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Hydrographic Measurements Collected Aboard the R/V *Endeavor*, 27 February - 16 March 2021: Western Boundary Time Series Cruise AB2102 (EN-663)

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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.

Contents

List of Figures

List of Tables

Abstract

This report presents final calibrated conductivity, temperature, depth (CTD) data collected during the Western Boundary Time Series project (WBTS) research cruise AB2102, which took place between February 27 and March 16, 2021, aboard the R/V *Endeavor*. Funded through the National Oceanic and Atmospheric Administration (NOAA) Global Ocean Monitoring and Observing (GOMO) Program, this WBTS survey was completed as part of a long term effort to monitor the temporal and spatial variability of the circulation and water mass properties at the western boundary of the North Atlantic Ocean. A brief narrative of all scientific operations conducted during AB2102 is also included.

1 Introduction

The "Abaco" oceanographic time series began in August 1984 when NOAA expanded its Straits of Florida program (now part of the WBTS project) to include in situ measurements east the Bahamas in the North Atlantic Ocean. Since then, 51 shipboard surveys have collected water mass property data, and many have collected current velocity data, along a zonal section east of Abaco Island, Bahamas at a nominal latitude of 26.5°N. Initially only extending across the Antilles Current and a portion of the Deep Western Boundary Current (DWBC), research cruises now reach farther eastward into the North Atlantic Subtropical Gyre interior capturing a portion of the DWBC recirculation. Observations associated with these surveys have typically been made using CTD hydrography methods, often augmented either initially with Pegasus (Spain et al., 1981), or later with lowered Acoustic doppler current profiler (LADCP; Firing, 1991) measurements to obtain ocean current velocity. Transient tracer (CFC) measurements have also been collected on eight of these sections.

In addition to shipboard surveys of the Abaco section, a moored current meter array was deployed by collaborators at the University of Miami from April 1986 to April 1997. This was followed in March 2004 by an international trans-basin instrument array (of which the Abaco section is a component), funded by the United Kingdom's Natural Environment Research Council and the United States' National Science Foundation. Current meter moorings along the Abaco section, funded through these programs, are maintained by partners at the University of Miami and at the National Oceanography Centre. Concurrently with these efforts, an array of pressure equipped inverted echo sounders (PIES) was also established along the Abaco section in September 2004 by NOAA.

As a result of the efforts mentioned above, a high-resolution record of water mass property and current velocity in the DWBC has been established, 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 1980s are clearly reflected in the cooling and freshening of the DWBC waters off Abaco, as well as the arrival of a strong CFC pulse, approximately 10 years later (e.g. Fine and Molinari, 1988; van Sebille et al., 2011). These in situ efforts are unique in that the result is a sectional time series from which quantitative transports can be directly calculated. Additionally, the Abaco section is one of only a few multidecadal oceanographic times series maintained in the world's oceans today.

To achieve the goals of NOAA's strategic plan in terms of understanding the Atlantic Ocean's role in multidecadal climate variability, these continued time series measurements at Abaco serve three main purposes:

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

2. Serving as a western boundary endpoint of a subtropical Meridional Overturning Circulation (MOC) heat flux monitoring system. The system is 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) have been proposed as an important mechanism in the atmosphere-ocean feedback within coupled models (e.g. Latif and Barnett, 1996).

2 Summary of Operations Completed

The research cruise departed from Ft. Lauderdale, Florida, on February 27, 2021 at 0900 EST, aboard the R/V *Endeavor*. The hydrographic survey consisted of four repeat CTDO2/ LADCP sections at historical locations in the western North Atlantic (Figure 1 and Table 2). During the transit to the first section east of Abaco Island, the ship stopped to conduct a 1000-meter test cast in the middle of the Northwest West Providence Channel (NWPC).

The Abaco hydrographic section at 26.5°N was conducted from February 28 through March 6, 2021. There were 23 CTDO2/LADCP stations successfully occupied, with full water column casts conducted at each station (stations 1-23). The communication serial port for the upward LADCP, s/n 13493, failed after station 3 and was replaced with s/n 15329. As a precaution LADCP battery packs were rotated between each cast to ensure complete charging until station spacing increased. During the section, a calibration (*cal-dip*) cast was performed in support of the project's tall moorings (maintained by our UM/RSMAS partner). During the cal-dip, moored sensors (SeaBird 37SM MicroCAT CTDs), slated for deployment during the cruise, were temporarily attached to the CTDO2/LADCP package frame. This type of operation provides a direct comparison of these sensors with the SeaBird 9plus used for the hydrographic survey. As work along the section progressed eastward, the weather was forecast for increasingly bad weather. As a result, after station 23 no further CTDO2/LADCP stations were conducted along the section and the ship headed back west to begin mooring operations

Following the hydrographic survey along the Abaco section, AOML and UM/RSMAS mooring operations were conducted from March 6 through March 13 (Figure 1). Despite the ship having to seek shelter from heavy weather for 48 hours, all planned mooring operations were completed. This included regular maintenance of NOAA pressure-equipped inverted echo sounders (PIES) deployed along the 26.5°N section. 15 months of daily-averaged data were telemetered from each PIES mooring. As detailed in Table 3, at PIES sites A, A2, B, C and E, following telemetry old PIES moorings were recovered and new PIES moorings were deployed. Mooring operations also included recovering and replacing all deployed UM/RSMAS tall moorings and a bottom lander mooring (Table 4). The tall moorings contained a mixture of current meters, Acoustic Doppler Current Profilers (ADCPs) and temperature/salinity recorders and the bottom lander is equipped with a bottom pressure sensor. In total, four moorings (3 taut-wire moorings and 1 bottom lander) were deployed at the locations listed in Table 5. An acoustic survey of each site was conducted following mooring deployment.

After successfully completing all planned mooring operations, CTDO2/LADCP hydrographic sections were conducted in NWPC and in the Straits of Florida, along 26.05°N and along 27°N (see Figure 1 and Table 2) between March 14 and March 16. During these sections all science operations went smoothly. However, due to time constraints no bottles were fired during the 26.05°N section to ensure the completion of all stations. After this work, the ship returned to Ft. Lauderdale, Florida on March 16, 2021, at 1630 EST concluding the AB2102 research cruise. The survey was a success. All planned operations were accom-

plished, except for the last five, easternmost CTDO2/LADCP stations on the 26.5°N Abaco line, which were not completed due to weather. A total of 49 CTDO2/LADCP stations were occupied during the cruise.

Table 1: AB2102 cruise participants of the R/V *Endeavor*.

Name	Responsibility	Affiliation
Bill Johns.	Chief Scientist	RSMAS/ U. Miami
James Hooper	CTD processing	UM/CIMAS
Ulises Rivero	Salinity analysis Watch Leader	NOAA/AOML
Pedro Pena	Salinity analysis, IES operations,	NOAA/AOML
Grant Rawson	Oxygen analysis	UM/CIMAS
Christian Saiz	Oxygen analysis, IES operations	UM/CIMAS
Adam Houk	LADCP operations	RSMAS/ U. Miami
Mark Graham	Technician	RSMAS/ U. Miami
Eduardo Jardim	Technician	RSMAS/ U. Miami
Manish Devana	Technician	RSMAS/ U. Miami

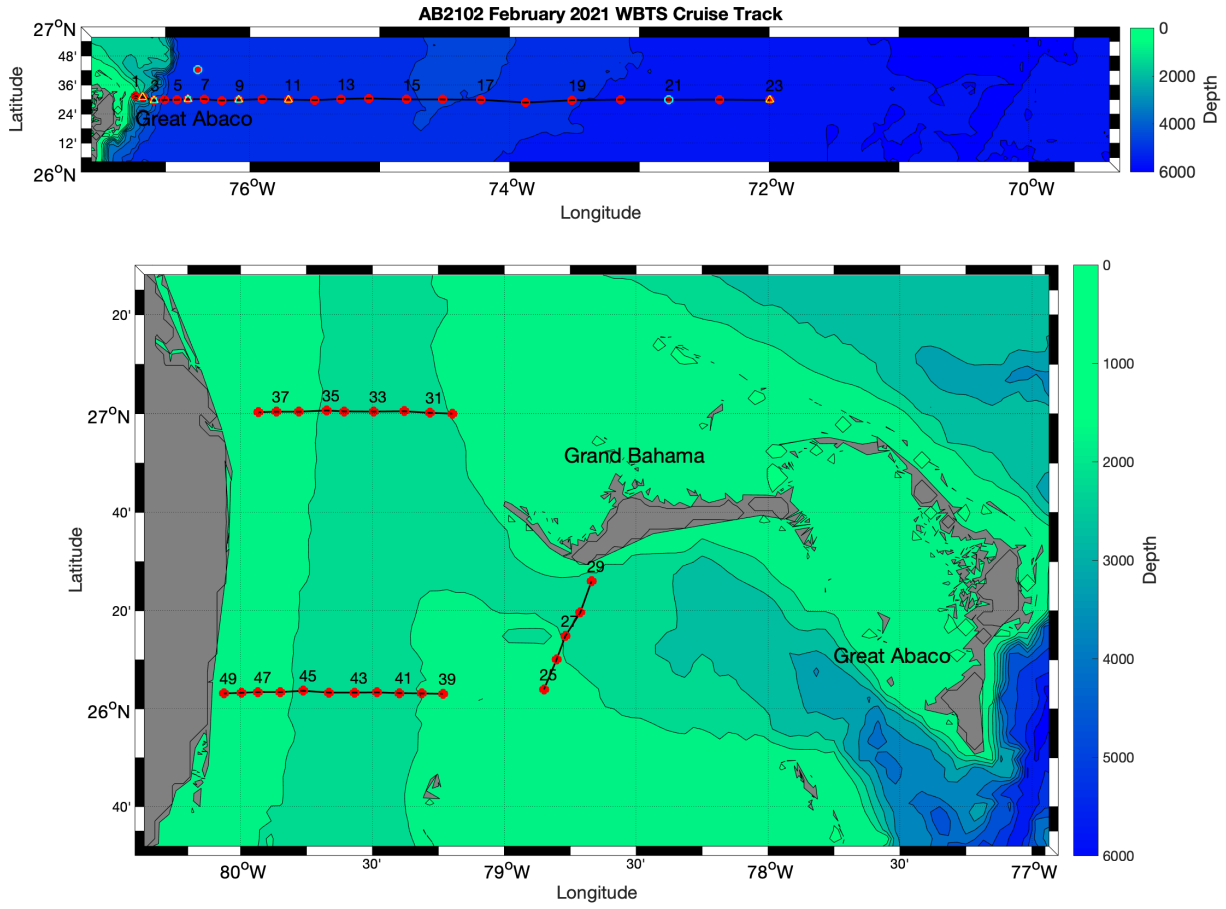

Figure 1: Completed science operations are shown above. CTD station locations completed along the Abaco, Northwest Providence Channel (NWPC), 26N and 27N sections are number sequentially, indicated with a red circle. If PIES mooring operations were also conducted at the site, the location is marked with a yellow triangle. Mooring site and station information can be found in Table 3.

Table 2: AB2102 – CTD Cast Summary

Station	Date	Time (GMT)	Latitude	Longitude	Depth	Corrected Depth
1	02/28/21	14:40:36	26.526N	76.881W	448	471
2	02/28/21	16:10:18	26.517N	76.824W	1292	1306
3	02/28/21	19:14:08	26.494N	76.732W	3813	3823
4	03/01/21	00:04:35	26.497N	76.653W	4588	4599
5	03/01/21	05:04:45	26.500N	76.560W	4823	4833
6	03/01/21	10:02:45	26.505N	76.475W	4840	4847
7	03/01/21	14:54:30	26.505N	76.348W	4836	4845
8	03/01/21	19:53:58	26.499N	76.220W	4803	4813
9	03/02/21	01:15:21	26.500N	76.085W	4794	4803
10	03/02/21	06:54:43	26.499N	75.909W	4736	4746
11	03/02/21	12:31:46	26.501N	75.703W	4683	4692
12	03/02/21	17:34:56	26.500N	75.499W	4679	4686
13	03/02/21	22:30:28	26.500N	75.296W	4629	4639
14	03/03/21	03:26:17	26.500N	75.082W	4606	4609
15	03/03/21	08:48:50	26.500N	74.792W	4533	4541
16	03/03/21	14:10:16	26.502N	74.514W	4488	4493
17	03/03/21	19:30:36	26.500N	74.216W	4534	4545
18	03/04/21	01:47:21	26.498N	73.880W	4754	4771
19	03/04/21	09:31:00	26.502N	73.531W	4940	4954
20	03/04/21	17:19:33	26.500N	73.153W	5041	5052
21	03/04/21	23:36:35	26.500N	72.779W	5127	5137
22	03/05/21	06:35:41	26.500N	72.383W	5178	5183
23	03/05/21	12:43:05	26.499N	72.003W	5279	5289
24	03/12/21	23:58:20	26.697N	76.400W	4837	4886
25	03/14/21	11:31:32	26.066N	78.849W	295	305
26	03/14/21	12:50:25	26.168N	78.802W	447	456
27	03/14/21	14:05:52	26.248N	78.770W	510	520
28	03/14/21	15:28:45	26.331N	78.711W	662	676
29	03/14/21	17:08:57	26.433N	78.671W	752	761
30	03/14/21	23:13:10	27.000N	79.196W	466	473
31	03/15/21	00:32:40	27.000N	79.282W	605	614
32	03/15/21	01:54:34	27.001N	79.379W	681	691
33	03/15/21	03:27:23	27.002N	79.494W	752	761
34	03/15/21	06:31:31	27.002N	79.606W	665	678
35	03/15/21	08:02:22	27.003N	79.671W	534	547
36	03/15/21	09:43:07	27.002N	79.778W	382	394
37	03/15/21	11:00:26	27.003N	79.863W	259	271
38	03/15/21	12:10:35	27.002N	79.931W	141	151
39	03/15/21	21:35:44	26.050N	79.233W	327	336
40	03/15/21	22:34:24	26.050N	79.312W	480	490
41	03/15/21	23:41:06	26.051N	79.398W	581	592
42	03/16/21	00:51:05	26.051N	79.481W	670	680
43	03/16/21	02:08:26	26.051N	79.568W	758	768
44	03/16/21	03:28:12	26.051N	79.665W	693	702
45	03/16/21	04:48:36	26.054N	79.761W	590	608
46	03/16/21	06:24:00	26.053N	79.849W	315	325
47	03/16/21	07:48:38	26.052N	79.934W	272	282
48	03/16/21	08:44:31	26.052N	79.996W	240	251
49	03/16/21	09:40:21	26.052N	80.062W	137	149

Table 3: Inverted echo-sounder locations and operation. The corresponding station numbers are in parenthesis next to the site name.

IES Site	S/N	Type	Latitude	Longitude	Date	Operation
A (2)	PIES	324	026°30.945′ N	076°50.044′ W	3/07/21	Telemetry failed/Recovered
A (2)	PIES	248	026°30.963′ N	076°50.040′ W	3/07/21	Deployed
A2 (3)	PIES	400	026°30.083′ N	076°44.791′ W	3/07/21	Telemetry failed/Recovered
A2 (3)	PIES	301	026°30.088′ N	076°44.806′ W	3/11/21	Deployed
B (6)	PIES	301	026°29.300′ N	076°28.200′ W	3/02/21	Telemetry failed/Recovered
B (6)	PIES	324	026°29.523′ N	076°28.218′ W	3/09/21	Deployed
C (9)	PIES	413	026°30.000′ N	076°05.600′ W	3/06/21	Telemetry failed/Recovered
C (9)	PIES	335	026°30.000′ N	076°05.624′ W	3/11/21	Deployed
D (11)	PIES	323	026°30.112′ N	075°42.318′ W	3/02/21	Telemetry
E (23)	PIES	335	026°30.067′ N	072°00.000′ W	3/05/21	Telemetry/Recovered
E (23)	PIES	402	026°30.070′ N	071°59.982′ W	3/05/21	Deployed

Table 4: Summary of mooring recovery operations. The corresponding station numbers are in parenthesis next to the site name.

Mooring Site	Mooring Number	Latitude (N)	Longitude (W)	Depth	Date of Recovery
WB0 (2)	M477	26° 30.54’	76° 50.52’	1006	3/10/2021
WB3 (6)	M478	26° 29.72’	76° 30.07’	4840	3/12/2021
WBC (9)	M480	26° 30.70’	76° 06.44’	4819	3/06/2021
WBL3 (6)	M479	26° 29.50’	76° 29.20’	4846	3/11/2021

Table 5: Summary of mooring deployment operations. The corresponding station numbers are in parenthesis next to the site name.

Mooring Site	Mooring Number	Latitude (N)	Longitude (W)	Depth	Date of Deployment
WB0 (2)	M481	26° 30.55’	76° 50.51’	1006	3/10/2021
WB3 (6)	M482	26° 29.98’	76° 30.08’	4840	3/13/2021
WBC (9)	M484	26° 30.89’	76° 06.59’	4819	3/09/2021
WBL3 (6)	M483	26° 29.52’	76° 29.02’	4846	3/11/2021

3 Standards and Pre-Cruise CTD Sensor Calibrations

The CTD 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 SBE11plus deck unit (V2). The serial data from the underwater unit is sent to the deck unit in RS-232 NRZ format. The deck unit decodes the serial data and sends it to a networked Windows computer for display and data storage using Sea-Bird Seasave software (version 7.26.7.121).

The SBE911plus system transmits data from primary, secondary and auxiliary sensors in the form of binary numbers equivalent to the frequency or voltage outputs from those sensors. These are referred to as the raw data. The SBE software performs the calculations required to convert raw data to engineering units.

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

The SBE 9plus underwater unit is configured with dual standard modular temperature (SBE 3 plus) and conductivity (SBE 4) sensors, which are mounted near the lower end cap. The conductivity cell entrance is co-planar with the tip of the temperature sensor probe. The pressure sensor is mounted inside the underwater unit main housing. A centrifugal pump module flushes water through sensor tubing at a constant rate independent of the CTD's motion to improve dynamic performance. Dual dissolved oxygen sensors (SBE 43) are added to the pumped sensor configuration following the temperature-conductivity (TC) pair. A reference temperature sensor is mounted to the SBE 9plus. An altimeter(s) is mounted to one of the lower internal side mounts for auxiliary sensors. A list of sensors used during the cruise can be seen in Table 6.

Table 6: Sensors used during AB2102 CTD casts.

Instrument	SN	Stations	Sensor Position	Comment
Black Frame		1-49		
Sea-Bird SBE 32 24-palce Carousel Water Sampler	0500	1-49		
Sea-Bird SBE9plus CTD	1335	1-49		
Paroscientific Digiquartz Pressure Sensor	135375	1-49		
Sea-Bird SBE3plus Temperature Sensor	5898	1-49	Primary	
Sea-Bird SBE3plus Temperature Sensor	5889	1-49	Secondary	
Sea-Bird SBE35 Reference Temperature Sensor	0083	1-38		
Sea-Bird SBE4C Conductivity Sensor	4709	1-49	Primary	
Sea-Bird SBE4C Conductivity Sensor	4349	1-49	Secondary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	2082	1-49	Primary	
Sea-Bird SBE43 Dissolved Oxygen Sensor	2940	1-49	Secondary	
Sea-Bird SBE5T Pump	9256	1-49	Primary	
Sea-Bird SBE5T Pump	7741	1-10	Secondary	
Sea-Bird SBE5T Pump	7889	11-49	Secondary	
Vale port VA 500 Altimeter	48591	1-49		Scale 15.0 Range - 100 m
RDI LADCP - 150 kHz Workhorse (AOML)	18145	1-49	Downward	
RDI LADCP - 300 kHz Workhorse (AOML)	13493	1-3	Upward	
RDI LADCP - 300 kHz Workhorse (AOML)	15329	4-49	Upward	

3.1 Pressure

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

The pressure sensor utilized during AB2102 was serial number (s/n) 1335. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration date and coefficients in Table 7 were entered into SEASAVE R using the configuration file.

Pressure coefficients are first formulated into:

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

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

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

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

Table 7: AB2102 Pressure Calibration Date and Coefficients.

s/n 1335
September 14, 2017
c_1 = -4.163434e+004
c_2 = -6.090208e-001
c_3 = 1.362600e-002
d_1 = 3.417500e-002
d_2 = 0.000000e+00
t_1 = 3.036781e+001
t_2 = -5.542870e-004
t_3 = 4.596360e-006
t_4 = 1.812390e-009
t_5 = 0.000000e+00
Slope = 1.00000000
Offset = 0.00000
AD590M = 1.278870e-002
AD590B = -9.314130e+000

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 temperatures from -5 to 35°C. The output frequency is inversely proportional to the square root of the thermistor resistance, which controls the output of a patented Wien Bridge circuit. The thermistor resistance is exponentially related to temperature. The SBE3plus thermometer has a typical accuracy/stability of ±0.004°C per year and resolution of 0.0003°C at 24 samples per second. The SBE3plus thermometer has a fast response time of 0.070 seconds.

Two temperature sensors (SBE 3plus) were used during AB2102, s/n 5898 and 5889. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients in Table 8 were entered into SEASAVE R using the configuration file. SEASAVE R automatically implements the equation below and converts between ITS-90 and IPTS-68 temperature scales as desired. The Temperature (ITS-90) is computed from g, h, i, j and f_0 and f is the instrument frequency (kHz) coefficients as follows:

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

Table 8: AB2102 – Temperature Pre-Cruise Calibration Dates and Coefficients.

s/n 5898	s/n 5889
December 2, 2020	December 2, 2020
g = 4.35096197e-003	g = 4.35763397e-003
h = 6.26642799e-004	h = 6.29428109e-004
i = 1.94041829e-005	i = 1.99795586e-005
j = 1.41674192e-006	j = 1.49642128e-006
f_0 = 1000.0	f_0 = 1000.0

3.3 Conductivity

The flow-through conductivity-sensing element is a glass tube (cell) with three platinum electrodes (SBE4). 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 $S{\cdot}m^{-1}$/month and resolution of 0.00004 $S{\cdot}m^{-1}$ at 24 scans per second.

Two conductivity sensors were used during AB2102, (s/n) 4709 and 4349. Pre-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates and coefficients shown in Table 9 were entered into Seasave R using the configuration file.

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

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

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

Table 9: AB2102 – Conductivity Calibration Dates and Coefficients.

s/n 4709	s/n 4349
December 9, 2020	December 9, 2020
g = -1.00535661e+001	g = -9.76341032e+000
h = 1.36924425e+000	h = 1.38688247e+000
i = -6.69753257e-004	i = -1.33349274e-003
j = 1.11276514e-004	j = 1.76268165e-004
CPcor = -9.5700e-008	CPcor = -9.5700e-008
CTcor = 3.2500e-006	CTcor = 3.2500e-006

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.

Oxygen sensors, s/n 2082 and 2940, were used during AB2102. The calibration dates and coefficients in Table 10 were entered into SEASAVE R using the configuration file.

Table 10: AB2102 – Oxygen Calibration Dates and Coefficients.

s/n 2082	s/n 2940
December 9, 2020	December 5, 2020
Soc = 0.47112	Soc = 0.42425
Voffset = -0.5371	Voffset = -0.5205
Tau20 = 1.32	Tau20 = 1.15
A = -4.2241e-03	A = -4.1453e-03
B = 2.3450e-04	B = 2.3336e-04
C = -3.4814e-06	C = -3.3623e-06
$E_{nominal}$ = 0.036	$E_{nominal}$ = 0.036

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

Dissolved oxygen concentration is calculated according to:

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

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

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

where θ is the absolute temperature (K); and

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

SEASAVE R 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.

3.5 Reference Temperature

The SBE35RT is an accurate, ocean-range temperature sensor that is capable of measuring temperature in the ocean to depths of 6800 meters (22,300 ft). The SBE35RT communicates via a standard RS-232 interface at 300 baud, 8 data bits, no parity. The SBE35RT makes a temperature measurement each time a bottle fire confirmation is received, and stores the value in EEPROM. Each stored value contains the time and bottle position in addition to the temperature data, allowing comparison of the SBE35RT record with CTD and water bottle data. Using one SBE35RT eliminates the need for reversing thermometers, and provides higher accuracy temperature readings at lower cost. Calibration coefficients stored in EEPROM allow the SBE35RT to transmit data in engineering units (Table 11). When configured in a real-time system, the SBE35RT can use the system modem channel for two-way communications; it is not necessary to change cable connections to communicate with and retrieve data from the SBE35RT. Retrieved from http://www.seabird.com/sites/default/files/documents/35RT_013.pdf (2015, February 12).

The sensor measurement ranges from -5 to 35°C. The SBE35RT digital reversing thermometer has a typical accuracy/stability of ±0.001°C per year and resolution of 0.000025°C.

Table 11: AB2102 – Reference Temperature Calibration Date and Coefficients.

s/n 0083
October 16, 2019
A0 = 4.983319110e-03
A1 = -1.359034550e-03
A2 = 1.999572590e-04
A3 = -1.105488950e-05
A4 = 2.339615690e-07
Slope = 1.0000
Offset = 0.0000

4 CTD Data Acquisition

Full-water-column CTD profiles were performed with a package consisting of a 24-place, 12-liter rosette frame (AOML's black frame), a 24-place water sampler pylon (SBE32) and 24, 12-liter Bullister-style Niskin bottles (for use in collecting salinity and dissolved oxygen calibration samples). This package was deployed on all casts. Underwater electronic components consisted of a SBE9plus CTD with dual pumps and the following sensors: dual temperature (SBE3plus), dual conductivity (SBE4), dual dissolved oxygen (SBE43), a reference temperature (SBE35), and a Valeport VA500 altimeter. The additional underwater electronic components consisted of two internally recording RDI LADCPs, a 300 kHz upward facing instrument and a 150 kHz downward facing instrument to measure water velocities. A total of 49 CTD casts were conducted during AB2102, usually to within 10 m of the bottom.

The CTD's supplied a standard Sea-Bird format data stream at a data rate of 24 frames/second. The SBE9plus CTD was connected to the SBE32 24-place pylon providing for single-conductor sea cable operations. Power to the SBE9plus CTD, SBE32 pylon, auxiliary sensors, and altimeter was provided through the sea cable from the SBE11plus deck unit in the computer lab. The CTD frame was suspended from a UNOLS-standard three-conductor 0.322" electro-mechanical sea cable.

The CTD was mounted vertically attached to the bottom center of the rosette frame. All SBE4 conductivity and SBE3 temperature sensors and their respective pumps were mounted vertically as recommended by SBE, outboard of the CTD. The CTD was outfitted with dual pumps. Primary temperature, conductivity, and dissolved oxygen were plumbed on one pump and secondary temperature, conductivity, and dissolved oxygen on the other. Pump exhausts were attached to outside corners of the CTD cage and directed downward. The altimeter was mounted on the inside of the support struts adjacent to the bottom frame ring. The LADCP's were vertically mounted inside the bottle rings with one 150 kHz pointing down, the other 300 kHz transducer pointing up. The R/V *Endeavor's* forward winch (primary winch) was used to deploy the CTD frame during the cruise with the starboard J-frame. O-rings were changed as necessary and Niskin bottle maintenance was performed each day to insure proper closure and sealing. Valves were inspected for leaks and repaired or replaced as needed.

4.1 CTD Operations

Prior to each cast, the deck watch prepared the CTD rosette for sampling. All valves, vents, and lanyards were checked for proper orientation. Niskin bottles were cocked, and all hardware and connections rechecked. Fifteen minutes or so prior to station, the deck unit was powered on and an on-deck pre-cast pressure was obtained. Once on station, the syringes were removed from the CTD sensor intake ports. Tag lines were necessary for both deployments and recoveries during this cruise. As directed by the deck watch leader, the CTD was lowered to 10 m for a 2-minutes soak to remove any air bubble from the sensor lines and to make sure the sensors were behaving appropriately. The CTD was then brought back to just

below the surface, with the console operator hitting Mark Scan just prior to beginning the descent. The profiling rate was no more than 30 m/min to 50 m, 45 m/min to 200 m, and no more than 60 m/min deeper than 200 m. Upon recovery, the CTD deck unit was turned off once the on-deck pressure was recorded. The CTD frame was left on deck for sampling. The bottles and rosette were examined before samples were taken and anything unusual was noted on the sample log.

A console operator monitored the progress of the deployment and quality of the CTD data through interactive graphics and operational displays of the Seasave software. Additionally, the operator created a sample log for each cast, to be used 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 CTD package from the bottom, usually allowing a safe approach to within 10 m.

On the up-cast, the winch operator stopped at each predetermined bottle trip depth following instructions from the CTD console operator. The CTD console operator then waited 30 seconds before closing a bottle and 5 seconds afterwards to allow the reference temperature sensor to sample. The data acquisition system responded with trip confirmation messages and the corresponding CTD data in a rosette bottle trip window on the display. All tripping attempts were noted on the console log. The console operator then directed the winch operator to raise the package up to the next bottle trip location. After the last bottle was tripped, the console operator directed the deck watch to bring the CTD package back on deck.

NOTE: Due to time constraints no bottles were tripped during the 26N section. This was done in order to ensure that the all the CTD station profiles across the 26N section could be completed.

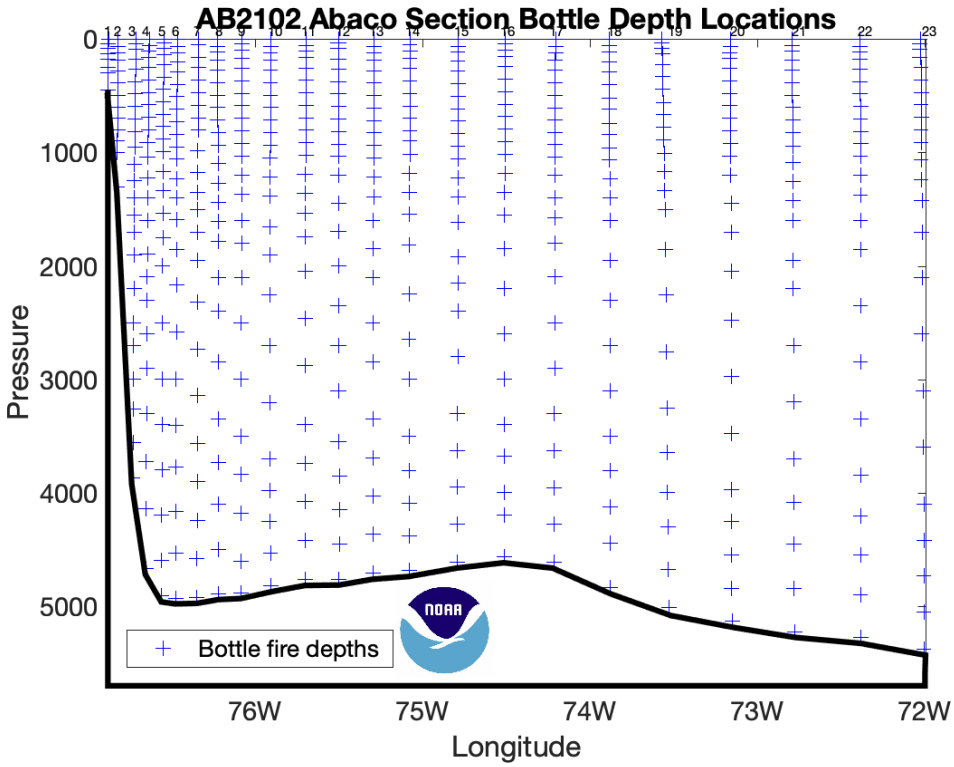

Figure 2: AB2102 Bottle locations for 26.5°N Deep Western Boundary Current section east of Abaco Island.

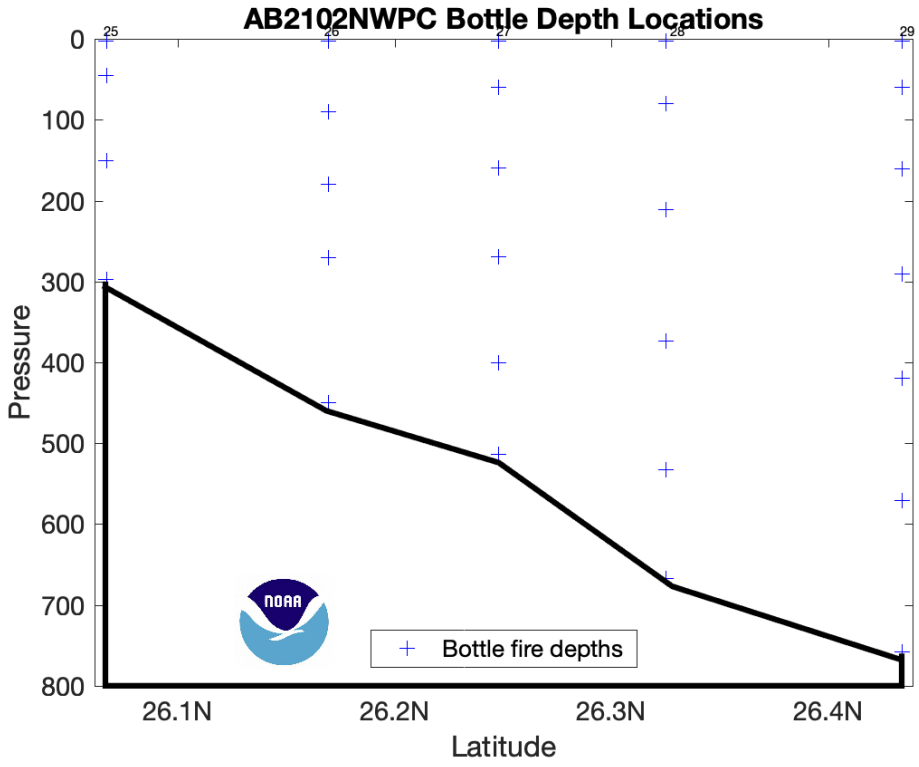

Figure 3: AB2102 Bottle locations for along the Northwest Providence Channel section.

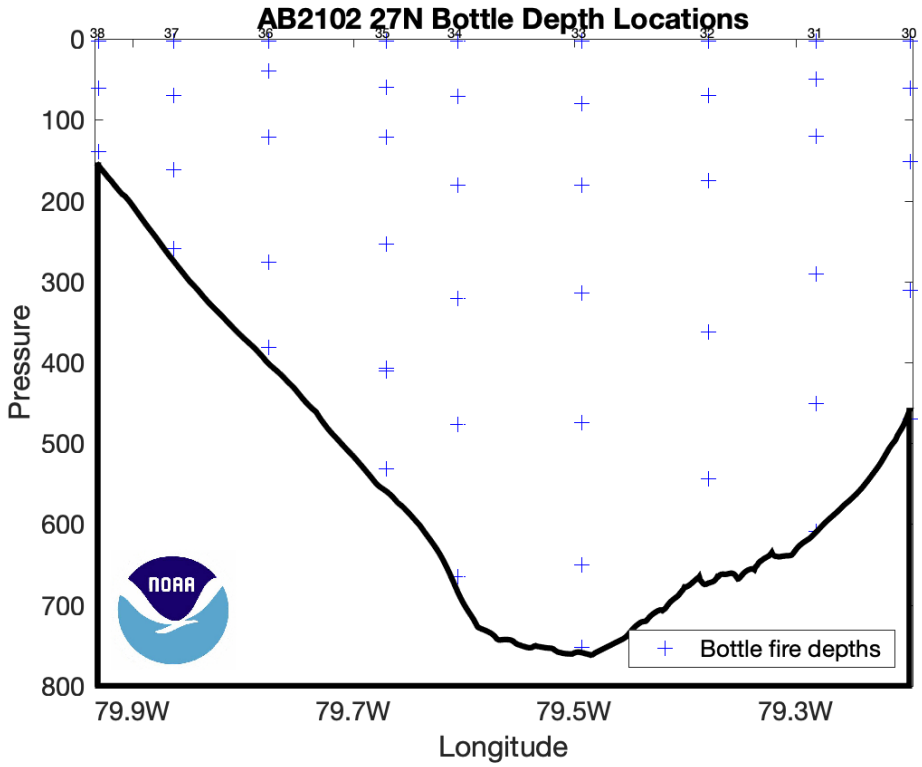

Figure 4: AB2102 Bottle locations for 27°N section in the Florida Straits.

4.2 Shipboard CTD Data Processing

Shipboard CTD data processing was performed automatically at the end of each deployment using SEABIRD SBE Data Processing version 7.26.7.114 and AOML Matlab processing software. The raw CTD data and bottle trips acquired by SBE Seasave on the Windows workstation were copied onto the CTD-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 R 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 R processing module sequence and specifications for primary calibrated data (1 dbar averages) uses the following routines in order for reduction of CTD/O2 data from this cruise:

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

2. ALIGNCTD aligns temperature, conductivity, and oxygen measurements in time relative to pressure to ensure that derived parameters are made using measurements from the same parcel of water. Primary and secondary conductivity were advanced by 0.073 seconds. Both oxygen are advanced by 1.073 seconds.

3. WILDEDIT computes the standard deviation of 250 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 0.01 of the mean.

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

5. 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.

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

8. DERIVE uses pressure, temperature, and conductivity to compute primary and secondary salinities, potential temperatures and densities. Oxygen voltage is used to calculate oxygen concentrations.

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

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

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

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

A total of 49 casts were processed.

4.3 CTD Calibration Procedures

Laboratory calibrations of the CTD pressure, temperature, conductivity, and dissolved oxygen sensors were all performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. The calibration dates are listed in Table 6.

A dual sensor configuration was employed on the CTD for temperature (T), conductivity (C), and dissolved oxygen (DO2). The secondary sensor set served as a calibration check for the primary sensors. During every cast, in-situ salinity and DO2 bottle samples were collected for use in calibrating both the primary and secondary C and O2 sensors. During this particular cruise, it was determined that the primary temperature, conductivity and dissolved oxygen sensors each behaved more stably than their primary counterparts. NOTE: During the cast at station 32 the primary sensor plumbing was obstructed by "sea snot" and the primary TCO2 profiles were unusable. The calibrated secondary TCO2 sensors were used for station 32 instead.

4.3.1 Salinity Analysis

A single Guildline Autosal, model 8400B laboratory salinometer (s/n 71011, owned by AOML), located in a climate-controlled room aboard the vessel, was used to determine the salinity of all water samples collected. Salinometer data output was logged to a computer file using Ocean Scientific International's (OSI) logging hardware and software interface. As a standard operating practice, the Autosal's water bath temperature was maintained at 24°C. In conjunction with this, to help further stabilize the Autosal and to improve measurement accuracy, the climate-controlled laboratory temperature was maintained at 1 to 2 degrees below 24°C. This ambient condition was monitored continuously with a digital thermometer. Once drawn, salinity samples were allowed to equilibrate to room temperature in the climate-controlled laboratory for approximately 12 hours prior to analysis. The salinometer was routinely *standardized* for each group of salinity samples analyzed (usually 2 casts, up to 52 samples) using two bottles of standard seawater: one at the beginning, and one at the end of each group of samples. For each calibration standard, the salinometer cell was initially flushed 6 times before a set of conductivity ratio reading was taken. For each salinity sample, the salinometer cell was initially flushed at least 3 times before a set of conductivity ratio readings were taken. The analyst flushed the cell of the Autosal and changed samples as prompted by the OSI software. Before each analysis session (or *run*) a sub-standard flush of the Autosal, with approximately 200 ml of seawater, was performed prior to the standardization mentioned above. This assured that any deionized water that may have been stored in the cell of the Autosal between extended periods of inactivity was completely flushed from the system.

IAPSO Standard Seawater Batch P-163 was used to standardize all casts (Table 12).

Table 12: AB2102 – Nominal values for the batches of IAPSO standard seawater.

P-163
Use By: April 2022
K15: 0.99985
Salinity: 34.994

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 polypropylene screw caps fitted with *Polyseal* poly cone inserts to prevent sample evaporation. 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 dataset. When duplicate measurements were deemed to have been collected and run properly, they were averaged and submitted with a quality flag of 6. On WBTS - AB2102, 661 salinity measurements were taken, including 56 duplicates, and approximately 28 vials of standard seawater were used. Up to two duplicate samples were drawn from most casts to determine total analytical precision.

The running standard calibration values are shown in Figure 5. Through the course of the cruise, the conductivity ratio of the Autosal standards were relatively stable between runs. There is a shift in the Autosal standards after station 21. This can result from long delays between runs. In this case these delays were due to a combination of bad weather and mooring operations. However, these shifts in the standard water readings do no affect the accuracy of the sample data. The precision of the salinity measurements during the cruise were estimated by using the duplicate samples. From the 56 duplicate samples (Table 13), which corresponds to 8.5% of the total samples collected during this cruise, the average residual for the duplicates was 9.58 $\times 10^{-4}$ PSU with and standard deviation of 0.007 PSU (Figure 5).

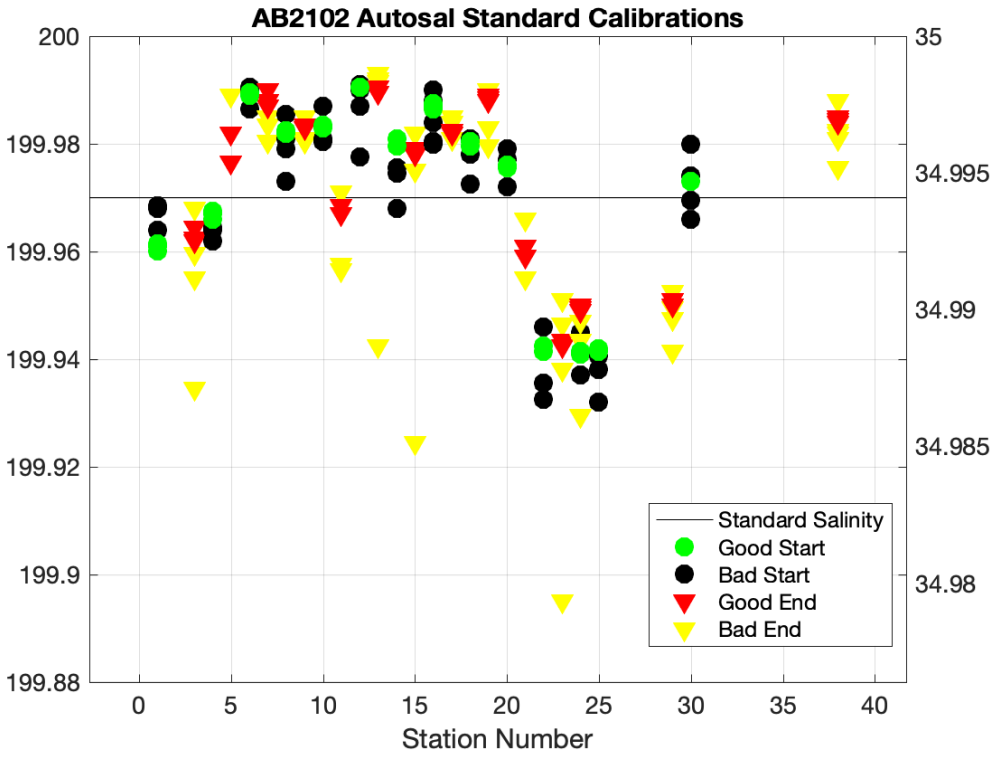

Figure 5: Standard vial calibrations throughout the cruise before and after each Autosal run. The green dots and red triangles are the good values used before and after each run to calculate salinity and drift corrections, respectively. The black dots and yellow triangles are the bad values not used.

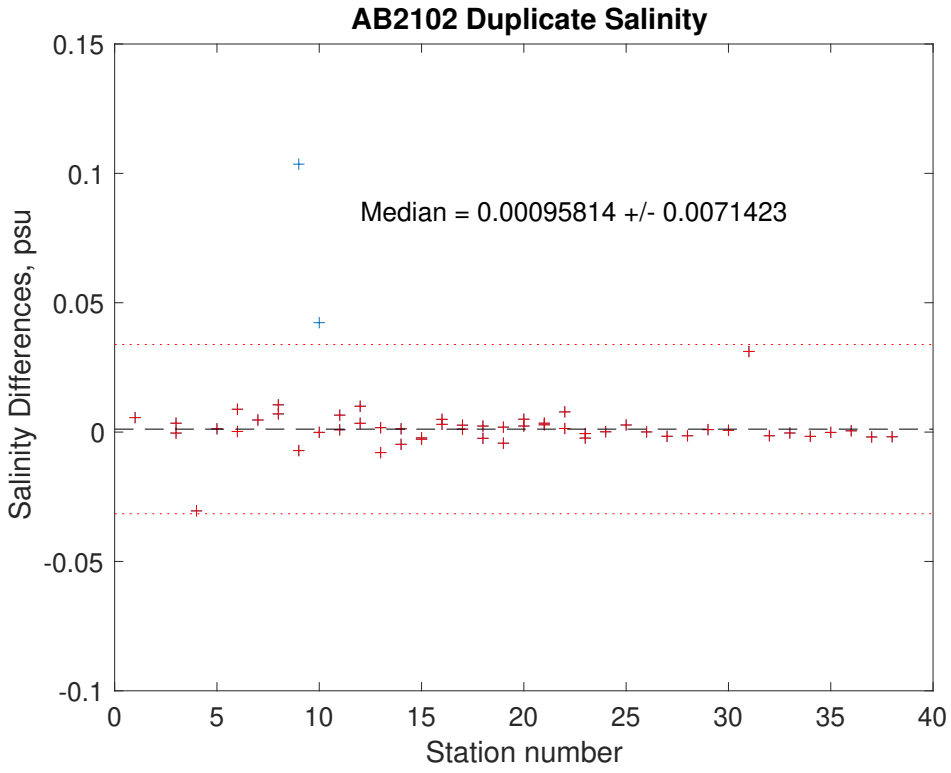

Figure 6: Salinity residuals of the duplicate samples.

Table 13: AB2102 – Duplicate salinity samples collected during the cruise.

Station	Niskin	Salinity1	Salinity2	Differences
1	1	36.358	36.364	-0.006
2	7	36.128	36.772	-0.644
3	3	34.920	34.920	0.000
3	13	35.075	35.078	-0.003
4	13	35.088	35.057	0.030
5	4	34.900	34.901	-0.001
6	5	34.906	34.915	-0.009
6	18	36.100	36.100	-0.000
7	24	36.875	36.879	-0.005
8	9	34.975	34.982	-0.007
8	17	35.829	35.839	-0.011
9	6	34.914	34.907	0.007
9	19	36.566	36.670	-0.104
10	11	34.993	35.035	-0.042
10	15	35.262	35.262	0.000
11	4	34.894	34.901	-0.007
11	23	36.852	36.853	-0.001
12	1	34.867	34.870	-0.003
12	16	35.656	35.666	-0.010
13	5	34.906	34.898	0.008
13	18	36.314	36.316	-0.002
14	6	34.922	34.923	-0.001
14	22	37.047	37.042	0.005
15	4	34.899	34.896	0.003
15	21	36.907	36.905	0.002
16	12	35.080	35.084	-0.005
16	19	36.662	36.665	-0.003
17	5	34.907	34.910	-0.003
17	17	36.179	36.180	-0.001
18	10	35.002	35.005	-0.002
18	16	35.777	35.775	0.002
19	1	34.860	34.862	-0.002
19	21	36.912	36.908	0.004
20	4	34.892	34.897	-0.005
20	23	36.902	36.904	-0.002
21	6	34.915	34.919	-0.003
21	18	36.336	36.339	-0.003
22	8	34.941	34.949	-0.008
22	24	36.877	36.878	-0.001
23	11	35.022	35.019	0.002
23	22	36.898	36.897	0.001
24	8	35.100	35.100	-0.000
25	1	36.526	36.529	-0.003
26	2	36.685	36.685	-0.000
27	3	36.692	36.690	0.002
28	4	36.808	36.806	0.001
29	5	36.870	36.871	-0.001
30	3	36.851	36.852	-0.001
31	5	36.124	36.155	-0.031
32	6	36.156	36.155	0.001
33	4	35.994	35.994	0.000
34	5	36.191	36.189	0.002
35	1	34.903	34.903	0.000
36	3	36.267	36.268	-0.000
37	2	36.337	36.335	0.002
38	3	36.183	36.181	0.002

4.3.2 Oxygen Analysis

Dissolved oxygen samples were drawn from Niskin bottles into calibrated 125 iodine titration flasks using silicon tubing. Bottles were rinsed three times and filled from the bottom via the tubing, overflowing three volumes while taking care not to entrain any bubbles. 1 ml of $MnCl_2$ and 1 ml of $NaOH/NaI$ were added immediately after drawing the sample was concluded using a ThermoScientific REPIPET II. The flasks were then stoppered and well shaken. Deionized water was added to the neck of each flask to create a water seal. On WBTS - AB2102, 647 oxygen samples were collected, including 54 duplicate samples (up to two duplicates taken randomly during each cast). Samples were stored in the shipboard oxygen analysis lab in plastic totes at room temperature for 1.5 hours before analysis.

Dissolved oxygen analyses were performed with an automated titrator using amperometric end-point detection (Langdon, 2010). The titrator was interfaced with a computer running LabView software customized by Ulises Rivero (NOAA/AOML). The software handled the sample titration and data logging; it also provided a graphical display of the data for the analyst. Thiosulfate (17.5 g per 500 ml) was dispensed by a 2 ml Gilmont burette driven with a stepper motor controlled by the titrator. The titration methodology follows techniques outlined by Carpenter (1965) and Culberson et al. (1991). Four replicate 10 ml iodate standards were run every 3-4 days, or when new thiosulfate was added to the system, or once the thiosulfate bottle had reached half its volume, which ever came first. The reagent blank (the difference between thiosulfate volumes required to titrate two 1 ml aliquots of the iodate standard) was determined twice during the research cruise: once at the beginning of the survey and once midway through the cruise. Thiosulfate normality was calculated from the laboratory temperature for each sample run. The dispenser used for the standard solution (SOCOREX Calibrex 520) and the burette were calibrated gravimetrically immediately prior to the cruise. Oxygen flask volumes were also determined gravimetrically with degassed deionized water at AOML prior to use.

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

The precision of the oxygen measurements during the cruise were estimated by using the duplicate samples. From the 54 duplicate samples (Figure 14), which corresponds to 8.3% of the total samples collected during this cruise, the average residual for the duplicates was 0.14 μmol/kg with and standard deviation of 1.06 μmol/kg (Figure 7).

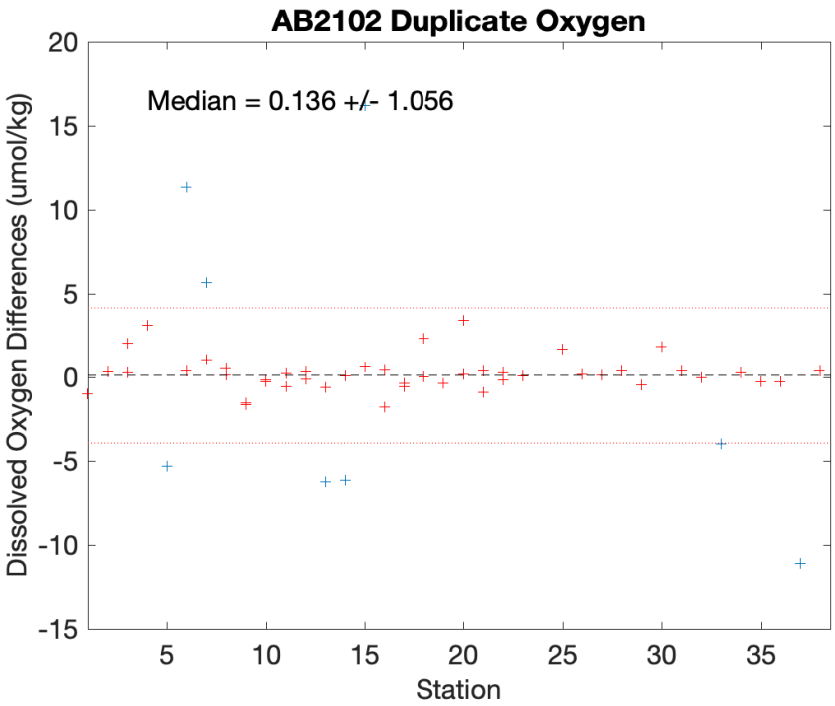

Figure 7: Oxygen residuals of the duplicate samples.

Table 14: AB2102 – Duplicate dissolved oxygen samples collected during the cruise (values in $umol/kg$).

Station	Niskin	Oxygen1	Oxygen2	Differences
1	7	217.9	216.9	0.993
2	10	205.9	206.2	-0.340
3	7	269.3	271.3	-2.022
3	15	150.2	150.4	-0.273
4	3	276.9	280.0	-3.107
5	8	275.4	270.0	5.332
6	2	273.6	284.9	-11.339
6	20	196.5	196.9	-0.353
7	5	277.2	278.2	-1.059
7	14	191.6	197.3	-5.681
8	8	274.7	274.8	-0.108
8	21	206.3	206.8	-0.524
9	4	278.4	276.8	1.647
9	24	214.6	213.1	1.560
10	5	276.7	276.5	0.180
10	20	197.3	197.0	0.287
11	11	253.3	252.7	0.562
11	17	168.7	168.9	-0.203
12	7	273.1	273.0	0.127
12	14	152.6	152.9	-0.301
13	10	265.1	264.5	0.636
13	20	208.6	202.4	6.249
14	8	270.2	270.2	-0.053
14	15	154.5	148.3	6.148
15	4	276.2	276.8	-0.594
15	15	153.7	169.9	-16.209
16	3	275.9	274.1	1.800
16	23	214.0	214.5	-0.437
17	11	248.5	248.2	0.382
17	14	152.4	151.9	0.551
18	2	270.9	271.0	-0.046
18	22	213.2	215.5	-2.350
19	9	266.3	265.9	0.375
20	4	272.2	275.6	-3.409
20	15	148.6	148.8	-0.163
21	1	261.0	260.1	0.898
21	13	187.8	188.2	-0.386
22	12	221.9	222.2	-0.270
22	23	216.6	216.4	0.174
23	9	269.2	269.3	-0.062
25	1	179.9	181.6	-1.687
26	2	195.4	195.6	-0.180
27	3	184.8	184.9	-0.109
28	4	192.3	192.6	-0.343
29	5	200.9	200.4	0.485
30	3	189.3	191.1	-1.856
31	2	142.0	142.3	-0.374
32	6	208.2	208.1	0.031
33	4	142.2	138.2	4.012
34	5	208.1	208.4	-0.289
35	1	150.4	150.1	0.276
36	3	208.0	207.7	0.259
37	2	151.8	140.7	11.119
38	3	213.0	213.4	-0.346

5 Post-Cruise Calibrations

In-situ salinity and dissolved oxygen samples collected during each cast were used to calibrate the conductivity and dissolved oxygen sensors. The digital reverse thermometer (reference temperature sensor), used to monitor the temperature sensors for pressure dependencies or offsets, was used to calibrate the temperature sensors. Primary TCO2 sensors, s/n T5898/C4709/s/n 2082, were selected for final data reduction with the exception of station 32. Secondary TCO2 sensors, s/n T5889/C4349/s/n 2940, were used.

5.1 CTD Data Processing

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

- FILL_SURFACE was used to copy the first good value of salinity, temperature, oxygen and oxygen current back to the surface. The program then calculated potential temperature and conductivity, and zeroed doc/dt of oxygen current for those records.
- DESPIKE1 removed spikes from primary temperature, salinity and oxygen data. Data were linearly interpolated over de-spiked records. Conductivity was back calculated, and sigma-theta and potential temperature were recomputed for the interpolated records.
- DESPIKE2 removed spikes from secondary sensors in the same method as DESPIKE1.
- CTD package slowdowns and reversals due to ship roll can move mixed water in tow in front of the CTD sensors. This mixture can create artificial density inversions and other artifacts. In addition to the Seasave R module LOOPEDIT, DELOOP, computes values of density locally referenced between every 1 dbar of pressure to compute N^2 = (- g/p) (dp/dz) and linearly interpolated measured parameters over those records where $N^2 \leq$ -1.0 e -05 s^{-2}.

Final calibrations are applied to delooped data files. ITS-90 temperature, PSS-78 salinity, and oxygen are computed, and WOCE quality flags are created (these flags and other CTD processing standards were established during the World Ocean Circulation Experiment in the 1990's).

5.2 CTD Pressure

The Seabird pre-cruise pressure sensor calibration coefficients were applied to raw pressure data during each cast. Residual pressure offsets (the difference between the first and last submerged pressures) were examined to check for calibration shifts (see Figure 8 and Table 15). Pressure sensor s/n 1335 was used for all stations of the cruise. Prior to the first station, a pressure offset of -0.55 dbar was applied to the original configuration file pressure offset, 0.0, for a total offset of -0.55. On deck pressures before the start of each cast were recorded and plotted in Figure 8. The on deck pressures before and after the cast were stable at -0.018 ± 0.15 dbar and 0.07 ± 0.24 dbar (median ± standard deviation). No further offset correction was necessary.

Near surface pressure values (which is taken as the near-surface pressure at the markscan and the last fired bottle pressure) showed no remarkable trends throughout the cruise. Pressure sensor, s/n 1335, was stable with near surface pressures prior to the downcast and following the upcast of 2.82 ± 0.59 dbar before and 2.57 ± 0.89 dbar (median ± standard deviation).

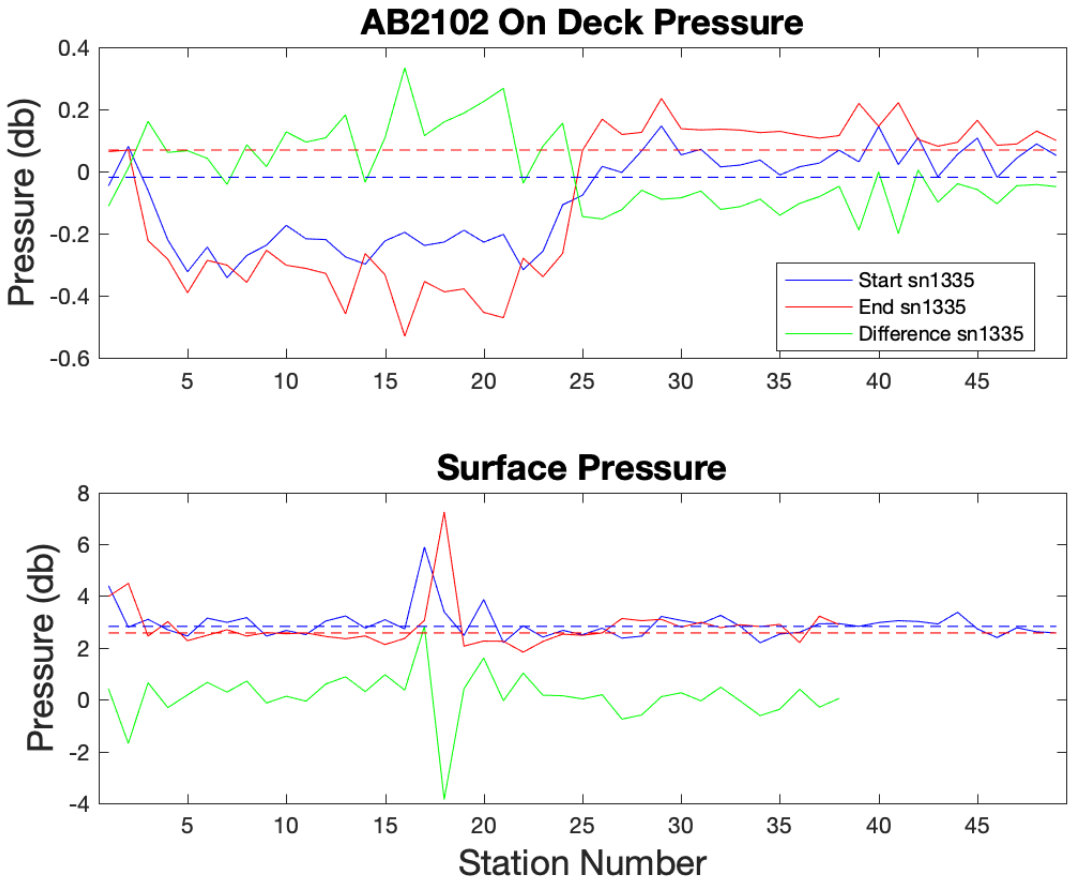

Figure 8: Top panel are the pressures measured on deck before the cast (blue), at the end of the upcast (red) and the difference (green) for s/n 1335. Bottom panel are the near sea surface pressure values measured at the start of the downcast (blue), at the end of the upcast (red) and the difference (green) for s/n 1335.

Table 15: AB2102 – near surface Pressure values and scan number used to remove surface soak and on-deck values (-999s are data not recorded).

Station	Markscan	Deck Prs Start	Deck Prs End	Sfc Prs Start	Sfc Prs End
1	3027	-0.0456	0.0647	4.3880	3.9780
2	2937	0.0812	0.0696	2.7932	4.4830
3	5455	-0.0600	-0.2218	3.0956	2.4470
4	7820	-0.2193	-0.2813	2.6929	3.0040
5	3532	-0.3218	-0.3894	2.4490	2.2700
6	4006	-0.2424	-0.2852	3.1408	2.4800
7	2984	-0.3411	-0.3005	2.9777	2.6930
8	6487	-0.2693	-0.3557	3.1619	2.4490
9	2848	-0.2364	-0.2527	2.4477	2.5830
10	3953	-0.1728	-0.3008	2.6642	2.5380
11	3783	-0.2158	-0.3111	2.5056	2.5720
12	5681	-0.2183	-0.3273	3.0296	2.4330
13	6401	-0.2742	-0.4571	3.2240	2.3460
14	5412	-0.2972	-0.2633	2.7563	2.4530
15	3536	-0.2226	-0.3314	3.0799	2.1220
16	2745	-0.1949	-0.5288	2.7217	2.3580
17	5880	-0.2371	-0.3531	5.8802	3.0580
18	5867	-0.2263	-0.3864	3.3820	7.2370
19	3750	-0.1883	-0.3769	2.4785	2.0630
20	5772	-0.2266	-0.4524	3.8561	2.2560
21	6033	-0.2016	-0.4697	2.1988	2.2480
22	3507	-0.3152	-0.2781	2.8475	1.8280
23	3291	-0.2556	-0.3377	2.4089	2.2430
24	3543	-0.1064	-0.2628	2.6683	2.5230
25	4044	-0.0760	0.0683	2.5031	2.4800
26	3172	0.0170	0.1690	2.7544	2.5690
27	2254	-0.0023	0.1197	2.3703	3.1270
28	2334	0.0670	0.1265	2.4461	3.0420
29	5455	0.1468	0.2354	3.2064	3.0950
30	5258	0.0542	0.1382	3.0524	2.7920
31	4682	0.0720	0.1343	2.9271	2.9800
32	4055	0.0155	0.1368	3.2476	2.7720
33	4341	0.0215	0.1337	2.8238	2.8860
34	3338	0.0373	0.1257	2.1909	2.8150
35	3908	-0.0104	0.1297	2.5268	2.9000
36	4142	0.0159	0.1177	2.5965	2.1980
37	3353	0.0278	0.1080	2.9238	3.2170
38	2604	0.0691	0.1161	2.9291	2.8870
39	3050	0.0318	0.2195	2.8227	-999.0000
40	2936	0.1451	0.1460	2.9691	-999.0000
41	3318	0.0230	0.2220	3.0422	-999.0000
42	2650	0.1093	0.1040	3.0120	-999.0000
43	4139	-0.0162	0.0819	2.9154	-999.0000
44	4217	0.0559	0.0947	3.3663	-999.0000
45	3029	0.1079	0.1653	2.7250	-999.0000
46	3028	-0.0180	0.0850	2.3915	-999.0000
47	2905	0.0439	0.0891	2.7701	-999.0000
48	4532	0.0893	0.1308	2.6156	-999.0000
49	3590	0.0522	0.1002	2.5714	-999.0000

5.3 CTD Temperature

The Seabird pre-cruise temperature sensor calibration coefficients were applied to raw primary and secondary temperature data during each cast. Data accuracy, reproducibility and stability were examined by comparing the differences between the two different temperature sensors over a range of pressures (bottle trip locations) for each cast. These comparisons are summarized in Figure 9, which shows a median temperature difference between the two sensors of -6.0 $\times 10^{-4}$ °C (-0.001 °C for the data below 1000 m) and a standard deviation of 0.005 °C (0.0009 °C for the data below 1000 m). There is a significant pressure dependence between the two sensors at depth, 0.003 °C at 5400 dbar. After applying the reference temperature correction to both sensors the median temperature difference improved to -1.6 $\times 10^{-4}$ °C (-2.3 $\times 10^{-4}$ °C for the data below 1000 m) and a standard deviation of 0.005 °C (0.0006 °C for the data below 1000 m). The pressure dependence between the two was minimized to 0.001 °C at 5400 dbar as seen in Figure 10.

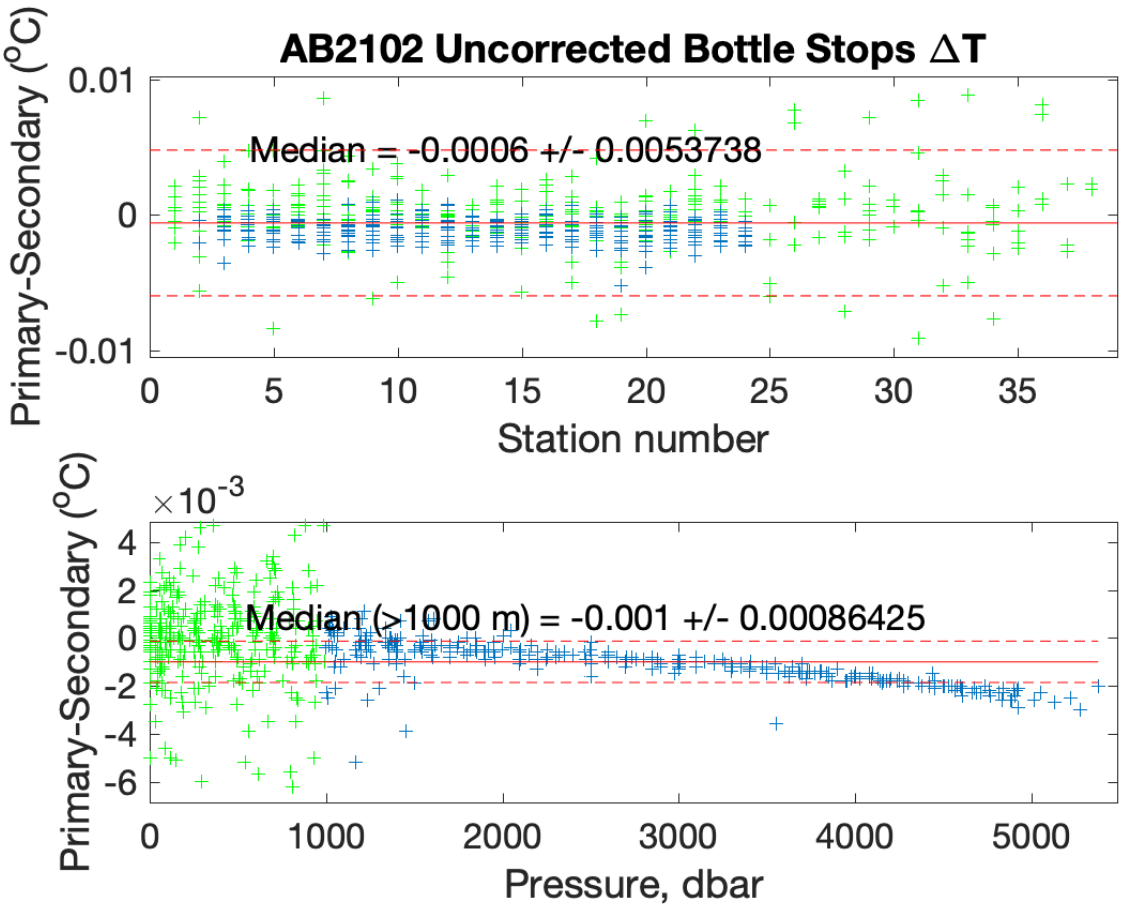

Figure 9: Temperature differences (before reference temperature corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation (same for top and bottom).

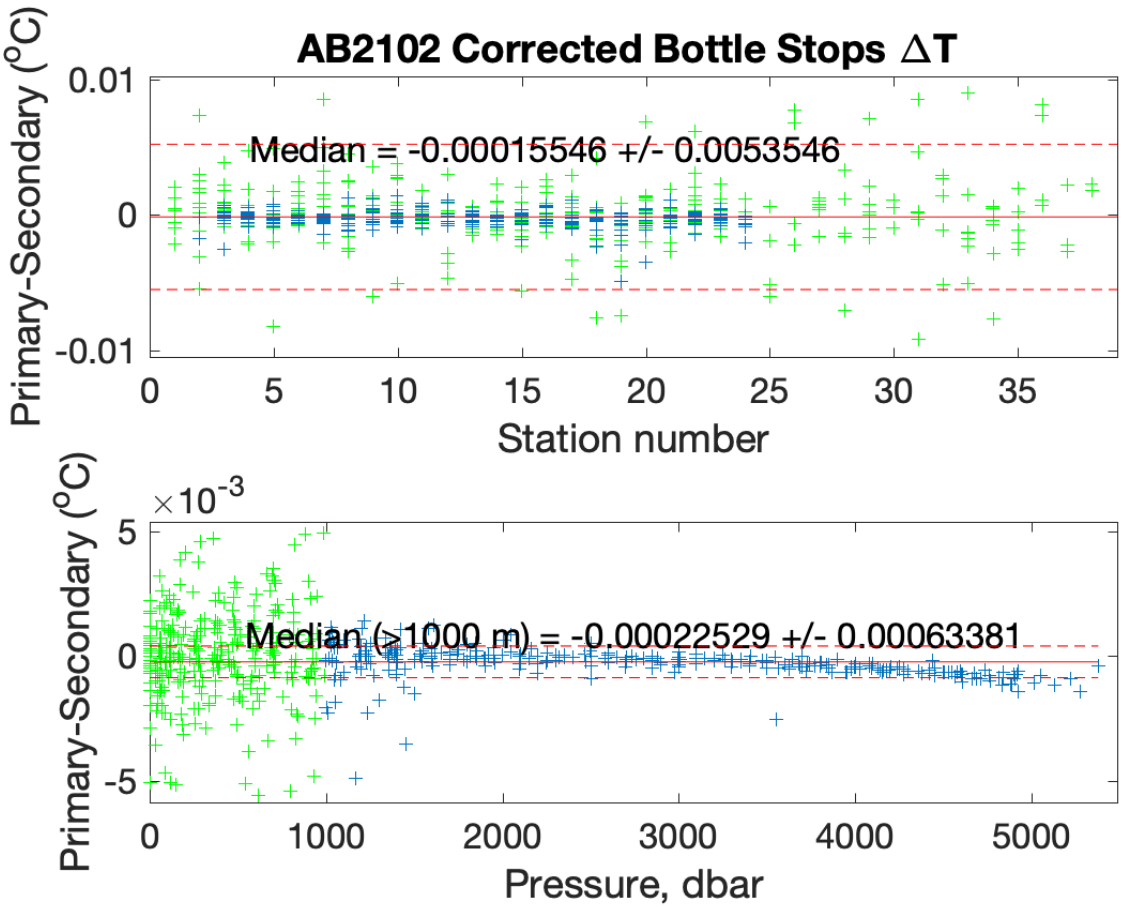

Figure 10: Temperature differences (after reference temperature corrections) between sensors by station number (top) and pressure (bottom). The green represents the surface data down to 1000 dbar. The blue represents data below 1000 dbar. The red solid line represents the median with the red dashed representing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

A SBE 35RT reference temperature was used during the cruise as a check to monitor the behavior of the primary and secondary temperature sensors. This allows for corrections to be made if there is any significant pressure dependence or offset seen in the sensors throughout the cruise. The bottle and instrument differences are compared to a normal distribution using 2.8 × standard deviation to find clear outliers. After these procedures 563 data points (91.7 %) were used in the final calculations. The primary sensor differences had a slight pressure dependence of approximately 0.001 °C at 5400 dbar (see Figure 11). The secondary sensor differences had a larger pressure dependence of approximately 0.003 °C at 5400 dbar. The primary was chosen with a median of 1.84 $\times 10^{-4}$ °C (3.28 $\times 10^{-4}$ °C for the data below 1000 m) and a standard deviation of 9.18 $\times 10^{-4}$ °C (2.92 $\times 10^{-4}$ °C for data the below 1000 m) seen in Figure 11. Both temperature sensors were corrected for by using the reference temperature. The primary temperature sensor, s/n 5898, was used for all the final data values, except station 32 (bad primary sensor profile). The secondary temperature sensor, s/n 5889, was used.

In order to calibrate the CTD temperature data against the reference temperature we derived the slope correction, m, and offset correction, b, using a least squares fit. This was done as a function of CTD pressure and delta T, where delta T is the CTD temperature minus the reference temperature. The corrections for the slope and offset are then applied to the CTD pressure, P_{CTD} , to calculate the temperature correction (T_{cor}),

$$T_{cor} = [m * P_{CTD} + b]$$

and T_{cor} is applied to calculate the calibrated CTD temperature,

$$T_{new} = T_{CTD} - T_{cor}$$

where T_{CTD} is the CTD temperature and T_{new} is the calibrated CTD temperature.

Table 16: AB2102 – Temperature coefficients.

Primary - s/n 5898	Secondary - s/n 5889
Stations 1-31,33-49	Station 32
m= -1.0044428e-07	m= 2.1830325e-07
b = 8.4343701e-05	b = -5.3626982e-06

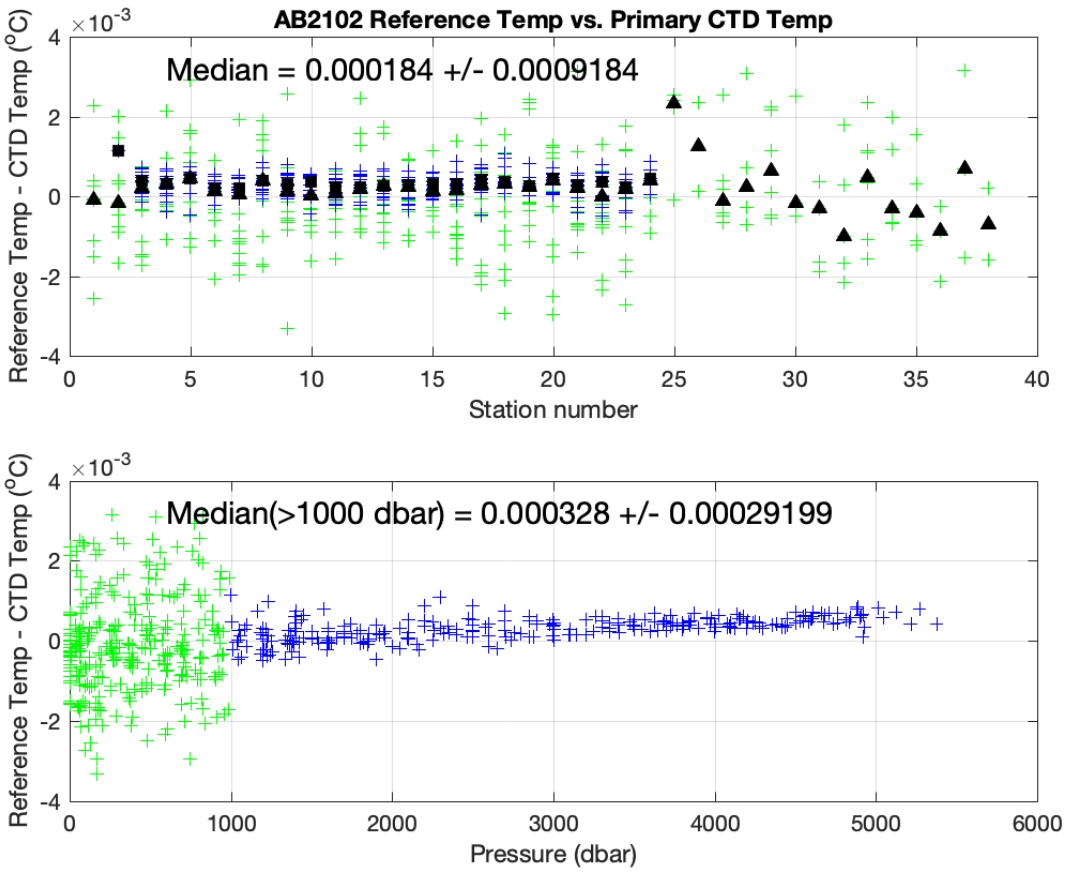

Figure 11: Reference temperature and uncalibrated secondary CTD temperature differences plotted by station number (top) and pressure (bottom). The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The black squares are the median of the data points below 1000 m and the triangles are the median of the data points above 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

The temperature coefficients used are shown in Table 16. The corrected primary temperature sensor is summarized in Figures 12 - 15, which shows a median temperature difference between the primary sensor and reference temperature sensor of 2.25 $\times 10^{-5}$ °C (8.95 $\times 10^{-5}$ °C for the data below 1000 m) and a standard deviation of 8.91 $\times 10^{-4}$ °C (2.42 $\times 10^{-4}$ °C for the data below 1000 m). Also, 93.8% of the residuals for the data are within the confidence limits determined by the WOCE standard (± 0.002 °C) and this number increases to 100% if we consider only the data below 1000 dbar.

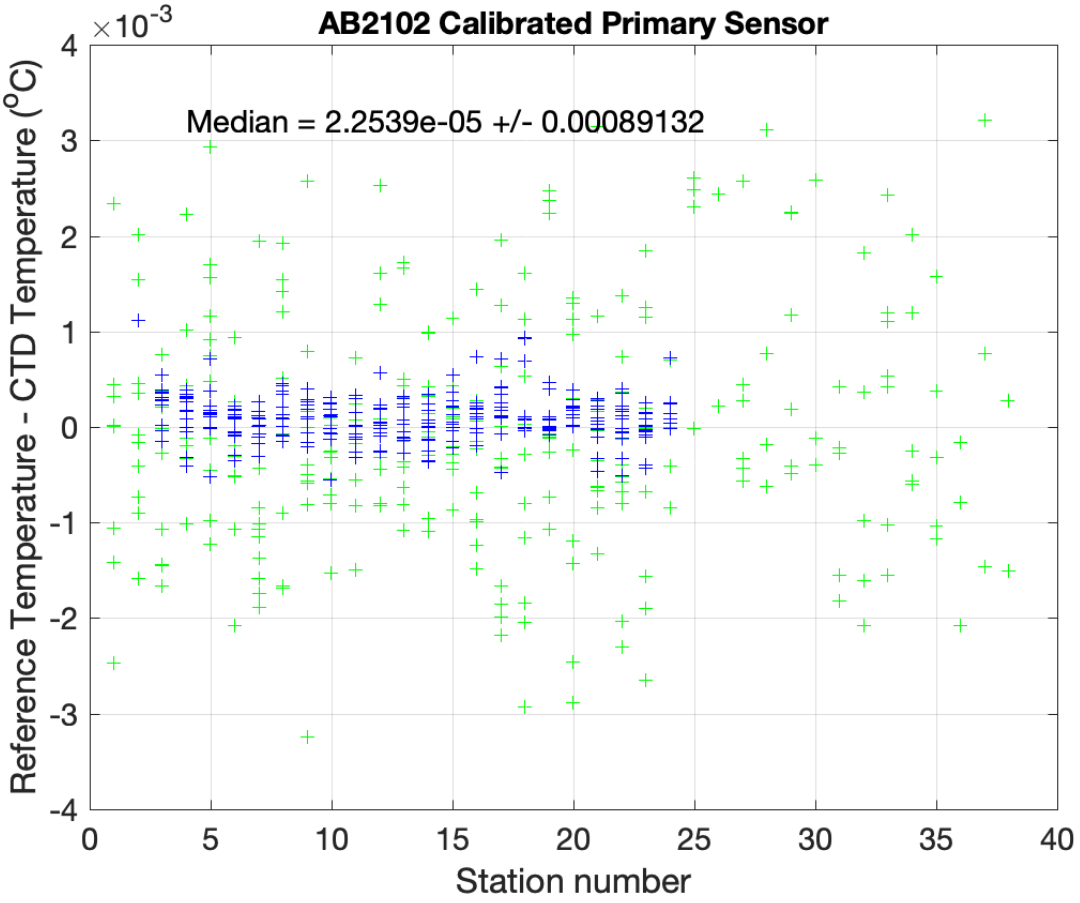

Figure 12: Reference temperature and calibrated secondary CTD temperature differences plotted vs. station. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

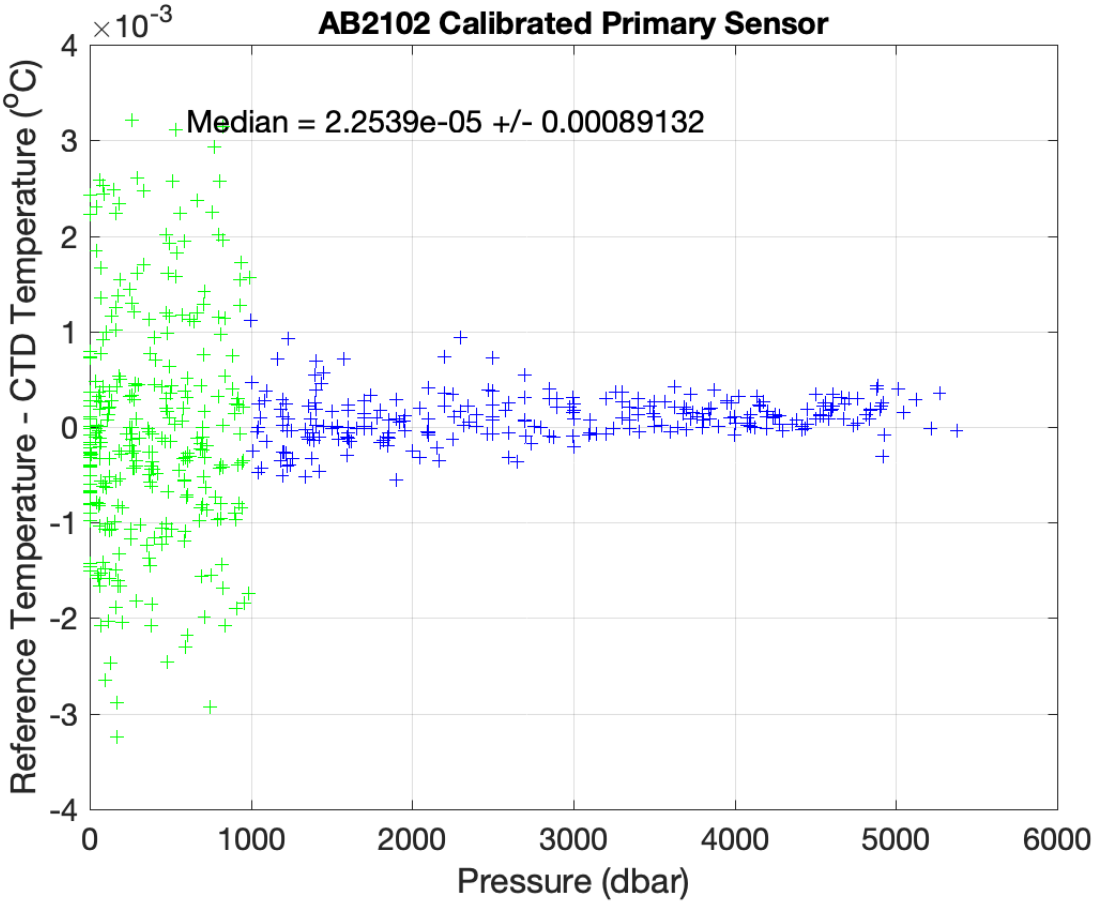

Figure 13: Reference temperature and calibrated secondary CTD temperature differences plotted vs. pressure. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

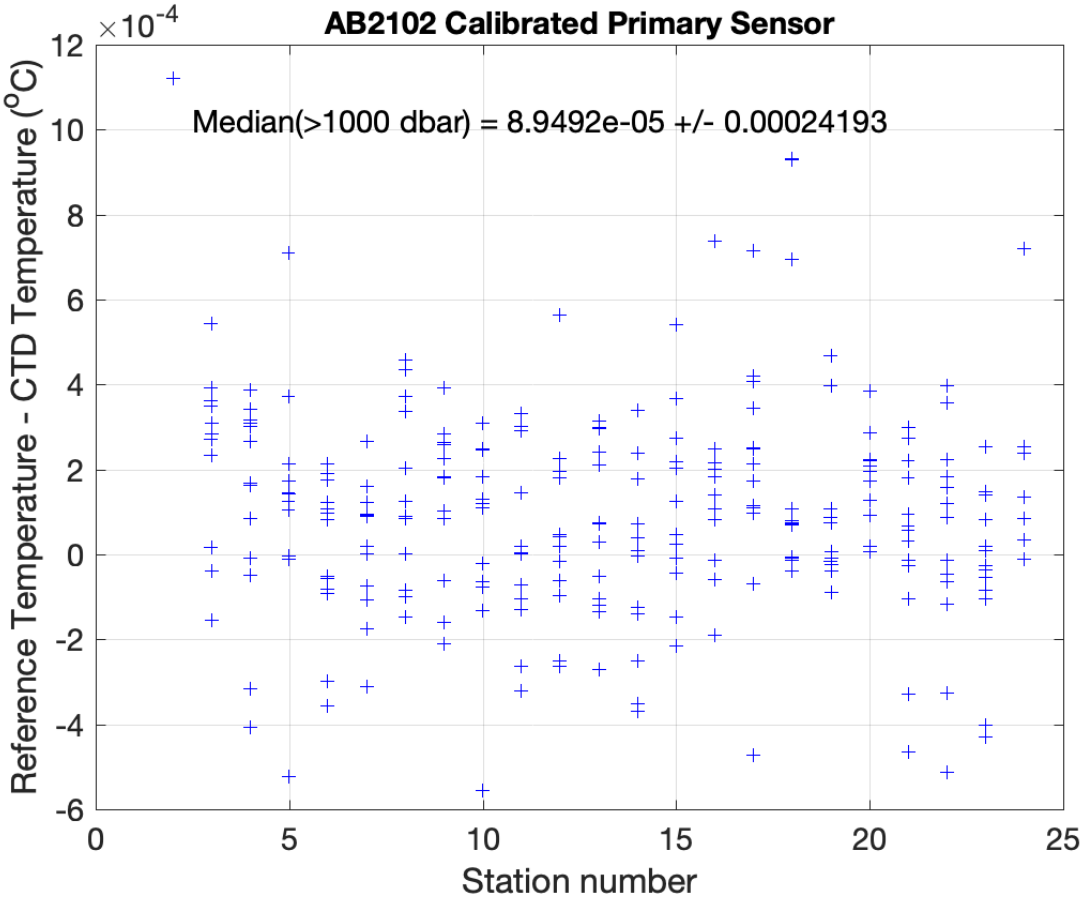

Figure 14: Reference temperature and calibrated secondary CTD temperature differences (blue crosses) plotted vs. station below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

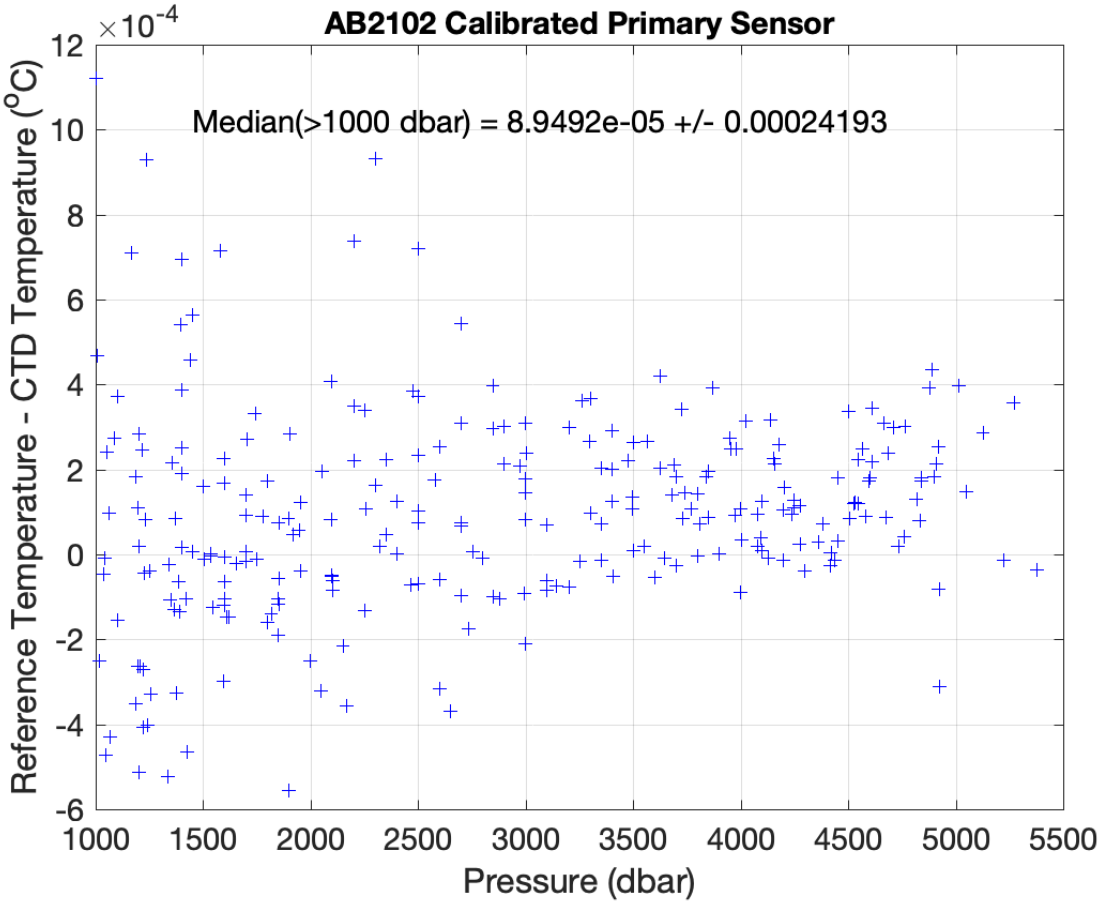

Figure 15: Reference temperature and calibrated secondary CTD temperature differences (blue crosses) plotted vs. pressure below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

5.4 Conductivity

The Seabird pre-cruise conductivity sensor calibration coefficients were applied to raw primary and secondary conductivity data during each cast. Comparisons between the primary and secondary conductivity sensors and between each of the sensors derived salinity values compared to bottle salinities were used to determine conductivity corrections. Uncorrected differences between the primary and secondary conductivity sensors (C1-C2) are shown in Figure 16 to help identify sensor drift. The sensors show a median difference of -0.001 mS/cm (-7.7 $\times 10^{-4}$ mS/cm for the data below 1000 dbar) with a standard deviation of 0.006 mS/cm (5.7 $\times 10^{-4}$ mS/cm for the data below 1000 dbar). The uncalibrated sensor comparison with the bottle salinities showed both sensor residuals behaving similarly. The primary was chosen with a median of -4.1 $\times 10^{-4}$ psu (-2.5 $\times 10^{-4}$ psu for the data below 1000 dbar) and a standard deviation of 0.002 psu (0.001 psu for the data below 1000 dbar) seen in Figure 17. Therefore the primary sensor, s/n 4709, was used for all the final data values, except station 32 (bad primary sensor profile). The secondary conductivity sensor, s/n 4349, was used. The bottle and instrument differences are compared to a normal distribution using 2.8 $\times$ standard deviation to find clear outliers. After these procedures, 531 data points (87.8 %) were used in the final calculations.

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

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

with

Table 17: AB2102 – Conductivity coefficients.

Primary - s/n 4709	Secondary - s/n 4349
Stations 1-31,33-49	Station 32
m = 9.9991438e-01	m = 9.9970375e-01
p_1 = -7.6038856e-06	p_1 = -4.4723729e-06
b = 3.3396698e-03	b = 9.6566107e-03
$pcor$= -1.992209e-07	$pcor$= -1.7264337e-07

where C_{CTD} is pre-cruise calibrated CTD conductivity (mS/cm), m is the conductivity slope, b is the offset (mS/cm), P is the pressure, $pcor$ is the pressure correction coefficient, $station$ is the station number and p_1 is the polynomial coefficient. The fit is also weighted in such way that the final solution is preferentially forced to fit the data below a specified depth, in this case 1000 dbar. The stations used are chosen by looking at residual trends between the sensor and bottle data.

The coefficients estimated by the equation above were then applied to the CTD conductivities and the final results (Figure 18 to Figure 21) show a residual of -6.04 $\times 10^{-6}$ psu (1.18 $\times 10^{-5}$ psu for the data below 1000 dbar) and a standard deviation of 0.002 psu (0.001 psu for the data below 1000 dbar). Additionally, 68.2% of the residuals for the data are within the confidence limits determined by the WOCE standard (± 0.002 psu), and this number increases to 83.0% if we consider only the data below 1000 dbar.

Temperature and salinity data collected during AB2102 were also compared with historical project data (Figure 22 and Figure 23). Water mass properties are very stable for deeper layers of the ocean. By comparison, one can assess the relative characteristics of the AB2102 data set, and more easily identify irregularities or inconsistencies in the θ - S diagrams.

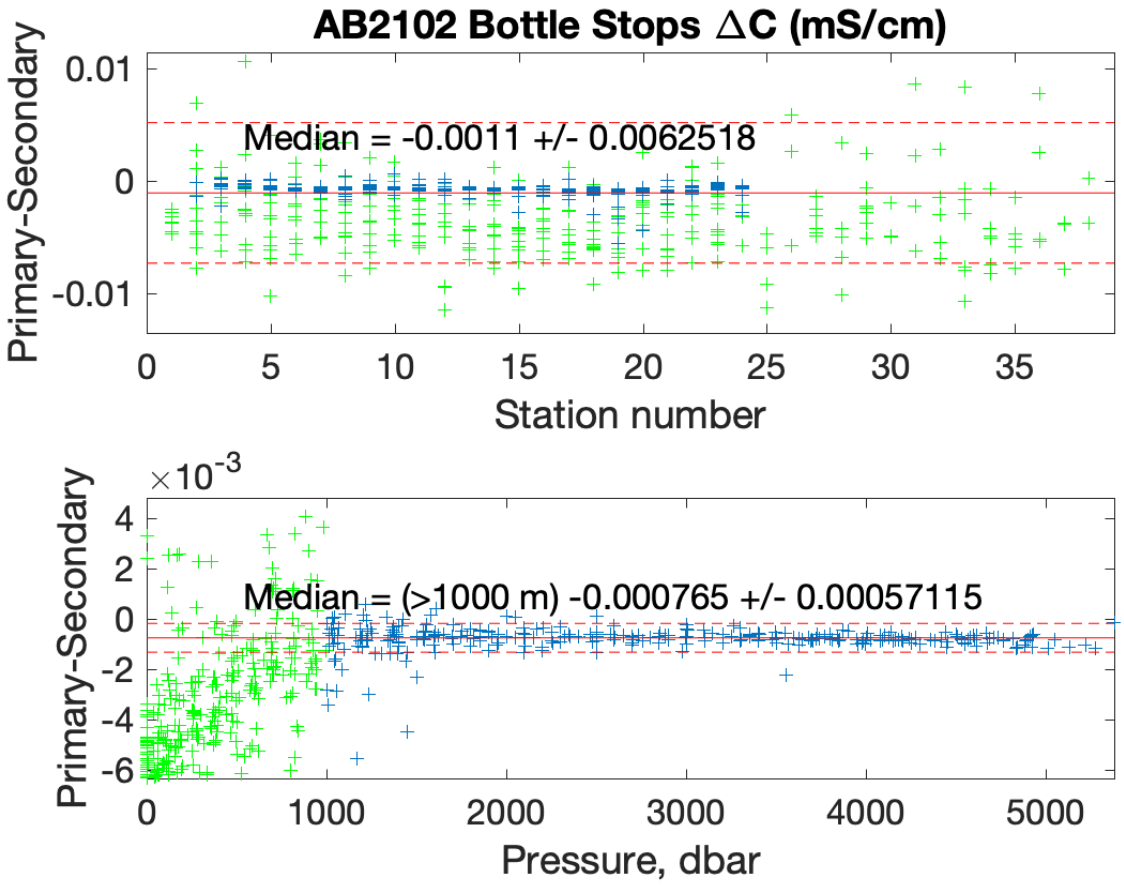

Figure 16: Conductivity upcast bottle stop (mS/cm) differences between sensors by station (top) and pressure (bottom). The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation.

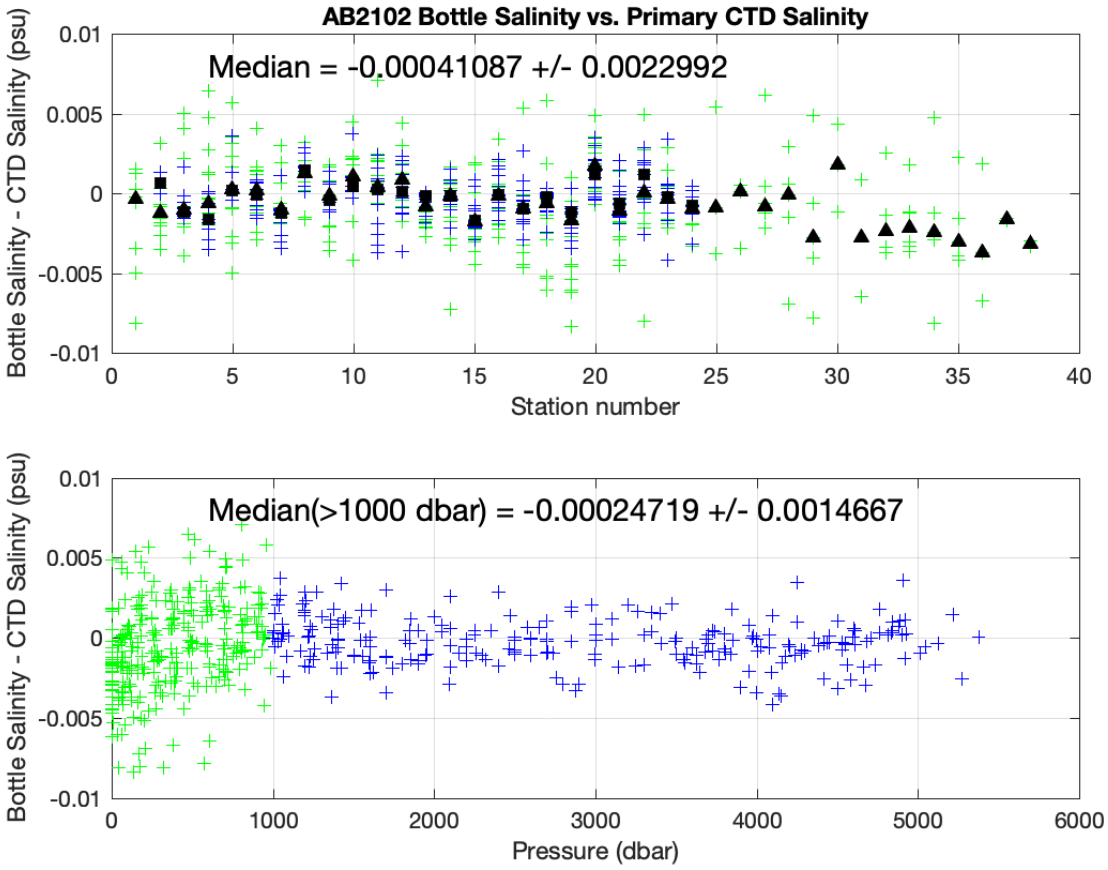

Figure 17: Bottle and uncalibrated secondary CTD salinity differences plotted by station (top) and pressure (bottom). The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The black squares are the median of the data points below 1000 m and the triangles are the median of the data points above 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

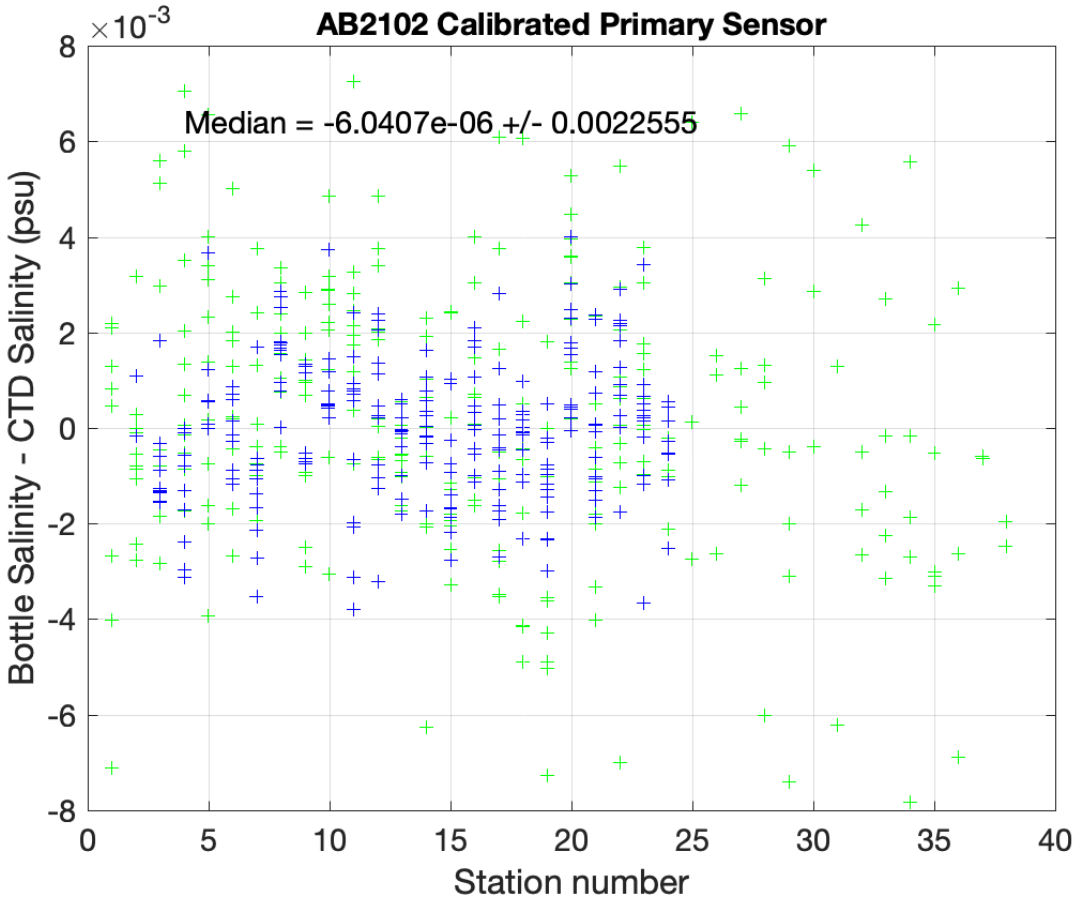

Figure 18: Bottle and calibrated secondary CTD salinity differences plotted vs. station. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

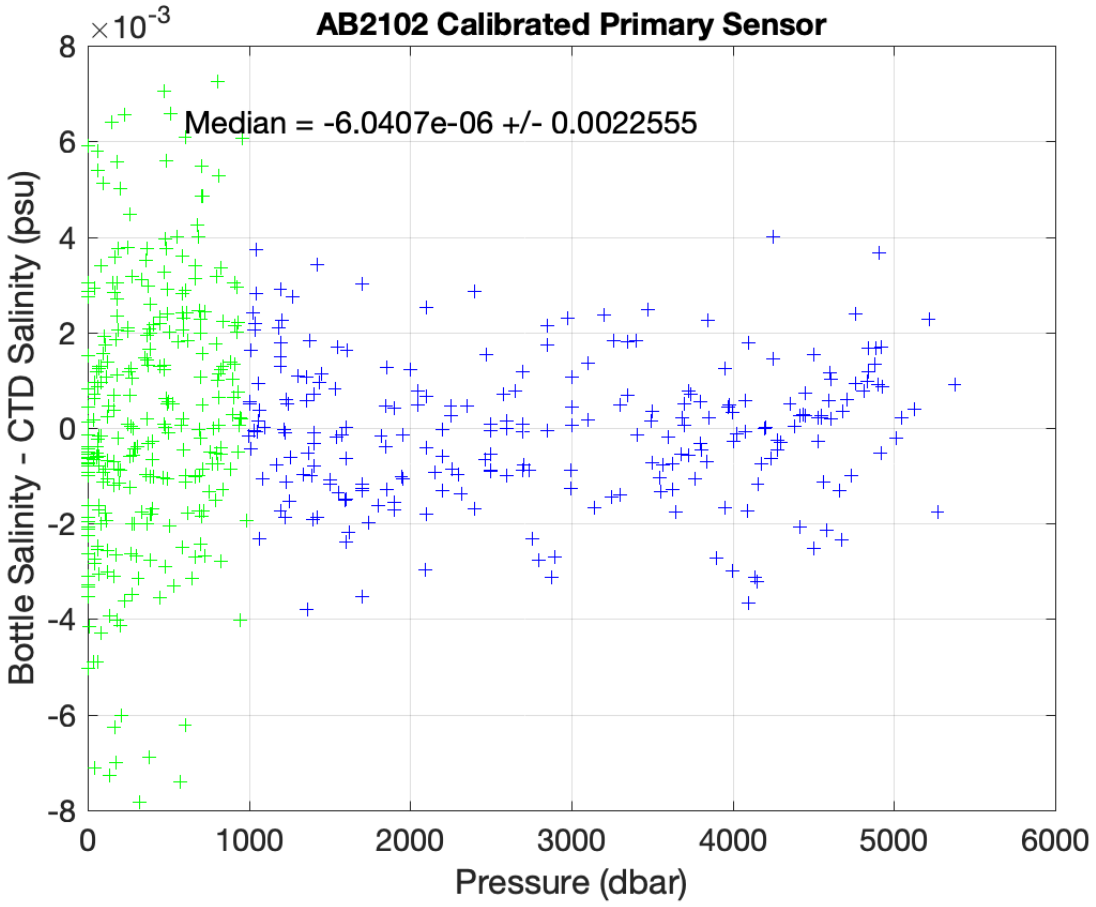

Figure 19: Bottle and calibrated secondary CTD salinity differences plotted vs. pressure. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

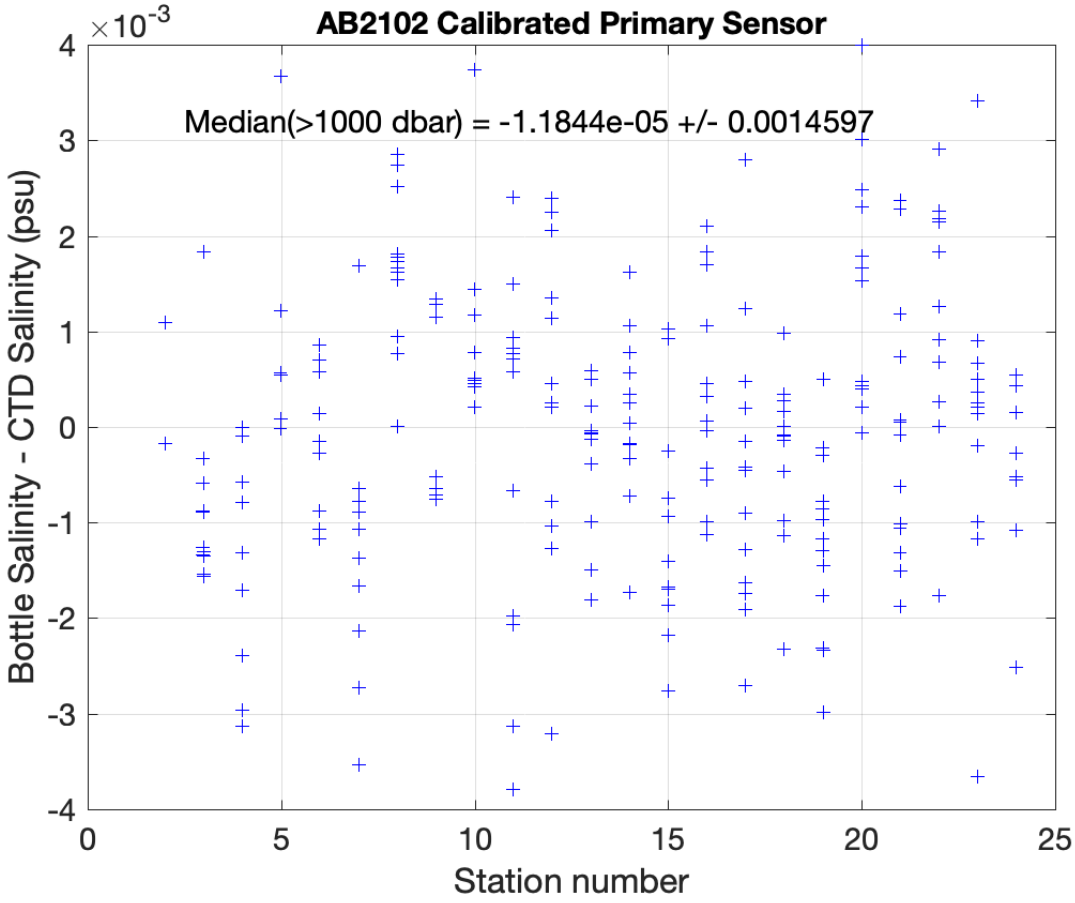

Figure 20: Bottle and calibrated secondary CTD salinity differences (blue crosses) plotted vs. station below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

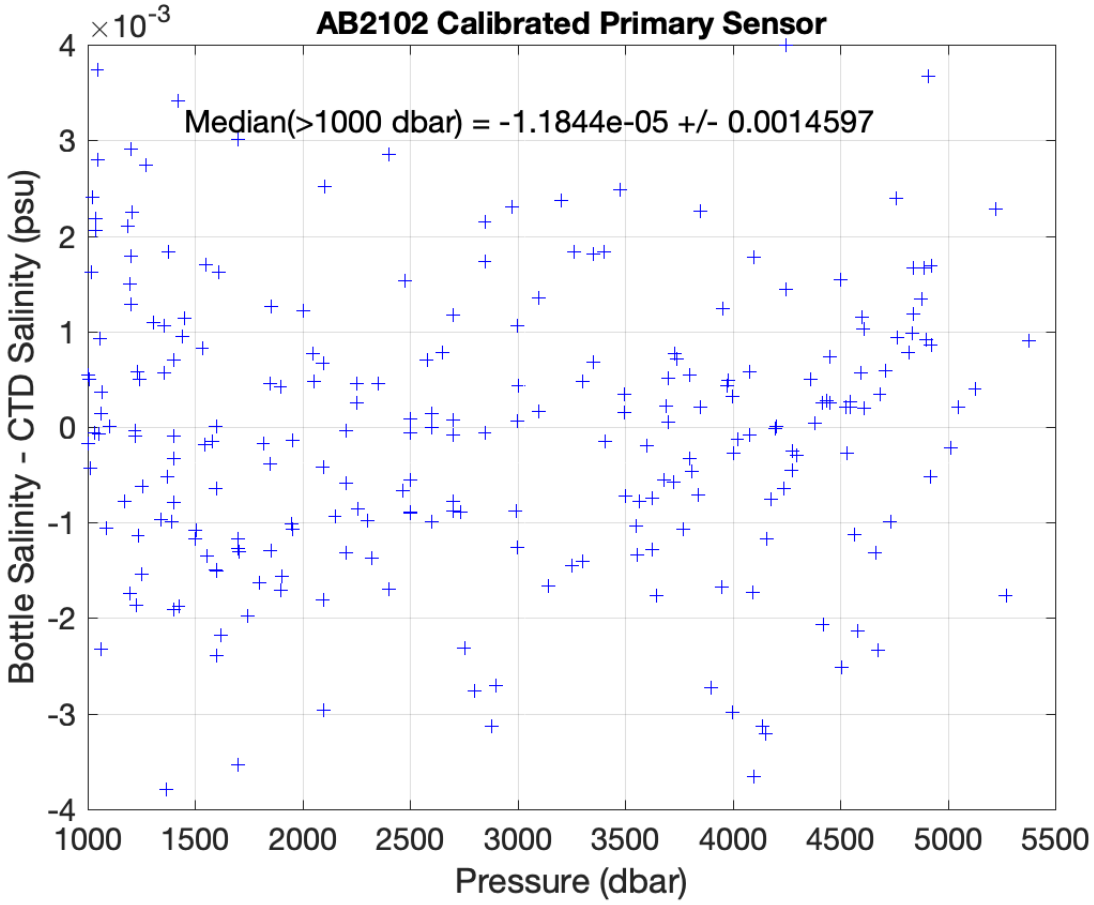

Figure 21: Bottle and calibrated secondary CTD salinity differences (blue crosses) plotted vs. pressure below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

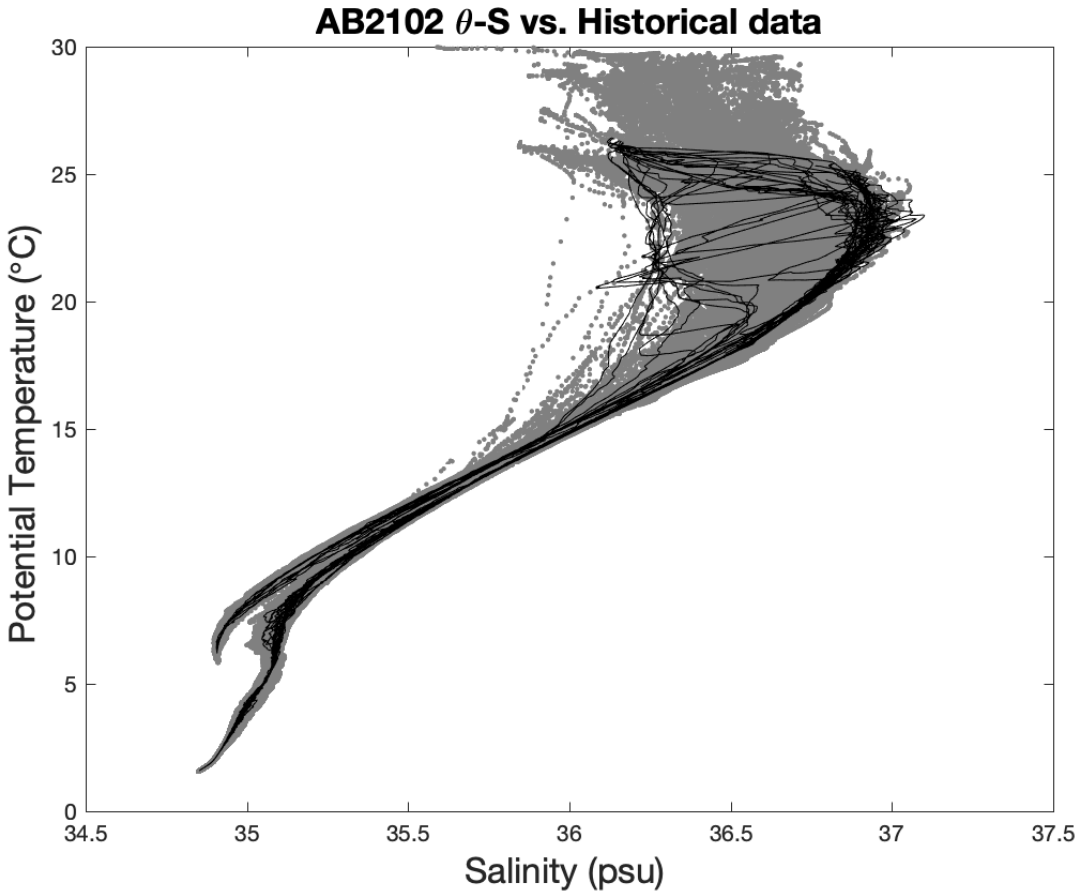

Figure 22: Potential Temperature (θ) - Salinity diagram for all stations. The solid black lines represent AB2102 data. Solid gray lines are historical data collected during the project.

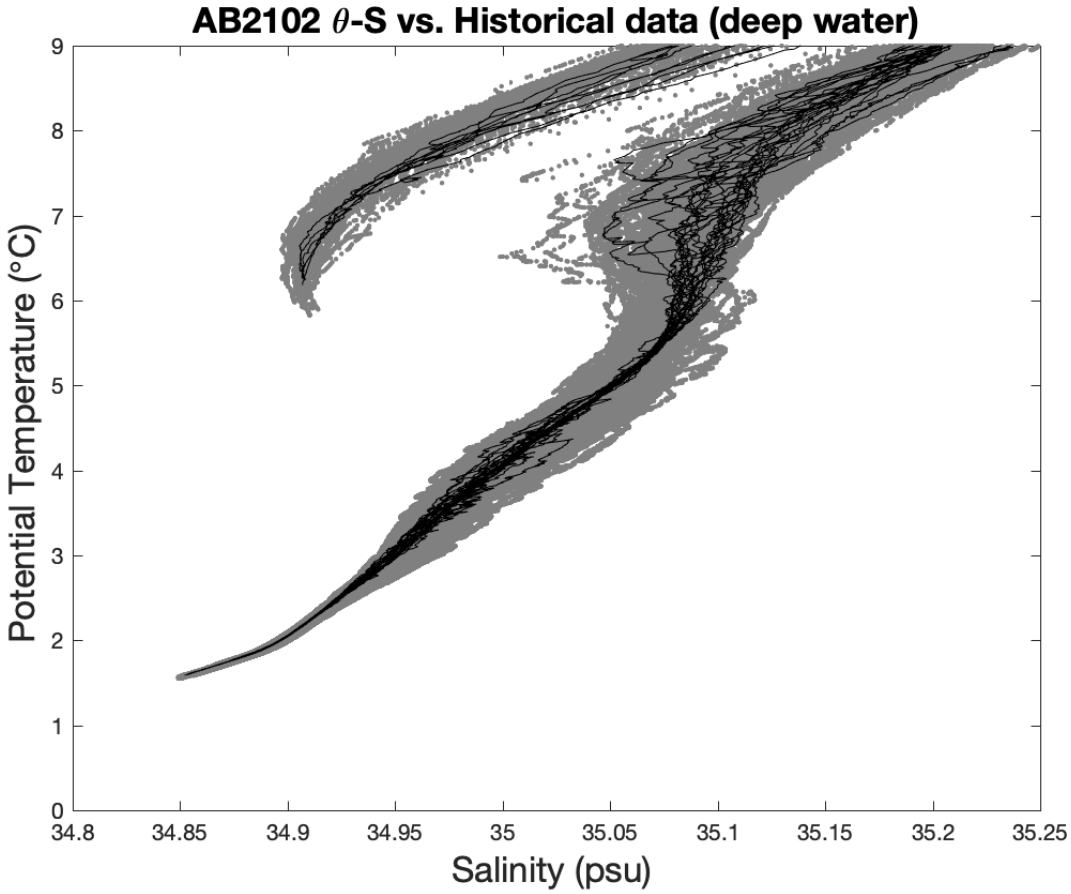

Figure 23: Potential Temperature (θ) - Salinity diagram for all stations (deep water). The solid black lines represent AB2102 data. Solid gray lines are historical data collected during the project.

5.5 Dissolved Oxygen

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

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

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

with

Table 18: AB2102 – Oxygen coefficients.

Primary - s/n 2082 Stations 1-24		Primary - s/n 2082 Stations 25-31,33-49		Secondary - s/n 2940 Station 32	
Soc	0.47886523	Soc	0.47112090	Soc	0.42523509
V_offset	-0.52133372	V_offset	-0.46850754	V_offset	-0.47552415
tau	0.75	tau	2.01	tau	1.17
A	-0.00359481	A	-0.00521127	A	-0.00353634
B	0.00021509	B	0.00521127	B	0.00025687
C	-2.5819176-06	C	-7.6024053-06	C	-3.8979264e-06
E	0.03765790	E	0.03576359	E	0.03679131
$p1$	0.00010832	$p1$	-0.00031254	$p1$	-0.00013584

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

A comparison between the primary and secondary sensors (Figure 24) was evaluated. The sensors show a median difference of -0.92 μmol/kg (1.91 μmol/kg for the data below 1000 dbar) and a standard deviation of 2.54 μmol/kg (1.66 μmol/kg for the data below 1000 dbar). The uncalibrated sensor comparison with the bottle salinities showed both sensor residuals behaving similarly. The primary was chosen with a median of 9.52 μmol/kg (12.83 μmol/kg for the data below 1000 dbar) and a standard deviation of 3.55 μmol/kg (3.15 μmol/kg for the data below 1000 dbar) seen in Figure 25. Therefore the primary sensor, s/n 2082, was used for all the final data values, except station 32 (bad primary sensor profile). The secondary oxygen sensor, s/n 2940, was used.

The oxygen coefficients used to correct the primary and secondary oxygen sensors are shown in Table 18. The calibration coefficients for the oxygen sensors were split into two groups, the 26.5°N Abaco section (stations1-24) and the three Florida Straits sections (stations 25-49). Also, analogous to the conductivity, the data is compared with a normal distribution using 2.8 $\times$ standard deviation to remove outliers. After these procedures 479 data points (80.8%) were used in the final calculations.

To minimize the differences between the oxygen samples and the CTD oxygen values estimated from the equation described in this section, the new coefficients above were calculated and then applied to the CTD original data (Figure 26 to Figure 29). The residual is -0.1 μmol/kg (-0.03 μmol/kg for the data below 1000 dbar) and the standard deviation 1.0 μmol/kg (0.92 μmol/kg for the data below 1000 dbar). Also 100% of the residuals for the data are within the confidence limits determined by the WOCE ($\pm$ 1% of the dissolved oxygen measured).

As with the salinity data, the final dissolved oxygen data were compared with historical oxygen data from the project to assess the relative characteristics of the collected data set and to identify any anomalous signatures in the θ - dissolved O_2 diagrams (Figure 30 & Figure 31).

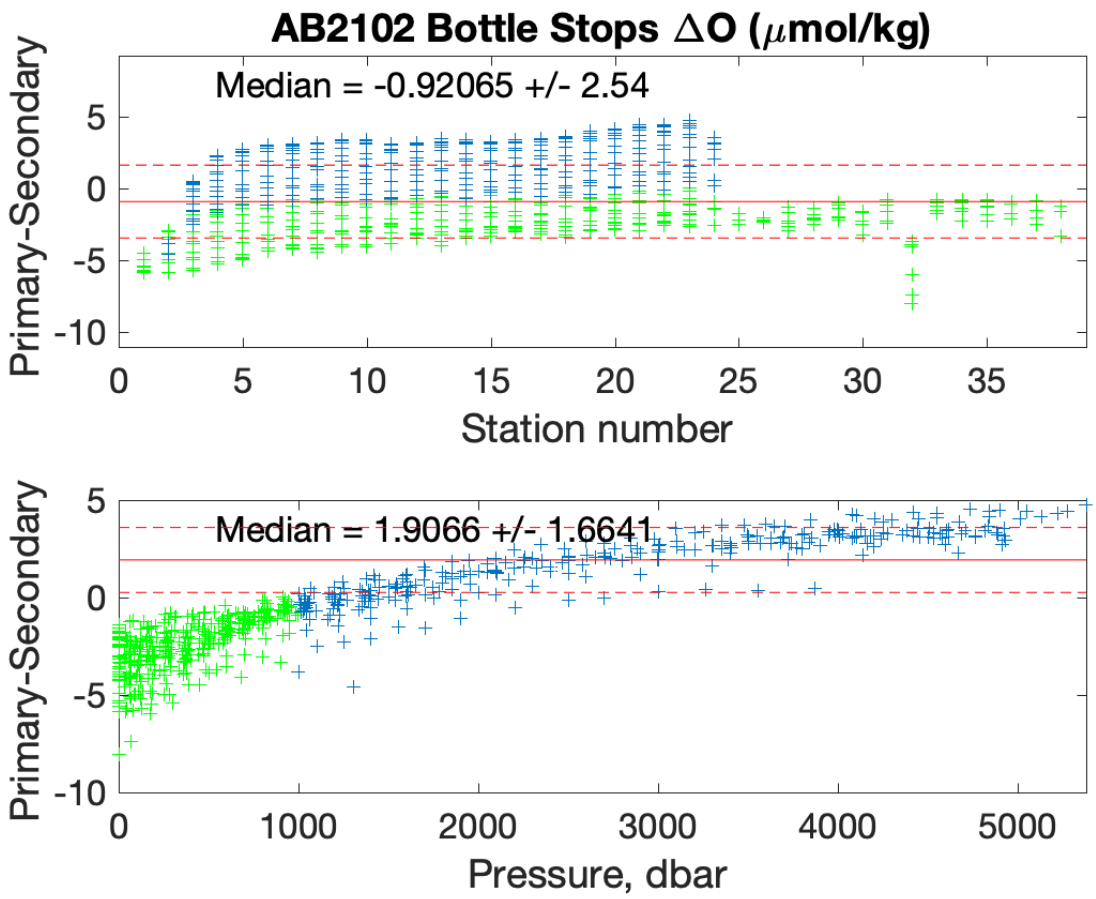

Figure 24: Dissolved oxygen upcast bottle stop differences between sensors by station (top) and by pressure (bottom). The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The red solid line represents the median with the red dashed representing the standard deviation.

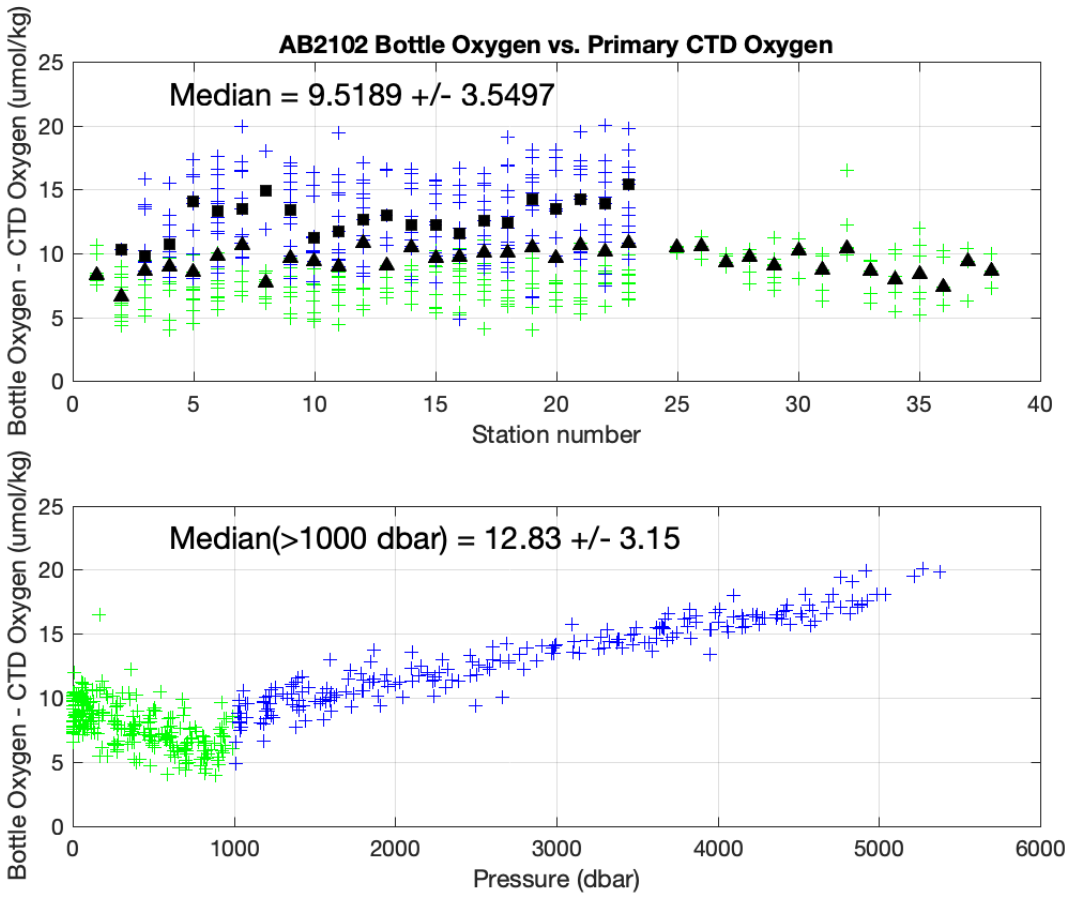

Figure 25: Bottle and uncalibrated secondary CTD oxygen differences plotted by station (top) and by pressure (bottom). The green crosses represent all data points and the blue crosses are the data points below 1000 dbar. The black squares are the median of the data points below 1000 m and the triangles are the median of the data points above 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

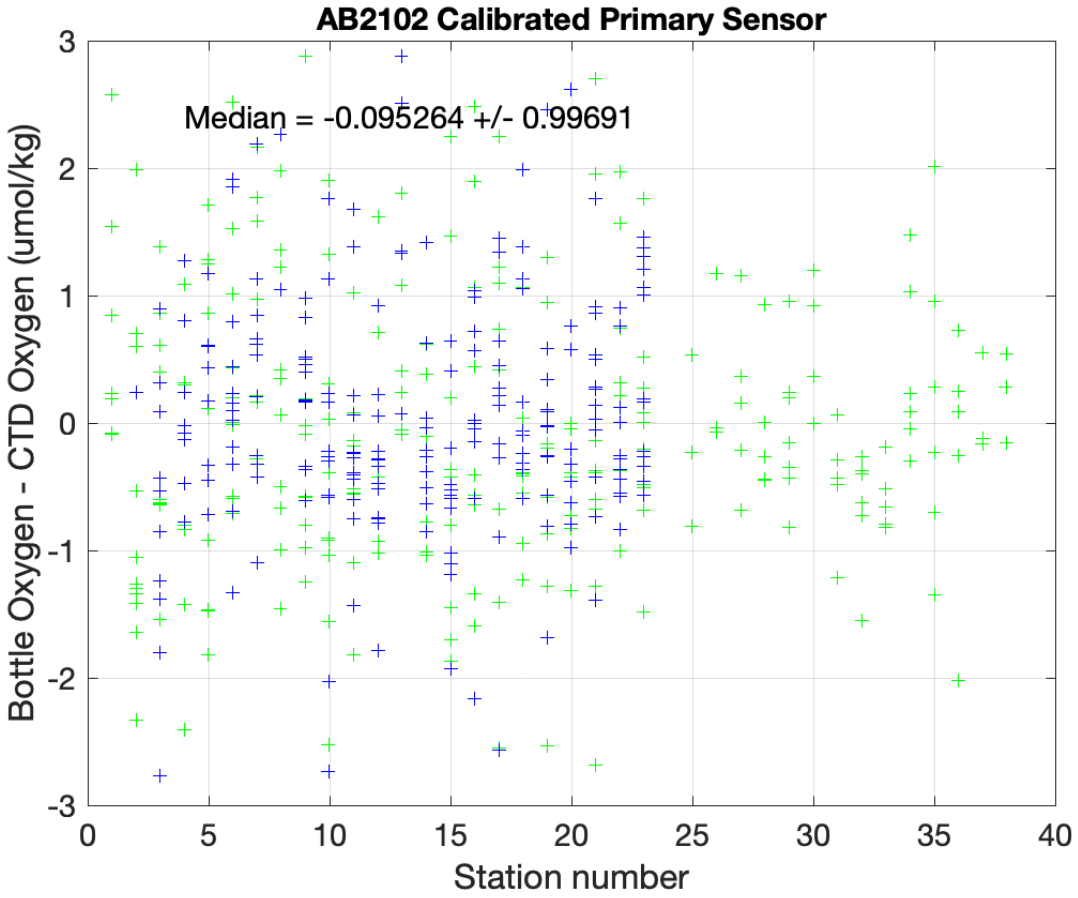

Figure 26: Bottle and calibrated secondary CTD oxygen differences plotted vs. station. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

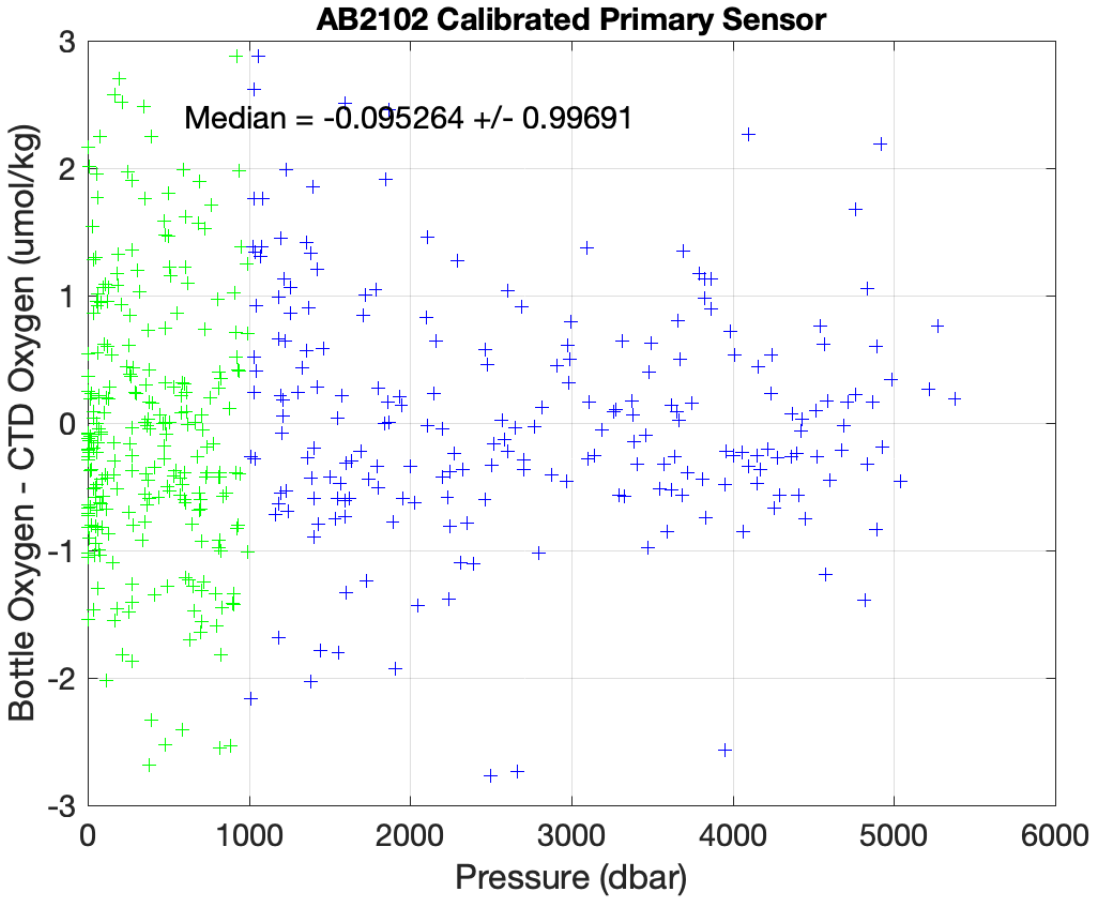

Figure 27: Bottle and calibrated secondary CTD oxygen differences plotted vs. pressure. The green crosses represent data points above 1000 dbar and the blue crosses are the data points below 1000 dbar. The median values shown were calculated using all data.

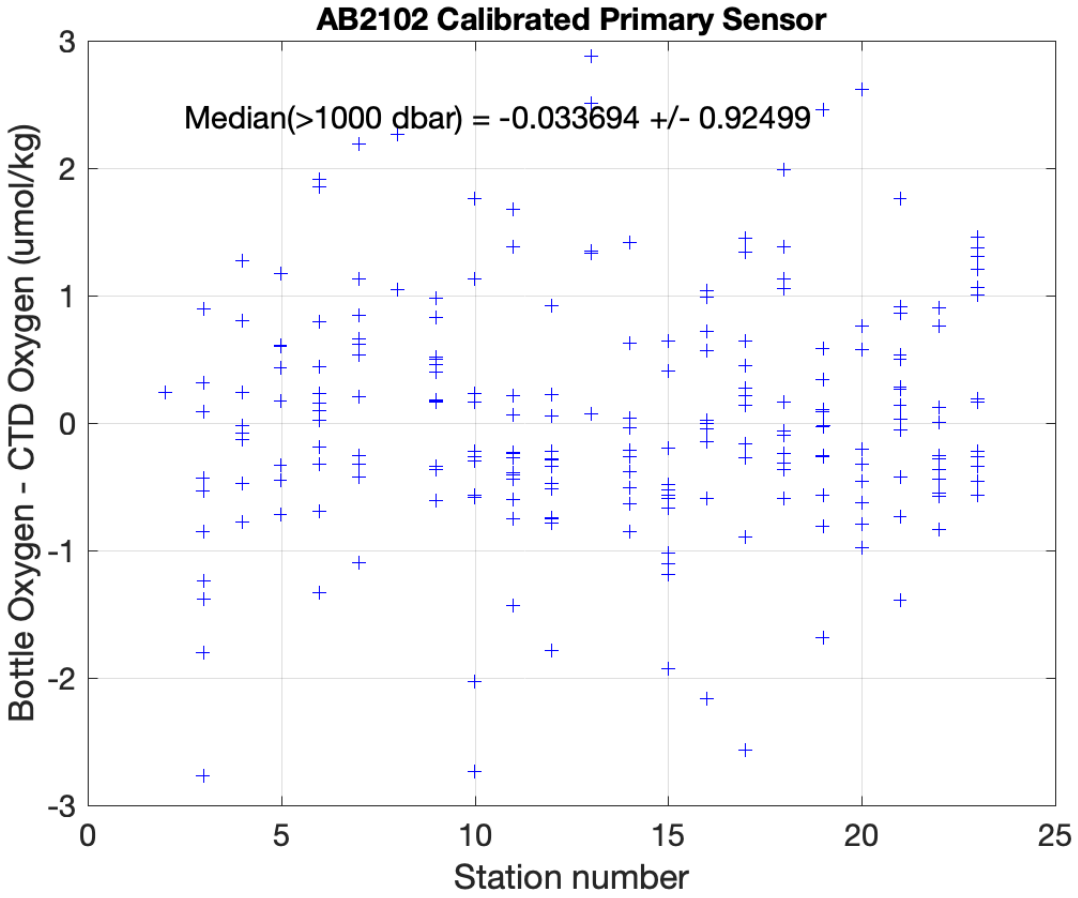

Figure 28: Bottle and calibrated secondary CTD oxygen differences (blue crosses) plotted vs. station below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

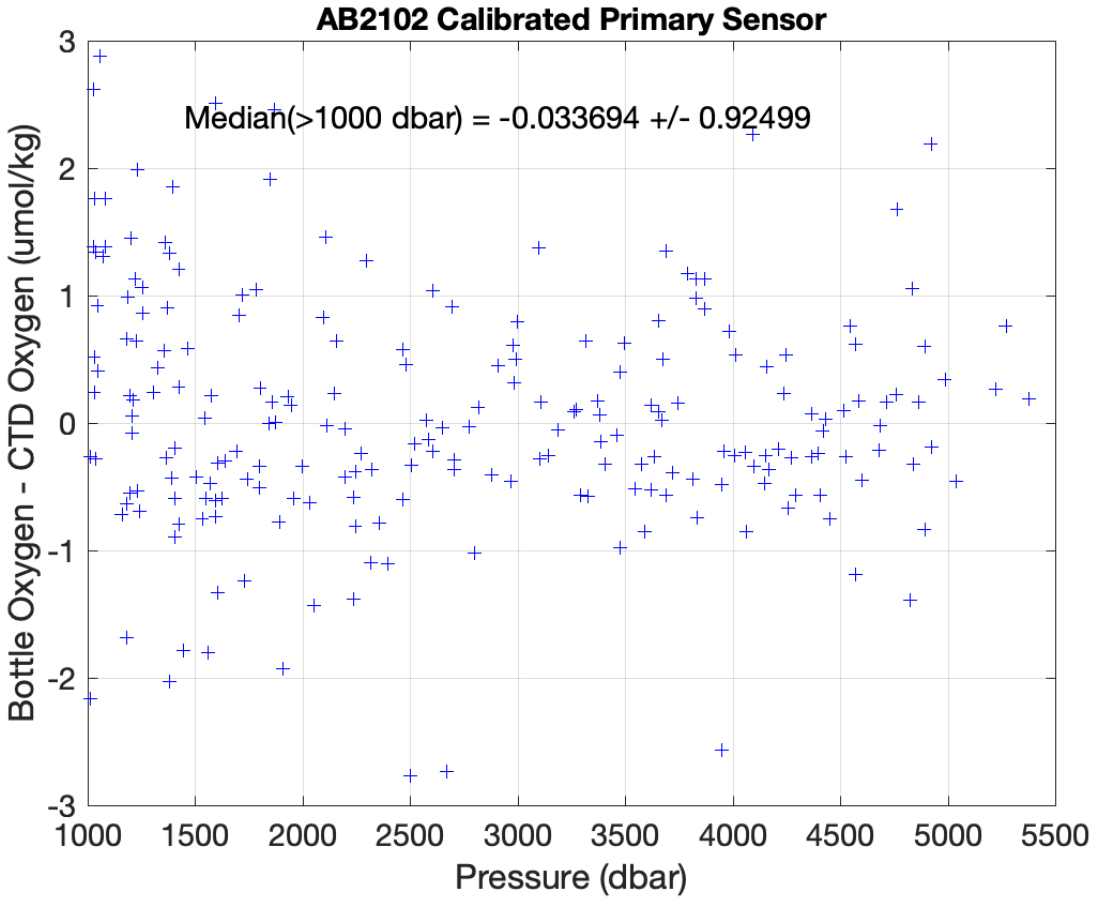

Figure 29: Bottle and calibrated secondary CTD oxygen differences (blue crosses) plotted vs. pressure below 1000 dbar. The median values shown were calculated only using data below 1000 dbar.

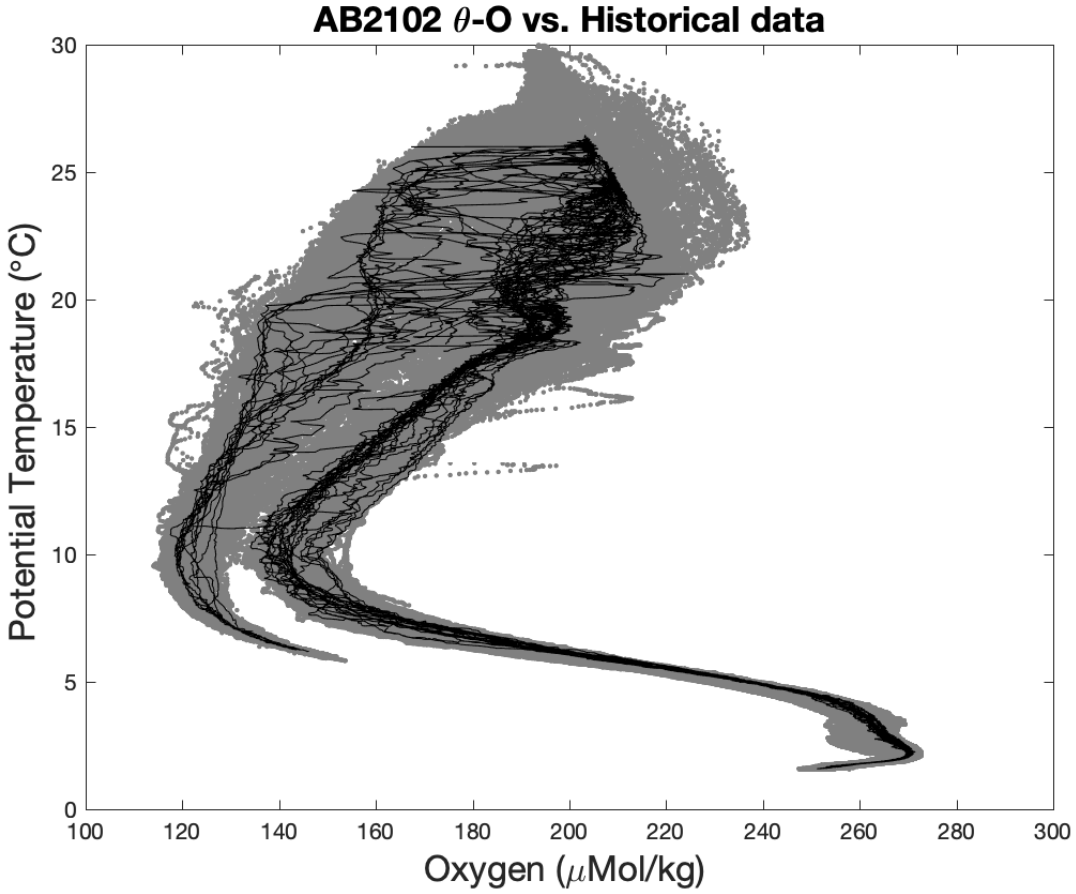

Figure 30: Potential Temperature (θ) - Oxygen diagram for all stations. The solid black lines represent AB2102 data. Solid gray lines are historical data collected during the project.

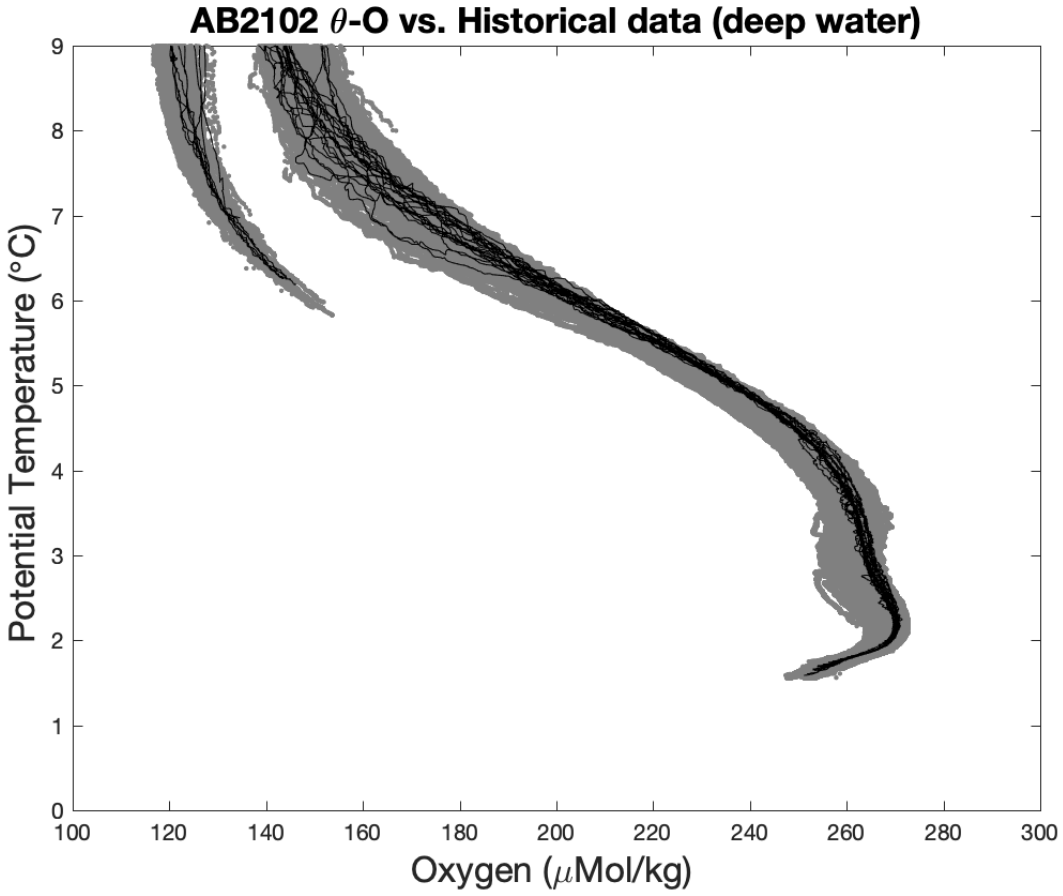

Figure 31: Potential Temperature (θ) - Oxygen diagram for all stations (deep water). The solid black lines represent AB2102 data. Solid gray lines are historical data collected during the project.

6 Final CTD Data Presentation

Post-cruise calibrations, determined from bottle data, were applied to CTD data associated with bottle data using Matlab sub-routines (`apply_calibration.m`). WOCE quality flags were appended to bottle data records. The "bad values" (WOCE quality control value = 4) were flagged if the bottle samples failed the initial quality control and were not used for the calibration (which meant they fell outside 2.8 × the standard deviations of the difference between samples and uncalibrated CTD values).

The final calibrated CTD data files were used to produce the section plots that follow and the table and station profile plots presented in the appendices. Vertical sections of CTD potential temperature, CTD salinity, CTD oxygen, and neutral density are contoured for Abaco, 27N, 26N and NWPC sections conducted during AB2102 in Figures 32 through 47 (refer to Figure 1 for geographical locations of sections). For the Abaco section, nominal vertical exaggerations are 400:1 below 1000 dbar (lower panels) and 200:1 above 1000 dbar (upper panels).

In Appendix A, for each CTD station, the upper table presents "standard depths" of the CTD cast, while the lower tables lists the bottle CTD trip depths for the cast. Following the two tables, a page of 4 plots illustrate the data collected of the stations. Niskin bottle depths are indicated on the right side of the larger profile plot and bottle salinity and oxygen values are plotted as points in the three smaller plots. A WOCE formatted CTD cast summary file is shown in Appendix B. It lists information regarding the beginning, middle (bottom of the cast), and end of each CTD cast. Finally, a bottle summary file (WOCE formatted) is presented in Appendix C. This table lists the specific details associated with each Niskin bottle trip over the course of the entire cruise. The -999's in the tables represent missing data.

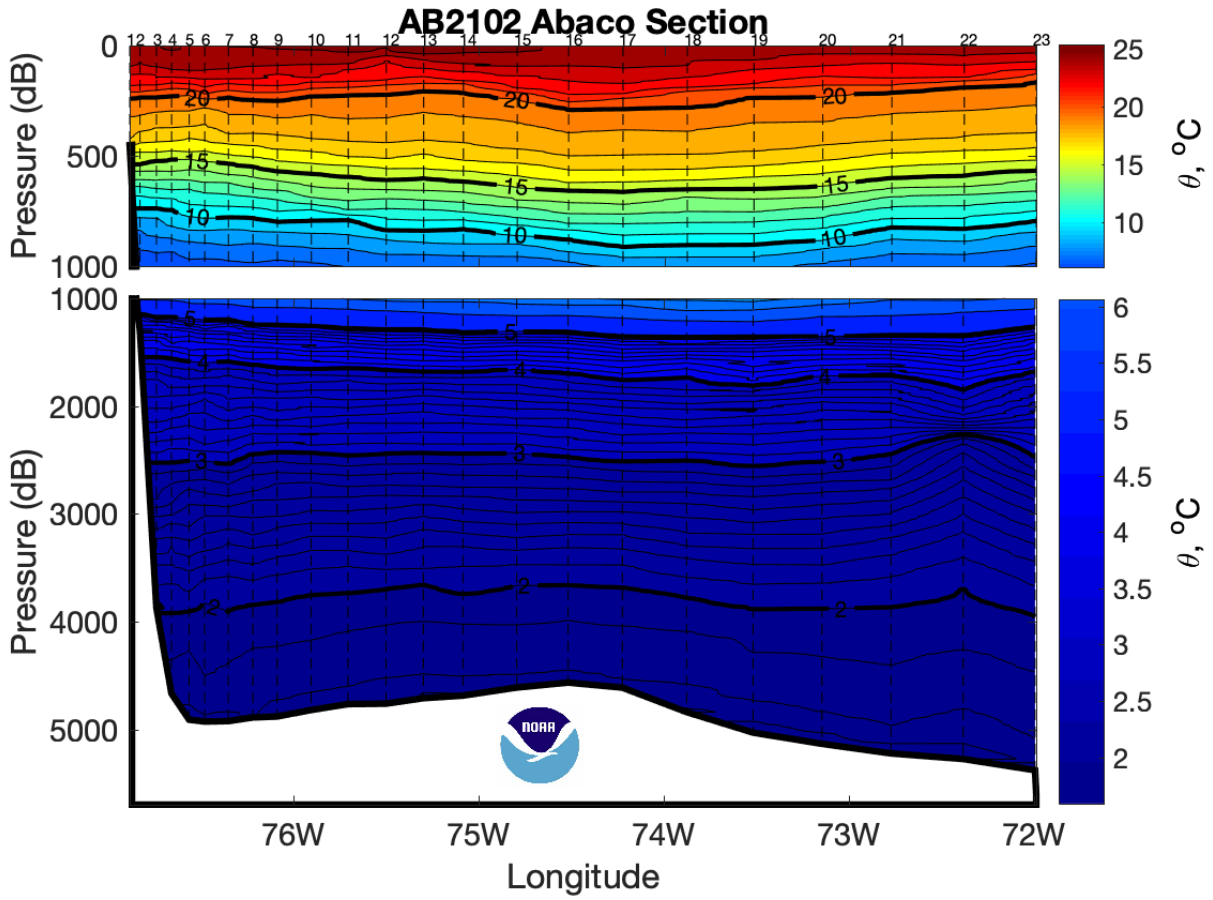

Figure 32: Potential Temperature (°C) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

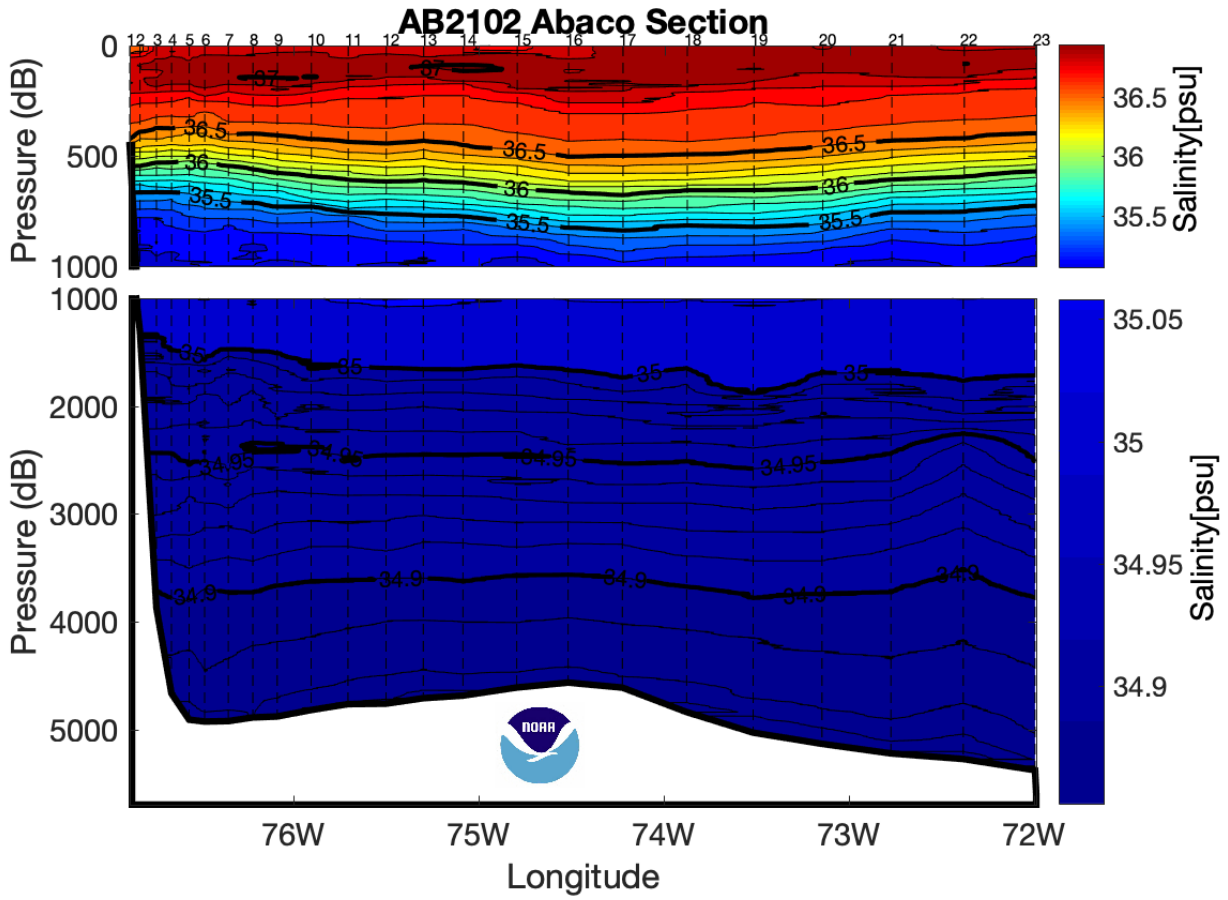

Figure 33: Salinity (PSS 78) section for the Abaco section. Dashed vertical lines are the CTD station locations.

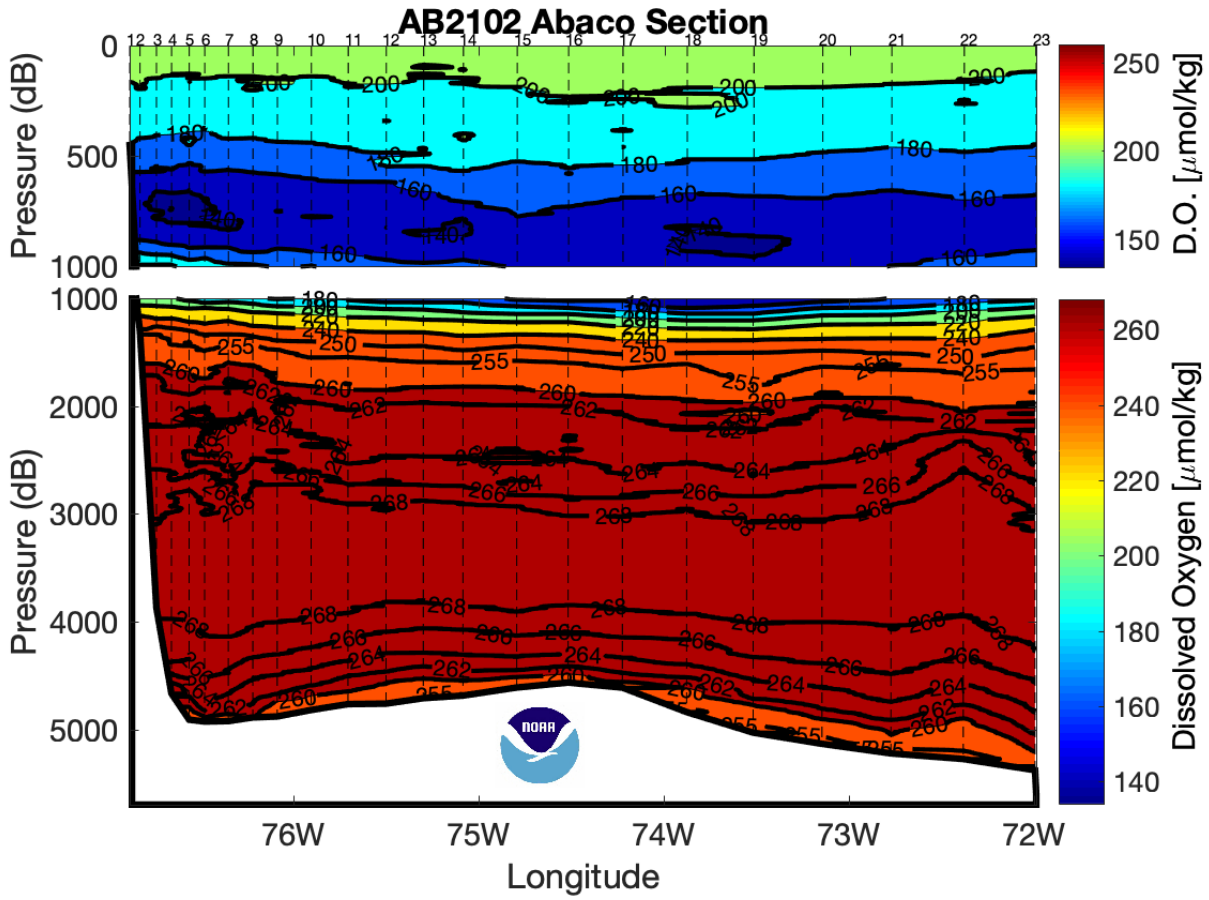

Figure 34: Dissolved Oxygen (μmol/kg) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

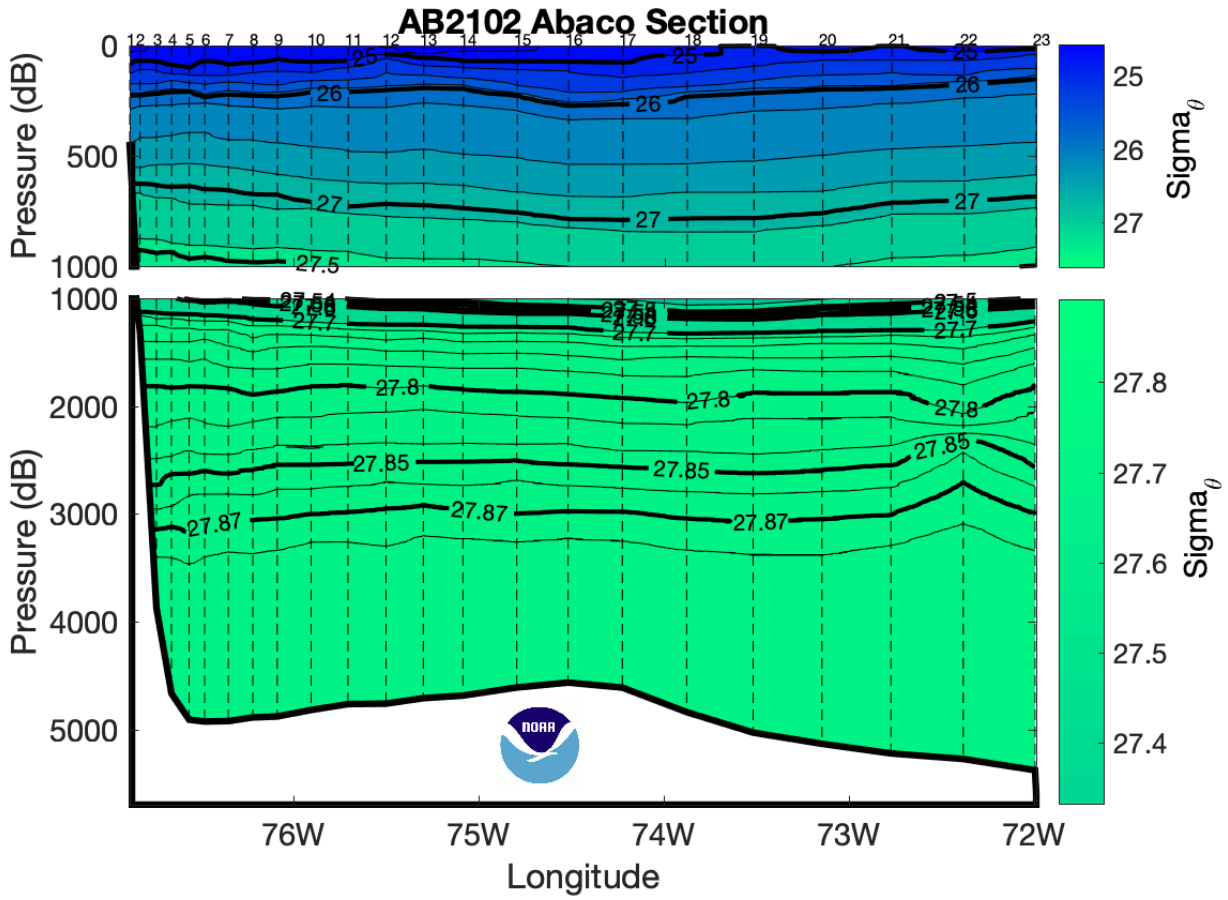

Figure 35: Neutral density (kg/m3) section for the Abaco Section. Dashed vertical lines are the CTD station locations.

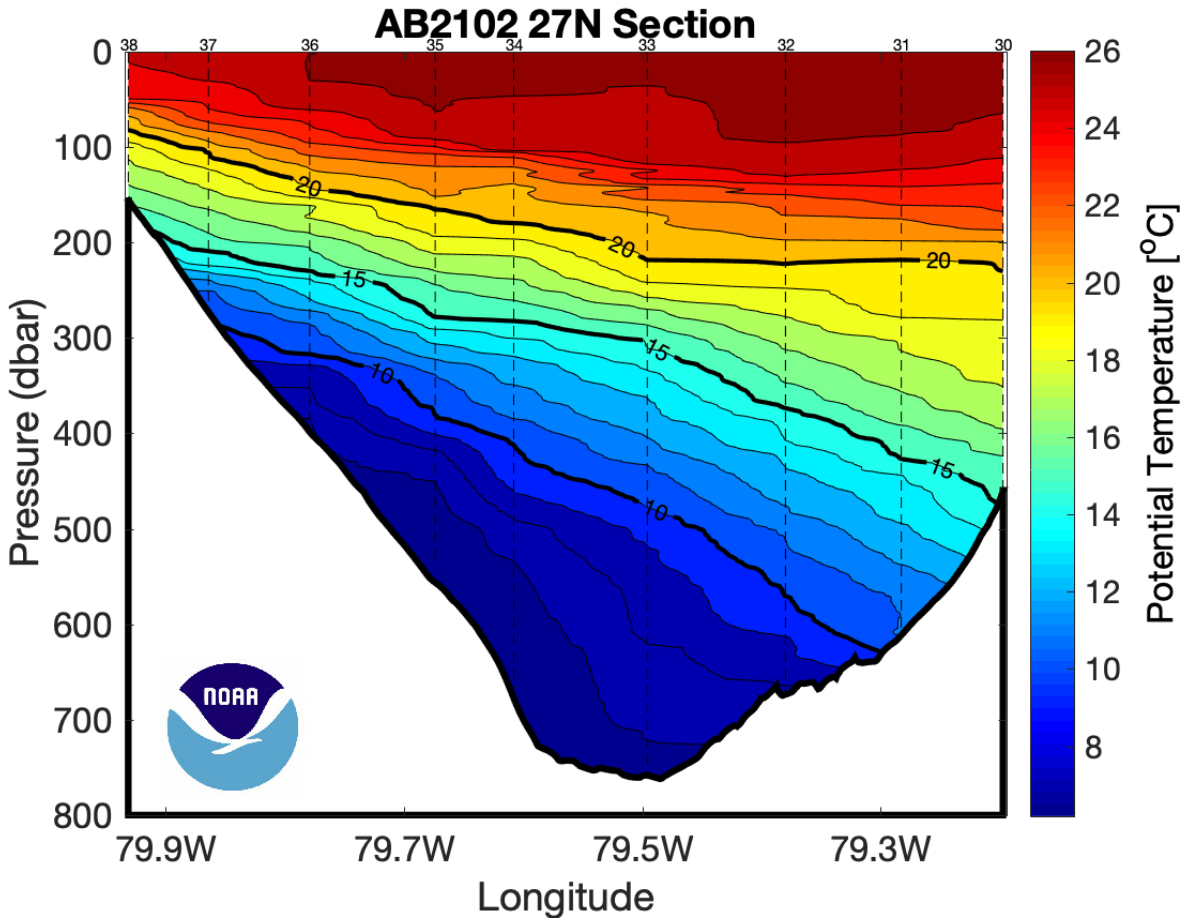

Figure 36: Potential Temperature (°C) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

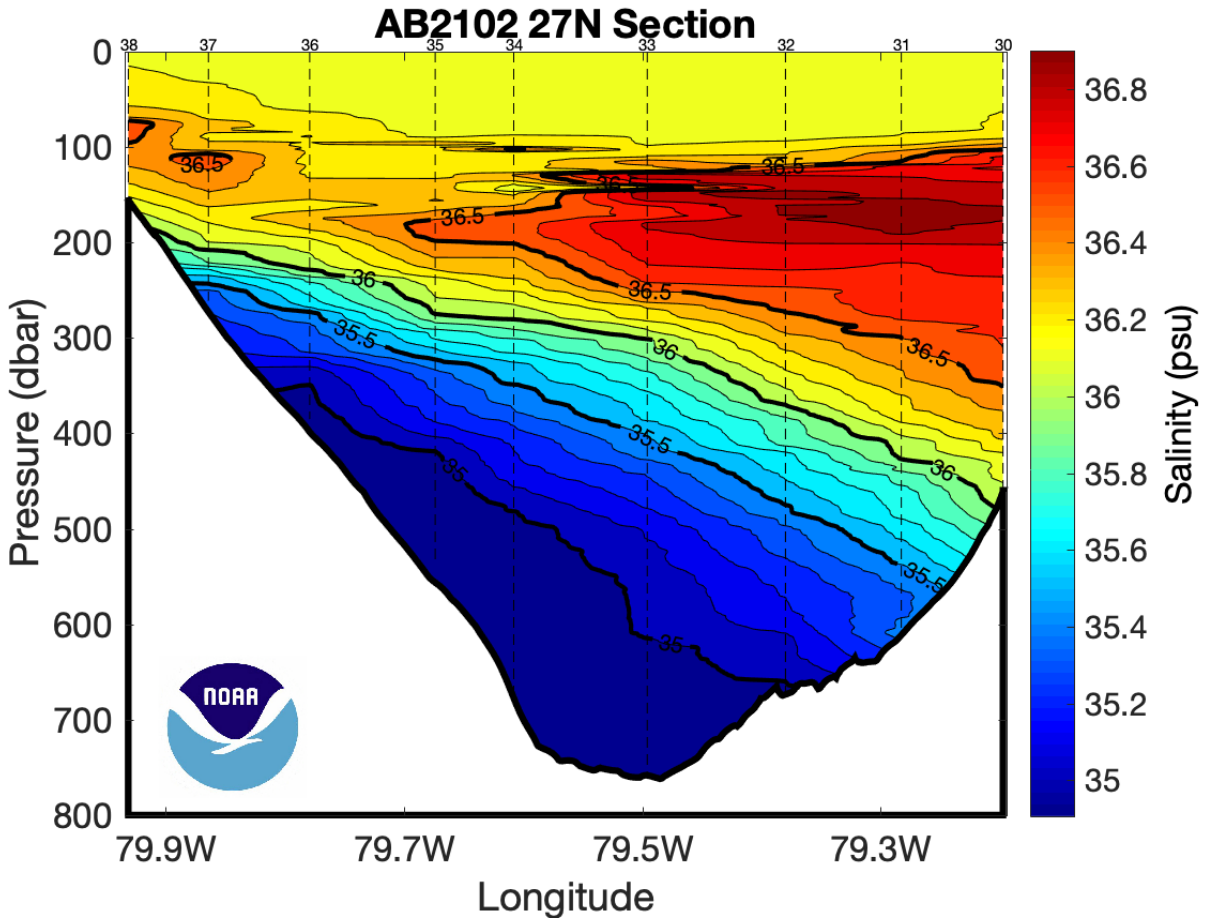

Figure 37: Salinity (PSS 78) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

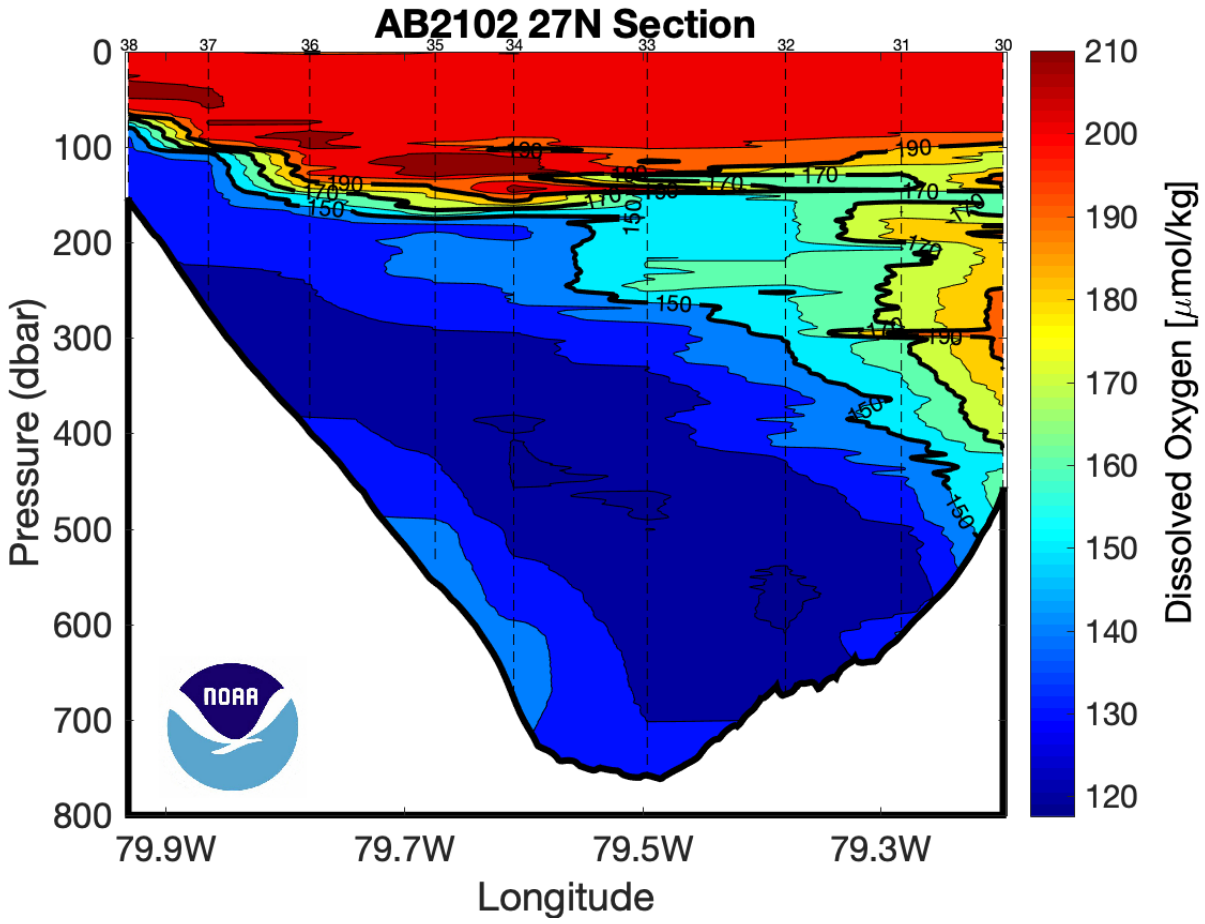

Figure 38: Dissolved Oxygen (μmol/kg) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

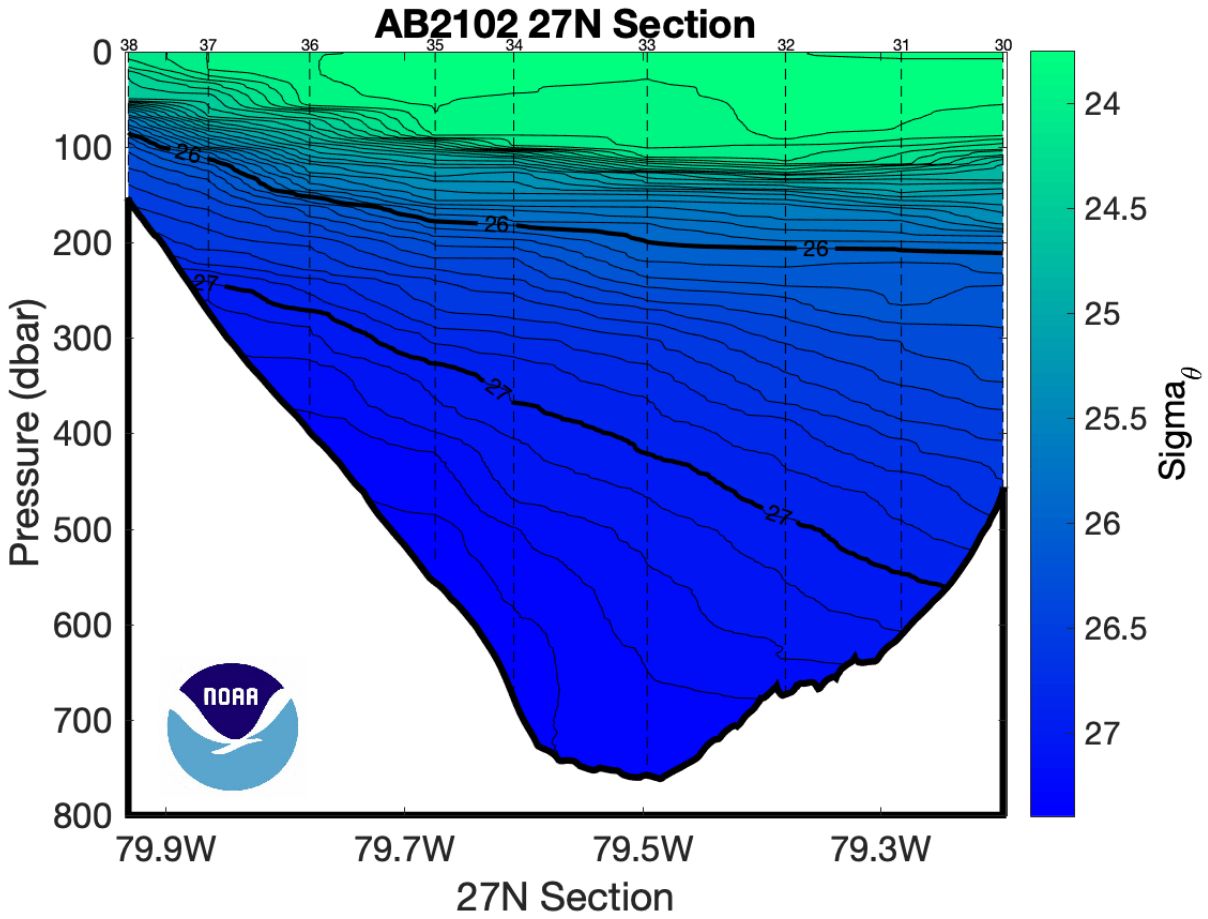

Figure 39: Neutral density (kg/m3) section for the Florida Current North section. Dashed vertical lines are the CTD station locations.

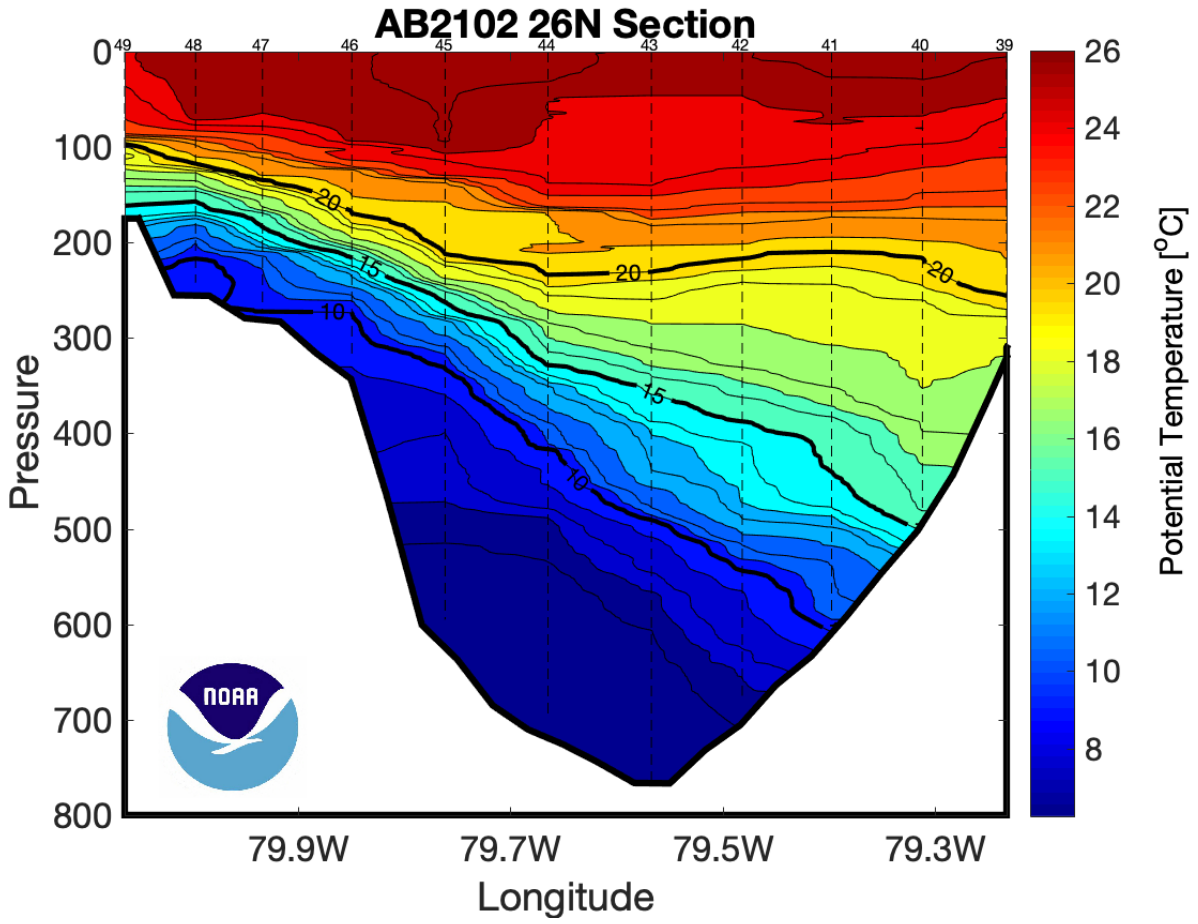

Figure 40: Potential Temperature (°C) section for the Florida Current South section. Dashed vertical lines are the CTD station locations.

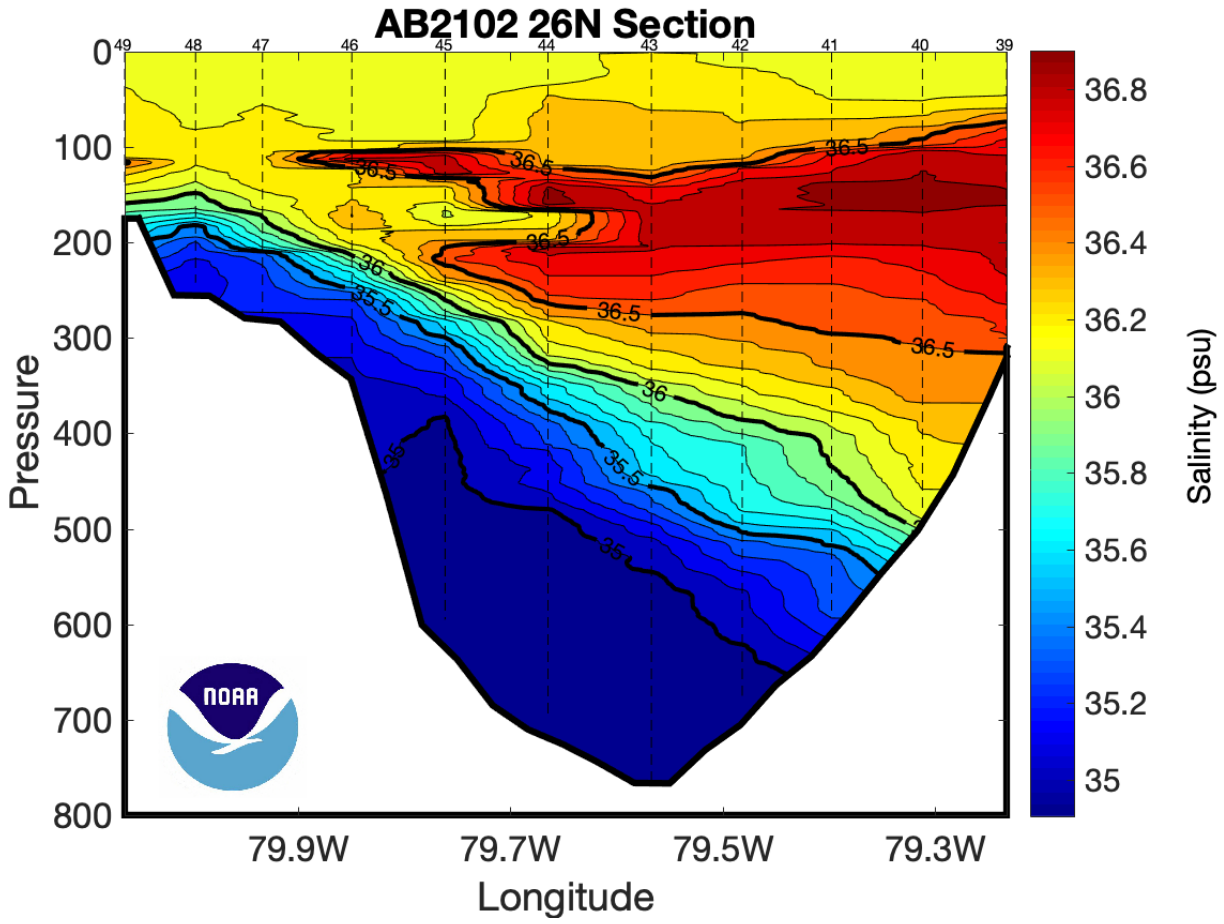

Figure 41: Salinity (PSS 78) section for the Florida Current South section. Dashed vertical lines are the CTD station locations.

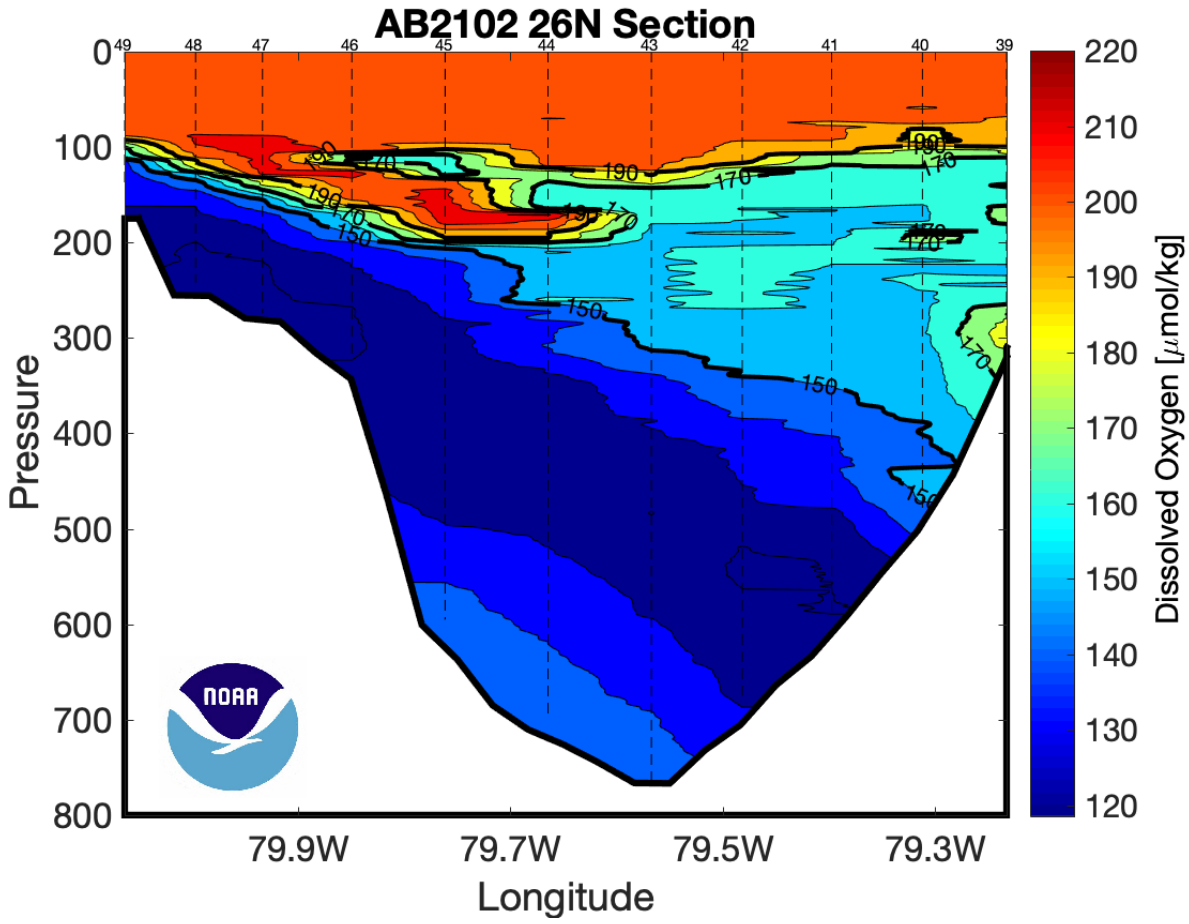

Figure 42: Dissolved Oxygen (μmol/kg) section for the Florida Current South section. Dashed vertical lines are the CTD station locations.

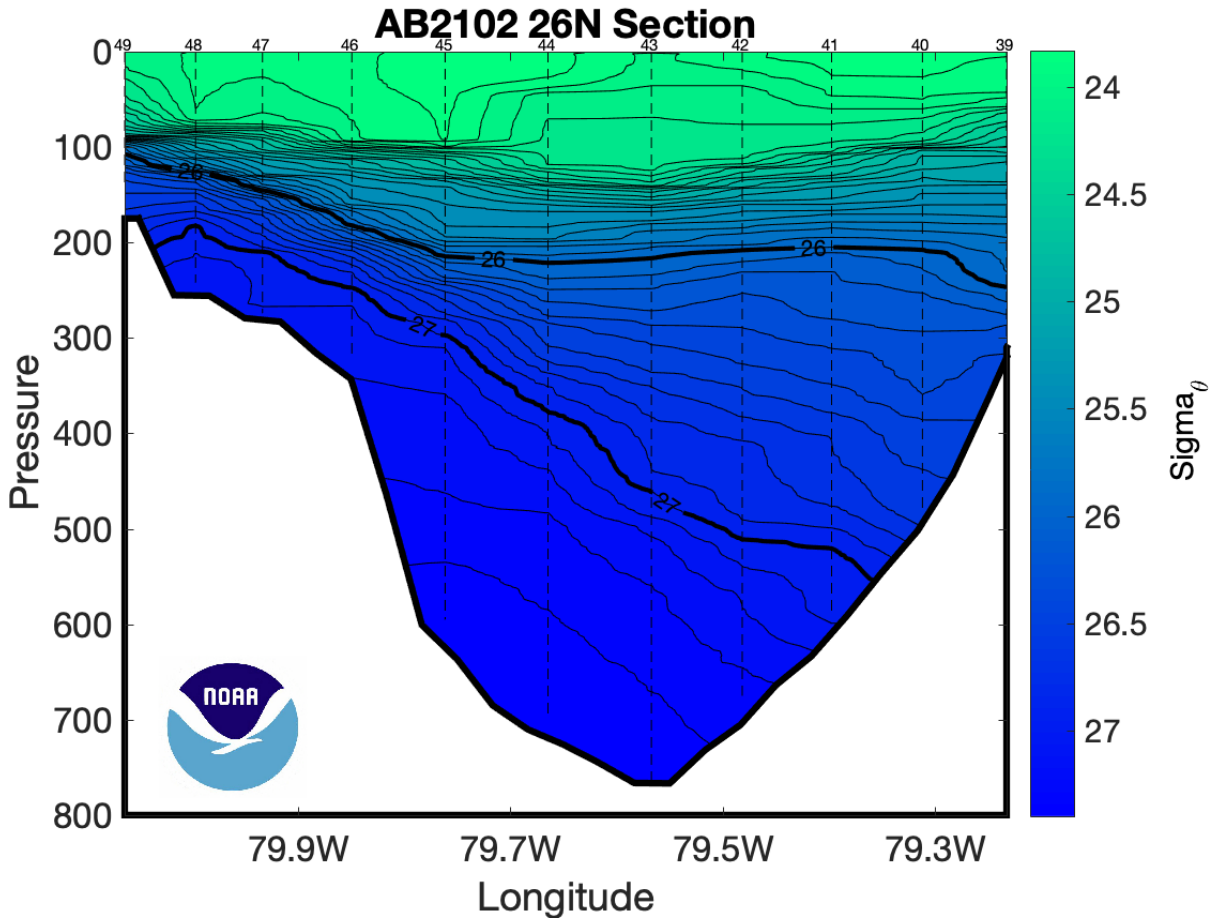

Figure 43: Neutral density (kg/m3) section for the Florida Current South section. Dashed vertical lines are the CTD station locations.

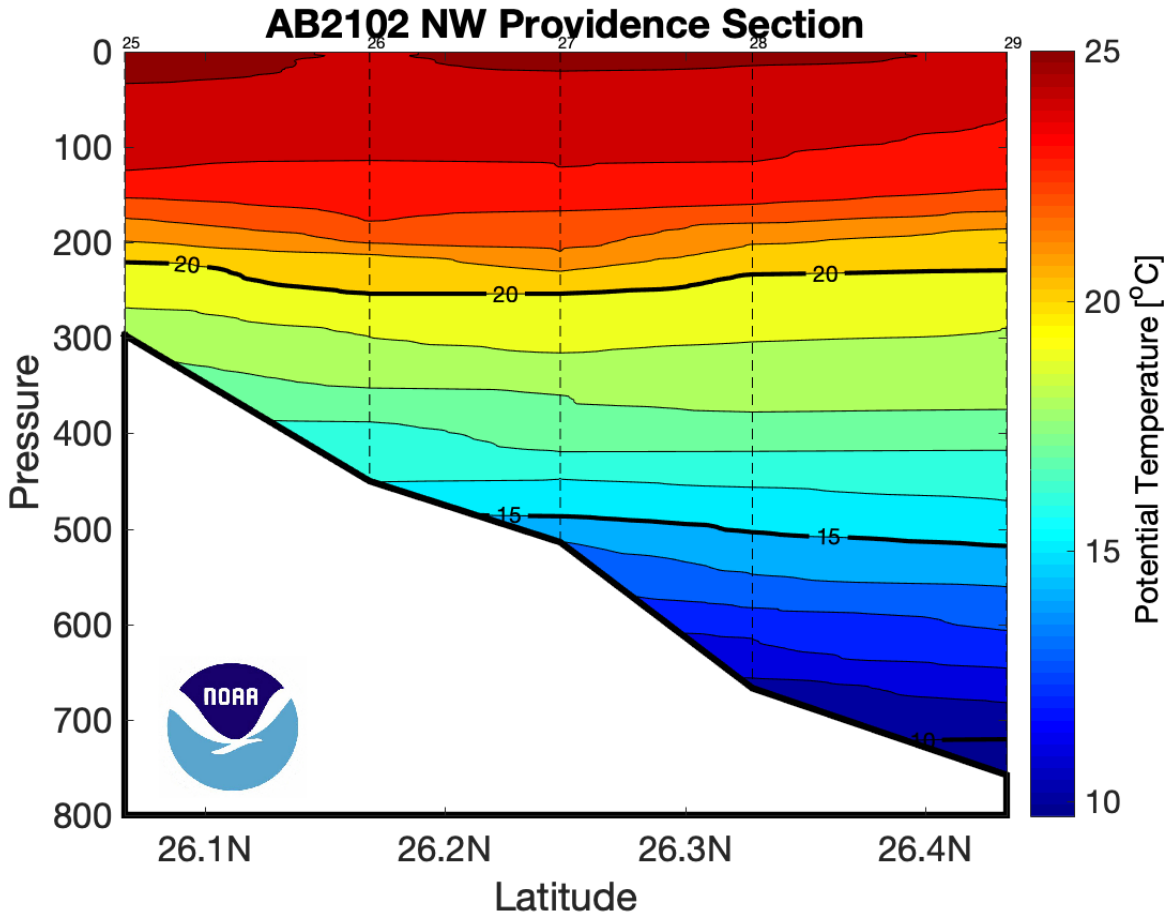

Figure 44: Potential Temperature (°C) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

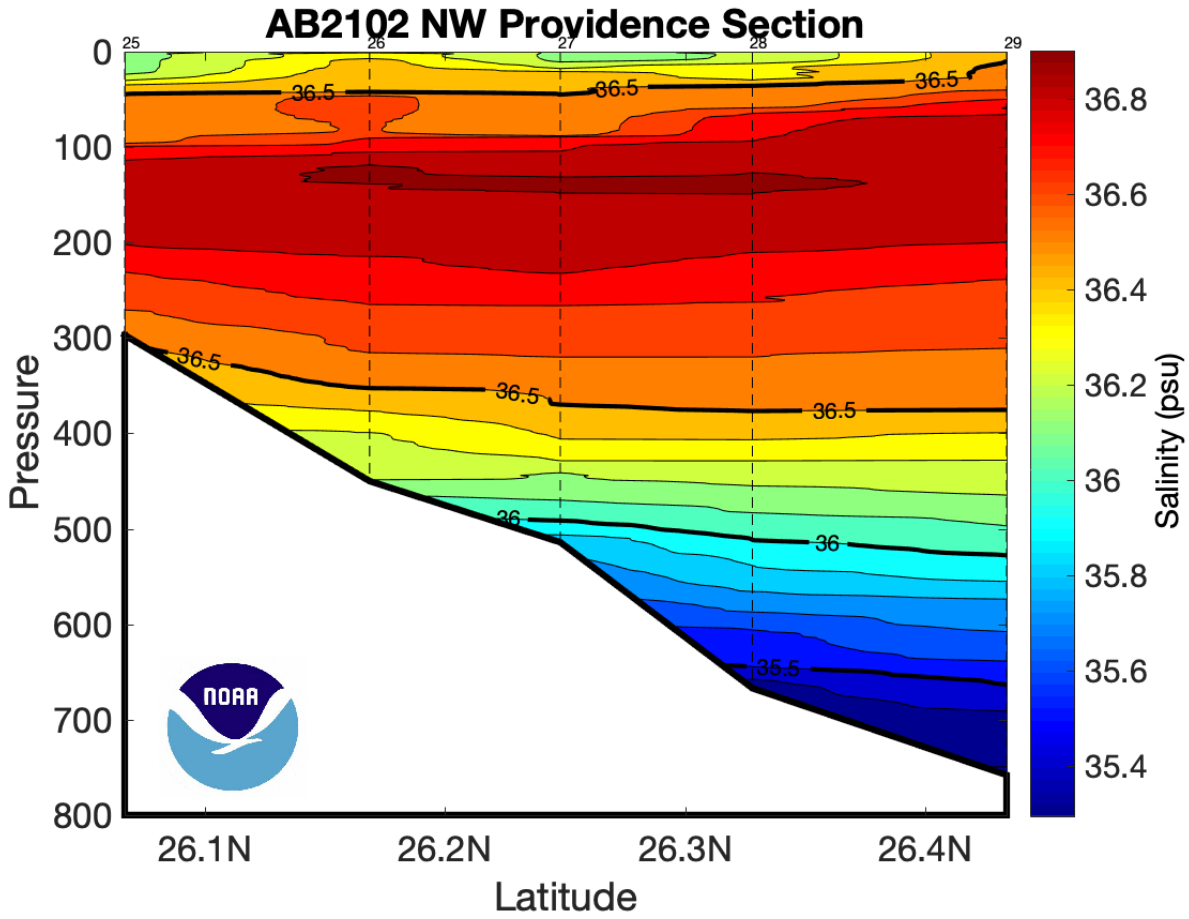

Figure 45: Salinity (PSS 78) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

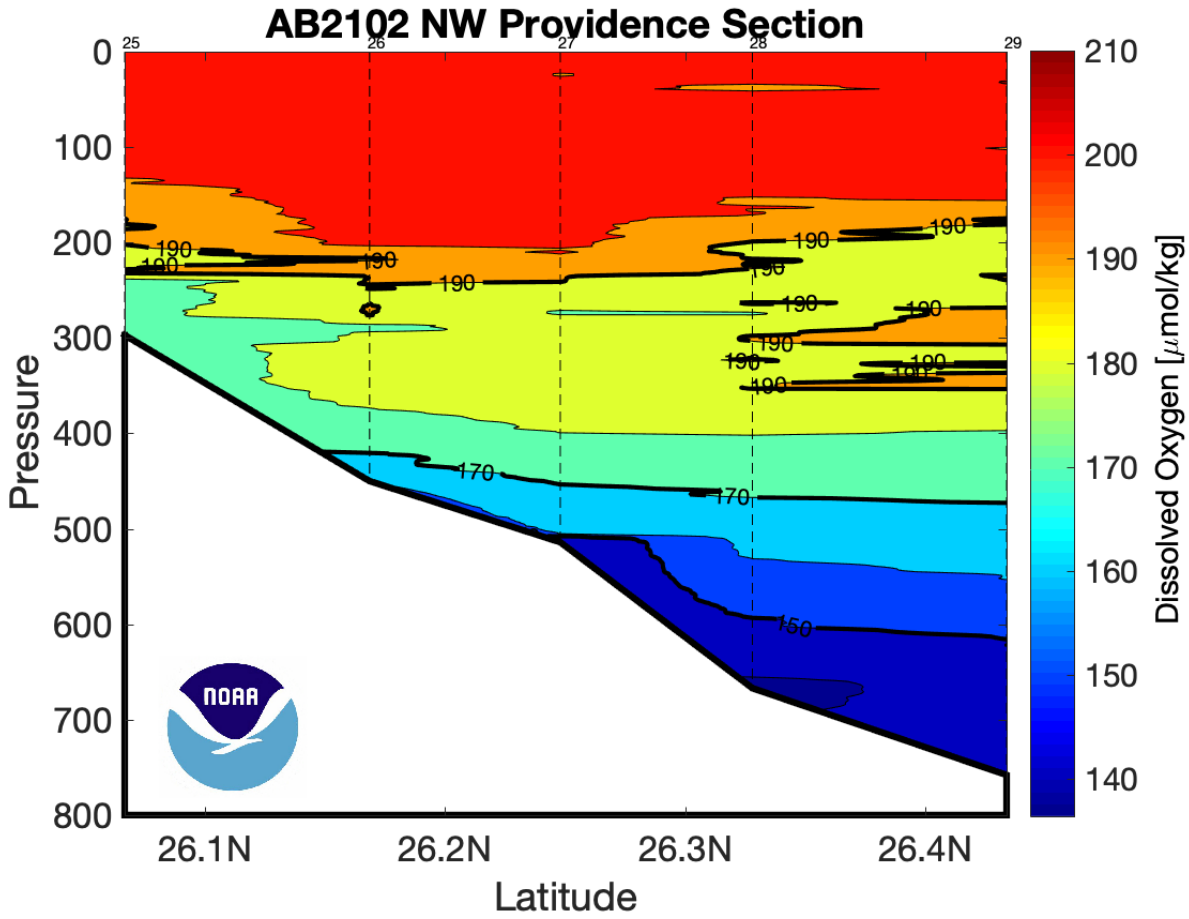

Figure 46: Dissolved Oxygen (μmol/kg) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

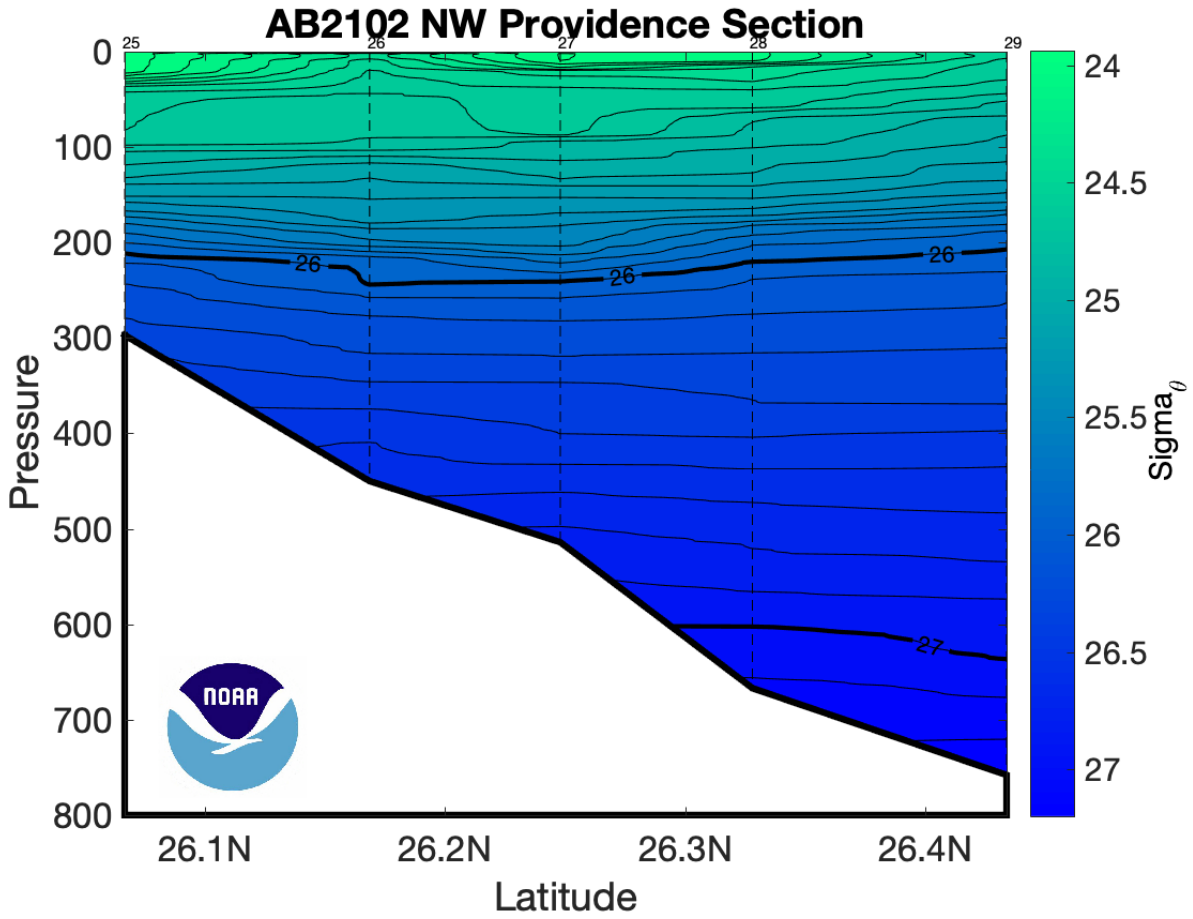

Figure 47: Neutral density (kg/m3) section for the Northwest Providence Channel section. Dashed vertical lines are the CTD station locations.

7 Acknowledgements

The successful completion of cruise AB2102 relied on dedicated assistance from many individuals both on shore and aboard the R/V *Endeavor*. Investigators and members of the Western Boundary Time Series project and the RAPID/MOC programs were instrumental in planning and executing the cruise. Seagoing cruise participants exhibited dedication and camaraderie during their 18 days at sea. We also thank the officers and crew of the R/V *Endeavor* for their professionalism and assistance in accomplishing the mission.

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A portion of this research was conducted within the jurisdictional waters of the Bahamas. Bahamian research clearance was obtained prior to the AB2102 survey with a waiver of port entry. We thank the Bahamian government for providing this request of research clearance.

8 References

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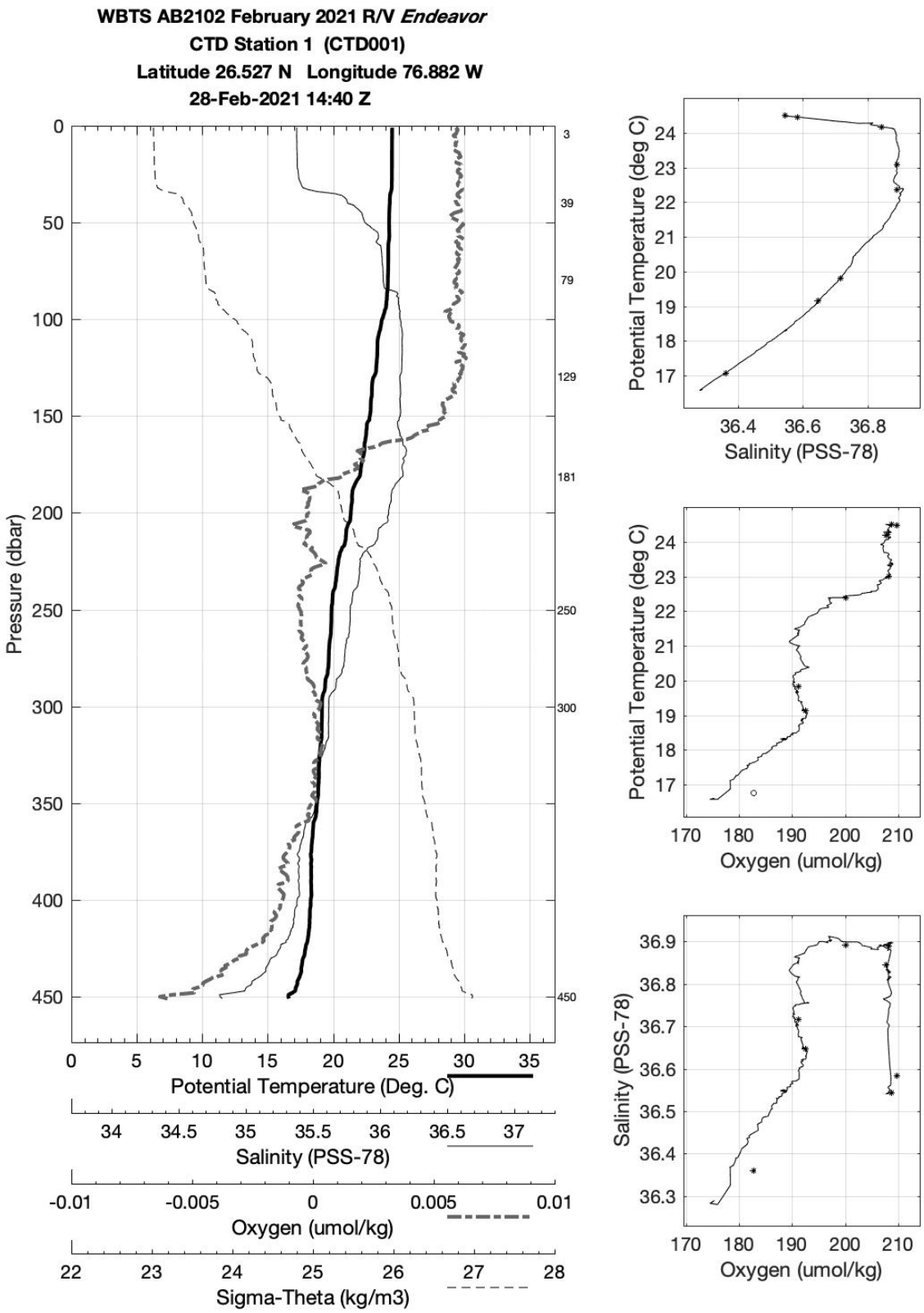
A Hydrographic - CTD Data

WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 1 (CTD001)
Latitude 26.527N Longitude 76.882W
28-Feb-2021 14:40Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.500	24.499	36.542	207.9	0.003	24.659
10	24.494	24.492	36.542	207.9	0.033	24.661
20	24.492	24.488	36.543	208.5	0.065	24.664
30	24.482	24.476	36.556	208.1	0.098	24.677
50	24.281	24.270	36.772	208.6	0.161	24.902
75	24.212	24.196	36.833	208.3	0.236	24.971
100	23.755	23.734	36.891	207.3	0.310	25.153
125	23.317	23.291	36.896	208.7	0.379	25.287
150	22.836	22.805	36.891	206.8	0.446	25.425
200	21.389	21.350	36.852	191.3	0.567	25.808
250	19.923	19.876	36.722	190.3	0.672	26.109
300	19.203	19.149	36.650	192.5	0.770	26.244
400	18.351	18.280	36.542	188.3	0.953	26.384

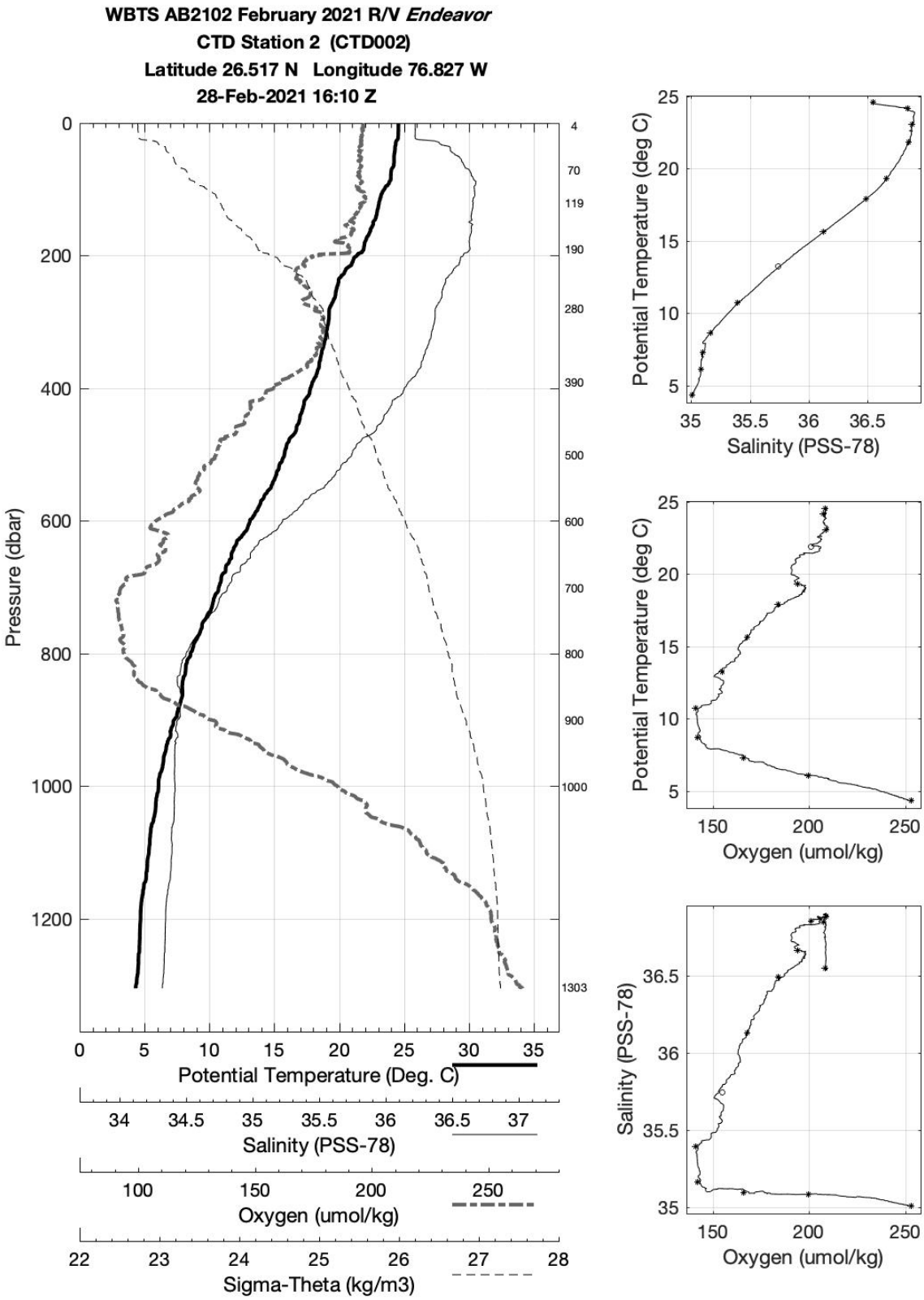
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
450	1	17.146	17.070	36.361	182.8
301	2	19.215	19.161	36.647	192.6
250	3	19.862	19.816	36.717	191.2
181	4	22.384	22.347	36.891	200.2
130	5	23.102	23.076	36.890	208.3
80	6	24.175	24.158	36.844	207.7
40	7	24.453	24.445	36.584	209.7
4	8	24.509	24.508	36.544	208.7


WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 1 (CTD001)
Latitude 26.527 N Longitude 76.882 W
28-Feb-2021 14:40 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)

WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 2 (CTD002)
Latitude 26.517N Longitude 76.827W
28-Feb-2021 16:10Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.562	24.562	36.538	209.0	0.003	24.638
10	24.562	24.560	36.539	208.9	0.033	24.639
20	24.539	24.534	36.538	208.6	0.066	24.646
30	24.364	24.358	36.684	208.8	0.098	24.809
50	24.237	24.226	36.798	208.3	0.160	24.936
75	24.004	23.988	36.874	207.8	0.234	25.065
100	23.495	23.474	36.897	207.6	0.306	25.234
125	23.043	23.017	36.888	208.7	0.374	25.361
150	22.632	22.602	36.866	206.7	0.439	25.465
200	21.387	21.347	36.828	196.1	0.561	25.790
250	19.838	19.791	36.706	194.3	0.667	26.119
300	19.224	19.169	36.655	197.9	0.763	26.243
400	17.839	17.770	36.472	184.6	0.944	26.457
500	15.852	15.772	36.155	168.7	1.105	26.688
600	13.205	13.119	35.736	152.1	1.246	26.939
700	10.807	10.720	35.403	142.6	1.364	27.140
800	8.632	8.544	35.153	143.3	1.464	27.310
900	7.378	7.286	35.104	167.2	1.550	27.460
1000	6.164	6.071	35.084	202.1	1.619	27.610
1100	5.432	5.335	35.067	226.6	1.677	27.689
1200	4.795	4.694	35.029	244.5	1.729	27.734
1300	4.442	4.335	35.009	252.2	1.778	27.757

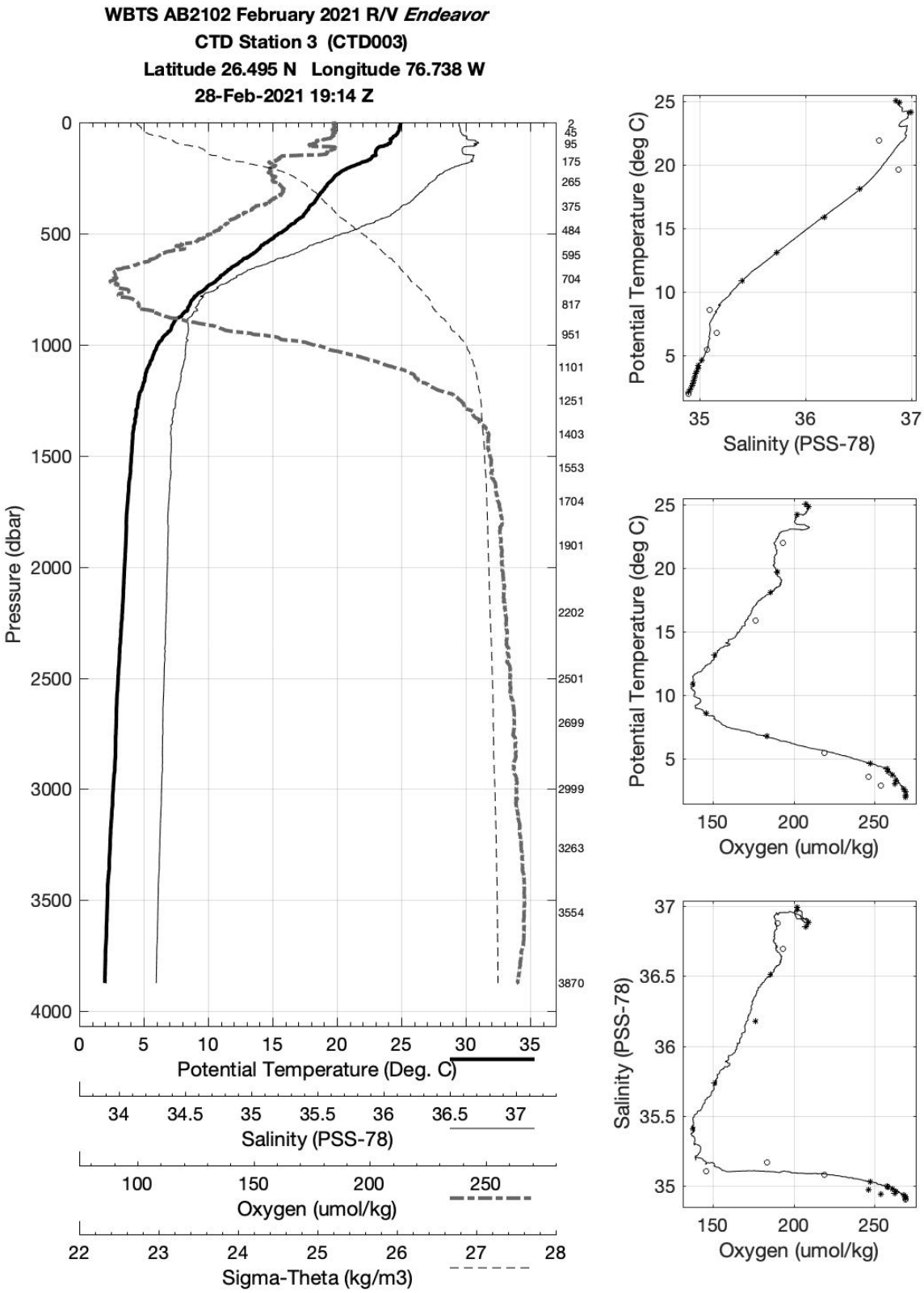
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
1304	1	4.429	4.322	35.010	253.4
1001	2	6.199	6.106	35.081	199.6
900	3	7.359	7.268	35.095	165.9
801	4	8.753	8.664	35.165	141.9
701	5	10.785	10.698	35.394	141.0
600	6	13.343	13.257	35.744	155.0
501	7	15.701	15.622	36.128	167.6
390	8	18.007	17.939	36.493	184.1
280	9	19.395	19.344	36.668	193.9
190	10	21.868	21.830	36.857	200.9
120	11	23.078	23.053	36.884	209.0
70	12	24.182	24.167	36.848	207.3
4	13	24.583	24.582	36.548	208.3


WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 2 (CTD002)
Latitude 26.517 N Longitude 76.827 W
28-Feb-2021 16:10 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)

WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 3 (CTD003)
Latitude 26.495N Longitude 76.738W
28-Feb-2021 19:14Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.955	24.955	36.863	208.7	0.003	24.763
10	24.944	24.941	36.862	208.7	0.032	24.767
20	24.876	24.872	36.866	209.3	0.063	24.791
30	24.851	24.845	36.871	208.7	0.095	24.804
50	24.707	24.697	36.880	209.1	0.158	24.856
75	24.178	24.162	36.914	206.5	0.233	25.043
100	23.956	23.934	36.979	200.8	0.306	25.160
125	23.068	23.042	36.883	208.0	0.374	25.350
150	22.908	22.878	36.957	193.7	0.440	25.454
200	21.101	21.062	36.834	189.2	0.561	25.874
250	19.796	19.749	36.716	189.0	0.664	26.138
300	19.076	19.022	36.639	192.5	0.759	26.269
400	17.711	17.642	36.452	180.8	0.937	26.473
500	15.575	15.496	36.103	170.1	1.097	26.712
600	13.340	13.254	35.758	152.2	1.236	26.928
700	10.973	10.884	35.410	138.8	1.356	27.116
800	8.842	8.753	35.182	144.4	1.458	27.300
900	7.441	7.350	35.101	163.9	1.545	27.449
1000	6.207	6.114	35.089	201.8	1.616	27.609
1100	5.468	5.371	35.070	227.7	1.674	27.687
1200	4.968	4.865	35.041	241.8	1.727	27.724
1300	4.526	4.418	35.007	253.5	1.777	27.747
1400	4.273	4.159	34.988	258.7	1.825	27.760
1500	4.174	4.052	34.990	259.1	1.873	27.773
1750	3.843	3.702	34.974	262.5	1.990	27.796
2000	3.680	3.517	34.968	263.2	2.107	27.810
2500	3.222	3.018	34.947	265.6	2.338	27.841
3000	2.890	2.642	34.930	267.7	2.566	27.862
3500	2.477	2.185	34.908	270.3	2.785	27.883

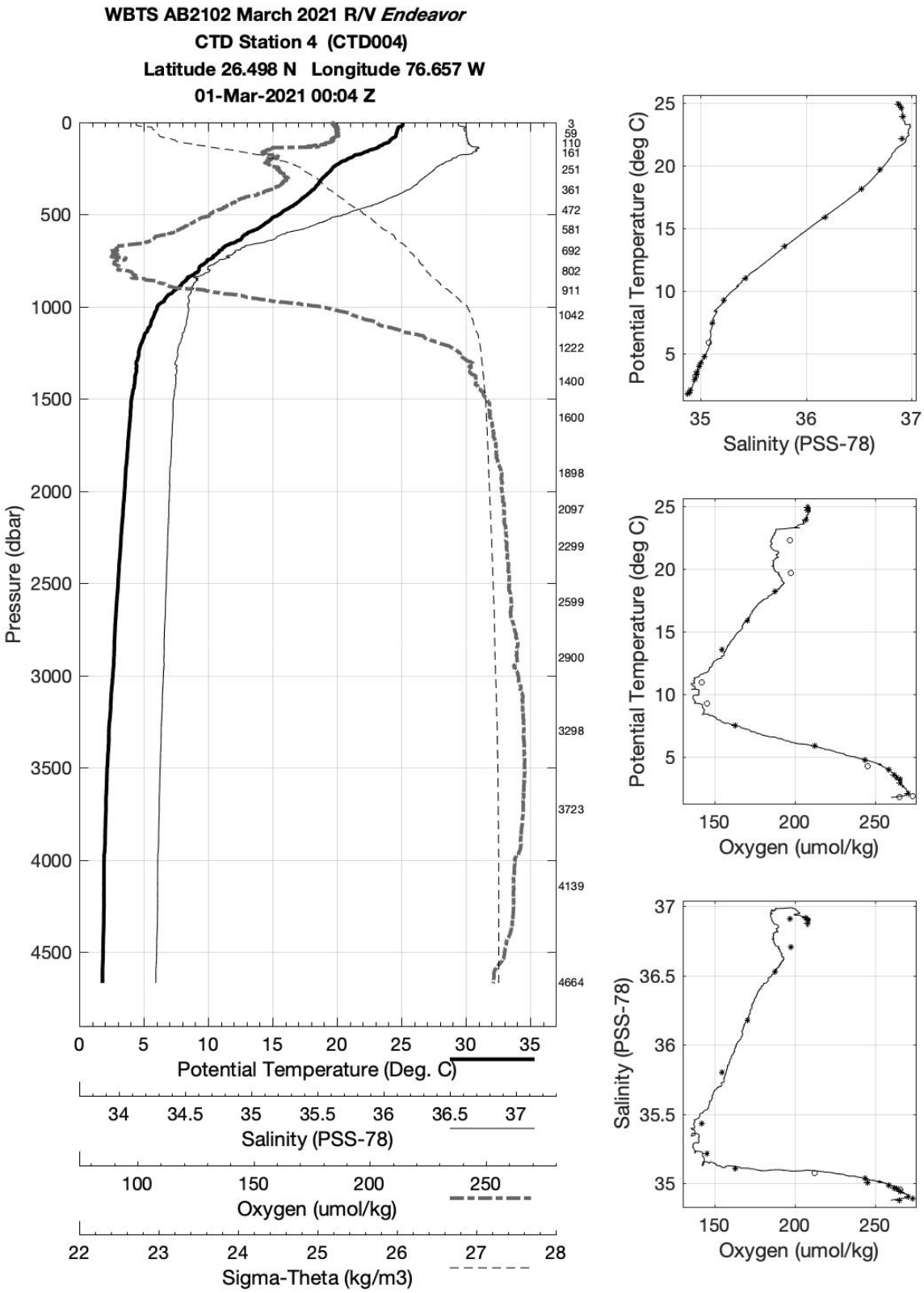
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
3870	1	2.320	1.991	34.900	269.0
3554	2	2.432	2.136	34.904	269.2
3264	3	2.658	2.388	34.920	269.4
2999	4	2.896	2.647	34.929	268.0
2699	5	3.093	2.872	34.938	253.9
2502	6	3.228	3.023	34.947	262.8
2203	7	3.493	3.313	34.959	263.0
1902	8	3.754	3.600	34.968	246.4
1705	9	3.878	3.740	34.976	261.0
1553	10	4.121	3.995	34.990	258.1
1403	11	4.314	4.200	34.992	257.7
1251	12	4.750	4.645	35.024	247.3
1102	13	5.559	5.461	35.077	219.1
952	14	6.860	6.766	35.166	183.6
817	15	8.662	8.572	35.100	146.3
704	16	10.958	10.869	35.406	138.1
595	17	13.190	13.106	35.732	151.3
485	18	15.970	15.892	36.177	176.6
376	19	18.114	18.048	36.515	186.0
265	20	19.659	19.610	36.881	190.3
176	21	21.957	21.922	36.698	193.2
95	22	24.146	24.126	36.994	202.4
45	23	24.859	24.849	36.883	209.5
2	24	24.998	24.998	36.854	207.4


WBTS AB2102 February 2021 R/V *Endeavor*
CTD Station 3 (CTD003)
Latitude 26.495 N Longitude 76.738 W
28-Feb-2021 19:14 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 4 (CTD004)
Latitude 26.498N Longitude 76.657W
01-Mar-2021 00:04Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.105	25.104	36.854	207.5	0.003	24.711
10	25.115	25.113	36.854	208.0	0.032	24.708
20	25.038	25.034	36.869	208.4	0.065	24.744
30	24.773	24.766	36.899	209.3	0.096	24.849
50	24.670	24.659	36.902	209.3	0.158	24.884
75	24.583	24.567	36.908	209.1	0.235	24.916
100	24.145	24.124	36.912	208.1	0.309	25.052
125	23.472	23.446	36.937	201.7	0.381	25.273
150	22.599	22.569	36.965	186.3	0.446	25.550
200	20.832	20.794	36.813	187.7	0.562	25.931
250	19.688	19.642	36.704	190.0	0.663	26.157
300	18.996	18.941	36.630	192.9	0.758	26.283
400	17.629	17.560	36.438	180.5	0.935	26.483
500	15.555	15.476	36.105	167.6	1.094	26.718
600	13.149	13.064	35.729	155.2	1.233	26.945
700	10.944	10.856	35.396	135.2	1.353	27.110
800	9.406	9.314	35.234	137.7	1.458	27.251
900	7.814	7.719	35.127	157.9	1.548	27.415
1000	6.155	6.062	35.090	204.0	1.619	27.616
1100	5.629	5.530	35.076	223.1	1.678	27.672
1200	4.916	4.814	35.036	242.8	1.731	27.725
1300	4.553	4.445	35.007	252.8	1.782	27.744
1400	4.430	4.314	35.009	254.2	1.830	27.760
1500	4.187	4.065	34.995	258.1	1.878	27.775
1750	3.923	3.780	34.982	261.0	1.996	27.795
2000	3.683	3.520	34.969	262.9	2.113	27.810
2500	3.223	3.019	34.948	265.4	2.343	27.842
3000	2.860	2.612	34.929	268.3	2.568	27.863
3500	2.464	2.172	34.907	270.3	2.785	27.883
4000	2.271	1.929	34.892	267.3	3.000	27.891
4500	2.250	1.850	34.885	263.8	3.222	27.891

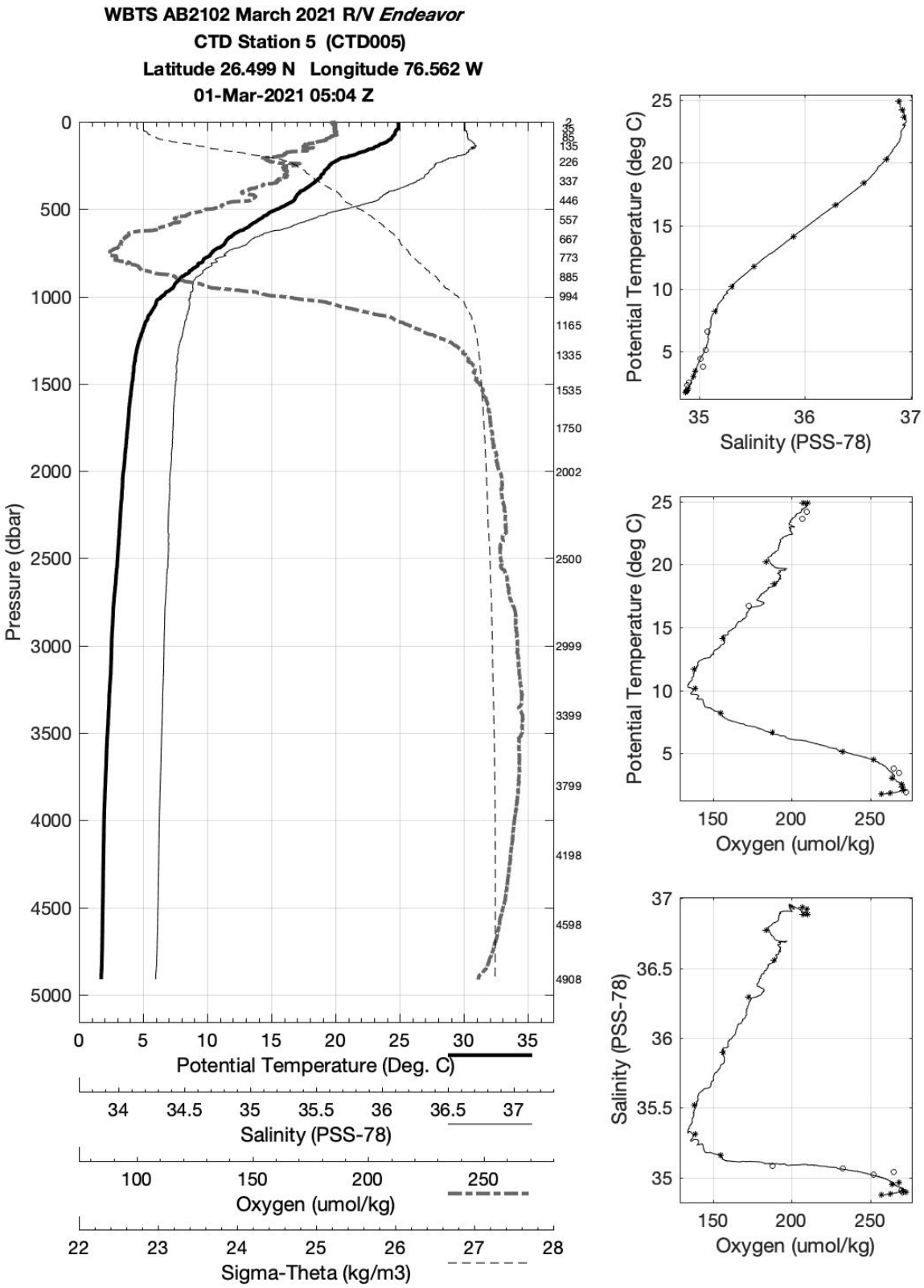
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4665	1	2.224	1.806	34.878	265.2
4139	2	2.285	1.927	34.888	273.3
3724	3	2.395	2.081	34.901	270.9
3299	4	2.585	7.416	−999.000	−999.0
2900	5	2.932	7.237	−999.000	−999.0
2599	6	3.134	2.922	34.943	265.8
2300	7	3.406	3.219	34.952	265.9
2097	8	3.572	3.401	34.961	263.7
1899	9	3.761	3.607	34.969	262.0
1601	10	4.107	3.976	34.988	258.5
1401	11	4.373	4.258	35.003	245.3
1222	12	4.897	4.794	35.035	244.1
1042	13	5.982	5.886	35.073	212.2
912	14	7.564	7.470	35.108	162.8
803	15	9.344	9.251	35.216	145.0
692	16	11.133	11.045	35.431	142.2
581	17	13.634	13.550	35.799	154.7
472	18	15.984	15.908	36.179	170.4
362	19	18.206	18.142	36.528	187.4
252	20	19.703	19.656	36.704	197.8
161	21	22.167	22.135	36.910	197.1
111	22	23.881	23.858	36.915	206.8
60	23	24.617	24.604	36.904	208.2
3	24	24.887	24.886	36.877	208.1


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 4 (CTD004)
Latitude 26.498 N Longitude 76.657 W
01-Mar-2021 00:04 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 5 (CTD005)
Latitude 26.499N Longitude 76.562W
01-Mar-2021 05:04Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.885	24.884	36.884	208.5	0.003	24.801
10	24.893	24.891	36.883	208.1	0.031	24.799
20	24.896	24.891	36.883	208.8	0.063	24.799
30	24.897	24.891	36.883	208.6	0.094	24.799
50	24.717	24.706	36.890	208.7	0.157	24.860
75	24.571	24.555	36.901	209.4	0.234	24.914
100	24.303	24.282	36.905	206.3	0.310	25.000
125	23.659	23.632	36.946	200.4	0.382	25.225
150	23.013	22.982	36.952	200.3	0.449	25.420
200	20.973	20.934	36.826	189.5	0.568	25.903
250	19.565	19.519	36.688	194.7	0.669	26.177
300	18.998	18.944	36.630	192.3	0.764	26.282
400	17.289	17.221	36.386	178.1	0.939	26.526
500	15.522	15.443	36.101	166.2	1.098	26.722
600	13.313	13.227	35.753	152.2	1.236	26.930
700	11.416	11.325	35.464	137.9	1.357	27.078
800	9.750	9.655	35.271	139.3	1.466	27.222
900	7.964	7.869	35.128	157.0	1.559	27.394
1000	6.588	6.492	35.098	191.1	1.636	27.566
1100	5.659	5.560	35.079	221.7	1.697	27.671
1200	5.069	4.965	35.050	237.8	1.750	27.719
1300	4.637	4.528	35.019	250.1	1.801	27.744
1400	4.399	4.284	35.005	255.1	1.850	27.760
1500	4.266	4.142	35.000	256.6	1.898	27.772
1750	3.939	3.796	34.984	260.4	2.017	27.794
2000	3.640	3.477	34.967	263.2	2.133	27.813
2500	3.217	3.013	34.952	263.7	2.362	27.846
3000	2.797	2.550	34.925	269.1	2.584	27.866
3500	2.526	2.233	34.910	270.8	2.803	27.881
4000	2.303	1.961	34.894	268.2	3.020	27.890
4500	2.255	1.856	34.885	264.5	3.242	27.891

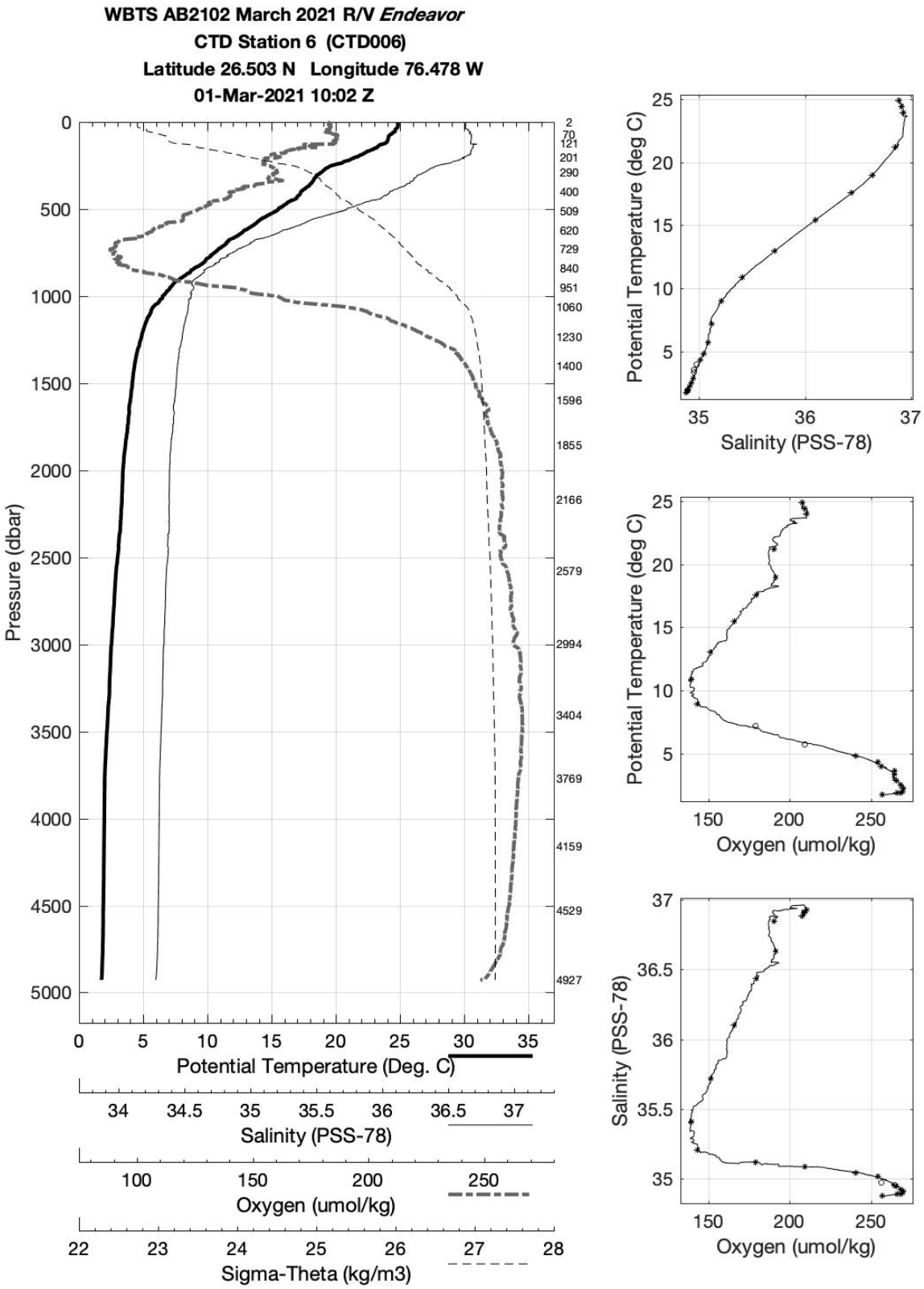
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4909	1	2.188	1.740	34.875	257.0
4599	2	2.246	1.835	34.883	262.7
4198	3	2.285	1.920	34.891	272.2
3800	4	2.380	2.058	34.901	270.7
3400	5	2.599	2.315	34.895	270.2
2999	6	2.795	2.549	34.906	269.8
2501	7	3.206	3.003	34.951	263.4
2003	8	3.600	3.438	34.964	267.9
1750	9	3.922	3.779	35.041	264.6
1535	10	4.223	6.602	−999.000	−999.0
1335	11	4.535	4.424	35.017	251.9
1165	12	5.214	5.112	35.062	232.2
995	13	6.687	6.591	35.082	187.7
886	14	8.287	8.192	35.155	154.9
774	15	10.207	10.113	35.311	138.6
667	16	11.804	11.716	35.518	138.0
557	17	14.225	14.142	35.896	156.5
446	18	16.717	16.643	36.295	172.9
337	19	18.438	18.379	36.561	189.0
226	20	20.286	20.243	36.770	184.0
136	21	23.623	23.594	36.936	206.7
86	22	24.222	24.204	36.921	209.5
35	23	24.857	24.849	36.887	207.5
2	24	24.856	24.856	36.887	210.3


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 5 (CTD005)
Latitude 26.499 N Longitude 76.562 W
01-Mar-2021 05:04 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 6 (CTD006)
Latitude 26.503N Longitude 76.478W
01-Mar-2021 10:02Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.822	24.822	36.891	207.8	0.003	24.825
10	24.828	24.826	36.890	208.8	0.031	24.824
20	24.829	24.825	36.890	208.8	0.062	24.824
30	24.813	24.807	36.889	208.7	0.094	24.829
50	24.614	24.603	36.907	208.2	0.155	24.904
75	24.215	24.199	36.928	210.4	0.231	25.042
100	24.072	24.050	36.926	210.2	0.304	25.085
125	23.716	23.690	36.922	210.4	0.376	25.190
150	23.077	23.046	36.932	198.2	0.444	25.386
200	21.684	21.644	36.883	192.2	0.567	25.749
250	19.731	19.685	36.710	188.7	0.674	26.151
300	18.722	18.669	36.598	190.1	0.768	26.328
400	17.350	17.282	36.397	177.4	0.941	26.519
500	15.606	15.527	36.117	166.2	1.099	26.715
600	13.505	13.419	35.782	153.6	1.239	26.913
700	11.550	11.459	35.489	140.1	1.362	27.072
800	9.913	9.818	35.287	138.9	1.471	27.207
900	7.975	7.880	35.131	157.8	1.565	27.395
1000	6.610	6.513	35.101	191.5	1.641	27.565
1100	5.649	5.550	35.079	221.4	1.703	27.672
1200	5.092	4.989	35.051	236.5	1.757	27.717
1300	4.710	4.601	35.027	247.6	1.808	27.742
1400	4.441	4.325	35.014	252.4	1.857	27.763
1500	4.274	4.151	35.006	255.4	1.905	27.775
1750	3.930	3.788	34.984	260.2	2.023	27.795
2000	3.581	3.419	34.962	263.9	2.139	27.815
2500	3.214	3.010	34.951	263.7	2.369	27.845
3000	2.781	2.535	34.926	267.8	2.590	27.868
3500	2.471	2.179	34.907	270.5	2.807	27.883
4000	2.319	1.976	34.895	268.5	3.021	27.890
4500	2.299	1.898	34.889	266.4	3.245	27.891

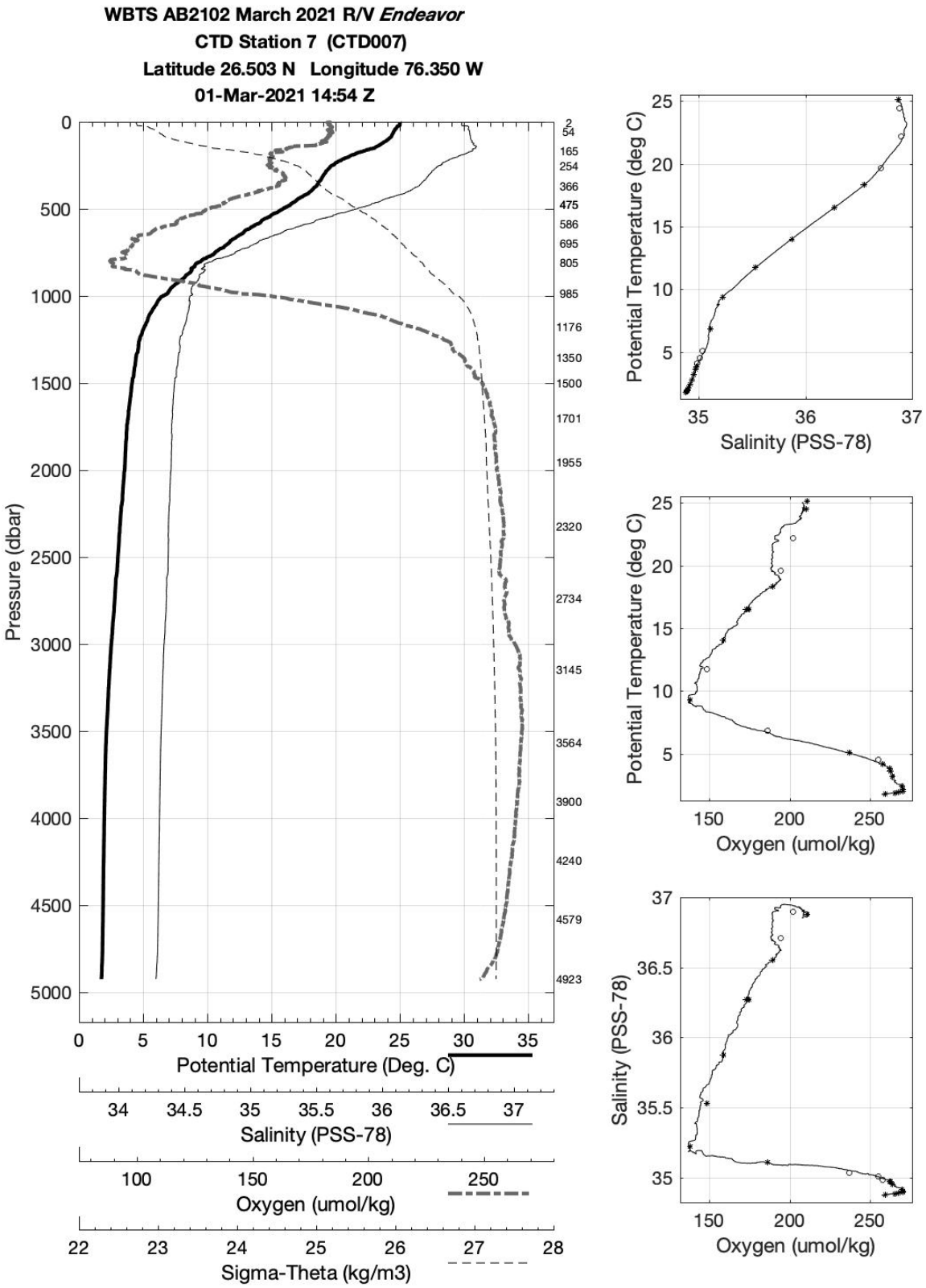
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4927	1	2.207	1.757	34.874	256.8
4530	2	2.296	1.891	34.888	266.2
4160	3	2.310	1.949	34.892	268.2
3770	4	2.329	2.012	34.896	269.7
3405	5	2.531	2.248	34.911	270.3
2994	6	2.773	2.528	34.924	268.6
2579	7	3.107	2.897	34.943	265.7
2166	8	3.532	3.356	34.952	264.4
1855	9	3.754	3.604	34.954	264.4
1596	10	4.120	3.990	34.974	256.5
1401	11	4.439	4.323	35.013	254.2
1231	12	4.925	4.820	35.042	240.6
1061	13	5.866	5.770	35.083	209.2
951	14	7.287	7.191	35.116	178.8
840	15	9.077	8.982	35.207	143.3
730	16	10.970	10.877	35.405	139.6
620	17	13.087	13.000	35.718	151.4
510	18	15.516	15.436	36.100	165.9
401	19	17.613	17.545	36.433	179.8
291	20	19.019	18.966	36.633	191.6
201	21	21.197	21.158	36.848	190.3
121	22	23.951	23.926	36.930	210.5
71	23	24.380	24.364	36.912	209.5
2	24	24.867	24.866	36.882	207.5


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 6 (CTD006)
Latitude 26.503 N Longitude 76.478 W
01-Mar-2021 10:02 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 7 (CTD007)
Latitude 26.503N Longitude 76.350W
01-Mar-2021 14:54Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.991	24.991	36.855	208.4	0.003	24.747
10	24.994	24.992	36.855	207.9	0.032	24.746
20	24.980	24.976	36.856	208.2	0.064	24.752
30	24.774	24.768	36.900	208.8	0.095	24.849
50	24.558	24.547	36.906	208.7	0.157	24.920
75	24.398	24.382	36.910	207.9	0.232	24.973
100	24.107	24.086	36.915	207.3	0.307	25.066
125	23.591	23.565	36.931	205.6	0.378	25.234
150	23.036	23.005	36.946	195.0	0.446	25.409
200	21.065	21.026	36.830	189.4	0.564	25.880
250	19.769	19.723	36.712	188.4	0.667	26.142
300	19.155	19.101	36.647	193.3	0.762	26.255
400	18.078	18.008	36.506	185.5	0.944	26.424
500	15.963	15.883	36.172	169.1	1.108	26.677
600	13.624	13.537	35.801	154.6	1.250	26.903
700	11.694	11.602	35.515	144.6	1.374	27.065
800	9.591	9.497	35.238	137.0	1.483	27.223
900	8.210	8.113	35.149	154.8	1.577	27.374
1000	6.607	6.510	35.092	189.3	1.655	27.558
1100	5.674	5.575	35.078	220.8	1.717	27.668
1200	5.068	4.965	35.046	239.1	1.771	27.716
1300	4.731	4.622	35.028	248.4	1.822	27.741
1400	4.493	4.377	35.013	253.0	1.872	27.756
1500	4.258	4.135	34.992	257.9	1.920	27.766
1750	3.877	3.735	34.975	262.3	2.040	27.793
2000	3.723	3.560	34.970	262.7	2.157	27.807
2500	3.235	3.031	34.952	263.9	2.389	27.844
3000	2.766	2.520	34.925	268.6	2.611	27.868
3500	2.431	2.141	34.906	270.8	2.826	27.885
4000	2.321	1.978	34.896	268.8	3.040	27.890
4500	2.285	1.885	34.888	265.6	3.263	27.891

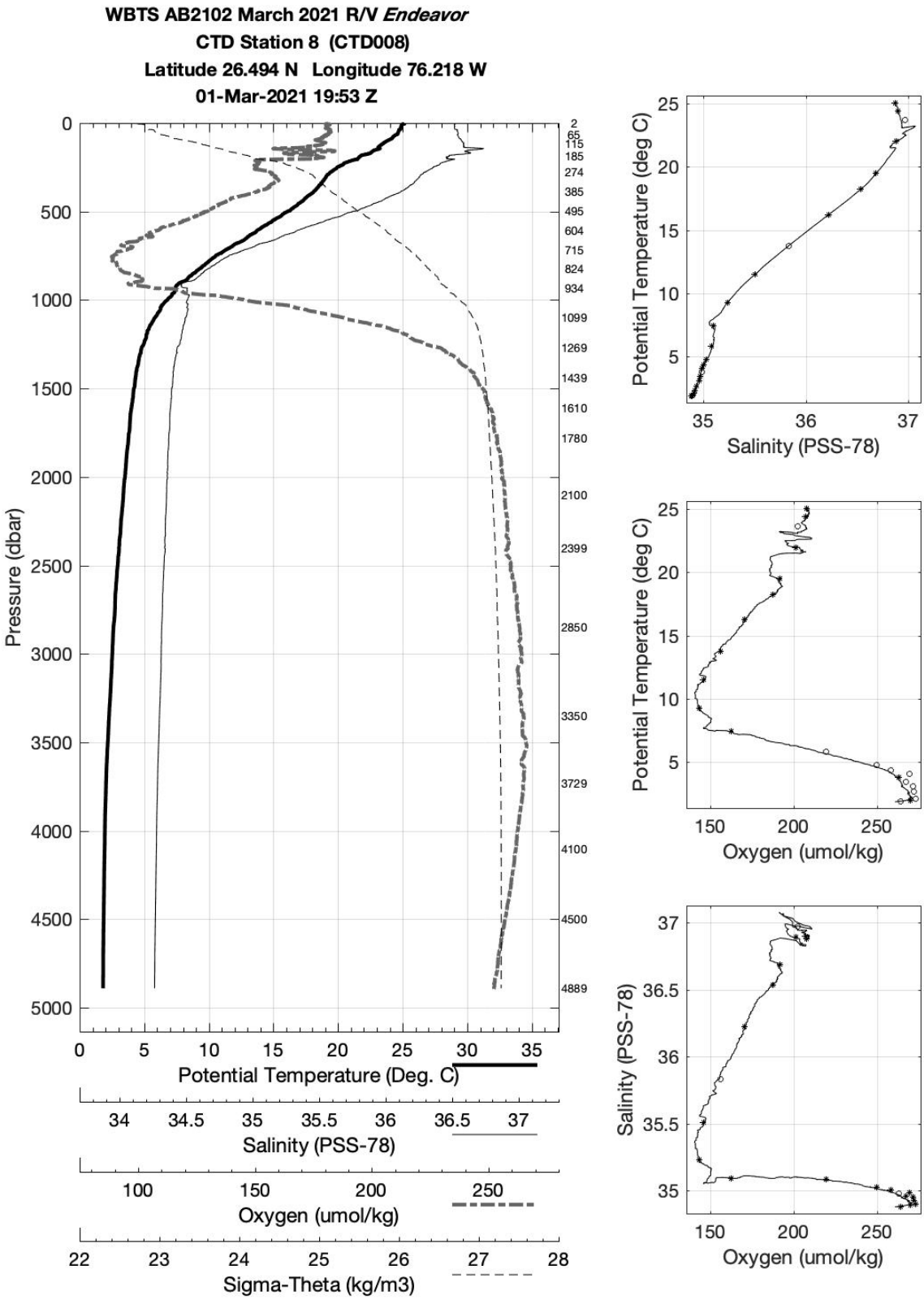
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4923	1	2.206	1.756	34.875	259.2
4580	2	2.279	1.869	34.884	265.6
4241	3	2.293	1.923	34.890	267.9
3901	4	2.338	2.006	34.894	270.5
3565	5	2.397	2.100	34.902	270.2
3145	6	2.653	2.395	34.917	269.6
2735	7	3.014	2.790	34.937	287.6
2321	8	3.396	3.206	34.953	263.9
1955	9	3.757	3.597	34.970	262.6
1702	10	3.946	3.808	34.973	262.4
1501	11	4.239	4.116	34.985	257.7
1351	12	4.627	4.514	35.006	255.1
1177	13	5.150	5.048	35.030	236.8
985	14	6.901	6.804	35.106	186.5
806	15	9.425	9.332	35.220	138.3
696	16	11.815	11.723	35.531	148.5
586	17	14.094	14.008	35.873	158.9
475	18	16.580	16.502	36.270	172.9
475	19	16.581	16.502	36.269	174.8
366	20	18.379	18.314	36.555	189.4
255	21	19.669	19.622	36.710	194.2
165	22	22.214	22.181	36.894	201.9
55	23	24.439	24.427	36.880	210.5
3	24	25.100	25.099	36.877	210.7


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 7 (CTD007)
Latitude 26.503 N Longitude 76.350 W
01-Mar-2021 14:54 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 8 (CTD008)
Latitude 26.494N Longitude 76.218W
01-Mar-2021 19:53Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.164	25.163	36.890	208.9	0.003	24.721
10	24.925	24.923	36.880	208.1	0.032	24.786
20	24.895	24.890	36.883	208.7	0.063	24.798
30	24.860	24.853	36.881	208.0	0.095	24.808
50	24.683	24.672	36.902	209.5	0.157	24.880
75	24.321	24.305	36.906	207.7	0.233	24.994
100	23.836	23.815	36.928	205.9	0.306	25.157
125	23.322	23.296	36.941	205.6	0.376	25.320
150	23.036	23.005	37.029	199.7	0.441	25.472
200	21.581	21.542	36.831	204.1	0.563	25.738
250	19.987	19.941	36.737	186.5	0.670	26.103
300	19.153	19.099	36.649	192.3	0.766	26.257
400	17.977	17.908	36.492	184.5	0.947	26.438
500	16.154	16.073	36.202	170.6	1.111	26.656
600	13.976	13.887	35.854	156.1	1.257	26.871
700	11.813	11.720	35.537	147.6	1.384	27.060
800	9.795	9.700	35.282	142.6	1.493	27.224
900	7.949	7.854	35.074	148.2	1.588	27.354
1000	6.887	6.788	35.100	182.7	1.667	27.527
1100	5.916	5.815	35.087	213.7	1.732	27.645
1200	5.268	5.163	35.060	233.9	1.788	27.703
1300	4.846	4.735	35.031	245.9	1.841	27.731
1400	4.527	4.411	35.007	253.5	1.892	27.748
1500	4.323	4.199	34.995	257.2	1.941	27.761
1750	3.959	3.816	34.977	261.3	2.062	27.787
2000	3.672	3.510	34.966	263.5	2.180	27.809
2500	3.145	2.943	34.943	266.2	2.409	27.845
3000	2.774	2.528	34.924	269.5	2.629	27.867
3500	2.469	2.177	34.908	270.9	2.845	27.883
4000	2.294	1.952	34.894	268.3	3.059	27.890
4500	2.256	1.856	34.885	264.3	3.281	27.891

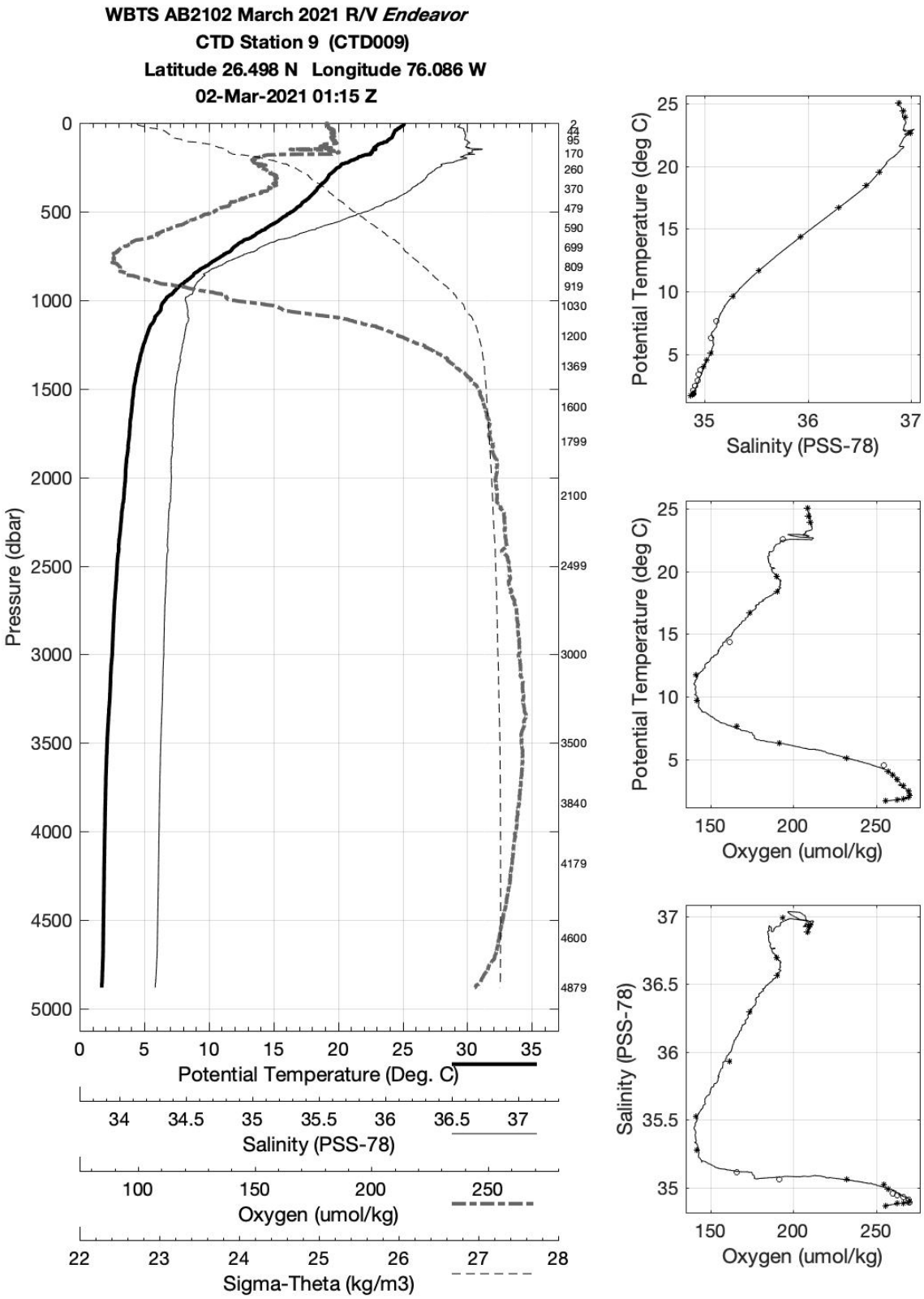
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4889	1	2.265	1.817	34.882	264.1
4500	2	2.256	1.857	34.887	469.9
4101	3	2.287	1.933	34.894	270.1
3729	4	2.357	2.044	34.900	273.3
3350	5	2.562	2.284	34.915	279.4
2850	6	2.850	2.618	34.929	272.2
2399	7	3.264	3.070	34.952	271.6
2101	8	3.562	3.391	34.962	267.3
1781	9	3.913	3.768	34.979	262.9
1611	10	4.135	4.003	34.986	269.5
1440	11	4.436	4.317	35.003	258.2
1270	12	4.837	4.729	35.029	249.9
1100	13	5.860	5.759	35.083	219.6
935	14	7.490	7.395	35.092	162.9
825	15	9.328	9.233	35.232	143.9
716	16	11.581	11.487	35.506	146.3
605	17	13.802	13.713	35.834	156.2
495	18	16.276	16.196	36.222	170.8
385	19	18.275	18.208	36.537	187.5
275	20	19.528	19.478	36.684	191.9
185	21	22.042	22.005	36.887	201.4
115	22	23.785	23.761	36.972	202.4
65	23	24.456	24.442	36.900	207.4
2	24	25.052	25.051	36.875	207.9


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 8 (CTD008)
Latitude 26.494 N Longitude 76.218 W
01-Mar-2021 19:53 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 9 (CTD009)
Latitude 26.498N Longitude 76.086W
02-Mar-2021 01:15Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.102	25.102	36.883	208.2	0.003	24.734
10	25.090	25.088	36.882	208.6	0.032	24.737
20	24.882	24.878	36.869	208.6	0.064	24.792
30	24.715	24.708	36.897	209.4	0.095	24.865
50	24.381	24.370	36.915	209.9	0.156	24.981
75	24.232	24.216	36.919	210.2	0.230	25.030
100	23.843	23.822	36.932	210.8	0.302	25.158
125	23.066	23.040	36.928	207.5	0.371	25.385
150	22.911	22.880	37.019	197.3	0.436	25.501
200	21.522	21.483	36.926	185.6	0.557	25.827
250	20.101	20.055	36.747	187.0	0.663	26.080
300	19.322	19.267	36.665	192.2	0.761	26.225
400	18.120	18.050	36.513	186.2	0.943	26.419
500	16.548	16.466	36.266	172.6	1.111	26.613
600	14.456	14.366	35.930	158.1	1.260	26.828
700	12.047	11.954	35.566	143.7	1.390	27.038
800	10.090	9.993	35.313	141.8	1.503	27.198
900	8.210	8.113	35.146	154.2	1.599	27.371
1000	6.701	6.604	35.066	178.0	1.677	27.525
1100	5.940	5.839	35.089	212.0	1.743	27.644
1200	5.302	5.196	35.061	230.7	1.800	27.700
1300	4.868	4.757	35.038	243.2	1.852	27.734
1400	4.576	4.458	35.019	250.5	1.903	27.752
1500	4.325	4.201	35.001	256.1	1.952	27.766
1750	4.003	3.860	34.986	259.8	2.073	27.790
2000	3.711	3.548	34.975	261.7	2.191	27.812
2500	3.105	2.903	34.943	265.9	2.418	27.848
3000	2.774	2.528	34.925	269.0	2.636	27.868
3500	2.424	2.134	34.905	269.9	2.851	27.885
4000	2.292	1.949	34.893	268.0	3.064	27.890
4500	2.247	1.848	34.884	264.0	3.285	27.891

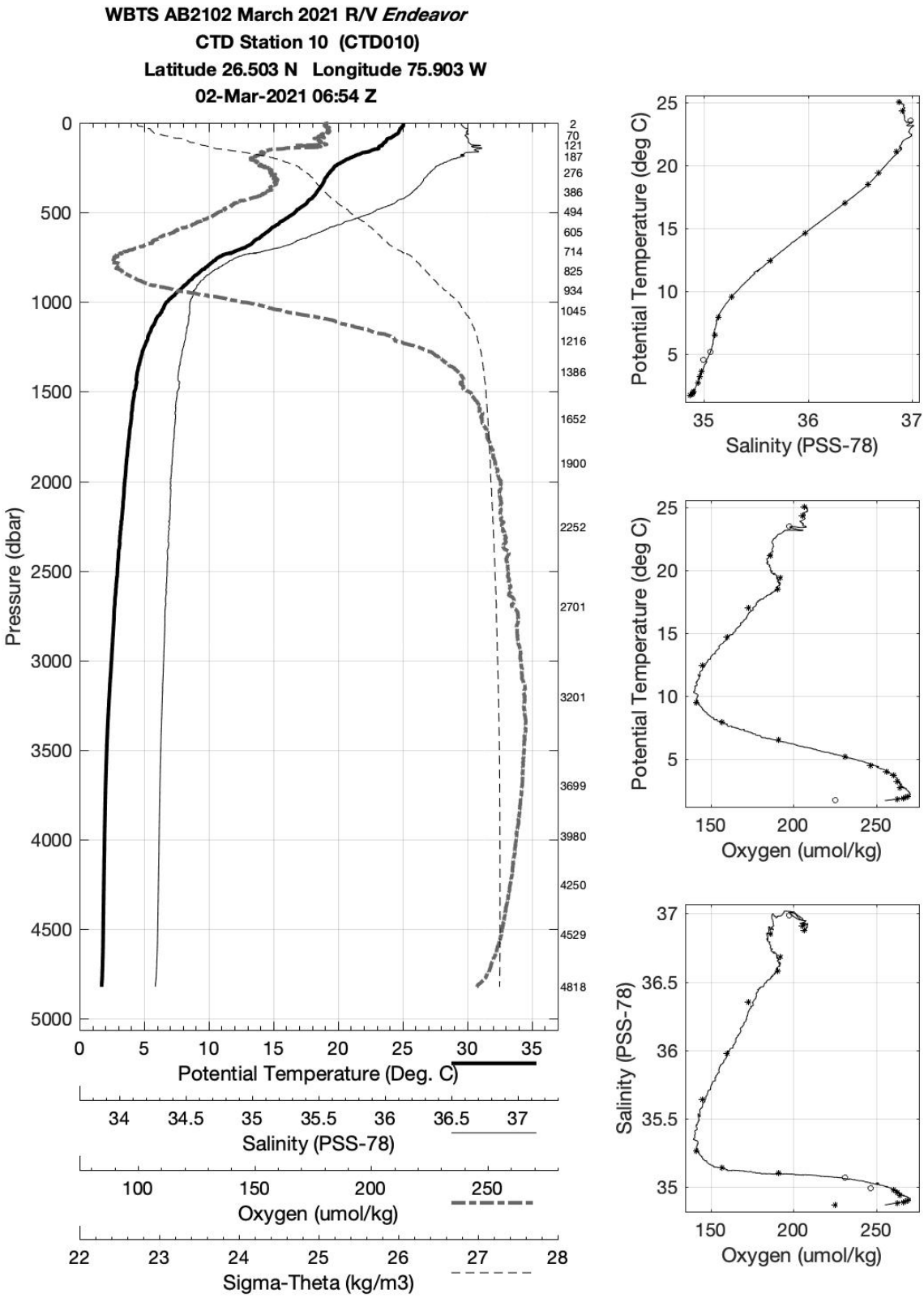
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4880	1	2.161	1.718	34.869	255.8
4601	2	2.242	1.831	34.883	263.1
4180	3	2.273	1.911	34.889	266.6
3840	4	2.319	1.993	34.895	270.1
3500	5	2.430	2.139	34.894	270.3
3000	6	2.771	2.525	34.911	269.6
2500	7	3.116	2.914	34.931	266.4
2100	8	3.576	3.405	34.947	263.0
1799	9	3.934	3.787	34.961	259.9
1601	10	4.190	4.058	34.991	257.5
1369	11	4.651	4.536	35.023	254.5
1200	12	5.247	5.142	35.060	232.5
1031	13	6.421	6.323	35.064	191.6
920	14	7.732	7.637	35.112	166.0
810	15	9.759	9.663	35.276	141.7
699	16	11.790	11.697	35.528	140.9
590	17	14.484	14.395	35.929	161.4
480	18	16.762	16.682	36.294	173.7
370	19	18.488	18.422	36.566	190.5
261	20	19.584	19.536	36.691	189.7
171	21	22.645	22.610	36.989	193.4
95	22	23.897	23.877	36.937	210.1
44	23	24.386	24.377	36.919	209.3
3	24	25.016	25.015	36.881	208.7


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 9 (CTD009)
Latitude 26.498 N Longitude 76.086 W
02-Mar-2021 01:15 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 10 (CTD010)
Latitude 26.503N Longitude 75.903W
02-Mar-2021 06:54Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.061	25.061	36.880	207.7	0.003	24.744
10	25.076	25.074	36.882	207.8	0.032	24.742
20	24.979	24.975	36.895	207.8	0.064	24.782
30	24.904	24.898	36.907	208.4	0.095	24.815
50	24.735	24.724	36.919	208.6	0.157	24.877
75	24.283	24.267	36.913	205.1	0.233	25.010
100	23.764	23.743	36.929	205.8	0.305	25.179
125	23.499	23.473	36.998	201.1	0.375	25.311
150	22.736	22.706	36.969	189.9	0.440	25.513
200	20.863	20.824	36.838	184.1	0.556	25.942
250	19.716	19.670	36.709	188.9	0.657	26.153
300	19.189	19.135	36.652	190.4	0.753	26.250
400	18.323	18.252	36.544	187.8	0.936	26.392
500	16.746	16.663	36.297	173.4	1.106	26.591
600	14.771	14.680	35.978	160.7	1.258	26.797
700	12.737	12.640	35.664	147.3	1.394	26.980
800	10.019	9.923	35.303	141.9	1.507	27.202
900	8.368	8.271	35.153	151.8	1.603	27.353
1000	6.818	6.720	35.095	180.9	1.683	27.533
1100	6.006	5.905	35.087	209.3	1.750	27.634
1200	5.393	5.286	35.067	229.0	1.808	27.694
1300	4.909	4.798	35.040	242.5	1.861	27.731
1400	4.572	4.455	35.019	250.2	1.912	27.752
1500	4.368	4.243	35.011	252.7	1.961	27.769
1750	3.986	3.842	34.991	258.7	2.081	27.796
2000	3.667	3.504	34.969	262.8	2.197	27.812
2500	3.138	2.936	34.945	265.2	2.424	27.848
3000	2.723	2.478	34.922	269.2	2.642	27.870
3500	2.397	2.107	34.903	270.3	2.854	27.886
4000	2.279	1.937	34.892	267.8	3.066	27.891
4500	2.237	1.838	34.883	263.3	3.287	27.891

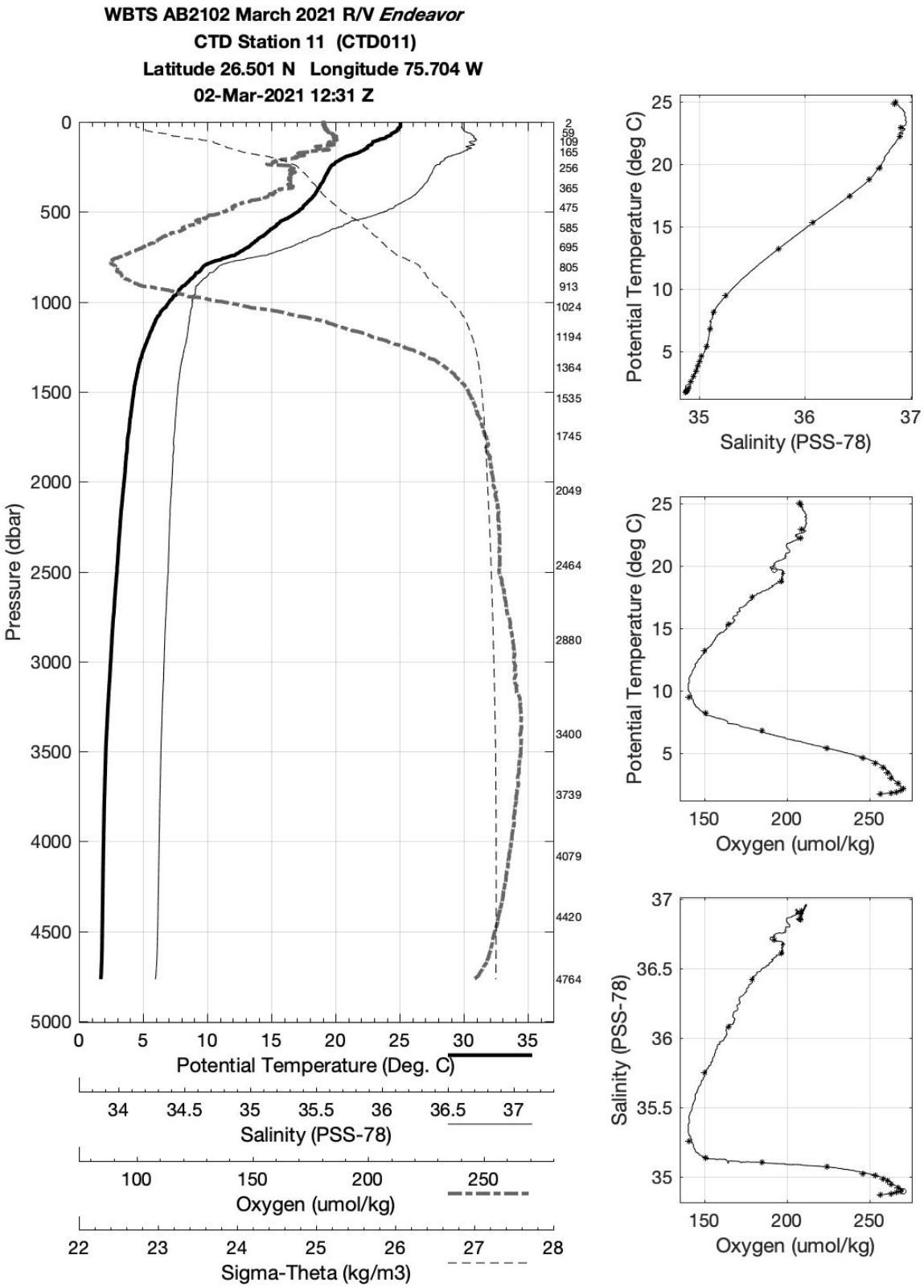
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4818	1	2.155	1.720	34.869	225.1
4529	2	2.234	1.831	34.883	262.7
4250	3	2.254	1.884	34.889	266.3
3981	4	2.282	1.942	34.893	267.7
3699	5	2.330	2.020	34.898	269.1
3202	6	2.557	7.277	−999.000	−999.0
2701	7	2.977	2.758	34.940	264.4
2252	8	3.412	3.229	34.959	262.9
1901	9	3.814	3.659	34.978	260.6
1653	10	4.143	6.692	−999.000	−999.0
1387	11	4.674	4.557	34.993	246.9
1216	12	5.296	5.189	35.065	231.4
1046	13	6.629	6.528	35.102	191.2
934	14	8.019	7.920	35.138	157.0
826	15	9.638	9.541	35.262	141.5
715	16	12.532	12.434	35.638	145.1
606	17	14.726	14.633	35.972	160.3
495	18	17.083	16.999	36.353	172.9
386	19	18.555	18.486	36.576	190.4
277	20	19.452	19.401	36.679	192.1
187	21	21.147	21.111	36.853	186.4
121	22	23.622	23.597	36.987	197.7
71	23	24.323	24.308	36.906	205.5
3	24	25.025	25.025	36.875	206.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 10 (CTD010)
Latitude 26.503 N Longitude 75.903 W
02-Mar-2021 06:54 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 11 (CTD011)
Latitude 26.501N Longitude 75.704W
02-Mar-2021 12:31Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.052	25.052	36.868	207.6	0.003	24.738
10	25.055	25.053	36.867	208.1	0.032	24.737
20	25.060	25.055	36.868	208.0	0.064	24.737
30	25.018	25.012	36.864	207.8	0.096	24.747
50	24.784	24.773	36.879	209.0	0.159	24.831
75	24.296	24.280	36.932	210.8	0.235	25.021
100	23.414	23.393	36.962	212.0	0.305	25.308
125	22.834	22.808	36.949	210.7	0.371	25.468
150	22.345	22.314	36.912	206.6	0.434	25.583
200	20.637	20.599	36.759	199.1	0.549	25.943
250	19.650	19.604	36.688	197.5	0.650	26.155
300	19.263	19.208	36.658	197.9	0.746	26.235
400	18.485	18.414	36.567	190.9	0.931	26.369
500	17.125	17.041	36.358	175.8	1.105	26.547
600	14.988	14.896	36.012	163.1	1.260	26.776
700	13.184	13.085	35.731	150.2	1.398	26.942
800	9.838	9.743	35.283	141.7	1.516	27.217
900	8.465	8.366	35.152	148.5	1.613	27.337
1000	7.145	7.045	35.109	175.8	1.696	27.499
1100	6.090	5.988	35.089	205.9	1.764	27.625
1200	5.516	5.408	35.072	224.4	1.824	27.684
1300	5.018	4.905	35.047	240.1	1.878	27.724
1400	4.643	4.525	35.024	249.0	1.929	27.749
1500	4.399	4.274	35.012	253.7	1.979	27.766
1750	3.968	3.825	34.988	259.3	2.099	27.795
2000	3.687	3.524	34.974	261.7	2.216	27.814
2500	3.175	2.972	34.950	263.5	2.442	27.848
3000	2.724	2.479	34.923	268.1	2.660	27.871
3500	2.384	2.094	34.903	270.3	2.872	27.886
4000	2.264	1.922	34.891	267.4	3.083	27.891
4500	2.218	1.819	34.881	262.0	3.303	27.891

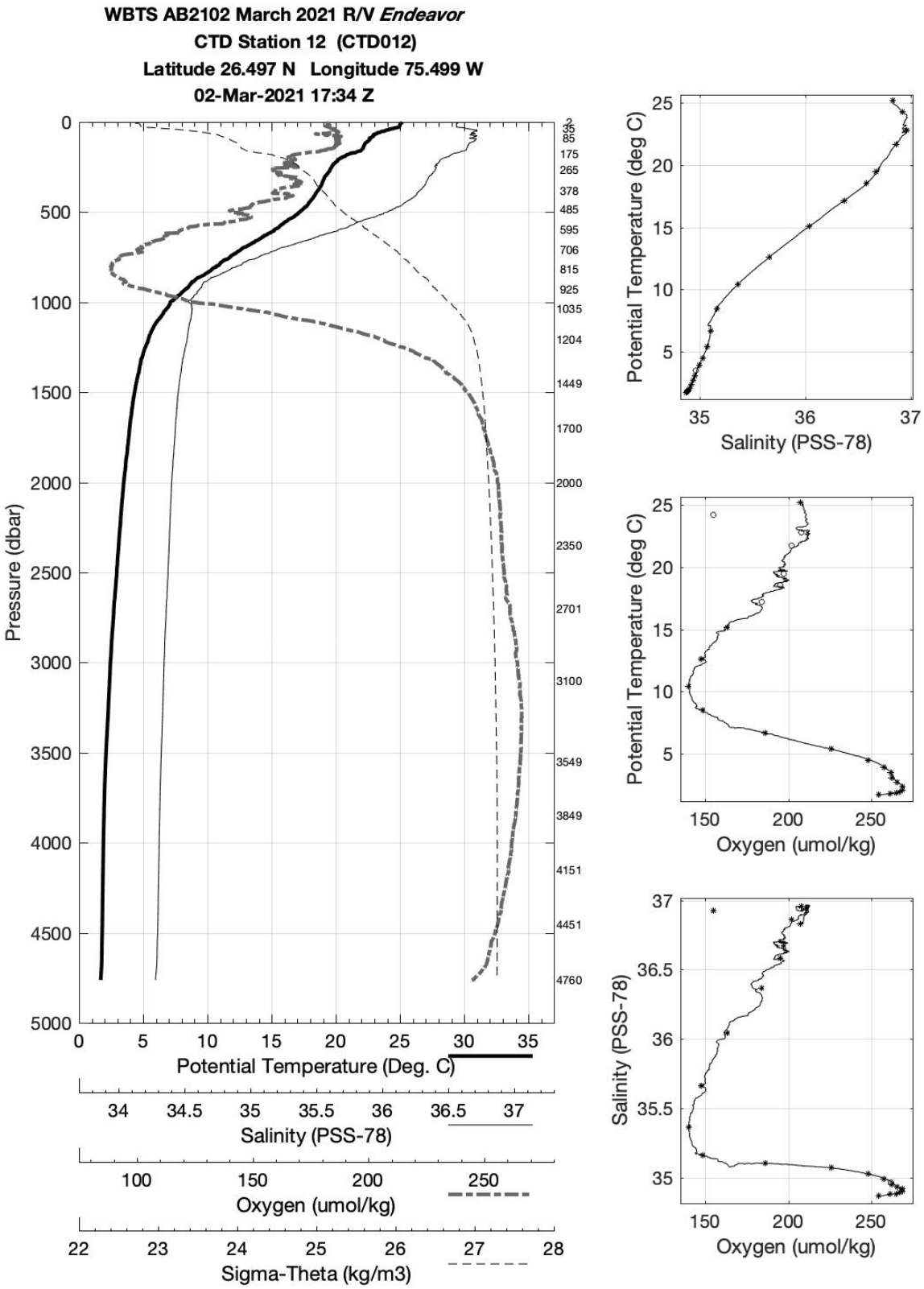
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4765	1	2.143	1.715	34.869	256.9
4420	2	2.225	1.836	34.881	263.2
4080	3	2.254	1.904	34.890	266.5
3740	4	2.319	2.005	34.898	268.8
3401	5	2.448	2.168	34.899	270.4
2880	6	2.802	2.568	34.924	267.3
2464	7	3.191	2.991	34.949	263.1
2050	8	3.620	3.453	34.971	261.0
1745	9	3.977	3.834	34.985	258.5
1536	10	4.336	4.209	35.008	253.8
1365	11	4.740	4.624	35.025	246.2
1195	12	5.524	5.417	35.073	224.3
1024	13	6.879	6.778	35.106	184.8
914	14	8.259	8.160	35.138	151.0
805	15	9.546	9.453	35.256	140.5
695	16	13.311	13.212	35.751	150.4
586	17	15.381	15.289	36.078	164.4
476	18	17.527	17.445	36.423	178.8
366	19	18.830	18.764	36.612	196.7
257	20	19.761	19.713	36.706	192.1
166	21	22.215	22.182	36.897	208.2
110	22	22.936	22.913	36.911	209.1
60	23	24.864	24.851	36.853	208.1
3	24	24.994	24.993	36.857	208.0


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 11 (CTD011)
Latitude 26.501 N Longitude 75.704 W
02-Mar-2021 12:31 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 12 (CTD012)
Latitude 26.497N Longitude 75.499W
02-Mar-2021 17:34Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.128	25.128	36.840	208.6	0.003	24.694
10	24.999	24.997	36.831	208.3	0.032	24.726
20	24.982	24.977	36.833	208.8	0.064	24.734
30	24.818	24.811	36.854	209.2	0.096	24.801
50	23.805	23.795	36.967	210.6	0.155	25.192
75	22.947	22.932	36.952	210.4	0.221	25.435
100	22.625	22.605	36.952	212.1	0.284	25.529
125	22.252	22.226	36.909	211.1	0.346	25.605
150	22.091	22.061	36.897	208.3	0.406	25.643
200	20.411	20.373	36.747	197.2	0.518	25.995
250	19.723	19.677	36.695	199.2	0.619	26.141
300	19.245	19.191	36.657	195.2	0.715	26.239
400	18.483	18.412	36.571	196.3	0.900	26.373
500	17.281	17.196	36.379	178.1	1.075	26.526
600	15.283	15.189	36.059	162.0	1.233	26.747
700	12.840	12.742	35.679	149.9	1.372	26.971
800	10.814	10.713	35.397	140.2	1.492	27.137
900	8.763	8.663	35.171	144.3	1.594	27.306
1000	7.226	7.125	35.082	166.3	1.681	27.466
1100	6.250	6.147	35.094	201.4	1.752	27.608
1200	5.542	5.434	35.073	224.5	1.812	27.682
1300	5.055	4.943	35.049	238.5	1.867	27.721
1400	4.737	4.618	35.030	246.7	1.919	27.743
1500	4.462	4.336	35.015	252.4	1.969	27.762
1750	4.021	3.877	34.993	258.6	2.090	27.793
2000	3.648	3.486	34.972	262.1	2.207	27.816
2500	3.150	2.947	34.948	264.2	2.432	27.849
3000	2.692	2.448	34.922	268.4	2.649	27.872
3500	2.401	2.111	34.904	269.5	2.861	27.886
4000	2.247	1.906	34.890	266.6	3.072	27.891
4500	2.206	1.808	34.880	261.4	3.292	27.891

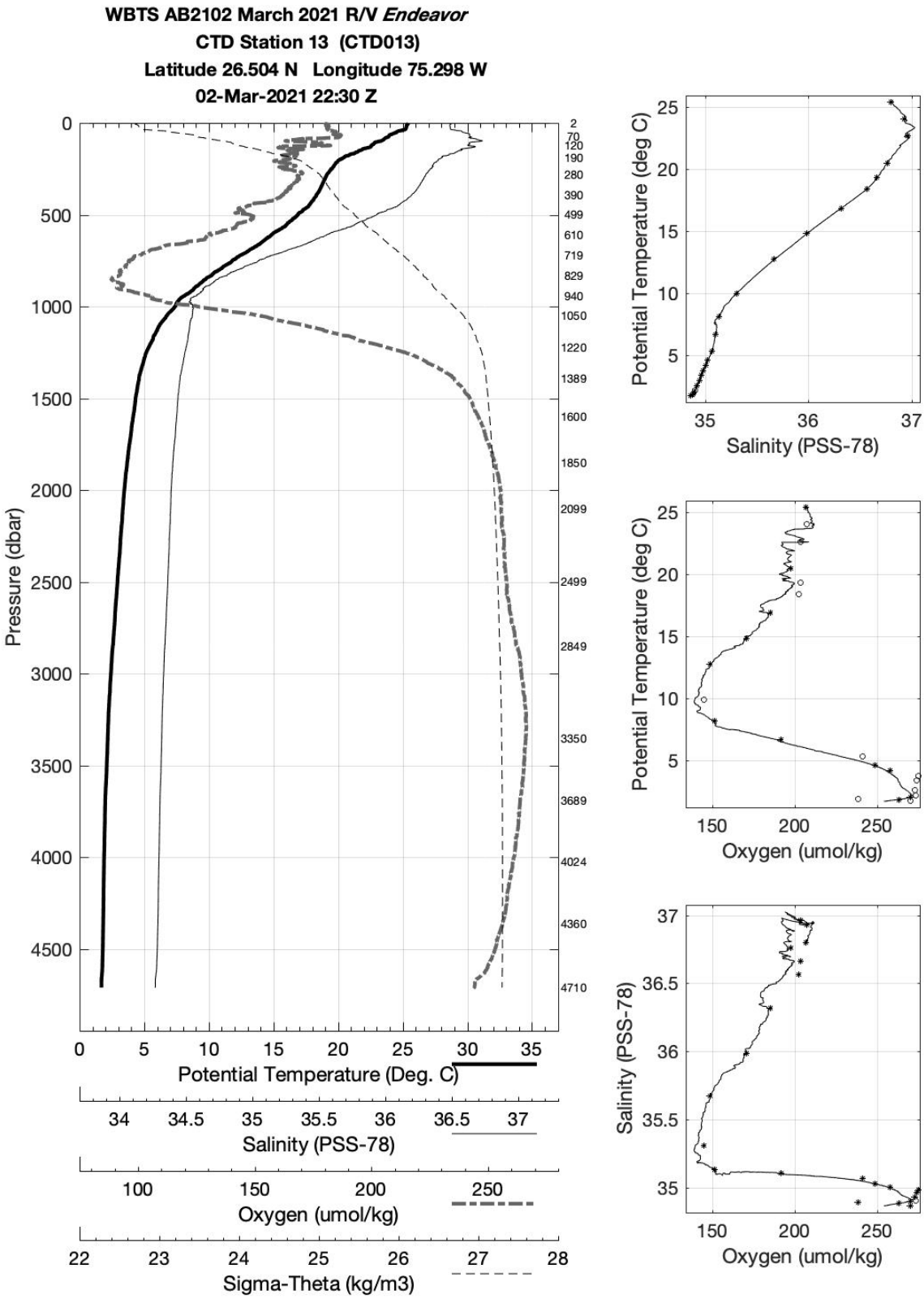
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4760	1	2.129	1.702	34.868	254.4
4452	2	2.209	1.816	34.881	261.5
4151	3	2.230	1.872	34.884	265.1
3850	4	2.275	1.950	34.893	267.2
3549	5	2.372	2.077	34.900	268.9
3100	6	2.636	2.382	34.919	268.7
2702	7	2.925	2.707	34.934	265.6
2351	8	3.270	3.080	34.954	262.7
2000	9	3.643	3.481	34.965	261.8
1700	10	4.084	3.944	34.994	257.6
1449	11	4.608	4.485	35.025	248.3
1204	12	5.498	5.391	35.073	225.8
1036	13	6.785	6.683	35.102	186.4
926	14	8.559	8.457	35.163	148.7
815	15	10.531	10.430	35.362	139.8
706	16	12.699	12.601	35.661	147.5
595	17	15.179	15.086	36.041	163.2
485	18	17.217	17.135	36.367	183.9
379	19	18.589	18.521	36.583	194.9
266	20	19.488	19.439	36.674	197.0
175	21	21.703	21.668	36.861	202.1
86	22	22.822	22.805	36.960	207.9
35	23	24.255	24.248	36.924	154.9
2	24	25.181	25.180	36.827	207.3


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 12 (CTD012)
Latitude 26.497 N Longitude 75.499 W
02-Mar-2021 17:34 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 13 (CTD013)
Latitude 26.504N Longitude 75.298W
02-Mar-2021 22:30Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.409	25.409	36.820	207.5	0.003	24.591
10	25.327	25.325	36.810	207.6	0.033	24.610
20	25.288	25.284	36.812	208.0	0.067	24.624
30	25.263	25.256	36.813	207.3	0.100	24.634
50	24.554	24.543	36.894	210.0	0.163	24.913
75	23.930	23.914	36.950	211.4	0.236	25.144
100	23.219	23.198	37.011	195.9	0.304	25.402
125	22.577	22.551	36.945	203.9	0.368	25.539
150	21.692	21.662	36.876	195.0	0.428	25.739
200	20.161	20.123	36.733	193.9	0.536	26.051
250	19.517	19.472	36.681	192.7	0.635	26.184
300	19.064	19.010	36.639	198.6	0.729	26.272
400	18.353	18.282	36.551	192.8	0.911	26.390
500	16.977	16.893	36.328	182.7	1.083	26.560
600	15.088	14.995	36.021	171.8	1.240	26.761
700	13.086	12.987	35.714	151.1	1.379	26.949
800	10.889	10.787	35.407	142.5	1.500	27.131
900	8.990	8.888	35.184	140.9	1.604	27.280
1000	7.512	7.409	35.114	166.4	1.693	27.451
1100	6.310	6.206	35.093	199.5	1.764	27.600
1200	5.615	5.507	35.075	221.3	1.826	27.674
1300	5.064	4.951	35.050	238.8	1.880	27.721
1400	4.710	4.591	35.028	247.7	1.932	27.745
1500	4.459	4.333	35.015	252.6	1.982	27.762
1750	4.002	3.859	34.990	258.6	2.104	27.793
2000	3.625	3.463	34.970	262.5	2.220	27.817
2500	3.136	2.934	34.947	264.3	2.445	27.849
3000	2.666	2.423	34.920	269.0	2.662	27.873
3500	2.392	2.102	34.904	269.8	2.871	27.886
4000	2.240	1.899	34.889	266.6	3.082	27.891
4500	2.193	1.796	34.878	260.7	3.300	27.890

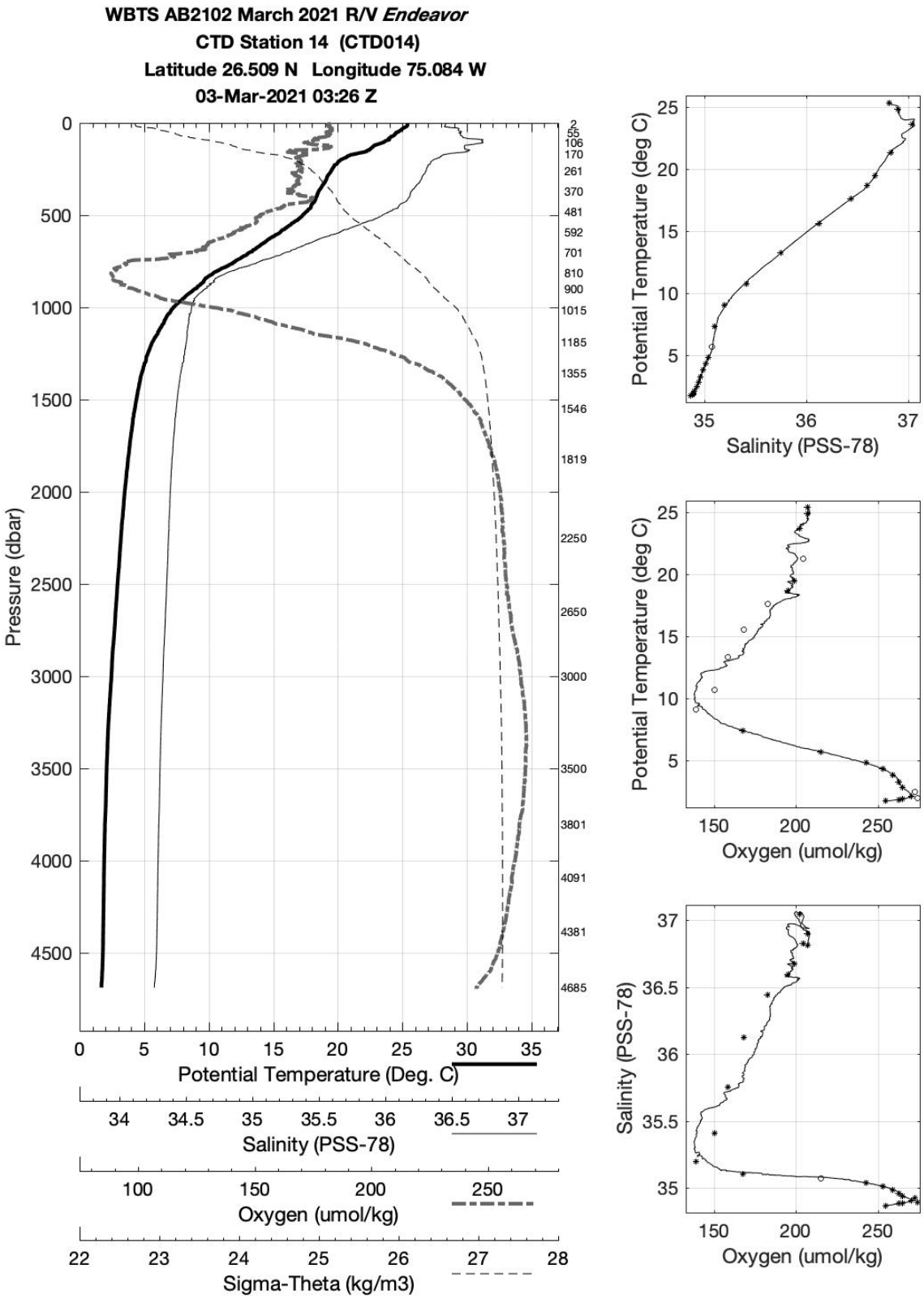
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4711	1	2.114	1.694	34.866	270.0
4360	2	2.206	1.824	34.882	263.0
4025	3	2.234	1.890	34.888	238.3
3689	4	2.291	1.983	34.896	269.9
3350	5	2.451	2.176	34.902	273.3
2850	6	2.778	2.548	34.926	272.9
2499	7	3.119	2.917	34.946	277.9
2100	8	3.550	3.380	34.965	273.6
1850	9	3.854	3.703	34.981	275.0
1601	10	4.286	4.153	35.004	257.7
1390	11	4.735	4.617	35.029	248.4
1220	12	5.438	5.329	35.067	241.0
1050	13	6.752	6.649	35.106	191.6
941	14	8.210	8.109	35.132	151.7
829	15	10.057	9.957	35.307	145.2
720	16	12.810	12.710	35.671	148.9
610	17	14.880	14.787	35.985	170.7
500	18	16.914	16.830	36.315	185.1
391	19	18.448	18.378	36.564	202.6
280	20	19.324	19.273	36.662	203.3
191	21	20.485	20.448	36.762	197.5
120	22	22.674	22.650	36.960	203.8
71	23	24.049	24.034	36.927	207.0
2	24	25.371	25.371	36.797	206.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 13 (CTD013)
Latitude 26.504 N Longitude 75.298 W
02-Mar-2021 22:30 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 14 (CTD014)
Latitude 26.509N Longitude 75.084W
03-Mar-2021 03:26Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.395	25.395	36.812	207.3	0.003	24.590
10	25.396	25.394	36.811	206.8	0.033	24.590
20	25.305	25.301	36.806	207.8	0.067	24.614
30	25.047	25.040	36.899	208.1	0.099	24.765
50	24.625	24.614	36.910	207.5	0.162	24.903
75	24.124	24.108	36.927	206.4	0.237	25.069
100	23.685	23.664	37.058	201.5	0.307	25.300
125	22.817	22.791	36.939	207.5	0.373	25.466
150	22.308	22.277	36.965	195.1	0.435	25.633
200	20.270	20.232	36.732	198.1	0.546	26.021
250	19.608	19.562	36.683	198.7	0.645	26.162
300	19.199	19.144	36.653	198.3	0.741	26.248
400	18.413	18.342	36.569	201.5	0.924	26.389
500	17.364	17.279	36.390	185.3	1.099	26.514
600	15.482	15.387	36.081	176.7	1.259	26.720
700	13.310	13.209	35.750	164.9	1.401	26.932
800	10.837	10.736	35.395	139.2	1.524	27.131
900	9.025	8.922	35.203	145.0	1.628	27.290
1000	7.364	7.262	35.114	170.2	1.715	27.471
1100	6.481	6.375	35.090	193.6	1.788	27.574
1200	5.677	5.568	35.077	219.5	1.850	27.668
1300	5.183	5.069	35.056	233.6	1.907	27.711
1400	4.789	4.669	35.033	245.0	1.959	27.740
1500	4.523	4.397	35.018	250.9	2.010	27.758
1750	4.030	3.886	34.991	258.8	2.132	27.791
2000	3.654	3.492	34.971	262.2	2.250	27.815
2500	3.139	2.937	34.948	264.2	2.475	27.849
3000	2.709	2.464	34.923	268.7	2.693	27.871
3500	2.385	2.095	34.903	270.1	2.904	27.886
4000	2.248	1.906	34.890	266.9	3.115	27.891
4500	2.201	1.803	34.879	261.3	3.334	27.891

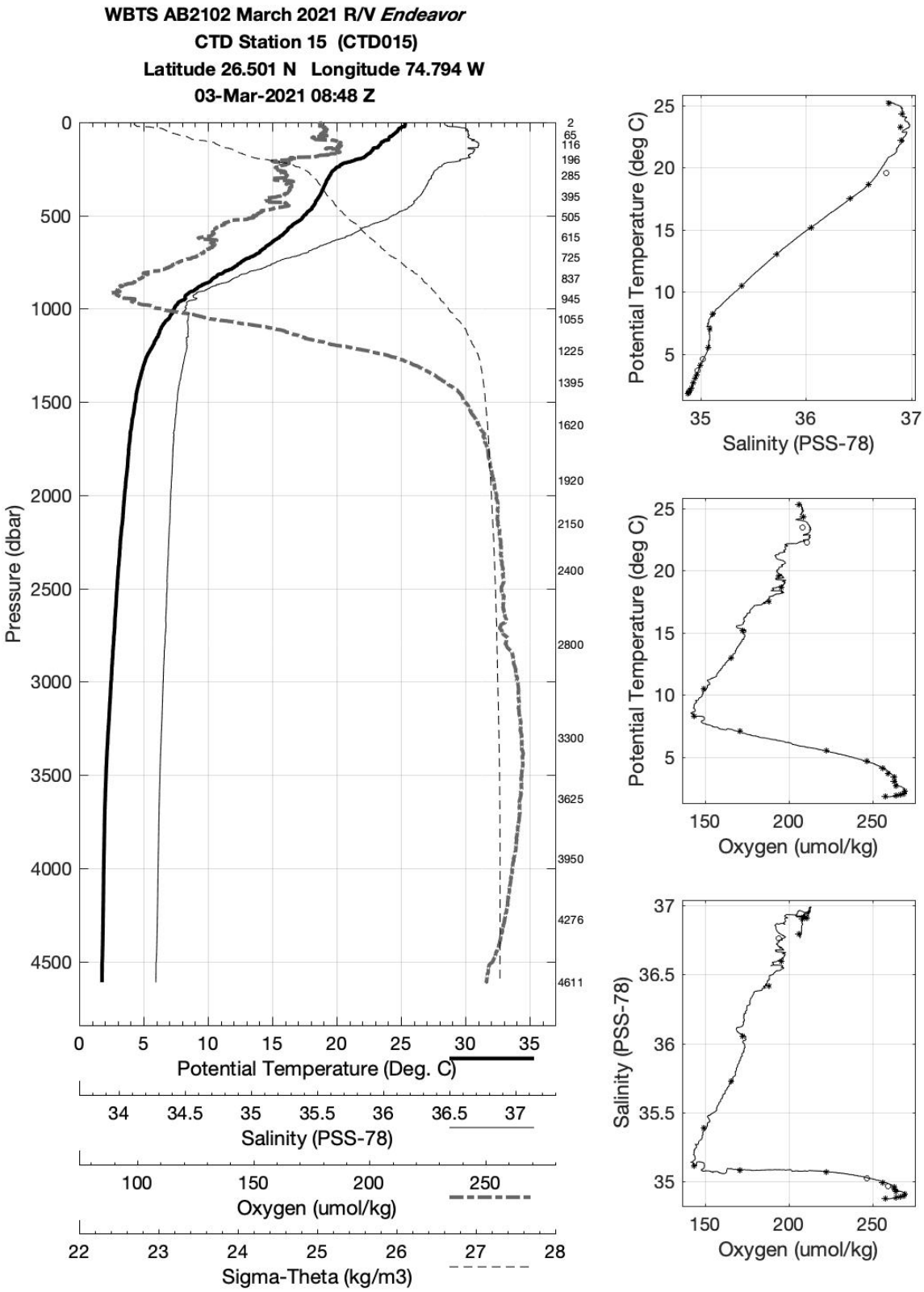
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4685	1	2.113	1.695	34.866	254.7
4381	2	2.215	1.831	34.882	263.0
4092	3	2.239	1.888	34.886	265.2
3801	4	2.281	1.962	34.894	274.0
3501	5	2.385	2.095	34.902	270.8
3000	6	2.691	2.447	34.922	272.7
2650	7	3.001	2.786	34.940	265.2
2250	8	3.383	3.200	34.959	262.9
1820	9	3.943	3.793	34.985	258.9
1546	10	4.411	4.282	35.011	253.1
1355	11	4.910	4.793	35.039	242.9
1186	12	5.761	5.653	35.069	215.2
1015	13	7.370	7.267	35.102	167.9
900	14	9.121	9.019	35.193	138.9
811	15	10.848	10.746	35.409	150.4
701	16	13.333	13.233	35.752	158.4
592	17	15.681	15.587	36.122	168.4
481	18	17.673	17.590	36.440	182.6
370	19	18.706	18.640	36.594	195.4
261	20	19.505	19.457	36.675	198.9
170	21	21.309	21.276	36.829	204.7
106	22	23.629	23.606	37.045	202.2
55	23	24.819	24.807	36.897	207.3
2	24	25.303	25.302	36.813	207.4


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 14 (CTD014)
Latitude 26.509 N Longitude 75.084 W
03-Mar-2021 03:26 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 15 (CTD015)
Latitude 26.501N Longitude 74.794W
03-Mar-2021 08:48Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.318	25.318	36.764	206.9	0.003	24.577
10	25.325	25.323	36.763	206.8	0.034	24.575
20	25.311	25.306	36.779	207.0	0.067	24.592
30	24.966	24.959	36.886	208.1	0.100	24.780
50	24.712	24.701	36.916	208.2	0.162	24.882
75	24.247	24.231	36.917	208.2	0.237	25.024
100	23.699	23.677	36.959	212.1	0.310	25.222
125	23.338	23.312	36.985	213.6	0.377	25.349
150	22.819	22.788	36.959	212.5	0.443	25.482
200	21.523	21.483	36.860	198.0	0.566	25.777
250	19.959	19.912	36.718	192.9	0.672	26.096
300	19.416	19.361	36.675	193.0	0.769	26.209
400	18.703	18.632	36.594	193.2	0.957	26.335
500	17.570	17.485	36.423	186.8	1.135	26.490
600	15.958	15.862	36.162	173.4	1.299	26.674
700	14.080	13.976	35.861	170.6	1.446	26.858
800	11.400	11.296	35.490	154.0	1.574	27.103
900	9.053	8.951	35.197	143.6	1.680	27.280
1000	7.485	7.382	35.074	157.3	1.770	27.423
1100	6.494	6.388	35.086	190.6	1.846	27.570
1200	5.826	5.716	35.080	213.6	1.911	27.652
1300	5.135	5.021	35.052	236.0	1.967	27.714
1400	4.758	4.639	35.030	246.8	2.020	27.741
1500	4.491	4.365	35.014	252.1	2.070	27.758
1750	4.002	3.858	34.988	259.2	2.192	27.791
2000	3.685	3.522	34.972	262.1	2.310	27.813
2500	3.141	2.938	34.949	263.5	2.536	27.850
3000	2.730	2.485	34.923	268.6	2.754	27.870
3500	2.377	2.088	34.902	269.9	2.966	27.886
4000	2.250	1.909	34.890	267.2	3.176	27.891
4500	2.193	1.795	34.878	260.9	3.396	27.890

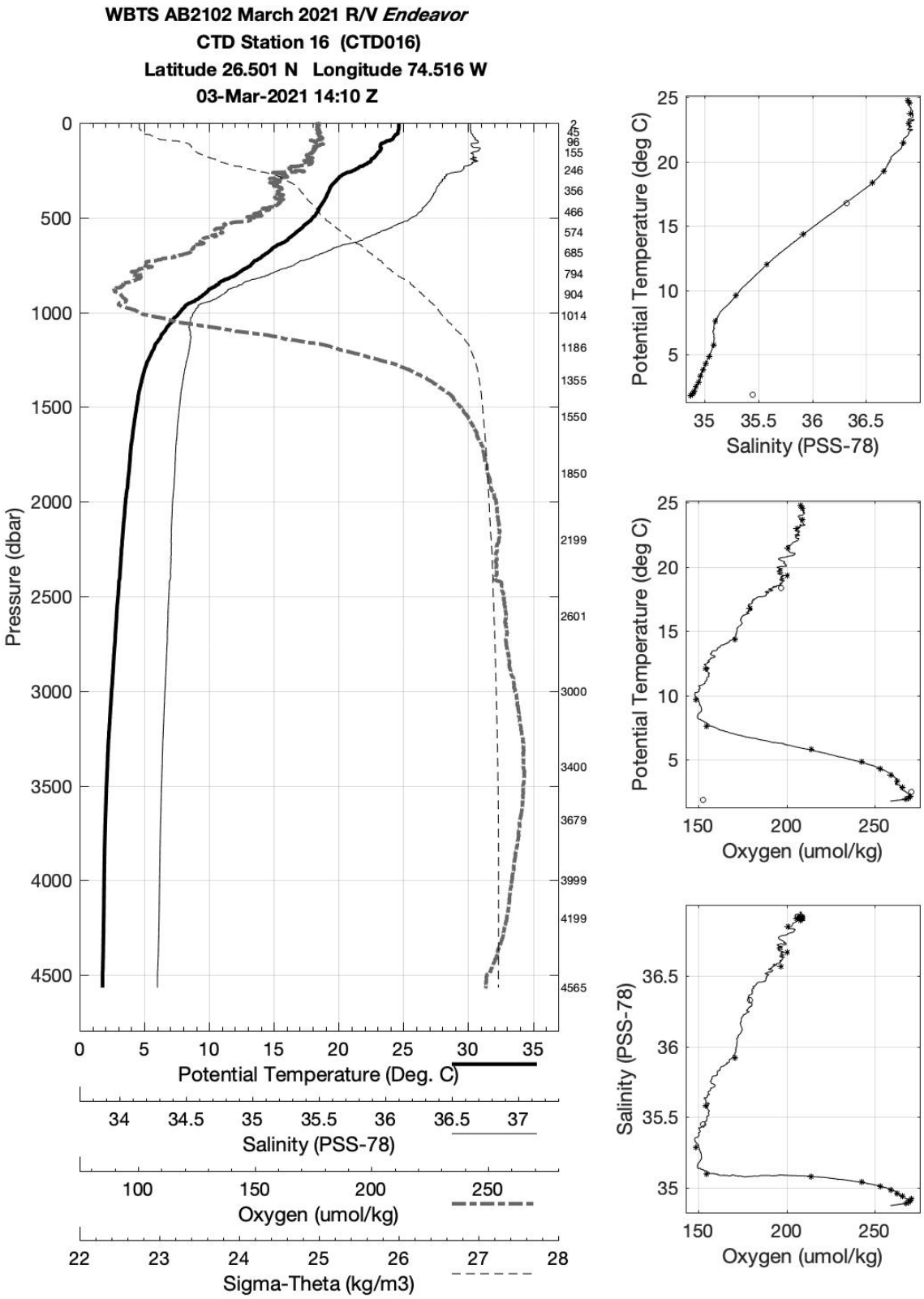
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4611	1	2.189	1.778	34.877	258.1
4276	2	2.228	1.856	34.885	264.2
3950	3	2.253	1.917	34.889	267.0
3625	4	2.325	2.023	34.897	269.0
3300	5	2.499	2.228	34.909	269.3
2800	6	2.886	2.658	34.931	264.0
2400	7	3.232	3.038	34.950	263.0
2151	8	3.503	3.329	34.963	263.1
1920	9	3.801	3.645	34.968	259.2
1620	10	4.198	4.064	34.996	256.0
1396	11	4.731	4.612	35.023	246.8
1226	12	5.594	5.483	35.071	222.6
1056	13	7.101	6.995	35.084	171.0
945	14	8.321	8.219	35.117	143.8
837	15	10.597	10.493	35.391	149.7
725	16	13.120	13.017	35.724	165.8
616	17	15.267	15.171	36.050	172.8
505	18	17.549	17.462	36.416	188.3
396	19	18.723	18.652	36.595	195.9
286	20	19.595	19.542	36.761	194.2
196	21	22.243	22.204	36.906	210.8
116	22	23.255	23.231	36.897	208.2
66	23	24.313	24.298	36.912	209.2
2	24	25.169	25.169	36.792	206.5


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 15 (CTD015)
Latitude 26.501 N Longitude 74.794 W
03-Mar-2021 08:48 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 16 (CTD016)
Latitude 26.501N Longitude 74.516W
03-Mar-2021 14:10Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.654	24.654	36.887	209.1	0.003	24.873
10	24.652	24.650	36.886	208.9	0.031	24.874
20	24.655	24.651	36.886	208.8	0.061	24.874
30	24.651	24.645	36.886	208.7	0.092	24.876
50	24.593	24.582	36.889	209.5	0.154	24.897
75	24.265	24.249	36.908	209.2	0.229	25.012
100	23.651	23.630	36.936	208.4	0.302	25.218
125	23.236	23.210	36.898	207.6	0.370	25.312
150	23.193	23.162	36.925	207.7	0.437	25.347
200	22.548	22.507	36.929	204.8	0.568	25.540
250	21.224	21.175	36.833	201.4	0.688	25.842
300	19.914	19.858	36.704	197.2	0.793	26.100
400	19.027	18.955	36.632	196.4	0.987	26.281
500	18.088	18.000	36.507	189.9	1.171	26.426
600	16.453	16.354	36.241	177.9	1.341	26.620
700	14.278	14.173	35.892	167.4	1.493	26.840
800	12.208	12.099	35.594	156.0	1.626	27.031
900	9.808	9.700	35.307	149.7	1.738	27.243
1000	7.830	7.725	35.108	155.6	1.832	27.400
1100	6.673	6.566	35.085	184.4	1.910	27.545
1200	5.775	5.665	35.079	215.9	1.975	27.657
1300	5.136	5.023	35.051	235.6	2.031	27.713
1400	4.777	4.658	35.032	245.5	2.084	27.740
1500	4.525	4.399	35.017	251.5	2.135	27.757
1750	4.062	3.918	34.992	258.4	2.258	27.788
2000	3.710	3.546	34.973	262.0	2.377	27.811
2500	3.173	2.970	34.948	264.3	2.605	27.847
3000	2.710	2.465	34.924	267.5	2.823	27.872
3500	2.368	2.079	34.902	270.1	3.034	27.887
4000	2.239	1.898	34.889	266.8	3.244	27.891
4500	2.174	1.777	34.876	259.2	3.463	27.890

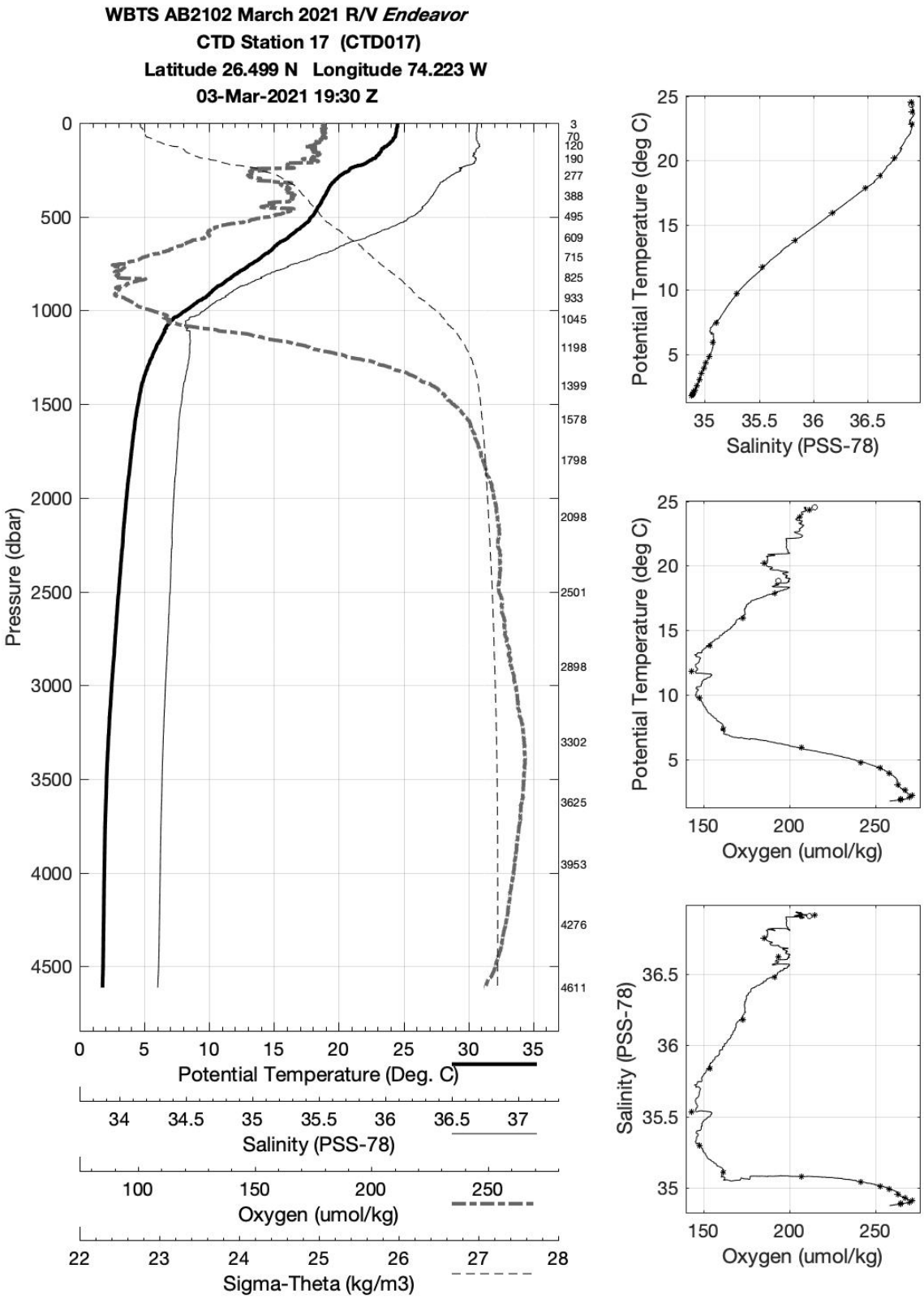
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
4565	1	2.182	1.776	34.875	102.0
4199	2	2.228	1.861	35.451	152.3
3999	3	2.240	1.899	34.889	267.6
3680	4	2.300	1.993	34.896	269.3
3401	5	2.429	2.149	34.907	270.1
3001	6	2.708	2.463	34.923	270.7
2601	7	3.065	2.854	34.942	265.9
2200	8	3.473	3.294	34.963	262.8
1850	9	3.962	3.810	34.987	259.3
1550	10	4.413	4.283	35.011	253.1
1356	11	4.915	4.798	35.040	242.6
1186	12	5.871	5.761	35.082	214.0
1014	13	7.699	7.593	35.100	154.8
904	14	9.692	9.585	35.287	148.6
795	15	12.136	12.028	35.581	154.1
685	16	14.438	14.334	35.919	170.8
575	17	16.854	16.758	36.323	179.2
466	18	18.449	18.366	36.562	196.8
356	19	19.352	19.287	36.664	200.4
247	20	21.504	21.455	36.844	201.0
156	21	22.995	22.963	36.900	205.9
96	22	23.744	23.724	36.912	208.9
46	23	24.554	24.544	36.903	209.0
2	24	24.745	24.744	36.891	208.1


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 16 (CTD016)
Latitude 26.501 N Longitude 74.516 W
03-Mar-2021 14:10 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 17 (CTD017)
Latitude 26.499N Longitude 74.223W
03-Mar-2021 19:30Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.542	24.542	36.919	209.2	0.003	24.932
10	24.545	24.543	36.917	209.5	0.030	24.930
20	24.537	24.533	36.917	209.6	0.060	24.933
30	24.479	24.473	36.915	209.1	0.090	24.950
50	24.450	24.439	36.913	209.8	0.151	24.958
75	24.362	24.346	36.912	209.7	0.226	24.986
100	24.080	24.059	36.920	207.1	0.300	25.078
125	23.675	23.649	36.934	204.1	0.371	25.211
150	23.301	23.269	36.910	205.9	0.440	25.304
200	22.443	22.402	36.908	206.8	0.572	25.554
250	20.868	20.820	36.804	191.3	0.689	25.917
300	19.862	19.806	36.718	190.1	0.793	26.124
400	18.887	18.815	36.619	199.3	0.986	26.306
500	17.998	17.911	36.495	193.0	1.167	26.439
600	16.359	16.261	36.232	174.4	1.337	26.635
700	14.419	14.313	35.919	157.3	1.489	26.830
800	12.304	12.195	35.599	145.4	1.624	27.017
900	10.318	10.208	35.350	146.0	1.740	27.189
1000	8.296	8.187	35.171	156.7	1.839	27.380
1100	6.700	6.593	35.061	175.0	1.920	27.523
1200	6.002	5.890	35.078	205.3	1.987	27.629
1300	5.372	5.256	35.066	228.7	2.047	27.697
1400	4.909	4.788	35.039	242.2	2.101	27.731
1500	4.640	4.513	35.025	248.6	2.153	27.750
1750	4.155	4.009	34.998	257.0	2.278	27.783
2000	3.785	3.621	34.977	261.1	2.399	27.807
2500	3.229	3.025	34.954	262.7	2.630	27.846
3000	2.727	2.482	34.924	267.8	2.851	27.871
3500	2.373	2.084	34.902	270.3	3.061	27.887
4000	2.251	1.910	34.890	267.1	3.272	27.891
4500	2.210	1.812	34.880	261.6	3.491	27.891

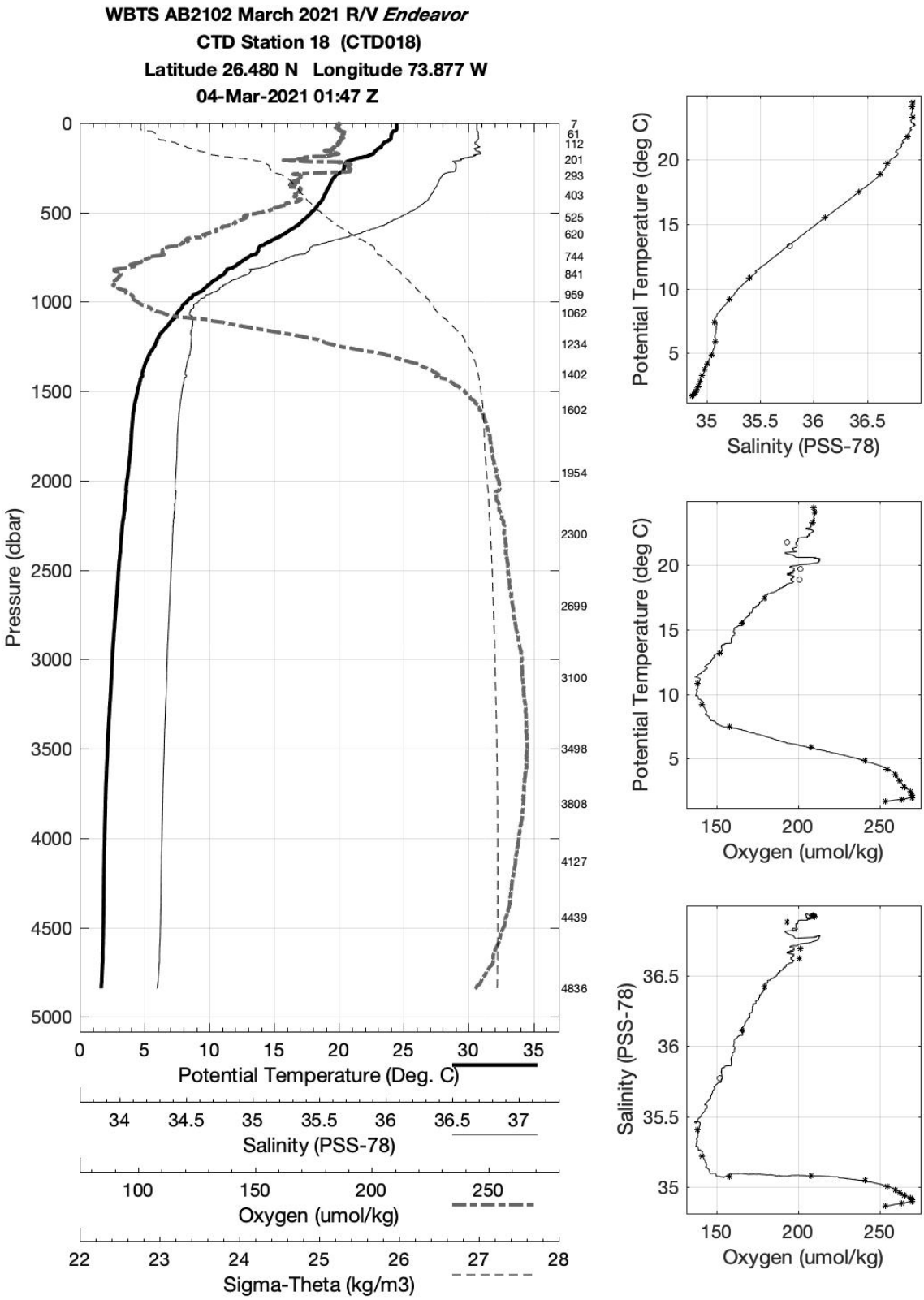
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4612	1	2.183	1.772	34.875	107.4
4276	2	2.225	1.853	34.884	264.5
3953	3	2.255	1.919	34.892	264.9
3625	4	2.332	2.030	34.897	269.9
3302	5	2.472	2.202	34.909	271.2
2899	6	2.813	2.576	34.926	267.2
2501	7	3.198	2.994	34.951	263.0
2098	8	3.649	3.478	34.969	283.7
1799	9	4.060	3.912	34.990	258.1
1579	10	4.453	4.320	35.011	253.0
1400	11	4.923	4.802	35.041	241.6
1199	12	5.996	5.884	35.076	206.8
1045	13	7.553	7.444	35.105	162.0
933	14	9.791	9.679	35.293	148.1
825	15	11.865	11.755	35.530	143.3
716	16	13.908	13.803	35.835	153.8
610	17	16.006	15.907	36.179	172.9
495	18	17.928	17.842	36.480	191.6
388	19	18.923	18.853	36.620	193.6
277	20	20.251	20.199	36.754	185.6
190	21	22.842	22.803	36.912	35.4
120	22	23.779	23.754	36.912	206.0
71	23	24.346	24.331	36.905	211.6
3	24	24.549	24.549	36.911	214.6


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 17 (CTD017)
Latitude 26.499 N Longitude 74.223 W
03-Mar-2021 19:30 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 18 (CTD018)
Latitude 26.480N Longitude 73.877W
04-Mar-2021 01:47Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.461	24.461	36.923	209.3	0.003	24.959
10	24.460	24.458	36.922	209.4	0.030	24.960
20	24.464	24.460	36.922	209.6	0.060	24.959
30	24.469	24.463	36.922	209.3	0.090	24.958
50	24.143	24.132	36.930	211.3	0.149	25.064
75	24.042	24.026	36.932	210.8	0.222	25.097
100	23.807	23.786	36.923	210.0	0.294	25.162
125	23.354	23.328	36.926	208.4	0.363	25.300
150	22.913	22.882	36.912	207.6	0.429	25.418
200	21.331	21.292	36.836	196.3	0.554	25.812
250	20.450	20.403	36.788	212.8	0.660	26.018
300	19.743	19.687	36.694	197.3	0.762	26.138
400	18.983	18.911	36.627	195.8	0.955	26.289
500	17.959	17.872	36.483	185.0	1.138	26.440
600	16.332	16.234	36.227	170.1	1.307	26.638
700	13.922	13.819	35.847	153.6	1.456	26.880
800	12.151	12.043	35.572	144.1	1.588	27.026
900	10.134	10.024	35.304	137.5	1.704	27.185
1000	8.372	8.263	35.127	145.1	1.804	27.333
1100	7.270	7.158	35.094	167.7	1.892	27.471
1200	6.170	6.056	35.083	199.5	1.964	27.611
1300	5.435	5.318	35.066	225.2	2.025	27.689
1400	4.946	4.825	35.041	241.0	2.080	27.728
1500	4.597	4.470	35.022	250.0	2.132	27.753
1750	4.131	3.985	34.991	258.1	2.256	27.781
2000	3.819	3.654	34.978	261.0	2.378	27.804
2500	3.209	3.005	34.951	264.0	2.610	27.846
3000	2.768	2.522	34.926	268.3	2.831	27.869
3500	2.448	2.157	34.906	270.2	3.046	27.884
4000	2.270	1.928	34.892	267.4	3.259	27.891
4500	2.220	1.822	34.882	262.4	3.479	27.891

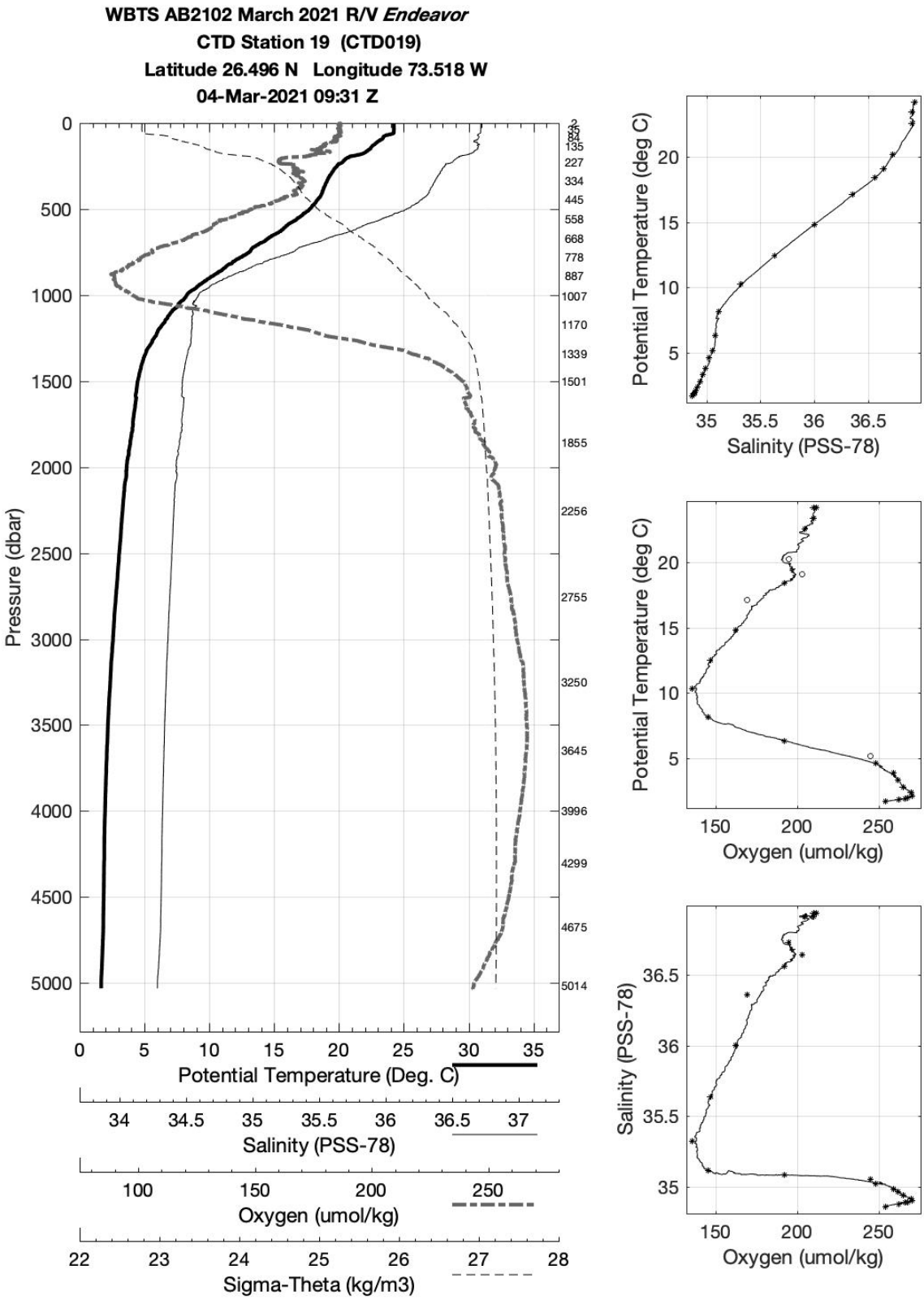
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4836	1	2.097	1.662	34.862	253.9
4439	2	2.230	1.839	34.883	263.6
4127	3	2.253	8.065	−999.000	−999.0
3808	4	2.304	1.983	34.895	269.8
3499	5	2.461	2.170	34.907	269.8
3100	6	2.699	2.445	34.921	268.9
2699	7	3.019	2.799	34.940	265.1
2300	8	3.444	3.256	34.960	262.5
1954	9	3.895	3.734	34.981	259.7
1602	10	4.304	4.171	35.003	254.6
1403	11	4.957	4.835	35.045	241.0
1234	12	5.992	5.877	35.079	207.7
1062	13	7.505	7.395	35.074	158.0
959	14	9.257	9.146	35.215	140.8
842	15	10.905	10.798	35.404	138.4
745	16	13.379	13.272	35.776	152.1
620	17	15.624	15.526	36.111	165.5
526	18	17.562	17.472	36.425	179.4
404	19	18.960	18.887	36.625	200.9
294	20	19.768	19.714	36.692	201.3
202	21	21.809	21.769	36.880	193.2
112	22	23.273	23.250	36.926	209.1
61	23	24.136	24.123	36.919	210.3
7	24	24.452	24.451	36.926	209.4


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 18 (CTD018)
Latitude 26.480 N Longitude 73.877 W
04-Mar-2021 01:47 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 19 (CTD019)
Latitude 26.496N Longitude 73.518W
04-Mar-2021 09:31Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.223	24.222	36.940	210.5	0.003	25.044
10	24.231	24.228	36.939	210.3	0.029	25.042
20	24.236	24.231	36.939	210.2	0.058	25.041
30	24.239	24.233	36.939	209.8	0.087	25.041
50	24.236	24.225	36.939	210.2	0.146	25.042
75	23.531	23.515	36.922	210.7	0.218	25.242
100	23.180	23.159	36.909	208.3	0.286	25.336
125	22.767	22.741	36.934	205.0	0.351	25.477
150	22.452	22.422	36.922	203.5	0.414	25.559
200	20.749	20.711	36.793	193.4	0.531	25.939
250	19.894	19.848	36.709	194.8	0.634	26.106
300	19.406	19.351	36.670	197.4	0.732	26.207
400	18.792	18.720	36.608	196.6	0.919	26.322
500	17.819	17.732	36.461	182.2	1.100	26.458
600	16.002	15.905	36.175	168.9	1.266	26.674
700	13.994	13.890	35.854	156.2	1.415	26.870
800	12.091	11.983	35.570	145.4	1.546	27.035
900	10.145	10.035	35.307	137.5	1.662	27.186
1000	8.364	8.255	35.124	143.8	1.763	27.332
1100	7.162	7.051	35.088	169.1	1.850	27.481
1200	6.210	6.097	35.082	199.1	1.922	27.605
1300	5.476	5.359	35.069	223.9	1.984	27.687
1400	4.918	4.797	35.040	241.9	2.038	27.730
1500	4.606	4.479	35.021	249.7	2.090	27.752
1750	4.259	4.113	35.019	253.4	2.215	27.789
2000	3.809	3.645	34.985	260.5	2.335	27.811
2500	3.262	3.057	34.954	263.3	2.566	27.843
3000	2.825	2.578	34.929	267.2	2.790	27.866
3500	2.470	2.179	34.907	270.4	3.006	27.883
4000	2.303	1.960	34.894	268.0	3.222	27.890
4500	2.253	1.853	34.885	264.4	3.443	27.891
5000	2.118	1.662	34.861	253.4	3.674	27.887

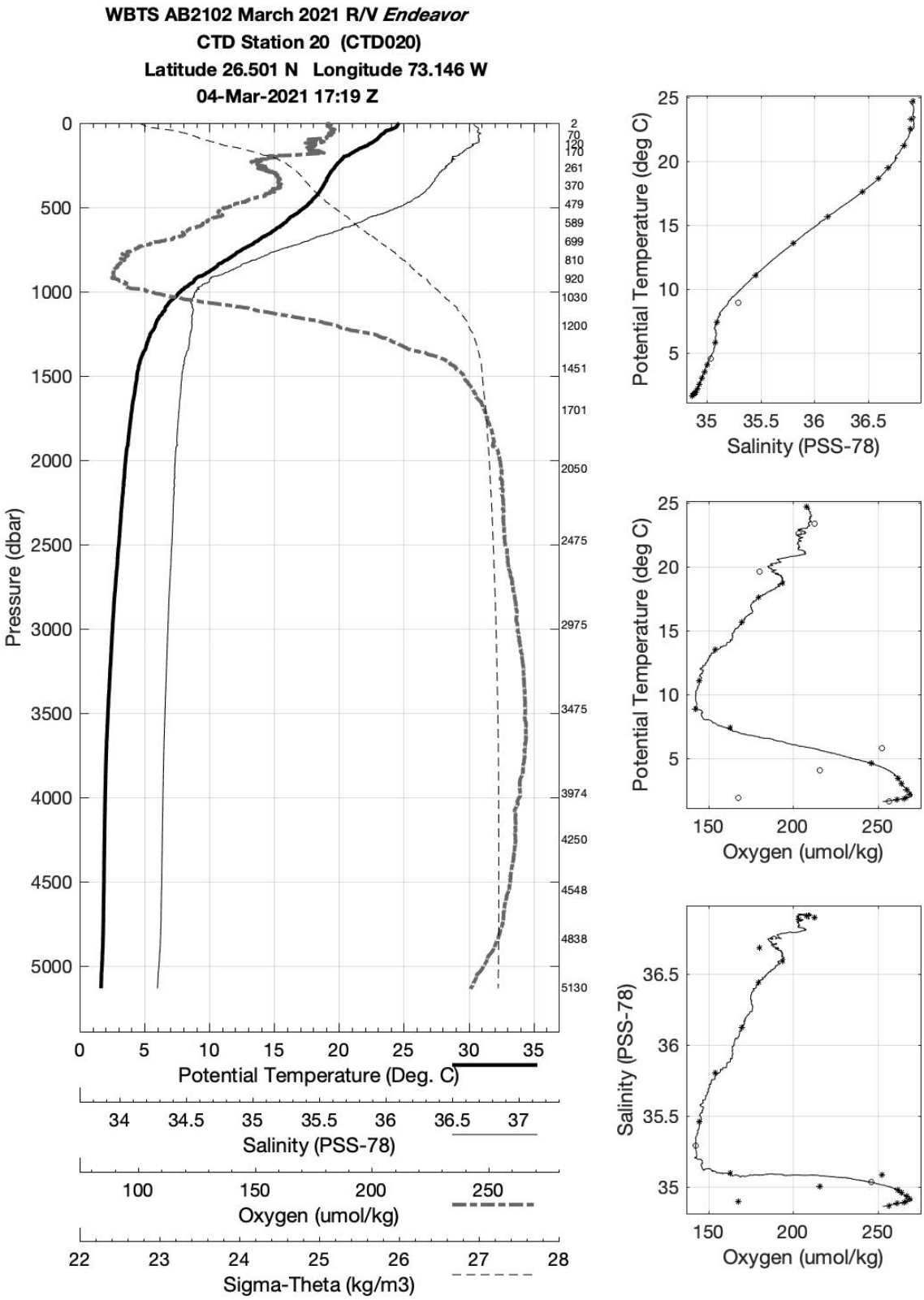
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
5014	1	2.121	1.662	34.861	254.0
4675	2	2.237	1.817	34.878	262.5
4300	3	2.270	1.894	34.888	266.0
3997	4	2.296	1.954	34.890	267.8
3646	5	2.402	2.096	34.901	270.3
3250	6	2.609	2.341	34.914	269.6
2756	7	3.002	2.777	34.937	265.2
2257	8	3.503	3.318	34.967	261.5
1856	9	3.960	3.807	34.986	258.9
1501	10	4.702	4.573	35.024	248.1
1340	11	5.237	5.119	35.056	244.8
1171	12	6.408	6.296	35.083	191.9
1008	13	8.239	8.130	35.115	145.0
888	14	10.345	10.235	35.321	135.4
778	15	12.563	12.455	35.636	146.6
669	16	14.953	14.850	36.002	162.1
559	17	17.202	17.107	36.360	169.1
445	18	18.501	18.422	36.562	191.8
335	19	19.176	19.116	36.643	203.0
227	20	20.229	20.186	36.729	194.5
135	21	22.627	22.600	36.910	204.7
85	22	23.473	23.456	36.913	210.1
36	23	24.234	24.226	36.935	211.4
2	24	24.238	24.237	36.937	209.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 19 (CTD019)
Latitude 26.496 N Longitude 73.518 W
04-Mar-2021 09:31 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 20 (CTD020)
Latitude 26.501N Longitude 73.146W
04-Mar-2021 17:19Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.623	24.622	36.895	208.8	0.003	24.889
10	24.524	24.522	36.894	209.7	0.030	24.919
20	24.449	24.444	36.904	209.3	0.061	24.950
30	24.252	24.245	36.920	210.4	0.090	25.022
50	23.578	23.568	36.914	210.7	0.147	25.220
75	23.206	23.191	36.920	209.7	0.215	25.335
100	22.875	22.855	36.922	204.2	0.280	25.435
125	22.315	22.289	36.881	205.1	0.343	25.566
150	21.644	21.614	36.848	203.5	0.403	25.732
200	20.397	20.359	36.753	193.1	0.513	26.003
250	19.838	19.791	36.721	187.2	0.614	26.131
300	19.346	19.291	36.666	193.1	0.711	26.220
400	18.625	18.553	36.584	191.0	0.898	26.347
500	17.429	17.344	36.404	178.0	1.075	26.509
600	15.794	15.698	36.134	170.2	1.236	26.690
700	13.855	13.752	35.829	157.2	1.383	26.880
800	11.725	11.620	35.520	145.5	1.510	27.066
900	9.693	9.587	35.271	142.6	1.622	27.234
1000	7.906	7.800	35.111	153.6	1.716	27.391
1100	6.705	6.598	35.087	185.1	1.795	27.543
1200	5.933	5.822	35.082	211.1	1.861	27.640
1300	5.329	5.214	35.064	229.1	1.920	27.701
1400	4.827	4.707	35.033	244.5	1.974	27.735
1500	4.549	4.423	35.016	250.8	2.026	27.754
1750	4.090	3.945	34.994	258.2	2.149	27.787
2000	3.705	3.542	34.973	262.0	2.268	27.812
2500	3.225	3.021	34.952	263.7	2.498	27.845
3000	2.781	2.535	34.927	267.5	2.719	27.868
3500	2.472	2.181	34.908	269.8	2.935	27.883
4000	2.311	1.968	34.895	268.2	3.150	27.890
4500	2.275	1.875	34.887	265.3	3.373	27.891
5000	2.181	1.723	34.869	257.0	3.606	27.889

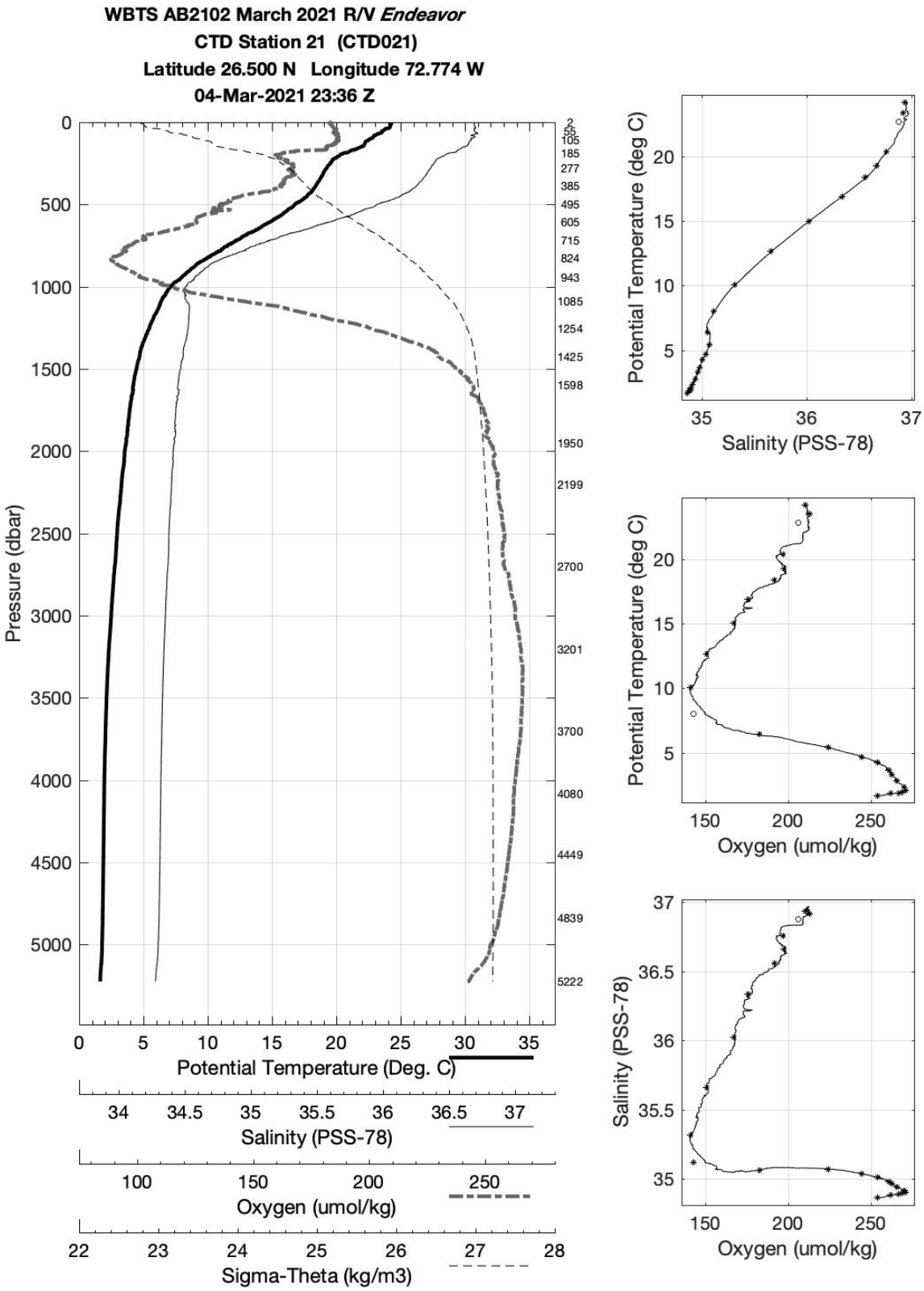
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
5131	1	2.125	1.652	34.860	256.9
4839	2	2.238	1.797	34.880	261.3
4549	3	2.269	1.863	34.886	265.8
4250	4	2.287	1.916	34.894	266.5
3975	5	2.316	1.976	34.895	167.6
3475	6	2.486	2.197	34.911	268.8
2976	7	2.795	2.552	34.929	266.9
2476	8	3.254	3.051	34.955	264.1
2051	9	3.689	3.521	34.975	261.6
1702	10	4.213	4.072	35.002	216.0
1451	11	4.727	4.603	35.033	246.0
1201	12	5.935	5.824	35.082	252.5
1031	13	7.549	7.443	35.098	162.9
921	14	9.033	8.928	35.289	142.9
810	15	11.232	11.127	35.460	144.8
700	16	13.672	13.571	35.805	154.2
590	17	15.754	15.660	36.126	169.7
480	18	17.677	17.594	36.446	179.7
371	19	18.733	18.667	36.597	193.8
261	20	19.558	19.510	36.685	180.3
170	21	21.222	21.189	36.835	−999.0
120	22	22.524	22.499	36.890	203.6
70	23	23.312	23.298	36.903	212.8
2	24	24.664	24.664	36.912	208.2


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 20 (CTD020)
Latitude 26.501 N Longitude 73.146 W
04-Mar-2021 17:19 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 21 (CTD021)
Latitude 26.500N Longitude 72.774W
04-Mar-2021 23:36Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.290	24.290	36.945	210.5	0.003	25.028
10	24.251	24.249	36.944	209.7	0.029	25.040
20	24.209	24.204	36.948	211.5	0.058	25.056
30	24.169	24.162	36.951	210.9	0.087	25.070
50	23.638	23.627	36.943	211.2	0.144	25.224
75	23.167	23.151	36.948	211.5	0.211	25.368
100	22.680	22.660	36.921	211.8	0.276	25.490
125	22.248	22.222	36.909	211.7	0.337	25.606
150	21.951	21.921	36.878	208.8	0.397	25.668
200	20.314	20.277	36.754	193.2	0.508	26.027
250	19.570	19.524	36.682	197.8	0.607	26.171
300	19.099	19.044	36.642	198.5	0.702	26.265
400	18.345	18.275	36.550	193.6	0.884	26.391
500	16.850	16.767	36.310	176.0	1.056	26.576
600	15.083	14.990	36.023	167.7	1.211	26.763
700	12.741	12.644	35.667	151.6	1.348	26.982
800	10.630	10.530	35.383	144.1	1.466	27.159
900	8.708	8.608	35.171	146.4	1.567	27.315
1000	7.204	7.103	35.058	160.5	1.654	27.450
1100	6.422	6.317	35.072	186.3	1.728	27.568
1200	5.844	5.734	35.078	210.7	1.792	27.648
1300	5.311	5.196	35.064	230.4	1.850	27.703
1400	4.855	4.735	35.039	243.4	1.904	27.737
1500	4.591	4.464	35.024	249.5	1.955	27.756
1750	4.075	3.931	34.991	258.4	2.078	27.787
2000	3.711	3.548	34.976	261.4	2.197	27.813
2500	3.157	2.954	34.947	264.9	2.425	27.847
3000	2.743	2.498	34.924	268.3	2.644	27.870
3500	2.427	2.136	34.905	270.6	2.857	27.885
4000	2.310	1.967	34.894	268.3	3.071	27.890
4500	2.287	1.886	34.888	265.9	3.295	27.891
5000	2.245	1.784	34.877	260.5	3.529	27.890

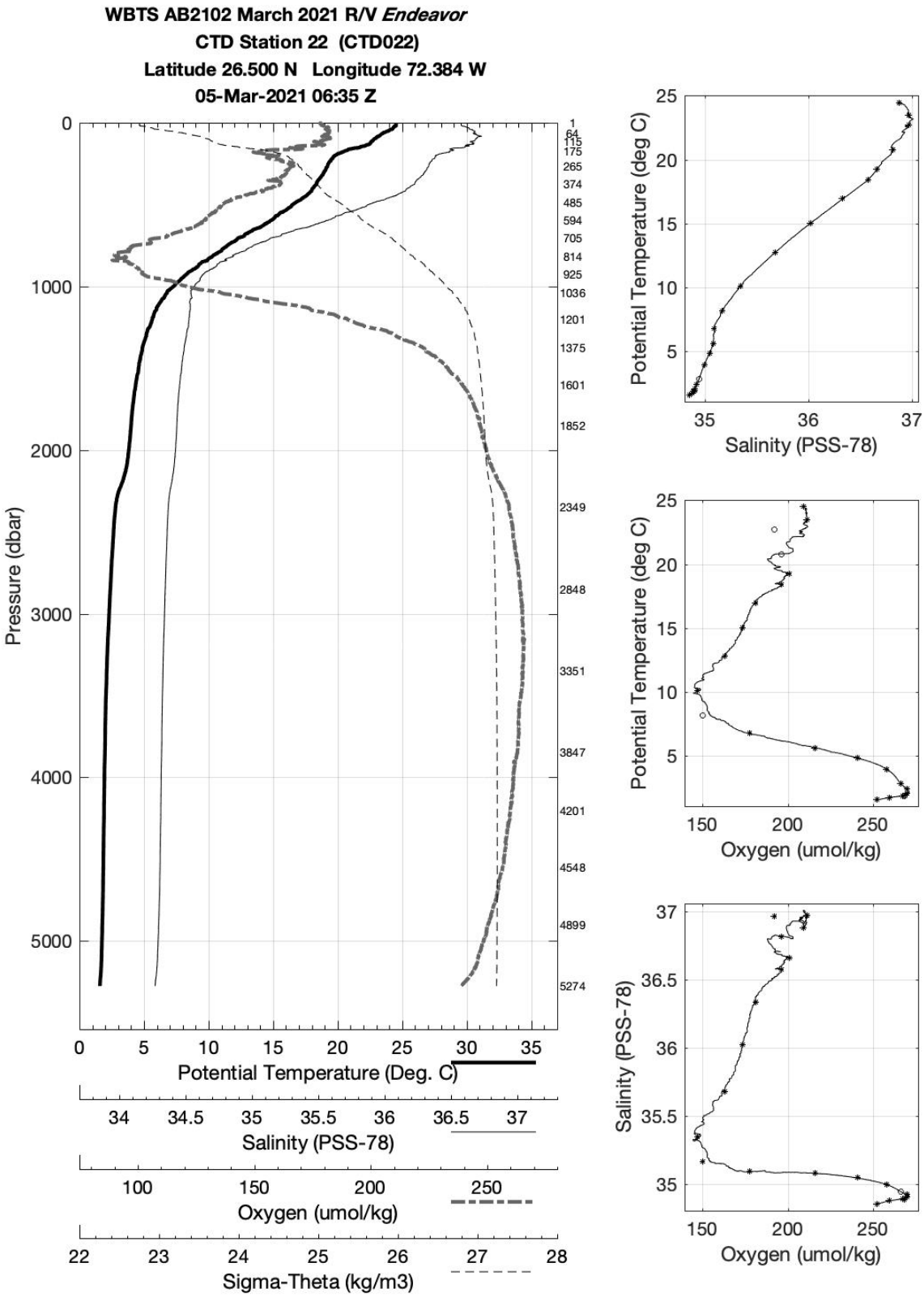
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
5223	1	2.130	1.645	34.861	253.5
4840	2	2.272	1.831	34.883	261.9
4450	3	2.289	1.894	34.889	266.4
4080	4	2.313	1.961	34.893	268.8
3701	5	2.371	2.060	34.900	270.5
3201	6	2.587	2.324	34.917	269.9
2701	7	2.993	2.773	34.938	265.6
2200	8	3.475	3.296	34.962	262.4
1950	9	3.804	3.644	34.979	260.5
1598	10	4.370	4.236	35.008	253.9
1426	11	4.811	4.689	35.036	244.3
1255	12	5.528	5.415	35.069	224.2
1086	13	6.503	6.399	35.059	183.0
944	14	8.119	8.018	35.115	143.0
825	15	10.170	10.070	35.319	141.3
715	16	12.730	12.631	35.660	151.0
605	17	15.089	14.996	36.022	167.2
496	18	17.011	16.928	36.337	176.0
386	19	18.464	18.396	36.561	191.7
278	20	19.338	19.287	36.662	197.8
185	21	20.433	20.398	36.756	197.1
105	22	22.718	22.696	36.879	205.9
56	23	23.438	23.426	36.914	213.1
2	24	24.233	24.232	36.938	210.1


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 21 (CTD021)
Latitude 26.500 N Longitude 72.774 W
04-Mar-2021 23:36 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 22 (CTD022)
Latitude 26.500N Longitude 72.384W
05-Mar-2021 06:35Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.516	24.516	36.874	208.5	0.003	24.905
10	24.521	24.519	36.873	208.8	0.030	24.904
20	24.509	24.504	36.879	209.5	0.061	24.913
30	24.316	24.310	36.916	211.1	0.091	24.999
50	23.952	23.941	36.956	210.5	0.149	25.141
75	23.330	23.314	36.980	210.8	0.217	25.344
100	22.837	22.816	36.969	210.5	0.282	25.481
125	22.548	22.523	36.957	207.2	0.344	25.557
150	21.764	21.734	36.898	199.6	0.404	25.736
200	19.830	19.793	36.705	195.8	0.509	26.118
250	19.333	19.288	36.664	199.3	0.605	26.219
300	19.020	18.966	36.634	197.6	0.698	26.280
400	18.155	18.085	36.522	192.4	0.878	26.417
500	16.602	16.519	36.261	178.2	1.048	26.597
600	14.862	14.770	35.977	173.0	1.201	26.776
700	12.564	12.468	35.639	160.0	1.336	26.994
800	10.694	10.594	35.388	145.6	1.454	27.151
900	8.845	8.744	35.213	152.9	1.555	27.326
1000	7.378	7.276	35.108	167.6	1.640	27.465
1100	6.342	6.238	35.081	194.7	1.712	27.586
1200	5.757	5.647	35.076	216.8	1.774	27.657
1300	5.299	5.184	35.059	231.6	1.832	27.701
1400	4.949	4.828	35.040	241.0	1.886	27.727
1500	4.711	4.582	35.027	247.7	1.938	27.744
1750	4.253	4.106	35.001	256.1	2.066	27.776
2000	3.994	3.827	34.986	259.4	2.191	27.793
2500	2.840	2.643	34.932	267.5	2.415	27.863
3000	2.540	2.299	34.914	270.4	2.620	27.878
3500	2.343	2.054	34.900	270.1	2.825	27.888
4000	2.279	1.937	34.892	267.8	3.036	27.890
4500	2.257	1.857	34.885	264.8	3.258	27.891
5000	2.202	1.743	34.872	258.5	3.490	27.889

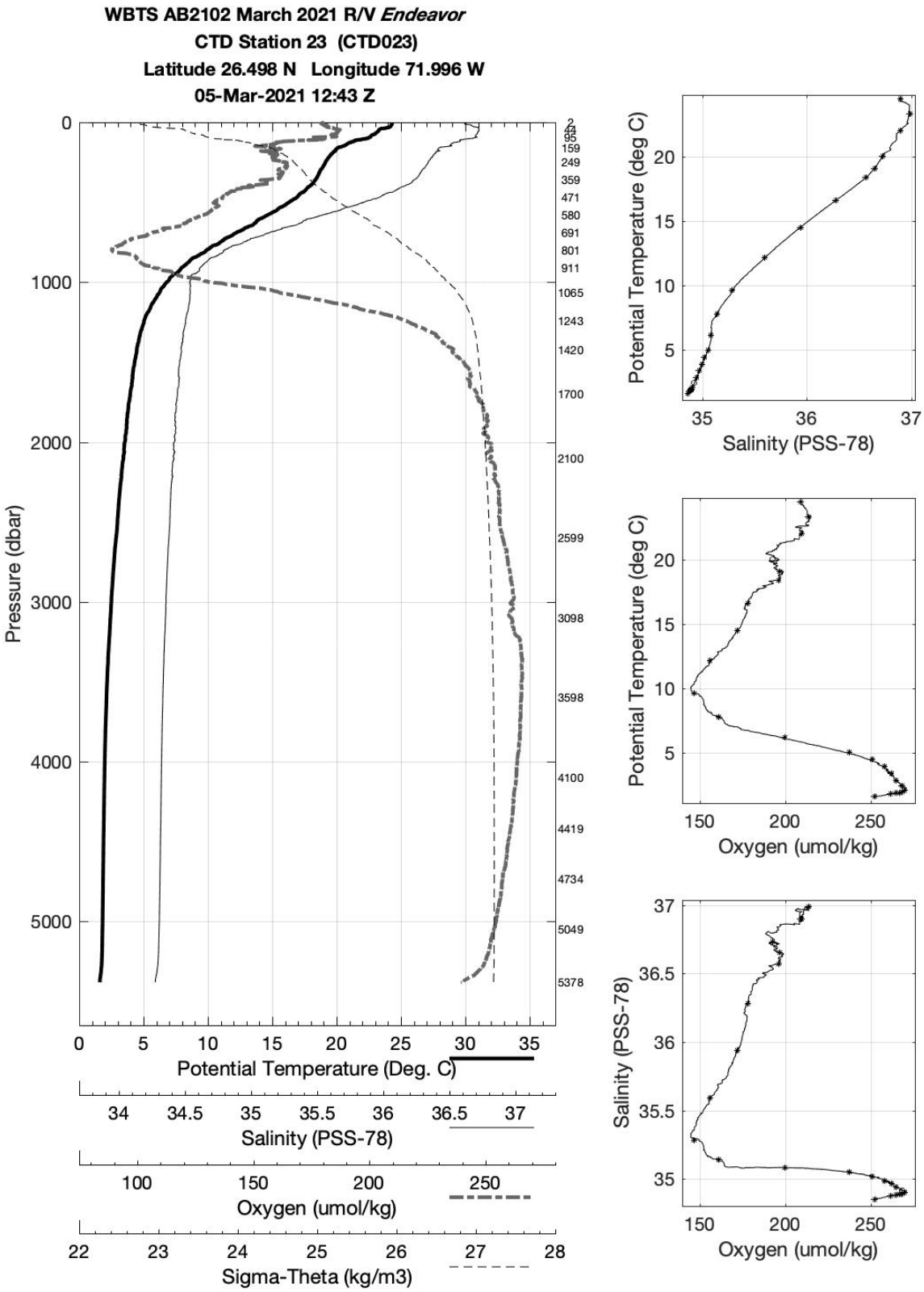
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
5274	1	2.079	1.589	34.850	251.9
4900	2	2.218	1.771	34.876	259.2
4549	3	2.260	1.855	34.885	268.1
4202	4	2.274	1.909	34.890	267.0
3848	5	2.309	1.983	34.897	268.7
3351	6	2.396	2.122	34.904	269.9
2849	7	2.638	2.411	34.921	269.8
2349	8	3.019	2.833	34.945	265.8
1852	9	4.127	3.972	34.995	257.8
1601	10	4.483	6.935	−999.000	−999.0
1375	11	5.002	4.882	35.045	240.7
1201	12	5.760	5.650	35.078	216.1
1037	13	6.869	6.767	35.089	177.7
925	14	8.291	8.191	35.165	150.3
815	15	10.249	10.150	35.346	147.4
705	16	12.823	12.724	35.678	163.3
594	17	15.121	15.028	36.019	173.7
486	18	17.020	16.939	36.331	181.1
375	19	18.503	18.436	36.572	196.1
265	20	19.319	19.271	36.660	200.7
176	21	20.829	20.795	36.815	196.1
115	22	22.741	22.717	36.964	191.9
65	23	23.475	23.462	36.967	211.2
2	24	24.456	24.456	36.877	209.0


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 22 (CTD022)
Latitude 26.500 N Longitude 72.384 W
05-Mar-2021 06:35 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 23 (CTD023)
Latitude 26.498N Longitude 71.996W
05-Mar-2021 12:43Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.286	24.285	36.892	209.0	0.003	24.989
10	24.295	24.293	36.893	209.1	0.030	24.987
20	24.239	24.234	36.936	210.4	0.059	25.038
30	24.117	24.110	36.963	211.0	0.088	25.096
50	23.307	23.296	36.984	214.0	0.142	25.353
75	22.926	22.911	36.971	212.2	0.207	25.455
100	22.427	22.407	36.947	208.6	0.269	25.582
125	21.203	21.178	36.842	194.9	0.326	25.848
150	20.482	20.454	36.786	188.7	0.380	26.003
200	19.600	19.563	36.687	195.1	0.479	26.165
250	19.174	19.129	36.650	197.9	0.573	26.250
300	18.795	18.742	36.609	195.9	0.665	26.318
400	17.974	17.904	36.489	188.6	0.843	26.437
500	16.386	16.304	36.225	176.3	1.009	26.620
600	14.261	14.171	35.884	169.9	1.158	26.834
700	12.103	12.009	35.577	155.7	1.289	27.036
800	10.019	9.923	35.312	144.4	1.401	27.209
900	8.262	8.165	35.160	156.4	1.495	27.374
1000	6.890	6.792	35.080	174.9	1.575	27.511
1100	6.061	5.959	35.082	205.1	1.642	27.623
1200	5.359	5.253	35.063	228.1	1.701	27.695
1300	4.931	4.819	35.042	241.0	1.754	27.730
1400	4.646	4.528	35.028	247.6	1.805	27.752
1500	4.432	4.307	35.015	252.6	1.854	27.765
1750	4.017	3.873	34.993	257.9	1.975	27.794
2000	3.714	3.551	34.980	259.7	2.092	27.816
2500	3.179	2.975	34.950	263.7	2.319	27.848
3000	2.750	2.505	34.926	267.3	2.538	27.870
3500	2.467	2.176	34.907	270.4	2.752	27.883
4000	2.333	1.989	34.896	269.2	2.968	27.889
4500	2.295	1.894	34.888	266.3	3.192	27.891
5000	2.284	1.822	34.881	262.5	3.427	27.890

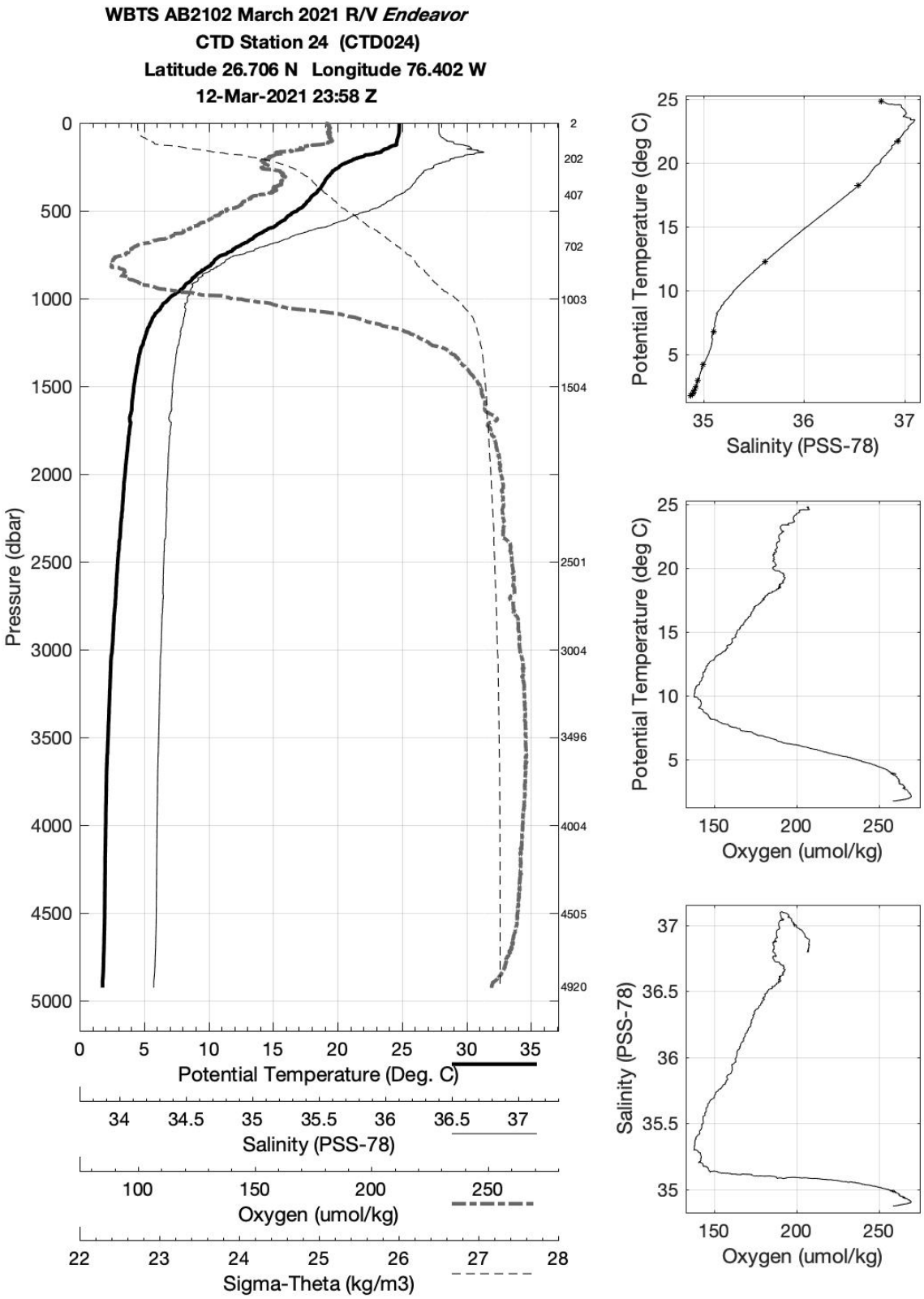
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
5378	1	2.113	1.608	34.855	252.2
5049	2	2.276	1.808	34.879	261.5
4734	3	2.288	1.859	34.884	264.8
4419	4	2.301	1.910	34.890	266.6
4100	5	2.322	1.967	34.891	268.5
3599	6	2.410	2.109	34.903	270.1
3098	7	2.678	2.424	34.914	268.5
2599	8	3.072	2.861	34.943	264.5
2100	9	3.547	3.376	34.967	261.9
1701	10	4.038	3.899	34.990	257.9
1421	11	4.544	4.425	35.020	250.5
1244	12	5.093	4.985	35.049	237.4
1066	13	6.249	6.149	35.081	199.5
912	14	7.862	7.766	35.139	160.7
802	15	9.695	9.601	35.283	146.6
691	16	12.238	12.145	35.594	155.7
581	17	14.615	14.527	35.939	171.5
471	18	16.722	16.644	36.282	177.7
360	19	18.465	18.402	36.567	196.1
250	20	19.152	19.107	36.650	196.7
160	21	20.095	20.065	36.729	192.2
95	22	22.067	22.048	36.898	209.6
45	23	23.356	23.347	36.986	213.7
2	24	24.499	24.499	36.895	208.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 23 (CTD023)
Latitude 26.498 N Longitude 71.996 W
05-Mar-2021 12:43 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 24 (CTD024)
Latitude 26.706N Longitude 76.402W
12-Mar-2021 23:58Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	24.779	24.778	36.798	206.7	0.003	24.768
10	24.786	24.784	36.797	206.3	0.032	24.766
20	24.788	24.784	36.797	206.2	0.064	24.766
30	24.792	24.786	36.797	207.1	0.095	24.765
50	24.786	24.775	36.798	206.9	0.159	24.769
75	24.737	24.721	36.807	206.5	0.239	24.793
100	24.628	24.606	36.850	207.5	0.318	24.860
125	24.582	24.555	36.964	202.7	0.395	24.962
150	23.665	23.633	36.991	198.8	0.467	25.259
200	21.551	21.511	36.903	187.8	0.592	25.802
250	20.182	20.135	36.763	186.7	0.699	26.071
300	19.419	19.364	36.673	192.0	0.797	26.206
400	18.382	18.311	36.551	188.0	0.982	26.383
500	16.956	16.872	36.330	174.5	1.154	26.566
600	14.775	14.683	35.975	162.9	1.308	26.794
700	12.488	12.391	35.627	145.9	1.442	27.000
800	10.343	10.245	35.332	138.1	1.558	27.169
900	8.729	8.629	35.173	145.2	1.658	27.313
1000	7.053	6.953	35.103	175.8	1.743	27.507
1100	5.872	5.771	35.082	212.7	1.809	27.647
1200	5.276	5.171	35.057	232.8	1.866	27.700
1300	4.815	4.704	35.030	245.2	1.918	27.734
1400	4.549	4.432	35.015	250.8	1.968	27.752
1500	4.335	4.211	35.001	255.2	2.018	27.765
1750	4.016	3.872	34.987	258.6	2.139	27.789
2000	3.686	3.524	34.969	261.7	2.257	27.810
2500	3.160	2.958	34.943	265.2	2.486	27.843
3000	2.766	2.521	34.924	267.8	2.708	27.867
3500	2.500	2.207	34.908	269.7	2.923	27.881
4000	2.368	2.024	34.898	268.7	3.141	27.888
4500	2.347	1.945	34.892	267.1	3.368	27.890

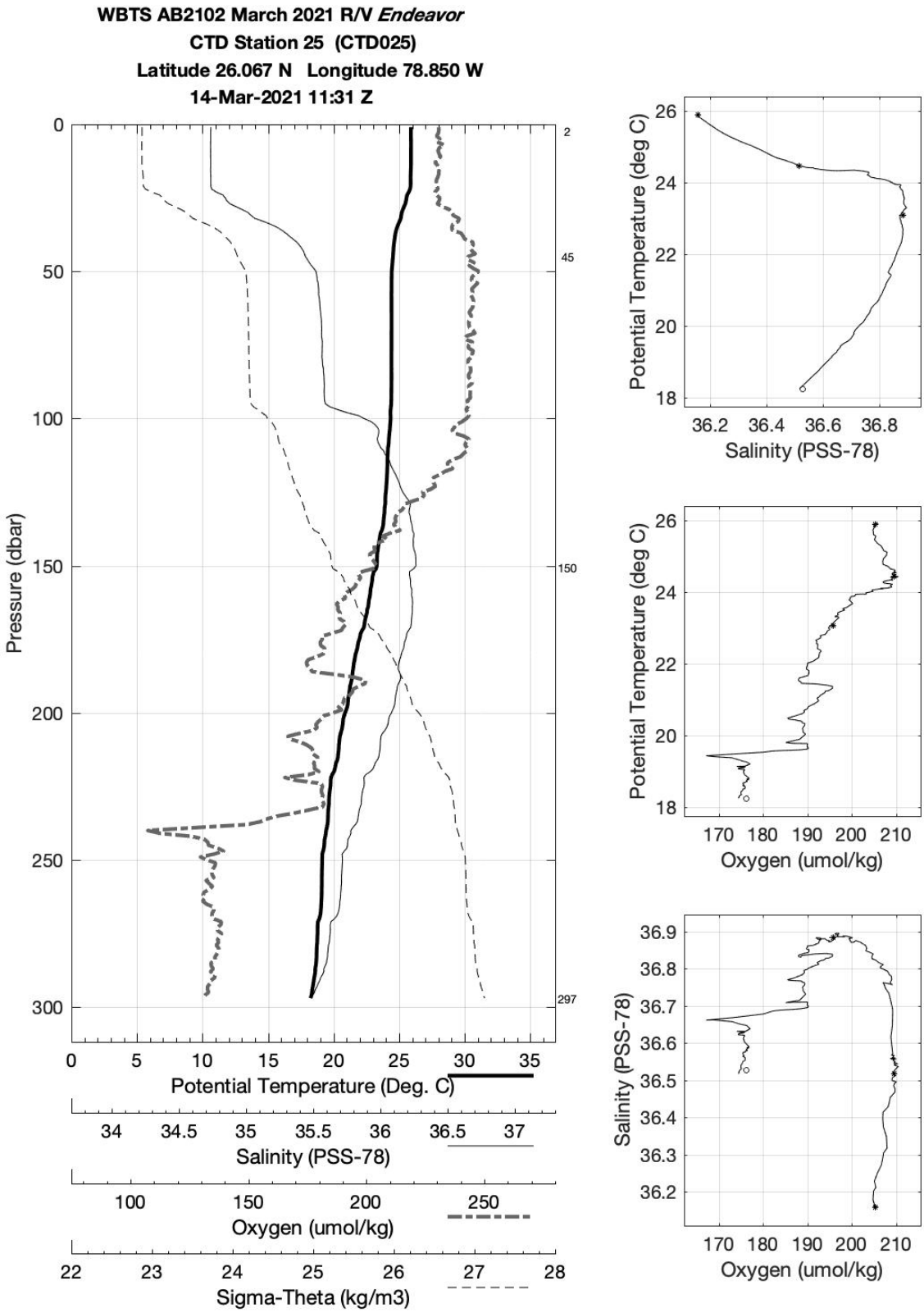
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
4921	1	2.232	1.782	34.875	−999.0
4506	2	2.355	1.951	34.890	−999.0
4005	3	2.375	2.029	34.897	−999.0
3497	4	2.507	2.215	34.908	−999.0
3005	5	2.755	2.509	34.923	−999.0
2502	6	3.163	2.960	34.942	−999.0
1505	7	4.340	4.215	35.001	−999.0
1003	8	6.886	6.787	35.100	−999.0
702	9	12.375	12.279	35.610	−999.0
408	10	18.304	18.232	36.536	−999.0
203	11	21.747	21.706	36.938	−999.0
3	12	24.843	24.842	36.769	−999.0


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 24 (CTD024)
Latitude 26.706 N Longitude 76.402 W
12-Mar-2021 23:58 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS-78)
Oxygen (umol/kg)
Sigma-Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS-78)
Oxygen (umol/kg)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 25 (CTD025)
Latitude 26.067N Longitude 78.850W
14-Mar-2021 11:31Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.903	25.902	36.159	205.2	0.004	23.939
10	25.906	25.904	36.158	205.3	0.040	23.938
20	25.883	25.878	36.159	204.9	0.079	23.946
30	25.211	25.204	36.293	207.0	0.117	24.256
50	24.445	24.434	36.537	210.5	0.186	24.675
75	24.434	24.418	36.560	209.2	0.268	24.697
100	24.371	24.350	36.709	208.9	0.349	24.831
125	24.009	23.983	36.849	203.1	0.425	25.047
150	23.323	23.292	36.896	197.1	0.496	25.287
200	20.916	20.877	36.808	191.4	0.618	25.905
250	19.175	19.129	36.632	174.9	0.717	26.236

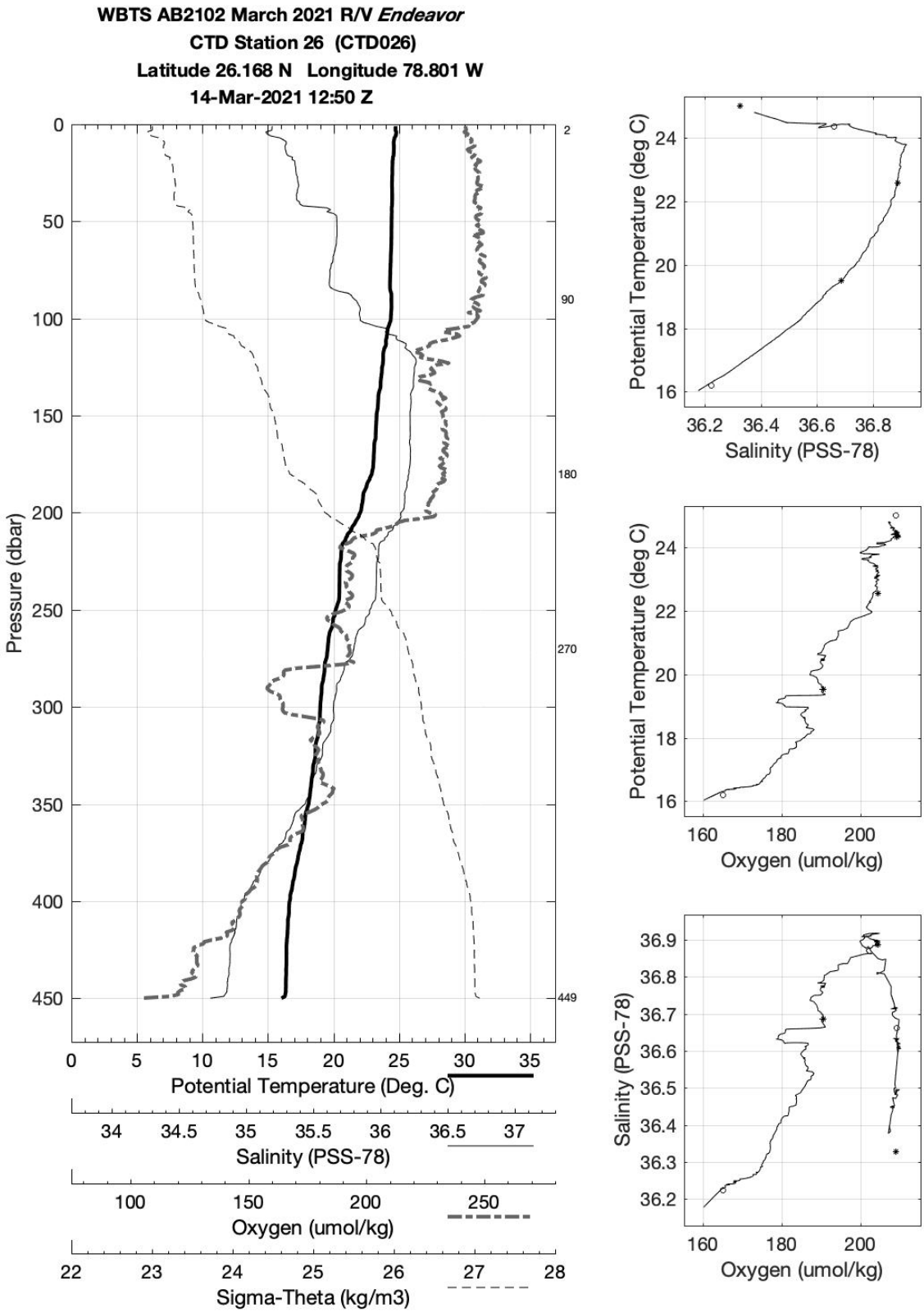
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
297	1	18.285	18.233	36.527	176.1
151	2	23.116	23.085	36.885	195.8
45	3	24.486	24.476	36.517	209.5
2	4	25.886	25.886	36.158	205.2


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 25 (CTD025)
Latitude 26.067 N Longitude 78.850 W
14-Mar-2021 11:31 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 26 (CTD026)
Latitude 26.168N Longitude 78.801W
14-Mar-2021 12:50Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.739	24.738	36.400	207.4	0.003	24.479
10	24.603	24.600	36.451	208.2	0.034	24.560
20	24.513	24.509	36.482	209.0	0.068	24.611
30	24.480	24.474	36.493	209.0	0.101	24.630
50	24.449	24.438	36.633	209.5	0.167	24.746
75	24.355	24.339	36.608	209.4	0.247	24.757
100	24.403	24.381	36.717	209.0	0.327	24.828
125	23.737	23.711	36.912	202.6	0.401	25.176
150	23.323	23.292	36.896	204.1	0.470	25.287
200	22.078	22.038	36.863	202.1	0.602	25.623
250	20.218	20.171	36.751	189.9	0.710	26.052
300	19.051	18.997	36.621	180.9	0.807	26.261
400	16.719	16.653	36.292	174.9	0.980	26.589

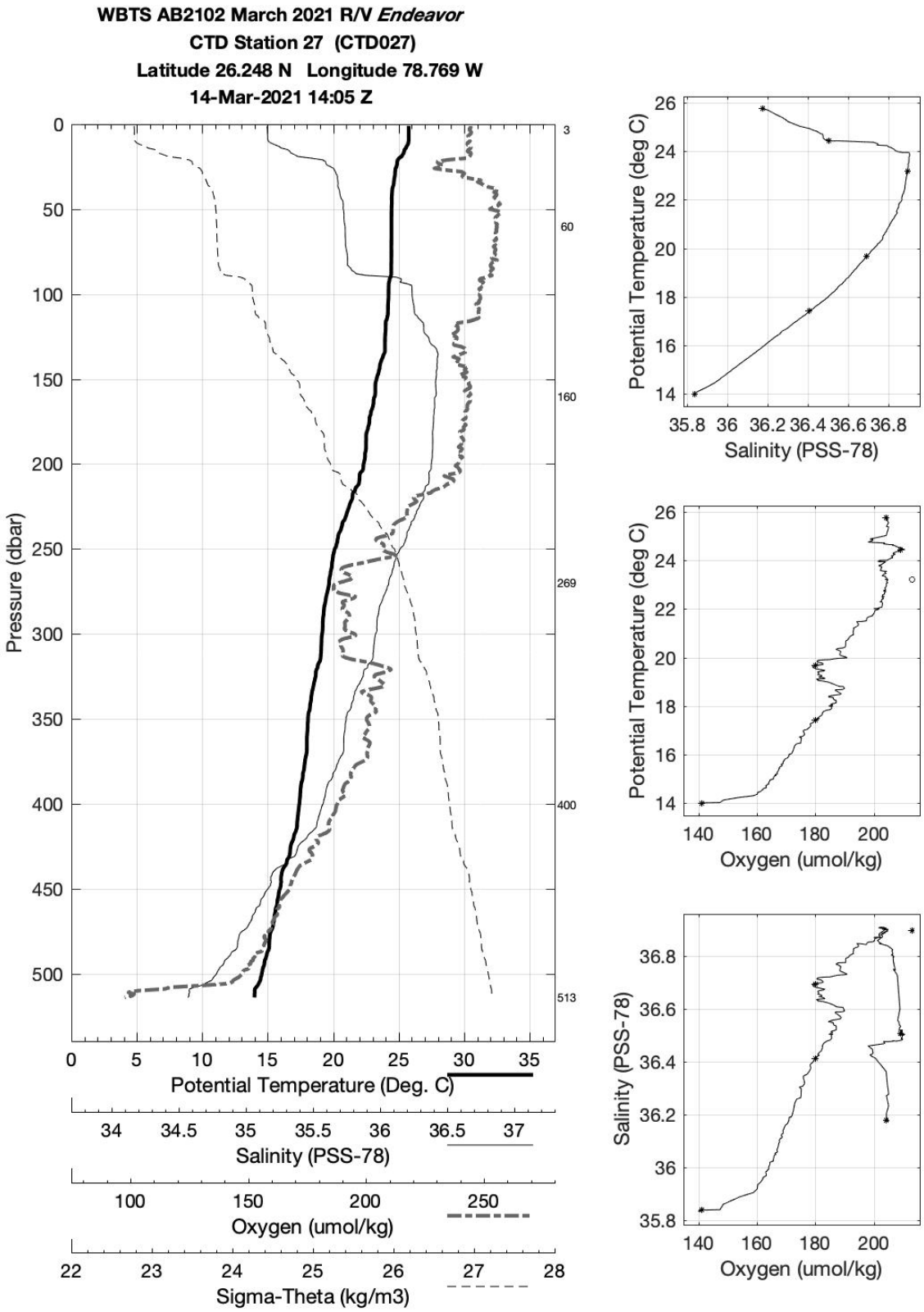
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
449	1	16.272	16.199	36.224	165.1
270	2	19.559	19.510	36.685	190.5
180	3	22.623	22.586	36.886	204.4
90	4	24.383	24.364	36.661	209.3
3	5	24.999	24.999	36.327	209.1


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 26 (CTD026)
Latitude 26.168 N Longitude 78.801 W
14-Mar-2021 12:50 Z
Pressure (dbar)
Potential Temperature (Deg. C)
Salinity (PSS-78)
Oxygen (umol/kg)
Sigma-Theta (kg/m3)
Potential Temperature (deg C)
Salinity (PSS-78)
Oxygen (umol/kg)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 27 (CTD027)
Latitude 26.248N Longitude 78.769W
14-Mar-2021 14:05Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.765	25.765	36.175	204.8	0.004	23.993
10	25.758	25.756	36.179	204.7	0.039	24.000
20	25.035	25.031	36.363	204.1	0.077	24.362
30	24.718	24.712	36.474	203.3	0.111	24.543
50	24.466	24.455	36.501	208.4	0.178	24.641
75	24.459	24.443	36.516	209.3	0.261	24.656
100	24.249	24.228	36.796	206.5	0.341	24.934
125	23.991	23.965	36.863	202.1	0.416	25.063
150	23.338	23.307	36.898	203.8	0.487	25.284
200	22.360	22.320	36.879	202.4	0.618	25.555
250	20.156	20.109	36.744	188.3	0.731	26.064
300	19.205	19.150	36.639	183.1	0.829	26.236
400	17.486	17.418	36.414	179.9	1.005	26.499
500	14.625	14.549	35.957	162.1	1.158	26.809

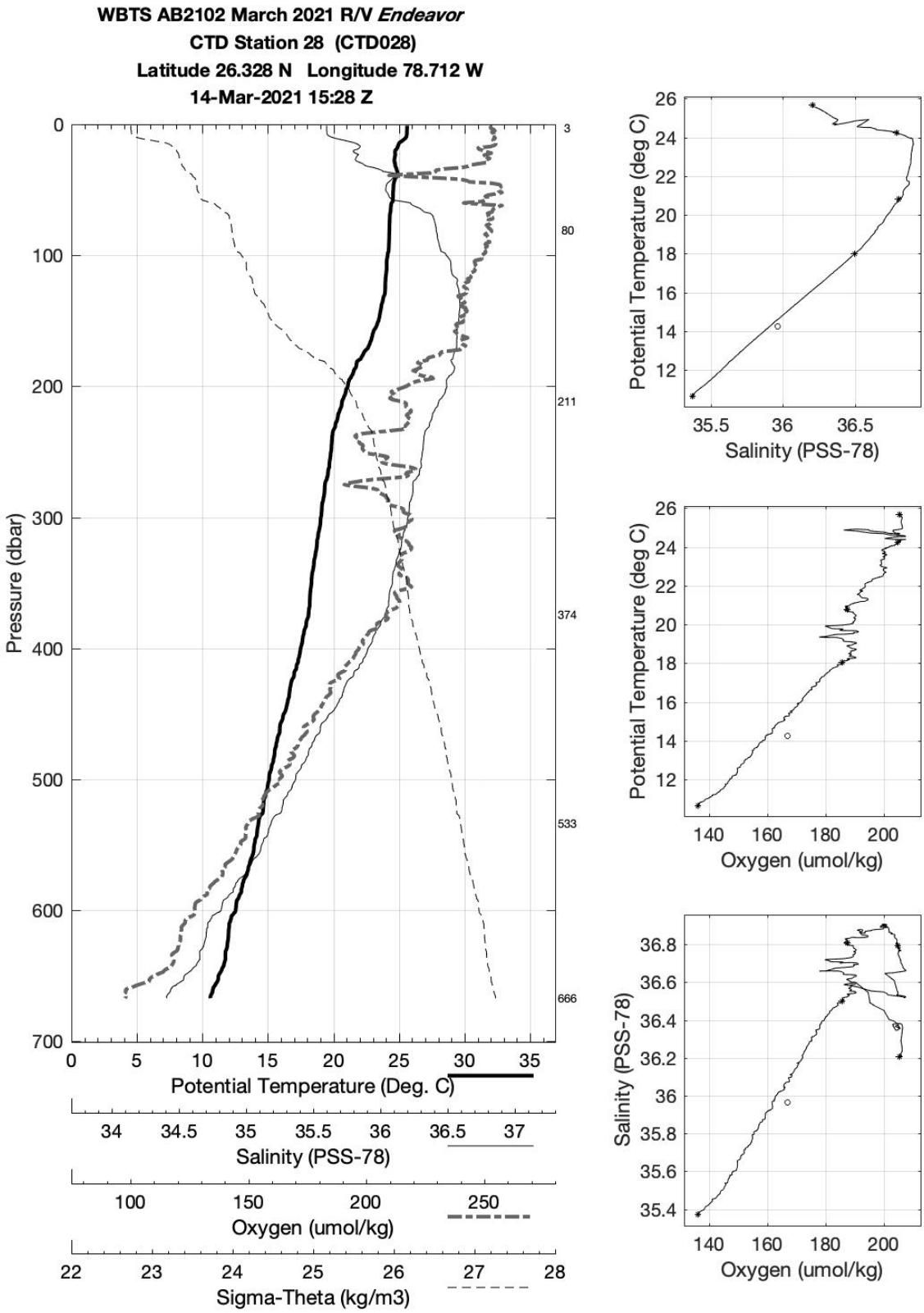
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
514	1	14.056	13.980	35.842	141.3
400	2	17.471	17.403	36.410	180.1
270	3	19.700	19.650	36.691	180.1
160	4	23.214	23.181	36.896	213.1
60	5	24.457	24.444	36.504	209.2
3	6	25.777	25.776	36.177	204.0


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 27 (CTD027)
Latitude 26.248 N Longitude 78.769 W
14-Mar-2021 14:05 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 28 (CTD028)
Latitude 26.328N Longitude 78.712W
14-Mar-2021 15:28Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.614	25.614	36.206	205.4	0.004	24.064
10	25.534	25.531	36.235	206.4	0.038	24.111
20	24.717	24.713	36.347	204.1	0.074	24.447
30	24.704	24.698	36.395	203.4	0.109	24.488
50	24.572	24.562	36.516	207.0	0.176	24.621
75	24.294	24.278	36.775	205.5	0.256	24.903
100	24.149	24.128	36.835	203.8	0.332	24.993
125	23.973	23.946	36.898	200.7	0.406	25.095
150	23.467	23.435	36.901	200.3	0.477	25.249
200	21.120	21.081	36.838	189.5	0.601	25.871
250	19.852	19.805	36.710	181.7	0.704	26.118
300	19.085	19.030	36.633	190.5	0.801	26.262
400	17.556	17.487	36.423	180.6	0.978	26.489
500	15.162	15.084	36.042	165.6	1.134	26.757
600	12.615	12.533	35.650	149.7	1.268	26.990

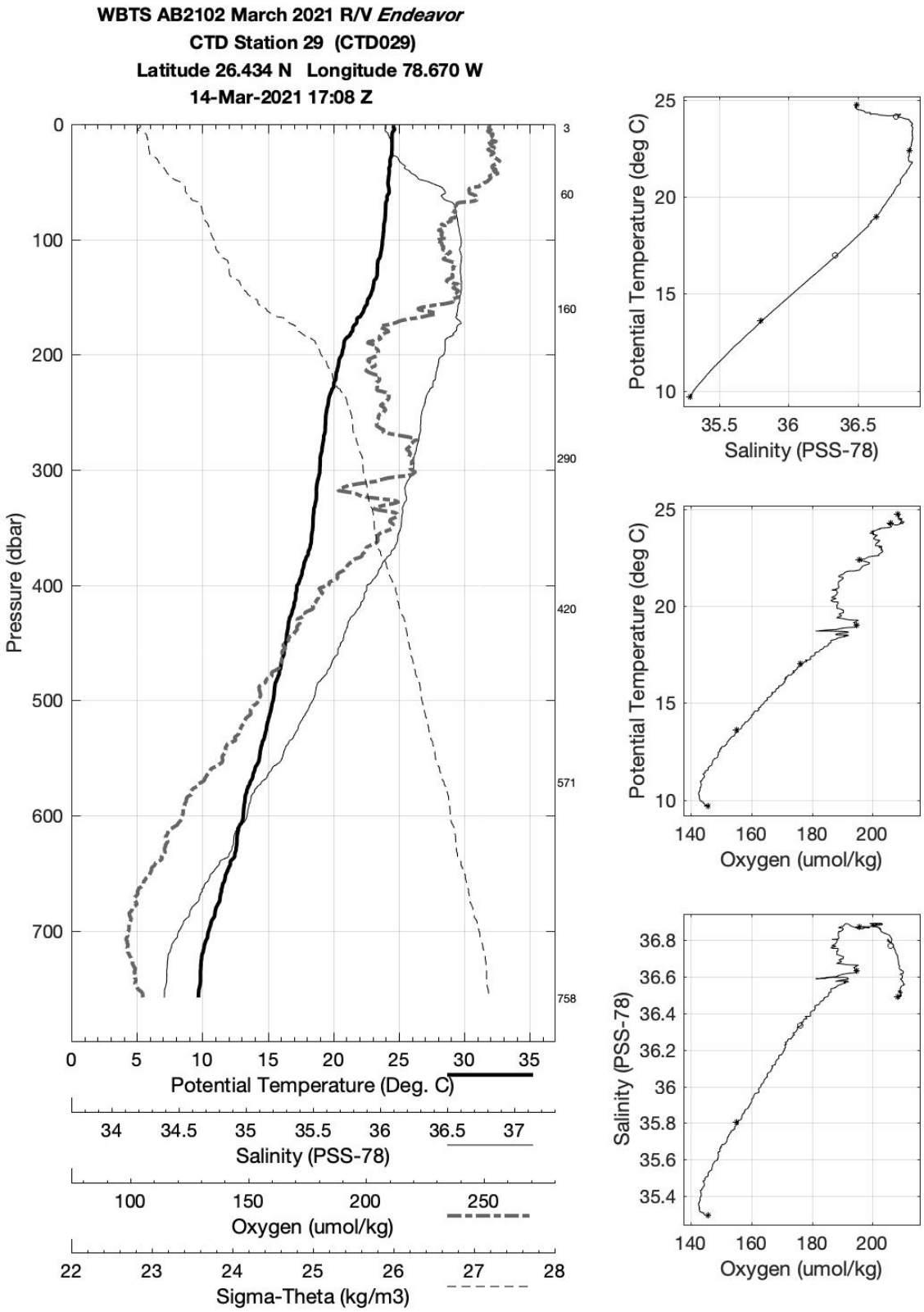
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
667	1	10.732	10.649	35.371	136.1
533	2	14.345	14.265	35.963	167.0
374	3	18.059	17.994	36.500	185.7
211	4	20.839	20.798	36.807	187.6
80	5	24.254	24.237	36.795	204.6
3	6	25.670	25.669	36.207	205.5


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 28 (CTD028)
Latitude 26.328 N Longitude 78.712 W
14-Mar-2021 15:28 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 29 (CTD029)
Latitude 26.434N Longitude 78.670W
14-Mar-2021 17:08Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	24.595	24.595	36.483	208.7	0.003	24.586
10	24.482	24.480	36.502	209.2	0.033	24.635
20	24.484	24.480	36.521	209.6	0.066	24.650
30	24.355	24.349	36.552	210.0	0.099	24.712
50	24.187	24.176	36.716	208.2	0.162	24.888
75	24.002	23.986	36.861	202.3	0.237	25.055
100	23.782	23.761	36.890	199.6	0.310	25.144
125	23.390	23.364	36.887	202.2	0.380	25.259
150	22.798	22.767	36.885	203.1	0.447	25.431
200	20.685	20.647	36.797	188.3	0.564	25.959
250	19.512	19.466	36.679	189.5	0.664	26.184
300	19.022	18.968	36.634	194.6	0.759	26.279
400	17.314	17.246	36.385	179.5	0.936	26.518
500	15.485	15.406	36.093	166.6	1.092	26.724
600	13.209	13.124	35.739	152.7	1.230	26.941
700	10.575	10.488	35.373	143.0	1.348	27.158

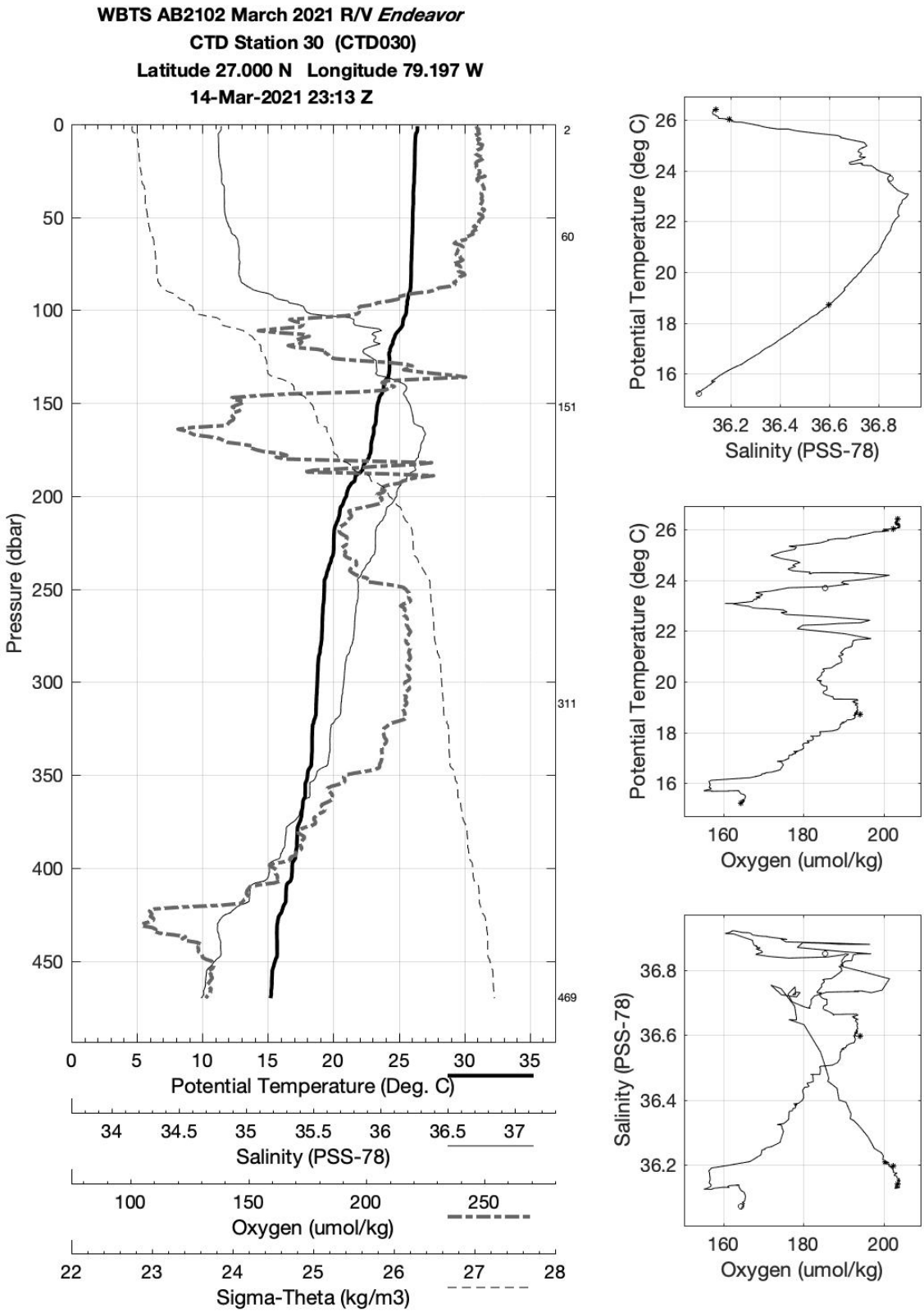
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
758	1	9.789	9.700	35.294	145.7
571	2	13.692	13.609	35.803	155.3
420	3	17.048	16.977	36.334	176.2
290	4	19.038	18.986	36.631	194.8
160	5	22.388	22.356	36.871	195.7
60	6	24.160	24.147	36.770	206.0
3	7	24.741	24.740	36.490	208.4


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 29 (CTD029)
Latitude 26.434 N Longitude 78.670 W
14-Mar-2021 17:08 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 30 (CTD030)
Latitude 27.000N Longitude 79.197W
14-Mar-2021 23:13Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.416	26.416	36.137	203.1	0.004	23.761
10	26.242	26.239	36.127	203.0	0.041	23.809
20	26.213	26.208	36.130	203.1	0.082	23.821
30	26.174	26.167	36.139	203.1	0.123	23.840
50	26.063	26.052	36.155	204.0	0.204	23.889
75	25.958	25.942	36.208	199.7	0.303	23.963
100	25.598	25.576	36.461	186.3	0.400	24.269
125	24.297	24.270	36.711	182.0	0.484	24.856
150	23.422	23.390	36.861	169.5	0.559	25.232
200	21.032	20.993	36.813	188.9	0.686	25.877
250	19.343	19.297	36.664	192.9	0.787	26.217
300	18.825	18.772	36.609	192.9	0.880	26.310
400	16.916	16.849	36.322	174.1	1.053	26.566

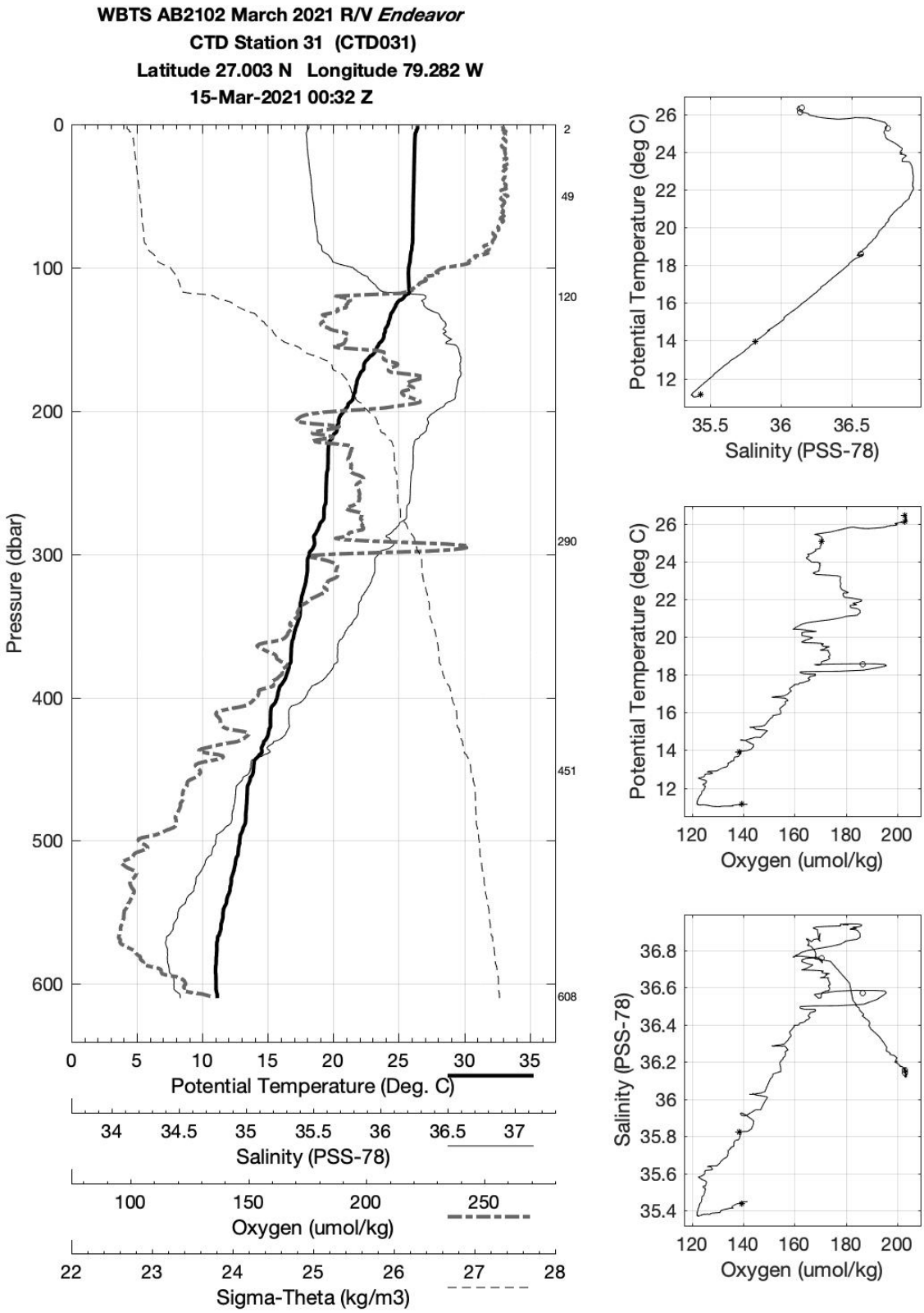
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
470	1	15.275	15.202	36.070	164.4
311	2	18.751	18.696	36.598	194.1
152	3	23.706	23.674	36.852	185.5
60	4	26.024	26.010	36.196	202.4
3	5	26.398	26.397	36.140	203.5


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 30 (CTD030)
Latitude 27.000 N Longitude 79.197 W
14-Mar-2021 23:13 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 31 (CTD031)
Latitude 27.003N Longitude 79.282W
15-Mar-2021 00:32Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.436	26.435	36.131	203.1	0.004	23.750
10	26.236	26.234	36.121	203.3	0.041	23.806
20	26.207	26.202	36.125	203.6	0.082	23.819
30	26.178	26.171	36.135	203.4	0.123	23.836
50	26.127	26.116	36.150	204.2	0.204	23.865
75	26.085	26.068	36.175	201.2	0.305	23.898
100	25.780	25.757	36.365	190.7	0.404	24.140
125	24.885	24.858	36.742	170.3	0.496	24.702
150	23.827	23.795	36.891	169.9	0.572	25.135
200	20.875	20.836	36.808	169.2	0.693	25.916
250	19.513	19.467	36.673	172.7	0.793	26.179
300	18.224	18.171	36.500	167.4	0.886	26.379
400	15.776	15.712	36.113	150.8	1.051	26.670
500	12.913	12.844	35.635	126.0	1.187	26.917
600	11.119	11.043	35.413	136.0	1.306	27.090

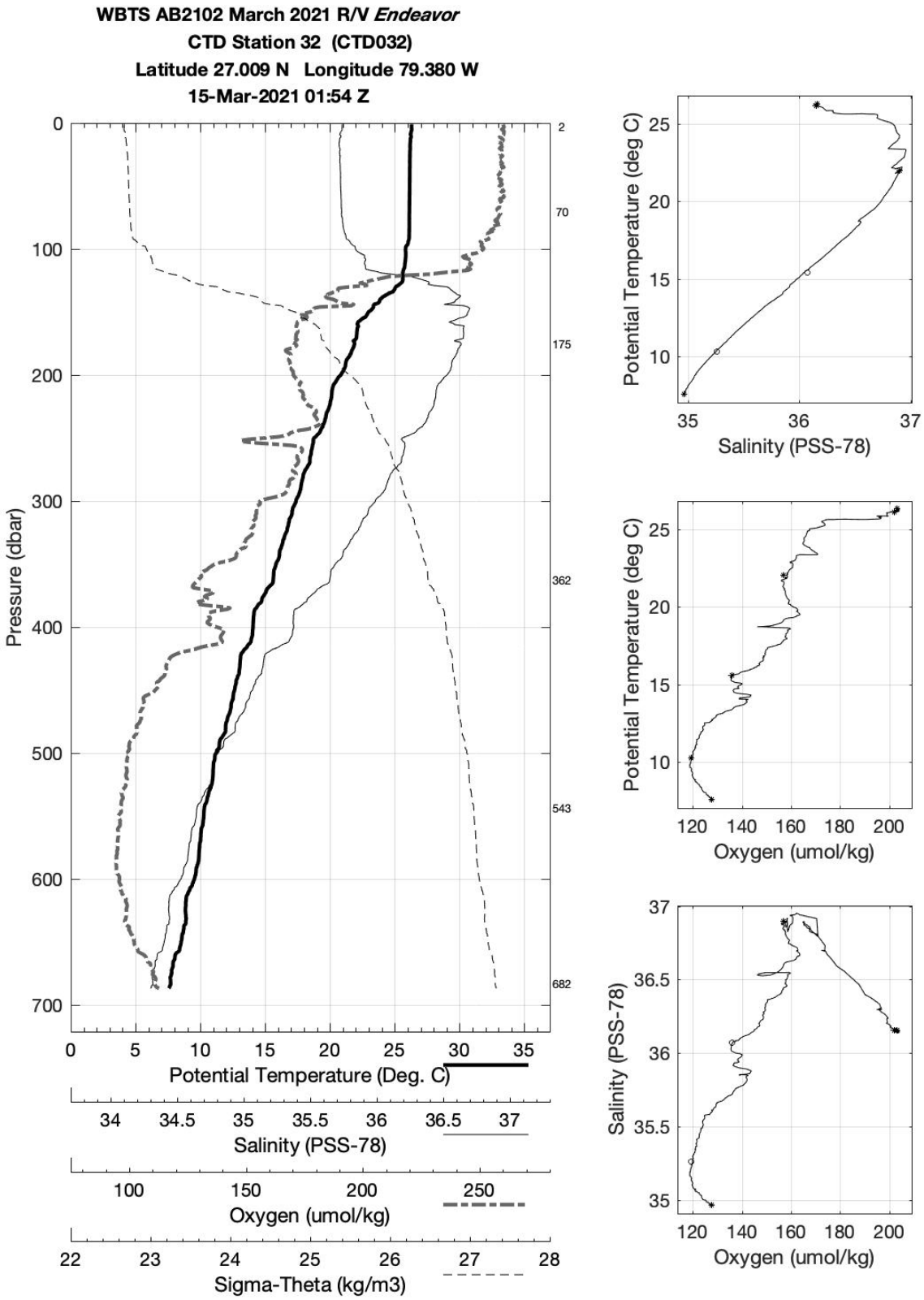
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
609	1	11.220	11.142	35.438	139.4
451	2	13.994	13.928	35.821	138.4
291	3	18.651	18.600	36.570	186.6
120	4	25.289	25.263	36.759	170.4
50	5	26.115	26.103	36.139	202.9
3	6	26.325	26.324	36.155	202.9


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 31 (CTD031)
Latitude 27.003 N Longitude 79.282 W
15-Mar-2021 00:32 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 32 (CTD032)
Latitude 27.009N Longitude 79.380W
15-Mar-2021 01:54Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.301	26.301	36.157	203.9	0.004	23.812
10	26.251	26.249	36.148	203.6	0.041	23.822
20	26.192	26.187	36.141	203.0	0.081	23.836
30	26.167	26.161	36.141	204.0	0.122	23.844
50	26.156	26.145	36.147	203.1	0.203	23.853
75	26.138	26.121	36.156	202.8	0.305	23.868
100	25.863	25.840	36.240	199.6	0.406	24.019
125	25.648	25.620	36.672	174.7	0.501	24.414
150	23.000	22.970	36.943	161.5	0.577	25.417
200	20.879	20.841	36.812	157.7	0.695	25.918
250	18.819	18.774	36.532	151.8	0.795	26.251
300	17.432	17.381	36.364	150.4	0.882	26.470
400	14.123	14.064	35.853	140.7	1.032	26.833
500	11.316	11.252	35.382	121.4	1.157	27.027
600	9.620	9.551	35.149	119.5	1.266	27.145

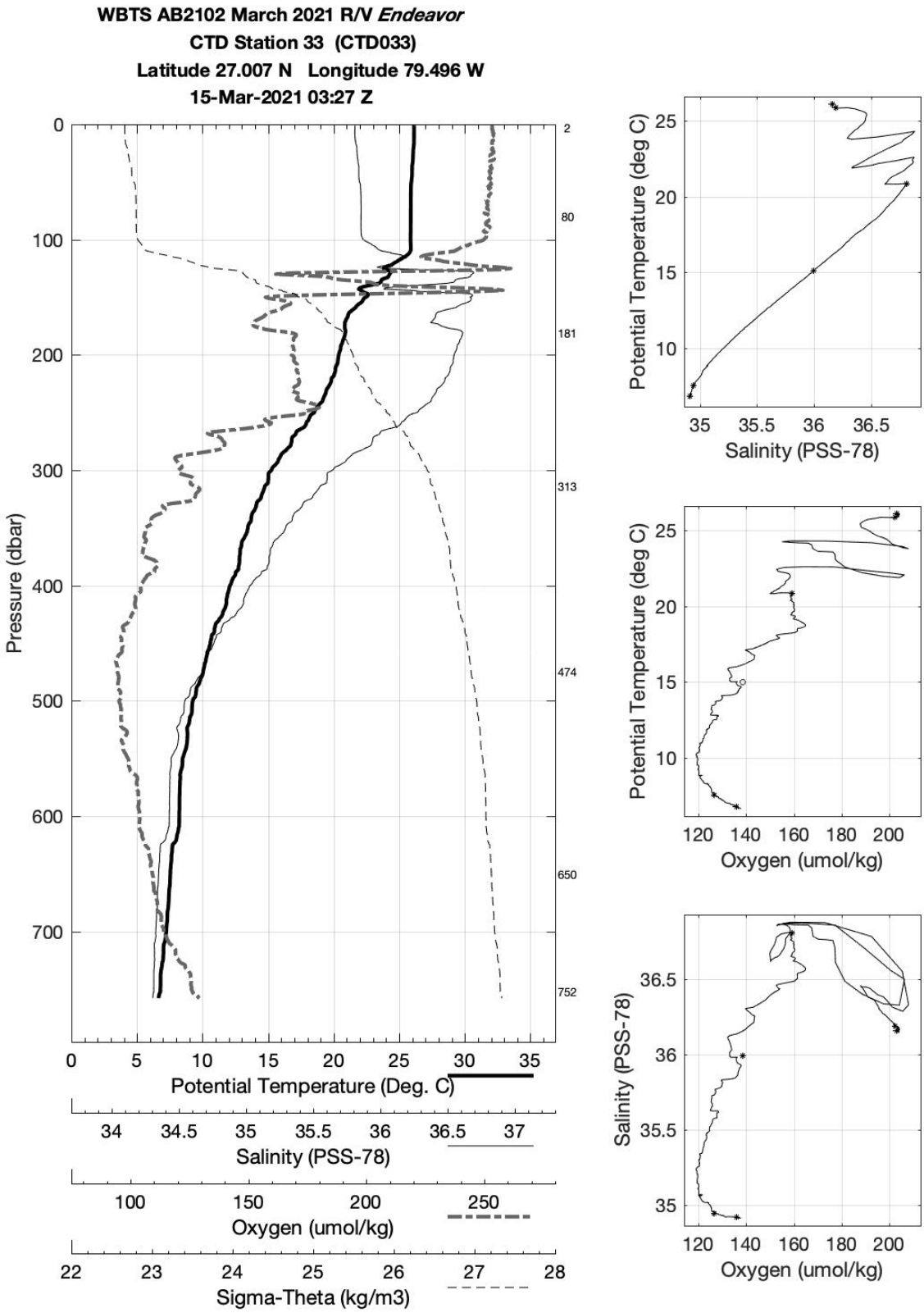
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
683	1	7.672	7.602	34.966	127.7
544	2	10.390	10.324	35.260	119.4
363	3	15.458	15.402	36.071	136.1
176	4	22.039	22.004	36.897	156.8
70	5	26.139	26.123	36.154	202.2
3	6	26.282	26.281	36.156	203.3


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 32 (CTD032)
Latitude 27.009 N Longitude 79.380 W
15-Mar-2021 01:54 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 33 (CTD033)
Latitude 27.007N Longitude 79.496W
15-Mar-2021 03:27Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.125	26.124	36.152	203.8	0.004	23.864
10	26.126	26.123	36.152	204.2	0.040	23.864
20	26.094	26.089	36.163	204.4	0.081	23.883
30	26.045	26.038	36.169	204.4	0.121	23.904
50	25.935	25.923	36.179	204.0	0.201	23.947
75	25.892	25.875	36.189	203.0	0.300	23.970
100	25.884	25.862	36.204	202.0	0.399	23.985
125	23.829	23.803	36.330	208.1	0.491	24.708
150	22.478	22.448	36.857	152.7	0.563	25.502
200	20.422	20.384	36.761	158.6	0.675	26.003
250	18.557	18.513	36.533	161.4	0.773	26.318
300	15.299	15.253	36.014	133.1	0.853	26.698
400	12.142	12.089	35.508	124.7	0.982	26.967
500	9.311	9.254	35.109	119.8	1.092	27.163
600	8.288	8.225	35.013	124.4	1.188	27.250
700	7.306	7.236	34.930	129.8	1.276	27.331

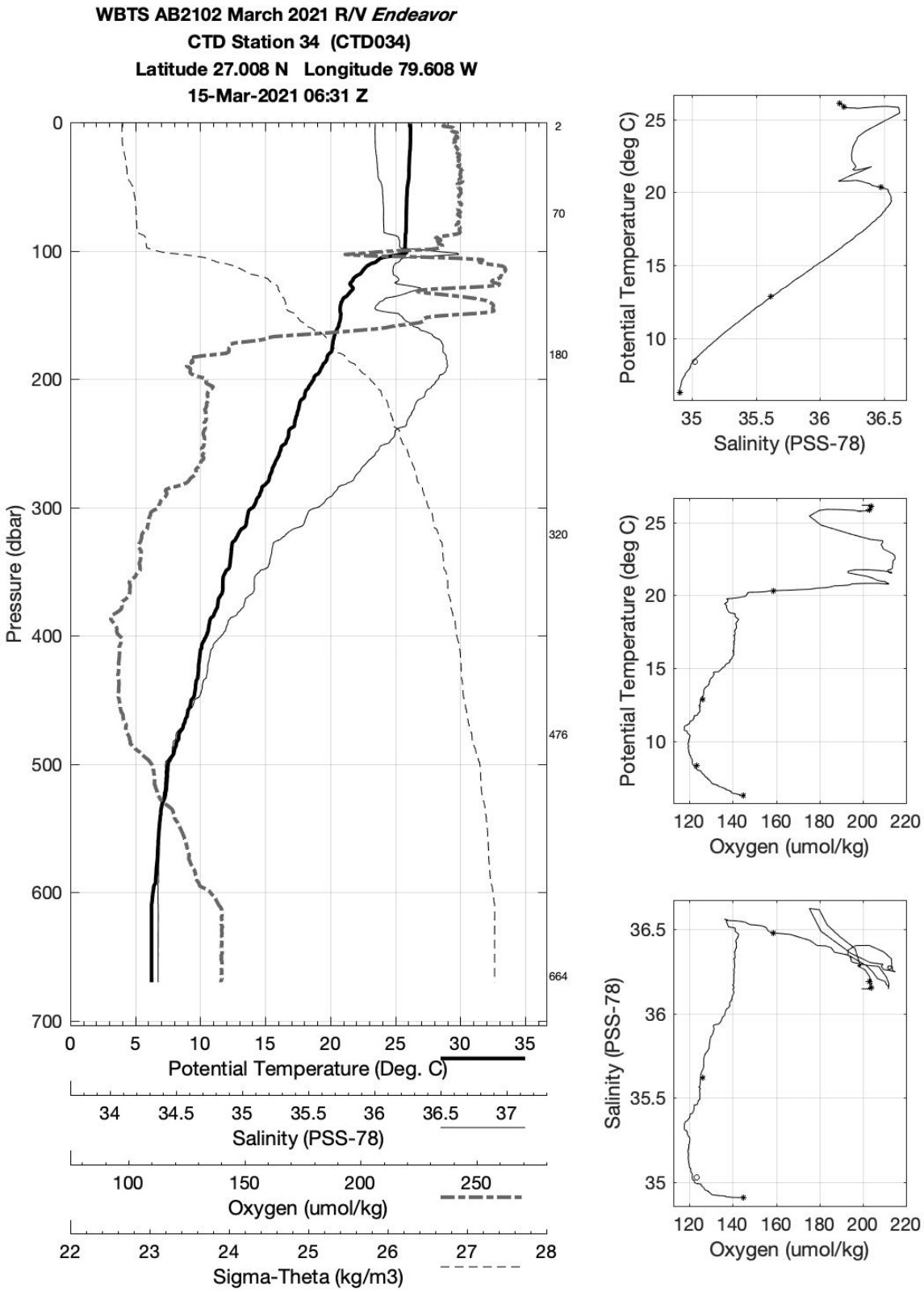
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
752	1	6.882	6.809	34.917	135.8
650	2	7.613	7.548	34.944	126.4
475	3	10.134	10.778	−999.000	−999.0
314	4	15.188	15.139	35.994	138.5
181	5	20.882	20.847	36.807	159.1
80	6	25.883	25.865	36.189	202.4
3	7	26.113	26.112	36.159	203.2


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 33 (CTD033)
Latitude 27.007 N Longitude 79.496 W
15-Mar-2021 03:27 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 34 (CTD034)
Latitude 27.008N Longitude 79.608W
15-Mar-2021 06:31Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.168	26.168	36.146	199.8	0.004	23.846
10	26.170	26.167	36.146	202.4	0.041	23.845
20	26.156	26.152	36.147	203.1	0.081	23.851
30	26.089	26.082	36.156	203.3	0.121	23.880
50	25.949	25.938	36.185	203.4	0.202	23.948
75	25.861	25.844	36.194	203.6	0.301	23.983
100	25.897	25.874	36.460	189.0	0.398	24.175
125	21.573	21.549	36.257	212.3	0.476	25.299
150	20.844	20.815	36.285	202.2	0.541	25.523
200	18.770	18.735	36.507	140.9	0.649	26.242
250	16.617	16.576	36.223	140.5	0.733	26.554
300	14.114	14.070	35.820	129.2	0.804	26.806
400	10.513	10.464	35.268	119.7	0.922	27.081
500	7.580	7.530	34.950	127.6	1.020	27.304
600	6.417	6.361	34.907	142.1	1.099	27.432

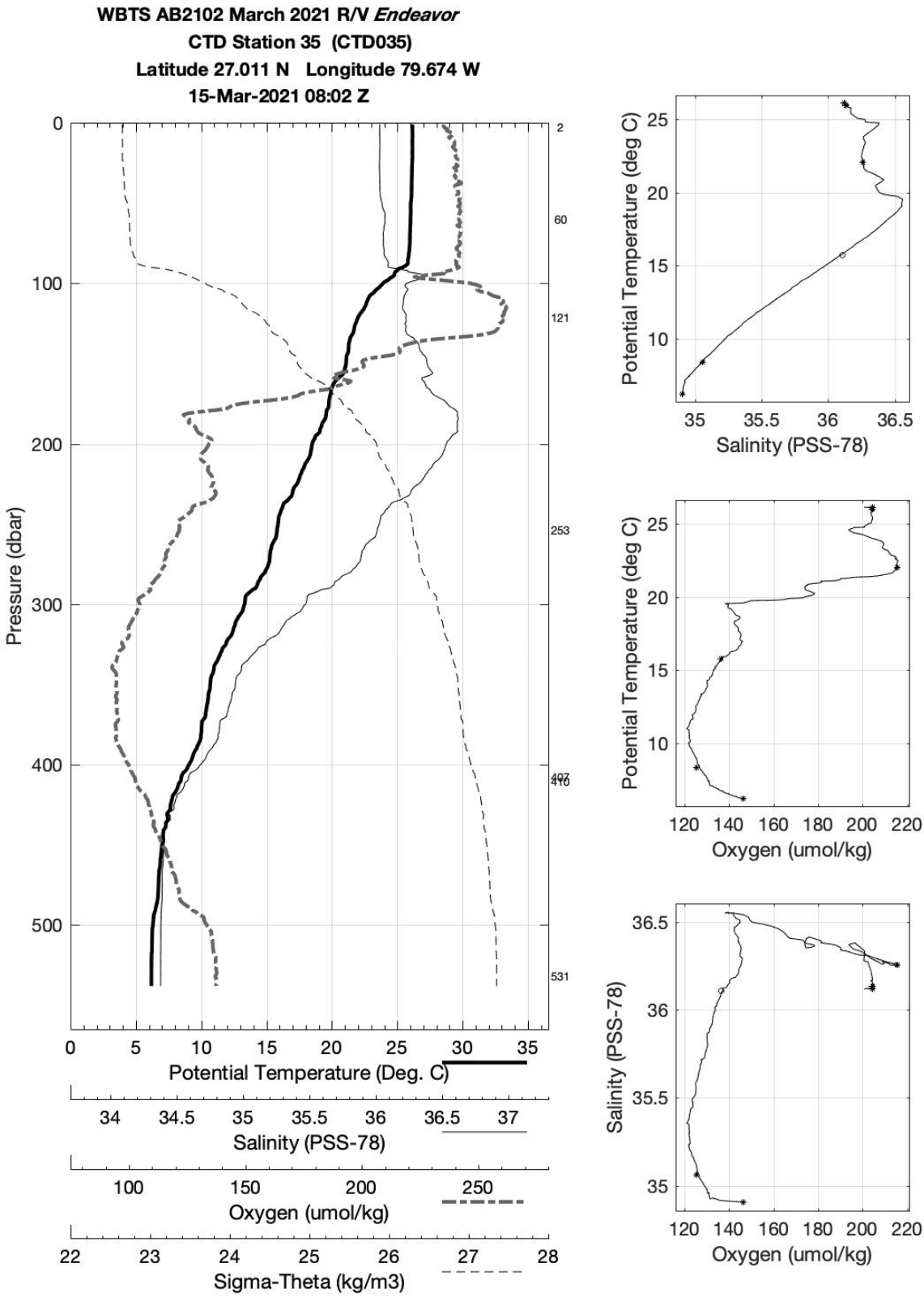
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
665	1	6.316	6.256	34.905	144.9
477	2	8.420	8.370	35.024	123.4
321	3	12.907	12.863	35.620	126.2
181	4	20.404	20.370	36.479	158.6
71	5	25.870	25.854	36.190	203.3
3	6	26.115	26.114	36.151	203.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 34 (CTD034)
Latitude 27.008 N Longitude 79.608 W
15-Mar-2021 06:31 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 35 (CTD035)
Latitude 27.011N Longitude 79.674W
15-Mar-2021 08:02Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	26.163	26.163	36.122	200.7	0.004	23.829
10	26.161	26.159	36.123	202.5	0.041	23.831
20	26.162	26.158	36.121	203.6	0.081	23.830
30	26.128	26.121	36.121	203.8	0.122	23.841
50	26.044	26.033	36.135	204.7	0.203	23.879
75	25.981	25.964	36.143	204.8	0.304	23.907
100	23.928	23.907	36.274	207.0	0.399	24.634
125	21.843	21.819	36.260	214.3	0.474	25.227
150	21.113	21.084	36.384	181.4	0.540	25.525
200	18.535	18.499	36.492	144.3	0.645	26.290
250	15.916	15.876	36.119	137.1	0.727	26.637
300	13.357	13.314	35.711	127.6	0.796	26.880
400	9.108	9.063	35.127	124.9	0.904	27.207
500	6.349	6.304	34.908	143.7	0.984	27.441

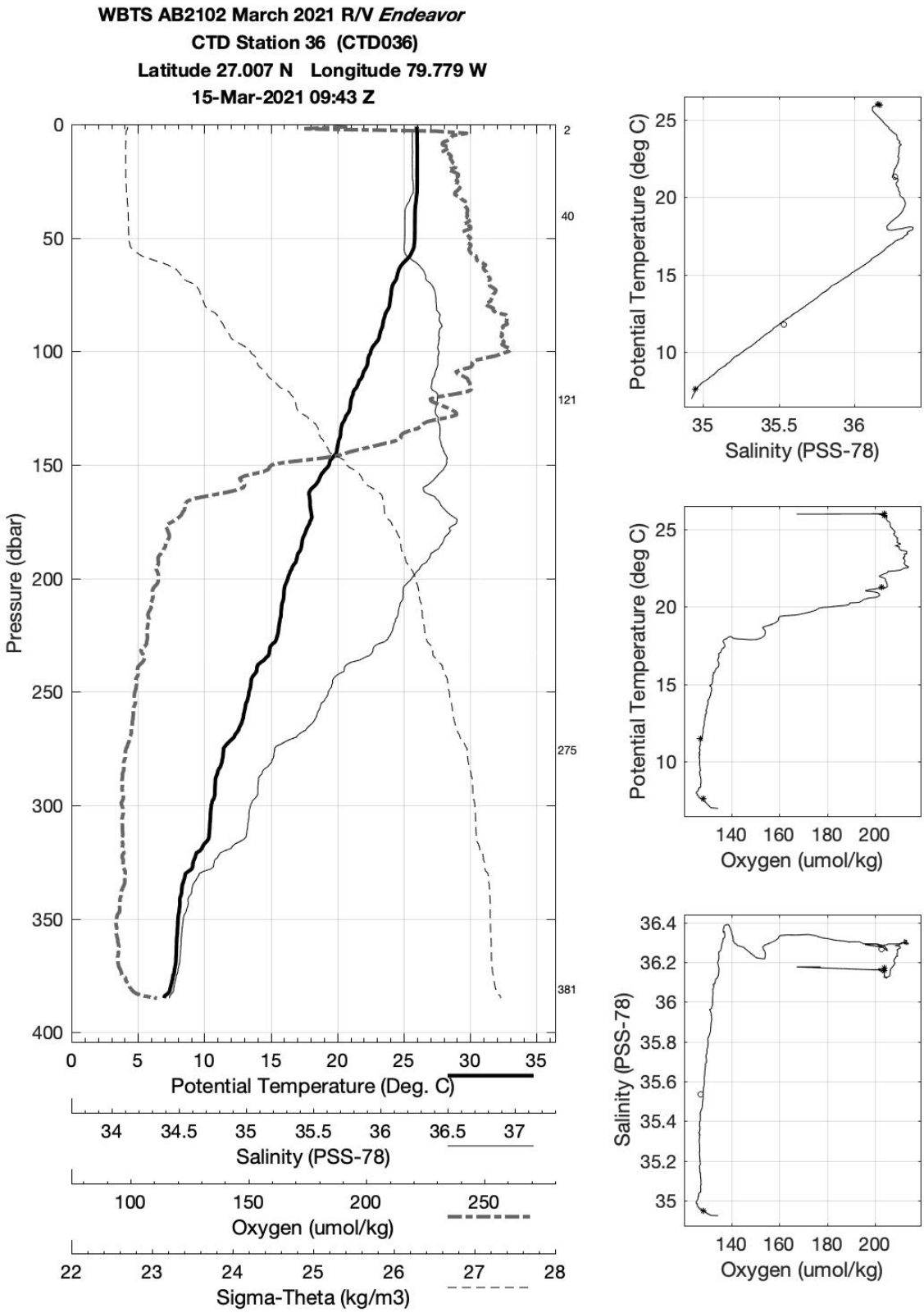
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
532	1	6.236	6.188	34.903	146.3
408	2	8.419	8.376	35.060	125.4
411	3	8.068	8.670	−999.000	−999.0
254	4	15.786	15.746	36.109	136.4
121	5	22.112	22.088	36.259	215.4
60	6	26.009	25.995	36.136	204.4
3	7	26.159	26.158	36.118	204.3


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 35 (CTD035)
Latitude 27.011 N Longitude 79.674 W
15-Mar-2021 08:02 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 36 (CTD036)
Latitude 27.007N Longitude 79.779W
15-Mar-2021 09:43Z

Pressure dbar	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}	DynHt m^2·s^{-2}	SigT kg·m^{-3}
1	25.993	25.992	36.176	177.4	0.004	23.924
10	26.016	26.014	36.161	200.2	0.040	23.905
20	26.017	26.013	36.162	200.0	0.080	23.906
30	26.010	26.004	36.167	201.6	0.120	23.913
50	25.840	25.828	36.123	205.0	0.200	23.934
75	24.067	24.051	36.280	210.1	0.291	24.595
100	22.547	22.527	36.297	213.7	0.371	25.054
125	20.986	20.962	36.282	199.9	0.439	25.480
150	19.418	19.391	36.334	160.4	0.497	25.940
200	16.317	16.285	36.159	134.9	0.584	26.574
250	13.396	13.361	35.734	129.6	0.654	26.888
300	10.563	10.527	35.337	126.7	0.710	27.123

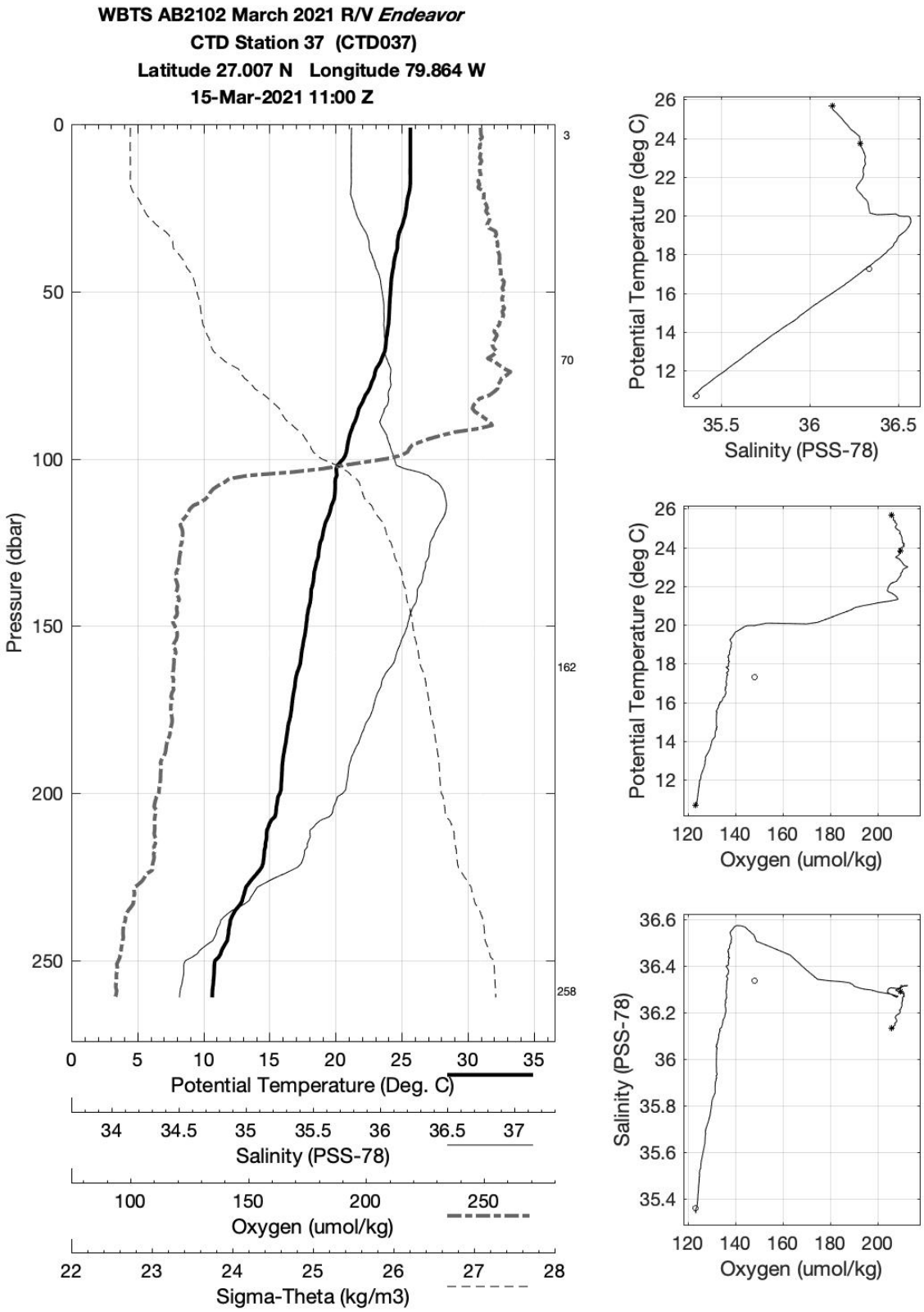
Pressure dbar	Niskin	Temp90 °C	PoTemp90 °C	Salinity PSS-78	Oxygen μmol·kg^{-1}
381	1	7.631	7.593	34.947	128.2
276	2	11.813	11.777	35.537	127.4
121	3	21.351	21.327	36.268	202.7
40	4	25.993	25.984	36.172	204.0
2	5	26.025	26.025	36.159	204.0


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 36 (CTD036)
Latitude 27.007 N Longitude 79.779 W
15-Mar-2021 09:43 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 37 (CTD037)
Latitude 27.007N Longitude 79.864W
15-Mar-2021 11:00Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.657	25.657	36.134	206.0	0.004	23.996
10	25.657	25.655	36.133	205.8	0.039	23.996
20	25.591	25.587	36.130	206.7	0.078	24.015
30	25.067	25.060	36.179	207.4	0.116	24.214
50	24.165	24.155	36.276	211.2	0.186	24.561
75	22.965	22.950	36.314	211.9	0.268	24.945
100	20.608	20.589	36.333	184.6	0.335	25.621
125	18.856	18.833	36.498	138.1	0.386	26.210
150	17.795	17.769	36.392	136.5	0.430	26.396
200	15.816	15.784	36.093	132.8	0.507	26.638
250	10.896	10.865	35.365	123.7	0.570	27.085

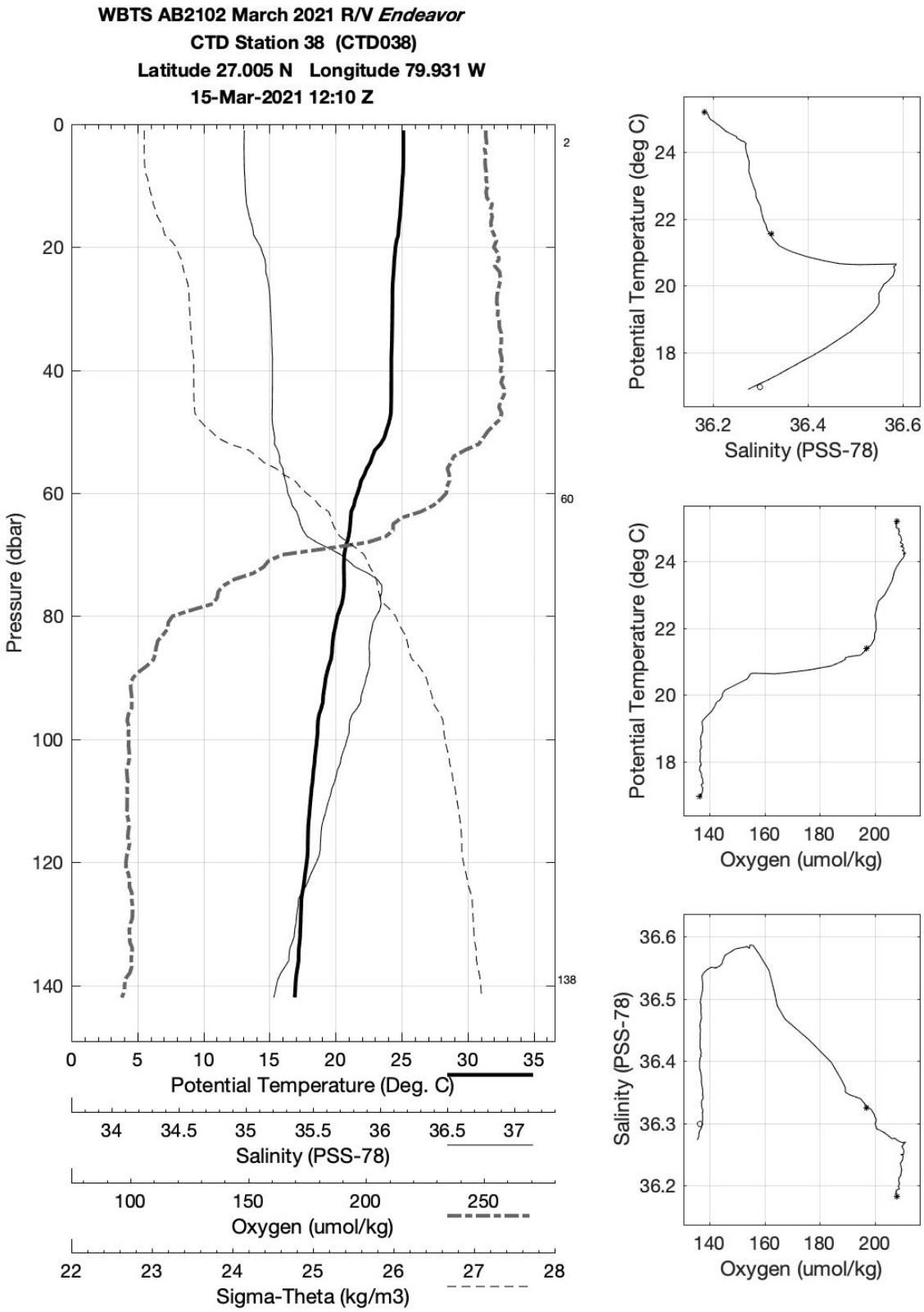
Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
259	1	10.701	10.669	35.360	123.0
162	2	17.292	17.265	36.336	147.9
70	3	23.744	23.730	36.289	209.7
3	4	25.684	25.683	36.133	205.8


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 37 (CTD037)
Latitude 27.007 N Longitude 79.864 W
15-Mar-2021 11:00 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 38 (CTD038)
Latitude 27.005N Longitude 79.931W
15-Mar-2021 12:10Z

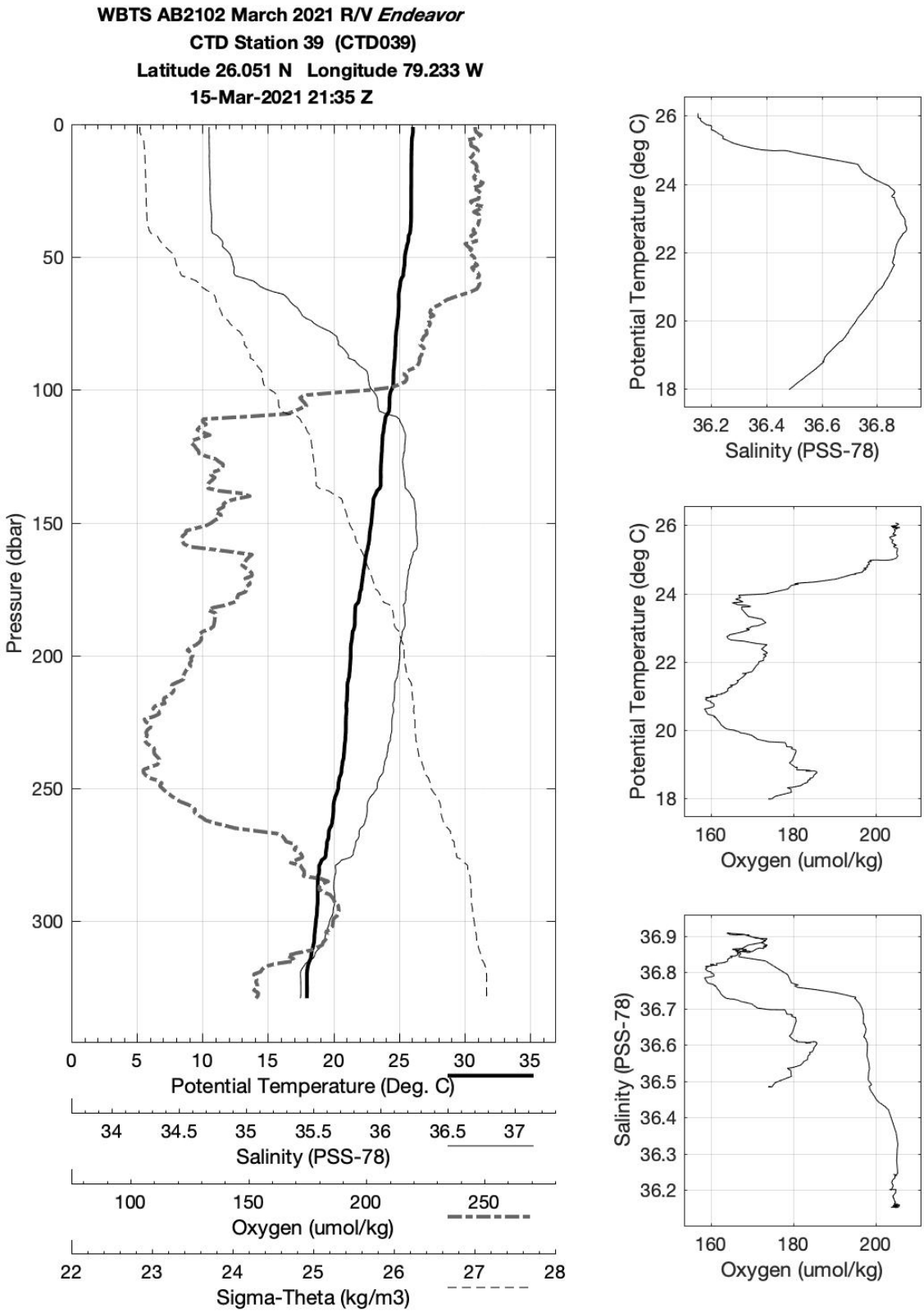
Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.139	25.139	36.188	207.7	0.004	24.197
10	25.043	25.041	36.190	208.1	0.037	24.229
20	24.543	24.538	36.235	209.3	0.073	24.416
30	24.312	24.305	36.263	210.2	0.108	24.507
50	23.837	23.826	36.273	208.1	0.176	24.657
75	20.664	20.650	36.586	155.8	0.241	25.797
100	18.611	18.593	36.485	136.9	0.290	26.261
125	17.503	17.481	36.353	137.5	0.333	26.437

Pressure	Niskin	Temp90	PoTemp90	Salinity	Oxygen
dbar		°C	°C	PSS-78	μmol·kg^{-1}
139	1	17.006	16.983	36.299	136.6
61	2	21.559	21.547	36.324	197.1
3	3	25.183	25.182	36.182	208.2


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 38 (CTD038)
Latitude 27.005 N Longitude 79.931 W
15-Mar-2021 12:10 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)

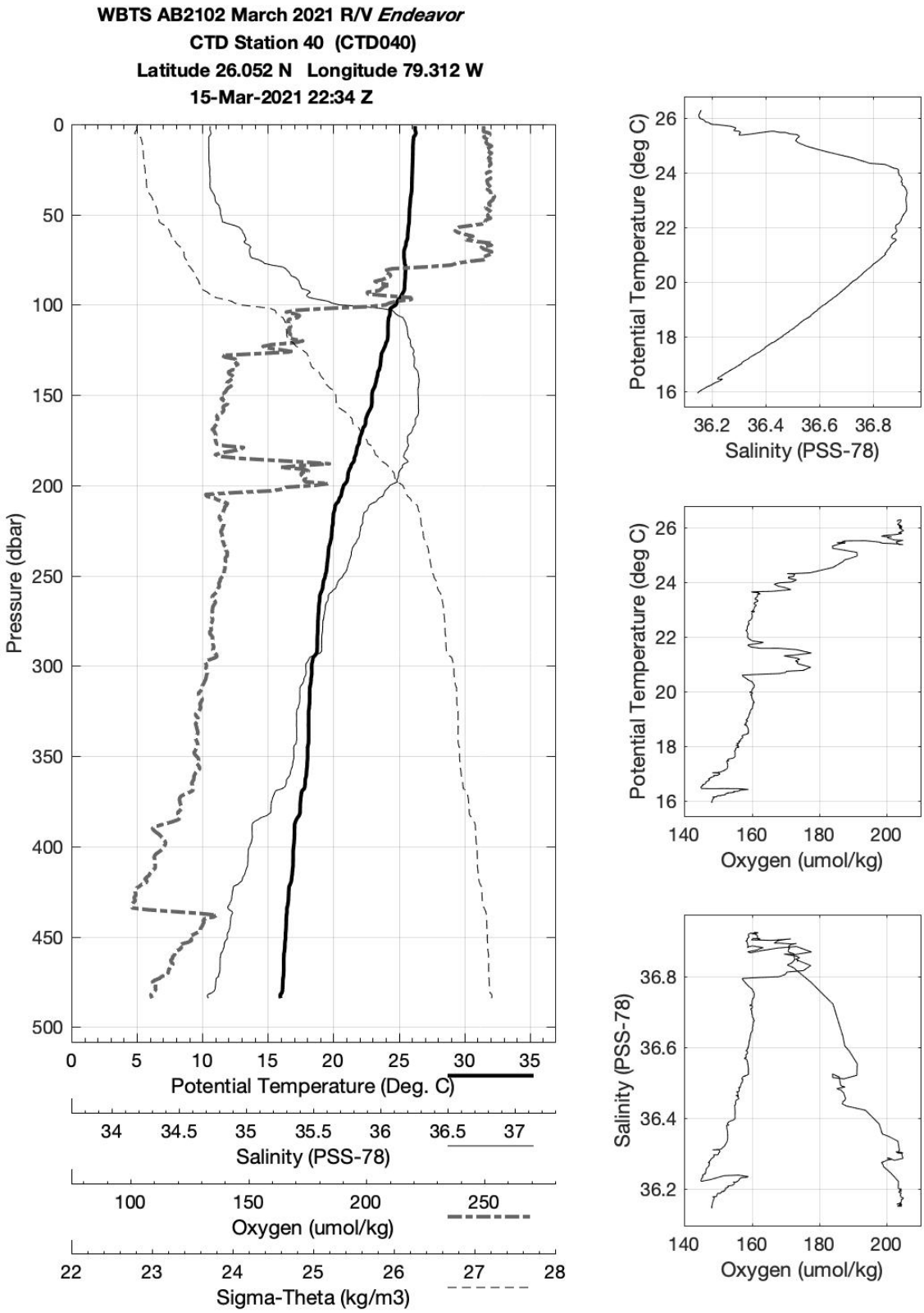
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 39 (CTD039)
Latitude 26.051N Longitude 79.233W
15-Mar-2021 21:35Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.062	26.062	36.152	204.7	0.004	23.883
10	25.956	25.953	36.153	205.1	0.040	23.918
20	25.938	25.934	36.154	204.5	0.080	23.925
30	25.931	25.924	36.157	204.4	0.120	23.930
50	25.454	25.443	36.232	204.6	0.198	24.137
75	24.886	24.870	36.533	198.5	0.288	24.541
100	24.441	24.420	36.744	190.3	0.370	24.836
125	23.688	23.662	36.858	167.4	0.444	25.149
150	22.918	22.887	36.904	168.1	0.513	25.411
200	21.348	21.309	36.845	165.5	0.634	25.814
250	20.412	20.365	36.762	161.2	0.743	26.009
300	18.707	18.653	36.589	185.0	0.839	26.325


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 39 (CTD039)
Latitude 26.051 N Longitude 79.233 W
15-Mar-2021 21:35 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)

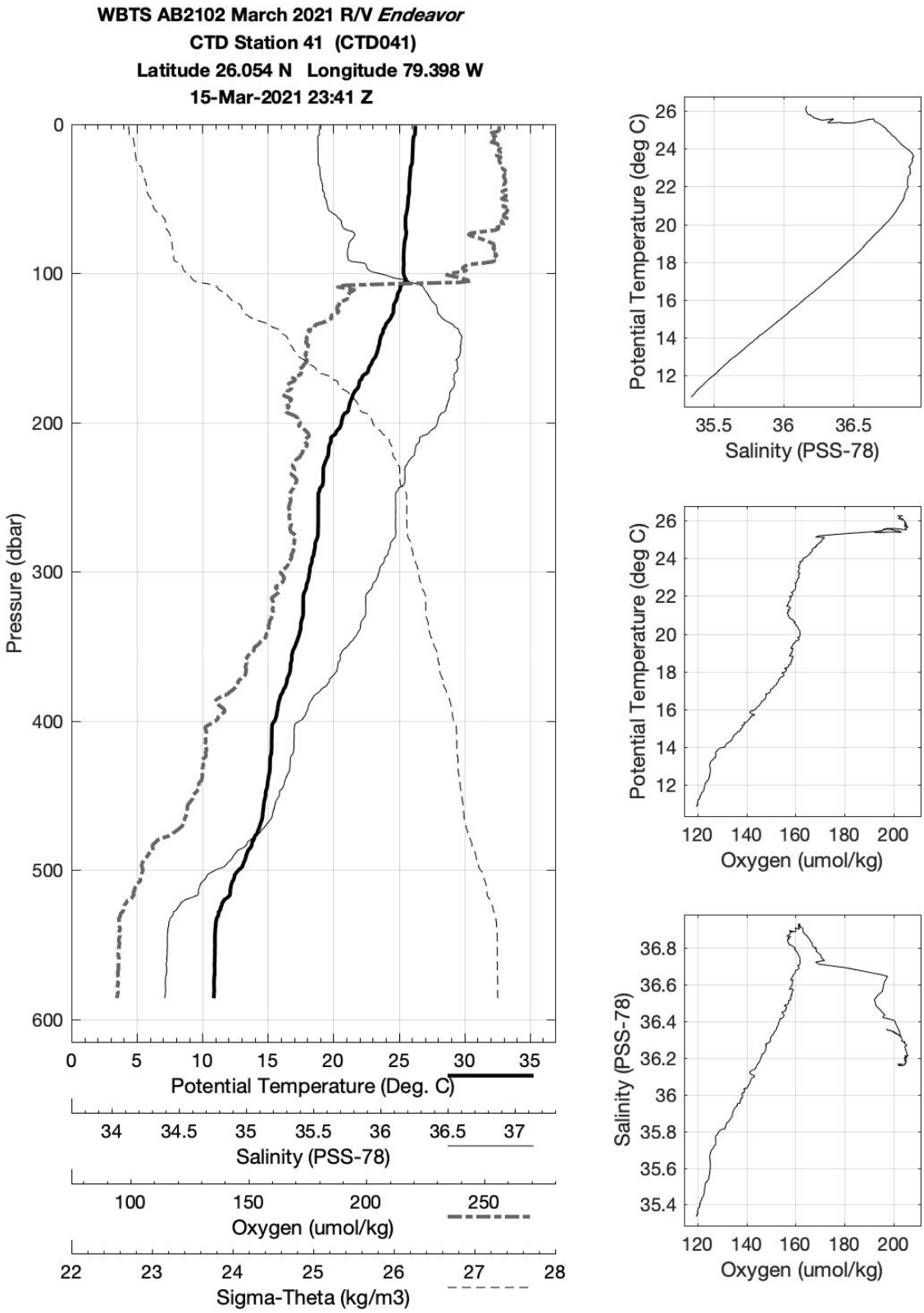
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 40 (CTD040)
Latitude 26.052N Longitude 79.312W
15-Mar-2021 22:34Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.240	26.239	36.157	203.1	0.004	23.831
10	26.095	26.093	36.152	203.5	0.041	23.874
20	26.055	26.051	36.153	204.0	0.081	23.887
30	26.008	26.001	36.157	204.3	0.121	23.906
50	25.812	25.801	36.196	203.9	0.200	23.998
75	25.431	25.414	36.335	203.3	0.296	24.223
100	24.790	24.768	36.631	187.0	0.386	24.645
125	23.844	23.817	36.905	169.8	0.460	25.139
150	22.978	22.947	36.922	160.4	0.529	25.407
200	20.819	20.781	36.817	175.2	0.649	25.938
250	19.421	19.375	36.646	160.1	0.749	26.182
300	18.397	18.344	36.509	157.3	0.842	26.342
400	17.032	16.965	36.302	150.2	1.016	26.523


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 40 (CTD040)
Latitude 26.052 N Longitude 79.312 W
15-Mar-2021 22:34 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)

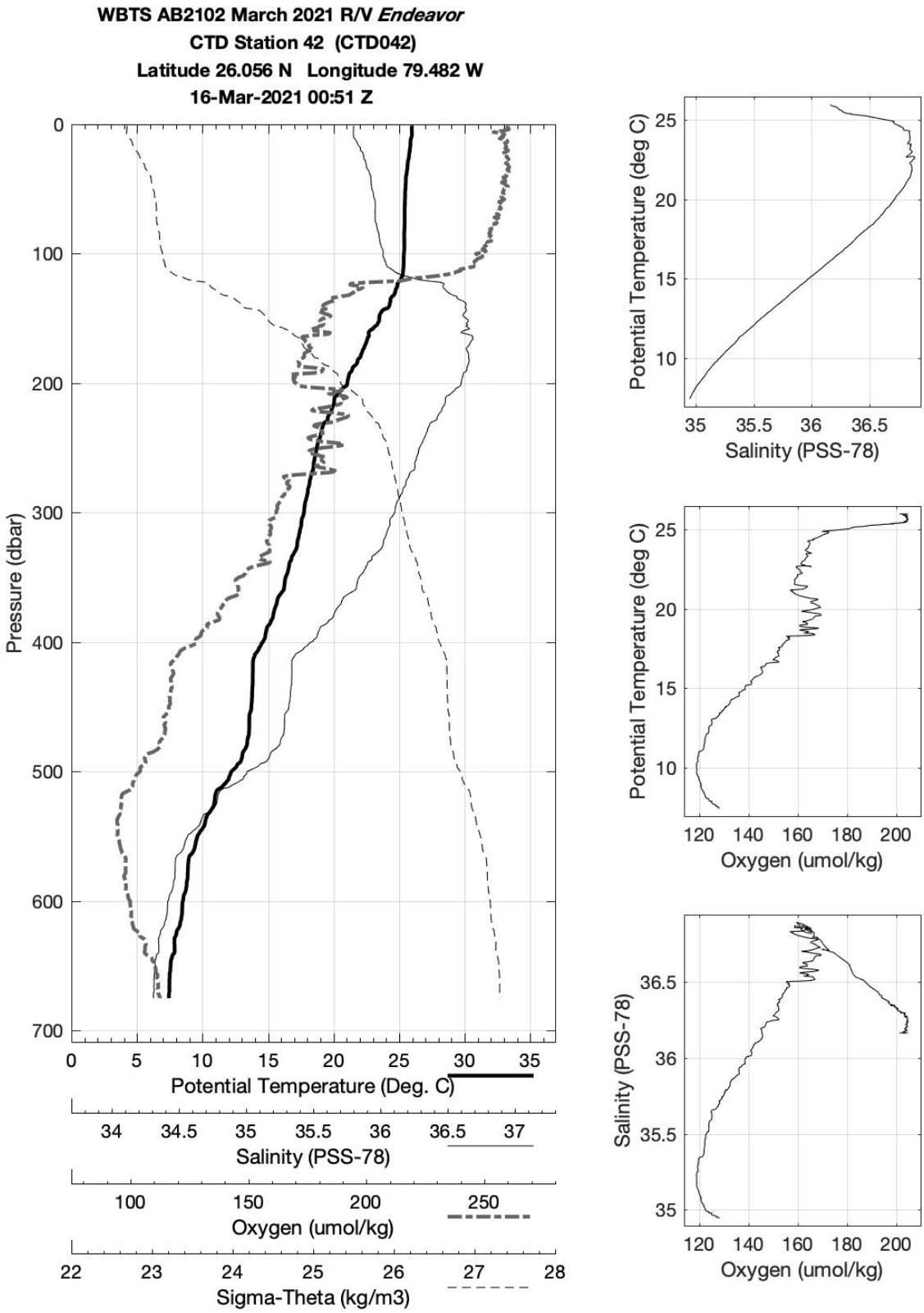
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 41 (CTD041)
Latitude 26.054N Longitude 79.398W
15-Mar-2021 23:41Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.257	26.256	36.167	203.6	0.004	23.834
10	26.104	26.101	36.157	202.5	0.041	23.875
20	26.054	26.050	36.159	203.0	0.081	23.892
30	25.897	25.890	36.168	204.3	0.121	23.949
50	25.726	25.715	36.200	204.1	0.199	24.028
75	25.549	25.533	36.351	197.6	0.295	24.199
100	25.375	25.353	36.486	192.7	0.387	24.356
125	24.613	24.586	36.799	168.3	0.471	24.828
150	23.460	23.428	36.925	161.6	0.544	25.269
200	20.665	20.627	36.800	159.9	0.664	25.967
250	18.896	18.851	36.575	157.6	0.761	26.264
300	18.247	18.194	36.487	155.6	0.853	26.363
400	15.577	15.514	36.061	141.3	1.016	26.675
500	12.846	12.777	35.608	125.3	1.158	26.909


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 41 (CTD041)
Latitude 26.054 N Longitude 79.398 W
15-Mar-2021 23:41 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)

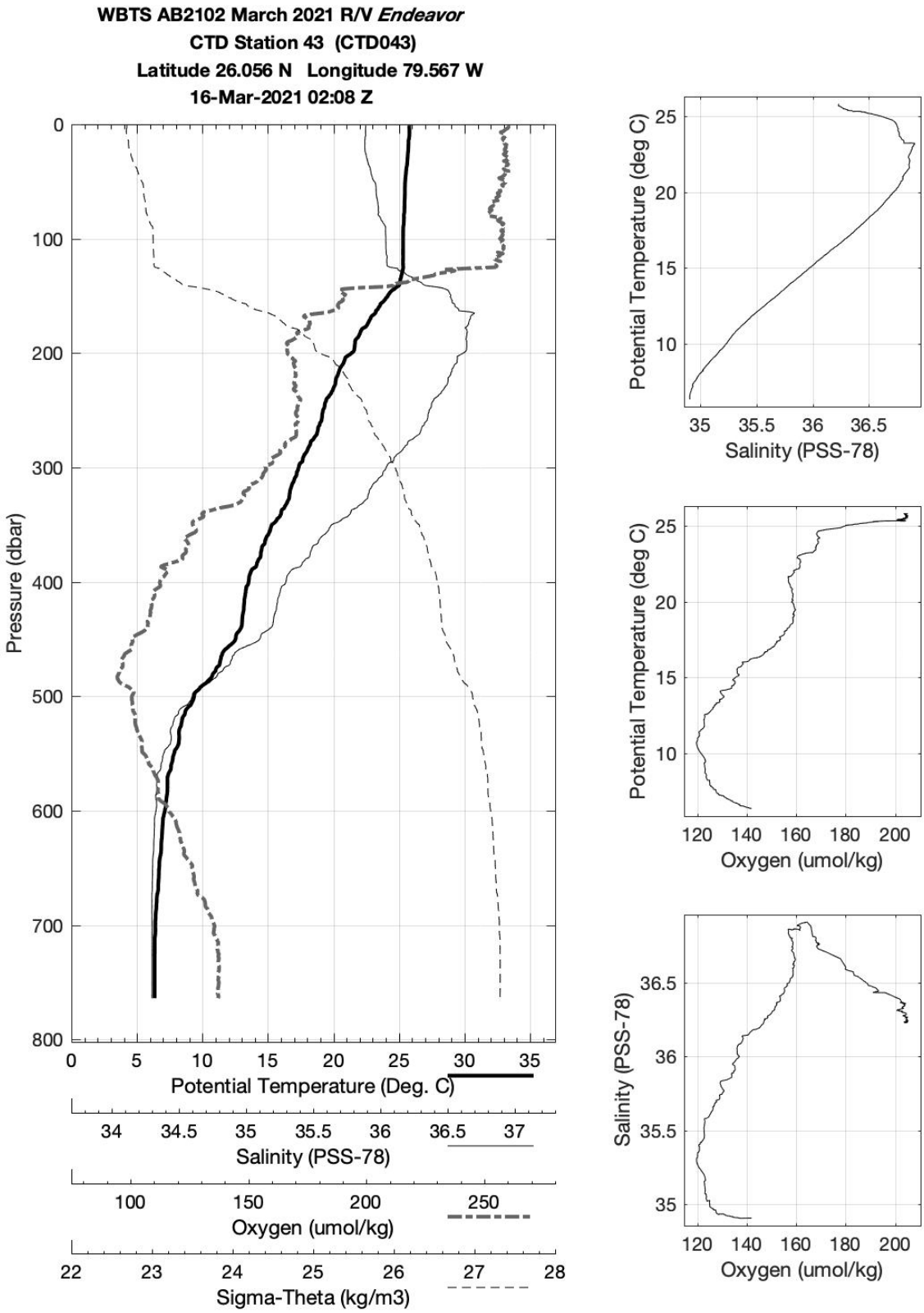
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 42 (CTD042)
Latitude 26.056N Longitude 79.482W
16-Mar-2021 00:51Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.963	25.963	36.168	204.3	0.004	23.926
10	25.936	25.934	36.167	203.4	0.040	23.935
20	25.823	25.818	36.209	204.5	0.079	24.002
30	25.666	25.659	36.241	203.9	0.118	24.076
50	25.490	25.479	36.279	203.6	0.194	24.161
75	25.438	25.421	36.299	202.6	0.287	24.194
100	25.389	25.367	36.348	197.4	0.381	24.248
125	24.882	24.855	36.712	171.9	0.470	24.680
150	23.516	23.484	36.856	163.9	0.547	25.200
200	21.087	21.048	36.823	158.0	0.670	25.870
250	18.755	18.711	36.568	163.6	0.768	26.295
300	17.790	17.739	36.417	153.7	0.856	26.423
400	14.648	14.588	35.906	136.2	1.012	26.762
500	12.258	12.191	35.518	123.8	1.145	26.955
600	8.557	8.493	35.034	121.6	1.251	27.225


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 42 (CTD042)
Latitude 26.056 N Longitude 79.482 W
16-Mar-2021 00:51 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)

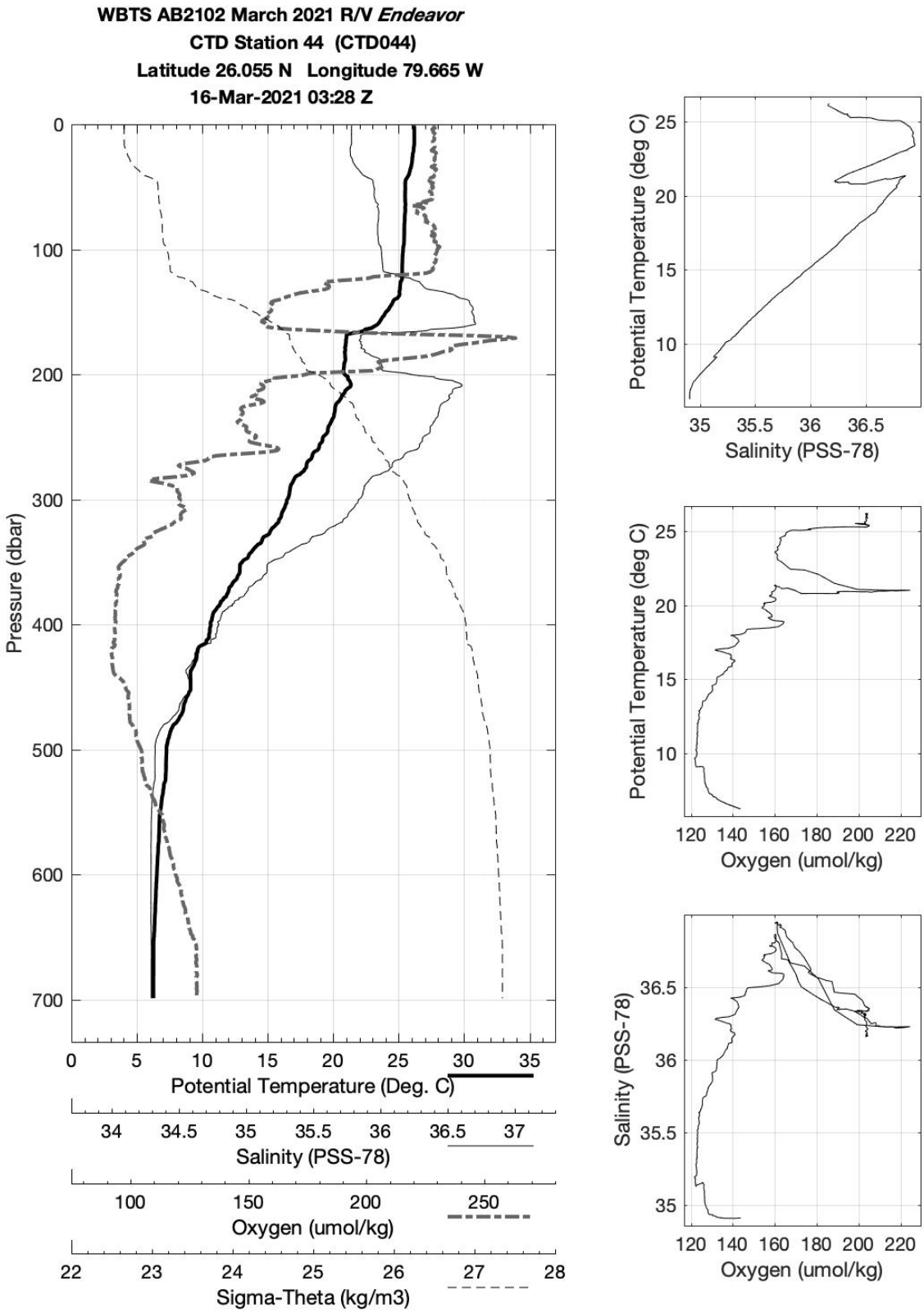
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 43 (CTD043)
Latitude 26.056N Longitude 79.567W
16-Mar-2021 02:08Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.782	25.781	36.234	205.0	0.004	24.033
10	25.794	25.792	36.234	204.4	0.039	24.030
20	25.718	25.713	36.229	204.5	0.077	24.050
30	25.654	25.647	36.242	205.2	0.116	24.081
50	25.485	25.474	36.286	204.4	0.192	24.167
75	25.430	25.414	36.312	201.4	0.286	24.206
100	25.337	25.315	36.359	203.1	0.378	24.272
125	25.351	25.324	36.387	202.0	0.470	24.291
150	24.185	24.153	36.763	169.0	0.556	24.931
200	21.417	21.378	36.840	156.8	0.685	25.791
250	19.240	19.194	36.628	159.0	0.787	26.216
300	17.385	17.334	36.360	152.0	0.877	26.478
400	13.583	13.525	35.739	129.0	1.024	26.858
500	9.424	9.367	35.157	122.9	1.144	27.182
600	7.190	7.131	34.931	130.9	1.233	27.346
700	6.472	6.407	34.907	140.8	1.311	27.426


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 43 (CTD043)
Latitude 26.056 N Longitude 79.567 W
16-Mar-2021 02:08 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)

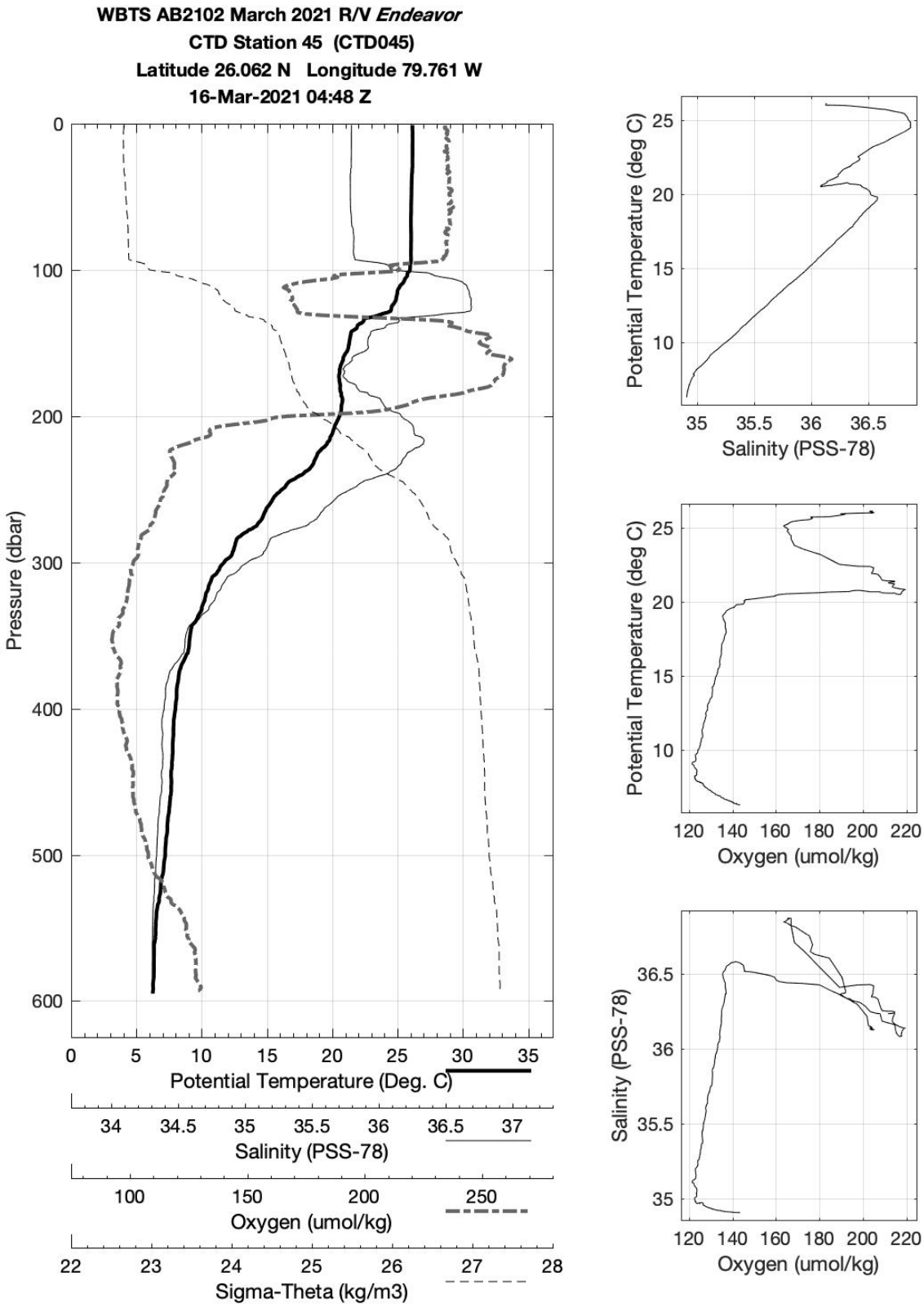
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 44 (CTD044)
Latitude 26.055N Longitude 79.665W
16-Mar-2021 03:28Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.186	26.185	36.168	203.8	0.004	23.857
10	26.194	26.192	36.167	203.9	0.040	23.854
20	26.144	26.139	36.158	203.5	0.081	23.864
30	26.024	26.017	36.177	203.6	0.121	23.916
50	25.512	25.501	36.308	203.7	0.198	24.176
75	25.479	25.462	36.337	201.7	0.292	24.210
100	25.361	25.339	36.354	204.6	0.385	24.261
125	25.234	25.207	36.567	179.8	0.477	24.463
150	24.078	24.046	36.923	162.2	0.557	25.084
200	20.917	20.879	36.539	171.3	0.688	25.699
250	19.277	19.232	36.619	158.8	0.793	26.199
300	16.536	16.487	36.213	139.4	0.879	26.567
400	10.691	10.642	35.332	122.9	1.008	27.099
500	7.317	7.268	34.932	129.5	1.102	27.327
600	6.583	6.527	34.906	138.2	1.181	27.409


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 44 (CTD044)
Latitude 26.055 N Longitude 79.665 W
16-Mar-2021 03:28 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)

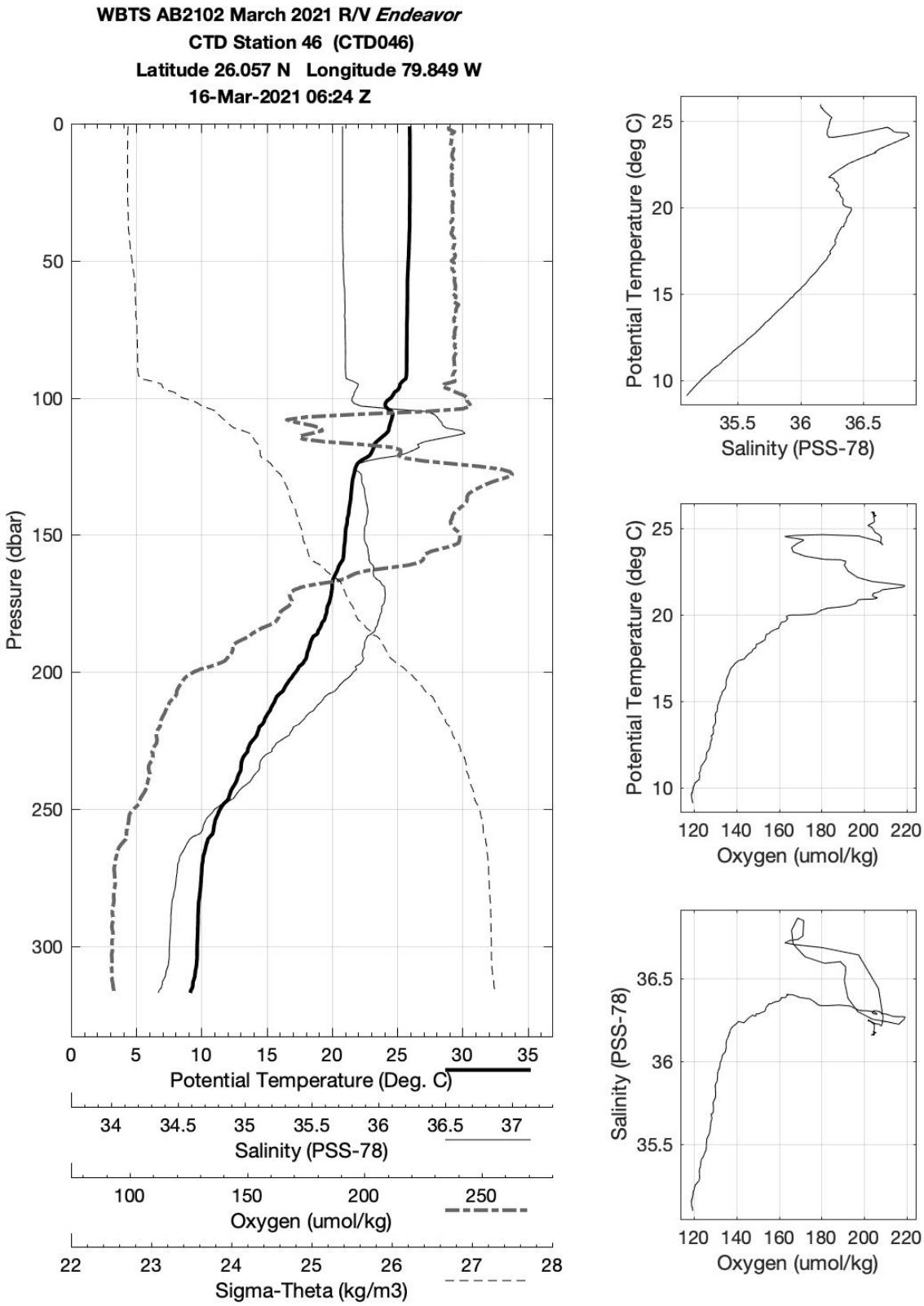
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 45 (CTD045)
Latitude 26.062N Longitude 79.761W
16-Mar-2021 04:48Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	26.136	26.136	36.135	203.2	0.004	23.847
10	26.149	26.147	36.134	203.4	0.041	23.843
20	26.149	26.145	36.134	203.9	0.081	23.844
30	26.147	26.140	36.134	204.0	0.122	23.845
50	26.070	26.059	36.128	204.5	0.203	23.866
75	26.052	26.035	36.147	203.3	0.304	23.888
100	25.974	25.952	36.384	192.1	0.404	24.093
125	24.573	24.546	36.874	166.5	0.487	24.897
150	21.324	21.295	36.236	211.6	0.558	25.354
200	20.586	20.548	36.442	164.8	0.686	25.715
250	16.206	16.166	36.130	134.4	0.783	26.578
300	11.758	11.719	35.494	126.7	0.847	27.027
400	8.031	7.989	34.980	123.2	0.943	27.260
500	7.254	7.205	34.934	130.4	1.027	27.338


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 45 (CTD045)
Latitude 26.062 N Longitude 79.761 W
16-Mar-2021 04:48 Z
Pressure (dbar)
0
100
200
300
400
500
600
0 5 10 15 20 25 30 35
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS-78)
100 150 200 250
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma-Theta (kg/m3)
Potential Temperature (deg C)
10 15 20 25
35 35.5 36 36.5
Salinity (PSS-78)
Potential Temperature (deg C)
10 15 20 25
120 140 160 180 200 220
Oxygen (umol/kg)
Salinity (PSS-78)
35 35.5 36 36.5
120 140 160 180 200 220
Oxygen (umol/kg)

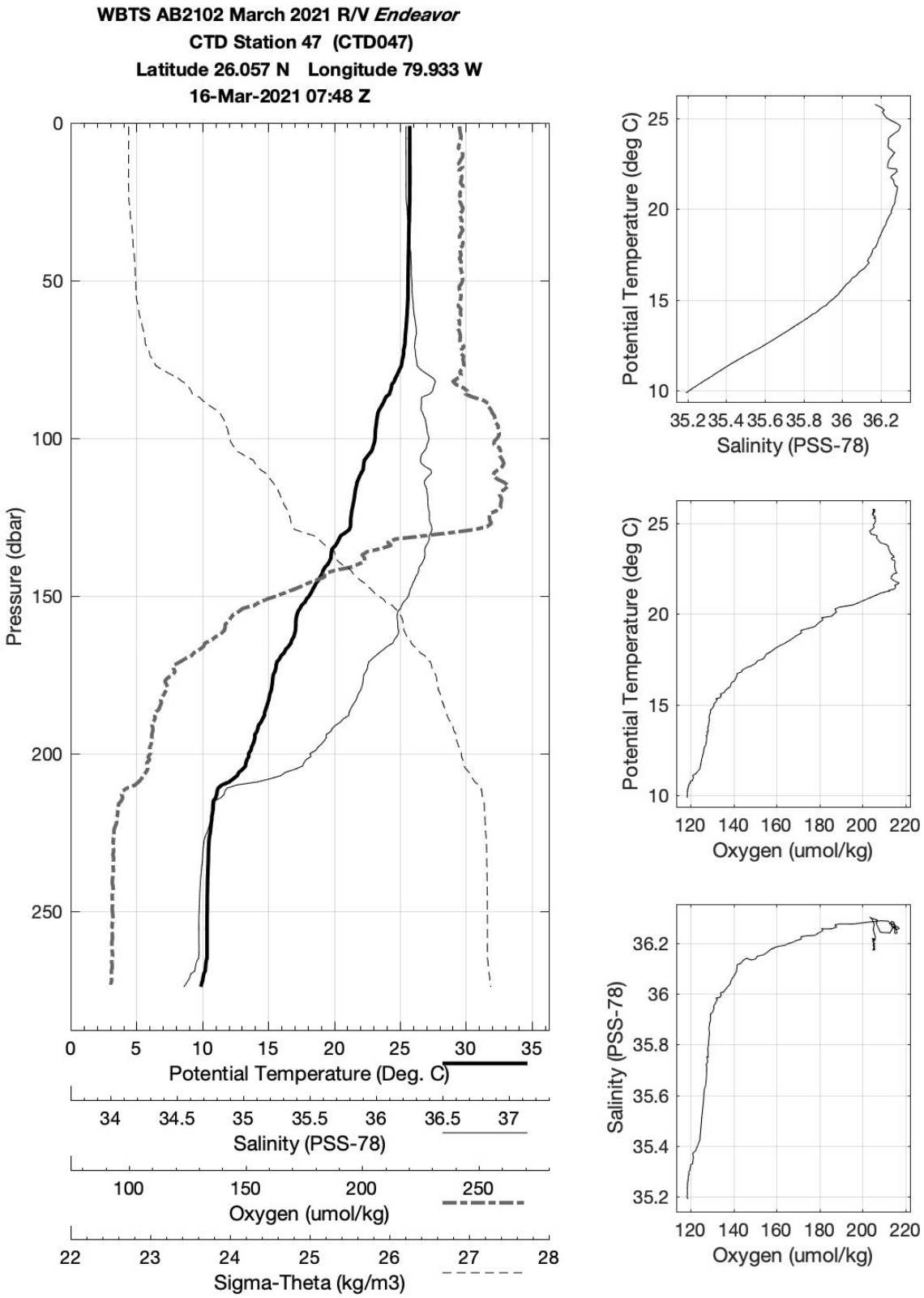
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 46 (CTD046)
Latitude 26.057N Longitude 79.849W
16-Mar-2021 06:24Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.948	25.947	36.160	203.4	0.004	23.925
10	25.961	25.959	36.160	204.4	0.040	23.922
20	25.965	25.961	36.160	204.2	0.080	23.921
30	25.953	25.947	36.160	204.1	0.119	23.926
50	25.854	25.842	36.163	203.9	0.199	23.960
75	25.749	25.732	36.175	204.9	0.298	24.004
100	24.544	24.523	36.215	208.0	0.394	24.405
125	21.867	21.842	36.239	210.9	0.471	25.204
150	21.046	21.017	36.285	206.1	0.537	25.468
200	17.247	17.213	36.221	139.4	0.645	26.400
250	11.455	11.423	35.426	124.3	0.711	27.029
300	9.700	9.666	35.167	119.1	0.761	27.139


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 46 (CTD046)
Latitude 26.057 N Longitude 79.849 W
16-Mar-2021 06:24 Z
Pressure (dbar)
0
50
100
150
200
250
300
0 5 10 15 20 25 30 35
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS-78)
100 150 200 250
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma-Theta (kg/m3)
Potential Temperature (deg C)
10 15 20 25
35.5 36 36.5
Salinity (PSS-78)
Potential Temperature (deg C)
10 15 20 25
120 140 160 180 200 220
Oxygen (umol/kg)
Salinity (PSS-78)
35.5 36 36.5
120 140 160 180 200 220
Oxygen (umol/kg)

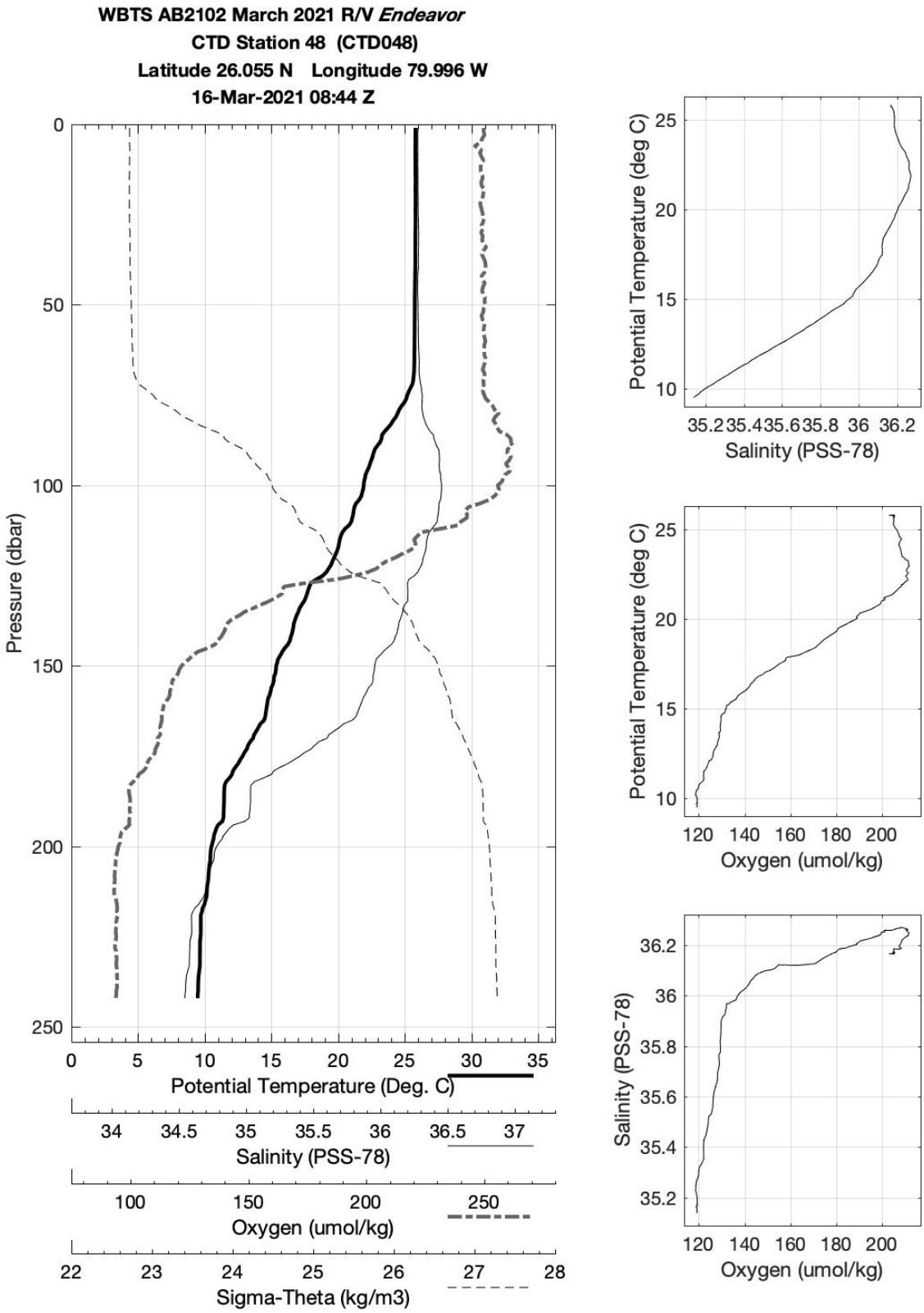
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 47 (CTD047)
Latitude 26.057N Longitude 79.933W
16-Mar-2021 07:48Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.753	25.753	36.173	204.9	0.004	23.995
10	25.755	25.753	36.172	205.7	0.039	23.995
20	25.760	25.755	36.172	205.8	0.078	23.995
30	25.725	25.719	36.179	205.2	0.117	24.011
50	25.627	25.616	36.198	205.7	0.195	24.057
75	25.206	25.189	36.218	205.8	0.291	24.204
100	23.136	23.115	36.274	214.3	0.375	24.867
125	21.308	21.283	36.275	212.3	0.445	25.387
150	18.145	18.119	36.183	159.6	0.502	26.149
200	13.547	13.519	35.749	128.2	0.577	26.867
250	10.398	10.368	35.260	118.8	0.630	27.091


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 47 (CTD047)
Latitude 26.057 N Longitude 79.933 W
16-Mar-2021 07:48 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)

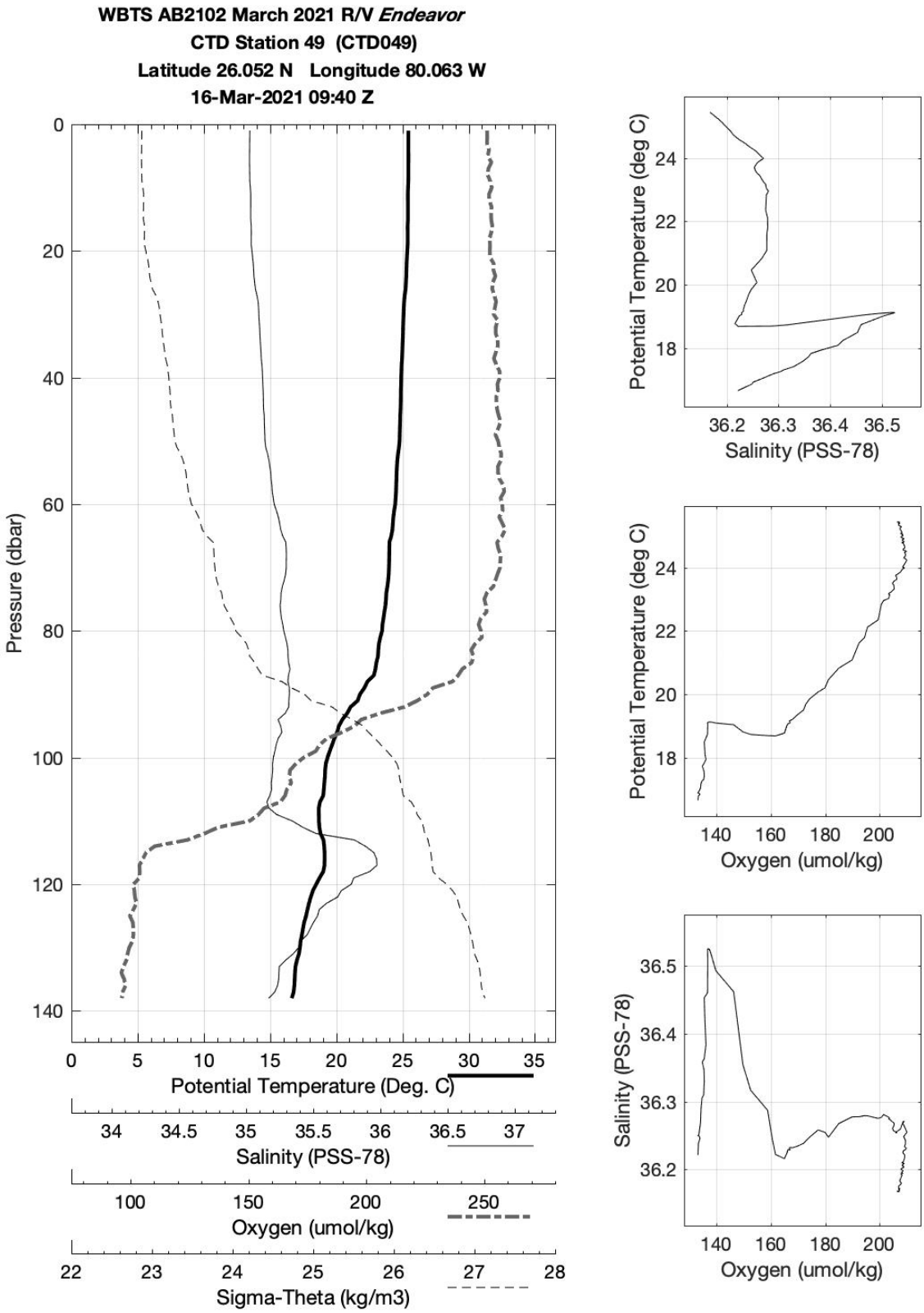
WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 48 (CTD048)
Latitude 26.055N Longitude 79.996W
16-Mar-2021 08:44Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.796	25.795	36.166	205.0	0.004	23.978
10	25.796	25.794	36.166	205.0	0.039	23.978
20	25.808	25.804	36.167	204.9	0.079	23.975
30	25.800	25.793	36.170	204.4	0.118	23.981
50	25.761	25.750	36.167	205.4	0.197	23.992
75	25.203	25.186	36.186	205.2	0.294	24.181
100	21.937	21.917	36.271	208.3	0.374	25.207
125	18.876	18.853	36.151	174.8	0.435	25.939
150	15.382	15.359	35.976	134.3	0.477	26.645
200	10.525	10.501	35.279	119.6	0.537	27.083


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 48 (CTD048)
Latitude 26.055 N Longitude 79.996 W
16-Mar-2021 08:44 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)

WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 49 (CTD049)
Latitude 26.052N Longitude 80.063W
16-Mar-2021 09:40Z

Pressure	Temp90	PoTemp90	Salinity	Oxygen	DynHt	SigT
dbar	°C	°C	PSS-78	μmol·kg^{-1}	m^2·s^{-2}	kg·m^{-3}
1	25.444	25.444	36.168	206.4	0.004	24.088
10	25.424	25.422	36.170	207.3	0.038	24.096
20	25.369	25.365	36.174	206.9	0.076	24.117
30	25.090	25.084	36.194	207.7	0.114	24.218
50	24.790	24.779	36.211	208.6	0.187	24.324
75	23.771	23.755	36.255	205.8	0.273	24.665
100	19.358	19.340	36.234	169.6	0.343	25.877
125	17.742	17.721	36.358	134.8	0.391	26.382


WBTS AB2102 March 2021 R/V *Endeavor*
CTD Station 49 (CTD049)
Latitude 26.052 N Longitude 80.063 W
16-Mar-2021 09:40 Z
Pressure (dbar)
0
20
40
60
80
100
120
140
0 5 10 15 20 25 30 35
Potential Temperature (Deg. C)
34 34.5 35 35.5 36 36.5 37
Salinity (PSS-78)
100 150 200 250
Oxygen (umol/kg)
22 23 24 25 26 27 28
Sigma-Theta (kg/m3)
Potential Temperature (deg C)
18 20 22 24
36.2 36.3 36.4 36.5
Salinity (PSS-78)
Potential Temperature (deg C)
18 20 22 24
140 160 180 200
Oxygen (umol/kg)
Salinity (PSS-78)
36.2 36.3 36.4 36.5
140 160 180 200
Oxygen (umol/kg)

B WOCE Summary File

Table 19: AB2102 – WOCE Summary File

SHIP/CRS EXPOCODE	WOCE SECT	STN	CAST	CAST TYPE	CAST DATE	UTC TIME	EVENT CODE	LAT	LON	NAV	UNC DPH	HT ABV BTM	WIRE OUT	MAX PRS	NO. BTLS	PARA-METERS	COMMENTS
WBTSEN	AB2102	1	1	ROS	02/28/2021	14:40	BE	26.52583N	76.88090W	GPS							
WBTSEN	AB2102	1	1	ROS	02/28/2021	14:56	BO	26.52771N	76.88094W	GPS	447	24	446	451	8	1,2	
WBTSEN	AB2102	1	1	ROS	02/28/2021	15:18	EN	26.52974N	76.87660W	GPS							
WBTSEN	AB2102	2	1	ROS	02/28/2021	16:10	BE	26.51684N	76.82424W	GPS							
WBTSEN	AB2102	2	1	ROS	02/28/2021	16:45	BO	26.51878N	76.82424W	GPS	1291	13	-999	1305	13	1,2	
WBTSEN	AB2102	2	1	ROS	02/28/2021	17:28	EN	26.52225N	76.81941W	GPS							
WBTSEN	AB2102	3	1	ROS	02/28/2021	19:14	BE	26.49382N	76.73198W	GPS							
WBTSEN	AB2102	3	1	ROS	02/28/2021	20:29	BO	26.49766N	76.73201W	GPS	3810	10	3891	3873	24	1,2	
WBTSEN	AB2102	3	1	ROS	02/28/2021	22:25	EN	26.50357N	76.71205W	GPS							
WBTSEN	AB2102	4	1	ROS	03/01/2021	00:04	BE	26.49653N	76.65342W	GPS							
WBTSEN	AB2102	4	1	ROS	03/01/2021	01:33	BO	26.50023N	76.65342W	GPS	4584	10	4623	4669	24	1,2	niskin 4,5 lanyard caught, 23 vent cap
WBTSEN	AB2102	4	1	ROS	03/01/2021	03:32	EN	26.51526N	76.63211W	GPS							
WBTSEN	AB2102	5	1	ROS	03/01/2021	05:04	BE	26.49952N	76.56028W	GPS							
WBTSEN	AB2102	5	1	ROS	03/01/2021	06:32	BO	26.49815N	76.56031W	GPS	4821	10	4819	4911	24	1,2	niskin 10 lanyard caught
WBTSEN	AB2102	5	1	ROS	03/01/2021	08:39	EN	26.48504N	76.54484W	GPS							
WBTSEN	AB2102	6	1	ROS	03/01/2021	10:02	BE	26.50516N	76.47486W	GPS							
WBTSEN	AB2102	6	1	ROS	03/01/2021	11:33	BO	26.50080N	76.47486W	GPS	4839	8	4856	4928	24	1,2	
WBTSEN	AB2102	6	1	ROS	03/01/2021	13:35	EN	26.49422N	76.46388W	GPS							
WBTSEN	AB2102	7	1	ROS	03/01/2021	14:54	BE	26.50453N	76.34780W	GPS							
WBTSEN	AB2102	7	1	ROS	03/01/2021	16:22	BO	26.49993N	76.34780W	GPS	4835	9	4839	4924	24	1,2	
WBTSEN	AB2102	7	1	ROS	03/01/2021	18:26	EN	26.48874N	76.34082W	GPS							
WBTSEN	AB2102	8	1	ROS	03/01/2021	19:53	BE	26.49868N	76.21964W	GPS							
WBTSEN	AB2102	8	1	ROS	03/01/2021	21:23	BO	26.49115N	76.21962W	GPS	4802	10	4784	4890	24	1,2	niskin 23 vent cap not closed
WBTSEN	AB2102	8	1	ROS	03/01/2021	23:30	EN	26.48150N	76.22416W	GPS							
WBTSEN	AB2102	9	1	ROS	03/02/2021	01:15	BE	26.50033N	76.08460W	GPS							
WBTSEN	AB2102	9	1	ROS	03/02/2021	02:44	BO	26.49625N	76.08461W	GPS	4793	8	4810	4881	24	1,2	niskin 1,2 pet cock open
WBTSEN	AB2102	9	1	ROS	03/02/2021	04:40	EN	26.49108N	76.07964W	GPS							
WBTSEN	AB2102	10	1	ROS	03/02/2021	06:54	BE	26.49918N	75.90862W	GPS							
WBTSEN	AB2102	10	1	ROS	03/02/2021	08:23	BO	26.50945N	75.90859W	GPS	4733	10	4801	4821	24	1,2	niskin 6 lanyard caught
WBTSEN	AB2102	10	1	ROS	03/02/2021	10:32	EN	26.52458N	75.90435W	GPS							
WBTSEN	AB2102	11	1	ROS	03/02/2021	12:31	BE	26.50069N	75.70308W	GPS							
WBTSEN	AB2102	11	1	ROS	03/02/2021	13:58	BO	26.50235N	75.70310W	GPS	4682	10	4676	4766	24	1,2	
WBTSEN	AB2102	11	1	ROS	03/02/2021	15:54	EN	26.50199N	75.69507W	GPS							
WBTSEN	AB2102	12	1	ROS	03/02/2021	17:34	BE	26.50016N	75.49877W	GPS							
WBTSEN	AB2102	12	1	ROS	03/02/2021	19:04	BO	26.49326N	75.49875W	GPS	4677	8	4677	4762	24	1,2	
WBTSEN	AB2102	12	1	ROS	03/02/2021	21:07	EN	26.48191N	75.50006W	GPS							
WBTSEN	AB2102	13	1	ROS	03/02/2021	22:30	BE	26.49984N	75.29624W	GPS							
WBTSEN	AB2102	13	1	ROS	03/02/2021	23:59	BO	26.50796N	75.29624W	GPS	4629	10	4625	4711	24	1,2	
WBTSEN	AB2102	13	1	ROS	03/03/2021	01:52	EN	26.51768N	75.29258W	GPS							
WBTSEN	AB2102	14	1	ROS	03/03/2021	03:26	BE	26.49953N	75.08158W	GPS							
WBTSEN	AB2102	14	1	ROS	03/03/2021	04:54	BO	26.51580N	75.08159W	GPS	4604	4	4654	4687	24	1,2	
WBTSEN	AB2102	14	1	ROS	03/03/2021	06:56	EN	26.52963N	75.07306W	GPS							
WBTSEN	AB2102	15	1	ROS	03/03/2021	08:48	BE	26.50016N	74.79154W	GPS							
WBTSEN	AB2102	15	1	ROS	03/03/2021	10:14	BO	26.50014N	74.79154W	GPS	4532	8	4538	4612	24	1,2	
WBTSEN	AB2102	15	1	ROS	03/03/2021	12:18	EN	26.49445N	74.78798W	GPS							
WBTSEN	AB2102	16	1	ROS	03/03/2021	14:10	BE	26.50216N	74.51396W	GPS							
WBTSEN	AB2102	16	1	ROS	03/03/2021	15:32	BO	26.49896N	74.51398W	GPS	4488	5	4494	4566	24	1,2	
WBTSEN	AB2102	16	1	ROS	03/03/2021	17:28	EN	26.49458N	74.50604W	GPS							
WBTSEN	AB2102	17	1	ROS	03/03/2021	19:30	BE	26.50001N	74.21594W	GPS							
WBTSEN	AB2102	17	1	ROS	03/03/2021	20:58	BO	26.49759N	74.21595W	GPS	4533	11	4628	4613	24	1,2	
WBTSEN	AB2102	17	1	ROS	03/03/2021	22:57	EN	26.48089N	74.20664W	GPS							
WBTSEN	AB2102	18	1	ROS	03/04/2021	01:47	BE	26.49832N	73.87992W	GPS							
WBTSEN	AB2102	18	1	ROS	03/04/2021	03:27	BO	26.46327N	73.87994W	GPS	4751	17	5355	4840	24	1,2	niskin 3 laynard caught, 20 pep cock
WBTSEN	AB2102	18	1	ROS	03/04/2021	05:43	EN	26.41137N	73.88599W	GPS							
WBTSEN	AB2102	19	1	ROS	03/04/2021	09:31	BE	26.50152N	73.53066W	GPS							
WBTSEN	AB2102	19	1	ROS	03/04/2021	11:08	BO	26.48912N	73.53061W	GPS	4924	14	5302	5031	24	1,2	
WBTSEN	AB2102	19	1	ROS	03/04/2021	13:20	EN	26.48478N	73.57180W	GPS							
WBTSEN	AB2102	20	1	ROS	03/04/2021	17:19	BE	26.50035N	73.15264W	GPS							
WBTSEN	AB2102	20	1	ROS	03/04/2021	19:00	BO	26.49970N	73.15260W	GPS	5037	11	5071	5135	24	1,2	
WBTSEN	AB2102	20	1	ROS	03/04/2021	21:06	EN	26.51104N	73.16216W	GPS							
WBTSEN	AB2102	21	1	ROS	03/04/2021	23:36	BE	26.49982N	72.77938W	GPS							
WBTSEN	AB2102	21	1	ROS	03/05/2021	01:11	BO	26.50074N	72.77936W	GPS	5126	10	5133	5224	24	1,2	

WBTSEN	AB2102	21	1	ROS	03/05/2021	04:01	EN	26.51614N	72.79400W	GPS								
WBTSEN	AB2102	22	1	ROS	03/05/2021	06:35	BE	26.50019N	72.38290W	GPS								
WBTSEN	AB2102	22	1	ROS	03/05/2021	08:10	BO	26.49678N	72.38293W	GPS	5176	5	5192	5276	24	1,2		
WBTSEN	AB2102	22	1	ROS	03/05/2021	10:23	EN	26.49278N	72.38834W	GPS								
WBTSEN	AB2102	23	1	ROS	03/05/2021	12:43	BE	26.49919N	72.00272W	GPS								
WBTSEN	AB2102	23	1	ROS	03/05/2021	14:18	BO	26.49679N	72.00268W	GPS	5277	10	5295	5380	24	1,2	niskin 13 bottle cap leak	
WBTSEN	AB2102	23	1	ROS	03/05/2021	16:21	EN	26.49295N	72.02528W	GPS								
WBTSEN	AB2102	24	1	ROS	03/12/2021	23:58	BE	26.69653N	76.40008W	GPS								
WBTSEN	AB2102	24	1	ROS	03/13/2021	01:27	BO	26.71116N	76.40011W	GPS	4833	49	4889	4925	12	1,2		
WBTSEN	AB2102	24	1	ROS	03/13/2021	04:00	EN	26.72384N	76.38300W	GPS								
WBTSEN	AB2102	25	1	ROS	03/14/2021	11:31	BE	26.06617N	78.84906W	GPS								
WBTSEN	AB2102	25	1	ROS	03/14/2021	11:45	BO	26.06709N	78.84908W	GPS	295	10	294	297	4	1,2	niskin 2 vent cap not sealed	
WBTSEN	AB2102	25	1	ROS	03/14/2021	11:59	EN	26.06813N	78.84735W	GPS								
WBTSEN	AB2102	26	1	ROS	03/14/2021	12:50	BE	26.16751N	78.80184W	GPS								
WBTSEN	AB2102	26	1	ROS	03/14/2021	13:05	BO	26.16929N	78.80184W	GPS	446	9	446	450	5	1,2		
WBTSEN	AB2102	26	1	ROS	03/14/2021	13:21	EN	26.17052N	78.80375W	GPS								
WBTSEN	AB2102	27	1	ROS	03/14/2021	14:05	BE	26.24835N	78.76972W	GPS								
WBTSEN	AB2102	27	1	ROS	03/14/2021	14:22	BO	26.24792N	78.76968W	GPS	510	10	508	514	6	1,2		
WBTSEN	AB2102	27	1	ROS	03/14/2021	14:40	EN	26.24840N	78.77199W	GPS								
WBTSEN	AB2102	28	1	ROS	03/14/2021	15:28	BE	26.33117N	78.71058W	GPS								
WBTSEN	AB2102	28	1	ROS	03/14/2021	15:46	BO	26.32558N	78.71059W	GPS	661	15	698	667	6	1,2		
WBTSEN	AB2102	28	1	ROS	03/14/2021	16:06	EN	26.31901N	78.70926W	GPS								
WBTSEN	AB2102	29	1	ROS	03/14/2021	17:08	BE	26.43334N	78.67140W	GPS								
WBTSEN	AB2102	29	1	ROS	03/14/2021	17:28	BO	26.43390N	78.67136W	GPS	752	9	753	758	7	1,2		
WBTSEN	AB2102	29	1	ROS	03/14/2021	17:51	EN	26.43424N	78.67591W	GPS								
WBTSEN	AB2102	30	1	ROS	03/14/2021	23:13	BE	26.99985N	79.19620W	GPS								
WBTSEN	AB2102	30	1	ROS	03/14/2021	23:30	BO	27.00059N	79.19623W	GPS	466	6	474	470	5	1,2		
WBTSEN	AB2102	30	1	ROS	03/14/2021	23:48	EN	27.00080N	79.19450W	GPS								
WBTSEN	AB2102	31	1	ROS	03/15/2021	00:32	BE	26.99969N	79.28174W	GPS								
WBTSEN	AB2102	31	1	ROS	03/15/2021	00:49	BO	27.00526N	79.28176W	GPS	604	9	607	610	6	1,2		
WBTSEN	AB2102	31	1	ROS	03/15/2021	01:08	EN	27.01230N	79.27974W	GPS								
WBTSEN	AB2102	32	1	ROS	03/15/2021	01:54	BE	27.00104N	79.37900W	GPS								
WBTSEN	AB2102	32	1	ROS	03/15/2021	02:12	BO	27.01307N	79.37900W	GPS	677	10	707	687	6	1,2		
WBTSEN	AB2102	32	1	ROS	03/15/2021	02:34	EN	27.02485N	79.37637W	GPS								
WBTSEN	AB2102	33	1	ROS	03/15/2021	03:27	BE	27.00152N	79.49408W	GPS								
WBTSEN	AB2102	33	1	ROS	03/15/2021	03:46	BO	27.01156N	79.49412W	GPS	746	10	772	758	7	1,2	niskin 3 laynard caught, bottle leakin	
WBTSEN	AB2102	33	1	ROS	03/15/2021	04:11	EN	27.02541N	79.48695W	GPS								
WBTSEN	AB2102	34	1	ROS	03/15/2021	06:31	BE	27.00200N	79.60556W	GPS								
WBTSEN	AB2102	34	1	ROS	03/15/2021	06:48	BO	27.01232N	79.60564W	GPS	659	13	691	670	6	1,2		
WBTSEN	AB2102	34	1	ROS	03/15/2021	07:11	EN	27.02648N	79.59881W	GPS								
WBTSEN	AB2102	35	1	ROS	03/15/2021	08:02	BE	27.00319N	79.67072W	GPS								
WBTSEN	AB2102	35	1	ROS	03/15/2021	08:18	BO	27.01575N	79.67081W	GPS	527	13	594	538	7	1,2	Niksin 3 mistrip with niskin 2, not sa	
WBTSEN	AB2102	35	1	ROS	03/15/2021	08:40	EN	27.02946N	79.66267W	GPS								
WBTSEN	AB2102	36	1	ROS	03/15/2021	09:43	BE	27.00183N	79.77752W	GPS								
WBTSEN	AB2102	36	1	ROS	03/15/2021	09:55	BO	27.00988N	79.77758W	GPS	378	12	405	385	5	1,2		
WBTSEN	AB2102	36	1	ROS	03/15/2021	10:13	EN	27.02086N	79.77283W	GPS								
WBTSEN	AB2102	37	1	ROS	03/15/2021	11:00	BE	27.00284N	79.86298W	GPS								
WBTSEN	AB2102	37	1	ROS	03/15/2021	11:12	BO	27.00988N	79.86305W	GPS	257	12	276	261	4	1,2		
WBTSEN	AB2102	37	1	ROS	03/15/2021	11:26	EN	27.01675N	79.85943W	GPS								
WBTSEN	AB2102	38	1	ROS	03/15/2021	12:10	BE	27.00203N	79.93080W	GPS								
WBTSEN	AB2102	38	1	ROS	03/15/2021	12:17	BO	27.00700N	79.93086W	GPS	138	10	148	142	3	1,2		
WBTSEN	AB2102	38	1	ROS	03/15/2021	12:26	EN	27.01241N	79.92878W	GPS								

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

C WOCE Bottle Summary File

Table 20: AB2102 – WOCE Bottle Summary File

SHIP/CRS EXPOCODE	WOCE SECT	STN	CAST	BTL#	BTL# Flag	DATE	UTC TIME	LAT	LON	DEPTH	CTD PRS	CTD TMP	CTD SAL	SAL FLAG	BTL SAL	SAL FLAG	CTD OXY	OXY FLAG	BTL OXY	OXY FLAG
WBTSEN	AB2102	1	1	1	2	20210228	1456	26.528N	76.881W	447	450	17.146	36.359	2	36.361	6	170.3	2	182.8	4
WBTSEN	AB2102	1	1	2	2	20210228	1500	26.528N	76.880W	298	301	19.215	36.650	2	36.647	2	192.4	2	192.6	2
WBTSEN	AB2102	1	1	3	2	20210228	1503	26.529N	76.880W	249	250	19.862	36.715	2	36.717	2	190.4	2	191.2	2
WBTSEN	AB2102	1	1	4	2	20210228	1507	26.529N	76.879W	180	181	22.384	36.896	2	36.891	2	197.6	2	200.2	2
WBTSEN	AB2102	1	1	5	2	20210228	1510	26.529N	76.878W	129	130	23.102	36.890	2	36.890	2	208.1	2	208.3	2
WBTSEN	AB2102	1	1	6	2	20210228	1513	26.529N	76.878W	79	80	24.175	36.843	2	36.844	2	207.8	2	207.7	2
WBTSEN	AB2102	1	1	7	2	20210228	1515	26.530N	76.877W	40	40	24.453	36.591	2	36.584	2	208.2	2	209.7	6
WBTSEN	AB2102	1	1	8	2	20210228	1518	26.530N	76.877W	4	4	24.509	36.544	2	36.544	2	208.8	2	208.7	2
WBTSEN	AB2102	2	1	1	2	20210228	1645	26.519N	76.824W	1291	1304	4.429	35.009	2	35.010	2	253.1	2	253.4	2
WBTSEN	AB2102	2	1	2	2	20210228	1652	26.519N	76.824W	992	1001	6.199	35.081	2	35.081	2	198.9	2	199.6	2
WBTSEN	AB2102	2	1	3	2	20210228	1655	26.519N	76.823W	893	900	7.359	35.094	2	35.095	2	167.4	2	165.9	2
WBTSEN	AB2102	2	1	4	2	20210228	1659	26.520N	76.823W	794	801	8.753	35.162	2	35.165	2	143.2	2	141.9	2
WBTSEN	AB2102	2	1	5	2	20210228	1702	26.520N	76.823W	695	701	10.785	35.396	2	35.394	2	142.7	2	141.0	2
WBTSEN	AB2102	2	1	6	2	20210228	1705	26.520N	76.822W	596	600	13.343	35.754	2	35.744	4	153.0	2	155.0	2
WBTSEN	AB2102	2	1	7	2	20210228	1708	26.521N	76.822W	497	501	15.701	36.128	2	36.128	2	168.2	2	167.6	2
WBTSEN	AB2102	2	1	8	2	20210228	1712	26.521N	76.822W	387	390	18.007	36.496	2	36.493	2	186.4	2	184.1	2
WBTSEN	AB2102	2	1	9	2	20210228	1716	26.521N	76.821W	278	280	19.395	36.668	2	36.668	2	195.2	2	193.9	2
WBTSEN	AB2102	2	1	10	2	20210228	1719	26.522N	76.821W	189	190	21.868	36.858	2	36.857	2	197.4	2	200.9	4
WBTSEN	AB2102	2	1	11	2	20210228	1722	26.522N	76.821W	119	120	23.078	36.885	2	36.884	2	208.4	2	209.0	2
WBTSEN	AB2102	2	1	12	2	20210228	1724	26.522N	76.820W	70	70	24.182	36.849	2	36.848	2	208.6	2	207.3	2
WBTSEN	AB2102	2	1	13	2	20210228	1728	26.522N	76.819W	4	4	24.583	36.549	2	36.548	2	209.3	2	208.3	2
WBTSEN	AB2102	3	1	1	2	20210228	2030	26.498N	76.732W	3810	3870	2.320	34.896	2	34.900	4	268.1	2	269.0	2
WBTSEN	AB2102	3	1	2	2	20210228	2039	26.498N	76.731W	3501	3554	2.432	34.905	2	34.904	2	270.1	2	269.2	2
WBTSEN	AB2102	3	1	3	2	20210228	2046	26.499N	76.729W	3218	3264	2.658	34.918	2	34.920	6	269.3	2	269.4	2
WBTSEN	AB2102	3	1	4	2	20210228	2053	26.499N	76.728W	2959	2999	2.896	34.930	2	34.929	2	267.7	2	268.0	2
WBTSEN	AB2102	3	1	5	2	20210228	2100	26.499N	76.727W	2664	2699	3.093	34.939	2	34.938	2	254.4	2	253.9	4
WBTSEN	AB2102	3	1	6	2	20210228	2106	26.500N	76.726W	2470	2502	3.228	34.948	2	34.947	2	265.6	2	262.8	2
WBTSEN	AB2102	3	1	7	2	20210228	2113	26.500N	76.725W	2177	2203	3.493	34.959	2	34.959	2	264.4	2	263.0	6
WBTSEN	AB2102	3	1	8	2	20210228	2120	26.500N	76.724W	1881	1902	3.754	34.970	2	34.968	2	252.0	2	246.4	4
WBTSEN	AB2102	3	1	9	2	20210228	2126	26.501N	76.723W	1687	1705	3.878	34.977	2	34.976	2	262.2	2	261.0	2
WBTSEN	AB2102	3	1	10	2	20210228	2131	26.501N	76.722W	1537	1553	4.121	34.991	2	34.990	2	259.9	2	258.1	2
WBTSEN	AB2102	3	1	11	2	20210228	2135	26.501N	76.722W	1389	1403	4.314	34.992	2	34.992	2	258.1	2	257.7	2
WBTSEN	AB2102	3	1	12	2	20210228	2140	26.501N	76.721W	1240	1251	4.750	35.026	2	35.024	2	247.8	2	247.3	2
WBTSEN	AB2102	3	1	13	2	20210228	2144	26.502N	76.720W	1092	1102	5.559	35.073	2	35.077	4	216.0	2	219.1	4
WBTSEN	AB2102	3	1	14	2	20210228	2148	26.502N	76.720W	943	952	6.860	35.098	2	35.166	4	182.3	2	183.6	2
WBTSEN	AB2102	3	1	15	2	20210228	2153	26.502N	76.720W	811	817	8.662	35.165	2	35.100	4	145.9	2	146.3	6
WBTSEN	AB2102	3	1	16	2	20210228	2157	26.503N	76.719W	698	704	10.958	35.408	2	35.406	2	138.8	2	138.1	2
WBTSEN	AB2102	3	1	17	2	20210228	2201	26.503N	76.718W	590	595	13.190	35.732	2	35.732	2	151.9	2	151.3	2
WBTSEN	AB2102	3	1	18	2	20210228	2205	26.503N	76.717W	481	485	15.970	36.172	2	36.177	2	163.9	2	176.6	4
WBTSEN	AB2102	3	1	19	2	20210228	2208	26.503N	76.716W	373	376	18.114	36.512	2	36.515	2	186.7	2	186.0	2
WBTSEN	AB2102	3	1	20	2	20210228	2212	26.502N	76.715W	263	265	19.659	36.701	2	36.881	4	189.7	2	190.3	2
WBTSEN	AB2102	3	1	21	2	20210228	2215	26.503N	76.714W	175	176	21.957	36.887	2	36.698	4	180.3	2	193.2	4
WBTSEN	AB2102	3	1	22	2	20210228	2219	26.503N	76.713W	94	95	24.146	36.989	2	36.994	2	203.0	2	202.4	2
WBTSEN	AB2102	3	1	23	2	20210228	2222	26.503N	76.713W	45	45	24.859	36.886	2	36.883	2	208.6	2	209.5	2
WBTSEN	AB2102	3	1	24	2	20210228	2225	26.504N	76.712W	2	2	24.998	36.855	2	36.854	2	209.0	2	207.4	2
WBTSEN	AB2102	4	1	1	2	20210301	0135	26.501N	76.653W	4584	4665	2.224	34.880	2	34.878	2	244.0	2	265.2	4
WBTSEN	AB2102	4	1	2	2	20210301	0145	26.502N	76.652W	4073	4139	2.285	34.891	2	34.888	2	247.3	2	273.3	4
WBTSEN	AB2102	4	1	3	2	20210301	0153	26.502N	76.650W	3667	3724	2.395	34.902	2	34.901	2	270.1	2	270.9	6
WBTSEN	AB2102	4	1	4	2	20210301	0202	26.502N	76.649W	3252	3299	2.585	34.915	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	4	1	5	2	20210301	0210	26.503N	76.648W	2861	2900	2.932	34.933	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	4	1	6	2	20210301	0216	26.503N	76.647W	2567	2599	3.134	34.943	2	34.943	2	265.9	2	265.8	2
WBTSEN	AB2102	4	1	7	2	20210301	0223	26.504N	76.646W	2272	2300	3.406	34.958	2	34.952	4	264.6	2	265.9	2
WBTSEN	AB2102	4	1	8	2	20210301	0228	26.505N	76.645W	2073	2097	3.572	34.964	2	34.961	2	263.7	2	263.7	2
WBTSEN	AB2102	4	1	9	2	20210301	0232	26.506N	76.644W	1878	1899	3.761	34.971	2	34.969	2	262.8	2	262.0	2
WBTSEN	AB2102	4	1	10	2	20210301	0239	26.507N	76.643W	1584	1601	4.107	34.991	2	34.988	2	259.0	2	258.5	2
WBTSEN	AB2102	4	1	11	2	20210301	0244	26.507N	76.642W	1387	1401	4.373	35.003	2	35.003	2	244.5	2	245.3	4
WBTSEN	AB2102	4	1	12	2	20210301	0249	26.508N	76.641W	1211	1222	4.897	35.035	2	35.035	2	244.2	2	244.1	2
WBTSEN	AB2102	4	1	13	2	20210301	0253	26.509N	76.640W	1033	1042	5.982	35.090	2	35.073	4	212.0	2	212.2	2
WBTSEN	AB2102	4	1	14	2	20210301	0258	26.510N	76.639W	904	912	7.564	35.107	2	35.108	2	164.2	2	162.8	2
WBTSEN	AB2102	4	1	15	2	20210301	0301	26.510N	76.639W	796	803	9.344	35.217	2	35.216	2	131.8	2	145.0	4
WBTSEN	AB2102	4	1	16	2	20210301	0305	26.511N	76.638W	686	692	11.133	35.432	2	35.431	2	131.6	2	142.2	4
WBTSEN	AB2102	4	1	17	2	20210301	0308	26.512N	76.637W	576	581	13.634	35.799	2	35.799	2	157.1	2	154.7	2

WBTSEN	AB2102	4	1	18	2	20210301	0312	26.512N	76.637W	468	472	15.984	36.172	2	36.179	2	170.1	2	170.4	2
WBTSEN	AB2102	4	1	19	2	20210301	0315	26.513N	76.636W	359	362	18.206	36.525	2	36.528	2	187.1	2	187.4	2
WBTSEN	AB2102	4	1	20	2	20210301	0319	26.513N	76.635W	250	252	19.703	36.702	2	36.704	2	182.8	2	197.8	4
WBTSEN	AB2102	4	1	21	2	20210301	0321	26.514N	76.635W	160	161	22.167	36.909	2	36.910	2	177.8	2	197.1	4
WBTSEN	AB2102	4	1	22	2	20210301	0324	26.514N	76.634W	110	111	23.881	36.915	2	36.915	2	205.8	2	206.8	2
WBTSEN	AB2102	4	1	23	2	20210301	0327	26.515N	76.633W	59	60	24.617	36.898	2	36.904	2	209.1	2	208.2	2
WBTSEN	AB2102	4	1	24	2	20210301	0330	26.515N	76.632W	3	3	24.887	36.877	2	36.877	2	208.9	2	208.1	2
WBTSEN	AB2102	5	1	1	2	20210301	0634	26.498N	76.560W	4821	4909	2.188	34.871	2	34.875	2	256.4	2	257.0	2
WBTSEN	AB2102	5	1	2	2	20210301	0641	26.497N	76.559W	4520	4599	2.246	34.883	2	34.883	2	263.1	2	262.7	2
WBTSEN	AB2102	5	1	3	2	20210301	0649	26.496N	76.558W	4130	4198	2.285	34.891	2	34.891	2	251.4	2	272.2	4
WBTSEN	AB2102	5	1	4	2	20210301	0658	26.496N	76.557W	3741	3800	2.380	34.900	2	34.901	6	269.6	2	270.7	2
WBTSEN	AB2102	5	1	5	2	20210301	0706	26.495N	76.556W	3351	3400	2.599	34.915	2	34.895	4	270.1	2	270.2	2
WBTSEN	AB2102	5	1	6	2	20210301	0715	26.494N	76.555W	2958	2999	2.795	34.925	2	34.906	4	269.2	2	269.8	2
WBTSEN	AB2102	5	1	7	2	20210301	0725	26.494N	76.554W	2470	2501	3.206	34.951	2	34.951	2	263.7	2	263.4	2
WBTSEN	AB2102	5	1	8	2	20210301	0735	26.493N	76.553W	1980	2003	3.600	34.963	2	34.964	2	252.6	2	267.9	4
WBTSEN	AB2102	5	1	9	2	20210301	0741	26.492N	76.553W	1732	1750	3.922	34.982	2	35.041	4	250.0	2	264.6	4
WBTSEN	AB2102	5	1	10	2	20210301	0747	26.492N	76.552W	1519	1535	4.223	35.000	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	5	1	11	2	20210301	0752	26.491N	76.552W	1322	1335	4.535	35.012	2	35.017	4	251.4	2	251.9	2
WBTSEN	AB2102	5	1	12	2	20210301	0756	26.491N	76.551W	1155	1165	5.214	35.056	2	35.062	4	232.9	2	232.2	2
WBTSEN	AB2102	5	1	13	2	20210301	0801	26.490N	76.550W	986	995	6.687	35.093	2	35.082	4	186.4	2	187.7	2
WBTSEN	AB2102	5	1	14	2	20210301	0805	26.489N	76.550W	878	886	8.287	35.154	2	35.155	2	154.8	2	154.9	2
WBTSEN	AB2102	5	1	15	2	20210301	0808	26.489N	76.549W	767	774	10.207	35.311	2	35.311	2	136.9	2	138.6	2
WBTSEN	AB2102	5	1	16	2	20210301	0812	26.488N	76.549W	662	667	11.804	35.514	2	35.518	2	139.5	2	138.0	2
WBTSEN	AB2102	5	1	17	2	20210301	0816	26.488N	76.548W	553	557	14.225	35.892	2	35.896	2	155.7	2	156.5	2
WBTSEN	AB2102	5	1	18	2	20210301	0820	26.487N	76.547W	443	446	16.717	36.293	2	36.295	2	171.3	2	172.9	4
WBTSEN	AB2102	5	1	19	2	20210301	0824	26.487N	76.547W	335	337	18.438	36.558	2	36.561	2	189.9	2	189.0	2
WBTSEN	AB2102	5	1	20	2	20210301	0827	26.486N	76.546W	224	226	20.286	36.764	2	36.770	2	185.9	2	184.0	2
WBTSEN	AB2102	5	1	21	2	20210301	0831	26.486N	76.546W	135	136	23.623	36.940	2	36.936	2	192.1	2	206.7	4
WBTSEN	AB2102	5	1	22	2	20210301	0834	26.486N	76.545W	85	86	24.222	36.923	2	36.921	2	197.4	2	209.5	4
WBTSEN	AB2102	5	1	23	2	20210301	0837	26.485N	76.545W	35	35	24.857	36.887	2	36.887	2	208.9	2	207.5	2
WBTSEN	AB2102	5	1	24	2	20210301	0839	26.485N	76.545W	2	2	24.856	36.888	2	36.887	2	209.0	2	210.3	2
WBTSEN	AB2102	6	1	1	2	20210301	1133	26.501N	76.475W	4839	4927	2.207	34.873	2	34.874	2	257.0	2	256.8	2
WBTSEN	AB2102	6	1	2	2	20210301	1141	26.500N	76.474W	4453	4530	2.296	34.888	2	34.888	2	266.1	2	266.2	2
WBTSEN	AB2102	6	1	3	2	20210301	1149	26.500N	76.474W	4093	4160	2.310	34.893	2	34.892	2	267.8	2	268.2	2
WBTSEN	AB2102	6	1	4	2	20210301	1156	26.500N	76.473W	3712	3770	2.329	34.897	2	34.896	2	269.5	2	269.7	2
WBTSEN	AB2102	6	1	5	2	20210301	1204	26.499N	76.473W	3356	3405	2.531	34.911	2	34.911	6	270.6	2	270.3	2
WBTSEN	AB2102	6	1	6	2	20210301	1213	26.499N	76.472W	2954	2994	2.773	34.925	2	34.924	2	267.8	2	268.6	2
WBTSEN	AB2102	6	1	7	2	20210301	1221	26.498N	76.471W	2547	2579	3.107	34.942	2	34.943	2	265.7	2	265.7	2
WBTSEN	AB2102	6	1	8	2	20210301	1230	26.498N	76.470W	2141	2166	3.532	34.962	2	34.952	4	264.2	2	264.4	2
WBTSEN	AB2102	6	1	9	2	20210301	1237	26.497N	76.470W	1835	1855	3.754	34.969	2	34.954	4	262.5	2	264.4	2
WBTSEN	AB2102	6	1	10	2	20210301	1244	26.497N	76.469W	1580	1596	4.120	34.996	2	34.974	4	257.8	2	256.5	2
WBTSEN	AB2102	6	1	11	2	20210301	1249	26.496N	76.469W	1387	1401	4.439	35.012	2	35.013	2	252.3	2	254.2	2
WBTSEN	AB2102	6	1	12	2	20210301	1254	26.496N	76.468W	1219	1231	4.925	35.042	2	35.042	2	241.3	2	240.6	2
WBTSEN	AB2102	6	1	13	2	20210301	1258	26.496N	76.468W	1051	1061	5.866	35.083	2	35.083	2	205.9	2	209.2	4
WBTSEN	AB2102	6	1	14	2	20210301	1302	26.496N	76.468W	943	951	7.287	35.116	2	35.116	2	166.4	2	178.8	4
WBTSEN	AB2102	6	1	15	2	20210301	1306	26.496N	76.467W	833	840	9.077	35.206	2	35.207	2	143.9	2	143.3	2
WBTSEN	AB2102	6	1	16	2	20210301	1309	26.496N	76.467W	724	730	10.970	35.408	2	35.405	2	138.0	2	139.6	2
WBTSEN	AB2102	6	1	17	2	20210301	1312	26.495N	76.467W	615	620	13.087	35.716	2	35.718	2	151.4	2	151.4	2
WBTSEN	AB2102	6	1	18	2	20210301	1316	26.495N	76.466W	506	510	15.516	36.098	2	36.100	6	165.9	2	165.9	2
WBTSEN	AB2102	6	1	19	2	20210301	1319	26.495N	76.466W	398	401	17.613	36.435	2	36.433	2	180.4	2	179.8	2
WBTSEN	AB2102	6	1	20	2	20210301	1322	26.495N	76.466W	288	291	19.019	36.634	2	36.633	2	191.2	2	191.6	6
WBTSEN	AB2102	6	1	21	2	20210301	1326	26.495N	76.465W	200	201	21.197	36.843	2	36.848	2	187.8	2	190.3	2
WBTSEN	AB2102	6	1	22	2	20210301	1329	26.495N	76.465W	120	121	23.951	36.930	2	36.930	2	210.3	2	210.5	2
WBTSEN	AB2102	6	1	23	2	20210301	1331	26.494N	76.464W	70	71	24.380	36.910	2	36.912	2	208.5	2	209.5	2
WBTSEN	AB2102	6	1	24	2	20210301	1335	26.494N	76.464W	2	2	24.867	36.879	2	36.882	2	208.2	2	207.5	2
WBTSEN	AB2102	7	1	1	2	20210301	1623	26.500N	76.348W	4835	4923	2.206	34.873	2	34.875	2	257.0	2	259.2	2
WBTSEN	AB2102	7	1	2	2	20210301	1630	26.499N	76.347W	4502	4580	2.279	34.886	2	34.884	2	265.0	2	265.6	2
WBTSEN	AB2102	7	1	3	2	20210301	1637	26.499N	76.347W	4171	4241	2.293	34.891	2	34.890	2	267.3	2	267.9	2
WBTSEN	AB2102	7	1	4	2	20210301	1644	26.498N	76.347W	3840	3901	2.338	34.897	2	34.894	2	269.4	2	270.5	2
WBTSEN	AB2102	7	1	5	2	20210301	1651	26.497N	76.346W	3512	3565	2.397	34.903	2	34.902	2	270.5	2	270.2	6
WBTSEN	AB2102	7	1	6	2	20210301	1700	26.496N	76.345W	3102	3145	2.653	34.918	2	34.917	2	269.8	2	269.6	2
WBTSEN	AB2102	7	1	7	2	20210301	1709	26.495N	76.345W	2700	2735	3.014	34.938	2	34.937	2	252.6	2	287.6	4
WBTSEN	AB2102	7	1	8	2	20210301	1718	26.494N	76.344W	2293	2321	3.396	34.954	2	34.953	2	265.0	2	263.9	2
WBTSEN	AB2102	7	1	9	2	20210301	1725	26.493N	76.344W	1933	1955	3.757	34.971	2	34.970	2	262.4	2	262.6	2
WBTSEN	AB2102	7	1	10	2	20210301	1732	26.493N	76.344W	1684	1702	3.946	34.977	2	34.973	2	261.5	2	262.4	2
WBTSEN	AB2102	7	1	11	2	20210301	1738	26.492N	76.343W	1486	1501	4.239	34.990	2	34.985	4	258.2	2	257.7	2

WBTSEN	AB2102	7	1	12	2	20210301	1742	26.492N	76.343W	1338	1351	4.627	35.020	2	35.006	4	240.3	2	255.1	4
WBTSEN	AB2102	7	1	13	2	20210301	1747	26.491N	76.343W	1166	1177	5.150	35.051	2	35.030	4	236.2	2	236.8	2
WBTSEN	AB2102	7	1	14	2	20210301	1752	26.491N	76.342W	977	985	6.901	35.108	2	35.106	2	175.3	2	186.5	4
WBTSEN	AB2102	7	1	15	2	20210301	1757	26.490N	76.342W	799	806	9.425	35.220	2	35.220	2	137.3	2	138.3	2
WBTSEN	AB2102	7	1	16	2	20210301	1801	26.490N	76.342W	690	696	11.815	35.532	2	35.531	2	138.4	2	148.5	4
WBTSEN	AB2102	7	1	17	2	20210301	1805	26.490N	76.341W	582	586	14.094	35.871	2	35.873	2	158.7	2	158.9	2
WBTSEN	AB2102	7	1	18	2	20210301	1808	26.490N	76.341W	472	475	16.580	36.269	2	36.270	2	173.2	2	172.9	2
WBTSEN	AB2102	7	1	19	2	20210301	1809	26.490N	76.341W	472	475	16.581	36.269	2	36.269	2	173.2	2	174.8	2
WBTSEN	AB2102	7	1	20	2	20210301	1813	26.489N	76.341W	363	366	18.379	36.551	2	36.555	2	189.3	2	189.4	2
WBTSEN	AB2102	7	1	21	2	20210301	1816	26.489N	76.341W	253	255	19.669	36.700	2	36.710	4	181.6	2	194.2	4
WBTSEN	AB2102	7	1	22	2	20210301	1819	26.489N	76.341W	164	165	22.214	36.923	2	36.894	4	183.1	2	201.9	4
WBTSEN	AB2102	7	1	23	2	20210301	1823	26.489N	76.341W	55	55	24.439	36.905	2	36.880	4	208.7	2	210.5	2
WBTSEN	AB2102	7	1	24	2	20210301	1826	26.489N	76.341W	3	3	25.100	36.877	2	36.877	6	208.5	2	210.7	2
WBTSEN	AB2102	8	1	1	2	20210301	2125	26.491N	76.220W	4802	4889	2.265	34.881	2	34.882	2	244.1	2	264.1	4
WBTSEN	AB2102	8	1	2	2	20210301	2133	26.491N	76.220W	4424	4500	2.256	34.885	2	34.887	2	248.0	2	469.9	4
WBTSEN	AB2102	8	1	3	2	20210301	2141	26.490N	76.220W	4035	4101	2.287	34.892	2	34.894	2	267.8	2	270.1	2
WBTSEN	AB2102	8	1	4	2	20210301	2149	26.490N	76.221W	3673	3729	2.357	34.900	2	34.900	2	255.0	2	273.3	4
WBTSEN	AB2102	8	1	5	2	20210301	2157	26.489N	76.221W	3302	3350	2.562	34.913	2	34.915	2	255.9	2	279.4	4
WBTSEN	AB2102	8	1	6	2	20210301	2206	26.488N	76.221W	2812	2850	2.850	34.927	2	34.929	2	255.7	2	272.2	4
WBTSEN	AB2102	8	1	7	2	20210301	2215	26.488N	76.222W	2370	2399	3.264	34.950	2	34.952	2	253.2	2	271.6	4
WBTSEN	AB2102	8	1	8	2	20210301	2222	26.487N	76.222W	2077	2101	3.562	34.960	2	34.962	2	252.7	2	267.3	4
WBTSEN	AB2102	8	1	9	2	20210301	2229	26.486N	76.222W	1761	1781	3.913	34.974	2	34.979	4	261.9	2	262.9	2
WBTSEN	AB2102	8	1	10	2	20210301	2233	26.486N	76.222W	1594	1611	4.135	34.985	2	34.986	2	249.2	2	269.5	4
WBTSEN	AB2102	8	1	11	2	20210301	2238	26.486N	76.222W	1425	1440	4.436	35.002	2	35.003	2	245.0	2	258.2	4
WBTSEN	AB2102	8	1	12	2	20210301	2242	26.485N	76.223W	1258	1270	4.837	35.026	2	35.029	2	236.1	2	249.9	4
WBTSEN	AB2102	8	1	13	2	20210301	2247	26.485N	76.223W	1090	1100	5.860	35.083	2	35.083	2	206.1	2	219.6	4
WBTSEN	AB2102	8	1	14	2	20210301	2251	26.485N	76.223W	927	935	7.490	35.091	2	35.092	2	161.0	2	162.9	2
WBTSEN	AB2102	8	1	15	2	20210301	2255	26.484N	76.223W	818	825	9.328	35.229	2	35.232	2	143.5	2	143.9	2
WBTSEN	AB2102	8	1	16	2	20210301	2259	26.484N	76.223W	710	716	11.581	35.505	2	35.506	2	146.3	2	146.3	2
WBTSEN	AB2102	8	1	17	2	20210301	2303	26.483N	76.223W	600	605	13.802	35.825	2	35.834	4	155.0	2	156.2	2
WBTSEN	AB2102	8	1	18	2	20210301	2307	26.483N	76.223W	492	495	16.276	36.219	2	36.222	2	171.3	2	170.8	2
WBTSEN	AB2102	8	1	19	2	20210301	2311	26.483N	76.223W	382	385	18.275	36.535	2	36.537	2	187.1	2	187.5	2
WBTSEN	AB2102	8	1	20	2	20210301	2315	26.482N	76.224W	273	275	19.528	36.683	2	36.684	2	190.5	2	191.9	2
WBTSEN	AB2102	8	1	21	2	20210301	2319	26.482N	76.224W	184	185	22.042	36.884	2	36.887	2	202.8	2	201.4	6
WBTSEN	AB2102	8	1	22	2	20210301	2322	26.482N	76.224W	114	115	23.785	36.980	2	36.972	4	198.9	2	202.4	4
WBTSEN	AB2102	8	1	23	2	20210301	2326	26.482N	76.224W	65	65	24.456	36.901	2	36.900	2	208.4	2	207.4	2
WBTSEN	AB2102	8	1	24	2	20210301	2330	26.482N	76.224W	2	2	25.052	36.875	2	36.875	2	208.6	2	207.9	2
WBTSEN	AB2102	9	1	1	2	20210302	0245	26.496N	76.085W	4793	4880	2.161	34.868	2	34.869	2	255.6	2	255.8	2
WBTSEN	AB2102	9	1	2	2	20210302	0251	26.496N	76.084W	4522	4601	2.242	34.882	2	34.883	2	262.9	2	263.1	2
WBTSEN	AB2102	9	1	3	2	20210302	0300	26.496N	76.084W	4112	4180	2.273	34.890	2	34.889	2	267.0	2	266.6	2
WBTSEN	AB2102	9	1	4	2	20210302	0307	26.495N	76.084W	3781	3840	2.319	34.896	2	34.895	2	269.1	2	270.1	6
WBTSEN	AB2102	9	1	5	2	20210302	0314	26.495N	76.083W	3449	3500	2.430	34.906	2	34.894	4	269.9	2	270.3	2
WBTSEN	AB2102	9	1	6	2	20210302	0323	26.495N	76.083W	2960	3000	2.771	34.925	2	34.911	4	269.1	2	269.6	2
WBTSEN	AB2102	9	1	7	2	20210302	0333	26.494N	76.083W	2469	2500	3.116	34.943	2	34.931	4	265.9	2	266.4	2
WBTSEN	AB2102	9	1	8	2	20210302	0341	26.494N	76.082W	2076	2100	3.576	34.965	2	34.947	4	262.2	2	263.0	2
WBTSEN	AB2102	9	1	9	2	20210302	0348	26.494N	76.082W	1780	1799	3.934	34.982	2	34.961	4	260.3	2	259.9	2
WBTSEN	AB2102	9	1	10	2	20210302	0353	26.494N	76.082W	1584	1601	4.190	34.992	2	34.991	2	258.1	2	257.5	2
WBTSEN	AB2102	9	1	11	2	20210302	0358	26.493N	76.082W	1356	1369	4.651	35.024	2	35.023	2	238.5	2	254.5	4
WBTSEN	AB2102	9	1	12	2	20210302	0402	26.493N	76.081W	1189	1200	5.247	35.059	2	35.060	2	232.3	2	232.5	2
WBTSEN	AB2102	9	1	13	2	20210302	0406	26.493N	76.081W	1022	1031	6.421	35.076	2	35.064	4	191.1	2	191.6	2
WBTSEN	AB2102	9	1	14	2	20210302	0409	26.493N	76.081W	912	920	7.732	35.123	2	35.112	4	163.1	2	166.0	2
WBTSEN	AB2102	9	1	15	2	20210302	0413	26.492N	76.081W	803	810	9.759	35.275	2	35.276	2	142.7	2	141.7	2
WBTSEN	AB2102	9	1	16	2	20210302	0416	26.492N	76.081W	694	699	11.790	35.526	2	35.528	2	142.2	2	140.9	2
WBTSEN	AB2102	9	1	17	2	20210302	0419	26.492N	76.081W	585	590	14.484	35.931	2	35.929	2	152.0	2	161.4	4
WBTSEN	AB2102	9	1	18	2	20210302	0422	26.492N	76.081W	476	480	16.762	36.297	2	36.294	2	173.8	2	173.7	2
WBTSEN	AB2102	9	1	19	2	20210302	0425	26.492N	76.080W	367	370	18.488	36.565	2	36.566	2	190.5	2	190.5	2
WBTSEN	AB2102	9	1	20	2	20210302	0429	26.492N	76.080W	259	261	19.584	36.690	2	36.691	2	190.5	2	189.7	2
WBTSEN	AB2102	9	1	21	2	20210302	0432	26.491N	76.080W	169	171	22.645	36.986	2	36.989	2	202.7	2	193.4	4
WBTSEN	AB2102	9	1	22	2	20210302	0434	26.491N	76.080W	95	95	23.897	36.938	2	36.937	2	210.6	2	210.1	2
WBTSEN	AB2102	9	1	23	2	20210302	0437	26.491N	76.080W	44	44	24.386	36.918	2	36.919	2	209.9	2	209.3	2
WBTSEN	AB2102	9	1	24	2	20210302	0440	26.491N	76.080W	3	3	25.016	36.882	2	36.881	2	208.5	2	208.7	6
WBTSEN	AB2102	10	1	1	2	20210302	0824	26.510N	75.909W	4733	4818	2.155	34.868	2	34.869	2	238.7	2	225.1	4
WBTSEN	AB2102	10	1	2	2	20210302	0830	26.511N	75.909W	4452	4529	2.234	34.882	2	34.883	2	263.0	2	262.7	2
WBTSEN	AB2102	10	1	3	2	20210302	0837	26.511N	75.910W	4181	4250	2.254	34.888	2	34.889	2	266.0	2	266.3	2
WBTSEN	AB2102	10	1	4	2	20210302	0843	26.512N	75.911W	3918	3981	2.282	34.892	2	34.893	2	267.9	2	267.7	2
WBTSEN	AB2102	10	1	5	2	20210302	0849	26.513N	75.912W	3643	3699	2.330	34.898	2	34.898	2	269.7	2	269.1	6

WBTSEN	AB2102	10	1	6	2	20210302	0900	26.515N	75.912W	3157	3202	2.557	34.914	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	10	1	7	2	20210302	0911	26.517N	75.912W	2666	2701	2.977	34.939	2	34.940	2	267.1	2	264.4	2
WBTSEN	AB2102	10	1	8	2	20210302	0920	26.518N	75.911W	2225	2252	3.412	34.959	2	34.959	2	263.5	2	262.9	2
WBTSEN	AB2102	10	1	9	2	20210302	0928	26.519N	75.911W	1880	1901	3.814	34.977	2	34.978	2	260.5	2	260.6	2
WBTSEN	AB2102	10	1	10	2	20210302	0934	26.520N	75.911W	1635	1653	4.143	34.999	2	-999.000	9	256.7	2	256.4	2
WBTSEN	AB2102	10	1	11	2	20210302	0940	26.520N	75.910W	1373	1387	4.674	35.032	2	34.993	4	249.0	2	246.9	2
WBTSEN	AB2102	10	1	12	2	20210302	0945	26.521N	75.910W	1205	1216	5.296	35.061	2	35.065	4	230.3	2	231.4	2
WBTSEN	AB2102	10	1	13	2	20210302	0950	26.522N	75.910W	1036	1046	6.629	35.098	2	35.102	2	189.4	2	191.2	2
WBTSEN	AB2102	10	1	14	2	20210302	0954	26.522N	75.909W	926	934	8.019	35.136	2	35.138	2	157.4	2	157.0	2
WBTSEN	AB2102	10	1	15	2	20210302	0958	26.522N	75.909W	818	826	9.638	35.261	2	35.262	6	142.4	2	141.5	2
WBTSEN	AB2102	10	1	16	2	20210302	1002	26.522N	75.908W	709	715	12.532	35.633	2	35.638	2	146.6	2	145.1	2
WBTSEN	AB2102	10	1	17	2	20210302	1006	26.523N	75.908W	601	606	14.726	35.969	2	35.972	2	160.0	2	160.3	2
WBTSEN	AB2102	10	1	18	2	20210302	1010	26.523N	75.907W	491	495	17.083	36.351	2	36.353	2	175.4	2	172.9	2
WBTSEN	AB2102	10	1	19	2	20210302	1014	26.524N	75.907W	384	386	18.555	36.574	2	36.576	2	190.4	2	190.4	2
WBTSEN	AB2102	10	1	20	2	20210302	1018	26.524N	75.906W	275	277	19.452	36.676	2	36.679	2	190.2	2	192.1	6
WBTSEN	AB2102	10	1	21	2	20210302	1022	26.524N	75.906W	186	187	21.147	36.851	2	36.853	2	185.1	2	186.4	2
WBTSEN	AB2102	10	1	22	2	20210302	1025	26.524N	75.905W	121	121	23.622	37.013	2	36.987	4	199.3	2	197.7	4
WBTSEN	AB2102	10	1	23	2	20210302	1028	26.524N	75.905W	70	71	24.323	36.909	2	36.906	2	206.5	2	205.5	2
WBTSEN	AB2102	10	1	24	2	20210302	1032	26.525N	75.904W	3	3	25.025	36.876	2	36.875	2	207.7	2	206.8	2
WBTSEN	AB2102	11	1	1	2	20210302	1358	26.502N	75.703W	4682	4765	2.143	34.868	2	34.869	2	255.2	2	256.9	2
WBTSEN	AB2102	11	1	2	2	20210302	1405	26.503N	75.703W	4346	4420	2.225	34.883	2	34.881	2	263.4	2	263.2	2
WBTSEN	AB2102	11	1	3	2	20210302	1412	26.503N	75.702W	4015	4080	2.254	34.889	2	34.890	2	266.8	2	266.5	2
WBTSEN	AB2102	11	1	4	2	20210302	1420	26.503N	75.702W	3683	3740	2.319	34.897	2	34.898	6	269.2	2	268.8	2
WBTSEN	AB2102	11	1	5	2	20210302	1427	26.503N	75.702W	3352	3401	2.448	34.907	2	34.899	4	270.4	2	270.4	2
WBTSEN	AB2102	11	1	6	2	20210302	1437	26.503N	75.701W	2842	2880	2.802	34.927	2	34.924	2	267.7	2	267.3	2
WBTSEN	AB2102	11	1	7	2	20210302	1446	26.504N	75.701W	2434	2464	3.191	34.950	2	34.949	2	263.7	2	263.1	2
WBTSEN	AB2102	11	1	8	2	20210302	1455	26.504N	75.700W	2026	2050	3.620	34.971	2	34.971	2	262.5	2	261.0	2
WBTSEN	AB2102	11	1	9	2	20210302	1501	26.503N	75.700W	1727	1745	3.977	34.987	2	34.985	2	259.0	2	258.5	2
WBTSEN	AB2102	11	1	10	2	20210302	1506	26.503N	75.700W	1520	1536	4.336	35.007	2	35.008	2	254.5	2	253.8	2
WBTSEN	AB2102	11	1	11	2	20210302	1510	26.503N	75.699W	1351	1365	4.740	35.029	2	35.025	2	246.4	2	246.2	6
WBTSEN	AB2102	11	1	12	2	20210302	1515	26.503N	75.699W	1184	1195	5.524	35.071	2	35.073	2	224.1	2	224.3	2
WBTSEN	AB2102	11	1	13	2	20210302	1519	26.503N	75.699W	1015	1024	6.879	35.104	2	35.106	2	183.4	2	184.8	2
WBTSEN	AB2102	11	1	14	2	20210302	1523	26.503N	75.698W	906	914	8.259	35.136	2	35.138	2	149.9	2	151.0	2
WBTSEN	AB2102	11	1	15	2	20210302	1526	26.503N	75.698W	798	805	9.546	35.249	2	35.256	2	142.3	2	140.5	2
WBTSEN	AB2102	11	1	16	2	20210302	1529	26.502N	75.698W	690	695	13.311	35.749	2	35.751	2	151.0	2	150.4	2
WBTSEN	AB2102	11	1	17	2	20210302	1532	26.502N	75.697W	581	586	15.381	36.075	2	36.078	2	164.3	2	164.4	6
WBTSEN	AB2102	11	1	18	2	20210302	1536	26.502N	75.697W	472	476	17.527	36.419	2	36.423	2	179.0	2	178.8	2
WBTSEN	AB2102	11	1	19	2	20210302	1539	26.502N	75.697W	363	366	18.830	36.610	2	36.612	2	197.2	2	196.7	2
WBTSEN	AB2102	11	1	20	2	20210302	1543	26.502N	75.696W	255	257	19.761	36.705	2	36.706	2	189.8	2	192.1	4
WBTSEN	AB2102	11	1	21	2	20210302	1546	26.502N	75.696W	164	166	22.215	36.896	2	36.897	2	209.3	2	208.2	2
WBTSEN	AB2102	11	1	22	2	20210302	1548	26.502N	75.696W	109	110	22.936	36.910	2	36.911	2	209.5	2	209.1	2
WBTSEN	AB2102	11	1	23	2	20210302	1551	26.502N	75.695W	59	60	24.864	36.852	2	36.853	6	208.6	2	208.1	2
WBTSEN	AB2102	11	1	24	2	20210302	1554	26.502N	75.695W	3	3	24.994	36.858	2	36.857	2	208.2	2	208.0	2
WBTSEN	AB2102	12	1	1	2	20210302	1904	26.493N	75.499W	4677	4760	2.129	34.866	2	34.868	6	254.2	2	254.4	2
WBTSEN	AB2102	12	1	2	2	20210302	1911	26.493N	75.499W	4377	4452	2.209	34.881	2	34.881	2	262.2	2	261.5	2
WBTSEN	AB2102	12	1	3	2	20210302	1918	26.493N	75.498W	4084	4151	2.230	34.887	2	34.884	2	265.6	2	265.1	2
WBTSEN	AB2102	12	1	4	2	20210302	1926	26.493N	75.499W	3790	3850	2.275	34.893	2	34.893	2	267.9	2	267.2	2
WBTSEN	AB2102	12	1	5	2	20210302	1933	26.492N	75.499W	3496	3549	2.372	34.901	2	34.900	2	269.4	2	268.9	2
WBTSEN	AB2102	12	1	6	2	20210302	1942	26.490N	75.499W	3057	3100	2.636	34.918	2	34.919	2	268.9	2	268.7	2
WBTSEN	AB2102	12	1	7	2	20210302	1951	26.489N	75.499W	2667	2702	2.925	34.935	2	34.934	2	265.9	2	265.6	6
WBTSEN	AB2102	12	1	8	2	20210302	1958	26.489N	75.499W	2322	2351	3.270	34.954	2	34.954	2	263.5	2	262.7	2
WBTSEN	AB2102	12	1	9	2	20210302	2005	26.488N	75.499W	1978	2000	3.643	34.972	2	34.965	4	262.1	2	261.8	2
WBTSEN	AB2102	12	1	10	2	20210302	2012	26.487N	75.499W	1682	1700	4.084	34.995	2	34.994	2	257.8	2	257.6	2
WBTSEN	AB2102	12	1	11	2	20210302	2017	26.486N	75.499W	1435	1449	4.608	35.024	2	35.025	2	250.1	2	248.3	2
WBTSEN	AB2102	12	1	12	2	20210302	2022	26.486N	75.499W	1193	1204	5.498	35.071	2	35.073	2	225.8	2	225.8	2
WBTSEN	AB2102	12	1	13	2	20210302	2027	26.485N	75.499W	1027	1036	6.785	35.100	2	35.102	2	185.4	2	186.4	2
WBTSEN	AB2102	12	1	14	2	20210302	2030	26.484N	75.500W	918	926	8.559	35.161	2	35.163	2	147.9	2	148.7	6
WBTSEN	AB2102	12	1	15	2	20210302	2034	26.484N	75.500W	808	815	10.531	35.361	2	35.362	2	140.2	2	139.8	2
WBTSEN	AB2102	12	1	16	2	20210302	2037	26.483N	75.500W	700	706	12.699	35.656	2	35.661	6	148.4	2	147.5	2
WBTSEN	AB2102	12	1	17	2	20210302	2041	26.483N	75.500W	591	595	15.179	36.041	2	36.041	2	161.6	2	163.2	2
WBTSEN	AB2102	12	1	18	2	20210302	2044	26.482N	75.500W	481	485	17.217	36.364	2	36.367	2	171.0	2	183.9	4
WBTSEN	AB2102	12	1	19	2	20210302	2049	26.482N	75.500W	376	379	18.589	36.581	2	36.583	2	183.9	2	194.9	4
WBTSEN	AB2102	12	1	20	2	20210302	2053	26.482N	75.501W	264	266	19.488	36.674	2	36.674	2	184.1	2	197.0	4
WBTSEN	AB2102	12	1	21	2	20210302	2057	26.482N	75.501W	174	175	21.703	36.859	2	36.861	2	197.1	2	202.1	4
WBTSEN	AB2102	12	1	22	2	20210302	2101	26.482N	75.501W	85	86	22.822	36.956	2	36.960	2	203.1	2	207.9	4
WBTSEN	AB2102	12	1	23	2	20210302	2104	26.482N	75.500W	35	35	24.255	36.925	2	36.924	2	202.1	2	154.9	4

WBTSEN	AB2102	12	1	24	2	20210302	2107	26.482N	75.500W	2	2	25.181	36.827	2	36.827	2	208.3	2	207.3	2
WBTSEN	AB2102	13	1	1	2	20210303	0000	26.508N	75.296W	4629	4711	2.114	34.865	2	34.866	2	236.3	2	270.0	4
WBTSEN	AB2102	13	1	2	2	20210303	0007	26.509N	75.296W	4288	4360	2.206	34.882	2	34.882	2	262.9	2	263.0	2
WBTSEN	AB2102	13	1	3	2	20210303	0014	26.509N	75.296W	3961	4025	2.234	34.888	2	34.888	2	250.5	2	238.3	4
WBTSEN	AB2102	13	1	4	2	20210303	0021	26.510N	75.295W	3634	3689	2.291	34.895	2	34.896	2	268.5	2	269.9	2
WBTSEN	AB2102	13	1	5	2	20210303	0028	26.511N	75.295W	3302	3350	2.451	34.908	2	34.902	4	255.7	2	273.3	4
WBTSEN	AB2102	13	1	6	2	20210303	0038	26.511N	75.294W	2812	2850	2.778	34.926	2	34.926	2	254.5	2	272.9	4
WBTSEN	AB2102	13	1	7	2	20210303	0046	26.512N	75.294W	2468	2499	3.119	34.946	2	34.946	2	251.8	2	277.9	4
WBTSEN	AB2102	13	1	8	2	20210303	0054	26.513N	75.294W	2076	2100	3.550	34.967	2	34.965	2	250.9	2	273.6	4
WBTSEN	AB2102	13	1	9	2	20210303	0059	26.513N	75.294W	1830	1850	3.854	34.981	2	34.981	2	249.3	2	275.0	4
WBTSEN	AB2102	13	1	10	2	20210303	0105	26.514N	75.293W	1584	1601	4.286	35.005	2	35.004	2	255.1	2	257.7	6
WBTSEN	AB2102	13	1	11	2	20210303	0110	26.514N	75.293W	1376	1390	4.735	35.030	2	35.029	2	247.0	2	248.4	2
WBTSEN	AB2102	13	1	12	2	20210303	0114	26.514N	75.293W	1209	1220	5.438	35.067	2	35.067	2	217.5	2	241.0	4
WBTSEN	AB2102	13	1	13	2	20210303	0119	26.515N	75.293W	1041	1050	6.752	35.106	2	35.106	2	188.7	2	191.6	2
WBTSEN	AB2102	13	1	14	2	20210303	0122	26.515N	75.293W	932	941	8.210	35.132	2	35.132	2	151.2	2	151.7	2
WBTSEN	AB2102	13	1	15	2	20210303	0125	26.515N	75.293W	822	829	10.057	35.308	2	35.307	2	133.1	2	145.2	4
WBTSEN	AB2102	13	1	16	2	20210303	0128	26.516N	75.293W	714	720	12.810	35.672	2	35.671	2	148.9	2	148.9	2
WBTSEN	AB2102	13	1	17	2	20210303	0132	26.516N	75.293W	605	610	14.880	35.986	2	35.985	2	170.4	2	170.7	2
WBTSEN	AB2102	13	1	18	2	20210303	0135	26.516N	75.293W	496	500	16.914	36.315	2	36.315	6	183.3	2	185.1	2
WBTSEN	AB2102	13	1	19	2	20210303	0138	26.516N	75.293W	388	391	18.448	36.565	2	36.564	2	185.8	2	202.6	4
WBTSEN	AB2102	13	1	20	2	20210303	0141	26.517N	75.293W	278	280	19.324	36.662	2	36.662	2	191.4	2	203.3	4
WBTSEN	AB2102	13	1	21	2	20210303	0144	26.517N	75.293W	189	191	20.485	36.762	2	36.762	2	196.4	2	197.5	2
WBTSEN	AB2102	13	1	22	2	20210303	0146	26.517N	75.293W	119	120	22.674	36.961	2	36.960	2	200.3	2	203.8	4
WBTSEN	AB2102	13	1	23	2	20210303	0149	26.517N	75.293W	70	71	24.049	36.928	2	36.927	2	202.1	2	207.0	4
WBTSEN	AB2102	13	1	24	2	20210303	0152	26.518N	75.293W	2	2	25.371	36.798	2	36.797	2	206.9	2	206.8	2
WBTSEN	AB2102	14	1	1	2	20210303	0454	26.516N	75.082W	4604	4685	2.113	34.865	2	34.866	2	255.0	2	254.7	2
WBTSEN	AB2102	14	1	2	2	20210303	0501	26.516N	75.081W	4308	4381	2.215	34.882	2	34.882	2	263.3	2	263.0	2
WBTSEN	AB2102	14	1	3	2	20210303	0508	26.517N	75.081W	4026	4092	2.239	34.888	2	34.886	2	266.1	2	265.2	2
WBTSEN	AB2102	14	1	4	2	20210303	0515	26.517N	75.081W	3743	3801	2.281	34.894	2	34.894	2	252.8	2	274.0	4
WBTSEN	AB2102	14	1	5	2	20210303	0521	26.518N	75.081W	3449	3501	2.385	34.902	2	34.902	2	270.2	2	270.8	2
WBTSEN	AB2102	14	1	6	2	20210303	0531	26.519N	75.080W	2960	3000	2.691	34.921	2	34.922	6	254.9	2	272.7	4
WBTSEN	AB2102	14	1	7	2	20210303	0540	26.520N	75.080W	2616	2650	3.001	34.939	2	34.940	2	265.2	2	265.2	2
WBTSEN	AB2102	14	1	8	2	20210303	0548	26.521N	75.079W	2224	2250	3.383	34.959	2	34.959	2	263.2	2	262.9	6
WBTSEN	AB2102	14	1	9	2	20210303	0557	26.522N	75.079W	1800	1820	3.943	34.985	2	34.985	2	259.4	2	258.9	2
WBTSEN	AB2102	14	1	10	2	20210303	0603	26.523N	75.078W	1530	1546	4.411	35.011	2	35.011	2	253.1	2	253.1	2
WBTSEN	AB2102	14	1	11	2	20210303	0608	26.523N	75.078W	1342	1355	4.910	35.038	2	35.039	2	241.5	2	242.9	2
WBTSEN	AB2102	14	1	12	2	20210303	0613	26.524N	75.077W	1175	1186	5.761	35.077	2	35.069	4	215.8	2	215.2	2
WBTSEN	AB2102	14	1	13	2	20210303	0617	26.524N	75.077W	1006	1015	7.370	35.100	2	35.102	2	168.9	2	167.9	2
WBTSEN	AB2102	14	1	14	2	20210303	0621	26.525N	75.077W	892	900	9.121	35.192	2	35.193	2	136.4	2	138.9	4
WBTSEN	AB2102	14	1	15	2	20210303	0624	26.525N	75.076W	804	811	10.848	35.408	2	35.409	2	132.7	2	150.4	4
WBTSEN	AB2102	14	1	16	2	20210303	0629	26.526N	75.076W	695	701	13.333	35.750	2	35.752	2	158.2	2	158.4	4
WBTSEN	AB2102	14	1	17	2	20210303	0633	26.527N	75.075W	587	592	15.681	36.120	2	36.122	2	169.9	2	168.4	4
WBTSEN	AB2102	14	1	18	2	20210303	0637	26.527N	75.075W	477	481	17.673	36.440	2	36.440	2	180.2	2	182.6	4
WBTSEN	AB2102	14	1	19	2	20210303	0641	26.528N	75.075W	368	370	18.706	36.596	2	36.594	2	196.2	2	195.4	2
WBTSEN	AB2102	14	1	20	2	20210303	0645	26.528N	75.074W	260	261	19.505	36.676	2	36.675	2	198.6	2	198.9	2
WBTSEN	AB2102	14	1	21	2	20210303	0648	26.529N	75.074W	169	170	21.309	36.835	2	36.829	2	192.9	2	204.7	4
WBTSEN	AB2102	14	1	22	2	20210303	0651	26.529N	75.074W	105	106	23.629	37.043	2	37.045	6	201.6	2	202.2	2
WBTSEN	AB2102	14	1	23	2	20210303	0653	26.529N	75.073W	55	55	24.819	36.898	2	36.897	2	208.3	2	207.3	2
WBTSEN	AB2102	14	1	24	2	20210303	0656	26.530N	75.073W	2	2	25.303	36.815	2	36.813	2	207.5	2	207.4	2
WBTSEN	AB2102	15	1	1	2	20210303	1014	26.500N	74.792W	4532	4611	2.189	34.876	2	34.877	2	259.3	2	258.1	2
WBTSEN	AB2102	15	1	2	2	20210303	1021	26.500N	74.791W	4206	4276	2.228	34.885	2	34.885	2	264.9	2	264.2	2
WBTSEN	AB2102	15	1	3	2	20210303	1028	26.499N	74.791W	3888	3950	2.253	34.891	2	34.889	2	267.5	2	267.0	2
WBTSEN	AB2102	15	1	4	2	20210303	1035	26.499N	74.791W	3571	3625	2.325	34.898	2	34.897	6	269.5	2	269.0	6
WBTSEN	AB2102	15	1	5	2	20210303	1043	26.499N	74.791W	3253	3300	2.499	34.910	2	34.909	2	269.9	2	269.3	2
WBTSEN	AB2102	15	1	6	2	20210303	1053	26.498N	74.790W	2764	2800	2.886	34.934	2	34.931	2	265.0	2	264.0	2
WBTSEN	AB2102	15	1	7	2	20210303	1101	26.497N	74.790W	2371	2400	3.232	34.951	2	34.950	2	264.1	2	263.0	2
WBTSEN	AB2102	15	1	8	2	20210303	1106	26.497N	74.790W	2126	2151	3.503	34.964	2	34.963	2	262.5	2	263.1	2
WBTSEN	AB2102	15	1	9	2	20210303	1112	26.497N	74.789W	1899	1920	3.801	34.979	2	34.968	4	261.1	2	259.2	2
WBTSEN	AB2102	15	1	10	2	20210303	1119	26.497N	74.789W	1603	1620	4.198	34.998	2	34.996	2	256.6	2	256.0	2
WBTSEN	AB2102	15	1	11	2	20210303	1124	26.497N	74.788W	1382	1396	4.731	35.028	2	35.023	4	247.0	2	246.8	2
WBTSEN	AB2102	15	1	12	2	20210303	1129	26.497N	74.788W	1214	1226	5.594	35.073	2	35.071	2	222.0	2	222.6	2
WBTSEN	AB2102	15	1	13	2	20210303	1133	26.497N	74.788W	1046	1056	7.101	35.083	2	35.084	2	170.6	2	171.0	2
WBTSEN	AB2102	15	1	14	2	20210303	1137	26.497N	74.787W	937	945	8.321	35.116	2	35.117	2	144.6	2	143.8	2
WBTSEN	AB2102	15	1	15	2	20210303	1141	26.497N	74.788W	830	837	10.597	35.392	2	35.391	2	151.1	2	149.7	2
WBTSEN	AB2102	15	1	16	2	20210303	1145	26.497N	74.788W	719	725	13.120	35.721	2	35.724	2	166.2	2	165.8	2
WBTSEN	AB2102	15	1	17	2	20210303	1150	26.497N	74.788W	611	616	15.267	36.048	2	36.050	2	174.5	2	172.8	2

WBTSEN	AB2102	15	1	18	2	20210303	1153	26.497N	74.788W	501	505	17.549	36.418	2	36.416	2	186.8	2	188.3	2
WBTSEN	AB2102	15	1	19	2	20210303	1157	26.497N	74.788W	393	396	18.723	36.597	2	36.595	2	193.7	2	195.9	2
WBTSEN	AB2102	15	1	20	2	20210303	1202	26.496N	74.788W	284	286	19.595	36.689	2	36.761	4	196.1	2	194.2	2
WBTSEN	AB2102	15	1	21	2	20210303	1206	26.496N	74.788W	195	196	22.243	36.908	2	36.906	6	197.8	2	210.8	4
WBTSEN	AB2102	15	1	22	2	20210303	1210	26.495N	74.788W	115	116	23.255	36.899	2	36.897	2	204.2	2	208.2	4
WBTSEN	AB2102	15	1	23	2	20210303	1214	26.495N	74.788W	65	66	24.313	36.915	2	36.912	2	209.0	2	209.2	2
WBTSEN	AB2102	15	1	24	2	20210303	1218	26.494N	74.788W	2	2	25.169	36.795	2	36.792	2	206.8	2	206.5	2
WBTSEN	AB2102	16	1	1	2	20210303	1533	26.499N	74.514W	4488	4565	2.182	34.876	2	34.875	2	242.8	2	102.0	4
WBTSEN	AB2102	16	1	2	2	20210303	1540	26.499N	74.514W	4131	4199	2.228	34.887	2	35.451	4	249.0	2	152.3	4
WBTSEN	AB2102	16	1	3	2	20210303	1545	26.498N	74.514W	3936	3999	2.240	34.889	2	34.889	2	266.8	2	267.6	6
WBTSEN	AB2102	16	1	4	2	20210303	1552	26.498N	74.513W	3624	3680	2.300	34.896	2	34.896	2	269.2	2	269.3	2
WBTSEN	AB2102	16	1	5	2	20210303	1558	26.498N	74.512W	3351	3401	2.429	34.906	2	34.907	2	270.2	2	270.1	2
WBTSEN	AB2102	16	1	6	2	20210303	1607	26.497N	74.512W	2960	3001	2.708	34.923	2	34.923	2	253.7	2	270.7	4
WBTSEN	AB2102	16	1	7	2	20210303	1615	26.497N	74.512W	2568	2601	3.065	34.943	2	34.942	2	264.9	2	265.9	2
WBTSEN	AB2102	16	1	8	2	20210303	1624	26.497N	74.511W	2174	2200	3.473	34.963	2	34.963	2	262.9	2	262.8	2
WBTSEN	AB2102	16	1	9	2	20210303	1631	26.497N	74.511W	1830	1850	3.962	34.987	2	34.987	2	259.3	2	259.3	2
WBTSEN	AB2102	16	1	10	2	20210303	1639	26.496N	74.510W	1534	1550	4.413	35.009	2	35.011	2	253.6	2	253.1	2
WBTSEN	AB2102	16	1	11	2	20210303	1644	26.496N	74.510W	1343	1356	4.915	35.039	2	35.040	2	242.0	2	242.6	2
WBTSEN	AB2102	16	1	12	2	20210303	1648	26.496N	74.509W	1175	1186	5.871	35.080	2	35.082	6	213.0	2	214.0	2
WBTSEN	AB2102	16	1	13	2	20210303	1653	26.496N	74.509W	1005	1014	7.699	35.101	2	35.100	2	157.0	2	154.8	2
WBTSEN	AB2102	16	1	14	2	20210303	1656	26.496N	74.509W	896	904	9.692	35.286	2	35.287	2	150.0	2	148.6	2
WBTSEN	AB2102	16	1	15	2	20210303	1659	26.495N	74.509W	788	795	12.136	35.583	2	35.581	2	155.7	2	154.1	2
WBTSEN	AB2102	16	1	16	2	20210303	1703	26.495N	74.508W	680	685	14.438	35.915	2	35.919	2	168.9	2	170.8	2
WBTSEN	AB2102	16	1	17	2	20210303	1706	26.495N	74.508W	570	575	16.854	36.308	2	36.323	4	179.8	2	179.2	2
WBTSEN	AB2102	16	1	18	2	20210303	1709	26.495N	74.508W	463	466	18.449	36.563	2	36.562	2	183.5	2	196.8	4
WBTSEN	AB2102	16	1	19	2	20210303	1713	26.495N	74.507W	353	356	19.352	36.662	2	36.664	6	197.9	2	200.4	2
WBTSEN	AB2102	16	1	20	2	20210303	1716	26.495N	74.507W	245	247	21.504	36.844	2	36.844	2	200.6	2	201.0	2
WBTSEN	AB2102	16	1	21	2	20210303	1719	26.495N	74.507W	155	156	22.995	36.897	2	36.900	2	206.3	2	205.9	2
WBTSEN	AB2102	16	1	22	2	20210303	1721	26.495N	74.506W	96	96	23.744	36.913	2	36.912	2	207.9	2	208.9	2
WBTSEN	AB2102	16	1	23	2	20210303	1724	26.495N	74.506W	45	46	24.554	36.903	2	36.903	2	209.0	2	209.0	6
WBTSEN	AB2102	16	1	24	2	20210303	1726	26.495N	74.506W	2	2	24.745	36.892	2	36.891	2	208.7	2	208.1	2
WBTSEN	AB2102	17	1	1	2	20210303	2058	26.498N	74.216W	4533	4612	2.183	34.875	2	34.875	2	241.6	2	107.4	4
WBTSEN	AB2102	17	1	2	2	20210303	2105	26.497N	74.215W	4206	4276	2.225	34.885	2	34.884	2	264.8	2	264.5	2
WBTSEN	AB2102	17	1	3	2	20210303	2112	26.497N	74.214W	3891	3953	2.255	34.891	2	34.892	2	267.5	2	264.9	2
WBTSEN	AB2102	17	1	4	2	20210303	2119	26.496N	74.214W	3571	3625	2.332	34.899	2	34.897	2	269.8	2	269.9	2
WBTSEN	AB2102	17	1	5	2	20210303	2126	26.495N	74.213W	3255	3302	2.472	34.908	2	34.909	6	270.6	2	271.2	2
WBTSEN	AB2102	17	1	6	2	20210303	2135	26.495N	74.211W	2860	2899	2.813	34.929	2	34.926	2	266.7	2	267.2	2
WBTSEN	AB2102	17	1	7	2	20210303	2143	26.494N	74.211W	2470	2501	3.198	34.952	2	34.951	2	263.2	2	263.0	2
WBTSEN	AB2102	17	1	8	2	20210303	2152	26.492N	74.210W	2074	2098	3.649	34.970	2	34.969	2	250.5	2	283.7	4
WBTSEN	AB2102	17	1	9	2	20210303	2158	26.491N	74.210W	1779	1799	4.060	34.991	2	34.990	2	257.8	2	258.1	2
WBTSEN	AB2102	17	1	10	2	20210303	2204	26.490N	74.210W	1562	1579	4.453	35.011	2	35.011	2	252.8	2	253.0	2
WBTSEN	AB2102	17	1	11	2	20210303	2208	26.490N	74.210W	1386	1400	4.923	35.043	2	35.041	2	242.5	2	241.6	6
WBTSEN	AB2102	17	1	12	2	20210303	2213	26.489N	74.210W	1188	1199	5.996	35.078	2	35.076	2	205.4	2	206.8	2
WBTSEN	AB2102	17	1	13	2	20210303	2217	26.488N	74.209W	1036	1045	7.553	35.102	2	35.105	2	160.7	2	162.0	2
WBTSEN	AB2102	17	1	14	2	20210303	2220	26.488N	74.208W	925	933	9.791	35.293	2	35.293	2	147.7	2	148.1	6
WBTSEN	AB2102	17	1	15	2	20210303	2223	26.487N	74.208W	818	825	11.865	35.533	2	35.530	2	145.9	2	143.3	2
WBTSEN	AB2102	17	1	16	2	20210303	2226	26.487N	74.208W	710	716	13.908	35.835	2	35.835	2	153.1	2	153.8	2
WBTSEN	AB2102	17	1	17	2	20210303	2229	26.486N	74.208W	605	610	16.006	36.173	2	36.179	6	171.8	2	172.9	2
WBTSEN	AB2102	17	1	18	2	20210303	2233	26.486N	74.207W	491	495	17.928	36.481	2	36.480	2	190.3	2	191.6	2
WBTSEN	AB2102	17	1	19	2	20210303	2237	26.485N	74.207W	385	388	18.923	36.618	2	36.620	2	191.8	2	193.6	4
WBTSEN	AB2102	17	1	20	2	20210303	2241	26.484N	74.207W	275	277	20.251	36.757	2	36.754	2	187.0	2	185.6	2
WBTSEN	AB2102	17	1	21	2	20210303	2245	26.483N	74.207W	189	190	22.842	36.908	2	36.912	2	197.2	2	35.4	4
WBTSEN	AB2102	17	1	22	2	20210303	2249	26.483N	74.207W	119	120	23.779	36.915	2	36.912	2	206.6	2	206.0	2
WBTSEN	AB2102	17	1	23	2	20210303	2252	26.482N	74.207W	70	71	24.346	36.921	2	36.905	4	209.4	2	211.6	2
WBTSEN	AB2102	17	1	24	2	20210303	2257	26.481N	74.207W	3	3	24.549	36.914	2	36.911	2	201.1	2	214.6	4
WBTSEN	AB2102	18	1	1	2	20210304	0329	26.463N	73.880W	4751	4836	2.097	34.861	2	34.862	2	252.8	2	253.9	2
WBTSEN	AB2102	18	1	2	2	20210304	0338	26.460N	73.879W	4365	4439	2.230	34.883	2	34.883	2	263.7	2	263.6	6
WBTSEN	AB2102	18	1	3	2	20210304	0344	26.458N	73.879W	4061	4127	2.253	34.890	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	18	1	4	2	20210304	0350	26.455N	73.880W	3750	3808	2.304	34.896	2	34.895	2	268.7	2	269.8	2
WBTSEN	AB2102	18	1	5	2	20210304	0357	26.453N	73.880W	3447	3499	2.461	34.907	2	34.907	2	269.9	2	269.8	2
WBTSEN	AB2102	18	1	6	2	20210304	0404	26.449N	73.880W	3058	3100	2.699	34.921	2	34.921	2	268.7	2	268.9	2
WBTSEN	AB2102	18	1	7	2	20210304	0412	26.446N	73.881W	2664	2699	3.019	34.940	2	34.940	2	265.4	2	265.1	2
WBTSEN	AB2102	18	1	8	2	20210304	0422	26.443N	73.881W	2273	2300	3.444	34.961	2	34.960	2	262.7	2	262.5	2
WBTSEN	AB2102	18	1	9	2	20210304	0431	26.439N	73.881W	1932	1954	3.895	34.981	2	34.981	2	260.3	2	259.7	2
WBTSEN	AB2102	18	1	10	2	20210304	0440	26.436N	73.882W	1586	1602	4.304	35.003	2	35.003	6	254.9	2	254.6	2
WBTSEN	AB2102	18	1	11	2	20210304	0446	26.434N	73.882W	1389	1403	4.957	35.045	2	35.045	2	241.6	2	241.0	2

WBTSEN	AB2102	18	1	12	2	20210304	0453	26.432N	73.883W	1222	1234	5.992	35.080	2	35.079	2	205.7	2	207.7	2
WBTSEN	AB2102	18	1	13	2	20210304	0459	26.430N	73.883W	1053	1062	7.505	35.076	2	35.074	2	156.6	2	158.0	2
WBTSEN	AB2102	18	1	14	2	20210304	0503	26.428N	73.883W	951	959	9.257	35.209	2	35.215	2	141.2	2	140.8	2
WBTSEN	AB2102	18	1	15	2	20210304	0507	26.426N	73.883W	835	842	10.905	35.402	2	35.404	2	139.0	2	138.4	2
WBTSEN	AB2102	18	1	16	2	20210304	0512	26.425N	73.884W	739	745	13.379	35.761	2	35.776	4	152.4	2	152.1	2
WBTSEN	AB2102	18	1	17	2	20210304	0517	26.423N	73.884W	615	620	15.624	36.113	2	36.111	2	166.8	2	165.5	2
WBTSEN	AB2102	18	1	18	2	20210304	0521	26.421N	73.885W	522	526	17.562	36.424	2	36.425	2	179.8	2	179.4	2
WBTSEN	AB2102	18	1	19	2	20210304	0525	26.419N	73.885W	401	404	18.960	36.626	2	36.625	2	188.0	2	200.9	4
WBTSEN	AB2102	18	1	20	2	20210304	0531	26.417N	73.885W	292	294	19.768	36.693	2	36.692	2	189.6	2	201.3	4
WBTSEN	AB2102	18	1	21	2	20210304	0534	26.415N	73.886W	201	202	21.809	36.884	2	36.880	2	190.5	2	193.2	4
WBTSEN	AB2102	18	1	22	2	20210304	0538	26.413N	73.886W	111	112	23.273	36.928	2	36.926	2	208.0	2	209.1	6
WBTSEN	AB2102	18	1	23	2	20210304	0541	26.412N	73.886W	61	61	24.136	36.924	2	36.919	2	211.3	2	210.3	2
WBTSEN	AB2102	18	1	24	2	20210304	0543	26.411N	73.886W	7	7	24.452	36.930	2	36.926	2	209.3	2	209.4	2
WBTSEN	AB2102	19	1	1	2	20210304	1110	26.489N	73.531W	4924	5014	2.121	34.861	2	34.861	6	253.7	2	254.0	2
WBTSEN	AB2102	19	1	2	2	20210304	1117	26.489N	73.533W	4594	4675	2.237	34.881	2	34.878	2	262.5	2	262.5	2
WBTSEN	AB2102	19	1	3	2	20210304	1125	26.488N	73.536W	4229	4300	2.270	34.889	2	34.888	2	266.5	2	266.0	2
WBTSEN	AB2102	19	1	4	2	20210304	1131	26.487N	73.537W	3934	3997	2.296	34.893	2	34.890	2	268.0	2	267.8	2
WBTSEN	AB2102	19	1	5	2	20210304	1139	26.486N	73.538W	3591	3646	2.402	34.902	2	34.901	2	270.3	2	270.3	2
WBTSEN	AB2102	19	1	6	2	20210304	1147	26.486N	73.541W	3204	3250	2.609	34.916	2	34.914	2	269.5	2	269.6	2
WBTSEN	AB2102	19	1	7	2	20210304	1158	26.485N	73.544W	2720	2756	3.002	34.939	2	34.937	2	265.2	2	265.2	2
WBTSEN	AB2102	19	1	8	2	20210304	1208	26.485N	73.547W	2230	2257	3.503	34.968	2	34.967	2	262.3	2	261.5	2
WBTSEN	AB2102	19	1	9	2	20210304	1218	26.484N	73.549W	1835	1856	3.960	34.987	2	34.986	2	256.4	2	258.9	6
WBTSEN	AB2102	19	1	10	2	20210304	1226	26.484N	73.552W	1486	1501	4.702	35.025	2	35.024	2	247.5	2	248.1	2
WBTSEN	AB2102	19	1	11	2	20210304	1232	26.483N	73.554W	1327	1340	5.237	35.057	2	35.056	2	222.8	2	244.8	4
WBTSEN	AB2102	19	1	12	2	20210304	1237	26.483N	73.556W	1160	1171	6.408	35.084	2	35.083	2	193.6	2	191.9	2
WBTSEN	AB2102	19	1	13	2	20210304	1243	26.483N	73.557W	999	1008	8.239	35.114	2	35.115	2	145.3	2	145.0	2
WBTSEN	AB2102	19	1	14	2	20210304	1248	26.483N	73.559W	880	888	10.345	35.322	2	35.321	2	138.0	2	135.4	2
WBTSEN	AB2102	19	1	15	2	20210304	1252	26.484N	73.560W	772	778	12.563	35.636	2	35.636	2	146.8	2	146.6	2
WBTSEN	AB2102	19	1	16	2	20210304	1256	26.484N	73.562W	663	669	14.953	36.003	2	36.002	2	163.4	2	162.1	2
WBTSEN	AB2102	19	1	17	2	20210304	1259	26.484N	73.563W	554	559	17.202	36.359	2	36.360	2	169.9	2	169.1	4
WBTSEN	AB2102	19	1	18	2	20210304	1303	26.484N	73.564W	442	445	18.501	36.566	2	36.562	2	192.4	2	191.8	2
WBTSEN	AB2102	19	1	19	2	20210304	1306	26.484N	73.566W	332	335	19.176	36.645	2	36.643	2	190.5	2	203.0	4
WBTSEN	AB2102	19	1	20	2	20210304	1309	26.484N	73.567W	226	227	20.229	36.733	2	36.729	2	183.0	2	194.5	4
WBTSEN	AB2102	19	1	21	2	20210304	1312	26.484N	73.568W	134	135	22.627	36.917	2	36.910	6	205.5	2	204.7	2
WBTSEN	AB2102	19	1	22	2	20210304	1315	26.485N	73.570W	84	85	23.473	36.917	2	36.913	2	209.2	2	210.1	2
WBTSEN	AB2102	19	1	23	2	20210304	1318	26.485N	73.571W	35	36	24.234	36.940	2	36.935	2	210.1	2	211.4	2
WBTSEN	AB2102	19	1	24	2	20210304	1320	26.485N	73.572W	2	2	24.238	36.942	2	36.937	2	210.0	2	209.8	2
WBTSEN	AB2102	20	1	1	2	20210304	1902	26.500N	73.153W	5037	5131	2.125	34.860	2	34.860	2	235.0	2	256.9	4
WBTSEN	AB2102	20	1	2	2	20210304	1909	26.500N	73.154W	4753	4839	2.238	34.878	2	34.880	2	261.6	2	261.3	2
WBTSEN	AB2102	20	1	3	2	20210304	1916	26.500N	73.155W	4471	4549	2.269	34.885	2	34.886	2	265.0	2	265.8	2
WBTSEN	AB2102	20	1	4	2	20210304	1922	26.501N	73.155W	4181	4250	2.287	34.890	2	34.894	6	266.7	2	266.5	6
WBTSEN	AB2102	20	1	5	2	20210304	1927	26.502N	73.155W	3912	3975	2.316	34.895	2	34.895	2	252.1	2	167.6	4
WBTSEN	AB2102	20	1	6	2	20210304	1937	26.503N	73.156W	3424	3475	2.486	34.908	2	34.911	2	269.8	2	268.8	2
WBTSEN	AB2102	20	1	7	2	20210304	1947	26.505N	73.156W	2936	2976	2.795	34.927	2	34.929	2	267.4	2	266.9	2
WBTSEN	AB2102	20	1	8	2	20210304	1957	26.506N	73.157W	2445	2476	3.254	34.953	2	34.955	2	263.6	2	264.1	2
WBTSEN	AB2102	20	1	9	2	20210304	2006	26.507N	73.157W	2027	2051	3.689	34.975	2	34.975	2	262.3	2	261.6	2
WBTSEN	AB2102	20	1	10	2	20210304	2013	26.508N	73.157W	1684	1702	4.213	34.999	2	35.002	2	245.5	2	216.0	4
WBTSEN	AB2102	20	1	11	2	20210304	2019	26.508N	73.158W	1437	1451	4.727	35.029	2	35.033	4	246.8	2	246.0	2
WBTSEN	AB2102	20	1	12	2	20210304	2024	26.508N	73.158W	1189	1201	5.935	35.080	2	35.082	2	202.4	2	252.5	4
WBTSEN	AB2102	20	1	13	2	20210304	2029	26.508N	73.159W	1022	1031	7.549	35.098	2	35.098	2	160.2	2	162.9	2
WBTSEN	AB2102	20	1	14	2	20210304	2032	26.509N	73.159W	913	921	9.033	35.203	2	35.289	4	143.7	2	142.9	2
WBTSEN	AB2102	20	1	15	2	20210304	2036	26.509N	73.159W	804	810	11.232	35.455	2	35.460	2	145.2	2	144.8	6
WBTSEN	AB2102	20	1	16	2	20210304	2039	26.509N	73.159W	694	700	13.672	35.803	2	35.805	2	155.5	2	154.2	2
WBTSEN	AB2102	20	1	17	2	20210304	2042	26.510N	73.160W	585	590	15.754	36.122	2	36.126	2	170.1	2	169.7	2
WBTSEN	AB2102	20	1	18	2	20210304	2045	26.510N	73.160W	476	480	17.677	36.442	2	36.446	2	179.7	2	179.7	2
WBTSEN	AB2102	20	1	19	2	20210304	2049	26.510N	73.160W	368	371	18.733	36.597	2	36.597	2	193.9	2	193.8	2
WBTSEN	AB2102	20	1	20	2	20210304	2052	26.510N	73.161W	259	261	19.558	36.681	2	36.685	2	181.0	2	180.3	4
WBTSEN	AB2102	20	1	21	2	20210304	2056	26.511N	73.161W	169	170	21.222	36.832	2	36.835	2	-999.0	9	-999.0	9
WBTSEN	AB2102	20	1	22	2	20210304	2059	26.511N	73.161W	119	120	22.524	36.888	2	36.890	2	198.6	2	203.6	4
WBTSEN	AB2102	20	1	23	2	20210304	2102	26.511N	73.161W	70	70	23.312	36.902	2	36.903	6	200.5	2	212.8	4
WBTSEN	AB2102	20	1	24	2	20210304	2106	26.511N	73.162W	2	2	24.664	36.909	2	36.912	2	208.9	2	208.2	2
WBTSEN	AB2102	21	1	1	2	20210305	0112	26.501N	72.779W	5126	5223	2.130	34.859	2	34.861	2	253.2	2	253.5	6
WBTSEN	AB2102	21	1	2	2	20210305	0124	26.501N	72.781W	4754	4840	2.272	34.882	2	34.883	2	263.3	2	261.9	2
WBTSEN	AB2102	21	1	3	2	20210305	0131	26.502N	72.781W	4375	4450	2.289	34.888	2	34.889	2	266.4	2	266.4	2
WBTSEN	AB2102	21	1	4	2	20210305	0139	26.502N	72.782W	4015	4080	2.313	34.894	2	34.893	2	268.2	2	268.8	2
WBTSEN	AB2102	21	1	5	2	20210305	0150	26.503N	72.783W	3645	3701	2.371	34.900	2	34.900	2	270.0	2	270.5	2

WBTSEN	AB2102	21	1	6	2	20210305	0205	26.504N	72.784W	3156	3201	2.587	34.915	2	34.917	6	269.9	2	269.9	2
WBTSEN	AB2102	21	1	7	2	20210305	0218	26.505N	72.785W	2666	2701	2.993	34.938	2	34.938	2	264.6	2	265.6	2
WBTSEN	AB2102	21	1	8	2	20210305	0232	26.506N	72.786W	2174	2200	3.475	34.964	2	34.962	2	262.8	2	262.4	2
WBTSEN	AB2102	21	1	9	2	20210305	0242	26.507N	72.787W	1929	1950	3.804	34.980	2	34.979	2	260.3	2	260.5	2
WBTSEN	AB2102	21	1	10	2	20210305	0249	26.507N	72.788W	1582	1598	4.370	35.009	2	35.008	2	254.6	2	253.9	2
WBTSEN	AB2102	21	1	11	2	20210305	0257	26.508N	72.789W	1412	1426	4.811	35.038	2	35.036	2	244.0	2	244.3	2
WBTSEN	AB2102	21	1	12	2	20210305	0301	26.509N	72.789W	1243	1255	5.528	35.070	2	35.069	2	223.3	2	224.2	2
WBTSEN	AB2102	21	1	13	2	20210305	0310	26.509N	72.790W	1076	1086	6.503	35.060	2	35.059	2	181.2	2	183.0	6
WBTSEN	AB2102	21	1	14	2	20210305	0314	26.509N	72.790W	935	944	8.119	35.119	2	35.115	2	142.7	2	143.0	4
WBTSEN	AB2102	21	1	15	2	20210305	0317	26.510N	72.790W	818	825	10.170	35.319	2	35.319	2	141.7	2	141.3	2
WBTSEN	AB2102	21	1	16	2	20210305	0324	26.511N	72.791W	709	715	12.730	35.661	2	35.660	2	151.6	2	151.0	2
WBTSEN	AB2102	21	1	17	2	20210305	0327	26.511N	72.791W	601	605	15.089	36.023	2	36.022	2	167.8	2	167.2	2
WBTSEN	AB2102	21	1	18	2	20210305	0333	26.512N	72.791W	492	496	17.011	36.337	2	36.337	6	177.3	2	176.0	2
WBTSEN	AB2102	21	1	19	2	20210305	0337	26.513N	72.792W	383	386	18.464	36.563	2	36.561	2	194.4	2	191.7	2
WBTSEN	AB2102	21	1	20	2	20210305	0340	26.513N	72.792W	276	278	19.338	36.664	2	36.662	2	198.2	2	197.8	2
WBTSEN	AB2102	21	1	21	2	20210305	0343	26.514N	72.792W	184	185	20.433	36.754	2	36.756	2	194.4	2	197.1	2
WBTSEN	AB2102	21	1	22	2	20210305	0350	26.515N	72.793W	105	105	22.718	36.887	2	36.879	4	203.4	2	205.9	4
WBTSEN	AB2102	21	1	23	2	20210305	0353	26.515N	72.793W	56	56	23.438	36.915	2	36.914	2	211.2	2	213.1	2
WBTSEN	AB2102	21	1	24	2	20210305	0356	26.515N	72.794W	2	2	24.233	36.941	2	36.938	2	210.2	2	210.1	2
WBTSEN	AB2102	22	1	1	2	20210305	0810	26.497N	72.383W	5176	5274	2.079	34.852	2	34.850	2	251.2	2	251.9	2
WBTSEN	AB2102	22	1	2	2	20210305	0818	26.497N	72.382W	4812	4900	2.218	34.875	2	34.876	2	260.1	2	259.2	2
WBTSEN	AB2102	22	1	3	2	20210305	0825	26.496N	72.383W	4471	4549	2.260	34.885	2	34.885	2	247.4	2	268.1	4
WBTSEN	AB2102	22	1	4	2	20210305	0833	26.495N	72.382W	4133	4202	2.274	34.890	2	34.890	2	267.2	2	267.0	2
WBTSEN	AB2102	22	1	5	2	20210305	0841	26.494N	72.382W	3788	3848	2.309	34.895	2	34.897	2	269.1	2	268.7	2
WBTSEN	AB2102	22	1	6	2	20210305	0851	26.494N	72.381W	3303	3351	2.396	34.904	2	34.904	2	270.5	2	269.9	2
WBTSEN	AB2102	22	1	7	2	20210305	0901	26.492N	72.381W	2811	2849	2.638	34.919	2	34.921	2	269.7	2	269.8	2
WBTSEN	AB2102	22	1	8	2	20210305	0911	26.491N	72.382W	2321	2349	3.019	34.941	2	34.945	4	266.2	2	265.8	2
WBTSEN	AB2102	22	1	9	2	20210305	0921	26.492N	72.383W	1832	1852	4.127	34.993	2	34.995	2	257.8	2	257.8	2
WBTSEN	AB2102	22	1	10	2	20210305	0927	26.492N	72.384W	1585	1601	4.483	35.013	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	22	1	11	2	20210305	0933	26.492N	72.384W	1362	1375	5.002	35.043	2	35.045	2	239.8	2	240.7	2
WBTSEN	AB2102	22	1	12	2	20210305	0938	26.491N	72.384W	1190	1201	5.760	35.075	2	35.078	2	216.6	2	216.1	6
WBTSEN	AB2102	22	1	13	2	20210305	0943	26.491N	72.384W	1027	1037	6.869	35.086	2	35.089	2	178.0	2	177.7	2
WBTSEN	AB2102	22	1	14	2	20210305	0946	26.491N	72.384W	917	925	8.291	35.162	2	35.165	2	147.5	2	150.3	4
WBTSEN	AB2102	22	1	15	2	20210305	0950	26.491N	72.385W	808	815	10.249	35.346	2	35.346	2	148.4	2	147.4	2
WBTSEN	AB2102	22	1	16	2	20210305	0955	26.491N	72.385W	699	705	12.823	35.673	2	35.678	2	161.7	2	163.3	2
WBTSEN	AB2102	22	1	17	2	20210305	0959	26.492N	72.385W	590	594	15.121	36.017	2	36.019	2	173.4	2	173.7	2
WBTSEN	AB2102	22	1	18	2	20210305	1003	26.492N	72.386W	482	486	17.020	36.330	2	36.331	2	180.3	2	181.1	2
WBTSEN	AB2102	22	1	19	2	20210305	1006	26.492N	72.386W	372	375	18.503	36.573	2	36.572	2	196.1	2	196.1	2
WBTSEN	AB2102	22	1	20	2	20210305	1010	26.492N	72.387W	264	265	19.319	36.661	2	36.660	2	198.8	2	200.7	2
WBTSEN	AB2102	22	1	21	2	20210305	1013	26.492N	72.387W	174	176	20.829	36.822	2	36.815	2	184.4	2	196.1	4
WBTSEN	AB2102	22	1	22	2	20210305	1017	26.492N	72.387W	114	115	22.741	36.963	2	36.964	2	200.1	2	191.9	4
WBTSEN	AB2102	22	1	23	2	20210305	1020	26.493N	72.388W	65	65	23.475	36.967	2	36.967	2	211.0	2	211.2	6
WBTSEN	AB2102	22	1	24	2	20210305	1023	26.493N	72.388W	2	2	24.456	36.878	2	36.877	6	209.4	2	209.0	2
WBTSEN	AB2102	23	1	1	2	20210305	1418	26.497N	72.003W	5277	5378	2.113	34.854	2	34.855	2	252.0	2	252.2	2
WBTSEN	AB2102	23	1	2	2	20210305	1425	26.497N	72.004W	4958	5049	2.276	34.879	2	34.879	2	262.0	2	261.5	2
WBTSEN	AB2102	23	1	3	2	20210305	1431	26.497N	72.005W	4651	4734	2.288	34.885	2	34.884	2	264.7	2	264.8	2
WBTSEN	AB2102	23	1	4	2	20210305	1438	26.496N	72.006W	4345	4419	2.301	34.890	2	34.890	2	267.1	2	266.6	2
WBTSEN	AB2102	23	1	5	2	20210305	1444	26.496N	72.007W	4034	4100	2.322	34.894	2	34.891	2	268.8	2	268.5	2
WBTSEN	AB2102	23	1	6	2	20210305	1454	26.496N	72.009W	3545	3599	2.410	34.903	2	34.903	2	270.3	2	270.1	2
WBTSEN	AB2102	23	1	7	2	20210305	1503	26.496N	72.011W	3056	3098	2.678	34.922	2	34.914	4	267.1	2	268.5	2
WBTSEN	AB2102	23	1	8	2	20210305	1513	26.496N	72.013W	2566	2599	3.072	34.943	2	34.943	2	264.7	2	264.5	2
WBTSEN	AB2102	23	1	9	2	20210305	1522	26.495N	72.015W	2076	2100	3.547	34.966	2	34.967	2	260.5	2	261.9	6
WBTSEN	AB2102	23	1	10	2	20210305	1530	26.494N	72.017W	1683	1701	4.038	34.991	2	34.990	2	256.9	2	257.9	2
WBTSEN	AB2102	23	1	11	2	20210305	1537	26.494N	72.018W	1407	1421	4.544	35.017	2	35.020	6	249.3	2	250.5	2
WBTSEN	AB2102	23	1	12	2	20210305	1541	26.494N	72.018W	1232	1244	5.093	35.049	2	35.049	2	236.3	2	237.4	2
WBTSEN	AB2102	23	1	13	2	20210305	1546	26.494N	72.019W	1056	1066	6.249	35.080	2	35.081	2	198.2	2	199.5	2
WBTSEN	AB2102	23	1	14	2	20210305	1550	26.494N	72.020W	904	912	7.862	35.136	2	35.139	2	160.1	2	160.7	2
WBTSEN	AB2102	23	1	15	2	20210305	1553	26.494N	72.020W	795	802	9.695	35.282	2	35.283	2	146.3	2	146.6	2
WBTSEN	AB2102	23	1	16	2	20210305	1556	26.494N	72.021W	685	691	12.238	35.594	2	35.594	2	156.4	2	155.7	2
WBTSEN	AB2102	23	1	17	2	20210305	1600	26.494N	72.022W	576	581	14.615	35.939	2	35.939	2	172.0	2	171.5	2
WBTSEN	AB2102	23	1	18	2	20210305	1603	26.494N	72.022W	468	471	16.722	36.281	2	36.282	2	177.7	2	177.7	2
WBTSEN	AB2102	23	1	19	2	20210305	1607	26.493N	72.023W	357	360	18.465	36.568	2	36.567	2	194.4	2	196.1	2
WBTSEN	AB2102	23	1	20	2	20210305	1610	26.493N	72.023W	248	250	19.152	36.647	2	36.650	2	198.2	2	196.7	2
WBTSEN	AB2102	23	1	21	2	20210305	1613	26.493N	72.024W	159	160	20.095	36.730	2	36.729	2	188.1	2	192.2	4
WBTSEN	AB2102	23	1	22	2	20210305	1615	26.493N	72.024W	95	95	22.067	36.896	2	36.898	6	209.5	2	209.6	2
WBTSEN	AB2102	23	1	23	2	20210305	1618	26.493N	72.025W	45	45	23.356	36.985	2	36.986	2	214.3	2	213.7	2

WBTSEN	AB2102	23	1	24	2	20210305	1621	26.493N	72.025W	2	2	24.499	36.896	2	36.895	2	209.0	2	208.8	2
WBTSEN	AB2102	24	1	1	2	20210313	0132	26.712N	76.400W	4833	4921	2.232	34.875	2	34.875	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	2	2	20210313	0145	26.713N	76.399W	4429	4506	2.355	34.892	2	34.890	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	3	2	20210313	0159	26.714N	76.398W	3941	4005	2.375	34.898	2	34.897	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	4	2	20210313	0213	26.715N	76.397W	3445	3497	2.507	34.908	2	34.908	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	5	2	20210313	0227	26.717N	76.396W	2964	3005	2.755	34.923	2	34.923	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	6	2	20210313	0242	26.718N	76.395W	2471	2502	3.163	34.942	2	34.942	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	7	2	20210313	0304	26.719N	76.392W	1489	1505	4.340	35.002	2	35.001	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	8	2	20210313	0318	26.721N	76.391W	994	1003	6.886	35.100	2	35.100	6	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	9	2	20210313	0330	26.722N	76.389W	696	702	12.375	35.610	2	35.610	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	10	2	20210313	0341	26.722N	76.387W	405	408	18.304	36.537	2	36.536	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	11	2	20210313	0350	26.723N	76.385W	202	203	21.747	36.939	2	36.938	2	-999.0	9	-999.0	9
WBTSEN	AB2102	24	1	12	2	20210313	0400	26.724N	76.383W	3	3	24.843	36.771	2	36.769	2	-999.0	9	-999.0	9
WBTSEN	AB2102	25	1	1	2	20210314	1145	26.067N	78.849W	295	297	18.285	36.520	2	36.527	4	165.3	2	176.1	4
WBTSEN	AB2102	25	1	2	2	20210314	1151	26.068N	78.848W	150	151	23.116	36.879	2	36.885	2	195.2	2	195.8	2
WBTSEN	AB2102	25	1	3	2	20210314	1156	26.068N	78.848W	45	45	24.486	36.520	2	36.517	2	210.3	2	209.5	2
WBTSEN	AB2102	25	1	4	2	20210314	1159	26.068N	78.847W	2	2	25.886	36.157	2	36.158	2	205.5	2	205.2	2
WBTSEN	AB2102	26	1	1	2	20210314	1305	26.169N	78.802W	446	449	16.272	36.213	2	36.224	4	154.1	2	165.1	4
WBTSEN	AB2102	26	1	2	2	20210314	1310	26.170N	78.802W	268	270	19.559	36.688	2	36.685	6	190.5	2	190.5	6
WBTSEN	AB2102	26	1	3	2	20210314	1313	26.170N	78.803W	179	180	22.623	36.885	2	36.886	2	203.3	2	204.4	2
WBTSEN	AB2102	26	1	4	2	20210314	1317	26.170N	78.803W	90	90	24.383	36.651	2	36.661	4	209.4	2	209.3	2
WBTSEN	AB2102	26	1	5	2	20210314	1321	26.171N	78.804W	3	3	24.999	36.326	2	36.327	2	196.9	2	209.1	4
WBTSEN	AB2102	27	1	1	2	20210314	1422	26.248N	78.770W	510	514	14.056	35.835	2	35.842	2	140.1	2	141.3	2
WBTSEN	AB2102	27	1	2	2	20210314	1426	26.248N	78.770W	397	400	17.471	36.411	2	36.410	2	180.0	2	180.1	2
WBTSEN	AB2102	27	1	3	2	20210314	1429	26.248N	78.771W	268	270	19.700	36.690	2	36.691	6	179.7	2	180.1	6
WBTSEN	AB2102	27	1	4	2	20210314	1432	26.248N	78.771W	159	160	23.214	36.897	2	36.896	2	194.0	2	213.1	4
WBTSEN	AB2102	27	1	5	2	20210314	1436	26.248N	78.771W	60	60	24.457	36.505	2	36.504	2	209.8	2	209.2	2
WBTSEN	AB2102	27	1	6	2	20210314	1440	26.248N	78.772W	3	3	25.777	36.177	2	36.177	2	204.2	2	204.0	2
WBTSEN	AB2102	28	1	1	2	20210314	1547	26.325N	78.710W	661	667	10.732	35.368	2	35.371	2	136.1	2	136.1	2
WBTSEN	AB2102	28	1	2	2	20210314	1551	26.324N	78.710W	529	533	14.345	35.915	2	35.963	4	151.6	2	167.0	4
WBTSEN	AB2102	28	1	3	2	20210314	1555	26.323N	78.710W	371	374	18.059	36.499	2	36.500	2	186.1	2	185.7	2
WBTSEN	AB2102	28	1	4	2	20210314	1559	26.322N	78.710W	210	211	20.839	36.813	2	36.807	6	186.6	2	187.6	6
WBTSEN	AB2102	28	1	5	2	20210314	1603	26.320N	78.709W	80	80	24.254	36.794	2	36.795	2	205.1	2	204.6	2
WBTSEN	AB2102	28	1	6	2	20210314	1606	26.319N	78.709W	3	3	25.670	36.208	2	36.207	2	205.8	2	205.5	2
WBTSEN	AB2102	29	1	1	2	20210314	1728	26.434N	78.671W	752	758	9.789	35.294	2	35.294	2	145.5	2	145.7	2
WBTSEN	AB2102	29	1	2	2	20210314	1733	26.434N	78.672W	567	571	13.692	35.810	2	35.803	2	155.7	2	155.3	2
WBTSEN	AB2102	29	1	3	2	20210314	1737	26.434N	78.673W	417	420	17.048	36.342	2	36.334	4	176.6	2	176.2	2
WBTSEN	AB2102	29	1	4	2	20210314	1741	26.434N	78.674W	288	290	19.038	36.633	2	36.631	2	194.6	2	194.8	2
WBTSEN	AB2102	29	1	5	2	20210314	1745	26.434N	78.674W	159	160	22.388	36.874	2	36.871	6	195.8	2	195.7	6
WBTSEN	AB2102	29	1	6	2	20210314	1748	26.434N	78.675W	60	60	24.160	36.761	2	36.770	4	205.0	2	206.0	2
WBTSEN	AB2102	29	1	7	2	20210314	1751	26.434N	78.676W	3	3	24.741	36.484	2	36.490	2	209.2	2	208.4	2
WBTSEN	AB2102	30	1	1	2	20210314	2330	27.001N	79.196W	466	470	15.275	36.062	2	36.070	4	164.4	2	164.4	2
WBTSEN	AB2102	30	1	2	2	20210314	2335	27.001N	79.196W	309	311	18.751	36.598	2	36.598	2	192.9	2	194.1	2
WBTSEN	AB2102	30	1	3	2	20210314	2340	27.001N	79.195W	151	152	23.706	36.842	2	36.852	4	169.0	2	185.5	4
WBTSEN	AB2102	30	1	4	2	20210314	2344	27.001N	79.195W	60	60	26.024	36.190	2	36.196	2	201.5	2	202.4	2
WBTSEN	AB2102	30	1	5	2	20210314	2348	27.001N	79.195W	3	3	26.398	36.137	2	36.140	2	203.1	2	203.5	2
WBTSEN	AB2102	31	1	1	2	20210315	0050	27.006N	79.282W	604	609	11.220	35.445	2	35.438	2	140.6	2	139.4	2
WBTSEN	AB2102	31	1	2	2	20210315	0054	27.007N	79.281W	448	451	13.994	35.819	2	35.821	2	138.4	2	138.4	6
WBTSEN	AB2102	31	1	3	2	20210315	0058	27.009N	79.281W	288	291	18.651	36.584	2	36.570	4	166.3	2	186.6	4
WBTSEN	AB2102	31	1	4	2	20210315	0102	27.010N	79.280W	120	120	25.289	36.748	2	36.759	4	170.8	2	170.4	2
WBTSEN	AB2102	31	1	5	2	20210315	0106	27.011N	79.280W	50	50	26.115	36.161	2	36.139	4	203.4	2	202.9	2
WBTSEN	AB2102	31	1	6	2	20210315	0108	27.012N	79.280W	3	3	26.325	36.132	2	36.155	4	203.2	2	202.9	2
WBTSEN	AB2102	32	1	1	2	20210315	0214	27.014N	79.379W	677	683	7.669	34.962	2	34.966	2	128.0	2	127.7	2
WBTSEN	AB2102	32	1	2	2	20210315	0218	27.016N	79.379W	540	544	10.395	35.253	2	35.260	4	119.8	2	119.4	2
WBTSEN	AB2102	32	1	3	2	20210315	0223	27.018N	79.378W	360	363	15.530	36.055	2	36.071	4	136.5	2	136.1	2
WBTSEN	AB2102	32	1	4	2	20210315	0227	27.021N	79.378W	174	176	22.037	36.900	2	36.897	2	158.3	2	156.8	2
WBTSEN	AB2102	32	1	5	2	20210315	0231	27.023N	79.377W	70	70	26.138	36.156	2	36.154	2	202.8	2	202.2	2
WBTSEN	AB2102	32	1	6	2	20210315	0234	27.025N	79.376W	3	3	26.283	36.156	2	36.156	6	204.0	2	203.3	6
WBTSEN	AB2102	33	1	1	2	20210315	0348	27.012N	79.494W	746	752	6.882	34.918	2	34.917	2	136.0	2	135.8	2
WBTSEN	AB2102	33	1	2	2	20210315	0351	27.014N	79.493W	645	650	7.613	34.947	2	34.944	2	127.2	2	126.4	2
WBTSEN	AB2102	33	1	3	2	20210315	0356	27.017N	79.492W	471	475	10.134	35.217	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	33	1	4	2	20210315	0400	27.020N	79.490W	311	314	15.188	35.997	2	35.994	6	126.8	2	138.5	4
WBTSEN	AB2102	33	1	5	2	20210315	0404	27.022N	79.489W	180	181	20.882	36.805	2	36.807	2	159.6	2	159.1	2
WBTSEN	AB2102	33	1	6	2	20210315	0407	27.023N	79.488W	80	80	25.883	36.189	2	36.189	2	203.2	2	202.4	2
WBTSEN	AB2102	33	1	7	2	20210315	0411	27.025N	79.487W	3	3	26.113	36.162	2	36.159	2	203.8	2	203.2	2
WBTSEN	AB2102	34	1	1	2	20210315	0649	27.013N	79.605W	659	665	6.316	34.908	2	34.905	2	144.8	2	144.9	2

WBTSEN	AB2102	34	1	2	2	20210315	0655	27.017N	79.604W	473	477	8.420	35.013	2	35.024	4	122.0	2	123.4	2
WBTSEN	AB2102	34	1	3	2	20210315	0659	27.020N	79.602W	318	321	12.907	35.628	2	35.620	2	125.1	2	126.2	2
WBTSEN	AB2102	34	1	4	2	20210315	0704	27.022N	79.601W	180	181	20.404	36.473	2	36.479	2	158.9	2	158.6	2
WBTSEN	AB2102	34	1	5	2	20210315	0708	27.025N	79.600W	70	71	25.870	36.190	2	36.190	6	203.4	2	203.3	6
WBTSEN	AB2102	34	1	6	2	20210315	0711	27.026N	79.599W	3	3	26.115	36.153	2	36.151	2	203.6	2	203.8	2
WBTSEN	AB2102	35	1	1	2	20210315	0819	27.017N	79.670W	527	532	6.236	34.907	2	34.903	6	146.0	2	146.3	6
WBTSEN	AB2102	35	1	2	2	20210315	0823	27.019N	79.668W	405	408	8.419	35.058	2	35.060	2	126.8	2	125.4	2
WBTSEN	AB2102	35	1	3	2	20210315	0824	27.020N	79.668W	408	411	8.068	35.031	2	-999.000	9	-999.0	9	-999.0	9
WBTSEN	AB2102	35	1	4	2	20210315	0829	27.023N	79.666W	252	254	15.786	36.097	2	36.109	4	137.2	2	136.4	2
WBTSEN	AB2102	35	1	5	2	20210315	0833	27.025N	79.665W	120	121	22.112	36.262	2	36.259	2	214.5	2	215.4	2
WBTSEN	AB2102	35	1	6	2	20210315	0837	27.027N	79.664W	60	60	26.009	36.137	2	36.136	2	204.6	2	204.4	2
WBTSEN	AB2102	35	1	7	2	20210315	0840	27.030N	79.663W	3	3	26.159	36.122	2	36.118	2	202.3	2	204.3	2
WBTSEN	AB2102	36	1	1	2	20210315	0957	27.011N	79.777W	378	381	7.631	34.954	2	34.947	2	127.5	2	128.2	2
WBTSEN	AB2102	36	1	2	2	20210315	1001	27.013N	79.776W	274	276	11.813	35.513	2	35.537	4	127.7	2	127.4	2
WBTSEN	AB2102	36	1	3	2	20210315	1006	27.016N	79.775W	120	121	21.351	36.259	2	36.268	4	204.7	2	202.7	6
WBTSEN	AB2102	36	1	4	2	20210315	1010	27.018N	79.774W	40	40	25.993	36.169	2	36.172	2	203.9	2	204.0	2
WBTSEN	AB2102	36	1	5	2	20210315	1013	27.021N	79.773W	2	2	26.025	36.162	2	36.159	2	203.7	2	204.0	2
WBTSEN	AB2102	37	1	1	2	20210315	1113	27.010N	79.863W	257	259	10.701	35.340	2	35.360	4	123.1	2	123.0	2
WBTSEN	AB2102	37	1	2	2	20210315	1118	27.012N	79.862W	161	162	17.292	36.325	2	36.336	4	129.1	2	147.9	4
WBTSEN	AB2102	37	1	3	2	20210315	1122	27.014N	79.860W	70	70	23.744	36.289	2	36.289	2	209.2	2	209.7	2
WBTSEN	AB2102	37	1	4	2	20210315	1126	27.017N	79.859W	3	3	25.684	36.133	2	36.133	2	205.9	2	205.8	2
WBTSEN	AB2102	38	1	1	2	20210315	1218	27.008N	79.931W	138	139	17.006	36.286	2	36.299	4	136.3	2	136.6	2
WBTSEN	AB2102	38	1	2	2	20210315	1223	27.010N	79.929W	60	61	21.559	36.327	2	36.324	2	197.2	2	197.1	2
WBTSEN	AB2102	38	1	3	2	20210315	1226	27.012N	79.929W	3	3	25.183	36.184	2	36.182	6	207.6	2	208.2	6