Northeast Fisheries Science Center
Woods Hole Laboratory
Woods Hole, MA 02543-1026

June 16, 2003

MEMORANDUM FOR: David Mountain
Jerry Prezioso
Carolyn Griswold

FROM: Maureen Taylor (ext 2306)

SUBJECT: DEL0305 ECOMON Survey

CTD data from the June ECOMON survey, DEL0305, have been processed and are now available in the following locations:

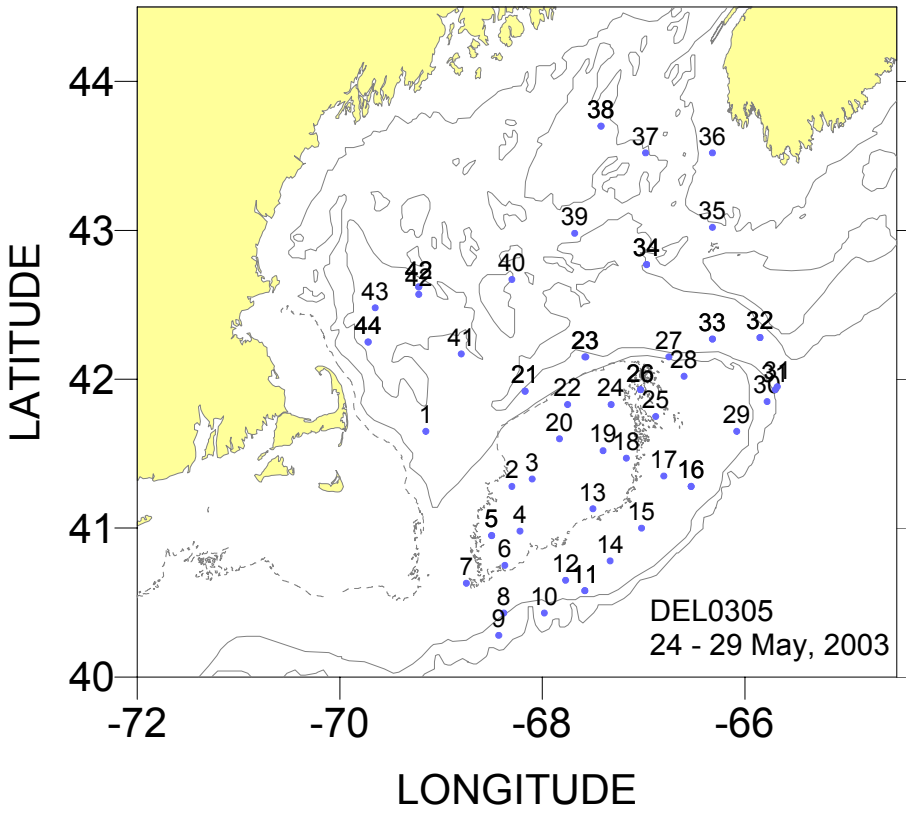
* whsun2: /ftp/pub/hydro/del0305.dat (ASCII NODC file)
(and in /data4/hydro)

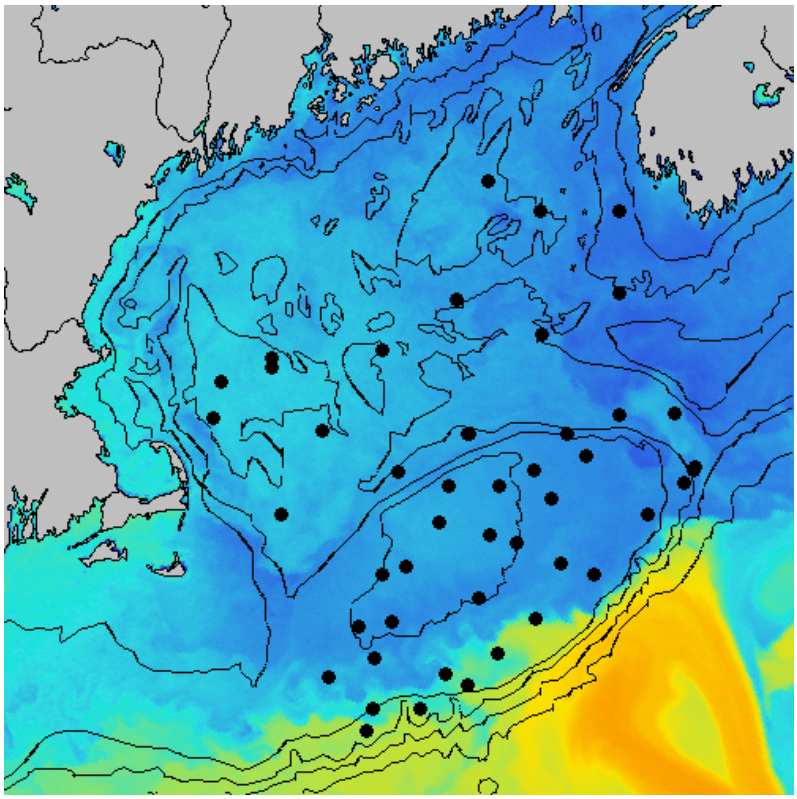
* ORACLE Tables: hydro_cruise, hydro_event, hydro_data

* del0305.pdf (distributed via email)

There were a total of 58 casts successfully completed including 19 salinity calibration samples. In addition, 55 chlorophyll and nutrient samples were taken from the surface and bottom on Georges Bank, and from the surface, mid-depth and bottom in the Gulf of Maine. Jay O'Reilly will analyze the extracted chlorophyll readings and David Townsend (University of Maine) will process the nutrient samples. When the chlorophyll values are available, I will compute the regression for extracted chlorophyll and fluorometer voltage and append to this document.

Please let Cristina Bascuñán or me know if you have any questions concerning this data and for future cruise needs.


LATITUDE
LONGITUDE
44
43
42
41
40
-72
-70
-68
-66
DEL0305
24 - 29 May, 2003

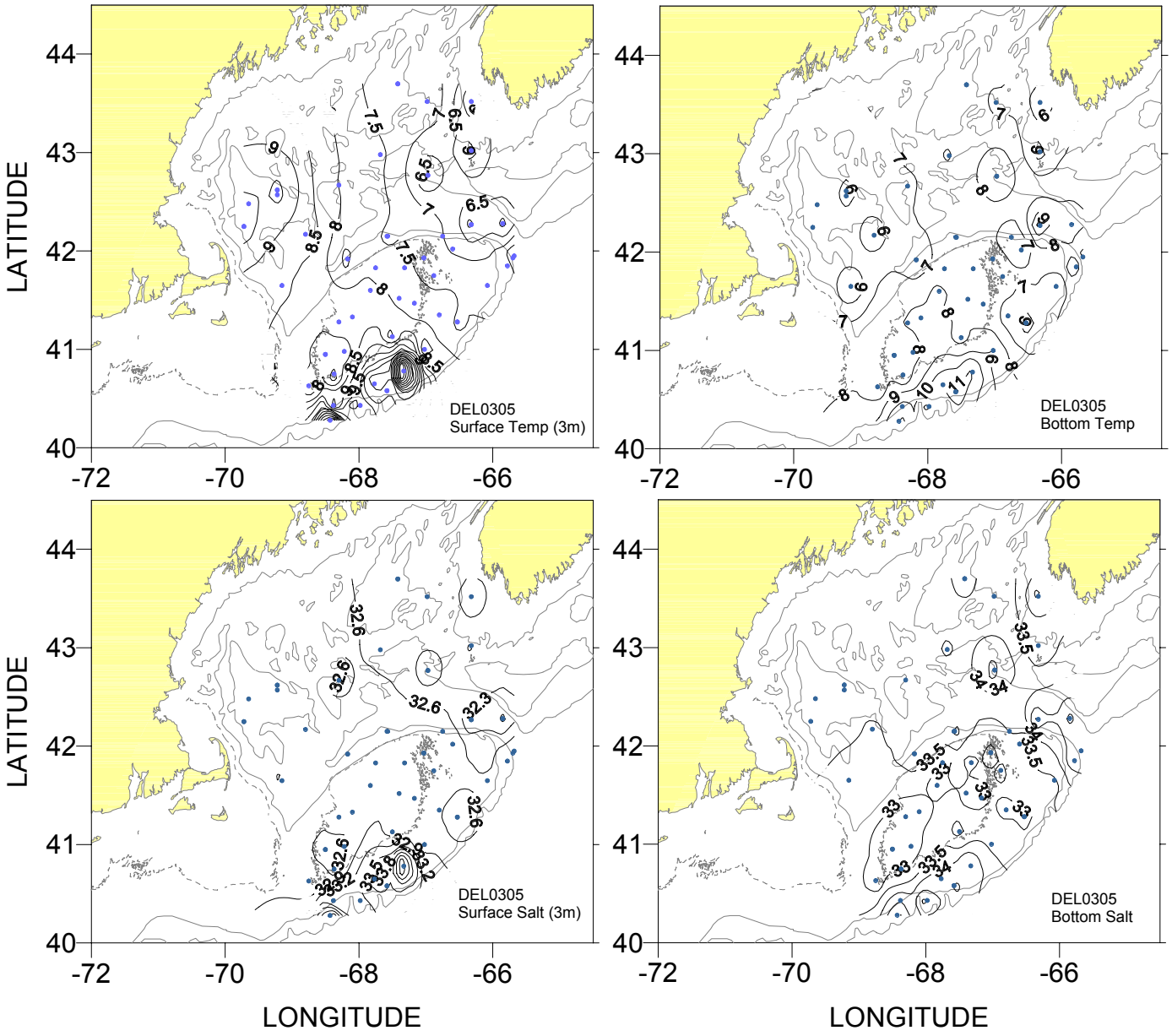


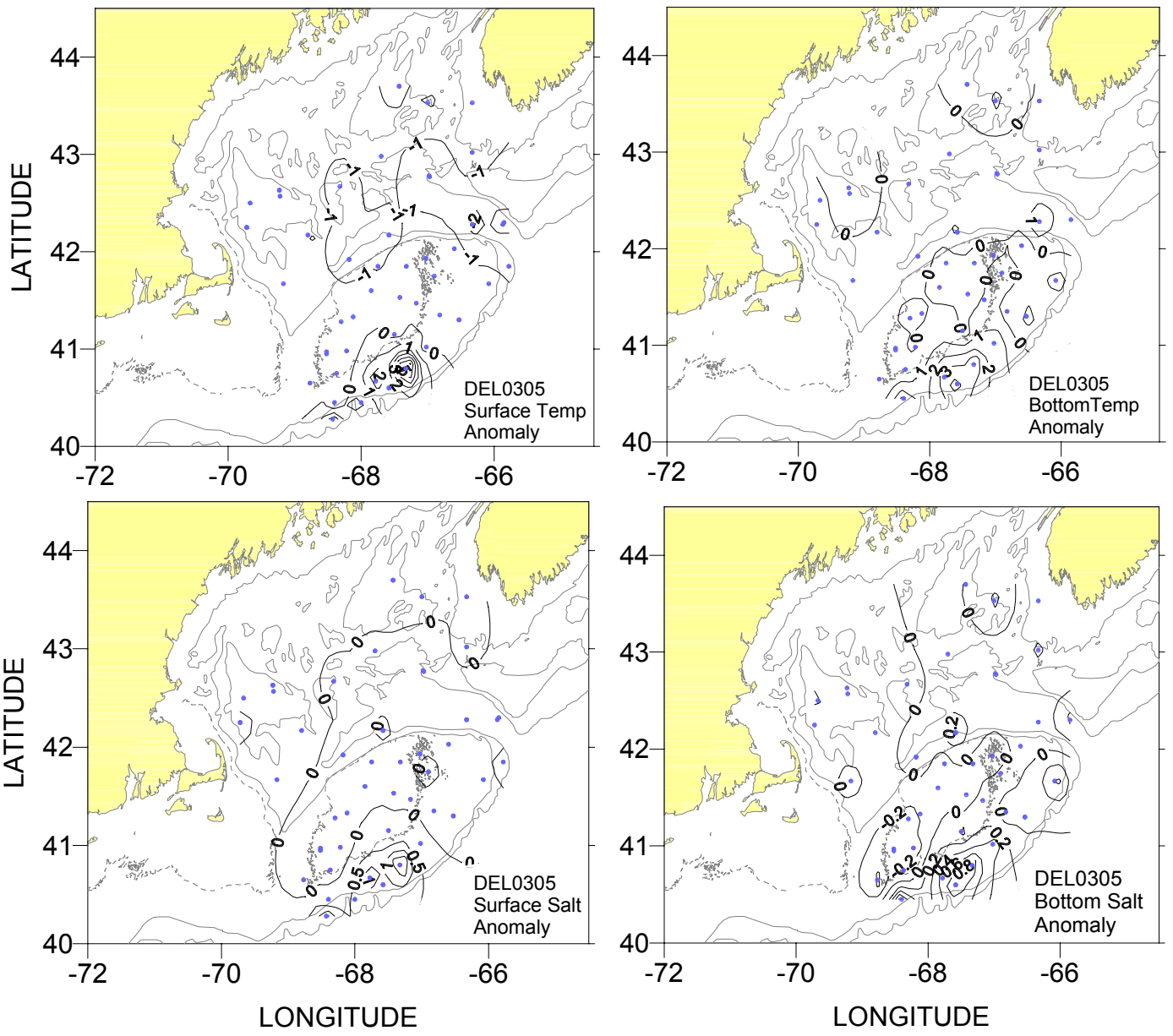
Areal average surface and bottom temp / salt and anomalies for June ECOMON survey DEL0305.

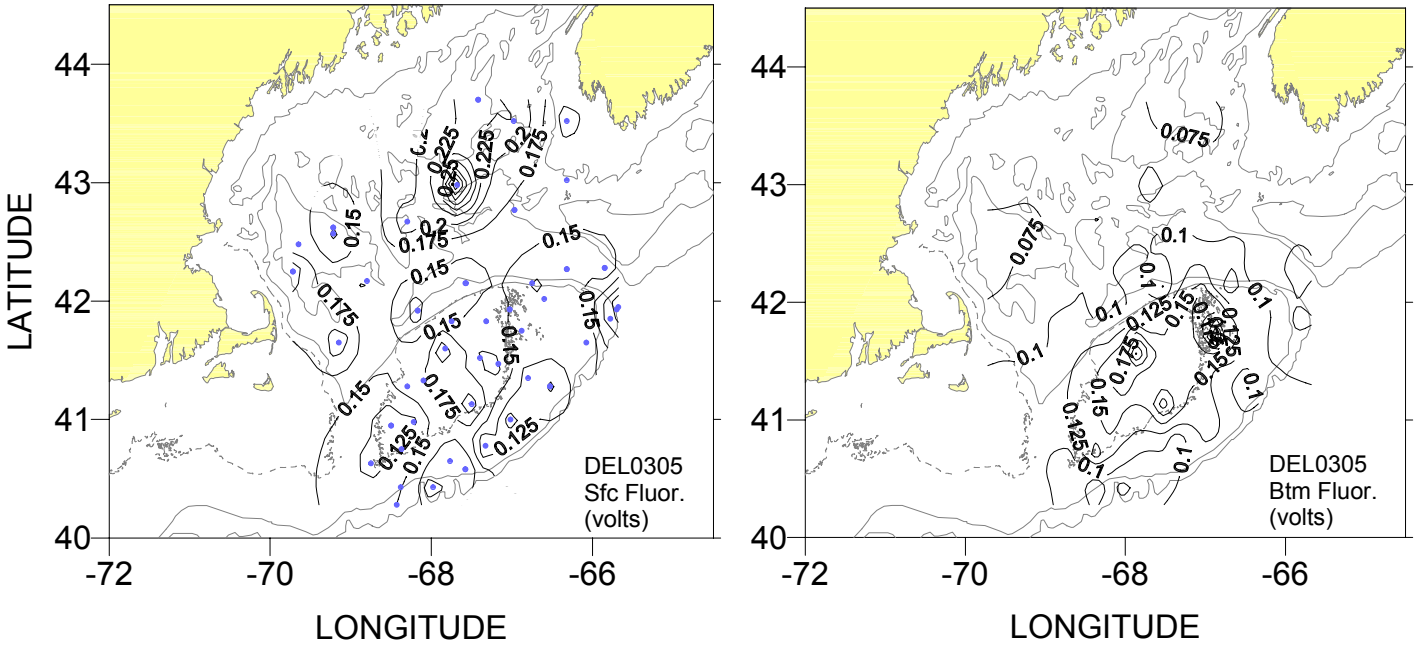
		SURFACE					BOTTOM				
CRUISE	CD	#obs	T / S	Anomaly	SDV1	SDV2	#obs	T / S	Anomaly	SDV1	SDV2 (1)
						Gulf of Maine West					
DE0305	147	11	8.92	-0.83	0.38	.80*	9	5.98	-0.01	0.31	.42*
DE0305	147	11	32.70	0.24	0.15	.30*	9	33.72	-0.06	0.10	.14*
						Gulf of Maine East					
DE0305	147	14	6.68	-1.06	0.27	0.91	13	7.33	0.20	0.35	0.83
DE0305	147	14	32.38	0.00	0.16	0.23	13	33.93	0.08	0.11	0.20
						Georges Bank					
DE0305	147	31	8.50	0.02	0.24	2.01	29	8.01	0.51	0.28	1.70
DE0305	147	31	32.91	0.06	0.08	0.65	29	33.13	0.02	0.10	0.45

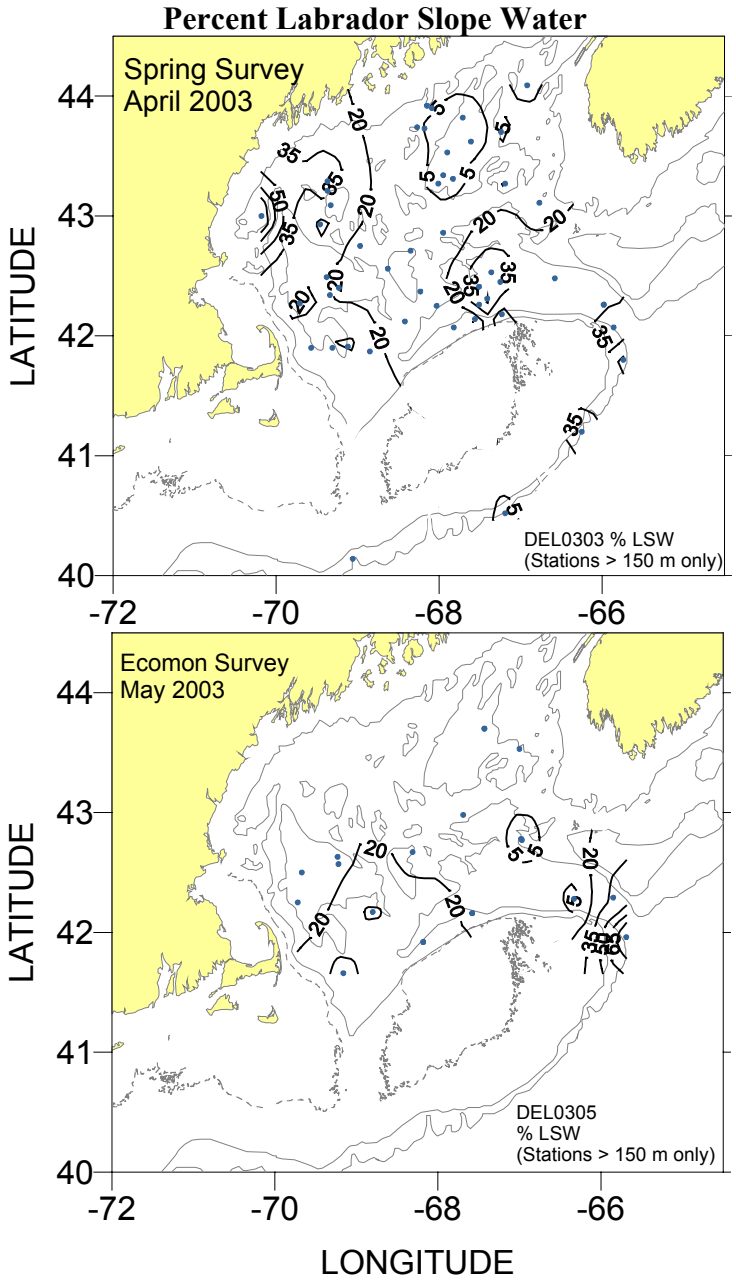
(1) "CRUISE", the code name for a cruise: "CD", the calendar mid-date of all the stations within a region for a cruise: "# obs", the number of observations included in each average: "T / S", the areal average temp / salt: "Anomaly", the areal average temp/salt anomaly: "SDV1", the standard deviation associated with the average temp/salt anomaly: "SDV2", the standard deviation of the individual anomalies from which the average anomaly was derived.

(*) 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.

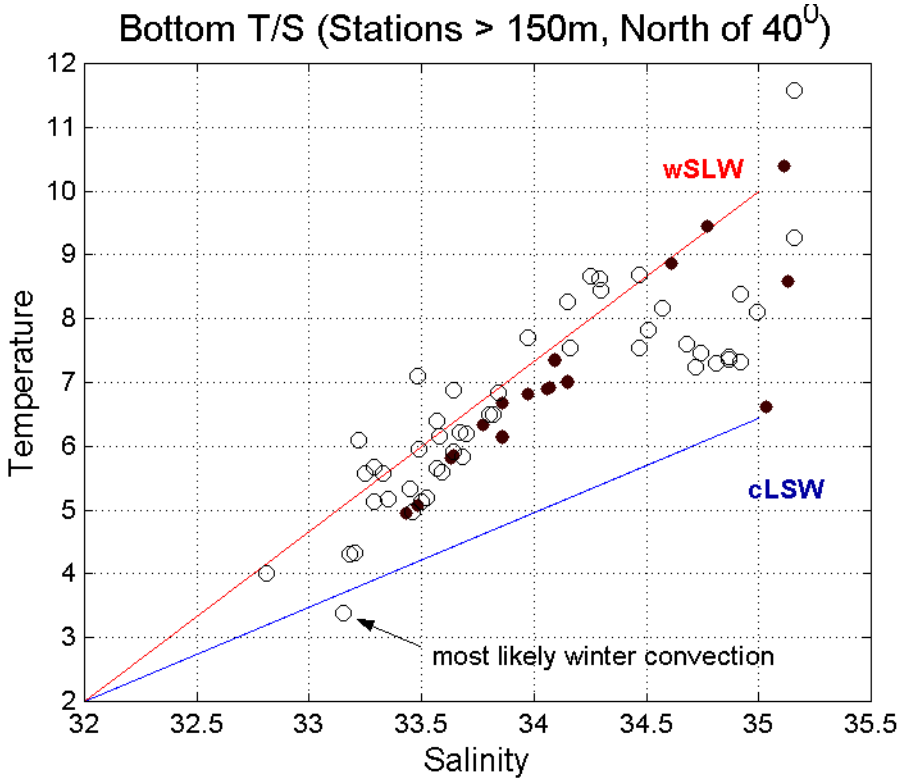

LATITUDE
LONGITUDE
44
43
42
41
40
-72
-70
-68
-66
DEL0305
Surface Temp (3m)
DEL0305
Bottom Temp
DEL0305
Surface Salt (3m)
DEL0305
Bottom Salt


LATITUDE
LONGITUDE
44
43
42
41
40
-72
-70
-68
-66
DEL0305
Surface Temp
Anomaly
DEL0305
BottomTemp
Anomaly
DEL0305
Surface Salt
Anomaly
DEL0305
Bottom Salt
Anomaly


LATITUDE
44
43
42
41
40
-72
-70
-68
-66
LONGITUDE
DEL0305
Sfc Fluor.
(volts)
0.225
0.2
0.175
0.15
0.125
LONGITUDE
DEL0305
Btm Fluor.
(volts)
0.075
0.1
0.125
0.15
0.175



Note: Percent LSW distributions in the western GOM during the spring survey are suspect since the colder temperatures are likely a result of deep wintertime (vertical) convection rather than lateral advection.



The T/S mixing lines for warm slope water (wSLW) and cold Labrador slope water (cLSW), mixed with cold (2 deg), fresh (32 psu) Scotian Shelf water.
Spring survey = open circles, Ecomon survey = filled circles

DEL0305 Spring Ecomon Survey

24 - 29 May, 2003

Cast #	Sta #	Lat	Long	Day	Mo	Yr	Time (GMT)	Btm Depth	Sfc Temp	Sfc Salt	Btm Temp	Btm Salt	Meters from Bottom
1	1	4139.5	6909.5	24	5	2003	21:49	170	8.54	32.53	4.93	33.41	2
2	2	4117.2	6818.2	25	5	2003	12:04	55	8.06	32.56	8.07	32.56	6
3	3	4120.1	6806.8	25	5	2003	13:13	22	8.34	32.64	8.40	32.66	5
4	4	4059.0	6813.0	25	5	2003	15:25	55	7.55	32.47	7.51	32.48	6
5	5	4057.7	6830.5	25	5	2003	17:08	39	7.58	32.38	7.55	32.44	3
6	5	4057.4	6830.7	25	5	2003	17:19	44	7.60	32.42	7.55	32.44	5
7	6	4045.0	6822.1	25	5	2003	19:01	60	7.04	32.47	6.97	32.48	4
8	7	4038.6	6845.5	25	5	2003	21:01	62	7.45	32.56	7.25	32.61	6
9	8	4026.6	6823.7	25	5	2003	23:28	97	8.28	33.00	10.51	34.47	4
10	9	4017.0	6826.1	26	5	2003	0:49	139	15.24	35.00	11.57	35.27	4
11	10	4026.5	6759.6	26	5	2003	3:15	138	9.43	33.45	11.48	35.36	8
12	11	4035.9	6735.3	26	5	2003	5:55	94	9.97	33.51	11.71	34.59	6
13	11	4035.8	6735.4	26	5	2003	5:58	94	10.93	33.92	11.89	34.66	6
14	12	4039.5	6746.8	26	5	2003	7:07	77	12.62	34.37	10.90	34.25	4
15	13	4108.9	6730.2	26	5	2003	10:33	53	7.72	32.74	7.44	32.75	8
16	14	4047.8	6720.3	26	5	2003	13:04	89	18.17	35.55	11.76	34.75	4
17	15	4100.5	6701.4	26	5	2003	15:18	69	7.65	32.71	9.01	33.45	5
18	16	4117.5	6632.3	26	5	2003	18:27	91	7.46	32.28	5.54	32.86	1
19	16	4117.5	6632.4	26	5	2003	18:32	91	7.34	32.37	5.53	32.85	6
20	17	4121.4	6648.9	26	5	2003	20:01	71	7.96	32.61	6.50	32.81	5
21	18	4128.1	6710.1	26	5	2003	21:46	52	7.51	32.80	7.41	32.80	5
22	19	4131.6	6724.7	26	5	2003	22:57	35	7.91	32.75	7.92	32.74	6
23	20	4136.4	6750.7	27	5	2003	1:13	35	8.49	32.67	8.49	32.67	6
24	21	4155.0	6810.7	27	5	2003	4:13	205	7.33	32.63	6.17	33.85	5
25	21	4155.4	6810.9	27	5	2003	4:25	209	7.36	32.62	6.12	33.83	10
26	22	4150.6	6745.2	27	5	2003	7:07	36	7.44	32.68	7.22	32.71	3
27	23	4209.6	6734.7	27	5	2003	9:30	183	7.39	32.69	7.01	34.14	3
28	23	4209.6	6735.0	27	5	2003	9:40	185	7.43	32.69	6.99	34.12	4
29	24	4150.6	6719.4	27	5	2003	12:31	48	7.66	32.78	7.66	32.78	6
30	25	4145.1	6653.5	27	5	2003	14:38	64	7.25	32.84	7.15	32.85	4
31	26	4156.0	6702.0	27	5	2003	16:15	60	7.22	32.89	7.13	32.89	4
32	26	4156.0	6702.0	27	5	2003	16:19	57	7.14	32.89	7.12	32.89	4

Cast #	Sta #	Lat	Long	Day	Mo	Yr	Time (GMT)	Btm Depth	Sfc Temp	Sfc Salt	Btm Temp	Btm Salt	Meters from Bottom
33	27	4209.5	6645.0	27	5	2003	18:34	135	6.96	32.82	5.83	33.61	3
34	28	4201.6	6636.2	27	5	2003	20:04	77	6.92	32.87	6.35	32.96	4
35	29	4139.7	6605.1	27	5	2003	23:49	100	7.15	32.62	6.22	33.33	6
36	30	4151.4	6547.1	28	5	2003	1:51	146	7.03	32.63	8.91	34.84	6
37	31	4156.5	6542.1	28	5	2003	2:49	246	7.98	32.88	8.27	35.07	46
38	31	4157.3	6541.6	28	5	2003	3:20	243	7.99	32.88	6.61	35.03	6
39	32	4217.6	6551.1	28	5	2003	6:04	217	5.90	31.90	8.66	35.15	6
40	32	4217.4	6551.7	28	5	2003	6:16	219	5.83	31.98	9.20	35.17	20
41	33	4216.7	6619.8	28	5	2003	8:52	233	5.81	32.04	10.39	35.11	3
42	33	4216.8	6619.9	28	5	2003	9:04	233	5.87	32.03	10.39	35.11	33
43	34	4246.4	6658.4	28	5	2003	13:21	164	6.09	32.07	9.44	34.76	5
44	34	4246.7	6658.7	28	5	2003	13:31	155	5.91	32.11	8.89	34.61	5
45	35	4301.1	6619.9	28	5	2003	17:02	126	5.74	32.28	5.58	32.97	2
46	36	4331.7	6619.8	28	5	2003	20:25	70	5.57	32.14	5.26	32.36	3
47	37	4331.9	6659.8	28	5	2003	23:27	211	7.32	32.47	6.82	33.97	6
48	38	4342.0	6725.6	29	5	2003	2:01	210	7.02	32.44	7.34	34.09	5
49	38	4342.0	6725.5	29	5	2003	2:15	208	7.07	32.49	7.36	34.09	8
50	39	4259.0	6741.6	29	5	2003	6:58	184	7.56	32.54	6.92	34.07	6
51	40	4240.2	6818.8	29	5	2003	10:40	201	7.99	32.49	6.91	34.04	6
52	41	4210.2	6848.0	29	5	2003	15:04	191	8.90	32.83	5.07	33.47	6
53	42	4237.7	6913.9	29	5	2003	18:21	222	9.59	32.80	5.85	33.64	2
54	42	4237.7	6913.8	29	5	2003	18:32	222	9.61	32.82	5.68	33.60	21
55	42	4234.2	6913.2	29	5	2003	19:02	218	9.62	32.81	5.81	33.63	2
56	43	4229.9	6939.9	29	5	2003	21:22	250	9.67	32.64	6.66	33.86	5
57	44	4215.1	6943.1	29	5	2003	23:12	217	9.84	32.71	6.33	33.76	6
58	44	4215.3	6943.0	29	5	2003	23:25	227	9.72	32.79	6.09	33.70	29