

*Oceans and Climate Branch CTD Data Report  
DEL0512 – Hydroacoustic Survey*

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DATE: November 18, 2005

Northeast Fisheries Science Center  
Woods Hole Laboratory  
Woods Hole, Ma 02543

November 18, 2005

MEMORANDUM FOR: David Mountain  
Michael Jech

FROM: Cristina Bascuñán (ext. 2243)

SUBJECT: DEL0512 – Hydroacoustic Survey

CTD data from the Hydroacoustic survey have been processed and are now available. There were 126 casts done, including 9 for calibrations. Please note there is no cast 17, 73, and 108.

Hydrographic data for this cruise may be found in the following location:

- whsun2: /ftp/pub/hydro/del0512.dat (NODC file)
- octemps

Please call if you have any questions.

Areal average surface and bottom temp / salt and anomalies for the HydroAcoustic survey DEL0512.

CRUISE	CD	SURFACE					BOTTOM				
		#obs	T / S	Anomaly	SDV1	SDV2	#obs	T / S	Anomaly	SDV1	SDV2
<b>Georges Bank</b>											
DEL0512	266	28	15.97	0.47	0.17	0.82*	28	13.09	-1.17	0.17	2.38*
DEL0512	266	26	31.89	-0.61	0.11	0.16*	26	32.2	-0.44	0.11	0.23*
<b>Gulf of Maine West</b>											
DEL0512	265	72	16.76	1.49	0.12	1.49*	71	7.69	-0.06	0.11	2.07*
DEL0512	265	67	31.47	-0.67	0.08	0.34*	66	33.46	-0.11	0.07	0.43*
<b>Gulf of Maine East</b>											
DEL0512	261	28	16.68	1.01	0.19	2.70*	28	8.84	-0.14	0.18	3.64*
DEL0512	261	28	31.79	-0.6	0.12	0.62*	28	34.16	-0.08	0.1	0.73*

(1) "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 included in each average; "T /S": the areal average temp / salt anomaly; "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 wa derived.

(\*) A true areal average could not be calculated due to poor station coverage. The average values listed were derived from a simple average of the observations within the region.

DEL0512  
HydroAcoustic Survey  
8 September - 11 October, 2005

Cast #	Sta #	Lat	Lon	Day	Month	Year	Time	Btm Depth	Sfc Temp	Sfc Salt	Btm Temp	Btm Salt	Metres from Btm
1	2	4151.3	6857.9	8	9	2005	11:00	160	19.7	31.19	5.5	33.19	2
2	7	4145.2	6810.1	9	9	2005	4:00	53	15.9	31.97	14.3	32.07	5
3	8	4206.3	6810.2	9	9	2005	6:24	201	18.3	31.94	8.1	34.78	8
4	10	4210.0	6810.1	9	9	2005	9:23	192	17.9	32.04	8.2	34.83	6
5	11	4210.0	6803.4	9	9	2005	10:11	225	17.7	32.14	8.4	34.79	5
6	12	4203.0	6803.3	9	9	2005	11:11	215	18.3	31.86	8.0	34.79	6
7	14	4147.5	6803.4	9	9	2005	15:11	44	16.2	99.99	12.9	99.99	3
8	20	4203.5	6803.4	9	9	2005	20:12	220	17.1	32.10	8.1	34.69	2
9	28	4147.5	6803.4	10	9	2005	12:11	44	15.6	31.99	10.9	32.25	3
10	30	4145.1	6810.2	10	9	2005	17:30	53	16.2	31.97	13.3	32.18	5
12	33	4209.9	6810.1	10	9	2005	22:00	192	18.1	31.10	6.1	37.01	4
13	34	4210.0	6803.4	10	9	2005	22:47	225	17.6	99.99	8.2	99.99	6
14	36	4157.6	6802.7	11	9	2005	3:42	191	16.4	99.99	8.0	99.99	4
15	38	4209.9	6803.3	11	9	2005	6:48	225	17.1	99.99	8.2	99.99	4
16	41	4147.5	6803.5	11	9	2005	15:11	44	15.9	99.99	12.0	99.99	6
18	48	4210.0	6756.6	12	9	2005	3:54	235	18.1	31.67	8.3	34.82	4
19	49	4210.0	6749.8	12	9	2005	4:54	216	18.0	31.56	8.3	34.69	3
20	50	4202.7	6746.2	12	9	2005	6:35	180	17.9	31.54	8.2	34.59	2
21	52	4152.9	6749.7	12	9	2005	9:18	35	15.5	32.02	15.5	32.03	2
22	53	4156.5	6743.0	12	9	2005	10:06	42	16.0	31.96	15.3	31.99	4
23	54	4215.4	6743.4	13	9	2005	0:30	229	16.8	31.87	8.2	34.93	3
24	55	4201.3	6742.9	13	9	2005	2:17	90	17.1	31.73	5.9	32.80	1
25	57	4156.4	6743.1	13	9	2005	5:41	39	16.2	31.96	14.4	32.03	4
26	58	4152.9	6750.5	13	9	2005	6:41	41	16.8	31.83	14.3	32.07	5
27	59	4210.0	6750.0	13	9	2005	8:48	218	16.6	31.84	8.2	34.60	5
28	60	4210.0	6756.8	13	9	2005	9:41	237	16.8	31.86	8.2	34.71	2
29	61	4156.7	6755.9	13	9	2005	11:18	151	16.2	31.89	7.2	33.73	4
30	66	4300.7	6956.1	14	9	2005	8:41	224	17.3	31.06	7.0	34.11	4
31	67	4258.5	7009.5	14	9	2005	10:06	158	17.3	31.09	5.4	32.93	4
32	68	4248.6	6954.0	14	9	2005	14:23	222	17.8	31.29	7.1	34.18	5

33	70	4246.9	7008.9	14	9	2005	15:48	79	17.8	31.17	6.5	32.51	4
34	71	4242.8	7000.5	14	9	2005	17:06	190	18.1	31.16	6.5	33.83	4
35	72	4223.0	7029.5	14	9	2005	20:17	88	17.5	31.01	5.8	32.01	13
36	73	4225.3	7017.3	14	9	2005	23:17	60	18.1	30.91	5.7	31.99	3
37	76	4221.1	7022.4	15	9	2005	1:30	89	17.7	30.95	5.8	31.91	1
38	77	4217.1	7021.7	15	9	2005	2:24	86	17.5	30.97	5.9	31.93	6
39	79	4218.9	7011.3	15	9	2005	4:18	54	18.0	30.94	6.0	31.82	1
40	79	4200.4	6559.4	20	9	2005	17:47	102	17.0	31.93	8.5	33.97	1
41	80	4218.0	6559.4	20	9	2005	19:47	243	14.2	31.65	8.6	35.00	15
42	81	4218.1	6613.1	20	9	2005	21:17	229	16.4	31.77	9.1	35.12	6
43	82	4200.4	6613.4	20	9	2005	23:36	84	16.2	31.74	8.0	33.00	5
44	83	4200.3	6626.5	21	9	2005	0:48	87	16.5	31.66	8.1	32.80	7
45	85	4218.0	6626.3	21	9	2005	6:11	270	16.2	31.73	8.4	35.02	4
47	87	4200.2	6639.8	21	9	2005	9:48	72	14.8	31.86	10.6	32.34	2
48	88	4200.2	6653.2	21	9	2005	11:11	58	15.0	31.91	13.1	32.07	9
49	89	4211.8	6653.2	21	9	2005	12:41	204	16.3	31.72	7.8	34.97	5
50	91	4218.2	6653.5	21	9	2005	16:47	297	15.8	32.02	7.7	35.00	5
51	92	4217.9	6706.6	21	9	2005	18:12	288	15.0	32.15	7.7	35.02	4
52	93	4202.5	6706.5	21	9	2005	20:06	54	16.4	31.84	13.3	32.09	3
53	94	4157.4	6720.0	21	9	2005	21:30	52	15.8	32.02	15.0	32.05	1
54	95	4206.4	6719.2	21	9	2005	22:47	66	16.0	31.86	6.2	32.94	7
55	97	4250.0	6720.3	22	9	2005	5:24	208	15.0	32.34	8.7	34.78	4
56	98	4250.0	6733.6	22	9	2005	6:35	219	15.8	32.11	7.8	34.50	6
57	99	4238.0	6733.9	22	9	2005	8:11	217	17.0	31.47	8.0	34.80	6
58	101	4208.3	6733.6	22	9	2005	13:41	180	17.1	31.96	8.1	34.90	2
59	103	4204.3	6736.1	22	9	2005	16:53	153	17.3	31.69	7.0	33.77	1
60	105	4157.4	6733.4	22	9	2005	19:47	45	16.3	32.02	15.1	32.05	3
61	106	4153.8	6747.1	22	9	2005	21:12	40	16.0	31.95	14.6	32.04	2
62	107	4202.7	6746.9	22	9	2005	22:23	182	17.2	31.86	7.9	34.40	6
63	108	4227.5	6746.6	23	9	2005	2:12	230	17.1	31.76	8.0	34.82	4
64	110	4240.3	6746.2	23	9	2005	6:05	175	18.1	31.37	7.8	34.58	6
65	112	4249.8	6747.0	23	9	2005	10:11	203	17.8	31.16	7.5	34.37	6
66	113	4249.9	6800.2	23	9	2005	11:36	196	17.4	31.32	7.5	34.39	5
67	114	4147.0	6800.3	23	9	2005	18:23	43	15.7	32.00	15.4	32.02	1
68	115	4142.9	6813.8	23	9	2005	19:42	30	17.1	31.90	16.2	31.97	4
69	116	4151.3	6813.8	23	9	2005	20:47	187	15.8	31.88	7.7	34.39	6
70	118	4158.5	6800.3	23	9	2005	23:47	187	16.2	31.93	7.6	34.21	3

71	120	4245.0	6814.0	24	9	2005	9:00	184	17.9	31.27	7.7	34.19	5
72	121	4250.0	6813.8	24	9	2005	10:48	190	17.3	31.28	7.5	34.18	4
74	123	4223.3	6827.4	24	9	2005	15:06	203	15.7	31.93	8.1	34.64	4
75	125	4209.1	6827.2	24	9	2005	19:42	179	17.4	31.86	7.6	34.35	3
76	127	4149.0	6825.2	25	9	2005	0:30	210	14.8	31.94	7.9	34.63	4
77	129	4115.3	6827.2	25	9	2005	6:05	56	16.6	31.84	16.4	31.84	1
78	130	4100.2	6840.6	25	9	2005	8:11	59	16.5	31.83	16.5	31.83	6
79	131	4133.6	6840.4	25	9	2005	11:48	137	16.4	31.65	5.4	32.82	1
80	133	4209.9	6840.6	25	9	2005	18:17	201	18.2	31.34	6.5	33.75	7
81	134	4210.0	6853.9	25	9	2005	19:36	170	17.8	31.19	5.8	33.34	6
82	135	4143.8	6853.9	25	9	2005	22:30	170	17.5	31.70	5.8	33.38	6
83	137	4100.1	6853.9	26	9	2005	5:30	70	15.8	31.87	11.8	32.11	6
84	138	4103.1	6907.4	26	9	2005	6:41	72	15.6	32.15	6.9	32.42	2
85	139	4122.7	6907.3	26	9	2005	9:00	158	17.5	31.53	5.6	33.19	4
86	141	4149.4	6906.9	26	9	2005	13:48	182	17.5	31.50	6.3	33.64	1
87	143	4203.4	6906.5	26	9	2005	17:53	185	18.4	31.31	6.2	33.62	3
88	145	4209.6	6907.4	26	9	2005	21:17	176	18.3	31.22	6.1	33.55	9
89	146	4210.1	6920.7	26	9	2005	22:47	193	18.2	31.30	6.3	33.69	7
90	147	4121.1	6920.8	27	9	2005	4:48	56	13.6	31.71	6.2	32.22	4
91	148	4132.1	6934.1	27	9	2005	6:24	43	16.2	31.50	6.8	31.88	7
92	149	4210.0	6934.2	27	9	2005	10:36	238	17.4	31.02	7.1	34.18	3
93	150	4209.8	6947.7	27	9	2005	12:00	166	15.7	31.08	6.4	33.61	8
94	151	4142.9	6947.6	27	9	2005	15:06	56	15.6	31.33	5.8	32.31	3
95	152	4318.1	6952.4	28	9	2005	1:00	181	14.6	31.24	6.4	33.76	3
96	153	4318.0	6959.8	28	9	2005	1:47	140	14.7	31.35	5.8	33.23	6
97	154	4317.9	7014.9	28	9	2005	5:35	89	13.6	31.35	6.4	32.48	5
98	156	4313.1	7005.3	28	9	2005	7:30	164	14.3	31.32	5.9	33.37	5
99	158	4307.8	6952.7	28	9	2005	11:23	180	15.1	31.26	6.8	33.99	2
100	159	4308.0	7022.1	28	9	2005	13:41	90	13.1	31.28	6.2	32.52	9
101	160	4303.1	7012.3	28	9	2005	15:30	174	14.6	31.29	5.7	33.16	2
102	162	4257.9	6949.7	28	9	2005	20:06	213	15.8	31.31	7.0	34.12	4
103	163	4258.0	6958.6	28	9	2005	21:06	184	16.1	31.24	7.0	34.11	2
104	165	4258.0	7008.4	29	9	2005	0:12	147	15.9	31.20	5.4	32.90	7
105	166	4258.0	7018.8	29	9	2005	2:24	157	16.2	31.24	5.5	33.02	5
106	168	4258.1	7028.0	29	9	2005	5:18	65	14.5	31.20	6.3	32.22	5
107	169	4253.1	7025.2	29	9	2005	6:41	164	15.7	31.28	5.4	32.84	4
109	172	4159.6	6706.6	4	10	2005	18:47	55	15.1	31.94	14.5	31.96	1

110	173	4250.4	6753.0	5	10	2005	1:47	200	17.2	31.39	7.6	34.42	4
111	174	4246.6	6800.7	5	10	2005	2:47	205	16.8	31.87	7.6	34.39	3
112	175	4156.4	6715.6	5	10	2005	9:23	56	15.3	31.95	15.3	31.95	2
113	176	4152.1	6723.3	5	10	2005	10:23	57	15.8	31.95	15.7	31.95	4
114	177	4243.6	6808.3	5	10	2005	16:47	185	16.9	31.53	7.6	34.28	2
115	178	4239.7	6816.4	5	10	2005	17:47	196	17.6	31.32	7.8	34.37	4
116	179	4159.9	6741.7	5	10	2005	22:42	55	16.5	31.57	6.8	32.56	4
117	180	4143.4	6749.3	6	10	2005	0:41	29	16.1	31.91	16.1	31.92	6
118	181	4234.4	6834.3	6	10	2005	7:18	209	17.5	31.23	7.9	34.55	1
119	182	4231.8	6843.0	6	10	2005	8:18	182	17.1	31.22	7.2	34.09	4
120	183	4143.2	6880.0	6	10	2005	14:23	31	16.1	31.87	16.1	31.88	2
121	184	4216.9	6829.5	6	10	2005	18:36	177	17.2	31.89	6.3	33.58	7
122	185	4142.9	6759.9	7	10	2005	0:06	29	16.1	31.78	15.5	31.90	6
123	186	4216.8	6829.6	7	10	2005	6:11	175	17.8	31.34	6.2	33.56	2
124	187	4142.9	6800.1	7	10	2005	12:36	31	15.7	31.84	15.2	31.92	4
125	191	4151.5	6807.4	7	10	2005	19:23	145	17.4	31.66	7.4	33.85	1
126	193	4208.2	6823.1	8	10	2005	0:00	184	17.6	31.91	7.3	34.06	3













