

Oceans and Climate Branch CTD Data Report
CTD_REPORT_2022004HB

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DATE: 5 December 2022

Oceans and Climate Branch CTD Data Report

CTD_REPORT_2022004HB

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

HB 2204
Spring ECOMON Survey
Data Coverage: May 31 – June 17, 2022
Mid Atlantic Bight, Georges Bank, Gulf of Maine

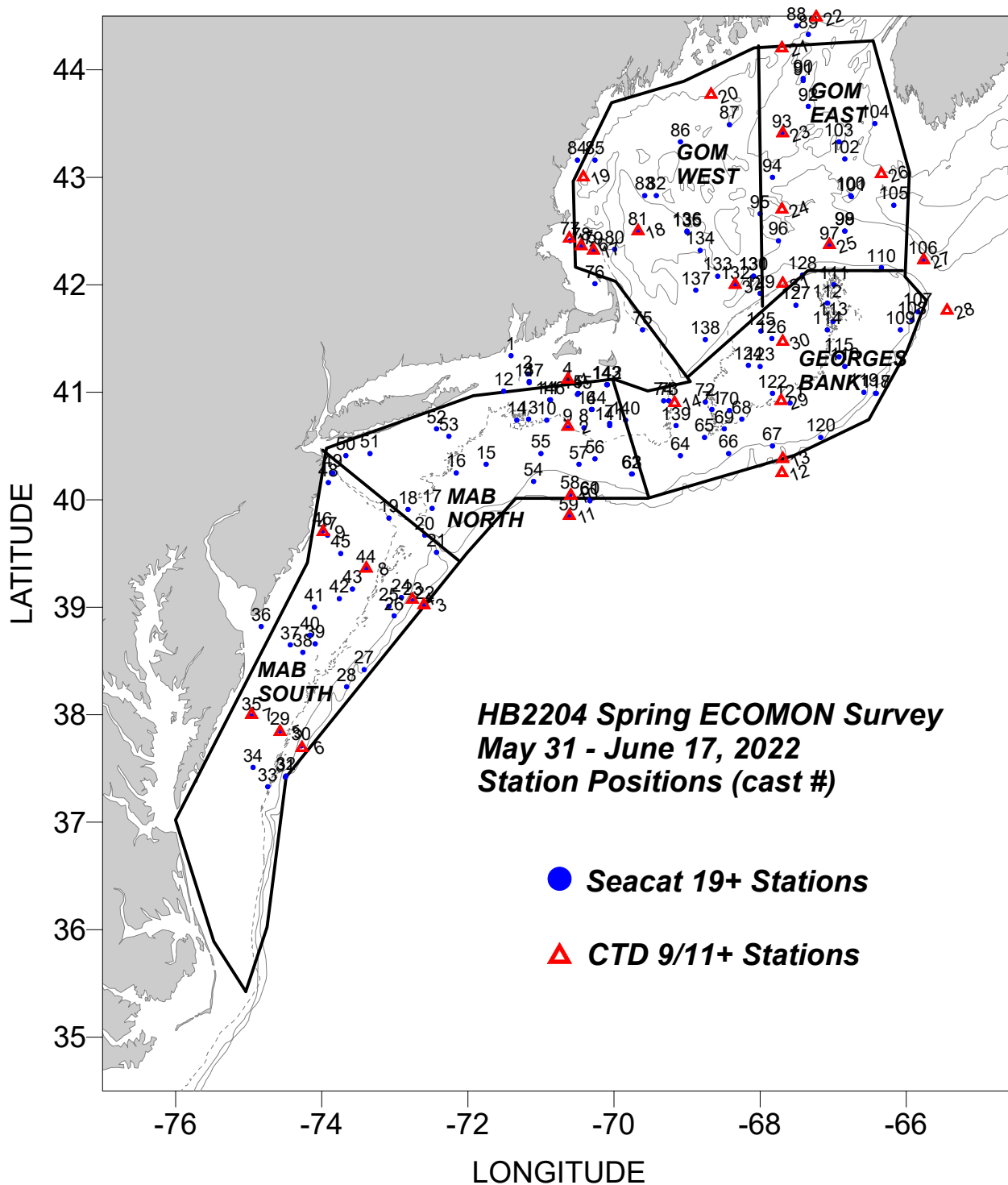
This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's HB2204 Spring ECOMON Survey aboard the NOAA FSV *Bigelow*. Data was obtained with a Sea-Bird Electronics SBE Model 19+V2 profiling CTD (s/n 7143) during double oblique bongo tows and on vertical casts with a SBE Model 9/11+ s/n 1486. Sea water samples were taken for the purpose of calibrating salinity values.

The SBE19+V2 was successfully deployed on 138 double oblique bongo casts and 9 vertical and water casts. The SBE9/11+ was used successfully on 32 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: November 22, 2022



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
HB2204 Spring ECOMON Survey
May 31 - June 17, 2022**

		SURFACE TEMPERATURE						BOTTOM TEMPERATURE					
Region	CD	#obs	Temp (°C)	Anomaly	SDV1	SDV2	Flag	#obs	Temp (°C)	Anomaly	SDV1	SDV2	Flag
WGOM	163	24	14.16	2.38	0.22	0.85	0	20	7.41	2.15	0.20	0.57	0
EGOM	163	23	12.52	3.24	0.19	1.02	0	17	8.91	1.49	0.29	0.45	0
GB	163	37	13.67	3.03	0.24	1.95	0	31	10.95	2.34	0.23	1.40	0
MABN	157	34	15.90	2.85	0.29	1.04	0	34	9.99	1.99	0.30	0.81	0
MABS	156	37	18.46	2.11	1.72	1.39	1	33	10.92	1.80	1.83	1.36	1

		SURFACE SALINITY						BOTTOM SALINITY					
Region	CD	#obs	Salinity	Anomaly	SDV1	SDV2	Flag	#obs	Salinity	Anomaly	SDV1	SDV2	Flag
WGOM	163	24	32.05	-0.01	0.09	0.25	0	20	33.44	0.13	0.07	0.31	0
EGOM	163	23	32.08	-0.25	0.10	0.26	0	17	34.13	0.03	0.09	0.36	0
GB	163	37	33.14	0.28	0.08	0.80	0	31	33.63	0.45	0.08	0.39	0
MABN	157	34	32.64	0.20	0.13	0.37	0	34	33.34	0.06	0.11	0.35	0
MABS	156	37	32.91	0.69	0.90	0.88	1	33	33.77	0.16	0.65	0.31	1

"Region"; WGOM is the Western Gulf of Maine; EGOM is the Eastern Gulf of Maine; 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;

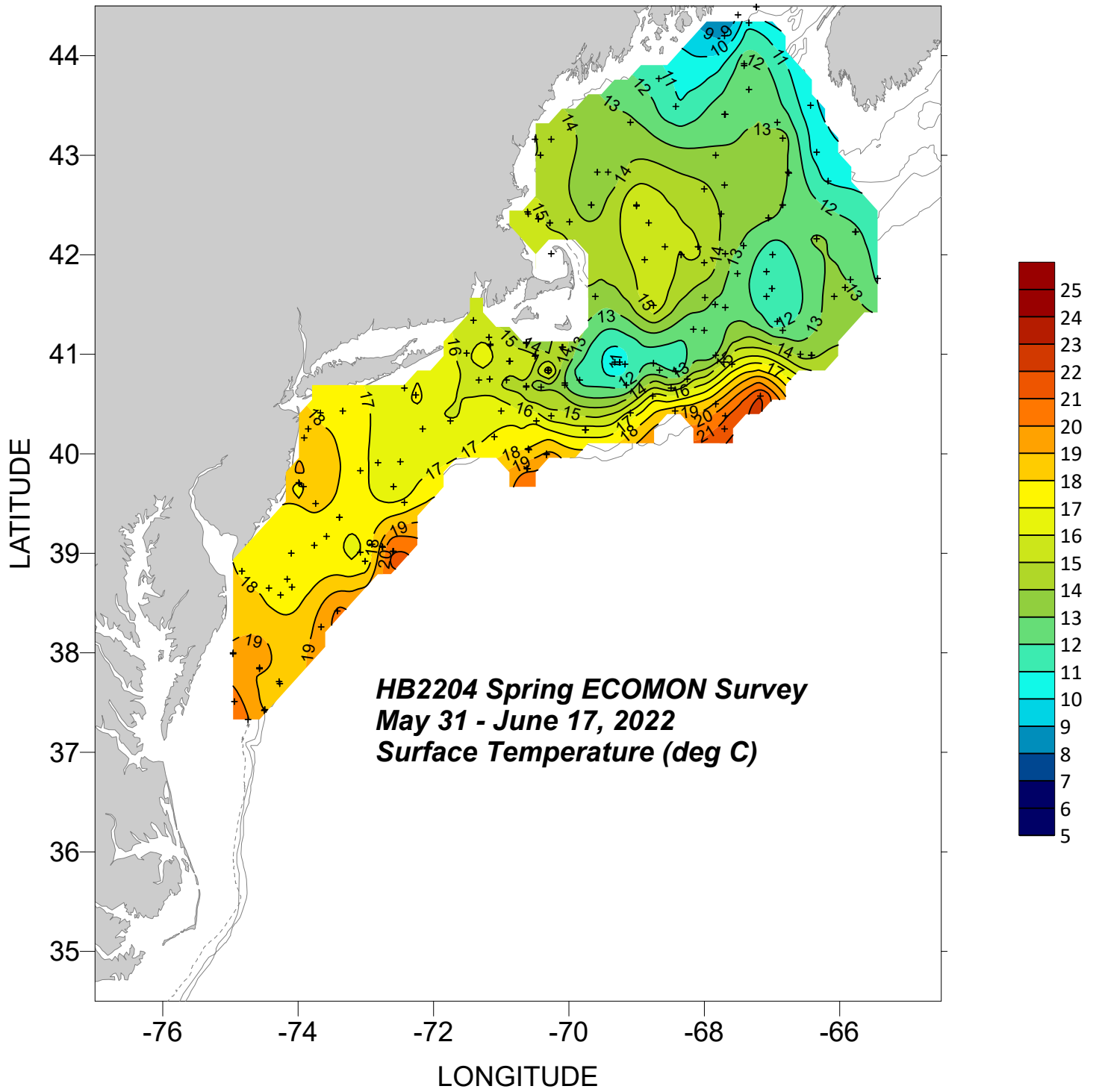
"#obs": the number of observations include in each average;

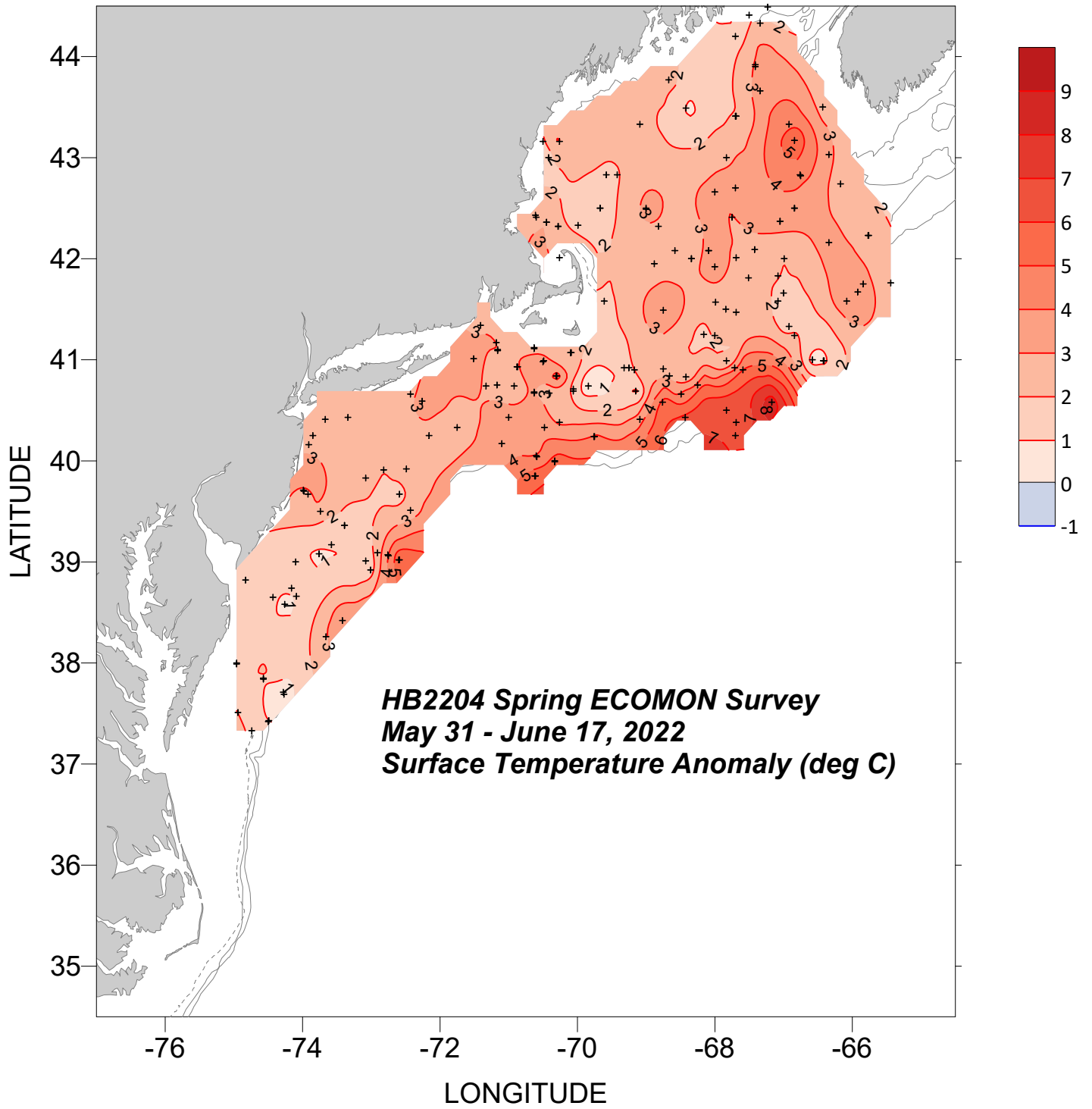
"Temp (°C)" and "Salinity": the areal averaged temperature or salinity; "Anomaly": the areal averaged temp/salt anomaly;

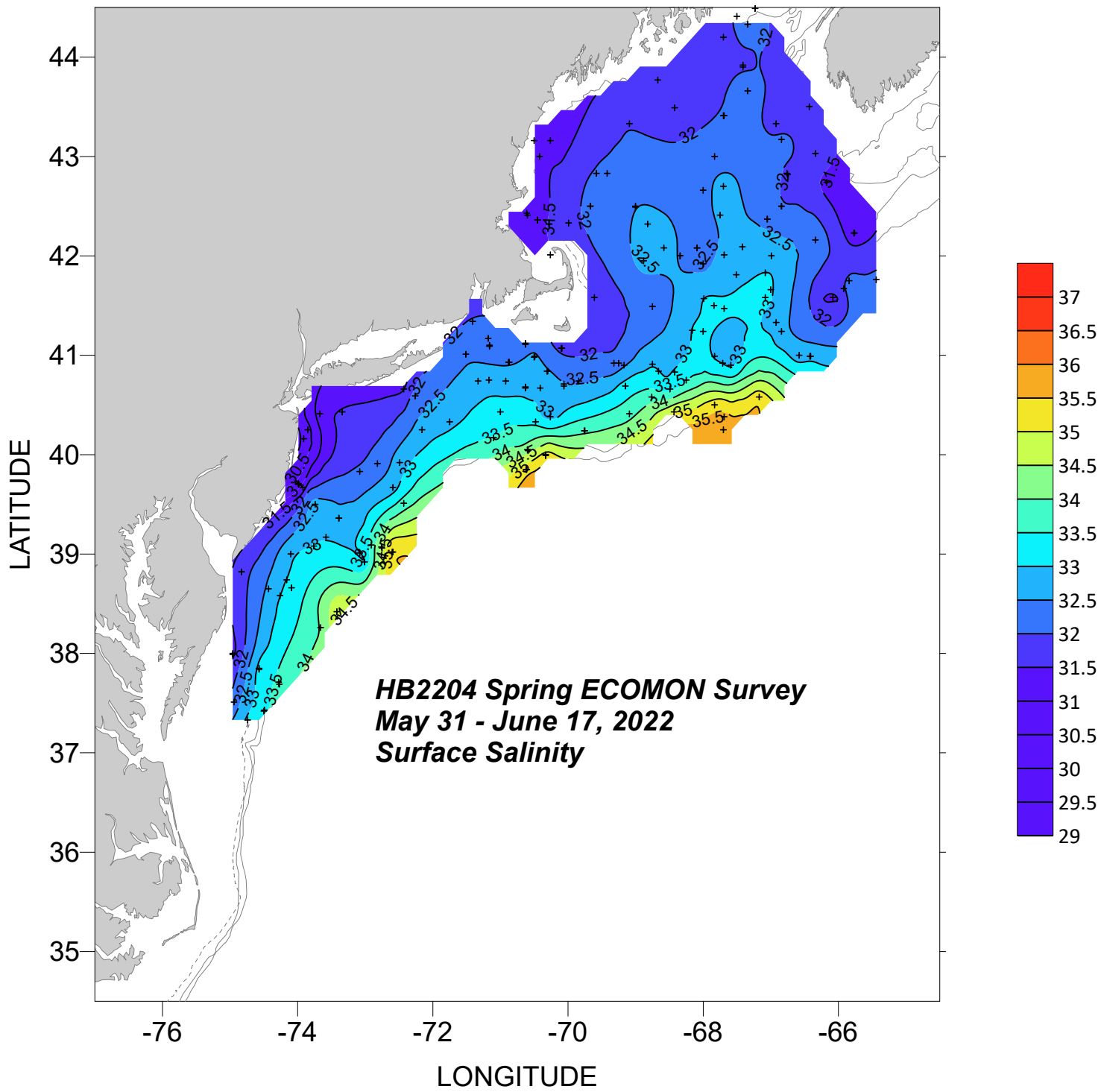
"SDV1": the standard deviation associated with the average temp/salt anomaly;

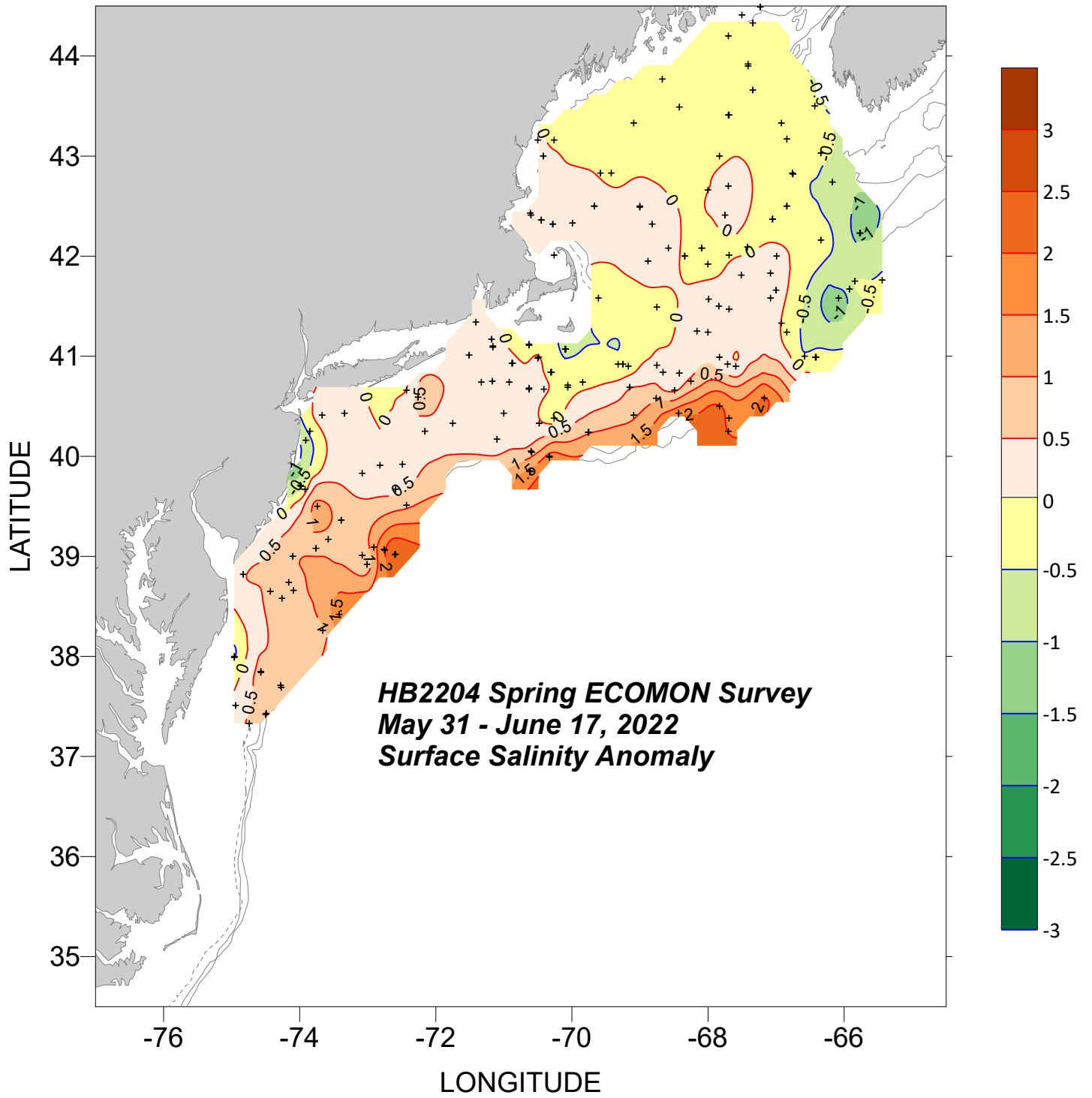
"SDV2": the standard deviation of the individual anomalies from which the average anomaly was derived;

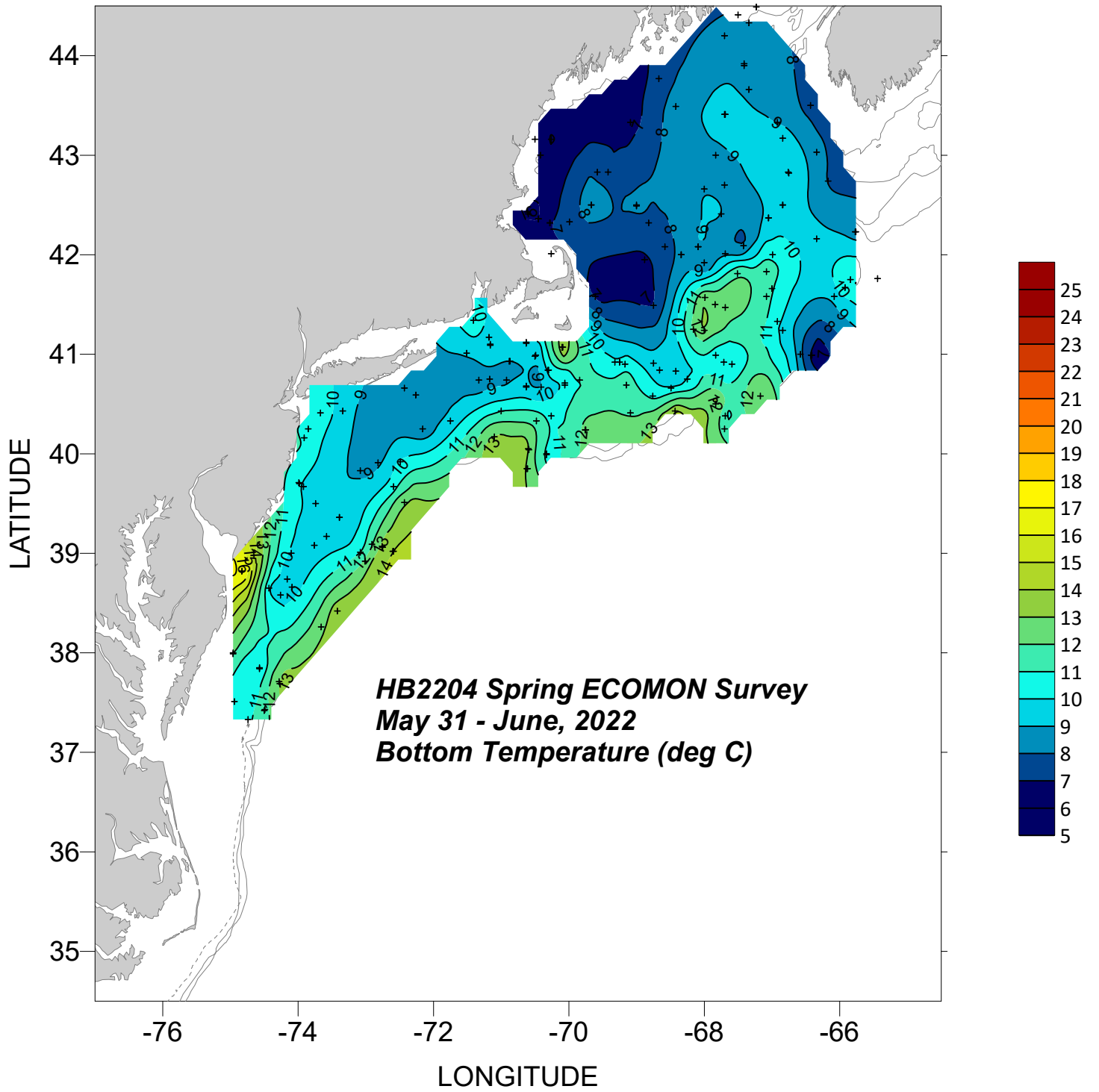
"Flag": a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.

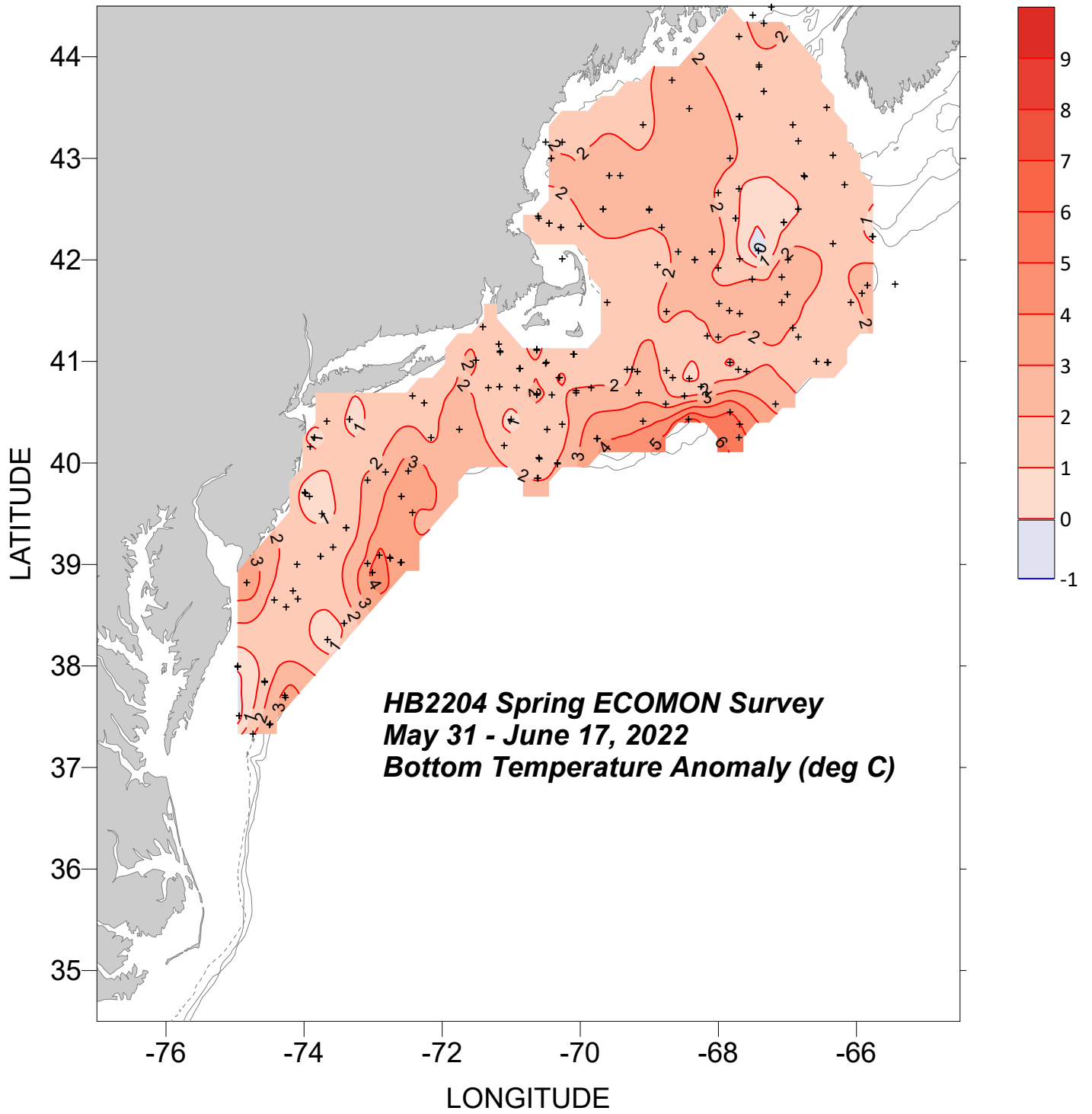


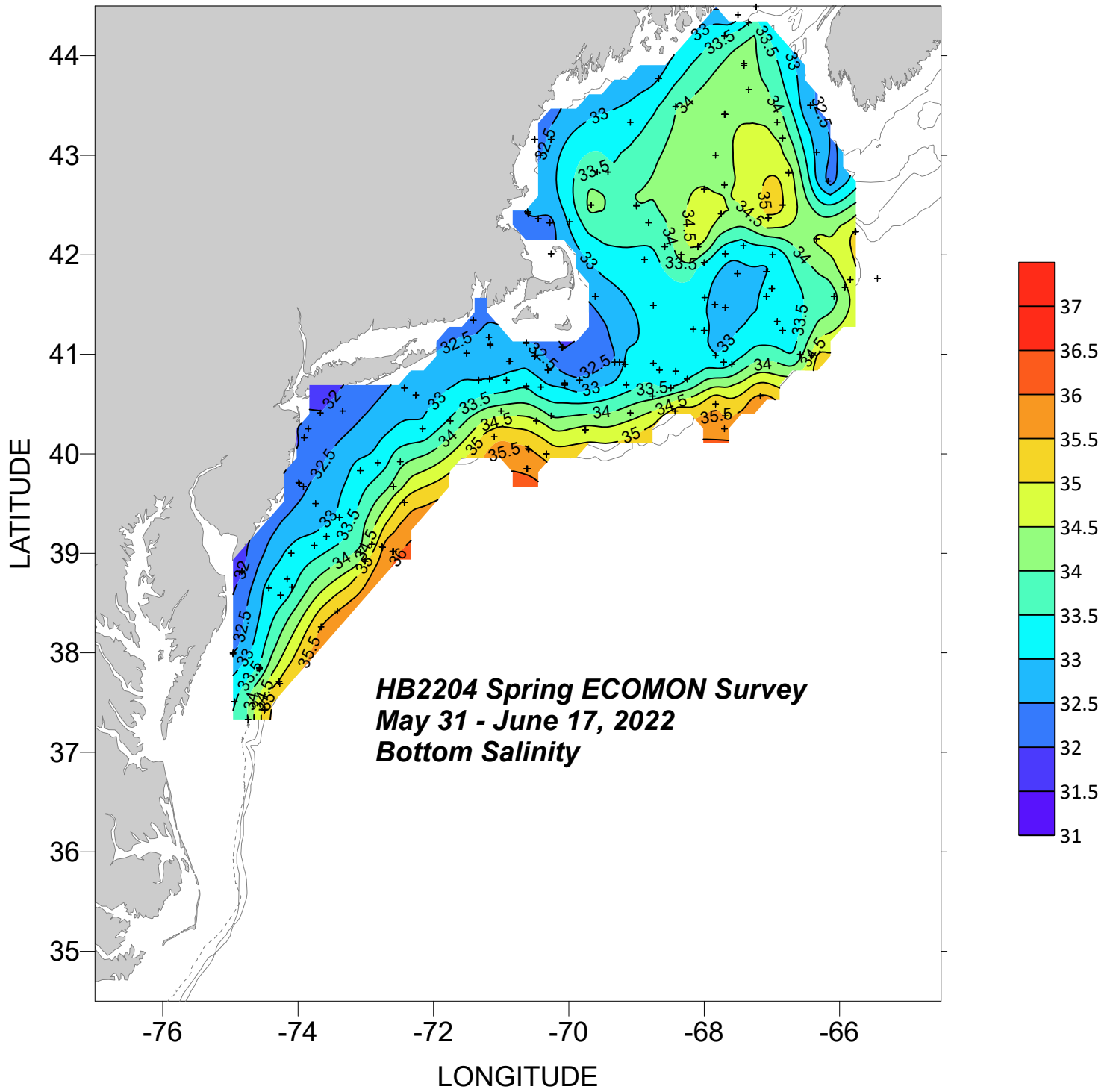


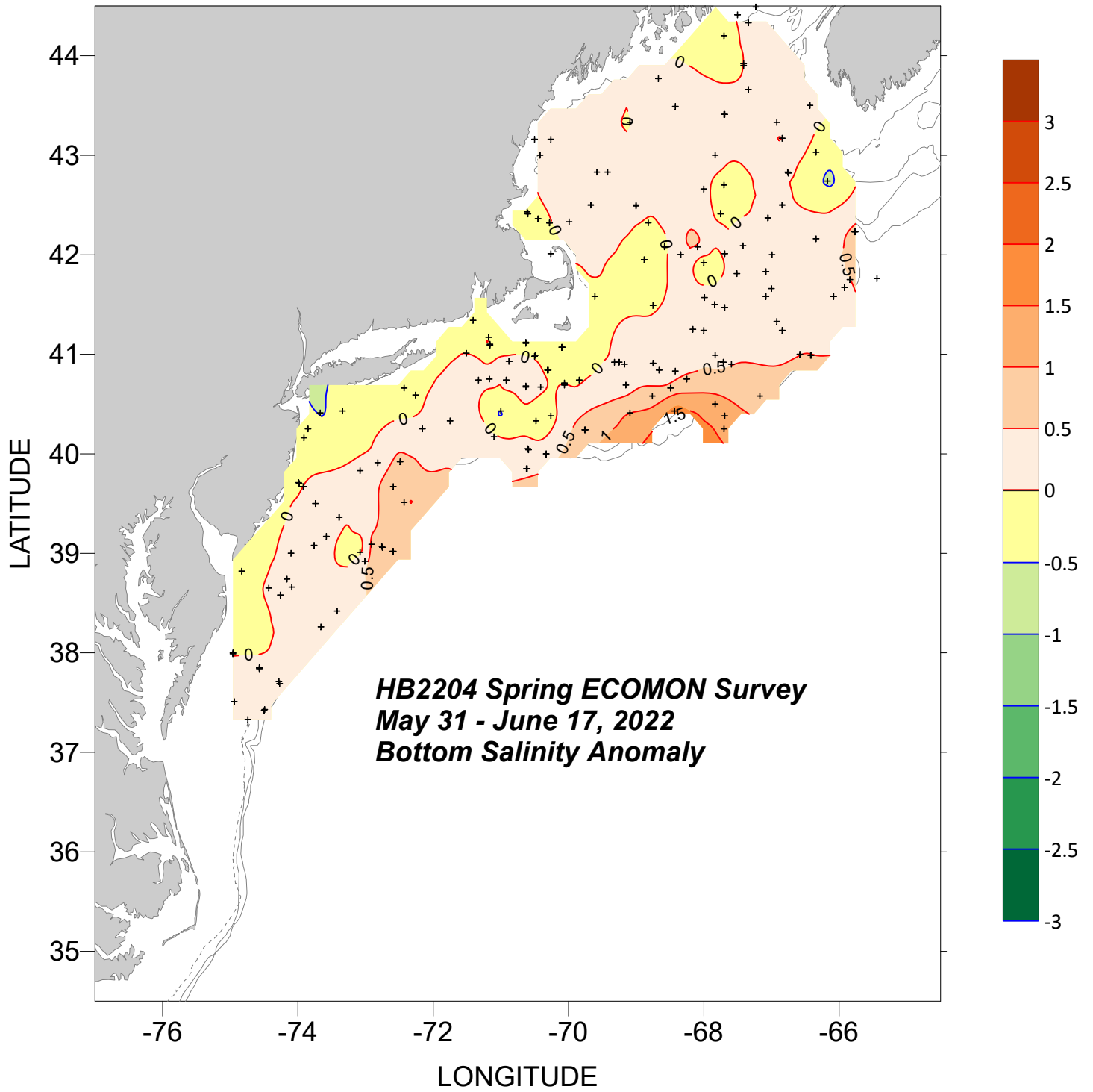












HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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	4120.6	7124.8	31	5	2022	20:34	32	15.77	32.05	10.88	32.29	5	B
2	2	4110.3	7110.7	31	5	2022	22:16	40	15.32	32.29	9.42	32.72	6	B
3	3	4106.0	7109.6	31	5	2022	23:04	35	15.60	32.41	9.41	32.71	5	B
4	4	4106.5	7037.8	1	6	2022	1:35	44	13.15	32.25	9.63	32.51	5	B
1	4	4107.1	7037.6	1	6	2022	1:59	43	13.12	32.26	9.69	32.52	2	W
5	5	4059.2	7029.7	1	6	2022	3:40	45	13.06	32.56	8.93	32.68	4	B
6	6	4050.2	7018.8	1	6	2022	5:01	46	11.25	32.43	9.02	32.78	6	B
7	7	4042.3	7003.9	1	6	2022	6:28	43	11.48	32.55	9.14	32.77	4	B
8	8	4040.1	7024.8	1	6	2022	8:05	54	13.28	32.91	8.77	33.05	5	B
9	9	4040.5	7037.7	1	6	2022	9:31	60	14.22	32.89	9.27	33.49	4	B
2	9	4040.9	7037.7	1	6	2022	10:01	60	14.16	32.90	9.16	33.44	3	W
10	10	4044.4	7055.0	1	6	2022	11:39	62	14.18	32.67	8.65	33.05	5	B
11	11	4055.6	7053.0	1	6	2022	12:53	53	14.32	32.51	8.72	32.89	5	B
12	12	4100.4	7130.4	3	6	2022	17:40	50	15.88	32.39	9.05	32.77	5	B
13	13	4045.2	7110.4	3	6	2022	19:49	59	15.56	32.77	8.60	33.00	4	B
14	14	4044.7	7120.0	3	6	2022	20:42	61	15.80	32.79	8.22	32.94	5	B
15	15	4019.8	7145.1	3	6	2022	23:37	73	15.86	32.83	9.38	33.55	3	B
16	16	4014.8	7209.6	4	6	2022	1:36	64	15.94	32.70	8.26	33.08	4	B
17	17	3955.3	7229.6	4	6	2022	4:00	65	16.56	32.80	10.24	33.93	5	B
18	18	3954.9	7249.3	4	6	2022	5:38	55	16.54	32.22	8.66	33.17	4	B
19	19	3949.8	7304.6	4	6	2022	6:58	65	17.43	32.05	8.85	33.23	6	B
20	20	3940.1	7235.7	4	6	2022	9:21	75	15.97	32.72	10.44	34.04	5	B
21	21	3930.3	7225.8	4	6	2022	10:48	119	17.18	33.72	13.23	35.25	7	B
22	22	3901.1	7235.4	4	6	2022	13:43	1013	21.52	35.53	13.06	35.69	811	B
3	22	3901.0	7236.2	4	6	2022	14:22	1003	21.49	35.70	6.20	35.07	495	W
23	23	3903.6	7245.1	4	6	2022	17:38	131	19.52	34.74	13.53	35.59	4	B
4	23	3904.1	7245.8	4	6	2022	18:07	127	19.17	34.73	13.59	35.60	1	W
24	24	3905.1	7254.4	4	6	2022	19:04	85	18.06	33.53	11.86	34.68	3	B
25	25	3900.3	7304.7	4	6	2022	20:11	78	16.46	32.96	10.59	34.01	4	B

HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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
26	26	3855.0	7300.8	4	6	2022	21:06	82	17.08	32.98	12.59	34.94	2	B
27	27	3825.3	7325.2	5	6	2022	0:22	116	20.40	35.16	13.66	35.54	4	B
28	28	3815.4	7339.3	5	6	2022	2:02	188	19.37	33.86	12.69	35.57	9	B
29	29	3750.8	7434.1	5	6	2022	6:50	54	20.20	33.18	9.83	33.50	5	B
5	29	3750.3	7434.1	5	6	2022	7:11	54	18.92	33.24	9.91	33.56	4	W
30	30	3742.3	7416.5	5	6	2022	8:58	104	18.10	33.53	13.53	35.11	5	B
6	30	3741.6	7416.4	5	6	2022	9:28	101	18.14	33.79	13.51	35.14	4	W
31	31	3725.5	7429.8	5	6	2022	11:36	224	18.75	33.39	13.49	35.66	21	B
32	31	3725.6	7429.6	5	6	2022	12:11	278	18.89	33.32	11.63	35.50	1	W
33	32	3720.0	7444.7	5	6	2022	13:43	53	20.10	33.11	10.74	33.91	6	B
34	33	3730.5	7456.2	5	6	2022	17:51	35	20.44	32.19	10.41	33.46	5	B
35	34	3759.7	7457.4	5	6	2022	20:53	26	19.15	31.36	11.84	32.62	2	B
7	34	3800.2	7457.9	5	6	2022	21:48	23	19.13	31.27	12.18	32.37	3	W
36	35	3849.1	7449.5	6	6	2022	2:53	16	17.89	31.82	17.64	31.90	5	B
37	36	3839.2	7425.8	6	6	2022	5:55	41	17.79	32.56	9.91	33.29	4	B
38	37	3834.7	7415.6	6	6	2022	7:00	46	17.44	33.11	9.58	33.27	5	B
39	38	3839.6	7405.7	6	6	2022	8:03	49	17.37	33.12	9.52	33.37	4	B
40	39	3844.3	7409.3	6	6	2022	8:45	46	17.63	32.99	9.50	33.26	5	B
41	40	3859.9	7405.8	6	6	2022	10:21	36	17.03	32.99	9.67	33.20	5	B
42	41	3904.7	7345.8	6	6	2022	12:04	39	16.97	33.02	9.55	33.18	5	B
43	42	3910.2	7335.0	6	6	2022	13:34	45	17.28	32.94	9.36	33.15	4	B
44	43	3921.3	7323.6	6	6	2022	14:58	49	17.57	32.67	8.94	33.07	6	B
8	43	3921.7	7323.4	6	6	2022	15:21	48	17.58	32.59	8.92	33.09	3	W
45	44	3930.1	7344.5	6	6	2022	17:20	27	18.35	32.74	9.77	32.73	5	B
46	45	3942.4	7359.3	6	6	2022	20:14	22	19.12	30.25	10.64	31.86	10	B
9	45	3942.0	7359.0	6	6	2022	20:37	23	16.70	30.71	9.94	32.25	4	W
47	46	3940.4	7355.4	6	6	2022	21:34	26	19.12	31.70	9.86	32.47	4	B
48	47	4009.4	7354.5	7	6	2022	0:27	21	18.76	29.95	11.20	32.02	4	B

HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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
49	48	4014.9	7351.1	7	6	2022	1:16	27	18.70	30.27	10.05	32.34	4	B
50	49	4024.4	7340.4	7	6	2022	2:39	26	17.61	31.39	10.86	31.99	4	B
51	50	4025.7	7320.2	7	6	2022	4:12	31	17.66	31.55	9.37	32.20	5	B
52	51	4039.6	7225.7	7	6	2022	8:14	44	16.56	31.39	8.44	32.68	5	B
53	52	4035.1	7215.6	7	6	2022	9:15	50	17.42	32.30	8.23	32.81	7	B
54	53	4010.4	7105.8	7	6	2022	14:36	134	16.93	33.45	13.46	35.49	5	B
55	54	4025.9	7100.1	7	6	2022	16:36	84	17.12	33.33	10.94	34.24	4	B
56	55	4023.1	7015.8	7	6	2022	19:49	80	15.30	32.68	10.61	33.96	3	B
57	56	4019.9	7028.9	7	6	2022	21:01	92	17.11	33.38	11.92	34.62	4	B
58	57	4003.0	7036.2	7	6	2022	22:51	136	17.48	NaN	13.49	35.58	2	B
10	57	4002.6	7035.4	7	6	2022	23:28	164	17.58	34.13	13.10	35.61	2	W
59	58	3951.0	7037.1	8	6	2022	1:10	754	20.13	35.42	12.66	35.57	551	B
11	58	3951.0	7036.9	8	6	2022	1:54	774	20.09	35.47	6.49	35.10	267	W
60	59	3959.9	7019.9	8	6	2022	4:11	300	19.56	35.39	12.34	35.58	99	B
61	59	3959.7	7019.6	8	6	2022	4:51	292	19.29	35.32	10.14	35.31	3	W
62	60	4014.6	6945.6	8	6	2022	8:07	84	16.35	NaN	12.38	34.72	5	B
63	60	4014.4	6945.1	8	6	2022	8:21	84	16.46	NaN	12.38	34.71	4	B
64	61	4024.6	6905.3	8	6	2022	11:39	82	16.46	33.78	11.86	34.30	4	B
65	62	4034.7	6845.8	8	6	2022	13:32	66	16.56	33.82	10.73	33.86	5	B
66	63	4025.6	6825.9	8	6	2022	15:25	98	19.08	35.28	14.54	35.43	4	B
12	64	4015.0	6742.2	8	6	2022	19:08	1073	21.40	35.66	6.32	35.07	571	W
13	65	4023.0	6741.2	8	6	2022	20:50	315	21.03	35.64	10.51	35.38	3	W
67	66	4029.9	6749.9	8	6	2022	22:32	112	19.14	NaN	13.69	35.57	4	B
68	67	4044.8	6815.1	9	6	2022	1:22	63	14.61	33.37	9.47	33.36	4	B
69	68	4039.8	6829.3	9	6	2022	2:47	64	14.27	33.07	9.66	33.38	6	B
70	69	4049.5	6825.3	9	6	2022	4:08	48	10.93	33.03	10.87	33.06	10	B
71	70	4050.2	6839.5	9	6	2022	5:18	62	12.79	32.96	11.33	33.17	16	B
72	71	4054.8	6845.1	9	6	2022	6:07	71	11.43	33.03	11.37	33.12	24	B

HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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
14	72	4053.9	6910.0	9	6	2022	8:14	66	10.82	32.40	10.81	33.23	2	W
73	73	4055.0	6915.1	9	6	2022	9:05	60	10.34	32.07	10.17	32.92	4	B
74	74	4055.0	6919.3	9	6	2022	9:43	42	10.21	32.19	10.12	32.43	4	B
75	75	4134.8	6936.4	9	6	2022	14:08	52	13.50	31.64	6.47	32.67	4	B
76	76	4200.4	7015.4	9	6	2022	19:19	46	16.49	31.52	6.74	32.32	3	B
77	77	4224.9	7035.9	9	6	2022	22:12	87	15.61	30.99	5.72	32.53	5	B
15	77	4225.8	7036.9	9	6	2022	22:41	88	15.51	31.12	5.75	32.54	3	W
78	78	4221.9	7027.2	9	6	2022	23:55	85	15.73	31.14	5.84	32.50	3	B
16	78	4221.6	7027.1	10	6	2022	0:21	84	15.09	31.43	5.82	32.52	2	W
79	79	4219.4	7016.9	10	6	2022	1:26	35	14.58	31.58	6.96	32.34	4	B
17	79	4219.3	7016.8	10	6	2022	1:53	35	14.56	31.59	7.02	32.34	3	W
80	80	4220.0	6959.6	10	6	2022	3:26	173	NaN	NaN	6.87	33.31	11	B
81	81	4229.9	6940.1	10	6	2022	6:11	252	13.50	32.16	7.96	33.87	49	B
18	81	4230.0	6940.1	10	6	2022	7:02	253	13.45	32.20	8.64	34.19	1	W
82	82	4249.5	6925.4	10	6	2022	9:37	156	13.21	32.08	7.08	33.48	4	B
83	83	4249.7	6934.5	10	6	2022	10:42	183	13.35	32.09	8.17	33.95	4	B
19	84	4259.9	7025.2	10	6	2022	14:59	104	13.91	31.48	6.22	32.51	3	W
84	85	4309.8	7029.8	10	6	2022	17:09	40	13.93	31.27	7.25	31.98	5	B
85	86	4309.9	7015.4	10	6	2022	18:12	124	15.08	31.12	5.85	32.71	4	B
86	87	4319.6	6905.7	10	6	2022	23:00	152	13.20	31.98	6.58	33.23	1	B
87	88	4329.5	6825.3	11	6	2022	2:09	168	10.92	31.66	8.64	33.98	5	B
20	89	4346.0	6840.2	11	6	2022	4:33	118	11.53	31.55	7.25	32.92	4	W
21	90	4411.9	6742.3	11	6	2022	9:27	188	8.73	31.87	8.39	33.63	2	W
88	90	4424.6	6730.2	11	6	2022	11:42	94	8.57	32.04	8.02	32.18	4	B
22	92	4429.1	6713.9	11	6	2022	13:15	81	8.36	32.04	8.00	32.31	6	W
89	93	4419.9	6720.2	11	6	2022	14:28	164	11.22	32.20	9.00	34.19	9	B
90	94	4355.0	6724.9	11	6	2022	17:02	222	12.83	31.88	8.81	34.16	19	B
91	94	4354.2	6724.3	11	6	2022	17:28	218	12.66	31.98	8.83	34.18	4	W

HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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92	95	4339.9	6720.4	11	6	2022	19:11	210	13.02	32.19	8.81	34.17	6	B
93	96	4324.9	6741.8	11	6	2022	21:38	243	12.81	32.03	9.31	34.36	40	B
23	96	4324.5	6741.1	11	6	2022	22:16	249	12.03	32.04	9.43	34.44	5	W
94	97	4259.9	6750.0	12	6	2022	1:23	191	13.16	32.28	8.81	34.31	3	B
24	98	4242.0	6742.2	12	6	2022	3:33	189	13.54	32.69	8.67	34.30	3	W
95	99	4239.8	6759.8	12	6	2022	5:23	188	14.21	32.36	8.99	34.52	5	B
96	100	4224.9	6745.2	12	6	2022	7:22	203	13.95	32.55	9.21	34.69	7	B
97	101	4222.0	6703.2	12	6	2022	10:58	329	13.25	32.34	9.46	35.06	128	B
25	101	4222.4	6703.0	12	6	2022	12:14	336	12.92	32.36	9.26	35.14	2	W
98	102	4229.8	6650.6	12	6	2022	14:01	286	12.95	31.98	9.00	35.08	85	B
99	102	4230.0	6650.7	12	6	2022	14:38	281	12.36	31.98	8.89	35.08	3	W
100	103	4249.6	6645.3	12	6	2022	16:55	218	13.02	31.95	10.31	34.73	15	B
101	103	4249.0	6645.2	12	6	2022	17:18	220	12.98	31.93	10.36	34.77	2	W
102	104	4310.2	6650.4	12	6	2022	19:41	162	13.53	32.11	9.40	34.35	9	B
103	105	4319.8	6655.1	12	6	2022	20:54	203	12.58	31.81	8.97	34.33	4	B
104	106	4329.9	6625.8	12	6	2022	23:27	92	10.19	31.67	7.57	32.50	3	B
26	107	4301.9	6620.1	13	6	2022	2:40	129	10.49	31.96	8.27	33.20	22	W
105	108	4244.6	6610.1	13	6	2022	4:38	61	10.86	31.29	7.86	32.20	5	B
106	109	4214.0	6546.2	13	6	2022	7:59	218	12.24	31.23	9.25	35.23	17	B
27	109	4214.0	6545.7	13	6	2022	8:58	222	12.17	31.24	8.49	35.20	4	W
28	110	4145.4	6526.7	13	6	2022	13:08	2008	11.84	32.14	6.57	35.09	1502	W
107	111	4145.1	6550.1	13	6	2022	15:36	132	12.90	32.09	11.49	34.82	4	B
108	112	4140.1	6555.0	13	6	2022	16:36	121	13.24	32.24	10.65	34.43	4	B
109	113	4134.5	6605.0	13	6	2022	19:09	102	13.48	31.12	9.24	33.72	4	B
110	114	4209.4	6620.5	13	6	2022	22:55	188	13.25	32.49	9.36	34.60	4	B
111	115	4200.2	6659.4	14	6	2022	2:11	68	11.15	32.95	11.15	32.95	8	B
112	116	4150.0	6704.8	14	6	2022	3:27	61	11.49	33.00	11.50	33.00	4	B
113	117	4139.8	6700.1	14	6	2022	4:30	64	11.02	33.09	11.03	33.09	8	B

HB2204 Spring ECOMON Survey
May 31 - June 17, 2022

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
114	118	4134.7	6704.9	14	6	2022	5:16	61	11.39	33.09	11.28	33.09	9	B
115	119	4119.7	6655.3	14	6	2022	6:43	70	10.97	32.83	10.39	33.10	6	B
116	120	4114.6	6650.3	14	6	2022	7:25	73	12.35	32.61	9.48	33.08	6	B
117	121	4059.5	6624.8	14	6	2022	10:01	490	13.79	32.92	10.66	35.35	288	B
118	121	4059.5	6625.2	14	6	2022	10:34	486	13.72	32.82	5.75	35.03	9	W
119	122	4100.1	6635.0	14	6	2022	11:53	90	13.64	32.72	9.01	33.42	4	B
120	123	4034.8	6710.1	14	6	2022	15:35	157	22.23	35.43	13.59	35.74	5	B
121	124	4054.2	6735.6	14	6	2022	19:04	72	16.06	32.67	9.90	33.40	4	B
29	125	4055.3	6742.5	14	6	2022	19:55	66	15.77	32.73	9.61	33.22	3	W
122	126	4059.4	6749.7	14	6	2022	20:57	53	11.85	33.03	10.38	32.99	4	B
123	127	4114.7	6759.9	14	6	2022	22:48	50	13.07	33.08	13.04	33.08	6	B
124	128	4115.1	6809.7	14	6	2022	23:45	41	12.23	33.02	12.29	33.06	3	B
125	129	4134.4	6759.5	15	6	2022	1:56	35	13.13	33.03	13.14	33.04	4	B
126	130	4129.8	6750.2	15	6	2022	3:12	37	12.97	33.07	12.97	33.07	10	B
30	131	4128.1	6741.2	15	6	2022	4:03	43	12.76	33.09	12.76	33.09	14	W
127	132	4148.8	6730.4	15	6	2022	6:53	38	12.48	32.92	12.49	32.92	7	B
128	133	4205.1	6725.2	15	6	2022	9:18	64	12.88	32.64	7.48	33.23	5	B
31	134	4200.9	6741.3	15	6	2022	10:54	74	13.38	32.61	8.65	33.08	3	W
129	135	4155.1	6800.1	15	6	2022	12:51	160	15.10	NaN	7.32	33.31	5	B
130	136	4204.8	6805.1	15	6	2022	14:19	223	15.15	32.31	9.49	34.88	21	B
131	136	4204.6	6805.3	15	6	2022	15:00	224	14.96	NaN	9.44	34.86	3	W
132	137	4200.1	6820.4	15	6	2022	16:44	184	15.00	NaN	8.37	34.19	13	B
32	137	4200.0	6820.6	15	6	2022	17:23	183	15.03	32.50	8.36	34.19	1	W
133	138	4204.7	6834.7	15	6	2022	19:02	175	15.15	32.67	7.41	33.60	4	B
134	139	4219.4	6849.3	15	6	2022	21:38	207	15.64	32.59	7.53	33.68	4	B
135	140	4229.6	6859.8	15	6	2022	23:20	222	16.03	32.51	8.03	33.91	20	B
136	140	4229.8	6859.9	15	6	2022	23:48	223	16.08	32.51	8.35	34.08	5	V
137	141	4157.0	6852.7	16	6	2022	3:30	137	15.26	32.71	6.87	33.37	3	B

**HB2204 Spring ECOMON Survey
May 31 - June 17, 2022**

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
138	142	4129.7	6845.2	16	6	2022	6:42	149	16.02	32.06	6.80	33.22	6	B
139	143	4041.4	6908.9	16	6	2022	11:48	66	11.58	33.25	11.55	33.26	6	B
140	144	4044.2	6950.1	16	6	2022	14:53	46	11.45	32.38	11.02	32.48	7	B
141	145	4041.6	7003.4	16	6	2022	16:12	45	13.78	32.60	10.66	32.93	5	B
142	146	4104.0	7005.3	16	6	2022	18:51	26	14.81	31.89	14.50	31.90	5	B
143	146	4104.2	7005.8	16	6	2022	19:21	25	14.94	31.85	14.44	31.90	3	W
144	147	4050.6	7017.8	16	6	2022	21:06	45	16.96	32.55	10.34	32.74	4	B
145	148	4058.6	7029.8	16	6	2022	22:31	46	18.07	32.64	9.67	32.80	4	B
146	149	4055.9	7052.0	17	6	2022	0:22	53	17.80	32.40	9.00	32.85	3	B
147	150	4105.4	7109.4	17	6	2022	2:04	37	17.46	32.16	10.49	32.44	4	B

Deployment codes: B=bongo cast; W=water cast; and V=vertical cast

Records in bold are collected with an SBE911+ CTD