

Oceanography Branch CTD Data Report
CTD_REPORT_2018004GU

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DATE: January 31, 2019

CTD_REPORT_2018004GU.pdf

Oceans and Climate Branch CTD Data Report

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

GU 1804
2018 Summer ECOMON Survey
Data Coverage: August 22 - 31, 2018
Mid Atlantic Bight and Georges Bank

This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's 2018 ECOMON Survey aboard the NOAA Ship *Gordon Gunter*. All data was obtained with a Seabird Electronics SBE Model 9/11+ CTD (s/n 0420) and a NMFS SBE19+V2 Seacat profiling CTD (s/n 7143). Salt water samples were collected for the purpose of calibrating the conductivity cell.

The SBE19+ was deployed on 70 double oblique bongo casts and 1 water sampling casts. The SBE9/11+ was used successfully on 19 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 in an [NODC formatted ASCII file](#) and in a [comma delimited file](#).

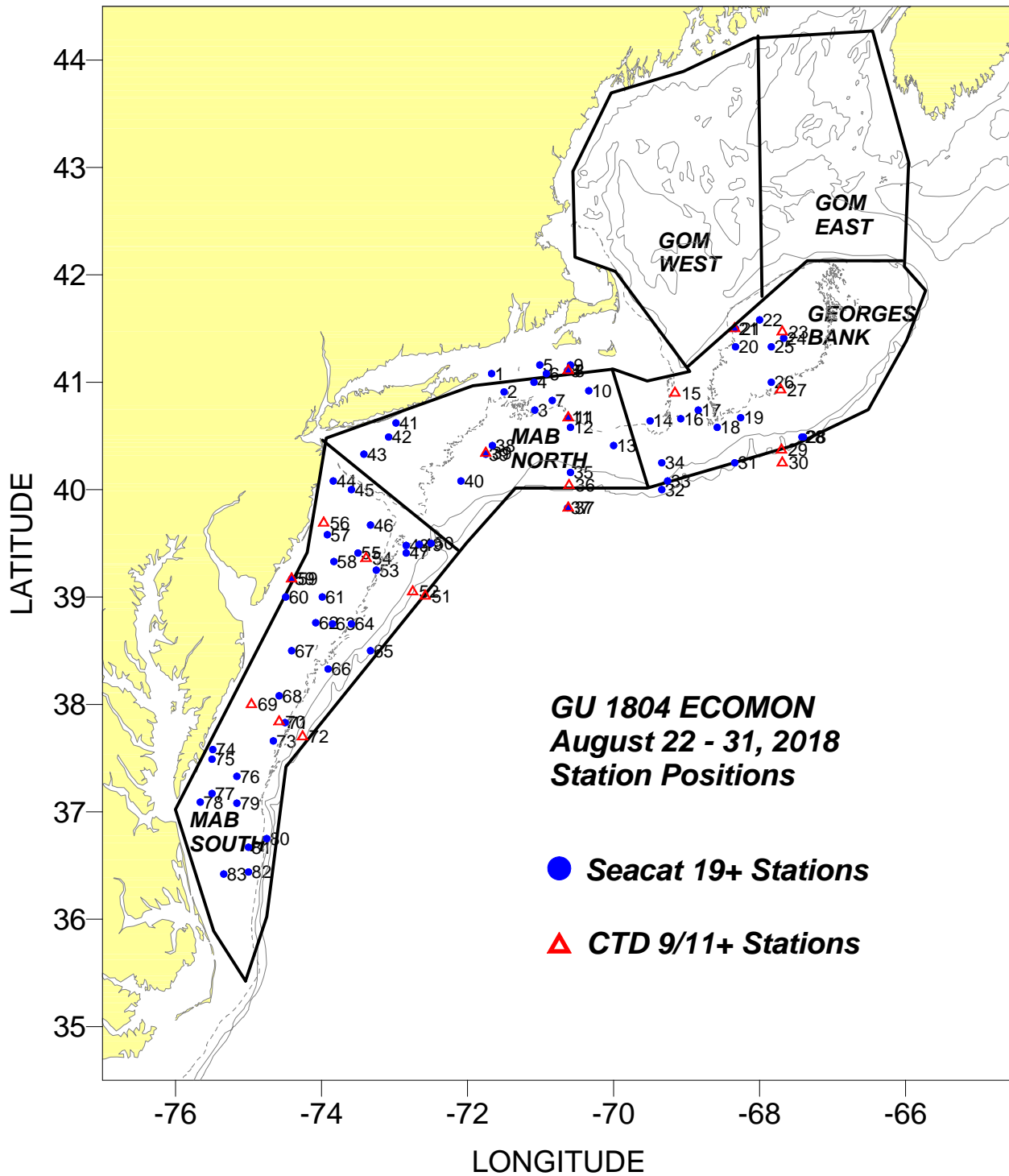
This report may be viewed on the [Oceans and Climate Branch website](#)

choose: **2018 Cruises**

AUG_ECOMON_GU1804

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Revised: January 31, 2019



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
GU1804 ECOMON Survey
August 22 - 31, 2018**

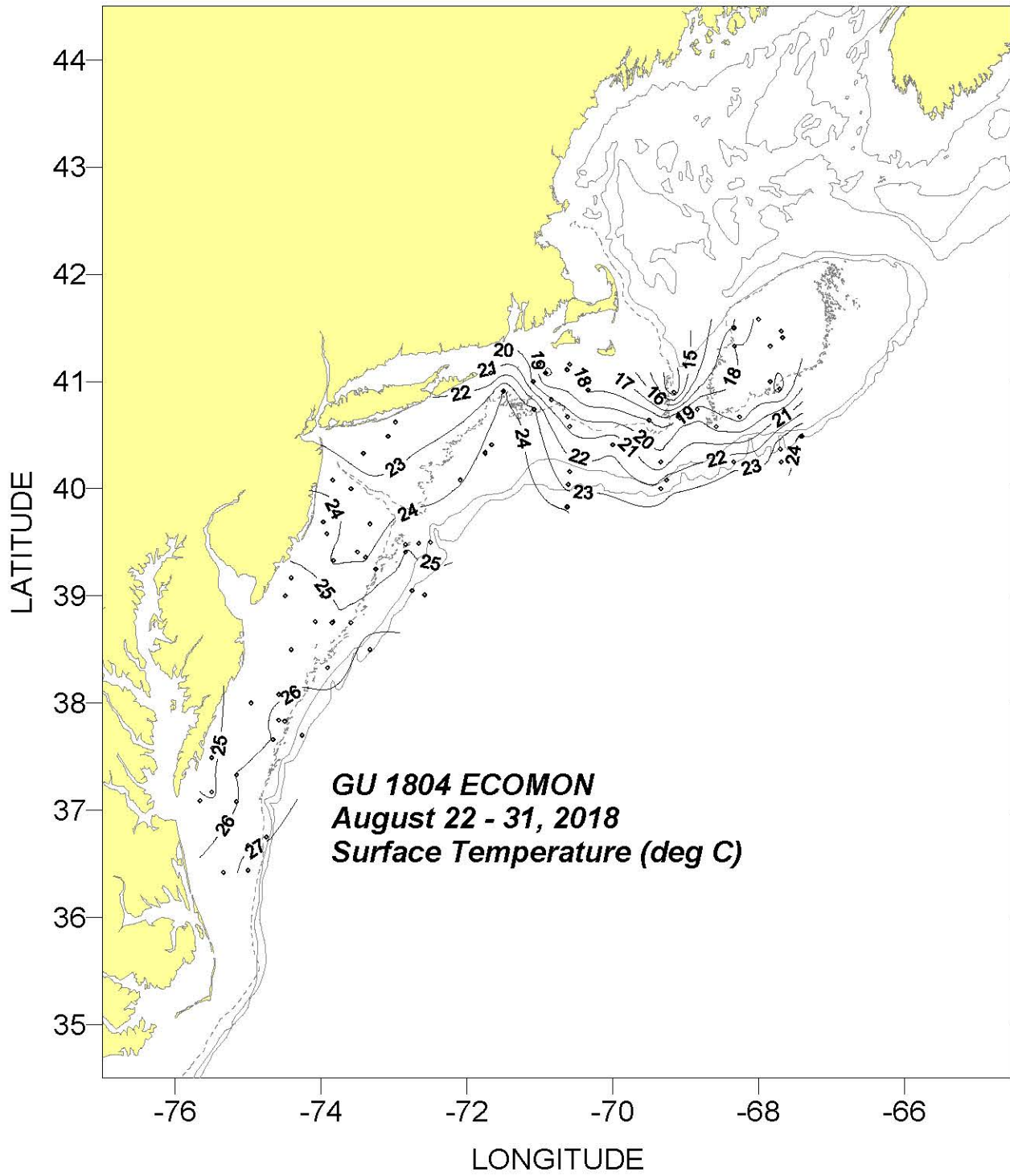
CRUISE	CD	SURFACE						BOTTOM						Purpose
		#obs	T/S	Anomaly	SDV1	SDV2	Flag	#obs	T/S	Anomaly	SDV1	SDV2	Flag	
							Georges Bank							
gu1804	237	20	19.15	2.10	0.29	1.87	0	18	14.81	1.45	0.33	1.27	0	22
gu1804	237	20	32.66	-0.07	0.10	0.55	0	18	32.85	-0.17	0.11	0.37	0	22
							MAB North							
gu1804	237	19	22.21	2.08	0.37	1.26	0	19	11.78	1.26	0.40	1.58	0	22
gu1804	237	19	32.35	-0.19	0.16	0.30	0	19	33.00	-0.35	0.15	0.19	0	22
							MAB South							
gu1804	241	40	25.42	2.02	0.28	0.75	0	40	11.70	-0.84	0.32	1.89	0	22
gu1804	241	40	31.25	-0.76	0.16	0.60	0	40	32.82	-0.42	0.12	0.30	0	22

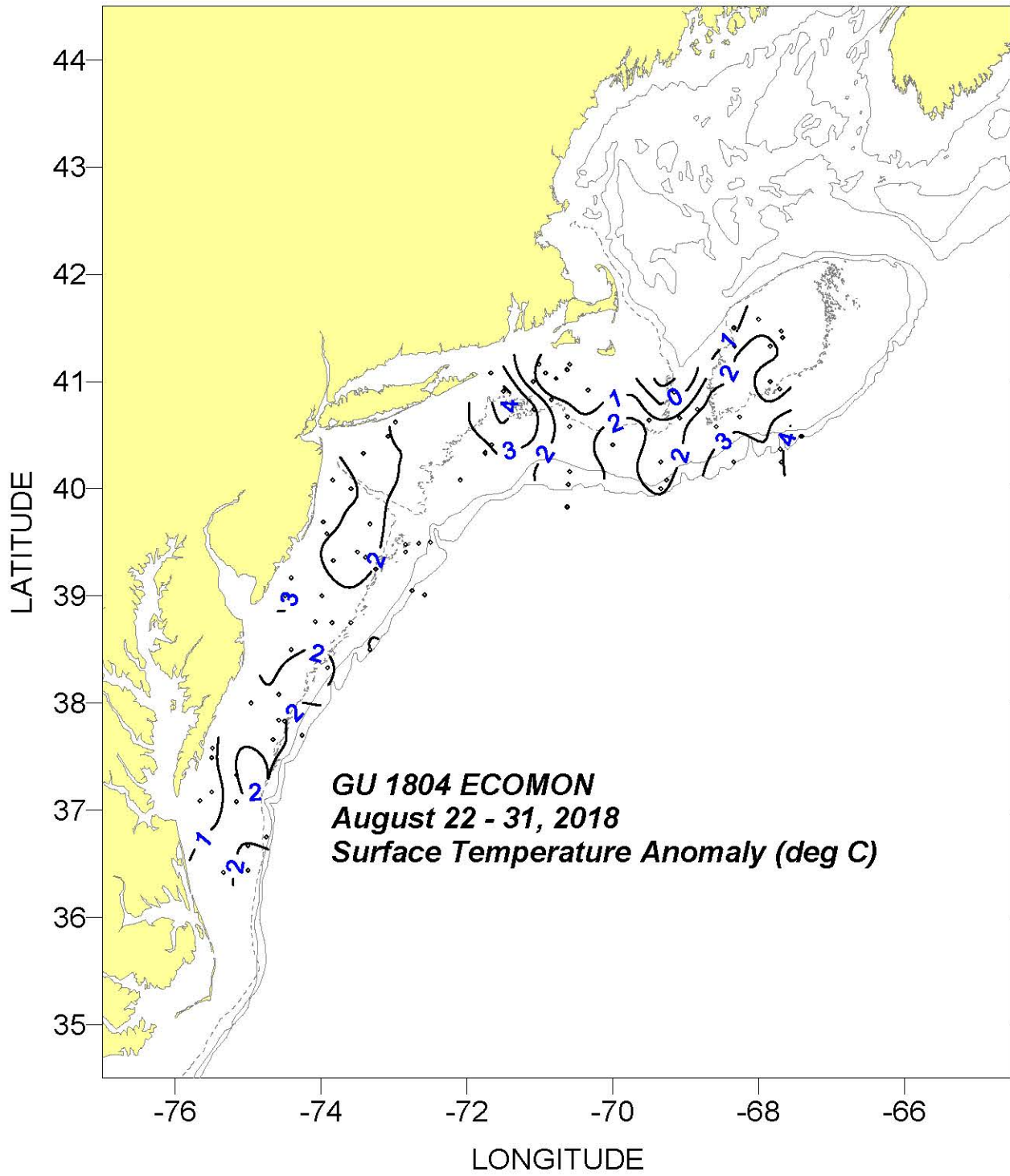
"CRUISE", the code name for a cruise: "CD", the calendar mid-date of all the stations within a region for a cruise:

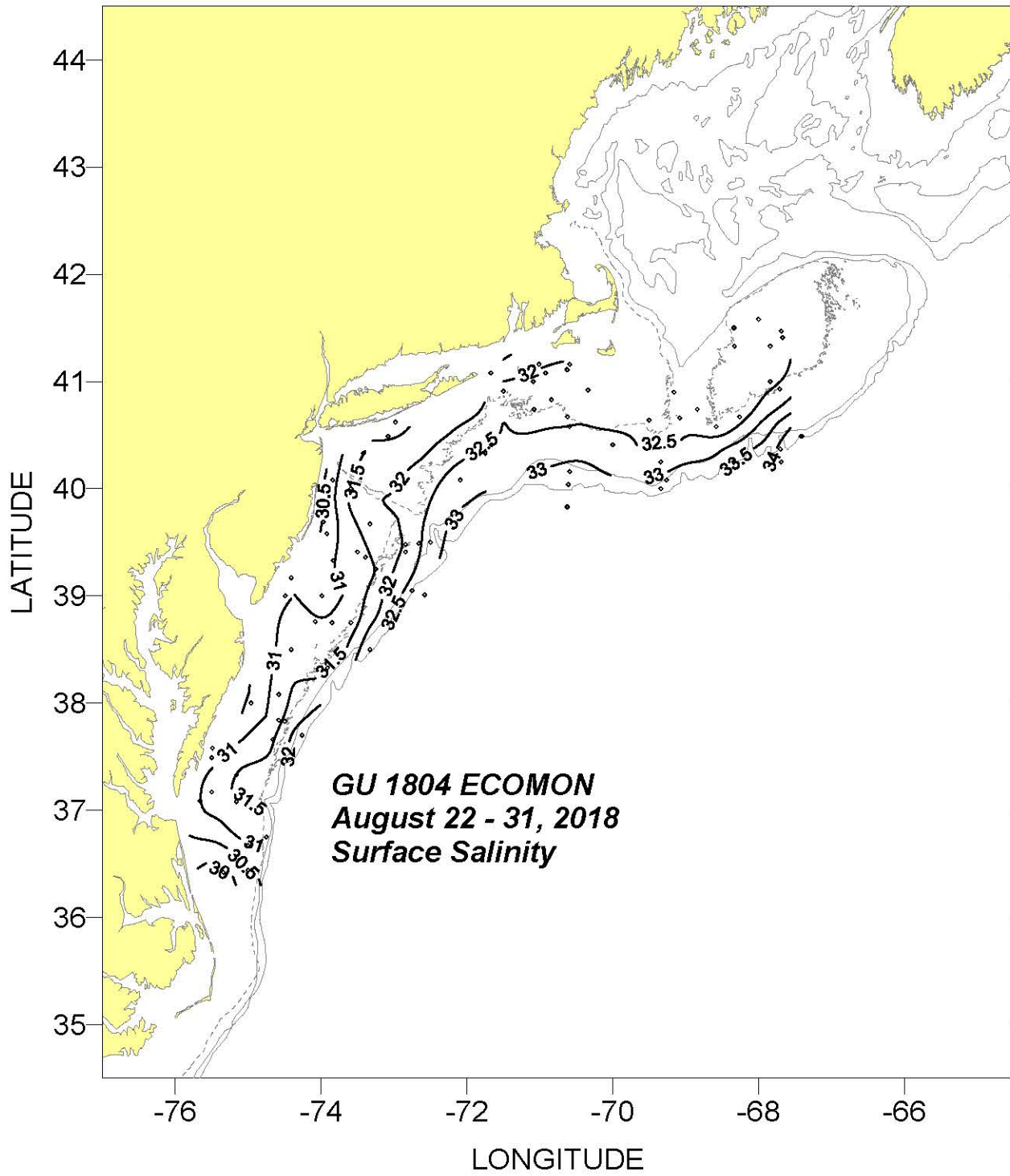
"#obs", the number of observations include in each average: "T/S", the areal average temp/salt: "Anomaly", the areal average temp/salt anomaly:

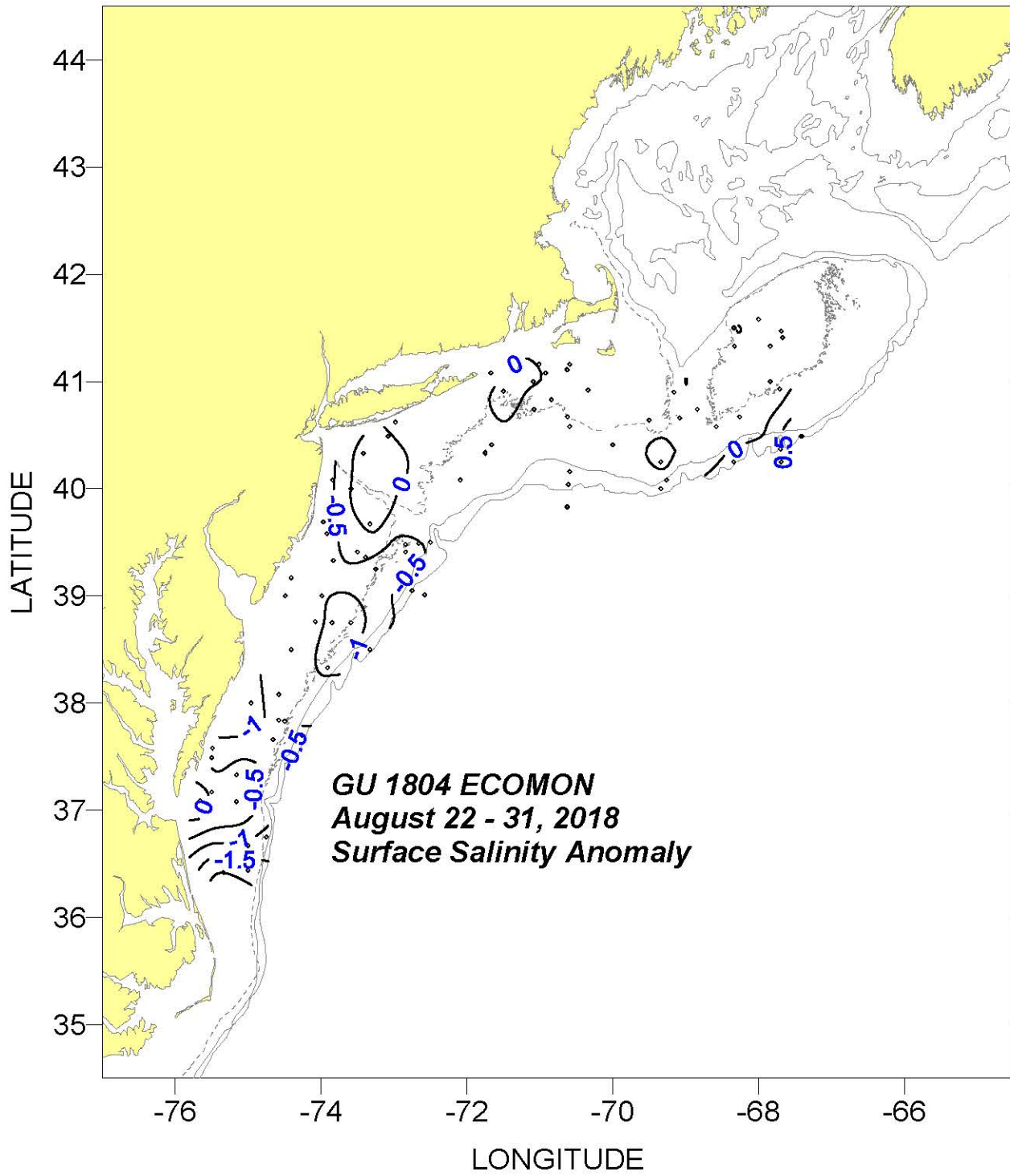
"SDV1", the standard deviation associated with the average temp/salt anomaly: "SDV2", the standard deviation of the individual anomalies from which the average anomaly was derived
"Flag", a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.

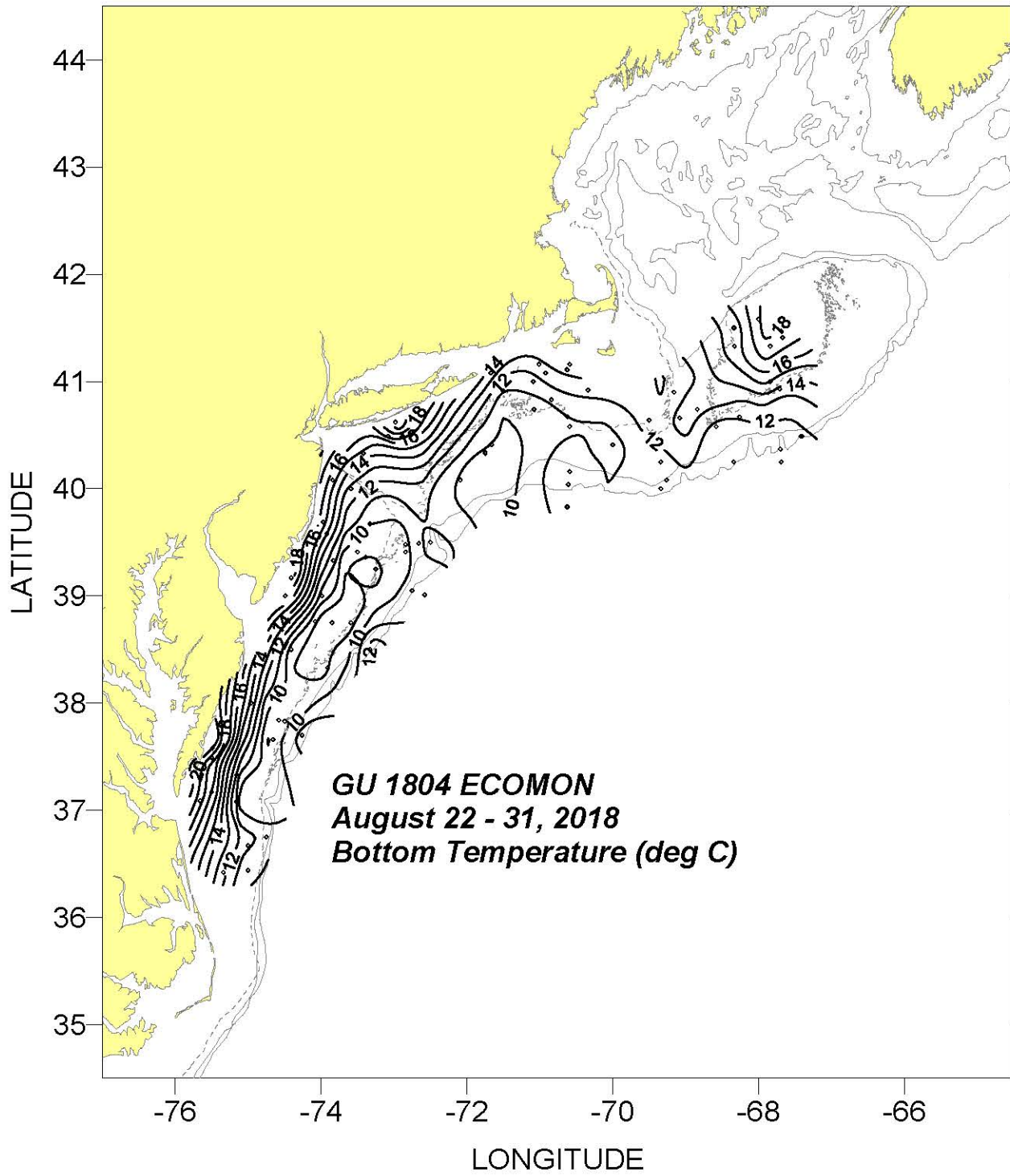
"Purpose", 2 digit code assigned by DMS to identify a unique NEFSC program survey.

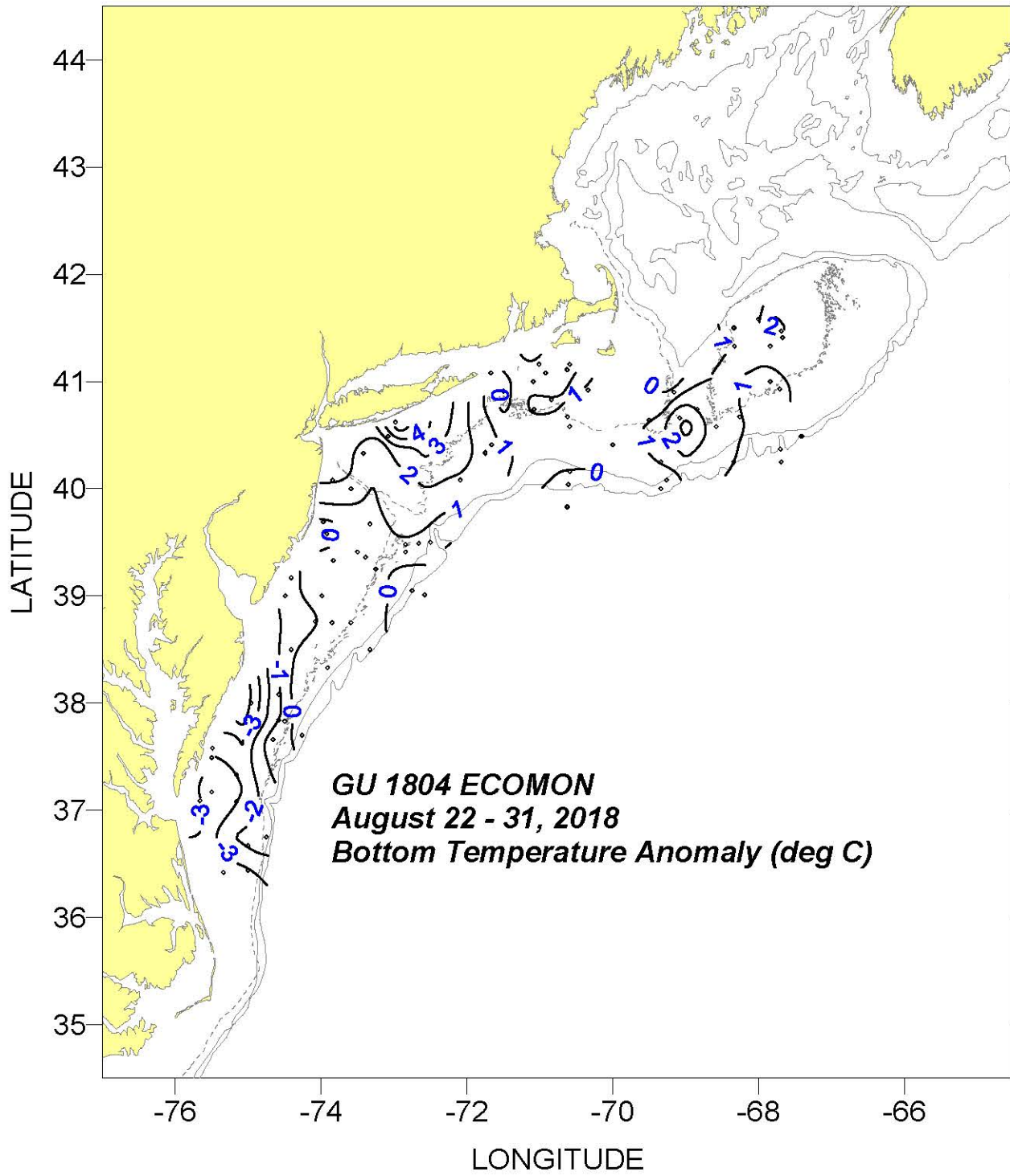


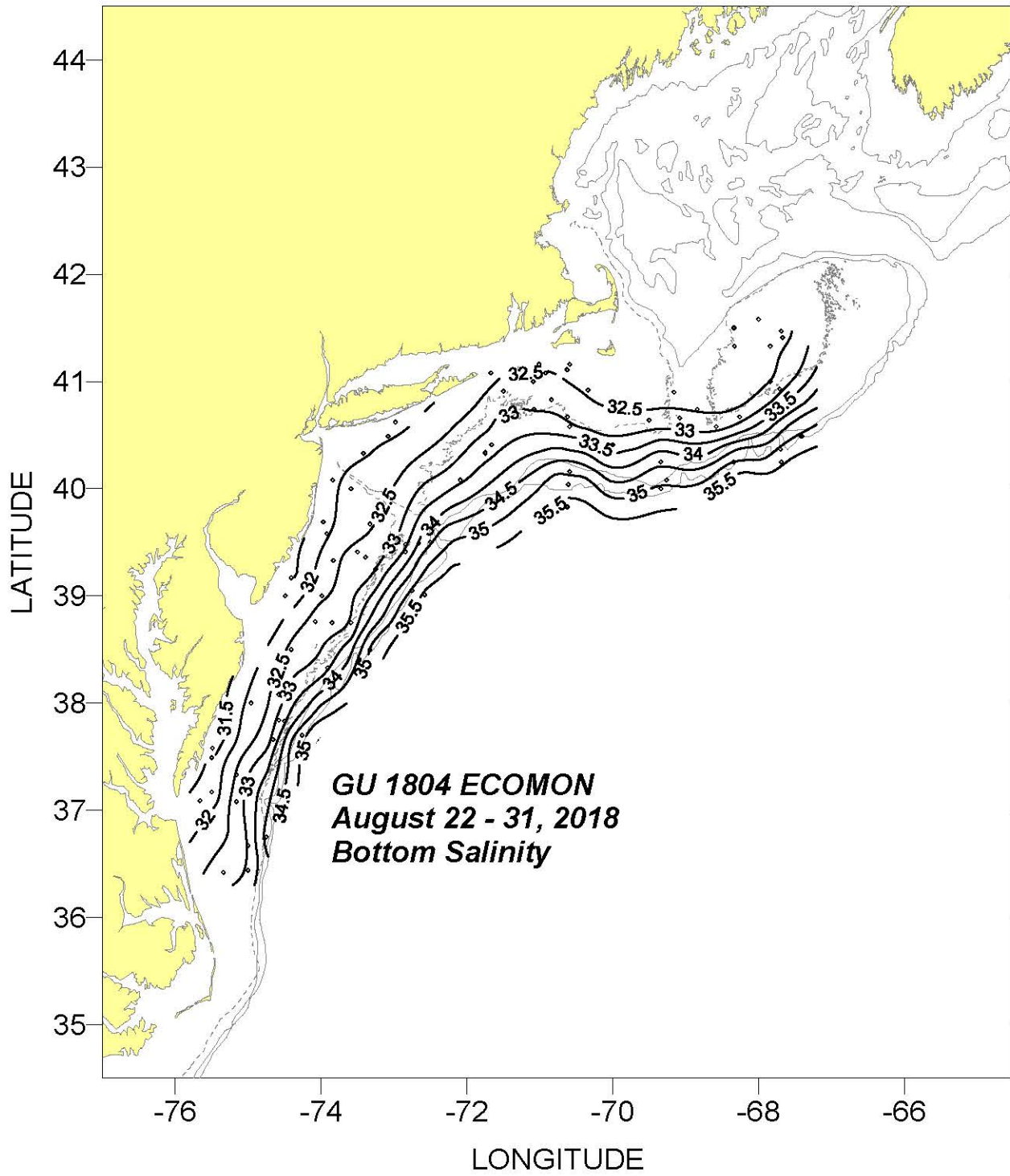


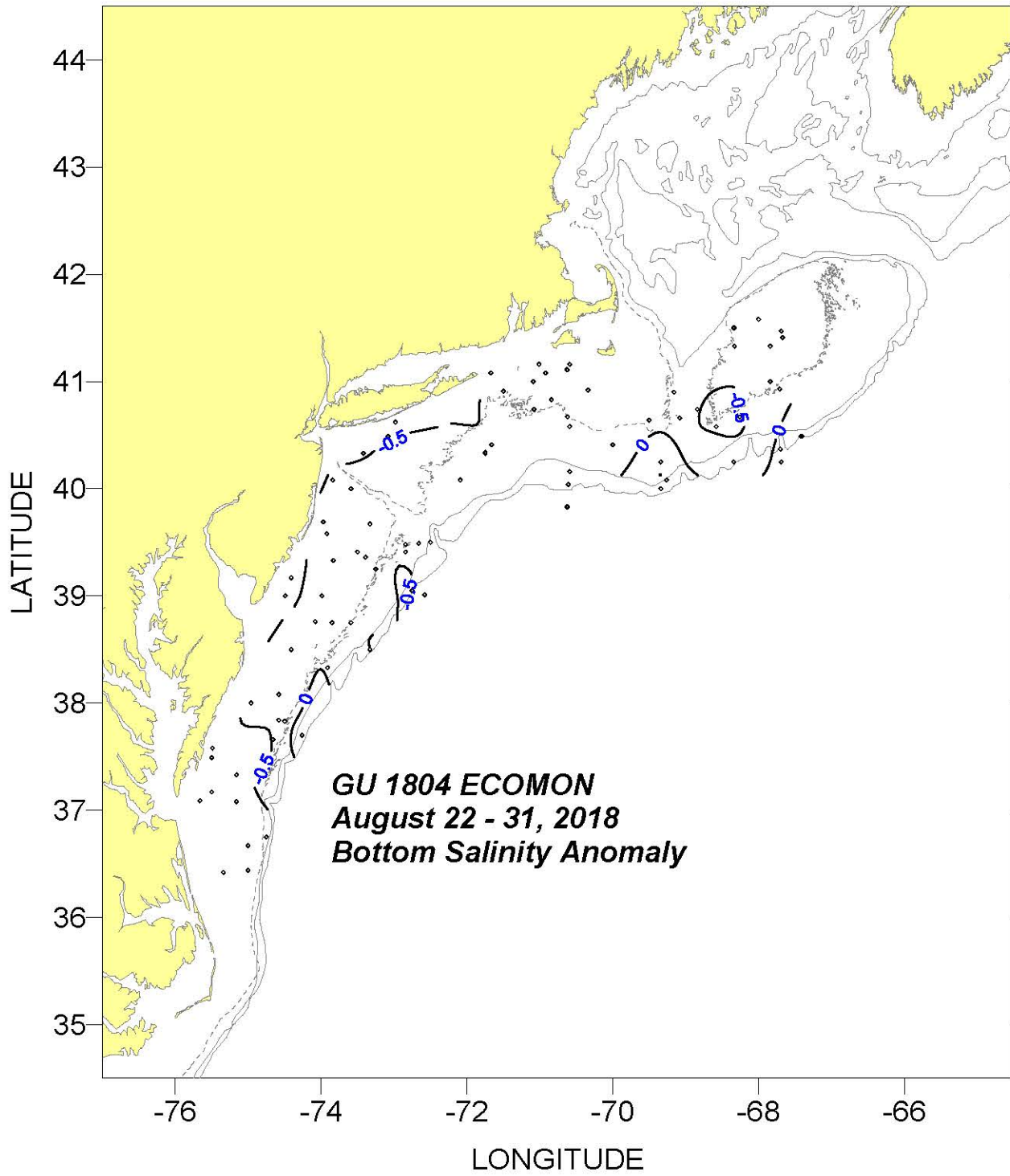












GU1804 ECOMON Survey
August 22 - 31, 2018

Cast #	Sta #	Lat (deg N)	Long (deg W)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (deg C)	Sfc Salt	Deepest Observed Temp (deg C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
1	1	4104.5	7140.3	22	8	2018	23:05	37	20.59	31.11	14.28	32.14	3	B
2	2	4054.5	7129.8	23	8	2018	0:58	56	24.16	32.49	10.35	32.89	3	B
3	3	4044.7	7105.0	23	8	2018	3:51	58	23.17	32.10	10.62	32.91	3	B
4	4	4059.8	7105.1	23	8	2018	5:51	49	19.80	32.12	11.53	32.61	5	B
5	5	4109.7	7100.4	23	8	2018	7:15	34	19.51	31.91	12.62	32.52	5	B
6	6	4104.9	7055.0	23	8	2018	8:15	36	17.67	31.91	13.01	32.49	4	B
7	7	4049.8	7050.2	23	8	2018	10:19	56	20.12	32.36	11.28	32.81	3	B
8	8	4106.3	7037.6	23	8	2018	12:32	43	18.36	32.26	13.17	32.45	6	B
1	8	4106.3	7037.2	23	8	2018	12:47	44	18.34	32.26	13.16	32.46	3	W
9	9	4109.7	7035.1	23	8	2018	13:32	39	18.49	32.07	13.77	32.38	4	B
10	10	4055.2	7020.2	23	8	2018	15:52	42	17.89	32.27	12.67	32.44	3	B
11	11	4040.1	7037.2	23	8	2018	18:15	61	20.55	32.37	10.27	32.83	4	B
2	11	4040.4	7037.1	23	8	2018	18:29	61	20.55	32.37	10.27	32.83	8	W
12	12	4034.5	7035.2	23	8	2018	19:46	66	20.73	32.45	10.29	32.82	3	B
13	13	4024.9	7000.2	23	8	2018	23:01	78	21.77	32.58	10.18	33.05	4	B
14	14	4038.7	6930.1	24	8	2018	2:00	54	19.12	32.44	12.90	32.56	8	B
3	15	4053.8	6909.5	24	8	2018	4:42	67	13.07	32.10	10.82	32.35	2	W
15	16	4039.8	6905.0	24	8	2018	6:32	81	19.42	32.27	13.37	32.51	6	B
16	17	4044.7	6850.5	24	8	2018	8:11	67	19.41	32.24	14.65	32.44	5	B
17	18	4034.7	6835.0	24	8	2018	10:14	70	19.68	32.17	11.35	32.70	3	B
19	19	4040.0	6815.3	24	8	2018	12:13	78	18.55	32.24	11.94	32.58	5	B
20	20	4120.0	6820.0	24	8	2018	16:24	60	18.02	32.36	15.70	32.36	8	B
4	21	4129.9	6820.1	24	8	2018	17:42	53	17.07	32.34	15.16	32.38	3	W
21	21	4130.0	6819.9	24	8	2018	18:12	52	17.07	32.37	15.19	32.38	5	B
22	22	4134.9	6800.0	24	8	2018	22:24	31	18.25	32.34	18.25	32.34	9	B
5	23	4128.3	6741.4	25	8	2018	0:58	39	18.20	32.33	18.21	32.32	2	W
23	24	4124.9	6740.3	25	8	2018	1:42	28	18.08	32.34	18.07	32.34	4	B
24	25	4119.8	6750.3	25	8	2018	3:01	42	18.33	32.37	18.27	32.37	5	B
25	26	4059.8	6750.1	25	8	2018	5:17	49	18.29	32.32	15.36	32.37	5	B

GU1804 ECOMON Survey
August 22 - 31, 2018

Cast #	Sta #	Lat (deg N)	Long (deg W)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (deg C)	Sfc Salt	Deepest Observed Temp (deg C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
6	27	4055.6	6742.7	25	8	2018	6:13	64	17.55	32.25	12.72	32.62	3	W
26	28	4029.7	6723.8	25	8	2018	9:27	348	24.21	34.47	12.16	35.44	146	B
27	28	4029.4	6725.4	25	8	2018	10:01	237	24.26	34.53	11.67	35.39	3	W
7	29	4022.2	6742.3	25	8	2018	12:04	248	23.85	34.36	10.71	35.34	18	W
8	30	4014.8	6741.3	25	8	2018	13:27	1010	23.19	34.00	5.67	35.03	504	W
28	31	4014.9	6820.1	25	8	2018	16:51	191	22.68	33.61	11.08	35.32	5	B
29	32	3959.8	6920.6	25	8	2018	22:49	115	22.33	33.33	11.99	35.08	5	B
30	33	4005.0	6915.3	25	8	2018	23:49	115	22.59	33.53	11.85	34.85	6	B
31	34	4014.9	6920.2	26	8	2018	1:21	88	20.13	32.28	11.53	34.56	6	B
32	35	4009.8	7035.1	26	8	2018	7:19	121	22.37	33.30	12.67	35.30	7	B
9	36	4002.3	7036.4	26	8	2018	8:26	171	22.62	33.08	11.99	35.47	5	W
33	37	3949.8	7037.6	26	8	2018	10:12	966	23.93	33.64	12.19	35.53	763	B
10	37	3949.8	7037.0	26	8	2018	10:37	978	23.86	33.72	6.22	35.06	472	W
34	38	4024.6	7139.5	26	8	2018	18:18	80	24.24	32.57	9.62	33.22	8	B
35	39	4020.0	7145.2	26	8	2018	19:20	73	24.13	32.58	9.76	33.36	4	B
11	39	4020.5	7145.1	26	8	2018	19:56	74	24.11	32.59	9.74	33.35	3	W
36	40	4004.9	7205.3	26	8	2018	22:40	74	23.94	32.76	9.18	33.29	4	B
37	41	4037.1	7259.1	27	8	2018	4:41	23	22.47	31.30	21.15	31.78	7	B
38	42	4029.7	7304.8	27	8	2018	5:49	32	22.30	31.41	14.60	32.04	6	B
39	43	4019.7	7325.3	27	8	2018	7:57	32	22.42	31.67	14.84	31.92	7	B
40	44	4004.8	7350.2	27	8	2018	10:41	27	23.62	30.41	15.68	31.98	6	B
41	45	4000.0	7335.2	27	8	2018	12:19	36	23.75	31.87	12.06	32.18	6	B
42	46	3940.1	7320.0	27	8	2018	15:00	38	23.50	31.88	10.05	32.44	6	B
43	47	3924.9	7250.1	27	8	2018	18:08	70	25.03	31.97	9.45	33.43	6	B
44	48	3928.6	7250.2	27	8	2018	19:01	62	24.93	32.00	9.31	33.26	4	B
45	49	3929.7	7239.9	27	8	2018	20:14	80	24.82	32.10	10.17	33.67	5	B
46	50	3929.9	7229.9	27	8	2018	21:24	114	24.41	33.03	11.98	34.88	5	B
12	51	3900.6	7234.8	28	8	2018	0:52	1080	25.49	32.79	5.57	35.03	575	W

GU1804 ECOMON Survey
August 22 - 31, 2018

Cast #	Sta #	Lat (deg N)	Long (deg W)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (deg C)	Sfc Salt	Deepest Observed Temp (deg C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
13	52	3903.0	7244.9	28	8	2018	2:31	183	25.16	32.91	10.46	35.33	2	W
47	53	3914.9	7314.9	28	8	2018	5:51	62	24.71	31.49	8.68	32.95	5	B
14	54	3921.7	7323.6	28	8	2018	7:09	49	23.87	31.32	9.11	32.64	5	W
48	55	3924.8	7329.8	28	8	2018	8:01	41	23.83	31.45	9.12	32.64	6	B
15	56	3941.4	7358.2	28	8	2018	11:08	25	24.55	30.52	15.52	31.77	3	W
49	57	3934.9	7355.1	28	8	2018	12:12	27	24.35	30.36	14.00	31.92	6	B
50	58	3919.9	7349.9	28	8	2018	14:12	38	23.87	31.15	10.08	32.52	2	B
51	59	3910.2	7424.6	28	8	2018	17:43	20	25.23	30.82	19.07	31.34	4	B
16	59	3910.1	7424.8	28	8	2018	17:55	21	25.42	30.85	17.81	31.53	3	W
52	60	3900.1	7429.6	28	8	2018	19:35	18	25.97	31.12	17.69	31.60	4	B
53	61	3859.8	7359.6	28	8	2018	22:37	39	25.47	30.65	10.62	32.41	3	B
54	62	3845.4	7405.0	29	8	2018	0:27	50	25.55	31.15	8.44	32.83	4	B
55	63	3844.8	7351.0	29	8	2018	1:54	46	24.95	30.94	8.89	32.70	5	B
56	64	3844.8	7335.2	29	8	2018	3:29	65	25.35	31.12	8.15	32.95	5	B
57	65	3829.9	7319.9	29	8	2018	5:43	124	26.39	32.46	12.85	35.16	5	B
58	66	3819.9	7354.6	29	8	2018	9:02	69	25.50	31.30	8.53	33.18	6	B
59	67	3829.9	7424.9	29	8	2018	11:58	45	25.79	31.21	9.28	32.65	6	B
60	68	3805.0	7434.8	29	8	2018	15:16	38	25.85	31.42	9.59	32.69	5	B
17	69	3800.1	7457.5	29	8	2018	18:09	22	25.43	30.24	13.87	32.24	2	W
18	70	3750.6	7434.7	29	8	2018	21:01	54	26.38	31.36	8.17	32.87	3	W
61	71	3749.9	7430.0	29	8	2018	21:54	59	26.38	31.38	8.17	32.90	5	B
19	72	3742.0	7415.4	29	8	2018	23:47	112	26.79	32.52	12.72	35.50	2	W
62	73	3739.9	7439.8	30	8	2018	2:21	59	26.01	31.39	8.38	32.93	4	B
63	74	3735.0	7529.7	30	8	2018	7:06	12	24.76	30.96	21.51	31.07	4	B
64	75	3729.5	7529.9	30	8	2018	8:05	15	24.82	30.87	18.14	31.56	3	B
65	76	3719.9	7509.6	30	8	2018	10:24	28	26.04	31.60	11.15	32.67	3	B
66	77	3710.0	7530.1	30	8	2018	12:40	18	24.78	30.98	17.79	31.65	6	B
67	78	3705.2	7539.9	30	8	2018	14:14	16	25.22	31.17	19.33	31.74	4	B

GU1804 ECOMON Survey
August 22 - 31, 2018

Cast #	Sta #	Lat (deg N)	Long (deg W)	Day	Mo	Year	Time (GMT)	Btm Depth (m)	Sfc Temp (deg C)	Sfc Salt	Deepest Observed Temp (deg C)	Deepest Observed Salt	Meters from Bottom	Method of Deployment
68	79	3705.0	7509.7	30	8	2018	17:21	37	25.96	31.87	9.36	32.75	4	B
69	80	3644.8	7444.8	30	8	2018	20:53	82	26.93	31.09	10.39	34.19	6	B
70	81	3640.0	7459.9	30	8	2018	22:51	33	26.96	31.01	12.06	32.79	3	B
71	82	3626.3	7500.1	31	8	2018	0:34	44	27.31	30.38	9.55	33.01	5	B
72	83	3625.0	7520.1	31	8	2018	2:34	32	26.56	29.65	12.11	32.84	3	B

Deployment codes: B=bongo cast; W=water cast; and V=vertical cast
Casts in **BOLD** are from the CTD s/n 0402