	150.9	1.329	27.009
800	10.455	10.356	35.368	143.7	1.445	27.177
900	8.559	8.460	35.167	147.7	1.544	27.335
1000	7.059	6.959	35.090	171.9	1.627	27.495
1100	6.053	5.951	35.089	206.4	1.695	27.629
1200	5.296	5.190	35.066	228.0	1.753	27.705
1300	4.824	4.713	35.037	242.0	1.805	27.737
1400	4.536	4.420	35.024	249.0	1.854	27.760
1500	4.243	4.120	34.999	255.5	1.903	27.773
1750	3.820	3.679	34.971	263.2	2.020	27.796
2000	3.572	3.411	34.966	264.1	2.135	27.819
2500	3.104	2.903	34.951	263.1	2.358	27.855
3000	2.609	2.366	34.920	268.0	2.570	27.877
3500	2.343	2.054	34.903	268.6	2.777	27.890
4000	2.257	1.915	34.893	266.4	2.986	27.893
4500	2.212	1.813	34.883	261.9	3.205	27.893

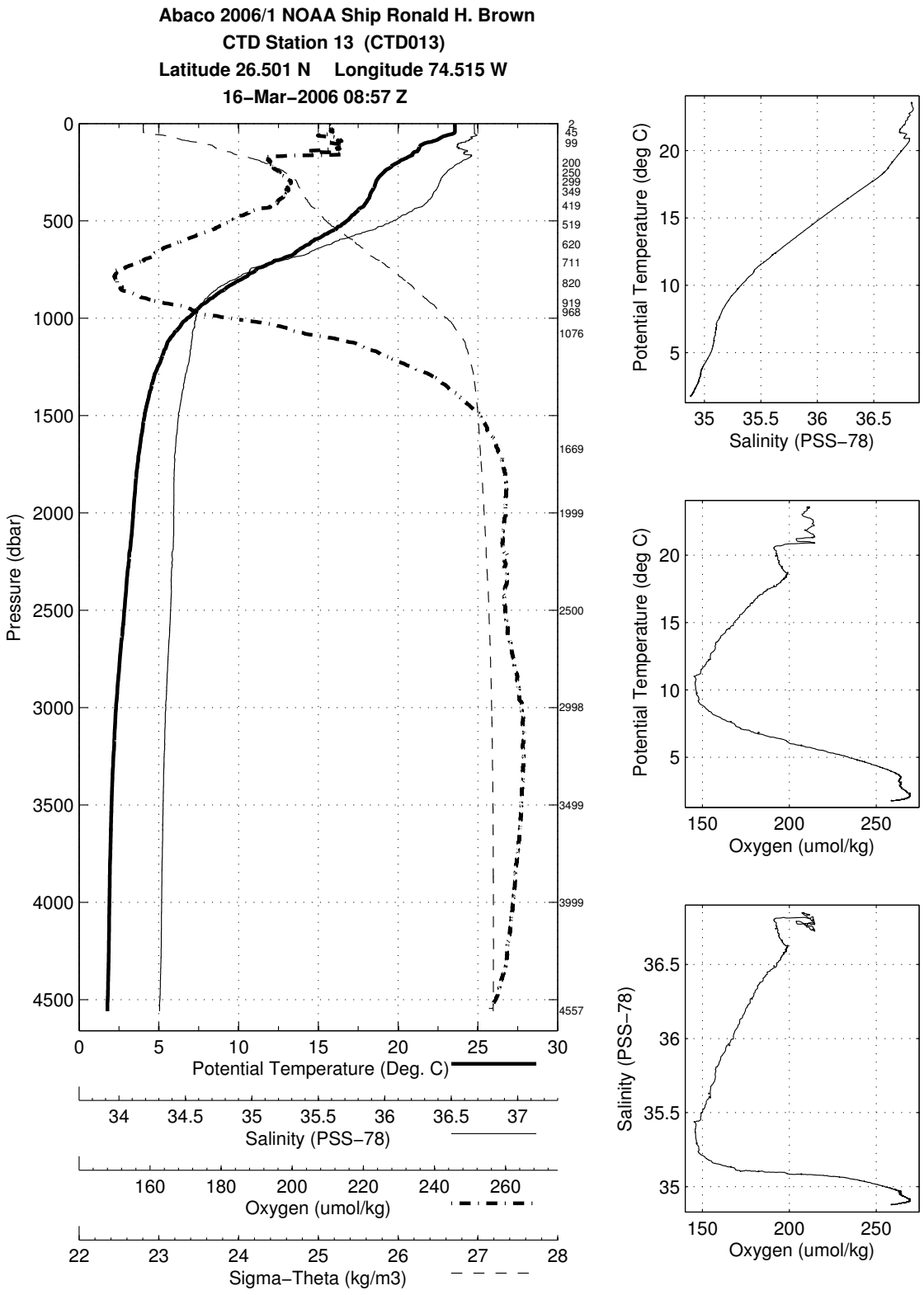
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4602	1	2.186	1.776	34.882	259.4
4447	2	2.215	1.823	34.885	262.6
4199	3	2.244	1.881	34.891	265.5
3700	4	2.290	1.981	34.899	268.7
3200	5	2.472	2.212	34.912	269.9
2700	6	2.862	2.645	34.937	266.3
2198	7	3.368	3.191	34.964	263.1
1799	8	3.771	3.626	34.972	263.8
1552	9	4.162	4.036	34.994	256.7
948	12	7.792	7.692	35.117	156.4
850	13	9.458	9.359	35.253	142.8
749	15	11.574	11.475	35.511	145.0
648	16	13.962	13.866	35.855	156.9
549	17	15.825	15.737	36.152	168.1
389	18	17.957	17.889	36.507	188.3
269	19	18.948	18.900	36.644	198.9
218	20	19.600	19.559	36.704	190.8
168	21	20.967	20.935	36.844	189.2
53	23	23.511	23.500	36.824	210.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 12 (CTD012)
Latitude 26.500 N Longitude 71.231 W
16−Mar−2006 04:05 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
53
168
218
269
388
549
648
749
850
947
1551
1798
2197
2700
3200
3700
4198
4447
4602
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
140 160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 13 (CTD013)
Latitude 26.501N Longitude 74.515W
16-Mar-2006 08:57Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.564	23.564	36.836	210.6	0.003	25.162
10	23.557	23.555	36.834	211.0	0.028	25.163
20	23.566	23.562	36.834	211.1	0.056	25.161
30	23.568	23.562	36.835	211.2	0.084	25.161
50	23.474	23.464	36.835	211.4	0.140	25.190
75	22.647	22.632	36.821	213.4	0.207	25.422
100	21.729	21.709	36.751	211.3	0.269	25.631
125	21.350	21.326	36.735	213.2	0.328	25.725
150	20.982	20.953	36.768	212.6	0.384	25.853
200	19.995	19.958	36.745	193.0	0.489	26.104
250	19.149	19.104	36.662	195.8	0.584	26.265
300	18.668	18.615	36.620	199.1	0.674	26.358
400	18.123	18.053	36.546	195.0	0.849	26.444
500	16.867	16.783	36.330	180.9	1.017	26.587
600	14.836	14.744	35.995	166.6	1.170	26.796
700	12.633	12.536	35.651	154.6	1.306	26.990
800	10.270	10.173	35.344	146.1	1.421	27.191
900	8.324	8.227	35.163	155.6	1.517	27.367
1000	6.872	6.773	35.103	180.9	1.597	27.531
1100	5.837	5.736	35.081	210.8	1.662	27.650
1200	5.308	5.202	35.067	228.7	1.718	27.704
1300	4.815	4.704	35.038	242.1	1.770	27.740
1400	4.499	4.382	35.017	249.9	1.820	27.759
1500	4.232	4.109	34.997	256.2	1.868	27.772
1750	3.806	3.665	34.971	263.1	1.986	27.798
2000	3.554	3.393	34.967	263.8	2.100	27.821
2500	3.037	2.836	34.947	263.8	2.320	27.858
3000	2.562	2.321	34.918	268.9	2.529	27.880
3500	2.323	2.035	34.901	268.6	2.733	27.890
4000	2.246	1.905	34.892	266.2	2.942	27.893
4500	2.193	1.795	34.881	261.0	3.161	27.893

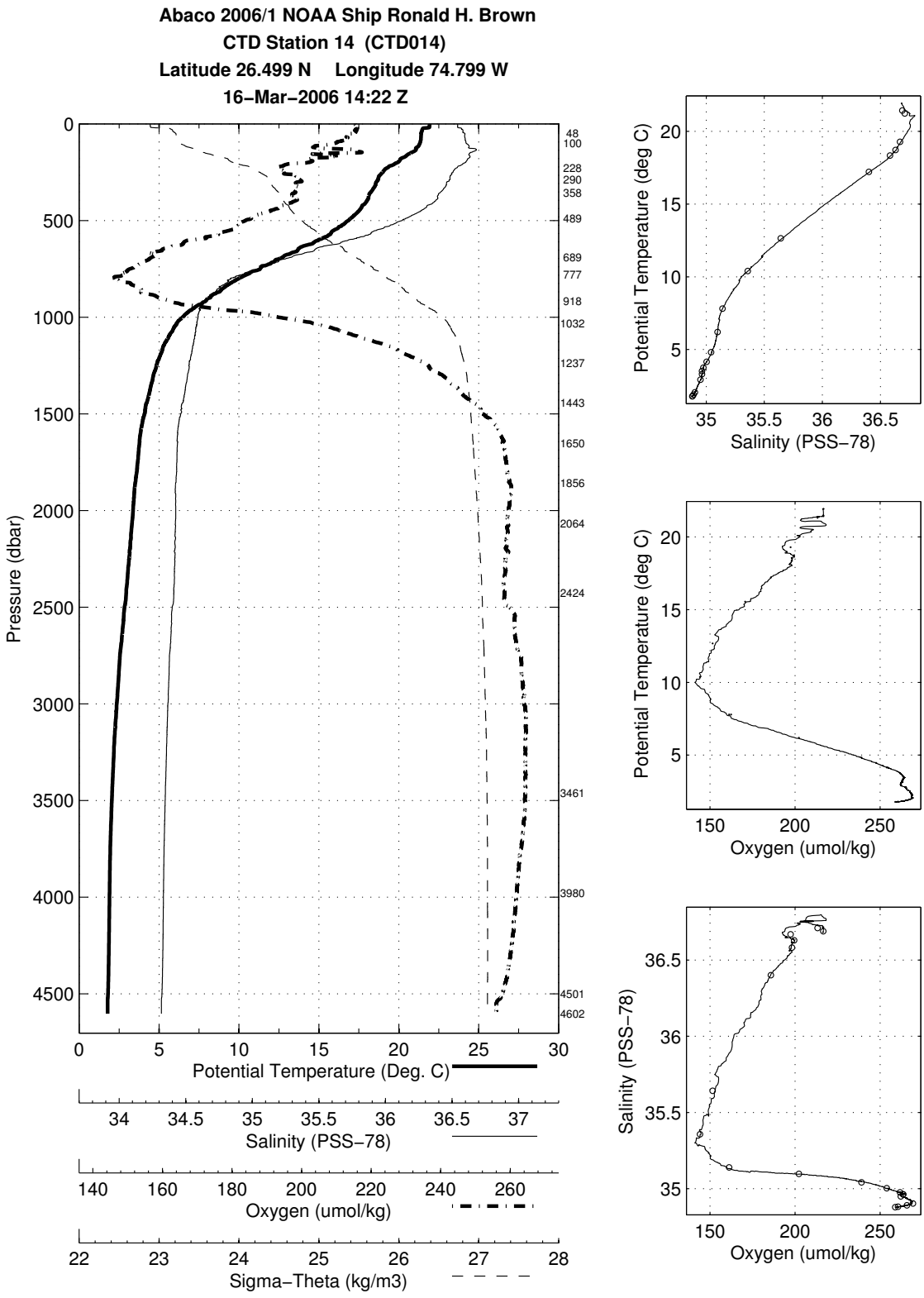
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4557	1	2.186	1.781	34.879	258.7
3999	2	2.246	1.905	34.891	266.2
3500	3	2.325	2.037	34.900	268.9
2999	4	2.566	2.325	34.917	269.3
2500	5	3.051	2.850	34.948	263.7
2000	6	3.576	3.415	34.967	263.5
1669	7	3.932	3.797	34.978	261.4
1076	9	5.981	5.881	35.085	206.9
969	10	6.921	6.825	35.104	182.3
920	11	7.712	7.616	35.133	166.3
821	12	9.824	9.726	35.293	146.8
712	13	12.475	12.377	35.629	153.7
620	15	14.615	14.521	35.955	165.6
519	16	16.512	16.426	36.268	178.4
419	17	17.792	17.720	36.489	191.2
350	18	18.426	18.364	36.588	198.2
299	19	18.752	18.698	36.626	199.0
250	20	19.181	19.136	36.662	195.7
201	21	19.997	19.959	36.742	192.2
99	22	21.934	21.914	36.771	209.1
46	23	23.523	23.513	36.835	210.4
3	24	23.523	23.523	36.836	210.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 13 (CTD013)
Latitude 26.501 N Longitude 74.515 W
16−Mar−2006 08:57 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 14 (CTD014)
Latitude 26.499N Longitude 74.799W
16-Mar-2006 14:22Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	21.929	21.928	36.682	216.2	0.002	25.517
10	21.930	21.929	36.683	216.6	0.025	25.517
20	21.815	21.811	36.689	216.6	0.049	25.555
30	21.463	21.457	36.712	216.4	0.073	25.671
50	21.413	21.403	36.726	215.6	0.119	25.698
75	21.401	21.387	36.728	213.6	0.177	25.703
100	21.333	21.314	36.734	210.0	0.234	25.728
125	21.095	21.071	36.751	205.1	0.291	25.808
150	20.772	20.744	36.758	215.4	0.346	25.903
200	19.969	19.931	36.729	201.5	0.448	26.100
250	19.053	19.008	36.655	195.2	0.543	26.285
300	18.654	18.600	36.617	198.8	0.632	26.360
400	18.063	17.993	36.546	197.5	0.806	26.458
500	16.937	16.853	36.344	182.2	0.973	26.581
600	15.059	14.966	36.019	166.1	1.129	26.765
700	12.538	12.441	35.624	152.5	1.265	26.988
800	10.088	9.992	35.300	141.2	1.380	27.188
900	8.280	8.182	35.165	155.6	1.476	27.376
1000	6.554	6.458	35.102	192.4	1.552	27.574
1100	5.698	5.598	35.082	217.0	1.613	27.668
1200	5.167	5.063	35.060	233.0	1.668	27.715
1300	4.752	4.642	35.038	243.1	1.719	27.746
1400	4.482	4.366	35.020	249.5	1.768	27.763
1500	4.204	4.082	34.996	255.4	1.816	27.775
1750	3.801	3.660	34.973	262.8	1.932	27.800
2000	3.534	3.373	34.966	263.5	2.045	27.823
2500	3.036	2.836	34.945	263.6	2.265	27.856
3000	2.587	2.345	34.918	268.2	2.475	27.878
3500	2.329	2.041	34.902	268.5	2.680	27.890
4000	2.235	1.894	34.891	265.8	2.889	27.893
4500	2.202	1.804	34.882	261.5	3.107	27.893

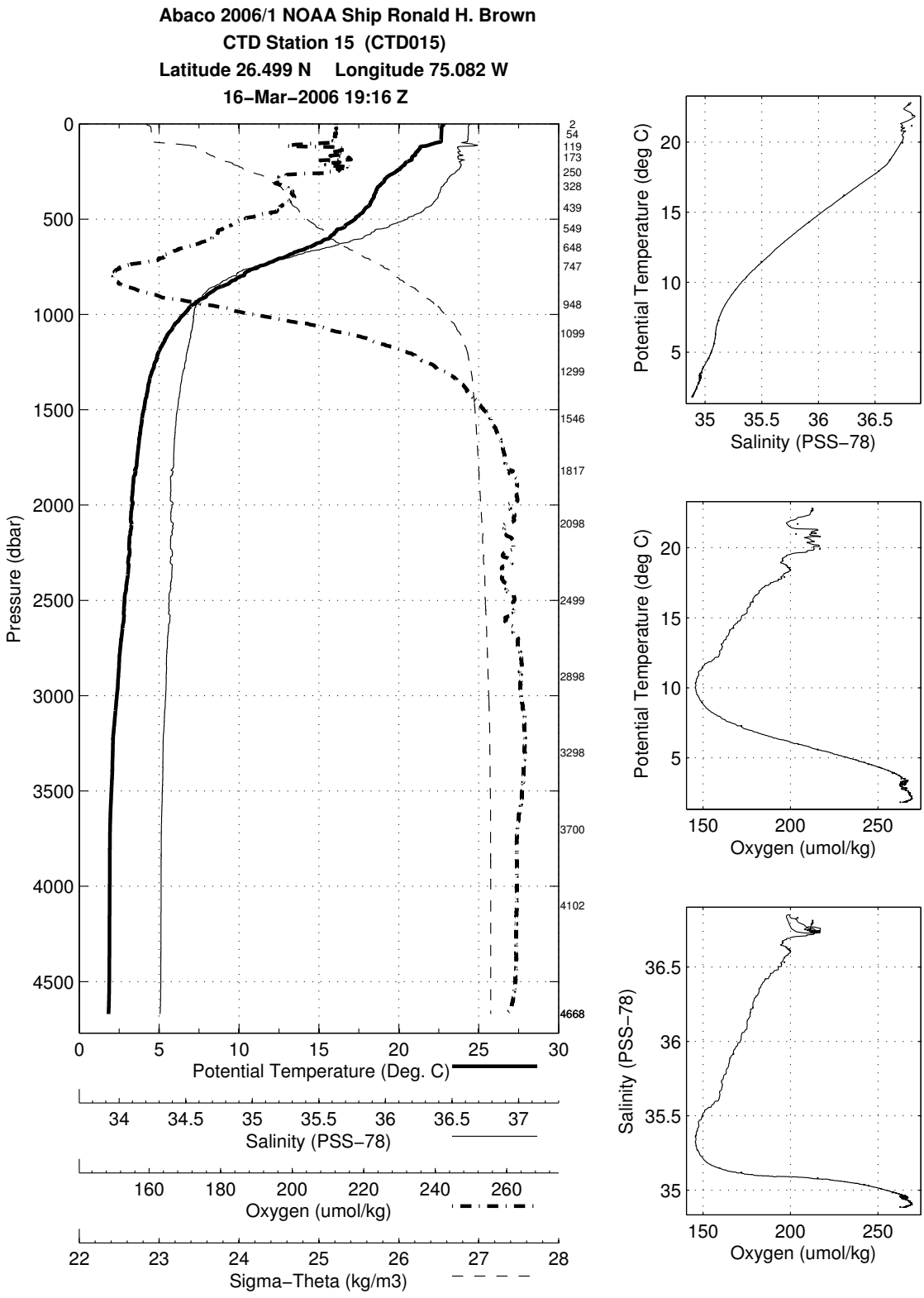
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4602	1	2.189	1.780	34.879	258.9
4502	2	2.201	1.803	34.882	260.6
3981	3	2.239	1.901	34.891	265.8
3461	4	2.344	2.060	34.903	269.3
2425	5	3.122	2.927	34.950	262.1
2065	6	3.479	3.313	34.963	263.6
1857	7	3.667	3.518	34.963	263.5
1650	8	3.885	3.752	34.975	261.7
1443	9	4.269	4.151	35.003	253.9
1237	11	4.921	4.815	35.041	239.0
1032	12	6.296	6.199	35.097	202.3
918	13	7.912	7.815	35.140	161.2
778	15	10.490	10.394	35.357	144.1
690	16	12.739	12.643	35.642	151.5
489	18	17.289	17.206	36.401	185.8
358	19	18.397	18.334	36.582	198.2
290	20	18.773	18.721	36.629	199.4
229	21	19.316	19.274	36.669	197.4
100	22	21.241	21.222	36.710	213.2
48	23	21.439	21.429	36.688	216.6


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 14 (CTD014)
Latitude 26.499 N Longitude 74.799 W
16−Mar−2006 14:22 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
48
100
228
290
358
489
689
777
918
1032
1237
1443
1650
1856
2064
2424
3461
3980
4501
4602
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
140 160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 15 (CTD015)
Latitude 26.499N Longitude 75.082W
16-Mar-2006 19:16Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.802	22.802	36.801	212.6	0.003	25.358
10	22.734	22.732	36.796	212.9	0.026	25.374
20	22.686	22.682	36.793	212.4	0.052	25.386
30	22.684	22.678	36.794	212.3	0.078	25.388
50	22.677	22.667	36.794	212.6	0.130	25.391
75	22.669	22.654	36.792	212.3	0.195	25.394
100	22.326	22.306	36.765	209.5	0.260	25.473
125	21.357	21.332	36.730	213.7	0.319	25.720
150	21.097	21.068	36.731	213.3	0.377	25.794
200	20.521	20.483	36.741	213.3	0.487	25.961
250	19.865	19.818	36.718	211.8	0.589	26.121
300	19.143	19.089	36.663	195.3	0.685	26.270
400	18.392	18.321	36.591	199.1	0.864	26.411
500	17.343	17.258	36.414	185.3	1.036	26.538
600	15.744	15.648	36.139	175.4	1.196	26.705
700	12.941	12.843	35.692	160.8	1.337	26.961
800	10.202	10.104	35.332	145.7	1.452	27.193
900	8.074	7.978	35.150	158.9	1.547	27.395
1000	6.618	6.522	35.094	187.9	1.622	27.558
1100	5.674	5.575	35.076	215.8	1.685	27.666
1200	5.050	4.947	35.051	234.1	1.739	27.722
1300	4.663	4.554	35.028	245.0	1.790	27.748
1400	4.401	4.285	35.010	252.0	1.838	27.764
1500	4.165	4.043	34.993	257.0	1.886	27.776
1750	3.771	3.631	34.970	263.3	2.002	27.800
2000	3.473	3.314	34.961	264.1	2.114	27.824
2500	3.047	2.846	34.942	266.3	2.335	27.853
3000	2.597	2.356	34.920	268.2	2.547	27.878
3500	2.303	2.016	34.900	268.5	2.750	27.890
4000	2.251	1.909	34.892	266.9	2.958	27.892
4500	2.282	1.881	34.890	266.5	3.178	27.893

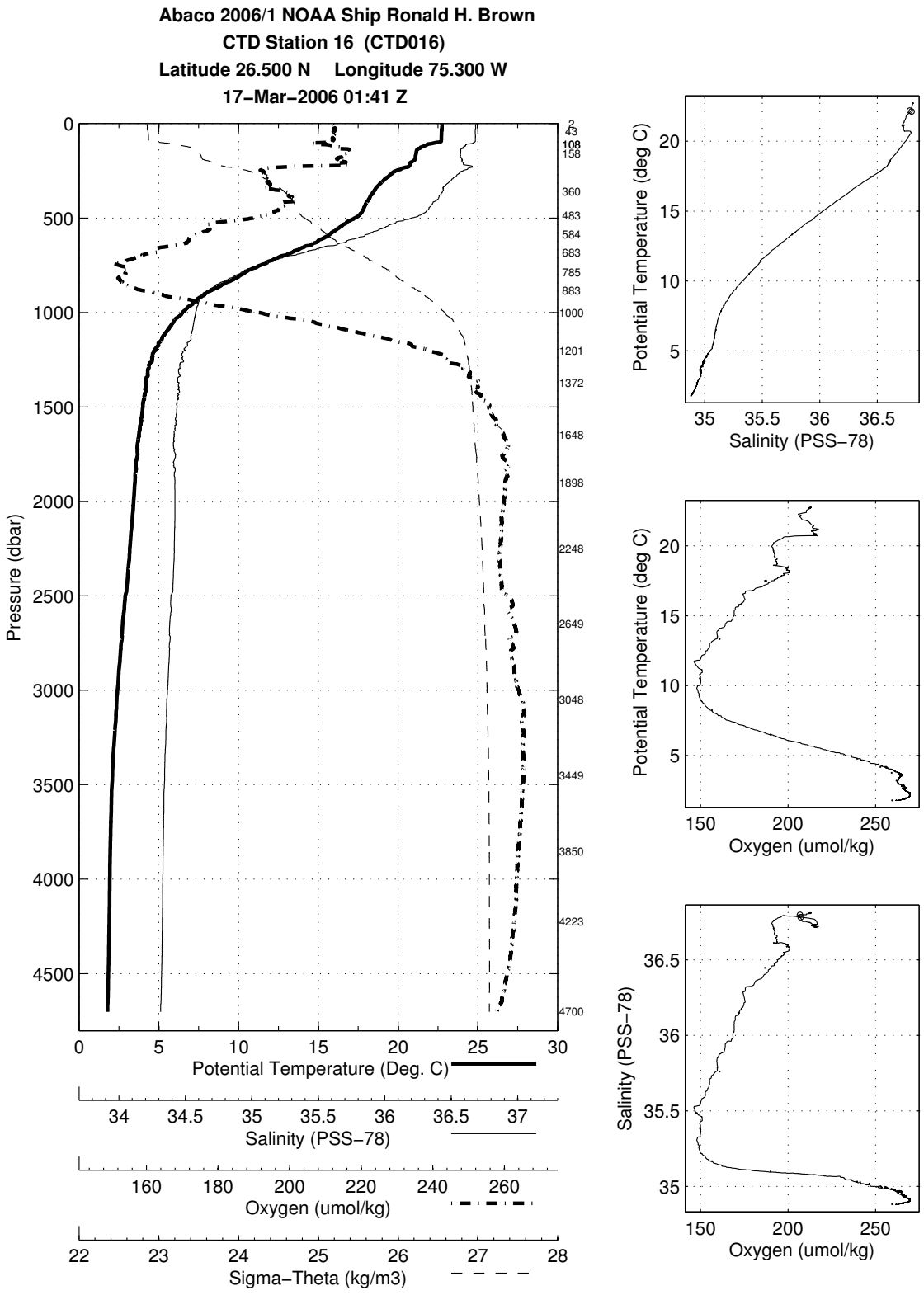
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4669	1	2.255	1.834	34.887	262.8
4102	2	2.258	1.905	34.894	266.2
3700	3	2.236	1.929	34.894	267.1
3299	4	2.356	2.089	34.905	269.5
2899	5	2.655	2.422	34.926	268.5
2500	6	3.028	2.827	34.943	266.5
2098	7	3.358	3.191	34.952	266.0
1818	8	3.689	3.543	34.969	263.4
1547	9	4.053	3.927	34.984	258.4
1299	10	4.672	4.563	35.032	244.7
1099	11	5.717	5.617	35.082	215.6
948	12	7.373	7.276	35.119	172.0
4669	1	2.255	1.834	34.888	262.8
748	15	11.565	11.467	35.496	149.7
648	16	14.386	14.289	35.916	167.4
549	17	16.300	16.211	36.227	178.4
440	18	18.018	17.942	36.533	196.6
329	19	18.797	18.738	36.632	197.7
251	20	20.009	19.962	36.741	216.8
174	21	21.210	21.176	36.823	203.1
120	22	21.936	21.912	36.830	204.1
54	23	22.698	22.687	36.803	212.7
3	24	22.806	22.806	36.812	212.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 15 (CTD015)
Latitude 26.499 N Longitude 75.082 W
16−Mar−2006 19:16 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 16 (CTD016)
Latitude 26.500N Longitude 75.300W
17-Mar-2006 01:41Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.744	22.744	36.813	212.6	0.003	25.384
10	22.750	22.748	36.811	212.8	0.026	25.381
20	22.755	22.751	36.811	212.9	0.052	25.380
30	22.739	22.733	36.809	212.7	0.078	25.384
50	22.730	22.720	36.808	212.8	0.130	25.387
75	22.731	22.716	36.810	212.2	0.195	25.389
100	22.409	22.389	36.799	210.5	0.260	25.475
125	21.447	21.423	36.733	214.7	0.321	25.697
150	21.178	21.149	36.719	216.5	0.378	25.762
200	20.928	20.889	36.727	215.1	0.492	25.839
250	19.919	19.872	36.734	191.3	0.598	26.119
300	19.167	19.112	36.662	193.6	0.694	26.263
400	18.243	18.173	36.580	201.0	0.873	26.440
500	17.357	17.272	36.417	188.4	1.044	26.537
600	15.536	15.441	36.104	169.8	1.203	26.725
700	12.845	12.747	35.670	154.8	1.344	26.963
800	10.284	10.186	35.351	150.0	1.461	27.194
900	7.991	7.896	35.146	159.9	1.556	27.404
1000	6.580	6.484	35.095	189.9	1.632	27.564
1100	5.592	5.494	35.073	218.7	1.693	27.674
1200	4.906	4.804	35.033	241.2	1.746	27.724
1300	4.423	4.316	34.990	251.9	1.796	27.744
1400	4.294	4.180	34.993	255.6	1.844	27.761
1500	4.124	4.002	34.981	259.3	1.892	27.771
1750	3.827	3.686	34.972	263.7	2.010	27.796
2000	3.579	3.418	34.967	263.8	2.124	27.819
2500	3.096	2.895	34.943	265.1	2.347	27.850
3000	2.651	2.408	34.922	268.2	2.562	27.875
3500	2.353	2.065	34.903	269.4	2.770	27.889
4000	2.268	1.926	34.893	267.6	2.980	27.892
4500	2.238	1.839	34.886	264.8	3.200	27.893

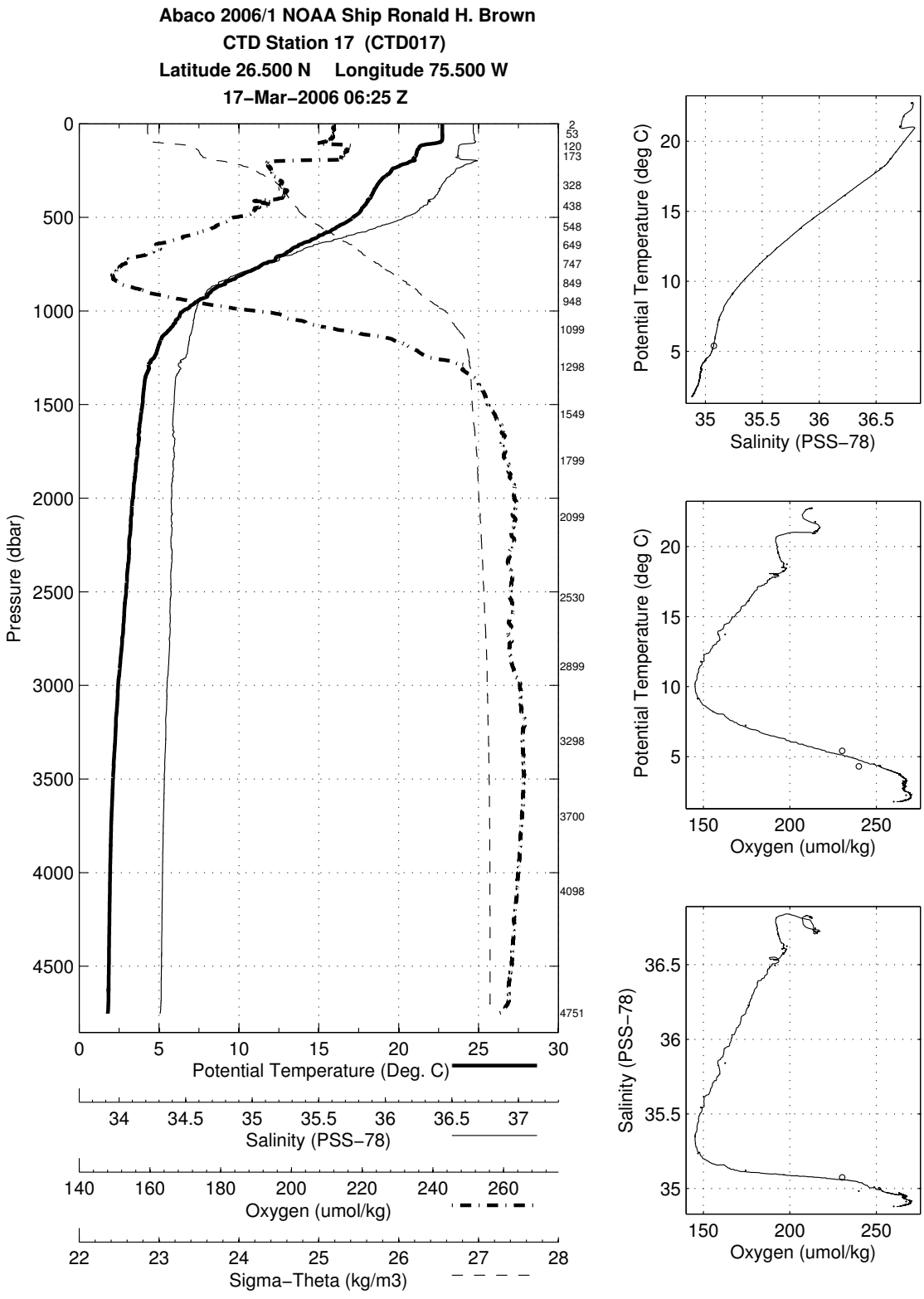
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4701	1	2.214	1.791	34.882	259.4
4224	2	2.261	1.893	34.891	265.6
3851	3	2.282	1.957	34.893	267.4
3450	4	2.380	2.096	34.905	269.4
3049	5	2.615	2.367	34.921	268.5
2649	6	2.946	2.732	34.934	266.7
2248	7	3.383	3.201	34.966	262.0
1899	8	3.669	3.516	34.966	264.0
1649	9	4.023	3.889	34.984	259.1
1372	10	4.372	4.260	35.000	252.7
1201	11	4.886	4.785	35.031	239.5
1001	12	6.603	6.506	35.098	190.0
883	13	8.332	8.236	35.167	156.5
785	15	10.595	10.497	35.386	149.5
684	16	13.424	13.326	35.760	160.9
585	17	15.848	15.754	36.149	172.0
484	18	17.547	17.465	36.447	186.8
361	19	18.478	18.414	36.600	199.8
158	20	21.178	21.147	36.732	214.7
109	21	22.216	22.194	36.782	207.2
109	22	22.151	22.129	36.798	206.8
43	23	22.723	22.715	36.810	212.2
2	24	22.719	22.718	36.810	212.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 16 (CTD016)
Latitude 26.500 N Longitude 75.300 W
17−Mar−2006 01:41 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 17 (CTD017)
Latitude 26.500N Longitude 75.500W
17-Mar-2006 06:25Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.734	22.734	36.816	212.3	0.003	25.389
10	22.734	22.732	36.814	211.7	0.026	25.388
20	22.741	22.737	36.814	212.4	0.052	25.386
30	22.744	22.737	36.814	212.3	0.078	25.387
50	22.747	22.737	36.816	212.4	0.130	25.388
75	22.751	22.736	36.821	211.8	0.195	25.392
100	22.527	22.507	36.822	208.5	0.260	25.459
125	21.316	21.291	36.724	216.6	0.320	25.727
150	21.173	21.143	36.721	215.9	0.377	25.765
200	20.835	20.797	36.826	193.7	0.489	25.940
250	19.590	19.544	36.704	193.4	0.590	26.183
300	18.966	18.912	36.644	195.3	0.684	26.301
400	18.267	18.197	36.568	195.3	0.862	26.424
500	17.246	17.162	36.393	181.9	1.033	26.545
600	15.069	14.976	36.030	167.3	1.190	26.772
700	12.919	12.821	35.693	155.2	1.327	26.966
800	10.424	10.325	35.365	145.3	1.445	27.181
900	8.313	8.216	35.166	155.7	1.541	27.371
1000	6.596	6.500	35.098	188.9	1.620	27.564
1100	5.737	5.638	35.078	213.4	1.682	27.660
1200	5.017	4.914	35.051	236.2	1.736	27.726
1300	4.469	4.362	35.001	252.5	1.786	27.748
1400	4.184	4.071	34.972	256.6	1.834	27.756
1500	4.078	3.957	34.965	259.1	1.882	27.763
1750	3.787	3.647	34.964	264.4	2.000	27.794
2000	3.527	3.367	34.951	267.1	2.116	27.811
2500	3.138	2.936	34.946	265.8	2.340	27.848
3000	2.682	2.438	34.923	268.8	2.557	27.874
3500	2.409	2.118	34.906	270.0	2.769	27.887
4000	2.281	1.939	34.894	268.4	2.980	27.892
4500	2.258	1.858	34.888	266.3	3.201	27.893

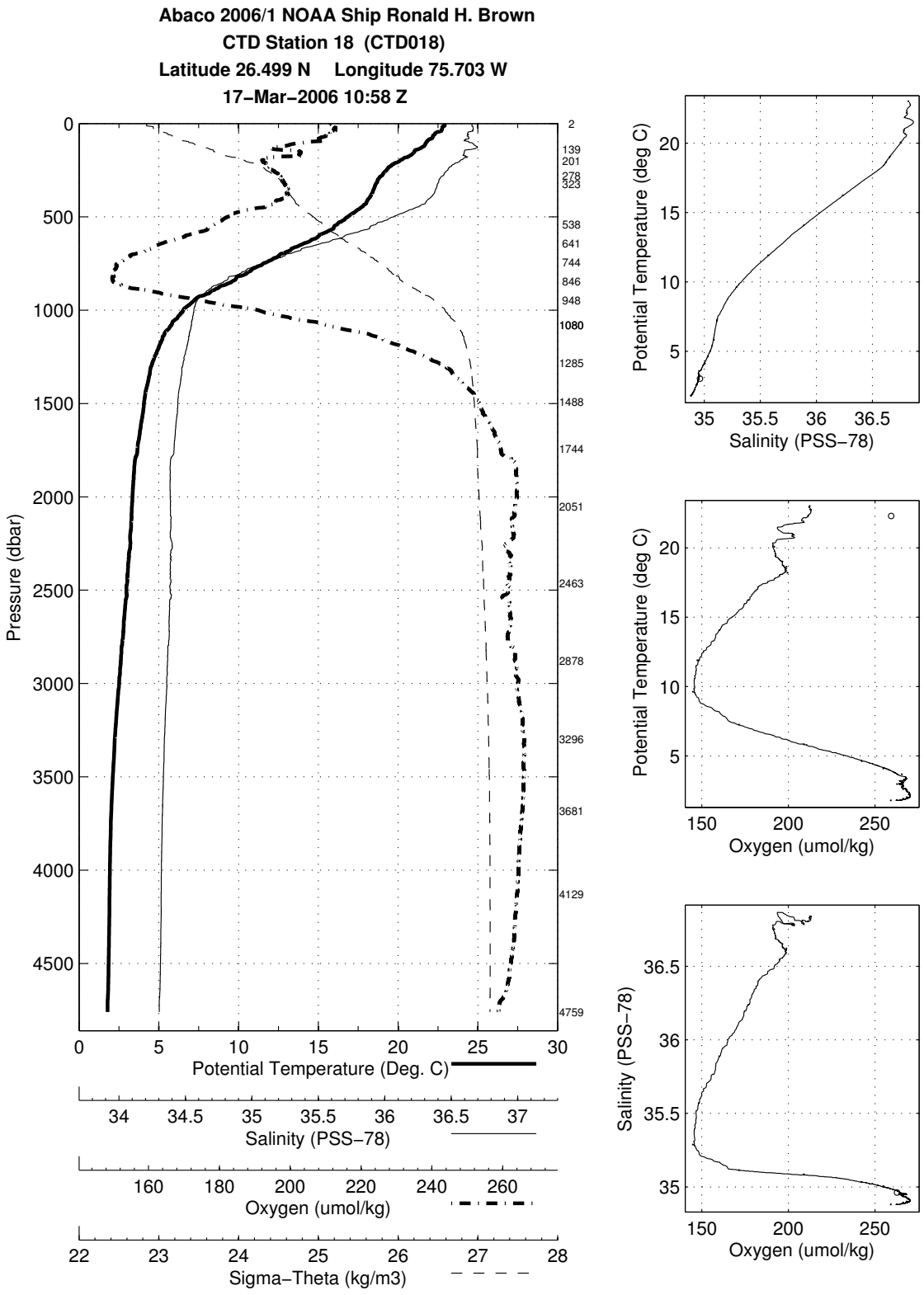
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4752	1	2.219	1.790	34.881	260.1
4098	2	2.274	1.921	34.893	266.8
3700	3	2.335	2.025	34.903	269.1
3299	4	2.527	2.255	34.913	267.2
2899	5	2.782	2.546	34.932	266.5
2531	6	3.084	2.879	34.942	267.1
2100	7	3.460	3.291	34.953	265.5
1549	9	3.949	3.825	34.961	277.3
1800	8	3.691	3.547	34.956	265.3
1298	10	4.328	4.223	34.983	239.9
1099	11	5.498	5.400	35.074	230.3
948	12	7.350	7.254	35.121	174.4
849	13	9.201	9.104	35.236	146.9
748	15	11.899	11.799	35.543	148.6
649	16	13.889	13.794	35.841	162.5
549	17	16.220	16.131	36.227	176.0
439	18	17.866	17.790	36.495	191.4
329	19	18.796	18.737	36.624	198.3
174	20	21.091	21.058	36.711	215.7
120	21	21.807	21.784	36.744	214.7
53	22	22.738	22.727	36.818	212.6
3	23	22.723	22.722	36.812	212.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 17 (CTD017)
Latitude 26.500 N Longitude 75.500 W
17−Mar−2006 06:25 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 18 (CTD018)
Latitude 26.499N Longitude 75.703W
17-Mar-2006 10:58Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.917	22.916	36.833	211.8	0.003	25.349
10	22.925	22.923	36.831	212.2	0.026	25.345
20	22.775	22.771	36.839	213.2	0.052	25.395
30	22.770	22.764	36.839	213.0	0.078	25.398
50	22.367	22.357	36.806	211.6	0.129	25.489
75	22.181	22.166	36.812	208.6	0.191	25.549
100	21.800	21.780	36.812	203.7	0.251	25.657
125	21.542	21.517	36.866	196.0	0.309	25.772
150	21.043	21.014	36.784	202.3	0.365	25.849
200	20.126	20.088	36.757	191.0	0.471	26.079
250	19.321	19.276	36.680	194.0	0.567	26.234
300	18.783	18.730	36.627	196.6	0.659	26.334
400	18.243	18.173	36.568	197.5	0.836	26.431
500	16.939	16.855	36.344	180.3	1.005	26.581
600	15.129	15.036	36.040	167.8	1.160	26.766
700	12.703	12.606	35.672	151.9	1.297	26.993
800	10.642	10.542	35.392	145.8	1.415	27.163
900	8.345	8.247	35.173	157.8	1.514	27.372
1000	6.634	6.537	35.096	189.9	1.590	27.558
1100	5.722	5.622	35.077	215.1	1.653	27.661
1200	5.088	4.984	35.052	234.0	1.707	27.719
1300	4.637	4.528	35.025	246.1	1.758	27.749
1400	4.389	4.273	35.010	252.0	1.806	27.765
1500	4.196	4.073	34.997	256.8	1.854	27.776
1750	3.798	3.657	34.972	263.3	1.971	27.799
2000	3.507	3.347	34.948	268.1	2.086	27.811
2500	3.176	2.973	34.949	265.5	2.312	27.847
3000	2.755	2.510	34.927	268.5	2.532	27.871
3500	2.407	2.117	34.906	270.2	2.744	27.887
4000	2.274	1.932	34.894	268.7	2.955	27.892
4500	2.253	1.853	34.888	266.3	3.176	27.893

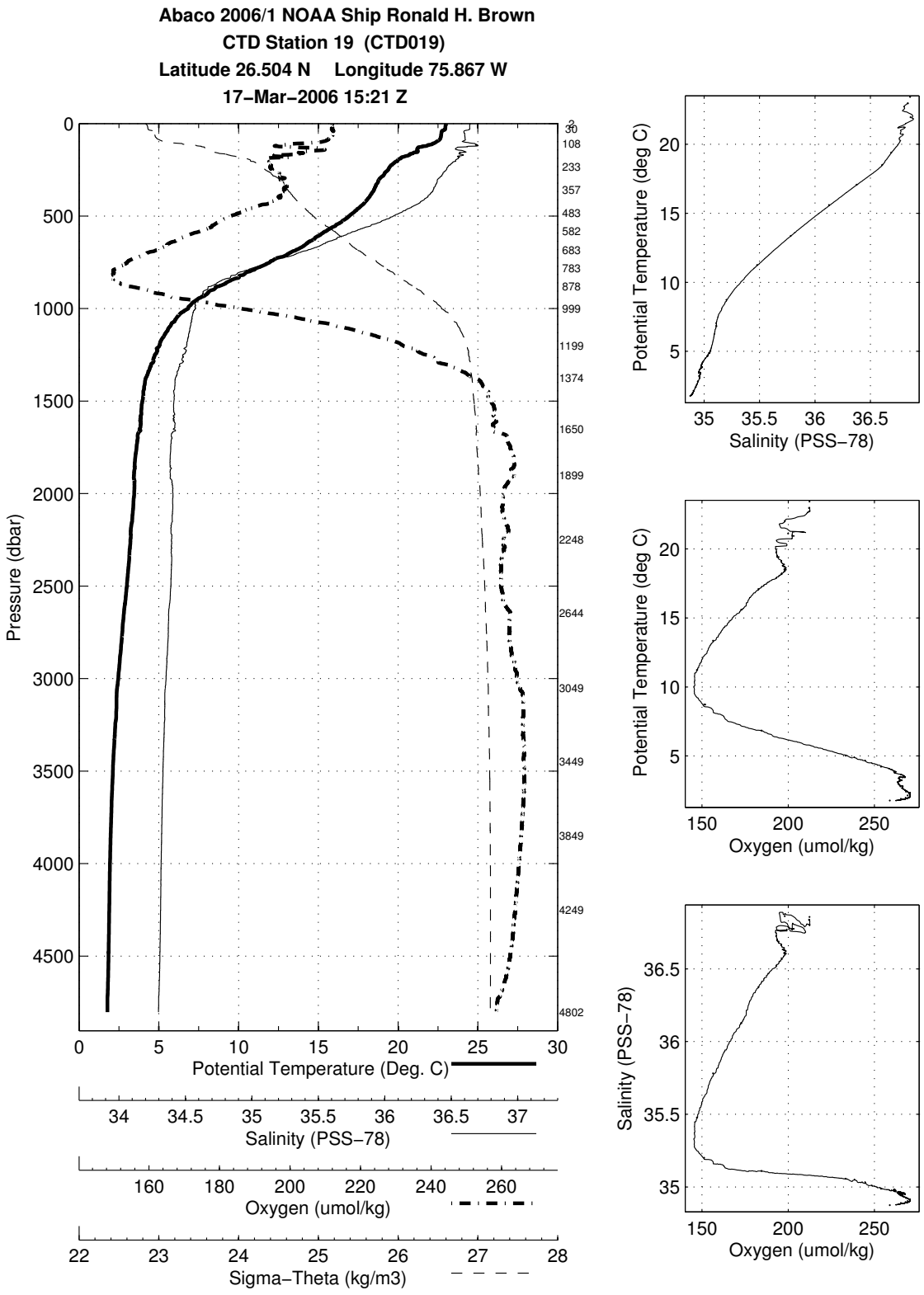
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4759	1	2.221	1.791	34.882	259.2
4129	2	2.273	1.916	34.894	266.3
3681	3	2.321	2.013	34.901	268.4
3296	4	2.497	2.227	34.915	269.5
2879	5	2.848	2.613	34.936	266.3
2464	6	3.220	3.020	34.962	262.7
2052	7	3.482	3.318	34.953	267.8
1744	8	3.722	3.583	34.954	265.5
1488	9	4.240	4.118	35.005	254.9
1285	10	4.741	4.633	35.033	242.4
1081	11	5.928	5.828	35.084	208.9
949	12	7.359	7.263	35.115	171.5
1081	11	5.928	5.828	35.086	208.9
847	13	9.730	9.629	35.288	144.9
744	15	12.018	11.918	35.570	148.3
642	16	14.176	14.080	35.888	160.1
539	17	16.337	16.249	36.237	176.9
324	19	18.690	18.632	36.621	198.8
278	20	19.048	18.998	36.652	196.5
202	21	20.101	20.064	36.751	191.9
140	22	20.947	20.920	36.779	203.1
2	24	23.021	23.021	36.821	212.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 18 (CTD018)
Latitude 26.499 N Longitude 75.703 W
17−Mar−2006 10:58 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 19 (CTD019)
Latitude 26.504N Longitude 75.867W
17-Mar-2006 15:21Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.012	23.011	36.839	212.3	0.003	25.326
10	22.976	22.974	36.836	212.0	0.026	25.334
20	22.969	22.964	36.836	212.1	0.053	25.337
30	22.962	22.956	36.836	212.1	0.079	25.340
50	22.727	22.717	36.801	212.2	0.131	25.382
75	22.686	22.671	36.806	211.9	0.197	25.399
100	22.393	22.373	36.806	208.2	0.261	25.485
125	21.535	21.510	36.822	197.9	0.321	25.740
150	21.277	21.248	36.804	204.0	0.378	25.800
200	20.005	19.968	36.747	192.9	0.482	26.104
250	19.419	19.373	36.688	194.0	0.579	26.216
300	18.873	18.819	36.636	197.0	0.671	26.319
400	18.237	18.167	36.565	196.6	0.849	26.430
500	17.014	16.930	36.355	181.4	1.018	26.571
600	15.240	15.146	36.061	168.8	1.174	26.757
700	13.277	13.177	35.756	155.8	1.314	26.942
800	10.760	10.659	35.405	145.7	1.435	27.152
900	8.433	8.335	35.177	156.2	1.535	27.362
1000	6.917	6.819	35.109	184.7	1.614	27.530
1100	5.757	5.658	35.079	215.0	1.678	27.658
1200	5.137	5.033	35.055	233.8	1.733	27.715
1300	4.620	4.511	35.011	246.5	1.784	27.740
1400	4.245	4.132	34.982	257.6	1.833	27.758
1500	4.090	3.968	34.975	260.6	1.880	27.770
1750	3.745	3.605	34.955	266.5	1.998	27.791
2000	3.621	3.459	34.969	264.3	2.113	27.817
2500	3.202	2.999	34.956	263.6	2.339	27.850
3000	2.707	2.462	34.926	268.7	2.556	27.874
3500	2.409	2.118	34.907	270.7	2.767	27.887
4000	2.279	1.937	34.895	269.1	2.979	27.892
4500	2.247	1.848	34.887	266.5	3.199	27.893

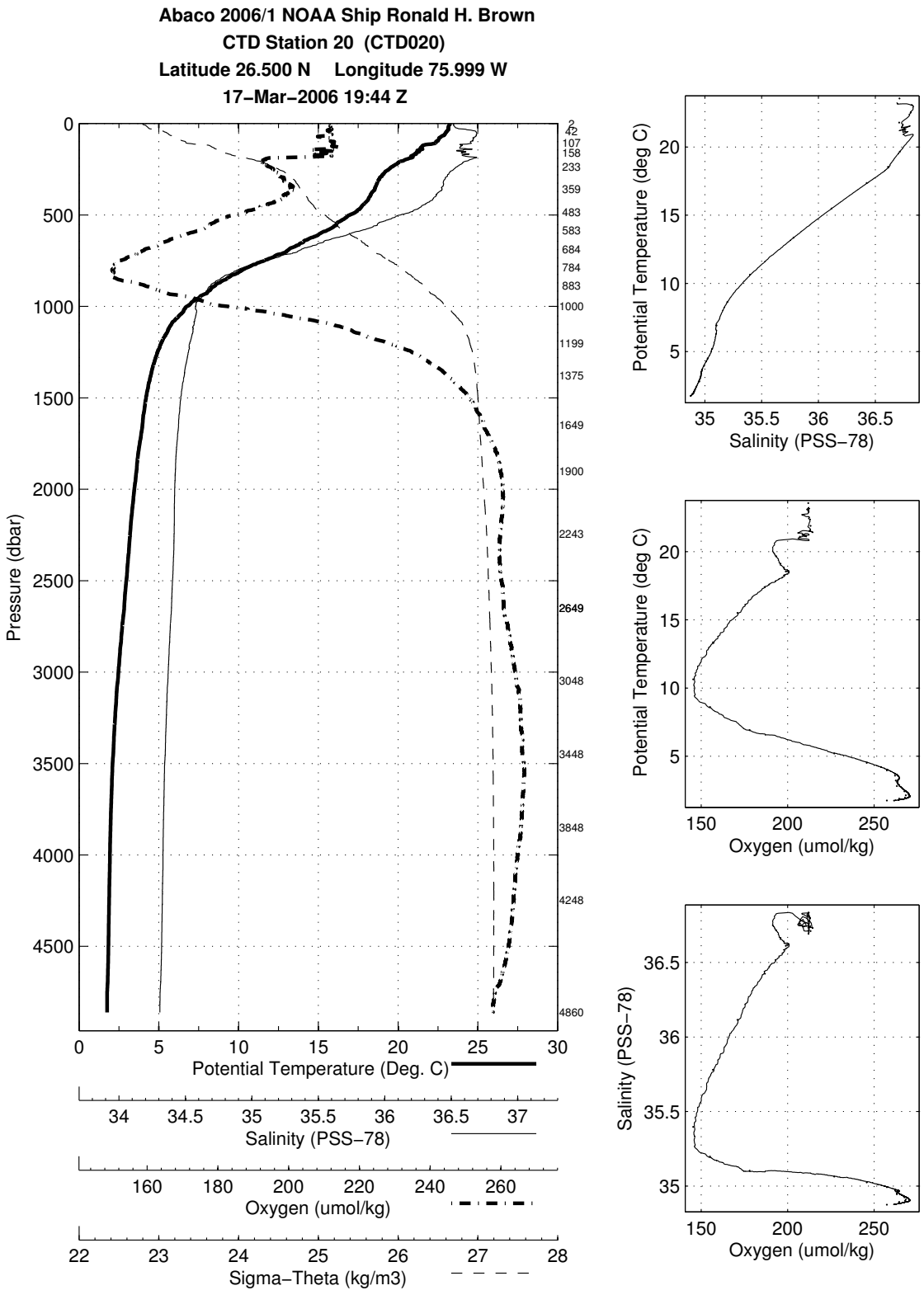
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4803	1	2.214	1.779	34.876	258.9
4250	2	2.264	1.893	34.891	265.3
3850	3	2.302	1.976	34.897	268.1
3449	4	2.423	2.138	34.905	269.2
3049	5	2.671	2.422	34.925	268.3
2645	6	3.020	2.805	34.943	265.1
2248	7	3.397	3.214	34.954	265.0
1900	8	3.594	3.442	34.953	266.4
1650	9	3.929	3.796	34.973	262.3
1374	10	4.343	4.230	34.989	253.8
1200	11	5.138	5.034	35.057	233.3
999	12	6.933	6.834	35.111	184.5
879	13	8.821	8.723	35.201	151.2
783	15	11.358	11.256	35.478	147.0
684	16	13.461	13.363	35.781	156.4
582	17	15.689	15.596	36.126	172.8
484	18	17.144	17.063	36.375	182.7
358	19	18.553	18.490	36.605	198.5
234	20	19.443	19.401	36.687	194.4
108	22	21.974	21.953	36.862	198.0
30	23	22.968	22.962	36.838	212.1
3	24	23.425	23.424	36.857	212.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 19 (CTD019)
Latitude 26.504 N Longitude 75.867 W
17−Mar−2006 15:21 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 20 (CTD020)
Latitude 26.500N Longitude 75.999W
17-Mar-2006 19:44Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.255	23.255	36.694	212.0	0.003	25.145
10	23.187	23.185	36.693	212.2	0.028	25.164
20	23.152	23.148	36.702	212.3	0.056	25.182
30	23.173	23.167	36.752	212.4	0.084	25.214
50	23.002	22.992	36.835	212.1	0.138	25.329
75	22.666	22.651	36.820	209.8	0.203	25.416
100	22.388	22.368	36.797	213.2	0.267	25.479
125	21.526	21.501	36.735	213.0	0.329	25.677
150	21.232	21.203	36.713	212.1	0.387	25.743
200	20.432	20.394	36.788	191.7	0.496	26.021
250	19.465	19.419	36.693	194.7	0.595	26.207
300	18.892	18.838	36.640	197.9	0.687	26.317
400	18.293	18.222	36.578	198.2	0.865	26.426
500	17.046	16.962	36.362	182.7	1.036	26.569
600	15.237	15.143	36.060	169.1	1.192	26.757
700	13.083	12.984	35.726	154.7	1.330	26.959
800	10.351	10.253	35.358	145.8	1.448	27.188
900	8.394	8.296	35.174	157.8	1.545	27.366
1000	6.853	6.755	35.096	180.9	1.625	27.528
1100	5.885	5.784	35.087	213.0	1.690	27.649
1200	5.262	5.157	35.061	229.7	1.746	27.705
1300	4.845	4.735	35.041	241.6	1.798	27.738
1400	4.553	4.435	35.022	249.1	1.848	27.757
1500	4.325	4.201	35.005	254.3	1.897	27.769
1750	3.944	3.801	34.981	261.4	2.017	27.792
2000	3.627	3.465	34.968	264.4	2.133	27.815
2500	3.164	2.961	34.954	264.0	2.358	27.852
3000	2.713	2.468	34.927	268.2	2.575	27.875
3500	2.390	2.101	34.906	270.8	2.784	27.888
4000	2.277	1.935	34.895	268.9	2.996	27.893
4500	2.241	1.842	34.887	266.2	3.215	27.893

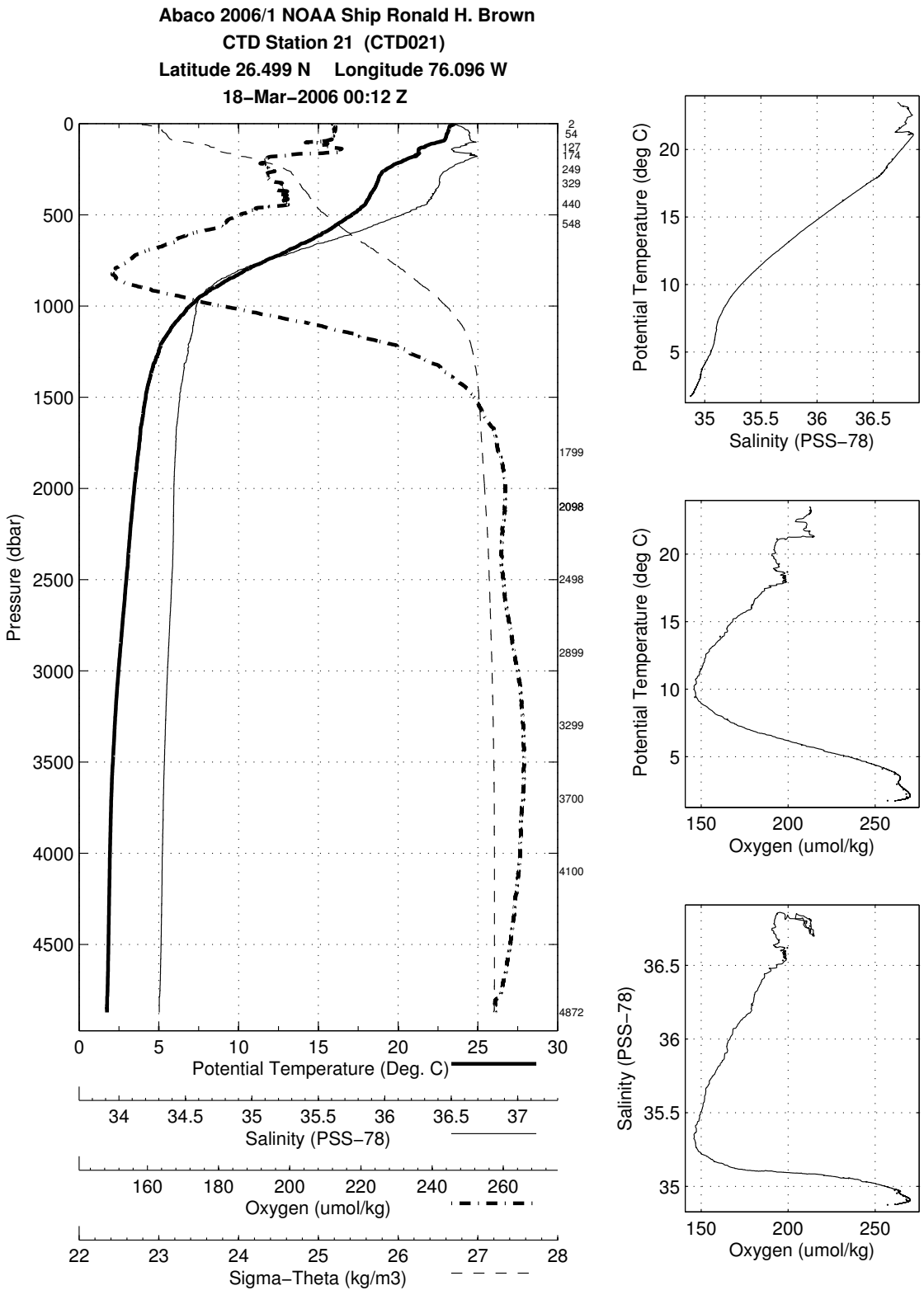
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4860	1	2.198	1.756	34.875	257.4
4248	2	2.259	1.889	34.893	264.6
3848	3	2.301	1.975	34.901	267.9
3448	4	2.421	2.136	34.909	268.4
3049	5	2.684	2.436	34.925	267.6
2649	6	3.035	2.820	34.952	263.2
2243	7	3.399	3.217	34.965	262.5
1900	8	3.742	3.588	34.972	262.2
1649	9	4.099	3.964	34.993	257.4
1376	10	4.625	4.509	35.025	245.7
1200	11	5.310	5.205	35.064	227.0
1000	12	7.024	6.925	35.103	178.1
884	13	8.732	8.634	35.198	155.1
785	15	10.741	10.643	35.397	145.4
685	16	13.458	13.360	35.779	156.8
583	17	15.583	15.491	36.115	171.0
483	18	17.443	17.360	36.424	186.8
359	19	18.592	18.528	36.612	198.9
234	20	19.700	19.657	36.716	193.4
159	21	21.175	21.145	36.762	207.1
108	22	21.814	21.793	36.710	213.3
43	23	23.077	23.068	36.820	212.1
2	24	23.554	23.554	36.712	212.0
2649	6	3.035	2.820	34.945	263.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 20 (CTD020)
Latitude 26.500 N Longitude 75.999 W
17−Mar−2006 19:44 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 21 (CTD021)
Latitude 26.499N Longitude 76.096W
18-Mar-2006 00:12Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.475	23.475	36.722	212.3	0.003	25.101
10	23.358	23.356	36.737	212.8	0.028	25.148
20	23.221	23.217	36.768	213.3	0.056	25.212
30	23.192	23.185	36.783	212.7	0.084	25.233
50	23.112	23.102	36.811	213.1	0.138	25.278
75	23.016	23.001	36.813	212.2	0.205	25.309
100	22.623	22.602	36.840	206.6	0.272	25.445
125	21.731	21.706	36.755	211.2	0.333	25.635
150	21.318	21.289	36.714	214.5	0.392	25.720
200	20.441	20.403	36.794	192.2	0.502	26.023
250	19.313	19.267	36.678	194.0	0.600	26.235
300	18.845	18.791	36.624	192.9	0.692	26.317
400	18.282	18.211	36.576	197.6	0.870	26.427
500	17.194	17.110	36.389	184.7	1.041	26.554
600	15.355	15.260	36.079	170.2	1.198	26.746
700	13.120	13.021	35.728	155.5	1.338	26.953
800	10.615	10.515	35.384	147.2	1.458	27.162
900	8.566	8.467	35.186	155.6	1.558	27.349
1000	7.045	6.946	35.107	178.9	1.639	27.511
1100	6.055	5.953	35.089	206.3	1.707	27.629
1200	5.304	5.198	35.063	228.0	1.764	27.702
1300	4.887	4.776	35.044	240.7	1.817	27.736
1400	4.545	4.428	35.022	249.2	1.867	27.758
1500	4.304	4.181	35.004	255.0	1.916	27.770
1750	3.921	3.779	34.979	261.8	2.035	27.793
2000	3.620	3.458	34.967	264.4	2.151	27.815
2500	3.164	2.961	34.955	263.9	2.375	27.853
3000	2.715	2.471	34.927	268.2	2.592	27.874
3500	2.413	2.123	34.908	270.1	2.803	27.888
4000	2.278	1.936	34.895	269.0	3.014	27.893
4500	2.242	1.843	34.887	265.9	3.234	27.894

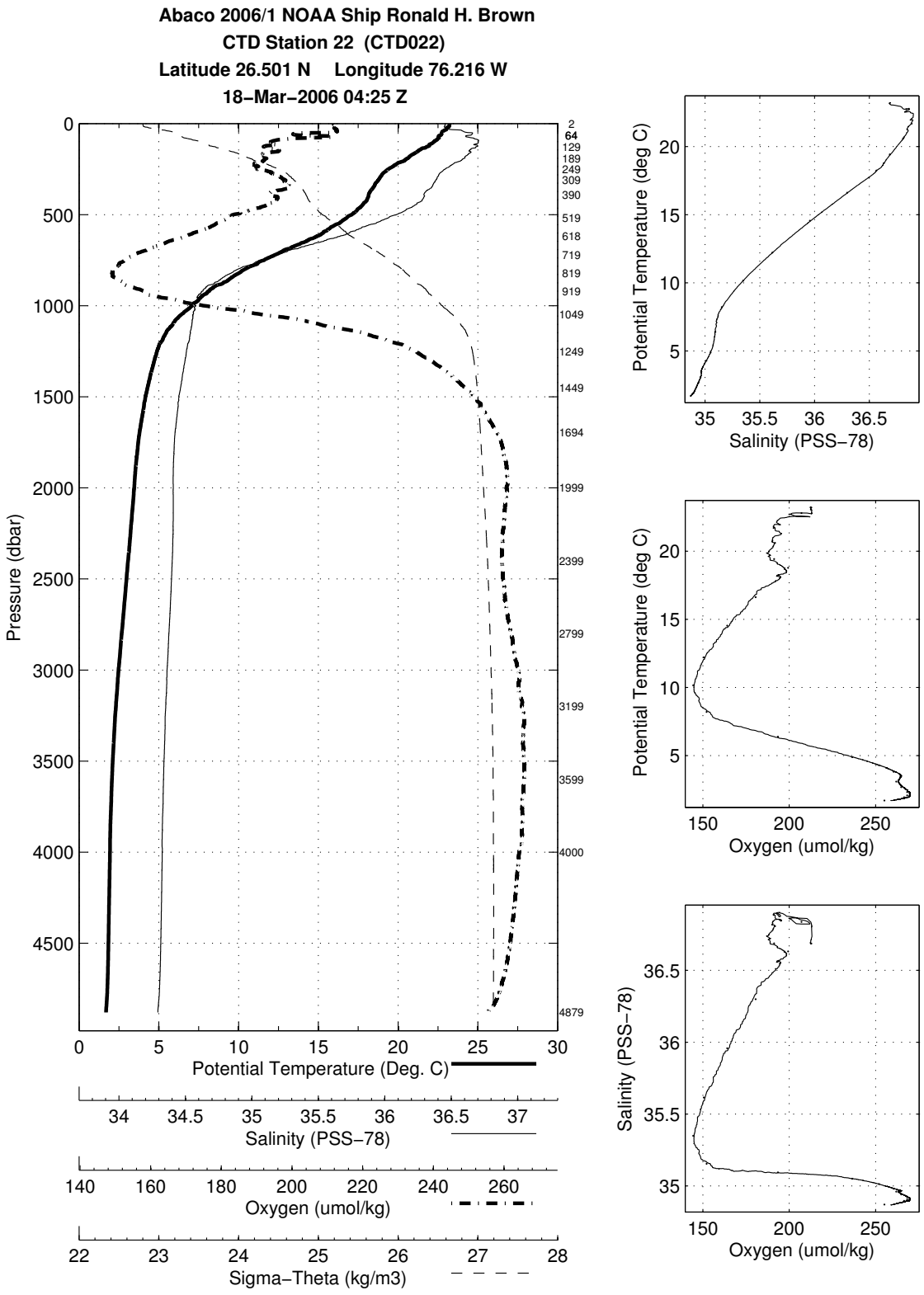
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4872	1	2.199	1.756	34.874	257.2
4100	2	2.269	1.916	34.894	NaN
3700	3	2.333	2.023	34.904	268.2
3299	4	2.509	2.238	34.913	267.9
2899	5	2.801	2.565	34.934	266.2
2499	6	3.169	2.966	34.952	262.5
2099	7	3.504	3.335	34.965	NaN
2099	7	3.504	3.335	34.964	NaN
1799	8	3.867	3.721	34.973	261.3
549	17	16.313	16.224	36.230	179.5
440	18	17.988	17.911	36.533	197.0
330	19	18.716	18.657	36.618	199.5
249	20	19.313	19.267	36.672	194.8
175	21	21.194	21.160	36.850	193.6
127	22	21.632	21.607	36.735	212.3
54	23	23.076	23.065	36.812	NaN
2	24	23.193	23.192	36.767	212.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 21 (CTD021)
Latitude 26.499 N Longitude 76.096 W
18−Mar−2006 00:12 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
2
54
127
174
249
329
440
548
1799
2098
2498
2899
3299
3700
4100
4872
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 22 (CTD022)
Latitude 26.501N Longitude 76.216W
18-Mar-2006 04:25Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.229	23.228	36.692	212.0	0.003	25.151
10	23.222	23.220	36.689	212.3	0.028	25.151
20	23.113	23.109	36.688	212.5	0.056	25.183
30	23.051	23.045	36.714	212.9	0.084	25.221
50	22.810	22.800	36.861	210.3	0.137	25.404
75	22.557	22.541	36.840	210.6	0.201	25.463
100	22.269	22.249	36.901	193.0	0.263	25.593
125	21.903	21.878	36.897	191.0	0.322	25.694
150	21.275	21.246	36.843	195.1	0.379	25.830
200	20.483	20.445	36.796	191.1	0.486	26.013
250	19.433	19.387	36.691	189.1	0.584	26.214
300	18.901	18.847	36.640	196.5	0.677	26.315
400	18.203	18.133	36.558	194.8	0.854	26.433
500	17.186	17.102	36.383	181.6	1.024	26.552
600	15.402	15.307	36.085	169.5	1.181	26.741
700	12.869	12.771	35.692	154.3	1.320	26.976
800	10.481	10.382	35.375	145.3	1.437	27.178
900	8.498	8.399	35.171	151.4	1.537	27.348
1000	7.181	7.080	35.110	172.8	1.620	27.494
1100	5.990	5.889	35.085	207.5	1.687	27.634
1200	5.249	5.144	35.064	229.7	1.744	27.710
1300	4.834	4.724	35.041	241.6	1.796	27.740
1400	4.548	4.431	35.022	249.0	1.845	27.757
1500	4.284	4.161	35.002	255.2	1.894	27.770
1750	3.851	3.709	34.973	263.0	2.012	27.795
2000	3.620	3.458	34.967	264.6	2.128	27.815
2500	3.180	2.977	34.955	263.6	2.353	27.852
3000	2.715	2.471	34.927	268.3	2.571	27.874
3500	2.401	2.111	34.908	270.0	2.781	27.889
4000	2.281	1.939	34.896	268.5	2.992	27.893
4500	2.240	1.841	34.887	265.8	3.212	27.894

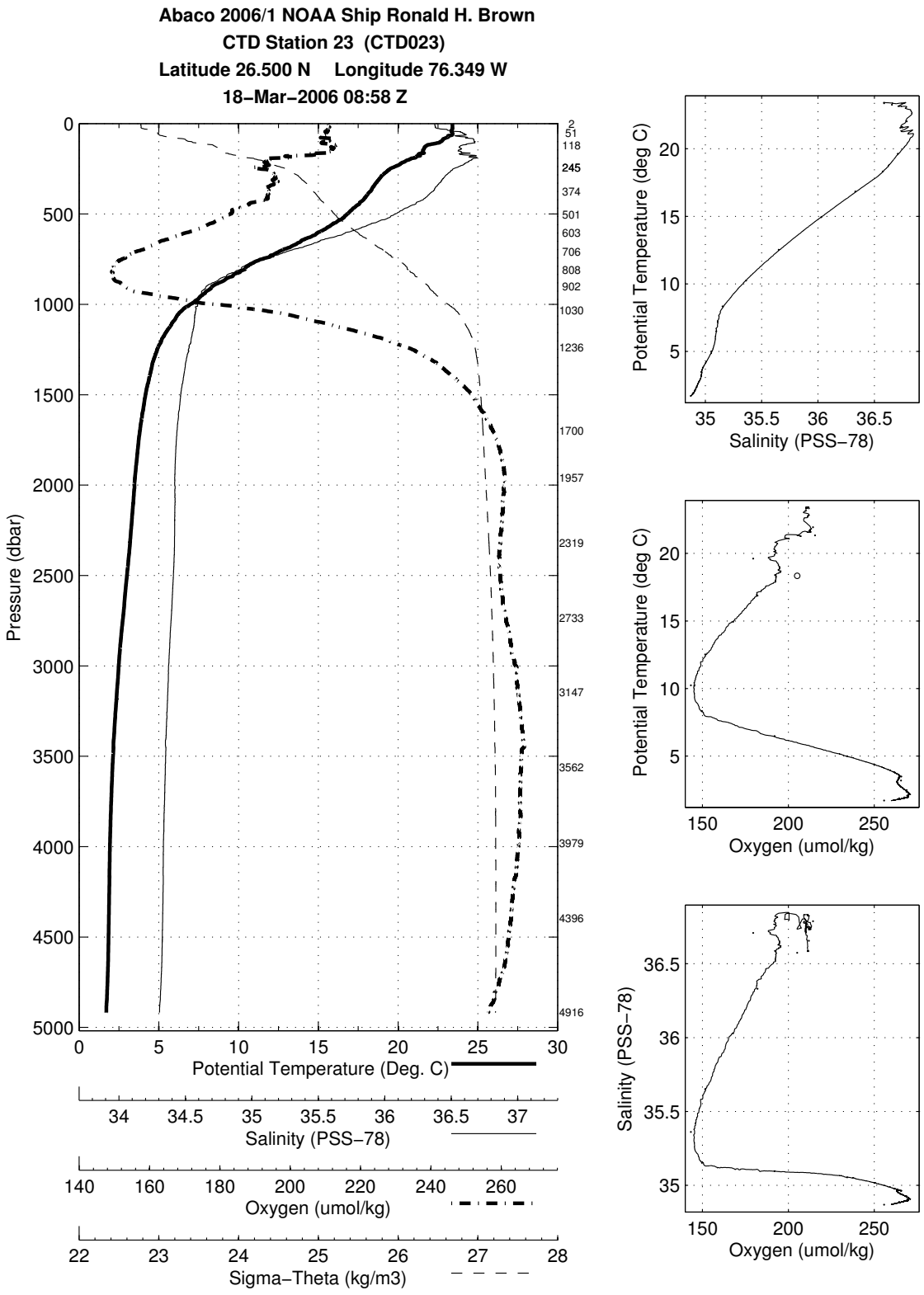
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4879	1	2.139	1.697	34.870	255.1
4000	2	2.278	1.936	34.896	266.5
3600	3	2.371	2.071	34.906	268.3
3200	4	2.582	2.319	34.921	268.3
2800	5	2.912	2.684	34.941	264.8
2400	6	3.280	3.084	34.960	261.9
2000	7	3.637	3.475	34.966	264.4
1695	8	3.955	3.817	34.980	260.3
1450	9	4.400	4.280	35.013	252.0
1250	10	4.989	4.881	35.051	236.5
1049	11	6.496	6.395	35.094	193.5
919	12	8.312	8.212	35.154	152.1
820	13	10.249	10.149	35.349	144.4
719	15	12.318	12.220	35.616	150.5
618	16	14.648	14.554	35.958	164.1
520	17	16.693	16.607	36.299	180.6
390	18	18.305	18.237	36.565	193.9
310	19	18.834	18.778	36.633	199.3
249	20	19.462	19.417	36.688	191.3
190	21	20.628	20.591	36.807	191.8
129	22	21.706	21.681	36.886	191.0
64	23	22.757	22.744	36.838	207.1
64	23	22.757	22.744	36.838	207.1
3	24	23.167	23.166	36.686	212.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 22 (CTD022)
Latitude 26.501 N Longitude 76.216 W
18−Mar−2006 04:25 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 23 (CTD023)
Latitude 26.500N Longitude 76.349W
18-Mar-2006 08:58Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.403	23.403	36.584	211.1	0.003	25.018
10	23.414	23.412	36.584	211.1	0.029	25.016
20	23.417	23.413	36.587	211.1	0.059	25.017
30	23.411	23.404	36.620	211.3	0.088	25.045
50	23.395	23.385	36.753	210.3	0.145	25.151
75	23.142	23.127	36.783	209.5	0.215	25.250
100	22.664	22.643	36.833	210.9	0.282	25.428
125	21.762	21.738	36.742	212.5	0.344	25.616
150	21.581	21.552	36.729	212.0	0.404	25.658
200	20.720	20.682	36.813	193.1	0.517	25.962
250	19.545	19.499	36.700	190.0	0.618	26.191
300	18.930	18.876	36.640	194.7	0.711	26.307
400	18.086	18.016	36.538	192.5	0.888	26.447
500	16.888	16.805	36.335	181.2	1.056	26.586
600	15.115	15.022	36.041	168.5	1.211	26.770
700	12.854	12.756	35.694	153.8	1.348	26.980
800	10.521	10.422	35.379	145.2	1.465	27.174
900	8.448	8.350	35.161	149.1	1.564	27.347
1000	7.077	6.978	35.107	176.5	1.647	27.506
1100	5.955	5.854	35.087	209.0	1.713	27.640
1200	5.280	5.175	35.067	229.6	1.770	27.707
1300	4.806	4.696	35.038	241.8	1.822	27.741
1400	4.532	4.415	35.020	249.1	1.872	27.758
1500	4.286	4.162	35.002	254.7	1.920	27.771
1750	3.880	3.738	34.975	262.4	2.039	27.794
2000	3.630	3.468	34.965	265.0	2.156	27.813
2500	3.205	3.001	34.957	263.5	2.383	27.851
3000	2.727	2.482	34.927	268.3	2.601	27.873
3500	2.422	2.131	34.909	270.1	2.813	27.888
4000	2.276	1.934	34.895	269.1	3.024	27.893
4500	2.249	1.849	34.888	266.2	3.244	27.894

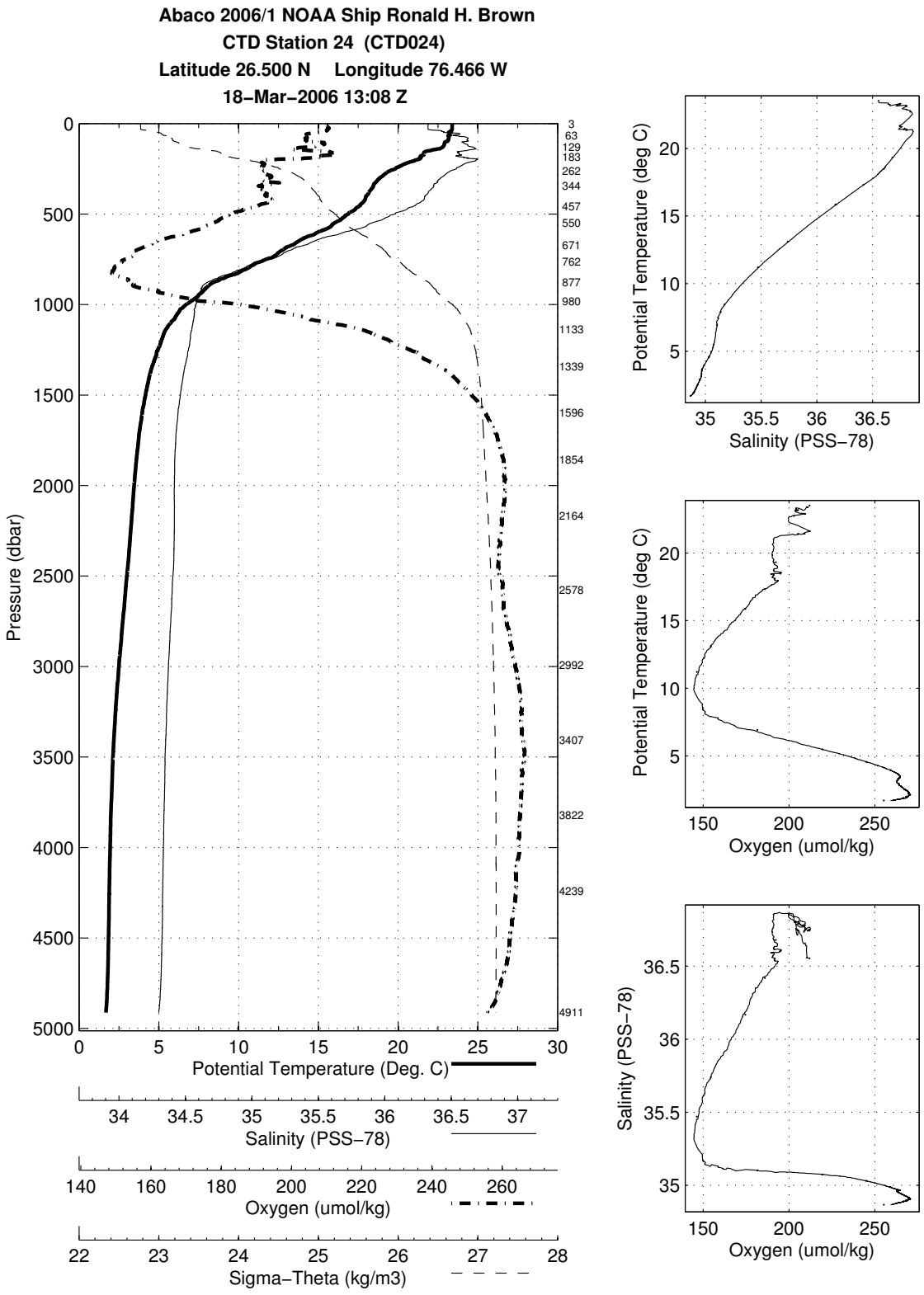
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4916	1	2.156	1.709	34.869	255.7
4396	2	2.254	1.867	34.888	264.5
3979	3	2.276	1.936	34.894	267.4
3563	4	2.377	2.081	34.905	269.1
3147	5	2.617	2.359	34.921	268.7
2733	6	2.986	2.763	34.942	265.2
2319	7	3.374	3.186	34.962	265.5
1957	8	3.644	3.486	34.964	265.8
1701	9	3.944	3.806	34.978	261.7
1236	11	5.107	5.000	35.055	234.2
1031	12	6.587	6.487	35.096	192.0
903	13	8.430	8.332	35.152	149.7
809	15	10.347	10.247	35.362	143.3
707	16	12.627	12.529	35.651	151.6
604	17	15.036	14.942	36.030	167.8
501	18	16.922	16.838	36.331	182.1
374	19	18.387	18.321	36.574	205.2
246	20	19.667	19.621	36.708	179.5
246	20	19.667	19.621	36.708	179.5
118	22	22.050	22.027	36.787	214.4
52	23	23.271	23.260	36.656	211.9
2	24	23.371	23.370	36.586	211.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 23 (CTD023)
Latitude 26.500 N Longitude 76.349 W
18−Mar−2006 08:58 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 24 (CTD024)
Latitude 26.500N Longitude 76.466W
18-Mar-2006 13:08Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.396	23.395	36.557	210.2	0.003	25.000
10	23.395	23.393	36.555	210.6	0.030	24.999
20	23.397	23.393	36.555	210.5	0.059	24.999
30	23.398	23.392	36.555	210.5	0.089	24.999
50	23.197	23.187	36.674	207.7	0.147	25.149
75	23.196	23.181	36.794	203.9	0.216	25.242
100	23.020	22.999	36.779	205.0	0.285	25.284
125	22.871	22.845	36.810	206.8	0.352	25.352
150	21.985	21.956	36.788	206.4	0.416	25.590
200	21.198	21.159	36.860	192.4	0.534	25.867
250	19.871	19.825	36.732	190.3	0.638	26.130
300	18.907	18.853	36.635	192.6	0.732	26.309
400	18.082	18.012	36.538	191.7	0.909	26.448
500	16.959	16.875	36.347	180.5	1.078	26.578
600	15.068	14.975	36.031	168.0	1.233	26.773
700	12.834	12.736	35.690	152.0	1.369	26.981
800	10.653	10.553	35.396	145.3	1.487	27.165
900	8.158	8.062	35.140	151.6	1.584	27.375
1000	6.809	6.711	35.098	183.7	1.664	27.536
1100	5.859	5.758	35.082	211.3	1.728	27.648
1200	5.263	5.158	35.063	229.5	1.784	27.707
1300	4.857	4.746	35.042	239.9	1.836	27.738
1400	4.512	4.395	35.019	249.0	1.886	27.759
1500	4.287	4.164	35.003	254.6	1.935	27.771
1750	3.874	3.732	34.974	262.5	2.053	27.793
2000	3.620	3.458	34.966	264.7	2.169	27.815
2500	3.200	2.996	34.956	263.2	2.395	27.851
3000	2.742	2.497	34.928	267.9	2.614	27.873
3500	2.413	2.122	34.906	270.8	2.826	27.887
4000	2.293	1.951	34.897	268.9	3.038	27.893
4500	2.248	1.848	34.888	266.2	3.258	27.894

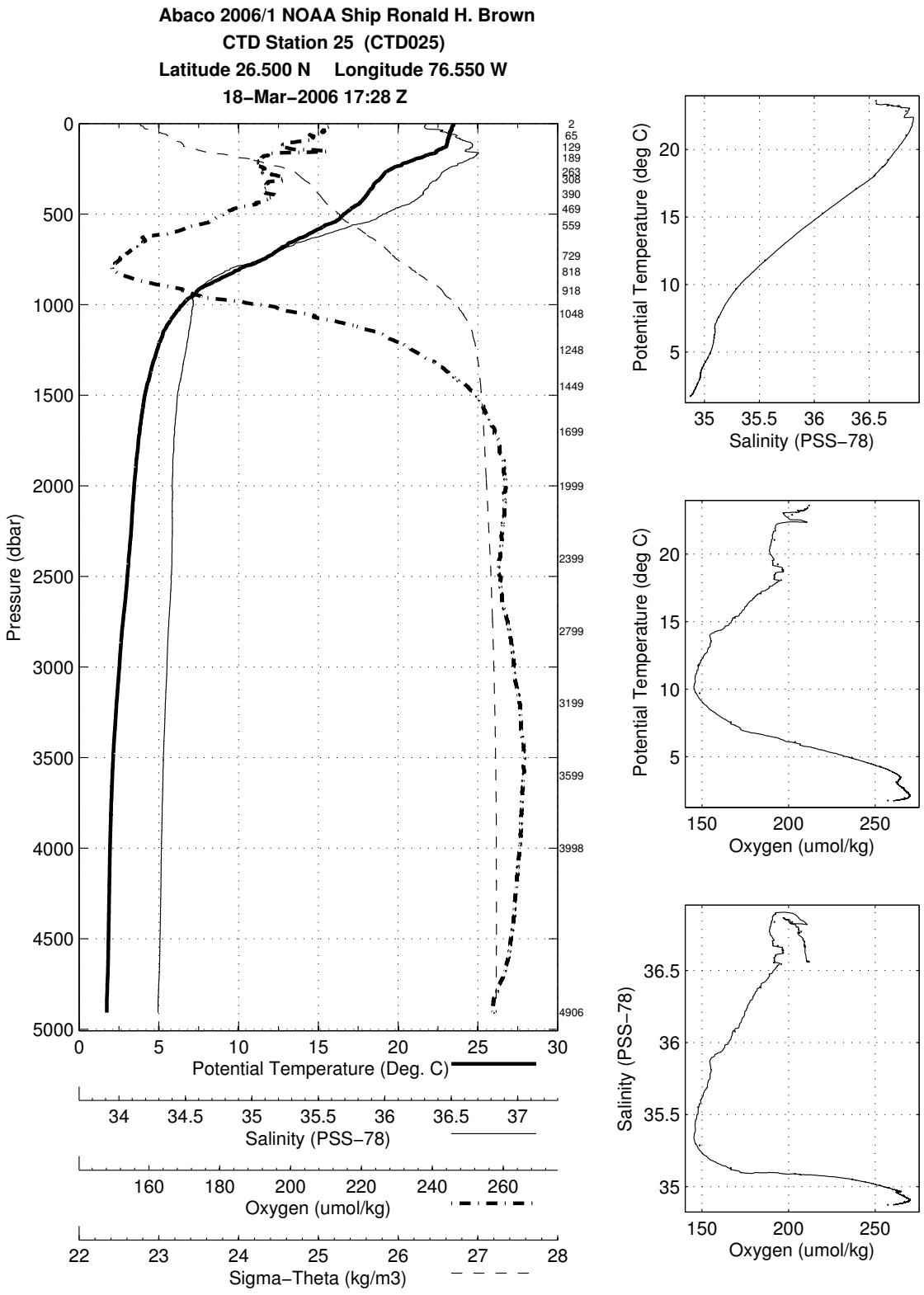
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4911	1	2.137	1.691	34.867	255.2
4239	2	2.264	1.895	34.891	266.7
3823	3	2.312	1.989	34.899	268.3
3407	4	2.468	2.186	34.911	269.6
2993	5	2.764	2.519	34.931	267.1
2578	6	3.122	2.912	34.950	263.9
2165	7	3.495	3.320	34.965	263.5
1855	8	3.736	3.586	34.968	264.0
1597	9	4.079	3.949	34.987	259.1
1340	10	4.677	4.565	35.032	245.0
1134	11	5.594	5.493	35.074	219.5
980	12	7.010	6.913	35.103	181.6
878	13	8.555	8.459	35.170	149.9
763	15	11.306	11.208	35.471	146.3
671	16	13.206	13.111	35.740	154.4
551	17	15.944	15.855	36.167	174.5
457	18	17.396	17.318	36.419	186.0
345	19	18.546	18.485	36.602	195.0
263	20	19.375	19.327	36.678	192.3
184	21	21.502	21.465	36.789	205.2
129	22	22.743	22.717	36.838	202.9
63	23	23.254	23.241	36.744	205.3
3	24	23.519	23.518	36.554	212.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 24 (CTD024)
Latitude 26.500 N Longitude 76.466 W
18−Mar−2006 13:08 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 25 (CTD025)
Latitude 26.500N Longitude 76.550W
18-Mar-2006 17:28Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.488	23.487	36.569	210.5	0.003	24.982
10	23.471	23.469	36.566	210.9	0.030	24.985
20	23.381	23.377	36.562	210.6	0.059	25.009
30	23.350	23.343	36.583	210.2	0.089	25.035
50	23.291	23.281	36.703	209.2	0.146	25.144
75	23.177	23.161	36.759	206.0	0.216	25.221
100	23.116	23.096	36.831	201.4	0.284	25.295
125	23.061	23.035	36.865	197.0	0.351	25.338
150	22.479	22.449	36.821	209.2	0.417	25.474
200	21.027	20.988	36.839	190.2	0.535	25.898
250	19.600	19.554	36.706	191.2	0.637	26.181
300	18.983	18.929	36.650	196.5	0.730	26.301
400	18.040	17.970	36.536	193.9	0.907	26.456
500	16.664	16.582	36.298	179.0	1.073	26.611
600	14.758	14.666	35.984	163.3	1.226	26.804
700	12.555	12.459	35.649	150.9	1.359	27.004
800	10.171	10.074	35.332	145.3	1.475	27.198
900	7.889	7.794	35.146	162.6	1.569	27.419
1000	6.572	6.476	35.098	190.1	1.644	27.568
1100	5.726	5.626	35.080	215.0	1.706	27.663
1200	5.197	5.093	35.062	231.0	1.761	27.713
1300	4.829	4.719	35.040	240.9	1.813	27.739
1400	4.535	4.418	35.021	249.0	1.862	27.758
1500	4.243	4.120	34.998	255.8	1.911	27.772
1750	3.869	3.727	34.975	262.6	2.029	27.795
2000	3.616	3.454	34.965	264.6	2.145	27.814
2500	3.226	3.022	34.958	263.0	2.372	27.849
3000	2.774	2.528	34.931	267.1	2.592	27.873
3500	2.427	2.137	34.909	270.3	2.804	27.887
4000	2.282	1.939	34.896	268.8	3.016	27.893
4500	2.242	1.843	34.887	266.2	3.236	27.894

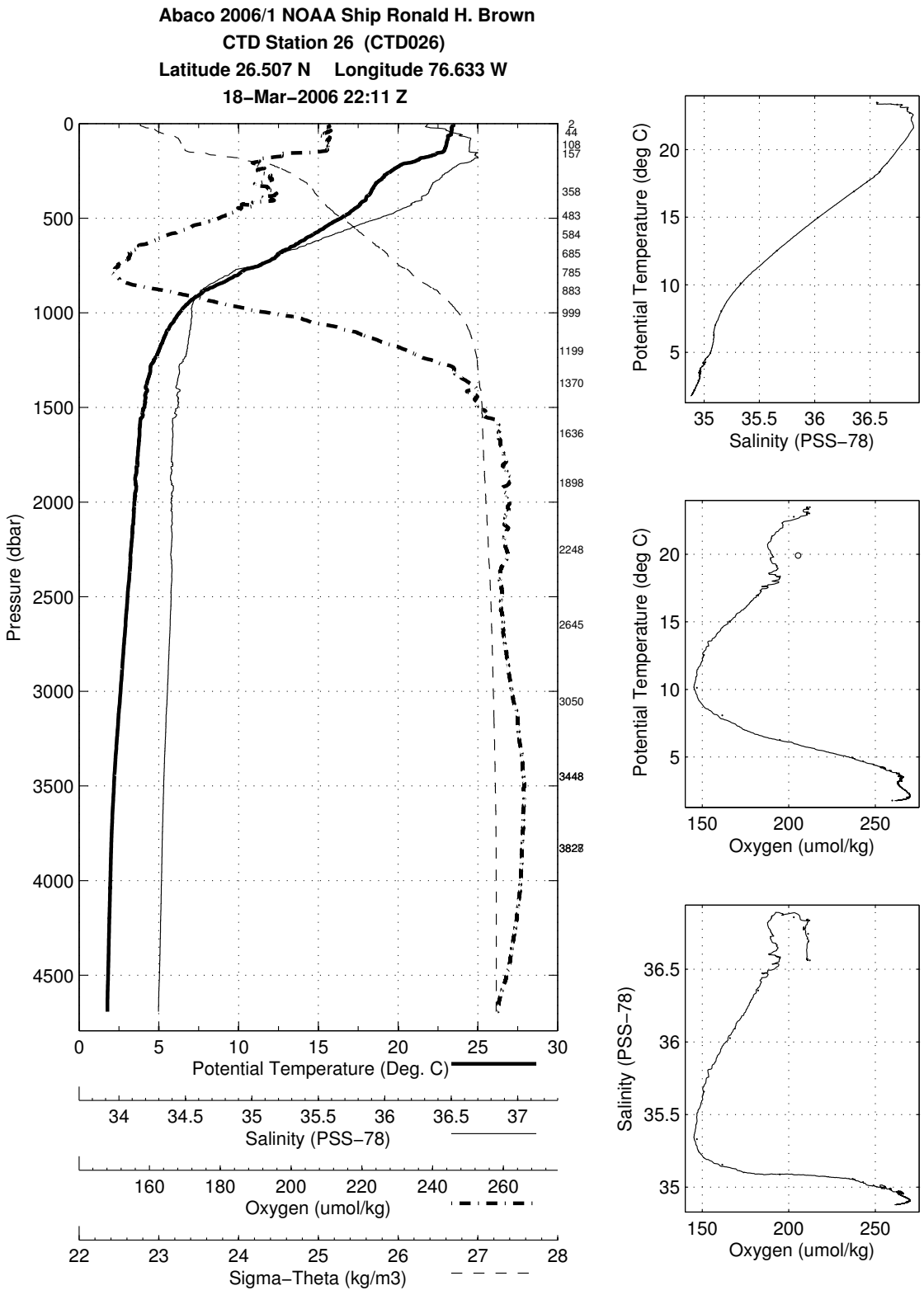
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4907	1	2.190	1.743	34.874	257.4
3999	2	2.284	1.942	34.897	267.0
3599	3	2.386	2.086	34.904	269.7
3199	4	2.611	2.348	34.920	268.2
2799	5	2.930	2.702	34.940	266.5
2399	6	3.313	3.117	34.961	262.1
1999	7	3.618	3.456	34.968	264.9
1699	8	3.936	3.799	34.979	NaN
1449	9	4.390	4.270	35.010	252.7
1249	10	4.999	4.891	35.052	236.8
1048	11	6.173	6.076	35.089	203.8
919	12	7.684	7.588	35.130	166.7
818	13	9.774	9.677	35.287	148.7
729	15	11.881	11.784	35.552	147.9
560	16	15.360	15.273	36.076	169.0
470	17	17.176	17.096	36.381	183.9
390	18	18.121	18.053	36.545	195.7
309	19	18.776	18.720	36.621	196.8
264	20	19.291	19.243	36.670	193.8
190	21	21.088	21.051	36.837	191.8
130	22	22.875	22.848	36.836	202.1
65	23	23.249	23.236	36.770	207.3
3	24	23.607	23.607	36.561	211.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 25 (CTD025)
Latitude 26.500 N Longitude 76.550 W
18−Mar−2006 17:28 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 26 (CTD026)
Latitude 26.507N Longitude 76.633W
18-Mar-2006 22:11Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.487	23.487	36.574	210.8	0.003	24.986
10	23.474	23.472	36.569	210.2	0.030	24.987
20	23.373	23.369	36.580	210.4	0.059	25.025
30	23.388	23.381	36.688	211.3	0.088	25.103
50	23.343	23.333	36.742	209.9	0.145	25.158
75	23.144	23.128	36.833	211.0	0.214	25.287
100	23.069	23.049	36.839	210.6	0.281	25.315
125	23.009	22.983	36.837	210.5	0.349	25.333
150	22.838	22.807	36.839	207.2	0.415	25.385
200	21.078	21.039	36.846	189.7	0.534	25.889
250	19.631	19.585	36.710	189.4	0.635	26.177
300	18.908	18.854	36.636	193.0	0.728	26.310
400	18.052	17.982	36.538	193.3	0.904	26.455
500	16.505	16.423	36.271	177.7	1.070	26.627
600	14.422	14.331	35.930	160.3	1.218	26.835
700	12.474	12.378	35.638	150.4	1.349	27.011
800	10.065	9.968	35.322	145.7	1.463	27.209
900	7.722	7.629	35.135	165.8	1.555	27.435
1000	6.373	6.278	35.088	192.8	1.627	27.586
1100	5.584	5.486	35.075	218.6	1.687	27.676
1200	5.114	5.011	35.059	234.7	1.741	27.721
1300	4.577	4.469	35.011	248.9	1.791	27.744
1400	4.312	4.197	34.996	255.6	1.840	27.762
1500	4.209	4.086	35.001	255.9	1.888	27.778
1750	3.830	3.689	34.964	264.0	2.005	27.790
2000	3.628	3.466	34.960	265.6	2.122	27.809
2500	3.243	3.039	34.959	263.2	2.351	27.849
3000	2.852	2.604	34.936	266.5	2.574	27.869
3500	2.478	2.186	34.912	270.1	2.790	27.886
4000	2.301	1.958	34.898	269.1	3.003	27.893
4500	2.220	1.821	34.885	264.9	3.223	27.894

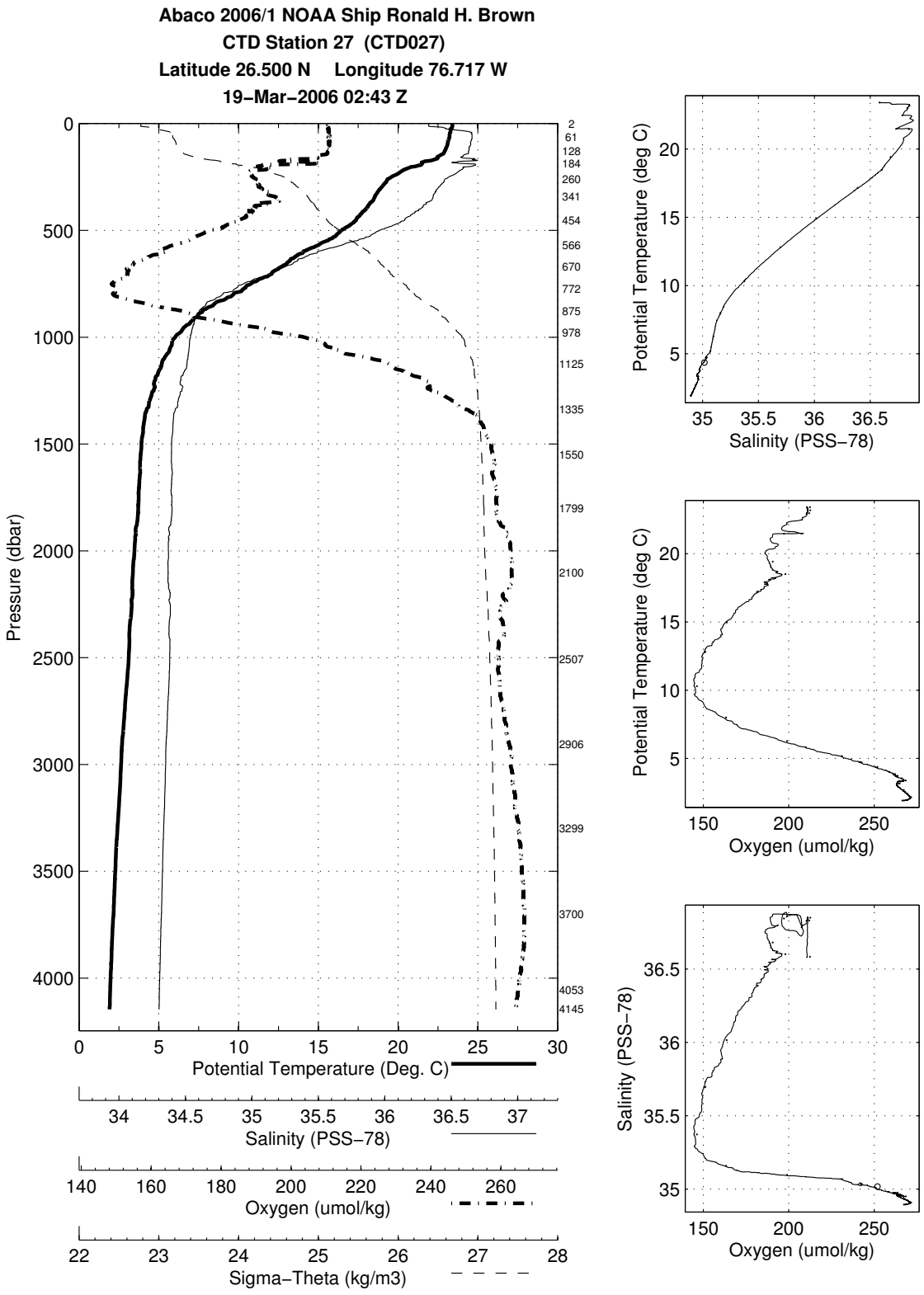
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3448	4	2.495	2.208	34.912	269.8
3828	2	2.335	2.011	34.900	268.3
3827	3	2.336	2.012	34.901	268.7
3448	4	2.495	2.208	34.912	269.8
3051	5	2.807	2.555	34.932	267.3
2646	6	3.134	2.917	34.950	263.6
2249	7	3.460	3.277	34.958	265.0
1898	8	3.653	3.501	34.954	266.1
1637	9	3.923	3.791	34.967	263.6
1371	10	4.357	4.245	34.992	253.8
1200	11	5.063	4.960	35.057	237.0
1000	12	6.367	6.273	35.088	194.8
884	13	8.145	8.051	35.154	161.6
785	15	10.207	10.112	35.330	146.9
686	16	12.617	12.523	35.657	151.0
584	17	15.063	14.972	36.026	166.1
483	18	16.986	16.905	36.354	182.2
359	19	18.408	18.345	36.583	194.9
157	21	22.743	22.711	36.858	202.9
109	22	23.037	23.014	36.836	211.9
44	23	23.337	23.328	36.744	211.2
2	24	23.477	23.476	36.561	212.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 26 (CTD026)
Latitude 26.507 N Longitude 76.633 W
18−Mar−2006 22:11 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 27 (CTD027)
Latitude 26.500N Longitude 76.717W
19-Mar-2006 02:43Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.400	23.400	36.582	210.5	0.003	25.017
10	23.406	23.404	36.580	210.6	0.029	25.015
20	23.367	23.363	36.679	211.0	0.058	25.102
30	23.294	23.288	36.752	210.9	0.087	25.179
50	23.240	23.230	36.851	210.9	0.141	25.271
75	23.182	23.166	36.848	211.0	0.209	25.288
100	23.109	23.088	36.843	211.1	0.277	25.307
125	22.982	22.956	36.832	210.5	0.344	25.337
150	22.638	22.608	36.797	208.0	0.411	25.411
200	21.138	21.100	36.851	189.1	0.532	25.876
250	19.631	19.585	36.707	187.8	0.634	26.174
300	18.996	18.941	36.642	190.1	0.728	26.292
400	18.037	17.968	36.524	188.0	0.905	26.448
500	16.535	16.452	36.275	174.9	1.071	26.623
600	14.150	14.061	35.887	160.9	1.220	26.860
700	12.196	12.101	35.600	149.3	1.349	27.036
800	9.775	9.680	35.292	144.8	1.459	27.234
900	7.538	7.446	35.128	169.8	1.547	27.456
1000	6.128	6.035	35.091	203.5	1.616	27.620
1100	5.444	5.346	35.074	224.1	1.674	27.693
1200	4.877	4.775	35.031	240.7	1.726	27.726
1300	4.512	4.405	35.014	249.4	1.775	27.754
1400	4.178	4.065	34.982	257.7	1.823	27.765
1500	4.031	3.910	34.973	260.8	1.870	27.774
1750	3.875	3.733	34.975	262.4	1.987	27.794
2000	3.635	3.473	34.953	266.9	2.105	27.802
2500	3.317	3.111	34.961	263.1	2.337	27.844
3000	2.882	2.634	34.936	266.9	2.562	27.867
3500	2.565	2.271	34.916	270.2	2.783	27.882
4000	2.320	1.977	34.899	269.4	3.001	27.892

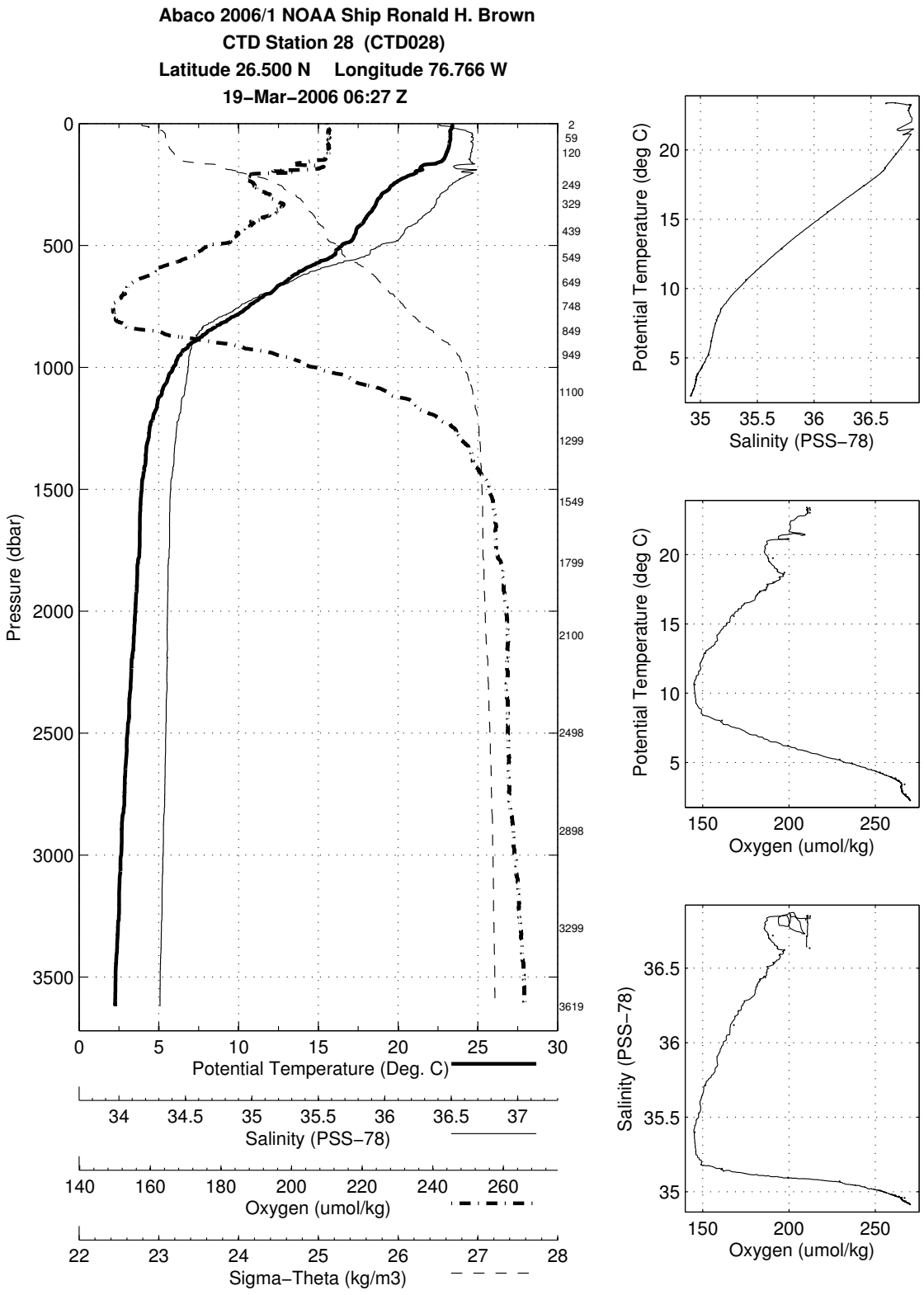
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4146	1	2.275	1.917	34.895	267.4
4054	2	2.301	1.952	34.896	268.3
3700	3	2.473	2.159	34.909	271.6
3300	4	2.694	2.418	34.925	269.2
2907	5	2.919	2.679	34.938	267.3
2508	6	3.318	3.112	34.964	263.4
2100	7	3.554	3.384	34.950	268.5
1800	8	3.880	3.734	34.976	263.6
1550	9	3.994	3.869	34.973	262.2
1336	10	4.469	4.358	35.017	251.9
1126	11	5.268	5.170	35.069	231.1
979	12	6.354	6.262	35.097	199.0
876	13	8.087	7.994	35.160	163.3
773	15	10.401	10.306	35.373	146.2
670	16	12.895	12.801	35.696	151.2
567	17	15.033	14.945	36.015	163.7
455	18	17.227	17.150	36.387	181.9
342	19	18.544	18.484	36.602	198.0
261	20	19.460	19.412	36.682	190.6
184	21	21.492	21.456	36.845	197.2
128	22	22.986	22.959	36.831	211.9
62	23	23.188	23.176	36.851	212.6
2	24	23.402	23.402	36.583	212.4


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 27 (CTD027)
Latitude 26.500 N Longitude 76.717 W
19−Mar−2006 02:43 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 28 (CTD028)
Latitude 26.500N Longitude 76.766W
19-Mar-2006 06:27Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.396	23.396	36.644	209.9	0.003	25.066
10	23.414	23.412	36.673	210.1	0.029	25.083
20	23.368	23.364	36.743	210.6	0.057	25.150
30	23.263	23.257	36.808	210.7	0.085	25.231
50	23.291	23.280	36.847	210.7	0.140	25.253
75	23.238	23.223	36.837	210.5	0.208	25.263
100	23.187	23.167	36.846	210.9	0.276	25.286
125	23.035	23.009	36.836	210.6	0.344	25.324
150	22.825	22.794	36.833	207.8	0.411	25.384
200	21.157	21.118	36.797	200.0	0.531	25.830
250	19.747	19.700	36.720	188.1	0.634	26.154
300	18.970	18.916	36.643	193.3	0.729	26.299
400	17.935	17.865	36.510	187.4	0.905	26.462
500	16.560	16.478	36.279	174.0	1.070	26.621
600	14.152	14.063	35.888	158.3	1.220	26.860
700	11.790	11.697	35.543	148.7	1.347	27.069
800	9.550	9.457	35.270	145.9	1.455	27.255
900	7.102	7.012	35.115	177.8	1.541	27.507
1000	5.998	5.906	35.088	206.7	1.606	27.635
1100	5.294	5.198	35.067	228.5	1.662	27.705
1200	4.753	4.652	35.033	243.4	1.713	27.742
1300	4.430	4.324	35.011	251.3	1.761	27.761
1400	4.262	4.148	35.000	254.9	1.808	27.771
1500	4.050	3.929	34.982	259.4	1.854	27.779
1750	3.926	3.784	34.972	261.8	1.971	27.786
2000	3.691	3.528	34.961	264.9	2.090	27.804
2500	3.235	3.030	34.951	265.2	2.322	27.843
3000	2.891	2.643	34.935	267.2	2.547	27.865
3500	2.583	2.288	34.916	270.2	2.769	27.881

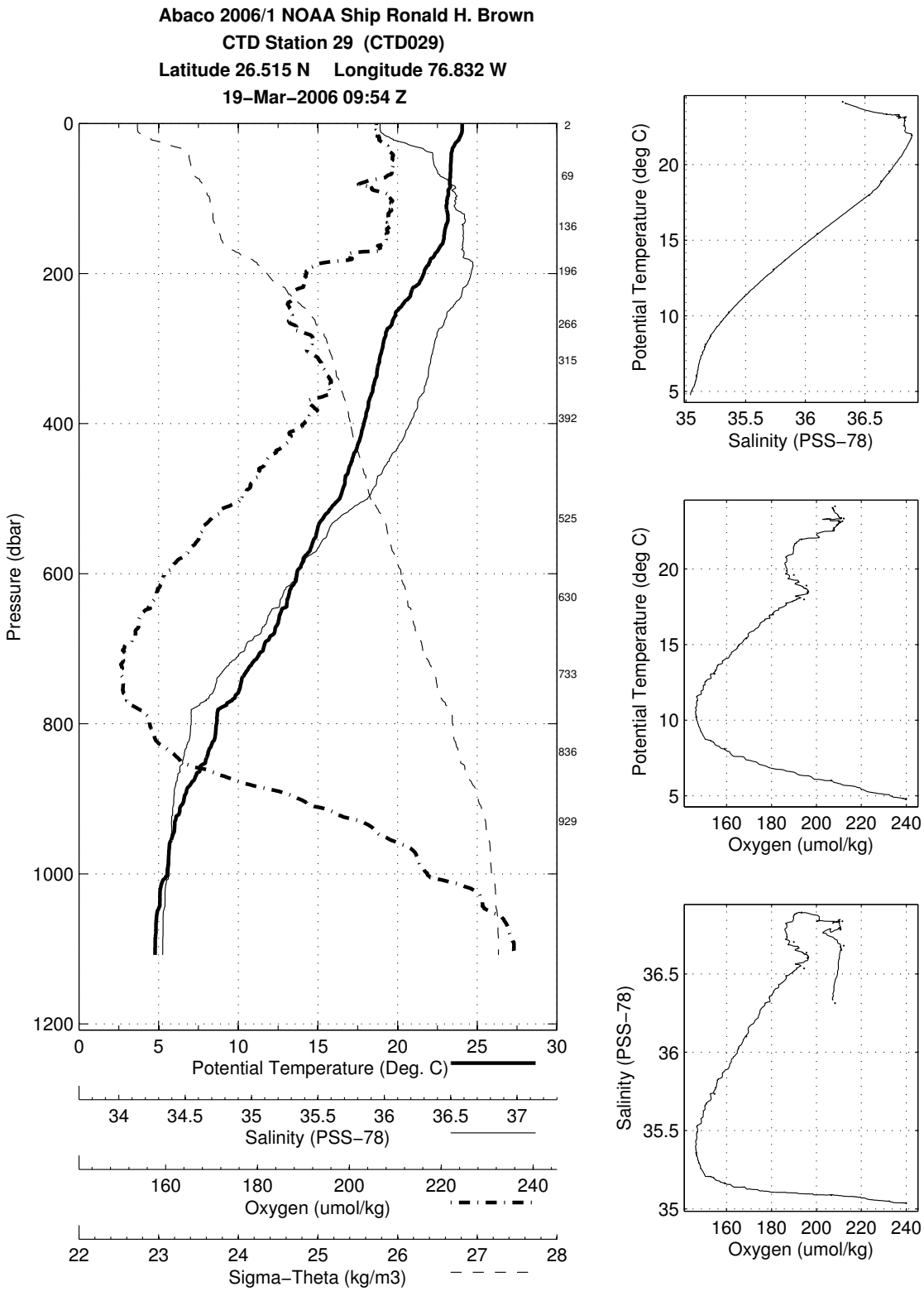
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3619	1	2.575	2.268	34.916	270.1
3299	2	2.713	2.437	34.924	269.1
2899	3	2.915	2.676	34.936	267.6
2499	4	3.206	3.002	34.950	265.4
2100	5	3.595	3.424	34.959	266.9
1800	6	3.830	3.684	34.969	263.5
1550	7	3.981	3.856	34.976	261.7
1300	8	4.380	4.274	35.010	252.6
1100	9	5.308	5.212	35.071	229.3
949	10	6.303	6.215	35.096	199.5
849	11	8.109	8.019	35.155	161.1
749	12	10.718	10.624	35.399	145.4
649	13	12.956	12.864	35.714	151.4
550	15	15.615	15.528	36.118	168.0
439	16	17.492	17.417	36.438	186.2
329	17	18.750	18.691	36.621	197.3
250	18	19.763	19.717	36.718	190.6
120	20	23.043	23.018	36.835	212.0
59	21	23.240	23.228	36.848	212.2
3	22	23.364	23.363	36.633	212.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 28 (CTD028)
Latitude 26.500 N Longitude 76.766 W
19−Mar−2006 06:27 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 29 (CTD029)
Latitude 26.515N Longitude 76.832W
19-Mar-2006 09:54Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.054	24.054	36.337	207.0	0.003	24.638
10	24.047	24.045	36.339	207.2	0.033	24.642
20	23.885	23.881	36.401	207.7	0.065	24.738
30	23.555	23.549	36.531	209.8	0.097	24.935
50	23.359	23.349	36.654	210.8	0.155	25.087
75	23.294	23.279	36.739	206.3	0.226	25.172
100	23.142	23.121	36.789	210.4	0.296	25.256
125	23.182	23.156	36.841	209.9	0.365	25.285
150	22.941	22.910	36.831	209.3	0.432	25.349
200	21.689	21.649	36.882	190.4	0.558	25.747
250	19.998	19.951	36.746	186.8	0.666	26.107
300	19.095	19.041	36.655	190.5	0.762	26.276
400	17.959	17.890	36.515	189.8	0.939	26.461
500	16.448	16.366	36.262	174.8	1.104	26.634
600	13.775	13.688	35.831	156.5	1.247	26.895
700	11.666	11.574	35.527	146.9	1.372	27.080
800	8.731	8.643	35.207	153.0	1.474	27.337
900	6.682	6.596	35.103	188.7	1.554	27.556
1000	5.630	5.541	35.075	219.3	1.613	27.670
1100	4.874	4.782	35.037	240.0	1.664	27.730

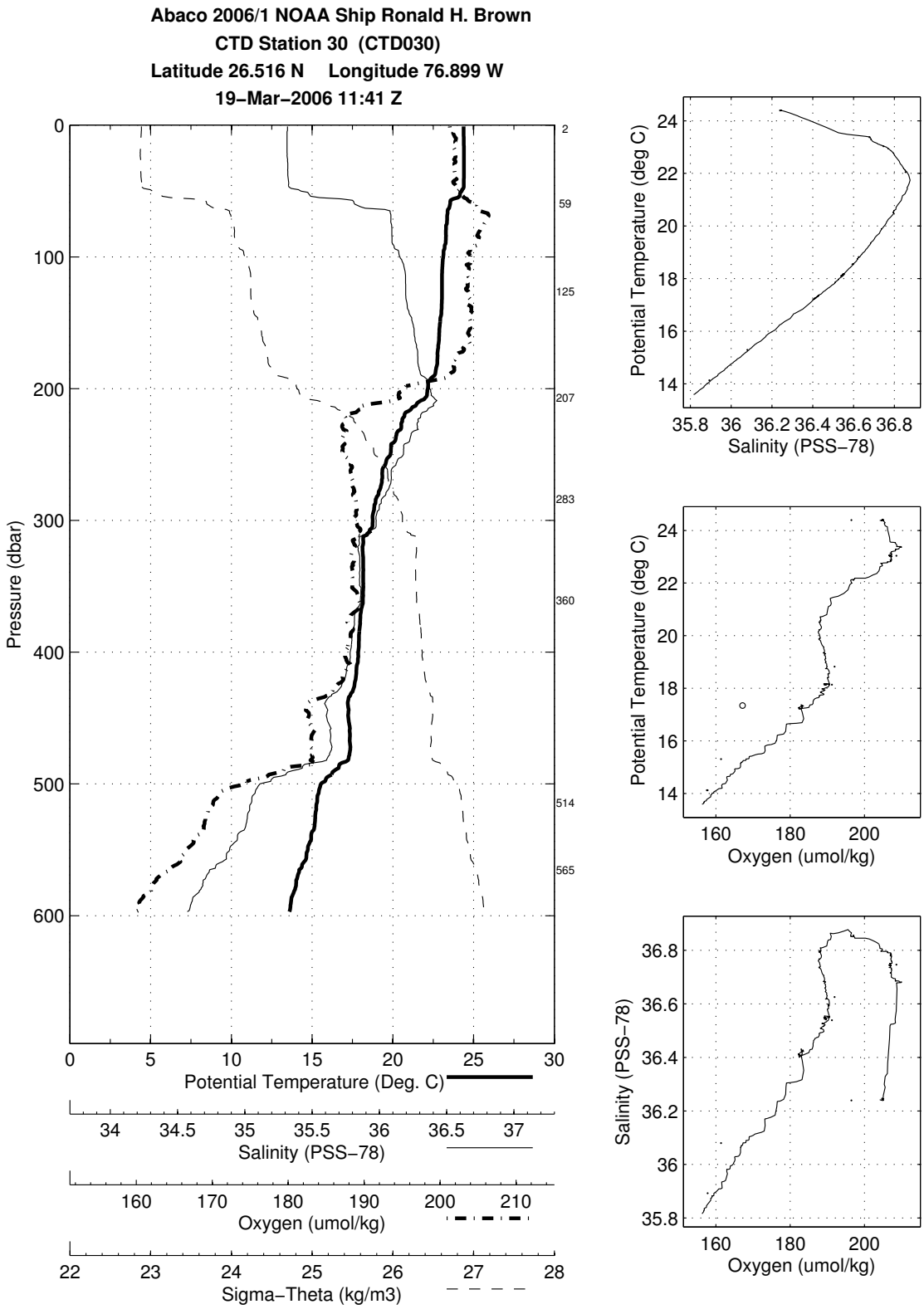
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
929	2	6.119	6.034	35.088	206.6
836	3	8.196	8.107	35.164	159.2
734	4	10.321	10.232	35.358	146.4
630	5	13.160	13.070	35.735	154.6
526	6	15.504	15.421	36.101	168.8
393	8	18.048	17.979	36.534	194.5
315	9	18.950	18.893	36.635	195.5
267	10	19.603	19.553	36.703	189.9
197	11	21.976	21.937	36.892	193.3
136	12	23.143	23.115	36.836	211.5
70	13	23.342	23.328	36.680	212.1
2	15	24.148	24.147	36.314	208.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 29 (CTD029)
Latitude 26.515 N Longitude 76.832 W
19−Mar−2006 09:54 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 30 (CTD030)
Latitude 26.516N Longitude 76.899W
19-Mar-2006 11:41Z

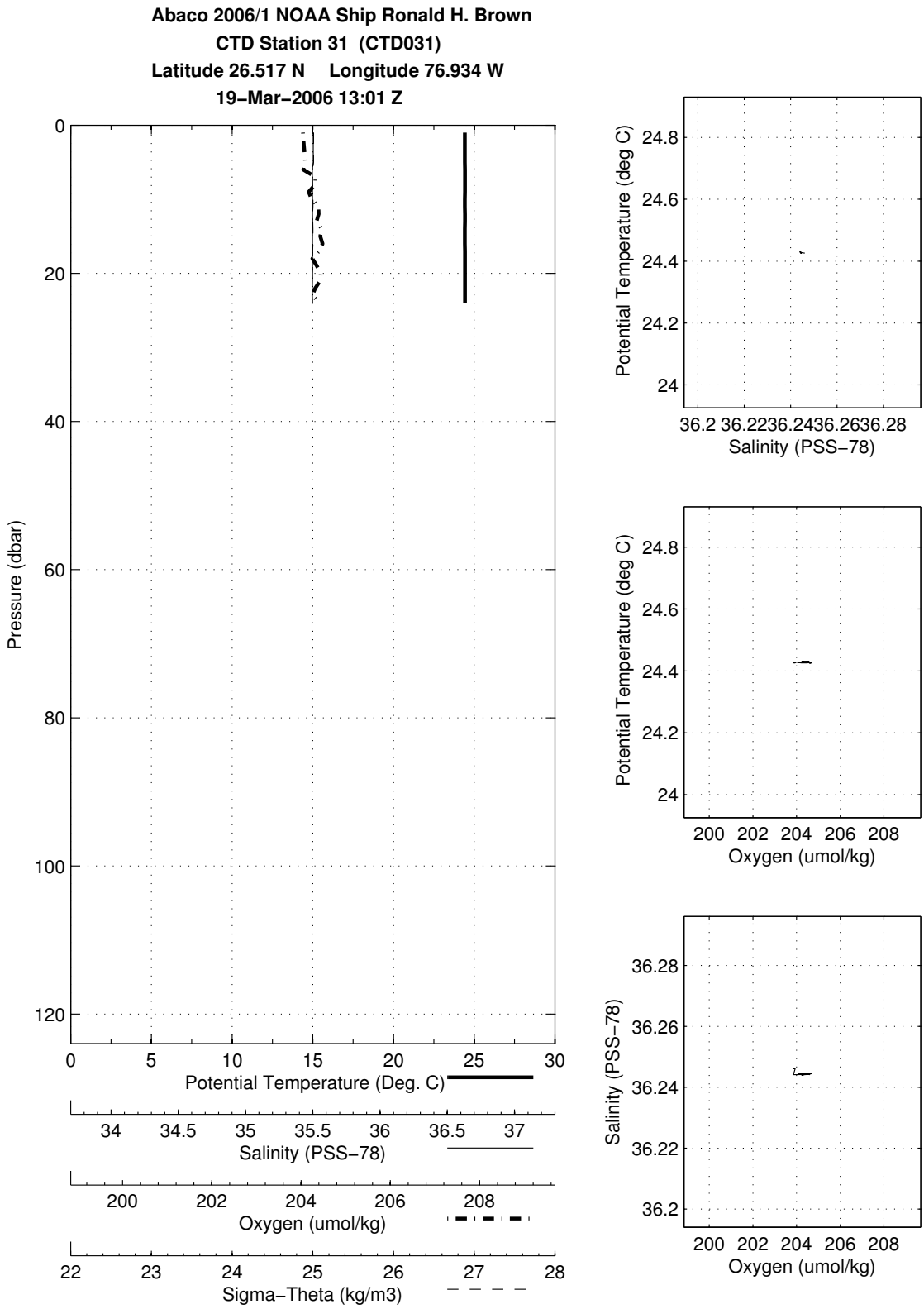
Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.382	24.382	36.242	204.1	0.003	24.468
10	24.392	24.390	36.240	205.1	0.035	24.464
20	24.408	24.404	36.240	205.0	0.069	24.459
30	24.408	24.401	36.243	204.8	0.104	24.463
50	24.274	24.263	36.299	205.3	0.173	24.547
75	23.352	23.337	36.684	209.4	0.249	25.113
100	23.139	23.118	36.720	207.2	0.320	25.204
125	23.068	23.042	36.745	206.6	0.389	25.245
150	22.953	22.923	36.774	207.2	0.458	25.302
200	22.215	22.175	36.847	197.4	0.591	25.572
250	19.898	19.851	36.735	187.8	0.699	26.125
300	18.805	18.752	36.619	189.6	0.792	26.323
400	17.920	17.851	36.508	188.1	0.965	26.465
500	15.627	15.548	36.125	173.0	1.131	26.717

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
566	2	14.223	14.139	35.893	157.8
514	3	15.369	15.289	36.080	161.4
360	5	18.159	18.096	36.539	191.2
284	6	18.872	18.821	36.625	191.9
207	7	22.094	22.052	36.855	197.0
126	8	23.058	23.032	36.746	208.6
59	9	23.391	23.379	36.678	223.2
3	10	24.397	24.397	36.240	196.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 30 (CTD030)
Latitude 26.516 N Longitude 76.899 W
19−Mar−2006 11:41 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 31 (CTD031)
Latitude 26.517N Longitude 76.934W
19-Mar-2006 13:01Z

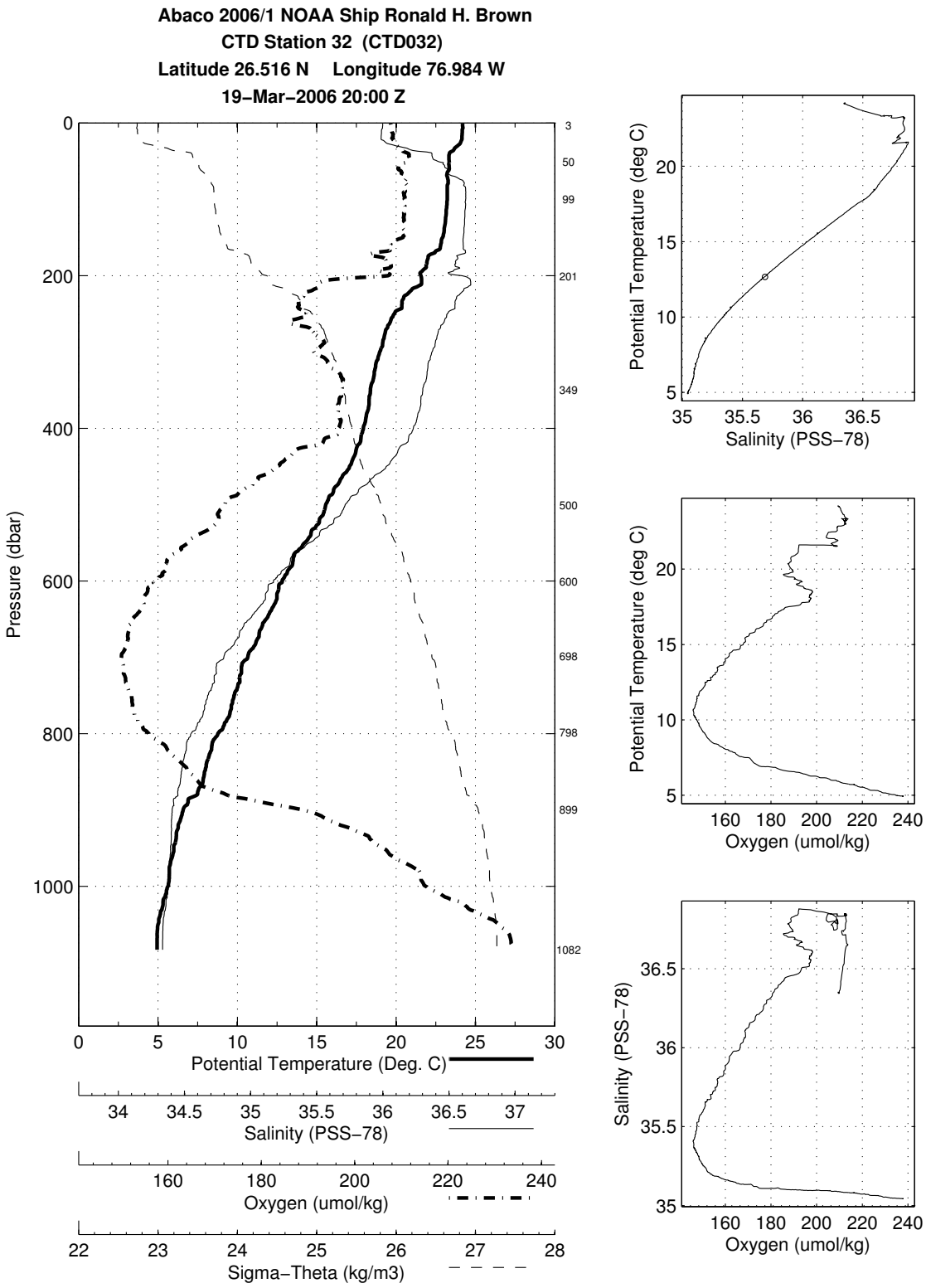
Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.426	24.426	36.246	203.8	0.003	24.458
10	24.428	24.426	36.245	204.2	0.035	24.456
20	24.433	24.429	36.244	204.6	0.069	24.455


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 31 (CTD031)
Latitude 26.517 N Longitude 76.934 W
19−Mar−2006 13:01 Z
Pressure (dbar)
0
20
40
60
80
100
120
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
200 202 204 206 208
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
24.8
24.6
24.4
24.2
24
36.2 36.2236.2436.2636.28
Salinity (PSS−78)
Potential Temperature (deg C)
24.8
24.6
24.4
24.2
24
200 202 204 206 208
Oxygen (umol/kg)
Salinity (PSS−78)
36.28
36.26
36.24
36.22
36.2
200 202 204 206 208
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 32 (CTD032)
Latitude 26.516N Longitude 76.984W
19-Mar-2006 20:00Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.194	24.194	36.354	209.3	0.003	24.609
10	24.172	24.170	36.347	209.6	0.033	24.611
20	24.159	24.155	36.345	209.5	0.066	24.614
30	23.883	23.876	36.434	210.8	0.099	24.764
50	23.351	23.341	36.681	212.9	0.158	25.109
75	23.300	23.285	36.829	212.7	0.228	25.239
100	23.242	23.221	36.848	212.5	0.297	25.272
125	23.143	23.117	36.842	212.4	0.365	25.297
150	22.970	22.940	36.835	212.2	0.433	25.343
200	21.603	21.563	36.826	208.6	0.559	25.729
250	19.922	19.875	36.739	189.5	0.667	26.122
300	19.026	18.972	36.648	191.2	0.762	26.288
400	18.009	17.940	36.537	197.0	0.938	26.465
500	15.651	15.572	36.131	170.3	1.100	26.716
600	12.912	12.828	35.704	153.8	1.237	26.973
700	10.739	10.651	35.408	145.9	1.353	27.157
800	8.858	8.769	35.212	152.4	1.453	27.321
900	6.664	6.577	35.100	188.9	1.535	27.556
1000	5.721	5.631	35.080	217.5	1.595	27.662

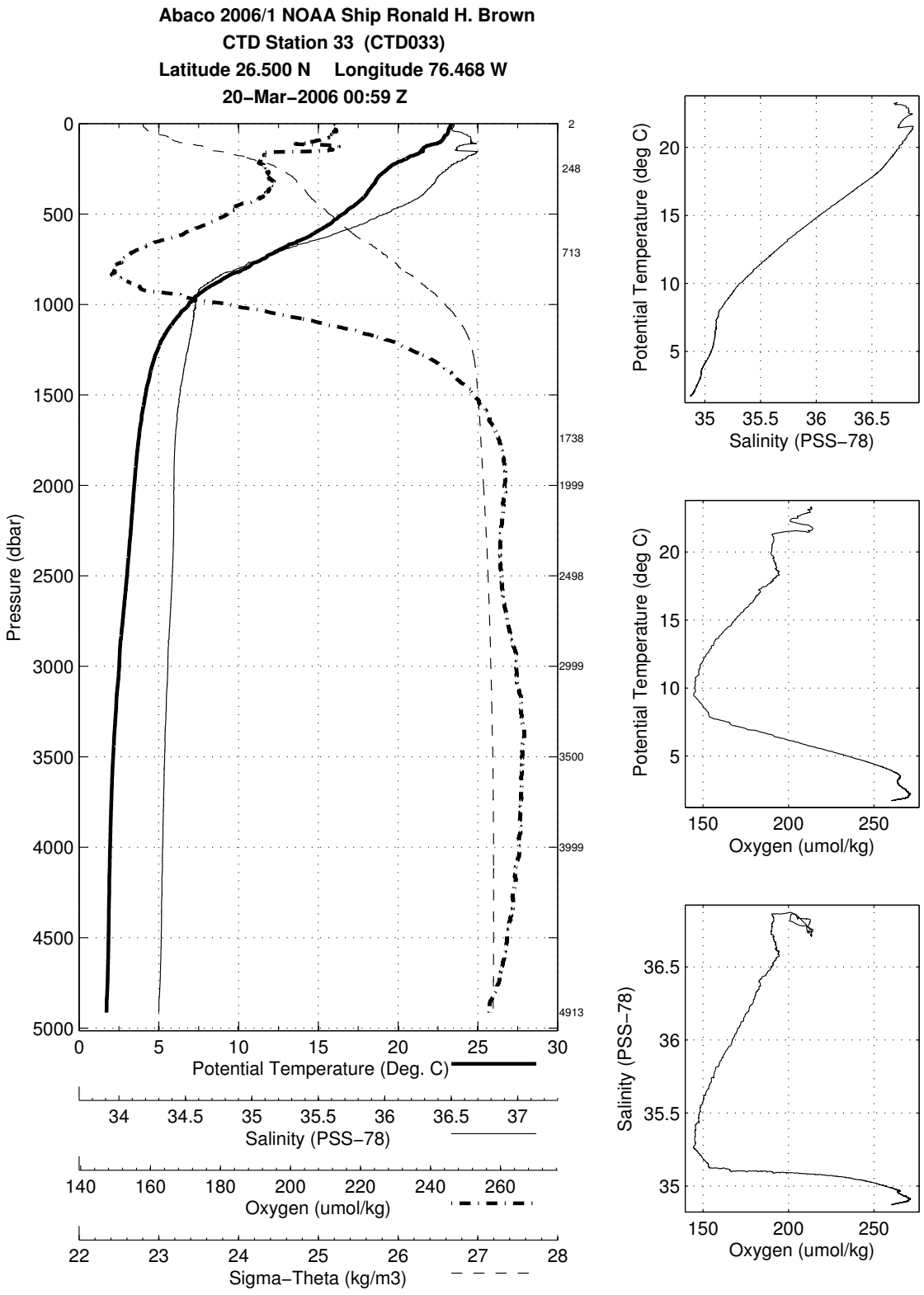
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
1083	2	5.031	4.939	35.045	NaN
900	4	6.653	6.566	35.100	NaN
799	6	8.681	8.593	35.192	NaN
699	8	10.722	10.635	35.400	NaN
600	10	12.744	12.660	35.687	NaN
500	12	15.636	15.556	36.124	NaN
350	16	18.499	18.437	36.594	NaN
201	18	21.605	21.565	36.861	NaN
100	20	23.232	23.211	36.841	NaN
50	22	23.351	23.341	36.676	NaN
3	24	24.164	24.163	36.347	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 32 (CTD032)
Latitude 26.516 N Longitude 76.984 W
19−Mar−2006 20:00 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 33 (CTD033)
Latitude 26.500N Longitude 76.468W
20-Mar-2006 00:59Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.300	23.300	36.723	213.0	0.003	25.154
10	23.283	23.281	36.720	213.1	0.028	25.157
20	23.280	23.276	36.721	213.1	0.056	25.159
30	23.200	23.194	36.712	213.2	0.084	25.177
50	23.130	23.120	36.772	211.2	0.140	25.244
75	22.912	22.897	36.827	211.7	0.207	25.350
100	22.671	22.651	36.835	206.0	0.272	25.427
125	21.799	21.774	36.758	214.0	0.335	25.618
150	21.487	21.458	36.751	210.8	0.394	25.701
200	20.378	20.340	36.777	190.4	0.503	26.027
250	19.403	19.357	36.684	191.4	0.601	26.217
300	18.778	18.724	36.620	192.7	0.693	26.331
400	18.000	17.931	36.519	190.9	0.869	26.453
500	16.631	16.548	36.289	180.3	1.035	26.611
600	14.936	14.844	36.006	167.3	1.187	26.783
700	12.600	12.503	35.651	152.1	1.323	26.997
800	10.556	10.457	35.375	145.2	1.439	27.166
900	8.311	8.213	35.151	153.1	1.538	27.360
1000	6.975	6.876	35.104	180.9	1.618	27.518
1100	5.995	5.894	35.086	208.2	1.684	27.634
1200	5.264	5.159	35.065	229.9	1.741	27.708
1300	4.825	4.714	35.043	242.4	1.793	27.743
1400	4.535	4.418	35.024	250.1	1.843	27.760
1500	4.291	4.167	35.005	255.5	1.891	27.773
1750	3.870	3.729	34.976	263.5	2.009	27.795
2000	3.621	3.459	34.968	265.2	2.125	27.816
2500	3.203	2.999	34.957	264.1	2.351	27.851
3000	2.760	2.515	34.930	268.7	2.569	27.873
3500	2.427	2.136	34.910	270.4	2.781	27.889
4000	2.289	1.946	34.897	269.5	2.993	27.894
4500	2.245	1.846	34.888	265.8	3.212	27.894

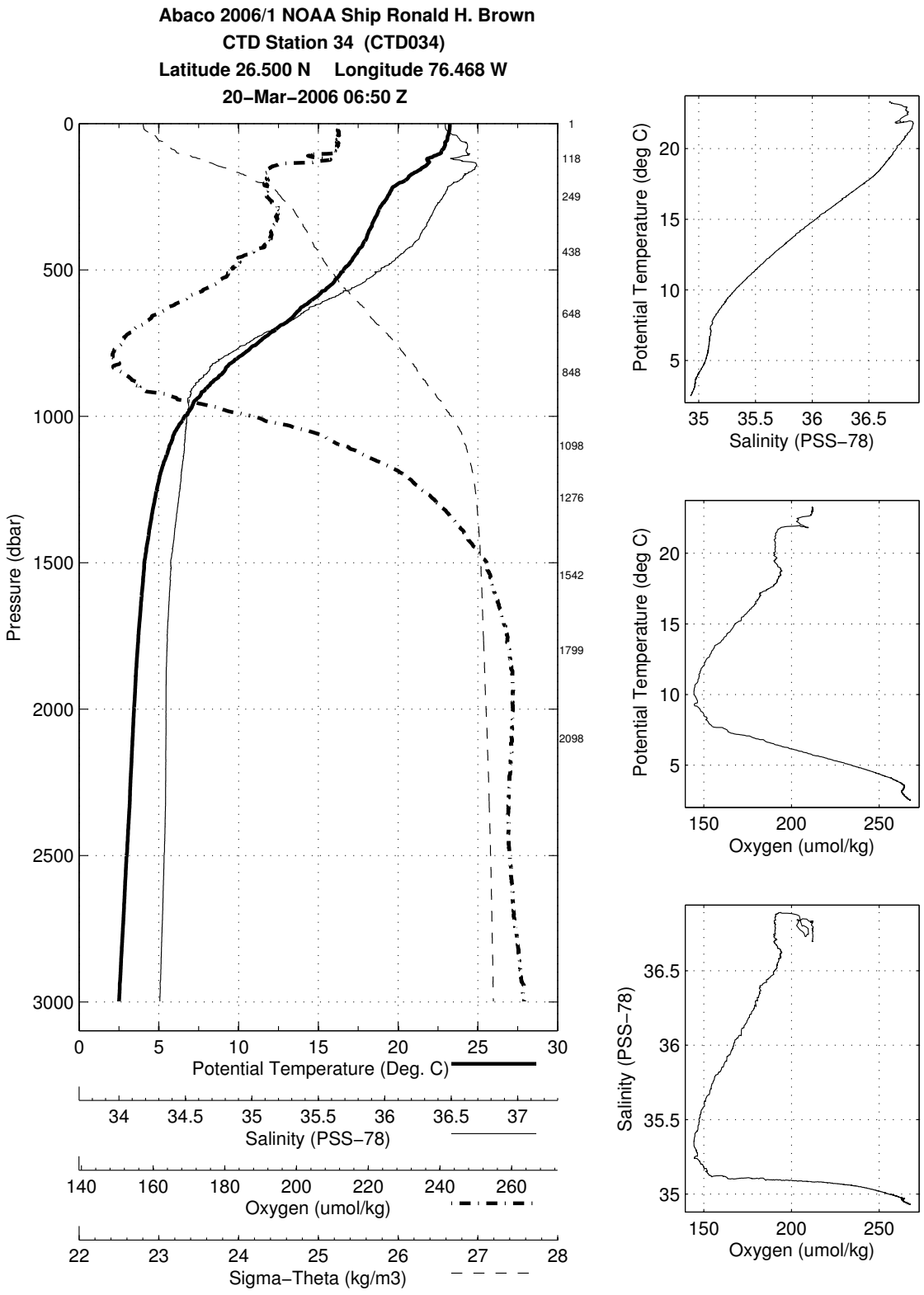
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4913	2	2.173	1.725	34.874	NaN
3999	4	2.291	1.948	34.898	NaN
3500	6	2.435	2.144	34.909	NaN
2999	8	2.749	2.504	34.928	NaN
2499	10	3.181	2.978	34.955	NaN
1999	12	3.616	3.455	34.967	NaN
1739	16	3.863	3.722	34.973	NaN
713	20	12.101	12.005	35.585	NaN
248	22	19.482	19.437	36.690	NaN
3	24	23.230	23.230	36.704	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 33 (CTD033)
Latitude 26.500 N Longitude 76.468 W
20−Mar−2006 00:59 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 34 (CTD034)
Latitude 26.500N Longitude 76.468W
20-Mar-2006 06:50Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.245	23.245	36.696	211.9	0.003	25.149
10	23.245	23.243	36.697	212.0	0.028	25.150
20	23.234	23.230	36.701	212.0	0.056	25.157
30	23.189	23.183	36.723	212.1	0.084	25.187
50	23.108	23.097	36.780	212.2	0.139	25.256
75	22.955	22.940	36.834	212.1	0.206	25.343
100	22.721	22.700	36.834	211.3	0.272	25.412
125	21.875	21.851	36.787	209.2	0.334	25.619
150	21.591	21.562	36.882	191.7	0.393	25.772
200	20.303	20.266	36.763	190.5	0.500	26.036
250	19.388	19.342	36.682	190.6	0.597	26.219
300	18.803	18.750	36.623	194.2	0.689	26.326
400	17.993	17.923	36.518	191.8	0.865	26.455
500	16.677	16.594	36.298	179.7	1.031	26.608
600	14.756	14.665	35.974	166.2	1.184	26.797
700	12.495	12.398	35.635	151.0	1.317	27.005
800	10.063	9.967	35.318	144.6	1.431	27.206
900	8.153	8.057	35.140	152.5	1.527	27.375
1000	6.708	6.611	35.097	186.5	1.604	27.549
1100	5.763	5.663	35.082	213.7	1.667	27.660
1200	5.183	5.078	35.061	231.9	1.723	27.715
1300	4.805	4.695	35.043	242.1	1.774	27.744
1400	4.490	4.374	35.020	249.9	1.823	27.762
1500	4.211	4.089	34.997	256.6	1.871	27.774
1750	3.857	3.716	34.976	262.7	1.989	27.796
2000	3.612	3.450	34.968	264.5	2.104	27.817
2500	3.187	2.983	34.957	263.5	2.329	27.852

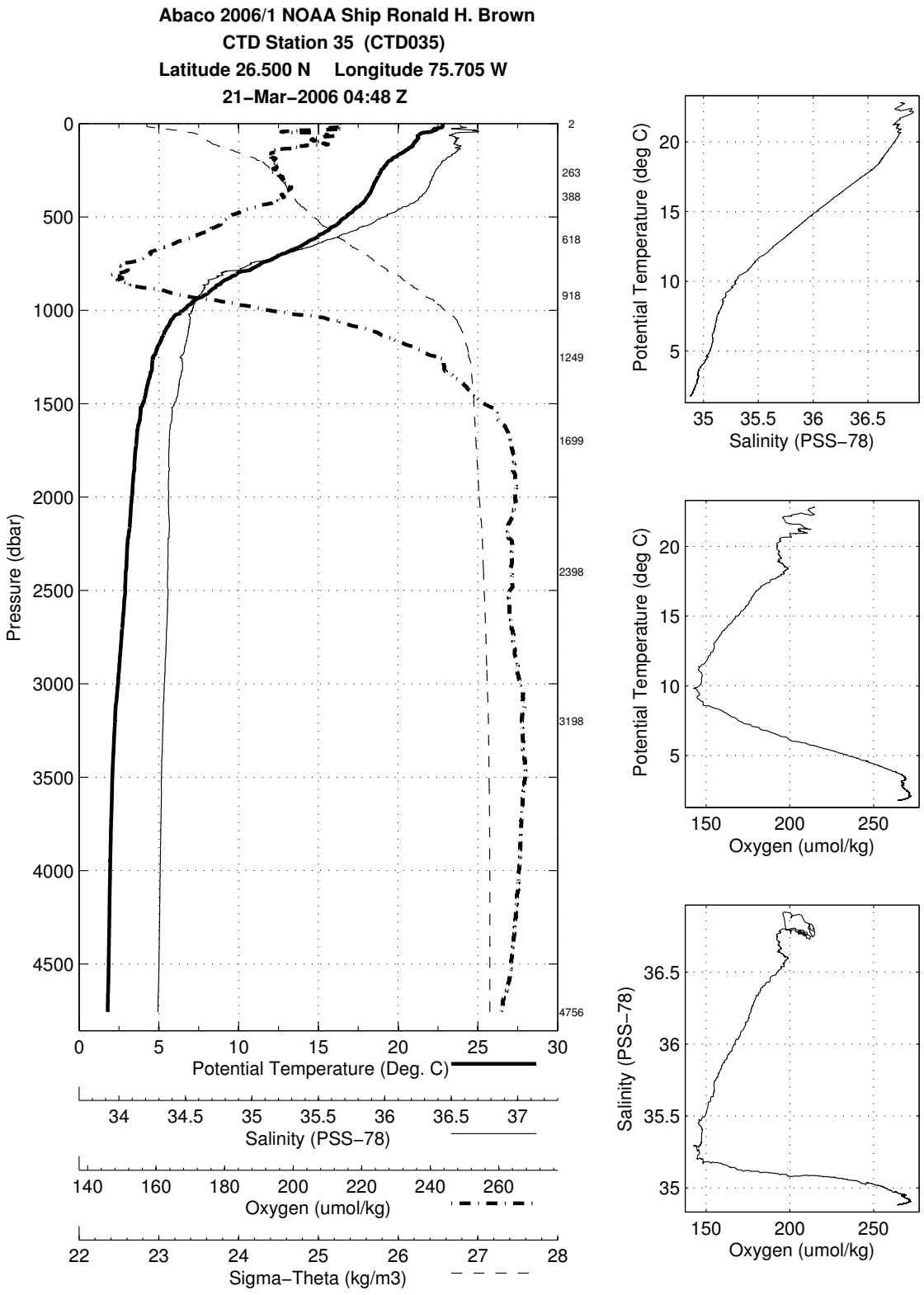
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
2099	2	3.529	3.359	34.967	NaN
1799	4	3.810	3.664	34.973	NaN
1542	6	4.156	4.030	34.995	NaN
1277	8	4.906	4.796	35.050	NaN
1099	10	5.798	5.698	35.082	NaN
848	12	9.240	9.143	35.232	NaN
649	16	13.397	13.304	35.769	NaN
438	18	17.615	17.540	36.458	NaN
249	20	19.375	19.329	36.678	NaN
119	22	21.938	21.914	36.777	NaN
2	24	23.310	23.310	36.686	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 34 (CTD034)
Latitude 26.500 N Longitude 76.468 W
20−Mar−2006 06:50 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 35 (CTD035)
Latitude 26.500N Longitude 75.705W
21-Mar-2006 04:48Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.792	22.792	36.798	214.3	0.003	25.359
10	22.798	22.796	36.800	214.4	0.026	25.359
20	22.751	22.747	36.831	212.9	0.052	25.396
30	22.275	22.269	36.787	213.8	0.078	25.500
50	21.530	21.520	36.772	207.0	0.125	25.700
75	21.249	21.235	36.765	208.5	0.182	25.774
100	21.061	21.042	36.767	207.8	0.237	25.829
125	20.854	20.830	36.790	200.2	0.292	25.904
150	20.416	20.388	36.777	194.6	0.344	26.014
200	19.483	19.447	36.691	192.9	0.442	26.198
250	18.983	18.938	36.644	193.0	0.534	26.294
300	18.700	18.647	36.617	196.3	0.624	26.348
400	18.069	17.999	36.539	194.6	0.800	26.452
500	16.817	16.734	36.318	179.4	0.967	26.590
600	15.103	15.010	36.032	169.2	1.122	26.766
700	12.761	12.664	35.662	154.7	1.260	26.974
800	10.030	9.933	35.289	145.2	1.377	27.189
900	8.268	8.171	35.164	160.0	1.474	27.377
1000	6.628	6.531	35.099	192.0	1.550	27.561
1100	5.566	5.468	35.078	222.1	1.611	27.681
1200	5.002	4.899	35.052	237.9	1.664	27.728
1300	4.681	4.572	35.038	246.7	1.714	27.755
1400	4.398	4.283	35.016	252.9	1.762	27.769
1500	4.125	4.003	34.988	259.2	1.809	27.777
1750	3.670	3.531	34.952	268.1	1.925	27.796
2000	3.467	3.308	34.949	268.9	2.039	27.816
2500	3.096	2.894	34.946	267.3	2.259	27.852
3000	2.685	2.441	34.923	270.4	2.474	27.874
3500	2.379	2.090	34.904	271.9	2.682	27.888
4000	2.289	1.946	34.896	270.1	2.893	27.893
4500	2.254	1.855	34.889	267.6	3.114	27.894

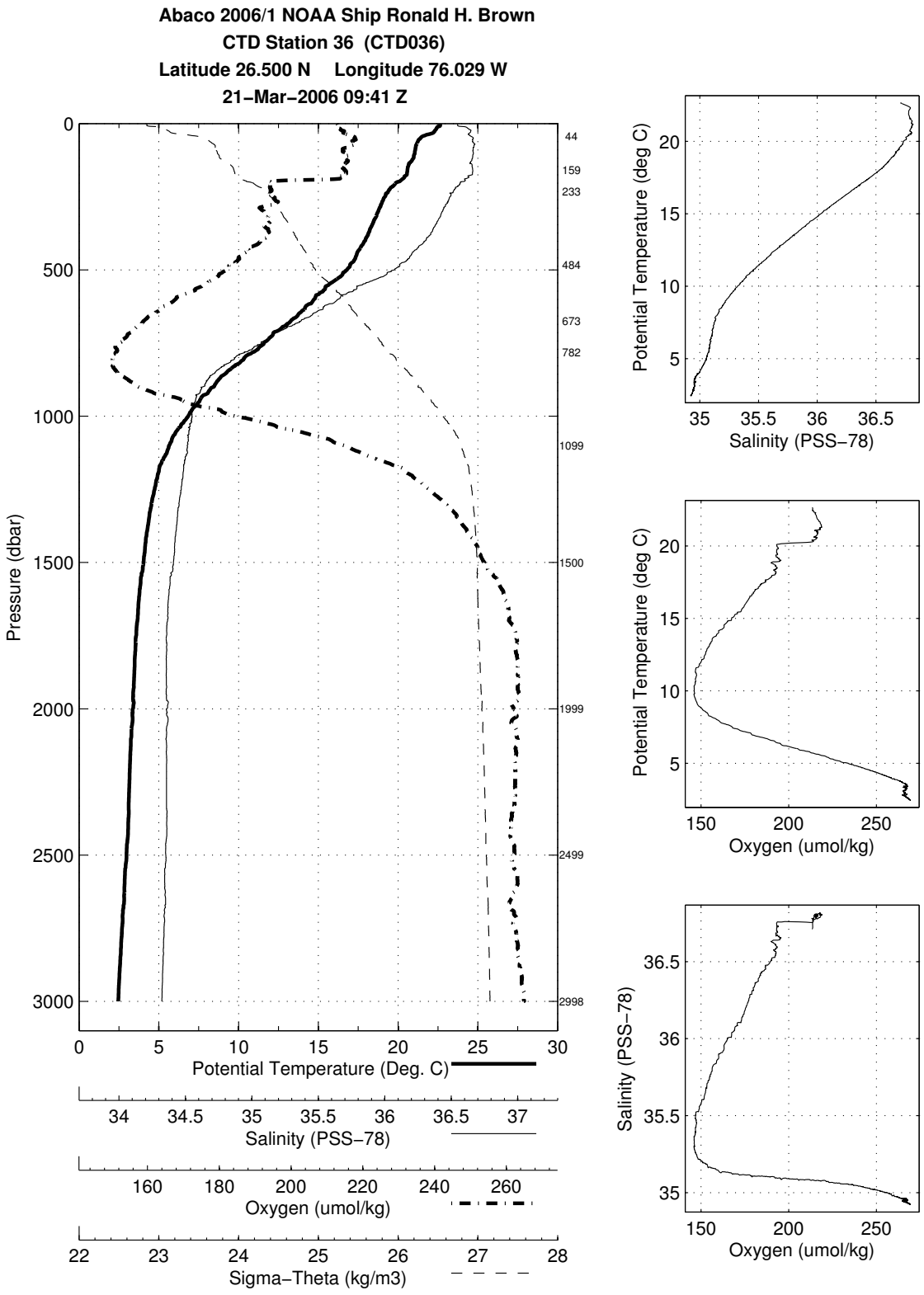
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4757	2	2.228	1.798	34.881	NaN
3199	4	2.516	2.256	34.914	NaN
2399	6	3.149	2.956	34.946	NaN
1699	8	3.746	3.611	34.959	NaN
1249	10	4.768	4.663	35.035	NaN
919	12	7.847	7.751	35.139	NaN
618	16	14.803	14.708	35.988	NaN
389	18	18.045	17.978	36.531	NaN
264	20	18.823	18.775	36.627	NaN
3	22	22.784	22.783	36.816	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 35 (CTD035)
Latitude 26.500 N Longitude 75.705 W
21−Mar−2006 04:48 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
2
263
388
618
918
1249
1699
2398
3198
4756
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
140 160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 36 (CTD036)
Latitude 26.500N Longitude 76.029W
21-Mar-2006 09:41Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.639	22.638	36.713	213.3	0.003	25.338
10	22.502	22.500	36.751	213.6	0.026	25.407
20	22.383	22.379	36.782	214.2	0.052	25.465
30	22.240	22.234	36.790	215.0	0.076	25.512
50	21.403	21.393	36.807	218.5	0.123	25.762
75	21.129	21.114	36.812	217.5	0.178	25.843
100	21.064	21.045	36.808	215.9	0.233	25.859
125	20.898	20.874	36.799	216.1	0.287	25.899
150	20.632	20.604	36.802	214.6	0.340	25.975
200	19.968	19.931	36.733	193.4	0.443	26.103
250	19.219	19.173	36.667	193.7	0.538	26.251
300	18.810	18.756	36.622	191.4	0.630	26.324
400	18.009	17.940	36.519	190.3	0.805	26.451
500	16.881	16.798	36.330	179.8	0.973	26.584
600	14.830	14.738	35.991	164.9	1.125	26.794
700	12.775	12.677	35.676	152.7	1.261	26.982
800	10.457	10.358	35.363	146.2	1.379	27.173
900	8.537	8.438	35.171	153.8	1.477	27.341
1000	6.940	6.841	35.108	182.6	1.557	27.526
1100	5.745	5.645	35.078	215.2	1.621	27.659
1200	5.032	4.929	35.053	235.1	1.675	27.726
1300	4.644	4.535	35.030	245.7	1.726	27.752
1400	4.353	4.238	35.009	252.7	1.774	27.768
1500	4.158	4.036	34.995	257.3	1.821	27.779
1750	3.717	3.578	34.954	266.5	1.937	27.793
2000	3.533	3.372	34.954	266.2	2.052	27.813
2500	3.179	2.976	34.949	266.2	2.277	27.847
3000	2.698	2.454	34.925	269.1	2.494	27.874

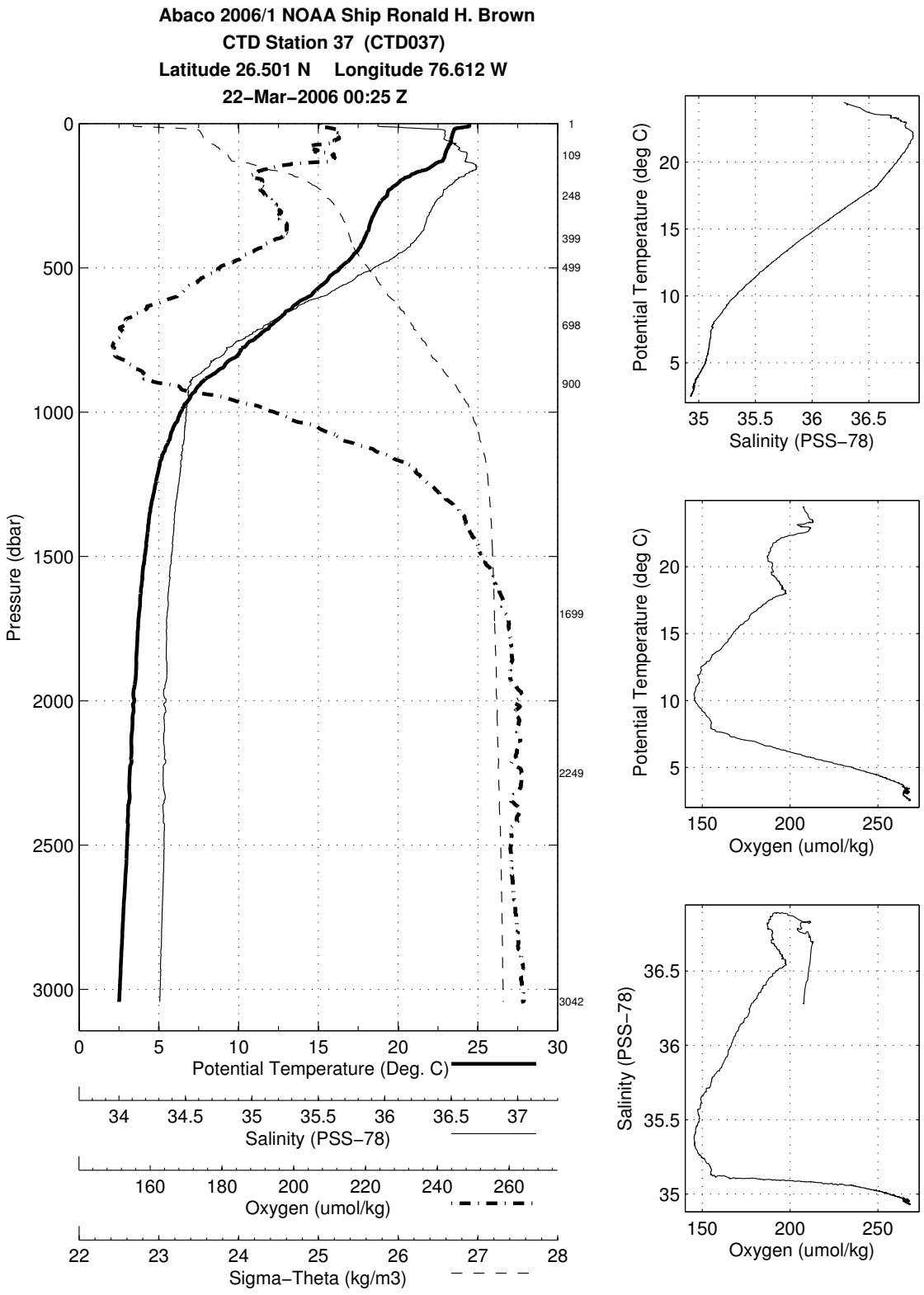
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
2999	2	2.700	2.456	34.926	NaN
2499	4	3.167	2.964	34.951	NaN
2000	6	3.521	3.361	34.952	NaN
1500	8	4.073	3.952	34.980	NaN
1100	10	5.807	5.707	35.080	NaN
783	12	11.154	11.054	35.454	NaN
674	16	13.605	13.507	35.802	NaN
484	18	17.030	16.949	36.358	NaN
233	20	19.490	19.447	36.695	NaN
159	22	20.527	20.496	36.796	NaN
45	24	21.578	21.569	36.792	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 36 (CTD036)
Latitude 26.500 N Longitude 76.029 W
21−Mar−2006 09:41 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
44
159
233
484
673
782
1099
1500
1999
2499
2998
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 37 (CTD037)
Latitude 26.501N Longitude 76.612W
22-Mar-2006 00:25Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.467	24.467	36.281	207.5	0.003	24.472
10	24.444	24.441	36.288	207.9	0.035	24.485
20	23.535	23.531	36.665	212.2	0.066	25.041
30	23.454	23.448	36.697	213.0	0.095	25.090
50	23.359	23.348	36.691	213.1	0.152	25.115
75	23.195	23.179	36.762	205.3	0.223	25.218
100	23.006	22.986	36.830	208.0	0.291	25.327
125	22.858	22.832	36.825	211.4	0.358	25.367
150	22.093	22.063	36.889	193.9	0.421	25.636
200	20.149	20.111	36.759	190.0	0.530	26.074
250	19.350	19.304	36.681	191.2	0.626	26.228
300	18.662	18.608	36.611	195.3	0.717	26.354
400	17.941	17.872	36.518	194.1	0.891	26.467
500	16.444	16.362	36.254	177.3	1.056	26.629
600	14.467	14.377	35.929	164.2	1.205	26.825
700	12.081	11.986	35.576	148.6	1.334	27.039
800	10.103	10.006	35.327	145.8	1.446	27.206
900	7.737	7.643	35.125	160.1	1.539	27.425
1000	6.473	6.378	35.094	193.8	1.612	27.578
1100	5.718	5.618	35.078	214.9	1.674	27.663
1200	5.088	4.984	35.056	235.9	1.728	27.722
1300	4.713	4.603	35.034	244.9	1.778	27.748
1400	4.442	4.327	35.018	251.8	1.827	27.765
1500	4.233	4.110	35.002	256.2	1.875	27.776
1750	3.836	3.695	34.972	263.8	1.992	27.796
2000	3.620	3.458	34.968	265.6	2.107	27.816
2500	3.214	3.010	34.957	264.5	2.334	27.850
3000	2.799	2.553	34.932	268.1	2.554	27.871

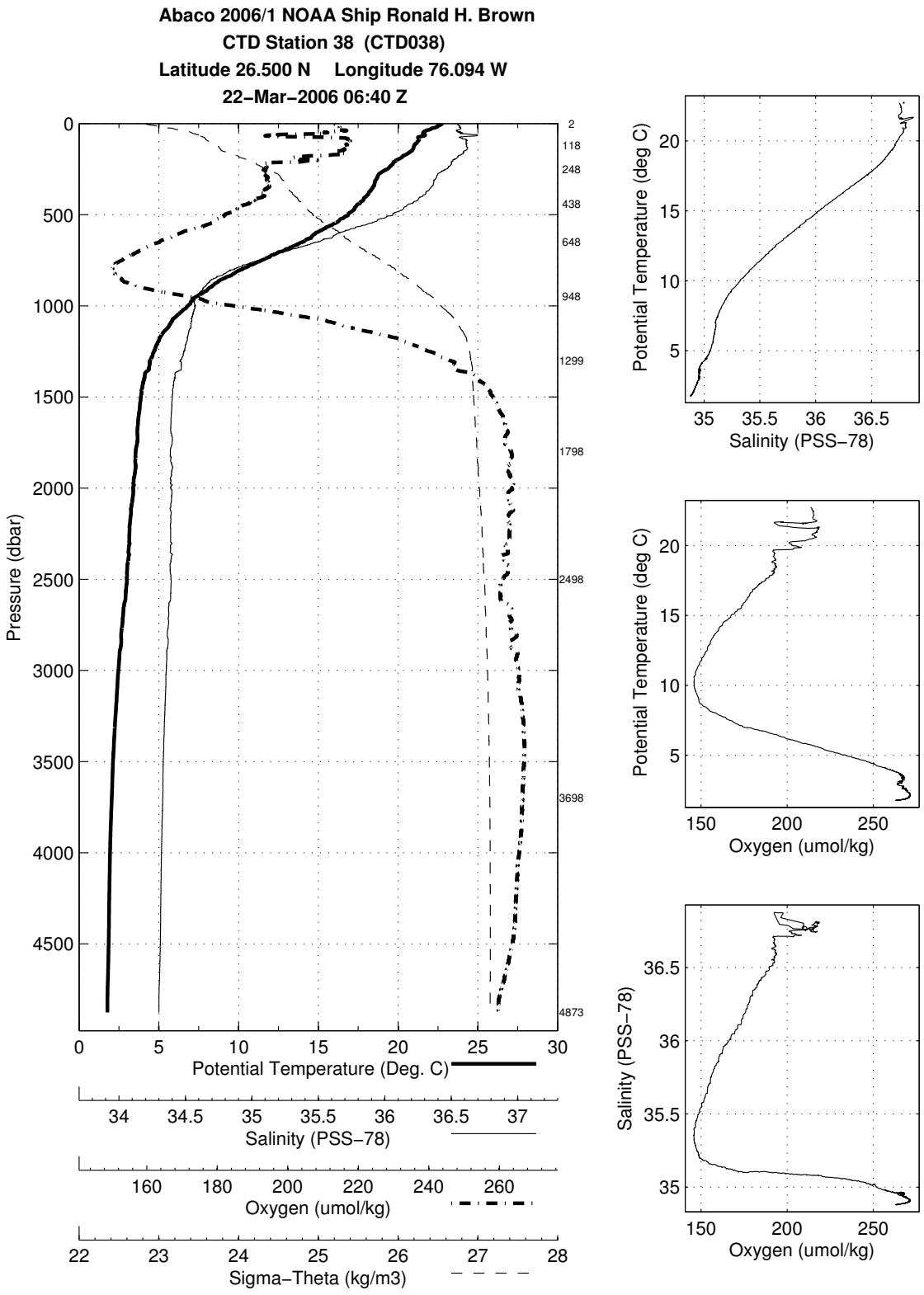
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
3042	2	2.761	2.511	34.931	NaN
2249	4	3.367	3.185	34.952	NaN
1699	6	3.895	3.757	34.976	NaN
900	10	7.736	7.643	35.124	NaN
698	12	12.307	12.212	35.605	NaN
499	16	16.634	16.552	36.289	NaN
399	18	17.949	17.880	36.520	NaN
249	20	19.373	19.328	36.679	NaN
109	22	23.015	22.993	36.816	NaN
2	24	24.317	24.317	36.310	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 37 (CTD037)
Latitude 26.501 N Longitude 76.612 W
22−Mar−2006 00:25 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
1
109
248
399
499
698
900
1699
2249
3042
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 38 (CTD038)
Latitude 26.500N Longitude 76.094W
22-Mar-2006 06:40Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	22.732	22.731	36.750	213.7	0.003	25.339
10	22.580	22.578	36.760	214.3	0.026	25.391
20	22.403	22.399	36.761	215.1	0.052	25.443
30	22.063	22.057	36.770	215.0	0.076	25.547
50	21.625	21.615	36.776	211.2	0.124	25.677
75	21.262	21.247	36.761	210.4	0.181	25.767
100	21.223	21.203	36.803	218.1	0.237	25.811
125	21.014	20.989	36.806	217.2	0.292	25.872
150	20.875	20.846	36.792	215.1	0.346	25.901
200	19.930	19.892	36.722	207.3	0.449	26.104
250	19.368	19.322	36.678	192.4	0.546	26.221
300	18.734	18.680	36.616	193.0	0.637	26.339
400	18.072	18.002	36.530	191.7	0.813	26.444
500	16.951	16.868	36.344	180.3	0.981	26.578
600	14.942	14.850	36.012	166.8	1.135	26.785
700	12.867	12.769	35.680	153.8	1.273	26.966
800	10.317	10.219	35.352	145.9	1.389	27.189
900	8.294	8.197	35.160	155.0	1.486	27.370
1000	6.921	6.823	35.105	183.0	1.565	27.527
1100	5.790	5.691	35.082	215.0	1.629	27.657
1200	5.034	4.931	35.051	235.5	1.684	27.724
1300	4.554	4.446	35.014	248.8	1.734	27.749
1400	4.187	4.074	34.976	257.2	1.782	27.759
1500	3.998	3.878	34.964	261.9	1.829	27.771
1750	3.784	3.644	34.963	265.4	1.946	27.794
2000	3.542	3.382	34.953	267.6	2.061	27.812
2500	3.201	2.998	34.956	264.8	2.287	27.851
3000	2.712	2.467	34.926	269.6	2.504	27.874
3500	2.418	2.128	34.908	271.4	2.716	27.887
4000	2.284	1.941	34.896	269.9	2.928	27.893
4500	2.254	1.854	34.889	267.8	3.148	27.894

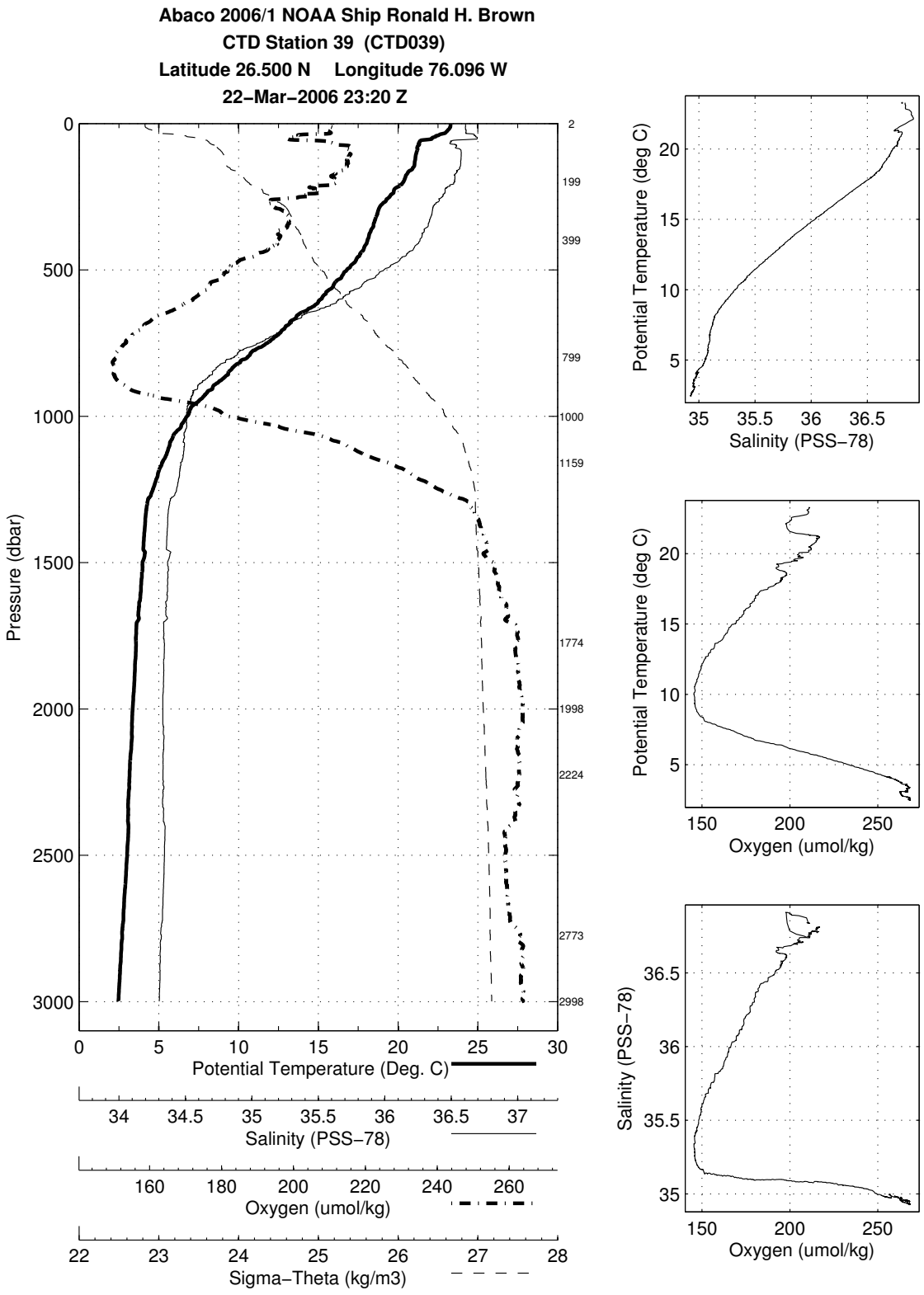
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4874	2	2.225	1.781	34.880	NaN
3699	4	2.360	2.049	34.903	NaN
2499	6	3.216	3.012	34.958	NaN
1799	8	3.769	3.624	34.968	NaN
1299	10	4.565	4.457	35.023	NaN
948	12	7.494	7.397	35.119	NaN
649	16	13.940	13.844	35.857	NaN
439	18	17.654	17.579	36.463	NaN
249	20	19.400	19.354	36.684	NaN
119	22	20.923	20.901	36.783	NaN
3	24	22.731	22.731	36.789	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 38 (CTD038)
Latitude 26.500 N Longitude 76.094 W
22−Mar−2006 06:40 Z
Pressure (dbar)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
2
118
248
438
648
948
1299
1798
2498
3698
4873
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
160 180 200 220 240 260
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
5 10 15 20
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
5 10 15 20
150 200 250
Oxygen (umol/kg)
Salinity (PSS−78)
35 35.5 36 36.5
150 200 250
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 39 (CTD039)
Latitude 26.500N Longitude 76.096W
22-Mar-2006 23:20Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	23.290	23.289	36.837	211.1	0.003	25.243
10	23.284	23.282	36.836	211.0	0.027	25.245
20	23.160	23.156	36.835	210.6	0.054	25.281
30	23.004	22.997	36.838	210.4	0.081	25.329
50	22.137	22.127	36.909	197.5	0.131	25.633
75	21.288	21.273	36.778	215.8	0.188	25.773
100	21.167	21.148	36.810	216.7	0.243	25.832
125	21.089	21.065	36.807	215.4	0.298	25.853
150	20.968	20.939	36.799	215.2	0.353	25.881
200	20.369	20.331	36.768	212.0	0.458	26.022
250	19.527	19.481	36.695	202.1	0.557	26.192
300	18.793	18.739	36.629	196.7	0.649	26.334
400	18.149	18.079	36.552	194.8	0.826	26.441
500	16.867	16.783	36.327	179.8	0.994	26.585
600	15.259	15.165	36.052	169.4	1.149	26.747
700	12.984	12.885	35.708	153.6	1.287	26.965
800	10.636	10.536	35.388	145.7	1.406	27.162
900	8.486	8.388	35.168	150.2	1.505	27.346
1000	6.864	6.766	35.094	179.8	1.585	27.525
1100	5.775	5.675	35.085	215.4	1.649	27.661
1200	5.035	4.931	35.053	235.4	1.704	27.726
1300	4.373	4.268	34.991	252.1	1.753	27.750
1400	4.201	4.087	34.976	256.3	1.801	27.758
1500	4.095	3.974	34.980	259.3	1.849	27.773
1750	3.715	3.576	34.956	266.4	1.966	27.795
2000	3.518	3.358	34.950	268.0	2.081	27.811
2500	3.217	3.013	34.960	262.8	2.306	27.852

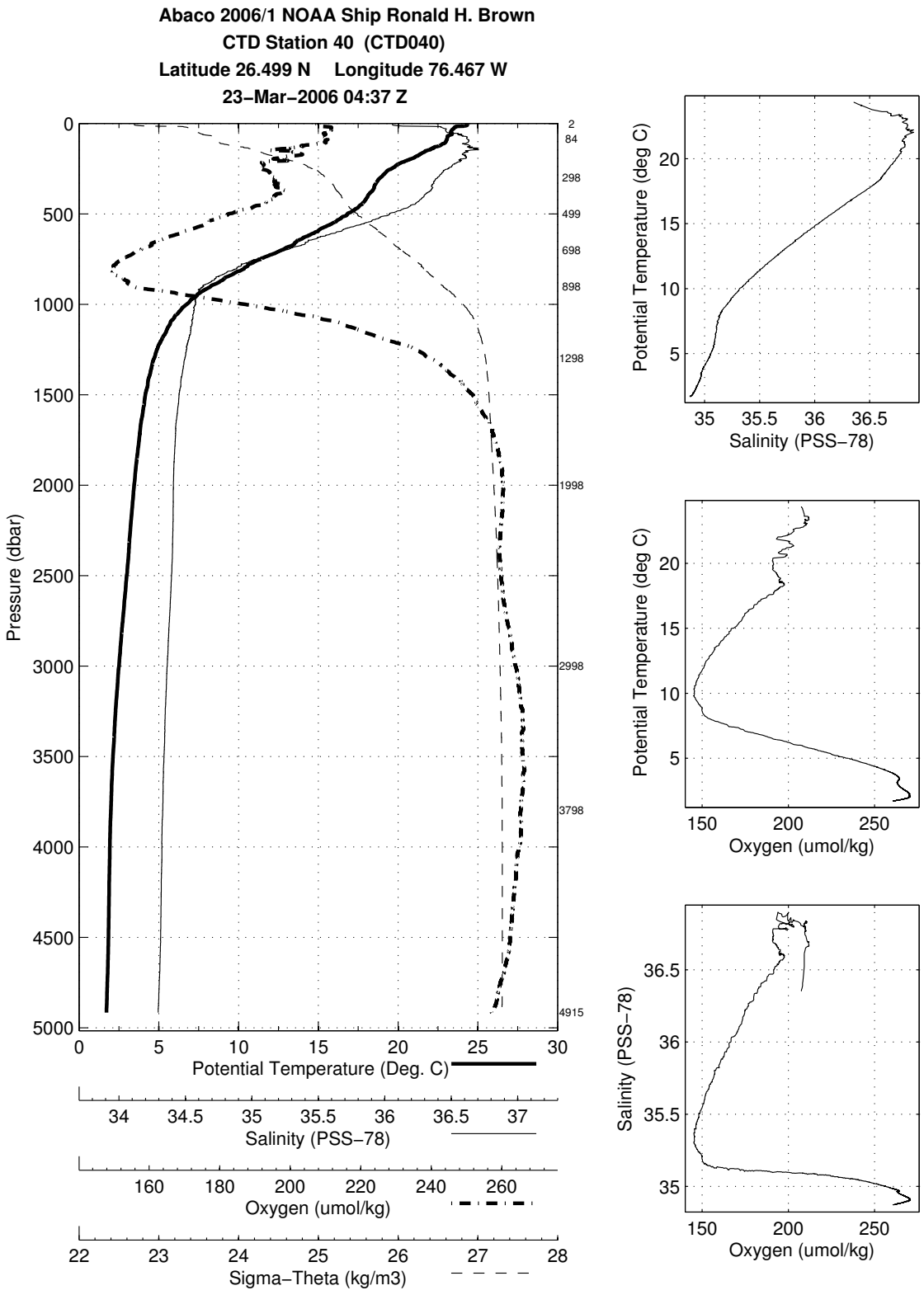
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
2999	2	2.713	2.468	34.928	NaN
2774	4	2.944	2.718	34.943	NaN
2224	6	3.334	3.155	34.950	NaN
1999	8	3.511	3.351	34.950	NaN
1774	10	3.709	3.567	34.959	NaN
1159	12	5.197	5.096	35.061	NaN
1000	16	6.881	6.783	35.099	NaN
799	18	10.797	10.697	35.411	NaN
400	20	18.037	17.968	36.532	NaN
199	22	20.256	20.219	36.764	NaN
2	24	23.277	23.276	36.809	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 39 (CTD039)
Latitude 26.500 N Longitude 76.096 W
22−Mar−2006 23:20 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 40 (CTD040)
Latitude 26.499N Longitude 76.467W
23-Mar-2006 04:37Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.346	24.346	36.354	207.5	0.003	24.564
10	24.316	24.313	36.366	207.7	0.034	24.582
20	23.550	23.546	36.664	211.7	0.065	25.037
30	23.461	23.454	36.696	211.8	0.094	25.088
50	23.301	23.291	36.703	210.8	0.151	25.141
75	23.117	23.102	36.828	210.1	0.220	25.291
100	23.009	22.989	36.834	210.2	0.287	25.329
125	22.551	22.526	36.841	203.2	0.353	25.468
150	21.798	21.768	36.825	197.7	0.414	25.670
200	20.741	20.703	36.787	199.2	0.527	25.936
250	19.623	19.577	36.706	190.9	0.628	26.176
300	18.934	18.880	36.640	195.3	0.721	26.306
400	18.171	18.100	36.554	194.5	0.899	26.438
500	16.904	16.820	36.336	180.5	1.068	26.583
600	14.899	14.807	36.000	166.6	1.222	26.786
700	12.763	12.666	35.672	153.8	1.358	26.981
800	10.450	10.352	35.371	145.4	1.474	27.181
900	8.346	8.249	35.158	151.5	1.572	27.360
1000	6.840	6.741	35.107	185.8	1.651	27.539
1100	5.827	5.726	35.089	214.4	1.715	27.658
1200	5.240	5.135	35.062	229.2	1.771	27.709
1300	4.803	4.692	35.041	242.0	1.822	27.743
1400	4.514	4.397	35.021	249.4	1.872	27.760
1500	4.278	4.155	35.005	255.0	1.920	27.774
1750	3.904	3.762	34.981	261.7	2.038	27.796
2000	3.612	3.451	34.969	264.3	2.154	27.818
2500	3.189	2.985	34.957	263.6	2.379	27.853
3000	2.749	2.503	34.930	268.0	2.596	27.874
3500	2.417	2.126	34.910	270.3	2.807	27.889
4000	2.270	1.929	34.896	268.9	3.018	27.894
4500	2.242	1.843	34.888	266.3	3.237	27.895

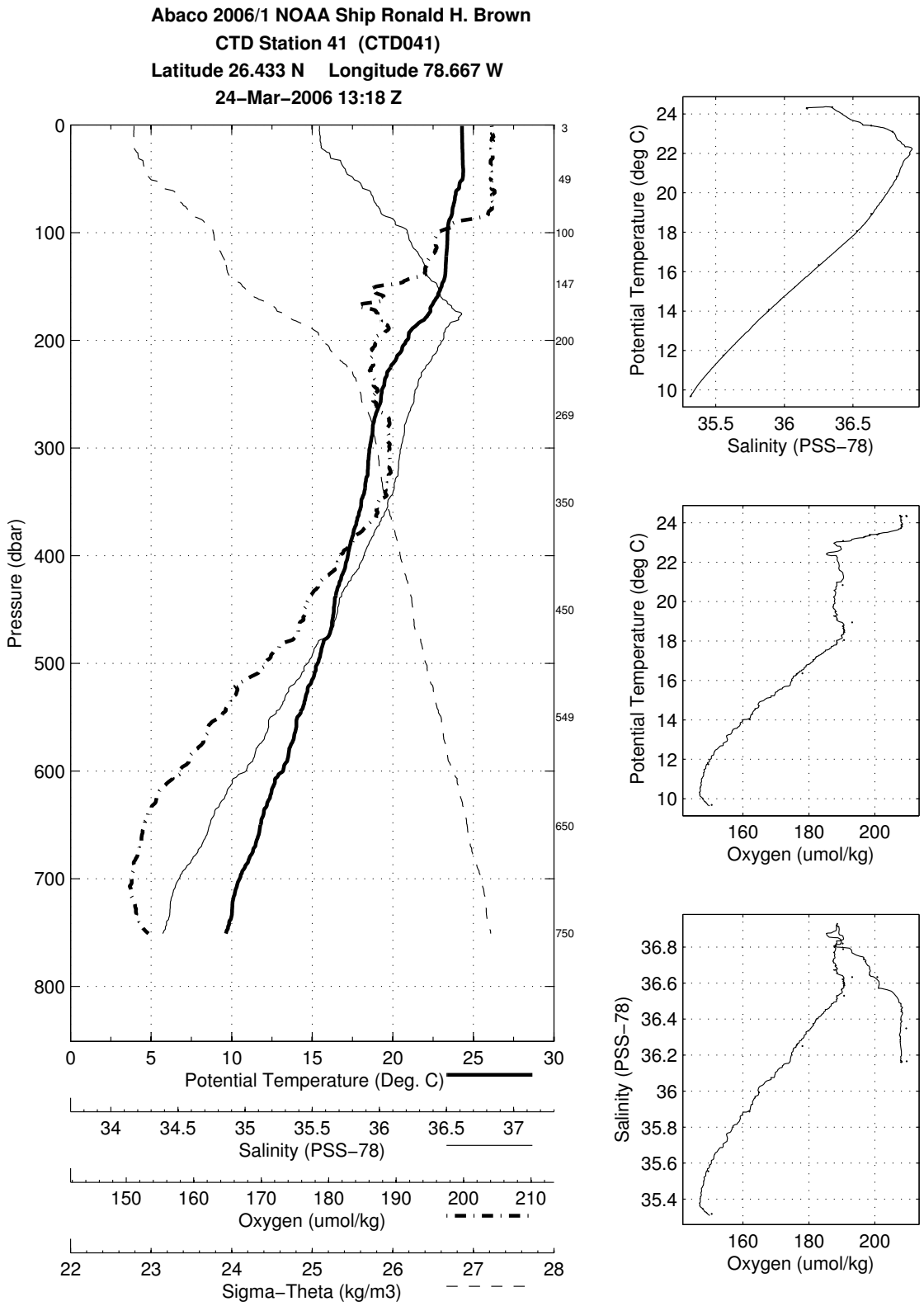
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4915	2	2.167	1.719	34.870	NaN
3799	4	2.314	1.993	34.899	NaN
2998	6	2.751	2.506	34.928	NaN
1998	8	3.612	3.450	34.968	NaN
1299	10	4.823	4.713	35.043	NaN
899	12	8.260	8.163	35.148	NaN
698	16	12.708	12.611	35.668	NaN
500	18	16.889	16.806	36.329	NaN
299	20	18.909	18.856	36.635	NaN
84	22	23.076	23.059	36.839	NaN
3	24	24.094	24.093	36.424	NaN


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 40 (CTD040)
Latitude 26.499 N Longitude 76.467 W
23−Mar−2006 04:37 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 41 (CTD041)
Latitude 26.433N Longitude 78.667W
24-Mar-2006 13:18Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.294	24.293	36.160	207.9	0.003	24.432
10	24.309	24.307	36.163	208.1	0.035	24.430
20	24.318	24.314	36.170	208.0	0.070	24.433
30	24.337	24.331	36.219	208.1	0.105	24.466
50	24.343	24.333	36.345	207.7	0.173	24.560
75	23.782	23.766	36.471	207.9	0.254	24.825
100	23.421	23.400	36.638	198.8	0.330	25.059
125	23.335	23.309	36.718	197.2	0.403	25.147
150	23.061	23.030	36.800	188.4	0.473	25.291
200	20.901	20.862	36.828	188.5	0.595	25.924
250	19.334	19.289	36.674	188.1	0.694	26.227
300	18.623	18.570	36.602	190.6	0.785	26.356
400	17.275	17.207	36.400	182.2	0.957	26.540
500	15.409	15.330	36.095	169.8	1.112	26.743
600	13.270	13.184	35.761	155.0	1.248	26.945
700	10.581	10.495	35.398	147.0	1.364	27.177

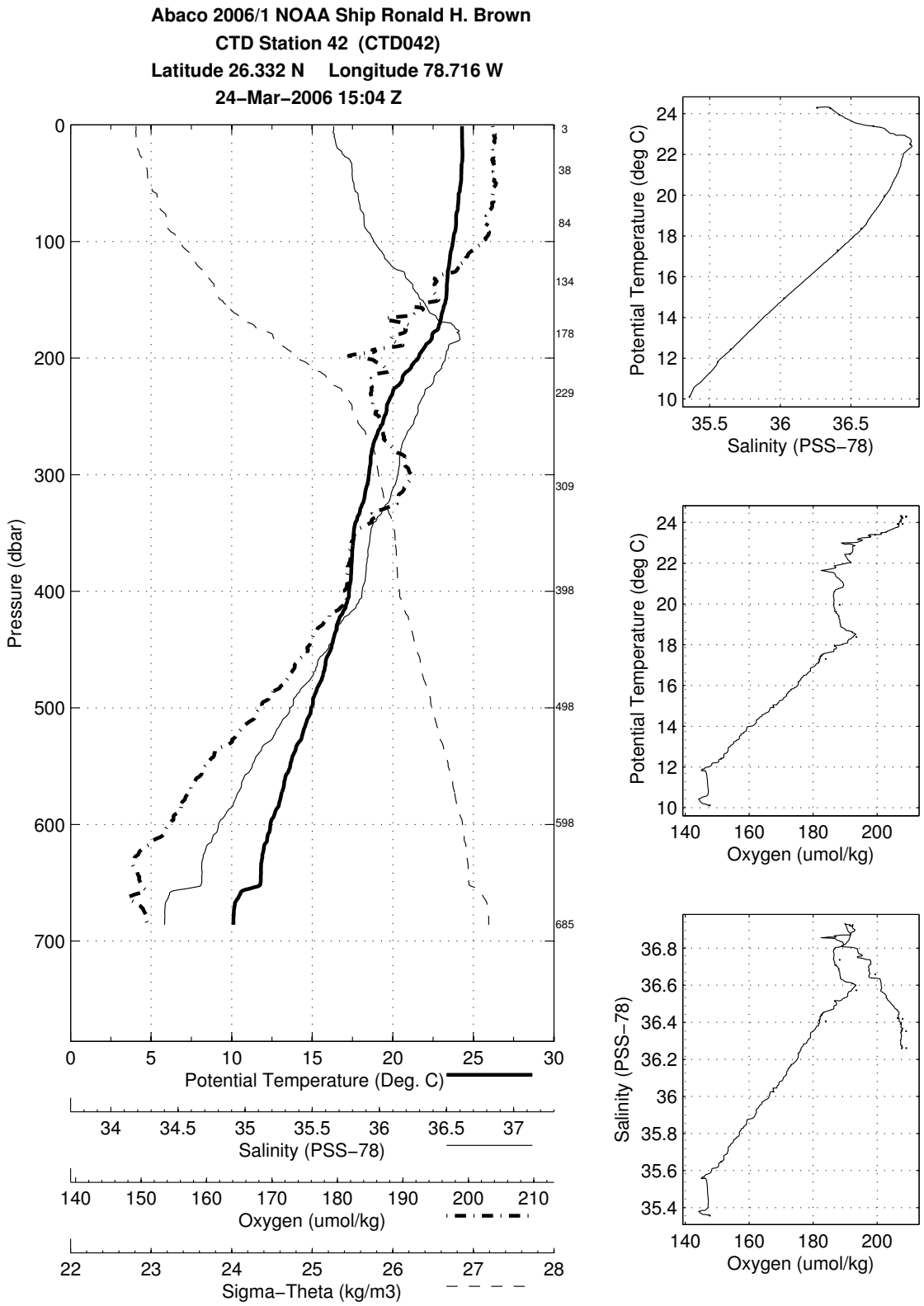
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
751	2	9.771	9.683	35.318	150.5
651	4	11.838	11.752	35.555	149.5
550	6	14.148	14.067	35.886	162.0
450	8	16.414	16.340	36.250	178.1
351	10	18.120	18.059	36.529	190.6
269	12	18.983	18.935	36.633	193.1
200	16	20.872	20.833	36.820	190.3
148	18	23.130	23.099	36.788	190.4
100	20	23.428	23.407	36.634	200.8
50	22	24.358	24.347	36.349	209.5
3	24	24.275	24.274	36.165	209.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 41 (CTD041)
Latitude 26.433 N Longitude 78.667 W
24−Mar−2006 13:18 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 42 (CTD042)
Latitude 26.332N Longitude 78.716W
24-Mar-2006 15:04Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.296	24.295	36.260	207.5	0.003	24.507
10	24.300	24.298	36.261	207.7	0.034	24.507
20	24.317	24.312	36.280	207.3	0.068	24.517
30	24.321	24.315	36.346	207.3	0.102	24.567
50	24.229	24.219	36.367	208.1	0.169	24.611
75	23.987	23.971	36.413	206.9	0.252	24.721
100	23.758	23.737	36.474	205.7	0.332	24.836
125	23.444	23.418	36.613	201.2	0.409	25.036
150	23.327	23.296	36.726	198.1	0.481	25.157
200	21.608	21.569	36.854	185.1	0.611	25.749
250	19.526	19.480	36.697	187.8	0.714	26.194
300	18.574	18.521	36.601	193.3	0.805	26.368
400	17.351	17.283	36.411	181.8	0.973	26.530
500	15.009	14.932	36.027	167.5	1.126	26.780
600	12.485	12.403	35.647	151.3	1.257	27.013

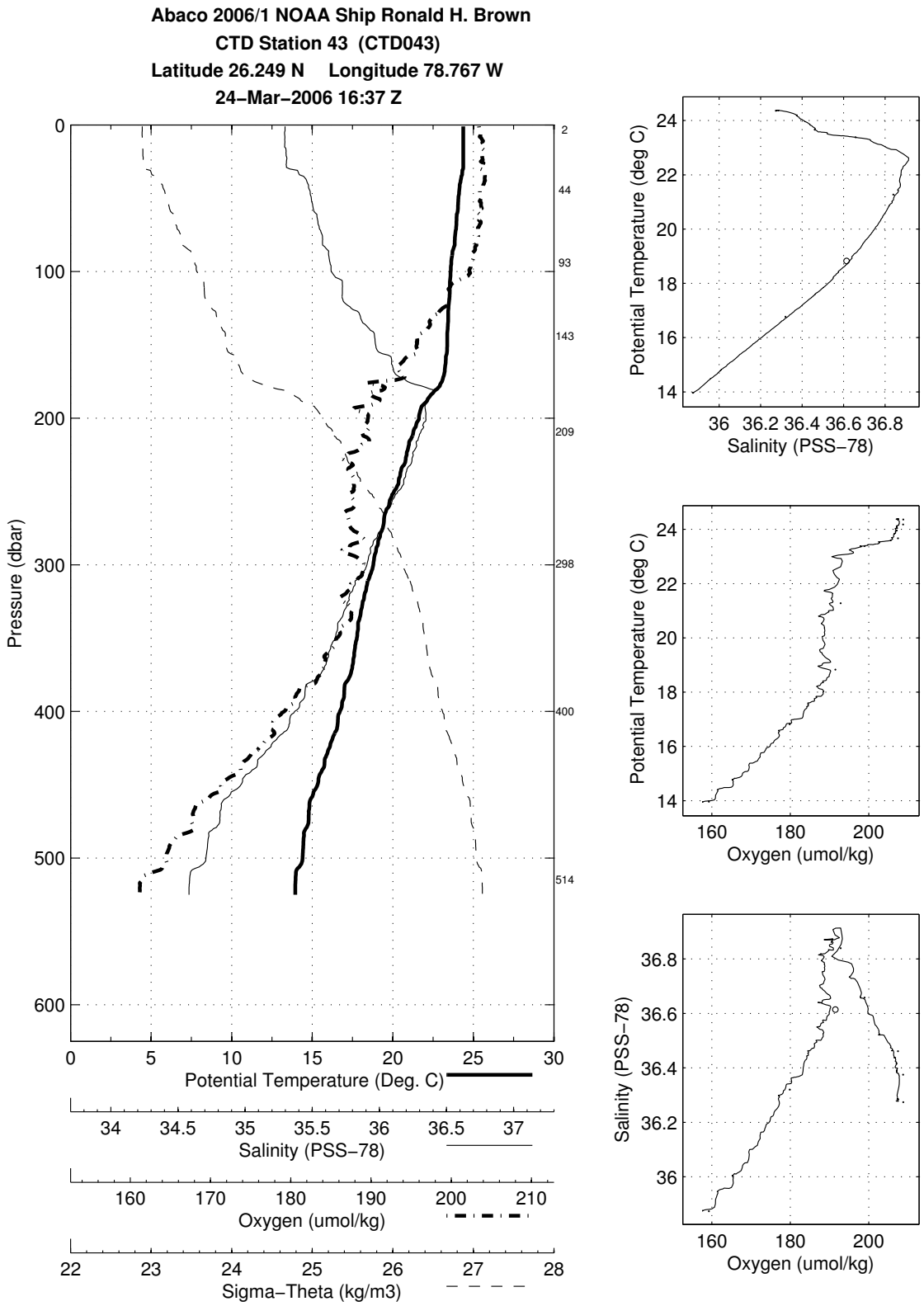
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
686	2	10.195	10.112	35.357	147.7
599	4	12.518	12.436	35.648	151.2
499	6	15.023	14.946	36.026	167.6
399	8	17.357	17.290	36.406	183.9
309	10	18.422	18.368	36.573	193.5
230	12	19.976	19.933	36.737	188.3
179	16	22.522	22.486	36.922	191.5
134	18	23.418	23.390	36.659	199.4
84	20	23.962	23.944	36.418	207.9
39	22	24.279	24.270	36.353	209.0
3	24	24.280	24.279	36.261	209.1


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 42 (CTD042)
Latitude 26.332 N Longitude 78.716 W
24−Mar−2006 15:04 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 43 (CTD043)
Latitude 26.249N Longitude 78.767W
24-Mar-2006 16:37Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.375	24.375	36.279	206.9	0.003	24.498
10	24.377	24.375	36.278	207.4	0.034	24.497
20	24.376	24.372	36.284	207.3	0.069	24.503
30	24.368	24.361	36.300	207.2	0.103	24.518
50	24.082	24.071	36.390	207.2	0.169	24.673
75	23.892	23.876	36.436	206.7	0.251	24.766
100	23.616	23.595	36.475	205.5	0.329	24.879
125	23.484	23.458	36.558	201.6	0.406	24.982
150	23.408	23.377	36.662	197.9	0.480	25.084
200	21.663	21.624	36.873	190.8	0.613	25.748
250	20.119	20.072	36.754	188.6	0.721	26.081
300	18.840	18.787	36.625	190.2	0.816	26.319
400	16.780	16.713	36.320	178.6	0.985	26.596
500	14.475	14.400	35.946	161.3	1.130	26.833

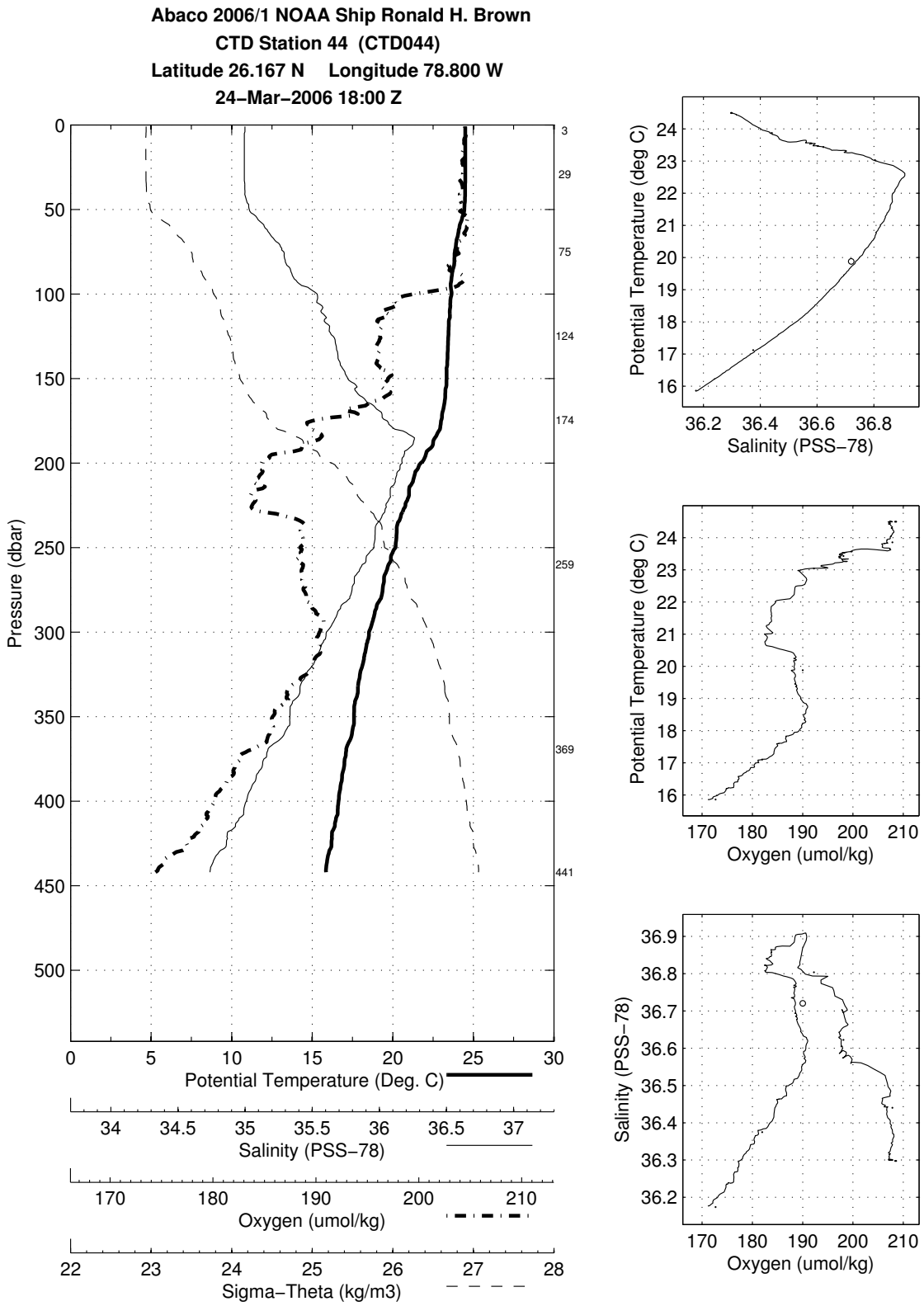
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
515	2	14.043	13.967	35.873	159.2
400	4	16.838	16.772	36.320	179.8
299	6	18.876	18.823	36.614	191.4
209	8	21.310	21.269	36.840	192.8
144	10	23.413	23.383	36.658	198.9
94	12	23.683	23.663	36.461	207.4
44	16	24.198	24.188	36.375	208.7
3	18	24.363	24.362	36.274	208.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 43 (CTD043)
Latitude 26.249 N Longitude 78.767 W
24−Mar−2006 16:37 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 44 (CTD044)
Latitude 26.167N Longitude 78.800W
24-Mar-2006 18:00Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.496	24.496	36.302	207.6	0.003	24.479
10	24.501	24.499	36.300	207.6	0.034	24.476
20	24.501	24.497	36.300	207.5	0.069	24.477
30	24.504	24.497	36.300	207.4	0.104	24.477
50	24.450	24.439	36.317	207.4	0.173	24.507
75	23.866	23.850	36.441	206.8	0.255	24.777
100	23.669	23.648	36.561	201.6	0.334	24.928
125	23.472	23.446	36.618	197.6	0.409	25.031
150	23.371	23.340	36.671	198.6	0.483	25.102
200	21.768	21.729	36.865	183.7	0.617	25.712
250	20.219	20.172	36.764	188.2	0.725	26.062
300	18.576	18.523	36.594	190.5	0.819	26.362
400	16.698	16.632	36.307	178.1	0.985	26.606

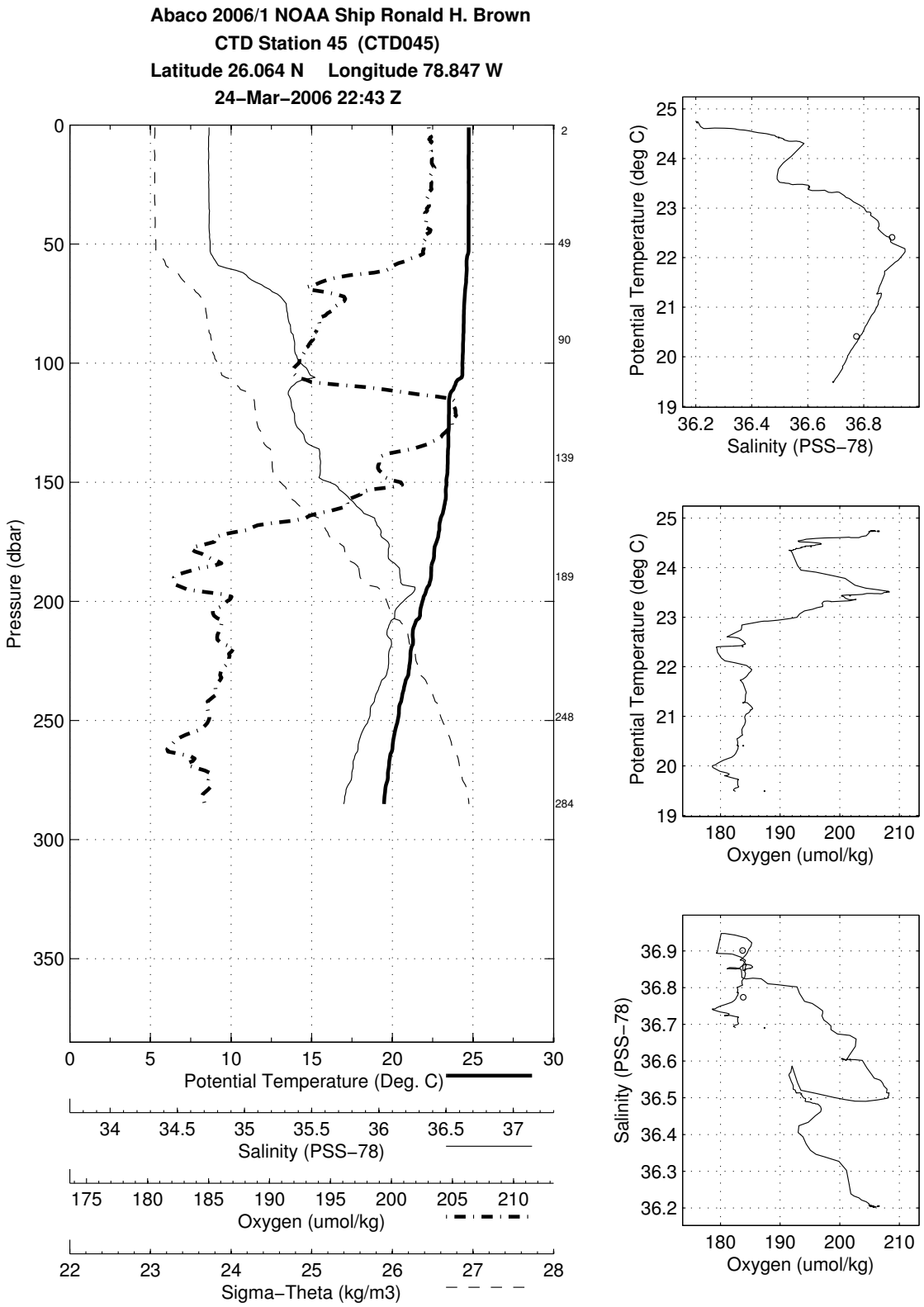
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
442	2	15.928	15.857	36.174	172.7
369	4	17.181	17.119	36.375	182.0
260	6	19.929	19.881	36.720	190.0
175	8	23.065	23.029	36.804	192.2
125	10	23.460	23.434	36.622	198.1
75	12	23.893	23.877	36.440	207.8
29	16	24.500	24.494	36.298	208.6
3	18	24.497	24.497	36.298	208.4


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 44 (CTD044)
Latitude 26.167 N Longitude 78.800 W
24−Mar−2006 18:00 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 45 (CTD045)
Latitude 26.064N Longitude 78.847W
24-Mar-2006 22:43Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.737	24.736	36.204	205.5	0.004	24.332
10	24.742	24.740	36.203	205.6	0.036	24.330
20	24.741	24.737	36.204	205.9	0.072	24.331
30	24.747	24.741	36.204	205.4	0.108	24.331
50	24.739	24.728	36.209	204.9	0.180	24.338
75	24.478	24.462	36.483	196.3	0.267	24.626
100	24.368	24.346	36.536	192.1	0.350	24.701
125	23.535	23.509	36.516	207.8	0.428	24.935
150	23.384	23.353	36.640	202.6	0.503	25.075
200	21.910	21.870	36.905	184.7	0.635	25.703
250	20.379	20.331	36.778	182.9	0.746	26.030

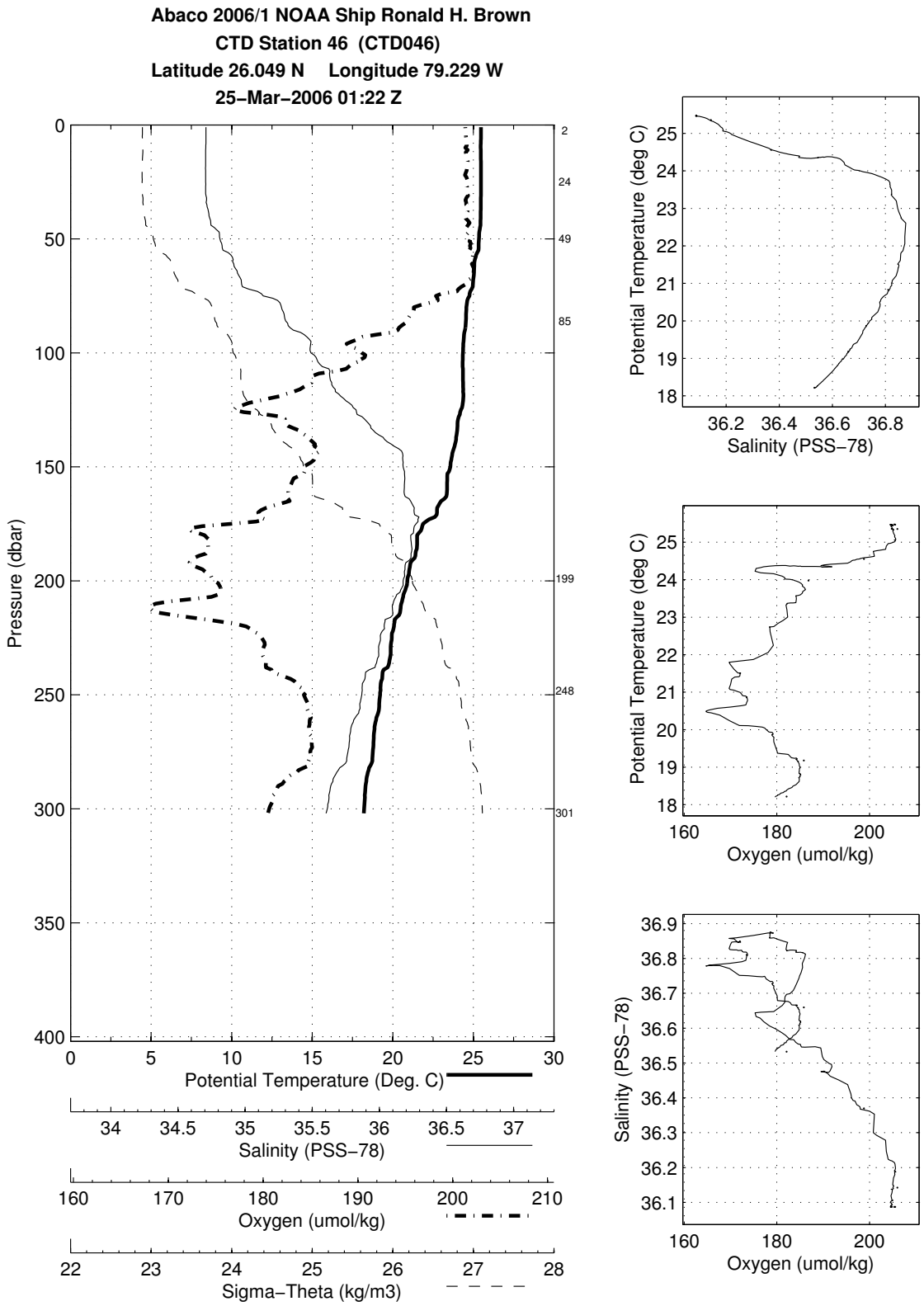
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
285	2	19.546	19.494	36.690	187.4
248	4	20.459	20.412	36.774	183.8
189	6	22.447	22.409	36.901	183.7
139	8	23.452	23.423	36.604	201.7
90	10	24.442	24.423	36.496	195.2
49	12	24.736	24.726	36.205	206.4
2	16	24.728	24.728	36.205	206.6


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 45 (CTD045)
Latitude 26.064 N Longitude 78.847 W
24−Mar−2006 22:43 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 46 (CTD046)
Latitude 26.049N Longitude 79.229W
25-Mar-2006 01:22Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.473	25.473	36.088	204.5	0.004	24.018
10	25.460	25.457	36.087	204.5	0.039	24.022
20	25.479	25.475	36.086	204.7	0.078	24.017
30	25.478	25.472	36.087	204.7	0.117	24.018
50	25.361	25.350	36.139	205.2	0.194	24.095
75	24.771	24.755	36.300	200.8	0.287	24.399
100	24.376	24.355	36.477	191.5	0.372	24.654
125	24.251	24.225	36.644	175.3	0.454	24.819
150	23.602	23.571	36.818	184.1	0.529	25.146
200	20.939	20.900	36.818	172.8	0.654	25.906
250	19.259	19.213	36.665	184.1	0.754	26.239
300	18.275	18.222	36.537	179.8	0.844	26.394

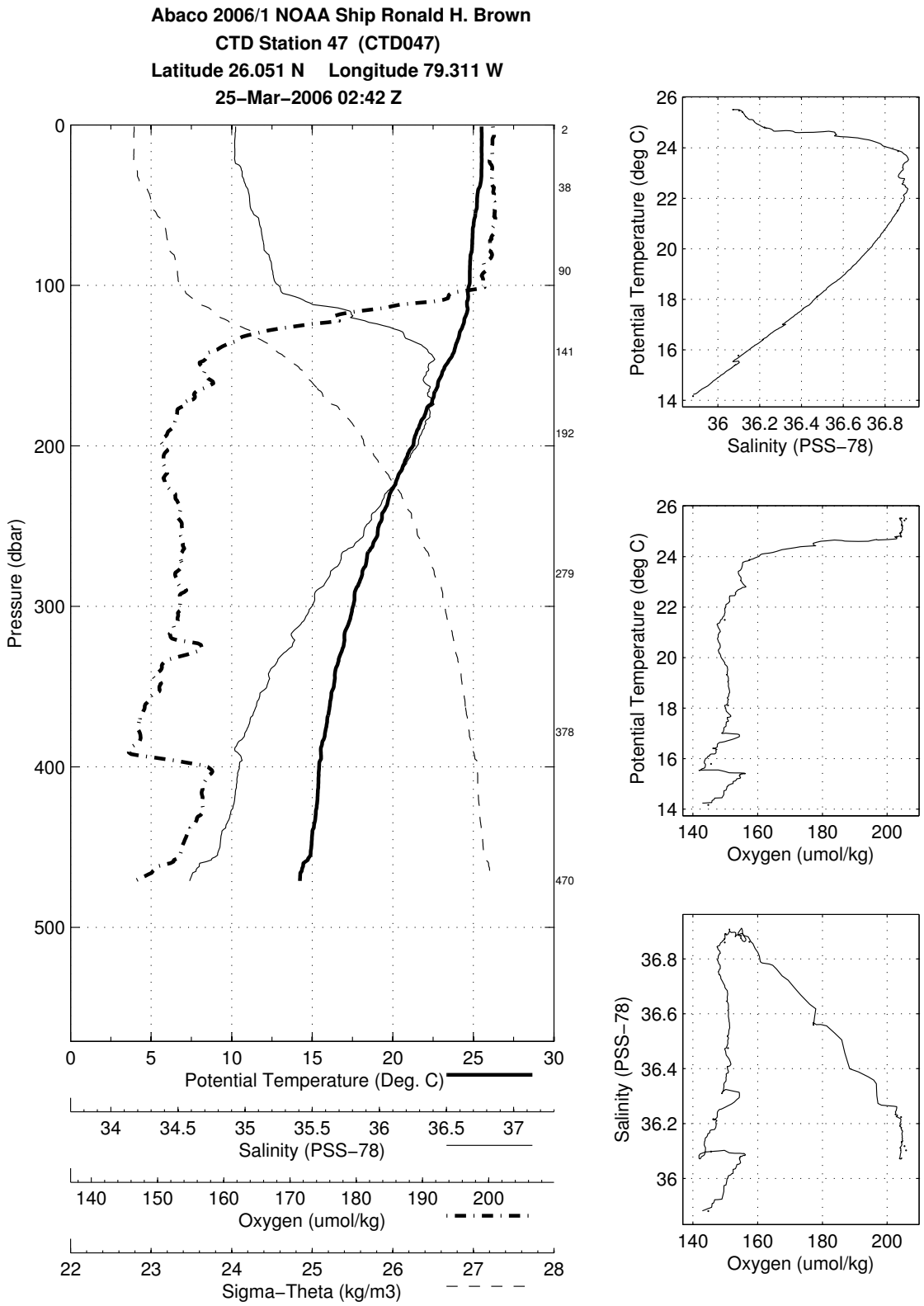
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
302	2	18.270	18.217	36.533	182.1
248	4	19.229	19.184	36.660	185.8
199	6	20.868	20.829	36.810	173.5
86	10	24.580	24.562	36.370	198.8
50	12	25.370	25.359	36.142	206.0
25	16	25.472	25.467	36.087	205.5
3	18	25.472	25.472	36.087	205.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 46 (CTD046)
Latitude 26.049 N Longitude 79.229 W
25−Mar−2006 01:22 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 47 (CTD047)
Latitude 26.051N Longitude 79.311W
25-Mar-2006 02:42Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.516	25.515	36.075	204.4	0.004	23.996
10	25.518	25.516	36.072	204.3	0.039	23.993
20	25.518	25.514	36.071	204.3	0.078	23.993
30	25.505	25.499	36.102	204.2	0.117	24.021
50	25.233	25.222	36.136	204.8	0.194	24.132
75	24.937	24.921	36.194	204.1	0.287	24.268
100	24.760	24.738	36.256	202.9	0.378	24.371
125	24.374	24.347	36.695	171.3	0.463	24.821
150	23.295	23.264	36.885	154.3	0.537	25.287
200	21.289	21.250	36.838	147.7	0.660	25.825
250	19.176	19.130	36.622	151.0	0.762	26.228
300	17.580	17.529	36.396	150.8	0.850	26.458
400	15.491	15.428	36.091	155.4	1.006	26.717

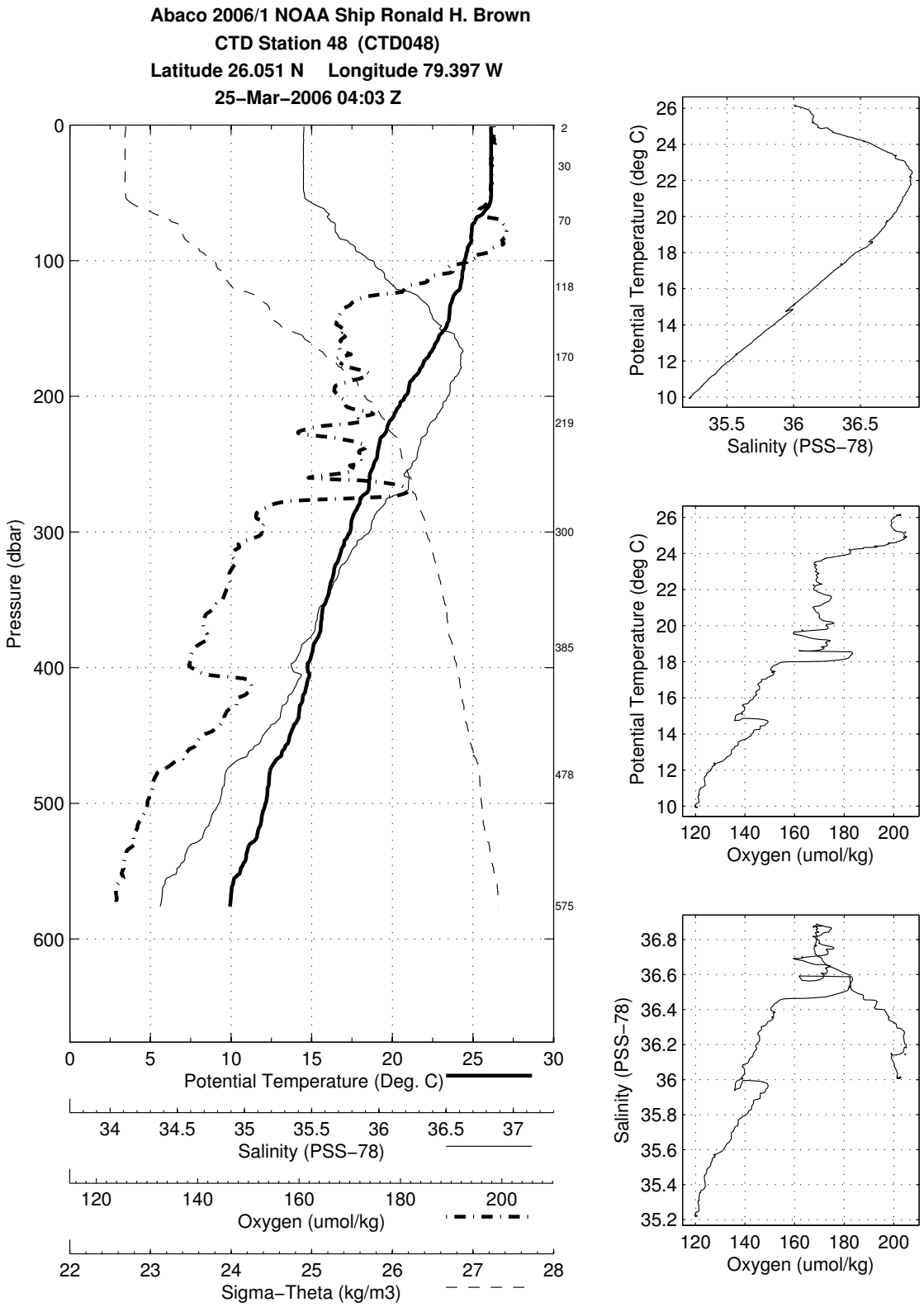
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
471	2	14.236	14.166	35.881	144.7
378	4	15.829	15.769	36.098	145.6
280	6	18.155	18.106	36.475	150.8
192	8	21.548	21.510	36.860	149.8
141	10	23.901	23.871	36.862	157.5
91	12	24.825	24.805	36.223	204.3
39	16	25.423	25.415	36.118	205.3
3	18	25.474	25.473	36.102	205.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 47 (CTD047)
Latitude 26.051 N Longitude 79.311 W
25−Mar−2006 02:42 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 48 (CTD048)
Latitude 26.051N Longitude 79.397W
25-Mar-2006 04:03Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.119	26.119	36.010	202.2	0.004	23.759
10	26.134	26.132	36.009	202.2	0.041	23.753
20	26.133	26.129	36.008	201.3	0.083	23.753
30	26.131	26.124	36.009	201.8	0.124	23.756
50	26.137	26.126	36.011	201.4	0.207	23.757
75	24.960	24.943	36.184	204.9	0.306	24.253
100	24.487	24.466	36.390	196.6	0.396	24.554
125	23.875	23.848	36.629	177.2	0.478	24.920
150	23.334	23.303	36.761	168.1	0.552	25.181
200	20.818	20.780	36.806	168.6	0.673	25.930
250	18.892	18.847	36.606	172.2	0.770	26.289
300	17.430	17.379	36.372	151.6	0.857	26.476
400	14.813	14.752	35.943	136.3	1.009	26.754
500	12.217	12.150	35.541	126.7	1.139	26.981

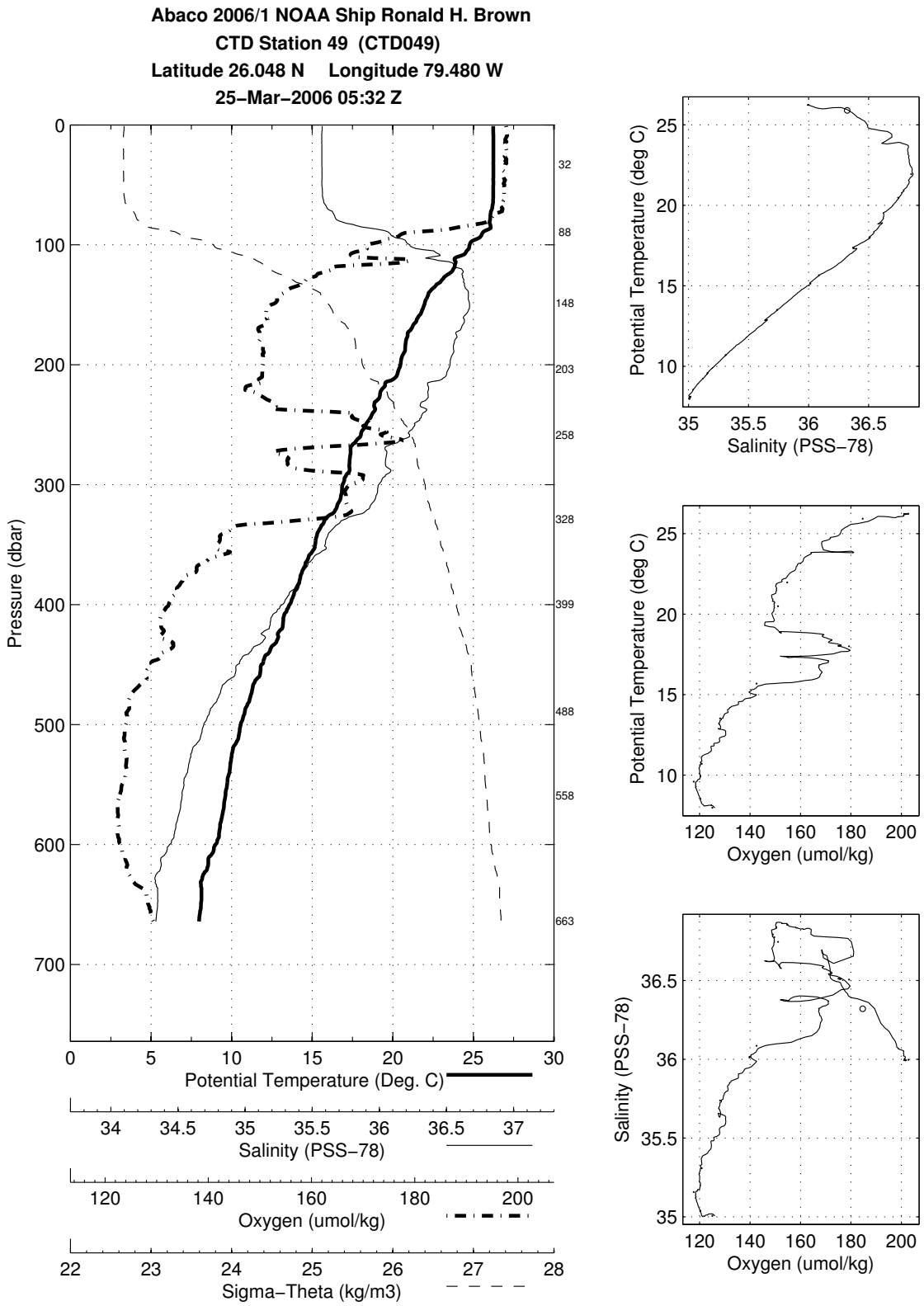
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
575	2	10.006	9.937	35.221	120.6
479	4	12.431	12.366	35.570	127.6
385	6	15.196	15.136	36.005	138.9
300	8	17.415	17.364	36.357	151.0
220	10	19.785	19.744	36.699	163.1
171	12	22.233	22.199	36.872	167.7
119	16	24.189	24.163	36.529	182.2
71	18	25.227	25.211	36.144	204.6
30	20	26.155	26.148	36.014	202.7
3	22	26.134	26.133	36.012	202.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 48 (CTD048)
Latitude 26.051 N Longitude 79.397 W
25−Mar−2006 04:03 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 49 (CTD049)
Latitude 26.048N Longitude 79.480W
25-Mar-2006 05:32Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.231	26.231	35.995	201.7	0.004	23.711
10	26.244	26.242	35.992	201.8	0.042	23.706
20	26.247	26.242	35.993	201.7	0.084	23.706
30	26.248	26.241	35.993	201.5	0.126	23.707
50	26.250	26.239	35.993	201.4	0.210	23.708
75	26.077	26.060	36.066	198.7	0.314	23.819
100	24.789	24.767	36.515	171.9	0.410	24.558
125	23.402	23.376	36.825	161.1	0.486	25.209
150	21.984	21.954	36.870	151.3	0.550	25.652
200	20.517	20.479	36.753	149.6	0.661	25.971
250	18.377	18.333	36.545	171.6	0.756	26.373
300	16.925	16.875	36.330	168.1	0.838	26.565
400	13.648	13.590	35.757	129.3	0.982	26.858
500	10.623	10.562	35.292	120.1	1.101	27.082
600	9.056	8.989	35.088	119.1	1.205	27.189

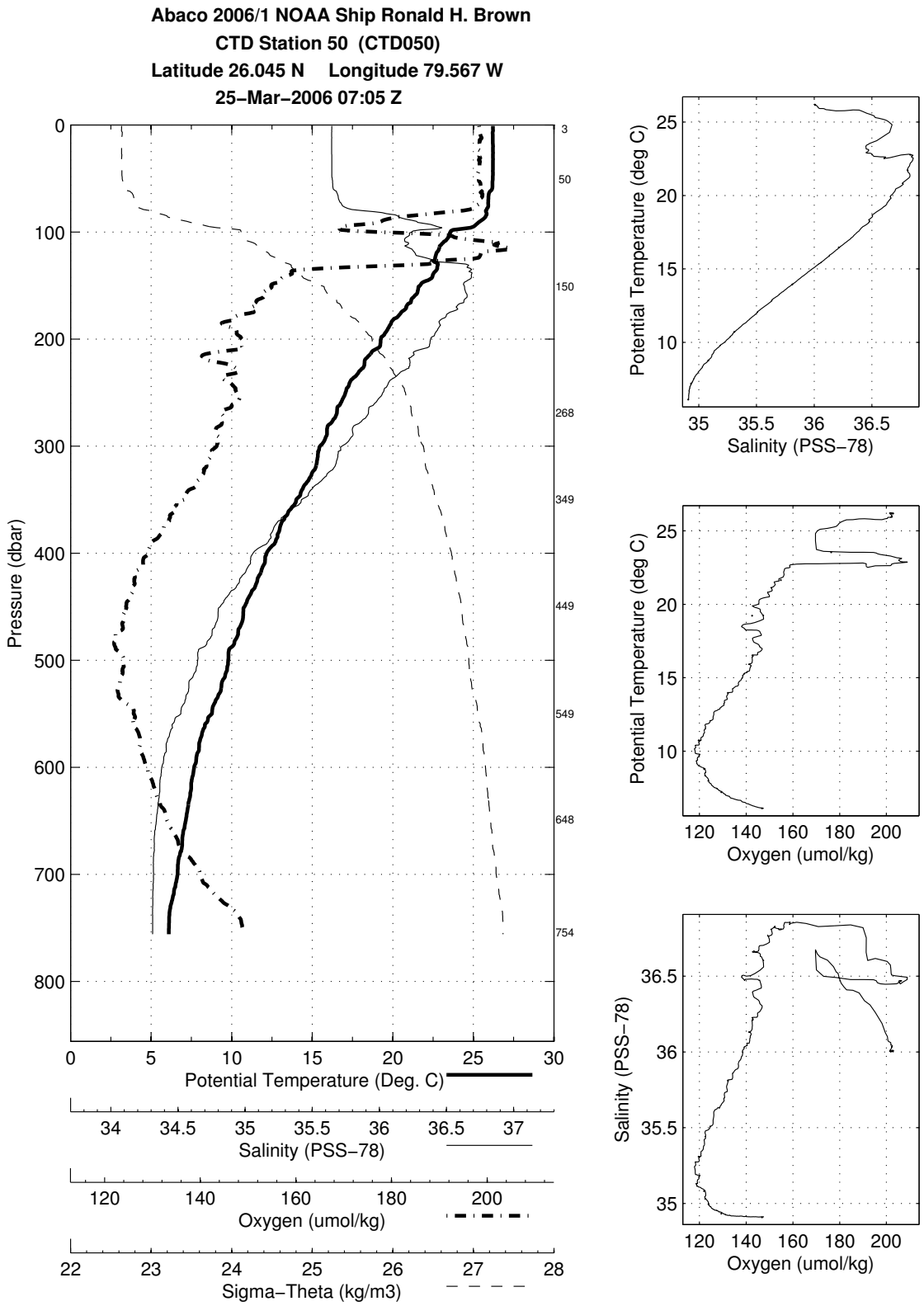
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
33	22	26.243	26.236	35.998	202.8
89	20	25.924	25.904	36.321	184.6
148	18	21.970	21.941	36.854	154.7
203	16	20.511	20.472	36.746	151.1
259	12	18.042	17.997	36.506	179.3
329	10	15.707	15.655	36.086	142.6
399	8	13.561	13.504	35.738	128.1
489	6	10.748	10.688	35.309	120.9
559	4	9.645	9.580	35.158	117.6
663	2	8.036	7.967	35.006	125.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 49 (CTD049)
Latitude 26.048 N Longitude 79.480 W
25−Mar−2006 05:32 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 50 (CTD050)
Latitude 26.045N Longitude 79.567W
25-Mar-2006 07:05Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.220	26.220	36.004	201.8	0.004	23.722
10	26.207	26.205	36.003	202.1	0.042	23.726
20	26.225	26.220	36.003	201.9	0.083	23.721
30	26.223	26.216	36.003	202.0	0.125	23.723
50	26.217	26.206	36.006	201.8	0.209	23.728
75	25.939	25.922	36.067	201.3	0.312	23.863
100	23.599	23.578	36.491	178.6	0.403	24.896
125	22.655	22.630	36.597	200.3	0.476	25.253
150	21.721	21.691	36.811	154.0	0.541	25.681
200	19.297	19.260	36.607	147.2	0.647	26.182
250	17.101	17.059	36.315	146.0	0.734	26.510
300	15.529	15.482	36.065	141.4	0.810	26.686
400	12.225	12.172	35.523	125.8	0.944	26.962
500	9.843	9.785	35.186	120.1	1.055	27.134
600	7.730	7.669	34.966	125.3	1.150	27.297
700	6.711	6.644	34.917	137.7	1.233	27.402

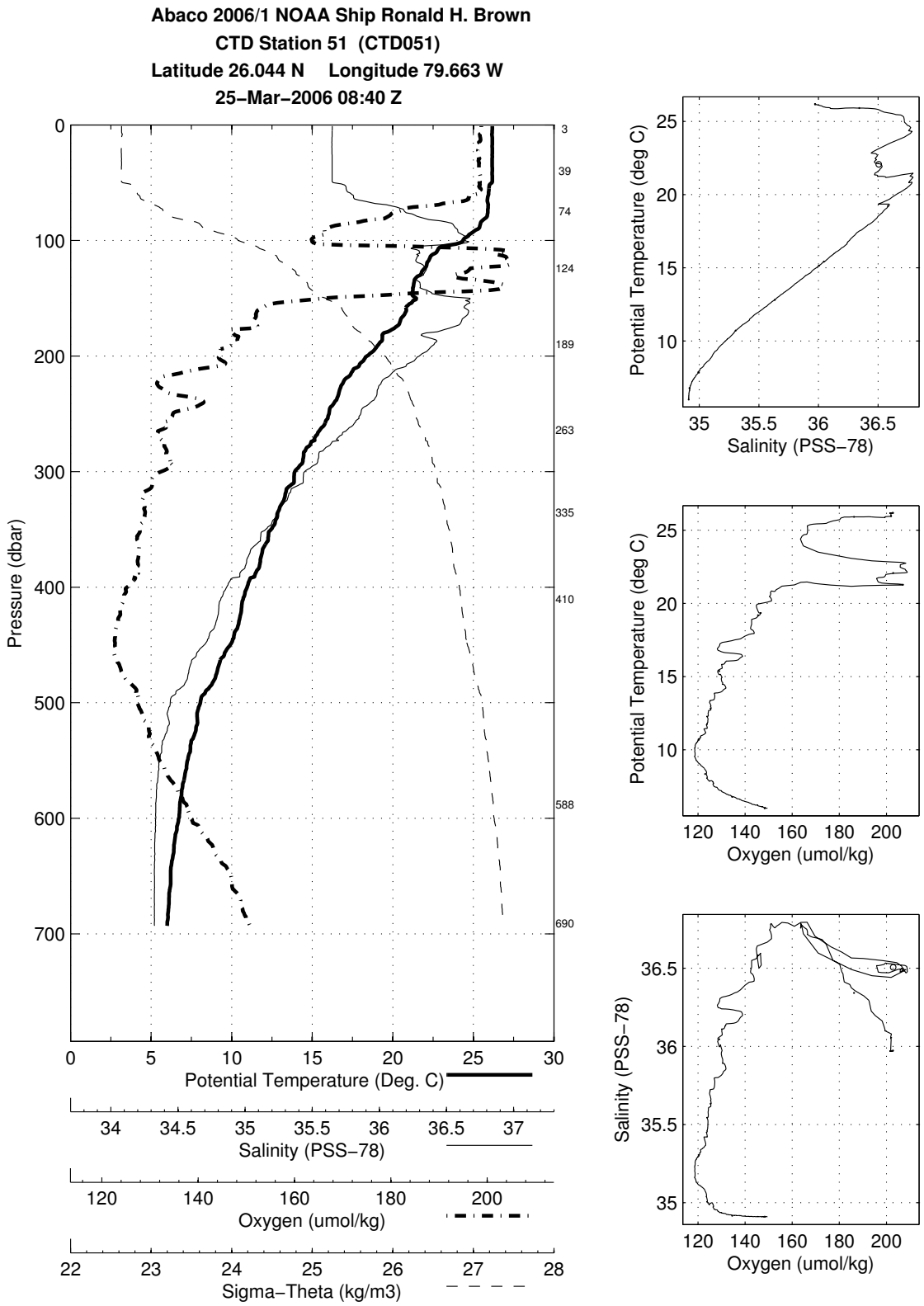
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
151	18	21.740	21.710	36.810	154.8
50	22	26.185	26.174	36.007	202.9
3	24	26.174	26.173	36.008	202.6
269	12	16.504	16.460	36.212	142.8
349	10	14.000	13.948	35.811	132.2
449	8	10.777	10.721	35.308	119.7
550	6	8.818	8.757	35.082	122.0
754	2	6.170	6.101	34.909	146.8
649	4	7.254	7.190	34.933	129.4


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 50 (CTD050)
Latitude 26.045 N Longitude 79.567 W
25−Mar−2006 07:05 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 51 (CTD051)
Latitude 26.044N Longitude 79.663W
25-Mar-2006 08:40Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.175	26.175	35.972	202.2	0.004	23.712
10	26.166	26.163	35.971	202.0	0.042	23.715
20	26.176	26.172	35.970	201.7	0.084	23.712
30	26.177	26.171	35.971	201.7	0.125	23.712
50	26.169	26.158	35.978	201.8	0.209	23.722
75	25.913	25.896	36.404	183.3	0.309	24.125
100	24.379	24.357	36.756	163.6	0.395	24.864
125	21.939	21.914	36.534	199.6	0.466	25.408
150	21.489	21.460	36.794	166.3	0.528	25.734
200	18.433	18.397	36.491	142.5	0.630	26.315
250	16.079	16.039	36.142	131.9	0.710	26.617
300	13.959	13.916	35.807	129.2	0.780	26.829
400	11.010	10.960	35.342	121.4	0.900	27.049
500	8.109	8.057	35.005	123.7	1.001	27.270
600	6.777	6.720	34.919	136.0	1.084	27.394

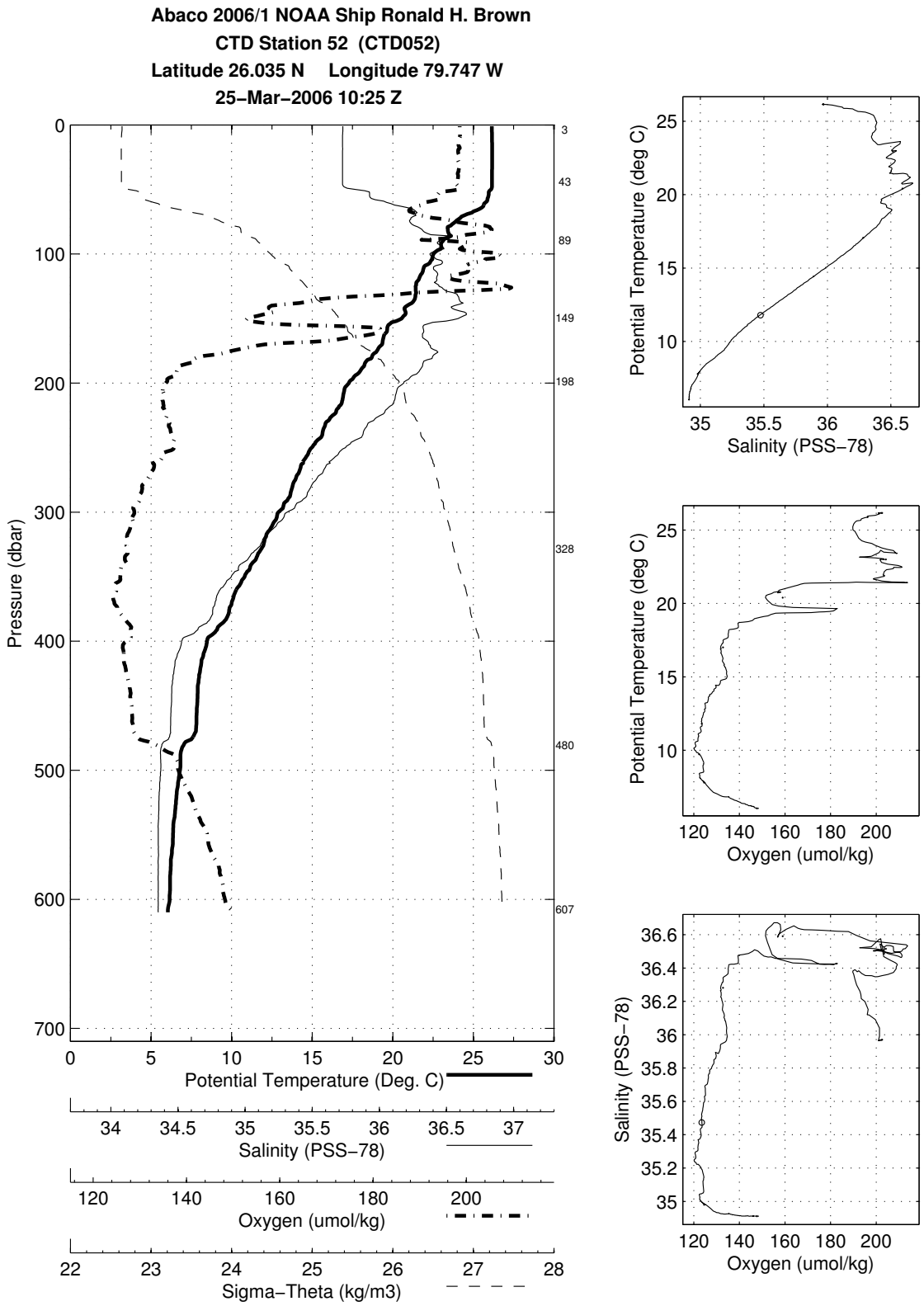
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
691	2	6.057	5.995	34.910	148.3
588	4	6.833	6.777	34.917	134.5
410	8	10.759	10.709	35.305	120.3
335	10	12.845	12.798	35.634	125.4
264	12	15.467	15.426	36.046	129.1
189	16	19.254	19.220	36.583	145.5
124	18	22.093	22.068	36.506	202.8
74	20	25.931	25.914	36.342	186.2
40	22	26.193	26.184	35.971	202.7
3	24	26.177	26.176	35.973	202.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 51 (CTD051)
Latitude 26.044 N Longitude 79.663 W
25−Mar−2006 08:40 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 52 (CTD052)
Latitude 26.035N Longitude 79.747W
25-Mar-2006 10:25Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.148	26.148	35.967	201.6	0.004	23.716
10	26.160	26.157	35.965	201.6	0.042	23.712
20	26.169	26.164	35.965	201.2	0.084	23.710
30	26.171	26.165	35.964	201.3	0.125	23.709
50	26.112	26.101	36.040	201.4	0.209	23.786
75	23.900	23.885	36.348	200.7	0.302	24.697
100	22.538	22.518	36.463	210.9	0.377	25.183
125	21.439	21.415	36.516	212.8	0.443	25.534
150	20.574	20.546	36.623	151.7	0.502	25.854
200	17.312	17.278	36.314	132.5	0.597	26.456
250	15.012	14.974	35.982	134.5	0.673	26.735
300	12.938	12.896	35.648	125.1	0.738	26.916
400	8.505	8.462	35.045	123.3	0.845	27.239
500	6.843	6.795	34.927	135.5	0.929	27.390
600	6.199	6.145	34.912	146.4	1.002	27.464

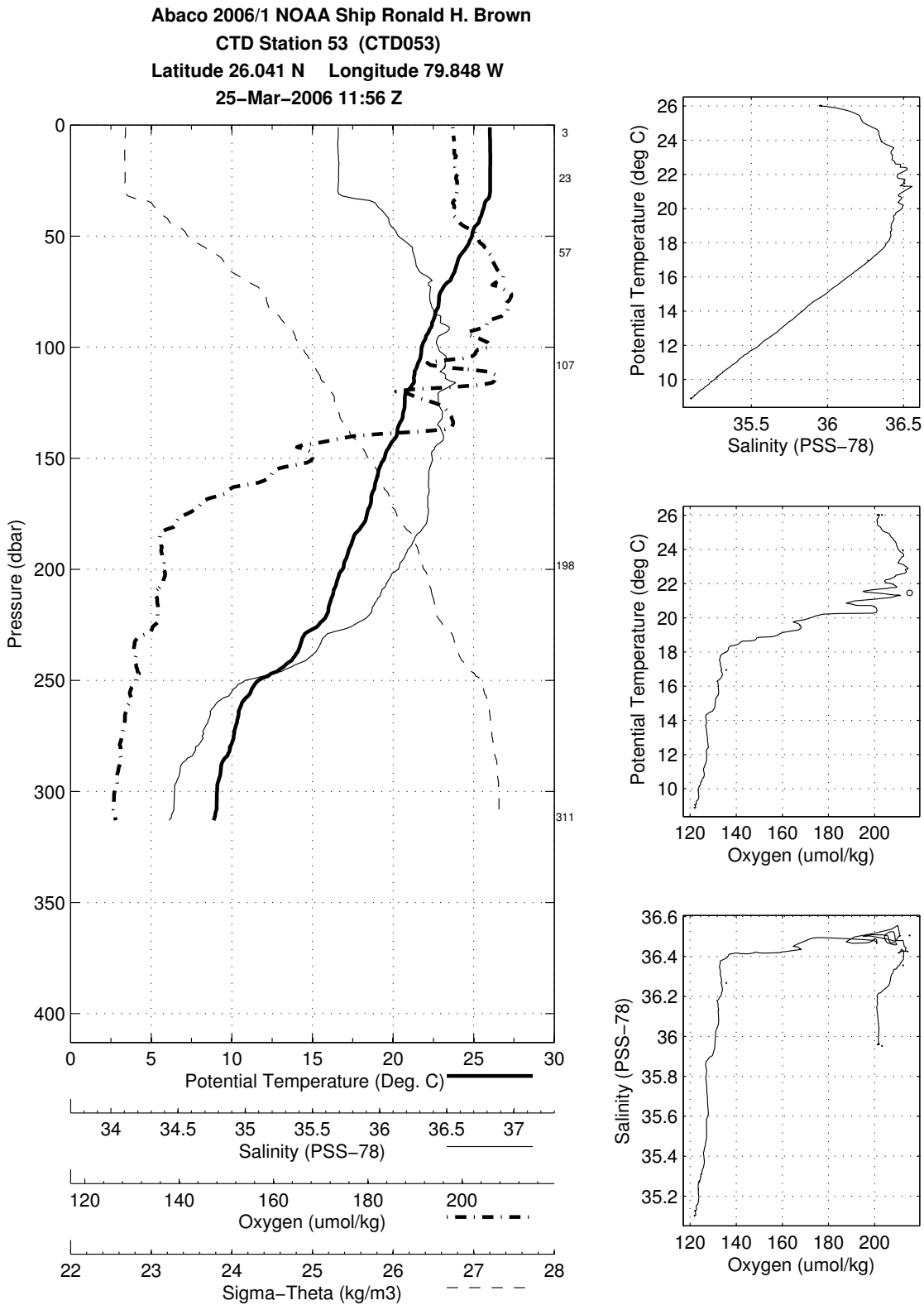
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
608	2	6.095	6.041	34.911	147.7
481	4	7.842	7.793	34.980	124.5
329	8	11.836	11.793	35.473	123.5
199	12	17.090	17.057	36.281	132.8
149	16	20.443	20.415	36.591	159.0
89	18	22.968	22.949	36.516	204.3
44	20	26.154	26.145	35.968	202.2
4	22	26.151	26.150	35.969	202.6


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 52 (CTD052)
Latitude 26.035 N Longitude 79.747 W
25−Mar−2006 10:25 Z
Pressure (dbar)
0
100
200
300
400
500
600
700
3
43
89
149
198
328
480
607
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
120 140 160 180 200
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
25
20
15
10
35 35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
25
20
15
10
120 140 160 180 200
Oxygen (umol/kg)
Salinity (PSS−78)
36.6
36.4
36.2
36
35.8
35.6
35.4
35.2
35
120 140 160 180 200
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 53 (CTD053)
Latitude 26.041N Longitude 79.848W
25-Mar-2006 11:56Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.007	26.007	35.960	200.9	0.004	23.756
10	26.026	26.024	35.958	201.3	0.041	23.749
20	26.029	26.025	35.961	201.7	0.083	23.751
30	26.025	26.018	35.958	201.9	0.124	23.751
50	24.904	24.894	36.264	206.5	0.201	24.330
75	22.968	22.952	36.426	214.0	0.283	25.029
100	21.791	21.772	36.468	209.3	0.352	25.398
125	20.749	20.725	36.469	196.6	0.414	25.688
150	19.489	19.461	36.437	168.2	0.469	26.000
200	16.907	16.874	36.264	133.5	0.559	26.515
250	11.678	11.646	35.488	127.2	0.628	27.035
300	9.119	9.086	35.129	122.3	0.677	27.206

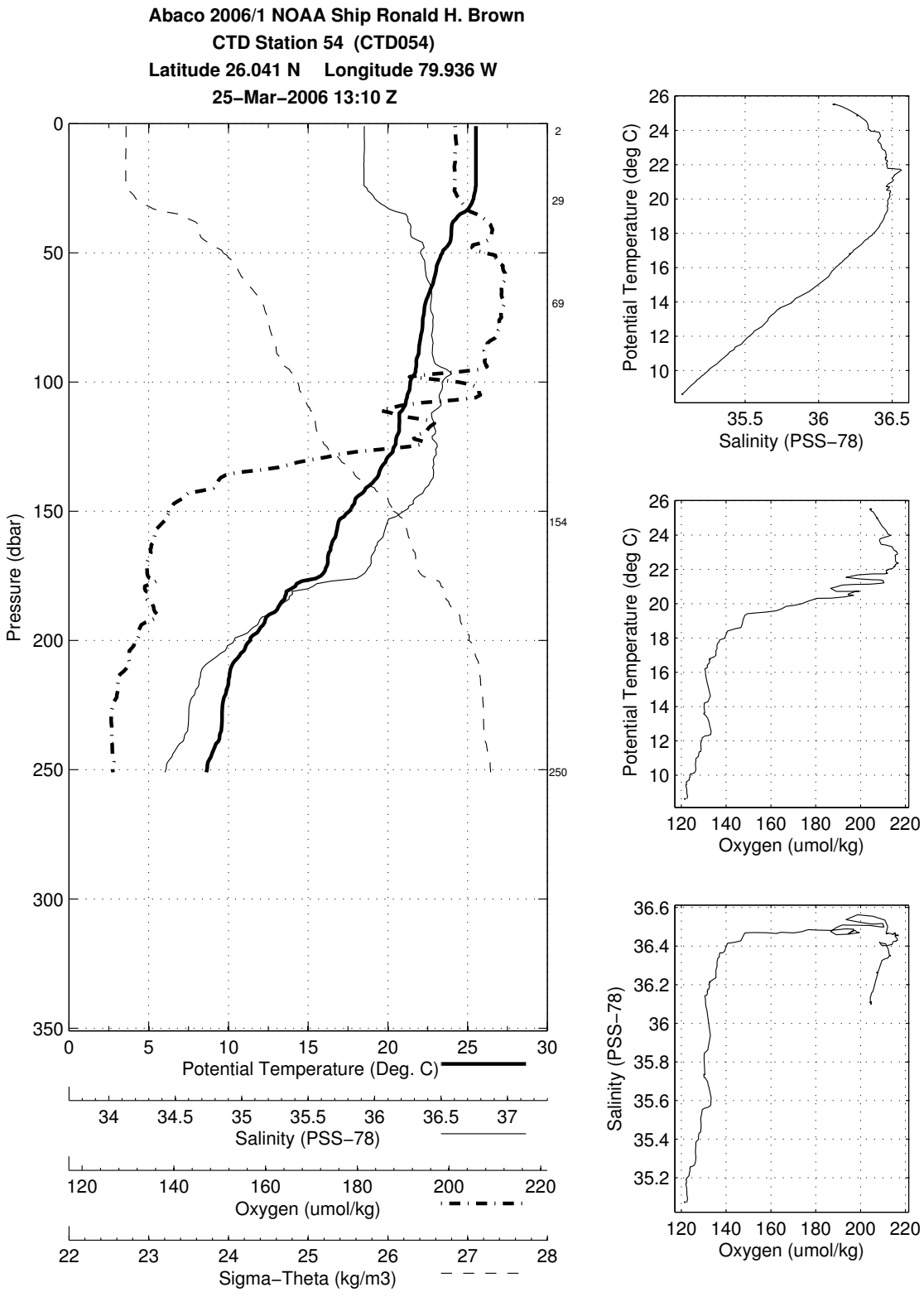
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
311	2	8.930	8.896	35.103	121.9
198	4	16.990	16.957	36.268	135.7
108	6	21.499	21.478	36.505	215.2
58	8	23.939	23.927	36.355	212.3
24	10	26.030	26.025	35.952	NaN
3	12	26.020	26.020	35.952	203.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 53 (CTD053)
Latitude 26.041 N Longitude 79.848 W
25−Mar−2006 11:56 Z
Pressure (dbar)
0
50
100
150
200
250
300
350
400
3
23
57
107
198
311
0 5 10 15 20 25 30
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS−78)
120 140 160 180 200
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
10 12 14 16 18 20 22 24 26
35.5 36 36.5
Salinity (PSS−78)
Potential Temperature (deg C)
10 12 14 16 18 20 22 24 26
120 140 160 180 200
Oxygen (umol/kg)
Salinity (PSS−78)
35.2 35.4 35.6 35.8 36 36.2 36.4 36.6
120 140 160 180 200
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 54 (CTD054)
Latitude 26.041N Longitude 79.936W
25-Mar-2006 13:10Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.517	25.516	36.109	204.4	0.004	24.021
10	25.527	25.524	36.110	204.6	0.039	24.019
20	25.528	25.524	36.108	204.4	0.078	24.018
30	25.319	25.312	36.178	205.8	0.116	24.136
50	23.427	23.417	36.402	211.5	0.183	24.876
75	22.215	22.200	36.469	215.5	0.255	25.278
100	21.424	21.404	36.514	205.1	0.321	25.536
125	20.424	20.401	36.490	193.3	0.380	25.791
150	17.612	17.586	36.315	135.9	0.429	26.382
200	11.386	11.360	35.432	128.0	0.497	27.046
250	8.680	8.653	35.077	122.6	0.544	27.234

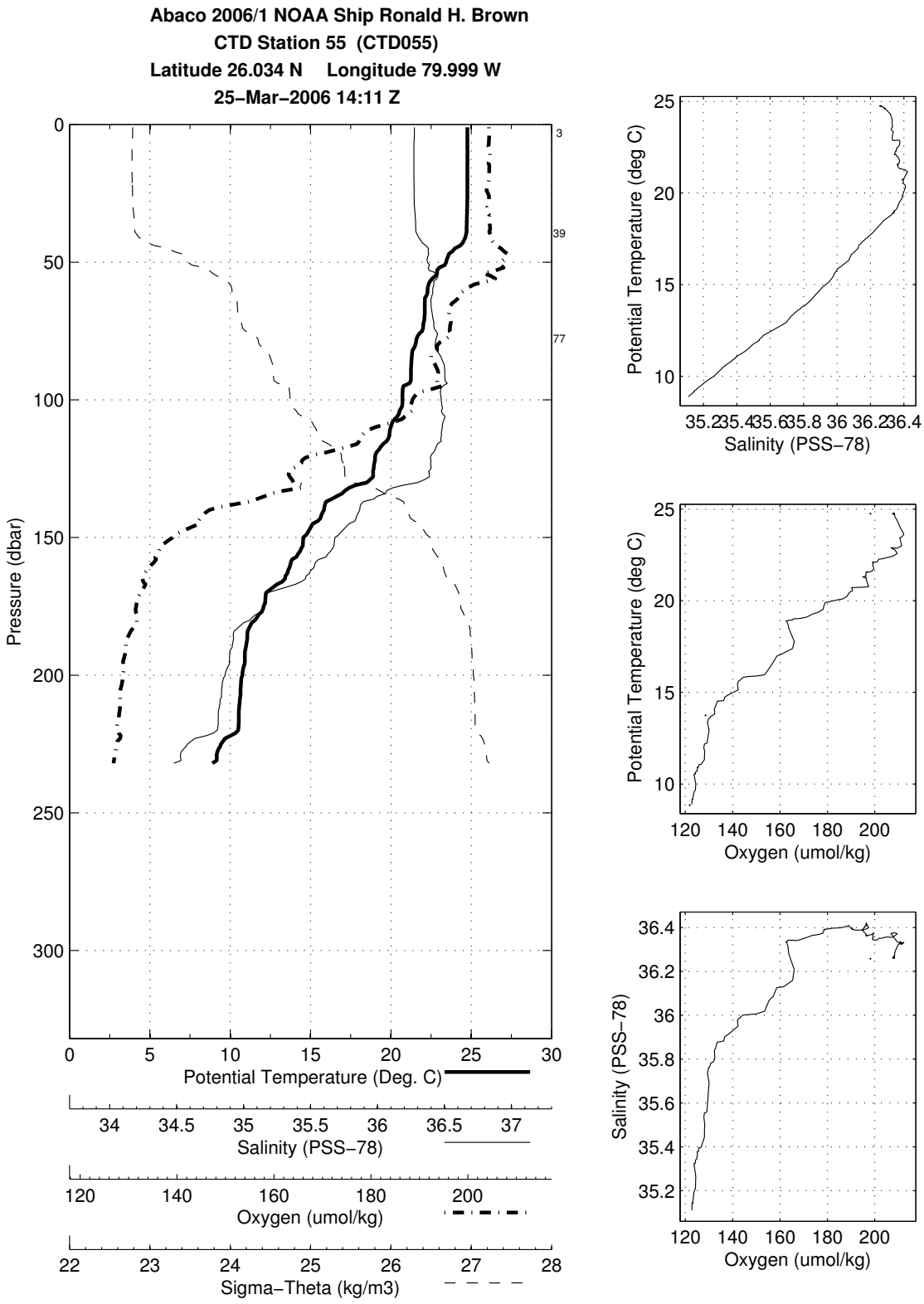
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
251	2	8.648	8.621	35.073	121.6
154	4	16.829	16.804	36.213	132.7
30	8	24.880	24.873	36.263	207.3
70	6	22.430	22.416	36.456	216.6
3	10	25.520	25.519	36.101	204.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 54 (CTD054)
Latitude 26.041 N Longitude 79.936 W
25−Mar−2006 13:10 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 55 (CTD055)
Latitude 26.034N Longitude 79.999W
25-Mar-2006 14:11Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.756	24.755	36.263	208.0	0.004	24.371
10	24.766	24.764	36.261	208.3	0.036	24.367
20	24.767	24.763	36.261	208.0	0.071	24.367
30	24.752	24.745	36.264	207.7	0.107	24.375
50	23.446	23.435	36.326	210.5	0.175	24.813
75	21.958	21.943	36.366	199.1	0.246	25.272
100	20.739	20.720	36.392	190.7	0.309	25.630
125	18.943	18.921	36.343	163.4	0.363	26.068
150	14.570	14.547	35.882	136.2	0.403	26.752
200	10.778	10.753	35.357	124.9	0.459	27.098

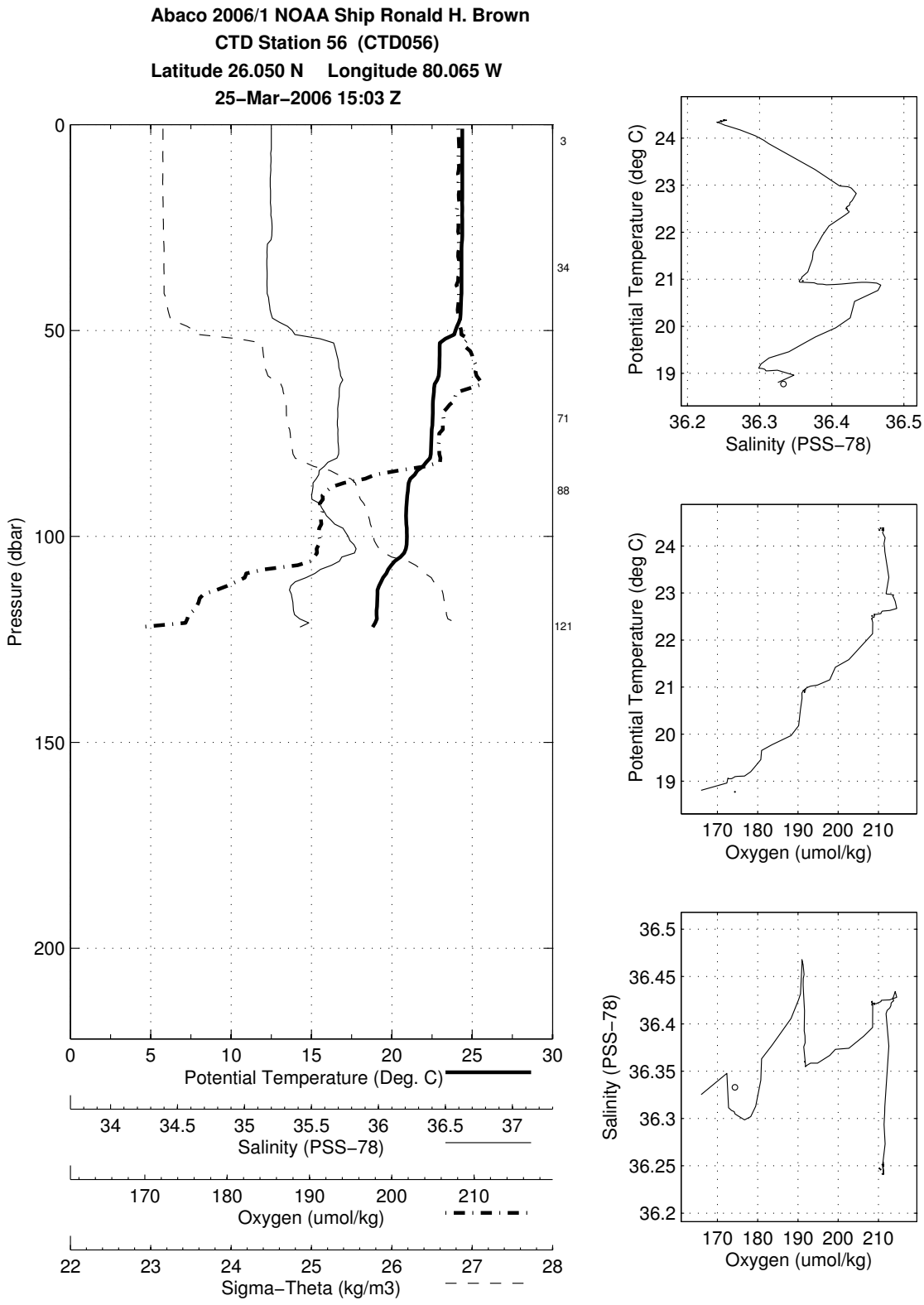
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
78	8	21.572	21.557	36.363	196.6
40	10	24.626	24.618	36.285	221.1
3	12	24.749	24.749	36.258	198.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 55 (CTD055)
Latitude 26.034 N Longitude 79.999 W
25−Mar−2006 14:11 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 56 (CTD056)
Latitude 26.050N Longitude 80.065W
25-Mar-2006 15:03Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.384	24.384	36.252	211.1	0.003	24.475
10	24.384	24.382	36.251	211.2	0.035	24.474
20	24.383	24.379	36.251	211.0	0.069	24.476
30	24.344	24.338	36.242	211.3	0.104	24.481
50	23.966	23.956	36.305	211.5	0.172	24.643
75	22.490	22.475	36.421	208.4	0.245	25.163
100	20.956	20.937	36.448	191.3	0.310	25.614

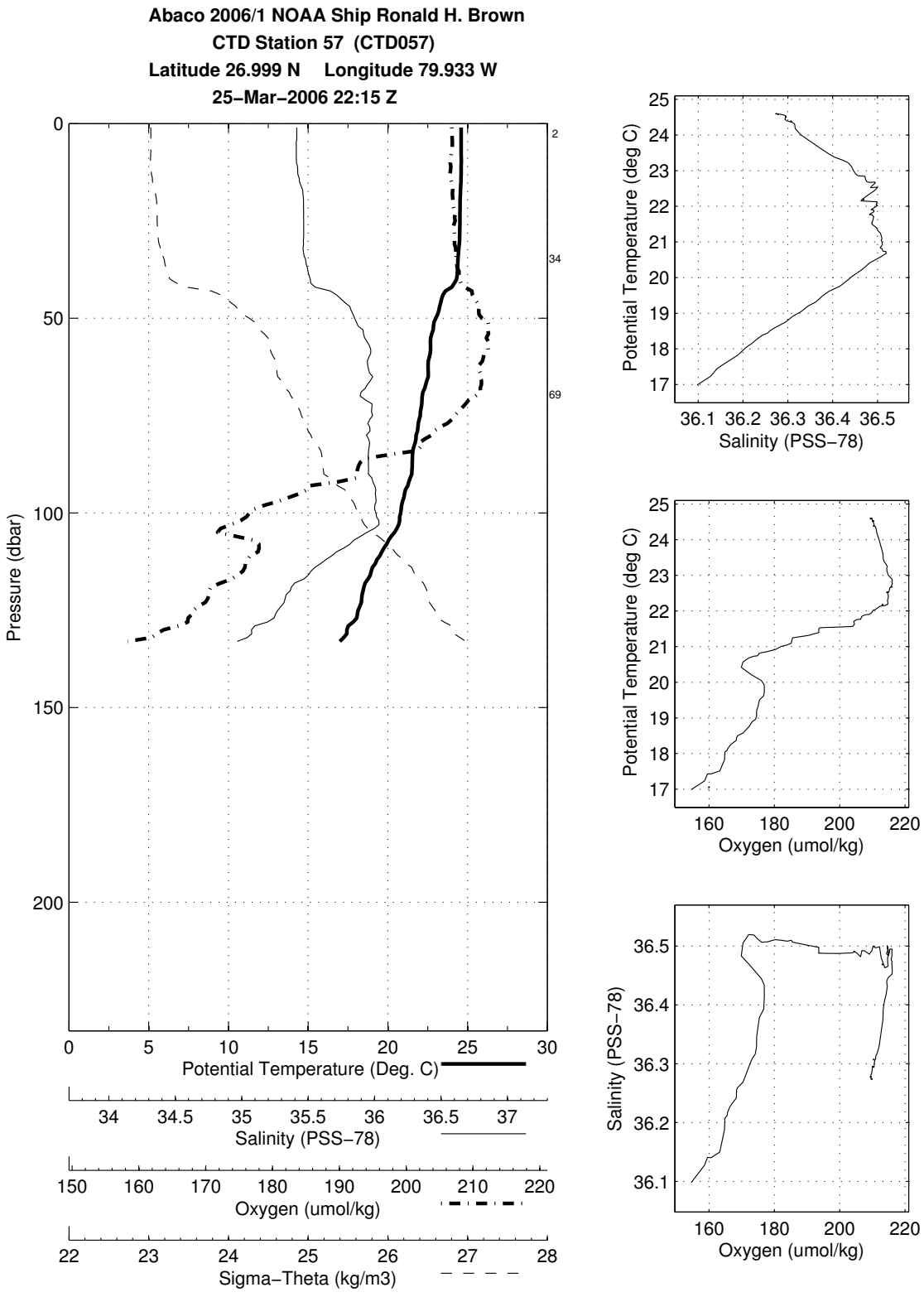
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
122	2	18.796	18.775	36.333	174.3
89	4	20.981	20.964	36.360	191.7
71	6	22.518	22.504	36.420	208.4
35	8	24.372	24.365	36.246	210.5
4	10	24.355	24.354	36.247	210.2


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 56 (CTD056)
Latitude 26.050 N Longitude 80.065 W
25−Mar−2006 15:03 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 57 (CTD057)
Latitude 26.999N Longitude 79.933W
25-Mar-2006 22:15Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.598	24.598	36.275	209.8	0.003	24.427
10	24.605	24.603	36.274	209.6	0.035	24.425
20	24.534	24.530	36.295	210.0	0.070	24.463
30	24.501	24.494	36.295	210.3	0.104	24.474
50	23.010	23.000	36.447	215.0	0.170	25.031
75	22.040	22.025	36.500	210.3	0.239	25.351
100	20.829	20.810	36.510	175.3	0.302	25.696
125	18.159	18.137	36.218	165.7	0.353	26.171

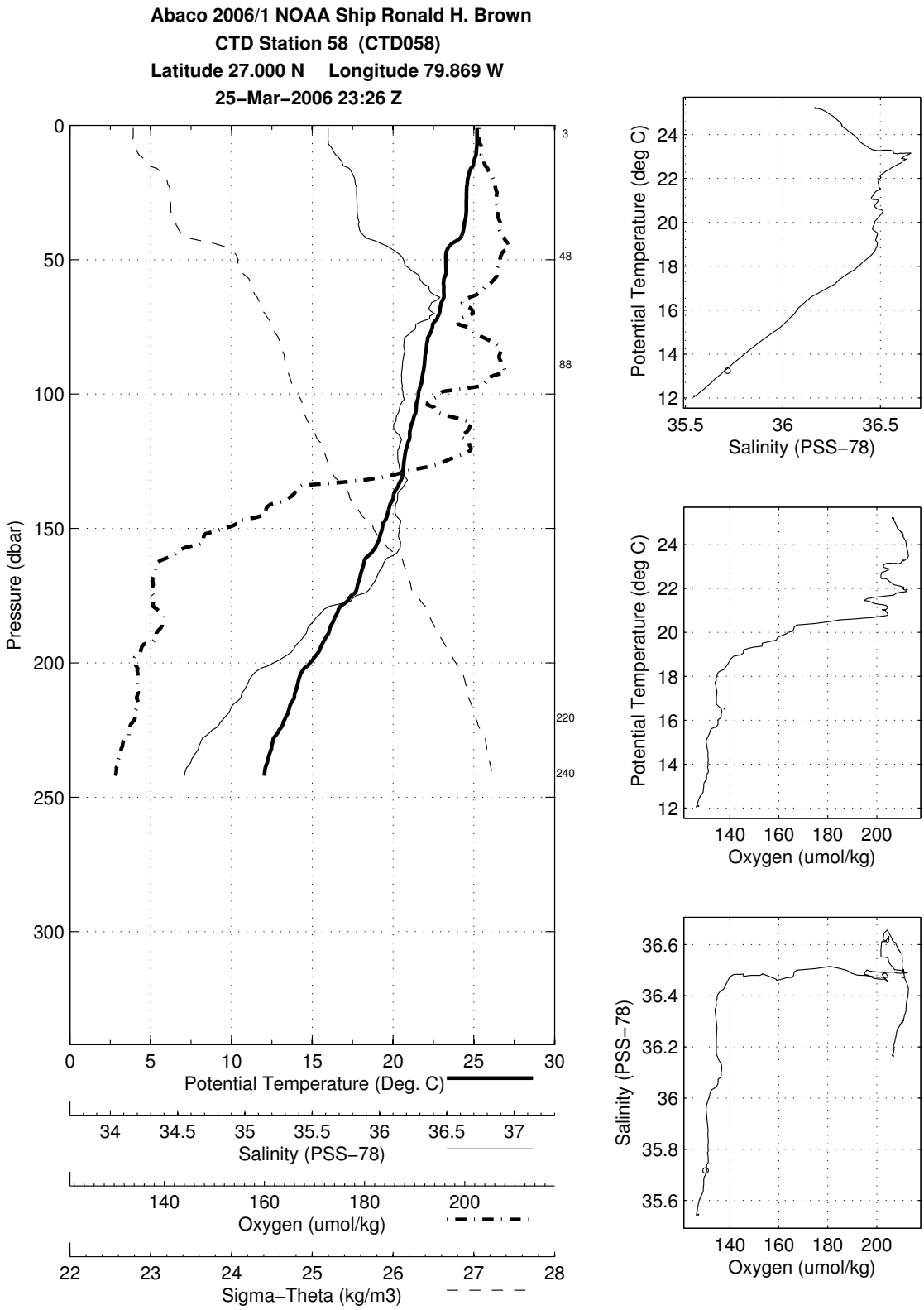
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
70	4	22.205	22.191	36.469	213.1
35	6	24.393	24.386	36.307	210.4
2	8	24.585	24.585	36.278	209.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 57 (CTD057)
Latitude 26.999 N Longitude 79.933 W
25−Mar−2006 22:15 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 58 (CTD058)
Latitude 27.000N Longitude 79.869W
25-Mar-2006 23:26Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.201	25.201	36.168	206.3	0.004	24.163
10	25.157	25.155	36.194	207.0	0.037	24.197
20	24.631	24.627	36.284	209.4	0.073	24.426
30	24.544	24.538	36.295	210.4	0.108	24.461
50	23.280	23.269	36.498	210.9	0.174	24.992
75	22.457	22.442	36.551	203.6	0.245	25.271
100	21.585	21.566	36.496	197.6	0.311	25.477
125	20.707	20.683	36.474	198.8	0.372	25.703
150	19.358	19.331	36.480	150.1	0.426	26.067
200	14.890	14.860	35.930	130.6	0.509	26.720

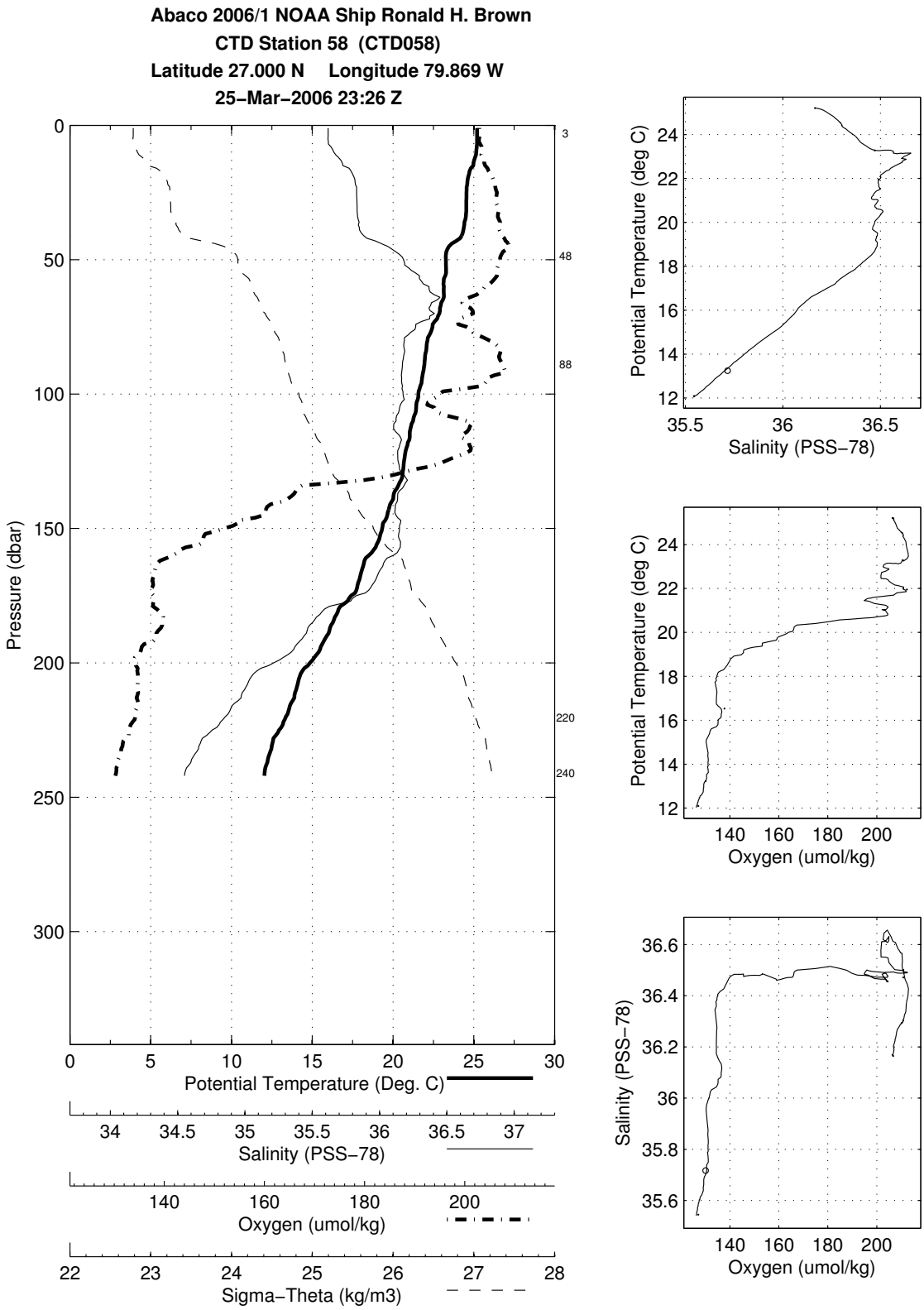
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
241	2	12.128	12.096	35.544	127.1
220	4	13.278	13.247	35.717	130.1
89	8	21.964	21.947	36.491	212.3
48	10	23.279	23.269	36.471	210.8
3	12	25.202	25.201	36.165	206.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 58 (CTD058)
Latitude 27.000 N Longitude 79.869 W
25−Mar−2006 23:26 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 58 (CTD058)
Latitude 27.000N Longitude 79.869W
25-Mar-2006 23:26Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.201	25.201	36.168	206.3	0.004	24.163
10	25.157	25.155	36.194	207.0	0.037	24.197
20	24.631	24.627	36.284	209.4	0.073	24.426
30	24.544	24.538	36.295	210.4	0.108	24.461
50	23.280	23.269	36.498	210.9	0.174	24.992
75	22.457	22.442	36.551	203.6	0.245	25.271
100	21.585	21.566	36.496	197.6	0.311	25.477
125	20.707	20.683	36.474	198.8	0.372	25.703
150	19.358	19.331	36.480	150.1	0.426	26.067
200	14.890	14.860	35.930	130.6	0.509	26.720

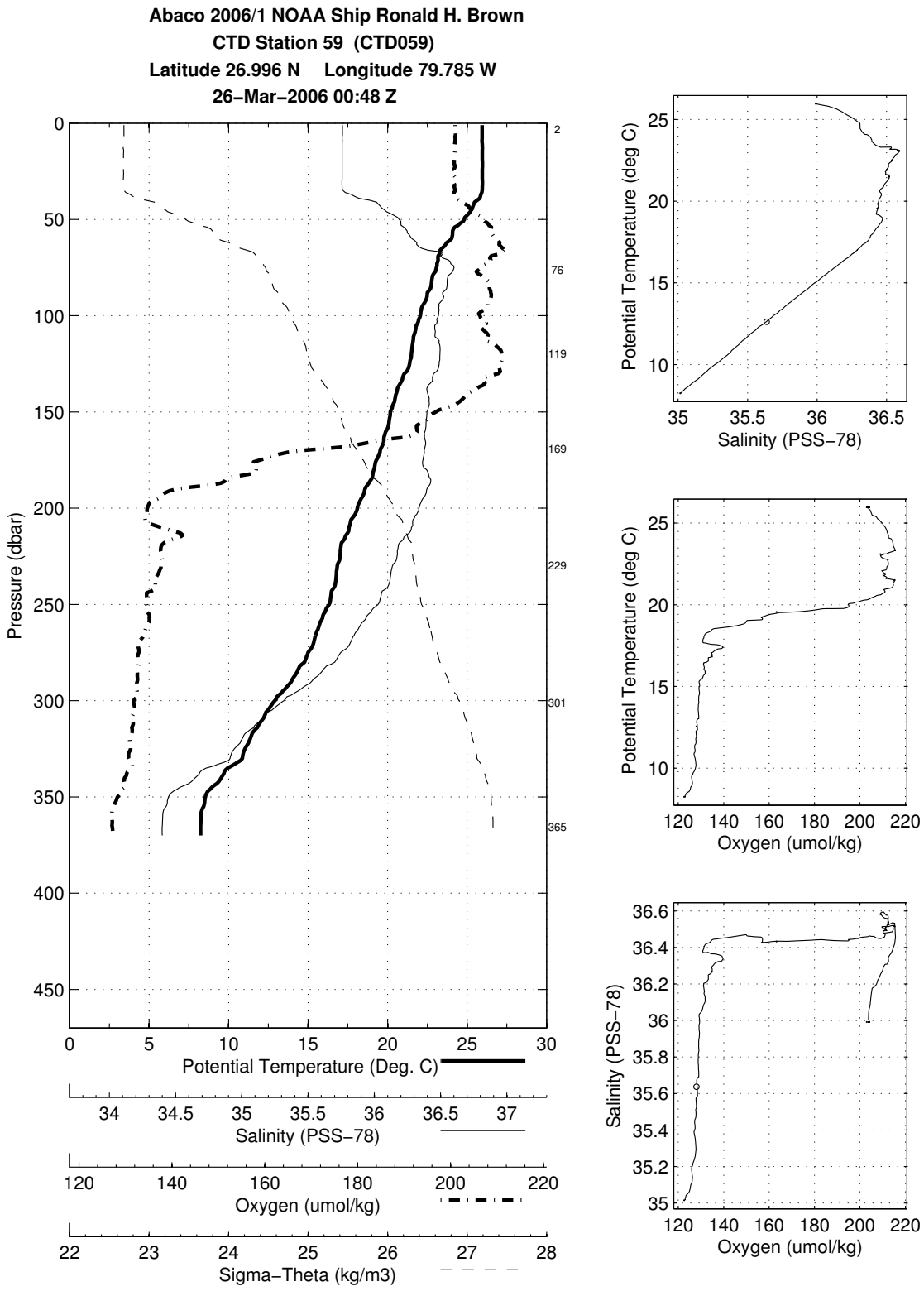
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
241	2	12.128	12.096	35.544	127.1
220	4	13.278	13.247	35.717	130.1
89	8	21.964	21.947	36.491	212.3
48	10	23.279	23.269	36.471	210.8
3	12	25.202	25.201	36.165	206.7


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 58 (CTD058)
Latitude 27.000 N Longitude 79.869 W
25−Mar−2006 23:26 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 59 (CTD059)
Latitude 26.996N Longitude 79.785W
26-Mar-2006 00:48Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.944	25.944	35.992	204.1	0.004	23.800
10	25.946	25.944	35.991	204.0	0.041	23.799
20	25.965	25.960	35.991	203.8	0.082	23.793
30	25.969	25.963	35.990	203.9	0.123	23.792
50	24.837	24.826	36.299	210.6	0.201	24.376
75	23.085	23.069	36.596	210.3	0.280	25.124
100	22.079	22.059	36.511	209.9	0.349	25.350
125	21.410	21.386	36.516	214.6	0.413	25.542
150	20.198	20.170	36.449	199.5	0.471	25.822
200	18.135	18.100	36.406	131.4	0.572	26.325
250	16.365	16.325	36.185	131.2	0.653	26.584
300	12.950	12.909	35.676	128.1	0.722	26.935

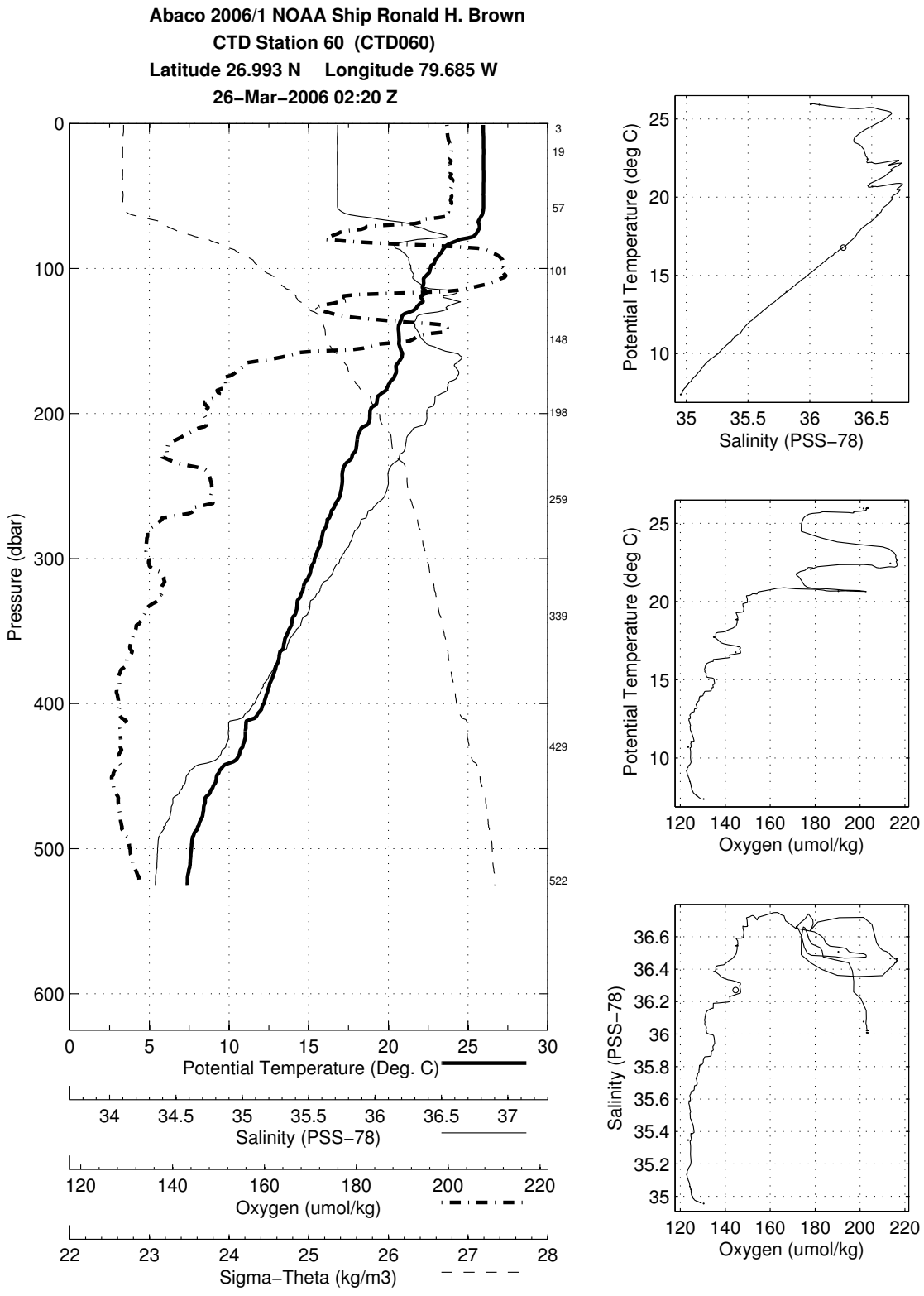
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
366	2	8.283	8.244	35.015	122.6
301	4	12.664	12.623	35.637	128.0
230	6	16.897	16.858	36.267	134.8
169	8	19.588	19.557	36.433	163.3
120	10	21.521	21.498	36.515	215.3
76	12	23.130	23.114	36.582	209.0
3	18	25.955	25.954	35.992	203.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 59 (CTD059)
Latitude 26.996 N Longitude 79.785 W
26−Mar−2006 00:48 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 60 (CTD060)
Latitude 26.993N Longitude 79.685W
26-Mar-2006 02:20Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.956	25.956	36.023	202.6	0.004	23.819
10	25.975	25.973	36.021	202.9	0.041	23.812
20	25.985	25.981	36.021	203.5	0.082	23.810
30	25.981	25.975	36.022	203.6	0.123	23.812
50	25.981	25.969	36.022	203.8	0.205	23.814
75	25.589	25.573	36.586	177.1	0.303	24.364
100	22.658	22.637	36.451	216.5	0.381	25.139
125	21.942	21.917	36.687	173.5	0.448	25.524
150	20.709	20.680	36.528	193.7	0.507	25.745
200	18.879	18.844	36.543	144.6	0.610	26.242
250	17.119	17.078	36.316	146.5	0.696	26.506
300	15.417	15.370	36.039	131.6	0.772	26.691
400	12.239	12.185	35.539	124.3	0.902	26.972
500	7.678	7.628	34.972	127.0	1.001	27.307

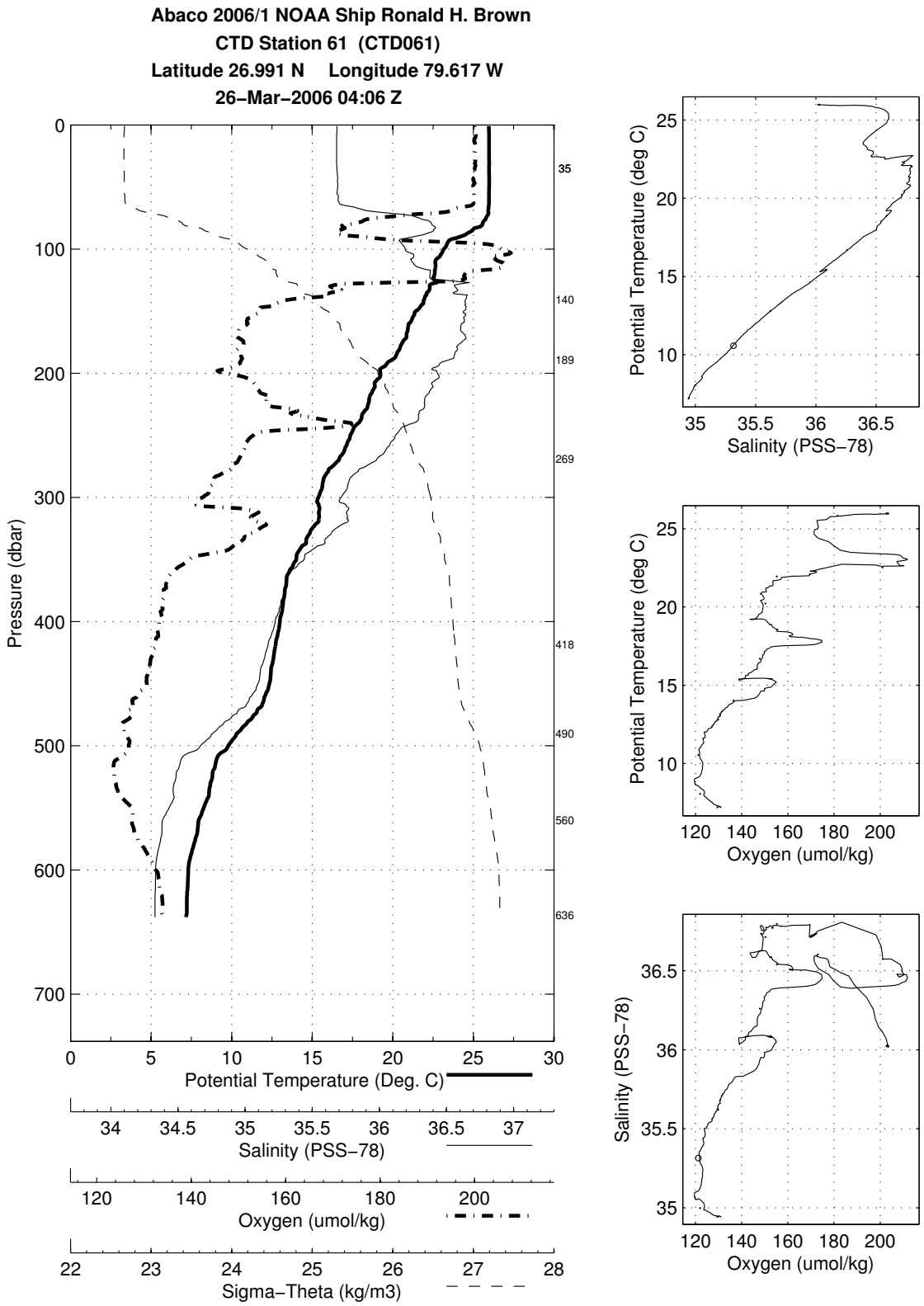
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
522	2	7.442	7.390	34.955	130.4
430	4	10.767	10.714	35.347	123.5
339	6	14.003	13.953	35.811	129.2
259	8	16.825	16.782	36.271	144.6
199	10	18.873	18.837	36.545	145.5
149	12	20.705	20.676	36.507	190.4
101	16	22.454	22.434	36.466	213.5
58	18	25.921	25.908	36.077	201.6
19	20	25.944	25.940	36.008	203.4
4	22	25.930	25.929	36.009	203.0


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 60 (CTD060)
Latitude 26.993 N Longitude 79.685 W
26−Mar−2006 02:20 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 61 (CTD061)
Latitude 26.991N Longitude 79.617W
26-Mar-2006 04:06Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.968	25.967	36.022	203.4	0.004	23.815
10	25.973	25.971	36.021	203.6	0.041	23.813
20	25.981	25.976	36.020	203.3	0.082	23.810
30	25.988	25.981	36.020	203.5	0.123	23.809
50	25.987	25.976	36.026	203.1	0.205	23.815
75	25.802	25.786	36.511	180.1	0.305	24.241
100	23.182	23.162	36.426	209.7	0.388	24.969
125	22.630	22.604	36.656	200.4	0.459	25.304
150	21.444	21.415	36.770	153.6	0.521	25.728
200	19.266	19.230	36.617	145.7	0.627	26.198
250	17.400	17.358	36.368	151.9	0.715	26.478
300	15.423	15.377	36.045	140.2	0.791	26.694
400	13.048	12.992	35.656	130.1	0.924	26.903
500	9.851	9.792	35.213	123.0	1.043	27.154
600	7.365	7.305	34.948	129.3	1.135	27.335

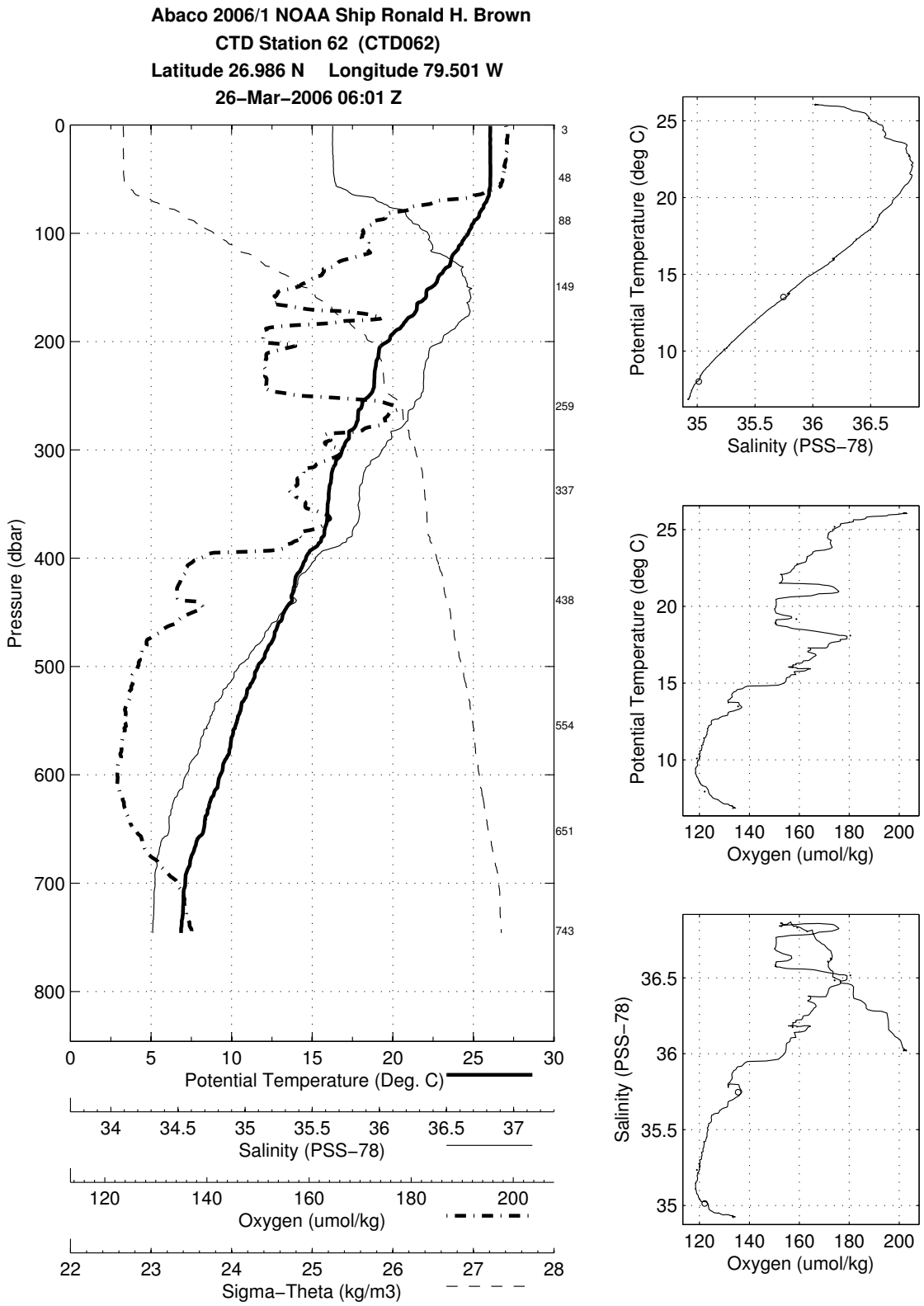
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
636	2	7.269	7.206	34.942	129.5
560	4	8.108	8.050	34.998	122.0
490	6	10.625	10.565	35.315	121.2
418	8	12.856	12.798	35.621	129.8
269	12	16.742	16.697	36.260	147.9
189	16	20.236	20.200	36.714	150.3
141	18	22.055	22.027	36.796	155.2
35	22	25.988	25.980	36.024	202.8
35	22	25.988	25.980	36.023	202.8


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 61 (CTD061)
Latitude 26.991 N Longitude 79.617 W
26−Mar−2006 04:06 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 62 (CTD062)
Latitude 26.986N Longitude 79.501W
26-Mar-2006 06:01Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.055	26.055	36.021	202.6	0.004	23.787
10	26.040	26.038	36.020	202.9	0.041	23.791
20	26.057	26.052	36.021	202.7	0.082	23.787
30	26.060	26.054	36.024	202.3	0.123	23.789
50	26.065	26.053	36.033	201.8	0.206	23.796
75	25.652	25.636	36.361	182.7	0.305	24.174
100	24.700	24.678	36.601	171.8	0.394	24.650
125	23.648	23.622	36.747	167.2	0.472	25.077
150	22.423	22.393	36.848	157.1	0.540	25.511
200	19.705	19.668	36.688	150.4	0.651	26.138
250	18.582	18.538	36.560	157.9	0.743	26.332
300	16.915	16.865	36.323	166.5	0.826	26.563
400	14.670	14.609	35.917	136.5	0.975	26.765
500	11.708	11.643	35.450	122.9	1.104	27.007
600	9.363	9.294	35.128	118.4	1.213	27.170
700	7.188	7.120	34.939	131.4	1.305	27.354

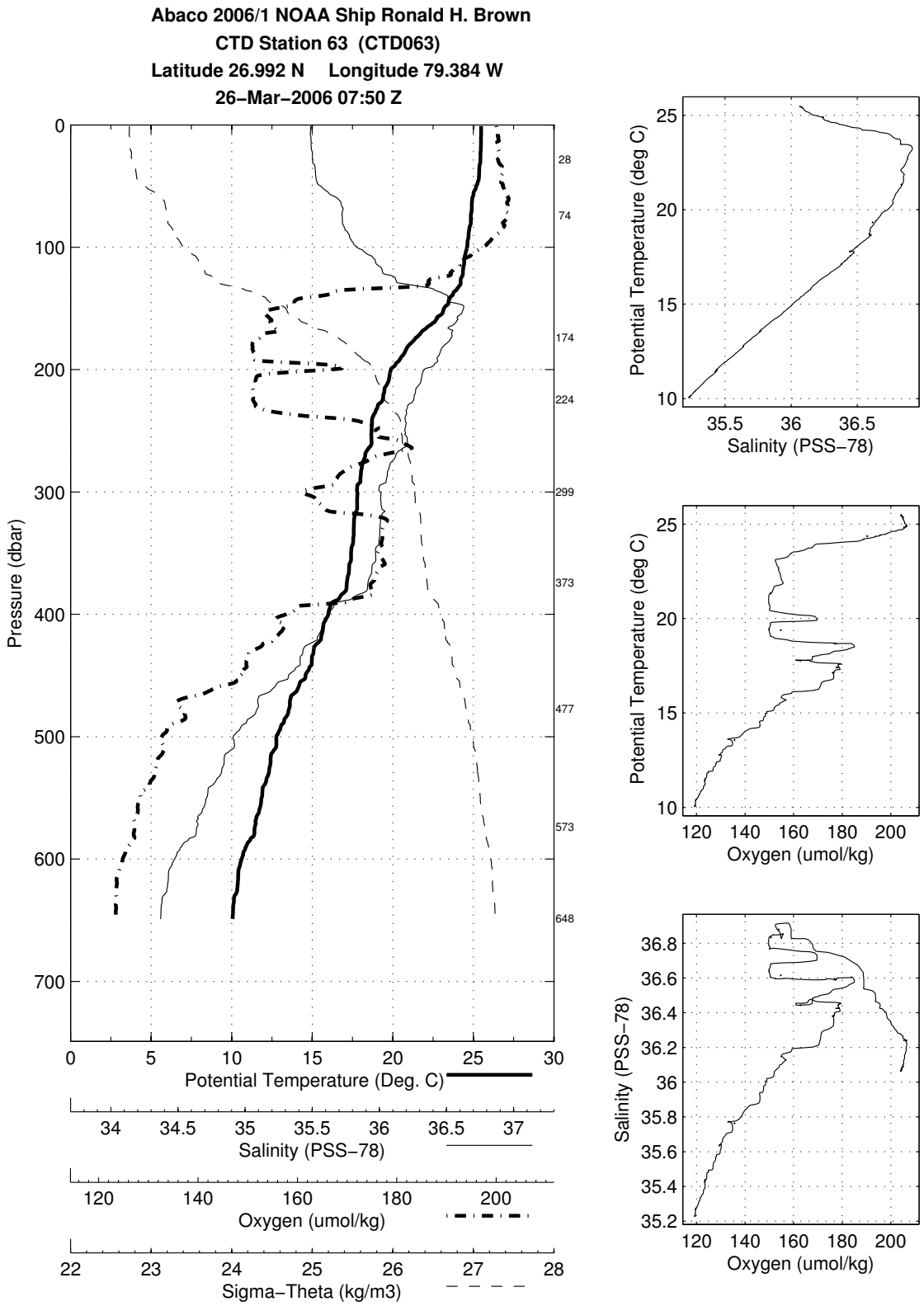
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
744	2	6.937	6.865	34.922	133.5
651	4	8.084	8.016	35.013	122.1
554	6	10.168	10.102	35.234	119.0
438	8	13.581	13.518	35.747	135.5
337	10	16.077	16.023	36.175	157.3
259	12	18.141	18.095	36.517	180.4
149	18	22.725	22.695	36.832	159.2
88	20	25.165	25.145	36.484	174.1
49	22	26.059	26.048	36.023	201.9
4	24	26.042	26.041	36.022	201.9


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 62 (CTD062)
Latitude 26.986 N Longitude 79.501 W
26−Mar−2006 06:01 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 63 (CTD063)
Latitude 26.992N Longitude 79.384W
26-Mar-2006 07:50Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.481	25.481	36.064	203.8	0.004	23.998
10	25.475	25.473	36.067	204.3	0.039	24.002
20	25.469	25.465	36.069	204.2	0.078	24.006
30	25.438	25.431	36.076	204.3	0.117	24.022
50	25.197	25.186	36.121	205.2	0.194	24.132
75	24.862	24.846	36.240	206.3	0.286	24.326
100	24.635	24.613	36.324	200.8	0.375	24.460
125	24.271	24.244	36.535	190.2	0.460	24.731
150	23.207	23.176	36.914	154.8	0.534	25.335
200	19.916	19.879	36.696	167.1	0.650	26.088
250	18.722	18.677	36.588	176.9	0.744	26.318
300	17.853	17.801	36.452	160.8	0.831	26.434
400	16.055	15.991	36.168	157.2	0.995	26.649
500	12.846	12.777	35.634	129.6	1.133	26.929
600	10.700	10.626	35.309	120.9	1.253	27.084

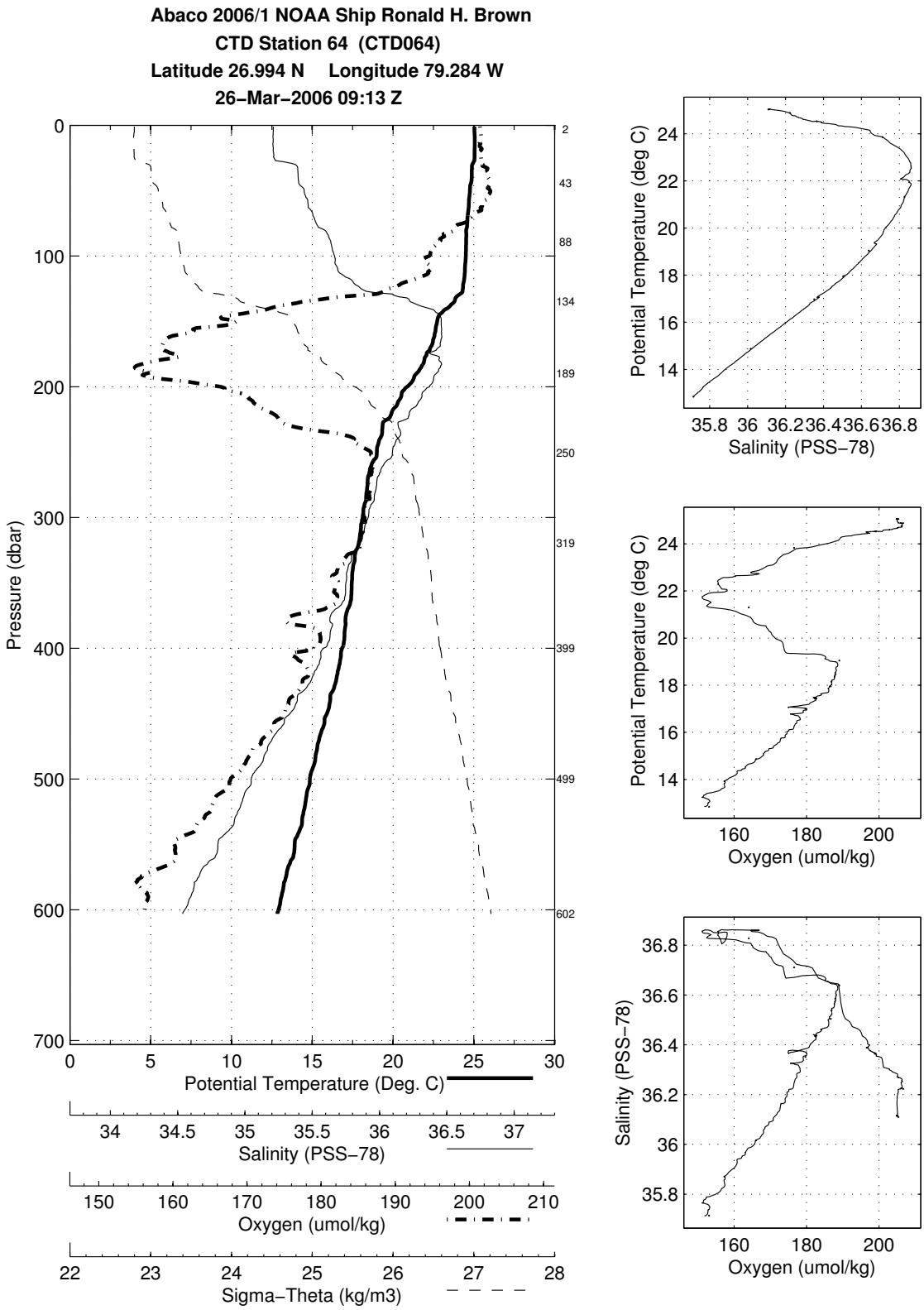
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
648	2	10.139	10.061	35.229	119.3
574	4	11.504	11.430	35.428	123.5
477	6	13.631	13.562	35.763	135.7
374	8	17.174	17.111	36.379	176.4
299	10	17.838	17.786	36.443	162.8
225	12	19.371	19.330	36.615	154.8
174	16	21.373	21.339	36.833	150.6
74	20	24.905	24.889	36.241	206.4
28	22	25.423	25.417	36.082	204.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 63 (CTD063)
Latitude 26.992 N Longitude 79.384 W
26−Mar−2006 07:50 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 64 (CTD064)
Latitude 26.994N Longitude 79.284W
26-Mar-2006 09:13Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.041	25.041	36.115	204.9	0.004	24.172
10	25.059	25.057	36.114	205.0	0.037	24.166
20	25.053	25.049	36.115	204.8	0.075	24.169
30	24.911	24.904	36.213	205.3	0.112	24.288
50	24.771	24.760	36.252	206.5	0.184	24.361
75	24.609	24.593	36.306	202.2	0.273	24.452
100	24.526	24.504	36.387	197.0	0.359	24.540
125	24.351	24.324	36.504	190.7	0.444	24.684
150	22.762	22.731	36.860	167.0	0.516	25.423
200	20.915	20.877	36.808	164.6	0.638	25.905
250	19.044	18.999	36.643	187.9	0.736	26.278
300	18.175	18.122	36.536	187.0	0.824	26.419
400	16.912	16.845	36.337	179.2	0.989	26.578
500	14.929	14.852	36.017	166.1	1.139	26.789
600	12.992	12.908	35.722	152.7	1.273	26.971

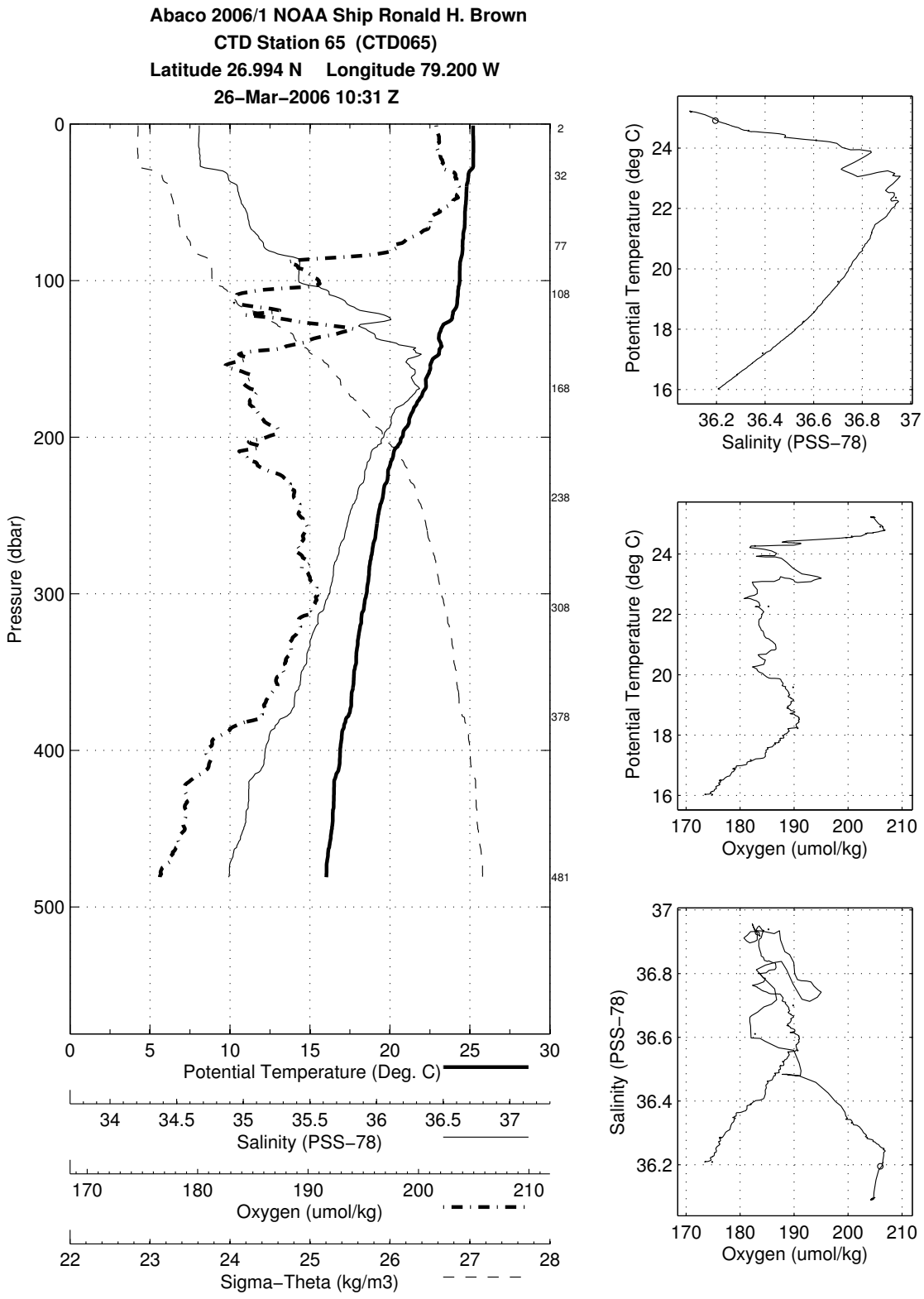
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
603	2	12.922	12.837	35.714	153.1
500	4	14.953	14.876	36.017	166.1
400	6	17.038	16.971	36.351	179.7
320	8	18.000	17.944	36.504	186.7
250	10	19.090	19.045	36.638	189.0
190	12	21.361	21.324	36.827	164.1
135	16	23.890	23.862	36.711	176.6
89	18	24.549	24.530	36.365	199.1
44	20	24.894	24.885	36.223	206.7
3	22	25.035	25.034	36.110	205.3


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 64 (CTD064)
Latitude 26.994 N Longitude 79.284 W
26−Mar−2006 09:13 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 65 (CTD065)
Latitude 26.994N Longitude 79.200W
26-Mar-2006 10:31Z

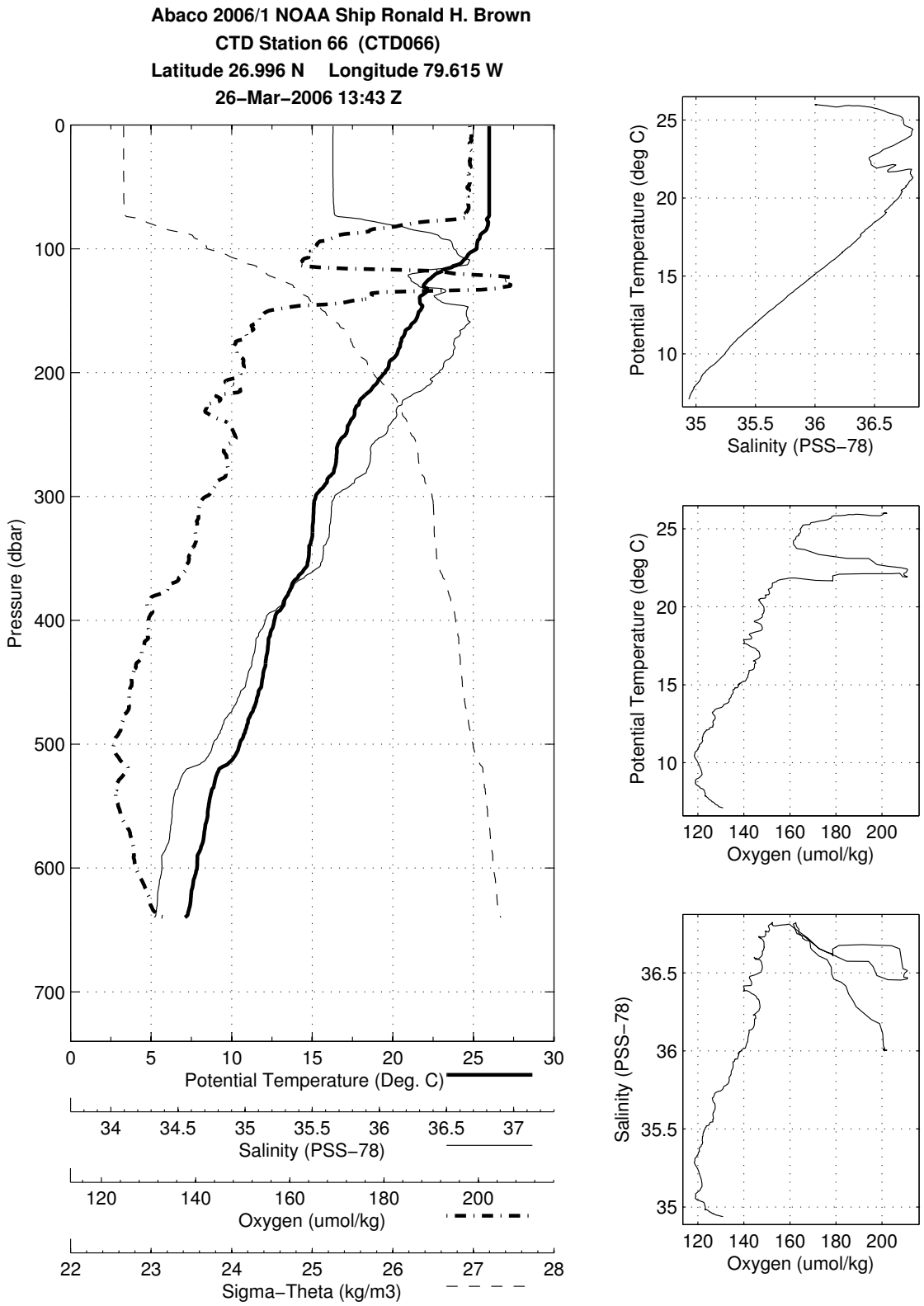
Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.205	25.205	36.093	204.2	0.004	24.105
10	25.217	25.215	36.091	204.6	0.038	24.100
20	25.217	25.213	36.096	204.7	0.076	24.104
30	24.999	24.992	36.184	205.7	0.114	24.239
50	24.763	24.752	36.256	206.1	0.186	24.366
75	24.564	24.548	36.338	200.7	0.274	24.490
100	24.381	24.360	36.480	191.1	0.359	24.654
125	23.880	23.854	36.838	187.6	0.437	25.077
150	22.717	22.686	36.905	183.2	0.506	25.470
200	20.795	20.757	36.810	185.4	0.623	25.939
250	19.305	19.260	36.676	189.0	0.722	26.236
300	18.592	18.539	36.599	190.9	0.813	26.362
400	16.958	16.891	36.349	178.8	0.981	26.576

Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
481	2	16.107	16.029	36.209	174.8
379	4	17.265	17.201	36.391	182.0
309	6	18.303	18.248	36.559	190.7
239	8	19.620	19.576	36.700	189.8
169	10	22.391	22.357	36.939	185.2
108	12	24.281	24.258	36.610	182.8
78	16	24.594	24.577	36.332	200.7
33	18	24.915	24.907	36.195	206.0
3	20	25.200	25.199	36.094	204.5


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 65 (CTD065)
Latitude 26.994 N Longitude 79.200 W
26−Mar−2006 10:31 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

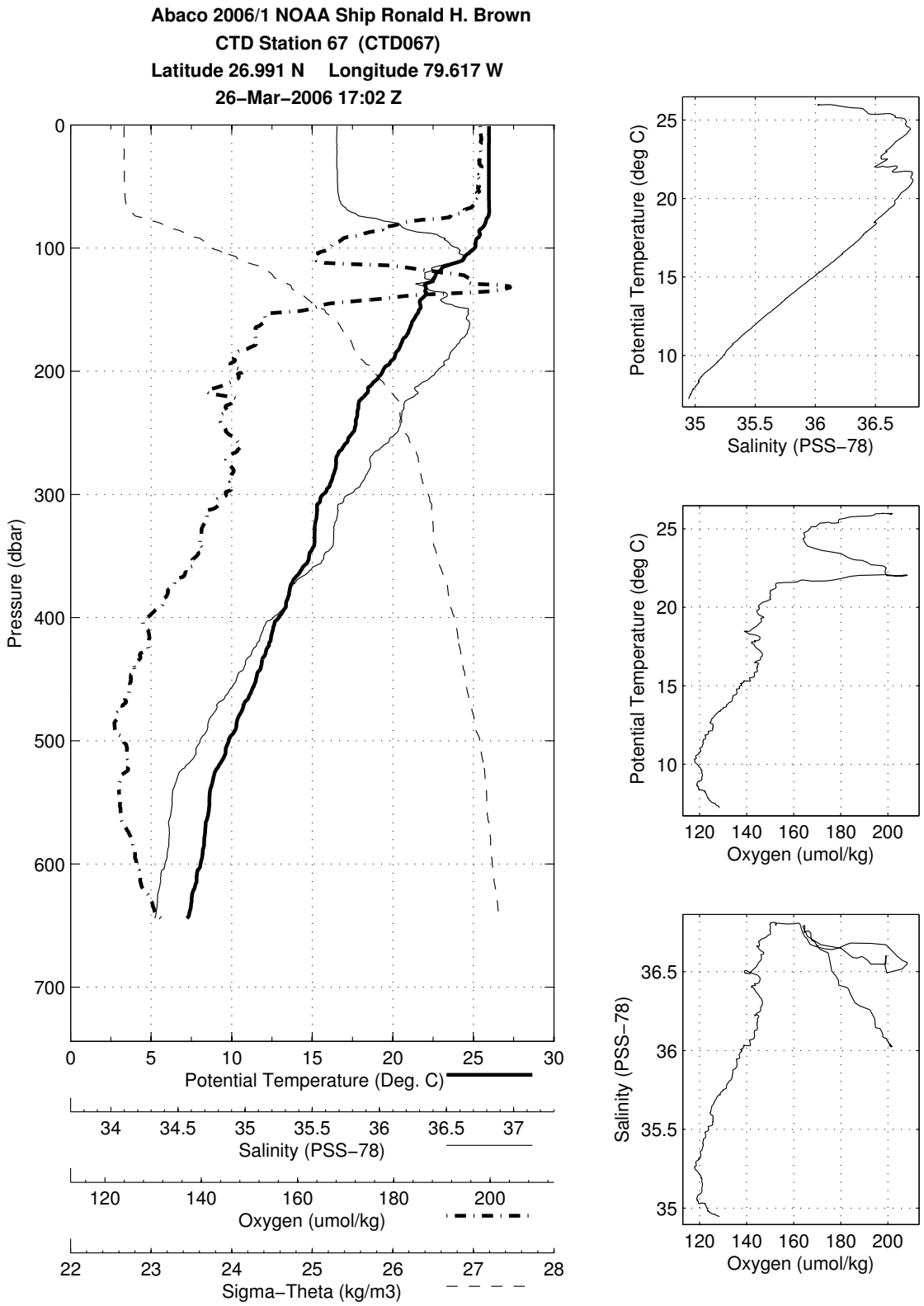
Abaco March 2006 R/V Brown
CTD Station 66 (CTD066)
Latitude 26.996N Longitude 79.615W
26-Mar-2006 13:43Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.988	25.988	36.006	201.5	0.004	23.796
10	25.986	25.984	36.004	201.8	0.041	23.796
20	25.992	25.988	36.004	201.6	0.082	23.795
30	25.993	25.987	36.005	201.5	0.123	23.796
50	25.993	25.982	36.006	200.9	0.205	23.798
75	25.917	25.901	36.109	200.3	0.308	23.901
100	25.224	25.202	36.726	165.4	0.399	24.585
125	22.235	22.210	36.470	210.5	0.474	25.276
150	21.723	21.693	36.804	154.7	0.538	25.676
200	19.558	19.521	36.638	147.9	0.644	26.138
250	17.105	17.063	36.317	146.7	0.731	26.511
300	15.265	15.218	36.015	140.0	0.807	26.706
400	12.708	12.653	35.601	126.6	0.943	26.928
500	10.553	10.492	35.288	118.6	1.060	27.091
600	7.911	7.849	34.983	123.6	1.156	27.283


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 66 (CTD066)
Latitude 26.996 N Longitude 79.615 W
26−Mar−2006 13:43 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

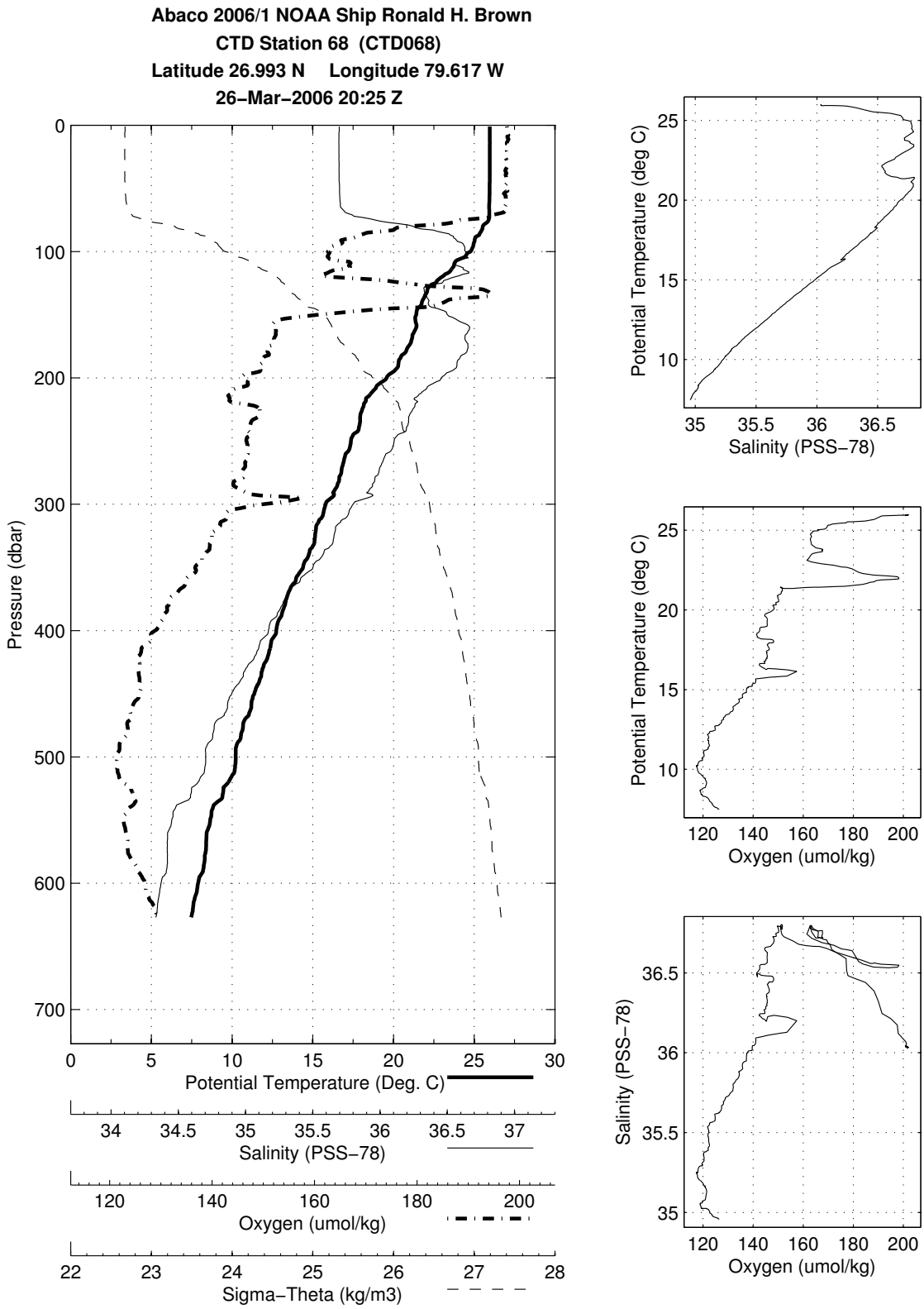
Abaco March 2006 R/V Brown
CTD Station 67 (CTD067)
Latitude 26.991N Longitude 79.617W
26-Mar-2006 17:02Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.970	25.970	36.027	201.4	0.004	23.818
10	25.973	25.971	36.025	201.7	0.041	23.816
20	25.973	25.969	36.025	201.5	0.082	23.817
30	25.972	25.966	36.026	201.3	0.122	23.818
50	25.980	25.969	36.031	201.2	0.204	23.821
75	25.913	25.896	36.202	194.4	0.306	23.973
100	25.099	25.077	36.744	167.2	0.396	24.636
125	22.529	22.504	36.551	199.1	0.471	25.254
150	21.663	21.634	36.808	161.8	0.534	25.696
200	19.417	19.381	36.620	147.4	0.641	26.161
250	17.542	17.499	36.380	143.6	0.729	26.453
300	15.712	15.665	36.097	143.4	0.806	26.669
400	12.975	12.920	35.650	125.3	0.944	26.913
500	9.870	9.811	35.214	119.9	1.058	27.151
600	8.132	8.070	35.007	122.8	1.154	27.269


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 67 (CTD067)
Latitude 26.991 N Longitude 79.617 W
26−Mar−2006 17:02 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

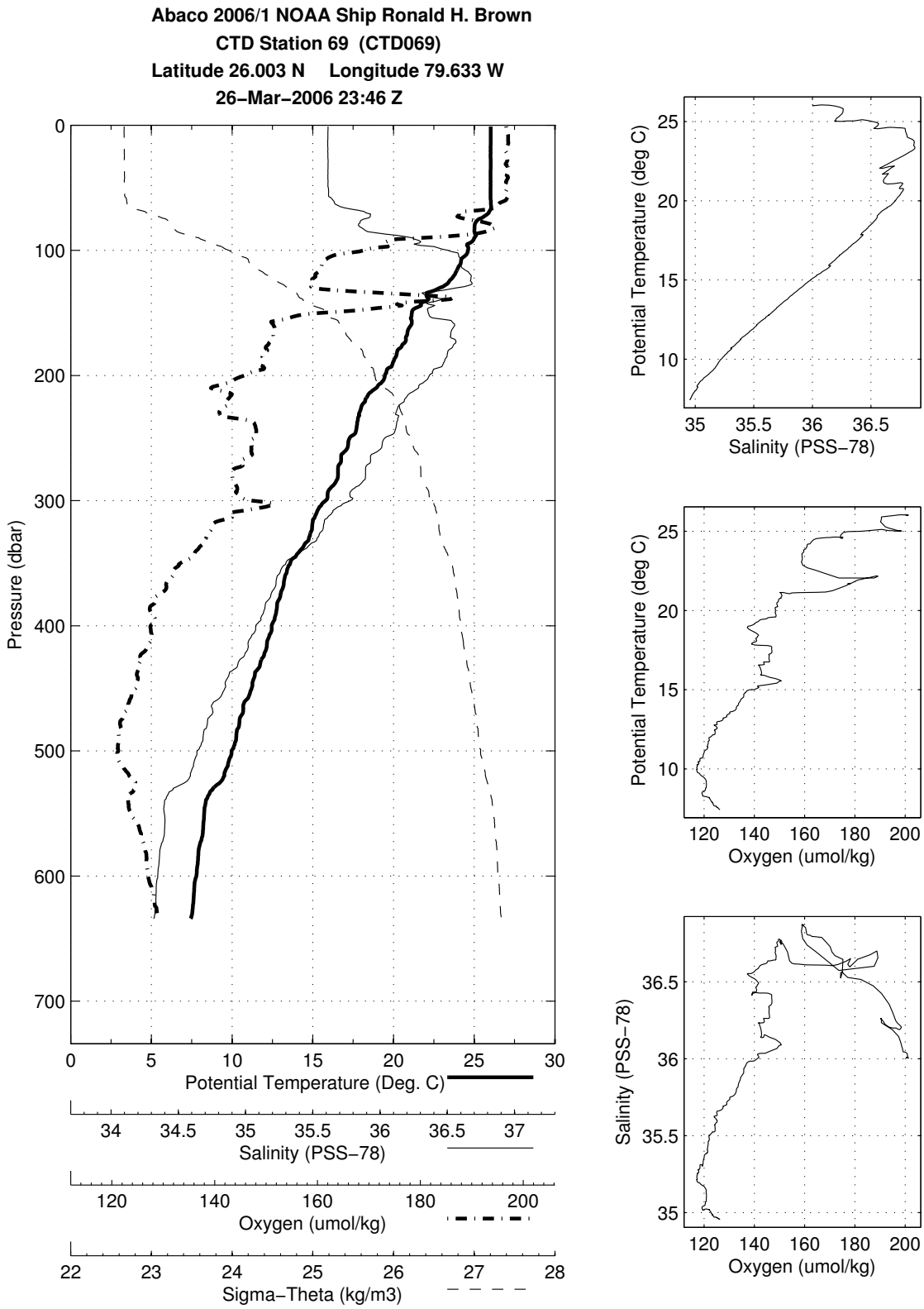
Abaco March 2006 R/V Brown
CTD Station 68 (CTD068)
Latitude 26.993N Longitude 79.617W
26-Mar-2006 20:25Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.961	25.961	36.035	201.5	0.004	23.827
10	25.967	25.965	36.034	201.7	0.041	23.825
20	25.971	25.967	36.034	201.5	0.081	23.824
30	25.973	25.966	36.034	201.5	0.122	23.825
50	25.965	25.954	36.038	201.5	0.204	23.831
75	25.911	25.894	36.246	191.5	0.306	24.007
100	24.789	24.767	36.778	162.9	0.392	24.757
125	22.601	22.576	36.639	179.5	0.465	25.300
150	21.437	21.408	36.671	160.9	0.529	25.654
200	19.612	19.575	36.639	145.0	0.638	26.125
250	17.409	17.367	36.358	145.3	0.726	26.469
300	15.845	15.797	36.117	149.0	0.804	26.654
400	12.792	12.737	35.619	125.6	0.940	26.925
500	10.283	10.223	35.250	117.5	1.054	27.109
600	7.952	7.889	34.988	123.5	1.151	27.281


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 68 (CTD068)
Latitude 26.993 N Longitude 79.617 W
26−Mar−2006 20:25 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

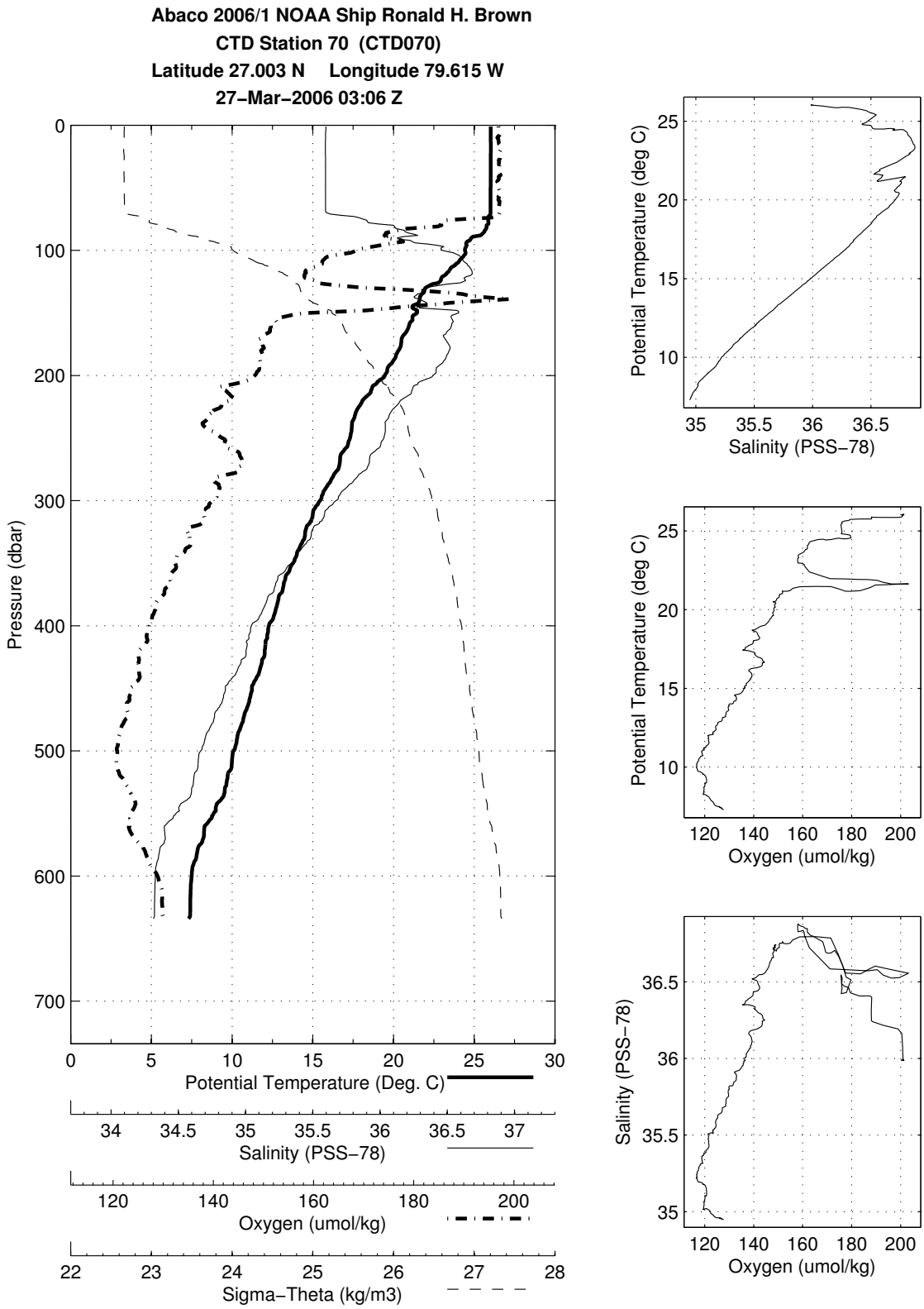
Abaco March 2006 R/V Brown
CTD Station 69 (CTD069)
Latitude 26.003N Longitude 79.633W
26-Mar-2006 23:46Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.025	26.025	36.007	200.7	0.004	23.785
10	26.023	26.020	36.005	201.1	0.041	23.785
20	26.021	26.017	36.005	200.9	0.082	23.786
30	26.028	26.021	36.006	200.7	0.123	23.786
50	26.027	26.016	36.008	201.0	0.206	23.789
75	25.302	25.286	36.222	192.1	0.307	24.177
100	24.633	24.612	36.729	170.1	0.395	24.767
125	23.468	23.442	36.868	158.9	0.470	25.222
150	21.172	21.143	36.610	160.6	0.534	25.681
200	19.502	19.465	36.617	144.4	0.640	26.137
250	17.327	17.285	36.347	146.5	0.728	26.480
300	15.836	15.788	36.141	146.0	0.806	26.674
400	12.512	12.458	35.571	124.2	0.938	26.943
500	10.027	9.967	35.216	117.3	1.051	27.126
600	7.849	7.787	34.979	123.6	1.145	27.289


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 69 (CTD069)
Latitude 26.003 N Longitude 79.633 W
26−Mar−2006 23:46 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

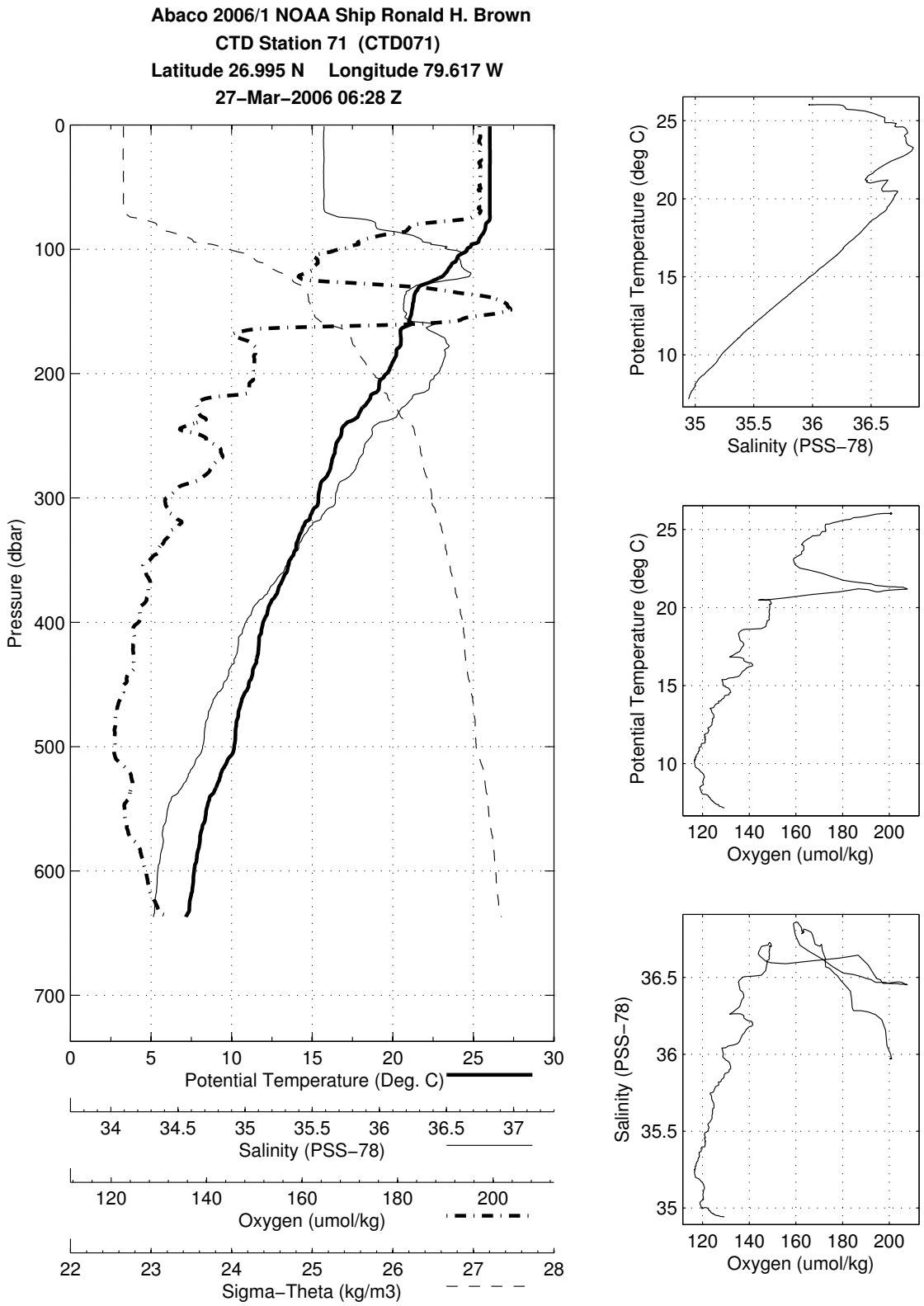
Abaco March 2006 R/V Brown
CTD Station 70 (CTD070)
Latitude 27.003N Longitude 79.615W
27-Mar-2006 03:06Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.024	26.024	35.992	200.8	0.004	23.774
10	26.026	26.024	35.990	200.5	0.041	23.773
20	26.038	26.034	35.988	201.2	0.082	23.769
30	26.026	26.019	35.989	200.8	0.124	23.774
50	26.024	26.013	35.989	200.9	0.206	23.776
75	25.877	25.860	36.216	193.1	0.309	23.994
100	24.445	24.423	36.694	169.4	0.398	24.798
125	22.889	22.863	36.823	160.6	0.470	25.357
150	21.488	21.458	36.793	158.8	0.533	25.733
200	19.491	19.454	36.638	147.1	0.638	26.156
250	17.343	17.301	36.342	139.9	0.725	26.472
300	15.499	15.452	36.053	138.0	0.802	26.683
400	12.331	12.277	35.540	123.9	0.934	26.955
500	10.151	10.092	35.234	116.8	1.047	27.119
600	7.554	7.494	34.960	125.7	1.143	27.317


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 70 (CTD070)
Latitude 27.003 N Longitude 79.615 W
27−Mar−2006 03:06 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

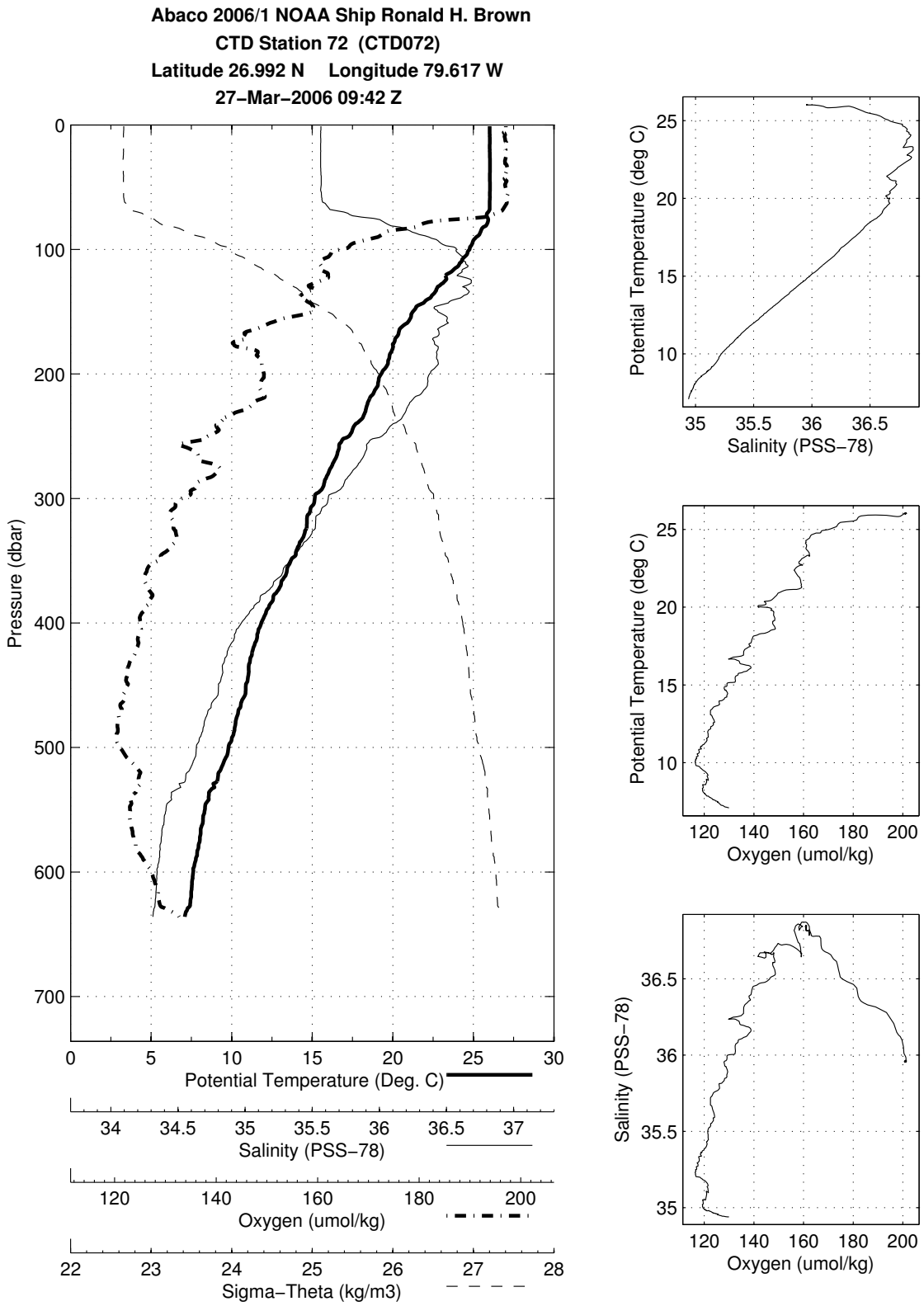
Abaco March 2006 R/V Brown
CTD Station 71 (CTD071)
Latitude 26.995N Longitude 79.617W
27-Mar-2006 06:28Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.025	26.025	35.972	200.6	0.004	23.759
10	26.023	26.021	35.970	200.8	0.041	23.759
20	26.033	26.028	35.971	201.0	0.083	23.757
30	26.037	26.030	35.972	200.5	0.124	23.757
50	26.035	26.023	35.971	200.8	0.207	23.759
75	26.049	26.032	36.155	198.4	0.311	23.895
100	24.619	24.597	36.716	168.2	0.402	24.761
125	22.549	22.524	36.709	161.7	0.474	25.368
150	21.200	21.171	36.457	206.7	0.538	25.557
200	19.654	19.617	36.657	148.6	0.646	26.128
250	16.811	16.770	36.259	136.8	0.734	26.536
300	15.426	15.379	36.041	128.6	0.809	26.690
400	12.008	11.956	35.499	122.1	0.939	26.986
500	10.218	10.158	35.240	116.6	1.050	27.112
600	7.736	7.675	34.969	123.9	1.145	27.298


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 71 (CTD071)
Latitude 26.995 N Longitude 79.617 W
27−Mar−2006 06:28 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)

Abaco March 2006 R/V Brown
CTD Station 72 (CTD072)
Latitude 26.992N Longitude 79.617W
27-Mar-2006 09:42Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.016	26.016	35.959	201.1	0.004	23.752
10	26.020	26.018	35.957	200.8	0.041	23.750
20	26.023	26.019	35.957	201.0	0.083	23.750
30	26.040	26.033	35.957	200.9	0.124	23.745
50	26.042	26.030	35.958	201.0	0.208	23.747
75	25.925	25.908	36.278	193.4	0.310	24.027
100	24.791	24.769	36.780	165.1	0.399	24.758
125	23.293	23.267	36.872	160.9	0.473	25.276
150	21.268	21.239	36.668	159.0	0.537	25.698
200	19.314	19.277	36.618	148.5	0.641	26.186
250	17.313	17.271	36.327	136.2	0.730	26.468
300	15.201	15.154	36.003	130.5	0.806	26.711
400	11.893	11.841	35.476	121.5	0.935	26.989
500	9.861	9.803	35.203	117.0	1.046	27.144
600	7.677	7.616	34.965	123.8	1.139	27.303


Abaco 2006/1 NOAA Ship Ronald H. Brown
CTD Station 72 (CTD072)
Latitude 26.992 N Longitude 79.617 W
27−Mar−2006 09:42 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS−78)
Oxygen (umol/kg)
Sigma−Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS−78)
Potential Temperature (deg C)
Oxygen (umol/kg)
Salinity (PSS−78)
Oxygen (umol/kg)