Oceanography Branch CTD Data Report
CTD_REPORT_2014001GU

For further information, contact Jerome Prezioso
National Marine Fisheries Service, Northeast Fisheries
Science Center, Woods Hole, Massachusetts 02543-1097.

DATE: August 1, 2014

Oceanography Branch CTD Data Report

CTD_REPORT_2014001GU

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

GU 14-01
ECOMON
Data Coverage: March 1 – 8, 2014
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 GU1401 ECOMON Survey aboard the NOAA Ship *Gordon Gunter*. Data was obtained with a Seabird Electronics SBE Model 19+ V2 profiling CTD (s/n 4758) and two Seabird Electronics SBE Model 9/11+ CTD (s/n 0420 & 2727). Sea water samples were taken for the purpose of correcting conductivity. The dissolved oxygen sensor on SBE0420 was discovered to have a ruptured membrane and the data was unusable. The dissolved oxygen data from the ship's SBE2727 was fine.

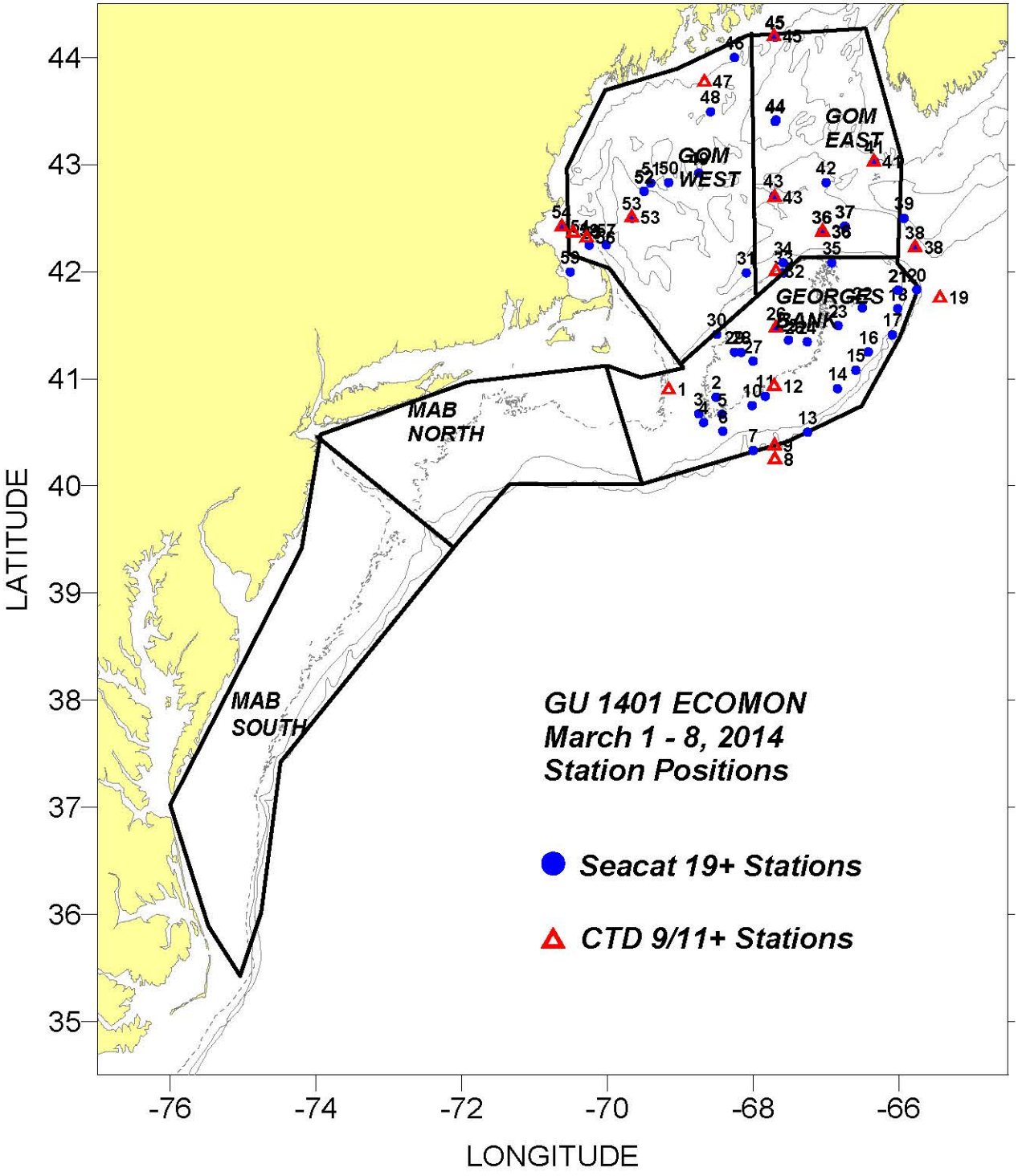
Data presented here have been audited, however, corrections and/or updates may be applied at a later time. The most recent and complete station data can be found in an NODC formatted ASCII file at:
ftp://ftp.nefsc.noaa.gov/pub/hydro/gu1401.dat

This report may be viewed on the Oceanography Branch website at:

http://www.nefsc.noaa.gov/HydroAtlas/

choose: **2014 Cruises**
MAR_ECOMON_GU1401
CTD_REPORT_201401GU.pdf

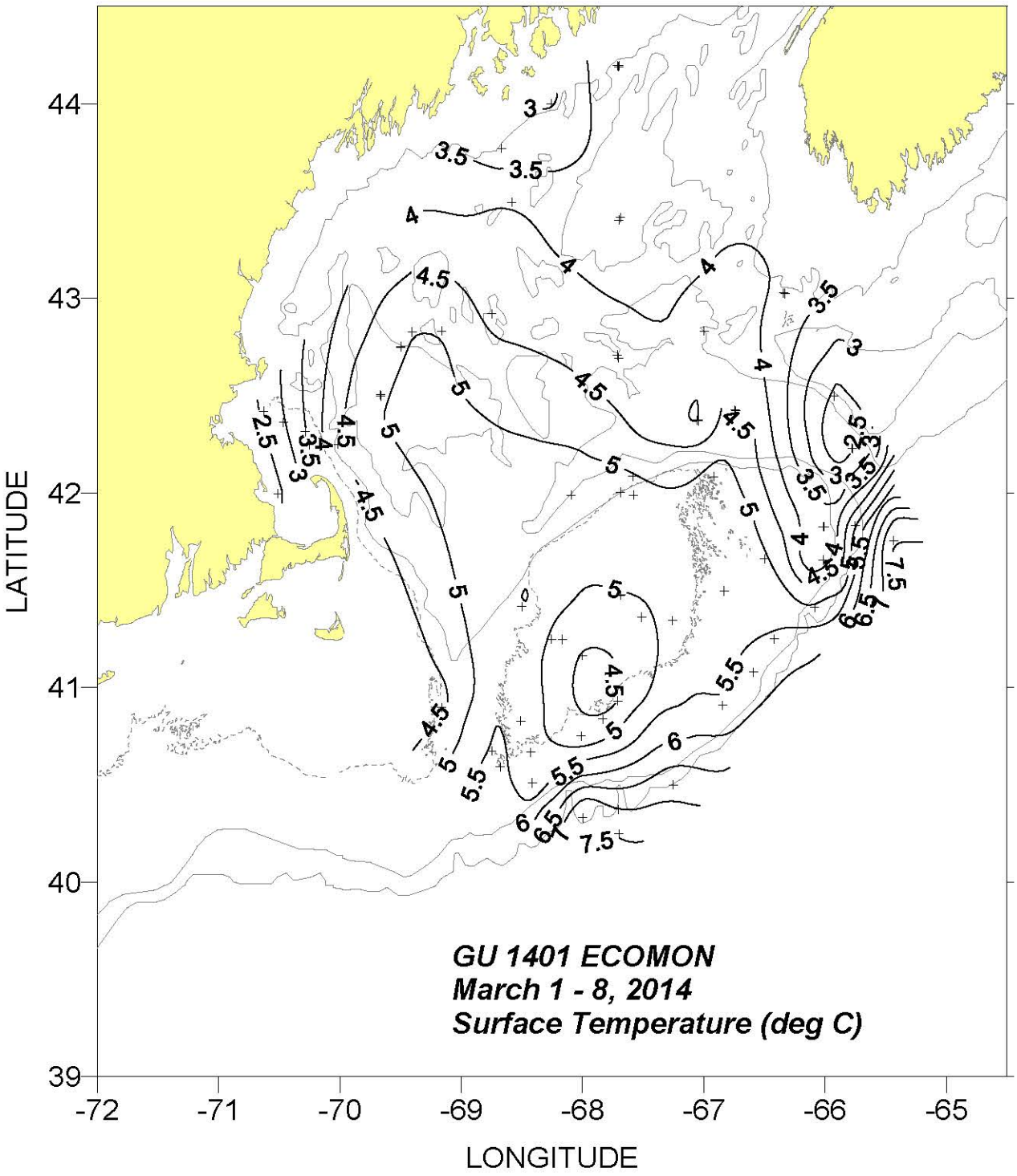
Revised: August 1, 2014

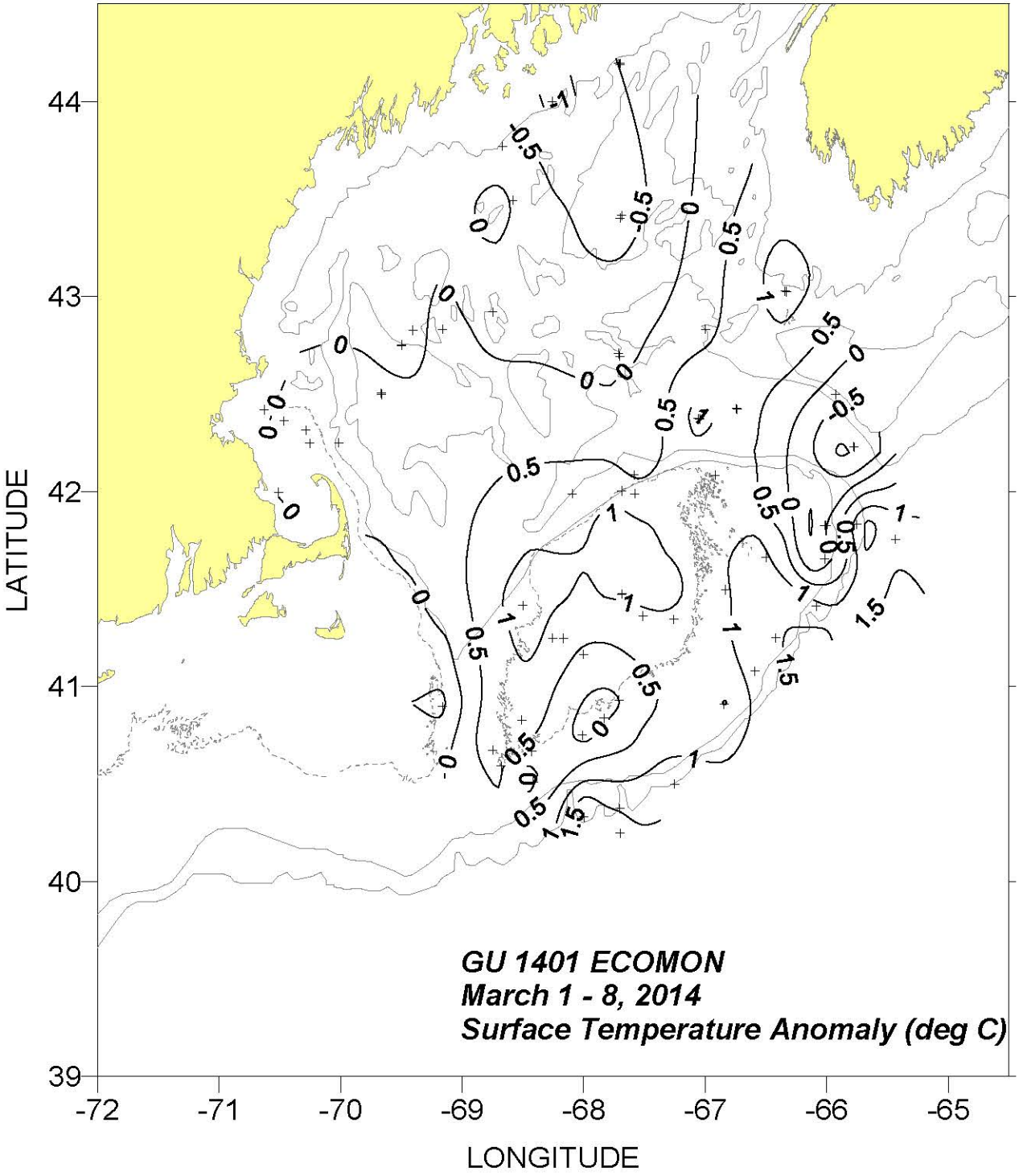

GU 1401 ECOMON
March 1 - 8, 2014
Station Positions
Seacat 19+ Stations
CTD 9/11+ Stations
GOM WEST
GOM EAST
GEORGES BANK
MAB NORTH
MAB SOUTH
LATITUDE
LONGITUDE
44
43
42
41
40
39
38
37
36
35
-76
-74
-72
-70
-68
-66

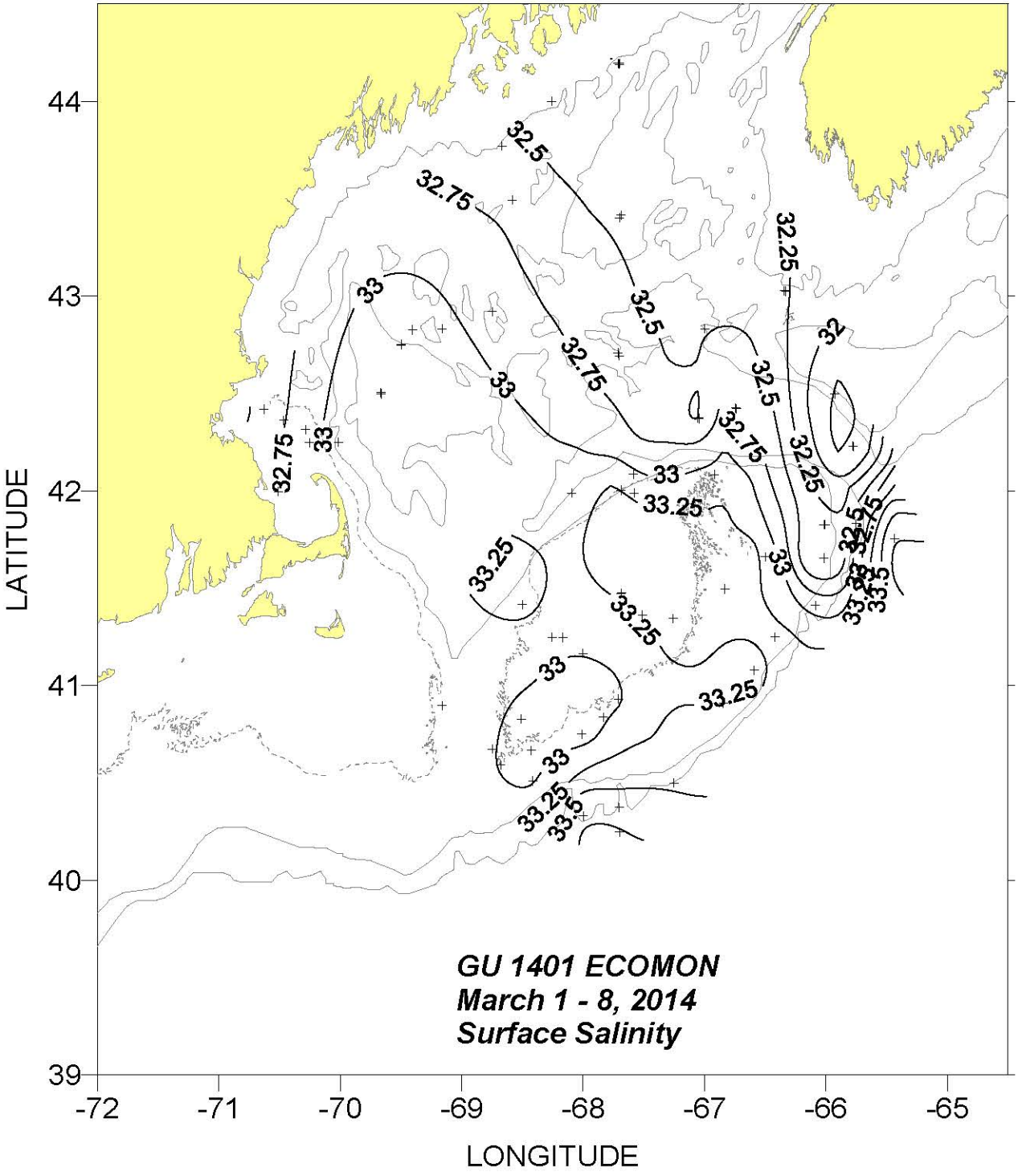
Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
GU1401 ECOMON Survey
March 1 - 8, 2014

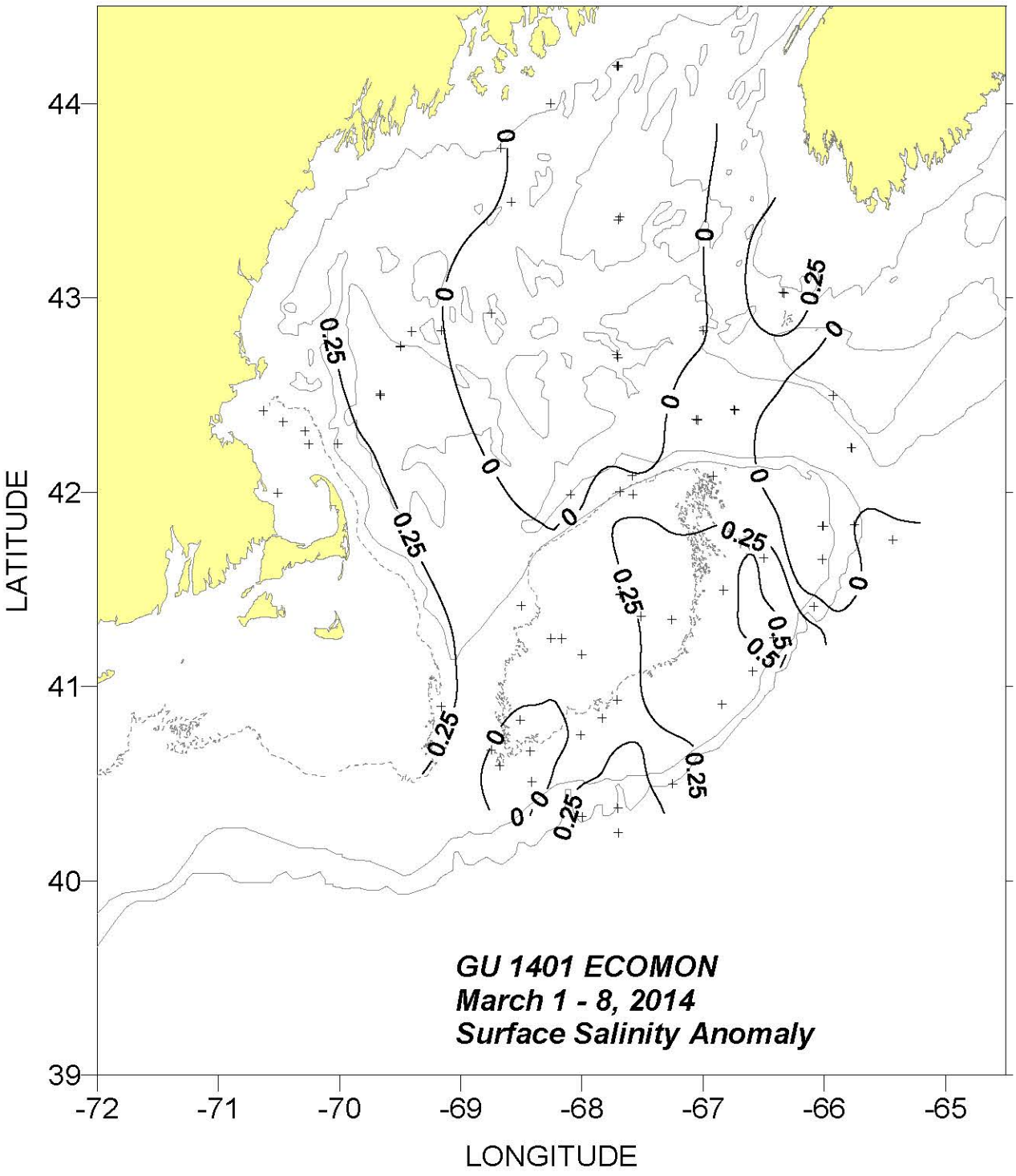
		SURFACE						BOTTOM						
CRUISE	CD	#obs	T/S	Anomaly	SDV1	SDV2	Flag	#obs	T/S	Anomaly	SDV1	SDV2	Flag	Purpose
						Western Gulf of Maine								
gu1401	66	16	4.36	0.05	0.27	1.36	1	14	5.88	0.89	0.26	1.9	1	22
gu1401	66	16	32.99	0.06	0.19	0.58	1	14	33.47	0.11	0.15	0.6	1	22
						Eastern Gulf of Maine								
gu1401	64	16	4.2	0.29	0.26	1.59	1	14	7.31	0.15	0.28	2.38	1	22
gu1401	64	16	32.59	0.01	0.19	0.66	1	14	33.95	-0.13	0.15	0.84	1	22
						Georges Bank								
gu1401	62	33	5.16	0.65	0.19	0.76	1	28	5.45	0.55	0.19	1.01	1	22
gu1401	62	33	33.08	0.11	0.11	0.33	1	28	33.24	0.14	0.11	0.3	1	22

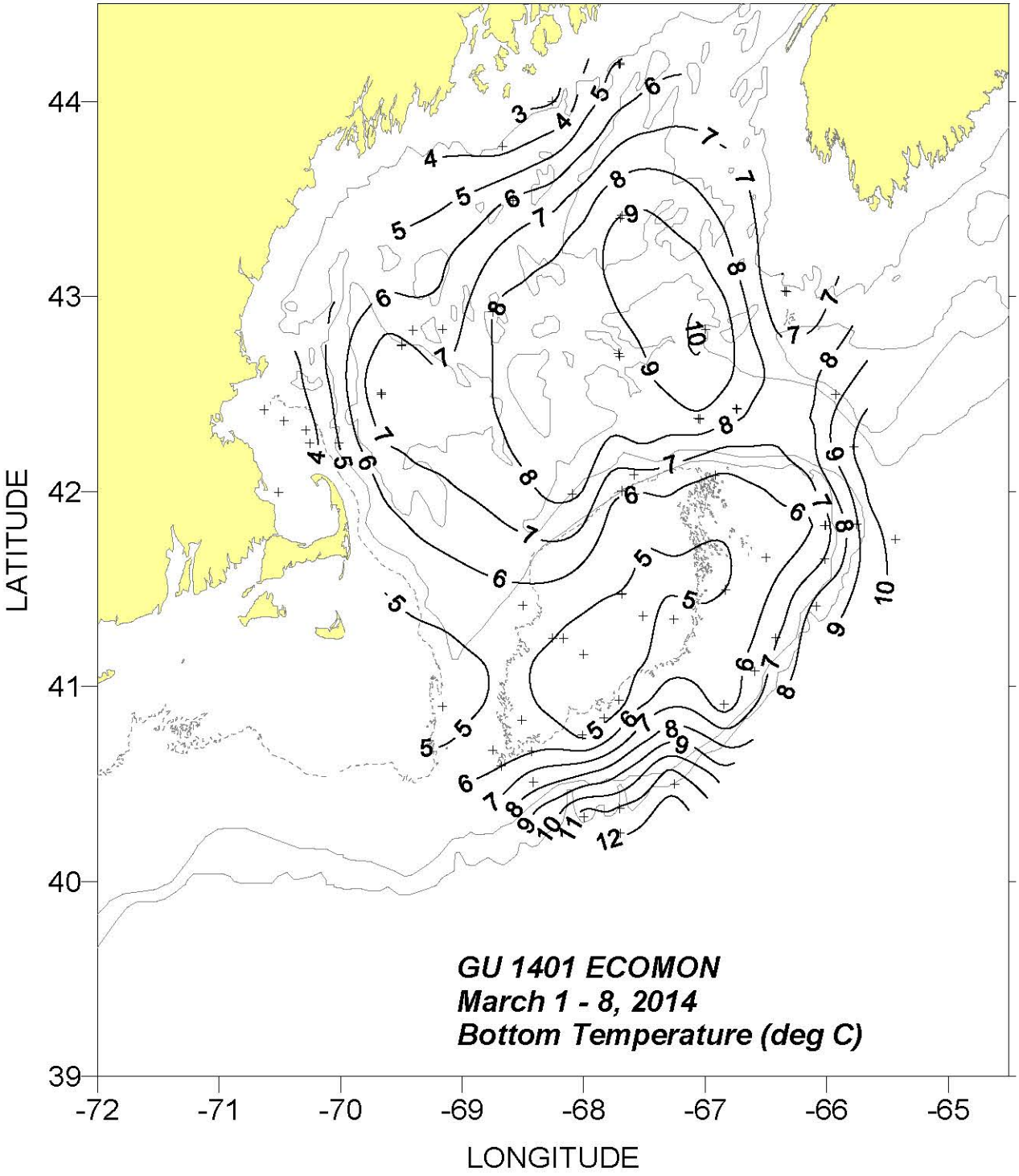
"CRUISE", the code name for a cruise: "CD", the calendar mid-date of all the stations within a region for a cruise:
"#obs", the number of observations include in each average: "T/S", the areal average temp/salt: "Anomaly", the areal average temp/salt anomaly:
"SDV1", the standard deviation associated 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.

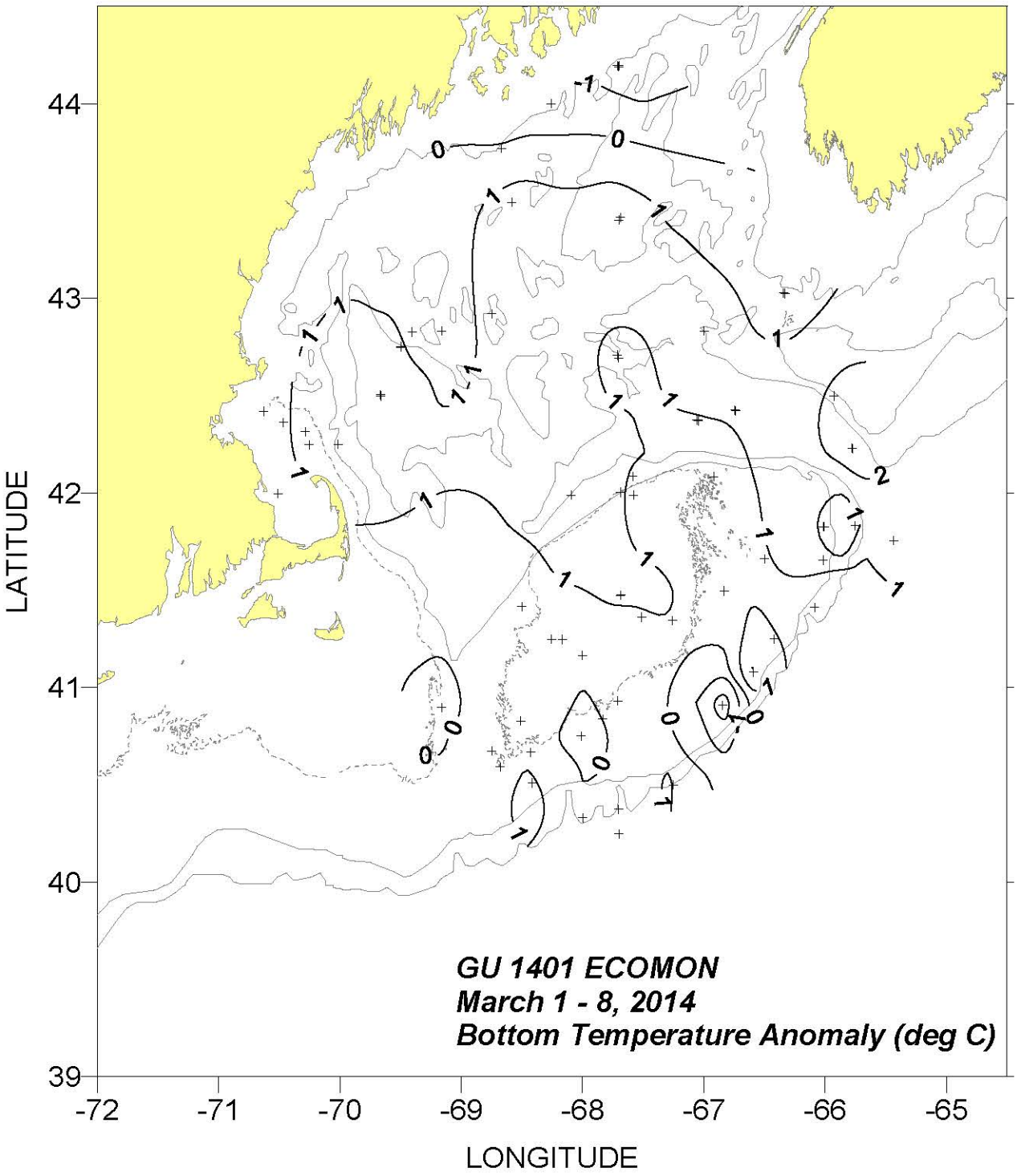

GU 1401 ECOMON
March 1 - 8, 2014
Surface Temperature (deg C)
LATITUDE
LONGITUDE
44
43
42
41
40
39
-72
-71
-70
-69
-68
-67
-66
-65

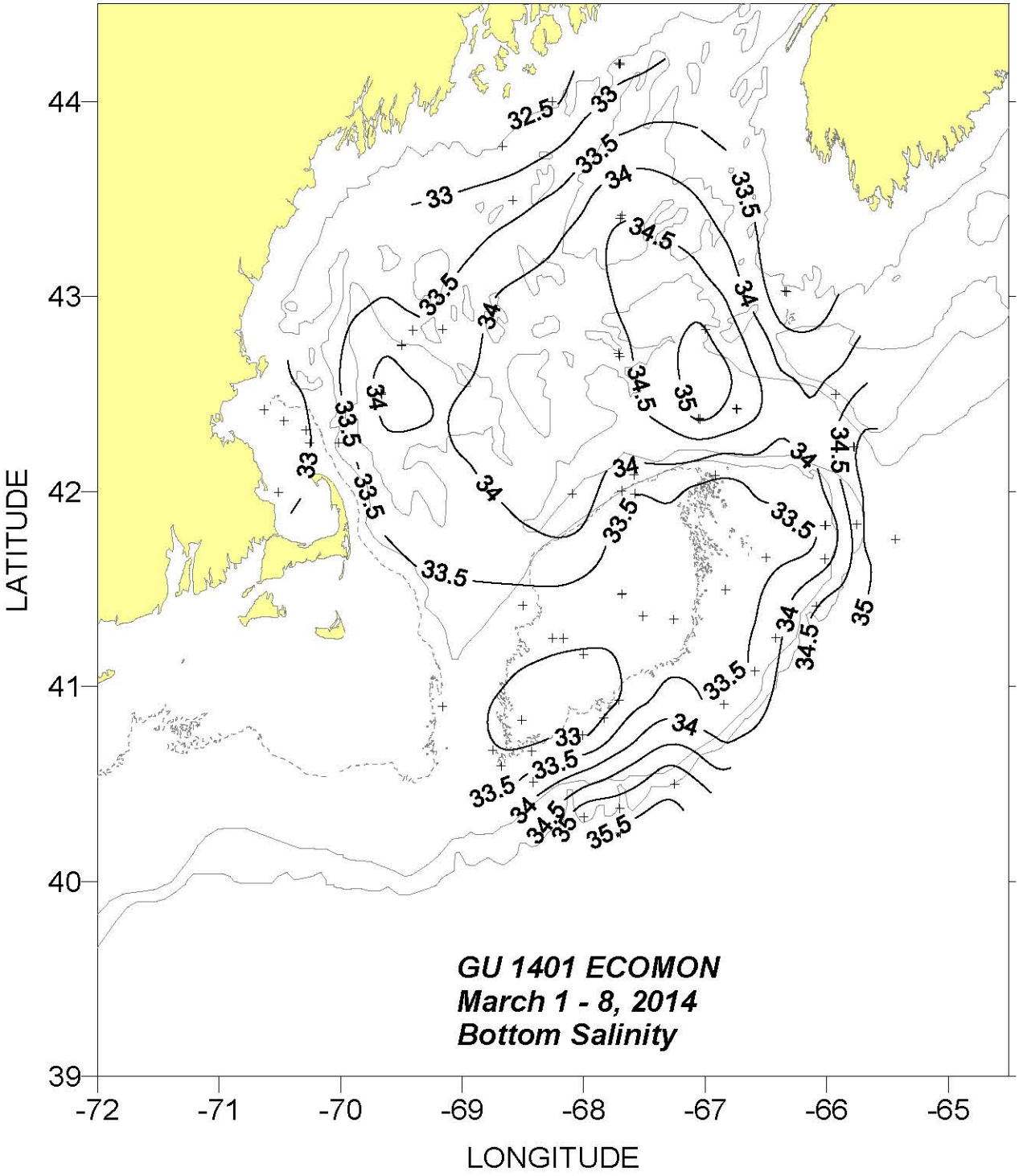

GU 1401 ECOMON
March 1 - 8, 2014
Surface Temperature Anomaly (deg C)
LATITUDE
LONGITUDE
44
43
42
41
40
39
-72
-71
-70
-69
-68
-67
-66
-65

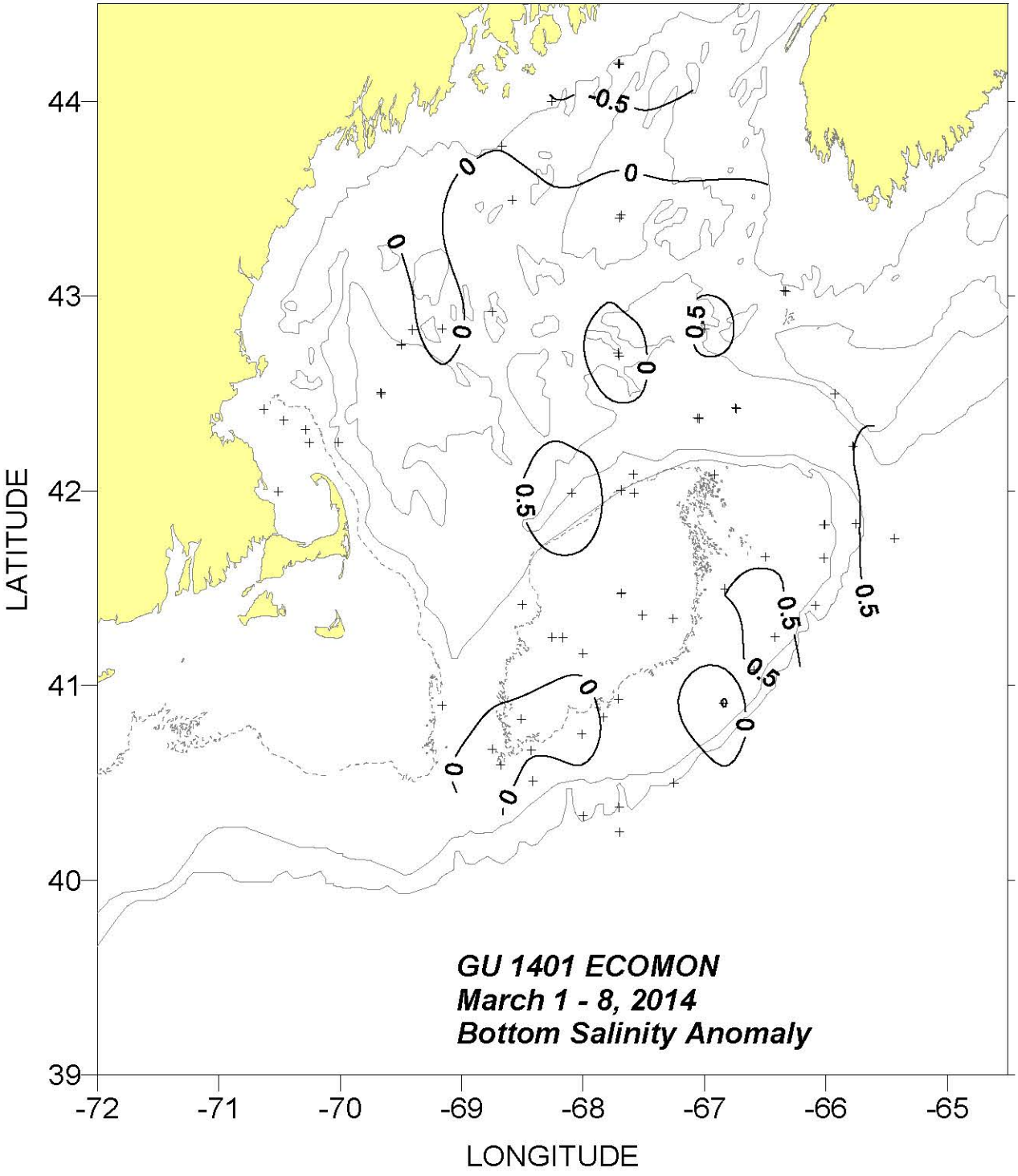

44
43
42
41
40
39
LATITUDE
-72
-71
-70
-69
-68
-67
-66
-65
LONGITUDE
32.5
32.75
33
32.25
32
33.25
33.5
GU 1401 ECOMON
March 1 - 8, 2014
Surface Salinity


44
43
42
41
40
39
LATITUDE
-72
-71
-70
-69
-68
-67
-66
-65
LONGITUDE
0
0.25
0.5
GU 1401 ECOMON
March 1 - 8, 2014
Surface Salinity Anomaly


GU 1401 ECOMON
March 1 - 8, 2014
Bottom Temperature (deg C)
LATITUDE
LONGITUDE
44
43
42
41
40
39
-72
-71
-70
-69
-68
-67
-66
-65


44
43
42
41
40
39
LATITUDE
-72
-71
-70
-69
-68
-67
-66
-65
LONGITUDE
GU 1401 ECOMON
March 1 - 8, 2014
Bottom Temperature Anomaly (deg C)


GU 1401 ECOMON
March 1 - 8, 2014
Bottom Salinity
LATITUDE
LONGITUDE
44
43
42
41
40
39
-72
-71
-70
-69
-68
-67
-66
-65


44
43
42
41
40
39
LATITUDE
-72
-71
-70
-69
-68
-67
-66
-65
LONGITUDE
-0.5
0
0
0
0
0.5
0
0.5
0.5
0.5
0
0
0
GU 1401 ECOMON
March 1 - 8, 2014
Bottom Salinity Anomaly

GU1401 ECOMON
March 1 - 8, 2014

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
001	**1**	**4053.8**	**6909.6**	**1**	**3**	**2014**	**14:34**	**72**	**4.35**	**33.15**	**4.36**	**33.16**	**3**	**W**
001	2	4049.7	6830.5	1	3	2014	18:32	58	5.53	32.92	5.51	32.92	6	B
002	3	4040.4	6844.8	1	3	2014	20:15	62	5.64	33.02	5.58	33.03	3	B
003	4	4035.5	6840.7	1	3	2014	21:07	62	5.89	32.97	5.85	32.98	2	B
004	5	4040.1	6825.6	1	3	2014	23:31	65	5.02	32.86	5.03	32.85	1	B
005	6	4030.6	6824.9	2	3	2014	1:07	92	4.92	32.94	8.05	33.85	2	B
006	7	4019.9	6759.9	2	3	2014	4:04	159	7.77	33.78	11.59	35.40	2	B
002	**8**	**4014.8**	**6742.0**	**2**	**3**	**2014**	**6:18**	**1317**	**7.57**	**33.81**	**6.10**	**35.02**	**810**	**W**
003	**9**	**4022.5**	**6742.2**	**2**	**3**	**2014**	**7:58**	**227**	**6.96**	**33.62**	**10.99**	**35.34**	**1**	**W**
007	10	4045.0	6800.7	2	3	2014	11:10	73	4.66	32.88	4.68	32.89	2	B
008	11	4050.3	6750.0	2	3	2014	12:40	66	4.46	32.97	4.46	32.99	1	B
004	**12**	**4055.9**	**6742.6**	**2**	**3**	**2014**	**13:49**	**63**	**4.45**	**32.93**	**4.37**	**32.93**	**1**	**W**
009	13	4030.0	6715.1	2	3	2014	17:42	186	6.88	33.47	12.30	35.51	14	B
010	14	4054.5	6650.6	2	3	2014	21:40	90	5.54	33.18	5.40	33.18	1	B
011	15	4104.8	6635.4	2	3	2014	23:55	88	5.72	33.18	6.49	33.59	1	B
012	16	4115.0	6625.1	3	3	2014	1:45	115	5.60	33.31	5.87	33.41	24	B
013	17	4124.7	6605.2	3	3	2014	4:01	143	5.21	33.00	8.56	34.70	6	B
014	18	4139.3	6600.9	3	3	2014	6:04	99	2.95	31.76	6.67	33.54	7	B
005	**19**	**4145.3**	**6526.1**	**3**	**3**	**2014**	**9:21**	**1850**	**7.87**	**33.90**	**6.09**	**35.01**	**1343**	**W**
015	20	4149.9	6545.2	3	3	2014	11:34	166	4.98	32.72	9.33	35.00	4	B
016	21	4149.6	6600.4	3	3	2014	13:11	100	3.75	32.25	5.96	33.33	4	B
017	21	4149.6	6600.9	3	3	2014	13:37	95	3.91	32.30	5.84	33.28	2	B
018	22	4139.7	6630.0	3	3	2014	16:53	76	5.35	33.31	5.36	33.31	4	B
019	23	4129.8	6650.0	3	3	2014	21:27	67	4.98	33.29	4.98	33.29	4	B
020	24	4120.7	6715.4	4	3	2014	0:55	48	5.17	33.35	5.19	33.35	4	B
021	25	4121.7	6730.8	4	3	2014	3:07	38	4.88	33.25	4.88	33.23	1	B
006	**26**	**4128.4**	**6741.2**	**4**	**3**	**2014**	**4:49**	**48**	**4.96**	**33.28**	**4.98**	**33.28**	**5**	**W**
022	26	4128.5	6741.0	4	3	2014	5:15	38	4.98	33.29	5.00	33.29	2	B
023	27	4109.9	6760.0	4	3	2014	8:16	43	4.41	33.00	4.41	32.99	8	B
024	28	4114.8	6810.0	4	3	2014	10:13	39	4.81	33.05	4.81	33.05	3	B
025	29	4114.9	6815.3	4	3	2014	11:04	50	4.93	33.09	5.06	33.11	4	B
026	30	4124.9	6829.9	4	3	2014	13:11	79	5.59	33.33	5.60	33.34	1	B

GU1401 ECOMON
March 1 - 8, 2014

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
027	31	4159.3	6805.6	4	3	2014	17:40	222	5.27	33.09	8.61	34.58	11	B
007	**32**	**4200.2**	**6741.2**	**4**	**3**	**2014**	**20:15**	**56**	**5.45**	**33.36**	**5.51**	**33.41**	**1**	**W**
028	33	4159.3	6734.8	4	3	2014	20:57	45	5.48	33.31	5.42	33.32	2	B
029	34	4205.1	6735.1	4	3	2014	21:57	167	4.76	32.86	7.62	34.00	3	B
030	35	4205.0	6655.1	5	3	2014	1:36	64	5.37	33.20	5.47	33.23	2	B
008	**36**	**4222.3**	**6702.6**	**5**	**3**	**2014**	**3:40**	**339**	**3.98**	**32.47**	**8.83**	**35.10**	**2**	**W**
031	36	4222.5	6703.4	5	3	2014	4:15	332	3.93	32.46	9.54	35.14	130	B
009	**36**	**4222.5**	**6702.7**	**5**	**3**	**2014**	**5:10**	**340**	**3.96**	**32.47**	**8.90**	**35.11**	**1**	**W**
032	36	4222.5	6703.2	5	3	2014	5:33	329	3.99	32.50	9.42	35.08	127	B
033	37	4225.3	6644.2	5	3	2014	7:22	344	4.74	32.93	9.15	35.11	140	B
034	37	4225.5	6644.6	5	3	2014	8:00	345	4.75	32.96	8.54	35.09	1	W
035	38	4213.8	6546.7	5	3	2014	12:58	218	1.71	31.56	10.65	35.20	17	B
010	**38**	**4213.6**	**6546.5**	**5**	**3**	**2014**	**13:58**	**218**	**1.51**	**31.54**	**9.59**	**35.22**	**5**	**W**
036	39	4229.9	6555.7	5	3	2014	15:55	129	2.34	31.68	8.71	34.10	4	B
012	**41**	**4301.6**	**6620.5**	**5**	**3**	**2014**	**20:43**	**134**	**3.98**	**32.28**	**5.74**	**32.96**	**3**	**W**
037	41	4301.5	6619.8	5	3	2014	21:01	122	3.98	32.27	5.59	32.90	1	B
038	42	4249.9	6659.9	6	3	2014	1:13	197	4.12	32.48	10.40	35.12	1	B
013	**43**	**4241.6**	**6742.2**	**6**	**3**	**2014**	**5:26**	**188**	**4.80**	**33.03**	**8.35**	**34.28**	**1**	**W**
039	43	4242.5	6742.8	6	3	2014	6:52	187	4.20	32.61	8.42	34.31	1	B
040	44	4324.1	6741.9	6	3	2014	14:58	245	3.69	32.47	9.37	34.59	44	B
041	44	4325.0	6741.1	6	3	2014	15:36	240	3.65	32.48	9.40	34.61	1	W
042	45	4411.8	6742.0	6	3	2014	21:27	184	3.99	32.53	4.81	32.74	2	B
043	45	4411.4	6742.1	6	3	2014	22:02	173	4.01	32.19	5.02	32.77	2	B
014	**45**	**4411.7**	**6742.7**	**6**	**3**	**2014**	**22:34**	**175**	**3.98**	**32.53**	**5.16**	**32.87**	**3**	**W**
044	46	4360.0	6815.4	7	3	2014	1:38	97	2.90	32.36	2.70	32.35	5	B
015	**47**	**4346.2**	**6840.0**	**7**	**3**	**2014**	**4:28**	**112**	**3.17**	**32.54**	**3.44**	**32.62**	**7**	**W**
046	48	4329.6	6834.9	7	3	2014	10:10	143	4.09	32.70	6.40	33.34	5	B
048	49	4255.2	6844.8	7	3	2014	15:03	204	4.32	32.86	8.15	34.11	17	B
049	50	4249.9	6909.6	7	3	2014	17:32	163	5.00	33.07	6.16	33.46	3	B
050	51	4249.6	6924.3	7	3	2014	19:04	143	5.06	33.16	6.42	33.55	4	B
051	52	4244.9	6929.8	7	3	2014	20:07	195	4.87	33.25	7.56	33.97	1	B
052	52	4245.2	6929.9	7	3	2014	20:47	193	4.89	33.25	7.39	33.91	10	B

GU1401 ECOMON
March 1 - 8, 2014

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
016	**53**	**4230.3**	**6940.0**	**7**	**3**	**2014**	**22:55**	**249**	**4.98**	**33.23**	**8.09**	**34.25**	**9**	**W**
053	53	4229.9	6939.8	7	3	2014	23:17	250	5.01	33.24	7.30	33.91	49	B
017	**54**	**4225.1**	**7037.6**	**8**	**3**	**2014**	**4:37**	**80**	**2.58**	**32.55**	**3.26**	**32.90**	**5**	**W**
054	54	4225.2	7037.6	8	3	2014	5:01	80	2.39	32.46	3.20	32.89	7	B
018	**55**	**4221.7**	**7028.0**	**8**	**3**	**2014**	**6:45**	**73**	**3.14**	**32.83**	**2.80**	**32.87**	**11**	**W**
019	**56**	**4218.9**	**7017.0**	**8**	**3**	**2014**	**8:22**	**33**	**3.39**	**32.89**	**3.37**	**32.89**	**4**	**W**
055	57	4215.0	7000.9	8	3	2014	10:06	136	4.58	33.09	4.96	33.25	7	B
056	58	4214.9	7015.1	8	3	2014	11:40	29	3.43	32.94	3.44	32.94	9	B
057	59	4159.8	7030.6	8	3	2014	13:58	34	2.25	32.71	2.25	32.72	10	B

data in bold are from SBE9/11+ (s/n 420 & 2727)

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