

Oceans and Climate Branch CTD Data Report
CTD_REPORT_2021002HB

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DATE: 24 January 2023

Oceans and Climate Branch CTD Data Report

CTD_REPORT_2021002HB

NOAA Fisheries Service
Northeast Fisheries Science Center
Woods Hole, MA 02543

HB 2102
AMAPPS
Data Coverage: June 6 – August 20, 2021
Mid Atlantic Bight, Georges Bank, Off-Shelf

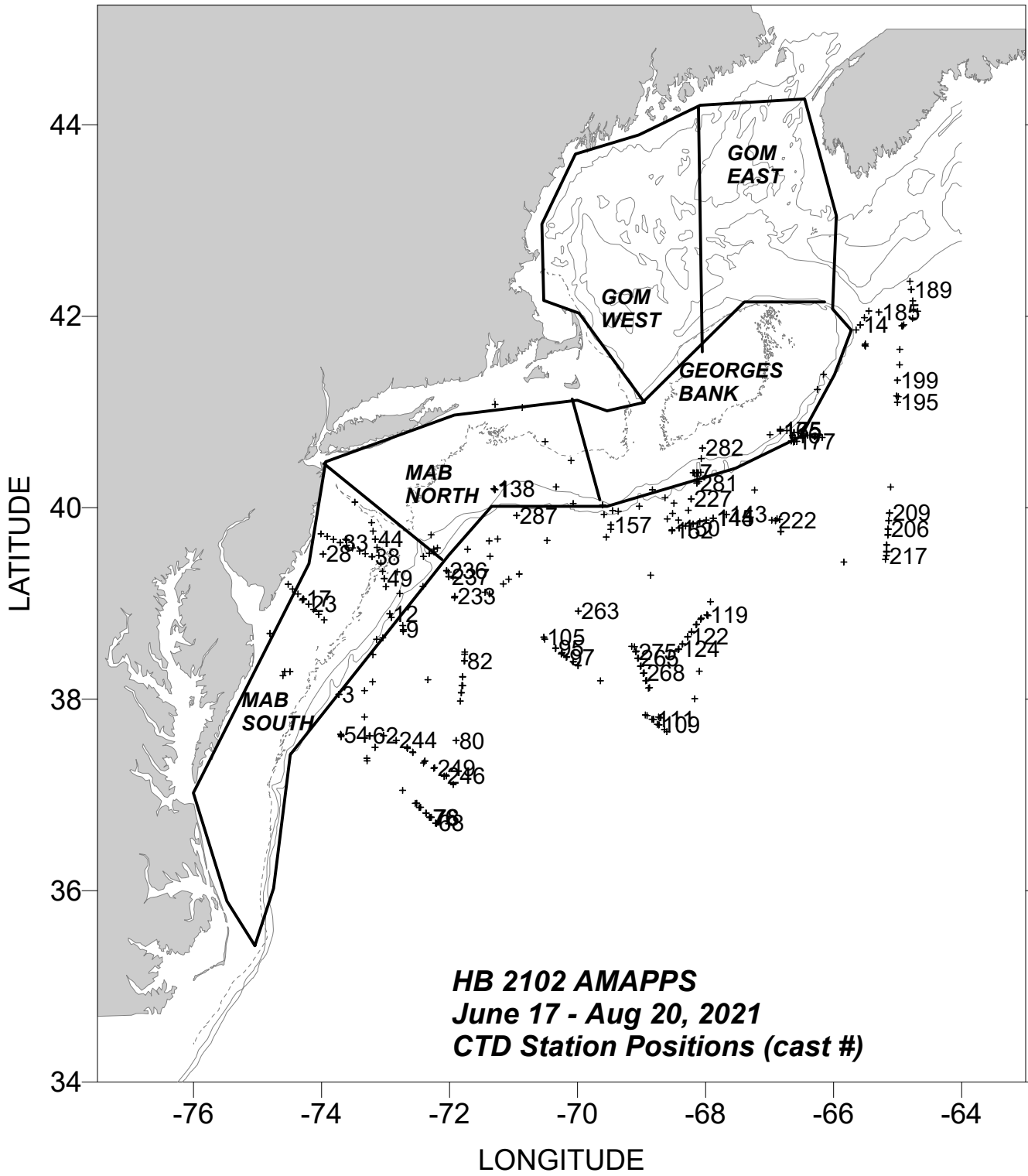
This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's HB2102 AMAPPS Survey aboard the NOAA FSV *Henry B Bigelow*. Data was obtained with the Sea-Bird Electronics SBE Model 19+V2 profiling CTDs (s/n 7037 & 6128) during various deployments and a SBE Model 9/11+ s/n 0832 during vertical casts. Sea water samples were taken for the purpose of calibrating salinity values. An SBE43 Dissolved Oxygen sensor was attached to the SBE 9/11+.

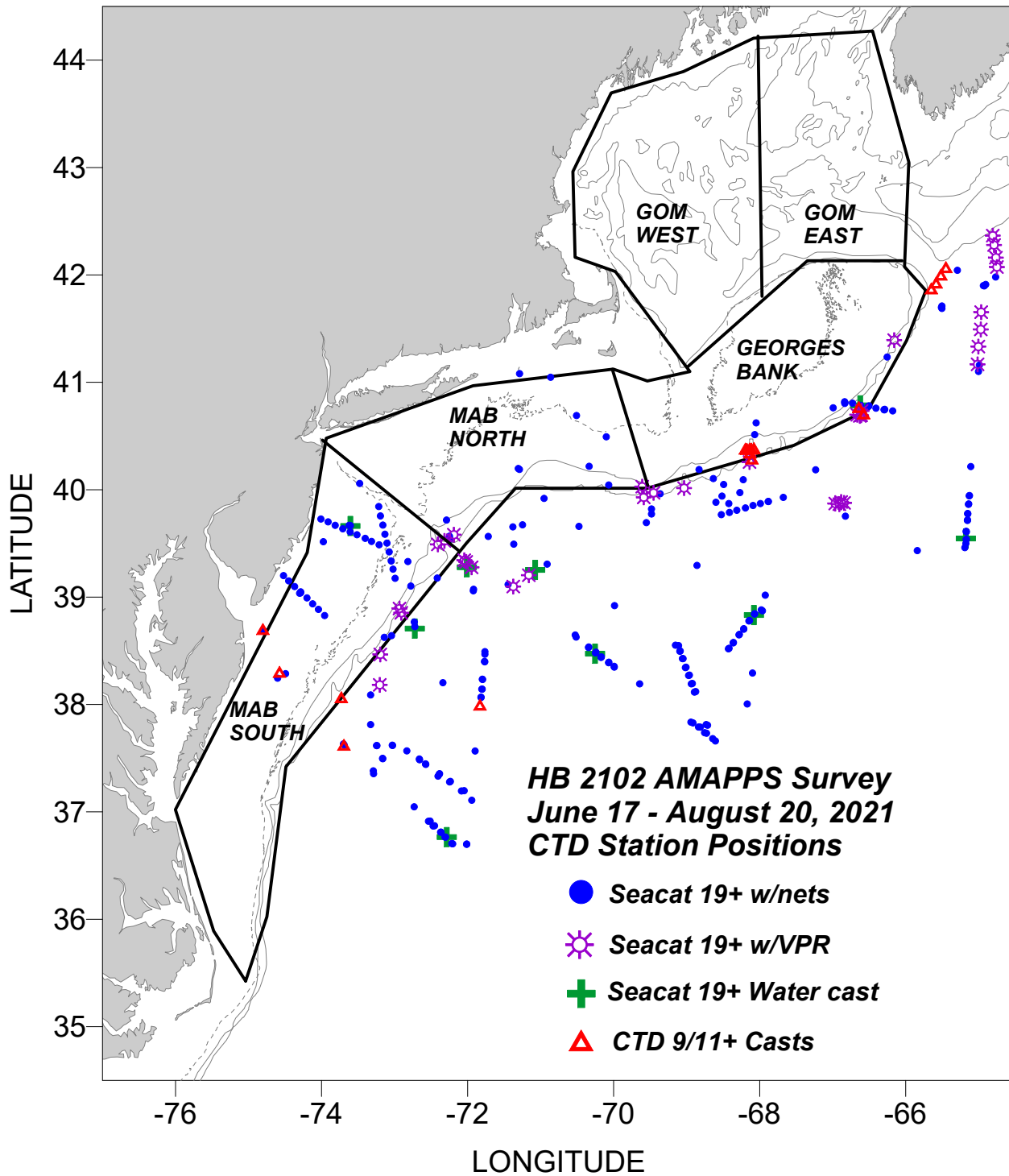
The SBE19+V2 was deployed on a total of 186 various bongo net configurations, 48 neuston net tows, a total of 34 VPR tows, and 18 water sampling casts. The SBE9/11+ was used successfully on 18 stations.

Data presented here have been audited, however, corrections and/or updates may be applied at a later time.

The most recent and complete station data can be found by contacting [Dr. Chris Melrose](#)

Revised: January 23, 2023





**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
HB2102 AMAPPS Survey
June 17 - August 20, 2021**

		SURFACE TEMPERATURE						BOTTOM TEMPERATURE					
Region	CD	#obs	Temp (°C)	Anomaly	SDV1	SDV2	Flag	#obs	Temp (°C)	Anomaly	SDV1	SDV2	Flag
GB	217	19	22.15	4.55	0.58	2.09	0	14	12.07	2.65	0.71	1.65	0
MABN	193	8	20.97	3.24	1.74	1.92	1	8	11.96	2.12	1.76	0.82	1
MABS	173	65	19.83	1.41	1.77	0.90	1	39	11.14	2.61	1.70	1.29	1

		SURFACE SALINITY						BOTTOM SALINITY					
Region	CD	#obs	Salinity	Anomaly	SDV1	SDV2	Flag	#obs	Salinity	Anomaly	SDV1	SDV2	Flag
GB	217	19	34.00	0.82	0.17	0.97	0	14	35.05	0.62	0.21	0.64	0
MABN	193	8	32.92	-0.04	0.67	0.40	1	8	34.65	0.44	0.56	0.32	1
MABS	173	65	32.62	0.41	0.83	0.45	1	39	33.04	-0.02	0.61	0.37	1

"Region": GB is Georges Bank; MABN is the northern Mid-Atlantic Bight; MABS is the southern Mid-Atlantic Bight;

"CD": the calendar mid-date of all the stations within a region for a cruise;

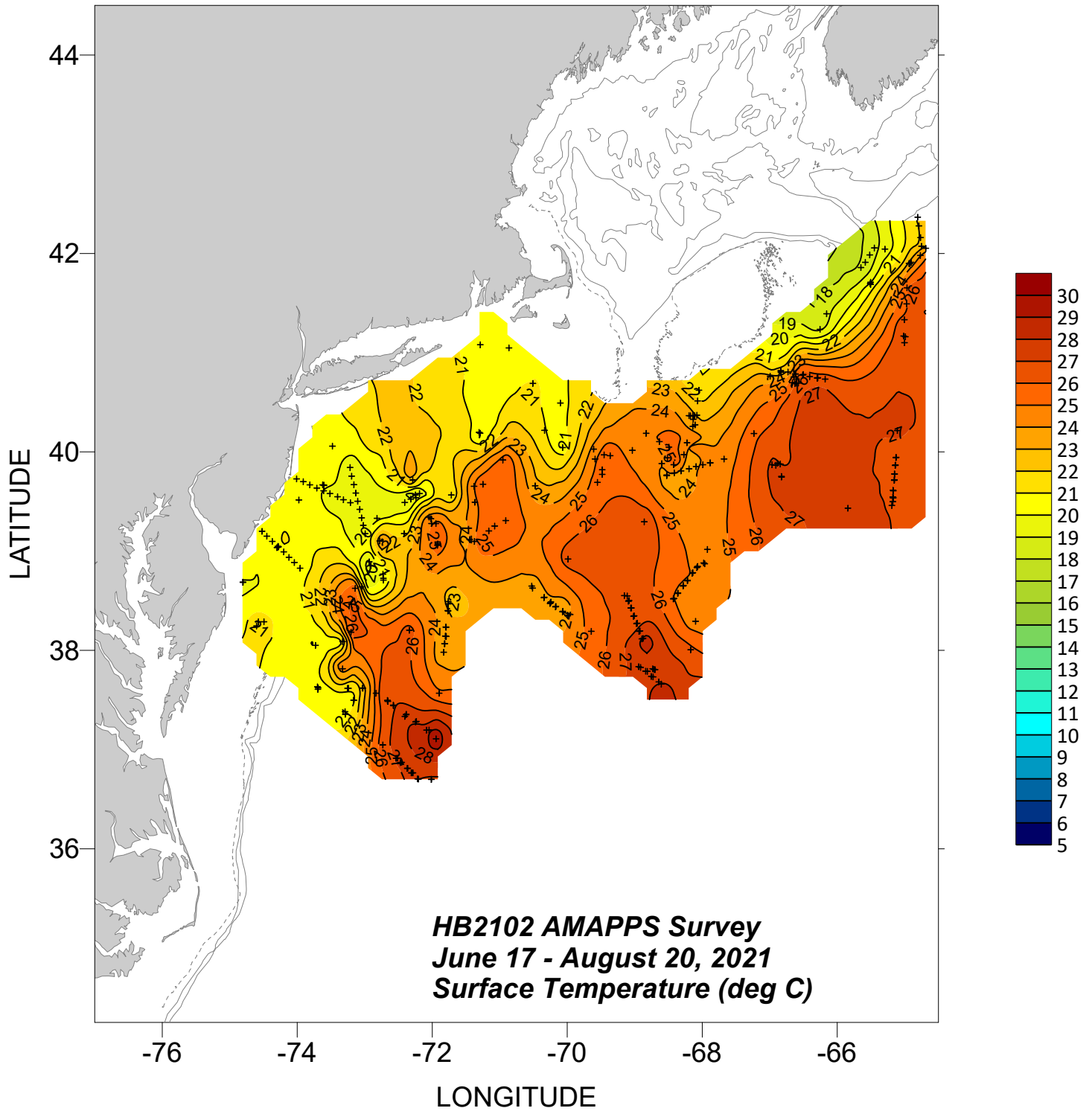
"#obs": the number of observations include in each average;

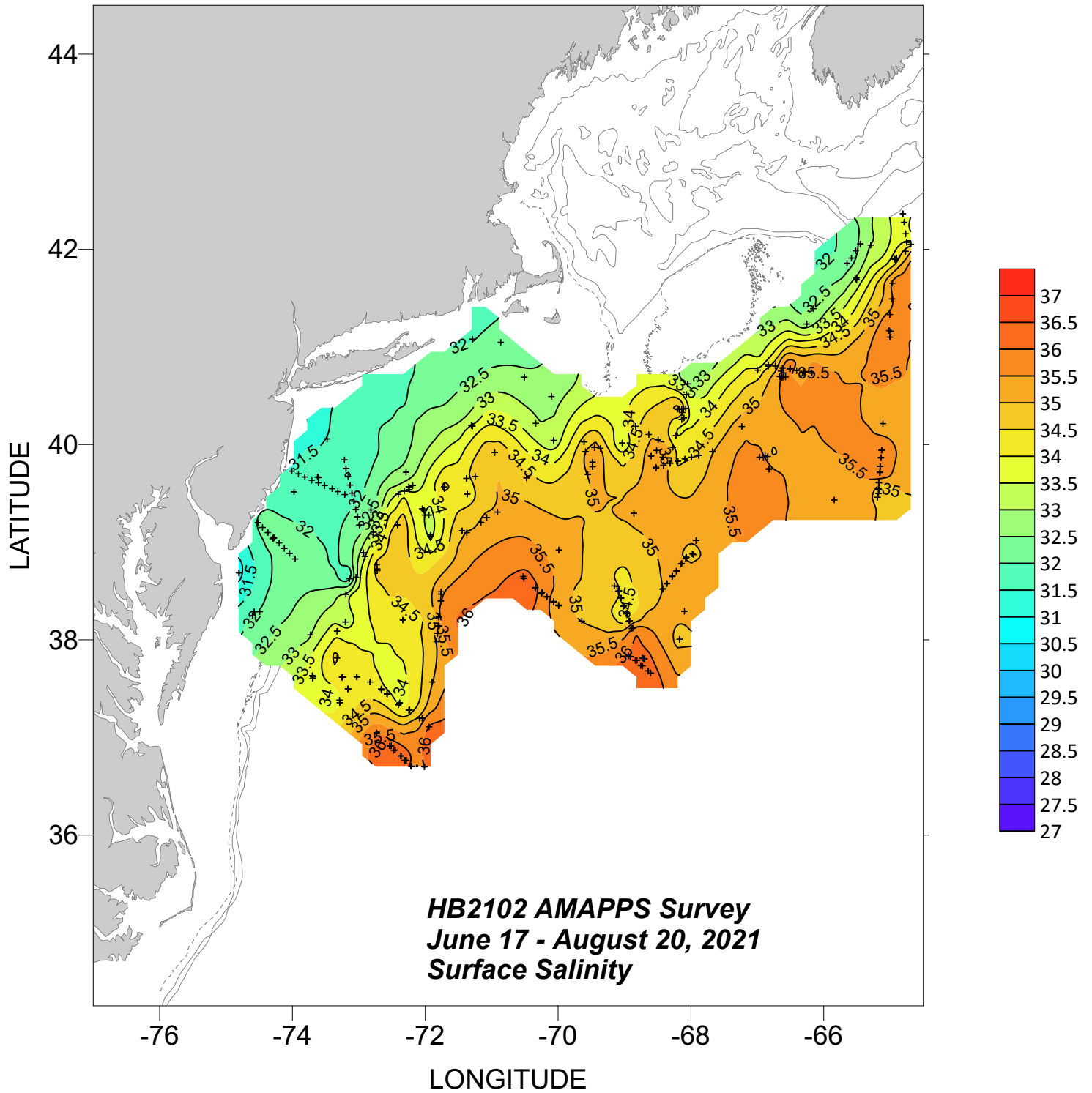
"Temp (°C)" and "Salinity": the areal averaged temperature or salinity; "Anomaly": the areal averaged temp/salt anomaly;

"SDV1": the standard deviation associated with the average temp/salt anomaly;

"SDV2": the standard deviation of the individual anomalies from which the average anomaly was derived;

"Flag": a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.





HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
1	1	4011.3	7117.4	17	6	2021	9:05	94	18.62	33.84	13.04	35.45	3	B
2	2	3933.9	7143.0	17	6	2021	15:57	1246	20.94	34.65	10.45	35.34	1044	B
3	3	3932.3	7214.4	17	6	2021	22:46	138	20.79	34.50	13.47	35.61	7	B
4.001	4	3929.4	7224.4	18	6	2021	0:29	124	18.92	33.61	13.29	35.39	24	O
4.002	4	3929.9	7222.3	18	6	2021	0:58	124	19.02	33.68	13.23	35.43	23	O
4.003	4	3930.2	7220.8	18	6	2021	1:16	124	19.11	33.73	13.45	35.53	23	O
4.004	4	3930.2	7219.7	18	6	2021	1:29	124	19.19	33.94	13.81	35.68	23	O
5.001	5	3931.4	7219.0	18	6	2021	2:34	294	18.20	33.40	13.41	35.57	192	O
5.002	5	3931.9	7218.5	18	6	2021	2:48	294	18.31	33.34	13.43	35.58	192	O
5.003	5	3931.9	7217.7	18	6	2021	2:59	294	17.82	33.45	13.47	35.59	192	O
5.004	5	3931.7	7216.4	18	6	2021	3:15	294	18.39	33.38	11.63	34.42	245	O
6.001	6	3934.8	7211.3	18	6	2021	4:32	137	17.83	33.18	13.53	35.66	25	O
6.002	6	3934.9	7212.1	18	6	2021	4:47	137	18.48	33.55	13.52	35.65	25	O
6.003	6	3935.1	7213.0	18	6	2021	4:59	137	18.78	33.65	13.45	35.64	25	O
6.004	6	3935.3	7213.6	18	6	2021	5:09	137	18.62	33.54	13.42	35.63	25	O
6.005	6	3935.5	7214.2	18	6	2021	5:19	137	18.39	33.39	13.39	35.60	25	O
6.006	6	3935.7	7215.0	18	6	2021	5:30	137	18.31	33.29	13.41	35.59	30	O
6.007	6	3936.0	7215.7	18	6	2021	5:42	137	18.05	33.19	13.42	35.63	31	O
7	7	3934.0	7214.8	18	6	2021	9:00	130	18.42	33.61	13.41	35.61	4	B
8	8	3910.6	7224.9	18	6	2021	16:01	662	21.47	35.13	12.11	35.54	459	B
9	9	3843.5	7243.4	18	6	2021	22:57	2197	20.00	34.60	11.33	35.45	1995	B
10	9	3842.4	7243.3	18	6	2021	23:26	2171	19.99	34.62	14.66	35.76	2100	W
11.001	10	3851.2	7254.5	19	6	2021	1:15	394	18.76	33.49	13.81	35.74	294	O
11.002	10	3850.6	7253.5	19	6	2021	1:31	394	18.97	33.68	13.76	35.71	293	O
12.002	11	3853.4	7255.9	19	6	2021	2:43	238	18.63	33.30	13.75	35.69	138	O
12.003	11	3853.0	7255.1	19	6	2021	2:55	238	18.80	33.32	13.90	35.74	137	O
12.004	11	3852.6	7254.5	19	6	2021	3:07	238	18.98	33.45	13.70	35.68	136	O
12.005	11	3852.0	7253.6	19	6	2021	3:18	238	19.22	33.62	13.74	35.69	137	O
12.006	11	3851.5	7252.8	19	6	2021	3:31	238	19.49	33.79	13.65	35.69	137	O

HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
13	12	3846.1	7243.8	19	6	2021	9:00	1941	20.06	34.65	10.81	35.39	1736	B
14	13	3817.2	7429.5	19	6	2021	22:44	34	21.32	32.08	12.29	32.93	5	B
1	14	3817.2	7434.5	20	6	2021	2:30	41	21.50	31.87	12.15	32.98	4	W
15	15	3814.7	7436.1	20	6	2021	9:09	42	21.38	32.09	12.46	32.98	5	B
16	16	3841.2	7448.3	20	6	2021	15:42	16	20.53	30.68	15.28	32.37	5	B
2	16	3841.1	7448.1	20	6	2021	15:59	17	19.27	30.88	14.76	32.46	4	W
17	17	3902.9	7417.1	20	6	2021	22:13	26	21.15	32.20	12.87	32.61	5	B
18	17	3902.6	7416.6	20	6	2021	22:29	28	21.10	32.22	12.97	32.57	8	W
19	18	3912.0	7431.2	21	6	2021	0:38	17	20.57	32.13	14.53	32.33	4	B
20	19	3909.0	7427.0	21	6	2021	1:19	20	20.65	32.17	13.15	32.51	4	B
21	20	3905.9	7422.1	21	6	2021	2:01	25	20.46	32.17	12.86	32.61	3	B
22	21	3902.4	7417.1	21	6	2021	2:49	27	20.25	32.18	12.88	32.61	6	B
23	22	3859.5	7412.0	21	6	2021	3:33	32	20.72	32.09	12.60	32.58	5	B
24	23	3856.2	7407.3	21	6	2021	4:17	42	20.71	32.20	11.93	32.85	2	B
25	24	3853.1	7402.6	21	6	2021	4:59	41	20.47	32.26	11.58	32.81	5	B
26	25	3849.7	7357.5	21	6	2021	5:44	46	20.28	32.45	10.93	32.98	4	B
27	26	3902.1	7418.0	21	6	2021	8:59	29	20.16	32.14	12.81	32.64	5	B
28	27	3930.9	7358.5	21	6	2021	15:42	24	20.59	31.59	12.97	32.33	4	B
29	28	3940.1	7337.4	21	6	2021	22:07	36	20.33	31.85	11.10	32.32	4	B
30	29	3943.6	7400.5	22	6	2021	0:33	20	20.18	31.47	13.05	32.31	5	B
31	30	3942.0	7354.6	22	6	2021	1:14	27	20.87	31.60	12.85	32.19	5	B
32	31	3940.1	7348.7	22	6	2021	1:56	20	20.86	31.77	13.96	31.91	5	B
33	32	3938.1	7342.5	22	6	2021	2:48	30	20.56	31.79	11.85	32.29	5	B
34	33	3936.4	7336.5	22	6	2021	3:32	32	19.67	31.88	11.29	32.30	4	B
35	34	3934.8	7330.9	22	6	2021	4:11	37	19.74	31.78	10.94	32.41	4	B
36	35	3932.8	7324.1	22	6	2021	5:00	35	19.81	31.72	11.53	32.38	4	B
37	36	3931.1	7318.9	22	6	2021	5:40	36	19.91	31.71	10.89	32.52	5	B
38	37	3929.2	7312.7	22	6	2021	6:28	40	19.86	31.72	9.03	32.71	4	B
39	38	3939.9	7336.3	22	6	2021	8:59	38	20.37	31.75	10.96	32.35	5	B

HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
40	38	3939.7	7336.3	22	6	2021	9:10	37	20.32	31.78	10.98	32.36	4	W
41	39	4003.5	7328.7	22	6	2021	15:50	78	20.73	31.43	7.51	33.13	5	B
42	40	3950.6	7313.0	22	6	2021	22:49	49	19.39	32.07	7.52	33.07	2	B
43	41	3945.3	7311.6	22	6	2021	23:37	47	19.81	31.41	7.79	33.06	5	B
44	42	3940.2	7309.6	23	6	2021	0:25	44	19.69	31.45	7.85	33.07	4	B
45	43	3935.1	7307.9	23	6	2021	1:11	44	19.67	31.77	8.02	32.97	4	B
46	44	3930.1	7306.2	23	6	2021	1:53	55	19.57	31.86	7.91	33.13	4	B
47	45	3925.2	7304.4	23	6	2021	2:36	66	19.53	32.00	8.16	33.43	3	B
48	46	3920.1	7302.7	23	6	2021	3:22	69	19.03	32.10	9.00	33.68	4	B
49	47	3915.6	7301.2	23	6	2021	4:08	74	19.25	32.27	9.18	33.85	4	B
50	48	3910.5	7259.5	23	6	2021	5:00	71	19.31	32.23	9.52	33.98	4	B
51	49	3919.8	7249.0	23	6	2021	8:58	81	19.01	32.12	11.62	34.82	5	B
52	50	3838.4	7302.5	23	6	2021	15:58	1227	19.53	33.41	12.80	35.64	1024	B
53	51	3805.3	7319.7	23	6	2021	22:46	2047	20.28	33.81	11.78	35.51	1844	B
3	52	3803.0	7343.7	24	6	2021	1:21	1088	19.85	32.87	4.18	34.98	84	W
4	53	3736.4	7341.5	24	6	2021	7:03	2118	20.60	33.79	3.45	34.95	24	V
54	54	3737.9	7342.0	24	6	2021	8:59	2125	20.69	33.83	11.77	35.51	1921	B
55.001	55	3721.3	7317.2	24	6	2021	23:47	2791	20.25	NaN	20.25	33.81	2781	B
55.002	55	3721.5	7317.2	24	6	2021	23:52	2791	20.24	33.81	20.25	33.81	2781	B
57.001	55	3722.9	7317.4	25	6	2021	0:43	2782	20.20	33.81	NaN	NaN	2771	T
57.002	55	3723.0	7317.4	25	6	2021	0:48	2782	20.21	33.81	20.20	33.81	2773	T
58.001	56	3729.7	7309.7	25	6	2021	2:10	2840	20.95	NaN	20.95	34.24	2830	T
58.002	56	3729.7	7309.7	25	6	2021	2:15	2840	20.95	NaN	20.92	34.24	2830	T
59.001	56	3729.8	7309.8	25	6	2021	2:25	2841	20.97	34.24	20.94	34.25	2830	B
59.002	56	3730.0	7309.9	25	6	2021	2:29	2841	20.95	NaN	20.97	34.24	2830	B
60.001	57	3737.1	7301.6	25	6	2021	4:01	2815	21.43	NaN	16.58	34.12	2801	T
60.002	57	3737.1	7301.7	25	6	2021	4:08	2815	21.45	NaN	21.18	34.12	2804	T
61.001	57	3737.2	7301.9	25	6	2021	4:20	2811	21.44	34.14	21.47	34.20	2801	B
61.002	57	3737.2	7302.0	25	6	2021	4:25	2811	21.43	NaN	21.48	34.20	2801	B

HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
62.001	58	3736.9	7314.5	25	6	2021	5:43	2706	20.49	34.04	20.51	34.15	2695	T
62.002	58	3737.0	7314.6	25	6	2021	5:47	2706	20.51	34.04	20.51	34.15	2695	T
62.003	58	3737.0	7314.6	25	6	2021	5:51	2706	20.53	34.15	20.53	34.16	2696	T
63.001	58	3737.0	7314.7	25	6	2021	6:01	2696	20.50	34.15	20.51	34.15	2685	B
63.002	58	3737.0	7314.9	25	6	2021	6:07	2696	20.48	34.14	20.50	34.14	2686	B
64	58	3737.0	7315.2	25	6	2021	6:18	2694	20.43	34.11	20.45	34.12	2681	W
65	59	3737.3	7341.4	25	6	2021	9:01	2145	19.86	33.73	12.13	35.54	1941	B
66	60	3702.8	7243.9	25	6	2021	15:54	3158	26.63	36.00	14.24	35.83	2956	B
67	61	3642.0	7200.7	25	6	2021	22:50	3810	26.50	36.44	19.14	36.69	3607	B
68.001	62	3642.3	7212.9	26	6	2021	0:40	3618	27.11	36.38	27.11	36.38	3608	B
68.002	62	3642.3	7212.8	26	6	2021	0:44	3618	27.10	36.38	27.11	36.38	3607	B
68.003	62	3642.2	7212.6	26	6	2021	0:48	3618	27.10	36.38	27.11	36.38	3608	B
69.001	62	3642.1	7212.3	26	6	2021	0:57	3628	27.09	34.80	27.10	36.37	3618	T
69.002	62	3642.1	7212.2	26	6	2021	1:00	3628	27.10	36.38	27.10	36.37	3618	T
70.001	63	3648.5	7222.7	26	6	2021	2:34	3381	27.29	NaN	27.29	36.30	3370	T
70.002	63	3648.5	7222.4	26	6	2021	2:39	3381	27.30	NaN	27.30	36.30	3370	T
71.001	63	3648.6	7221.8	26	6	2021	2:49	3383	27.32	36.30	27.32	36.30	3373	B
71.002	63	3648.7	7221.5	26	6	2021	2:53	3383	27.33	36.30	27.33	36.30	3373	B
72.001	64	3654.7	7232.2	26	6	2021	4:32	3273	27.17	36.28	27.18	36.28	3262	T
72.002	64	3654.7	7231.9	26	6	2021	4:35	3273	27.15	36.28	27.15	36.28	3263	T
72.003	64	3654.8	7231.6	26	6	2021	4:39	3273	27.14	36.28	27.15	36.28	3263	T
73.001	64	3654.8	7230.8	26	6	2021	4:50	3263	27.13	36.28	27.13	36.28	3252	B
73.002	64	3654.8	7230.5	26	6	2021	4:53	3263	27.13	36.28	27.13	36.28	3252	B
73.003	64	3654.9	7230.2	26	6	2021	4:56	3263	27.12	36.28	27.13	36.28	3253	B
74.001	65	3652.1	7228.3	26	6	2021	5:29	3239	27.17	NaN	27.18	36.30	3228	T
74.002	65	3652.2	7228.0	26	6	2021	5:33	3239	27.18	36.30	27.18	36.30	3228	T
75.001	65	3652.2	7227.2	26	6	2021	5:46	3291	27.20	36.31	27.20	36.31	3280	B
75.002	65	3652.2	7226.8	26	6	2021	5:50	3291	27.20	36.32	27.21	36.32	3280	B
75.003	65	3652.2	7226.6	26	6	2021	5:53	3291	27.21	36.32	27.22	36.32	3281	B

HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
76.001	66	3645.9	7218.7	26	6	2021	6:55	3469	27.37	36.32	27.38	36.32	3458	T
76.002	66	3645.9	7218.5	26	6	2021	6:59	3469	27.38	36.32	27.38	36.32	3459	T
76.003	66	3645.9	7218.4	26	6	2021	7:02	3469	27.38	36.32	27.38	36.31	3458	T
77.001	66	3645.9	7218.0	26	6	2021	7:09	3473	27.39	NaN	27.40	36.32	3463	B
77.002	66	3645.9	7217.8	26	6	2021	7:13	3473	27.40	36.32	27.40	36.32	3462	B
77.003	66	3645.9	7217.6	26	6	2021	7:16	3473	27.39	36.32	27.40	36.32	3463	B
78	66	3645.9	7217.1	26	6	2021	7:26	3490	27.38	36.32	27.43	36.36	3481	W
79	67	3641.9	7200.8	26	6	2021	9:02	3812	26.36	36.44	19.10	36.68	3607	B
80	68	3734.0	7153.8	26	6	2021	15:52	3246	25.10	34.97	12.61	35.61	3044	B
81	69	3829.5	7145.7	26	6	2021	22:46	2864	22.21	35.46	10.82	35.39	2660	B
82.001	70	3824.1	7146.1	26	6	2021	23:49	2900	23.84	35.42	22.06	35.47	2889	B
82.002	70	3824.0	7146.1	26	6	2021	23:53	2900	23.78	35.44	22.05	35.46	2890	B
83.001	70	3823.8	7145.9	27	6	2021	0:02	2902	23.26	NaN	22.03	35.46	2892	T
83.002	70	3823.7	7145.9	27	6	2021	0:06	2902	22.78	NaN	22.01	35.46	2892	T
83.003	70	3823.7	7145.8	27	6	2021	0:11	2902	22.57	35.46	22.00	35.46	2892	T
84.001	71	3814.2	7147.8	27	6	2021	1:23	3012	23.54	NaN	21.86	35.36	3001	T
84.002	71	3814.1	7147.8	27	6	2021	1:28	3012	23.37	33.73	21.85	35.36	3001	T
85.001	71	3814.0	7147.7	27	6	2021	1:36	3019	23.56	35.49	21.88	35.36	3009	B
85.002	71	3813.8	7147.7	27	6	2021	1:41	3019	23.57	35.49	21.90	35.37	3009	B
86.001	72	3804.1	7148.9	27	6	2021	2:51	3028	23.73	NaN	21.98	35.29	3018	T
86.002	72	3804.0	7148.9	27	6	2021	2:58	3028	23.72	35.38	21.98	35.29	3017	T
87.001	72	3803.9	7148.9	27	6	2021	3:05	3029	23.71	35.38	21.99	35.29	3019	B
87.002	72	3803.8	7148.8	27	6	2021	3:09	3029	23.68	35.39	21.99	35.30	3018	B
87.003	72	3803.7	7148.8	27	6	2021	3:12	3029	23.69	35.38	21.98	35.31	3017	B
5	73	3758.8	7149.8	27	6	2021	4:00	3056	23.11	34.88	3.77	34.96	1536	W
88.001	74	3808.6	7148.3	27	6	2021	6:10	3007	23.02	35.39	22.05	35.26	2997	T
88.002	74	3808.6	7148.2	27	6	2021	6:16	3007	22.91	35.35	22.05	35.27	2996	T
89.001	74	3808.6	7148.1	27	6	2021	6:26	3007	23.61	35.42	22.08	35.27	2997	B
89.002	74	3808.5	7147.9	27	6	2021	6:32	3007	23.55	35.38	22.14	35.30	2997	B

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
90	74	3808.4	7147.6	27	6	2021	6:42	3013	23.51	35.35	22.13	35.31	3000	W
91	75	3828.1	7145.8	27	6	2021	9:00	2870	23.20	35.44	11.15	35.42	2666	B
92	76	3907.0	7126.7	27	6	2021	15:53	2716	23.33	35.17	9.49	35.23	2513	B
93	77	3837.6	7030.8	27	6	2021	22:46	2997	23.55	36.13	15.76	36.24	2746	B
94.001	78	3832.2	7020.3	28	6	2021	0:30	3152	23.91	36.10	22.04	36.08	3141	B
94.002	78	3832.0	7020.4	28	6	2021	0:35	3152	23.93	36.10	21.94	36.08	3142	B
95.001	78	3831.8	7020.6	28	6	2021	0:44	3140	22.86	36.10	21.70	36.08	3130	T
95.002	78	3831.7	7020.8	28	6	2021	0:50	3140	23.65	36.10	21.81	36.08	3130	T
96.001	79	3826.6	7010.1	28	6	2021	2:16	3350	23.59	35.87	22.00	35.86	3339	T
96.002	79	3826.5	7010.1	28	6	2021	2:20	3350	23.30	35.86	22.00	35.86	3340	T
96.003	79	3826.5	7010.2	28	6	2021	2:22	3350	23.44	35.86	21.83	35.75	3340	T
97.001	79	3826.3	7010.3	28	6	2021	2:32	3353	23.84	35.86	21.75	35.73	3343	B
97.002	79	3826.2	7010.3	28	6	2021	2:37	3353	23.87	35.85	22.09	35.75	3343	B
98.001	80	3821.3	6959.5	28	6	2021	3:53	3531	24.08	35.16	22.06	34.97	3520	T
98.002	80	3821.2	6959.5	28	6	2021	3:58	3531	23.87	35.16	22.10	34.99	3521	T
99.001	80	3821.0	6959.5	28	6	2021	4:08	3535	24.08	35.13	22.19	34.98	3524	B
99.002	80	3820.8	6959.4	28	6	2021	4:13	3535	24.08	35.13	22.27	35.01	3525	B
99.003	80	3820.7	6959.3	28	6	2021	4:17	3535	24.17	35.11	22.42	35.03	3525	B
100.001	81	3823.7	7003.9	28	6	2021	5:03	3458	22.84	NaN	22.22	35.28	3448	T
100.002	81	3823.6	7003.9	28	6	2021	5:08	3458	22.83	35.26	22.21	35.25	3447	T
100.003	81	3823.5	7004.0	28	6	2021	5:12	3458	22.83	35.26	22.24	35.23	3448	T
101.001	81	3823.3	7004.1	28	6	2021	5:21	3462	23.15	35.31	22.22	35.23	3451	B
101.002	81	3823.2	7004.1	28	6	2021	5:25	3462	23.32	35.36	22.50	35.27	3452	B
102.001	9081	3829.2	7014.5	28	6	2021	6:39	3257	23.70	35.92	22.17	35.97	3247	T
102.002	9081	3829.2	7014.6	28	6	2021	6:42	3257	23.31	35.90	22.18	35.96	3247	T
102.003	9081	3829.1	7014.7	28	6	2021	6:46	3257	23.60	35.96	22.10	35.97	3246	T
103.001	9081	3828.9	7014.9	28	6	2021	6:56	3259	23.71	35.92	21.85	35.83	3248	B
103.002	9081	3828.7	7014.9	28	6	2021	7:01	3259	23.71	35.91	21.91	35.84	3249	B
103.003	9081	3828.6	7015.0	28	6	2021	7:04	3259	23.73	35.92	21.84	35.82	3249	B

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
104	9081	3828.3	7015.2	28	6	2021	7:14	3266	23.61	35.93	21.81	35.81	3254	W
105	82	3838.8	7031.5	28	6	2021	9:02	2980	23.43	36.10	15.79	36.24	2767	B
106	83	3811.5	6938.6	28	6	2021	15:50	3786	25.32	34.99	11.72	35.50	3584	B
107	84	3739.6	6836.3	28	6	2021	22:37	4163	28.38	36.30	18.23	36.49	3959	B
108.001	85	3744.2	6845.3	29	6	2021	0:49	4348	27.72	36.23	27.22	36.23	4337	B
108.002	85	3744.1	6844.9	29	6	2021	0:53	4348	27.68	36.23	27.24	36.23	4338	B
108.003	85	3744.1	6844.5	29	6	2021	0:57	4348	27.70	36.23	27.25	36.23	4338	B
109.001	85	3744.0	6843.8	29	6	2021	1:04	4364	27.75	36.20	27.25	36.23	4354	T
109.002	85	3743.9	6843.3	29	6	2021	1:09	4364	27.72	36.23	27.25	36.23	4353	T
109.003	85	3743.9	6843.0	29	6	2021	1:12	4364	27.71	35.25	27.25	36.23	4354	T
110.001	86	3747.5	6850.3	29	6	2021	3:05	4256	27.42	36.11	27.12	36.19	4246	T
110.002	86	3747.4	6849.6	29	6	2021	3:11	4256	27.40	36.10	27.12	36.19	4246	T
111.001	86	3747.3	6848.8	29	6	2021	3:21	4274	27.44	36.20	27.16	36.19	4264	B
111.002	86	3747.2	6848.3	29	6	2021	3:24	4274	27.46	36.20	27.13	36.19	4264	B
111.003	86	3747.2	6848.0	29	6	2021	3:28	4274	27.45	36.20	27.14	36.19	4264	B
112.001	87	3750.1	6856.6	29	6	2021	5:11	4166	27.30	NaN	27.29	36.16	4156	T
112.002	87	3750.0	6856.0	29	6	2021	5:16	4166	27.31	36.16	27.23	36.15	4156	T
113.001	87	3749.8	6855.0	29	6	2021	5:30	4184	27.32	36.18	27.09	36.15	4174	B
113.002	87	3749.6	6854.6	29	6	2021	5:35	4184	27.33	36.18	27.23	36.17	4174	B
113.003	87	3749.5	6854.2	29	6	2021	5:39	4184	27.33	36.19	27.17	36.16	4174	B
114.001	88	3748.8	6844.0	29	6	2021	6:26	4304	27.24	36.14	27.25	36.14	4294	T
114.002	88	3748.7	6843.7	29	6	2021	6:30	4304	27.23	36.14	27.25	36.14	4294	T
114.003	88	3748.7	6843.4	29	6	2021	6:33	4304	27.24	36.14	27.22	36.13	4294	T
115.001	88	3748.5	6843.0	29	6	2021	6:39	4320	27.25	36.16	27.20	36.14	4309	B
115.002	88	3748.4	6842.7	29	6	2021	6:43	4320	27.27	36.16	27.22	36.15	4310	B
115.003	88	3748.3	6842.5	29	6	2021	6:46	4320	27.27	36.16	27.22	36.15	4310	B
116	88	3748.3	6841.9	29	6	2021	6:57	4326	27.26	36.16	27.20	36.15	4314	W
117	89	3740.9	6838.5	29	6	2021	9:02	4458	27.43	36.26	18.52	36.54	4251	B
118	90	3800.3	6810.2	29	6	2021	15:56	4524	26.33	34.73	13.11	35.69	4321	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
119	91	3852.8	6758.6	29	6	2021	22:41	3768	24.38	34.56	12.15	35.55	3566	B
120.001	92	3846.9	6808.3	30	6	2021	0:14	3831	25.24	35.51	24.69	35.38	3821	B
120.002	92	3846.8	6808.3	30	6	2021	0:16	3831	25.22	35.47	24.35	35.34	3821	B
120.003	92	3846.8	6808.4	30	6	2021	0:19	3831	25.21	35.51	24.40	35.37	3821	B
120.004	92	3846.7	6808.5	30	6	2021	0:21	3831	25.21	NaN	24.57	35.41	3820	B
121.001	92	3846.6	6808.6	30	6	2021	0:28	3847	25.26	NaN	24.84	35.44	3837	T
121.002	92	3846.5	6808.7	30	6	2021	0:33	3847	25.26	NaN	24.28	35.36	3837	T
122.001	93	3839.2	6816.7	30	6	2021	1:44	3948	24.97	35.10	23.55	35.36	3937	T
122.002	93	3839.1	6816.8	30	6	2021	1:51	3948	24.94	35.09	24.13	35.27	3940	T
123.001	93	3838.9	6816.9	30	6	2021	2:02	3960	24.95	35.09	23.63	35.30	3950	B
123.002	93	3838.9	6817.0	30	6	2021	2:05	3960	24.98	32.63	23.37	35.25	3950	B
123.003	93	3838.8	6817.1	30	6	2021	2:08	3960	25.01	35.10	23.09	35.25	3949	B
124.001	94	3831.4	6825.1	30	6	2021	3:14	4001	24.93	35.01	23.59	35.12	3991	B
124.002	94	3831.3	6825.3	30	6	2021	3:19	4001	24.91	35.00	23.73	35.11	3991	B
124.003	94	3831.2	6825.4	30	6	2021	3:22	4001	24.93	35.02	21.81	34.93	3990	B
125.001	94	3831.1	6825.7	30	6	2021	3:30	4000	24.89	35.04	22.00	34.98	3990	T
125.002	94	3831.0	6825.8	30	6	2021	3:34	4000	24.94	35.01	21.76	34.95	3989	T
126.001	95	3834.7	6821.5	30	6	2021	4:26	3980	24.98	NaN	24.36	35.22	3970	T
126.002	95	3834.6	6821.6	30	6	2021	4:33	3980	24.99	35.06	24.38	35.22	3969	T
127.001	95	3834.4	6821.7	30	6	2021	4:42	3980	25.00	35.06	24.83	35.16	3970	B
127.002	95	3834.3	6821.8	30	6	2021	4:46	3980	25.01	35.07	24.60	35.21	3970	B
128.001	96	3842.3	6813.0	30	6	2021	6:12	3900	24.68	NaN	23.34	35.27	3890	T
128.002	96	3842.2	6813.0	30	6	2021	6:19	3900	24.69	NaN	23.30	35.26	3890	T
129.001	96	3842.0	6813.0	30	6	2021	6:27	3902	24.74	34.97	23.33	35.25	3891	B
129.002	96	3841.9	6813.1	30	6	2021	6:30	3902	24.75	34.97	23.36	35.24	3891	B
129.003	96	3841.8	6813.2	30	6	2021	6:33	3902	24.77	34.98	24.52	35.06	3892	B
130.001	97	3850.8	6804.0	30	6	2021	8:02	3766	24.55	35.04	24.13	34.89	3755	T
130.002	97	3850.7	6804.1	30	6	2021	8:07	3766	24.57	35.05	24.21	34.92	3756	T
130.003	97	3850.6	6804.1	30	6	2021	8:10	3766	24.58	35.06	24.11	34.89	3756	T

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
131.001	97	3850.5	6804.2	30	6	2021	8:17	3775	24.56	NaN	24.59	35.08	3765	B
131.002	97	3850.3	6804.3	30	6	2021	8:20	3775	24.54	35.09	24.46	35.08	3764	B
131.003	97	3850.2	6804.4	30	6	2021	8:24	3775	24.58	35.12	24.66	35.15	3765	B
132	97	3850.0	6804.6	30	6	2021	8:32	3788	24.69	35.17	24.67	35.15	3780	W
133	98	3852.3	6757.7	30	6	2021	9:22	3793	24.21	34.85	10.83	35.39	3552	B
134	99	3956.4	6830.9	30	6	2021	23:49	2290	23.88	35.12	12.79	35.65	2087	B
135.001	100	3952.9	6835.9	1	7	2021	0:50	2270	24.02	NaN	24.02	35.35	2260	B
135.002	100	3952.8	6835.9	1	7	2021	0:53	2270	24.01	35.37	23.99	35.35	2259	B
135.003	100	3952.7	6835.9	1	7	2021	0:57	2270	24.02	35.37	24.00	35.37	2259	B
136	101	4029.5	7006.0	1	7	2021	9:02	68	20.67	32.78	10.12	33.79	3	B
137	102	4102.8	7051.7	1	7	2021	15:50	45	20.35	32.22	10.46	32.65	3	B
138	103	4011.8	7118.3	5	7	2021	9:01	95	21.15	33.09	13.11	35.52	3	B
139	104	3939.5	7028.5	5	7	2021	15:56	2132	23.16	34.66	12.33	35.57	1928	B
140	105	4002.6	7004.0	5	7	2021	22:28	165	20.32	33.14	12.49	35.59	4	B
141	106	3817.5	6805.9	6	7	2021	10:53	4302	24.10	35.27	11.76	35.50	4098	B
142	107	3901.0	6755.4	6	7	2021	15:57	3622	24.59	35.27	13.69	35.77	3420	B
143	108	3955.7	6740.5	6	7	2021	22:20	2703	24.32	35.02	14.88	35.86	2482	B
144.001	109	3953.4	6752.9	7	7	2021	0:08	2645	24.27	34.65	24.27	34.66	2635	B
144.002	109	3953.4	6752.9	7	7	2021	0:11	2645	24.25	NaN	24.27	34.65	2635	B
144.003	109	3953.4	6752.9	7	7	2021	0:15	2645	24.25	34.66	24.26	34.66	2635	B
145.001	109	3953.4	6752.8	7	7	2021	0:23	2660	24.25	NaN	24.26	34.69	2650	T
145.002	109	3953.4	6752.7	7	7	2021	0:26	2660	24.25	34.68	24.26	34.68	2650	T
146.001	110	3952.2	6759.4	7	7	2021	1:17	2654	24.11	34.52	24.11	34.52	2644	B
146.002	110	3952.2	6759.5	7	7	2021	1:21	2654	24.13	34.49	24.12	34.52	2644	B
147.001	111	3951.1	6805.4	7	7	2021	2:03	2680	23.99	34.41	23.98	34.41	2670	B
147.002	111	3951.1	6805.4	7	7	2021	2:07	2680	24.02	NaN	24.01	34.41	2670	B
148.001	112	3949.8	6811.7	7	7	2021	2:49	2666	23.80	NaN	23.82	34.38	2656	B
148.002	112	3949.8	6811.7	7	7	2021	2:52	2666	23.78	NaN	23.81	34.37	2656	B
149.001	113	3948.5	6818.7	7	7	2021	3:40	2697	23.90	34.95	23.91	34.97	2686	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
149.002	113	3948.4	6818.8	7	7	2021	3:44	2697	23.89	NaN	23.88	34.94	2685	B
149.003	113	3948.4	6818.8	7	7	2021	3:48	2697	23.85	34.91	23.89	34.93	2687	B
150.001	114	3947.3	6824.8	7	7	2021	4:27	2665	23.64	NaN	23.64	35.25	2655	B
150.002	114	3947.2	6824.9	7	7	2021	4:31	2665	23.64	35.25	23.63	35.24	2655	B
150.003	114	3947.2	6824.9	7	7	2021	4:34	2665	23.65	35.24	23.65	35.25	2655	B
151.001	115	3946.0	6831.5	7	7	2021	5:19	2522	23.59	35.18	23.59	35.19	2512	B
151.002	115	3945.9	6831.5	7	7	2021	5:23	2522	23.59	NaN	23.60	35.20	2511	B
151.003	115	3945.8	6831.5	7	7	2021	5:26	2522	23.60	35.20	23.60	35.19	2511	B
152	115	3945.6	6831.5	7	7	2021	5:38	2537	23.63	35.23	23.63	35.22	2526	W
153	116	3958.3	6816.2	7	7	2021	8:59	2164	22.66	34.70	13.00	35.66	1960	B
154	117	4041.4	7030.4	7	7	2021	22:08	58	21.13	32.59	9.56	33.23	4	B
155	118	4104.8	7117.3	8	7	2021	9:01	43	20.58	31.97	10.31	32.72	4	B
156	120	4013.0	7020.1	30	7	2021	15:53	106	21.06	33.05	13.40	35.63	4	B
157	121	3949.2	6928.8	30	7	2021	22:46	1754	25.86	35.44	12.19	35.57	1552	B
158.002	122	3955.8	6935.1	31	7	2021	0:52	363	25.06	35.05	15.13	35.83	262	O
158.003	122	3955.4	6933.1	31	7	2021	1:15	363	25.26	35.07	15.41	35.90	262	O
158.004	122	3954.6	6932.3	31	7	2021	1:33	363	25.39	35.11	14.76	35.81	262	O
159.001	123	3958.2	6927.2	31	7	2021	2:30	122	25.59	35.37	17.75	36.44	21	O
159.002	123	3957.5	6926.9	31	7	2021	2:46	122	25.60	35.36	17.83	36.44	21	O
159.003	123	3956.8	6926.8	31	7	2021	2:57	122	25.65	35.38	17.74	36.44	21	O
159.004	123	3956.1	6926.7	31	7	2021	3:09	122	25.70	35.42	17.72	36.43	21	O
159.005	123	3955.3	6926.5	31	7	2021	3:22	122	25.70	35.46	17.59	36.41	22	O
160	124	4001.7	6936.5	31	7	2021	5:12	118	NaN	NaN	16.97	36.30	23	O
161	125	3946.4	6928.8	31	7	2021	9:03	1935	25.14	35.27	15.03	NaN	1732	B
6	127	4022.2	6804.6	1	8	2021	0:27	151	22.28	33.86	12.94	35.67	4	W
7	128	4021.9	6808.2	1	8	2021	1:19	521	22.78	34.75	6.03	35.09	1	V
8	129	4021.9	6811.7	1	8	2021	2:25	150	23.40	35.18	13.20	35.68	5	V
9	130	4021.8	6810.4	1	8	2021	3:08	221	22.30	34.60	12.32	35.59	2	V

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
10	131	4021.9	6806.8	1	8	2021	4:00	213	22.67	34.51	12.55	35.62	7	V
11	132	4019.7	6808.0	1	8	2021	4:47	970	22.06	34.21	4.91	35.02	3	W
163	133	4030.8	6804.0	1	8	2021	9:01	115	22.27	33.90	14.28	35.69	5	B
164	134	4011.1	6714.0	1	8	2021	15:51	2390	25.75	35.35	12.91	35.65	2184	B
165	135	4048.2	6650.0	1	8	2021	22:49	110	20.34	33.48	13.82	35.12	3	B
166	136	4048.3	6643.7	1	8	2021	23:47	182	24.66	35.35	10.71	35.34	2	B
167.001	137	4046.5	6630.7	2	8	2021	1:17	1500	26.41	35.98	26.42	35.98	1489	B
167.002	137	4046.6	6630.5	2	8	2021	1:20	1500	26.42	NaN	26.42	35.98	1489	B
167.003	137	4046.6	6630.4	2	8	2021	1:22	1500	26.41	35.98	26.42	35.98	1489	B
168.001	137	4046.8	6630.2	2	8	2021	1:32	1500	26.40	35.98	26.40	35.98	1489	T
168.002	137	4046.9	6630.0	2	8	2021	1:38	1500	26.40	35.99	26.40	35.99	1493	T
169.001	138	4044.6	6617.5	2	8	2021	2:49	2352	26.81	35.94	26.80	35.94	2341	B
169.002	138	4044.7	6617.4	2	8	2021	2:52	2352	26.80	35.93	26.80	35.94	2341	B
169.003	138	4044.8	6617.4	2	8	2021	2:55	2352	26.80	35.93	26.80	35.93	2341	B
170.001	138	4044.9	6617.2	2	8	2021	3:02	2328	26.79	35.93	26.80	35.93	2318	T
170.002	138	4045.1	6617.1	2	8	2021	3:08	2328	26.79	35.92	26.79	35.92	2321	T
171	139	4044.0	6610.6	2	8	2021	3:53	2760	26.71	36.02	14.47	35.90	2556	B
172	140	4045.5	6624.4	2	8	2021	6:13	2128	26.56	35.82	14.49	35.91	1920	B
173	141	4047.1	6636.9	2	8	2021	7:37	732	26.35	35.88	13.82	35.80	529	B
174	141	4047.1	6637.3	2	8	2021	7:57	697	26.37	35.90	26.35	35.95	684	W
175	142	4048.6	6649.9	2	8	2021	9:02	109	18.92	33.02	12.38	34.46	3	B
176.001	143	4044.0	6636.2	3	8	2021	0:06	1595	NaN	NaN	16.70	36.17	1494	O
176.002	143	4043.6	6635.6	3	8	2021	0:19	1595	NaN	NaN	15.93	36.00	1494	O
176.003	143	4043.2	6635.2	3	8	2021	0:30	1595	26.46	35.80	16.07	36.02	1493	O
176.004	143	4042.8	6634.9	3	8	2021	0:40	1595	NaN	NaN	15.47	35.90	1493	O
176.005	143	4042.3	6634.5	3	8	2021	0:52	1595	26.42	35.79	14.95	35.82	1494	O
177.001	144	4041.5	6636.7	3	8	2021	1:58	1728	NaN	NaN	14.89	35.83	1626	O
177.002	144	4041.1	6636.0	3	8	2021	2:13	1728	NaN	NaN	14.91	35.84	1627	O
177.003	144	4040.7	6635.5	3	8	2021	2:24	1728	NaN	NaN	15.34	35.91	1627	O

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
177.004	144	4040.2	6634.8	3	8	2021	2:37	1728	NaN	NaN	15.43	35.90	1627	O
178.001	145	4041.2	6637.6	3	8	2021	3:40	1705	NaN	NaN	15.52	35.91	1607	O
178.002	145	4040.7	6637.2	3	8	2021	3:54	1705	NaN	NaN	15.61	35.92	1607	O
178.003	145	4040.1	6636.8	3	8	2021	4:06	1705	NaN	NaN	15.48	35.91	1607	O
178.004	145	4039.5	6636.5	3	8	2021	4:17	1705	NaN	NaN	15.37	35.89	1607	O
179.001	146	4041.8	6639.7	3	8	2021	5:19	1365	NaN	NaN	17.71	36.23	1284	O
179.002	146	4041.1	6639.3	3	8	2021	5:32	1365	26.21	35.72	17.05	36.07	1283	O
179.003	146	4040.5	6638.9	3	8	2021	5:42	1365	NaN	NaN	17.92	36.32	1284	O
179.004	146	4039.9	6638.5	3	8	2021	5:52	1365	NaN	NaN	17.72	36.21	1284	O
179.005	146	4039.3	6638.2	3	8	2021	6:01	1365	26.34	35.76	17.36	36.22	1280	O
180	147	4049.1	6650.1	3	8	2021	8:58	106	19.29	33.15	12.29	34.45	4	B
181	148	4114.1	6615.2	3	8	2021	15:53	235	17.97	32.44	11.65	35.42	31	B
182	149	4141.2	6530.2	3	8	2021	23:25	1910	20.47	33.25	12.67	35.61	1706	B
183.002	150	4123.4	6609.4	4	8	2021	3:11	182	NaN	NaN	9.11	33.01	100	O
183.003	150	4123.0	6609.9	4	8	2021	3:20	182	NaN	NaN	9.14	32.99	99	O
183.004	150	4122.8	6610.3	4	8	2021	3:27	182	NaN	NaN	8.99	33.19	85	O
183.005	150	4122.6	6610.8	4	8	2021	3:34	182	NaN	NaN	8.98	33.17	91	O
183.006	150	4122.5	6611.1	4	8	2021	3:41	182	NaN	NaN	8.94	33.12	91	O
183.007	150	4122.3	6611.6	4	8	2021	3:47	182	NaN	NaN	9.05	32.99	100	O
183.008	150	4122.2	6612.0	4	8	2021	3:53	182	18.73	32.56	9.34	32.97	101	O
184	151	4142.6	6530.2	4	8	2021	15:37	1881	19.84	33.12	12.54	35.59	1679	B
185	152	4202.6	6517.5	5	8	2021	0:24	1487	19.57	33.05	8.95	35.22	1283	B
12	153	4203.3	6526.9	5	8	2021	1:44	1160	NaN	NaN	4.26	34.97	2	V
13	154	4159.1	6531.1	5	8	2021	3:25	1190	NaN	NaN	4.18	34.97	1	W
14	155	4154.6	6535.0	5	8	2021	5:07	1189	18.11	32.22	4.29	34.97	10	V
15	156	4151.4	6538.9	5	8	2021	6:37	1228	18.04	32.20	4.16	34.96	10	V
186	157	4141.8	6530.6	5	8	2021	9:00	1836	19.86	32.89	14.60	35.91	1632	B
187	158	4158.8	6446.0	5	8	2021	15:55	2194	25.41	35.66	13.99	35.80	1991	B

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
188.002	159	4221.9	6448.3	6	8	2021	0:07	1042	NaN	NaN	14.48	35.60	940	O
188.003	159	4221.6	6448.0	6	8	2021	0:15	1042	NaN	NaN	14.40	35.65	940	O
188.004	159	4221.3	6447.7	6	8	2021	0:24	1042	NaN	NaN	14.41	35.73	939	O
188.005	159	4220.7	6447.5	6	8	2021	0:36	1042	NaN	NaN	14.74	35.73	938	O
188.006	159	4220.3	6447.4	6	8	2021	0:45	1042	NaN	NaN	15.33	35.91	938	O
188.007	159	4220.0	6447.3	6	8	2021	0:54	1042	22.54	33.97	15.30	35.86	939	O
189.002	160	4216.7	6447.3	6	8	2021	1:38	1631	NaN	NaN	14.67	35.75	1528	O
189.003	160	4216.5	6446.7	6	8	2021	1:46	1631	NaN	NaN	15.10	35.85	1528	O
189.004	160	4216.3	6446.2	6	8	2021	1:54	1631	NaN	NaN	15.37	35.91	1529	O
189.005	160	4215.9	6445.4	6	8	2021	2:05	1631	22.50	34.01	15.45	35.92	1528	O
189.006	160	4215.6	6444.7	6	8	2021	2:15	1631	22.41	34.03	15.52	35.90	1529	O
190.001	161	4209.6	6445.9	6	8	2021	3:40	1867	21.65	33.78	16.28	36.12	1767	O
190.002	161	4209.4	6445.0	6	8	2021	3:53	1867	21.74	33.81	16.84	36.18	1785	O
190.003	161	4209.2	6444.5	6	8	2021	4:00	1867	21.97	33.86	16.97	36.22	1785	O
190.004	161	4209.0	6443.9	6	8	2021	4:07	1867	NaN	NaN	17.17	36.25	1785	O
190.005	161	4208.8	6443.4	6	8	2021	4:15	1867	22.17	33.85	16.68	36.23	1765	O
190.006	161	4208.6	6442.8	6	8	2021	4:23	1867	22.28	33.91	17.00	36.23	1784	O
190.007	161	4208.4	6442.3	6	8	2021	4:29	1867	NaN	NaN	17.07	36.25	1785	O
190.008	161	4208.2	6441.9	6	8	2021	4:36	1867	22.28	33.97	17.29	36.30	1786	O
191.001	162	4204.3	6445.0	6	8	2021	5:52	2063	21.75	33.74	16.57	36.17	1978	O
191.002	162	4204.2	6444.5	6	8	2021	6:01	2063	21.77	33.63	16.80	36.18	1980	O
191.003	162	4204.0	6444.2	6	8	2021	6:06	2063	21.74	33.57	16.81	36.20	1981	O
191.004	162	4203.8	6443.8	6	8	2021	6:13	2063	21.72	33.51	16.81	36.19	1982	O
191.005	162	4203.7	6443.4	6	8	2021	6:19	2063	21.77	33.51	16.76	36.20	1980	O
191.006	162	4203.5	6443.0	6	8	2021	6:25	2063	21.88	33.51	16.94	36.24	1981	O
191.007	162	4203.3	6442.5	6	8	2021	6:32	2063	22.03	33.56	16.87	36.09	1981	O
191.008	162	4203.1	6442.0	6	8	2021	6:39	2063	22.48	33.85	16.89	36.14	1982	O
192	162	4203.1	6441.2	6	8	2021	6:54	2119	23.56	34.27	19.16	36.38	2063	W
193	163	4154.6	6454.2	6	8	2021	9:04	2243	23.36	34.22	18.25	36.47	2142	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
194	164	4154.0	6456.1	7	8	2021	9:00	2293	21.47	33.44	14.40	35.85	2089	B
195	165	4106.0	6500.1	7	8	2021	15:50	3482	26.55	35.87	14.76	35.89	3280	B
196	166	4153.8	6455.3	7	8	2021	21:51	2304	23.52	34.24	14.40	35.85	2097	B
197.001	167	4139.2	6457.9	8	8	2021	0:07	2689	26.71	35.95	18.45	36.38	2582	O
197.002	167	4139.4	6457.1	8	8	2021	0:19	2689	26.65	35.93	17.93	36.11	2589	O
197.003	167	4139.5	6456.4	8	8	2021	0:28	2689	26.59	35.92	15.23	35.23	2588	O
197.004	167	4139.6	6455.7	8	8	2021	0:37	2689	26.54	35.90	15.86	35.39	2588	O
197.005	167	4139.7	6455.0	8	8	2021	0:46	2689	26.49	35.89	17.14	35.84	2588	O
197.006	167	4139.9	6454.2	8	8	2021	0:55	2689	26.43	35.88	16.38	35.53	2587	O
198.001	168	4129.5	6458.0	8	8	2021	2:32	2901	25.75	35.39	19.64	36.23	2809	O
198.002	168	4129.5	6458.9	8	8	2021	2:45	2901	25.59	35.34	20.78	36.61	2810	O
198.003	168	4129.4	6459.8	8	8	2021	2:56	2901	25.53	35.30	20.32	36.57	2810	O
198.004	168	4129.4	6500.7	8	8	2021	3:06	2901	25.41	35.19	18.20	36.29	2795	O
198.005	168	4129.4	6501.7	8	8	2021	3:19	2901	25.04	35.23	17.60	35.95	2805	O
198.006	168	4129.4	6502.6	8	8	2021	3:30	2901	25.35	35.09	19.50	36.51	2810	O
199.001	169	4119.9	6500.2	8	8	2021	4:57	3133	26.40	35.66	17.36	36.15	3041	O
199.002	169	4119.4	6501.0	8	8	2021	5:10	3133	26.41	35.64	17.40	36.13	3043	O
199.003	169	4119.0	6501.6	8	8	2021	5:20	3133	26.40	35.66	18.64	36.51	3042	O
199.004	169	4118.5	6502.6	8	8	2021	5:34	3133	NaN	NaN	18.88	36.55	3042	O
199.005	169	4118.2	6503.1	8	8	2021	5:42	3133	26.39	35.62	18.43	36.46	3042	O
199.006	169	4117.9	6503.6	8	8	2021	5:50	3133	26.39	35.60	18.21	36.41	3041	O
200.001	170	4110.0	6500.9	8	8	2021	7:02	3380	26.51	35.88	16.49	35.78	3288	O
200.002	170	4109.8	6501.1	8	8	2021	7:13	3380	NaN	NaN	15.60	35.54	3289	O
200.003	170	4109.4	6502.1	8	8	2021	7:21	3380	NaN	NaN	17.83	36.09	3289	O
200.004	170	4109.1	6502.9	8	8	2021	7:31	3380	26.53	35.91	19.01	36.46	3289	O
200.005	170	4108.8	6503.8	8	8	2021	7:42	3380	26.53	35.89	19.39	36.56	3289	O
200.006	170	4108.5	6504.6	8	8	2021	7:51	3380	26.50	35.88	19.30	36.58	3288	O
201	171	4109.6	6459.4	8	8	2021	9:01	3401	26.32	35.54	14.50	35.89	3197	B
202	172	4012.9	6506.5	8	8	2021	15:49	4358	27.34	35.17	18.75	36.59	4155	B

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
203	173	3927.6	6511.4	8	8	2021	22:49	4757	27.01	35.11	13.59	35.74	4551	B
204.001	174	3936.6	6510.1	9	8	2021	0:12	4651	27.15	35.66	27.22	35.94	4641	B
204.002	174	3936.6	6510.1	9	8	2021	0:15	4651	27.17	35.67	27.22	35.93	4641	B
204.003	174	3936.6	6510.2	9	8	2021	0:18	4651	27.18	35.65	27.22	35.95	4640	B
205.001	174	3936.7	6510.3	9	8	2021	0:28	4649	27.18	35.67	27.18	35.95	4637	T
205.002	174	3936.8	6510.4	9	8	2021	0:33	4649	27.17	34.91	27.23	35.91	4641	T
206.001	175	3946.5	6508.9	9	8	2021	1:47	4563	26.72	35.86	26.70	35.87	4552	B
206.002	175	3946.6	6508.9	9	8	2021	1:50	4563	26.70	35.86	26.71	35.86	4553	B
206.003	175	3946.6	6508.9	9	8	2021	1:53	4563	26.69	35.85	26.70	35.86	4552	B
207.001	175	3946.7	6508.9	9	8	2021	2:02	4562	26.67	35.85	26.68	35.86	4551	T
207.002	175	3946.7	6509.0	9	8	2021	2:06	4562	26.66	35.85	26.68	35.86	4551	T
208.001	176	3956.5	6507.9	9	8	2021	3:19	4521	26.27	35.84	26.28	35.84	4510	B
208.002	176	3956.6	6507.8	9	8	2021	3:22	4521	26.26	35.84	26.27	35.84	4510	B
208.003	176	3956.6	6507.7	9	8	2021	3:25	4521	26.25	35.84	26.26	35.84	4511	B
209.001	176	3956.7	6507.5	9	8	2021	3:36	4524	26.23	35.84	26.10	35.86	4513	T
209.002	176	3956.8	6507.5	9	8	2021	3:38	4524	26.22	35.84	26.22	35.84	4514	T
209.003	176	3956.8	6507.5	9	8	2021	3:43	4524	26.21	35.84	26.20	35.84	4513	T
210.001	177	3951.8	6508.4	9	8	2021	4:32	4533	26.56	35.85	26.56	35.84	4523	B
210.002	177	3951.8	6508.4	9	8	2021	4:35	4533	26.56	35.85	26.56	35.85	4523	B
210.003	177	3951.9	6508.3	9	8	2021	4:38	4533	26.56	35.86	26.56	35.86	4523	B
211.001	177	3952.0	6508.2	9	8	2021	4:44	4534	26.57	35.87	26.58	35.87	4524	T
211.002	177	3952.0	6508.2	9	8	2021	4:48	4534	26.57	35.88	26.58	35.88	4524	T
211.003	177	3952.0	6508.2	9	8	2021	4:50	4534	26.57	35.88	26.58	35.88	4524	T
212.001	178	3942.8	6509.2	9	8	2021	6:05	4582	26.78	36.01	26.66	36.01	4571	B
212.002	178	3942.9	6509.2	9	8	2021	6:08	4582	26.77	36.01	26.67	36.00	4572	B
212.003	178	3942.9	6509.2	9	8	2021	6:10	4582	26.76	36.01	26.67	36.01	4571	B
213.001	178	3943.1	6509.1	9	8	2021	6:17	4584	26.76	36.01	26.68	36.01	4574	T
213.002	178	3943.2	6509.2	9	8	2021	6:20	4584	26.77	36.01	26.67	36.01	4574	T
213.003	178	3943.2	6509.2	9	8	2021	6:22	4584	26.77	36.01	26.66	36.01	4574	T

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Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment
213.004	178	3943.3	6509.2	9	8	2021	6:24	4584	26.77	36.01	26.68	36.01	4574	T
214.001	179	3932.1	6510.3	9	8	2021	7:49	4708	26.30	34.01	26.87	34.49	4698	B
214.002	179	3932.1	6510.3	9	8	2021	7:52	4708	26.27	34.00	26.67	34.34	4698	B
214.003	179	3932.2	6510.3	9	8	2021	7:54	4708	26.29	34.01	26.86	34.49	4698	B
214.004	179	3932.2	6510.2	9	8	2021	7:56	4708	26.29	34.01	27.02	34.65	4698	B
215.001	179	3932.3	6510.2	9	8	2021	8:02	4708	26.29	34.00	27.98	35.72	4698	T
215.002	179	3932.4	6510.2	9	8	2021	8:05	4708	26.30	34.01	28.01	35.82	4698	T
215.003	179	3932.4	6510.2	9	8	2021	8:07	4708	26.30	34.01	28.02	35.81	4698	T
215.004	179	3932.5	6510.3	9	8	2021	8:09	4708	26.30	NaN	27.97	35.83	4698	T
216	179	3932.7	6510.5	9	8	2021	8:18	4702	26.31	34.02	27.63	34.78	4693	W
217	180	3929.9	6510.5	9	8	2021	9:15	4752	26.37	33.86	13.98	35.79	4549	B
218	181	3925.9	6550.4	9	8	2021	16:06	4435	27.30	35.19	12.54	35.59	4233	B
219	182	3945.2	6649.5	9	8	2021	22:57	3747	27.42	35.84	11.84	35.49	3542	B
220	182	3944.8	6649.4	9	8	2021	23:20	3749	27.38	35.83	27.02	35.85	3734	W
221.002	183	3952.2	6657.8	10	8	2021	0:41	3074	NaN	NaN	14.82	35.84	2983	O
221.003	183	3951.8	6657.5	10	8	2021	0:50	3074	NaN	NaN	15.58	36.03	2982	O
221.004	183	3951.4	6657.2	10	8	2021	0:59	3074	NaN	NaN	15.32	35.95	2983	O
221.005	183	3951.1	6656.9	10	8	2021	1:07	3074	NaN	NaN	15.16	35.91	2983	O
221.006	183	3950.7	6656.5	10	8	2021	1:16	3074	NaN	NaN	14.44	35.78	2983	O
221.007	183	3950.3	6656.2	10	8	2021	1:25	3074	NaN	NaN	14.88	35.82	2981	O
221.008	183	3950.0	6655.8	10	8	2021	1:33	3074	27.29	35.78	14.31	35.76	2966	O
222	184	3951.9	6654.4	10	8	2021	2:45	2835	27.39	35.74	22.46	35.87	2794	O
223	185	3953.1	6653.0	10	8	2021	4:59	3321	27.01	35.41	18.09	35.93	3270	O
224	186	3952.6	6650.6	10	8	2021	6:51	3484	26.62	34.65	19.38	35.78	3433	O
225	187	4045.7	6659.6	10	8	2021	22:51	107	24.07	34.41	14.42	35.13	3	B
16	188	4045.2	6638.5	11	8	2021	2:00	960	26.26	35.35	4.55	34.98	27	W
17	189	4041.6	6634.5	11	8	2021	4:04	2170	NaN	NaN	3.59	34.95	7	V
226	190	4044.7	6617.7	11	8	2021	9:03	2350	26.47	34.21	14.75	35.95	2146	B
227	191	4005.5	6813.5	11	8	2021	23:00	1870	24.87	33.74	13.35	35.72	1667	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
228	192	4000.9	6902.1	12	8	2021	3:23	1194	24.33	33.47	15.32	34.31	1152	O
229	193	3941.6	6933.1	12	8	2021	9:04	1925	25.46	35.01	12.47	35.59	1705	B
230	194	4011.2	6849.8	12	8	2021	15:52	137	24.76	34.42	14.32	35.80	4	B
231	195	3929.5	7122.0	13	8	2021	10:46	2400	24.65	34.07	12.02	35.53	2197	B
232	196	3943.0	7217.3	13	8	2021	15:53	109	24.45	32.66	13.52	35.38	3	B
233	197	3904.3	7155.1	13	8	2021	22:57	2358	25.84	33.29	11.54	35.47	2151	B
234.001	198	3916.6	7156.7	14	8	2021	0:37	1734	NaN	NaN	15.15	35.83	1643	O
234.002	198	3915.9	7156.0	14	8	2021	0:52	1734	NaN	NaN	15.10	35.89	1643	O
234.003	198	3915.2	7155.5	14	8	2021	1:03	1734	NaN	NaN	15.05	35.89	1643	O
234.004	198	3914.4	7154.9	14	8	2021	1:15	1734	NaN	NaN	15.18	35.88	1643	O
234.005	198	3913.7	7154.4	14	8	2021	1:27	1734	25.66	33.32	15.21	35.85	1647	O
235	199	3919.6	7201.1	14	8	2021	3:01	1695	25.36	33.24	16.70	35.43	1659	O
236	200	3920.5	7202.7	14	8	2021	5:05	1745	25.22	33.25	16.09	35.75	1694	O
237	200	3916.7	7200.6	14	8	2021	6:19	1675	25.23	33.26	24.78	33.49	1664	W
238	201	3903.5	7155.3	14	8	2021	9:09	2371	25.63	33.22	11.49	35.47	2166	B
239	202	3906.1	7246.6	14	8	2021	15:48	127	24.84	33.07	13.80	35.68	3	B
240	203	3837.5	7308.4	14	8	2021	22:44	515	25.96	31.48	13.43	35.69	310	B
241.001	204	3827.9	7311.7	15	8	2021	0:10	1520	NaN	NaN	14.78	35.72	1429	O
241.002	204	3827.2	7311.9	15	8	2021	0:24	1520	27.05	33.50	18.94	36.24	1464	O
242.001	205	3810.9	7312.1	15	8	2021	3:37	2202	NaN	NaN	15.66	36.16	2121	O
242.002	205	3810.4	7312.1	15	8	2021	3:52	2202	26.87	33.16	17.41	36.11	2167	O
243	206	3748.8	7319.6	15	8	2021	10:16	2201	25.64	34.79	13.50	35.71	1997	B
244	207	3734.1	7249.9	15	8	2021	15:51	2879	26.61	34.10	13.15	35.68	2675	B
245	208	3706.5	7156.5	15	8	2021	22:49	3563	29.84	36.16	19.48	36.67	3359	B
246.001	209	3711.7	7205.0	16	8	2021	0:46	3341	29.01	35.24	28.89	35.86	3330	B
246.002	209	3711.7	7204.8	16	8	2021	0:49	3341	29.06	35.27	28.91	35.87	3330	B
246.003	209	3711.7	7204.5	16	8	2021	0:53	3341	29.10	35.28	28.90	35.87	3330	B
247.001	209	3711.8	7202.9	16	8	2021	1:18	3371	29.13	35.16	29.19	36.03	3361	T
247.002	209	3711.9	7202.7	16	8	2021	1:19	3371	29.15	35.13	29.03	35.92	3361	T

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
247.003	209	3712.0	7202.4	16	8	2021	1:23	3371	29.12	35.12	29.18	35.11	3367	T
248.001	210	3716.7	7214.8	16	8	2021	3:18	3592	28.23	34.12	28.28	34.38	3582	B
248.002	210	3716.8	7214.6	16	8	2021	3:21	3592	27.86	34.10	27.95	34.22	3582	B
248.003	210	3716.9	7214.5	16	8	2021	3:24	3592	27.10	33.88	27.33	34.05	3582	B
249.001	210	3717.0	7214.2	16	8	2021	3:31	3475	26.81	33.94	27.01	34.13	3464	T
249.002	210	3717.1	7214.0	16	8	2021	3:34	3475	26.80	34.01	26.99	34.22	3465	T
249.003	210	3717.1	7213.9	16	8	2021	3:37	3475	26.76	34.02	26.88	34.16	3465	T
250.001	211	3721.0	7223.2	16	8	2021	4:51	3198	27.25	33.74	26.82	34.27	3188	B
250.002	211	3721.1	7223.2	16	8	2021	4:54	3198	27.24	33.74	26.85	34.27	3187	B
250.003	211	3721.2	7223.2	16	8	2021	4:57	3198	27.24	33.73	26.88	34.25	3187	B
251.001	211	3721.3	7223.1	16	8	2021	5:03	3204	27.24	33.74	26.72	34.32	3194	T
251.002	211	3721.4	7223.0	16	8	2021	5:06	3204	27.26	33.79	26.66	34.35	3193	T
251.003	211	3721.4	7223.0	16	8	2021	5:09	3204	27.28	33.81	26.71	34.32	3194	T
251.004	211	3721.4	7222.9	16	8	2021	5:11	3204	27.25	33.81	26.39	34.41	3194	T
252.001	212	3726.5	7234.3	16	8	2021	6:24	3008	26.98	34.10	27.40	34.98	2998	B
252.002	212	3726.6	7234.4	16	8	2021	6:27	3008	26.94	34.06	27.85	35.57	2997	B
252.003	212	3726.7	7234.4	16	8	2021	6:30	3008	26.94	34.05	27.85	35.47	2998	B
253.001	212	3726.8	7234.5	16	8	2021	6:36	3005	26.90	34.03	27.92	35.50	2995	T
253.002	212	3726.9	7234.6	16	8	2021	6:39	3005	26.89	34.01	27.96	35.54	2995	T
253.003	212	3726.9	7234.6	16	8	2021	6:42	3005	26.86	33.99	28.06	35.63	2994	T
254.001	213	3729.1	7239.4	16	8	2021	7:17	2952	26.55	34.15	26.60	34.60	2941	B
254.002	213	3729.2	7239.5	16	8	2021	7:19	2952	26.54	34.17	26.33	34.45	2942	B
254.003	213	3729.3	7239.5	16	8	2021	7:22	2952	26.52	34.18	26.18	34.44	2942	B
255.001	213	3729.4	7239.6	16	8	2021	7:29	2951	26.52	34.22	25.93	34.55	2940	T
255.002	213	3729.5	7239.6	16	8	2021	7:32	2951	26.52	34.23	25.96	34.52	2940	T
255.003	213	3729.5	7239.7	16	8	2021	7:36	2951	26.52	34.23	26.01	34.48	2941	T
256	213	3729.7	7239.8	16	8	2021	7:42	2952	26.52	34.25	25.98	34.48	2941	W
257	214	3720.0	7224.3	16	8	2021	9:27	3180	27.60	33.93	13.77	35.75	2975	B
258	215	3812.1	7220.3	16	8	2021	15:50	2985	26.47	34.27	15.78	36.23	2782	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
259.001	216	3905.9	7122.5	17	8	2021	1:33	2748	NaN	NaN	16.01	36.04	2662	O
259.002	216	3906.4	7121.9	17	8	2021	1:45	2748	25.61	34.95	17.26	35.73	2696	O
260.001	217	3912.2	7109.7	17	8	2021	4:03	2715	NaN	NaN	15.63	36.01	2629	O
260.002	217	3912.7	7108.9	17	8	2021	4:16	2715	25.64	35.07	17.40	35.54	2666	O
261	217	3915.1	7104.5	17	8	2021	5:22	2698	25.65	35.07	25.64	35.07	2680	W
262	218	3918.4	7054.6	17	8	2021	9:02	2647	25.73	35.05	12.05	35.53	2444	B
263	219	3855.2	6959.3	17	8	2021	15:50	2910	26.53	35.19	11.21	35.42	2708	B
264	220	3832.9	6906.6	17	8	2021	22:46	3473	27.03	34.06	11.52	35.46	3266	B
265.001	221	3825.6	6903.6	18	8	2021	0:03	3614	26.30	34.48	26.50	34.86	3604	B
265.002	221	3825.6	6903.4	18	8	2021	0:06	3614	26.29	34.47	26.49	34.88	3604	B
265.003	221	3825.6	6903.2	18	8	2021	0:09	3614	26.26	34.44	26.40	34.92	3604	B
266.001	221	3825.6	6902.9	18	8	2021	0:18	3619	26.26	34.41	26.48	34.89	3609	T
266.002	221	3825.6	6902.8	18	8	2021	0:22	3619	26.37	34.47	26.48	34.87	3609	T
266.003	221	3825.6	6902.7	18	8	2021	0:25	3619	26.37	34.50	26.43	34.88	3609	T
267.001	222	3816.2	6858.4	18	8	2021	1:37	3820	27.07	34.39	26.76	34.33	3810	B
267.002	222	3816.2	6858.3	18	8	2021	1:40	3820	26.94	34.35	26.79	34.32	3810	B
267.003	222	3816.3	6858.1	18	8	2021	1:42	3820	26.92	34.34	26.82	34.31	3810	B
268.001	222	3816.4	6857.8	18	8	2021	1:52	3820	27.02	34.34	26.37	34.32	3809	T
268.002	222	3816.5	6857.6	18	8	2021	1:55	3820	27.01	34.34	25.76	34.40	3809	T
268.003	222	3816.5	6857.6	18	8	2021	1:58	3820	27.01	34.34	25.83	34.39	3809	T
269.001	223	3806.9	6853.7	18	8	2021	3:10	3993	29.00	35.96	29.01	35.95	3982	B
269.002	223	3806.9	6853.5	18	8	2021	3:13	3993	29.01	35.96	29.02	35.96	3983	B
269.003	223	3807.0	6853.3	18	8	2021	3:15	3993	29.03	35.96	29.02	35.96	3982	B
269.004	223	3807.0	6853.1	18	8	2021	3:18	3993	29.03	35.96	29.04	35.97	3983	B
270.001	223	3807.2	6852.6	18	8	2021	3:25	3998	28.98	35.93	29.00	35.94	3988	T
270.002	223	3807.3	6852.3	18	8	2021	3:29	3998	28.94	35.91	28.96	35.91	3988	T
270.003	223	3807.3	6852.1	18	8	2021	3:32	3998	28.90	35.88	28.92	35.89	3988	T
271.001	224	3811.5	6856.1	18	8	2021	4:57	3904	26.53	33.68	27.71	34.75	3894	B
271.002	224	3811.5	6855.9	18	8	2021	4:59	3904	26.62	33.67	26.45	34.20	3894	B

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Cast #	Site ID #	Lat (DDMM.M)	Long (DDMM.M)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (° C)	Sfc Salt	Deepest Observed Temp (° C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
271.003	224	3811.6	6855.7	18	8	2021	5:03	3904	26.63	33.68	26.48	34.29	3893	B
272.001	224	3811.7	6855.3	18	8	2021	5:09	3908	26.66	33.67	26.55	34.35	3898	T
272.002	224	3811.7	6855.2	18	8	2021	5:11	3908	26.62	33.63	26.47	34.34	3897	T
272.003	224	3811.7	6855.0	18	8	2021	5:15	3908	26.62	33.62	26.62	34.39	3898	T
273.001	225	3820.6	6901.0	18	8	2021	6:28	3738	26.26	33.95	25.56	34.49	3728	B
273.002	225	3820.7	6900.9	18	8	2021	6:31	3738	26.26	33.96	25.48	34.50	3728	B
273.003	225	3820.7	6900.8	18	8	2021	6:33	3738	26.28	33.98	25.43	34.45	3728	B
274.001	225	3820.8	6900.6	18	8	2021	6:39	3733	26.35	34.00	25.39	34.44	3722	T
274.002	225	3820.9	6900.5	18	8	2021	6:41	3733	26.34	33.99	25.38	34.44	3723	T
274.003	225	3820.9	6900.4	18	8	2021	6:45	3733	26.33	33.99	25.25	34.44	3722	T
275.001	226	3829.7	6905.5	18	8	2021	7:54	3531	26.45	34.83	26.47	34.84	3521	B
275.002	226	3829.8	6905.4	18	8	2021	7:57	3531	26.42	34.81	26.45	34.83	3521	B
275.003	226	3829.8	6905.3	18	8	2021	8:00	3531	26.39	34.80	26.42	34.81	3521	B
276.001	226	3829.9	6905.2	18	8	2021	8:06	3530	26.39	34.79	26.42	34.80	3520	T
276.002	226	3830.0	6905.1	18	8	2021	8:09	3530	26.40	34.79	26.41	34.79	3520	T
276.003	226	3830.0	6905.1	18	8	2021	8:13	3530	26.39	34.78	26.40	34.79	3520	T
277	226	3830.1	6905.0	18	8	2021	8:20	3528	26.36	34.77	26.38	34.77	3517	W
278	227	3833.1	6909.2	18	8	2021	9:03	3465	26.48	34.59	11.52	35.46	3262	B
279	228	3917.7	6851.4	18	8	2021	15:56	2960	26.93	35.11	11.73	35.48	2756	B
280	229	3952.2	6825.3	18	8	2021	22:55	2560	27.15	35.58	12.21	35.55	2356	B
281.001	230	4015.5	6808.2	19	8	2021	2:16	588	NaN	NaN	16.39	35.90	507	O
281.002	230	4015.1	6807.9	19	8	2021	2:26	588	23.96	34.18	18.94	35.80	539	O
18	231	4016.3	6806.3	19	8	2021	4:42	1121	23.88	34.13	6.26	35.10	615	W
282	232	4037.3	6802.8	19	8	2021	9:05	92	21.18	32.53	10.76	33.34	4	B
283	233	4002.9	6829.6	19	8	2021	15:53	1505	26.04	35.17	12.76	35.63	1302	B
284	234	3957.7	6921.8	19	8	2021	22:47	156	25.82	34.98	11.95	35.53	4	B
285	235	3940.4	7114.8	20	8	2021	9:03	1910	25.73	34.88	12.19	35.55	1707	B
286	236	3939.2	7122.8	20	8	2021	15:44	1777	25.74	34.10	12.19	35.55	1574	B
287	237	3955.1	7057.1	20	8	2021	22:10	511	26.08	34.96	12.08	35.54	306	B

HB2102 AMAPPS Survey
June 17 - August 20, 2021

Cast	Site ID	Lat	Long	Day	Mo	Year	Time	Btm	Sfc	Sfc	Deepest Observed	Deepest Observed	Meters from	Method of
#	#	(DDMM.M)	(DDMM.M)				(GMT)	Depth (m)	Temp (° C)	Salt	Temp (° C)	Salt	Bottom	Deployment

Deployment codes: B=bongo cast; W=water cast; O=VPR deployment; T=neuston net Tow-yo; and V=vertical cast

Records in bold are collected with an SBE911+ CTD