

*Oceans and Climate Branch CTD Data Report
CTD_REPORT_2021006GM*

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

GM 21-06
North Atlantic Right Whale Survey
Data Coverage: August 17 - 19, 2021

This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's GM2106 Northern Right Whale Survey aboard the NEFSC Ship R/V *Gloria Michelle*.

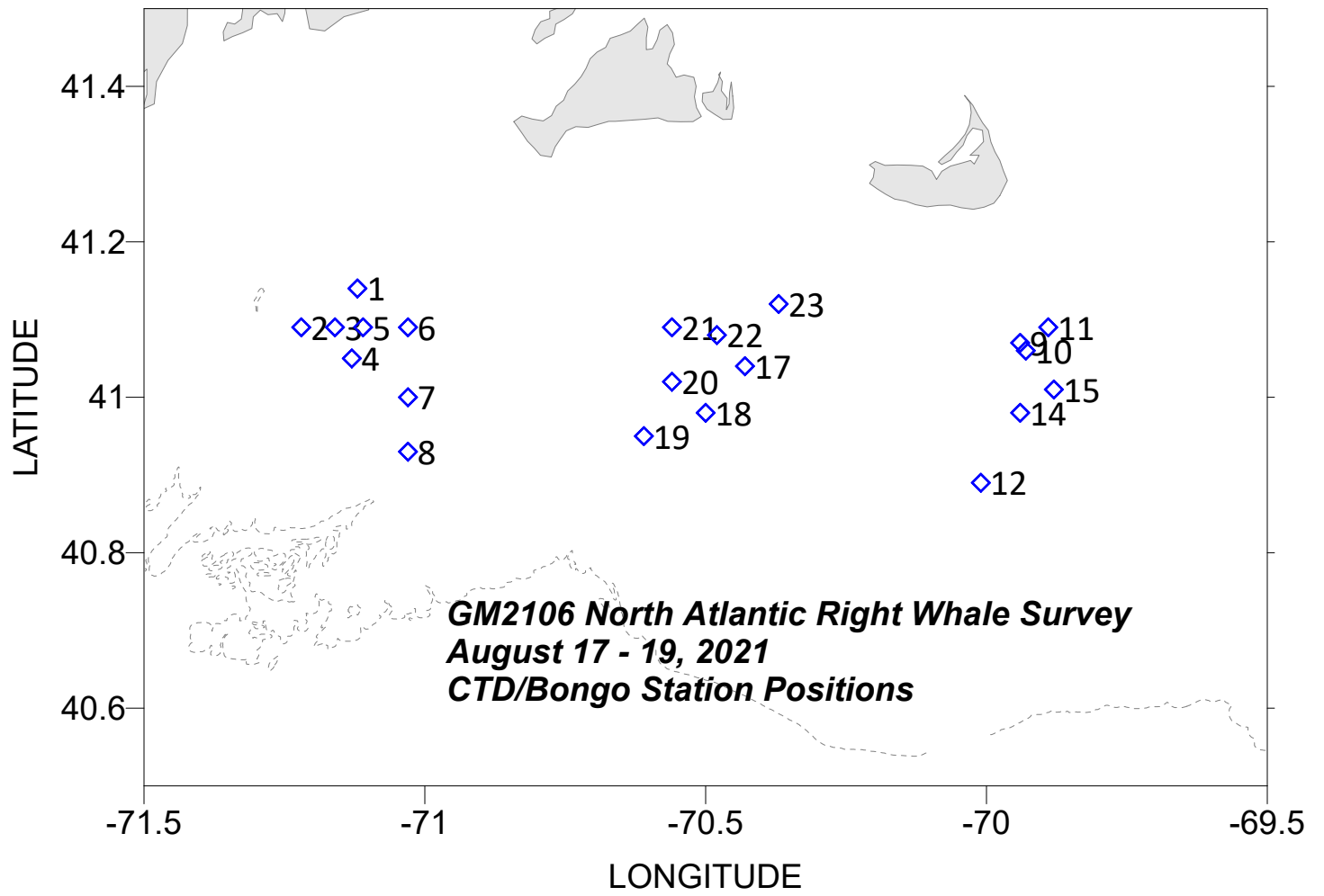
All data was obtained with a Seabird Electronics SBE19+V2 Seacat profiling CTD (s/n 4758).

The SBE19+V2 was deployed on 23 double oblique bongo casts (however, the CTD malfunctioned and no data was collected during casts #13 & 16).

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

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

Revised: January 24, 2022



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
GM2106 North Atlantic Right Whale Survey
August 17 - 19, 2021**

CD	SURFACE						BOTTOM					
	#obs	Temp (degC)	Anomaly	SDV1	SDV2	Flag	#obs	Temp (degC)	Anomaly	SDV1	SDV2	Flag
230	11	21.33	4.36	1.33	0.88	1	10	15.96	3.23	1.28	2.44	1

CD	SURFACE						BOTTOM					
	#obs	Salinity	Anomaly	SDV1	SDV2	Flag	#obs	Salinity	Anomaly	SDV1	SDV2	Flag
230	11	32.12	-0.22	0.50	0.36	1	10	32.31	-0.13	0.49	0.23	1

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

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

"Temp (degC)"/"Salt": 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.

**GM2106 North Atlantic Right Whale Survey
August 17 - 19, 2021**

Cast #	Station #	Lat (DDMM.M)	Long (DDMM.M)	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	4108.1	7107.3	17	8	2021	15:29	33	22.16	32.16	14.45	32.46	12	B
2	2	4105.4	7113.0	17	8	2021	17:31	35	22.66	32.06	13.60	32.56	14	B
3	3	4105.4	7109.5	17	8	2021	18:25	36	22.77	32.19	13.36	32.64	9	B
4	4	4102.9	7107.6	17	8	2021	19:26	40	22.85	32.32	12.82	32.71	8	B
5	5	4105.2	7106.4	17	8	2021	20:26	34	22.92	32.38	13.29	32.63	12	B
6	6	4105.4	7101.7	17	8	2021	21:33	38	23.07	32.35	13.28	32.63	12	B
7	7	4100.1	7101.9	17	8	2021	22:37	48	22.84	32.29	11.59	32.95	6	B
8	8	4055.8	7101.7	18	8	2021	23:55	51	23.44	32.47	11.29	32.99	6	B
9	9	4104.2	6956.2	18	8	2021	11:31	20	20.90	31.64	20.91	31.64	7	B
10	10	4103.6	6956.0	18	8	2021	13:05	30	21.13	31.64	21.01	31.65	8	B
11	11	4105.2	6953.1	18	8	2021	14:53	33	20.28	31.62	20.17	31.62	5	B
12	12	4053.5	7000.8	18	8	2021	17:43	23	19.45	31.91	18.09	31.98	1	B
14	14	4059.0	6956.4	18	8	2021	20:03	34	18.97	31.74	18.81	31.82	6	B
15	15	4100.7	6952.7	18	8	2021	20:55	36	18.84	31.73	18.85	31.77	1	B
17	17	4102.5	7025.8	19	8	2021	11:18	51	21.61	32.43	13.66	32.62	14	B
18	18	4058.5	7029.9	19	8	2021	13:14	40	22.31	32.48	13.36	32.75	1	B
19	19	4057.1	7036.4	19	8	2021	14:14	52	22.80	32.52	12.71	32.86	8	B
20	20	4101.2	7033.8	19	8	2021	15:10	45	22.34	32.49	12.93	32.73	1	B
21	21	4105.6	7033.7	19	8	2021	16:43	40	20.52	32.44	15.00	32.43	13	B
23	22	4104.9	7029.1	19	8	2021	17:35	40	21.29	32.44	14.41	32.51	9	B
24	23	4107.3	7022.3	19	8	2021	18:50	35	20.90	32.86	16.72	32.14	17	B

Deployment codes: B=bongo cast