



# **SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT**

## **SOUTH BAY WATER RECLAMATION PLANT**

NPDES Permit No. CA0109045  
SDRWQCB Order No. R9-2013-0006

## **NOVEMBER 2021**

Environmental Monitoring and Technical Services  
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The City of  
**SAN DIEGO**  
Public Utilities Department

Environmental Monitoring & Technical Services Division

December 31, 2021

Mr. David W. Gibson, Executive Officer  
California Regional Water Quality Control Board  
San Diego Region  
2375 Northside Drive, Suite 100  
San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the November 2021 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2021-0011, NPDES Permit No. CA0109045.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the South Bay outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan. These data are also presented in the monthly report submitted by the International Boundary and Water Commission, U.S. Section for discharge from the South Bay International Wastewater Treatment Plant (Order No. R9-2021-0001, NPDES Permit No. CA0108928).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Peter S. Vroom, Ph.D.  
Deputy Public Utilities Director

PV/rk

cc: U.S. Environmental Protection Agency, Region 9



## INTRODUCTION

Monthly reports of water quality and ocean conditions from Playa Blanco, Mexico to Coronado, USA are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2021-0011, NPDES Permit No. CA0109045, for the South Bay Water Reclamation Plant (SBWRP), South Bay Ocean Outfall (SBOO). This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the SBWRP are presented in separate reports.

## MATERIALS AND METHODS

### *Shore Stations*

Water quality monitoring was conducted at 11 stations located along the shore from Playa Blanca, Mexico to Coronado, USA (see station locations map). Three sites are located south of the international border (stations S0, S2, S3), while eight sites are in the United States (stations S4–S6 and S8–S12).

Seawater samples were collected from the surf zone at each station on a weekly basis. These samples were subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of total coliform, fecal coliform, and *Enterococcus* bacteria. Visual observations of water color and clarity, surf height, human or animal activity, and weather conditions were recorded at the time of sample collection. Wind speed and direction were measured using a hand-held anemometer with a compass.

### *Kelp Bed Stations*

Seven kelp bed and other nearshore stations (I19, I24, I25, I26, I32, I39, I40; collectively referred to as "kelp" stations herein) were sampled four times during the month according to NPDES permit specifications. Six stations (I19, I24, I25, I26, I32, I40) are located along the 9-m depth contour, and one (I39) is located along the 18-m depth contour. Three of these stations, I25, I26, and I39, were selected based on their proximity to suitable substrates for the Imperial Beach kelp bed (see station locations map); however, this kelp bed has been historically transient and variable in terms of size and density. Thus, these three stations are only occasionally located within an area where kelp is actually found.

The seven kelp stations are sampled on a weekly basis during the month. Routine monitoring at each kelp site consists of collecting seawater samples at three discrete depths for bacteriological analyses (total coliforms, fecal coliforms, and *Enterococcus* bacteria) and generating water column profiles of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, and transmissivity. Visual observations of weather and water conditions are also recorded at all stations.

Seawater samples at the kelp bed stations are primarily collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses were drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column profiles of the various physical/chemical parameters were taken using a CTD. The CTD collected these physical/chemical data at a rate  $\geq 4$  scans per second. The data were then internally averaged using the CTD proprietary software, Seasoft, to create water column profiles equivalent

to one reading per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

### ***Offshore Stations***

Quarterly offshore water quality sampling is typically conducted over three days during February, May, August, and November for a total of 40 stations during each month (see station locations map). These offshore stations (I1–I40) are arranged in a grid surrounding the discharge site, and are generally located along the 9, 19, 28, 38, and 55-m depth contours. The seven offshore sites designated as kelp bed stations (described above) are included as part of the monthly offshore water quality sampling, however the data from these seven stations are reported within the kelp bed station section of the report with the other four days of kelp bed water quality sampling. Monitoring at all sites included measurements of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, and chromomorphic dissolved organic matter (CDOM). Visual observations of weather and water conditions were also recorded at all stations. Seawater samples for the analysis of indicator bacteria, suspended solids, and oil and grease concentrations were collected at 28 of the stations.

At these offshore stations, water samples for bacteriological analyses were collected using a rosette sampler with Niskin bottles. Measurements of the physical/chemical parameters listed above were taken using a Sea-Bird CTD. Additionally, CTD profile data for depths closest to those at which bacteriological samples were collected were extracted from the CTD profiles and are presented with the bacteriological data.

### ***Bacteriological Reporting and Quality Assurance***

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)<sup>1</sup>. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the water-contact standards specified in the 2019 California Ocean Plan (Ocean Plan). The six standards are defined as follows:

#### **Water-Contact Objectives**

##### **Fecal coliform:**

- (1) The 30-day geometric mean (GM) of fecal coliform density not to exceed 200 CFU/100 mL, calculated based on the five most recent samples from each site
- (2) The single sample maximum (SSM) not to exceed 400 CFU/100 mL

##### ***Enterococci:***

- (1) The six-week rolling GM of *Enterococci* not to exceed 30 CFU/100 mL, calculated weekly
- (2) The statistical threshold value (STV) of 110 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner

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<sup>1</sup> Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

## Shellfish Harvesting Standards

### Total coliform:

- (1) The median total coliform density shall not exceed 70 CFU/100 mL
- (2) The STV of 230 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner

Compliance with the seven Ocean Plan standards are summarized below for the stations located in USA waters. In contrast, no such compliance summaries are presented for the three shore stations located in Mexican waters south of the International Border (i.e., S0, S2, and S3) since this region is not subject to the Ocean Plan standards.

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated exactly the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987<sup>2</sup>) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2021 Quality Assurance Report, which will be completed in March 2022.

## SUMMARY OF RESULTS

### ➤ Shoreline Water Quality Sampling

- Due to site access restrictions in Mexico, the South Bay shoreline sampling is typically carried out on the same day each week (i.e., Tuesday) to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the USIBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
  - Due to the national holiday in Mexico, samples were not collected the week of November 2.
- During November, two of the eight shore stations located north of the border were out of compliance with the 2019 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
  - The statistical threshold value (STV) standard for *Enterococcus* was exceeded at station S9.
  - The 30-day running median standard for total coliforms was exceeded at stations S5 and S9.
- A sewage-like odor was observed at station S5 on one or more days in November.

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2 Gilbert, R.O. (1987). Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York.

- Historical analyses of Ocean Plan compliance rates for the South Bay outfall shore and kelp monitoring stations, combined with the results of satellite imagery data, suggest that outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego's most recent *Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* for details (<https://www.sandiego.gov/public-utilities/sustainability/ocean-monitoring/reports>).

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled on November 2, 8, 16, 22, and 30.
- During November, all of the kelp bed stations were in compliance with the various 2019 Ocean Plan water contact standards.
- Water column temperatures ranged from 13.71 to 17.55°C. The difference between surface and bottom waters ranged from 0.27 to 2.73°C.
- Concentrations of chlorophyll *a* ranged from 0.58 to 6.49 µg/L at the kelp bed stations.
- Nothing of sewage origin was observed at any of the kelp stations.

➤ **Offshore Water Quality Sampling**

- Quarterly offshore water quality sampling was conducted over three days during the month (i.e., November 3, 4, and 5).
- During November, all of the offshore stations located within State jurisdictional waters (i.e., I12, I14, I16, I18, I22, I23, I33, I36–I38) were in compliance with the various 2019 Ocean Plan water contact standards.
- Water column temperatures ranged from 12.04 to 18.2°C at the offshore sites. The difference between surface and bottom waters ranged from 1.31 to 6.09°C.
- Chlorophyll *a* concentrations ranged from 0.58 to 4.25 µg/L at the offshore sites.
- CDOM data are available upon request.
- Nothing of sewage origin was observed at any of the offshore stations.



## TABLES AND FIGURES





**Figure 1.1** Station Map



# Shore Stations



**Table 2.1**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >200 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2021	10	6	4	2	12	5	5	3
02 Nov 2021	8	8	4	2	17	4	5	3
03 Nov 2021	8	8	4	2	17	4	5	3
04 Nov 2021	3	7	4	2	24	2	4	2
05 Nov 2021	3	7	4	2	24	2	4	2
06 Nov 2021	3	7	4	2	24	2	4	2
07 Nov 2021	3	7	4	2	24	2	4	2
08 Nov 2021	3	7	4	2	24	2	4	2
09 Nov 2021	3	5	4	2	15	2	4	2
10 Nov 2021	3	5	4	2	15	2	4	2
11 Nov 2021	2	4	4	2	24	2	3	2
12 Nov 2021	2	4	4	2	24	2	3	2
13 Nov 2021	2	4	4	2	24	2	3	2
14 Nov 2021	2	4	4	2	24	2	3	2
15 Nov 2021	2	4	4	2	24	2	3	2
16 Nov 2021	3	3	4	2	17	2	3	2
17 Nov 2021	3	3	4	2	17	2	3	2
18 Nov 2021	3	4	4	2	24	3	4	2
19 Nov 2021	3	4	4	2	24	3	4	2
20 Nov 2021	3	4	4	2	24	3	4	2
21 Nov 2021	3	4	4	2	24	3	4	2
22 Nov 2021	3	4	4	2	24	3	4	2
23 Nov 2021	3	3	4	2	15	2	3	4
24 Nov 2021	3	3	4	2	15	2	3	4
25 Nov 2021	3	4	2	2	6	3	4	4
26 Nov 2021	3	4	2	2	6	3	4	4
27 Nov 2021	3	4	2	2	6	3	4	4
28 Nov 2021	3	4	2	2	6	3	4	4
29 Nov 2021	3	4	2	2	6	3	4	4
30 Nov 2021	3	5	2	2	5	2	3	4

\* Geometric mean calculated using n<5

**Table 2.2**

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
02 Nov 2021	IC	IC	IC	IC	IC	IC	IC	IC
09 Nov 2021	IC	IC	IC	IC	IC	IC	IC	IC
16 Nov 2021	IC	IC	IC	IC	IC	IC	IC	IC
23 Nov 2021	IC	IC	IC	IC	IC	IC	IC	IC
30 Nov 2021	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.3**

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (\*). Values >30 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2021	18	9	10	3	9	8	7	3
02 Nov 2021	18	11	10	2	18	12	7	3
03 Nov 2021	18	11	10	2	18	12	7	3
04 Nov 2021	18	11	10	2	18	12	7	3
05 Nov 2021	18	11	10	2	18	12	7	3
06 Nov 2021	18	11	10	2	18	12	7	3
07 Nov 2021	18	11	10	2	18	12	7	3
08 Nov 2021	18	11	10	2	18	12	7	3
09 Nov 2021	9	6	6	2	18	6	4	3
10 Nov 2021	9	6	6	2	18	6	4	3
11 Nov 2021	9	6	6	2	18	6	4	3
12 Nov 2021	9	6	6	2	18	6	4	3
13 Nov 2021	9	6	6	2	18	6	4	3
14 Nov 2021	9	6	6	2	18	6	4	3
15 Nov 2021	9	6	6	2	18	6	4	3
16 Nov 2021	4	3	5	2	16	3	3	2
17 Nov 2021	4	3	5	2	16	3	3	2
18 Nov 2021	4	3	5	2	16	3	3	2
19 Nov 2021	4	3	5	2	16	3	3	2
20 Nov 2021	4	3	5	2	16	3	3	2
21 Nov 2021	4	3	5	2	16	3	3	2
22 Nov 2021	4	3	5	2	16	3	3	2
23 Nov 2021	5	3	4	2	16	4	2	2
24 Nov 2021	5	3	4	2	16	4	2	2
25 Nov 2021	5	3	4	2	16	4	2	2
26 Nov 2021	5	3	4	2	16	4	2	2
27 Nov 2021	5	3	4	2	16	4	2	2
28 Nov 2021	5	3	4	2	16	4	2	2
29 Nov 2021	5	3	4	2	16	4	2	2
30 Nov 2021	3	3	6	2	17	4	3	2

\* Geometric mean calculated using n<5

**Table 2.4**

Summary of compliance at the SBOO shore stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	S4	S5	S6	S8	S9	S10	S11	S12
November	IC	IC	IC	IC	E	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.5**

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the SBOO shore stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >70 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2021	16	50	30	20	20	20	27	15
02 Nov 2021	20	<b>80</b>	20	20	20	20	20	10
03 Nov 2021	20	<b>80</b>	20	20	20	20	20	10
04 Nov 2021	16	50	30	17	<b>100</b>	20	14	7
05 Nov 2021	16	50	30	17	<b>100</b>	20	14	7
06 Nov 2021	16	50	30	17	<b>100</b>	20	14	7
07 Nov 2021	16	50	30	17	<b>100</b>	20	14	7
08 Nov 2021	16	50	30	17	<b>100</b>	20	14	7
09 Nov 2021	20	20	20	14	20	20	20	4
10 Nov 2021	20	20	20	14	20	20	20	4
11 Nov 2021	20	11	12	17	<b>100</b>	20	14	7
12 Nov 2021	20	11	12	17	<b>100</b>	20	14	7
13 Nov 2021	20	11	12	17	<b>100</b>	20	14	7
14 Nov 2021	20	11	12	17	<b>100</b>	20	14	7
15 Nov 2021	20	11	12	17	<b>100</b>	20	14	7
16 Nov 2021	20	20	20	20	<b>180</b>	20	8	4
17 Nov 2021	20	20	20	20	<b>180</b>	20	8	4
18 Nov 2021	20	11	12	17	<b>190</b>	34	6	3
19 Nov 2021	20	11	12	17	<b>190</b>	34	6	3
20 Nov 2021	20	11	12	17	<b>190</b>	34	6	3
21 Nov 2021	20	11	12	17	<b>190</b>	34	6	3
22 Nov 2021	20	11	12	17	<b>190</b>	34	6	3
23 Nov 2021	20	2	4	14	<b>180</b>	20	4	4
24 Nov 2021	20	2	4	14	<b>180</b>	20	4	4
25 Nov 2021	20	11	4	8	<b>100</b>	27	6	3
26 Nov 2021	20	11	4	8	<b>100</b>	27	6	3
27 Nov 2021	20	11	4	8	<b>100</b>	27	6	3
28 Nov 2021	20	11	4	8	<b>100</b>	27	6	3
29 Nov 2021	20	11	4	8	<b>100</b>	27	6	3
30 Nov 2021	20	20	4	2	<b>180</b>	6	8	4

\* Median calculated using n<5

**Table 2.6**

Summary of compliance at the SBOO shore stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per station, per month.

Date	S4	S5	S6	S8	S9	S10	S11	S12
November	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.7**

Summary of water quality parameters at the SBOO shore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero
S0	09 Nov 2021	1215	4000	680	360
S0	16 Nov 2021	820	260e	20e	40
S0	23 Nov 2021	1030	100	28e	50
S0	30 Nov 2021	1055	11000	1100	860
S2	09 Nov 2021	1255	<2	<2	<2
S2	16 Nov 2021	950	200e	16e	36e
S2	23 Nov 2021	1130	600e	60	82
S2	30 Nov 2021	1140	<2	2e	14e
S3	09 Nov 2021	1315	6e	2e	6e
S3	16 Nov 2021	915	<20	4e	4e
S3	23 Nov 2021	1110	8e	2e	2e
S3	30 Nov 2021	1125	<2	<2	4e
S4	02 Nov 2021	945	36e	4e	<2
S4	09 Nov 2021	942	<20	<2	<2
S4	16 Nov 2021	816	20e	4e	4e
S4	23 Nov 2021	955	16e	<2	8e
S4	30 Nov 2021	1049	8e	2e	<2
S5	02 Nov 2021	1056	160e	30e	8e
S5	09 Nov 2021	821	2e	<2	<2
S5	16 Nov 2021	910	20e	2e	2e
S5	23 Nov 2021	816	2e	<2	<2
S5	30 Nov 2021	933	<20	8e	2e
S6	02 Nov 2021	1118	4e	2e	2e
S6	09 Nov 2021	836	<2	<2	2e
S6	16 Nov 2021	934	20e	<2	6e
S6	23 Nov 2021	840	4e	4e	<2
S6	30 Nov 2021	952	60e	2e	38e
S8	02 Nov 2021	840	14e	<2	<2
S8	09 Nov 2021	1107	<2	<2	<2
S8	16 Nov 2021	1016	<20	<2	<2
S8	23 Nov 2021	1046	2e	<2	2e
S8	30 Nov 2021	832	<2	<2	<2
S9	02 Nov 2021	820	180e	60	220e
S9	09 Nov 2021	1128	<20	<2	16e
S9	16 Nov 2021	1041	<200	4e	2e
S9	23 Nov 2021	1110	20e	<2	2e
S9	30 Nov 2021	756	<200	4e	6e
S10	02 Nov 2021	932	48	<2	16e
S10	09 Nov 2021	1001	<2	<2	<2
S10	16 Nov 2021	824	80e	6e	4e
S10	23 Nov 2021	941	6e	2e	6e
S10	30 Nov 2021	1038	2e	<2	4e
S11	02 Nov 2021	1108	8e	8e	<2
S11	09 Nov 2021	830	<20	<2	<2
S11	16 Nov 2021	922	4e	6e	6e

<b>Station</b>	<b>Date</b>	<b>Time</b>	<b>Total</b>	<b>Fecal</b>	<b>Enterο</b>
S11	23 Nov 2021	829	2e	2e	<2
S11	30 Nov 2021	943	20e	2e	14e
S12	02 Nov 2021	1029	4e	<2	2e
S12	09 Nov 2021	854	<2	<2	<2
S12	16 Nov 2021	943	<2	<2	<2
S12	23 Nov 2021	858	10e	40e	2e
S12	30 Nov 2021	906	<20	<2	<2

ns = not sampled

ND = no data

### Comments

Station	Date	Depth	Parameter	Comments
S0	02 Nov 2021			Station not sampled due to Mexican holiday
S2	02 Nov 2021			Station not sampled due to Mexican holiday
S3	02 Nov 2021			Station not sampled due to Mexican holiday

**Table 2.8**

Summary of visual observations made during the month for each SBOO shore station by sample date.

Station	Date	Parameter	Value
S0	09 Nov 2021	Arrive Time	1215
S0	09 Nov 2021	Weather	Sunny
S0	09 Nov 2021	Wind Speed (kts)	4.1
S0	09 Nov 2021	Wind Dir	N
S0	09 Nov 2021	Animal Life	Bird-10; Dog-1
S0	09 Nov 2021	Floatables	None
S0	09 Nov 2021	Water Color	Green
S0	09 Nov 2021	Current Direction	N
S0	09 Nov 2021	Water Temp (C)	16
S0	09 Nov 2021	Wave Height Low (ft)	3
S0	09 Nov 2021	High Tide (ft)	3.48
S0	09 Nov 2021	High Tide Time	112
S0	09 Nov 2021	Low Tide (ft)	2.84
S0	09 Nov 2021	Low Tide Time	515
S0	09 Nov 2021	Comments	Kelp; 0.5 L/sec water flowing from stormdrain
S0	16 Nov 2021	Arrive Time	820
S0	16 Nov 2021	Weather	Cloudy
S0	16 Nov 2021	Wind Speed (kts)	3.4
S0	16 Nov 2021	Wind Dir	NE
S0	16 Nov 2021	Animal Life	Bird-10; Dog-2; Dolphin-2
S0	16 Nov 2021	Floatables	None
S0	16 Nov 2021	Water Color	Green
S0	16 Nov 2021	Current Direction	N
S0	16 Nov 2021	Water Temp (C)	15
S0	16 Nov 2021	Wave Height Low (ft)	4
S0	16 Nov 2021	High Tide (ft)	5.66
S0	16 Nov 2021	High Tide Time	657
S0	16 Nov 2021	Low Tide (ft)	0.87
S0	16 Nov 2021	Low Tide Time	44
S0	16 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-1; 0.5 L/sec water flowing from storm drain
S0	23 Nov 2021	Arrive Time	1030
S0	23 Nov 2021	Weather	Cloudy
S0	23 Nov 2021	Wind Speed (kts)	1.7
S0	23 Nov 2021	Wind Dir	NE
S0	23 Nov 2021	Animal Life	Bird-10; Dog-2
S0	23 Nov 2021	Floatables	None
S0	23 Nov 2021	Water Color	Green
S0	23 Nov 2021	Current Direction	NE
S0	23 Nov 2021	Water Temp (C)	16
S0	23 Nov 2021	Wave Height Low (ft)	3
S0	23 Nov 2021	High Tide (ft)	5.19
S0	23 Nov 2021	High Tide Time	957
S0	23 Nov 2021	Low Tide (ft)	2.76
S0	23 Nov 2021	Low Tide Time	331
S0	23 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-4; 0.5 L/sec water flowing from storm drain
S0	30 Nov 2021	Arrive Time	1055
S0	30 Nov 2021	Weather	Sunny
S0	30 Nov 2021	Wind Speed (kts)	1.8
S0	30 Nov 2021	Wind Dir	S
S0	30 Nov 2021	Animal Life	Seagull-20
S0	30 Nov 2021	Floatables	None

Station	Date	Parameter	Value
S0	30 Nov 2021	Water Color	Green
S0	30 Nov 2021	Current Direction	S
S0	30 Nov 2021	Water Temp (C)	17
S0	30 Nov 2021	Wave Height Low (ft)	2
S0	30 Nov 2021	High Tide (ft)	5.41
S0	30 Nov 2021	High Tide Time	542
S0	30 Nov 2021	Low Tide (ft)	0.61
S0	30 Nov 2021	Low Tide Time	1220
S0	30 Nov 2021	Comments	Kelp; ""AP104"" 0.5 L/sec flowing from storm drain
S2	09 Nov 2021	Arrive Time	1255
S2	09 Nov 2021	Weather	Sunny
S2	09 Nov 2021	Wind Speed (kts)	3.9
S2	09 Nov 2021	Wind Dir	N
S2	09 Nov 2021	Animal Life	Bird-15
S2	09 Nov 2021	Floatables	None
S2	09 Nov 2021	Water Color	Green
S2	09 Nov 2021	Current Direction	N
S2	09 Nov 2021	Water Temp (C)	16
S2	09 Nov 2021	Wave Height Low (ft)	3
S2	09 Nov 2021	High Tide (ft)	3.48
S2	09 Nov 2021	High Tide Time	112
S2	09 Nov 2021	Low Tide (ft)	2.84
S2	09 Nov 2021	Low Tide Time	515
S2	09 Nov 2021	Comments	Kelp; No flow from storm drain
S2	16 Nov 2021	Arrive Time	950
S2	16 Nov 2021	Weather	Cloudy
S2	16 Nov 2021	Wind Speed (kts)	3
S2	16 Nov 2021	Wind Dir	NE
S2	16 Nov 2021	Animal Life	Bird-20; Dog-3
S2	16 Nov 2021	Floatables	None
S2	16 Nov 2021	Water Color	Green
S2	16 Nov 2021	Current Direction	N
S2	16 Nov 2021	Water Temp (C)	15
S2	16 Nov 2021	Wave Height Low (ft)	4
S2	16 Nov 2021	High Tide (ft)	5.66
S2	16 Nov 2021	High Tide Time	657
S2	16 Nov 2021	Low Tide (ft)	0.87
S2	16 Nov 2021	Low Tide Time	44
S2	16 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No flow from storm drain
S2	23 Nov 2021	Arrive Time	1130
S2	23 Nov 2021	Weather	Cloudy
S2	23 Nov 2021	Wind Speed (kts)	2.1
S2	23 Nov 2021	Wind Dir	NE
S2	23 Nov 2021	Animal Life	Bird-20; Dog-3; Dolphin-2
S2	23 Nov 2021	Floatables	None
S2	23 Nov 2021	Water Color	Green
S2	23 Nov 2021	Current Direction	N
S2	23 Nov 2021	Water Temp (C)	16
S2	23 Nov 2021	Wave Height Low (ft)	3
S2	23 Nov 2021	High Tide (ft)	5.19
S2	23 Nov 2021	High Tide Time	957
S2	23 Nov 2021	Low Tide (ft)	2.76
S2	23 Nov 2021	Low Tide Time	331
S2	23 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-5; No flow from storm drain
S2	30 Nov 2021	Arrive Time	1140

Station	Date	Parameter	Value
S2	30 Nov 2021	Weather	Sunny
S2	30 Nov 2021	Wind Speed (kts)	2.1
S2	30 Nov 2021	Wind Dir	S
S2	30 Nov 2021	Animal Life	Dog-5; Seagull-20
S2	30 Nov 2021	Floatables	None
S2	30 Nov 2021	Water Color	Green
S2	30 Nov 2021	Current Direction	S
S2	30 Nov 2021	Water Temp (C)	17
S2	30 Nov 2021	Wave Height Low (ft)	2
S2	30 Nov 2021	High Tide (ft)	5.41
S2	30 Nov 2021	High Tide Time	542
S2	30 Nov 2021	Low Tide (ft)	0.61
S2	30 Nov 2021	Low Tide Time	1220
S2	30 Nov 2021	Comments	Kelp; No flow from storm drain
S3	09 Nov 2021	Arrive Time	1315
S3	09 Nov 2021	Weather	Sunny
S3	09 Nov 2021	Wind Speed (kts)	7.7
S3	09 Nov 2021	Wind Dir	N
S3	09 Nov 2021	Animal Life	Bird-10
S3	09 Nov 2021	Floatables	None
S3	09 Nov 2021	Water Color	Green
S3	09 Nov 2021	Current Direction	N
S3	09 Nov 2021	Water Temp (C)	16
S3	09 Nov 2021	Wave Height Low (ft)	3
S3	09 Nov 2021	High Tide (ft)	3.48
S3	09 Nov 2021	High Tide Time	112
S3	09 Nov 2021	Low Tide (ft)	2.84
S3	09 Nov 2021	Low Tide Time	515
S3	09 Nov 2021	Comments	Kelp; No flow from stromdrain
S3	16 Nov 2021	Arrive Time	915
S3	16 Nov 2021	Weather	Cloudy
S3	16 Nov 2021	Wind Speed (kts)	3.1
S3	16 Nov 2021	Wind Dir	NE
S3	16 Nov 2021	Animal Life	Bird-20; Dog-4
S3	16 Nov 2021	Floatables	None
S3	16 Nov 2021	Water Color	Green
S3	16 Nov 2021	Current Direction	N
S3	16 Nov 2021	Water Temp (C)	15
S3	16 Nov 2021	Wave Height Low (ft)	4
S3	16 Nov 2021	High Tide (ft)	5.66
S3	16 Nov 2021	High Tide Time	657
S3	16 Nov 2021	Low Tide (ft)	0.87
S3	16 Nov 2021	Low Tide Time	44
S3	16 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No flow from storm drain
S3	23 Nov 2021	Arrive Time	1110
S3	23 Nov 2021	Weather	Cloudy
S3	23 Nov 2021	Wind Speed (kts)	1.8
S3	23 Nov 2021	Wind Dir	NE
S3	23 Nov 2021	Animal Life	Bird-20; Dog-2
S3	23 Nov 2021	Floatables	None
S3	23 Nov 2021	Water Color	Green
S3	23 Nov 2021	Current Direction	N
S3	23 Nov 2021	Water Temp (C)	16
S3	23 Nov 2021	Wave Height Low (ft)	3
S3	23 Nov 2021	High Tide (ft)	5.19
S3	23 Nov 2021	High Tide Time	957
S3	23 Nov 2021	Low Tide (ft)	2.76

Station	Date	Parameter	Value
S3	23 Nov 2021	Low Tide Time	331
S3	23 Nov 2021	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-5; No flow from storm drain
S3	30 Nov 2021	Arrive Time	1125
S3	30 Nov 2021	Weather	Sunny
S3	30 Nov 2021	Wind Speed (kts)	2.1
S3	30 Nov 2021	Wind Dir	S
S3	30 Nov 2021	Animal Life	Dog-5; Seagull-20
S3	30 Nov 2021	Floatables	None
S3	30 Nov 2021	Water Color	Green
S3	30 Nov 2021	Current Direction	S
S3	30 Nov 2021	Water Temp (C)	17
S3	30 Nov 2021	Wave Height Low (ft)	2
S3	30 Nov 2021	High Tide (ft)	5.41
S3	30 Nov 2021	High Tide Time	542
S3	30 Nov 2021	Low Tide (ft)	0.61
S3	30 Nov 2021	Low Tide Time	1220
S3	30 Nov 2021	Comments	Kelp; No flow from storm drain
S4	02 Nov 2021	Arrive Time	945
S4	02 Nov 2021	Weather	Cloudy
S4	02 Nov 2021	Wind Speed (kts)	5.22
S4	02 Nov 2021	Wind Dir	NW
S4	02 Nov 2021	Animal Life	Bird-3; Pelican-2
S4	02 Nov 2021	Floatables	Foam
S4	02 Nov 2021	Water Color	Green
S4	02 Nov 2021	Current Direction	S
S4	02 Nov 2021	Water Temp (C)	16
S4	02 Nov 2021	Wave Height Low (ft)	2
S4	02 Nov 2021	High Tide (ft)	5.63
S4	02 Nov 2021	High Tide Time	753
S4	02 Nov 2021	Low Tide (ft)	0.27
S4	02 Nov 2021	Low Tide Time	139
S4	02 Nov 2021	Comments	Water turbid; Trash-2; Seagrass; Kelp; Debris; Person/Walker/Jogger-1
S4	09 Nov 2021	Arrive Time	942
S4	09 Nov 2021	Weather	Sunny
S4	09 Nov 2021	Wind Speed (kts)	2.6
S4	09 Nov 2021	Wind Dir	E
S4	09 Nov 2021	Animal Life	
S4	09 Nov 2021	Floatables	Foam
S4	09 Nov 2021	Water Color	Green
S4	09 Nov 2021	Current Direction	N
S4	09 Nov 2021	Water Temp (C)	18.6
S4	09 Nov 2021	Wave Height Low (ft)	4
S4	09 Nov 2021	High Tide (ft)	3.48
S4	09 Nov 2021	High Tide Time	112
S4	09 Nov 2021	Low Tide (ft)	2.84
S4	09 Nov 2021	Low Tide Time	515
S4	09 Nov 2021	Comments	Seagrass; Kelp; Debris
S4	16 Nov 2021	Arrive Time	816
S4	16 Nov 2021	Weather	Overcast
S4	16 Nov 2021	Wind Speed (kts)	0.6
S4	16 Nov 2021	Wind Dir	E
S4	16 Nov 2021	Animal Life	Bird-1
S4	16 Nov 2021	Floatables	Foam
S4	16 Nov 2021	Water Color	Green
S4	16 Nov 2021	Current Direction	S

Station	Date	Parameter	Value
S4	16 Nov 2021	Water Temp (C)	16.6
S4	16 Nov 2021	Wave Height Low (ft)	2
S4	16 Nov 2021	High Tide (ft)	5.66
S4	16 Nov 2021	High Tide Time	657
S4	16 Nov 2021	Low Tide (ft)	0.87
S4	16 Nov 2021	Low Tide Time	44
S4	16 Nov 2021	Comments	Kelp; Seagrass
S4	23 Nov 2021	Arrive Time	955
S4	23 Nov 2021	Weather	Cloudy
S4	23 Nov 2021	Wind Speed (kts)	2.7
S4	23 Nov 2021	Wind Dir	SW
S4	23 Nov 2021	Animal Life	Seagull-2
S4	23 Nov 2021	Floatables	None
S4	23 Nov 2021	Water Color	Green
S4	23 Nov 2021	Current Direction	N
S4	23 Nov 2021	Water Temp (C)	16.8
S4	23 Nov 2021	Wave Height Low (ft)	1
S4	23 Nov 2021	High Tide (ft)	5.19
S4	23 Nov 2021	High Tide Time	957
S4	23 Nov 2021	Low Tide (ft)	2.76
S4	23 Nov 2021	Low Tide Time	331
S4	23 Nov 2021	Comments	Kelp; Seagrass
S4	30 Nov 2021	Arrive Time	1049
S4	30 Nov 2021	Weather	Hazy
S4	30 Nov 2021	Wind Speed (kts)	5
S4	30 Nov 2021	Wind Dir	S
S4	30 Nov 2021	Animal Life	Bird-1; Seagull-1
S4	30 Nov 2021	Floatables	None
S4	30 Nov 2021	Water Color	Green
S4	30 Nov 2021	Current Direction	N
S4	30 Nov 2021	Water Temp (C)	17.5
S4	30 Nov 2021	Wave Height Low (ft)	3
S4	30 Nov 2021	High Tide (ft)	5.41
S4	30 Nov 2021	High Tide Time	542
S4	30 Nov 2021	Low Tide (ft)	0.61
S4	30 Nov 2021	Low Tide Time	1220
S4	30 Nov 2021	Comments	Kelp; Seagrass
S5	02 Nov 2021	Arrive Time	1056
S5	02 Nov 2021	Weather	Cloudy
S5	02 Nov 2021	Wind Speed (kts)	5.62
S5	02 Nov 2021	Wind Dir	NW
S5	02 Nov 2021	Animal Life	Bird-4; Pelican-1
S5	02 Nov 2021	Floatables	Foam
S5	02 Nov 2021	Water Color	Green
S5	02 Nov 2021	Current Direction	S
S5	02 Nov 2021	Water Temp (C)	18
S5	02 Nov 2021	Wave Height Low (ft)	2
S5	02 Nov 2021	High Tide (ft)	5.63
S5	02 Nov 2021	High Tide Time	753
S5	02 Nov 2021	Low Tide (ft)	0.27
S5	02 Nov 2021	Low Tide Time	139
S5	02 Nov 2021	Comments	Seagrass; Kelp
S5	09 Nov 2021	Arrive Time	821
S5	09 Nov 2021	Weather	Sunny
S5	09 Nov 2021	Wind Speed (kts)	5.7
S5	09 Nov 2021	Wind Dir	E
S5	09 Nov 2021	Animal Life	

Station	Date	Parameter	Value
S5	09 Nov 2021	Floatables	Foam
S5	09 Nov 2021	Water Color	Green
S5	09 Nov 2021	Current Direction	N
S5	09 Nov 2021	Water Temp (C)	17.6
S5	09 Nov 2021	Wave Height Low (ft)	3
S5	09 Nov 2021	High Tide (ft)	3.48
S5	09 Nov 2021	High Tide Time	112
S5	09 Nov 2021	Low Tide (ft)	2.84
S5	09 Nov 2021	Low Tide Time	515
S5	09 Nov 2021	Comments	Water clear; Trash-2; Kelp; Seagrass; Debris; Person/Walker/Jogger-3
S5	16 Nov 2021	Arrive Time	910
S5	16 Nov 2021	Weather	Overcast
S5	16 Nov 2021	Wind Speed (kts)	1
S5	16 Nov 2021	Wind Dir	NW
S5	16 Nov 2021	Animal Life	Pelican-14
S5	16 Nov 2021	Floatables	None
S5	16 Nov 2021	Water Color	Green
S5	16 Nov 2021	Current Direction	S
S5	16 Nov 2021	Water Temp (C)	17.8
S5	16 Nov 2021	Wave Height Low (ft)	1
S5	16 Nov 2021	High Tide (ft)	5.66
S5	16 Nov 2021	High Tide Time	657
S5	16 Nov 2021	Low Tide (ft)	0.87
S5	16 Nov 2021	Low Tide Time	44
S5	16 Nov 2021	Comments	Water turbid; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-3
S5	23 Nov 2021	Arrive Time	816
S5	23 Nov 2021	Weather	Cloudy
S5	23 Nov 2021	Wind Speed (kts)	0.3
S5	23 Nov 2021	Wind Dir	E
S5	23 Nov 2021	Animal Life	Bird-5; Dog-1
S5	23 Nov 2021	Floatables	Foam
S5	23 Nov 2021	Water Color	Green
S5	23 Nov 2021	Current Direction	N
S5	23 Nov 2021	Water Temp (C)	15.2
S5	23 Nov 2021	Wave Height Low (ft)	1
S5	23 Nov 2021	High Tide (ft)	5.19
S5	23 Nov 2021	High Tide Time	957
S5	23 Nov 2021	Low Tide (ft)	2.76
S5	23 Nov 2021	Low Tide Time	331
S5	23 Nov 2021	Comments	Water clear; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-2; Sewage-like odor
S5	30 Nov 2021	Arrive Time	933
S5	30 Nov 2021	Weather	Hazy
S5	30 Nov 2021	Wind Speed (kts)	3.1
S5	30 Nov 2021	Wind Dir	NW
S5	30 Nov 2021	Animal Life	Bird-1; Seagull-45
S5	30 Nov 2021	Floatables	None
S5	30 Nov 2021	Water Color	Brown
S5	30 Nov 2021	Current Direction	S
S5	30 Nov 2021	Water Temp (C)	18
S5	30 Nov 2021	Wave Height Low (ft)	1
S5	30 Nov 2021	High Tide (ft)	5.41
S5	30 Nov 2021	High Tide Time	542
S5	30 Nov 2021	Low Tide (ft)	0.61
S5	30 Nov 2021	Low Tide Time	1220

Station	Date	Parameter	Value
S5	30 Nov 2021	Comments	Water turbid; Trash-1; Kelp; Seagrass; Debris; Person/Walker/Jogger-1
S6	02 Nov 2021	Arrive Time	1118
S6	02 Nov 2021	Weather	Cloudy
S6	02 Nov 2021	Wind Speed (kts)	6.93
S6	02 Nov 2021	Wind Dir	NW
S6	02 Nov 2021	Animal Life	
S6	02 Nov 2021	Foatables	Foam
S6	02 Nov 2021	Water Color	Green
S6	02 Nov 2021	Current Direction	S
S6	02 Nov 2021	Water Temp (C)	17.3
S6	02 Nov 2021	Wave Height Low (ft)	3
S6	02 Nov 2021	High Tide (ft)	5.63
S6	02 Nov 2021	High Tide Time	753
S6	02 Nov 2021	Low Tide (ft)	0.27
S6	02 Nov 2021	Low Tide Time	139
S6	02 Nov 2021	Comments	Seagrass; Kelp
S6	09 Nov 2021	Arrive Time	836
S6	09 Nov 2021	Weather	Sunny
S6	09 Nov 2021	Wind Speed (kts)	3.3
S6	09 Nov 2021	Wind Dir	E
S6	09 Nov 2021	Animal Life	
S6	09 Nov 2021	Foatables	Foam
S6	09 Nov 2021	Water Color	Green
S6	09 Nov 2021	Current Direction	N
S6	09 Nov 2021	Water Temp (C)	18.5
S6	09 Nov 2021	Wave Height Low (ft)	4
S6	09 Nov 2021	High Tide (ft)	3.48
S6	09 Nov 2021	High Tide Time	112
S6	09 Nov 2021	Low Tide (ft)	2.84
S6	09 Nov 2021	Low Tide Time	515
S6	09 Nov 2021	Comments	Water clear; Surfer/Paddle boarder-7; Trash-2; Kelp; Seagrass; Algae; Person/Walker/Jogger-7
S6	16 Nov 2021	Arrive Time	934
S6	16 Nov 2021	Weather	Overcast
S6	16 Nov 2021	Wind Speed (kts)	0
S6	16 Nov 2021	Wind Dir	
S6	16 Nov 2021	Animal Life	Bird-1; Dog-1
S6	16 Nov 2021	Foatables	None
S6	16 Nov 2021	Water Color	Green
S6	16 Nov 2021	Current Direction	S
S6	16 Nov 2021	Water Temp (C)	17.7
S6	16 Nov 2021	Wave Height Low (ft)	2
S6	16 Nov 2021	High Tide (ft)	5.66
S6	16 Nov 2021	High Tide Time	657
S6	16 Nov 2021	Low Tide (ft)	0.87
S6	16 Nov 2021	Low Tide Time	44
S6	16 Nov 2021	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-3
S6	23 Nov 2021	Arrive Time	840
S6	23 Nov 2021	Weather	Cloudy
S6	23 Nov 2021	Wind Speed (kts)	1.1
S6	23 Nov 2021	Wind Dir	NE
S6	23 Nov 2021	Animal Life	Bird-200
S6	23 Nov 2021	Foatables	Foam
S6	23 Nov 2021	Water Color	Green
S6	23 Nov 2021	Current Direction	N

Station	Date	Parameter	Value
S6	23 Nov 2021	Water Temp (C)	16
S6	23 Nov 2021	Wave Height Low (ft)	1
S6	23 Nov 2021	High Tide (ft)	5.19
S6	23 Nov 2021	High Tide Time	957
S6	23 Nov 2021	Low Tide (ft)	2.76
S6	23 Nov 2021	Low Tide Time	331
S6	23 Nov 2021	Comments	Kelp; Seagrass
S6	30 Nov 2021	Arrive Time	952
S6	30 Nov 2021	Weather	Partly cloudy
S6	30 Nov 2021	Wind Speed (kts)	3.6
S6	30 Nov 2021	Wind Dir	W
S6	30 Nov 2021	Animal Life	Bird-8
S6	30 Nov 2021	Floatables	None
S6	30 Nov 2021	Water Color	Blue
S6	30 Nov 2021	Current Direction	S
S6	30 Nov 2021	Water Temp (C)	18.2
S6	30 Nov 2021	Wave Height Low (ft)	3
S6	30 Nov 2021	High Tide (ft)	5.41
S6	30 Nov 2021	High Tide Time	542
S6	30 Nov 2021	Low Tide (ft)	0.61
S6	30 Nov 2021	Low Tide Time	1220
S6	30 Nov 2021	Comments	Water clear; Surfer/Paddle boarder-10; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-1
S8	02 Nov 2021	Arrive Time	840
S8	02 Nov 2021	Weather	Cloudy
S8	02 Nov 2021	Wind Speed (kts)	2.9
S8	02 Nov 2021	Wind Dir	W
S8	02 Nov 2021	Animal Life	Bird-1; Pelican-1
S8	02 Nov 2021	Floatables	None
S8	02 Nov 2021	Water Color	Green
S8	02 Nov 2021	Current Direction	S
S8	02 Nov 2021	Water Temp (C)	17.2
S8	02 Nov 2021	Wave Height Low (ft)	2
S8	02 Nov 2021	High Tide (ft)	5.63
S8	02 Nov 2021	High Tide Time	753
S8	02 Nov 2021	Low Tide (ft)	0.27
S8	02 Nov 2021	Low Tide Time	139
S8	02 Nov 2021	Comments	Seagrass; Kelp
S8	09 Nov 2021	Arrive Time	1107
S8	09 Nov 2021	Weather	Sunny
S8	09 Nov 2021	Wind Speed (kts)	6.8
S8	09 Nov 2021	Wind Dir	NW
S8	09 Nov 2021	Animal Life	
S8	09 Nov 2021	Floatables	Foam
S8	09 Nov 2021	Water Color	Green
S8	09 Nov 2021	Current Direction	S
S8	09 Nov 2021	Water Temp (C)	18.2
S8	09 Nov 2021	Wave Height Low (ft)	2
S8	09 Nov 2021	High Tide (ft)	3.48
S8	09 Nov 2021	High Tide Time	112
S8	09 Nov 2021	Low Tide (ft)	2.84
S8	09 Nov 2021	Low Tide Time	515
S8	09 Nov 2021	Comments	Kelp; Seagrass; Debris
S8	16 Nov 2021	Arrive Time	1016
S8	16 Nov 2021	Weather	Overcast
S8	16 Nov 2021	Wind Speed (kts)	2.5
S8	16 Nov 2021	Wind Dir	W

Station	Date	Parameter	Value
S8	16 Nov 2021	Animal Life	Seagull-15
S8	16 Nov 2021	Floatables	None
S8	16 Nov 2021	Water Color	Green
S8	16 Nov 2021	Current Direction	S
S8	16 Nov 2021	Water Temp (C)	18.5
S8	16 Nov 2021	Wave Height Low (ft)	1
S8	16 Nov 2021	High Tide (ft)	5.66
S8	16 Nov 2021	High Tide Time	657
S8	16 Nov 2021	Low Tide (ft)	0.87
S8	16 Nov 2021	Low Tide Time	44
S8	16 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-8
S8	23 Nov 2021	Arrive Time	1046
S8	23 Nov 2021	Weather	Cloudy
S8	23 Nov 2021	Wind Speed (kts)	5.2
S8	23 Nov 2021	Wind Dir	SW
S8	23 Nov 2021	Animal Life	Bird-4; Pelican-2; Seagull-4
S8	23 Nov 2021	Floatables	None
S8	23 Nov 2021	Water Color	Green
S8	23 Nov 2021	Current Direction	N
S8	23 Nov 2021	Water Temp (C)	16.6
S8	23 Nov 2021	Wave Height Low (ft)	1
S8	23 Nov 2021	High Tide (ft)	5.19
S8	23 Nov 2021	High Tide Time	957
S8	23 Nov 2021	Low Tide (ft)	2.76
S8	23 Nov 2021	Low Tide Time	331
S8	23 Nov 2021	Comments	Water clear; Surfer/Paddle boarder-3; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-6
S8	30 Nov 2021	Arrive Time	832
S8	30 Nov 2021	Weather	Cloudy
S8	30 Nov 2021	Wind Speed (kts)	1.9
S8	30 Nov 2021	Wind Dir	E
S8	30 Nov 2021	Animal Life	Bird-70; Seagull-1
S8	30 Nov 2021	Floatables	None
S8	30 Nov 2021	Water Color	Green
S8	30 Nov 2021	Current Direction	S
S8	30 Nov 2021	Water Temp (C)	16.2
S8	30 Nov 2021	Wave Height Low (ft)	1
S8	30 Nov 2021	High Tide (ft)	5.41
S8	30 Nov 2021	High Tide Time	542
S8	30 Nov 2021	Low Tide (ft)	0.61
S8	30 Nov 2021	Low Tide Time	1220
S8	30 Nov 2021	Comments	none
S9	02 Nov 2021	Arrive Time	820
S9	02 Nov 2021	Weather	Cloudy
S9	02 Nov 2021	Wind Speed (kts)	2.1
S9	02 Nov 2021	Wind Dir	NW
S9	02 Nov 2021	Animal Life	Seagull-5
S9	02 Nov 2021	Floatables	Foam
S9	02 Nov 2021	Water Color	Green
S9	02 Nov 2021	Current Direction	S
S9	02 Nov 2021	Water Temp (C)	16.4
S9	02 Nov 2021	Wave Height Low (ft)	3
S9	02 Nov 2021	High Tide (ft)	5.63
S9	02 Nov 2021	High Tide Time	753
S9	02 Nov 2021	Low Tide (ft)	0.27
S9	02 Nov 2021	Low Tide Time	139

Station	Date	Parameter	Value
S9	02 Nov 2021	Comments	Water turbid; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-3
S9	09 Nov 2021	Arrive Time	1128
S9	09 Nov 2021	Weather	Sunny
S9	09 Nov 2021	Wind Speed (kts)	8.6
S9	09 Nov 2021	Wind Dir	N
S9	09 Nov 2021	Animal Life	Seagull-18
S9	09 Nov 2021	Floatables	Foam
S9	09 Nov 2021	Water Color	Green
S9	09 Nov 2021	Current Direction	S
S9	09 Nov 2021	Water Temp (C)	17.8
S9	09 Nov 2021	Wave Height Low (ft)	3
S9	09 Nov 2021	High Tide (ft)	3.48
S9	09 Nov 2021	High Tide Time	112
S9	09 Nov 2021	Low Tide (ft)	2.84
S9	09 Nov 2021	Low Tide Time	515
S9	09 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-4
S9	16 Nov 2021	Arrive Time	1041
S9	16 Nov 2021	Weather	Partly cloudy
S9	16 Nov 2021	Wind Speed (kts)	4.9
S9	16 Nov 2021	Wind Dir	W
S9	16 Nov 2021	Animal Life	Seagull-6
S9	16 Nov 2021	Floatables	None
S9	16 Nov 2021	Water Color	Green
S9	16 Nov 2021	Current Direction	S
S9	16 Nov 2021	Water Temp (C)	17.9
S9	16 Nov 2021	Wave Height Low (ft)	1
S9	16 Nov 2021	High Tide (ft)	5.66
S9	16 Nov 2021	High Tide Time	657
S9	16 Nov 2021	Low Tide (ft)	0.87
S9	16 Nov 2021	Low Tide Time	44
S9	16 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-5
S9	23 Nov 2021	Arrive Time	1110
S9	23 Nov 2021	Weather	Cloudy
S9	23 Nov 2021	Wind Speed (kts)	3.6
S9	23 Nov 2021	Wind Dir	S
S9	23 Nov 2021	Animal Life	Seagull-73
S9	23 Nov 2021	Floatables	Foam
S9	23 Nov 2021	Water Color	Green
S9	23 Nov 2021	Current Direction	N
S9	23 Nov 2021	Water Temp (C)	16.8
S9	23 Nov 2021	Wave Height Low (ft)	1
S9	23 Nov 2021	High Tide (ft)	5.19
S9	23 Nov 2021	High Tide Time	957
S9	23 Nov 2021	Low Tide (ft)	2.76
S9	23 Nov 2021	Low Tide Time	331
S9	23 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-3
S9	30 Nov 2021	Arrive Time	756
S9	30 Nov 2021	Weather	Cloudy
S9	30 Nov 2021	Wind Speed (kts)	0.3
S9	30 Nov 2021	Wind Dir	S
S9	30 Nov 2021	Animal Life	Seagull-11
S9	30 Nov 2021	Floatables	None
S9	30 Nov 2021	Water Color	Blue

Station	Date	Parameter	Value
S9	30 Nov 2021	Current Direction	S
S9	30 Nov 2021	Water Temp (C)	16.2
S9	30 Nov 2021	Wave Height Low (ft)	1
S9	30 Nov 2021	High Tide (ft)	5.41
S9	30 Nov 2021	High Tide Time	542
S9	30 Nov 2021	Low Tide (ft)	0.61
S9	30 Nov 2021	Low Tide Time	1220
S9	30 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-1
S10	02 Nov 2021	Arrive Time	932
S10	02 Nov 2021	Weather	Cloudy
S10	02 Nov 2021	Wind Speed (kts)	3.6
S10	02 Nov 2021	Wind Dir	W
S10	02 Nov 2021	Animal Life	
S10	02 Nov 2021	Floatables	None
S10	02 Nov 2021	Water Color	Green
S10	02 Nov 2021	Current Direction	S
S10	02 Nov 2021	Water Temp (C)	16.6
S10	02 Nov 2021	Wave Height Low (ft)	2
S10	02 Nov 2021	High Tide (ft)	5.63
S10	02 Nov 2021	High Tide Time	753
S10	02 Nov 2021	Low Tide (ft)	0.27
S10	02 Nov 2021	Low Tide Time	139
S10	02 Nov 2021	Comments	Water turbid; Trash-2; Kelp; Seagrass; Person/Walker/Jogger-1
S10	09 Nov 2021	Arrive Time	1001
S10	09 Nov 2021	Weather	Sunny
S10	09 Nov 2021	Wind Speed (kts)	5.1
S10	09 Nov 2021	Wind Dir	NW
S10	09 Nov 2021	Animal Life	Bird-2
S10	09 Nov 2021	Floatables	Foam
S10	09 Nov 2021	Water Color	Green
S10	09 Nov 2021	Current Direction	N
S10	09 Nov 2021	Water Temp (C)	20.6
S10	09 Nov 2021	Wave Height Low (ft)	3
S10	09 Nov 2021	High Tide (ft)	3.48
S10	09 Nov 2021	High Tide Time	112
S10	09 Nov 2021	Low Tide (ft)	2.84
S10	09 Nov 2021	Low Tide Time	515
S10	09 Nov 2021	Comments	Water clear; Trash-2; Kelp; Seagrass; Debris; Person/Walker/Jogger-7
S10	16 Nov 2021	Arrive Time	824
S10	16 Nov 2021	Weather	Overcast
S10	16 Nov 2021	Wind Speed (kts)	0.9
S10	16 Nov 2021	Wind Dir	E
S10	16 Nov 2021	Animal Life	
S10	16 Nov 2021	Floatables	Foam
S10	16 Nov 2021	Water Color	Green
S10	16 Nov 2021	Current Direction	S
S10	16 Nov 2021	Water Temp (C)	16.9
S10	16 Nov 2021	Wave Height Low (ft)	3
S10	16 Nov 2021	High Tide (ft)	5.66
S10	16 Nov 2021	High Tide Time	657
S10	16 Nov 2021	Low Tide (ft)	0.87
S10	16 Nov 2021	Low Tide Time	44
S10	16 Nov 2021	Comments	Kelp; Seagrass
S10	23 Nov 2021	Arrive Time	941

Station	Date	Parameter	Value
S10	23 Nov 2021	Weather	Cloudy
S10	23 Nov 2021	Wind Speed (kts)	1.3
S10	23 Nov 2021	Wind Dir	W
S10	23 Nov 2021	Animal Life	Bird-3
S10	23 Nov 2021	Floatables	None
S10	23 Nov 2021	Water Color	Green
S10	23 Nov 2021	Current Direction	N
S10	23 Nov 2021	Water Temp (C)	16.3
S10	23 Nov 2021	Wave Height Low (ft)	1
S10	23 Nov 2021	High Tide (ft)	5.19
S10	23 Nov 2021	High Tide Time	957
S10	23 Nov 2021	Low Tide (ft)	2.76
S10	23 Nov 2021	Low Tide Time	331
S10	23 Nov 2021	Comments	Kelp; Seagrass
S10	30 Nov 2021	Arrive Time	1038
S10	30 Nov 2021	Weather	Hazy
S10	30 Nov 2021	Wind Speed (kts)	3.6
S10	30 Nov 2021	Wind Dir	SW
S10	30 Nov 2021	Animal Life	Bird-2
S10	30 Nov 2021	Floatables	None
S10	30 Nov 2021	Water Color	Green
S10	30 Nov 2021	Current Direction	N
S10	30 Nov 2021	Water Temp (C)	17.9
S10	30 Nov 2021	Wave Height Low (ft)	2
S10	30 Nov 2021	High Tide (ft)	5.41
S10	30 Nov 2021	High Tide Time	542
S10	30 Nov 2021	Low Tide (ft)	0.61
S10	30 Nov 2021	Low Tide Time	1220
S10	30 Nov 2021	Comments	none
S11	02 Nov 2021	Arrive Time	1108
S11	02 Nov 2021	Weather	Cloudy
S11	02 Nov 2021	Wind Speed (kts)	5.6
S11	02 Nov 2021	Wind Dir	NW
S11	02 Nov 2021	Animal Life	Pelican-5; Seagull-2
S11	02 Nov 2021	Floatables	None
S11	02 Nov 2021	Water Color	Green
S11	02 Nov 2021	Current Direction	S
S11	02 Nov 2021	Water Temp (C)	17.9
S11	02 Nov 2021	Wave Height Low (ft)	3
S11	02 Nov 2021	High Tide (ft)	5.63
S11	02 Nov 2021	High Tide Time	753
S11	02 Nov 2021	Low Tide (ft)	0.27
S11	02 Nov 2021	Low Tide Time	139
S11	02 Nov 2021	Comments	Seagrass; Kelp
S11	09 Nov 2021	Arrive Time	830
S11	09 Nov 2021	Weather	Sunny
S11	09 Nov 2021	Wind Speed (kts)	5.1
S11	09 Nov 2021	Wind Dir	E
S11	09 Nov 2021	Animal Life	
S11	09 Nov 2021	Floatables	Foam
S11	09 Nov 2021	Water Color	Green
S11	09 Nov 2021	Current Direction	N
S11	09 Nov 2021	Water Temp (C)	19.3
S11	09 Nov 2021	Wave Height Low (ft)	4
S11	09 Nov 2021	High Tide (ft)	3.48
S11	09 Nov 2021	High Tide Time	112
S11	09 Nov 2021	Low Tide (ft)	2.84
S11	09 Nov 2021	Low Tide Time	515

Station	Date	Parameter	Value
S11	09 Nov 2021	Comments	Kelp; Seagrass
S11	16 Nov 2021	Arrive Time	922
S11	16 Nov 2021	Weather	Overcast
S11	16 Nov 2021	Wind Speed (kts)	2.7
S11	16 Nov 2021	Wind Dir	NW
S11	16 Nov 2021	Animal Life	Bird-1; Dog-1; Dolphin-5
S11	16 Nov 2021	Floatables	Foam
S11	16 Nov 2021	Water Color	Green
S11	16 Nov 2021	Current Direction	S
S11	16 Nov 2021	Water Temp (C)	17.6
S11	16 Nov 2021	Wave Height Low (ft)	3
S11	16 Nov 2021	High Tide (ft)	5.66
S11	16 Nov 2021	High Tide Time	657
S11	16 Nov 2021	Low Tide (ft)	0.87
S11	16 Nov 2021	Low Tide Time	44
S11	16 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Debris; Person/Walker/Jogger-4
S11	23 Nov 2021	Arrive Time	829
S11	23 Nov 2021	Weather	Cloudy
S11	23 Nov 2021	Wind Speed (kts)	0
S11	23 Nov 2021	Wind Dir	
S11	23 Nov 2021	Animal Life	Bird-1
S11	23 Nov 2021	Floatables	Foam
S11	23 Nov 2021	Water Color	Blue
S11	23 Nov 2021	Current Direction	N
S11	23 Nov 2021	Water Temp (C)	15.8
S11	23 Nov 2021	Wave Height Low (ft)	2
S11	23 Nov 2021	High Tide (ft)	5.19
S11	23 Nov 2021	High Tide Time	957
S11	23 Nov 2021	Low Tide (ft)	2.76
S11	23 Nov 2021	Low Tide Time	331
S11	23 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-3
S11	30 Nov 2021	Arrive Time	943
S11	30 Nov 2021	Weather	Hazy
S11	30 Nov 2021	Wind Speed (kts)	4.4
S11	30 Nov 2021	Wind Dir	NW
S11	30 Nov 2021	Animal Life	Dog-1
S11	30 Nov 2021	Floatables	None
S11	30 Nov 2021	Water Color	Green
S11	30 Nov 2021	Current Direction	N
S11	30 Nov 2021	Water Temp (C)	18
S11	30 Nov 2021	Wave Height Low (ft)	2
S11	30 Nov 2021	High Tide (ft)	5.41
S11	30 Nov 2021	High Tide Time	542
S11	30 Nov 2021	Low Tide (ft)	0.61
S11	30 Nov 2021	Low Tide Time	1220
S11	30 Nov 2021	Comments	Water clear; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-1
S12	02 Nov 2021	Arrive Time	1029
S12	02 Nov 2021	Weather	Cloudy
S12	02 Nov 2021	Wind Speed (kts)	3.3
S12	02 Nov 2021	Wind Dir	NW
S12	02 Nov 2021	Animal Life	Bird-3
S12	02 Nov 2021	Floatables	Foam
S12	02 Nov 2021	Water Color	Green
S12	02 Nov 2021	Current Direction	S

Station	Date	Parameter	Value
S12	02 Nov 2021	Water Temp (C)	17.1
S12	02 Nov 2021	Wave Height Low (ft)	1
S12	02 Nov 2021	High Tide (ft)	5.63
S12	02 Nov 2021	High Tide Time	753
S12	02 Nov 2021	Low Tide (ft)	0.27
S12	02 Nov 2021	Low Tide Time	139
S12	02 Nov 2021	Comments	Water turbid; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-3
S12	09 Nov 2021	Arrive Time	854
S12	09 Nov 2021	Weather	Sunny
S12	09 Nov 2021	Wind Speed (kts)	3.8
S12	09 Nov 2021	Wind Dir	E
S12	09 Nov 2021	Animal Life	
S12	09 Nov 2021	Floatables	None
S12	09 Nov 2021	Water Color	Green
S12	09 Nov 2021	Current Direction	N
S12	09 Nov 2021	Water Temp (C)	17.6
S12	09 Nov 2021	Wave Height Low (ft)	2
S12	09 Nov 2021	High Tide (ft)	3.48
S12	09 Nov 2021	High Tide Time	112
S12	09 Nov 2021	Low Tide (ft)	2.84
S12	09 Nov 2021	Low Tide Time	515
S12	09 Nov 2021	Comments	Water clear; Trash-2; Kelp; Seagrass; Debris; Person/Walker/Jogger-6
S12	16 Nov 2021	Arrive Time	943
S12	16 Nov 2021	Weather	Overcast
S12	16 Nov 2021	Wind Speed (kts)	2.1
S12	16 Nov 2021	Wind Dir	W
S12	16 Nov 2021	Animal Life	Bird-1; Dog-1
S12	16 Nov 2021	Floatables	None
S12	16 Nov 2021	Water Color	Green
S12	16 Nov 2021	Current Direction	S
S12	16 Nov 2021	Water Temp (C)	17.8
S12	16 Nov 2021	Wave Height Low (ft)	1
S12	16 Nov 2021	High Tide (ft)	5.66
S12	16 Nov 2021	High Tide Time	657
S12	16 Nov 2021	Low Tide (ft)	0.87
S12	16 Nov 2021	Low Tide Time	44
S12	16 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-1
S12	23 Nov 2021	Arrive Time	858
S12	23 Nov 2021	Weather	Cloudy
S12	23 Nov 2021	Wind Speed (kts)	1.5
S12	23 Nov 2021	Wind Dir	E
S12	23 Nov 2021	Animal Life	Bird-30; Dog-1; Pelican-4; Seagull-2
S12	23 Nov 2021	Floatables	None
S12	23 Nov 2021	Water Color	Green
S12	23 Nov 2021	Current Direction	N
S12	23 Nov 2021	Water Temp (C)	15.9
S12	23 Nov 2021	Wave Height Low (ft)	1
S12	23 Nov 2021	High Tide (ft)	5.19
S12	23 Nov 2021	High Tide Time	957
S12	23 Nov 2021	Low Tide (ft)	2.76
S12	23 Nov 2021	Low Tide Time	331
S12	23 Nov 2021	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-2
S12	30 Nov 2021	Arrive Time	906

Station	Date	Parameter	Value
S12	30 Nov 2021	Weather	Cloudy
S12	30 Nov 2021	Wind Speed (kts)	1.1
S12	30 Nov 2021	Wind Dir	N
S12	30 Nov 2021	Animal Life	Bird-25; Dog-3
S12	30 Nov 2021	Floatables	None
S12	30 Nov 2021	Water Color	Green
S12	30 Nov 2021	Current Direction	S
S12	30 Nov 2021	Water Temp (C)	16.8
S12	30 Nov 2021	Wave Height Low (ft)	1
S12	30 Nov 2021	High Tide (ft)	5.41
S12	30 Nov 2021	High Tide Time	542
S12	30 Nov 2021	Low Tide (ft)	0.61
S12	30 Nov 2021	Low Tide Time	1220
S12	30 Nov 2021	Comments	Water clear; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-5

# Kelp Stations



**Table 3.1**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >200 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Nov 2021	4	2	3	3	2	2	5
02 Nov 2021	4	2	3	2	3	2	5
03 Nov 2021	5	2	3	3	3	2	6
04 Nov 2021	5	2	3	3	3	2	6
05 Nov 2021	5	2	3	3	3	2	6
06 Nov 2021	5	2	3	3	3	2	6
07 Nov 2021	5	2	3	3	3	2	6
08 Nov 2021	4	2	3	2	2	2	5
09 Nov 2021	4	2	3	2	2	2	5
10 Nov 2021	5	2	3	2	3	2	6
11 Nov 2021	5	2	3	2	3	2	6
12 Nov 2021	5	2	3	2	3	2	6
13 Nov 2021	5	2	3	2	3	2	6
14 Nov 2021	5	2	3	2	3	2	6
15 Nov 2021	5	2	3	2	3	2	6
16 Nov 2021	4	2	3	2	2	2	5
17 Nov 2021	4	2	3	2	2	2	5
18 Nov 2021	4	2	3	2	2	2	5
19 Nov 2021	5	2	2	2	3	2	6
20 Nov 2021	5	2	2	2	3	2	6
21 Nov 2021	5	2	2	2	3	2	6
22 Nov 2021	4	2	2	2	2	2	5
23 Nov 2021	4	2	2	2	2	2	5
24 Nov 2021	4	2	2	2	2	2	5
25 Nov 2021	4	2	2	2	2	2	5
26 Nov 2021	2	2	2	2	3	2	2
27 Nov 2021	2	2	2	2	3	2	2
28 Nov 2021	2	2	2	2	3	2	2
29 Nov 2021	2	2	2	2	3	2	2
30 Nov 2021	2	2	2	2	2	2	2

\* Geometric mean calculated using n<5

**Table 3.2**

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
02 Nov 2021	IC						
08 Nov 2021	IC						
16 Nov 2021	IC						
22 Nov 2021	IC						
30 Nov 2021	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.3**

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (\*). Values >30 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Nov 2021	5	5	5	2	2	3	4
02 Nov 2021	4	4	4	2	2	3	3
03 Nov 2021	5	5	5	2	2	3	4
04 Nov 2021	5	5	5	2	2	3	4
05 Nov 2021	5	5	5	2	2	3	4
06 Nov 2021	5	5	5	2	2	3	4
07 Nov 2021	5	5	5	2	2	3	4
08 Nov 2021	4	4	4	2	2	3	3
09 Nov 2021	3	2	2	2	2	3	2
10 Nov 2021	3	2	2	2	2	3	2
11 Nov 2021	3	2	2	2	2	3	2
12 Nov 2021	3	2	2	2	2	3	2
13 Nov 2021	3	2	2	2	2	3	2
14 Nov 2021	3	2	2	2	2	3	2
15 Nov 2021	3	2	2	2	2	3	2
16 Nov 2021	2	2	2	2	2	3	2
17 Nov 2021	2	2	2	2	2	3	2
18 Nov 2021	2	2	2	2	2	3	2
19 Nov 2021	2	2	2	2	2	3	2
20 Nov 2021	2	2	2	2	2	3	2
21 Nov 2021	2	2	2	2	2	3	2
22 Nov 2021	2	2	2	2	2	3	2
23 Nov 2021	2	2	2	2	2	3	2
24 Nov 2021	2	2	2	2	2	3	2
25 Nov 2021	2	2	2	2	2	3	2
26 Nov 2021	2	2	2	2	2	3	2
27 Nov 2021	2	2	2	2	2	3	2
28 Nov 2021	2	2	2	2	2	3	2
29 Nov 2021	2	2	2	2	2	3	2
30 Nov 2021	3	2	2	2	2	3	3

\* Geometric mean calculated using n<5

**Table 3.4**

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	I19	I24	I25	I26	I32	I39	I40
November	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.5**

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the SBOO kelp stations. Data are based on the median of the five most recent samples from each site and depth over the previous 30 days unless otherwise noted (\*). Values >70 CFU/100 mL exceed the standard.

Date	I19			I24			I25			I26			I32			I39			I40		
	2m	6m	11m	2m	6m	11m	2m	6m	9m	2m	6m	9m	2m	6m	9m	2m	12m	18m	2m	6m	9m
01 Nov 2021	3	12	16	2	3	6	14	12	7	2	10	6	2	2	2	2	2	3	16	20	20
02 Nov 2021	4	20	20	2	2	10	8	10	10	2	8	6	2	2	2	2	2	4	12	20	20
03 Nov 2021	31	25	20	2	2	11	11	9	14	2	7	8	2	2	5	2	2	7	13	18	20
04 Nov 2021	31	25	20	2	2	11	11	9	14	2	7	8	2	2	5	2	2	7	13	18	20
05 Nov 2021	31	25	20	2	2	11	11	9	14	2	7	8	2	2	5	2	2	7	13	18	20
06 Nov 2021	31	25	20	2	2	11	11	9	14	2	7	8	2	2	5	2	2	7	13	18	20
07 Nov 2021	31	25	20	2	2	11	11	9	14	2	7	8	2	2	5	2	2	7	13	18	20
08 Nov 2021	2	4	20	2	2	2	4	10	10	2	2	6	2	2	2	2	2	2	6	16	20
09 Nov 2021	2	4	20	2	2	2	4	10	10	2	2	6	2	2	2	2	2	2	6	16	20
10 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
11 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
12 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
13 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
14 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
15 Nov 2021	31	25	20	2	2	11	2	3	10	2	2	4	2	2	5	2	2	7	13	18	16
16 Nov 2021	2	4	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	6	16	12
17 Nov 2021	2	4	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	6	16	12
18 Nov 2021	2	4	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	6	16	12
19 Nov 2021	31	24	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	4	9	7
20 Nov 2021	31	24	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	4	9	7
21 Nov 2021	31	24	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	4	9	7
22 Nov 2021	2	2	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
23 Nov 2021	2	2	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24 Nov 2021	2	2	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25 Nov 2021	2	2	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
26 Nov 2021	2	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	2	2	2
27 Nov 2021	2	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	2	2	2
28 Nov 2021	2	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	2	2	2
29 Nov 2021	2	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	12	2	2	2
30 Nov 2021	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

\* Median calculated using n<5

**Table 3.6**

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per station by depth, per month.

Date	I19			I24			I25			I26			I32			I39			I40			
	2m	6m	11m	2m	6m	11m	2m	6m	9m	2m	6m	9m	2m	6m	9m	2m	12m	18m	2m	6m	9m	
November	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.7**

Summary of water quality parameters at the SBOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	Temp	XMS	DO	Sal	pH
I19	02 Nov 2021	1107	2	60e	<2	2e	15.1	64.44	8.0	33.45	8.0
I19	02 Nov 2021	1107	6	46	<2	2e	14.6	64.79	7.4	33.42	7.9
I19	02 Nov 2021	1107	11	20e	4e	2e	14.5	60.06	7.2	33.42	7.9
I19	08 Nov 2021	955	2	<2	<2	<2	16.0	76.19	7.6	33.49	7.9
I19	08 Nov 2021	955	6	<2	<2	<2	15.1	77.76	7.4	33.45	7.9
I19	08 Nov 2021	955	11	<20	<2	<2	14.8	75.24	7.4	33.49	7.9
I19	16 Nov 2021	1039	2	<2	<2	<2	16.1	76.73	8.3	33.47	8.0
I19	16 Nov 2021	1039	6	<2	<2	<2	15.4	79.06	8.1	33.48	8.0
I19	16 Nov 2021	1039	11	<2	<2	<2	14.8	81.42	7.5	33.42	7.9
I19	22 Nov 2021	1029	2	2e	<2	<2	14.3	79.19	7.1	33.42	7.9
I19	22 Nov 2021	1029	6	<2	<2	<2	14.2	78.41	7.0	33.42	7.9
I19	22 Nov 2021	1029	11	<2	<2	<2	14.0	78.47	6.9	33.44	7.9
I19	30 Nov 2021	1030	2	<2	<2	<2	16.3	79.46	9.4	33.50	8.1
I19	30 Nov 2021	1030	6	<2	<2	4e	15.9	71.89	8.6	33.48	8.1
I19	30 Nov 2021	1030	11	4e	2e	6e	15.8	70.10	8.1	33.48	8.0
I24	02 Nov 2021	1140	2	<2	<2	<2	16.3	73.32	8.1	33.46	8.0
I24	02 Nov 2021	1140	6	2e	<2	2e	15.7	77.26	7.9	33.49	8.0
I24	02 Nov 2021	1140	11	36e	2e	<2	14.7	59.81	7.2	33.41	7.9
I24	08 Nov 2021	1013	2	<2	<2	<2	16.3	79.74	7.6	33.49	8.0
I24	08 Nov 2021	1013	6	<2	<2	<2	16.0	80.15	7.5	33.49	8.0
I24	08 Nov 2021	1013	11	<2	<2	<2	14.2	55.92	6.7	33.42	7.9
I24	16 Nov 2021	1100	2	<2	<2	<2	16.4	76.35	8.6	33.48	8.0
I24	16 Nov 2021	1100	6	<2	<2	<2	16.0	76.51	8.6	33.49	8.0
I24	16 Nov 2021	1100	11	<2	<2	<2	15.1	76.96	8.1	33.56	8.0
I24	22 Nov 2021	1049	2	<2	<2	<2	15.1	79.86	7.5	33.44	8.0
I24	22 Nov 2021	1049	6	<2	<2	<2	15.0	79.79	7.5	33.44	8.0
I24	22 Nov 2021	1049	11	2e	<2	<2	14.0	81.53	6.8	33.43	7.9
I24	30 Nov 2021	1050	2	<2	<2	<2	16.9	84.43	8.4	33.53	8.1
I24	30 Nov 2021	1050	6	<2	<2	<2	16.4	81.81	8.8	33.53	8.1
I24	30 Nov 2021	1050	11	<2	<2	<2	15.7	75.11	8.1	33.47	8.0
I25	02 Nov 2021	1147	2	<2	<2	<2	16.5	74.74	8.4	33.48	8.1
I25	02 Nov 2021	1147	6	4e	4e	<2	15.4	78.59	7.8	33.51	8.0
I25	02 Nov 2021	1147	9	18e	<2	<2	15.2	75.02	7.5	33.34	8.0
I25	08 Nov 2021	1018	2	<2	<2	<2	16.2	81.35	7.7	33.50	8.0
I25	08 Nov 2021	1018	6	<2	<2	<2	15.9	79.40	7.6	33.50	8.0
I25	08 Nov 2021	1018	9	<2	<2	2e	14.8	78.93	7.1	33.56	7.9
I25	16 Nov 2021	1108	2	<2	<2	<2	16.5	69.27	8.5	33.44	8.0
I25	16 Nov 2021	1108	6	2e	<2	<2	16.2	74.74	8.2	33.47	8.0
I25	16 Nov 2021	1108	9	<2	<2	<2	15.6	76.41	8.1	33.47	8.0

Station	Date	Time	Depth	Total	Fecal	Enteric	Temp	XMS	DO	Sal	pH
I25	22 Nov 2021	1055	2	<2	<2	<2	15.3	79.67	7.9	33.46	8.0
I25	22 Nov 2021	1055	6	<2	<2	<2	15.2	80.84	7.8	33.45	8.0
I25	22 Nov 2021	1055	9	<2	<2	<2	14.6	82.08	7.5	33.54	8.0
I25	30 Nov 2021	1058	2	<2	<2	<2	16.8	80.49	8.4	33.52	8.1
I25	30 Nov 2021	1058	6	<2	<2	<2	16.1	82.69	9.0	33.51	8.1
I25	30 Nov 2021	1058	9	<2	<2	<2	15.7	77.90	8.4	33.49	8.0
I26	02 Nov 2021	1159	2	<2	<2	<2	16.5	75.40	8.4	33.48	8.1
I26	02 Nov 2021	1159	6	<2	<2	<2	15.6	78.67	7.8	33.48	8.0
I26	02 Nov 2021	1159	9	6e	<2	2e	14.5	78.17	7.3	33.40	7.9
I26	08 Nov 2021	1026	2	<2	<2	<2	15.9	75.25	7.8	33.51	8.0
I26	08 Nov 2021	1026	6	2e	<2	<2	15.8	76.37	7.6	33.47	7.9
I26	08 Nov 2021	1026	9	2e	<2	<2	14.5	80.33	7.3	33.58	7.9
I26	16 Nov 2021	1118	2	<2	<2	<2	16.3	75.47	8.7	33.48	8.0
I26	16 Nov 2021	1118	6	<2	<2	<2	15.2	78.75	8.0	33.44	8.0
I26	16 Nov 2021	1118	9	<2	<2	<2	15.1	79.15	7.6	33.43	7.9
I26	22 Nov 2021	1104	2	<2	<2	<2	15.5	80.81	8.0	33.46	8.0
I26	22 Nov 2021	1104	6	<2	<2	<2	15.2	80.30	7.9	33.50	8.0
I26	22 Nov 2021	1104	9	<2	<2	<2	14.0	83.83	6.9	33.44	7.9
I26	30 Nov 2021	1108	2	<2	<2	<2	16.5	83.76	8.7	33.50	8.1
I26	30 Nov 2021	1108	6	<2	<2	<2	16.2	83.48	8.7	33.51	8.1
I26	30 Nov 2021	1108	9	<2	<2	<2	15.9	81.08	8.1	33.48	8.0
I32	02 Nov 2021	1214	2	16e	12e	<2	15.7	66.51	7.9	33.45	8.0
I32	02 Nov 2021	1214	6	16e	<2	<2	14.6	77.49	7.3	33.43	7.9
I32	02 Nov 2021	1214	9	8e	2e	<2	14.5	77.01	7.3	33.43	7.9
I32	08 Nov 2021	1037	2	<2	<2	<2	15.6	78.71	7.6	33.52	7.9
I32	08 Nov 2021	1037	6	<2	<2	<2	14.9	78.18	7.3	33.47	7.9
I32	08 Nov 2021	1037	9	<2	<2	<2	14.1	78.49	7.0	33.47	7.9
I32	16 Nov 2021	1130	2	<2	<2	<2	16.3	73.20	8.5	33.46	8.0
I32	16 Nov 2021	1130	6	<2	<2	<2	16.0	76.66	8.4	33.47	8.0
I32	16 Nov 2021	1130	9	<2	<2	<2	15.4	78.73	8.0	33.44	8.0
I32	22 Nov 2021	1119	2	<2	<2	<2	15.0	78.26	7.7	33.43	8.0
I32	22 Nov 2021	1119	6	<2	<2	<2	14.0	79.74	6.9	33.44	7.9
I32	22 Nov 2021	1119	9	<2	<2	<2	13.8	81.84	6.7	33.41	7.9
I32	30 Nov 2021	1120	2	<2	<2	<2	16.2	80.84	9.8	33.48	8.1
I32	30 Nov 2021	1120	6	<2	<2	<2	16.0	73.14	9.6	33.47	8.1
I32	30 Nov 2021	1120	9	<2	<2	<2	16.0	78.46	8.9	33.47	8.1
I39	02 Nov 2021	1043	2	<2	<2	<2	16.9	76.54	8.5	33.50	8.1
I39	02 Nov 2021	1043	12	<2	<2	<2	16.7	75.36	8.4	33.51	8.1
I39	02 Nov 2021	1043	18	24e	2e	2e	14.2	78.83	7.1	33.48	7.9
I39	08 Nov 2021	934	2	<2	<2	<2	17.5	83.81	8.0	33.55	8.0
I39	08 Nov 2021	934	12	<2	<2	<2	16.1	79.03	7.8	33.50	8.0
I39	08 Nov 2021	934	18	<2	<2	<2	15.4	81.90	7.3	33.52	7.9
I39	16 Nov 2021	1017	2	<2	<2	<2	16.6	81.22	8.3	33.49	8.0
I39	16 Nov 2021	1017	12	<2	<2	<2	16.5	81.14	8.2	33.49	8.0
I39	16 Nov 2021	1017	18	22e	2e	2e	14.5	83.22	7.2	33.41	7.9

Station	Date	Time	Depth	Total	Fecal	Enteric	Temp	XMS	DO	Sal	pH
I39	22 Nov 2021	1008	2	<2	<2	2e	15.8	81.89	8.0	33.48	8.0
I39	22 Nov 2021	1008	12	<2	<2	<2	14.7	85.33	7.4	33.47	8.0
I39	22 Nov 2021	1008	18	<2	<2	<2	13.7	85.82	6.7	33.44	7.9
I39	30 Nov 2021	1007	2	<2	<2	<2	17.1	86.20	8.0	33.54	8.0
I39	30 Nov 2021	1007	12	14e	<2	<2	16.8	86.16	7.9	33.54	8.0
I39	30 Nov 2021	1007	18	2e	<2	<2	15.4	82.76	7.6	33.48	8.0
I40	02 Nov 2021	1125	2	6e	4e	<2	15.8	67.65	7.6	33.49	8.0
I40	02 Nov 2021	1125	6	16e	<2	<2	15.0	73.21	7.7	33.49	8.0
I40	02 Nov 2021	1125	9	12e	2e	<2	14.5	73.22	7.4	33.43	7.9
I40	08 Nov 2021	1007	2	<2	<2	<2	16.0	78.20	7.7	33.51	8.0
I40	08 Nov 2021	1007	6	2e	<2	<2	15.0	67.22	7.3	33.45	7.9
I40	08 Nov 2021	1007	9	<2	<2	<2	14.6	55.02	7.1	33.45	7.9
I40	16 Nov 2021	1051	2	<2	<2	<2	16.1	76.59	8.4	33.47	8.0
I40	16 Nov 2021	1051	6	<2	<2	<2	15.8	77.40	8.5	33.46	8.0
I40	16 Nov 2021	1051	9	<2	<2	<2	15.2	75.28	8.1	33.48	8.0
I40	22 Nov 2021	1041	2	<2	2e	<2	14.5	76.59	7.3	33.41	7.9
I40	22 Nov 2021	1041	6	<2	<2	<2	14.4	74.61	7.2	33.42	7.9
I40	22 Nov 2021	1041	9	<2	<2	2e	14.3	73.60	7.0	33.42	7.9
I40	30 Nov 2021	1042	2	10e	2e	8e	16.6	81.21	8.2	33.51	8.1
I40	30 Nov 2021	1042	6	26e	2e	6e	16.2	80.38	8.0	33.51	8.0
I40	30 Nov 2021	1042	9	16e	<2	12e	15.9	79.51	7.8	33.53	8.0

ns = not sampled

ND = no data

**Table 3.8**

Summary of visual observations made during the month for each SBOO kelp station by sample date.

Station	Date	Parameter	Value
I19	02 Nov 2021	Depth (m)	11
I19	02 Nov 2021	Arrive Time	1107
I19	02 Nov 2021	Depart Time	1118
I19	02 Nov 2021	Air Temp (C)	15.8
I19	02 Nov 2021	Weather	Overcast
I19	02 Nov 2021	Visibility (mi)	6
I19	02 Nov 2021	Wind Speed (kts)	6.3
I19	02 Nov 2021	Wind Dir	N
I19	02 Nov 2021	Water Color	Green
I19	02 Nov 2021	Wave Ht Low (ft)	4
I19	02 Nov 2021	Wave Period (sec)	15
I19	02 Nov 2021	Sea State	Light Chop
I19	02 Nov 2021	High Tide (ft)	5.51
I19	02 Nov 2021	High Tide Time	1454
I19	02 Nov 2021	Low Tide (ft)	0.36
I19	02 Nov 2021	Low Tide Time	830
I19	02 Nov 2021	Comments	none
I19	08 Nov 2021	Depth (m)	12
I19	08 Nov 2021	Arrive Time	955
I19	08 Nov 2021	Depart Time	1001
I19	08 Nov 2021	Air Temp (C)	14.9
I19	08 Nov 2021	Weather	Haze
I19	08 Nov 2021	Visibility (mi)	6
I19	08 Nov 2021	Wind Speed (kts)	5.5
I19	08 Nov 2021	Wind Dir	SW
I19	08 Nov 2021	Water Color	Blueish-Green
I19	08 Nov 2021	Wave Ht Low (ft)	5
I19	08 Nov 2021	Wave Period (sec)	18
I19	08 Nov 2021	Sea State	Regular Swell
I19	08 Nov 2021	High Tide (ft)	6.14
I19	08 Nov 2021	High Tide Time	1824
I19	08 Nov 2021	Low Tide (ft)	-0.66
I19	08 Nov 2021	Low Tide Time	206
I19	08 Nov 2021	Comments	none
I19	16 Nov 2021	Depth (m)	11
I19	16 Nov 2021	Arrive Time	1039
I19	16 Nov 2021	Depart Time	1046
I19	16 Nov 2021	Air Temp (C)	15.1
I19	16 Nov 2021	Weather	Fog
I19	16 Nov 2021	Visibility (mi)	2
I19	16 Nov 2021	Wind Speed (kts)	4.6
I19	16 Nov 2021	Wind Dir	SE
I19	16 Nov 2021	Water Color	Green
I19	16 Nov 2021	Wave Ht Low (ft)	3
I19	16 Nov 2021	Wave Period (sec)	15
I19	16 Nov 2021	Sea State	Wind Ripples
I19	16 Nov 2021	High Tide (ft)	5.58
I19	16 Nov 2021	High Tide Time	1454
I19	16 Nov 2021	Low Tide (ft)	0.33
I19	16 Nov 2021	Low Tide Time	2130
I19	16 Nov 2021	Comments	none
I19	22 Nov 2021	Depth (m)	1
I19	22 Nov 2021	Arrive Time	1029

Station	Date	Parameter	Value
I19	22 Nov 2021	Depart Time	1031
I19	22 Nov 2021	Air Temp (C)	23
I19	22 Nov 2021	Weather	Partly Cloudy
I19	22 Nov 2021	Visibility (mi)	10
I19	22 Nov 2021	Wind Speed (kts)	5.9
I19	22 Nov 2021	Wind Dir	W
I19	22 Nov 2021	Water Color	Green
I19	22 Nov 2021	Wave Ht Low (ft)	2.3
I19	22 Nov 2021	Wave Period (sec)	12
I19	22 Nov 2021	Sea State	Calm
I19	22 Nov 2021	High Tide (ft)	5.51
I19	22 Nov 2021	High Tide Time	1724
I19	22 Nov 2021	Low Tide (ft)	0
I19	22 Nov 2021	Low Tide Time	48
I19	22 Nov 2021	Comments	none
I19	30 Nov 2021	Depth (m)	11
I19	30 Nov 2021	Arrive Time	1030
I19	30 Nov 2021	Depart Time	1035
I19	30 Nov 2021	Air Temp (C)	12.4
I19	30 Nov 2021	Weather	Fog
I19	30 Nov 2021	Visibility (mi)	1
I19	30 Nov 2021	Wind Speed (kts)	4.6
I19	30 Nov 2021	Wind Dir	S
I19	30 Nov 2021	Water Color	Blue
I19	30 Nov 2021	Wave Ht Low (ft)	3
I19	30 Nov 2021	Wave Period (sec)	12
I19	30 Nov 2021	Sea State	Wind Ripples
I19	30 Nov 2021	High Tide (ft)	5.32
I19	30 Nov 2021	High Tide Time	1336
I19	30 Nov 2021	Low Tide (ft)	0.69
I19	30 Nov 2021	Low Tide Time	2018
I19	30 Nov 2021	Comments	none
I24	02 Nov 2021	Depth (m)	10
I24	02 Nov 2021	Arrive Time	1140
I24	02 Nov 2021	Depart Time	1141
I24	02 Nov 2021	Air Temp (C)	16
I24	02 Nov 2021	Weather	Overcast
I24	02 Nov 2021	Visibility (mi)	6
I24	02 Nov 2021	Wind Speed (kts)	7.5
I24	02 Nov 2021	Wind Dir	NW
I24	02 Nov 2021	Water Color	Blueish-Green
I24	02 Nov 2021	Wave Ht Low (ft)	4
I24	02 Nov 2021	Wave Period (sec)	15
I24	02 Nov 2021	Sea State	Light Chop
I24	02 Nov 2021	High Tide (ft)	5.51
I24	02 Nov 2021	High Tide Time	1454
I24	02 Nov 2021	Low Tide (ft)	0.36
I24	02 Nov 2021	Low Tide Time	830
I24	02 Nov 2021	Comments	none
I24	08 Nov 2021	Depth (m)	11
I24	08 Nov 2021	Arrive Time	1013
I24	08 Nov 2021	Depart Time	1016
I24	08 Nov 2021	Air Temp (C)	14.9
I24	08 Nov 2021	Weather	Haze
I24	08 Nov 2021	Visibility (mi)	6
I24	08 Nov 2021	Wind Speed (kts)	3.1
I24	08 Nov 2021	Wind Dir	W
I24	08 Nov 2021	Water Color	Blueish-Green

Station	Date	Parameter	Value
I24	08 Nov 2021	Wave Ht Low (ft)	5
I24	08 Nov 2021	Wave Period (sec)	18
I24	08 Nov 2021	Sea State	Regular Swell
I24	08 Nov 2021	High Tide (ft)	6.14
I24	08 Nov 2021	High Tide Time	1824
I24	08 Nov 2021	Low Tide (ft)	-0.66
I24	08 Nov 2021	Low Tide Time	206
I24	08 Nov 2021	Comments	none
I24	16 Nov 2021	Depth (m)	10
I24	16 Nov 2021	Arrive Time	1100
I24	16 Nov 2021	Depart Time	1104
I24	16 Nov 2021	Air Temp (C)	15.2
I24	16 Nov 2021	Weather	Fog
I24	16 Nov 2021	Visibility (mi)	2
I24	16 Nov 2021	Wind Speed (kts)	2.7
I24	16 Nov 2021	Wind Dir	S
I24	16 Nov 2021	Water Color	Green
I24	16 Nov 2021	Wave Ht Low (ft)	3
I24	16 Nov 2021	Wave Period (sec)	15
I24	16 Nov 2021	Sea State	Wind Ripples
I24	16 Nov 2021	High Tide (ft)	5.58
I24	16 Nov 2021	High Tide Time	1454
I24	16 Nov 2021	Low Tide (ft)	0.33
I24	16 Nov 2021	Low Tide Time	2130
I24	16 Nov 2021	Comments	none
I24	22 Nov 2021	Depth (m)	11
I24	22 Nov 2021	Arrive Time	1049
I24	22 Nov 2021	Depart Time	1051
I24	22 Nov 2021	Air Temp (C)	19.6
I24	22 Nov 2021	Weather	Partly Cloudy
I24	22 Nov 2021	Visibility (mi)	10
I24	22 Nov 2021	Wind Speed (kts)	4.3
I24	22 Nov 2021	Wind Dir	N
I24	22 Nov 2021	Water Color	Green
I24	22 Nov 2021	Wave Ht Low (ft)	2.3
I24	22 Nov 2021	Wave Period (sec)	12
I24	22 Nov 2021	Sea State	Calm
I24	22 Nov 2021	High Tide (ft)	5.51
I24	22 Nov 2021	High Tide Time	1724
I24	22 Nov 2021	Low Tide (ft)	0
I24	22 Nov 2021	Low Tide Time	48
I24	22 Nov 2021	Comments	none
I24	30 Nov 2021	Depth (m)	10
I24	30 Nov 2021	Arrive Time	1050
I24	30 Nov 2021	Depart Time	1055
I24	30 Nov 2021	Air Temp (C)	13.2
I24	30 Nov 2021	Weather	Fog
I24	30 Nov 2021	Visibility (mi)	1
I24	30 Nov 2021	Wind Speed (kts)	1.2
I24	30 Nov 2021	Wind Dir	W
I24	30 Nov 2021	Water Color	Blue
I24	30 Nov 2021	Wave Ht Low (ft)	3
I24	30 Nov 2021	Wave Period (sec)	12
I24	30 Nov 2021	Sea State	Wind Ripples
I24	30 Nov 2021	High Tide (ft)	5.32
I24	30 Nov 2021	High Tide Time	1336
I24	30 Nov 2021	Low Tide (ft)	0.69
I24	30 Nov 2021	Low Tide Time	2018

Station	Date	Parameter	Value
I24	30 Nov 2021	Comments	none
I25	02 Nov 2021	Depth (m)	8
I25	02 Nov 2021	Arrive Time	1147
I25	02 Nov 2021	Depart Time	1150
I25	02 Nov 2021	Air Temp (C)	16.1
I25	02 Nov 2021	Weather	Overcast
I25	02 Nov 2021	Visibility (mi)	6
I25	02 Nov 2021	Wind Speed (kts)	8.7
I25	02 Nov 2021	Wind Dir	NW
I25	02 Nov 2021	Water Color	Blueish-Green
I25	02 Nov 2021	Wave Ht Low (ft)	4
I25	02 Nov 2021	Wave Period (sec)	15
I25	02 Nov 2021	Sea State	Light Chop
I25	02 Nov 2021	High Tide (ft)	5.51
I25	02 Nov 2021	High Tide Time	1454
I25	02 Nov 2021	Low Tide (ft)	0.36
I25	02 Nov 2021	Low Tide Time	830
I25	02 Nov 2021	Comments	none
I25	08 Nov 2021	Depth (m)	10
I25	08 Nov 2021	Arrive Time	1018
I25	08 Nov 2021	Depart Time	1022
I25	08 Nov 2021	Air Temp (C)	15.2
I25	08 Nov 2021	Weather	Haze
I25	08 Nov 2021	Visibility (mi)	6
I25	08 Nov 2021	Wind Speed (kts)	0.7
I25	08 Nov 2021	Wind Dir	S
I25	08 Nov 2021	Water Color	Blueish-Green
I25	08 Nov 2021	Wave Ht Low (ft)	5
I25	08 Nov 2021	Wave Period (sec)	18
I25	08 Nov 2021	Sea State	Regular Swell
I25	08 Nov 2021	High Tide (ft)	6.14
I25	08 Nov 2021	High Tide Time	1824
I25	08 Nov 2021	Low Tide (ft)	-0.66
I25	08 Nov 2021	Low Tide Time	206
I25	08 Nov 2021	Comments	none
I25	16 Nov 2021	Depth (m)	10
I25	16 Nov 2021	Arrive Time	1108
I25	16 Nov 2021	Depart Time	1112
I25	16 Nov 2021	Air Temp (C)	15.4
I25	16 Nov 2021	Weather	Fog
I25	16 Nov 2021	Visibility (mi)	2
I25	16 Nov 2021	Wind Speed (kts)	2
I25	16 Nov 2021	Wind Dir	S
I25	16 Nov 2021	Water Color	Green
I25	16 Nov 2021	Wave Ht Low (ft)	3
I25	16 Nov 2021	Wave Period (sec)	15
I25	16 Nov 2021	Sea State	Wind Ripples
I25	16 Nov 2021	High Tide (ft)	5.58
I25	16 Nov 2021	High Tide Time	1454
I25	16 Nov 2021	Low Tide (ft)	0.33
I25	16 Nov 2021	Low Tide Time	2130
I25	16 Nov 2021	Comments	Kelp Debris; Seagrass; Lobster Floats
I25	22 Nov 2021	Depth (m)	10
I25	22 Nov 2021	Arrive Time	1055
I25	22 Nov 2021	Depart Time	1057
I25	22 Nov 2021	Air Temp (C)	20.2
I25	22 Nov 2021	Weather	Partly Cloudy

Station	Date	Parameter	Value
I25	22 Nov 2021	Visibility (mi)	10
I25	22 Nov 2021	Wind Speed (kts)	6.4
I25	22 Nov 2021	Wind Dir	N
I25	22 Nov 2021	Water Color	Green
I25	22 Nov 2021	Wave Ht Low (ft)	2.3
I25	22 Nov 2021	Wave Period (sec)	12
I25	22 Nov 2021	Sea State	Calm
I25	22 Nov 2021	High Tide (ft)	5.51
I25	22 Nov 2021	High Tide Time	1724
I25	22 Nov 2021	Low Tide (ft)	0
I25	22 Nov 2021	Low Tide Time	48
I25	22 Nov 2021	Comments	none
I25	30 Nov 2021	Depth (m)	8
I25	30 Nov 2021	Arrive Time	1058
I25	30 Nov 2021	Depart Time	1102
I25	30 Nov 2021	Air Temp (C)	13.6
I25	30 Nov 2021	Weather	Fog
I25	30 Nov 2021	Visibility (mi)	2
I25	30 Nov 2021	Wind Speed (kts)	4.3
I25	30 Nov 2021	Wind Dir	W
I25	30 Nov 2021	Water Color	Blue
I25	30 Nov 2021	Wave Ht Low (ft)	3
I25	30 Nov 2021	Wave Period (sec)	12
I25	30 Nov 2021	Sea State	Wind Ripples
I25	30 Nov 2021	High Tide (ft)	5.32
I25	30 Nov 2021	High Tide Time	1336
I25	30 Nov 2021	Low Tide (ft)	0.69
I25	30 Nov 2021	Low Tide Time	2018
I25	30 Nov 2021	Comments	none
I26	02 Nov 2021	Depth (m)	9
I26	02 Nov 2021	Arrive Time	1159
I26	02 Nov 2021	Depart Time	1204
I26	02 Nov 2021	Air Temp (C)	16.2
I26	02 Nov 2021	Weather	Partly Cloudy
I26	02 Nov 2021	Visibility (mi)	7
I26	02 Nov 2021	Wind Speed (kts)	9.8
I26	02 Nov 2021	Wind Dir	NW
I26	02 Nov 2021	Water Color	Blueish-Green
I26	02 Nov 2021	Wave Ht Low (ft)	4
I26	02 Nov 2021	Wave Period (sec)	15
I26	02 Nov 2021	Sea State	Light Chop
I26	02 Nov 2021	High Tide (ft)	5.51
I26	02 Nov 2021	High Tide Time	1454
I26	02 Nov 2021	Low Tide (ft)	0.36
I26	02 Nov 2021	Low Tide Time	830
I26	02 Nov 2021	Comments	none
I26	08 Nov 2021	Depth (m)	10
I26	08 Nov 2021	Arrive Time	1026
I26	08 Nov 2021	Depart Time	1030
I26	08 Nov 2021	Air Temp (C)	15.2
I26	08 Nov 2021	Weather	Haze
I26	08 Nov 2021	Visibility (mi)	6
I26	08 Nov 2021	Wind Speed (kts)	0
I26	08 Nov 2021	Wind Dir	NE
I26	08 Nov 2021	Water Color	Blueish-Green
I26	08 Nov 2021	Wave Ht Low (ft)	5
I26	08 Nov 2021	Wave Period (sec)	18
I26	08 Nov 2021	Sea State	Regular Swell

Station	Date	Parameter	Value
I26	08 Nov 2021	High Tide (ft)	6.14
I26	08 Nov 2021	High Tide Time	1824
I26	08 Nov 2021	Low Tide (ft)	-0.66
I26	08 Nov 2021	Low Tide Time	206
I26	08 Nov 2021	Comments	none
I26	16 Nov 2021	Depth (m)	9
I26	16 Nov 2021	Arrive Time	1118
I26	16 Nov 2021	Depart Time	1122
I26	16 Nov 2021	Air Temp (C)	15.3
I26	16 Nov 2021	Weather	Fog
I26	16 Nov 2021	Visibility (mi)	2
I26	16 Nov 2021	Wind Speed (kts)	3.9
I26	16 Nov 2021	Wind Dir	SW
I26	16 Nov 2021	Water Color	Green
I26	16 Nov 2021	Wave Ht Low (ft)	3
I26	16 Nov 2021	Wave Period (sec)	15
I26	16 Nov 2021	Sea State	Wind Ripples
I26	16 Nov 2021	High Tide (ft)	5.58
I26	16 Nov 2021	High Tide Time	1454
I26	16 Nov 2021	Low Tide (ft)	0.33
I26	16 Nov 2021	Low Tide Time	2130
I26	16 Nov 2021	Comments	none
I26	22 Nov 2021	Depth (m)	10
I26	22 Nov 2021	Arrive Time	1104
I26	22 Nov 2021	Depart Time	1107
I26	22 Nov 2021	Air Temp (C)	20.6
I26	22 Nov 2021	Weather	Partly Cloudy
I26	22 Nov 2021	Visibility (mi)	10
I26	22 Nov 2021	Wind Speed (kts)	6.5
I26	22 Nov 2021	Wind Dir	N
I26	22 Nov 2021	Water Color	Green
I26	22 Nov 2021	Wave Ht Low (ft)	2.3
I26	22 Nov 2021	Wave Period (sec)	12
I26	22 Nov 2021	Sea State	Calm
I26	22 Nov 2021	High Tide (ft)	5.51
I26	22 Nov 2021	High Tide Time	1724
I26	22 Nov 2021	Low Tide (ft)	0
I26	22 Nov 2021	Low Tide Time	48
I26	22 Nov 2021	Comments	none
I26	30 Nov 2021	Depth (m)	1
I26	30 Nov 2021	Arrive Time	1108
I26	30 Nov 2021	Depart Time	1115
I26	30 Nov 2021	Air Temp (C)	13.8
I26	30 Nov 2021	Weather	Fog
I26	30 Nov 2021	Visibility (mi)	2
I26	30 Nov 2021	Wind Speed (kts)	4.4
I26	30 Nov 2021	Wind Dir	W
I26	30 Nov 2021	Water Color	Blue
I26	30 Nov 2021	Wave Ht Low (ft)	3
I26	30 Nov 2021	Wave Period (sec)	12
I26	30 Nov 2021	Sea State	Wind Ripples
I26	30 Nov 2021	High Tide (ft)	5.32
I26	30 Nov 2021	High Tide Time	1336
I26	30 Nov 2021	Low Tide (ft)	0.69
I26	30 Nov 2021	Low Tide Time	2018
I26	30 Nov 2021	Comments	none
I32	02 Nov 2021	Depth (m)	10

Station	Date	Parameter	Value
I32	02 Nov 2021	Arrive Time	1214
I32	02 Nov 2021	Depart Time	1216
I32	02 Nov 2021	Air Temp (C)	16.2
I32	02 Nov 2021	Weather	Partly Cloudy
I32	02 Nov 2021	Visibility (mi)	7
I32	02 Nov 2021	Wind Speed (kts)	9.3
I32	02 Nov 2021	Wind Dir	NW
I32	02 Nov 2021	Water Color	Blueish-Green
I32	02 Nov 2021	Wave Ht Low (ft)	4
I32	02 Nov 2021	Wave Period (sec)	15
I32	02 Nov 2021	Sea State	Light Chop
I32	02 Nov 2021	High Tide (ft)	5.51
I32	02 Nov 2021	High Tide Time	1454
I32	02 Nov 2021	Low Tide (ft)	0.36
I32	02 Nov 2021	Low Tide Time	830
I32	02 Nov 2021	Comments	Kelp Debris
I32	08 Nov 2021	Depth (m)	11
I32	08 Nov 2021	Arrive Time	1037
I32	08 Nov 2021	Depart Time	1042
I32	08 Nov 2021	Air Temp (C)	15.1
I32	08 Nov 2021	Weather	Haze
I32	08 Nov 2021	Visibility (mi)	6
I32	08 Nov 2021	Wind Speed (kts)	0
I32	08 Nov 2021	Wind Dir	E
I32	08 Nov 2021	Water Color	Blueish-Green
I32	08 Nov 2021	Wave Ht Low (ft)	5
I32	08 Nov 2021	Wave Period (sec)	18
I32	08 Nov 2021	Sea State	Regular Swell
I32	08 Nov 2021	High Tide (ft)	6.14
I32	08 Nov 2021	High Tide Time	1824
I32	08 Nov 2021	Low Tide (ft)	-0.66
I32	08 Nov 2021	Low Tide Time	206
I32	08 Nov 2021	Comments	none
I32	16 Nov 2021	Depth (m)	10
I32	16 Nov 2021	Arrive Time	1130
I32	16 Nov 2021	Depart Time	1136
I32	16 Nov 2021	Air Temp (C)	15.1
I32	16 Nov 2021	Weather	Fog
I32	16 Nov 2021	Visibility (mi)	2
I32	16 Nov 2021	Wind Speed (kts)	7.2
I32	16 Nov 2021	Wind Dir	NW
I32	16 Nov 2021	Water Color	Green
I32	16 Nov 2021	Wave Ht Low (ft)	3
I32	16 Nov 2021	Wave Period (sec)	15
I32	16 Nov 2021	Sea State	Wind Ripples
I32	16 Nov 2021	High Tide (ft)	5.58
I32	16 Nov 2021	High Tide Time	1454
I32	16 Nov 2021	Low Tide (ft)	0.33
I32	16 Nov 2021	Low Tide Time	2130
I32	16 Nov 2021	Comments	Lobster Floats
I32	22 Nov 2021	Depth (m)	11
I32	22 Nov 2021	Arrive Time	1119
I32	22 Nov 2021	Depart Time	1121
I32	22 Nov 2021	Air Temp (C)	20.1
I32	22 Nov 2021	Weather	Partly Cloudy
I32	22 Nov 2021	Visibility (mi)	10
I32	22 Nov 2021	Wind Speed (kts)	4.8
I32	22 Nov 2021	Wind Dir	N

Station	Date	Parameter	Value
I32	22 Nov 2021	Water Color	Green
I32	22 Nov 2021	Wave Ht Low (ft)	2.3
I32	22 Nov 2021	Wave Period (sec)	12
I32	22 Nov 2021	Sea State	Calm
I32	22 Nov 2021	High Tide (ft)	5.51
I32	22 Nov 2021	High Tide Time	1724
I32	22 Nov 2021	Low Tide (ft)	0
I32	22 Nov 2021	Low Tide Time	48
I32	22 Nov 2021	Comments	none
I32	30 Nov 2021	Depth (m)	10
I32	30 Nov 2021	Arrive Time	1120
I32	30 Nov 2021	Depart Time	1126
I32	30 Nov 2021	Air Temp (C)	13.8
I32	30 Nov 2021	Weather	Fog
I32	30 Nov 2021	Visibility (mi)	2
I32	30 Nov 2021	Wind Speed (kts)	4.4
I32	30 Nov 2021	Wind Dir	W
I32	30 Nov 2021	Water Color	Blue
I32	30 Nov 2021	Wave Ht Low (ft)	3
I32	30 Nov 2021	Wave Period (sec)	12
I32	30 Nov 2021	Sea State	Wind Ripples
I32	30 Nov 2021	High Tide (ft)	5.32
I32	30 Nov 2021	High Tide Time	1336
I32	30 Nov 2021	Low Tide (ft)	0.69
I32	30 Nov 2021	Low Tide Time	2018
I32	30 Nov 2021	Comments	none
I39	02 Nov 2021	Depth (m)	19
I39	02 Nov 2021	Arrive Time	1043
I39	02 Nov 2021	Depart Time	1047
I39	02 Nov 2021	Air Temp (C)	15.9
I39	02 Nov 2021	Weather	Overcast
I39	02 Nov 2021	Visibility (mi)	6
I39	02 Nov 2021	Wind Speed (kts)	6.7
I39	02 Nov 2021	Wind Dir	N
I39	02 Nov 2021	Water Color	Green
I39	02 Nov 2021	Wave Ht Low (ft)	4
I39	02 Nov 2021	Wave Period (sec)	15
I39	02 Nov 2021	Sea State	Light Chop
I39	02 Nov 2021	High Tide (ft)	5.51
I39	02 Nov 2021	High Tide Time	1454
I39	02 Nov 2021	Low Tide (ft)	0.36
I39	02 Nov 2021	Low Tide Time	830
I39	02 Nov 2021	Comments	Kelp Debris
I39	08 Nov 2021	Depth (m)	19
I39	08 Nov 2021	Arrive Time	934
I39	08 Nov 2021	Depart Time	939
I39	08 Nov 2021	Air Temp (C)	14.9
I39	08 Nov 2021	Weather	Overcast
I39	08 Nov 2021	Visibility (mi)	12
I39	08 Nov 2021	Wind Speed (kts)	0
I39	08 Nov 2021	Wind Dir	SW
I39	08 Nov 2021	Water Color	Blueish-Green
I39	08 Nov 2021	Wave Ht Low (ft)	5
I39	08 Nov 2021	Wave Period (sec)	18
I39	08 Nov 2021	Sea State	Regular Swell
I39	08 Nov 2021	High Tide (ft)	6.14
I39	08 Nov 2021	High Tide Time	1824
I39	08 Nov 2021	Low Tide (ft)	-0.66

Station	Date	Parameter	Value
I39	08 Nov 2021	Low Tide Time	206
I39	08 Nov 2021	Comments	none
I39	16 Nov 2021	Depth (m)	19
I39	16 Nov 2021	Arrive Time	1017
I39	16 Nov 2021	Depart Time	1023
I39	16 Nov 2021	Air Temp (C)	15
I39	16 Nov 2021	Weather	Fog
I39	16 Nov 2021	Visibility (mi)	2
I39	16 Nov 2021	Wind Speed (kts)	4.1
I39	16 Nov 2021	Wind Dir	SW
I39	16 Nov 2021	Water Color	Green
I39	16 Nov 2021	Wave Ht Low (ft)	3
I39	16 Nov 2021	Wave Period (sec)	15
I39	16 Nov 2021	Sea State	Wind Ripples
I39	16 Nov 2021	High Tide (ft)	5.58
I39	16 Nov 2021	High Tide Time	1454
I39	16 Nov 2021	Low Tide (ft)	0.33
I39	16 Nov 2021	Low Tide Time	2130
I39	16 Nov 2021	Comments	none
I39	22 Nov 2021	Depth (m)	19
I39	22 Nov 2021	Arrive Time	1008
I39	22 Nov 2021	Depart Time	1010
I39	22 Nov 2021	Air Temp (C)	18.6
I39	22 Nov 2021	Weather	Clear
I39	22 Nov 2021	Visibility (mi)	10
I39	22 Nov 2021	Wind Speed (kts)	5.3
I39	22 Nov 2021	Wind Dir	NW
I39	22 Nov 2021	Water Color	Greenish-Blue
I39	22 Nov 2021	Wave Ht Low (ft)	2.3
I39	22 Nov 2021	Wave Period (sec)	12
I39	22 Nov 2021	Sea State	Calm
I39	22 Nov 2021	High Tide (ft)	5.51
I39	22 Nov 2021	High Tide Time	1724
I39	22 Nov 2021	Low Tide (ft)	0
I39	22 Nov 2021	Low Tide Time	48
I39	22 Nov 2021	Comments	none
I39	30 Nov 2021	Depth (m)	19
I39	30 Nov 2021	Arrive Time	1007
I39	30 Nov 2021	Depart Time	1012
I39	30 Nov 2021	Air Temp (C)	13.1
I39	30 Nov 2021	Weather	Fog
I39	30 Nov 2021	Visibility (mi)	1
I39	30 Nov 2021	Wind Speed (kts)	0.7
I39	30 Nov 2021	Wind Dir	S
I39	30 Nov 2021	Water Color	Blue
I39	30 Nov 2021	Wave Ht Low (ft)	3
I39	30 Nov 2021	Wave Period (sec)	12
I39	30 Nov 2021	Sea State	Wind Ripples
I39	30 Nov 2021	High Tide (ft)	5.32
I39	30 Nov 2021	High Tide Time	1336
I39	30 Nov 2021	Low Tide (ft)	0.69
I39	30 Nov 2021	Low Tide Time	2018
I39	30 Nov 2021	Comments	none
I40	02 Nov 2021	Depth (m)	9
I40	02 Nov 2021	Arrive Time	1125
I40	02 Nov 2021	Depart Time	1131
I40	02 Nov 2021	Air Temp (C)	16.8

Station	Date	Parameter	Value
I40	02 Nov 2021	Weather	Overcast
I40	02 Nov 2021	Visibility (mi)	6
I40	02 Nov 2021	Wind Speed (kts)	8.6
I40	02 Nov 2021	Wind Dir	N
I40	02 Nov 2021	Water Color	Green
I40	02 Nov 2021	Wave Ht Low (ft)	4
I40	02 Nov 2021	Wave Period (sec)	15
I40	02 Nov 2021	Sea State	Light Chop
I40	02 Nov 2021	High Tide (ft)	5.51
I40	02 Nov 2021	High Tide Time	1454
I40	02 Nov 2021	Low Tide (ft)	0.36
I40	02 Nov 2021	Low Tide Time	830
I40	02 Nov 2021	Comments	none
I40	08 Nov 2021	Depth (m)	11
I40	08 Nov 2021	Arrive Time	1007
I40	08 Nov 2021	Depart Time	1011
I40	08 Nov 2021	Air Temp (C)	14.9
I40	08 Nov 2021	Weather	Haze
I40	08 Nov 2021	Visibility (mi)	6
I40	08 Nov 2021	Wind Speed (kts)	3.9
I40	08 Nov 2021	Wind Dir	W
I40	08 Nov 2021	Water Color	Blueish-Green
I40	08 Nov 2021	Wave Ht Low (ft)	5
I40	08 Nov 2021	Wave Period (sec)	18
I40	08 Nov 2021	Sea State	Regular Swell
I40	08 Nov 2021	High Tide (ft)	6.14
I40	08 Nov 2021	High Tide Time	1824
I40	08 Nov 2021	Low Tide (ft)	-0.66
I40	08 Nov 2021	Low Tide Time	206
I40	08 Nov 2021	Comments	none
I40	16 Nov 2021	Depth (m)	11
I40	16 Nov 2021	Arrive Time	1051
I40	16 Nov 2021	Depart Time	1056
I40	16 Nov 2021	Air Temp (C)	15.1
I40	16 Nov 2021	Weather	Fog
I40	16 Nov 2021	Visibility (mi)	2
I40	16 Nov 2021	Wind Speed (kts)	0.8
I40	16 Nov 2021	Wind Dir	SE
I40	16 Nov 2021	Water Color	Green
I40	16 Nov 2021	Wave Ht Low (ft)	3
I40	16 Nov 2021	Wave Period (sec)	15
I40	16 Nov 2021	Sea State	Wind Ripples
I40	16 Nov 2021	High Tide (ft)	5.58
I40	16 Nov 2021	High Tide Time	1454
I40	16 Nov 2021	Low Tide (ft)	0.33
I40	16 Nov 2021	Low Tide Time	2130
I40	16 Nov 2021	Comments	none
I40	22 Nov 2021	Depth (m)	11
I40	22 Nov 2021	Arrive Time	1041
I40	22 Nov 2021	Depart Time	1044
I40	22 Nov 2021	Air Temp (C)	19.2
I40	22 Nov 2021	Weather	Partly Cloudy
I40	22 Nov 2021	Visibility (mi)	10
I40	22 Nov 2021	Wind Speed (kts)	7.2
I40	22 Nov 2021	Wind Dir	N
I40	22 Nov 2021	Water Color	Green
I40	22 Nov 2021	Wave Ht Low (ft)	2.3
I40	22 Nov 2021	Wave Period (sec)	12

Station	Date	Parameter	Value
I40	22 Nov 2021	Sea State	Calm
I40	22 Nov 2021	High Tide (ft)	5.51
I40	22 Nov 2021	High Tide Time	1724
I40	22 Nov 2021	Low Tide (ft)	0
I40	22 Nov 2021	Low Tide Time	48
I40	22 Nov 2021	Comments	none
I40	30 Nov 2021	Depth (m)	9
I40	30 Nov 2021	Arrive Time	1042
I40	30 Nov 2021	Depart Time	1052
I40	30 Nov 2021	Air Temp (C)	12.9
I40	30 Nov 2021	Weather	Fog
I40	30 Nov 2021	Visibility (mi)	1
I40	30 Nov 2021	Wind Speed (kts)	3.1
I40	30 Nov 2021	Wind Dir	SW
I40	30 Nov 2021	Water Color	Blue
I40	30 Nov 2021	Wave Ht Low (ft)	3
I40	30 Nov 2021	Wave Period (sec)	12
I40	30 Nov 2021	Sea State	Wind Ripples
I40	30 Nov 2021	High Tide (ft)	5.32
I40	30 Nov 2021	High Tide Time	1336
I40	30 Nov 2021	Low Tide (ft)	0.69
I40	30 Nov 2021	Low Tide Time	2018
I40	30 Nov 2021	Comments	none

**Table 3.9**

Summary of CTD profile data from the SBOO kelp stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I19	02 Nov 2021	1	15.31	65.69	8.0	33.41	8.0	24.7	2.01
I19	02 Nov 2021	2	15.10	64.44	8.0	33.45	8.0	24.8	2.10
I19	02 Nov 2021	3	14.89	62.93	7.8	33.45	8.0	24.8	2.38
I19	02 Nov 2021	4	14.72	66.78	7.7	33.44	7.9	24.8	2.21
I19	02 Nov 2021	5	14.67	67.94	7.5	33.43	7.9	24.8	2.35
I19	02 Nov 2021	6	14.64	64.79	7.4	33.42	7.9	24.8	2.84
I19	02 Nov 2021	7	14.57	63.13	7.3	33.43	7.9	24.9	2.92
I19	02 Nov 2021	8	14.51	64.80	7.3	33.42	7.9	24.9	3.10
I19	02 Nov 2021	9	14.49	64.57	7.3	33.42	7.9	24.9	3.06
I19	02 Nov 2021	10	14.47	60.06	7.2	33.42	7.9	24.9	3.24
I19	08 Nov 2021	1	16.09	76.30	7.7	33.49	7.9	24.6	1.19
I19	08 Nov 2021	2	15.96	76.19	7.6	33.49	7.9	24.6	1.21
I19	08 Nov 2021	3	15.57	77.20	7.5	33.51	7.9	24.7	1.26
I19	08 Nov 2021	4	15.32	78.05	7.4	33.48	7.9	24.7	1.27
I19	08 Nov 2021	5	15.16	78.34	7.4	33.48	7.9	24.8	1.32
I19	08 Nov 2021	6	15.11	77.76	7.4	33.45	7.9	24.8	1.44
I19	08 Nov 2021	7	15.12	77.54	7.4	33.45	7.9	24.8	1.64
I19	08 Nov 2021	8	15.11	77.35	7.4	33.45	7.9	24.8	1.76
I19	08 Nov 2021	9	15.10	76.75	7.5	33.45	7.9	24.8	1.92
I19	08 Nov 2021	10	14.78	75.24	7.4	33.49	7.9	24.9	2.02
I19	16 Nov 2021	1	16.19	77.12	8.2	33.47	8.0	24.5	1.44
I19	16 Nov 2021	2	16.12	76.73	8.3	33.47	8.0	24.5	1.50
I19	16 Nov 2021	3	16.04	77.79	8.4	33.47	8.0	24.6	1.80
I19	16 Nov 2021	4	15.94	77.97	8.4	33.47	8.0	24.6	2.21
I19	16 Nov 2021	5	15.76	78.69	8.3	33.47	8.0	24.6	2.48
I19	16 Nov 2021	6	15.41	79.06	8.1	33.48	8.0	24.7	2.65
I19	16 Nov 2021	7	15.08	80.04	7.8	33.44	7.9	24.8	2.70
I19	16 Nov 2021	8	14.94	81.08	7.7	33.42	7.9	24.8	2.61
I19	16 Nov 2021	9	14.90	81.60	7.6	33.41	7.9	24.8	2.58
I19	16 Nov 2021	10	14.84	81.42	7.5	33.42	7.9	24.8	2.50
I19	22 Nov 2021	1	14.30	79.26	7.1	33.42	7.9	24.9	0.86
I19	22 Nov 2021	2	14.31	79.19	7.1	33.42	7.9	24.9	0.87
I19	22 Nov 2021	3	14.29	79.10	7.1	33.42	7.9	24.9	0.89
I19	22 Nov 2021	4	14.27	78.86	7.1	33.42	7.9	24.9	0.90
I19	22 Nov 2021	5	14.25	78.67	7.0	33.42	7.9	24.9	0.93
I19	22 Nov 2021	6	14.21	78.41	7.0	33.42	7.9	24.9	0.95
I19	22 Nov 2021	7	14.18	77.20	7.0	33.42	7.9	24.9	0.99
I19	22 Nov 2021	8	14.16	77.09	6.9	33.42	7.9	24.9	1.11
I19	22 Nov 2021	9	14.15	77.76	7.0	33.42	7.9	24.9	1.21
I19	22 Nov 2021	10	14.04	78.47	6.9	33.44	7.9	25.0	1.29
I19	30 Nov 2021	1	16.34	79.12	9.4	33.48	8.1	24.5	1.79
I19	30 Nov 2021	2	16.30	79.46	9.4	33.50	8.1	24.5	1.80
I19	30 Nov 2021	3	16.11	74.97	9.2	33.50	8.1	24.6	2.12
I19	30 Nov 2021	4	16.01	71.11	9.0	33.49	8.1	24.6	3.80
I19	30 Nov 2021	5	15.97	71.69	8.8	33.48	8.1	24.6	5.42
I19	30 Nov 2021	6	15.95	71.89	8.6	33.48	8.1	24.6	6.49
I19	30 Nov 2021	7	15.93	71.61	8.4	33.48	8.1	24.6	6.22
I19	30 Nov 2021	8	15.92	70.60	8.3	33.48	8.0	24.6	6.01
I19	30 Nov 2021	9	15.89	70.49	8.3	33.48	8.0	24.6	5.49
I19	30 Nov 2021	10	15.84	70.10	8.1	33.48	8.0	24.6	4.80
I24	02 Nov 2021	1	16.34	73.06	8.1	33.46	8.0	24.5	2.93

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I24	02 Nov 2021	2	16.34	73.32	8.1	33.46	8.0	24.5	2.97
I24	02 Nov 2021	3	16.29	73.93	8.1	33.47	8.0	24.5	3.07
I24	02 Nov 2021	4	16.04	73.51	8.1	33.48	8.0	24.6	3.24
I24	02 Nov 2021	5	15.92	74.28	8.1	33.45	8.0	24.6	4.05
I24	02 Nov 2021	6	15.74	77.26	7.9	33.49	8.0	24.6	5.02
I24	02 Nov 2021	7	15.07	77.52	7.6	33.45	8.0	24.8	5.05
I24	02 Nov 2021	8	14.88	74.18	7.3	33.46	7.9	24.8	4.72
I24	02 Nov 2021	9	14.67	66.32	7.2	33.43	7.9	24.8	3.63
I24	02 Nov 2021	10	14.64	62.42	7.1	33.41	7.9	24.8	2.74
I24	02 Nov 2021	11	14.69	59.81	7.2	33.41	7.9	24.8	2.42
I24	08 Nov 2021	1	16.44	79.79	7.6	33.49	8.0	24.5	0.85
I24	08 Nov 2021	2	16.31	79.74	7.6	33.49	8.0	24.5	0.87
I24	08 Nov 2021	3	16.17	81.22	7.7	33.51	8.0	24.6	0.92
I24	08 Nov 2021	4	16.11	80.49	7.7	33.49	8.0	24.6	1.00
I24	08 Nov 2021	5	16.08	80.23	7.7	33.49	8.0	24.6	1.25
I24	08 Nov 2021	6	16.03	80.15	7.5	33.49	8.0	24.6	1.41
I24	08 Nov 2021	7	15.64	79.83	7.3	33.53	8.0	24.7	1.57
I24	08 Nov 2021	8	14.90	78.84	7.1	33.54	7.9	24.9	1.69
I24	08 Nov 2021	9	14.49	77.74	6.9	33.48	7.9	24.9	1.67
I24	08 Nov 2021	10	14.24	64.20	6.8	33.44	7.9	24.9	1.60
I24	08 Nov 2021	11	14.22	55.92	6.7	33.42	7.9	24.9	1.61
I24	16 Nov 2021	1	16.44	76.47	8.6	33.48	8.0	24.5	2.28
I24	16 Nov 2021	2	16.41	76.35	8.6	33.48	8.0	24.5	2.37
I24	16 Nov 2021	3	16.38	76.04	8.6	33.48	8.0	24.5	2.57
I24	16 Nov 2021	4	16.33	76.30	8.6	33.48	8.0	24.5	2.97
I24	16 Nov 2021	5	16.24	76.14	8.6	33.50	8.0	24.5	3.25
I24	16 Nov 2021	6	16.03	76.51	8.6	33.49	8.0	24.6	3.59
I24	16 Nov 2021	7	15.91	77.20	8.6	33.48	8.0	24.6	3.82
I24	16 Nov 2021	8	15.86	77.56	8.6	33.47	8.0	24.6	3.95
I24	16 Nov 2021	9	15.78	77.91	8.4	33.48	8.0	24.6	3.87
I24	16 Nov 2021	10	15.13	76.96	8.1	33.56	8.0	24.8	3.65
I24	22 Nov 2021	1	15.10	80.18	7.5	33.44	8.0	24.7	1.02
I24	22 Nov 2021	2	15.10	79.86	7.5	33.44	8.0	24.7	1.03
I24	22 Nov 2021	3	15.09	80.19	7.5	33.44	8.0	24.7	1.06
I24	22 Nov 2021	4	15.08	80.16	7.5	33.44	8.0	24.8	1.04
I24	22 Nov 2021	5	15.05	80.07	7.5	33.44	8.0	24.8	1.05
I24	22 Nov 2021	6	15.00	79.79	7.5	33.44	8.0	24.8	1.12
I24	22 Nov 2021	7	14.99	79.60	7.6	33.44	8.0	24.8	1.34
I24	22 Nov 2021	8	14.98	79.55	7.5	33.44	8.0	24.8	1.54
I24	22 Nov 2021	9	14.47	79.80	7.3	33.54	7.9	25.0	1.71
I24	22 Nov 2021	10	14.00	81.13	7.0	33.44	7.9	25.0	1.95
I24	22 Nov 2021	11	14.00	81.53	6.8	33.43	7.9	25.0	1.73
I24	30 Nov 2021	1	16.93	84.65	8.3	33.53	8.1	24.4	0.68
I24	30 Nov 2021	2	16.88	84.43	8.4	33.53	8.1	24.4	0.70
I24	30 Nov 2021	3	16.83	83.96	8.4	33.53	8.1	24.4	0.76
I24	30 Nov 2021	4	16.79	83.90	8.4	33.53	8.1	24.4	0.87
I24	30 Nov 2021	5	16.66	83.56	8.6	33.52	8.1	24.5	0.94
I24	30 Nov 2021	6	16.39	81.81	8.8	33.53	8.1	24.5	1.10
I24	30 Nov 2021	7	16.04	76.52	9.0	33.49	8.1	24.6	1.83
I24	30 Nov 2021	8	16.00	74.52	9.0	33.48	8.1	24.6	3.31
I24	30 Nov 2021	9	15.79	75.08	8.6	33.50	8.1	24.6	4.07
I24	30 Nov 2021	10	15.74	75.11	8.1	33.47	8.0	24.6	4.04
I25	02 Nov 2021	1	16.51	71.90	8.4	33.47	8.1	24.5	2.63
I25	02 Nov 2021	2	16.48	74.74	8.4	33.48	8.1	24.5	2.74
I25	02 Nov 2021	3	16.36	74.34	8.3	33.48	8.1	24.5	2.89
I25	02 Nov 2021	4	16.24	73.68	8.3	33.47	8.1	24.5	3.49

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I25	02 Nov 2021	5	16.16	75.99	8.1	33.48	8.1	24.5	4.30
I25	02 Nov 2021	6	15.41	78.59	7.8	33.51	8.0	24.7	4.83
I25	02 Nov 2021	7	15.05	78.03	7.5	33.45	8.0	24.8	4.71
I25	02 Nov 2021	8	14.91	76.25	7.4	33.44	8.0	24.8	3.95
I25	02 Nov 2021	9	15.19	75.02	7.5	33.34	8.0	24.6	3.25
I25	08 Nov 2021	1	16.36	81.66	7.6	33.49	8.0	24.5	0.94
I25	08 Nov 2021	2	16.16	81.35	7.7	33.50	8.0	24.6	0.96
I25	08 Nov 2021	3	16.09	80.73	7.7	33.49	8.0	24.6	1.03
I25	08 Nov 2021	4	16.07	79.79	7.7	33.48	8.0	24.6	1.19
I25	08 Nov 2021	5	16.04	79.49	7.6	33.48	8.0	24.6	1.35
I25	08 Nov 2021	6	15.92	79.40	7.6	33.50	8.0	24.6	1.53
I25	08 Nov 2021	7	15.72	79.30	7.5	33.51	7.9	24.7	1.69
I25	08 Nov 2021	8	15.33	78.90	7.3	33.52	7.9	24.8	1.84
I25	08 Nov 2021	9	14.79	78.93	7.1	33.56	7.9	24.9	1.84
I25	16 Nov 2021	1	16.50	73.21	8.5	33.45	8.0	24.4	3.36
I25	16 Nov 2021	2	16.52	69.27	8.5	33.44	8.0	24.4	3.34
I25	16 Nov 2021	3	16.38	73.31	8.4	33.49	8.0	24.5	3.30
I25	16 Nov 2021	4	16.26	73.81	8.3	33.47	8.0	24.5	3.46
I25	16 Nov 2021	5	16.24	74.53	8.2	33.47	8.0	24.5	3.65
I25	16 Nov 2021	6	16.22	74.74	8.2	33.47	8.0	24.5	3.62
I25	16 Nov 2021	7	15.94	75.28	8.2	33.51	8.0	24.6	3.56
I25	16 Nov 2021	8	15.58	76.41	8.1	33.47	8.0	24.7	3.46
I25	22 Nov 2021	1	15.36	78.05	7.9	33.45	8.0	24.7	1.95
I25	22 Nov 2021	2	15.33	79.67	7.9	33.46	8.0	24.7	1.84
I25	22 Nov 2021	3	15.27	79.80	7.9	33.45	8.0	24.7	1.75
I25	22 Nov 2021	4	15.24	80.10	7.9	33.45	8.0	24.7	1.87
I25	22 Nov 2021	5	15.22	80.65	7.8	33.45	8.0	24.7	1.93
I25	22 Nov 2021	6	15.20	80.84	7.8	33.45	8.0	24.7	2.06
I25	22 Nov 2021	7	15.15	81.00	7.7	33.45	8.0	24.7	2.02
I25	22 Nov 2021	8	15.08	81.56	7.7	33.46	8.0	24.8	2.11
I25	22 Nov 2021	9	14.65	82.08	7.5	33.54	8.0	24.9	2.13
I25	30 Nov 2021	1	16.85	73.65	8.4	33.49	8.1	24.4	0.95
I25	30 Nov 2021	2	16.79	80.49	8.4	33.52	8.1	24.4	0.92
I25	30 Nov 2021	3	16.64	83.32	8.4	33.52	8.1	24.5	0.95
I25	30 Nov 2021	4	16.54	83.16	8.6	33.52	8.1	24.5	1.05
I25	30 Nov 2021	5	16.36	83.67	8.8	33.53	8.1	24.5	1.12
I25	30 Nov 2021	6	16.14	82.69	9.0	33.51	8.1	24.6	1.26
I25	30 Nov 2021	7	15.94	81.37	8.9	33.52	8.1	24.6	1.50
I25	30 Nov 2021	8	15.74	77.90	8.4	33.49	8.0	24.6	1.95
I26	02 Nov 2021	1	16.55	75.25	8.4	33.47	8.1	24.4	2.50
I26	02 Nov 2021	2	16.54	75.40	8.4	33.48	8.1	24.5	2.49
I26	02 Nov 2021	3	16.49	75.17	8.4	33.48	8.1	24.5	2.47
I26	02 Nov 2021	4	16.37	74.43	8.3	33.49	8.1	24.5	2.70
I26	02 Nov 2021	5	16.02	74.62	8.2	33.50	8.1	24.6	3.20
I26	02 Nov 2021	6	15.61	78.67	7.8	33.48	8.0	24.7	4.12
I26	02 Nov 2021	7	14.82	80.60	7.6	33.48	8.0	24.8	4.48
I26	02 Nov 2021	8	14.47	78.73	7.4	33.42	8.0	24.9	4.22
I26	02 Nov 2021	9	14.48	78.17	7.3	33.40	7.9	24.9	3.74
I26	08 Nov 2021	1	16.16	75.74	7.8	33.49	8.0	24.6	0.98
I26	08 Nov 2021	2	15.94	75.25	7.8	33.51	8.0	24.6	0.99
I26	08 Nov 2021	3	15.84	74.97	7.7	33.48	7.9	24.6	1.05
I26	08 Nov 2021	4	15.82	75.26	7.6	33.48	7.9	24.6	1.14
I26	08 Nov 2021	5	15.82	75.76	7.6	33.47	7.9	24.6	1.35
I26	08 Nov 2021	6	15.82	76.37	7.6	33.47	7.9	24.6	1.56
I26	08 Nov 2021	7	15.72	77.30	7.5	33.50	7.9	24.7	1.70

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I26	08 Nov 2021	8	15.33	78.93	7.4	33.55	7.9	24.8	1.83
I26	08 Nov 2021	9	14.50	80.33	7.3	33.58	7.9	25.0	1.87
I26	16 Nov 2021	1	16.38	75.09	8.6	33.47	8.0	24.5	2.97
I26	16 Nov 2021	2	16.29	75.47	8.7	33.48	8.0	24.5	3.13
I26	16 Nov 2021	3	15.79	76.86	8.4	33.52	8.0	24.7	3.45
I26	16 Nov 2021	4	15.52	78.34	8.2	33.48	8.0	24.7	3.42
I26	16 Nov 2021	5	15.26	78.57	8.1	33.45	8.0	24.7	3.58
I26	16 Nov 2021	6	15.24	78.75	8.0	33.44	8.0	24.7	3.19
I26	16 Nov 2021	7	15.21	78.97	7.9	33.44	7.9	24.7	2.95
I26	16 Nov 2021	8	15.09	79.32	7.7	33.44	7.9	24.7	2.98
I26	16 Nov 2021	9	15.09	79.15	7.6	33.43	7.9	24.7	2.71
I26	22 Nov 2021	1	15.55	80.43	8.0	33.45	8.0	24.7	1.24
I26	22 Nov 2021	2	15.54	80.81	8.0	33.46	8.0	24.7	1.27
I26	22 Nov 2021	3	15.46	80.75	8.0	33.47	8.0	24.7	1.25
I26	22 Nov 2021	4	15.40	79.70	8.0	33.47	8.0	24.7	1.23
I26	22 Nov 2021	5	15.36	79.14	8.0	33.46	8.0	24.7	1.44
I26	22 Nov 2021	6	15.20	80.30	7.9	33.50	8.0	24.8	1.77
I26	22 Nov 2021	7	14.56	82.09	7.6	33.57	8.0	25.0	2.10
I26	22 Nov 2021	8	14.05	82.72	7.2	33.50	7.9	25.0	2.23
I26	22 Nov 2021	9	13.99	83.83	6.9	33.44	7.9	25.0	1.95
I26	30 Nov 2021	1	16.52	83.66	8.7	33.50	8.1	24.5	0.69
I26	30 Nov 2021	2	16.53	83.76	8.7	33.50	8.1	24.5	0.71
I26	30 Nov 2021	3	16.45	83.64	8.7	33.52	8.1	24.5	0.72
I26	30 Nov 2021	4	16.37	83.73	8.7	33.50	8.1	24.5	0.76
I26	30 Nov 2021	5	16.34	83.47	8.7	33.50	8.1	24.5	0.82
I26	30 Nov 2021	6	16.25	83.48	8.7	33.51	8.1	24.5	0.93
I26	30 Nov 2021	7	16.06	83.23	8.6	33.50	8.1	24.6	1.07
I26	30 Nov 2021	8	15.90	82.07	8.3	33.50	8.0	24.6	1.17
I26	30 Nov 2021	9	15.87	81.08	8.1	33.48	8.0	24.6	1.21
I32	02 Nov 2021	1	15.78	70.06	8.0	33.43	8.0	24.6	1.83
I32	02 Nov 2021	2	15.71	66.51	7.9	33.45	8.0	24.6	1.84
I32	02 Nov 2021	3	15.18	68.42	7.7	33.53	8.0	24.8	1.86
I32	02 Nov 2021	4	14.74	71.09	7.4	33.45	7.9	24.8	1.84
I32	02 Nov 2021	5	14.67	75.16	7.3	33.44	7.9	24.8	1.90
I32	02 Nov 2021	6	14.61	77.49	7.3	33.43	7.9	24.8	2.06
I32	02 Nov 2021	7	14.57	77.39	7.3	33.43	7.9	24.9	2.31
I32	02 Nov 2021	8	14.50	77.22	7.3	33.43	7.9	24.9	2.41
I32	02 Nov 2021	9	14.46	77.01	7.3	33.43	7.9	24.9	2.57
I32	02 Nov 2021	10	14.45	72.22	7.3	33.42	7.9	24.9	2.53
I32	08 Nov 2021	1	15.91	78.83	7.6	33.47	7.9	24.6	0.86
I32	08 Nov 2021	2	15.61	78.71	7.6	33.52	7.9	24.7	0.88
I32	08 Nov 2021	3	15.34	78.32	7.6	33.48	7.9	24.7	0.92
I32	08 Nov 2021	4	15.22	77.69	7.6	33.47	7.9	24.7	1.00
I32	08 Nov 2021	5	15.15	77.56	7.5	33.46	7.9	24.8	1.07
I32	08 Nov 2021	6	14.95	78.18	7.3	33.47	7.9	24.8	1.16
I32	08 Nov 2021	7	14.71	78.77	7.2	33.47	7.9	24.9	1.37
I32	08 Nov 2021	8	14.48	79.11	7.1	33.47	7.9	24.9	1.44
I32	08 Nov 2021	9	14.12	78.49	7.0	33.47	7.9	25.0	1.53
I32	08 Nov 2021	10	14.00	73.81	6.9	33.44	7.9	25.0	1.57
I32	16 Nov 2021	1	16.32	73.37	8.4	33.47	8.0	24.5	3.11
I32	16 Nov 2021	2	16.27	73.20	8.5	33.46	8.0	24.5	3.15
I32	16 Nov 2021	3	16.25	73.03	8.6	33.46	8.0	24.5	3.57
I32	16 Nov 2021	4	16.24	73.47	8.6	33.46	8.0	24.5	4.17
I32	16 Nov 2021	5	16.15	74.30	8.5	33.48	8.0	24.5	4.50
I32	16 Nov 2021	6	16.01	76.66	8.4	33.47	8.0	24.6	4.43

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I32	16 Nov 2021	7	15.72	77.41	8.2	33.49	8.0	24.7	3.85
I32	16 Nov 2021	8	15.28	76.78	8.1	33.47	8.0	24.7	3.41
I32	16 Nov 2021	9	15.37	78.73	8.0	33.44	8.0	24.7	3.22
I32	16 Nov 2021	10	15.20	79.66	8.0	33.46	8.0	24.7	2.98
I32	22 Nov 2021	1	15.01	76.14	7.7	33.43	8.0	24.8	1.50
I32	22 Nov 2021	2	15.02	78.26	7.7	33.43	8.0	24.8	1.50
I32	22 Nov 2021	3	14.97	77.98	7.6	33.44	8.0	24.8	1.54
I32	22 Nov 2021	4	14.63	77.85	7.5	33.49	8.0	24.9	1.62
I32	22 Nov 2021	5	14.17	78.11	7.1	33.47	7.9	25.0	1.82
I32	22 Nov 2021	6	13.96	79.74	6.9	33.44	7.9	25.0	2.00
I32	22 Nov 2021	7	13.91	80.72	6.8	33.42	7.9	25.0	2.05
I32	22 Nov 2021	8	13.87	81.49	6.7	33.42	7.9	25.0	1.82
I32	22 Nov 2021	9	13.85	81.84	6.7	33.41	7.9	25.0	1.63
I32	22 Nov 2021	10	13.85	81.94	6.7	33.41	7.9	25.0	1.43
I32	30 Nov 2021	1	16.26	81.05	9.7	33.47	8.1	24.5	1.19
I32	30 Nov 2021	2	16.16	80.84	9.8	33.48	8.1	24.5	1.03
I32	30 Nov 2021	3	16.10	79.83	9.9	33.47	8.1	24.6	0.99
I32	30 Nov 2021	4	16.07	77.94	9.9	33.47	8.1	24.6	1.16
I32	30 Nov 2021	5	16.06	75.29	9.8	33.47	8.1	24.6	1.90
I32	30 Nov 2021	6	16.02	73.14	9.6	33.47	8.1	24.6	3.27
I32	30 Nov 2021	7	16.00	73.66	9.2	33.47	8.1	24.6	4.68
I32	30 Nov 2021	8	15.97	76.49	8.9	33.47	8.1	24.6	5.17
I32	30 Nov 2021	9	15.96	78.46	8.9	33.47	8.1	24.6	4.22
I39	02 Nov 2021	1	16.89	70.04	8.5	33.50	8.1	24.4	2.67
I39	02 Nov 2021	2	16.89	76.54	8.5	33.50	8.1	24.4	2.68
I39	02 Nov 2021	3	16.88	76.79	8.5	33.51	8.1	24.4	2.74
I39	02 Nov 2021	4	16.83	76.38	8.5	33.50	8.1	24.4	2.87
I39	02 Nov 2021	5	16.81	76.04	8.7	33.50	8.1	24.4	3.15
I39	02 Nov 2021	6	16.81	75.80	8.7	33.49	8.1	24.4	3.56
I39	02 Nov 2021	7	16.81	75.65	8.7	33.49	8.1	24.4	3.83
I39	02 Nov 2021	8	16.81	75.66	8.7	33.49	8.1	24.4	4.00
I39	02 Nov 2021	9	16.80	75.51	8.7	33.49	8.1	24.4	4.08
I39	02 Nov 2021	10	16.79	75.52	8.6	33.50	8.1	24.4	4.22
I39	02 Nov 2021	11	16.76	75.19	8.6	33.50	8.1	24.4	4.31
I39	02 Nov 2021	12	16.69	75.36	8.4	33.51	8.1	24.4	4.50
I39	02 Nov 2021	13	16.27	77.04	8.2	33.53	8.1	24.6	4.51
I39	02 Nov 2021	14	16.28	78.74	8.0	33.49	8.0	24.5	4.48
I39	02 Nov 2021	15	15.80	80.61	7.8	33.54	8.0	24.7	4.18
I39	02 Nov 2021	16	15.38	82.45	7.7	33.49	8.0	24.7	3.93
I39	02 Nov 2021	17	14.81	82.15	7.4	33.53	8.0	24.9	3.60
I39	02 Nov 2021	18	14.16	78.83	7.1	33.48	7.9	25.0	3.22
I39	08 Nov 2021	1	17.55	84.03	8.1	33.54	8.0	24.3	0.87
I39	08 Nov 2021	2	17.51	83.81	8.0	33.55	8.0	24.3	0.86
I39	08 Nov 2021	3	17.37	83.91	8.0	33.55	8.0	24.3	0.85
I39	08 Nov 2021	4	16.93	83.41	7.9	33.57	8.0	24.4	0.95
I39	08 Nov 2021	5	16.67	83.07	7.8	33.53	8.0	24.5	1.10
I39	08 Nov 2021	6	16.61	81.32	7.6	33.51	8.0	24.5	1.25
I39	08 Nov 2021	7	16.55	80.36	7.6	33.51	8.0	24.5	1.38
I39	08 Nov 2021	8	16.52	79.87	7.6	33.52	8.0	24.5	1.68
I39	08 Nov 2021	9	16.40	77.89	7.7	33.52	8.0	24.5	2.01
I39	08 Nov 2021	10	16.32	78.01	7.8	33.51	8.0	24.5	2.28
I39	08 Nov 2021	11	16.19	78.66	7.8	33.51	8.0	24.6	2.47
I39	08 Nov 2021	12	16.09	79.03	7.8	33.50	8.0	24.6	2.58
I39	08 Nov 2021	13	15.89	79.70	7.7	33.51	8.0	24.6	2.62
I39	08 Nov 2021	14	15.77	80.57	7.6	33.49	8.0	24.6	2.65
I39	08 Nov 2021	15	15.77	80.28	7.6	33.48	7.9	24.6	2.52
I39	08 Nov 2021	16	15.73	81.20	7.5	33.49	7.9	24.6	2.31

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma-t$ )	Chlor ( $\mu\text{g/L}$ )
I39	08 Nov 2021	17	15.63	81.54	7.4	33.49	7.9	24.7	2.27
I39	08 Nov 2021	18	15.39	81.90	7.3	33.52	7.9	24.7	2.14
I39	16 Nov 2021	1	16.64	81.24	8.3	33.49	8.0	24.4	1.99
I39	16 Nov 2021	2	16.64	81.22	8.3	33.49	8.0	24.4	2.00
I39	16 Nov 2021	3	16.62	81.05	8.3	33.50	8.0	24.4	1.97
I39	16 Nov 2021	4	16.60	80.90	8.3	33.49	8.0	24.5	2.03
I39	16 Nov 2021	5	16.59	80.78	8.3	33.49	8.0	24.5	2.22
I39	16 Nov 2021	6	16.58	80.68	8.3	33.49	8.0	24.5	2.39
I39	16 Nov 2021	7	16.57	80.83	8.3	33.49	8.0	24.5	2.43
I39	16 Nov 2021	8	16.56	80.96	8.3	33.49	8.0	24.5	2.51
I39	16 Nov 2021	9	16.55	81.02	8.2	33.49	8.0	24.5	2.57
I39	16 Nov 2021	10	16.56	81.13	8.3	33.49	8.0	24.5	2.60
I39	16 Nov 2021	11	16.55	81.20	8.2	33.49	8.0	24.5	2.58
I39	16 Nov 2021	12	16.51	81.14	8.2	33.49	8.0	24.5	2.56
I39	16 Nov 2021	13	16.00	81.97	8.0	33.55	8.0	24.6	2.56
I39	16 Nov 2021	14	15.18	83.01	7.7	33.45	8.0	24.7	2.55
I39	16 Nov 2021	15	15.05	83.62	7.6	33.40	7.9	24.7	2.36
I39	16 Nov 2021	16	15.00	83.87	7.6	33.39	7.9	24.7	2.21
I39	16 Nov 2021	17	14.86	83.68	7.4	33.43	7.9	24.8	2.13
I39	16 Nov 2021	18	14.51	83.22	7.2	33.41	7.9	24.9	2.00
I39	22 Nov 2021	1	15.89	82.05	8.0	33.47	8.0	24.6	1.05
I39	22 Nov 2021	2	15.85	81.89	8.0	33.48	8.0	24.6	1.07
I39	22 Nov 2021	3	15.78	81.74	8.0	33.48	8.0	24.6	1.09
I39	22 Nov 2021	4	15.75	81.62	8.0	33.48	8.0	24.6	1.16
I39	22 Nov 2021	5	15.54	81.80	7.8	33.50	8.0	24.7	1.22
I39	22 Nov 2021	6	15.29	82.32	7.8	33.49	8.0	24.7	1.31
I39	22 Nov 2021	7	15.14	83.22	7.7	33.47	8.0	24.8	1.39
I39	22 Nov 2021	8	15.07	84.01	7.6	33.45	8.0	24.8	1.44
I39	22 Nov 2021	9	15.01	84.39	7.6	33.45	8.0	24.8	1.48
I39	22 Nov 2021	10	14.89	84.73	7.5	33.45	8.0	24.8	1.48
I39	22 Nov 2021	11	14.84	85.05	7.5	33.44	8.0	24.8	1.47
I39	22 Nov 2021	12	14.67	85.33	7.4	33.47	8.0	24.9	1.53
I39	22 Nov 2021	13	14.47	85.39	7.2	33.46	7.9	24.9	1.52
I39	22 Nov 2021	14	14.31	85.48	7.1	33.46	7.9	24.9	1.50
I39	22 Nov 2021	15	14.18	85.70	7.0	33.45	7.9	25.0	1.44
I39	22 Nov 2021	16	13.97	85.73	6.8	33.46	7.9	25.0	1.37
I39	22 Nov 2021	17	13.76	85.73	6.7	33.46	7.9	25.0	1.32
I39	22 Nov 2021	18	13.71	85.82	6.7	33.44	7.9	25.0	1.23
I39	30 Nov 2021	1	17.12	86.12	8.0	33.53	8.0	24.4	0.62
I39	30 Nov 2021	2	17.11	86.20	8.0	33.54	8.0	24.4	0.59
I39	30 Nov 2021	3	17.07	85.94	8.0	33.54	8.0	24.4	0.58
I39	30 Nov 2021	4	17.06	85.78	8.0	33.53	8.0	24.4	0.58
I39	30 Nov 2021	5	17.05	85.80	8.0	33.53	8.0	24.4	0.62
I39	30 Nov 2021	6	17.04	85.81	8.0	33.53	8.0	24.4	0.68
I39	30 Nov 2021	7	17.04	85.87	8.0	33.53	8.0	24.4	0.75
I39	30 Nov 2021	8	17.03	86.09	8.0	33.53	8.0	24.4	0.80
I39	30 Nov 2021	9	17.02	86.14	7.9	33.53	8.0	24.4	0.82
I39	30 Nov 2021	10	17.01	86.08	8.0	33.53	8.0	24.4	0.85
I39	30 Nov 2021	11	16.96	86.05	8.0	33.53	8.0	24.4	0.88
I39	30 Nov 2021	12	16.79	86.16	7.9	33.54	8.0	24.4	0.90
I39	30 Nov 2021	13	16.55	86.10	8.0	33.52	8.0	24.5	0.96
I39	30 Nov 2021	14	16.44	85.94	8.3	33.51	8.0	24.5	1.05
I39	30 Nov 2021	15	16.34	85.73	8.4	33.52	8.0	24.5	1.07
I39	30 Nov 2021	16	15.99	85.23	8.3	33.53	8.0	24.6	1.19
I39	30 Nov 2021	17	15.57	84.20	8.0	33.51	8.0	24.7	1.30
I39	30 Nov 2021	18	15.44	82.76	7.6	33.48	8.0	24.7	1.39
I40	02 Nov 2021	1	16.03	66.04	7.7	33.47	8.0	24.6	2.18

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I40	02 Nov 2021	2	15.79	67.65	7.6	33.49	8.0	24.6	2.33
I40	02 Nov 2021	3	15.62	67.46	7.6	33.47	8.0	24.7	2.22
I40	02 Nov 2021	4	15.48	67.94	7.6	33.46	8.0	24.7	2.36
I40	02 Nov 2021	5	15.29	69.34	7.6	33.45	8.0	24.7	2.48
I40	02 Nov 2021	6	14.98	73.21	7.7	33.49	8.0	24.8	2.63
I40	02 Nov 2021	7	14.67	76.93	7.6	33.47	8.0	24.9	2.90
I40	02 Nov 2021	8	14.55	76.58	7.5	33.44	7.9	24.9	3.00
I40	02 Nov 2021	9	14.51	73.22	7.4	33.43	7.9	24.9	3.01
I40	02 Nov 2021	10	14.49	63.56	7.2	33.43	7.9	24.9	3.59
I40	08 Nov 2021	1	16.22	78.81	7.8	33.50	8.0	24.5	0.98
I40	08 Nov 2021	2	16.02	78.20	7.7	33.51	8.0	24.6	0.99
I40	08 Nov 2021	3	15.67	77.27	7.6	33.52	7.9	24.7	1.09
I40	08 Nov 2021	4	15.12	76.08	7.4	33.51	7.9	24.8	1.21
I40	08 Nov 2021	5	15.02	72.28	7.3	33.46	7.9	24.8	1.35
I40	08 Nov 2021	6	14.97	67.22	7.3	33.45	7.9	24.8	1.71
I40	08 Nov 2021	7	14.94	65.40	7.3	33.45	7.9	24.8	2.12
I40	08 Nov 2021	8	14.74	62.31	7.3	33.46	7.9	24.8	2.48
I40	08 Nov 2021	9	14.57	55.02	7.1	33.45	7.9	24.9	2.60
I40	08 Nov 2021	10	14.38	43.93	6.8	33.44	7.9	24.9	2.73
I40	16 Nov 2021	1	16.17	76.56	8.4	33.46	8.0	24.5	1.93
I40	16 Nov 2021	2	16.12	76.59	8.4	33.47	8.0	24.5	1.93
I40	16 Nov 2021	3	16.02	76.89	8.4	33.47	8.0	24.6	2.05
I40	16 Nov 2021	4	15.96	77.00	8.5	33.47	8.0	24.6	2.41
I40	16 Nov 2021	5	15.80	77.29	8.5	33.47	8.0	24.6	2.57
I40	16 Nov 2021	6	15.78	77.40	8.5	33.46	8.0	24.6	2.96
I40	16 Nov 2021	7	15.73	77.67	8.5	33.46	8.0	24.6	3.05
I40	16 Nov 2021	8	15.60	76.93	8.4	33.46	8.0	24.7	3.18
I40	16 Nov 2021	9	15.20	75.28	8.1	33.48	8.0	24.8	3.33
I40	22 Nov 2021	1	14.54	76.49	7.3	33.42	7.9	24.9	0.97
I40	22 Nov 2021	2	14.53	76.59	7.3	33.41	7.9	24.9	0.97
I40	22 Nov 2021	3	14.54	76.49	7.3	33.42	7.9	24.9	1.00
I40	22 Nov 2021	4	14.48	76.40	7.3	33.43	7.9	24.9	1.02
I40	22 Nov 2021	5	14.43	75.93	7.3	33.42	7.9	24.9	1.07
I40	22 Nov 2021	6	14.37	74.61	7.2	33.42	7.9	24.9	1.23
I40	22 Nov 2021	7	14.34	73.67	7.2	33.42	7.9	24.9	1.32
I40	22 Nov 2021	8	14.29	73.32	7.1	33.42	7.9	24.9	1.52
I40	22 Nov 2021	9	14.26	73.60	7.0	33.42	7.9	24.9	1.71
I40	22 Nov 2021	10	14.13	74.53	6.9	33.44	7.9	25.0	1.83
I40	30 Nov 2021	1	16.60	81.29	8.2	33.51	8.1	24.5	0.86
I40	30 Nov 2021	2	16.57	81.21	8.2	33.51	8.1	24.5	0.91
I40	30 Nov 2021	3	16.57	80.99	8.2	33.51	8.1	24.5	0.95
I40	30 Nov 2021	4	16.47	80.92	8.2	33.51	8.1	24.5	1.01
I40	30 Nov 2021	5	16.45	80.63	8.1	33.51	8.1	24.5	1.16
I40	30 Nov 2021	6	16.23	80.38	8.0	33.51	8.0	24.5	1.29
I40	30 Nov 2021	7	16.23	79.83	8.0	33.49	8.0	24.5	1.38
I40	30 Nov 2021	8	16.21	79.82	7.9	33.49	8.0	24.5	1.45
I40	30 Nov 2021	9	15.91	79.51	7.8	33.53	8.0	24.6	1.40
I40	30 Nov 2021	10	15.63	79.28	7.5	33.49	8.0	24.7	1.43

NA = not available

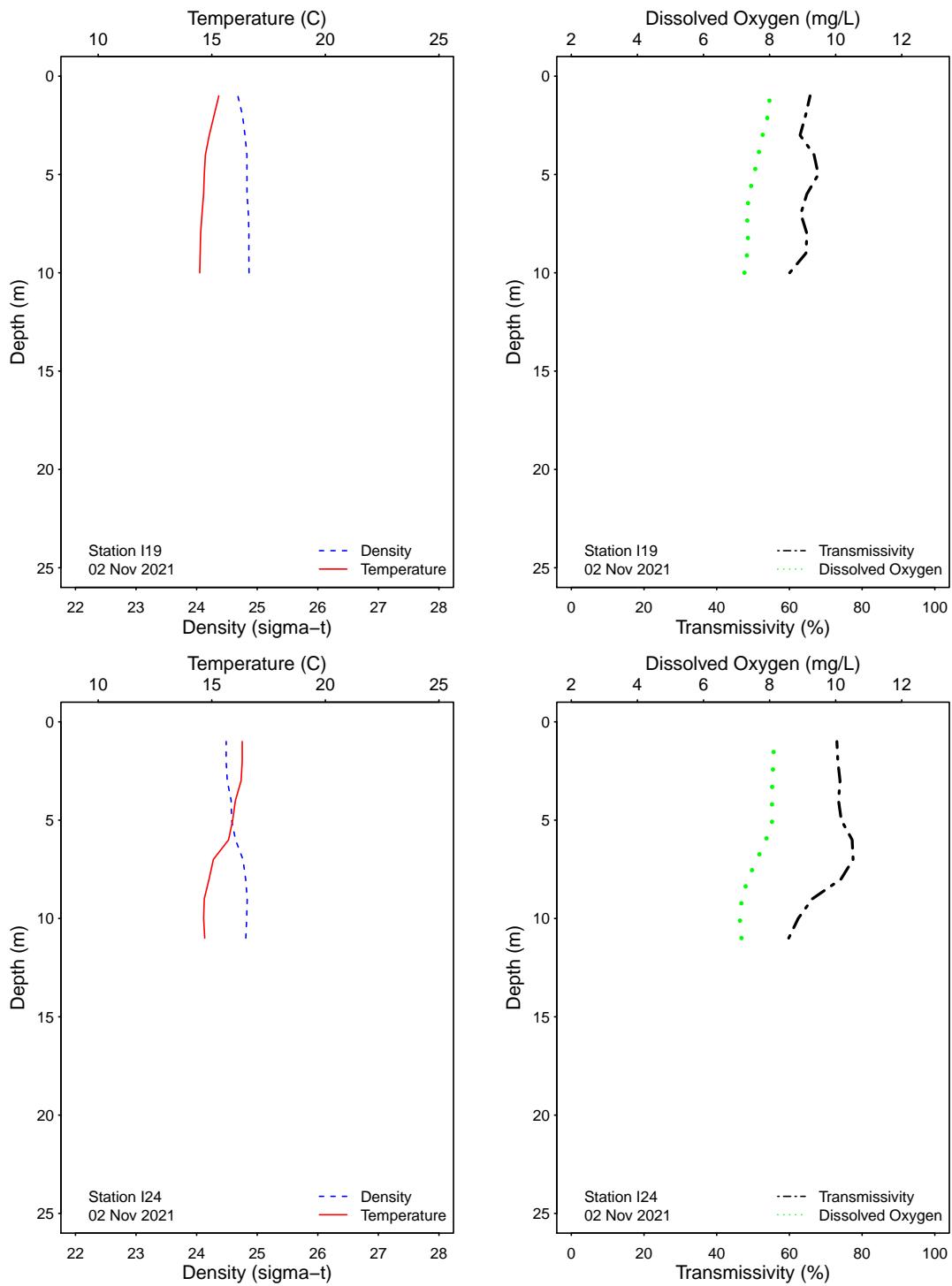


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

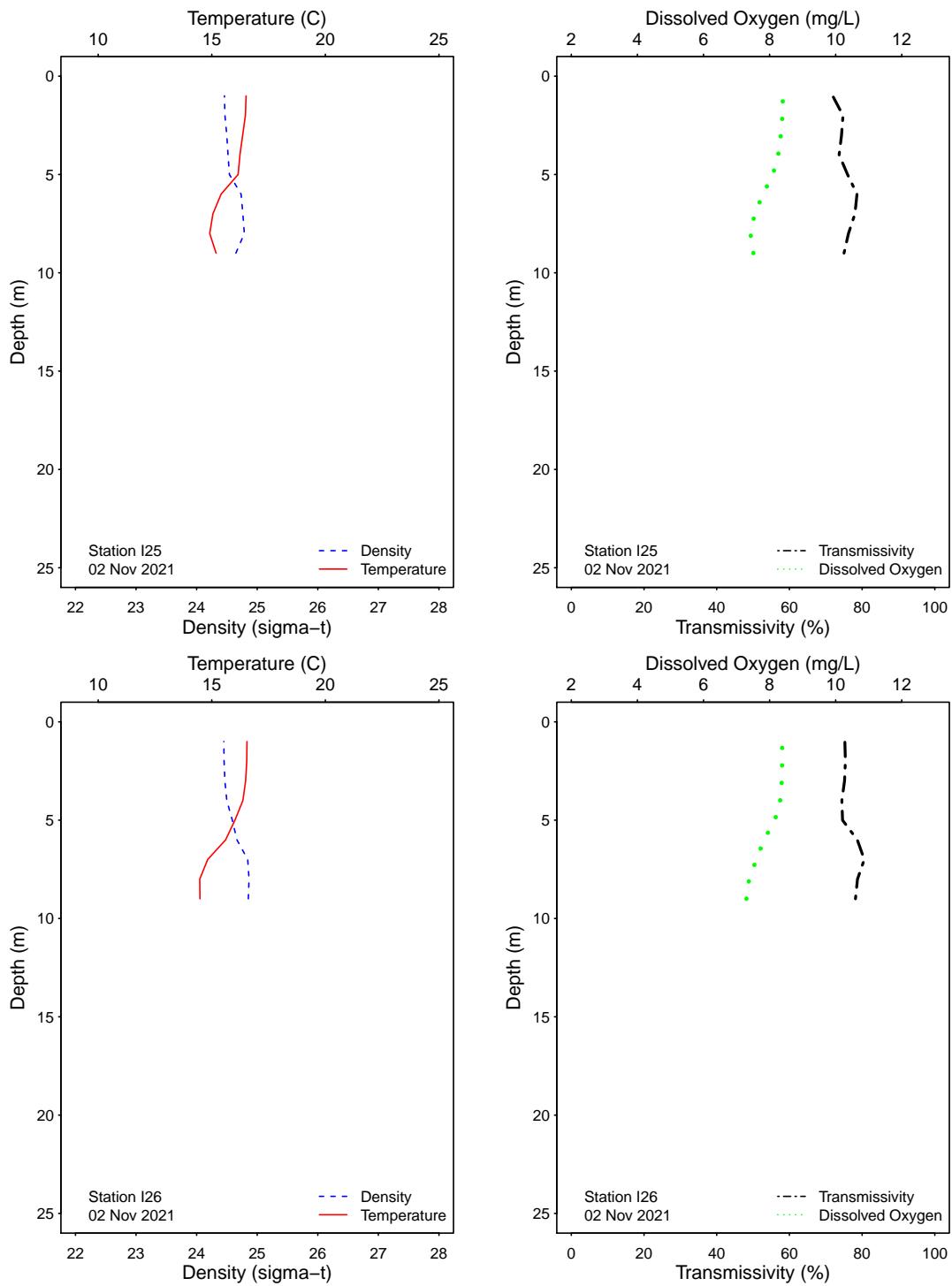


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

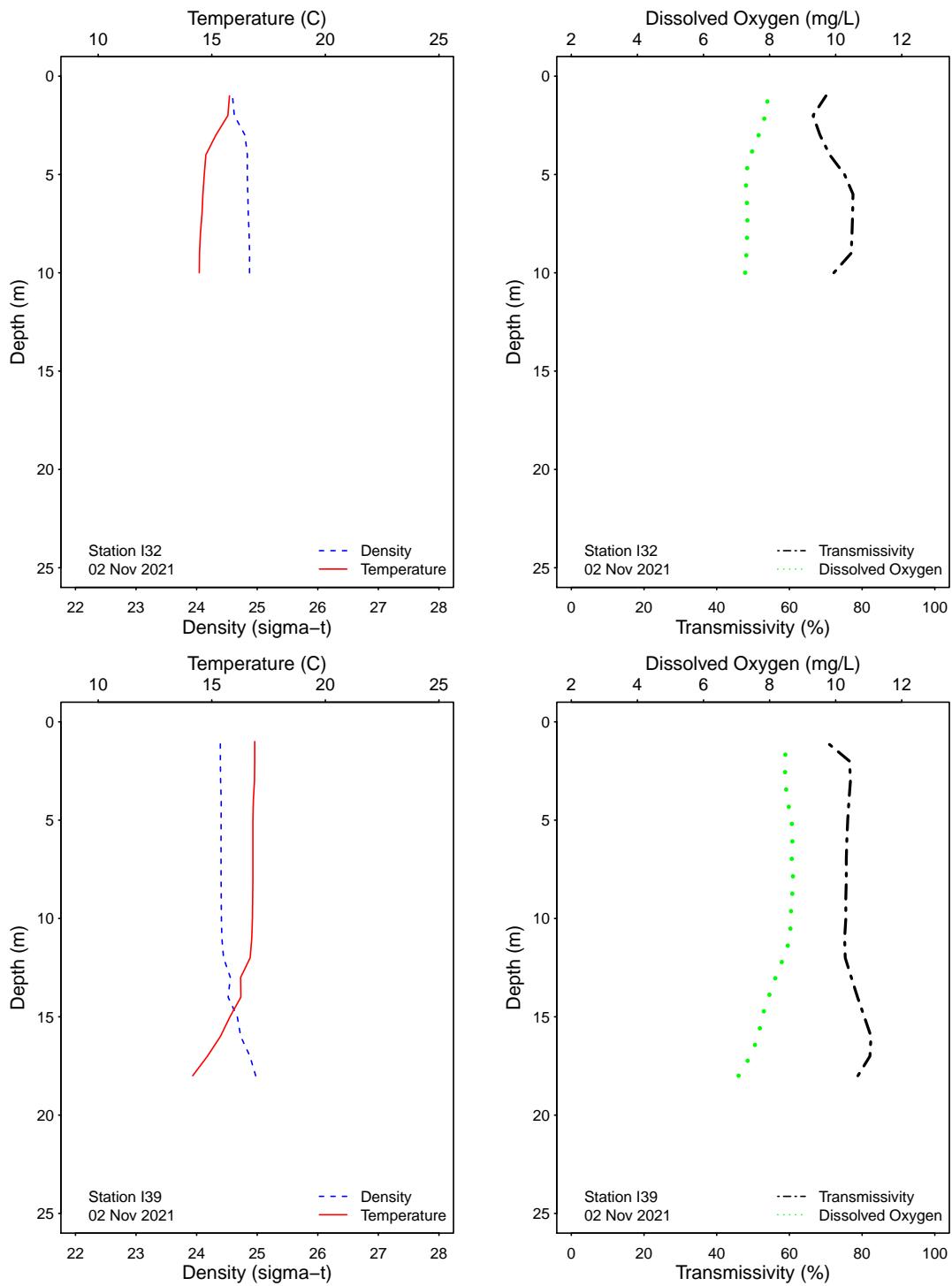


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

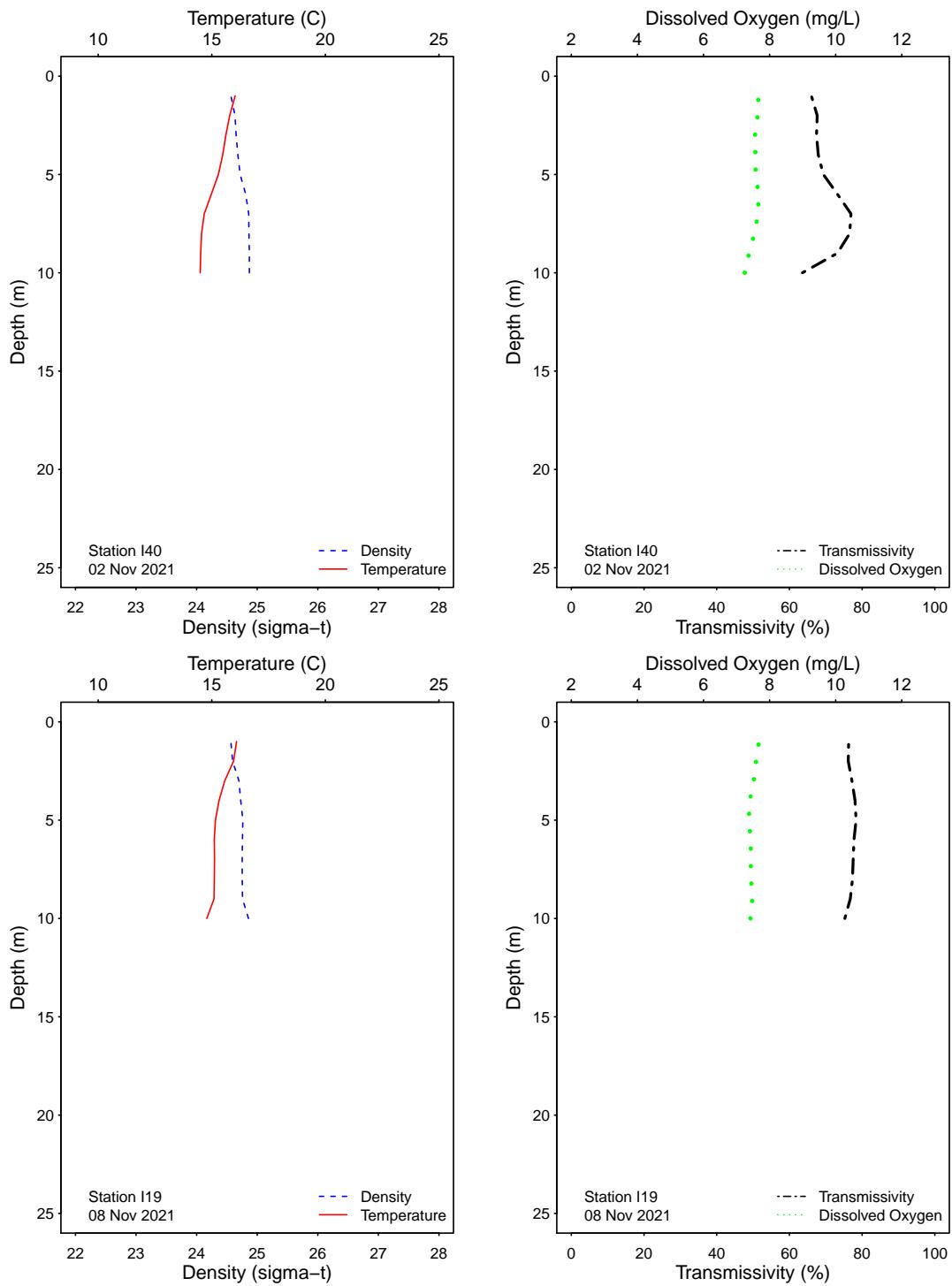


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

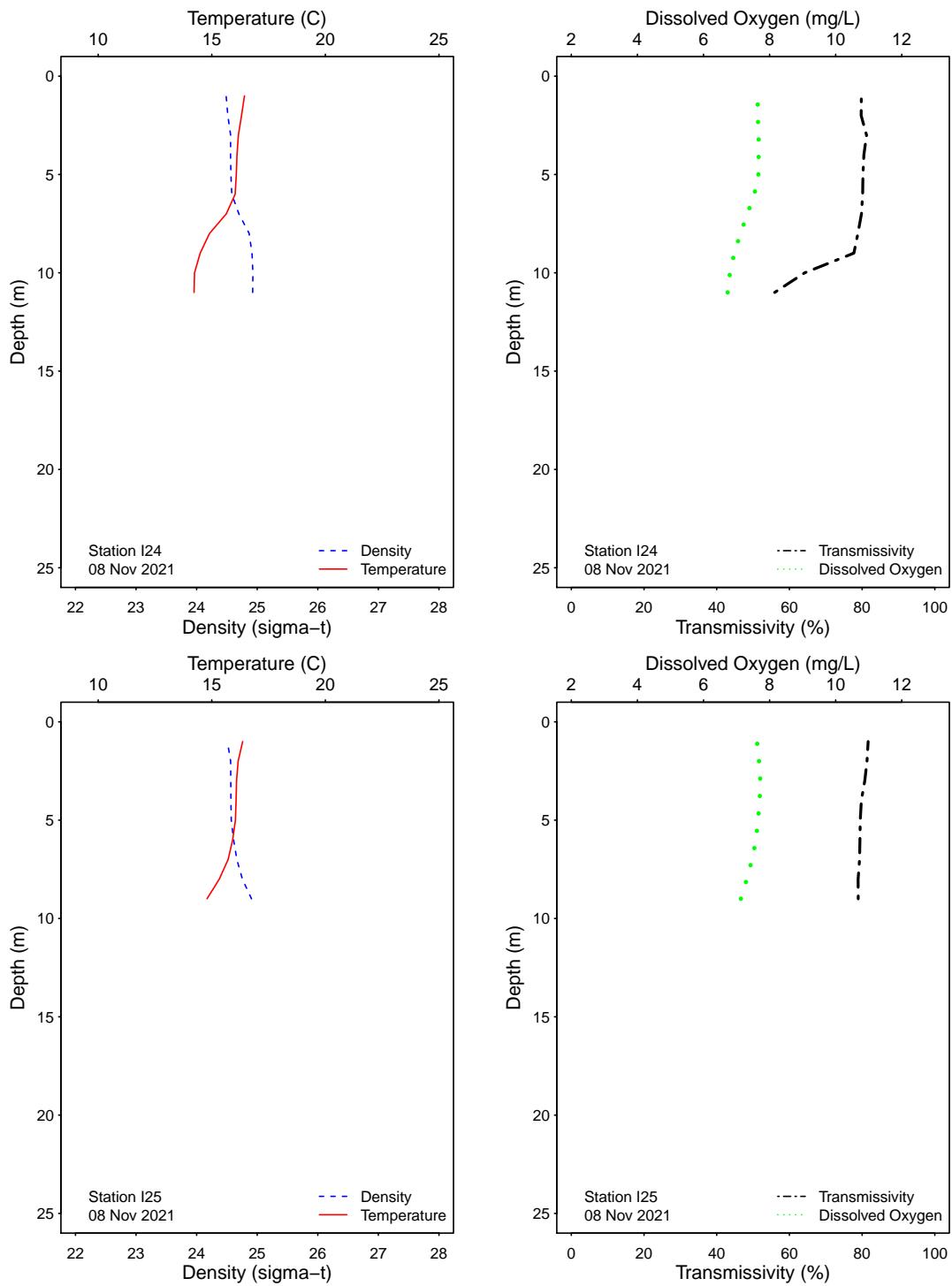


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

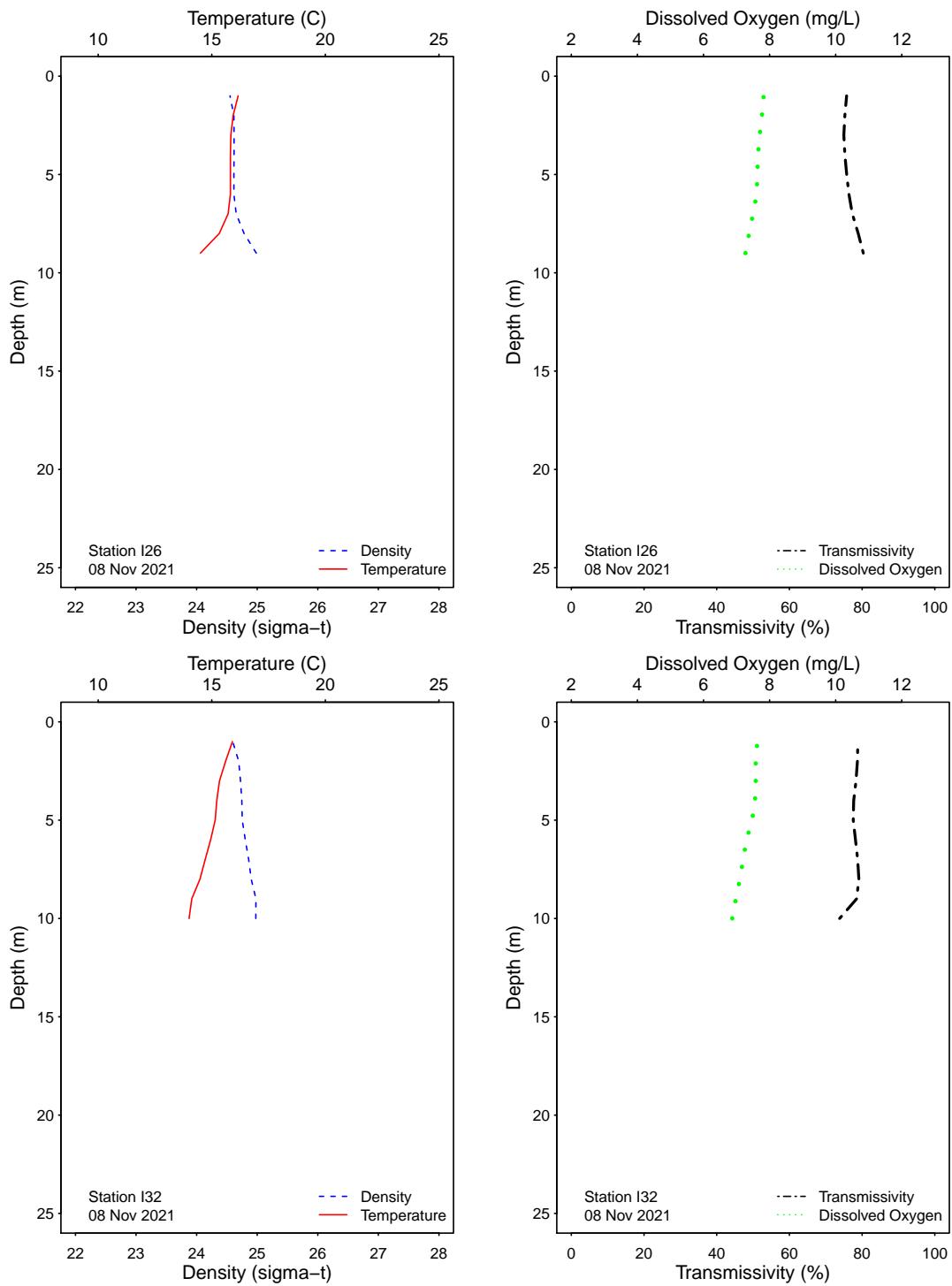


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

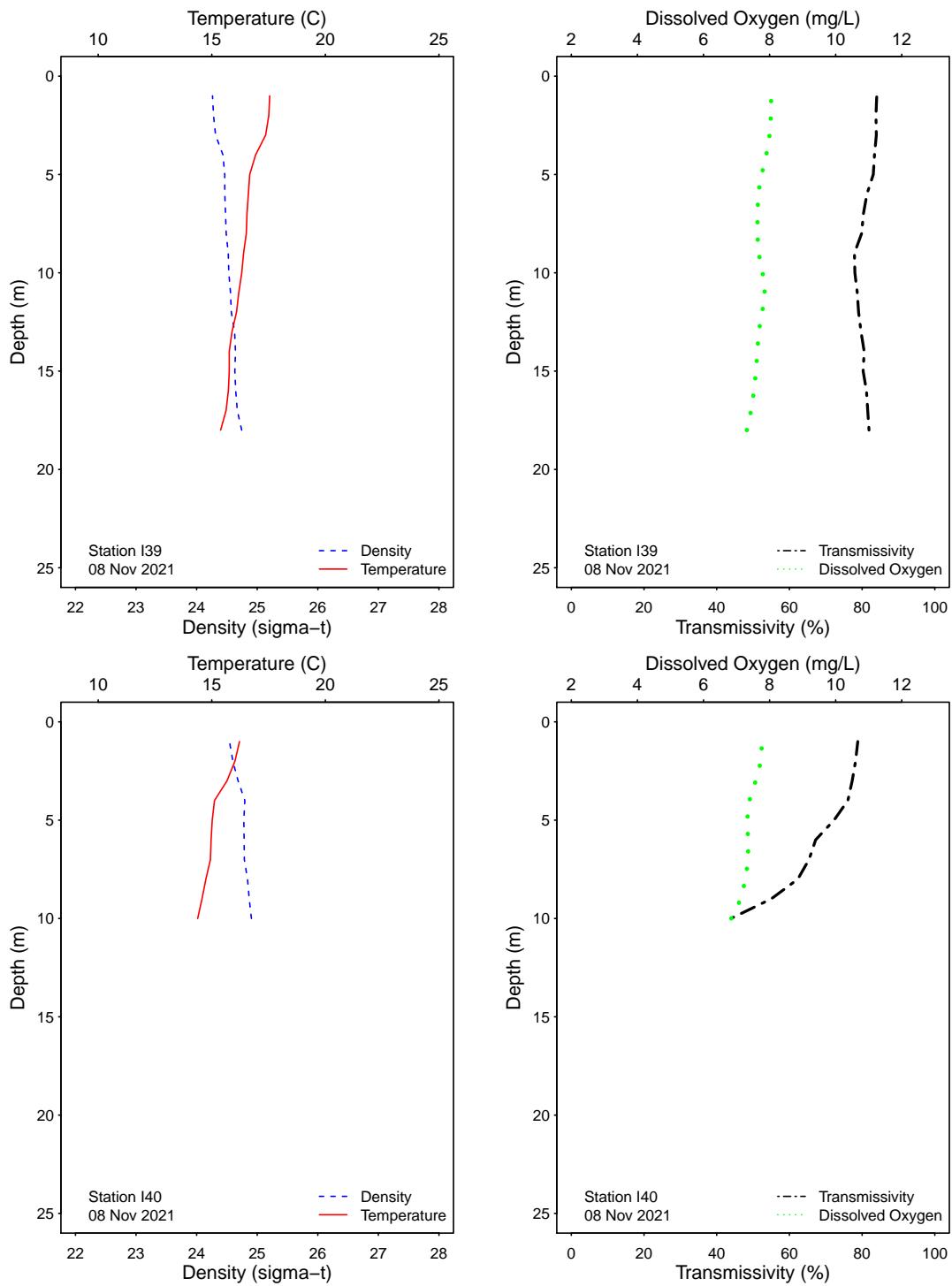


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

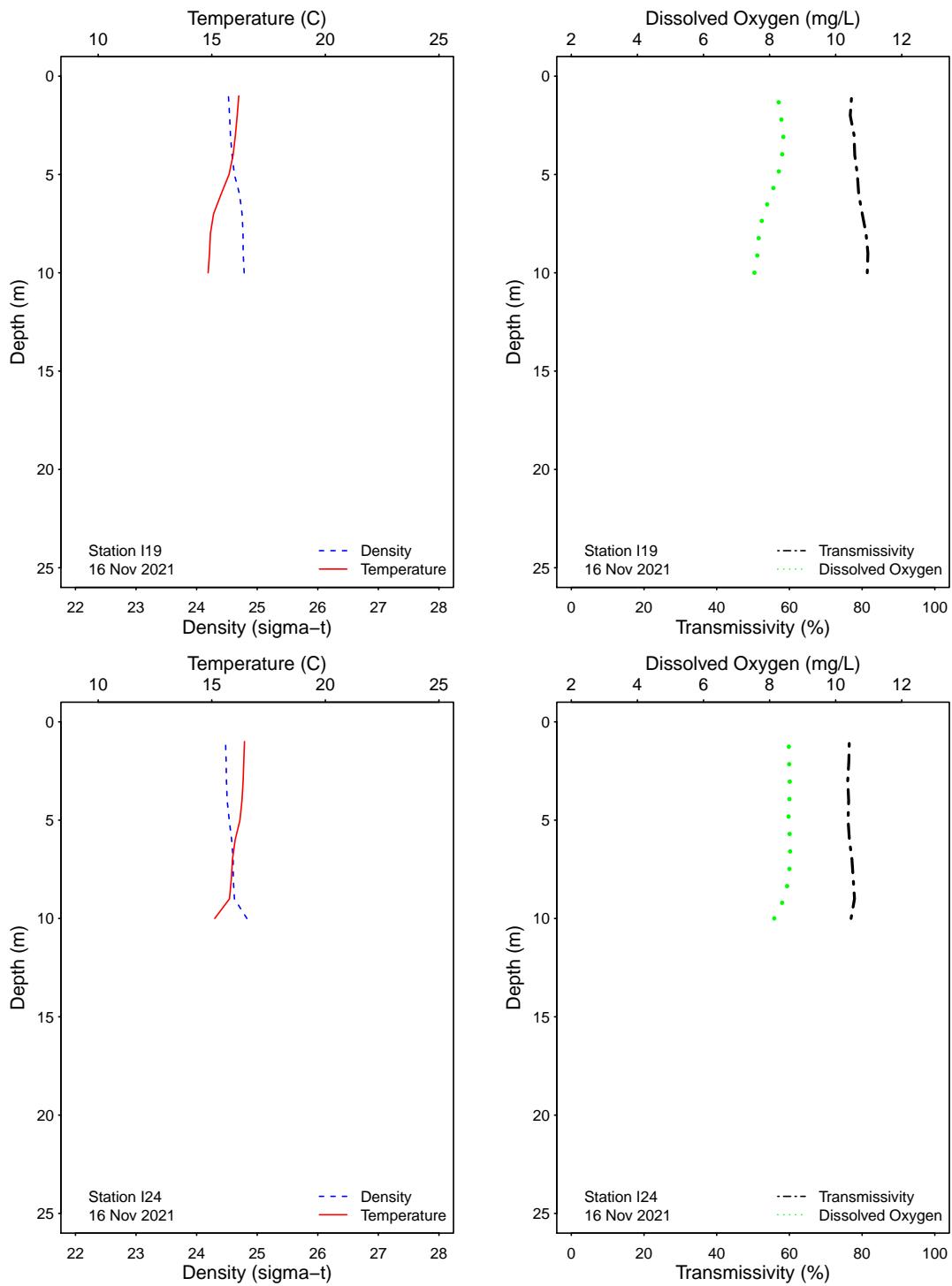


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

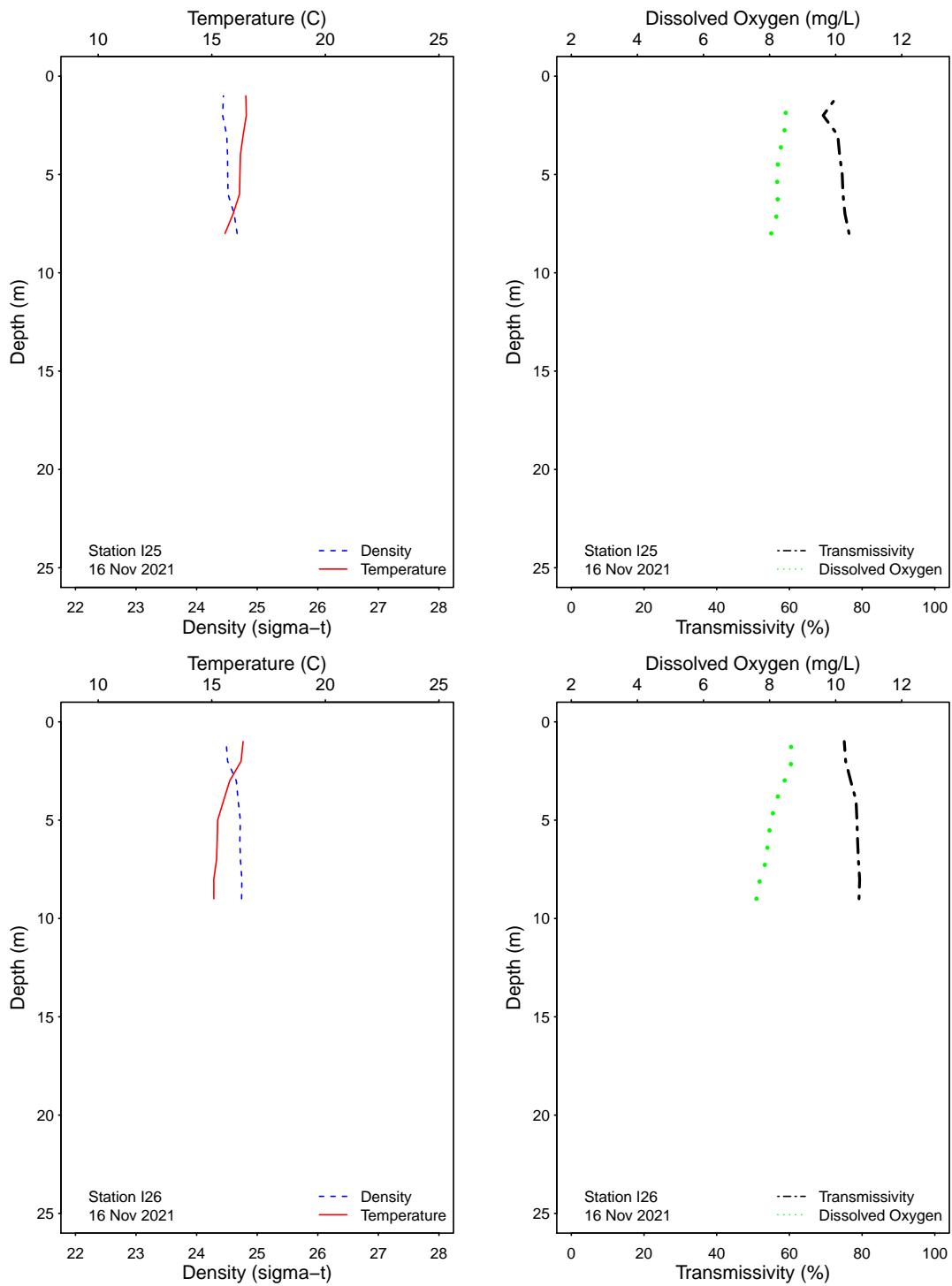


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

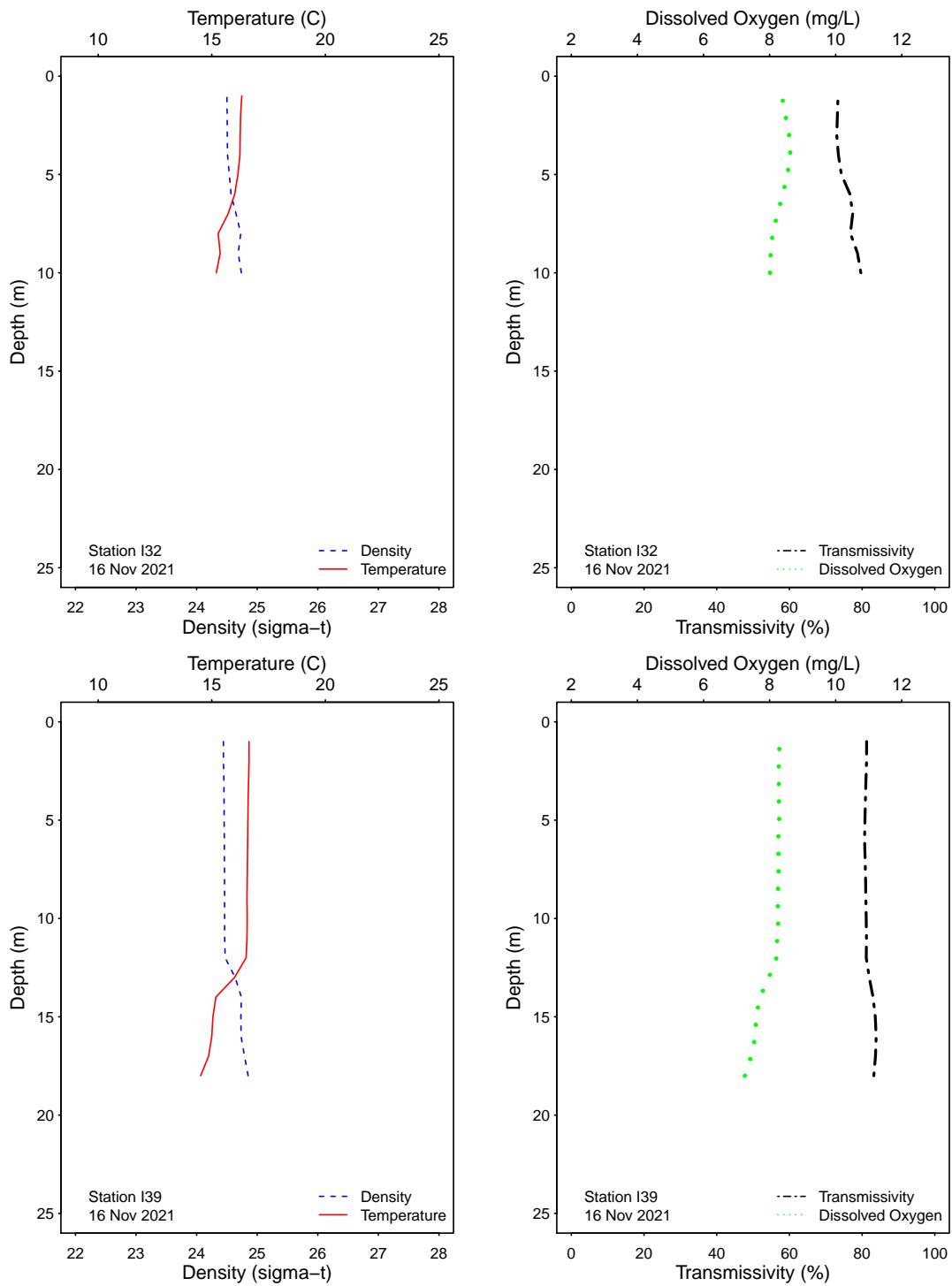


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

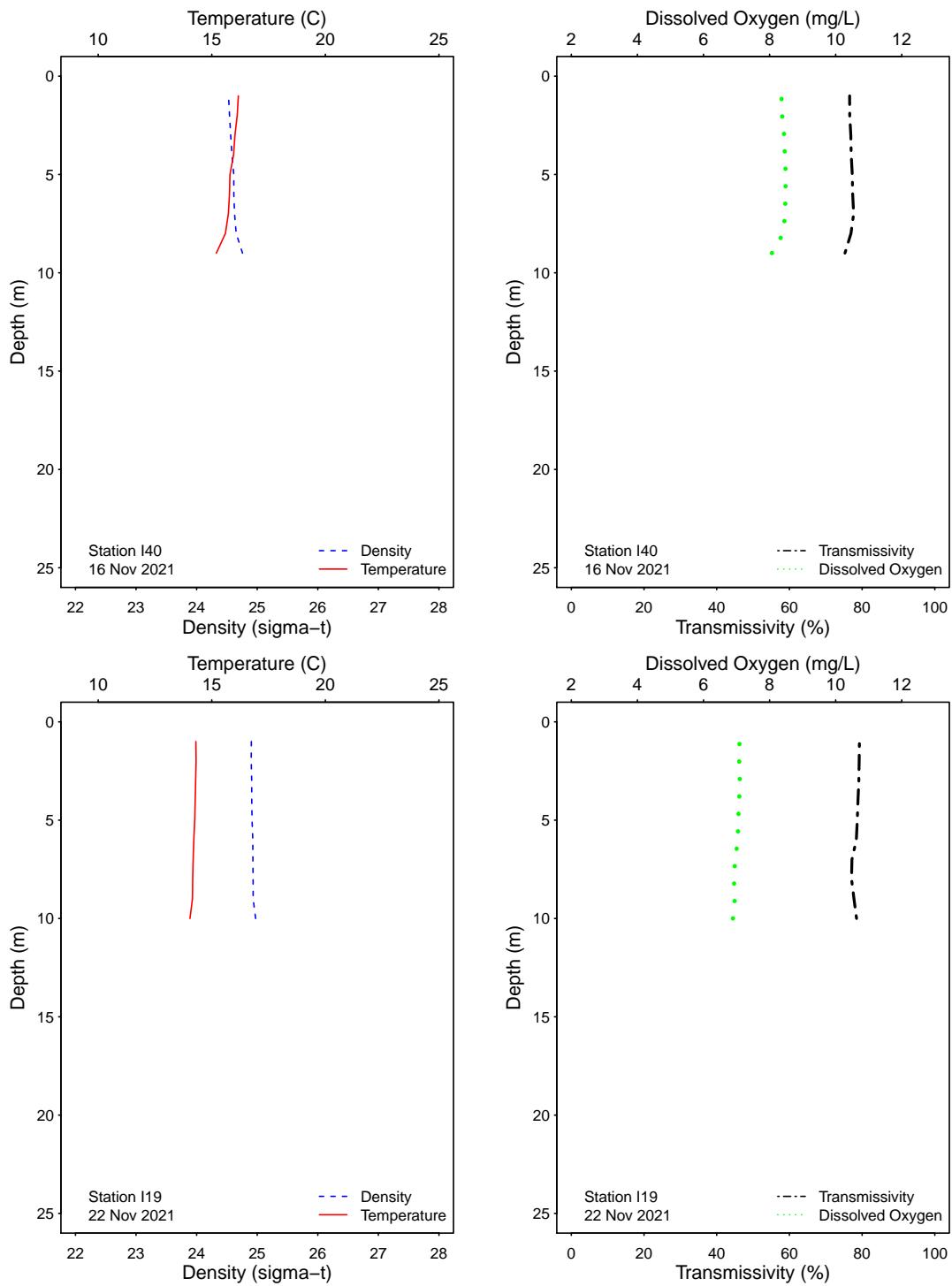


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

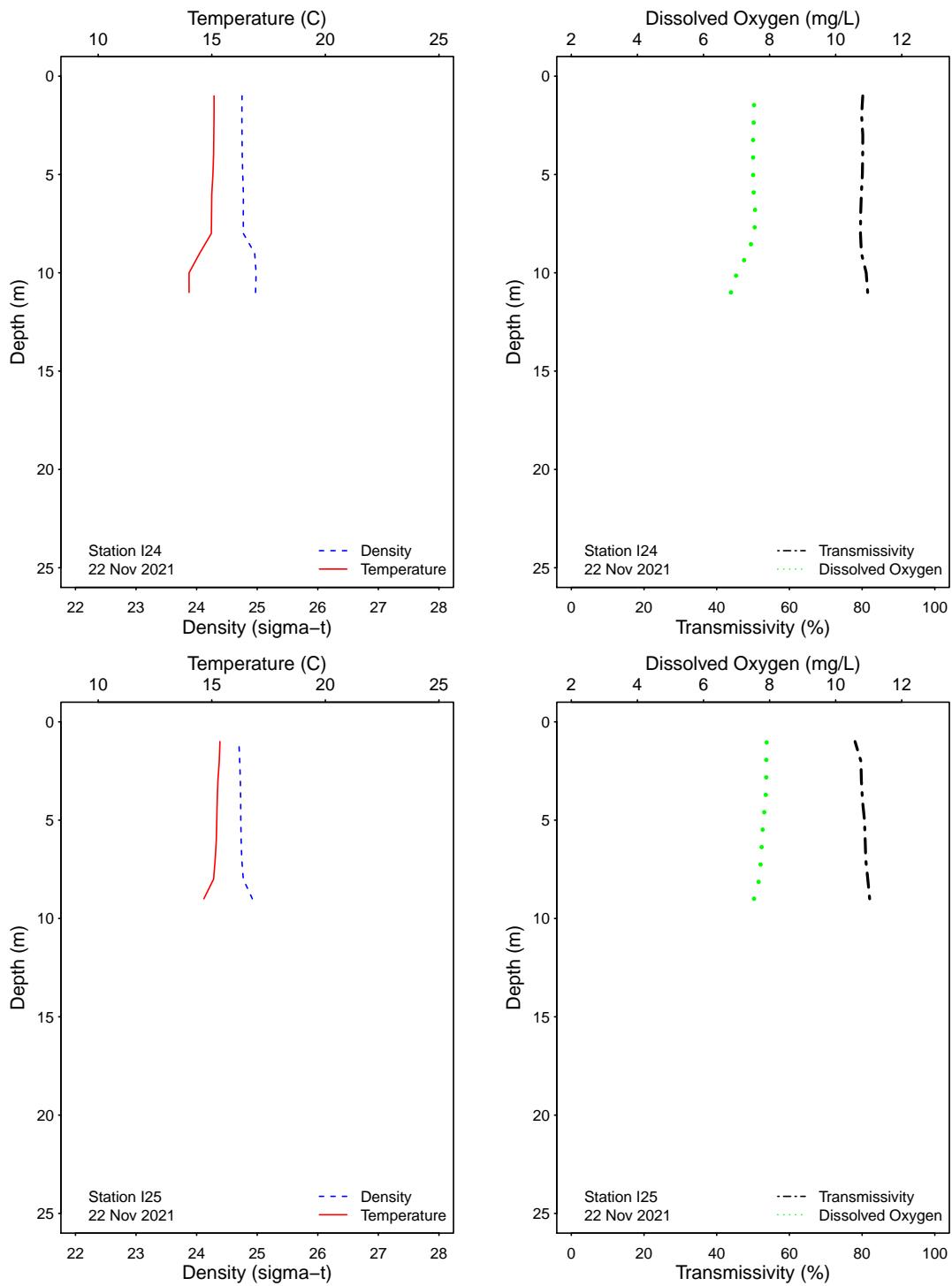


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

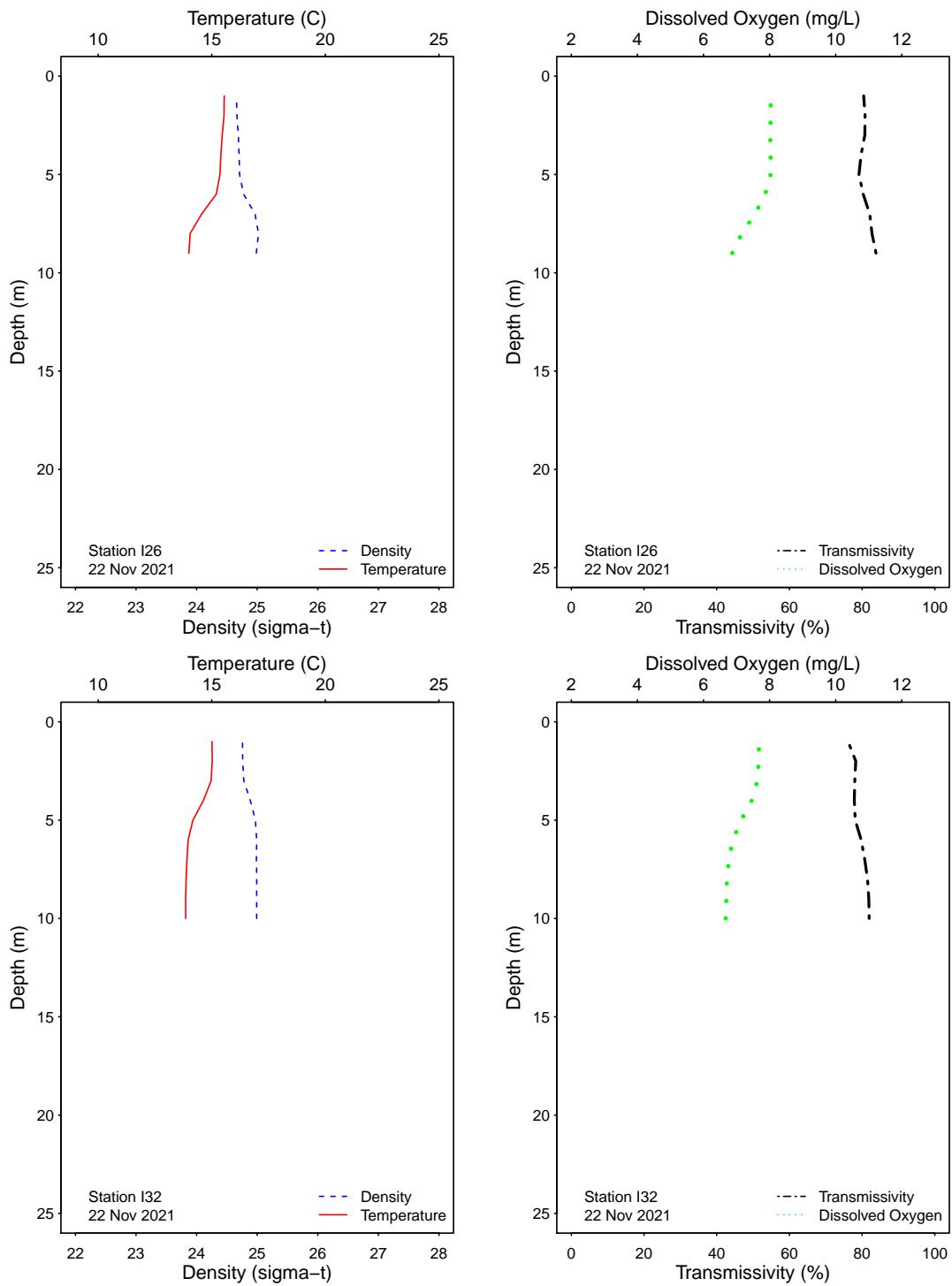


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

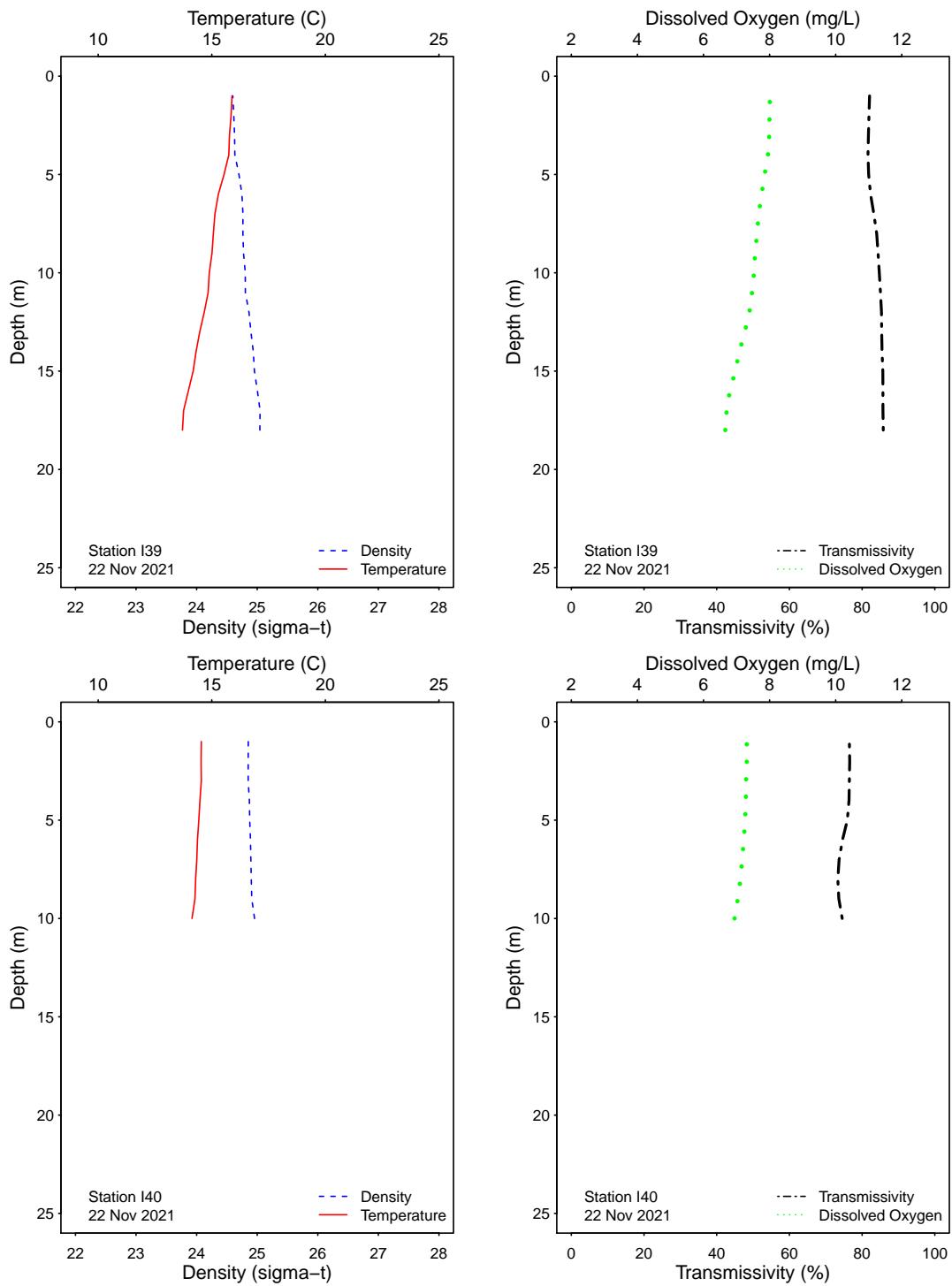


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

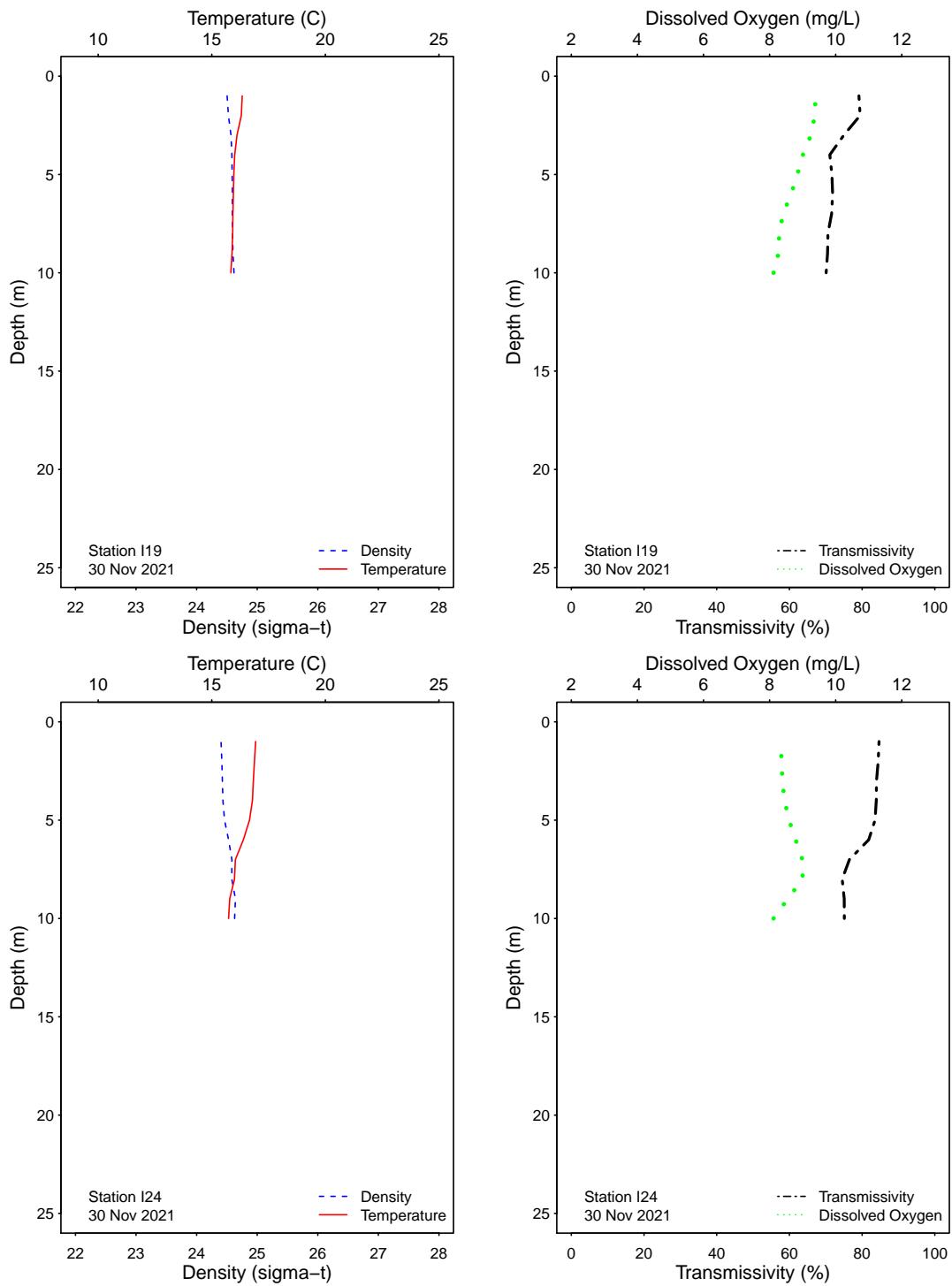


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

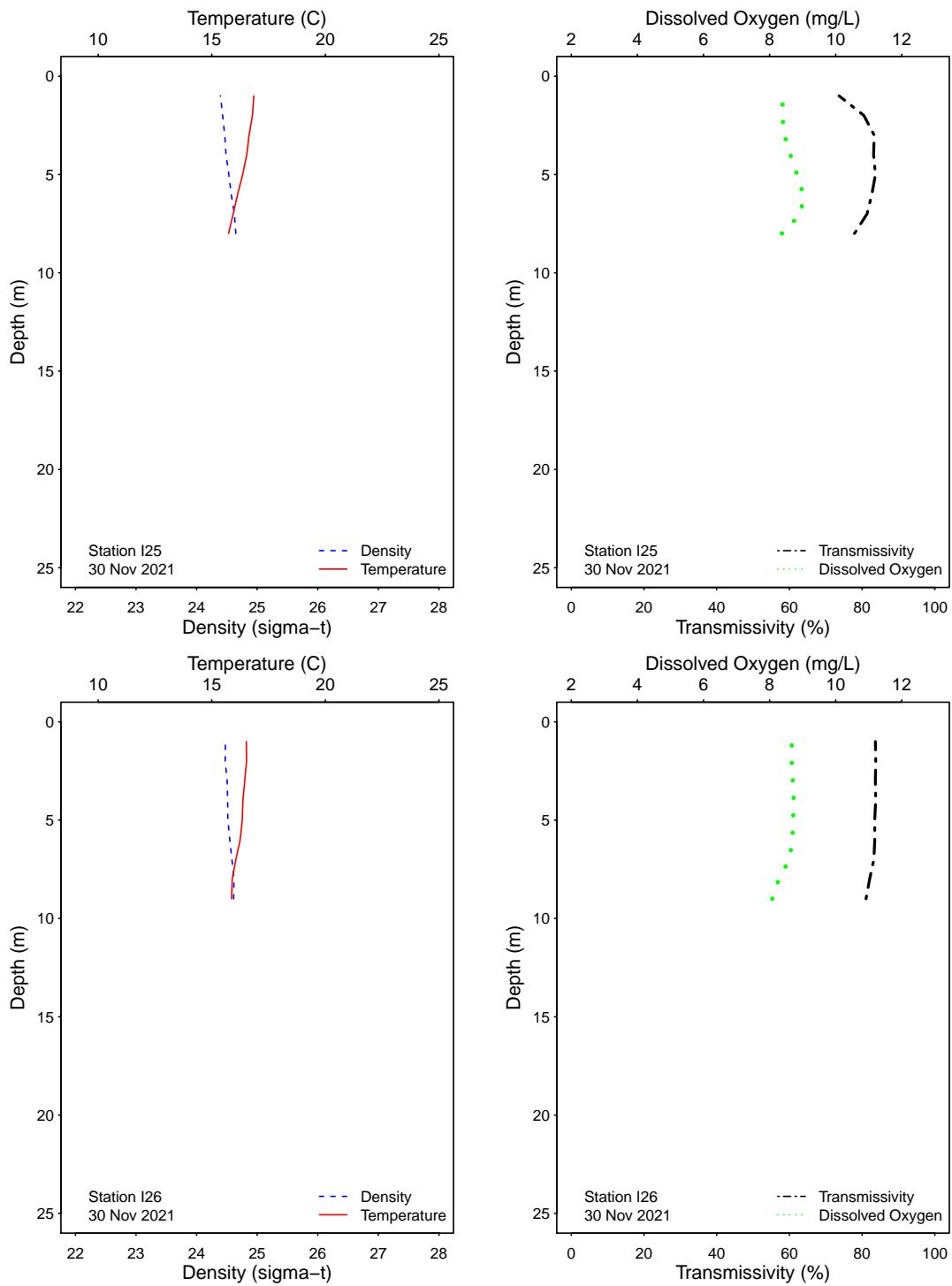


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

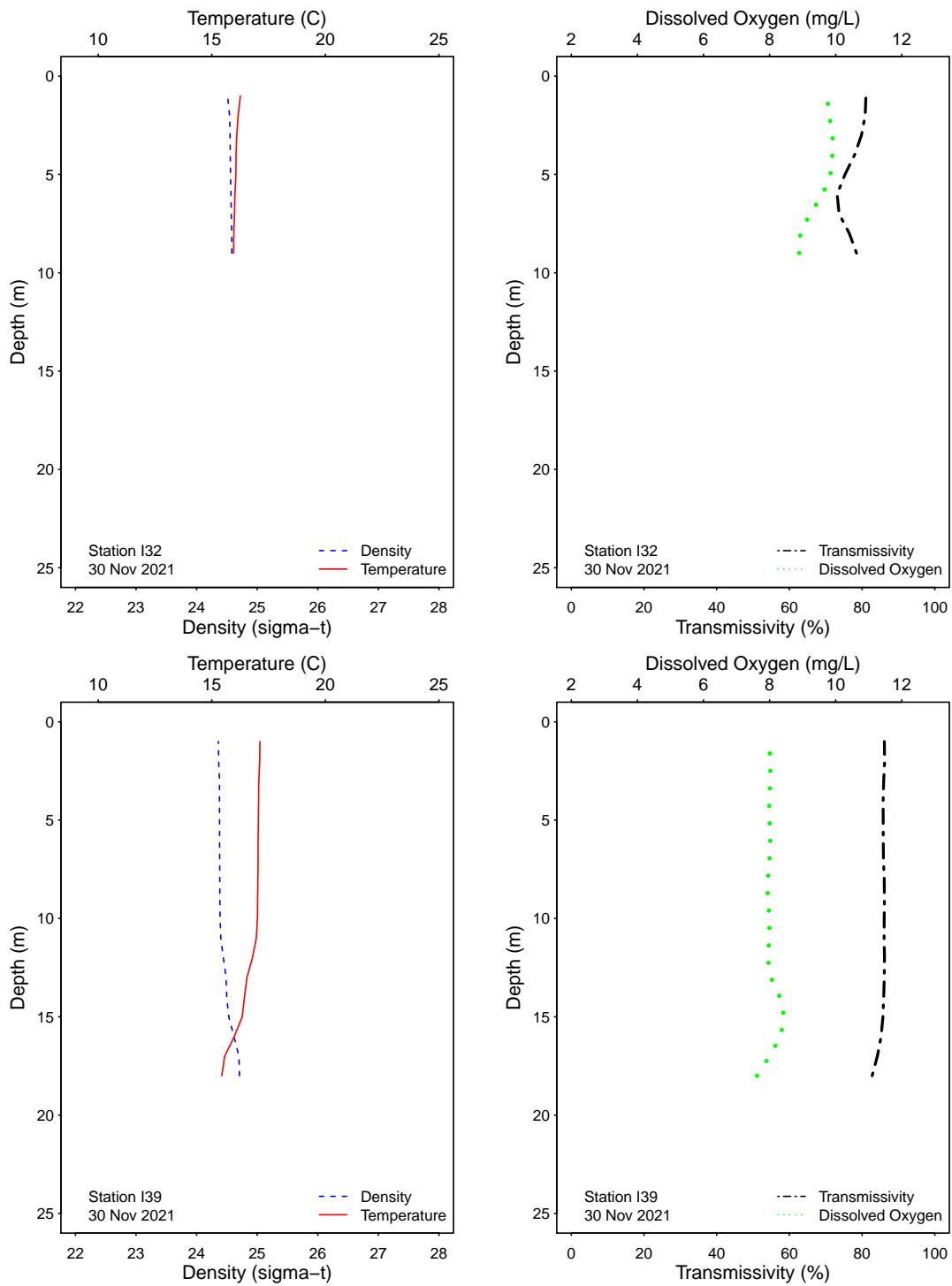


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

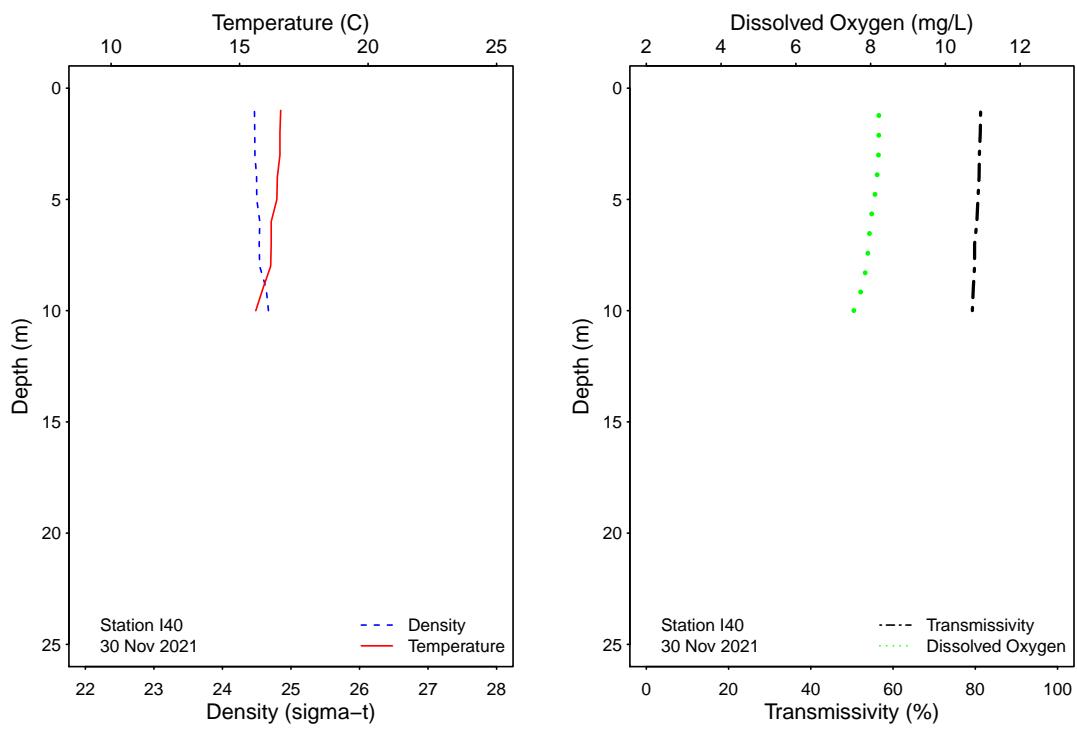


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.



# Offshore Stations



**Table 4.1**

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria at the SBOO offshore stations within State jurisdictional waters. Fecal coliform density shall not exceed 400 CFU/100 mL.

date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
03 Nov 2021	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC
04 Nov 2021	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 4.2**

Summary of compliance with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria at the SBOO offshore stations within State jurisdictional waters. *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
November	IC									

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 4.3**

Summary of compliance with the Ocean Plan's Statistical Threshold Value standard for total coliform bacteria at the SBOO offshore stations within State jurisdictional waters. Total coliform density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	112	114	116	118	120	123	133	136	137	138
November	2m IC	18m IC	27m IC	2m IC	18m IC	2m IC	18m IC	2m IC	6m IC	2m IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 4.4**

Summary of water quality parameters at the SBOO offshore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Enter) bacteria are reported as CFU/100 mL; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Enter	Temp	XMS	DO	Sal	pH
I10	05 Nov 2021	1127	2	<2	<2	<2	17.1	85.55	7.8	33.55	8.0
I10	05 Nov 2021	1127	12	<2	<2	<2	14.1	85.09	7.3	33.40	7.9
I10	05 Nov 2021	1127	18	<2	<2	<2	13.2	82.03	7.0	33.38	7.8
I11	05 Nov 2021	1113	2	<2	<2	<2	16.9	83.18	7.7	33.52	8.0
I11	05 Nov 2021	1113	6	4e	<2	<2	15.5	83.15	7.5	33.46	7.9
I11	05 Nov 2021	1113	11	2e	<2	<2	13.3	74.36	6.7	33.41	7.8
I12	04 Nov 2021	1025	2	<2	<2	<2	18.0	85.38	7.8	33.55	8.0
I12	04 Nov 2021	1025	18	20e	4e	<2	13.8	86.89	7.3	33.36	7.9
I12	04 Nov 2021	1025	27	<20	<2	2e	12.8	81.36	6.2	33.45	7.8
I13	04 Nov 2021	1113	2	<2	<2	<2	18.2	86.92	7.8	33.55	8.0
I13	04 Nov 2021	1113	18	<2	<2	<2	14.0	86.67	7.6	33.36	7.9
I13	04 Nov 2021	1113	37	<2	<2	<2	12.5	85.80	6.1	33.47	7.8
I14	04 Nov 2021	1127	2	<2	<2	<2	17.9	85.65	7.8	33.56	8.0
I14	04 Nov 2021	1127	18	<2	<2	<2	13.9	86.75	7.5	33.39	7.9
I14	04 Nov 2021	1127	27	<2	<2	<2	12.8	81.22	6.4	33.46	7.8
I16	04 Nov 2021	1617	2	<2	<2	<2	18.0	86.70	7.7	33.55	8.0
I16	04 Nov 2021	1617	18	<2	<2	<2	13.8	87.01	7.4	33.37	7.9
I16	04 Nov 2021	1617	27	60e	16e	8e	12.8	80.87	6.3	33.39	7.8
I18	04 Nov 2021	955	2	<2	<2	<2	16.9	83.80	7.7	33.53	8.0
I18	04 Nov 2021	955	12	<2	<2	<2	13.8	83.42	6.9	33.48	7.8
I18	04 Nov 2021	955	18	<2	<2	<2	12.9	82.88	6.4	33.45	7.8
I20	04 Nov 2021	834	2	<2	<2	<2	18.1	85.65	7.8	33.54	8.0
I20	04 Nov 2021	834	18	<2	<2	<2	16.1	86.08	7.8	33.39	7.9
I20	04 Nov 2021	834	55	<2	<2	<2	12.3	86.50	5.9	33.50	7.7
I21	04 Nov 2021	853	2	<2	<2	<2	18.1	86.77	7.8	33.55	8.0
I21	04 Nov 2021	853	18	<2	<2	<2	14.0	87.20	7.6	33.36	7.9
I21	04 Nov 2021	853	37	<2	<2	<2	12.6	86.82	6.1	33.46	7.8
I22	04 Nov 2021	931	2	<2	<2	<2	17.9	86.21	7.8	33.55	8.0
I22	04 Nov 2021	931	18	<2	<2	<2	13.6	87.08	7.2	33.40	7.8
I22	04 Nov 2021	931	27	<2	<2	<2	12.7	82.10	6.4	33.45	7.8
I23	04 Nov 2021	944	2	<2	<2	<2	16.9	83.70	7.7	33.52	8.0
I23	04 Nov 2021	944	12	<2	<2	<2	15.5	81.99	7.4	33.47	7.9
I23	04 Nov 2021	944	18	<2	<2	<2	13.3	82.20	6.5	33.43	7.8
I3	05 Nov 2021	1002	2	<2	<2	<2	18.0	86.82	7.7	33.55	8.0
I3	05 Nov 2021	1002	18	50	10e	6e	13.7	86.85	7.3	33.34	7.9
I3	05 Nov 2021	1002	27	<2	<2	<2	12.9	83.69	6.5	33.43	7.8
I30	03 Nov 2021	913	2	<2	<2	<2	16.8	84.31	7.7	33.50	8.0
I30	03 Nov 2021	913	18	<2	<2	<2	13.5	87.58	7.3	33.35	7.9
I30	03 Nov 2021	913	27	2e	<2	<2	12.9	79.22	6.3	33.45	7.8

Station	Date	Time	Depth	Total	Fecal	Enterο	Temp	XMS	DO	Sal	pH
I33	03 Nov 2021	813	2	<2	<2	<2	17.1	83.01	7.8	33.51	8.0
I33	03 Nov 2021	813	18	<2	2e	<2	13.5	87.31	7.2	33.40	7.8
I33	03 Nov 2021	813	27	2e	<2	<2	12.7	86.33	6.6	33.45	7.8
I36	03 Nov 2021	950	2	<2	<2	<2	15.5	73.84	7.9	33.45	7.9
I36	03 Nov 2021	950	6	2e	<2	<2	15.2	71.31	7.8	33.49	7.9
I36	03 Nov 2021	950	11	<20	<2	<2	14.2	70.75	6.9	33.49	7.8
I37	03 Nov 2021	748	2	<20	<2	<2	15.8	71.25	7.0	33.50	7.8
I37	03 Nov 2021	748	6	<2	<2	<2	14.9	76.83	7.1	33.45	7.8
I37	03 Nov 2021	748	11	<2	<2	<2	14.1	78.57	6.9	33.41	7.8
I38	03 Nov 2021	1022	2	2e	4e	<2	15.7	75.65	8.1	33.47	8.0
I38	03 Nov 2021	1022	6	<2	<2	<2	14.7	67.10	7.6	33.50	7.9
I38	03 Nov 2021	1022	11	<20	<2	<2	14.1	61.35	6.6	33.45	7.8
I5	05 Nov 2021	1033	2	<2	<2	<2	16.1	78.51	7.8	33.50	7.9
I5	05 Nov 2021	1033	6	<2	<2	<2	15.6	75.46	7.7	33.46	7.9
I5	05 Nov 2021	1033	11	4e	2e	<2	13.5	77.92	6.5	33.44	7.8
I7	05 Nov 2021	842	2	<2	<2	<2	17.8	86.39	7.8	33.49	8.0
I7	05 Nov 2021	842	18	<2	<2	<2	16.6	87.05	7.9	33.38	8.0
I7	05 Nov 2021	842	52	<2	<2	<2	12.6	85.22	6.2	33.46	7.8
I8	05 Nov 2021	1157	2	<2	<2	<2	18.2	86.56	7.8	33.56	8.0
I8	05 Nov 2021	1157	18	10e	4e	<2	14.2	86.57	7.5	33.37	7.9
I8	05 Nov 2021	1157	37	<2	<2	<2	12.6	77.36	6.3	33.45	7.8
I9	05 Nov 2021	1142	2	<2	<2	<2	18.0	86.22	7.8	33.57	8.0
I9	05 Nov 2021	1142	18	16e	6e	4e	13.8	86.37	7.4	33.35	7.9
I9	05 Nov 2021	1142	27	<2	6e	<2	13.0	85.74	6.8	33.42	7.8

ns = not sampled

ND = no data

**Table 4.5**

Summary of visual observations made during the month for each SBOO offshore station by sample date.

Station	Date	Parameter	Value
I1	05 Nov 2021	Depth (m)	62
I1	05 Nov 2021	Arrive Time	907
I1	05 Nov 2021	Depart Time	915
I1	05 Nov 2021	Air Temp (C)	14.9
I1	05 Nov 2021	Weather	Fog
I1	05 Nov 2021	Visibility (mi)	1
I1	05 Nov 2021	Wind Speed (kts)	1
I1	05 Nov 2021	Wind Dir	W
I1	05 Nov 2021	Water Color	Blue
I1	05 Nov 2021	Wave Ht Low (ft)	5.6
I1	05 Nov 2021	Wave Period (sec)	9.8
I1	05 Nov 2021	Sea State	Calm
I1	05 Nov 2021	High Tide (ft)	6.66
I1	05 Nov 2021	High Tide Time	1624
I1	05 Nov 2021	Low Tide (ft)	-1.02
I1	05 Nov 2021	Low Tide Time	2318
I1	05 Nov 2021	Comments	Bottles for OA sampling bottle 19002 1 meter niskin 5, bottle 19003 is 60 meter Niskin 4
I10	05 Nov 2021	Depth (m)	21
I10	05 Nov 2021	Arrive Time	1127
I10	05 Nov 2021	Depart Time	1130
I10	05 Nov 2021	Air Temp (C)	15.1
I10	05 Nov 2021	Weather	Fog
I10	05 Nov 2021	Visibility (mi)	2
I10	05 Nov 2021	Wind Speed (kts)	2.2
I10	05 Nov 2021	Wind Dir	SW
I10	05 Nov 2021	Water Color	Green
I10	05 Nov 2021	Wave Ht Low (ft)	5.6
I10	05 Nov 2021	Wave Period (sec)	9.8
I10	05 Nov 2021	Sea State	Calm
I10	05 Nov 2021	High Tide (ft)	6.66
I10	05 Nov 2021	High Tide Time	1624
I10	05 Nov 2021	Low Tide (ft)	-1.02
I10	05 Nov 2021	Low Tide Time	2318
I10	05 Nov 2021	Comments	none
I11	05 Nov 2021	Depth (m)	13
I11	05 Nov 2021	Arrive Time	1113
I11	05 Nov 2021	Depart Time	1116
I11	05 Nov 2021	Air Temp (C)	14.9
I11	05 Nov 2021	Weather	Fog
I11	05 Nov 2021	Visibility (mi)	2
I11	05 Nov 2021	Wind Speed (kts)	2.8
I11	05 Nov 2021	Wind Dir	W
I11	05 Nov 2021	Water Color	Green
I11	05 Nov 2021	Wave Ht Low (ft)	5.6
I11	05 Nov 2021	Wave Period (sec)	9.8
I11	05 Nov 2021	Sea State	Calm
I11	05 Nov 2021	High Tide (ft)	6.66
I11	05 Nov 2021	High Tide Time	1624
I11	05 Nov 2021	Low Tide (ft)	-1.02
I11	05 Nov 2021	Low Tide Time	2318
I11	05 Nov 2021	Comments	none
I12	04 Nov 2021	Depth (m)	30

Station	Date	Parameter	Value
I12	04 Nov 2021	Arrive Time	1025
I12	04 Nov 2021	Depart Time	1033
I12	04 Nov 2021	Air Temp (C)	15.3
I12	04 Nov 2021	Weather	Fog
I12	04 Nov 2021	Visibility (mi)	2
I12	04 Nov 2021	Wind Speed (kts)	4.9
I12	04 Nov 2021	Wind Dir	N
I12	04 Nov 2021	Water Color	Blue
I12	04 Nov 2021	Wave Ht Low (ft)	3.6
I12	04 Nov 2021	Wave Period (sec)	17
I12	04 Nov 2021	Sea State	Light Chop
I12	04 Nov 2021	High Tide (ft)	6.4
I12	04 Nov 2021	High Tide Time	1548
I12	04 Nov 2021	Low Tide (ft)	-0.72
I12	04 Nov 2021	Low Tide Time	2230
I12	04 Nov 2021	Comments	none
I13	04 Nov 2021	Depth (m)	39
I13	04 Nov 2021	Arrive Time	1113
I13	04 Nov 2021	Depart Time	1116
I13	04 Nov 2021	Air Temp (C)	15.1
I13	04 Nov 2021	Weather	Fog
I13	04 Nov 2021	Visibility (mi)	2
I13	04 Nov 2021	Wind Speed (kts)	4
I13	04 Nov 2021	Wind Dir	NW
I13	04 Nov 2021	Water Color	Blue
I13	04 Nov 2021	Wave Ht Low (ft)	3.6
I13	04 Nov 2021	Wave Period (sec)	17
I13	04 Nov 2021	Sea State	Light Chop
I13	04 Nov 2021	High Tide (ft)	6.4
I13	04 Nov 2021	High Tide Time	1548
I13	04 Nov 2021	Low Tide (ft)	-0.72
I13	04 Nov 2021	Low Tide Time	2230
I13	04 Nov 2021	Comments	none
I14	04 Nov 2021	Depth (m)	28
I14	04 Nov 2021	Arrive Time	1127
I14	04 Nov 2021	Depart Time	1130
I14	04 Nov 2021	Air Temp (C)	15
I14	04 Nov 2021	Weather	Fog
I14	04 Nov 2021	Visibility (mi)	2
I14	04 Nov 2021	Wind Speed (kts)	4.7
I14	04 Nov 2021	Wind Dir	NW
I14	04 Nov 2021	Water Color	Blue
I14	04 Nov 2021	Wave Ht Low (ft)	3.6
I14	04 Nov 2021	Wave Period (sec)	17
I14	04 Nov 2021	Sea State	Light Chop
I14	04 Nov 2021	High Tide (ft)	6.4
I14	04 Nov 2021	High Tide Time	1548
I14	04 Nov 2021	Low Tide (ft)	-0.72
I14	04 Nov 2021	Low Tide Time	2230
I14	04 Nov 2021	Comments	none
I15	04 Nov 2021	Depth (m)	32
I15	04 Nov 2021	Arrive Time	1037
I15	04 Nov 2021	Depart Time	1041
I15	04 Nov 2021	Air Temp (C)	15.2
I15	04 Nov 2021	Weather	Fog
I15	04 Nov 2021	Visibility (mi)	2
I15	04 Nov 2021	Wind Speed (kts)	1.9
I15	04 Nov 2021	Wind Dir	N

Station	Date	Parameter	Value
I15	04 Nov 2021	Water Color	Blue
I15	04 Nov 2021	Wave Ht Low (ft)	3.6
I15	04 Nov 2021	Wave Period (sec)	17
I15	04 Nov 2021	Sea State	Light Chop
I15	04 Nov 2021	High Tide (ft)	6.4
I15	04 Nov 2021	High Tide Time	1548
I15	04 Nov 2021	Low Tide (ft)	-0.72
I15	04 Nov 2021	Low Tide Time	2230
I15	04 Nov 2021	Comments	none
I16	04 Nov 2021	Depth (m)	29
I16	04 Nov 2021	Arrive Time	1017
I16	04 Nov 2021	Depart Time	1021
I16	04 Nov 2021	Air Temp (C)	15
I16	04 Nov 2021	Weather	Fog
I16	04 Nov 2021	Visibility (mi)	2
I16	04 Nov 2021	Wind Speed (kts)	3.5
I16	04 Nov 2021	Wind Dir	NE
I16	04 Nov 2021	Water Color	Blue
I16	04 Nov 2021	Wave Ht Low (ft)	3.6
I16	04 Nov 2021	Wave Period (sec)	17
I16	04 Nov 2021	Sea State	Light Chop
I16	04 Nov 2021	High Tide (ft)	6.4
I16	04 Nov 2021	High Tide Time	1548
I16	04 Nov 2021	Low Tide (ft)	-0.72
I16	04 Nov 2021	Low Tide Time	2230
I16	04 Nov 2021	Comments	none
I17	04 Nov 2021	Depth (m)	28
I17	04 Nov 2021	Arrive Time	1007
I17	04 Nov 2021	Depart Time	1012
I17	04 Nov 2021	Air Temp (C)	14.9
I17	04 Nov 2021	Weather	Fog
I17	04 Nov 2021	Visibility (mi)	2
I17	04 Nov 2021	Wind Speed (kts)	4.4
I17	04 Nov 2021	Wind Dir	N
I17	04 Nov 2021	Water Color	Blue
I17	04 Nov 2021	Wave Ht Low (ft)	3.6
I17	04 Nov 2021	Wave Period (sec)	17
I17	04 Nov 2021	Sea State	Light Chop
I17	04 Nov 2021	High Tide (ft)	6.4
I17	04 Nov 2021	High Tide Time	1548
I17	04 Nov 2021	Low Tide (ft)	-0.72
I17	04 Nov 2021	Low Tide Time	2230
I17	04 Nov 2021	Comments	none
I18	04 Nov 2021	Depth (m)	21
I18	04 Nov 2021	Arrive Time	955
I18	04 Nov 2021	Depart Time	959
I18	04 Nov 2021	Air Temp (C)	14.7
I18	04 Nov 2021	Weather	Fog
I18	04 Nov 2021	Visibility (mi)	2
I18	04 Nov 2021	Wind Speed (kts)	3.9
I18	04 Nov 2021	Wind Dir	NE
I18	04 Nov 2021	Water Color	Blue
I18	04 Nov 2021	Wave Ht Low (ft)	3.6
I18	04 Nov 2021	Wave Period (sec)	17
I18	04 Nov 2021	Sea State	Light Chop
I18	04 Nov 2021	High Tide (ft)	6.4
I18	04 Nov 2021	High Tide Time	1548
I18	04 Nov 2021	Low Tide (ft)	-0.72

Station	Date	Parameter	Value
I18	04 Nov 2021	Low Tide Time	2230
I18	04 Nov 2021	Comments	Kelp Debris
I2	05 Nov 2021	Depth (m)	34
I2	05 Nov 2021	Arrive Time	945
I2	05 Nov 2021	Depart Time	950
I2	05 Nov 2021	Air Temp (C)	15
I2	05 Nov 2021	Weather	Fog
I2	05 Nov 2021	Visibility (mi)	1
I2	05 Nov 2021	Wind Speed (kts)	5.3
I2	05 Nov 2021	Wind Dir	S
I2	05 Nov 2021	Water Color	Blue
I2	05 Nov 2021	Wave Ht Low (ft)	5.6
I2	05 Nov 2021	Wave Period (sec)	9.8
I2	05 Nov 2021	Sea State	Calm
I2	05 Nov 2021	High Tide (ft)	6.66
I2	05 Nov 2021	High Tide Time	1624
I2	05 Nov 2021	Low Tide (ft)	-1.02
I2	05 Nov 2021	Low Tide Time	2318
I2	05 Nov 2021	Comments	none
I20	04 Nov 2021	Depth (m)	57
I20	04 Nov 2021	Arrive Time	834
I20	04 Nov 2021	Depart Time	839
I20	04 Nov 2021	Air Temp (C)	15.4
I20	04 Nov 2021	Weather	Fog
I20	04 Nov 2021	Visibility (mi)	2
I20	04 Nov 2021	Wind Speed (kts)	7.9
I20	04 Nov 2021	Wind Dir	N
I20	04 Nov 2021	Water Color	Blue
I20	04 Nov 2021	Wave Ht Low (ft)	3.6
I20	04 Nov 2021	Wave Period (sec)	17
I20	04 Nov 2021	Sea State	Light Chop
I20	04 Nov 2021	High Tide (ft)	6.4
I20	04 Nov 2021	High Tide Time	1548
I20	04 Nov 2021	Low Tide (ft)	-0.72
I20	04 Nov 2021	Low Tide Time	2230
I20	04 Nov 2021	Comments	none
I21	04 Nov 2021	Depth (m)	42
I21	04 Nov 2021	Arrive Time	853
I21	04 Nov 2021	Depart Time	903
I21	04 Nov 2021	Air Temp (C)	15.4
I21	04 Nov 2021	Weather	Fog
I21	04 Nov 2021	Visibility (mi)	2
I21	04 Nov 2021	Wind Speed (kts)	7.2
I21	04 Nov 2021	Wind Dir	N
I21	04 Nov 2021	Water Color	Blue
I21	04 Nov 2021	Wave Ht Low (ft)	3.6
I21	04 Nov 2021	Wave Period (sec)	17
I21	04 Nov 2021	Sea State	Light Chop
I21	04 Nov 2021	High Tide (ft)	6.4
I21	04 Nov 2021	High Tide Time	1548
I21	04 Nov 2021	Low Tide (ft)	-0.72
I21	04 Nov 2021	Low Tide Time	2230
I21	04 Nov 2021	Comments	OA bottle 19004 at 1m Niskin 6; OA bottle 19005 at 41m Niskin 1
I22	04 Nov 2021	Depth (m)	30
I22	04 Nov 2021	Arrive Time	931
I22	04 Nov 2021	Depart Time	934

Station	Date	Parameter	Value
I22	04 Nov 2021	Air Temp (C)	15.1
I22	04 Nov 2021	Weather	Fog
I22	04 Nov 2021	Visibility (mi)	2
I22	04 Nov 2021	Wind Speed (kts)	5.1
I22	04 Nov 2021	Wind Dir	N
I22	04 Nov 2021	Water Color	Blue
I22	04 Nov 2021	Wave Ht Low (ft)	3.6
I22	04 Nov 2021	Wave Period (sec)	17
I22	04 Nov 2021	Sea State	Light Chop
I22	04 Nov 2021	High Tide (ft)	6.4
I22	04 Nov 2021	High Tide Time	1548
I22	04 Nov 2021	Low Tide (ft)	-0.72
I22	04 Nov 2021	Low Tide Time	2230
I22	04 Nov 2021	Comments	none
I23	04 Nov 2021	Depth (m)	23
I23	04 Nov 2021	Arrive Time	944
I23	04 Nov 2021	Depart Time	947
I23	04 Nov 2021	Air Temp (C)	14.6
I23	04 Nov 2021	Weather	Fog
I23	04 Nov 2021	Visibility (mi)	2
I23	04 Nov 2021	Wind Speed (kts)	4
I23	04 Nov 2021	Wind Dir	NE
I23	04 Nov 2021	Water Color	Blue
I23	04 Nov 2021	Wave Ht Low (ft)	3.6
I23	04 Nov 2021	Wave Period (sec)	17
I23	04 Nov 2021	Sea State	Light Chop
I23	04 Nov 2021	High Tide (ft)	6.4
I23	04 Nov 2021	High Tide Time	1548
I23	04 Nov 2021	Low Tide (ft)	-0.72
I23	04 Nov 2021	Low Tide Time	2230
I23	04 Nov 2021	Comments	Kelp Debris
I27	04 Nov 2021	Depth (m)	30
I27	04 Nov 2021	Arrive Time	917
I27	04 Nov 2021	Depart Time	921
I27	04 Nov 2021	Air Temp (C)	14.9
I27	04 Nov 2021	Weather	Fog
I27	04 Nov 2021	Visibility (mi)	2
I27	04 Nov 2021	Wind Speed (kts)	3.8
I27	04 Nov 2021	Wind Dir	N
I27	04 Nov 2021	Water Color	Blue
I27	04 Nov 2021	Wave Ht Low (ft)	3.6
I27	04 Nov 2021	Wave Period (sec)	17
I27	04 Nov 2021	Sea State	Light Chop
I27	04 Nov 2021	High Tide (ft)	6.4
I27	04 Nov 2021	High Tide Time	1548
I27	04 Nov 2021	Low Tide (ft)	-0.72
I27	04 Nov 2021	Low Tide Time	2230
I27	04 Nov 2021	Comments	none
I28	03 Nov 2021	Depth (m)	58
I28	03 Nov 2021	Arrive Time	834
I28	03 Nov 2021	Depart Time	844
I28	03 Nov 2021	Air Temp (C)	15.4
I28	03 Nov 2021	Weather	Continuous Layer of Clouds
I28	03 Nov 2021	Visibility (mi)	6
I28	03 Nov 2021	Wind Speed (kts)	5.5
I28	03 Nov 2021	Wind Dir	NE
I28	03 Nov 2021	Water Color	Blueish-Green
I28	03 Nov 2021	Wave Ht Low (ft)	2

Station	Date	Parameter	Value
I28	03 Nov 2021	Wave Period (sec)	11
I28	03 Nov 2021	Sea State	Light Chop
I28	03 Nov 2021	High Tide (ft)	6
I28	03 Nov 2021	High Tide Time	1524
I28	03 Nov 2021	Low Tide (ft)	-0.23
I28	03 Nov 2021	Low Tide Time	2154
I28	03 Nov 2021	Comments	none
I29	03 Nov 2021	Depth (m)	38
I29	03 Nov 2021	Arrive Time	859
I29	03 Nov 2021	Depart Time	903
I29	03 Nov 2021	Air Temp (C)	14.6
I29	03 Nov 2021	Weather	Continuous Layer of Clouds
I29	03 Nov 2021	Visibility (mi)	5
I29	03 Nov 2021	Wind Speed (kts)	4.2
I29	03 Nov 2021	Wind Dir	NE
I29	03 Nov 2021	Water Color	Blueish-Green
I29	03 Nov 2021	Wave Ht Low (ft)	2
I29	03 Nov 2021	Wave Period (sec)	11
I29	03 Nov 2021	Sea State	Light Chop
I29	03 Nov 2021	High Tide (ft)	6
I29	03 Nov 2021	High Tide Time	1524
I29	03 Nov 2021	Low Tide (ft)	-0.23
I29	03 Nov 2021	Low Tide Time	2154
I29	03 Nov 2021	Comments	none
I3	05 Nov 2021	Depth (m)	29
I3	05 Nov 2021	Arrive Time	1002
I3	05 Nov 2021	Depart Time	1013
I3	05 Nov 2021	Air Temp (C)	14.7
I3	05 Nov 2021	Weather	Fog
I3	05 Nov 2021	Visibility (mi)	1
I3	05 Nov 2021	Wind Speed (kts)	3.3
I3	05 Nov 2021	Wind Dir	E
I3	05 Nov 2021	Water Color	Green
I3	05 Nov 2021	Wave Ht Low (ft)	5.6
I3	05 Nov 2021	Wave Period (sec)	9.8
I3	05 Nov 2021	Sea State	Calm
I3	05 Nov 2021	High Tide (ft)	6.66
I3	05 Nov 2021	High Tide Time	1624
I3	05 Nov 2021	Low Tide (ft)	-1.02
I3	05 Nov 2021	Low Tide Time	2318
I3	05 Nov 2021	Comments	none
I30	03 Nov 2021	Depth (m)	29
I30	03 Nov 2021	Arrive Time	913
I30	03 Nov 2021	Depart Time	915
I30	03 Nov 2021	Air Temp (C)	14.2
I30	03 Nov 2021	Weather	Continuous Layer of Clouds
I30	03 Nov 2021	Visibility (mi)	5
I30	03 Nov 2021	Wind Speed (kts)	6.6
I30	03 Nov 2021	Wind Dir	NE
I30	03 Nov 2021	Water Color	Blueish-Green
I30	03 Nov 2021	Wave Ht Low (ft)	2
I30	03 Nov 2021	Wave Period (sec)	8
I30	03 Nov 2021	Sea State	Light Chop
I30	03 Nov 2021	High Tide (ft)	6
I30	03 Nov 2021	High Tide Time	1524
I30	03 Nov 2021	Low Tide (ft)	-0.23
I30	03 Nov 2021	Low Tide Time	2154
I30	03 Nov 2021	Comments	Kelp Debris

Station	Date	Parameter	Value
I31	03 Nov 2021	Depth (m)	20
I31	03 Nov 2021	Arrive Time	926
I31	03 Nov 2021	Depart Time	929
I31	03 Nov 2021	Air Temp (C)	13.9
I31	03 Nov 2021	Weather	Continuous Layer of Clouds
I31	03 Nov 2021	Visibility (mi)	5
I31	03 Nov 2021	Wind Speed (kts)	6.3
I31	03 Nov 2021	Wind Dir	NE
I31	03 Nov 2021	Water Color	Blueish-Green
I31	03 Nov 2021	Wave Ht Low (ft)	2
I31	03 Nov 2021	Wave Period (sec)	8
I31	03 Nov 2021	Sea State	Light Chop
I31	03 Nov 2021	High Tide (ft)	6
I31	03 Nov 2021	High Tide Time	1524
I31	03 Nov 2021	Low Tide (ft)	-0.23
I31	03 Nov 2021	Low Tide Time	2154
I31	03 Nov 2021	Comments	none
I33	03 Nov 2021	Depth (m)	31
I33	03 Nov 2021	Arrive Time	813
I33	03 Nov 2021	Depart Time	817
I33	03 Nov 2021	Air Temp (C)	15
I33	03 Nov 2021	Weather	Continuous Layer of Clouds
I33	03 Nov 2021	Visibility (mi)	6
I33	03 Nov 2021	Wind Speed (kts)	2.4
I33	03 Nov 2021	Wind Dir	NE
I33	03 Nov 2021	Water Color	Blueish-Green
I33	03 Nov 2021	Wave Ht Low (ft)	2
I33	03 Nov 2021	Wave Period (sec)	11
I33	03 Nov 2021	Sea State	Light Chop
I33	03 Nov 2021	High Tide (ft)	6
I33	03 Nov 2021	High Tide Time	1524
I33	03 Nov 2021	Low Tide (ft)	-0.23
I33	03 Nov 2021	Low Tide Time	2154
I33	03 Nov 2021	Comments	none
I34	03 Nov 2021	Depth (m)	20
I34	03 Nov 2021	Arrive Time	801
I34	03 Nov 2021	Depart Time	805
I34	03 Nov 2021	Air Temp (C)	14.7
I34	03 Nov 2021	Weather	Continuous Layer of Clouds
I34	03 Nov 2021	Visibility (mi)	6
I34	03 Nov 2021	Wind Speed (kts)	6.4
I34	03 Nov 2021	Wind Dir	E
I34	03 Nov 2021	Water Color	Blueish-Green
I34	03 Nov 2021	Wave Ht Low (ft)	2
I34	03 Nov 2021	Wave Period (sec)	11
I34	03 Nov 2021	Sea State	Light Chop
I34	03 Nov 2021	High Tide (ft)	6
I34	03 Nov 2021	High Tide Time	1524
I34	03 Nov 2021	Low Tide (ft)	-0.23
I34	03 Nov 2021	Low Tide Time	2154
I34	03 Nov 2021	Comments	none
I35	03 Nov 2021	Depth (m)	20
I35	03 Nov 2021	Arrive Time	1005
I35	03 Nov 2021	Depart Time	1011
I35	03 Nov 2021	Air Temp (C)	14.7
I35	03 Nov 2021	Weather	Continuous Layer of Clouds
I35	03 Nov 2021	Visibility (mi)	5

Station	Date	Parameter	Value
I35	03 Nov 2021	Wind Speed (kts)	0.5
I35	03 Nov 2021	Wind Dir	N
I35	03 Nov 2021	Water Color	Green
I35	03 Nov 2021	Wave Ht Low (ft)	2
I35	03 Nov 2021	Wave Period (sec)	8
I35	03 Nov 2021	Sea State	Light Chop
I35	03 Nov 2021	High Tide (ft)	6
I35	03 Nov 2021	High Tide Time	1524
I35	03 Nov 2021	Low Tide (ft)	-0.23
I35	03 Nov 2021	Low Tide Time	2154
I35	03 Nov 2021	Comments	none
I36	03 Nov 2021	Depth (m)	12
I36	03 Nov 2021	Arrive Time	950
I36	03 Nov 2021	Depart Time	953
I36	03 Nov 2021	Air Temp (C)	14.2
I36	03 Nov 2021	Weather	Continuous Layer of Clouds
I36	03 Nov 2021	Visibility (mi)	5
I36	03 Nov 2021	Wind Speed (kts)	2.2
I36	03 Nov 2021	Wind Dir	NE
I36	03 Nov 2021	Water Color	Blueish-Green
I36	03 Nov 2021	Wave Ht Low (ft)	2
I36	03 Nov 2021	Wave Period (sec)	8
I36	03 Nov 2021	Sea State	Light Chop
I36	03 Nov 2021	High Tide (ft)	6
I36	03 Nov 2021	High Tide Time	1524
I36	03 Nov 2021	Low Tide (ft)	-0.23
I36	03 Nov 2021	Low Tide Time	2154
I36	03 Nov 2021	Comments	none
I37	03 Nov 2021	Depth (m)	14
I37	03 Nov 2021	Arrive Time	748
I37	03 Nov 2021	Depart Time	754
I37	03 Nov 2021	Air Temp (C)	15.1
I37	03 Nov 2021	Weather	Continuous Layer of Clouds
I37	03 Nov 2021	Visibility (mi)	6
I37	03 Nov 2021	Wind Speed (kts)	5.9
I37	03 Nov 2021	Wind Dir	NE
I37	03 Nov 2021	Water Color	Blueish-Green
I37	03 Nov 2021	Wave Ht Low (ft)	2
I37	03 Nov 2021	Wave Period (sec)	11
I37	03 Nov 2021	Sea State	Light Chop
I37	03 Nov 2021	High Tide (ft)	6
I37	03 Nov 2021	High Tide Time	1524
I37	03 Nov 2021	Low Tide (ft)	-0.23
I37	03 Nov 2021	Low Tide Time	2154
I37	03 Nov 2021	Comments	none
I38	03 Nov 2021	Depth (m)	12
I38	03 Nov 2021	Arrive Time	1022
I38	03 Nov 2021	Depart Time	1027
I38	03 Nov 2021	Air Temp (C)	15.1
I38	03 Nov 2021	Weather	Continuous Layer of Clouds
I38	03 Nov 2021	Visibility (mi)	5
I38	03 Nov 2021	Wind Speed (kts)	3.6
I38	03 Nov 2021	Wind Dir	NW
I38	03 Nov 2021	Water Color	Green
I38	03 Nov 2021	Wave Ht Low (ft)	2
I38	03 Nov 2021	Wave Period (sec)	8
I38	03 Nov 2021	Sea State	Light Chop
I38	03 Nov 2021	High Tide (ft)	6

Station	Date	Parameter	Value
I38	03 Nov 2021	High Tide Time	1524
I38	03 Nov 2021	Low Tide (ft)	-0.23
I38	03 Nov 2021	Low Tide Time	2154
I38	03 Nov 2021	Comments	none
I4	05 Nov 2021	Depth (m)	20
I4	05 Nov 2021	Arrive Time	1024
I4	05 Nov 2021	Depart Time	1029
I4	05 Nov 2021	Air Temp (C)	14.7
I4	05 Nov 2021	Weather	Fog
I4	05 Nov 2021	Visibility (mi)	1
I4	05 Nov 2021	Wind Speed (kts)	2.6
I4	05 Nov 2021	Wind Dir	SE
I4	05 Nov 2021	Water Color	Green
I4	05 Nov 2021	Wave Ht Low (ft)	5.6
I4	05 Nov 2021	Wave Period (sec)	9.8
I4	05 Nov 2021	Sea State	Calm
I4	05 Nov 2021	High Tide (ft)	6.66
I4	05 Nov 2021	High Tide Time	1624
I4	05 Nov 2021	Low Tide (ft)	-1.02
I4	05 Nov 2021	Low Tide Time	2318
I4	05 Nov 2021	Comments	Kelp
I5	05 Nov 2021	Depth (m)	15
I5	05 Nov 2021	Arrive Time	1033
I5	05 Nov 2021	Depart Time	1036
I5	05 Nov 2021	Air Temp (C)	14.7
I5	05 Nov 2021	Weather	Fog
I5	05 Nov 2021	Visibility (mi)	1
I5	05 Nov 2021	Wind Speed (kts)	3.8
I5	05 Nov 2021	Wind Dir	S
I5	05 Nov 2021	Water Color	Green
I5	05 Nov 2021	Wave Ht Low (ft)	5.6
I5	05 Nov 2021	Wave Period (sec)	9.8
I5	05 Nov 2021	Sea State	Calm
I5	05 Nov 2021	High Tide (ft)	6.66
I5	05 Nov 2021	High Tide Time	1624
I5	05 Nov 2021	Low Tide (ft)	-1.02
I5	05 Nov 2021	Low Tide Time	2318
I5	05 Nov 2021	Comments	Kelp; Kelp Debris
I6	05 Nov 2021	Depth (m)	1
I6	05 Nov 2021	Arrive Time	1053
I6	05 Nov 2021	Depart Time	1057
I6	05 Nov 2021	Air Temp (C)	14.6
I6	05 Nov 2021	Weather	Fog
I6	05 Nov 2021	Visibility (mi)	2
I6	05 Nov 2021	Wind Speed (kts)	4.2
I6	05 Nov 2021	Wind Dir	SW
I6	05 Nov 2021	Water Color	Green
I6	05 Nov 2021	Wave Ht Low (ft)	5.6
I6	05 Nov 2021	Wave Period (sec)	9.8
I6	05 Nov 2021	Sea State	Calm
I6	05 Nov 2021	High Tide (ft)	6.66
I6	05 Nov 2021	High Tide Time	1624
I6	05 Nov 2021	Low Tide (ft)	-1.02
I6	05 Nov 2021	Low Tide Time	2318
I6	05 Nov 2021	Comments	none
I7	05 Nov 2021	Depth (m)	1
I7	05 Nov 2021	Arrive Time	842

Station	Date	Parameter	Value
I7	05 Nov 2021	Depart Time	847
I7	05 Nov 2021	Air Temp (C)	14.8
I7	05 Nov 2021	Weather	Fog
I7	05 Nov 2021	Visibility (mi)	1
I7	05 Nov 2021	Wind Speed (kts)	1.2
I7	05 Nov 2021	Wind Dir	SW
I7	05 Nov 2021	Water Color	Blue
I7	05 Nov 2021	Wave Ht Low (ft)	5.6
I7	05 Nov 2021	Wave Period (sec)	9.8
I7	05 Nov 2021	Sea State	Calm
I7	05 Nov 2021	High Tide (ft)	6.66
I7	05 Nov 2021	High Tide Time	1624
I7	05 Nov 2021	Low Tide (ft)	-1.02
I7	05 Nov 2021	Low Tide Time	2318
I7	05 Nov 2021	Comments	none
I8	05 Nov 2021	Depth (m)	36
I8	05 Nov 2021	Arrive Time	1157
I8	05 Nov 2021	Depart Time	1202
I8	05 Nov 2021	Air Temp (C)	15.2
I8	05 Nov 2021	Weather	Fog
I8	05 Nov 2021	Visibility (mi)	2
I8	05 Nov 2021	Wind Speed (kts)	0.5
I8	05 Nov 2021	Wind Dir	W
I8	05 Nov 2021	Water Color	Blueish-Green
I8	05 Nov 2021	Wave Ht Low (ft)	5.6
I8	05 Nov 2021	Wave Period (sec)	9.8
I8	05 Nov 2021	Sea State	Calm
I8	05 Nov 2021	High Tide (ft)	6.66
I8	05 Nov 2021	High Tide Time	1624
I8	05 Nov 2021	Low Tide (ft)	-1.02
I8	05 Nov 2021	Low Tide Time	2318
I8	05 Nov 2021	Comments	none
I9	05 Nov 2021	Depth (m)	30
I9	05 Nov 2021	Arrive Time	1142
I9	05 Nov 2021	Depart Time	1147
I9	05 Nov 2021	Air Temp (C)	15.1
I9	05 Nov 2021	Weather	Fog
I9	05 Nov 2021	Visibility (mi)	2
I9	05 Nov 2021	Wind Speed (kts)	3.1
I9	05 Nov 2021	Wind Dir	W
I9	05 Nov 2021	Water Color	Blueish-Green
I9	05 Nov 2021	Wave Ht Low (ft)	5.6
I9	05 Nov 2021	Wave Period (sec)	9.8
I9	05 Nov 2021	Sea State	Calm
I9	05 Nov 2021	High Tide (ft)	6.66
I9	05 Nov 2021	High Tide Time	1624
I9	05 Nov 2021	Low Tide (ft)	-1.02
I9	05 Nov 2021	Low Tide Time	2318
I9	05 Nov 2021	Comments	none

**Table 4.6**

Summary of CTD profile data from the SBOO offshore stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I1	05 Nov 2021	1	17.79	86.78	7.7	33.48	8.0	24.2	0.62
I1	05 Nov 2021	2	17.79	79.73	7.7	33.47	8.0	24.2	0.65
I1	05 Nov 2021	3	17.79	86.71	7.7	33.48	8.0	24.2	0.63
I1	05 Nov 2021	4	17.79	86.82	7.7	33.48	8.0	24.2	0.64
I1	05 Nov 2021	5	17.79	86.81	7.7	33.47	8.0	24.2	0.67
I1	05 Nov 2021	6	17.79	86.73	7.7	33.47	8.0	24.2	0.66
I1	05 Nov 2021	7	17.78	86.75	7.6	33.47	8.0	24.2	0.71
I1	05 Nov 2021	8	17.78	86.80	7.7	33.47	8.0	24.2	0.67
I1	05 Nov 2021	9	17.78	86.78	7.7	33.47	8.0	24.2	0.65
I1	05 Nov 2021	10	17.78	86.89	7.7	33.47	8.0	24.2	0.67
I1	05 Nov 2021	11	17.75	86.94	7.7	33.48	8.0	24.2	0.65
I1	05 Nov 2021	12	17.69	86.96	7.7	33.46	8.0	24.2	0.67
I1	05 Nov 2021	13	17.58	86.88	7.7	33.46	8.0	24.2	0.67
I1	05 Nov 2021	14	17.57	87.00	7.7	33.44	8.0	24.2	0.71
I1	05 Nov 2021	15	17.54	86.94	7.8	33.45	8.0	24.2	0.73
I1	05 Nov 2021	16	17.47	86.98	7.7	33.45	8.0	24.2	0.70
I1	05 Nov 2021	17	17.46	86.94	7.8	33.44	8.0	24.2	0.78
I1	05 Nov 2021	18	17.36	86.95	7.8	33.44	8.0	24.2	0.80
I1	05 Nov 2021	19	17.26	87.00	7.8	33.44	8.0	24.3	0.87
I1	05 Nov 2021	20	17.20	86.92	7.8	33.43	8.0	24.3	0.79
I1	05 Nov 2021	21	17.05	86.99	7.8	33.42	8.0	24.3	0.81
I1	05 Nov 2021	22	16.78	87.01	7.9	33.42	8.0	24.4	0.80
I1	05 Nov 2021	23	16.67	86.99	7.9	33.41	8.0	24.4	0.82
I1	05 Nov 2021	24	16.60	86.81	7.9	33.41	8.0	24.4	0.89
I1	05 Nov 2021	25	16.39	85.74	7.8	33.46	8.0	24.5	0.98
I1	05 Nov 2021	26	15.73	86.57	7.8	33.44	8.0	24.6	0.98
I1	05 Nov 2021	27	15.37	86.46	7.8	33.40	7.9	24.7	1.04
I1	05 Nov 2021	28	15.02	86.63	7.6	33.43	7.9	24.8	1.12
I1	05 Nov 2021	29	14.37	86.82	7.6	33.41	7.9	24.9	1.17
I1	05 Nov 2021	30	14.18	86.95	7.6	33.35	7.9	24.9	1.18
I1	05 Nov 2021	31	14.16	86.98	7.6	33.34	7.9	24.9	1.21
I1	05 Nov 2021	32	14.15	87.02	7.6	33.34	7.9	24.9	1.35
I1	05 Nov 2021	33	14.12	87.02	7.6	33.34	7.9	24.9	1.26
I1	05 Nov 2021	34	14.05	87.06	7.5	33.34	7.9	24.9	1.28
I1	05 Nov 2021	35	13.99	87.11	7.6	33.34	7.9	24.9	1.26
I1	05 Nov 2021	36	13.91	87.16	7.5	33.34	7.9	24.9	1.28
I1	05 Nov 2021	37	13.76	87.26	7.4	33.37	7.9	25.0	1.28
I1	05 Nov 2021	38	13.57	87.42	7.3	33.37	7.9	25.0	1.29
I1	05 Nov 2021	39	13.51	87.47	7.2	33.38	7.9	25.0	1.16
I1	05 Nov 2021	40	13.47	87.46	7.2	33.37	7.8	25.0	1.13
I1	05 Nov 2021	41	13.30	87.32	7.0	33.41	7.8	25.1	1.06
I1	05 Nov 2021	42	13.23	87.38	6.9	33.41	7.8	25.1	1.08
I1	05 Nov 2021	43	13.16	87.34	6.8	33.42	7.8	25.1	1.05
I1	05 Nov 2021	44	13.10	87.35	6.7	33.42	7.8	25.2	1.01
I1	05 Nov 2021	45	13.14	87.22	6.7	33.42	7.8	25.1	0.98
I1	05 Nov 2021	46	13.07	87.14	6.7	33.43	7.8	25.2	0.97
I1	05 Nov 2021	47	13.03	87.02	6.6	33.43	7.8	25.2	0.97
I1	05 Nov 2021	48	12.96	87.08	6.5	33.44	7.8	25.2	0.97
I1	05 Nov 2021	49	12.92	87.08	6.5	33.44	7.8	25.2	0.97
I1	05 Nov 2021	50	12.87	86.98	6.4	33.44	7.8	25.2	0.88
I1	05 Nov 2021	51	12.86	87.03	6.4	33.44	7.8	25.2	0.87
I1	05 Nov 2021	52	12.85	87.04	6.4	33.45	7.8	25.2	0.84
I1	05 Nov 2021	53	12.77	86.90	6.3	33.46	7.8	25.2	0.85
I1	05 Nov 2021	54	12.71	86.79	6.2	33.46	7.8	25.3	0.84
I1	05 Nov 2021	55	12.69	86.72	6.1	33.46	7.8	25.3	0.86
I1	05 Nov 2021	56	12.64	86.50	6.0	33.48	7.8	25.3	0.86

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I1	05 Nov 2021	57	12.53	86.41	5.9	33.50	7.8	25.3	0.81
I1	05 Nov 2021	58	12.31	86.48	5.8	33.53	7.7	25.4	0.79
I1	05 Nov 2021	59	12.24	86.41	5.6	33.53	7.7	25.4	0.92
I1	05 Nov 2021	60	12.16	86.34	5.5	33.55	7.7	25.4	0.76
I10	05 Nov 2021	1	17.53	85.60	7.8	33.53	8.0	24.3	0.94
I10	05 Nov 2021	2	17.10	85.55	7.8	33.55	8.0	24.4	0.93
I10	05 Nov 2021	3	16.67	84.56	7.7	33.51	8.0	24.4	0.94
I10	05 Nov 2021	4	16.63	82.78	7.6	33.50	8.0	24.4	1.06
I10	05 Nov 2021	5	16.62	82.33	7.6	33.51	8.0	24.5	1.25
I10	05 Nov 2021	6	16.49	81.80	7.5	33.54	8.0	24.5	1.56
I10	05 Nov 2021	7	16.04	81.12	7.4	33.59	8.0	24.7	1.71
I10	05 Nov 2021	8	14.82	80.29	7.3	33.60	7.9	24.9	1.88
I10	05 Nov 2021	9	14.34	82.20	7.3	33.46	7.9	24.9	1.83
I10	05 Nov 2021	10	14.27	83.56	7.3	33.41	7.9	24.9	1.70
I10	05 Nov 2021	11	14.20	84.65	7.3	33.40	7.9	24.9	1.51
I10	05 Nov 2021	12	14.12	85.09	7.3	33.40	7.9	24.9	1.44
I10	05 Nov 2021	13	14.04	85.13	7.2	33.40	7.9	24.9	1.34
I10	05 Nov 2021	14	13.81	85.31	7.2	33.44	7.9	25.0	1.29
I10	05 Nov 2021	15	13.35	85.21	7.1	33.44	7.9	25.1	1.26
I10	05 Nov 2021	16	13.20	83.58	7.0	33.39	7.9	25.1	1.21
I10	05 Nov 2021	17	13.17	82.61	7.0	33.38	7.8	25.1	1.12
I10	05 Nov 2021	18	13.15	82.03	7.0	33.38	7.8	25.1	1.13
I10	05 Nov 2021	19	13.14	81.79	7.0	33.38	7.8	25.1	1.11
I11	05 Nov 2021	1	16.94	83.23	7.8	33.51	8.0	24.4	1.39
I11	05 Nov 2021	2	16.89	83.18	7.7	33.52	8.0	24.4	1.37
I11	05 Nov 2021	3	16.11	82.90	7.6	33.58	8.0	24.6	1.42
I11	05 Nov 2021	4	15.75	82.82	7.6	33.48	7.9	24.6	1.57
I11	05 Nov 2021	5	15.65	82.95	7.6	33.47	7.9	24.6	1.69
I11	05 Nov 2021	6	15.51	83.15	7.5	33.46	7.9	24.7	1.67
I11	05 Nov 2021	7	15.39	83.10	7.4	33.47	7.9	24.7	1.69
I11	05 Nov 2021	8	14.80	82.48	7.2	33.49	7.9	24.9	1.69
I11	05 Nov 2021	9	13.88	82.94	7.0	33.49	7.9	25.0	1.65
I11	05 Nov 2021	10	13.40	80.65	6.8	33.43	7.8	25.1	1.60
I11	05 Nov 2021	11	13.31	74.36	6.7	33.41	7.8	25.1	1.46
I11	05 Nov 2021	12	13.28	69.55	6.7	33.40	7.8	25.1	1.44
I11	05 Nov 2021	13	13.31	62.84	6.6	33.40	7.8	25.1	1.50
I12	04 Nov 2021	1	17.98	85.76	7.8	33.55	8.0	24.2	0.62
I12	04 Nov 2021	2	17.99	85.38	7.8	33.55	8.0	24.2	0.62
I12	04 Nov 2021	3	17.96	86.30	7.8	33.56	8.0	24.2	0.63
I12	04 Nov 2021	4	17.92	86.60	7.7	33.56	8.0	24.2	0.64
I12	04 Nov 2021	5	17.38	86.52	7.7	33.60	8.0	24.4	0.65
I12	04 Nov 2021	6	16.62	86.38	7.7	33.56	8.0	24.5	0.74
I12	04 Nov 2021	7	16.00	86.28	7.7	33.49	8.0	24.6	0.84
I12	04 Nov 2021	8	15.83	86.21	7.8	33.43	7.9	24.6	1.02
I12	04 Nov 2021	9	15.42	86.06	7.7	33.42	7.9	24.7	1.05
I12	04 Nov 2021	10	15.20	86.27	7.6	33.42	7.9	24.7	1.16
I12	04 Nov 2021	11	14.61	86.08	7.4	33.44	7.9	24.9	1.29
I12	04 Nov 2021	12	13.93	85.31	7.2	33.29	7.9	24.9	1.26
I12	04 Nov 2021	13	14.04	85.22	7.2	33.30	7.9	24.9	1.20
I12	04 Nov 2021	14	14.02	86.21	7.4	33.36	7.9	24.9	1.21
I12	04 Nov 2021	15	13.93	86.74	7.5	33.36	7.9	24.9	1.20
I12	04 Nov 2021	16	13.87	87.03	7.5	33.36	7.9	24.9	1.18
I12	04 Nov 2021	17	13.84	87.07	7.4	33.36	7.9	25.0	1.19
I12	04 Nov 2021	18	13.76	86.89	7.3	33.36	7.9	25.0	1.17
I12	04 Nov 2021	19	13.76	86.57	7.3	33.34	7.9	25.0	1.20
I12	04 Nov 2021	20	13.65	86.94	7.2	33.38	7.9	25.0	1.25
I12	04 Nov 2021	21	13.38	86.80	7.1	33.38	7.8	25.1	1.19
I12	04 Nov 2021	22	13.24	86.41	7.0	33.40	7.8	25.1	1.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I12	04 Nov 2021	23	13.15	87.26	7.0	33.40	7.8	25.1	1.16
I12	04 Nov 2021	24	12.96	86.92	6.8	33.44	7.8	25.2	1.10
I12	04 Nov 2021	25	12.82	84.97	6.5	33.45	7.8	25.2	1.11
I12	04 Nov 2021	26	12.79	82.78	6.3	33.45	7.8	25.2	1.15
I12	04 Nov 2021	27	12.79	81.36	6.2	33.45	7.8	25.2	1.23
I12	04 Nov 2021	28	12.79	80.36	6.2	33.45	7.8	25.2	1.28
I13	04 Nov 2021	1	18.19	86.90	7.7	33.55	8.0	24.1	0.58
I13	04 Nov 2021	2	18.16	86.92	7.8	33.55	8.0	24.1	0.59
I13	04 Nov 2021	3	18.14	86.90	7.7	33.55	8.0	24.1	0.59
I13	04 Nov 2021	4	17.85	86.83	7.7	33.59	8.0	24.2	0.60
I13	04 Nov 2021	5	17.52	86.84	7.8	33.50	8.0	24.2	0.61
I13	04 Nov 2021	6	17.09	86.82	7.8	33.49	8.0	24.3	0.63
I13	04 Nov 2021	7	16.94	86.84	7.9	33.45	8.0	24.3	0.66
I13	04 Nov 2021	8	16.94	86.20	7.8	33.44	8.0	24.3	0.83
I13	04 Nov 2021	9	16.83	86.47	7.8	33.47	8.0	24.4	0.80
I13	04 Nov 2021	10	16.33	86.30	7.8	33.46	8.0	24.5	0.88
I13	04 Nov 2021	11	16.18	85.86	7.9	33.40	8.0	24.5	0.99
I13	04 Nov 2021	12	15.99	85.92	7.9	33.41	8.0	24.5	1.21
I13	04 Nov 2021	13	15.84	85.82	7.8	33.39	8.0	24.5	1.35
I13	04 Nov 2021	14	15.61	85.93	7.8	33.41	8.0	24.6	1.40
I13	04 Nov 2021	15	15.26	86.03	7.8	33.40	8.0	24.7	1.61
I13	04 Nov 2021	16	14.75	86.08	7.8	33.43	7.9	24.8	1.55
I13	04 Nov 2021	17	14.10	86.29	7.7	33.40	7.9	24.9	1.54
I13	04 Nov 2021	18	13.99	86.67	7.6	33.36	7.9	24.9	1.51
I13	04 Nov 2021	19	13.90	86.95	7.5	33.35	7.9	24.9	1.50
I13	04 Nov 2021	20	13.85	87.11	7.5	33.35	7.9	24.9	1.44
I13	04 Nov 2021	21	13.77	87.31	7.5	33.35	7.9	25.0	1.31
I13	04 Nov 2021	22	13.72	87.43	7.5	33.34	7.9	25.0	1.29
I13	04 Nov 2021	23	13.54	87.59	7.4	33.38	7.9	25.0	1.22
I13	04 Nov 2021	24	13.25	87.69	7.3	33.41	7.9	25.1	1.15
I13	04 Nov 2021	25	13.16	87.88	7.1	33.39	7.8	25.1	1.11
I13	04 Nov 2021	26	13.15	87.95	7.1	33.39	7.8	25.1	1.00
I13	04 Nov 2021	27	13.12	87.99	7.1	33.39	7.8	25.1	0.96
I13	04 Nov 2021	28	13.10	88.02	7.1	33.39	7.8	25.1	0.92
I13	04 Nov 2021	29	13.07	87.96	7.0	33.39	7.8	25.1	0.89
I13	04 Nov 2021	30	13.04	88.04	7.0	33.40	7.8	25.1	0.90
I13	04 Nov 2021	31	12.97	88.07	7.0	33.42	7.8	25.2	0.90
I13	04 Nov 2021	32	12.81	86.68	6.8	33.45	7.8	25.2	0.94
I13	04 Nov 2021	33	12.59	87.47	6.6	33.47	7.8	25.3	0.90
I13	04 Nov 2021	34	12.66	86.59	6.4	33.43	7.8	25.2	0.92
I13	04 Nov 2021	35	12.60	86.03	6.4	33.48	7.8	25.3	0.95
I13	04 Nov 2021	36	12.50	85.96	6.2	33.48	7.8	25.3	0.98
I13	04 Nov 2021	37	12.50	85.80	6.1	33.47	7.8	25.3	1.00
I13	04 Nov 2021	38	12.50	85.55	6.0	33.47	7.8	25.3	0.99
I14	04 Nov 2021	1	17.93	85.79	7.8	33.55	8.0	24.2	0.83
I14	04 Nov 2021	2	17.88	85.65	7.8	33.56	8.0	24.2	0.84
I14	04 Nov 2021	3	17.83	85.63	7.8	33.56	8.0	24.2	0.84
I14	04 Nov 2021	4	17.79	85.68	7.8	33.56	8.0	24.2	0.82
I14	04 Nov 2021	5	17.73	85.63	7.8	33.55	8.0	24.2	0.88
I14	04 Nov 2021	6	17.63	85.56	7.8	33.55	8.0	24.3	0.92
I14	04 Nov 2021	7	17.43	85.40	7.8	33.57	8.0	24.3	0.94
I14	04 Nov 2021	8	16.67	84.97	7.7	33.60	8.0	24.5	1.01
I14	04 Nov 2021	9	16.27	85.20	7.7	33.51	8.0	24.5	1.12
I14	04 Nov 2021	10	15.82	83.33	7.6	33.52	8.0	24.6	1.19
I14	04 Nov 2021	11	15.26	85.87	7.6	33.48	7.9	24.7	1.25
I14	04 Nov 2021	12	15.13	86.09	7.8	33.39	7.9	24.7	1.32
I14	04 Nov 2021	13	15.09	86.06	7.8	33.38	7.9	24.7	1.31
I14	04 Nov 2021	14	14.93	86.08	7.8	33.38	7.9	24.7	1.26
I14	04 Nov 2021	15	14.76	85.97	7.8	33.37	7.9	24.8	1.33

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I14	04 Nov 2021	16	14.60	86.03	7.7	33.38	7.9	24.8	1.30
I14	04 Nov 2021	17	14.12	86.34	7.6	33.41	7.9	24.9	1.40
I14	04 Nov 2021	18	13.94	86.75	7.5	33.39	7.9	25.0	1.43
I14	04 Nov 2021	19	13.86	86.94	7.4	33.38	7.9	25.0	1.39
I14	04 Nov 2021	20	13.79	87.05	7.3	33.38	7.9	25.0	1.33
I14	04 Nov 2021	21	13.70	87.12	7.3	33.38	7.9	25.0	1.34
I14	04 Nov 2021	22	13.64	87.13	7.3	33.40	7.9	25.0	1.23
I14	04 Nov 2021	23	13.46	87.14	7.2	33.42	7.9	25.1	1.21
I14	04 Nov 2021	24	13.18	87.14	7.1	33.43	7.8	25.1	1.20
I14	04 Nov 2021	25	13.16	87.05	6.9	33.44	7.8	25.2	1.18
I14	04 Nov 2021	26	12.79	84.48	6.7	33.47	7.8	25.2	1.18
I14	04 Nov 2021	27	12.77	81.22	6.4	33.46	7.8	25.2	1.16
I14	04 Nov 2021	28	12.77	79.71	6.3	33.46	7.8	25.2	1.19
I15	04 Nov 2021	1	18.05	86.86	7.8	33.55	8.0	24.2	0.61
I15	04 Nov 2021	2	18.04	86.74	7.8	33.56	8.0	24.2	0.60
I15	04 Nov 2021	3	18.01	86.83	7.8	33.56	8.0	24.2	0.61
I15	04 Nov 2021	4	17.97	86.74	7.8	33.55	8.0	24.2	0.64
I15	04 Nov 2021	5	17.91	86.82	7.7	33.56	8.0	24.2	0.72
I15	04 Nov 2021	6	17.61	86.66	7.7	33.58	8.0	24.3	0.71
I15	04 Nov 2021	7	17.02	86.56	7.7	33.52	8.0	24.4	0.81
I15	04 Nov 2021	8	16.07	86.40	7.7	33.58	8.0	24.6	0.90
I15	04 Nov 2021	9	15.45	86.12	7.8	33.39	7.9	24.6	0.93
I15	04 Nov 2021	10	15.42	86.06	7.9	33.36	7.9	24.6	1.10
I15	04 Nov 2021	11	15.49	86.09	7.8	33.37	7.9	24.6	1.19
I15	04 Nov 2021	12	15.06	85.95	7.8	33.35	7.9	24.7	1.27
I15	04 Nov 2021	13	14.96	86.02	7.8	33.35	7.9	24.7	1.32
I15	04 Nov 2021	14	14.87	86.08	7.7	33.36	7.9	24.7	1.38
I15	04 Nov 2021	15	14.54	86.27	7.6	33.40	7.9	24.8	1.41
I15	04 Nov 2021	16	14.05	86.70	7.5	33.38	7.9	24.9	1.40
I15	04 Nov 2021	17	13.93	86.93	7.4	33.37	7.9	24.9	1.36
I15	04 Nov 2021	18	13.82	87.14	7.4	33.37	7.9	25.0	1.32
I15	04 Nov 2021	19	13.78	87.22	7.4	33.36	7.9	25.0	1.25
I15	04 Nov 2021	20	13.76	87.26	7.4	33.37	7.9	25.0	1.20
I15	04 Nov 2021	21	13.68	87.35	7.3	33.37	7.9	25.0	1.22
I15	04 Nov 2021	22	13.62	87.42	7.3	33.38	7.9	25.0	1.15
I15	04 Nov 2021	23	13.48	87.42	7.2	33.40	7.9	25.1	1.19
I15	04 Nov 2021	24	13.26	87.51	7.1	33.42	7.8	25.1	1.10
I15	04 Nov 2021	25	13.00	87.51	6.9	33.44	7.8	25.2	1.09
I15	04 Nov 2021	26	12.86	86.79	6.7	33.44	7.8	25.2	1.09
I15	04 Nov 2021	27	12.79	85.58	6.5	33.45	7.8	25.2	1.11
I15	04 Nov 2021	28	12.73	84.74	6.3	33.45	7.8	25.2	1.12
I15	04 Nov 2021	29	12.71	84.14	6.2	33.45	7.8	25.3	1.16
I15	04 Nov 2021	30	12.71	82.80	6.1	33.45	7.8	25.3	1.23
I15	04 Nov 2021	31	12.71	82.22	6.1	33.45	7.8	25.3	1.28
I16	04 Nov 2021	1	17.95	86.79	7.7	33.53	8.0	24.2	0.71
I16	04 Nov 2021	2	17.96	86.70	7.7	33.55	8.0	24.2	0.71
I16	04 Nov 2021	3	17.95	86.52	7.7	33.55	8.0	24.2	0.69
I16	04 Nov 2021	4	17.93	86.71	7.7	33.56	8.0	24.2	0.70
I16	04 Nov 2021	5	17.51	86.64	7.6	33.61	8.0	24.3	0.72
I16	04 Nov 2021	6	16.79	86.45	7.7	33.61	8.0	24.5	0.74
I16	04 Nov 2021	7	16.06	86.12	7.6	33.54	8.0	24.6	0.80
I16	04 Nov 2021	8	15.78	86.05	7.7	33.46	7.9	24.6	0.92
I16	04 Nov 2021	9	15.59	86.21	7.6	33.45	7.9	24.6	1.05
I16	04 Nov 2021	10	15.33	86.27	7.7	33.43	7.9	24.7	1.15
I16	04 Nov 2021	11	15.19	86.24	7.7	33.41	7.9	24.7	1.17
I16	04 Nov 2021	12	14.84	86.36	7.5	33.48	7.9	24.8	1.22
I16	04 Nov 2021	13	14.34	86.44	7.5	33.46	7.9	24.9	1.36
I16	04 Nov 2021	14	13.99	86.51	7.4	33.41	7.9	25.0	1.26
I16	04 Nov 2021	15	13.93	86.70	7.4	33.37	7.9	24.9	1.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I16	04 Nov 2021	16	13.90	86.82	7.4	33.37	7.9	24.9	1.28
I16	04 Nov 2021	17	13.86	86.94	7.4	33.37	7.9	25.0	1.30
I16	04 Nov 2021	18	13.84	87.01	7.4	33.37	7.9	25.0	1.23
I16	04 Nov 2021	19	13.75	87.06	7.3	33.38	7.9	25.0	1.19
I16	04 Nov 2021	20	13.48	86.43	7.2	33.41	7.9	25.1	1.21
I16	04 Nov 2021	21	13.14	85.00	7.0	33.35	7.8	25.1	1.20
I16	04 Nov 2021	22	12.92	84.28	6.6	33.27	7.8	25.1	1.24
I16	04 Nov 2021	23	12.88	82.85	6.4	33.28	7.8	25.1	1.22
I16	04 Nov 2021	24	12.82	82.11	6.3	33.35	7.8	25.2	1.36
I16	04 Nov 2021	25	12.79	80.27	6.2	33.43	7.8	25.2	1.24
I16	04 Nov 2021	26	12.82	81.22	6.3	33.39	7.8	25.2	1.27
I16	04 Nov 2021	27	12.82	80.87	6.3	33.39	7.8	25.2	1.24
I16	04 Nov 2021	28	12.79	80.01	6.3	33.44	7.8	25.2	1.24
I17	04 Nov 2021	1	17.80	85.89	7.7	33.55	8.0	24.2	0.92
I17	04 Nov 2021	2	17.83	85.20	7.8	33.55	8.0	24.2	0.92
I17	04 Nov 2021	3	17.80	86.09	7.8	33.56	8.0	24.2	0.94
I17	04 Nov 2021	4	17.49	85.88	7.7	33.61	8.0	24.3	0.90
I17	04 Nov 2021	5	16.96	85.65	7.7	33.60	8.0	24.4	1.00
I17	04 Nov 2021	6	16.32	85.80	7.7	33.55	8.0	24.6	1.05
I17	04 Nov 2021	7	15.99	85.89	7.6	33.51	8.0	24.6	1.16
I17	04 Nov 2021	8	15.75	86.10	7.7	33.46	7.9	24.6	1.23
I17	04 Nov 2021	9	15.59	86.27	7.6	33.45	7.9	24.7	1.28
I17	04 Nov 2021	10	15.36	86.27	7.6	33.46	7.9	24.7	1.26
I17	04 Nov 2021	11	15.11	86.30	7.5	33.48	7.9	24.8	1.31
I17	04 Nov 2021	12	14.47	86.05	7.4	33.51	7.9	24.9	1.34
I17	04 Nov 2021	13	14.38	85.24	7.3	33.42	7.9	24.9	1.33
I17	04 Nov 2021	14	13.96	84.90	7.3	33.46	7.9	25.0	1.34
I17	04 Nov 2021	15	13.78	85.58	7.3	33.42	7.9	25.0	1.26
I17	04 Nov 2021	16	13.67	86.26	7.2	33.40	7.9	25.0	1.25
I17	04 Nov 2021	17	13.61	86.31	7.3	33.40	7.9	25.0	1.23
I17	04 Nov 2021	18	13.55	86.72	7.3	33.39	7.9	25.0	1.19
I17	04 Nov 2021	19	13.52	86.98	7.2	33.39	7.9	25.0	1.20
I17	04 Nov 2021	20	13.49	87.15	7.2	33.40	7.8	25.1	1.19
I17	04 Nov 2021	21	13.45	87.20	7.2	33.40	7.8	25.1	1.17
I17	04 Nov 2021	22	13.23	87.22	7.1	33.45	7.8	25.1	1.19
I17	04 Nov 2021	23	12.92	87.19	6.9	33.46	7.8	25.2	1.17
I17	04 Nov 2021	24	12.91	85.60	6.7	33.44	7.8	25.2	1.20
I17	04 Nov 2021	25	12.82	82.65	6.5	33.45	7.8	25.2	1.20
I18	04 Nov 2021	1	16.97	84.13	7.7	33.52	8.0	24.4	1.46
I18	04 Nov 2021	2	16.94	83.80	7.7	33.53	8.0	24.4	1.38
I18	04 Nov 2021	3	16.60	83.94	7.7	33.51	8.0	24.5	1.39
I18	04 Nov 2021	4	16.52	83.88	7.7	33.50	7.9	24.5	1.47
I18	04 Nov 2021	5	16.47	83.25	7.5	33.49	7.9	24.5	1.50
I18	04 Nov 2021	6	16.45	82.02	7.6	33.50	7.9	24.5	1.67
I18	04 Nov 2021	7	16.35	81.23	7.6	33.51	7.9	24.5	1.91
I18	04 Nov 2021	8	16.09	80.83	7.5	33.52	7.9	24.6	1.84
I18	04 Nov 2021	9	15.35	80.75	7.4	33.60	7.9	24.8	1.88
I18	04 Nov 2021	10	14.71	81.94	7.3	33.50	7.9	24.9	1.90
I18	04 Nov 2021	11	14.14	83.09	7.1	33.53	7.8	25.0	1.85
I18	04 Nov 2021	12	13.78	83.42	6.9	33.48	7.8	25.1	1.89
I18	04 Nov 2021	13	13.58	83.57	6.8	33.45	7.8	25.1	1.49
I18	04 Nov 2021	14	13.39	83.47	6.7	33.45	7.8	25.1	1.41
I18	04 Nov 2021	15	13.22	83.49	6.7	33.46	7.8	25.2	1.40
I18	04 Nov 2021	16	13.12	83.86	6.6	33.45	7.8	25.2	1.29
I18	04 Nov 2021	17	13.01	83.69	6.5	33.46	7.8	25.2	1.26
I18	04 Nov 2021	18	12.95	82.88	6.4	33.45	7.8	25.2	1.47
I18	04 Nov 2021	19	12.95	81.97	6.4	33.45	7.8	25.2	1.43
I2	05 Nov 2021	1	18.02	86.63	7.7	33.54	8.0	24.2	0.61

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I2	05 Nov 2021	2	18.02	86.52	7.8	33.54	8.0	24.2	0.59
I2	05 Nov 2021	3	18.02	86.58	7.8	33.54	8.0	24.2	0.61
I2	05 Nov 2021	4	18.02	86.59	7.8	33.54	8.0	24.2	0.64
I2	05 Nov 2021	5	18.01	86.65	7.8	33.54	8.0	24.2	0.63
I2	05 Nov 2021	6	18.01	86.69	7.8	33.54	8.0	24.2	0.63
I2	05 Nov 2021	7	18.01	86.50	7.8	33.54	8.0	24.2	0.66
I2	05 Nov 2021	8	18.00	86.65	7.8	33.54	8.0	24.2	0.71
I2	05 Nov 2021	9	17.85	86.62	7.7	33.55	8.0	24.2	0.68
I2	05 Nov 2021	10	17.52	86.63	7.8	33.51	8.0	24.2	0.69
I2	05 Nov 2021	11	17.39	86.73	7.8	33.48	8.0	24.3	0.71
I2	05 Nov 2021	12	17.10	86.72	7.8	33.46	8.0	24.3	0.74
I2	05 Nov 2021	13	16.89	86.93	7.8	33.43	8.0	24.3	0.74
I2	05 Nov 2021	14	16.79	87.02	7.9	33.41	8.0	24.3	0.76
I2	05 Nov 2021	15	16.57	86.97	7.8	33.41	8.0	24.4	0.79
I2	05 Nov 2021	16	16.27	86.70	7.8	33.40	8.0	24.5	0.78
I2	05 Nov 2021	17	16.20	86.46	7.8	33.39	8.0	24.5	0.93
I2	05 Nov 2021	18	16.09	86.54	7.8	33.38	8.0	24.5	1.11
I2	05 Nov 2021	19	15.99	86.60	7.8	33.39	8.0	24.5	1.23
I2	05 Nov 2021	20	15.59	86.51	7.7	33.39	8.0	24.6	1.18
I2	05 Nov 2021	21	15.24	86.46	7.7	33.40	7.9	24.7	1.25
I2	05 Nov 2021	22	14.45	86.39	7.6	33.43	7.9	24.9	1.31
I2	05 Nov 2021	23	13.89	86.95	7.6	33.35	7.9	24.9	1.26
I2	05 Nov 2021	24	13.84	87.30	7.5	33.33	7.9	24.9	1.19
I2	05 Nov 2021	25	13.79	87.32	7.5	33.33	7.9	24.9	1.12
I2	05 Nov 2021	26	13.75	87.34	7.5	33.33	7.9	24.9	1.13
I2	05 Nov 2021	27	13.71	87.47	7.5	33.33	7.9	25.0	1.08
I2	05 Nov 2021	28	13.57	86.92	7.4	33.36	7.9	25.0	1.07
I2	05 Nov 2021	29	13.36	87.60	7.3	33.38	7.9	25.1	1.03
I2	05 Nov 2021	30	13.26	87.54	7.1	33.39	7.8	25.1	1.02
I2	05 Nov 2021	31	13.14	87.70	7.0	33.41	7.8	25.1	0.97
I2	05 Nov 2021	32	12.87	87.53	6.7	33.45	7.8	25.2	0.92
I20	04 Nov 2021	1	18.08	85.53	7.8	33.53	8.0	24.1	0.64
I20	04 Nov 2021	2	18.08	85.65	7.8	33.54	8.0	24.1	0.67
I20	04 Nov 2021	3	18.08	86.11	7.8	33.54	8.0	24.1	0.68
I20	04 Nov 2021	4	18.05	86.58	7.8	33.54	8.0	24.1	0.75
I20	04 Nov 2021	5	17.94	86.68	7.7	33.54	8.0	24.2	0.73
I20	04 Nov 2021	6	17.66	86.60	7.7	33.51	8.0	24.2	0.71
I20	04 Nov 2021	7	17.59	86.80	7.8	33.46	8.0	24.2	0.66
I20	04 Nov 2021	8	17.30	86.97	7.8	33.50	8.0	24.3	0.66
I20	04 Nov 2021	9	16.85	87.13	7.9	33.43	8.0	24.3	0.71
I20	04 Nov 2021	10	16.75	87.02	7.8	33.40	8.0	24.3	0.77
I20	04 Nov 2021	11	16.73	87.05	7.8	33.39	8.0	24.3	0.70
I20	04 Nov 2021	12	16.72	87.01	7.9	33.39	8.0	24.3	0.68
I20	04 Nov 2021	13	16.61	86.92	7.9	33.39	8.0	24.4	0.75
I20	04 Nov 2021	14	16.43	86.57	7.9	33.38	8.0	24.4	0.73
I20	04 Nov 2021	15	16.39	86.43	7.9	33.38	7.9	24.4	0.90
I20	04 Nov 2021	16	16.33	86.30	7.9	33.38	7.9	24.4	1.03
I20	04 Nov 2021	17	16.31	86.25	7.9	33.38	7.9	24.4	1.17
I20	04 Nov 2021	18	16.08	86.08	7.8	33.39	7.9	24.5	1.28
I20	04 Nov 2021	19	15.75	86.51	7.8	33.37	7.9	24.6	1.37
I20	04 Nov 2021	20	15.47	86.65	7.8	33.36	7.9	24.6	1.33
I20	04 Nov 2021	21	15.20	86.80	7.7	33.36	7.9	24.7	1.35
I20	04 Nov 2021	22	14.57	86.90	7.7	33.40	7.9	24.8	1.32
I20	04 Nov 2021	23	14.11	87.24	7.6	33.34	7.9	24.9	1.32
I20	04 Nov 2021	24	14.03	87.44	7.5	33.33	7.9	24.9	1.23
I20	04 Nov 2021	25	13.75	87.59	7.4	33.37	7.8	25.0	1.13
I20	04 Nov 2021	26	13.49	87.70	7.3	33.36	7.8	25.0	1.05
I20	04 Nov 2021	27	13.39	87.73	7.3	33.35	7.8	25.0	0.98
I20	04 Nov 2021	28	13.38	87.75	7.3	33.35	7.8	25.0	0.89
I20	04 Nov 2021	29	13.33	87.83	7.2	33.35	7.8	25.1	0.90

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I20	04 Nov 2021	30	13.29	87.90	7.2	33.36	7.8	25.1	0.85
I20	04 Nov 2021	31	13.19	87.91	7.2	33.38	7.8	25.1	1.02
I20	04 Nov 2021	32	13.06	88.04	7.1	33.38	7.8	25.1	0.87
I20	04 Nov 2021	33	13.01	88.07	7.1	33.38	7.8	25.1	0.82
I20	04 Nov 2021	34	12.93	88.10	7.0	33.39	7.8	25.2	0.77
I20	04 Nov 2021	35	12.84	88.16	7.0	33.39	7.8	25.2	0.74
I20	04 Nov 2021	36	12.80	88.18	6.9	33.39	7.8	25.2	0.73
I20	04 Nov 2021	37	12.72	88.18	6.9	33.40	7.8	25.2	0.70
I20	04 Nov 2021	38	12.70	88.15	6.8	33.40	7.8	25.2	0.66
I20	04 Nov 2021	39	12.67	88.13	6.7	33.41	7.8	25.2	0.66
I20	04 Nov 2021	40	12.61	87.96	6.6	33.44	7.8	25.3	0.64
I20	04 Nov 2021	41	12.48	87.50	6.4	33.47	7.8	25.3	0.62
I20	04 Nov 2021	42	12.42	86.99	6.2	33.48	7.8	25.3	0.65
I20	04 Nov 2021	43	12.40	86.68	6.1	33.49	7.7	25.3	0.71
I20	04 Nov 2021	44	12.39	86.66	6.0	33.49	7.7	25.3	0.68
I20	04 Nov 2021	45	12.37	86.67	6.0	33.49	7.7	25.3	0.67
I20	04 Nov 2021	46	12.35	86.59	6.0	33.49	7.7	25.4	0.67
I20	04 Nov 2021	47	12.33	86.48	5.9	33.50	7.7	25.4	0.75
I20	04 Nov 2021	48	12.32	86.39	5.9	33.50	7.7	25.4	0.75
I20	04 Nov 2021	49	12.31	86.43	5.9	33.50	7.7	25.4	0.69
I20	04 Nov 2021	50	12.28	86.46	5.9	33.50	7.7	25.4	0.68
I20	04 Nov 2021	51	12.28	86.51	5.9	33.50	7.7	25.4	0.69
I20	04 Nov 2021	52	12.28	86.43	5.9	33.50	7.7	25.4	0.65
I20	04 Nov 2021	53	12.28	86.46	5.9	33.50	7.7	25.4	0.64
I20	04 Nov 2021	54	12.28	86.49	5.9	33.50	7.7	25.4	0.63
I20	04 Nov 2021	55	12.28	86.50	5.9	33.50	7.7	25.4	0.61
I21	04 Nov 2021	1	18.11	86.96	7.7	33.55	8.0	24.1	0.68
I21	04 Nov 2021	2	18.11	86.77	7.8	33.55	8.0	24.1	0.65
I21	04 Nov 2021	3	18.10	86.69	7.7	33.55	8.0	24.1	0.66
I21	04 Nov 2021	4	17.94	85.15	7.7	33.58	8.0	24.2	0.67
I21	04 Nov 2021	5	17.49	86.56	7.8	33.55	8.0	24.3	0.64
I21	04 Nov 2021	6	17.12	86.90	7.8	33.49	8.0	24.3	0.67
I21	04 Nov 2021	7	16.99	86.94	7.8	33.46	8.0	24.3	0.72
I21	04 Nov 2021	8	16.93	86.87	7.8	33.46	8.0	24.3	0.79
I21	04 Nov 2021	9	16.65	86.63	7.8	33.50	8.0	24.4	0.80
I21	04 Nov 2021	10	16.28	86.25	7.8	33.46	8.0	24.5	0.79
I21	04 Nov 2021	11	16.35	86.19	7.8	33.39	8.0	24.4	0.96
I21	04 Nov 2021	12	16.01	86.20	7.8	33.45	8.0	24.6	1.07
I21	04 Nov 2021	13	15.79	86.24	7.8	33.40	7.9	24.6	1.15
I21	04 Nov 2021	14	15.46	86.31	7.7	33.43	7.9	24.7	1.28
I21	04 Nov 2021	15	15.15	86.41	7.8	33.35	7.9	24.7	1.29
I21	04 Nov 2021	16	14.73	86.81	7.7	33.47	7.9	24.8	1.42
I21	04 Nov 2021	17	14.07	87.09	7.6	33.39	7.9	24.9	1.33
I21	04 Nov 2021	18	13.98	87.20	7.6	33.36	7.9	24.9	1.45
I21	04 Nov 2021	19	13.95	87.36	7.6	33.36	7.9	24.9	1.37
I21	04 Nov 2021	20	13.81	87.61	7.5	33.35	7.9	24.9	1.31
I21	04 Nov 2021	21	13.77	87.67	7.5	33.35	7.9	25.0	1.26
I21	04 Nov 2021	22	13.73	87.76	7.5	33.36	7.9	25.0	1.13
I21	04 Nov 2021	23	13.52	87.82	7.3	33.40	7.8	25.0	1.17
I21	04 Nov 2021	24	13.23	87.94	7.1	33.42	7.8	25.1	1.04
I21	04 Nov 2021	25	13.11	88.05	7.0	33.40	7.8	25.1	0.98
I21	04 Nov 2021	26	13.06	88.09	6.9	33.42	7.8	25.2	0.91
I21	04 Nov 2021	27	13.03	88.13	6.8	33.43	7.8	25.2	0.86
I21	04 Nov 2021	28	13.02	88.14	6.8	33.42	7.8	25.2	0.81
I21	04 Nov 2021	29	13.01	88.13	6.8	33.43	7.8	25.2	0.75
I21	04 Nov 2021	30	12.93	88.13	6.7	33.43	7.8	25.2	0.74
I21	04 Nov 2021	31	12.89	88.10	6.8	33.42	7.8	25.2	0.70
I21	04 Nov 2021	32	12.88	88.00	6.8	33.43	7.8	25.2	0.70
I21	04 Nov 2021	33	12.80	87.85	6.7	33.44	7.8	25.2	0.70
I21	04 Nov 2021	34	12.78	87.86	6.7	33.44	7.8	25.2	0.70

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I21	04 Nov 2021	35	12.63	87.55	6.5	33.49	7.8	25.3	0.72
I21	04 Nov 2021	36	12.45	86.66	6.3	33.50	7.8	25.3	0.73
I21	04 Nov 2021	37	12.55	86.82	6.1	33.46	7.8	25.3	0.71
I21	04 Nov 2021	38	12.39	86.35	6.1	33.50	7.8	25.4	0.72
I21	04 Nov 2021	39	12.38	86.21	6.0	33.49	7.7	25.3	0.71
I21	04 Nov 2021	40	12.38	86.07	6.0	33.49	7.7	25.3	0.75
I21	04 Nov 2021	41	12.38	85.97	6.0	33.49	7.7	25.3	0.71
I22	04 Nov 2021	1	17.86	86.22	7.8	33.55	8.0	24.2	0.79
I22	04 Nov 2021	2	17.86	86.21	7.8	33.55	8.0	24.2	0.82
I22	04 Nov 2021	3	17.82	86.32	7.7	33.56	8.0	24.2	0.87
I22	04 Nov 2021	4	17.31	86.27	7.6	33.65	8.0	24.4	0.85
I22	04 Nov 2021	5	16.08	85.99	7.6	33.63	8.0	24.7	0.86
I22	04 Nov 2021	6	15.48	86.10	7.6	33.53	7.9	24.7	0.92
I22	04 Nov 2021	7	15.07	86.32	7.7	33.43	7.9	24.7	1.08
I22	04 Nov 2021	8	15.02	86.41	7.7	33.38	7.9	24.7	1.10
I22	04 Nov 2021	9	14.92	86.52	7.7	33.40	7.9	24.8	1.13
I22	04 Nov 2021	10	14.49	86.52	7.5	33.48	7.9	24.9	1.18
I22	04 Nov 2021	11	14.04	86.80	7.5	33.41	7.9	24.9	1.17
I22	04 Nov 2021	12	13.97	86.86	7.4	33.38	7.9	24.9	1.17
I22	04 Nov 2021	13	13.93	86.86	7.4	33.38	7.9	24.9	1.14
I22	04 Nov 2021	14	13.87	86.83	7.4	33.38	7.9	25.0	1.13
I22	04 Nov 2021	15	13.82	86.88	7.4	33.37	7.9	25.0	1.18
I22	04 Nov 2021	16	13.78	86.92	7.3	33.37	7.9	25.0	1.18
I22	04 Nov 2021	17	13.67	87.03	7.3	33.39	7.8	25.0	1.18
I22	04 Nov 2021	18	13.57	87.08	7.2	33.40	7.8	25.0	1.13
I22	04 Nov 2021	19	13.51	87.04	7.2	33.40	7.8	25.1	1.13
I22	04 Nov 2021	20	13.41	86.96	7.1	33.40	7.8	25.1	1.12
I22	04 Nov 2021	21	13.40	87.07	7.1	33.40	7.8	25.1	1.10
I22	04 Nov 2021	22	13.32	87.37	7.1	33.42	7.8	25.1	1.09
I22	04 Nov 2021	23	13.05	87.43	7.0	33.44	7.8	25.2	1.05
I22	04 Nov 2021	24	12.90	87.51	6.8	33.45	7.8	25.2	1.05
I22	04 Nov 2021	25	12.78	87.02	6.7	33.45	7.8	25.2	1.07
I22	04 Nov 2021	26	12.78	84.79	6.5	33.45	7.8	25.2	1.02
I22	04 Nov 2021	27	12.73	82.10	6.4	33.45	7.8	25.2	1.08
I22	04 Nov 2021	28	12.73	81.18	6.2	33.45	7.8	25.2	1.12
I23	04 Nov 2021	1	16.93	84.03	7.8	33.51	8.0	24.4	1.56
I23	04 Nov 2021	2	16.90	83.70	7.7	33.52	8.0	24.4	1.57
I23	04 Nov 2021	3	16.76	83.66	7.7	33.52	8.0	24.4	1.60
I23	04 Nov 2021	4	16.60	83.74	7.7	33.51	8.0	24.5	1.75
I23	04 Nov 2021	5	16.37	83.87	7.7	33.50	7.9	24.5	1.81
I23	04 Nov 2021	6	16.11	84.80	7.6	33.48	7.9	24.6	1.69
I23	04 Nov 2021	7	15.87	85.52	7.6	33.45	7.9	24.6	1.62
I23	04 Nov 2021	8	15.82	85.79	7.6	33.44	7.9	24.6	1.47
I23	04 Nov 2021	9	15.77	84.70	7.5	33.45	7.9	24.6	1.42
I23	04 Nov 2021	10	15.71	83.15	7.4	33.46	7.9	24.6	1.49
I23	04 Nov 2021	11	15.67	82.49	7.4	33.45	7.9	24.6	1.55
I23	04 Nov 2021	12	15.48	81.99	7.4	33.47	7.9	24.7	1.54
I23	04 Nov 2021	13	15.34	82.13	7.4	33.45	7.9	24.7	1.55
I23	04 Nov 2021	14	14.84	82.49	7.2	33.51	7.9	24.9	1.62
I23	04 Nov 2021	15	13.71	83.31	7.0	33.48	7.8	25.1	1.53
I23	04 Nov 2021	16	13.56	83.40	6.8	33.42	7.8	25.1	1.40
I23	04 Nov 2021	17	13.40	82.92	6.6	33.42	7.8	25.1	1.35
I23	04 Nov 2021	18	13.28	82.20	6.5	33.43	7.8	25.1	1.25
I23	04 Nov 2021	19	13.06	81.44	6.4	33.45	7.8	25.2	1.42
I23	04 Nov 2021	20	12.96	80.16	6.3	33.44	7.8	25.2	1.41
I23	04 Nov 2021	21	12.94	78.38	6.3	33.44	7.8	25.2	1.36
I27	04 Nov 2021	1	17.43	84.54	7.8	33.53	8.0	24.3	1.33
I27	04 Nov 2021	2	17.44	84.59	7.8	33.53	8.0	24.3	1.35

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I27	04 Nov 2021	3	17.08	84.25	7.7	33.62	8.0	24.4	1.50
I27	04 Nov 2021	4	16.15	84.56	7.5	33.63	7.9	24.7	1.40
I27	04 Nov 2021	5	15.04	85.18	7.5	33.57	7.9	24.9	1.47
I27	04 Nov 2021	6	14.81	86.15	7.5	33.44	7.9	24.8	1.41
I27	04 Nov 2021	7	14.65	86.45	7.5	33.40	7.9	24.8	1.30
I27	04 Nov 2021	8	14.52	86.72	7.6	33.38	7.9	24.8	1.23
I27	04 Nov 2021	9	14.32	86.67	7.6	33.40	7.9	24.9	1.16
I27	04 Nov 2021	10	14.02	86.79	7.6	33.38	7.9	24.9	1.13
I27	04 Nov 2021	11	13.95	86.98	7.5	33.37	7.9	24.9	1.20
I27	04 Nov 2021	12	13.93	87.08	7.5	33.37	7.9	24.9	1.15
I27	04 Nov 2021	13	13.76	87.16	7.4	33.39	7.9	25.0	1.13
I27	04 Nov 2021	14	13.68	87.11	7.3	33.38	7.8	25.0	1.18
I27	04 Nov 2021	15	13.66	87.42	7.3	33.38	7.8	25.0	1.12
I27	04 Nov 2021	16	13.63	87.51	7.3	33.37	7.8	25.0	1.05
I27	04 Nov 2021	17	13.58	87.53	7.2	33.38	7.8	25.0	1.07
I27	04 Nov 2021	18	13.47	87.59	7.2	33.40	7.8	25.1	1.03
I27	04 Nov 2021	19	13.44	87.68	7.2	33.39	7.8	25.1	1.00
I27	04 Nov 2021	20	13.39	87.64	7.2	33.39	7.8	25.1	1.05
I27	04 Nov 2021	21	13.34	87.62	7.1	33.40	7.8	25.1	0.99
I27	04 Nov 2021	22	13.29	87.40	7.1	33.40	7.8	25.1	0.94
I27	04 Nov 2021	23	13.23	87.32	7.0	33.42	7.8	25.1	0.97
I27	04 Nov 2021	24	13.05	87.45	6.9	33.44	7.8	25.2	0.95
I27	04 Nov 2021	25	12.99	87.66	6.8	33.44	7.8	25.2	0.96
I27	04 Nov 2021	26	12.85	87.60	6.7	33.46	7.8	25.2	0.96
I27	04 Nov 2021	27	12.74	87.26	6.6	33.47	7.8	25.3	0.95
I27	04 Nov 2021	28	12.67	85.34	6.4	33.47	7.8	25.3	0.93
I28	03 Nov 2021	1	18.13	86.98	7.5	33.55	8.0	24.1	0.86
I28	03 Nov 2021	2	18.13	84.20	7.7	33.55	8.0	24.1	0.86
I28	03 Nov 2021	3	18.13	86.68	7.7	33.55	8.0	24.1	0.75
I28	03 Nov 2021	4	18.12	86.30	7.7	33.55	8.0	24.1	0.88
I28	03 Nov 2021	5	18.03	86.83	7.6	33.56	8.0	24.2	0.82
I28	03 Nov 2021	6	17.83	86.95	7.7	33.57	8.0	24.2	0.84
I28	03 Nov 2021	7	17.44	87.00	7.7	33.58	8.0	24.3	0.82
I28	03 Nov 2021	8	17.06	86.82	7.8	33.52	8.0	24.4	0.90
I28	03 Nov 2021	9	16.88	86.61	7.8	33.50	8.0	24.4	0.91
I28	03 Nov 2021	10	16.62	86.54	7.7	33.52	8.0	24.5	0.96
I28	03 Nov 2021	11	16.12	86.45	7.6	33.58	8.0	24.6	1.00
I28	03 Nov 2021	12	16.00	86.59	7.6	33.48	7.9	24.6	1.11
I28	03 Nov 2021	13	14.92	86.29	7.5	33.58	7.9	24.9	1.23
I28	03 Nov 2021	14	14.35	86.95	7.6	33.48	7.9	24.9	1.28
I28	03 Nov 2021	15	14.09	87.15	7.6	33.42	7.9	24.9	1.40
I28	03 Nov 2021	16	13.98	87.32	7.5	33.38	7.9	24.9	1.32
I28	03 Nov 2021	17	13.91	87.43	7.5	33.39	7.9	25.0	1.33
I28	03 Nov 2021	18	13.86	87.52	7.5	33.38	7.9	25.0	1.32
I28	03 Nov 2021	19	13.80	87.58	7.4	33.38	7.9	25.0	1.33
I28	03 Nov 2021	20	13.81	87.61	7.4	33.37	7.9	25.0	1.24
I28	03 Nov 2021	21	13.79	87.16	7.4	33.37	7.9	25.0	1.20
I28	03 Nov 2021	22	13.68	87.63	7.4	33.39	7.9	25.0	1.22
I28	03 Nov 2021	23	13.56	87.72	7.3	33.41	7.9	25.1	1.22
I28	03 Nov 2021	24	13.44	87.92	7.2	33.41	7.8	25.1	1.13
I28	03 Nov 2021	25	13.24	87.69	7.1	33.43	7.8	25.1	1.12
I28	03 Nov 2021	26	13.16	88.08	7.1	33.41	7.8	25.1	1.08
I28	03 Nov 2021	27	13.04	88.15	7.0	33.42	7.8	25.2	1.01
I28	03 Nov 2021	28	12.94	87.79	7.0	33.41	7.8	25.2	0.91
I28	03 Nov 2021	29	12.94	88.35	7.0	33.41	7.8	25.2	0.85
I28	03 Nov 2021	30	12.92	88.34	7.0	33.41	7.8	25.2	0.89
I28	03 Nov 2021	31	12.91	88.35	7.0	33.41	7.8	25.2	0.89
I28	03 Nov 2021	32	12.90	88.34	6.9	33.41	7.8	25.2	0.80
I28	03 Nov 2021	33	12.80	88.32	6.8	33.44	7.8	25.2	0.81
I28	03 Nov 2021	34	12.81	88.36	6.8	33.42	7.8	25.2	0.79

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I28	03 Nov 2021	35	12.60	88.41	6.8	33.45	7.8	25.3	0.77
I28	03 Nov 2021	36	12.55	88.42	6.7	33.44	7.8	25.3	0.75
I28	03 Nov 2021	37	12.53	88.43	6.6	33.44	7.8	25.3	0.73
I28	03 Nov 2021	38	12.49	88.47	6.6	33.44	7.8	25.3	0.72
I28	03 Nov 2021	39	12.42	88.37	6.5	33.46	7.8	25.3	0.70
I28	03 Nov 2021	40	12.39	88.26	6.4	33.46	7.8	25.3	0.67
I28	03 Nov 2021	41	12.37	87.83	6.3	33.48	7.8	25.3	0.67
I28	03 Nov 2021	42	12.37	87.47	6.2	33.48	7.8	25.3	0.65
I28	03 Nov 2021	43	12.31	87.39	6.1	33.50	7.8	25.4	0.66
I28	03 Nov 2021	44	12.31	87.35	6.0	33.50	7.7	25.4	0.68
I28	03 Nov 2021	45	12.28	87.44	6.0	33.51	7.7	25.4	0.68
I28	03 Nov 2021	46	12.23	87.60	6.0	33.51	7.7	25.4	0.67
I28	03 Nov 2021	47	12.25	87.63	5.9	33.50	7.7	25.4	0.67
I28	03 Nov 2021	48	12.23	87.50	5.9	33.51	7.7	25.4	0.67
I28	03 Nov 2021	49	12.19	87.48	5.9	33.52	7.7	25.4	0.70
I28	03 Nov 2021	50	12.15	87.42	5.8	33.52	7.7	25.4	0.68
I28	03 Nov 2021	51	12.10	87.15	5.8	33.53	7.7	25.4	0.69
I28	03 Nov 2021	52	12.08	86.57	5.7	33.53	7.7	25.4	0.66
I28	03 Nov 2021	53	12.05	86.19	5.6	33.54	7.7	25.4	0.64
I28	03 Nov 2021	54	12.05	85.99	5.6	33.54	7.7	25.4	0.62
I28	03 Nov 2021	55	12.04	85.92	5.5	33.54	7.7	25.4	0.61
I29	03 Nov 2021	1	17.76	85.69	7.8	33.53	8.0	24.2	0.93
I29	03 Nov 2021	2	17.76	85.78	7.8	33.53	8.0	24.2	0.97
I29	03 Nov 2021	3	17.76	85.87	7.8	33.53	8.0	24.2	0.93
I29	03 Nov 2021	4	17.76	85.86	7.8	33.54	8.0	24.2	0.99
I29	03 Nov 2021	5	17.76	85.90	7.8	33.53	8.0	24.2	1.00
I29	03 Nov 2021	6	17.76	85.87	7.8	33.54	8.0	24.2	1.00
I29	03 Nov 2021	7	17.74	85.69	7.8	33.54	8.0	24.2	1.08
I29	03 Nov 2021	8	17.73	85.91	7.8	33.54	8.0	24.2	1.10
I29	03 Nov 2021	9	17.66	85.59	7.7	33.55	8.0	24.2	1.06
I29	03 Nov 2021	10	17.60	85.54	7.8	33.54	8.0	24.2	1.20
I29	03 Nov 2021	11	17.49	85.41	7.8	33.54	8.0	24.3	1.18
I29	03 Nov 2021	12	17.39	85.61	7.8	33.53	8.0	24.3	1.24
I29	03 Nov 2021	13	16.45	85.92	7.6	33.74	8.0	24.7	1.27
I29	03 Nov 2021	14	15.33	86.33	7.6	33.52	7.9	24.8	1.32
I29	03 Nov 2021	15	15.24	86.53	7.5	33.47	7.9	24.7	1.36
I29	03 Nov 2021	16	14.44	86.77	7.5	33.54	7.9	25.0	1.27
I29	03 Nov 2021	17	13.90	86.93	7.6	33.40	7.9	25.0	1.33
I29	03 Nov 2021	18	13.83	87.22	7.6	33.35	7.9	25.0	1.31
I29	03 Nov 2021	19	13.78	87.38	7.6	33.37	7.9	25.0	1.24
I29	03 Nov 2021	20	13.59	87.53	7.4	33.42	7.9	25.1	1.26
I29	03 Nov 2021	21	13.47	87.65	7.2	33.43	7.8	25.1	1.23
I29	03 Nov 2021	22	13.31	87.70	7.1	33.42	7.8	25.1	1.21
I29	03 Nov 2021	23	13.15	87.87	7.0	33.44	7.8	25.2	1.15
I29	03 Nov 2021	24	13.13	87.91	7.0	33.43	7.8	25.2	1.12
I29	03 Nov 2021	25	12.93	87.99	6.9	33.44	7.8	25.2	1.07
I29	03 Nov 2021	26	12.93	88.03	6.8	33.44	7.8	25.2	1.00
I29	03 Nov 2021	27	12.88	88.06	6.8	33.46	7.8	25.2	1.01
I29	03 Nov 2021	28	12.81	88.04	6.7	33.46	7.8	25.2	0.94
I29	03 Nov 2021	29	12.78	87.92	6.6	33.45	7.8	25.2	0.93
I29	03 Nov 2021	30	12.77	87.71	6.6	33.45	7.8	25.2	0.91
I29	03 Nov 2021	31	12.75	87.45	6.5	33.46	7.8	25.2	0.90
I29	03 Nov 2021	32	12.67	86.97	6.4	33.47	7.8	25.3	0.94
I29	03 Nov 2021	33	12.62	85.62	6.3	33.48	7.8	25.3	0.94
I29	03 Nov 2021	34	12.58	84.46	6.2	33.48	7.8	25.3	1.01
I29	03 Nov 2021	35	12.55	83.24	6.1	33.48	7.8	25.3	1.05
I29	03 Nov 2021	36	12.54	82.48	6.1	33.48	7.8	25.3	1.10
I29	03 Nov 2021	37	12.52	81.39	6.0	33.47	7.8	25.3	1.10
I29	03 Nov 2021	38	12.53	80.05	6.0	33.47	7.8	25.3	1.12

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I3	05 Nov 2021	1	18.02	86.85	7.8	33.55	8.0	24.2	0.63
I3	05 Nov 2021	2	18.04	86.82	7.7	33.55	8.0	24.2	0.64
I3	05 Nov 2021	3	18.05	86.83	7.7	33.56	8.0	24.2	0.63
I3	05 Nov 2021	4	18.04	86.86	7.8	33.56	8.0	24.2	0.65
I3	05 Nov 2021	5	18.03	86.94	7.7	33.56	8.0	24.2	0.67
I3	05 Nov 2021	6	17.90	86.89	7.7	33.56	8.0	24.2	0.73
I3	05 Nov 2021	7	17.52	86.63	7.7	33.58	8.0	24.3	0.80
I3	05 Nov 2021	8	17.22	85.36	7.7	33.55	8.0	24.4	0.85
I3	05 Nov 2021	9	17.03	84.27	7.7	33.54	8.0	24.4	1.16
I3	05 Nov 2021	10	16.77	83.66	7.6	33.55	8.0	24.5	1.42
I3	05 Nov 2021	11	16.35	82.91	7.4	33.56	8.0	24.6	1.53
I3	05 Nov 2021	12	15.04	83.16	7.5	33.57	7.9	24.9	1.56
I3	05 Nov 2021	13	14.31	85.09	7.6	33.39	7.9	24.9	1.51
I3	05 Nov 2021	14	14.14	86.44	7.6	33.36	7.9	24.9	1.46
I3	05 Nov 2021	15	13.88	86.75	7.5	33.37	7.9	25.0	1.37
I3	05 Nov 2021	16	13.73	87.04	7.4	33.34	7.9	25.0	1.31
I3	05 Nov 2021	17	13.69	87.05	7.3	33.34	7.9	25.0	1.26
I3	05 Nov 2021	18	13.67	86.85	7.3	33.34	7.9	25.0	1.29
I3	05 Nov 2021	19	13.67	87.16	7.4	33.35	7.9	25.0	1.21
I3	05 Nov 2021	20	13.65	87.26	7.4	33.35	7.9	25.0	1.17
I3	05 Nov 2021	21	13.58	87.29	7.3	33.36	7.9	25.0	1.16
I3	05 Nov 2021	22	13.55	87.27	7.2	33.36	7.9	25.0	1.15
I3	05 Nov 2021	23	13.44	87.12	7.2	33.40	7.9	25.1	1.14
I3	05 Nov 2021	24	13.16	86.96	7.0	33.44	7.8	25.2	1.06
I3	05 Nov 2021	25	12.90	86.36	6.7	33.45	7.8	25.2	1.12
I3	05 Nov 2021	26	12.87	85.04	6.5	33.44	7.8	25.2	1.12
I3	05 Nov 2021	27	12.87	83.69	6.5	33.43	7.8	25.2	1.26
I30	03 Nov 2021	1	16.85	84.23	7.7	33.50	8.0	24.4	1.24
I30	03 Nov 2021	2	16.84	84.31	7.7	33.50	8.0	24.4	1.25
I30	03 Nov 2021	3	16.74	84.41	7.7	33.51	8.0	24.4	1.31
I30	03 Nov 2021	4	16.65	84.42	7.7	33.50	8.0	24.4	1.38
I30	03 Nov 2021	5	16.54	84.16	7.6	33.53	8.0	24.5	1.44
I30	03 Nov 2021	6	15.69	84.33	7.6	33.62	7.9	24.8	1.41
I30	03 Nov 2021	7	15.18	85.27	7.5	33.51	7.9	24.8	1.42
I30	03 Nov 2021	8	14.67	86.38	7.5	33.47	7.9	24.9	1.40
I30	03 Nov 2021	9	14.45	86.79	7.5	33.41	7.9	24.9	1.30
I30	03 Nov 2021	10	14.30	86.87	7.6	33.39	7.9	24.9	1.20
I30	03 Nov 2021	11	13.94	87.06	7.6	33.37	7.9	24.9	1.11
I30	03 Nov 2021	12	13.85	87.15	7.6	33.33	7.9	24.9	1.21
I30	03 Nov 2021	13	13.80	87.25	7.6	33.33	7.9	24.9	1.21
I30	03 Nov 2021	14	13.69	87.44	7.6	33.36	7.9	25.0	1.10
I30	03 Nov 2021	15	13.62	87.55	7.4	33.36	7.9	25.0	1.16
I30	03 Nov 2021	16	13.54	87.55	7.4	33.37	7.9	25.0	1.11
I30	03 Nov 2021	17	13.47	87.64	7.4	33.36	7.9	25.0	1.08
I30	03 Nov 2021	18	13.48	87.58	7.3	33.35	7.9	25.0	1.06
I30	03 Nov 2021	19	13.57	87.60	7.2	33.39	7.8	25.0	1.10
I30	03 Nov 2021	20	13.53	87.20	7.0	33.44	7.8	25.1	1.07
I30	03 Nov 2021	21	13.29	87.02	6.9	33.48	7.8	25.2	1.07
I30	03 Nov 2021	22	13.14	86.83	6.7	33.47	7.8	25.2	1.14
I30	03 Nov 2021	23	13.04	86.45	6.6	33.47	7.8	25.2	1.29
I30	03 Nov 2021	24	12.99	86.07	6.4	33.46	7.8	25.2	1.35
I30	03 Nov 2021	25	12.95	85.34	6.4	33.46	7.8	25.2	1.27
I30	03 Nov 2021	26	12.90	83.27	6.3	33.46	7.8	25.2	1.32
I30	03 Nov 2021	27	12.90	79.22	6.3	33.45	7.8	25.2	1.47
I30	03 Nov 2021	28	12.90	77.41	6.2	33.45	7.8	25.2	1.52
I31	03 Nov 2021	1	16.57	85.21	7.8	33.47	8.0	24.4	0.97
I31	03 Nov 2021	2	16.55	85.13	7.8	33.48	8.0	24.5	0.96
I31	03 Nov 2021	3	16.52	84.88	7.8	33.48	8.0	24.5	0.96
I31	03 Nov 2021	4	16.49	84.56	7.7	33.49	8.0	24.5	1.02

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I31	03 Nov 2021	5	15.96	84.67	7.7	33.54	8.0	24.6	1.09
I31	03 Nov 2021	6	14.98	85.95	7.6	33.48	7.9	24.8	1.18
I31	03 Nov 2021	7	14.80	86.83	7.6	33.44	7.9	24.8	1.22
I31	03 Nov 2021	8	14.54	86.83	7.5	33.38	7.9	24.8	1.08
I31	03 Nov 2021	9	14.55	86.81	7.5	33.39	7.9	24.8	1.05
I31	03 Nov 2021	10	14.54	86.59	7.4	33.41	7.9	24.8	1.00
I31	03 Nov 2021	11	14.52	86.23	7.3	33.43	7.9	24.9	1.24
I31	03 Nov 2021	12	14.45	85.72	7.2	33.45	7.9	24.9	1.11
I31	03 Nov 2021	13	14.41	85.16	7.1	33.45	7.8	24.9	1.07
I31	03 Nov 2021	14	14.27	84.91	7.0	33.48	7.8	25.0	1.22
I31	03 Nov 2021	15	13.85	84.83	7.0	33.48	7.8	25.0	1.26
I31	03 Nov 2021	16	13.71	85.24	7.0	33.42	7.8	25.0	1.31
I31	03 Nov 2021	17	13.59	85.48	7.0	33.44	7.8	25.1	1.28
I31	03 Nov 2021	18	13.39	84.94	6.8	33.47	7.8	25.1	1.32
I31	03 Nov 2021	19	13.33	81.16	6.4	33.46	7.8	25.1	1.36
I33	03 Nov 2021	1	17.05	82.16	7.8	33.50	8.0	24.4	2.14
I33	03 Nov 2021	2	17.05	83.01	7.8	33.51	8.0	24.4	2.11
I33	03 Nov 2021	3	17.05	83.16	7.8	33.51	8.0	24.4	2.09
I33	03 Nov 2021	4	17.03	83.00	7.8	33.51	8.0	24.4	2.07
I33	03 Nov 2021	5	17.01	83.17	7.8	33.51	8.0	24.4	2.11
I33	03 Nov 2021	6	16.98	83.43	7.7	33.51	8.0	24.4	2.13
I33	03 Nov 2021	7	16.86	83.87	7.7	33.53	8.0	24.4	2.13
I33	03 Nov 2021	8	16.21	84.77	7.6	33.59	7.9	24.6	2.12
I33	03 Nov 2021	9	15.66	85.63	7.5	33.56	7.9	24.7	2.02
I33	03 Nov 2021	10	15.11	86.44	7.4	33.50	7.9	24.8	1.89
I33	03 Nov 2021	11	14.97	86.71	7.5	33.45	7.9	24.8	1.70
I33	03 Nov 2021	12	14.86	86.83	7.4	33.44	7.9	24.8	1.42
I33	03 Nov 2021	13	14.43	87.03	7.4	33.47	7.9	24.9	1.35
I33	03 Nov 2021	14	13.91	87.16	7.4	33.46	7.9	25.0	1.47
I33	03 Nov 2021	15	13.69	87.38	7.3	33.40	7.8	25.0	1.28
I33	03 Nov 2021	16	13.55	87.47	7.3	33.39	7.8	25.0	1.20
I33	03 Nov 2021	17	13.68	87.39	7.3	33.38	7.8	25.0	1.22
I33	03 Nov 2021	18	13.46	87.31	7.2	33.40	7.8	25.1	1.15
I33	03 Nov 2021	19	13.39	87.29	7.2	33.40	7.8	25.1	1.14
I33	03 Nov 2021	20	13.26	87.45	7.1	33.41	7.8	25.1	1.09
I33	03 Nov 2021	21	13.20	87.68	7.0	33.40	7.8	25.1	1.04
I33	03 Nov 2021	22	13.18	87.87	7.0	33.40	7.8	25.1	1.05
I33	03 Nov 2021	23	13.08	87.93	7.0	33.41	7.8	25.1	0.99
I33	03 Nov 2021	24	13.01	87.78	7.0	33.42	7.8	25.2	0.99
I33	03 Nov 2021	25	12.91	88.01	6.9	33.42	7.8	25.2	0.98
I33	03 Nov 2021	26	12.84	87.90	6.8	33.44	7.8	25.2	0.97
I33	03 Nov 2021	27	12.73	86.33	6.6	33.45	7.8	25.2	0.91
I33	03 Nov 2021	28	12.70	85.39	6.5	33.46	7.8	25.3	0.88
I33	03 Nov 2021	29	12.65	84.81	6.4	33.46	7.8	25.3	0.85
I33	03 Nov 2021	30	12.55	83.49	6.3	33.48	7.8	25.3	0.84
I34	03 Nov 2021	1	16.64	83.53	7.6	33.48	7.9	24.4	1.83
I34	03 Nov 2021	2	16.62	83.75	7.7	33.49	7.9	24.4	1.81
I34	03 Nov 2021	3	16.57	81.35	7.5	33.51	7.9	24.5	1.79
I34	03 Nov 2021	4	16.51	78.22	7.4	33.51	7.9	24.5	1.91
I34	03 Nov 2021	5	16.47	74.93	7.3	33.51	7.9	24.5	2.04
I34	03 Nov 2021	6	16.38	72.52	7.2	33.52	7.9	24.5	2.17
I34	03 Nov 2021	7	16.00	73.19	7.2	33.53	7.9	24.6	2.28
I34	03 Nov 2021	8	14.91	81.39	7.5	33.50	7.9	24.8	2.11
I34	03 Nov 2021	9	14.09	85.02	7.6	33.42	7.9	24.9	1.77
I34	03 Nov 2021	10	13.76	86.86	7.5	33.36	7.8	25.0	1.42
I34	03 Nov 2021	11	13.57	86.81	7.3	33.37	7.8	25.0	1.27
I34	03 Nov 2021	12	13.41	86.46	7.1	33.38	7.8	25.1	1.20
I34	03 Nov 2021	13	13.35	85.59	7.0	33.38	7.8	25.1	1.12
I34	03 Nov 2021	14	13.32	85.25	7.0	33.38	7.8	25.1	1.09

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I34	03 Nov 2021	15	13.25	85.03	6.9	33.41	7.8	25.1	1.10
I34	03 Nov 2021	16	13.19	84.46	6.7	33.42	7.8	25.1	1.12
I34	03 Nov 2021	17	13.16	83.62	6.6	33.42	7.8	25.1	1.12
I34	03 Nov 2021	18	13.08	81.56	6.5	33.44	7.8	25.2	1.13
I34	03 Nov 2021	19	13.04	78.83	6.4	33.44	7.8	25.2	1.18
I35	03 Nov 2021	1	16.51	73.44	8.0	33.50	8.0	24.5	1.58
I35	03 Nov 2021	2	16.48	74.71	8.0	33.50	8.0	24.5	1.66
I35	03 Nov 2021	3	16.43	76.07	7.9	33.50	8.0	24.5	1.77
I35	03 Nov 2021	4	15.93	75.59	7.7	33.58	8.0	24.7	1.87
I35	03 Nov 2021	5	15.62	75.96	7.3	33.52	7.9	24.7	2.08
I35	03 Nov 2021	6	15.12	74.43	6.9	33.57	7.9	24.8	2.25
I35	03 Nov 2021	7	14.68	75.43	6.7	33.54	7.8	24.9	2.28
I35	03 Nov 2021	8	14.11	78.17	6.7	33.53	7.8	25.0	2.10
I35	03 Nov 2021	9	13.89	80.58	6.7	33.48	7.8	25.0	1.87
I35	03 Nov 2021	10	13.80	81.76	6.7	33.46	7.8	25.0	1.68
I35	03 Nov 2021	11	13.76	82.14	6.7	33.45	7.8	25.0	1.59
I35	03 Nov 2021	12	13.63	82.63	6.7	33.46	7.8	25.1	1.51
I35	03 Nov 2021	13	13.54	83.05	6.6	33.45	7.8	25.1	1.45
I35	03 Nov 2021	14	13.47	82.82	6.4	33.46	7.8	25.1	1.47
I35	03 Nov 2021	15	13.41	81.73	6.3	33.45	7.8	25.1	1.44
I35	03 Nov 2021	16	13.37	81.04	6.2	33.45	7.8	25.1	1.51
I35	03 Nov 2021	17	13.34	81.05	6.2	33.45	7.8	25.1	1.56
I35	03 Nov 2021	18	13.32	78.95	6.1	33.45	7.8	25.1	1.50
I35	03 Nov 2021	19	13.31	72.23	6.0	33.45	7.8	25.1	1.66
I36	03 Nov 2021	1	15.55	74.29	7.8	33.45	7.9	24.7	1.75
I36	03 Nov 2021	2	15.54	73.84	7.9	33.45	7.9	24.7	1.81
I36	03 Nov 2021	3	15.49	73.10	7.9	33.46	7.9	24.7	1.94
I36	03 Nov 2021	4	15.48	72.19	7.9	33.45	7.9	24.7	2.01
I36	03 Nov 2021	5	15.39	71.61	7.8	33.48	7.9	24.7	2.19
I36	03 Nov 2021	6	15.17	71.31	7.8	33.49	7.9	24.8	2.61
I36	03 Nov 2021	7	14.88	71.22	7.6	33.52	7.9	24.9	3.15
I36	03 Nov 2021	8	14.65	72.31	7.4	33.48	7.8	24.9	3.47
I36	03 Nov 2021	9	14.53	74.28	7.2	33.46	7.8	24.9	3.72
I36	03 Nov 2021	10	14.42	75.48	7.0	33.46	7.8	24.9	3.59
I36	03 Nov 2021	11	14.24	70.75	6.9	33.49	7.8	25.0	3.36
I37	03 Nov 2021	1	15.84	71.28	7.0	33.50	7.8	24.6	2.42
I37	03 Nov 2021	2	15.84	71.25	7.0	33.50	7.8	24.6	2.43
I37	03 Nov 2021	3	15.55	71.70	6.9	33.54	7.8	24.7	2.35
I37	03 Nov 2021	4	15.12	73.34	7.0	33.49	7.8	24.8	2.21
I37	03 Nov 2021	5	15.02	75.21	7.0	33.46	7.8	24.8	1.99
I37	03 Nov 2021	6	14.88	76.83	7.1	33.45	7.8	24.8	1.83
I37	03 Nov 2021	7	14.45	78.35	7.2	33.47	7.8	24.9	1.69
I37	03 Nov 2021	8	14.21	79.84	7.2	33.41	7.8	24.9	1.49
I37	03 Nov 2021	9	14.15	80.08	7.1	33.41	7.8	24.9	1.42
I37	03 Nov 2021	10	14.11	79.26	7.0	33.41	7.8	24.9	1.37
I37	03 Nov 2021	11	14.13	78.57	6.9	33.41	7.8	24.9	1.44
I37	03 Nov 2021	12	14.05	77.92	6.7	33.46	7.8	25.0	1.44
I38	03 Nov 2021	1	15.79	75.65	8.1	33.45	8.0	24.6	1.92
I38	03 Nov 2021	2	15.72	75.65	8.1	33.47	8.0	24.6	1.90
I38	03 Nov 2021	3	15.57	75.08	8.0	33.48	8.0	24.7	1.92
I38	03 Nov 2021	4	15.24	73.16	7.9	33.50	7.9	24.8	1.95
I38	03 Nov 2021	5	15.06	69.46	7.8	33.48	7.9	24.8	2.14
I38	03 Nov 2021	6	14.72	67.10	7.6	33.50	7.9	24.9	2.75
I38	03 Nov 2021	7	14.47	67.43	7.2	33.47	7.8	24.9	3.53
I38	03 Nov 2021	8	14.25	69.78	6.9	33.48	7.8	25.0	4.25
I38	03 Nov 2021	9	14.14	68.03	6.8	33.46	7.8	25.0	4.22
I38	03 Nov 2021	10	14.07	70.14	6.7	33.45	7.8	25.0	3.86

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I38	03 Nov 2021	11	14.05	61.35	6.6	33.45	7.8	25.0	3.43
I4	05 Nov 2021	1	17.48	84.79	7.7	33.55	8.0	24.3	0.98
I4	05 Nov 2021	2	17.09	84.26	7.6	33.60	8.0	24.4	1.04
I4	05 Nov 2021	3	16.54	83.38	7.6	33.53	8.0	24.5	1.13
I4	05 Nov 2021	4	16.34	83.20	7.7	33.50	8.0	24.5	1.43
I4	05 Nov 2021	5	15.97	83.43	7.6	33.52	8.0	24.6	1.59
I4	05 Nov 2021	6	15.58	83.69	7.6	33.46	7.9	24.7	1.65
I4	05 Nov 2021	7	15.46	83.52	7.5	33.46	7.9	24.7	1.62
I4	05 Nov 2021	8	15.15	83.04	7.5	33.46	7.9	24.8	1.74
I4	05 Nov 2021	9	14.85	83.07	7.4	33.44	7.9	24.8	1.76
I4	05 Nov 2021	10	14.47	83.22	7.2	33.45	7.9	24.9	1.67
I4	05 Nov 2021	11	14.05	83.77	7.1	33.43	7.9	25.0	1.61
I4	05 Nov 2021	12	13.70	83.03	6.8	33.46	7.8	25.1	1.46
I4	05 Nov 2021	13	13.23	82.14	6.6	33.45	7.8	25.1	1.41
I4	05 Nov 2021	14	13.12	81.40	6.5	33.43	7.8	25.1	1.42
I4	05 Nov 2021	15	13.09	79.94	6.5	33.42	7.8	25.2	1.51
I4	05 Nov 2021	16	13.08	77.31	6.5	33.41	7.8	25.1	1.58
I4	05 Nov 2021	17	13.06	76.01	6.4	33.41	7.8	25.2	1.58
I4	05 Nov 2021	18	13.05	75.61	6.4	33.42	7.8	25.2	1.54
I5	05 Nov 2021	1	16.18	79.30	7.8	33.48	7.9	24.5	2.23
I5	05 Nov 2021	2	16.09	78.51	7.8	33.50	7.9	24.6	2.21
I5	05 Nov 2021	3	15.81	77.91	7.7	33.49	7.9	24.6	2.30
I5	05 Nov 2021	4	15.68	77.11	7.7	33.47	7.9	24.6	2.48
I5	05 Nov 2021	5	15.61	76.06	7.7	33.46	7.9	24.7	2.73
I5	05 Nov 2021	6	15.57	75.46	7.7	33.46	7.9	24.7	3.03
I5	05 Nov 2021	7	15.53	75.67	7.6	33.46	7.9	24.7	3.10
I5	05 Nov 2021	8	15.07	75.69	7.4	33.50	7.9	24.8	3.08
I5	05 Nov 2021	9	14.35	76.44	6.9	33.49	7.8	24.9	2.98
I5	05 Nov 2021	10	13.66	78.02	6.6	33.47	7.8	25.1	2.64
I5	05 Nov 2021	11	13.46	77.92	6.5	33.44	7.8	25.1	2.08
I5	05 Nov 2021	12	13.39	75.82	6.5	33.42	7.8	25.1	1.86
I5	05 Nov 2021	13	13.25	75.54	6.5	33.43	7.8	25.1	1.83
I5	05 Nov 2021	14	13.14	74.61	6.4	33.42	7.8	25.1	1.78
I6	05 Nov 2021	1	18.00	85.74	7.8	33.57	8.0	24.2	0.81
I6	05 Nov 2021	2	17.98	85.82	7.8	33.57	8.0	24.2	0.77
I6	05 Nov 2021	3	17.77	85.66	7.8	33.59	8.0	24.2	0.78
I6	05 Nov 2021	4	17.36	85.40	7.8	33.56	8.0	24.3	0.86
I6	05 Nov 2021	5	17.09	84.74	7.8	33.53	8.0	24.4	1.05
I6	05 Nov 2021	6	16.94	84.22	7.7	33.52	8.0	24.4	1.32
I6	05 Nov 2021	7	16.91	83.68	7.6	33.52	8.0	24.4	1.48
I6	05 Nov 2021	8	16.72	82.94	7.6	33.54	8.0	24.5	1.70
I6	05 Nov 2021	9	16.50	82.72	7.7	33.52	8.0	24.5	1.85
I6	05 Nov 2021	10	16.33	82.05	7.5	33.52	8.0	24.5	1.94
I6	05 Nov 2021	11	15.45	81.72	7.4	33.58	7.9	24.8	1.90
I6	05 Nov 2021	12	14.58	82.62	7.5	33.42	7.9	24.8	1.65
I6	05 Nov 2021	13	14.51	84.08	7.5	33.38	7.9	24.8	1.59
I6	05 Nov 2021	14	14.40	85.04	7.5	33.36	7.9	24.8	1.50
I6	05 Nov 2021	15	14.20	85.76	7.5	33.37	7.9	24.9	1.46
I6	05 Nov 2021	16	13.94	86.10	7.5	33.36	7.9	24.9	1.37
I6	05 Nov 2021	17	13.68	86.66	7.4	33.35	7.9	25.0	1.28
I6	05 Nov 2021	18	13.59	87.06	7.4	33.35	7.9	25.0	1.18
I6	05 Nov 2021	19	13.51	86.78	7.3	33.36	7.9	25.0	1.11
I6	05 Nov 2021	20	13.27	86.66	7.1	33.39	7.9	25.1	1.09
I6	05 Nov 2021	21	13.11	85.51	6.8	33.41	7.8	25.1	1.10
I6	05 Nov 2021	22	12.99	84.38	6.6	33.42	7.8	25.2	1.19
I6	05 Nov 2021	23	12.95	81.88	6.5	33.41	7.8	25.2	1.23
I6	05 Nov 2021	24	12.91	79.44	6.4	33.42	7.8	25.2	1.26
I6	05 Nov 2021	25	12.89	78.64	6.4	33.42	7.8	25.2	1.29

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I6	05 Nov 2021	26	12.89	76.20	6.4	33.42	7.8	25.2	1.34
I7	05 Nov 2021	1	17.82	86.69	7.8	33.49	8.0	24.2	0.62
I7	05 Nov 2021	2	17.81	86.39	7.8	33.49	8.0	24.2	0.64
I7	05 Nov 2021	3	17.81	86.08	7.8	33.49	8.0	24.2	0.63
I7	05 Nov 2021	4	17.81	86.67	7.7	33.49	8.0	24.2	0.68
I7	05 Nov 2021	5	17.81	86.67	7.7	33.49	8.0	24.2	0.62
I7	05 Nov 2021	6	17.81	86.92	7.8	33.49	8.0	24.2	0.62
I7	05 Nov 2021	7	17.81	86.94	7.7	33.49	8.0	24.2	0.65
I7	05 Nov 2021	8	17.81	86.90	7.8	33.49	8.0	24.2	0.65
I7	05 Nov 2021	9	17.81	86.79	7.8	33.49	8.0	24.2	0.64
I7	05 Nov 2021	10	17.81	86.77	7.7	33.49	8.0	24.2	0.61
I7	05 Nov 2021	11	17.79	86.71	7.7	33.50	8.0	24.2	0.63
I7	05 Nov 2021	12	17.74	86.86	7.7	33.48	8.0	24.2	0.61
I7	05 Nov 2021	13	17.42	86.96	7.8	33.48	8.0	24.2	0.65
I7	05 Nov 2021	14	17.26	87.13	7.8	33.43	8.0	24.2	0.64
I7	05 Nov 2021	15	17.09	87.23	7.8	33.44	8.0	24.3	0.64
I7	05 Nov 2021	16	16.86	87.29	7.8	33.42	8.0	24.3	0.70
I7	05 Nov 2021	17	16.66	87.19	7.9	33.40	8.0	24.4	0.75
I7	05 Nov 2021	18	16.62	87.05	7.9	33.38	8.0	24.4	0.79
I7	05 Nov 2021	19	16.54	87.03	7.9	33.38	8.0	24.4	0.88
I7	05 Nov 2021	20	16.45	86.89	7.9	33.37	8.0	24.4	1.00
I7	05 Nov 2021	21	16.13	86.69	7.8	33.38	8.0	24.5	1.08
I7	05 Nov 2021	22	15.75	86.51	7.9	33.36	8.0	24.5	1.22
I7	05 Nov 2021	23	15.56	86.49	7.9	33.34	8.0	24.6	1.44
I7	05 Nov 2021	24	15.05	86.60	7.8	33.35	7.9	24.7	1.48
I7	05 Nov 2021	25	14.24	86.81	7.7	33.40	7.9	24.9	1.52
I7	05 Nov 2021	26	13.94	87.00	7.5	33.35	7.9	24.9	1.42
I7	05 Nov 2021	27	14.05	87.09	7.5	33.33	7.9	24.9	1.21
I7	05 Nov 2021	28	13.89	87.09	7.5	33.36	7.9	24.9	1.16
I7	05 Nov 2021	29	13.67	87.34	7.4	33.35	7.9	25.0	1.14
I7	05 Nov 2021	30	13.61	87.65	7.3	33.35	7.9	25.0	1.12
I7	05 Nov 2021	31	13.52	87.69	7.2	33.37	7.8	25.0	1.09
I7	05 Nov 2021	32	13.58	87.59	7.2	33.36	7.8	25.0	1.02
I7	05 Nov 2021	33	13.37	87.76	7.2	33.38	7.8	25.1	1.02
I7	05 Nov 2021	34	13.13	87.83	7.0	33.42	7.8	25.1	0.92
I7	05 Nov 2021	35	13.08	87.88	6.9	33.41	7.8	25.1	0.94
I7	05 Nov 2021	36	13.07	87.90	6.8	33.41	7.8	25.1	0.88
I7	05 Nov 2021	37	13.06	87.93	6.8	33.41	7.8	25.1	0.86
I7	05 Nov 2021	38	13.05	87.86	6.8	33.41	7.8	25.1	0.85
I7	05 Nov 2021	39	13.03	87.84	6.8	33.41	7.8	25.2	0.81
I7	05 Nov 2021	40	13.00	87.78	6.8	33.41	7.8	25.2	0.81
I7	05 Nov 2021	41	12.92	87.77	6.7	33.43	7.8	25.2	0.81
I7	05 Nov 2021	42	12.85	87.78	6.6	33.44	7.8	25.2	0.79
I7	05 Nov 2021	43	12.80	87.58	6.5	33.45	7.8	25.2	0.84
I7	05 Nov 2021	44	12.77	87.41	6.5	33.45	7.8	25.2	0.86
I7	05 Nov 2021	45	12.71	87.33	6.4	33.46	7.8	25.3	0.83
I7	05 Nov 2021	46	12.64	87.00	6.3	33.46	7.8	25.3	0.85
I7	05 Nov 2021	47	12.63	86.63	6.3	33.46	7.8	25.3	0.89
I7	05 Nov 2021	48	12.63	86.54	6.2	33.46	7.8	25.3	0.89
I7	05 Nov 2021	49	12.62	86.30	6.2	33.46	7.8	25.3	0.85
I7	05 Nov 2021	50	12.62	85.88	6.2	33.46	7.8	25.3	0.85
I7	05 Nov 2021	51	12.61	85.65	6.2	33.46	7.8	25.3	0.88
I7	05 Nov 2021	52	12.61	85.22	6.2	33.46	7.8	25.3	0.95
I8	05 Nov 2021	1	18.20	86.45	7.8	33.55	8.0	24.1	0.63
I8	05 Nov 2021	2	18.18	86.56	7.8	33.56	8.0	24.1	0.65
I8	05 Nov 2021	3	18.15	86.50	7.8	33.56	8.0	24.1	0.66
I8	05 Nov 2021	4	17.95	86.51	7.7	33.59	8.0	24.2	0.66
I8	05 Nov 2021	5	17.04	86.50	7.8	33.57	8.0	24.4	0.70
I8	05 Nov 2021	6	16.62	86.19	7.9	33.41	8.0	24.4	0.87

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
I8	05 Nov 2021	7	16.59	86.06	7.8	33.40	8.0	24.4	0.91
I8	05 Nov 2021	8	16.58	86.00	7.9	33.39	8.0	24.4	1.08
I8	05 Nov 2021	9	16.58	85.94	7.9	33.39	8.0	24.4	1.16
I8	05 Nov 2021	10	16.58	85.25	7.8	33.39	8.0	24.4	1.23
I8	05 Nov 2021	11	16.37	86.01	7.8	33.41	8.0	24.4	1.24
I8	05 Nov 2021	12	16.15	85.94	7.9	33.38	8.0	24.5	1.34
I8	05 Nov 2021	13	16.07	85.75	7.8	33.38	8.0	24.5	1.46
I8	05 Nov 2021	14	15.62	86.08	7.7	33.43	8.0	24.6	1.50
I8	05 Nov 2021	15	15.13	86.17	7.7	33.39	8.0	24.7	1.50
I8	05 Nov 2021	16	14.93	86.30	7.7	33.35	7.9	24.7	1.47
I8	05 Nov 2021	17	14.62	86.35	7.6	33.39	7.9	24.8	1.41
I8	05 Nov 2021	18	14.18	86.57	7.5	33.37	7.9	24.9	1.46
I8	05 Nov 2021	19	14.04	86.78	7.5	33.35	7.9	24.9	1.36
I8	05 Nov 2021	20	13.93	87.04	7.5	33.34	7.9	24.9	1.32
I8	05 Nov 2021	21	13.80	87.18	7.4	33.35	7.9	25.0	1.24
I8	05 Nov 2021	22	13.68	87.33	7.4	33.35	7.9	25.0	1.20
I8	05 Nov 2021	23	13.63	87.45	7.3	33.35	7.9	25.0	1.20
I8	05 Nov 2021	24	13.59	87.47	7.3	33.36	7.9	25.0	1.17
I8	05 Nov 2021	25	13.56	87.52	7.2	33.36	7.9	25.0	1.11
I8	05 Nov 2021	26	13.52	87.58	7.2	33.37	7.9	25.0	1.13
I8	05 Nov 2021	27	13.44	87.60	7.2	33.37	7.9	25.0	1.06
I8	05 Nov 2021	28	13.39	87.66	7.1	33.37	7.9	25.1	1.09
I8	05 Nov 2021	29	13.31	87.66	7.0	33.39	7.9	25.1	1.09
I8	05 Nov 2021	30	13.07	87.69	6.9	33.42	7.8	25.2	1.03
I8	05 Nov 2021	31	12.94	87.70	6.8	33.42	7.8	25.2	0.99
I8	05 Nov 2021	32	12.81	87.64	6.7	33.44	7.8	25.2	1.04
I8	05 Nov 2021	33	12.69	86.94	6.5	33.45	7.8	25.3	1.02
I8	05 Nov 2021	34	12.69	84.33	6.3	33.45	7.8	25.2	1.04
I8	05 Nov 2021	35	12.67	78.87	6.3	33.45	7.8	25.3	1.08
I8	05 Nov 2021	36	12.65	77.36	6.3	33.45	7.8	25.3	1.15
I9	05 Nov 2021	1	18.01	86.22	7.8	33.56	8.0	24.2	0.69
I9	05 Nov 2021	2	17.97	86.22	7.8	33.57	8.0	24.2	0.69
I9	05 Nov 2021	3	17.92	86.19	7.8	33.56	8.0	24.2	0.72
I9	05 Nov 2021	4	17.90	86.08	7.8	33.56	8.0	24.2	0.75
I9	05 Nov 2021	5	17.85	86.10	7.8	33.56	8.0	24.2	0.77
I9	05 Nov 2021	6	17.32	85.83	7.8	33.58	8.0	24.4	0.82
I9	05 Nov 2021	7	16.61	85.47	7.8	33.53	8.0	24.5	0.97
I9	05 Nov 2021	8	16.40	84.81	7.7	33.45	8.0	24.5	1.16
I9	05 Nov 2021	9	16.30	84.66	7.7	33.44	8.0	24.5	1.33
I9	05 Nov 2021	10	16.24	84.67	7.7	33.44	8.0	24.5	1.46
I9	05 Nov 2021	11	16.19	84.40	7.7	33.44	8.0	24.5	1.55
I9	05 Nov 2021	12	15.96	84.71	7.7	33.45	8.0	24.6	1.55
I9	05 Nov 2021	13	15.53	85.63	7.6	33.45	8.0	24.7	1.56
I9	05 Nov 2021	14	14.86	86.07	7.5	33.45	7.9	24.8	1.56
I9	05 Nov 2021	15	14.32	86.23	7.5	33.40	7.9	24.9	1.52
I9	05 Nov 2021	16	14.01	86.44	7.5	33.36	7.9	24.9	1.44
I9	05 Nov 2021	17	13.91	86.88	7.5	33.34	7.9	24.9	1.33
I9	05 Nov 2021	18	13.85	86.37	7.4	33.35	7.9	24.9	1.24
I9	05 Nov 2021	19	13.75	87.09	7.4	33.35	7.9	25.0	1.20
I9	05 Nov 2021	20	13.73	87.12	7.3	33.34	7.9	25.0	1.20
I9	05 Nov 2021	21	13.67	87.14	7.3	33.35	7.9	25.0	1.19
I9	05 Nov 2021	22	13.57	87.10	7.2	33.36	7.9	25.0	1.12
I9	05 Nov 2021	23	13.29	86.75	7.1	33.39	7.9	25.1	1.12
I9	05 Nov 2021	24	13.22	86.37	7.0	33.38	7.8	25.1	1.11
I9	05 Nov 2021	25	13.20	86.04	7.0	33.38	7.8	25.1	1.12
I9	05 Nov 2021	26	13.16	85.91	6.9	33.39	7.8	25.1	1.16
I9	05 Nov 2021	27	12.98	85.74	6.8	33.42	7.8	25.2	1.17
I9	05 Nov 2021	28	12.82	85.44	6.5	33.44	7.8	25.2	1.16
I9	05 Nov 2021	29	12.75	81.23	6.3	33.44	7.8	25.2	1.21

NA = not available

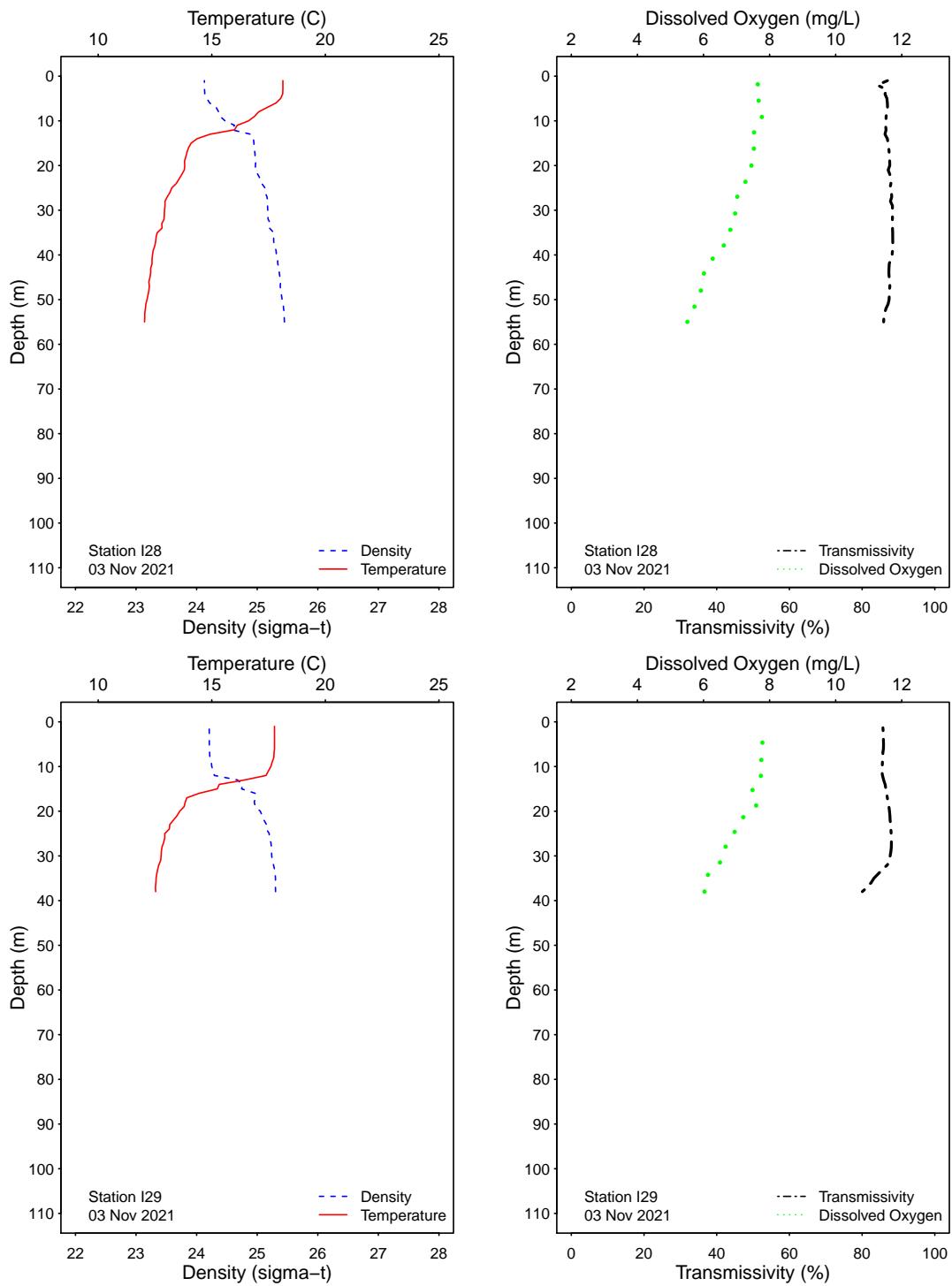


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

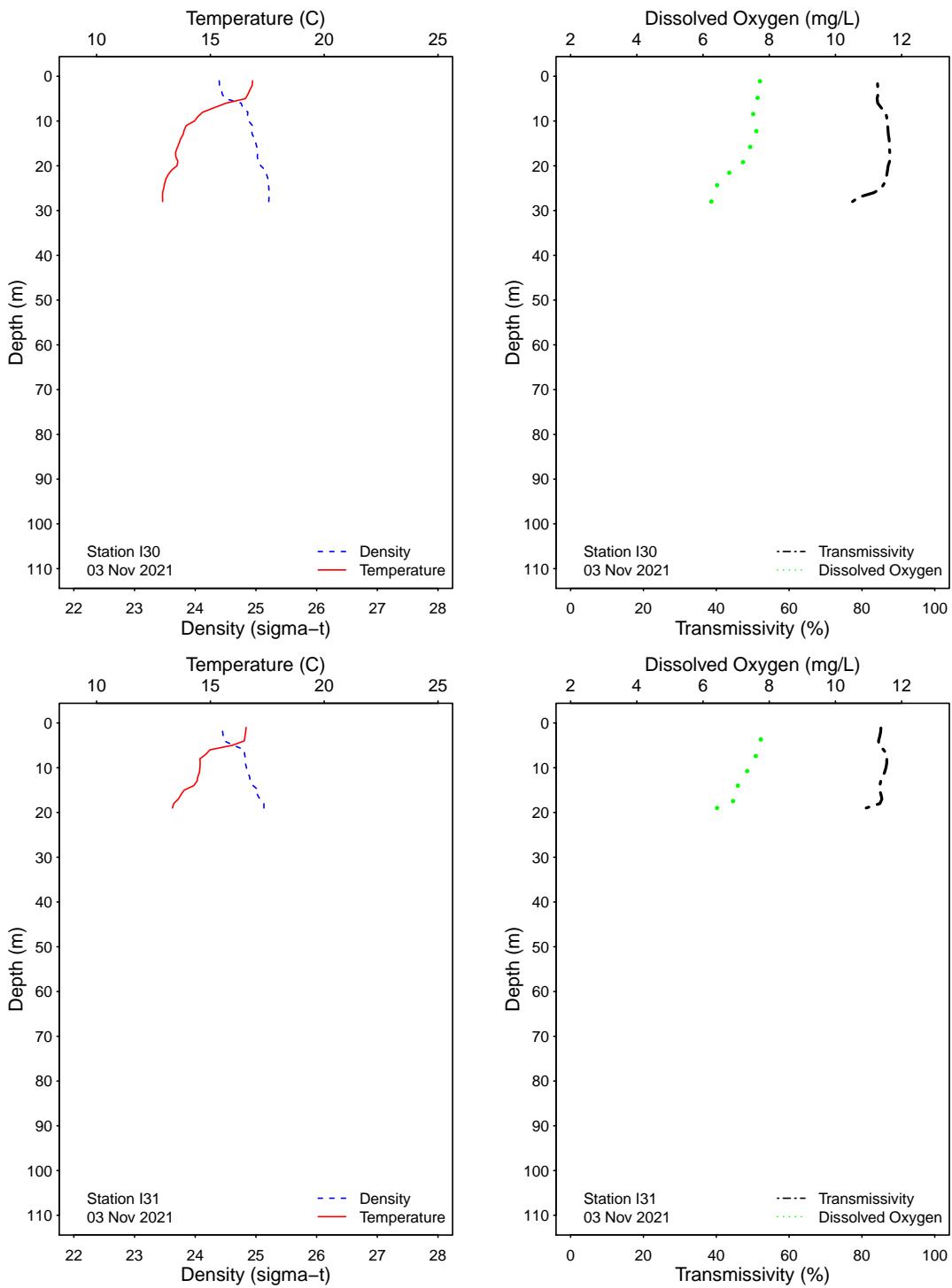


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

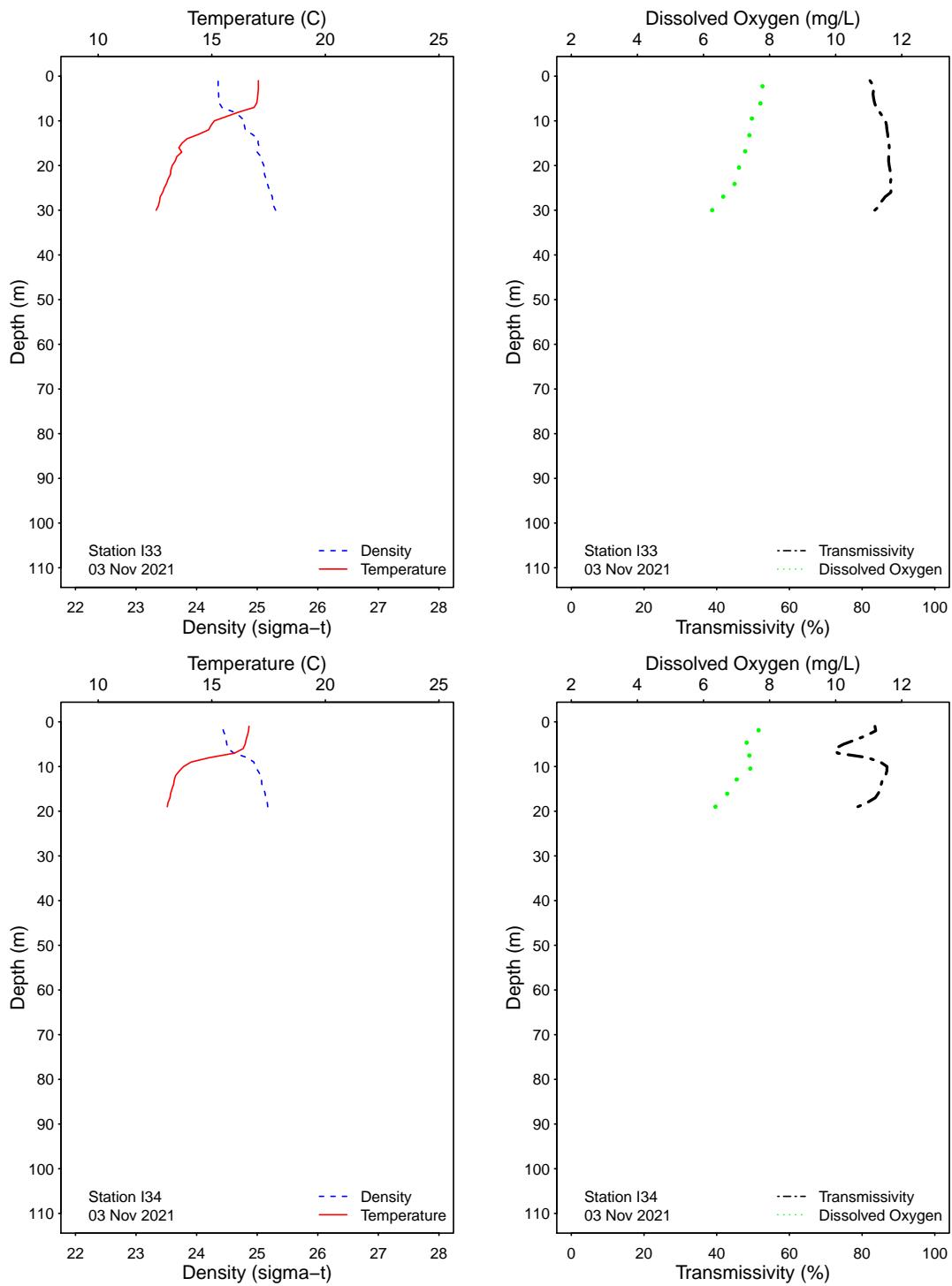


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

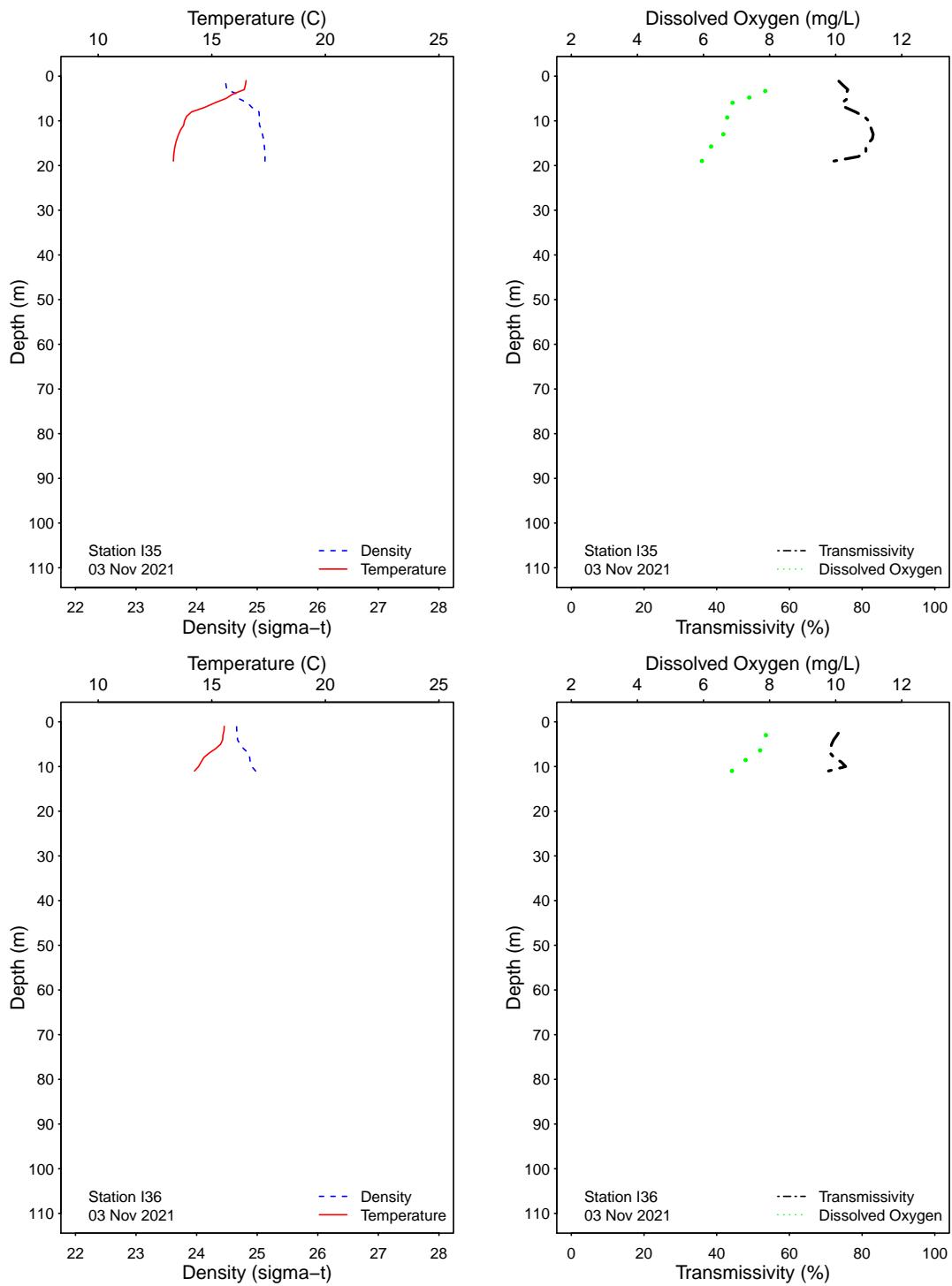


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

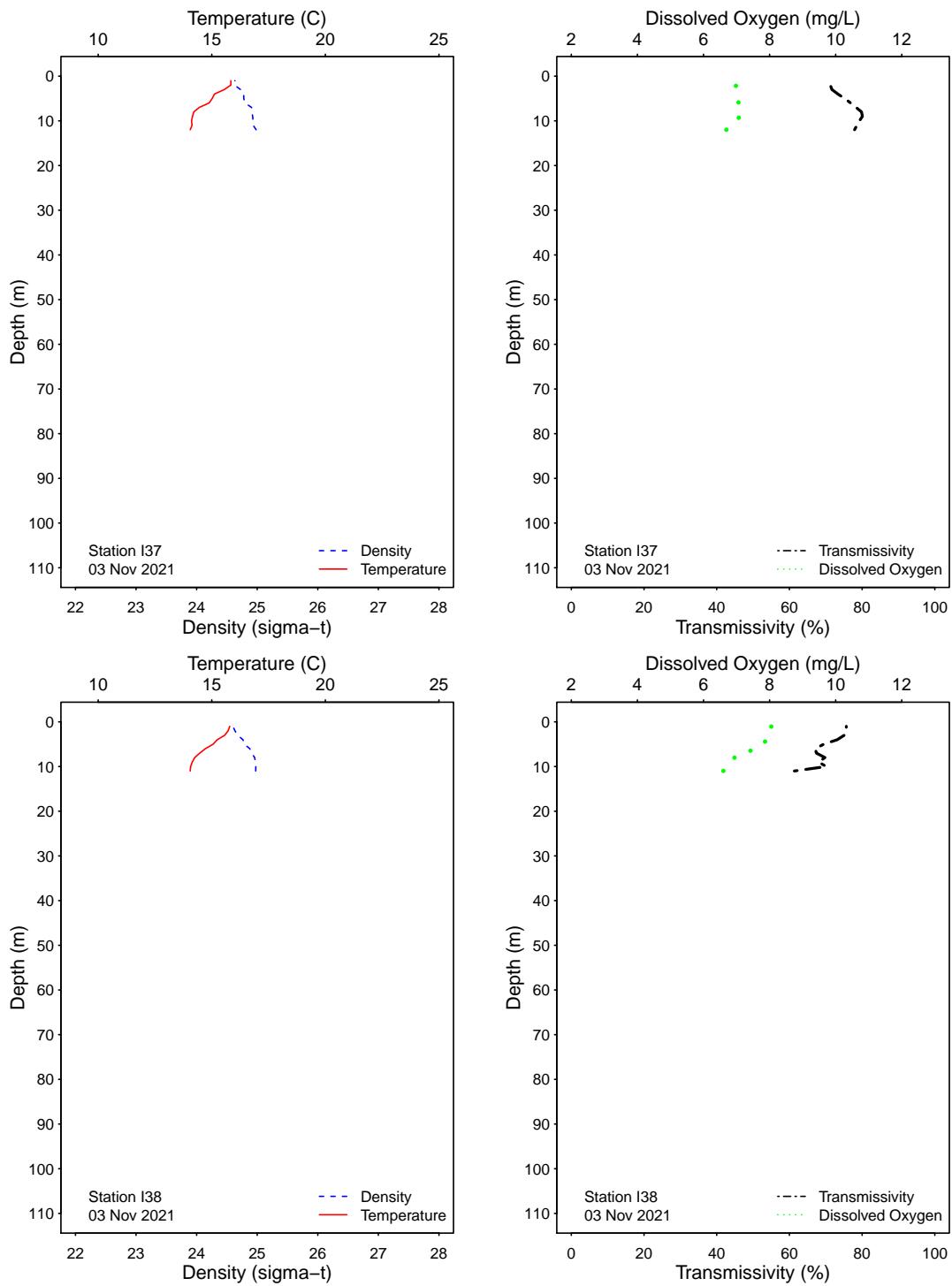


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

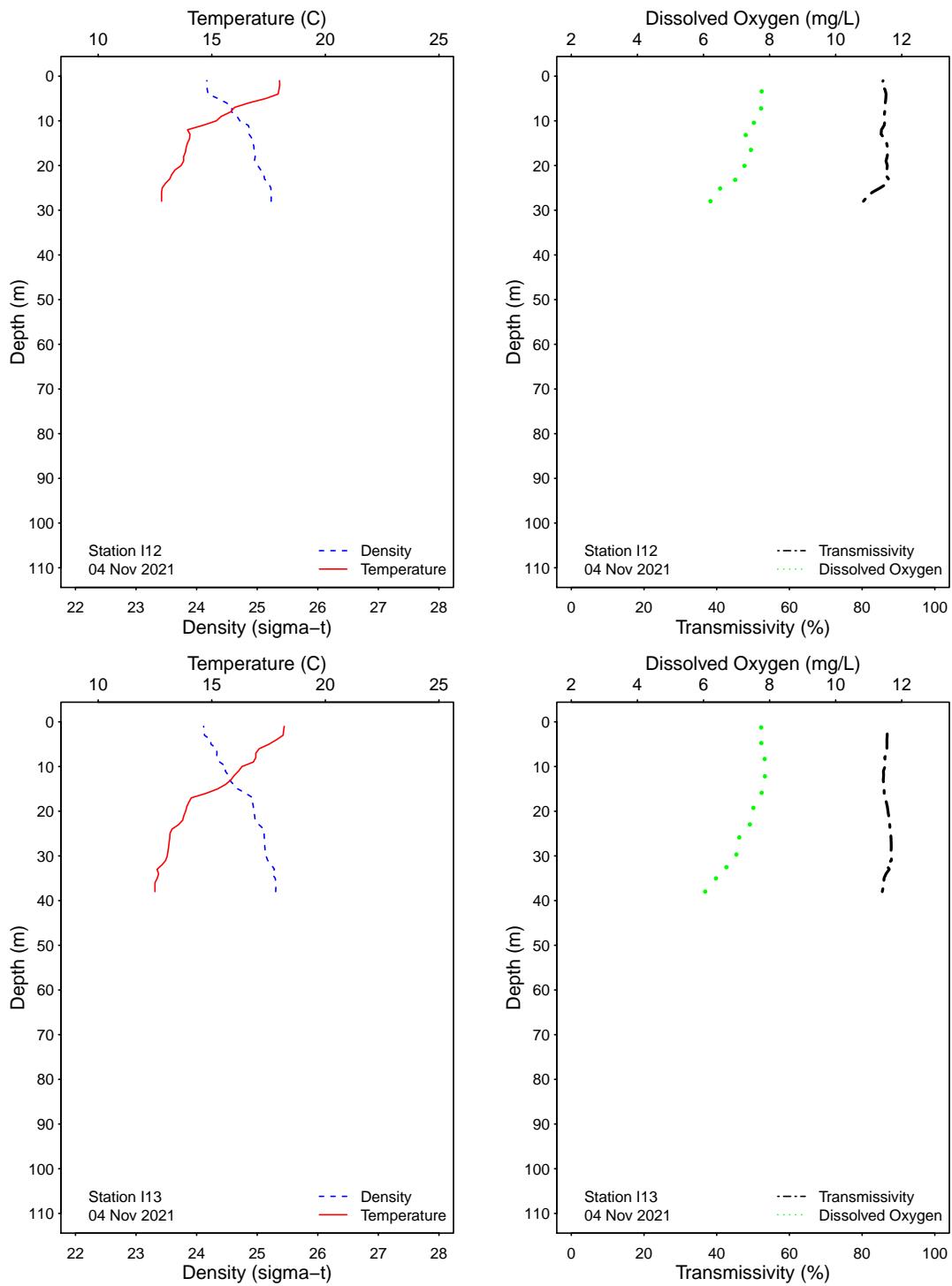


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

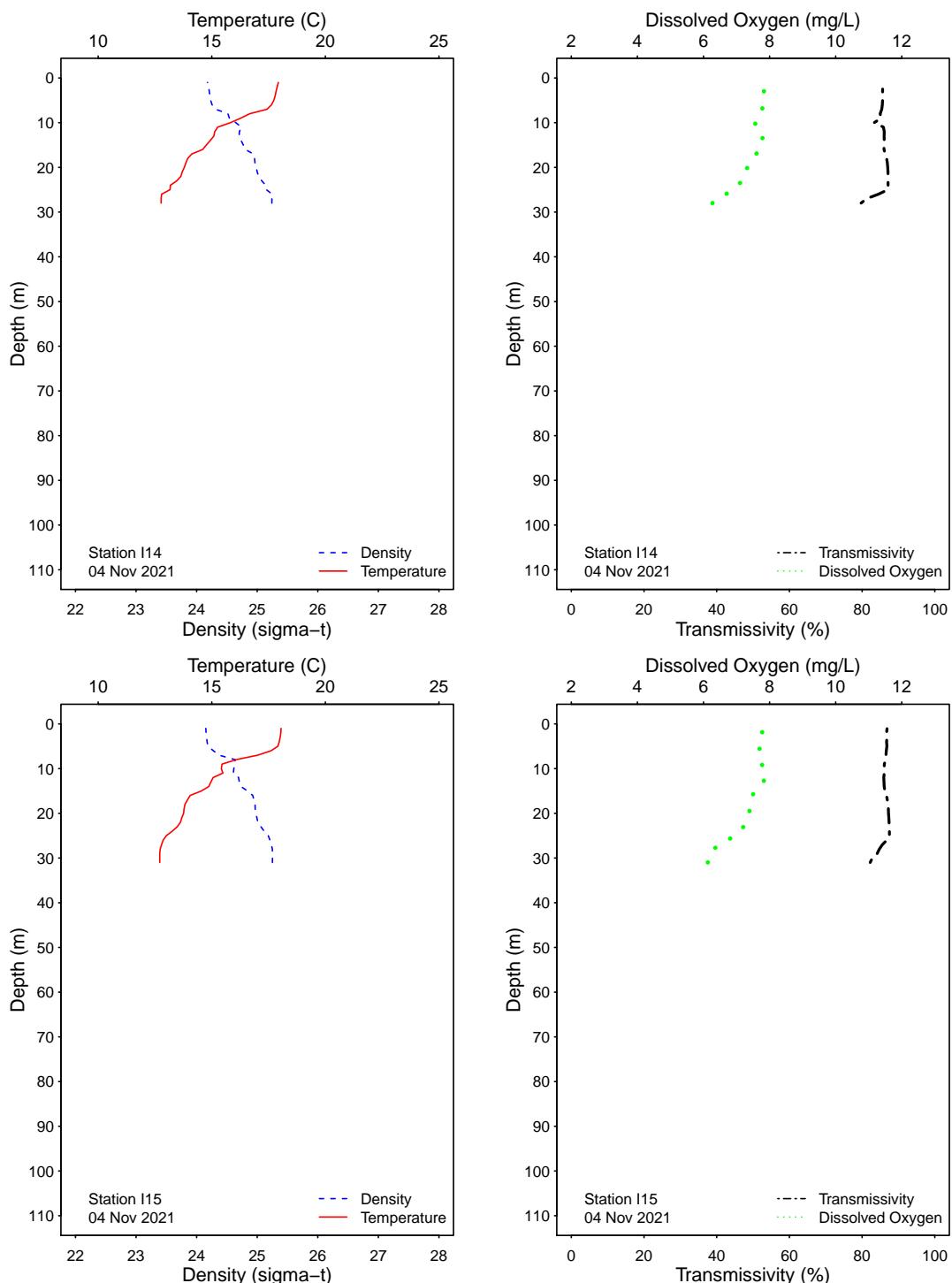


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

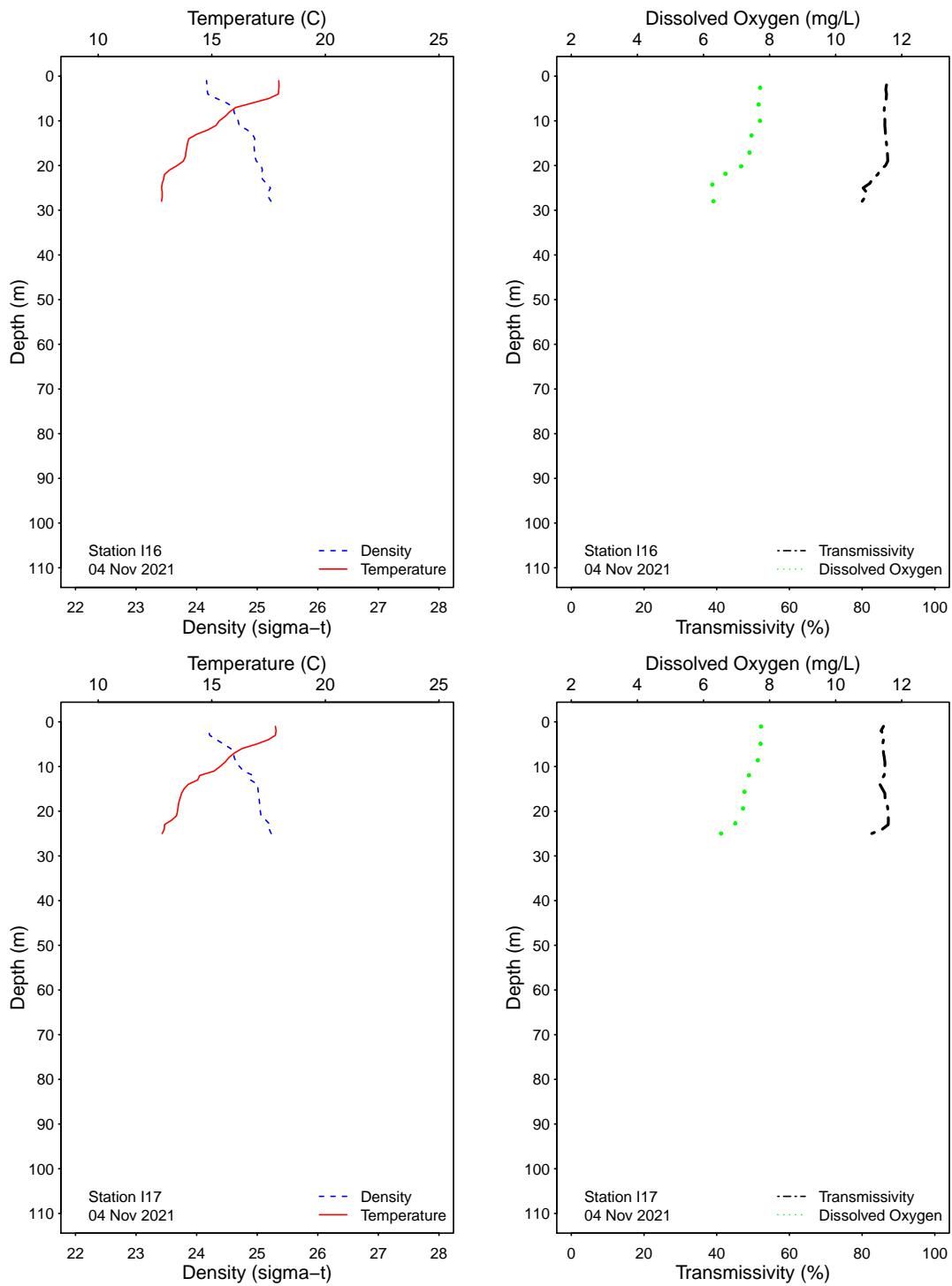


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

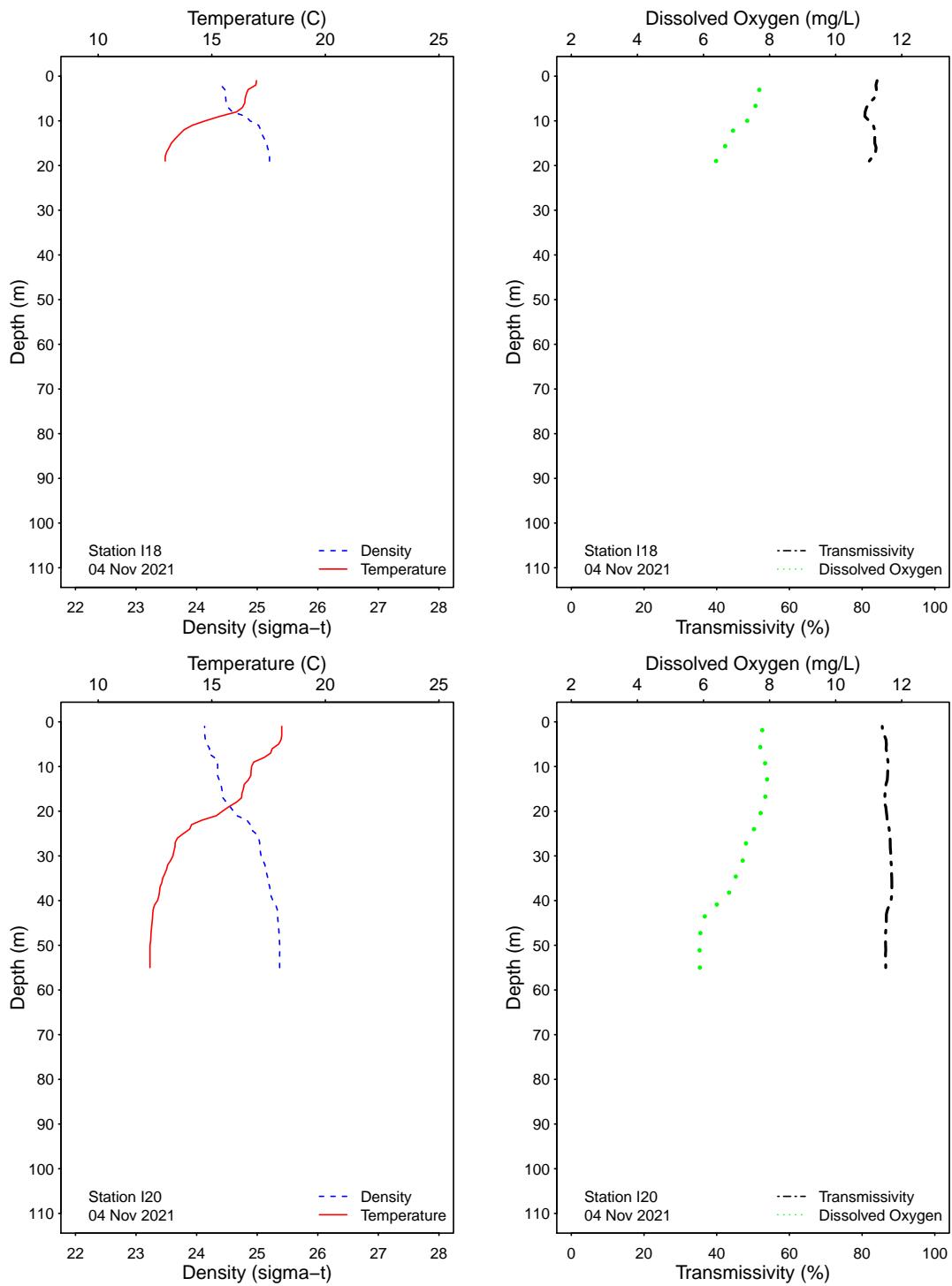


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

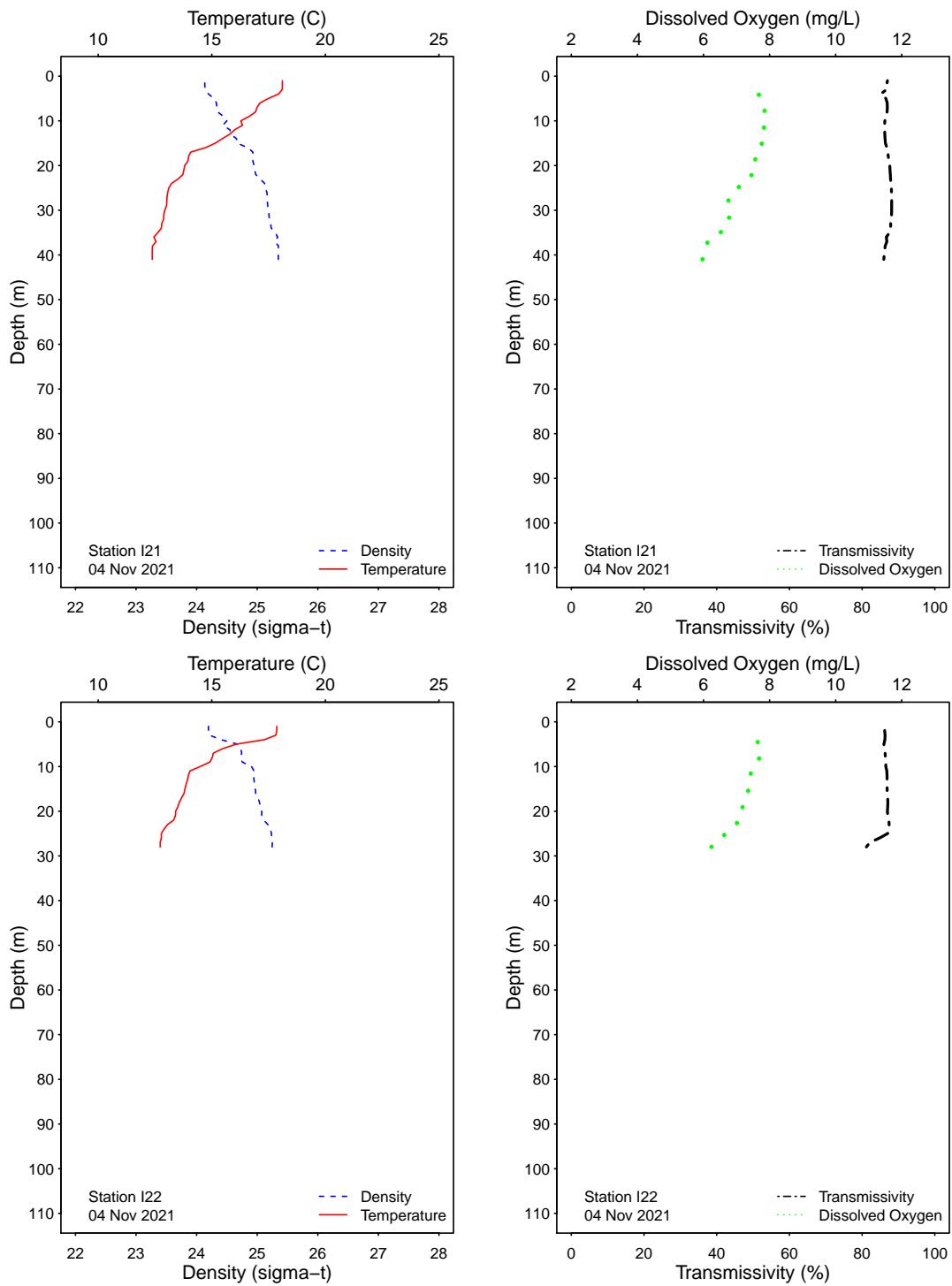


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

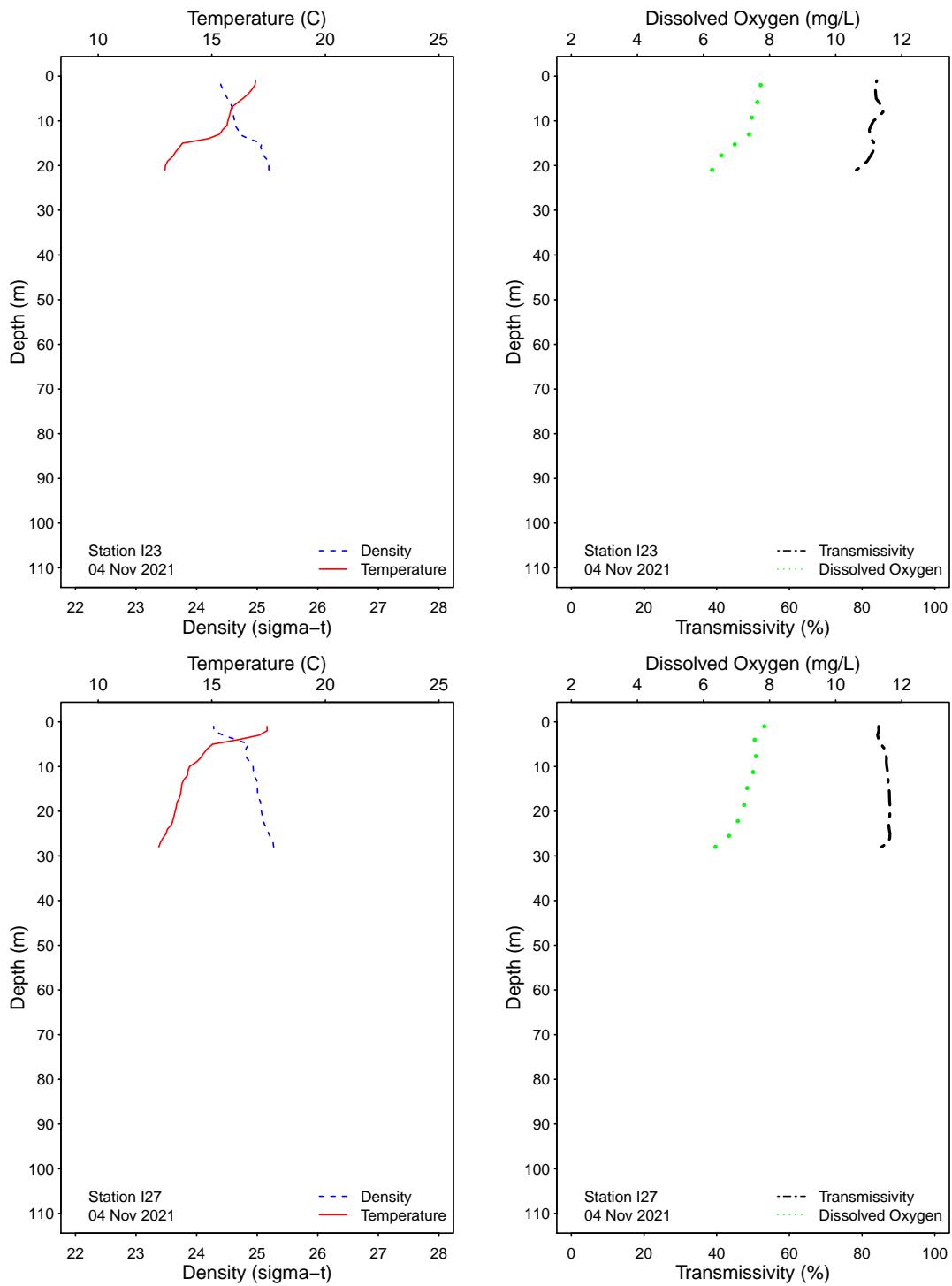


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

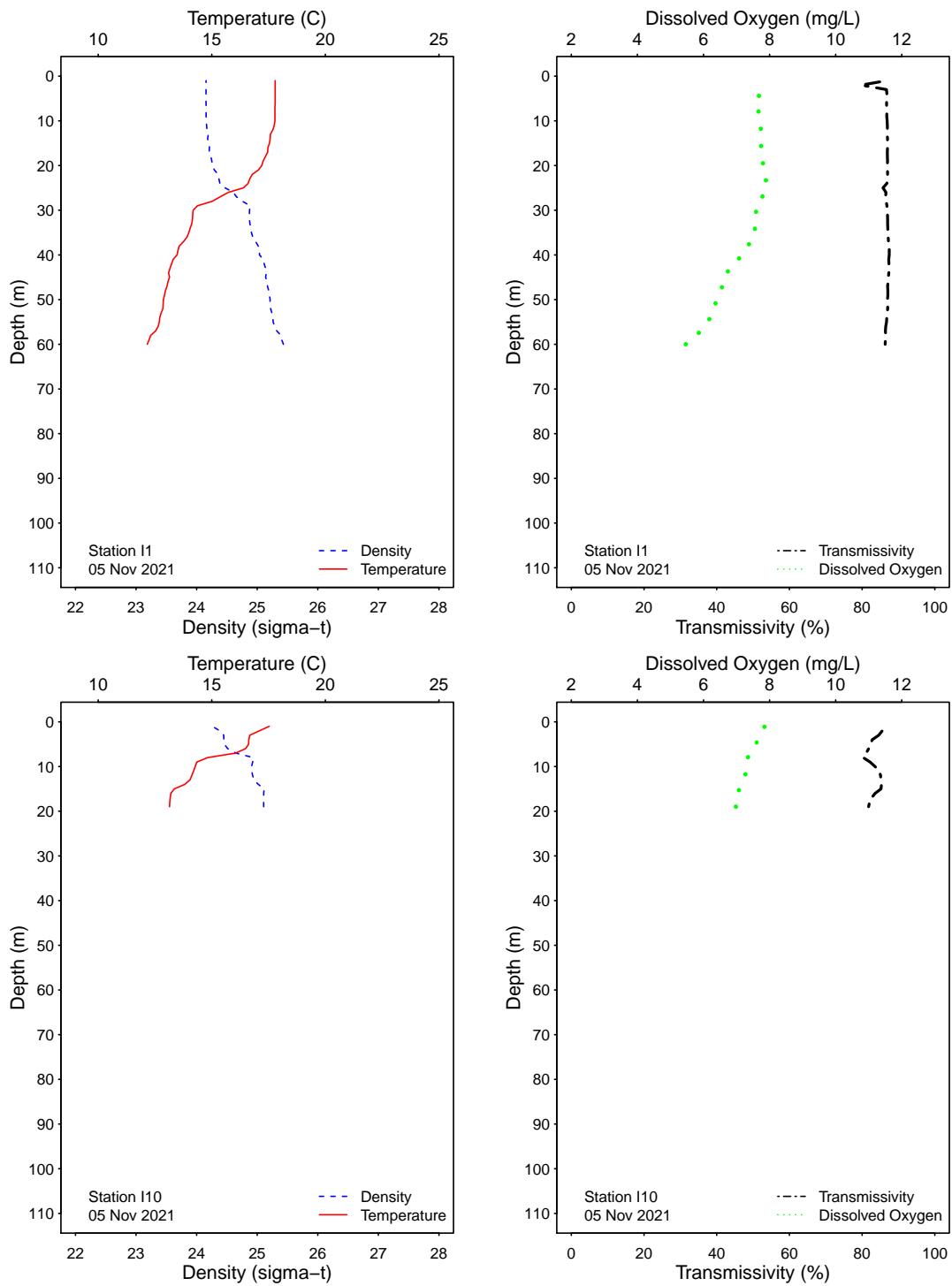


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

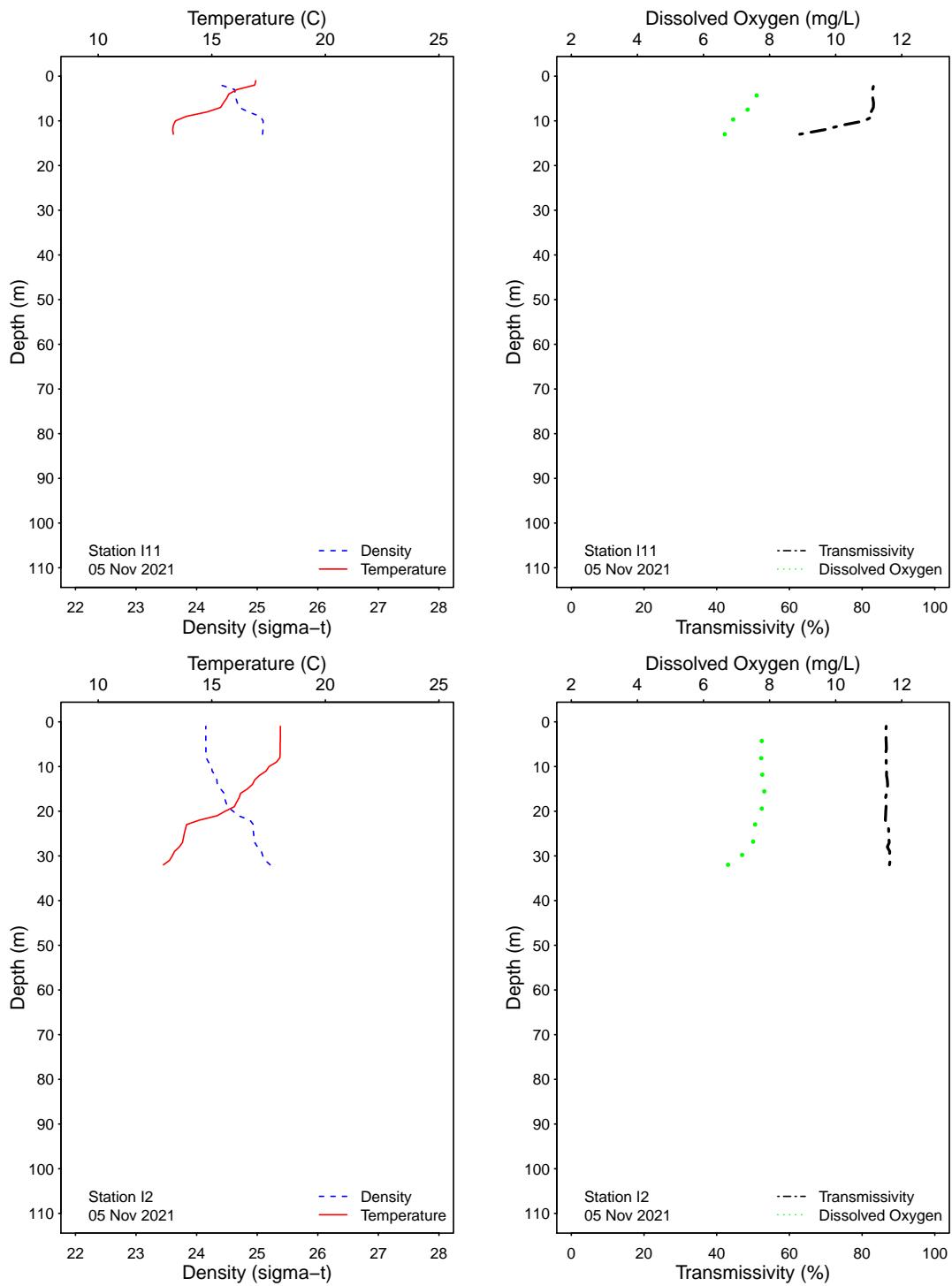


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

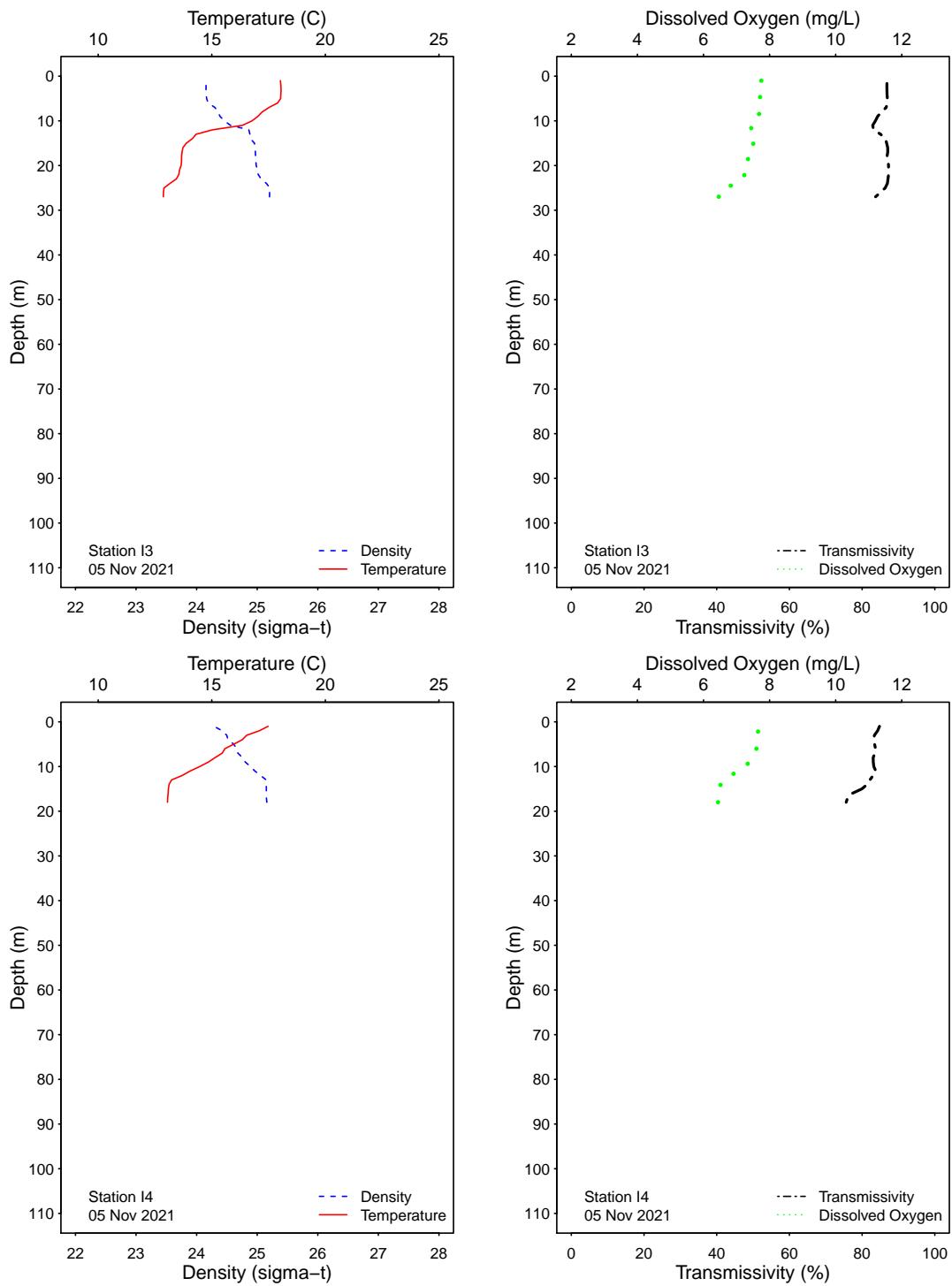


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

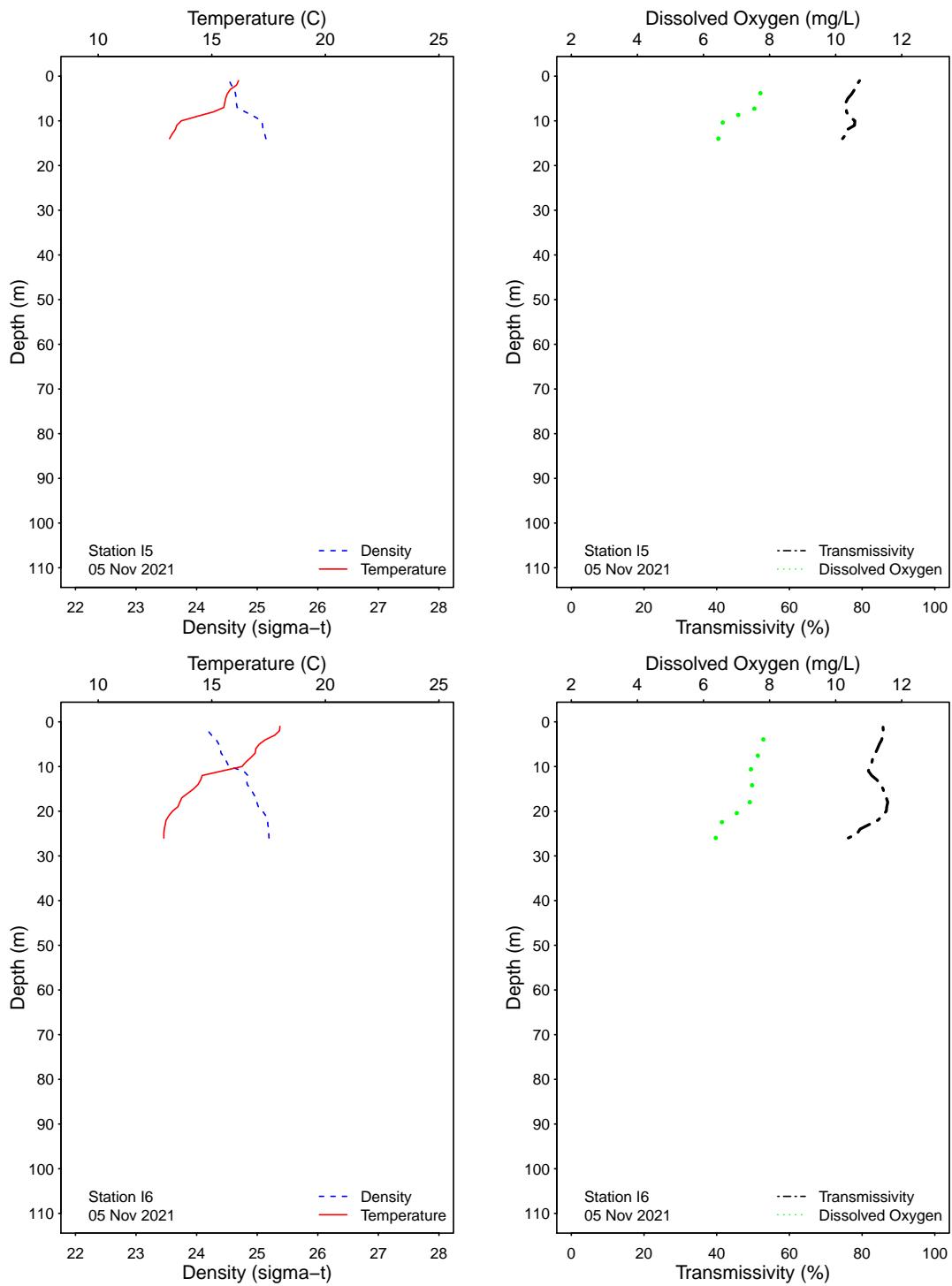


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

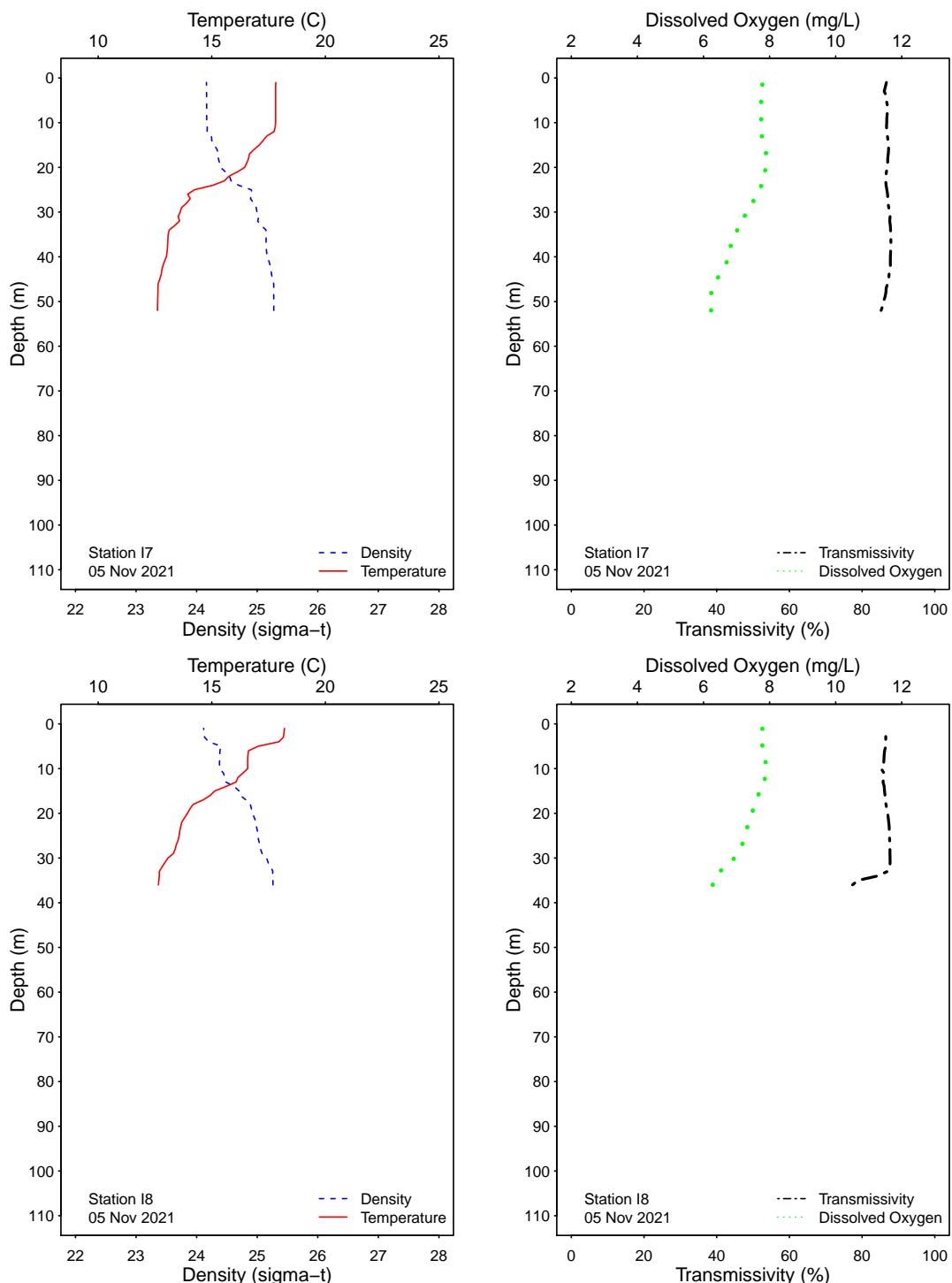


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

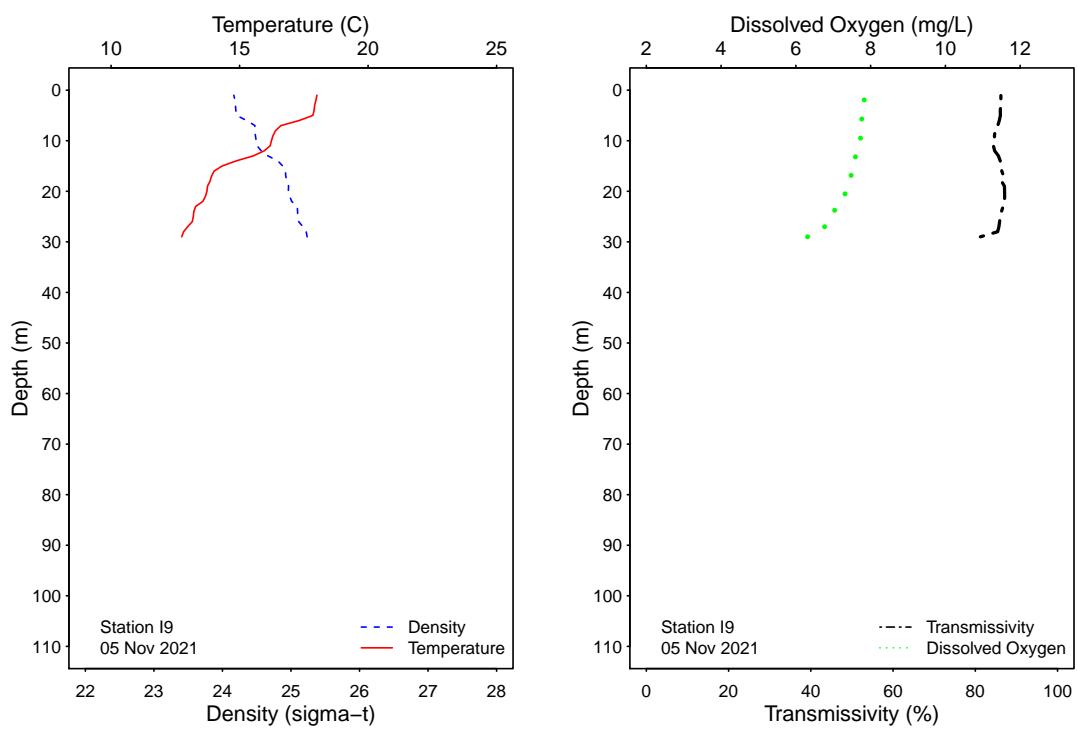


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.



## APPENDIX A

### Quality Assurance



**Table A.1**

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected SBOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
I3	05 Nov 2021	18	JF	LAB DUPLICATE	22e	4e	2e
I8	05 Nov 2021	37	AR	LAB DUPLICATE	<2	<2	<2
I9	05 Nov 2021	27	AR	LAB DUPLICATE	8e	<2	4e
I12	04 Nov 2021	18	BS	LAB DUPLICATE	20e	6e	<2
I13	04 Nov 2021	18	BS	LAB DUPLICATE	<2	<2	<2
I16	04 Nov 2021	18	CRE	LAB DUPLICATE	<2	<2	<2
I19	02 Nov 2021	6	CRE	LAB DUPLICATE	24e	<2	<2
I19	08 Nov 2021	6	JF	LAB DUPLICATE	<2	<2	<2
I19	16 Nov 2021	6	CRE	LAB DUPLICATE	4e	<2	<2
I19	22 Nov 2021	6	KA	LAB DUPLICATE	2e	<2	<2
I19	30 Nov 2021	6	KA	LAB DUPLICATE	<20	<2	<2
I30	03 Nov 2021	27	CRE	LAB DUPLICATE	<20	<2	<2
I36	03 Nov 2021	11	HF	FIELD DUPLICATE	<20	<2	<2
I36	03 Nov 2021	11	CRE	LAB DUPLICATE	4e	<2	<2
I40	02 Nov 2021	6	CRE	LAB DUPLICATE	8e	2e	<2
I40	08 Nov 2021	6	JF	LAB DUPLICATE	<2	2e	<2
I40	16 Nov 2021	6	CRE	LAB DUPLICATE	<2	<2	<2
I40	22 Nov 2021	6	KA	LAB DUPLICATE	<2	<2	<2
I40	30 Nov 2021	6	KA	LAB DUPLICATE	40e	<2	2e
S12	02 Nov 2021		JF	FIELD DUPLICATE	<20	4e	8e
S12	02 Nov 2021		JF	LAB DUPLICATE	<20	8e	8e
S12	09 Nov 2021		JF	FIELD DUPLICATE	<20	<2	<2
S12	09 Nov 2021		JF	LAB DUPLICATE	<2	<2	<2
S12	16 Nov 2021		CRE	FIELD DUPLICATE	20e	2e	2e
S12	16 Nov 2021		CRE	LAB DUPLICATE	<20	<2	<2
S12	23 Nov 2021		JF	FIELD DUPLICATE	4e	4e	<2
S12	23 Nov 2021		JF	LAB DUPLICATE	<2	4e	<2
S12	30 Nov 2021		JF	FIELD DUPLICATE	<20	8e	<2
S12	30 Nov 2021		JF	LAB DUPLICATE	<20	6e	<2

ns = not sampled

ND = no data

