



# Oceans and Climate Branch CTD Data Report

CTD\_REPORT\_2022001GM

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

GM 22-01  
North Atlantic Right Whale Survey  
Data Coverage: February 7 – 11 & March 10 - 11, 2022

This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's GM2201 North Atlantic Right Whale Survey aboard the NEFSC Ship R/V *Gloria Michelle*.

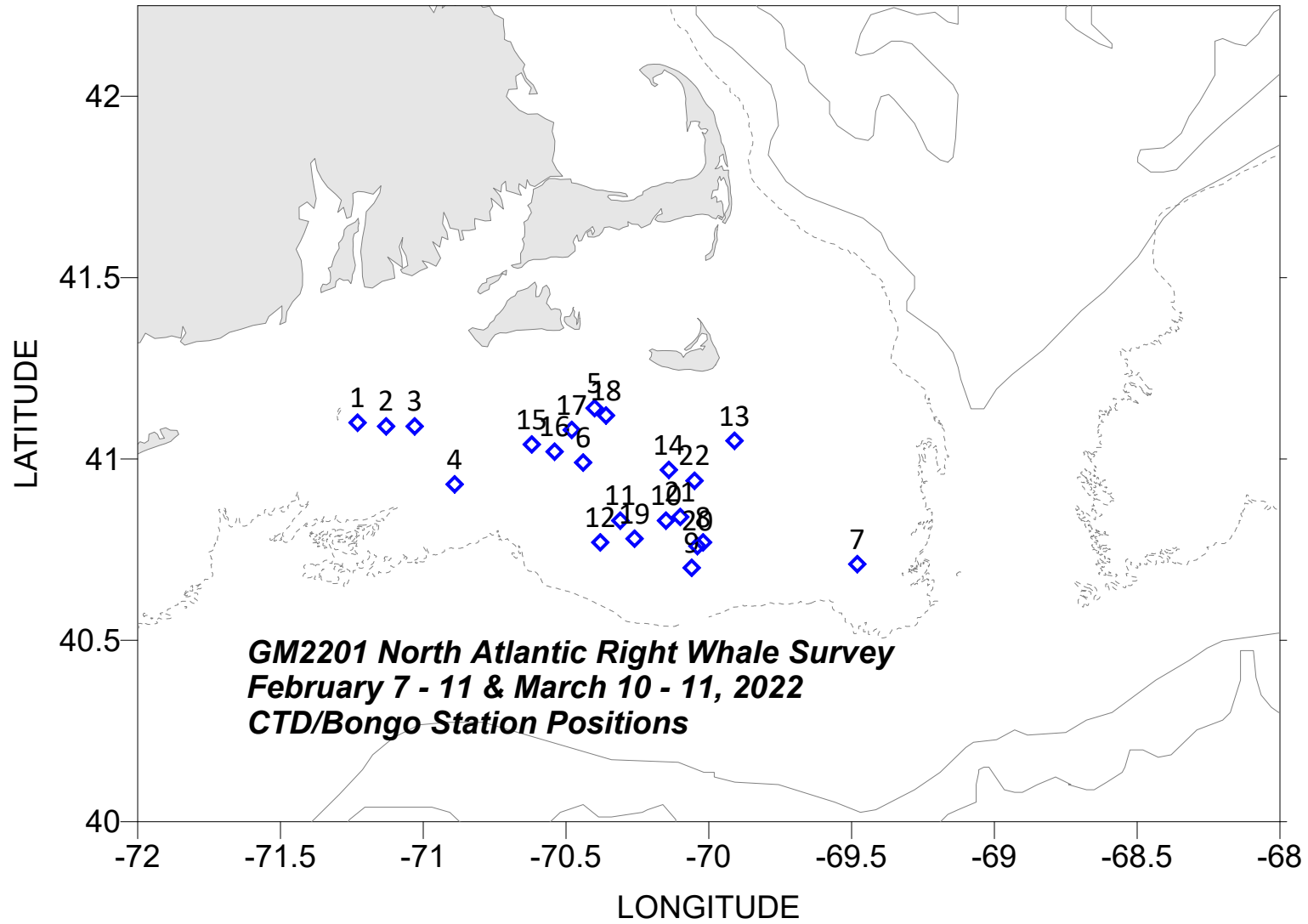
All data was obtained with a Seabird Electronics SBE19+V2 Seacat profiling CTD (s/n 4758).

The SBE19+V2 was deployed on 22 double oblique bongo casts (however, the CTD malfunctioned and no data was collected during cast #18).

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: September 20, 2022



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the  
GM2201 North Atlantic Right Whale Survey  
February 7 - 11 & March 10 - 11, 2022**

CD	SURFACE						BOTTOM					
	#obs	Temp ( °C)	Anomaly	SDV1	SDV2	Flag	#obs	Temp ( °C)	Anomaly	SDV1	SDV2	Flag
52	15	5.31	1.57	1.46	0.51	1	11	5.23	1.96	1.52	0.63	1

CD	SURFACE						BOTTOM					
	#obs	Salinity	Anomaly	SDV1	SDV2	Flag	#obs	Salinity	Anomaly	SDV1	SDV2	Flag
52	15	32.93	0.25	0.52	0.12	1	11	32.95	0.09	0.50	0.07	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 ( °C)" and "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.

**GM2201 North Atlantic Right Whale Survey  
February 7 - 11 & March 10 - 11, 2022**

Cast #	Station #	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	4105.8	7113.8	7	2	2022	17:01	34	5.01	32.90	4.91	32.90	17	B
2	2	4105.5	7108.0	7	2	2022	18:26	32	4.87	32.98	4.84	32.99	15	B
3	3	4105.4	7101.9	7	2	2022	20:39	39	5.46	33.01	5.29	33.05	8	B
4	4	4056.1	7053.1	7	2	2022	22:44	55	5.59	32.85	5.59	32.88	16	B
5	5	4108.2	7023.9	9	2	2022	20:10	38	3.20	32.56	3.29	32.66	12	B
6	6	4059.7	7026.3	9	2	2022	23:48	41	4.24	32.84	4.24	32.86	7	B
7	7	4042.4	6928.8	10	2	2022	12:06	48	7.30	33.24	7.31	33.24	12	B
8	8	4046.1	7001.3	10	2	2022	16:04	25	5.76	33.05	5.72	33.04	4	B
9	9	4042.0	7003.5	10	2	2022	17:44	45	5.94	33.08	5.77	33.08	4	B
10	10	4049.8	7009.0	10	2	2022	19:14	34	5.73	33.06	5.59	33.05	1	B
11	11	4049.8	7018.4	10	2	2022	20:36	46	5.42	33.03	5.25	33.03	11	B
12	12	4046.1	7022.7	10	2	2022	22:53	52	5.17	32.84	5.11	32.90	7	B
13	13	4103.3	6954.9	11	2	2022	12:13	24	5.32	32.88	5.33	32.88	7	B
14	14	4058.1	7008.1	11	2	2022	14:45	22	5.02	32.96	4.95	32.97	5	B
15	15	4102.3	7037.3	10	3	2022	19:32	45	4.81	32.81	4.75	32.86	12	B
16	16	4101.5	7032.5	10	3	2022	21:15	45	4.67	32.75	4.64	32.82	4	B
17	17	4104.7	7028.7	10	3	2022	22:19	40	4.63	32.73	4.48	32.72	3	B
19	19	4046.8	7015.6	11	3	2022	11:41	44	5.46	33.00	5.48	33.00	15	B
20	20	4045.6	7002.1	11	3	2022	13:29	36	5.48	32.97	5.43	32.98	2	B
21	21	4050.4	7005.8	11	3	2022	17:00	24	5.71	32.95	5.46	32.95	5	B
22	22	4056.5	7002.8	11	3	2022	18:09	24	5.31	32.91	5.25	32.91	2	B

Deployment codes: B=bongo cast