

CRUISE REPORT

C243

SCIENTIFIC ACTIVITIES

Rockland ME-Bequia-St. Croix USVI

October 12-November 19, 2012

SSV Corwith Cramer

SEA Semester®



Sea Education Association
Woods Hole, Massachusetts

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To obtain unpublished data, contact the Chief Scientist or SEA data archivist:

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Data Description

This cruise report provides a record of data collected aboard the SSV *Corwith Cramer* during Cruise C243 (U.S. State Department Cruise 12-047). The cruise track of C243 (Figure 1, Table 1) was a passage from Rockland Maine to Bequia, and ending in St. Croix USVI. Aspects of the western North Atlantic as recorded on C243 including currents, temperature, salinity, chlorophyll, are displayed in Figures 2-9. The cruise participants are listed in Table 2. Student projects aboard C243 are listed in Table 3.

During the six week voyage we collected samples or data at 47 discrete oceanographic stations (Appendix A), and 47 surface stations (Appendix B). Chemical properties of seawater with depth are contained in Appendix C. The CTD and Secchi disc information is listed in Appendix D and the profiles are illustrated in Appendix E. Lists of biological net samples are contained in Appendix F and McLane pump deployments in Appendix G.

Figure 1. Midnight and noon positions on SSV *Corwith Cramer* cruise 243.

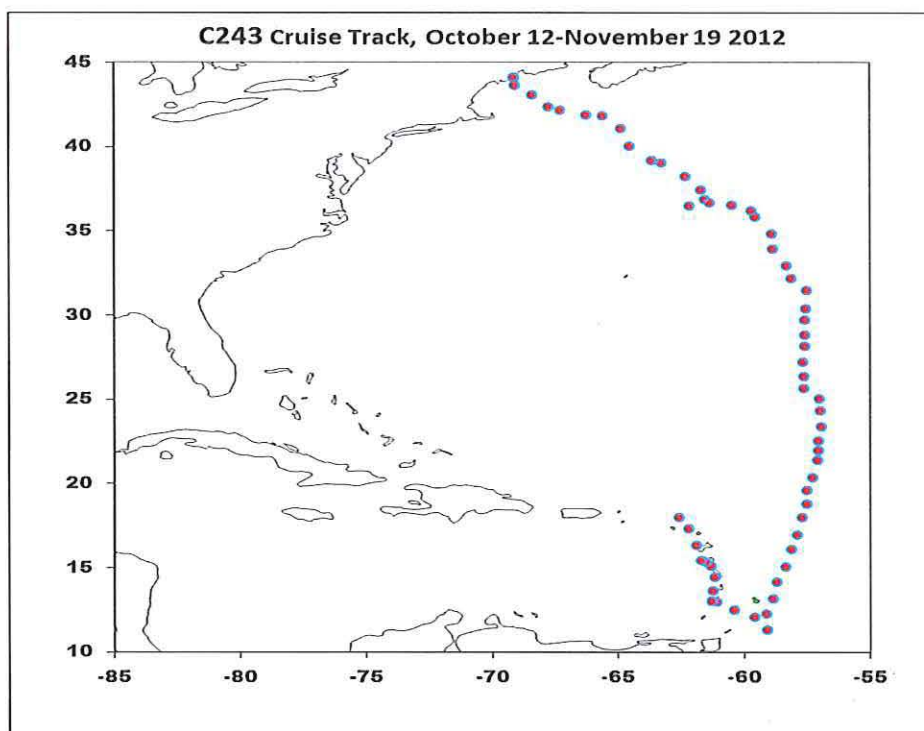


Figure 2. CTDs figured along leg 1 of C243 and used for cross sectional depiction in figures 3-8.

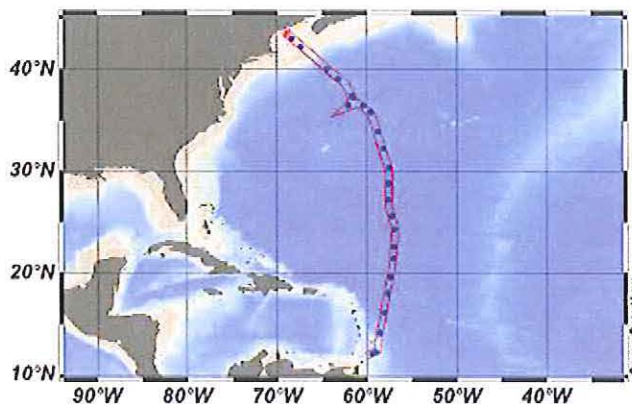


Figure 3. CTD Temperature Cross Section on C243 from the Gulf of Maine to 12°N.

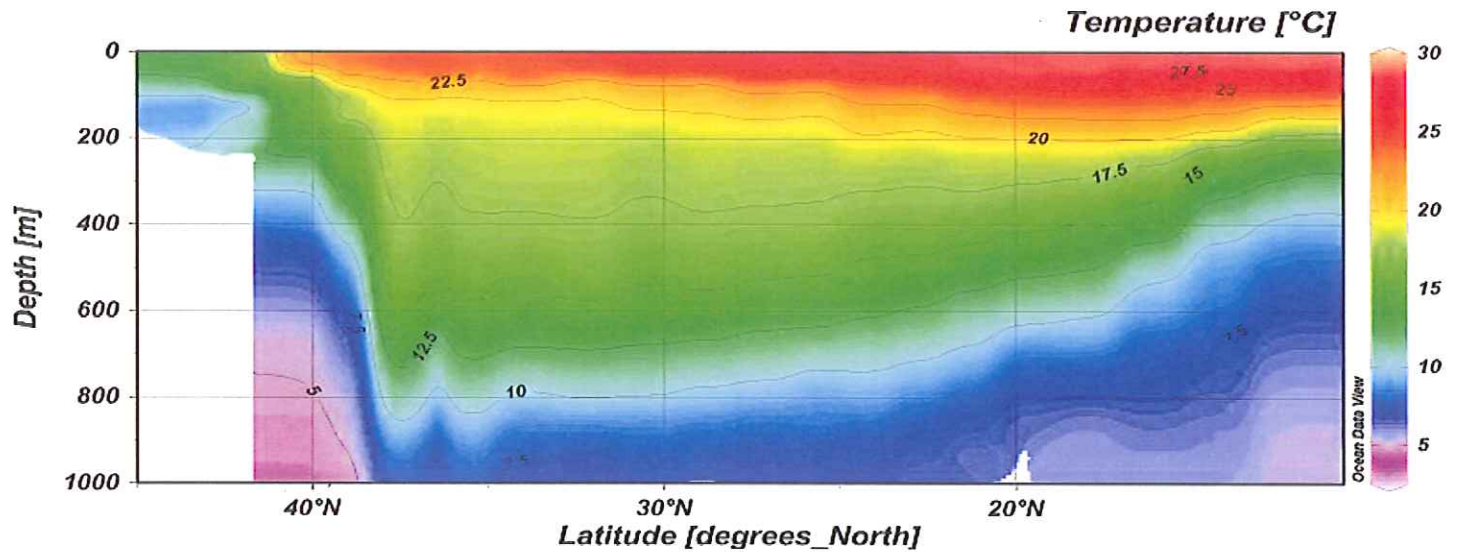


Figure 4. CTD Salinity Cross Section on C243 from the Gulf of Maine to 12°N.

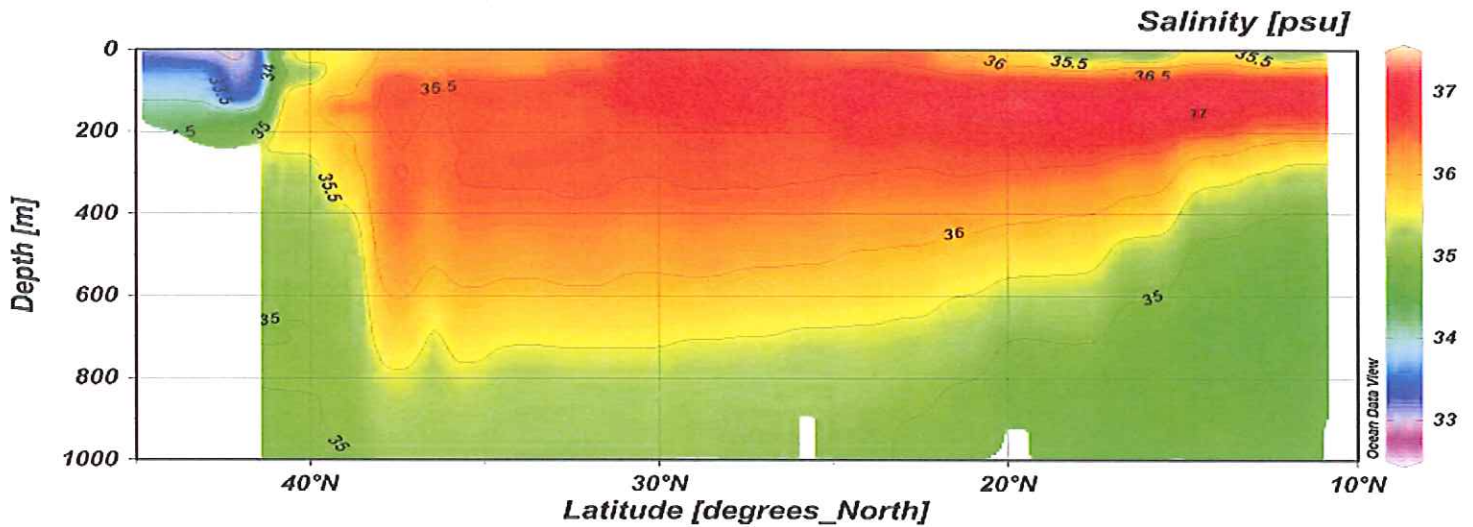


Figure 5. Density along the C243 Cruise Track from the Gulf of Maine to 12°N

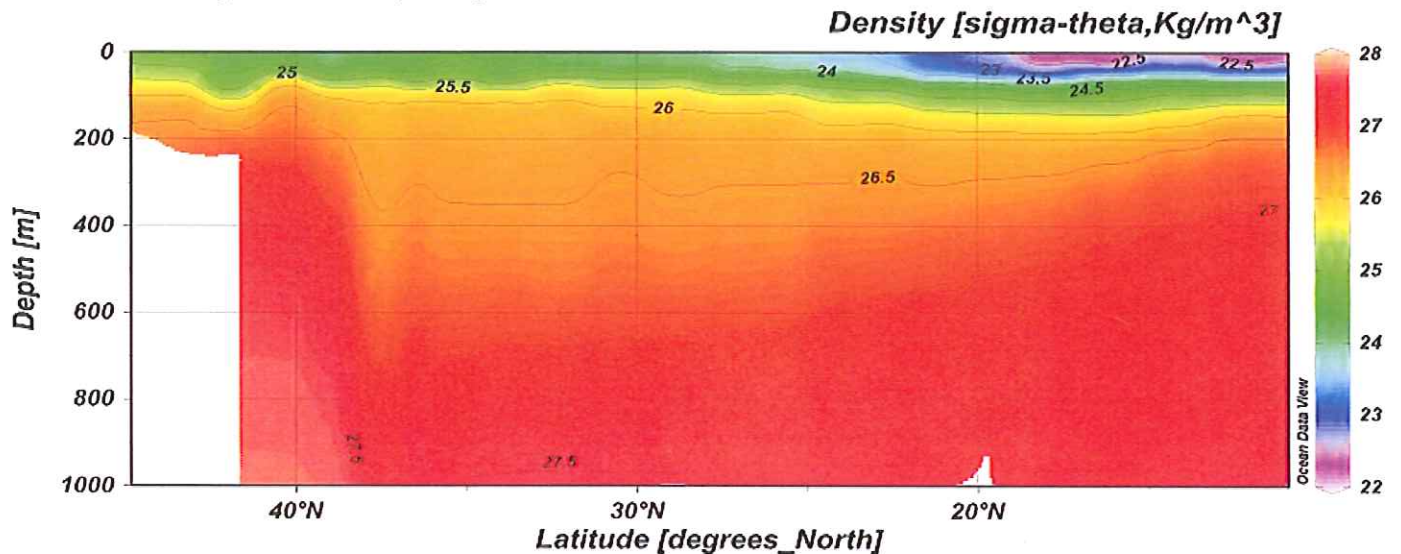


Figure 6. *In situ* Dissolved Oxygen on C243 from the Gulf of Maine to 12°N

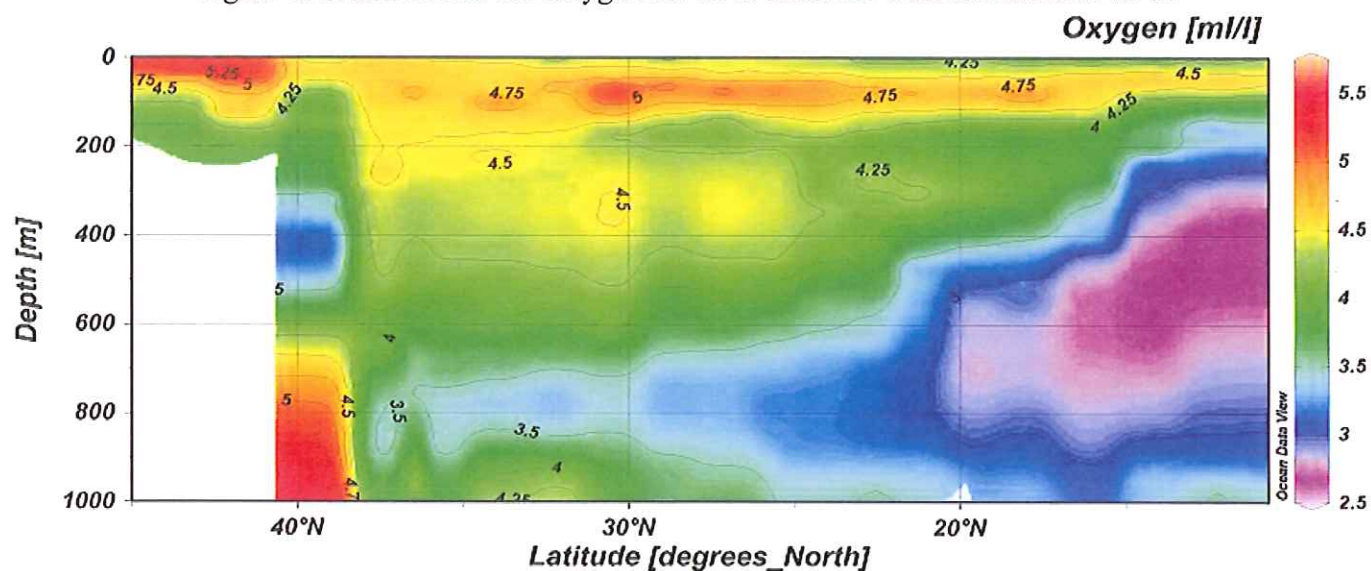


Figure 7. Saturation (%) of Dissolved Oxygen on C243 from the Gulf of Maine to 12°N

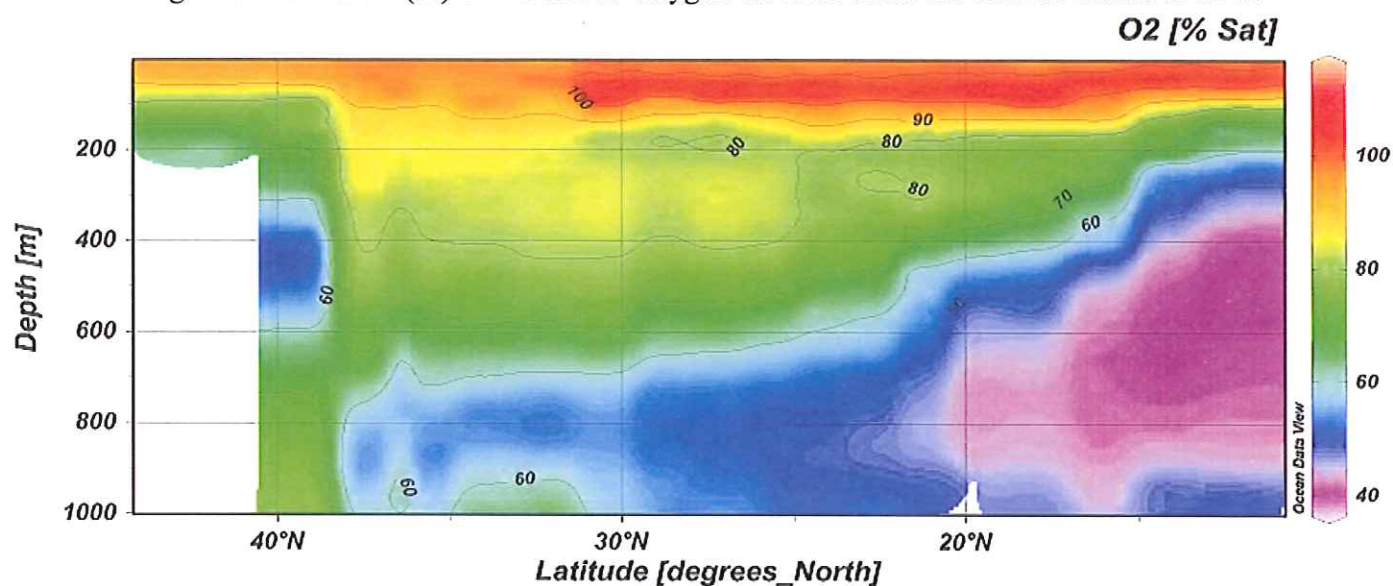


Figure 8. *In situ* Chlorophyll *a* Fluorescence on C243 from the Gulf of Maine to 12°N

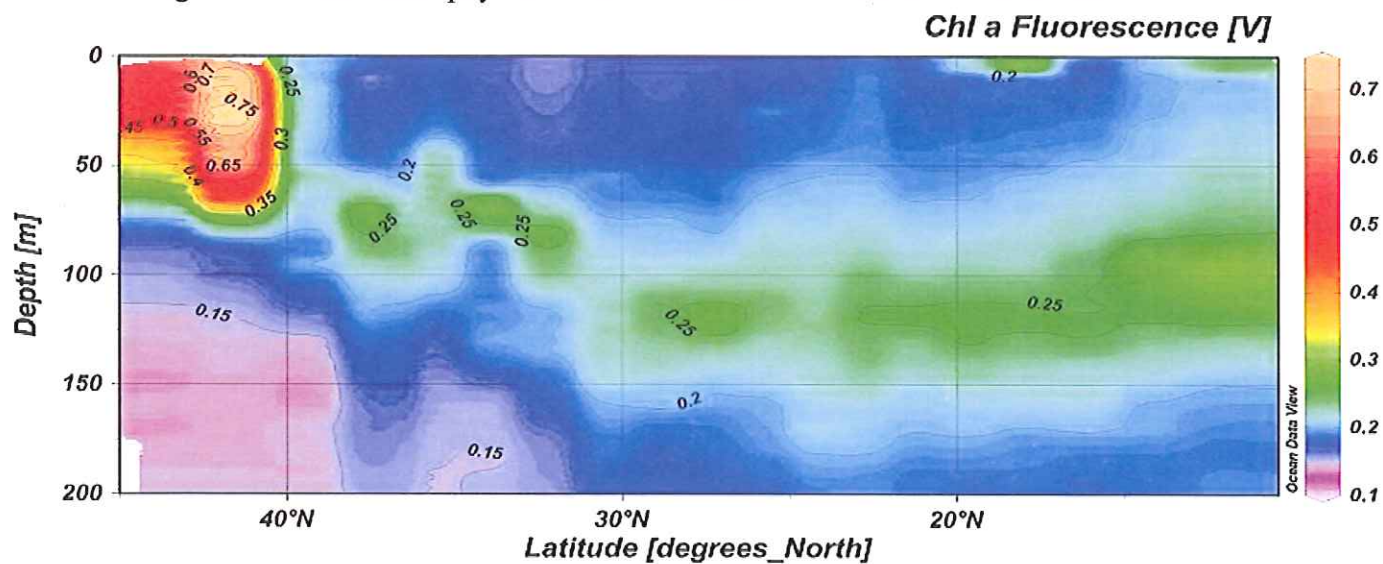


Figure 9. Surface Pump Measurements from Gulf of Maine to 11 N to Bequia
Temperature, Salinity, Chlorophyll a, CDOM, and Transmissivity. Full range on the left, expanded range on the right.

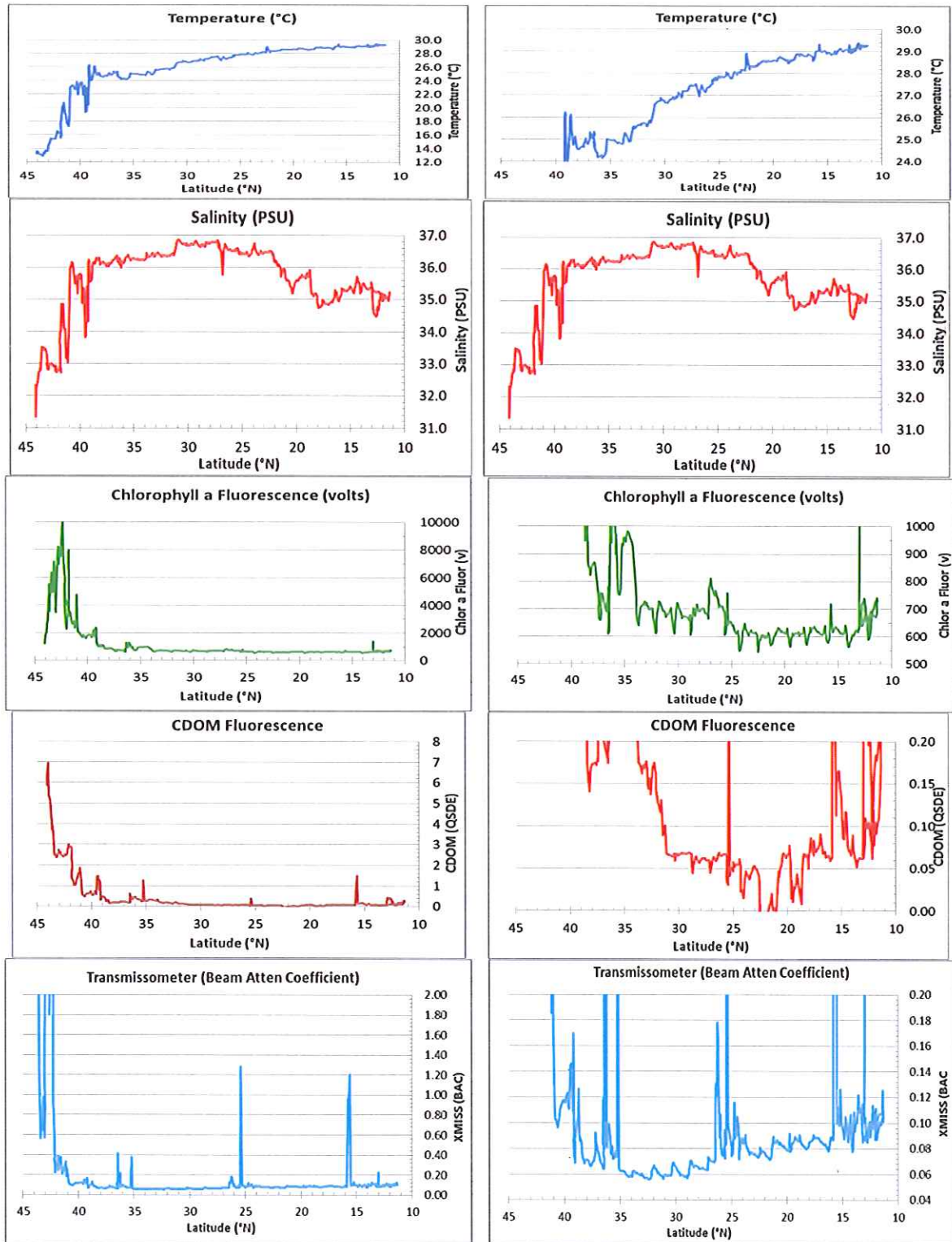


Figure 10. ADCP derived current magnitude. The easterly component of current on C243 (left) and the surface current (right)

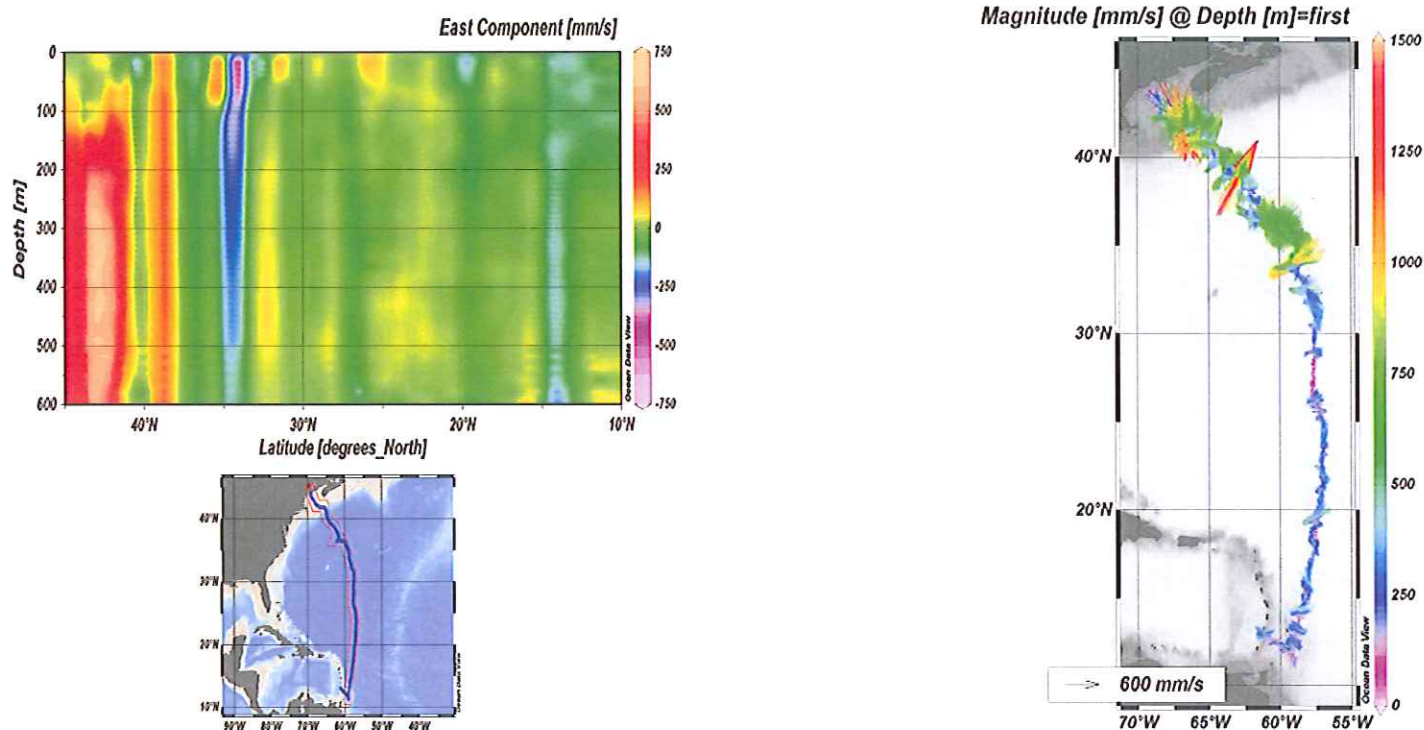


TABLE 1.
C243 Midnight and Noon Positions

DATE	TIME	LAT.	LONG.	COMMENTS
2012	(local)			
12-Oct	1200	44°5.6' N	69°6.1' W	Alongside, Rockland ME
13-Oct	0000	44°5.6' N	69°6.1' W	Alongside, Rockland ME
	1200	44°5.8' N	69°5.7' W	Anchored, Rockland ME
14-Oct	0000	43°38.8' N	69°4.9' W	
	1200	43°4.3' N	68°21.5' W	
15-Oct	0000	42°20.2' N	67°42.3' W	
	1200	42°10.1' N	67°15.4' W	
16-Oct	0000	41°52.1' N	66°13.0' W	
	1200	41°50.9' N	65°34.4' W	
17-Oct	0000	41°3.5' N	64°51.9' W	
	1200	40°2.4' N	64°29.4' W	
18-Oct	0000	39°11.3' N	63°37.8' W	
	1200	39°0.9' N	63°14.2' W	
19-Oct	0000	38°14.7' N	62°17.8' W	
	1200	37°24.6' N	61°39.3' W	
20-Oct	0000	36°51.1' N	61°30.9' W	
	1200	36°28.1' N	62°8.1' W	
21-Oct	0000	36°39.5' N	61°19.9' W	
	1200	36°31.7' N	60°27.2' W	
22-Oct	0000	36°10.9' N	59°40.7' W	
	1200	35°47.9' N	59°32.1' W	
23-Oct	0000	34°48.4' N	58°51.6' W	
	1200	33°54.7' N	58°50.2' W	
24-Oct	0000	32°56.9' N	58°18.4' W	
	1200	32°11.8' N	58°7.4' W	
25-Oct	0000	31°28.7' N	57°29.1' W	

	1200	30°22.1' N	57°31.9' W	
26-Oct	0000	29°41.9' N	57°34.8' W	
	1200	28°49.11' N	57°34.7' W	
27-Oct	0000	28°8.5' N	57°33.6' W	
	1200	27°11.2' N	57°38.9' W	
28-Oct	0000	26°20.9' N	57°35.6' W	
	1200	25°39.1' N	57°35.6' W	
29-Oct	0000	25°0.4' N	57°0.6' W	
	1200	24°19.5' N	56°56.5' W	
30-Oct	0000	23°23.4' N	56°54.2' W	
	1200	22°32.3' N	57°1.1' W	
31-Oct	0000	21°58.2' N	57°2.8' W	
	1200	21°21.9' N	57°5.0' W	
1-Nov	0000	20°21.8' N	57°15.2' W	
	1200	19°34.9' N	57°30.1' W	
2-Nov	0000	18°48.3' N	57°30.1' W	
	1200	18°0.1' N	57°40.1' W	
3-Nov	0000	16°55.2' N	57°53.0' W	
	1200	16°6.4' N	58°5.6' W	
4-Nov	0000	15°2.5' N	58°19.3' W	
	1200	14°7.5' N	58°40.0' W	
5-Nov	0000	13°9.1' N	58°50.7' W	
	1200	12°14.1' N	59°7.2' W	
6-Nov	0000	11°19.8' N	59°3.5' W	
	1200	12°2.6' N	59°33.0' W	
7-Nov	0000	12°30.7' N	60°21.4' W	
	1200	12°57.8' N	61°4.0' W	
8-Nov	0000	13°0.4' N	61°14.7' W	Anchored, Bequia
	1200	13°0.4' N	61°14.7' W	Anchored, Bequia
9-Nov	0000	13°0.4' N	61°14.7' W	Anchored, Bequia
	1200	13°0.4' N	61°14.7' W	Anchored, Bequia
10-Nov	0000	13°0.4' N	61°14.7' W	Anchored, Bequia
	1200	13°0.4' N	61°14.7' W	Anchored, Bequia
11-Nov	0000	13°0.4' N	61°14.7' W	Anchored, Bequia
	1200	13°38.2' N	61°13.7' W	
12-Nov	0000	14°24.5' N	61°8.7' W	
	1200	15°6.6' N	61°16.3' W	
13-Nov	0000	15°18.7' N	61°28.2' W	
	1200	15°26.4' N	61°40.2' W	
14-Nov	0000	16°18.9' N	61°51.3' W	
	1200	17°17.8' N	62°11.0' W	
15-Nov	0000	17°58.1' N	62°33.2' W	
	1200	17°55.4' N	62°52.3' W	Anchored, Anse de Colombier St. Barthelemy
16-Nov	0000	18°1.4' N	63°13.1' W	
	1200	18°54.9' N	63°29.6' W	
17-Nov	0000	18°26.7' N	64°16.3' W	
	1200	18°21.5' N	64°46.6' W	
18-Nov	0000	18°21.8' N	64°44.9' W	Anchored, Francis Bay St. John USVI
	1200	18°21.8' N	64°44.9' W	
19-Nov	0000	18°22.0' N	64°45.6' W	
	1200	17°44.8' N	64°41.9' W	Alongside, Christiensted St. Croix USVI

Table 2. Ship's Complement for SSV *Corwith Cramer* Cruise C243

Nautical Staff

Terry Hayward	Captain
Molly Eddy	Chief Mate
Colleen Allard	2 nd Mate
Dan Stone	3 rd Mate
Don Collasius	Engineer
Rob Emmet	Steward

Scientific Staff

Chuck Lea	Chief Scientist
Maia Theophanis	First Assistant Scientist
Julia Twitchell	Second Assistant Scientist
Liann Correia	Third Assistant Scientist

Deck Hands

Daniel Roche
Becca Goldman
Ryan "Peaches" Loftus

Visitors

Nansha Medard	St. Lucian Observer
Alanna Mitchell	Canadian Journalist

Students

Jack Bethel	Cornell College
Katherine George	Warren Wilson College
Caitlyn Hackmann	University of Rhode Island
Allison Hall	Roger Williams University
Duncan Harvey	Middlebury College
Christina Maruyama	Colorado College
Alice McBride	Cornell University
Aaron Milstein	Northern Essex Community College
Stephanie Mygas	Rowan University
Eli Niebuhr	University of Redlands
Michelle Opela	Cornell University
Elizabeth Ruiz	Vassar College
Georgina Stone	University of Redlands
Elizabeth Urban	Rollins College
Sonja 'Ali' Uribe	Dartmouth College

Table 3. Student Projects Aboard C243.

Myctophid species distribution in the Sargasso Sea and the 15 degree C isotherm	Elizabeth Ruiz
The Distribution and Structure of North Atlantic Eddies	Duncan Harvey
The Identification of Water Masses and the North Atlantic Oscillation Along the C-243 Cruise Track	Caity Hackmann and Eli Niebuhr
Age and distribution of <i>Sargassum natans</i> and <i>fluitans</i> in the North Atlantic	Stephanie Mygas and Michelle Opela
A Study of Distribution of <i>Trichodesmium</i> in the Southern Sargasso Sea and the Caribbean	Katherine George and Aaron Milstein
Abundance and Distribution of Macro plastic and Micro plastic in the North Atlantic	Christina Maruyama and Alexandra Uribe
Leptocephali larvae distribution in the Western North Atlantic	Allison Hall and Georgina Stone
Sessile Epibiont Variety and Abundance as a Method of Correlating <i>Sargassum</i> Age and Geographic Location in the Sargasso Sea	Elizabeth Urban

APPENDIX A

STATION INFORMATION SUMMARY OF C243

STATION	DATE	TIME	LAT.	LONG.	GENERAL LOCALE	EQUIPMENT	Surface Station
C243		(Local)	(°N)	(°W)			SS-001
001	10/14	0037	43°38.9' N	69°4.8' W	Shelf/Gulf of ME	Neuston net	
002	10/14	1013	43°3.2' N	68°23.1' W	Shelf/Gulf of ME	Phytoplankton net Secchi Disc CTD	
003	10/15	0856	42°11.9' N	67°27.7' W	Shelf/Gulf of ME	Phytoplankton net Secchi Disc CTD	SS-003
004	10/17	0950	40°5.3' N	64°31.9' W	Slope Water	Secchi Disc CTD	SS-004
005	10/18	0040	39°11.7' N	63°35.8' W	Slope Water	Neuston net	SS-005
006	10/18	0933	39°2.5' N	63°15.7' W	Slope Water	Phytoplankton net Secchi Disc CTD Niskin Bottles Neuston net	006-HC #13
007	10/18	2150	38°22.9' N	62°24.8' W	Gulf Stream	Meter net	
008	10/19	0007	38°14.5' N	62°17.4' W	Gulf Stream	Neuston net	SS-006
009	10/19	0931	37°26.4' N	61°39.6' W	North Sargasso Sea	Phytoplankton net Secchi Disc CTD Neuston net	SS-007
010	10/19	1618	37°13.6' N	61°31.1' W	North Sargasso Sea	CTD	010-HC #13

011	10/20	0032	36°51.5' N	61°32.0' W	North Sargasso Sea	Niskin Bottles	SS-008
012	10/20	0950	36°26.3' N	62°4.5' W	North Sargasso Sea	Neuston net	012-HC #13
						Phytoplankton net	
						Secchi Disc	
						CTD	
						Niskin Bottles	
						Neuston net	
013	10/20	2143	36°33.3' N	61°15.4' W	North Sargasso Sea	Meter nets (1m:333; 2m)	SS-009
						Neuston net	
014	10/21	0920	36°26.9' N	60°27.8' W	North Sargasso Sea	Phytoplankton net	SS-010
						Secchi Disc	
						CTD	
						Neuston net	
015	10/22	0007	36°10.6' N	59°40.8' W	North Sargasso Sea	Neuston net	SS-011
016	10/22	0933	35°49.2' N	59°36.7' W	North Sargasso Sea	Phytoplankton net	SS-012
						Secchi Disc	
						CTD	
017	10/22	1142	35°48.2' N	59°32.9' W	North Sargasso Sea	Neuston net	
018	10/23	0930	33°55.7' N	58°49.1' W	North Sargasso Sea	Phytoplankton net	SS-014
						Secchi Disc	
						CTD	
						Neuston net	
019	10/24	0006	32°56.9' N	58°18.4' W	North Sargasso Sea	Neuston net	SS-015
020	10/24	0948	32°23.0' N	58°9.5' W	North Sargasso Sea	Phytoplankton net	SS-016
						Secchi Disc	
						CTD	
						Neuston net	
021	10/24	2202	31°37.5' N	57°29.1' W	North Sargasso Sea	Meter net (2m)	
022	10/25	0000	30°23.9' N	57°32.2' W	North Sargasso Sea	Neuston net	SS-017
023	10/25	0929	30°23.9' N	57°32.2' W	South Sargasso Sea	Phytoplankton net	SS-018
						Secchi Disc	
						CTD	
						Meter net (200)	
						Neuston net	
024	10/26	0008	29°41.5' N	57°34.8' W	South Sargasso Sea	Neuston net	SS-019
025	10/26	0909	28°50.0' N	57°37.7' W	South Sargasso Sea	Phytoplankton net	025-HC #13
						Secchi Disc	
						CTD	
						Niskin Bottles	
						Meter net (1m:200)	
						Neuston net	
026	10/27	0000	28°8.6' N	57°33.6' W	South Sargasso Sea	Neuston net	SS-020
027	10/27	0858	27°9.9' N	57°39.3' W	South Sargasso Sea	Phytoplankton net	SS-021
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
028	10/28	0900	25°35.7' N	57°15.1' W	South Sargasso Sea	Phytoplankton net	SS-022
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
029	10/28	2127	24°59.4' N	57°2.7' W	South Sargasso Sea	Meter nets (1m:333; 2m)	SS-023
030	10/29	0844	24°19.9' N	56°58.8' W	Transition Zone	Phytoplankton net	SS-024

						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
031	10/30	0046	23°12.9' N	56°54.3' W	Transition Zone	Neuston net	SS-025
032	10/30	0900	22°34.4' N	57°15.0' W	Transition Zone	Phytoplankton net	SS-026/027
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
033	10/31	0008	21°58.2' N	57°2.8' W	Transition Zone	Neuston net	SS-028
034	10/31	0900	21°25.4' N	57°4.6' W	Transition Zone	Phytoplankton net	SS-029/030
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
035	11/1	0006	20°21.1' N	57°15.2' W	Transition Zone	Neuston net	SS-031
036	11/1	0904	19°38.2' N	57°26.8' W	Transition Zone	Phytoplankton net	SS-032/036- HC#13
						Secchi Disc	
						CTD	
						Niskin Bottles	
						Meter net (1m:200)	
						Neuston net	
037	11/1	2221	18°53.9' N	57°31.3' W	Transition Zone	Meter nets (1m:333; 2m)	SS-033
038	11/2	0900	18°3.6' N	57°40.5' W	Transition Zone	Neuston net	
						Phytoplankton net	SS-034/035
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
039	11/3	0004	16°55.1' N	57°53.0' W	Transition Zone	Neuston net	SS-036
040	11/3	0911	16°9.7' N	58°5.4' W	Tropical	Phytoplankton net	SS-037/038
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
042	11/4	0908	14°10.0' N	58°36.2' W	Tropical		SS-040/041
043	11/4	2226	13°15.3' N	58°47.5' W	Tropical	Meter nets (1m:333; 2m)	SS-042
044	11/5	0909	12°16.8' N	59°4.9' W	Tropical	Phytoplankton net	044-HC #13/SS- 043
						Secchi Disc	
						CTD	
						Meter net (1m:200)	
						Neuston net	
045	11/5	2126	11°21.5' N	59°2.9' W	Tropical	Meter nets (2m)	SS-044
046	11/6	0853	12°5.8' N	59°29.8' W	Tropical	Phytoplankton net	
						Secchi Disc	SS-045/046
						CTD	
						Meter net (1m:200)	
						Neuston net	

APPENDIX B

SURFACE STATION INFORMATION S243

Station	Date	Time	Log	Latitude	Longitude	Temp.	Salinity	Chlor. <i>in vivo</i> Fluor	Chloro- <i>phyll a</i>	CDOM <i>in vivo</i> Fluor	SiO ₂	NO ₃
SS-	2012	(local)	(nm)	N	W	(°C)	(PSU)	(V)	(µg/l)	(V)	(µM)	(µM)
001	10/14	0105	N/A	43°39.5'	69°5.9'	13.0	32.87	4861.7	-	233.8	-	-
002	10/15	0001	N/A	42°20.2'	67°42.3'	15.4	32.88	6706.2	-	177.2	-	-
003	10/15	1206	N/A	42°9.8'	67°14.4'	16.5	32.74	2549.7	0.880	191.5	-	2.55
004	10/17	1046	N/A	40°4.8'	64°31.5'	23.2	35.63	1842.7	0.416	108.3	-	0.10
005	10/18	0040	74.0	39°11.5'	63°36.8'	24.5	35.90	1577.6	-	99.5	-	-
006-HC #13	10/18	1034	86.5	39°2.5'	63°15.8'	24.1	35.57	1136.8	0.243	100.5	-	-
006	10/19	0025	159.9	38°14.1'	62°16.7'	25.1	36.28	831.0	-	88.1	-	-
007	10/19	1135	208.7	37°25.9'	61°40.5'	24.8	36.11	667.0	0.125	90.9	-	*
010-HC #13	10/19	1650	226.6	37°13.7'	61°31.5'	24.8	36.09	753.8	0.106	91.3	-	-
008	10/20	0055	249.7	36°51.1'	61°33.2'	25.3	36.22	696.5	-	90.0	-	-
012-HC #13	10/20	1202	279.0	36°28.1'	62°8.2'	25.2	36.21	622.1	0.065	90.3	-	*
009	10/21	0036	307.7	36°34.3'	61°15.6'	25.2	36.27	732.6	-	90.7	-	-
010	10/21	1136	350.6	36°31.0'	60°28.7'	24.9	36.27	788.2	0.143	95.4	-	*
011	10/22	0033	HB	36°10.6'	59°40.3'	24.3	36.23	1042.6	-	98.1	-	-
012	10/22	1105	402.5	35°48.8'	59°34.4'	24.2	36.20	970.9	0.161	95.8	-	*
013	10/23	0226	-	34°34.7'	58°48.7'	24.9	36.24	964.3	-	95.1	-	-
014	10/23	1205	471.4	33°54.6'	58°50.1'	24.8	36.25	690.5	0.113	92.4	-	*
015	10/24	0012	513.9	32°56.8'	58°18.3'	25.5	36.42	714.4	-	89.5	-	-
016	10/24	1103	543.3	32°12.8'	58°9.4'	25.7	36.35	655.5	0.066	89.4	-	*
017	10/25	0015	596.6	31°27.9'	57°28.9'	25.7	36.39	685.0	-	86.7	-	-
018	10/25	1233	655.7	30°27.0'	57°31.6'	26.8	36.73	608.7	0.038	85.2	-	*
019	10/26	0018	701.8	29°41.3'	57°34.9'	26.7	36.74	673.1	-	85.6	-	-
025-HC #13	10/26	1019	756.0	28°49.5'	57°36.6'	26.9	36.64	613.9	0.047	85.1	-	-
020	10/27	0004	793.4	28°8.5'	57°33.6'	27.2	36.77	680.9	-	84.9	-	-
021	10/27	1144	855.5	27°10.8'	57°39.1'	27.5	36.68	666.1	0.045	85.0	-	*
022	10/28	1149	960.5	25°38.9'	57°12.3'	27.7	36.52	606.2	0.022	84.3	-	*
023	10/28	2320	1004.2	25°2.3'	57°1.1'	27.8	36.42	647.8	-	85.2	-	-
024	10/29	1115	1043.7	24°19.7'	56°57.4'	28.0	36.35	557.4	0.032	84.1	-	*
025	10/30	0046	1095.2	23°21.9'	56°54.3'	27.9	36.44	611.1	-	84.8	-	-
026	10/30	1057	1141.1	22°53.3'	57°1.6'	28.4	36.47	570.1	-	83.5	-	-
027	10/30	1217	1141.1	22°31.8'	57°0.7'	28.7	36.47	549.9	0.050	82.8	-	*
028	10/31	1208	1161.0	21°58.2'	57°2.8'	28.3	36.13	609.0	-	82.7	-	-
029	10/31	1102	1187.5	21°23.5'	57°5.2'	28.4	35.73	584.1	-	83.7	-	-
030	10/31	1200	1187.9	21°21.7'	57°4.9'	28.4	35.78	569.8	0.030	82.8	-	*
031	11/1	0038	1244.0	20°20.5'	57°15.2'	28.5	35.20	617.4	-	85.5	-	-
032	11/1	1016	1282.6	19°36.9'	57°28.2'	28.6	35.68	578.9	-	84.6	-	-
036-HC #13	11/1	1022	1282.6	19°36.8'	57°28.3'	28.6	35.68	576.5	0.047	84.0	3.72	-
033	11/1	2241	1328.2	18°51.7'	57°31.1'	28.6	35.77	610.9	-	83.4	-	-
034	11/2	1035	1377.5	18°2.4'	57°40.6'	28.6	34.96	585.7	-	85.5	-	-
035	11/2	1146	1378.0	18°0.8'	57°40.4'	28.7	34.97	571.2	0.038	85.4	-	*
036	11/3	0005	1442.8	16°55.2'	57°53.0'	28.8	34.88	621.3	-	86.3	3.22	-
037	11/3	1050	1484.0	16°7.8'	58°5.2'	28.9	34.97	608.9	-	85.4	2.58	-
038	11/3	1200	1484.2	16°6.3'	58°5.6'	28.9	34.97	586.5	-	85.1	-	*
039	11/4	0010	1547.4	15°2.0'	58°19.5'	29.0	35.38	632.5	-	88.3	3.13	-
040	11/4	0924	1600.9	14°9.8'	58°36.5'	28.9	35.54	595.0	-	86.3	1.85	-
041	11/4	0946	1600.9	14°9.6'	58°36.9'	28.9	35.53	588.7	0.047	85.4	-	0.0
042	11/4	2239	1661.5	13°14.0'	58°48.6'	29.1	35.34	617.8	-	85.2	2.98	-
044-HC #13	11/5	1022	1723.3	12°15.9'	59°5.8'	29.2	35.21	624.6	0.094	85.6	2.63	-
043	11/5	1115	1723.2	12°15.3'	59°6.5'	29.2	35.17	610.4	-	86.0	-	-
044	11/5	2341	1784.2	11°20.0'	59°3.5'	29.3	35.24	729.1	-	94.6	2.77	-
045	11/6	1042	1835.5	12°4.3'	59°31.6'	29.2	34.99	633.0	-	87.3	-	-
046	11/6	1145	1835.6	12°3.1'	59°32.7'	29.2	34.98	608.3	0.079	86.6	3.25	0.3
047	11/7	0020	1893.0	12°30.5'	60°21.4'	29.0	34.67	729.4	-	92.9	4.29	-

(*indicates value was below detectable limits)

APPENDIX C

C243 HYDROCAST DATA. Dash (-) indicates no value. Station locations are given in Appendix A.

STATION	BOT- TLE	DEPTH	TEMP.	SAL.	DENSITY	O ₂	O ₂	PO ₄	NO ₃	CHLOR.	CHLOR.
		(m)	(°C)	(PSU)	(σ _t)	probe (ml/l)	winkler (ml/l)	(μg/l)	(μg/l)	(μg/l)	(volts)
C243											
006	13	0	24.1	35.60	23.98	-	-	0.13	0.34	0.243	0.205
Slope Water	12	26	24.0	35.56	24.07	4.6	2.84	0.08	0.00	0.264	0.208
39°2.5' N	11	49	23.6	35.97	24.49	4.6	-	0.12	0.31	0.297	0.203
63°15.7' W	10	70	20.7	35.93	25.28	4.4	-	0.50	9.19	0.034	0.204
Secchi depth:											
26m	9	85	19.0	36.07	25.84	4.0	-	0.31	4.71	0.118	0.185
Secchi 1%= 70m	8	99	17.4	35.83	26.06	4.1	2.51	0.31	5.62	0.074	0.189
	7	149	18.4	36.56	26.36	4.1	-	0.21	4.54	0.000	0.135
	6	248	14.9	35.94	26.72	3.7	-	0.67	13.91	-	-
	5	297	13.5	35.75	26.87	3.5	-	0.84	17.54	-	-
	4	397	10.6	35.38	27.14	3.0	-	1.10	32.29	-	-
	3	497	8.4	35.16	27.33	3.3	2.13	1.25	24.47	-	-
	2	744	5.4	35.03	27.64	5.0	-	1.18	29.37	-	-
	1	892	4.9	35.01	27.70	5.4	-	0.95	26.40	-	-
010	13	0	24.9	36.10	24.23	4.6	-	0.08	2.44	0.106	0.172
N.Sargasso Sea	12	20	24.7	36.09	24.26	4.6	-	0.08	0.04	0.083	0.168
37°13.6'N	11	50	24.0	36.43	24.72	4.6	-	0.08	0.00	0.174	0.176
61°31.1'W	10	70	21.5	36.66	25.62	4.7	-	0.20	2.74	0.198	0.290
	9	89	20.4	36.64	25.90	4.6	-	0.18	2.12	0.178	0.252
	8	119	19.5	36.57	26.09	4.5	-	0.13	2.01	0.074	0.190
	7	149	19.1	36.54	26.17	4.5	-	0.14	2.85	0.043	0.178
	6	247	18.3	36.51	26.36	4.6	-	0.40	4.28	-	-
	5	297	18.2	36.55	26.41	4.5	-	0.38	6.32	-	-
	4	397	17.6	36.49	26.50	4.4	-	0.31	4.81	-	-
	3	497	16.7	36.33	26.60	4.4	-	0.65	7.80	-	-
	2	743	12.4	35.62	26.99	3.5	-	1.22	21.40	-	-
	1	894	9.2	35.24	27.27	3.3	-	1.56	34.22	-	-
025	13	0	24.9	36.10	23.97	4.5	-	0.08	2.44	0.106	0.165
S.Sargasso Sea	12	20	24.7	36.09	24.26	4.5	-	0.08	0.04	0.083	0.168
28°29.9'N	11	50	24.0	36.43	24.72	5.2	-	0.08	0.00	0.174	0.185
57°37.6'W	10	70	21.5	36.66	25.62	5.1	-	0.20	2.74	0.198	0.197
Secchi depth: 34m	9	89	20.4	36.64	25.90	4.8	-	0.18	2.12	0.178	0.208
Secchi 1%=91m	8	119	19.5	36.57	26.09	4.7	-	0.13	2.01	0.074	0.249
	7	149	19.1	36.54	26.17	4.2	-	0.14	2.85	0.043	0.206
	6	247	18.3	36.51	26.36	4.3	-	0.40	4.28	-	-
	5	297	18.2	36.55	26.41	4.4	-	0.38	6.32	-	-
	4	397	17.6	36.49	26.50	4.3	-	0.31	4.81	-	-
	3	497	16.7	36.33	26.60	4.1	-	0.65	7.80	-	-
	2	743	12.4	35.62	26.99	3.3	-	1.22	21.40	-	-
	1	894	9.2	35.24	27.27	3.5	-	1.56	34.22	-	-

036	13	0	28.6	35.68	22.7	-	-	0.15	1.09	0.047	0.215
Subtropic. to	11	25	28.5	35.68	22.75	4.4	1.95	0.13	0.00	0.033	0.185
Tropic.Transition	12	74	26.0	36.80	24.39	4.9	-	0.25	0.00	0.118	0.208
19°38.1'N	10	89	25.1	37.01	24.82	4.7	-	0.14	0.00	0.234	0.221
57°26.8'W	9	125	23.9	37.22	25.35	4.4	-	0.13	0.00	0.289	0.254
Secchi depth: 34m	8	149	23.0	37.21	25.61	4.1	2.03	0.28	0.22	0.118	0.224
Secchi 1%= 91m	7	199	20.1	36.89	26.18	3.9	-	0.17	2.82	0.005	0.185
	6	298	17.5	36.47	26.53	4.2	-	0.33	5.52	-	-
	5	496	12.8	35.71	26.98	3.0	-	1.25	21.97	-	-
	4	594	10.8	35.38	27.11	2.8	-	1.23	34.98	-	-
	3	744	7.5	34.92	27.28	2.8	2.06	1.61	19.45	-	-
	2	794	6.9	34.85	27.32	2.9	-	1.76	25.82	-	-
	1	877	6.1	34.78	27.37	3.0	-	1.68	23.14	-	-
044	13	0	29.2	35.22	22.2	-	-	0.08	1.70	0.094	0.214
Tropical	12	26	29.0	35.21	22.21	4.4	-	0.08	0.00	0.086	0.205
12°16.4' N	11	75	25.9	36.79	24.42	4.5	-	0.29	0.00	0.292	0.238
59°5.3' W	10	90	25.0	37.08	24.90	4.4	-	0.17	0.00	0.468	0.268
Secchi depth: 33m	9	124	23.3	37.18	25.51	3.6	-	0.16	2.19	0.043	0.250
Secchi 1%= 89m	8	149	20.1	36.76	26.08	3.0	-	0.41	0.00	0.029	0.202
	7	198	17.0	36.35	26.55	3.5	-	0.49	0.00	0.000	0.190
	6	298	13.2	35.66	26.87	2.9	-	2.68	7.27	-	-
	5	497	8.4	34.91	27.14	2.7	-	1.76	19.86	-	-
	4	595	7.2	34.77	27.21	2.7	-	1.82	23.47	-	-
	3	744	5.9	34.67	27.30	2.9	-	2.08	26.58	-	-
	2	794	5.7	34.67	27.34	3.0	-	1.86	21.38	-	-
	1	892	5.4	34.73	27.41	3.1	-	1.82	22.47	-	-

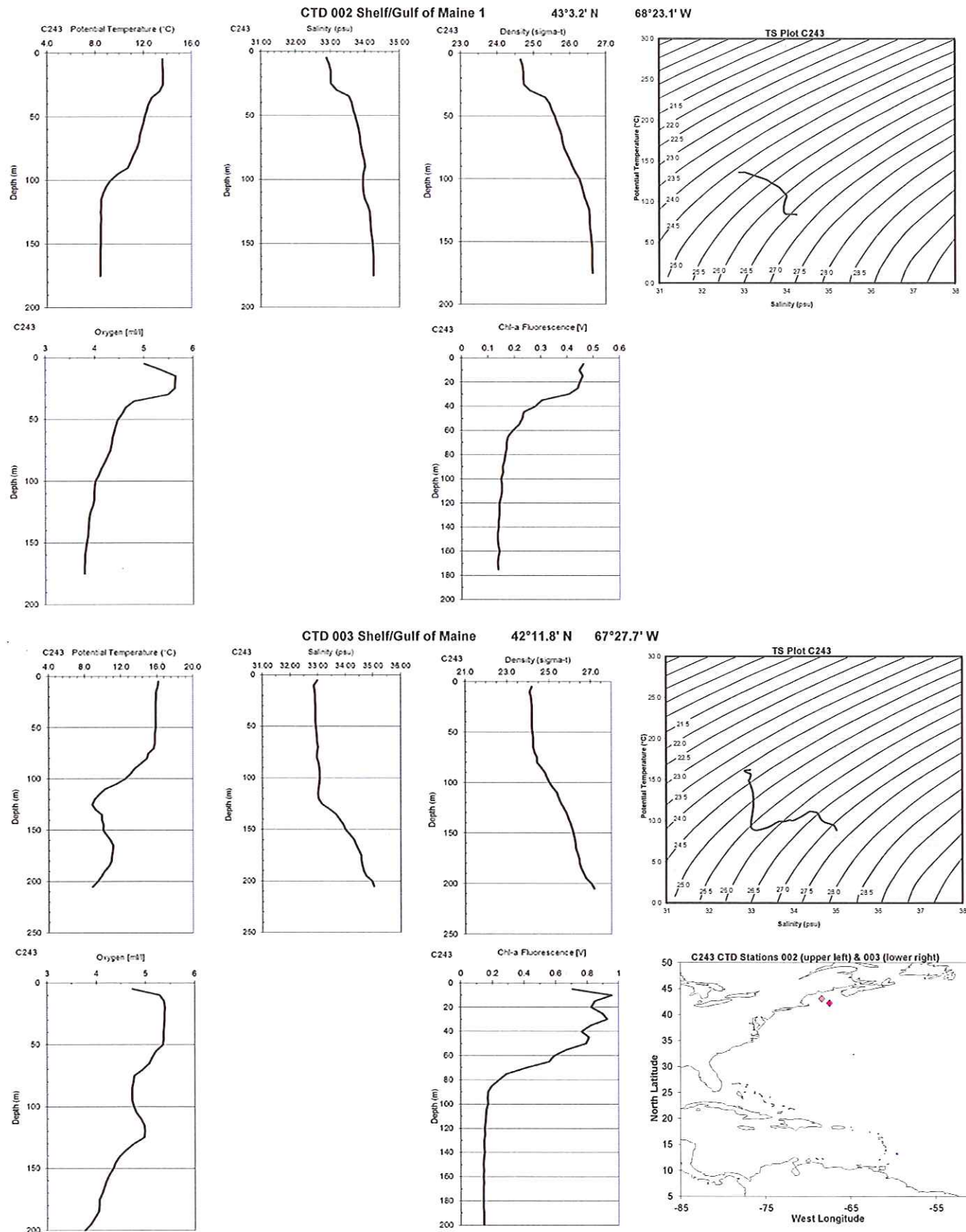
APPENDIX D

C243 CTD AND SECCHI DISC STATION SUMMARY

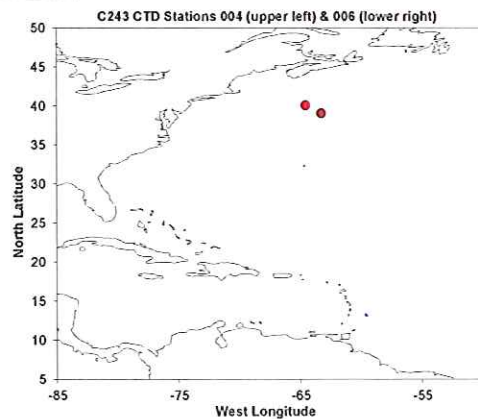
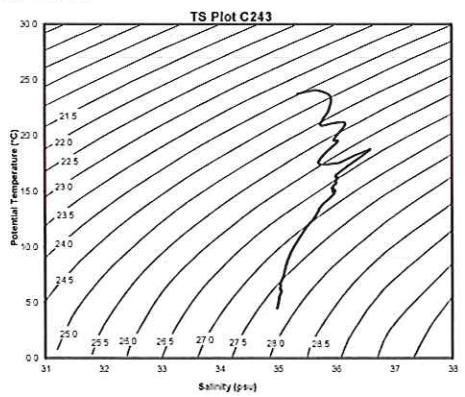
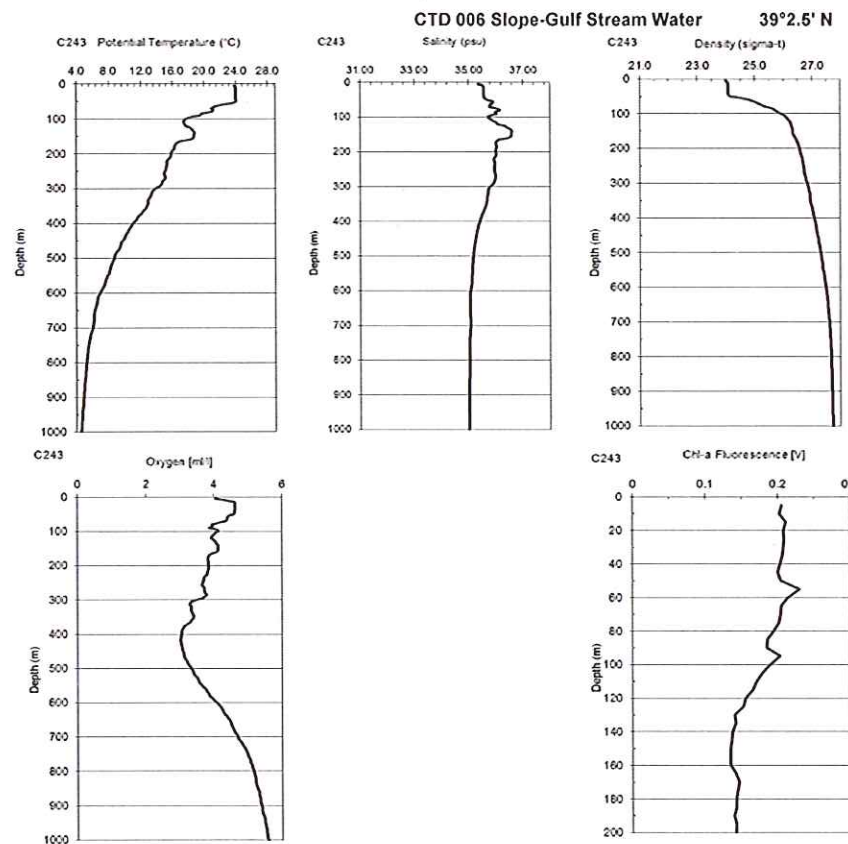
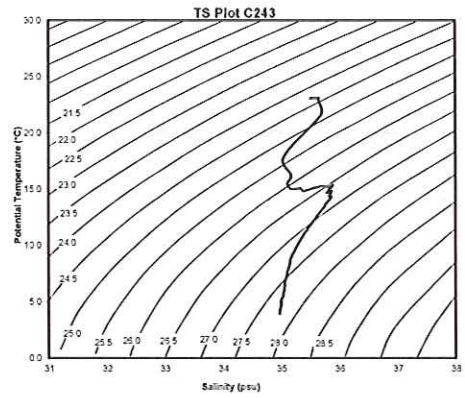
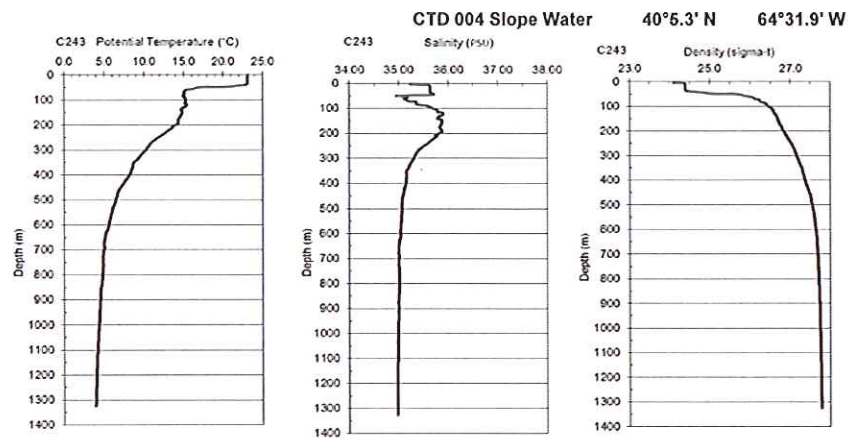
STATION	DATE	LAT.	LONG.	CAST DEPTH	GENERAL LOCATION	Secchi Depth	SD 1% Depth
C243	2012	(°N)	(°W)	(m)		(m)	(m)
002	10/14	43°3.3'	68°23.2'	175	Gulf of Maine	9	24
003	10/15	42°12.0'	67°27.8'	205	Gulf of Maine	7	19
004	10/17	40°5.6'	64°32.1'	1325	Slope Water	10	27
006	10/18	39°2.5'	63°15.7'	1005	Slope Water	26	70
009	10/19	37°26.4'	61°39.8'	985	North Sargasso Sea	35	94
010	10/19	37°13.6'	61°31.1'	1010	North Sargasso Sea	-	-
012	10/20	36°26.3'	12°4.5'	975	North Sargasso Sea	29	78
014	10/21	36°27.0'	60°26.8'	610	North Sargasso Sea	22	59
016	10/22	35°49.3'	59°36.5'	985	North Sargasso Sea	21	56
018	10/23	33°55.6'	58°49.2'	1025	North Sargasso Sea	34	91
020	10/24	32°13.1'	58°9.4'	1000	North Sargasso Sea	34	91
023	10/25	30°23.9'	57°32.2'	965	South Sargasso Sea	33	89
025	10/26	28°29.9'	57°37.6'	940	South Sargasso Sea	34	91
027	10/27	27°9.9'	57°39.3'	1000	South Sargasso Sea	33	89
028	10/28	25°35.8'	57°14.9'	855	South Sargasso Sea	23	62
030	10/29	24°19.9'	56°58.8'	985	Transition Zone	35	94
032	10/30	22°34.3'	57°2.2'	995	Transition Zone	39	105

034	10/31	21°25.4'	57°4.6'	950	Transition Zone	40	107
036	11/1	19°38.1'	57°26.8'	880	Transition Zone	34	91
038	11/2	18°3.4'	57°40.5'	980	Transition Zone	38	102
040	11/3	16°9.6'	58°4.6'	950	Tropical	30	81
042	11/4	14°9.9'	58°36.3'	955	Tropical	33	89
044	11/5	12°16.8'	59°4.9'	990	Tropical	33	89
046	11/6	12°5.7'	59°29.9'	910	Tropical	31	83
048	11/12	15°8.1'	61°15.0'	905	Tropical	21	56
049	11/13	15°27.5'	61°40.0'	1950	Tropical	33	89
050	11/14	17°19.5'	62°9.2'	395	Tropical	23	62

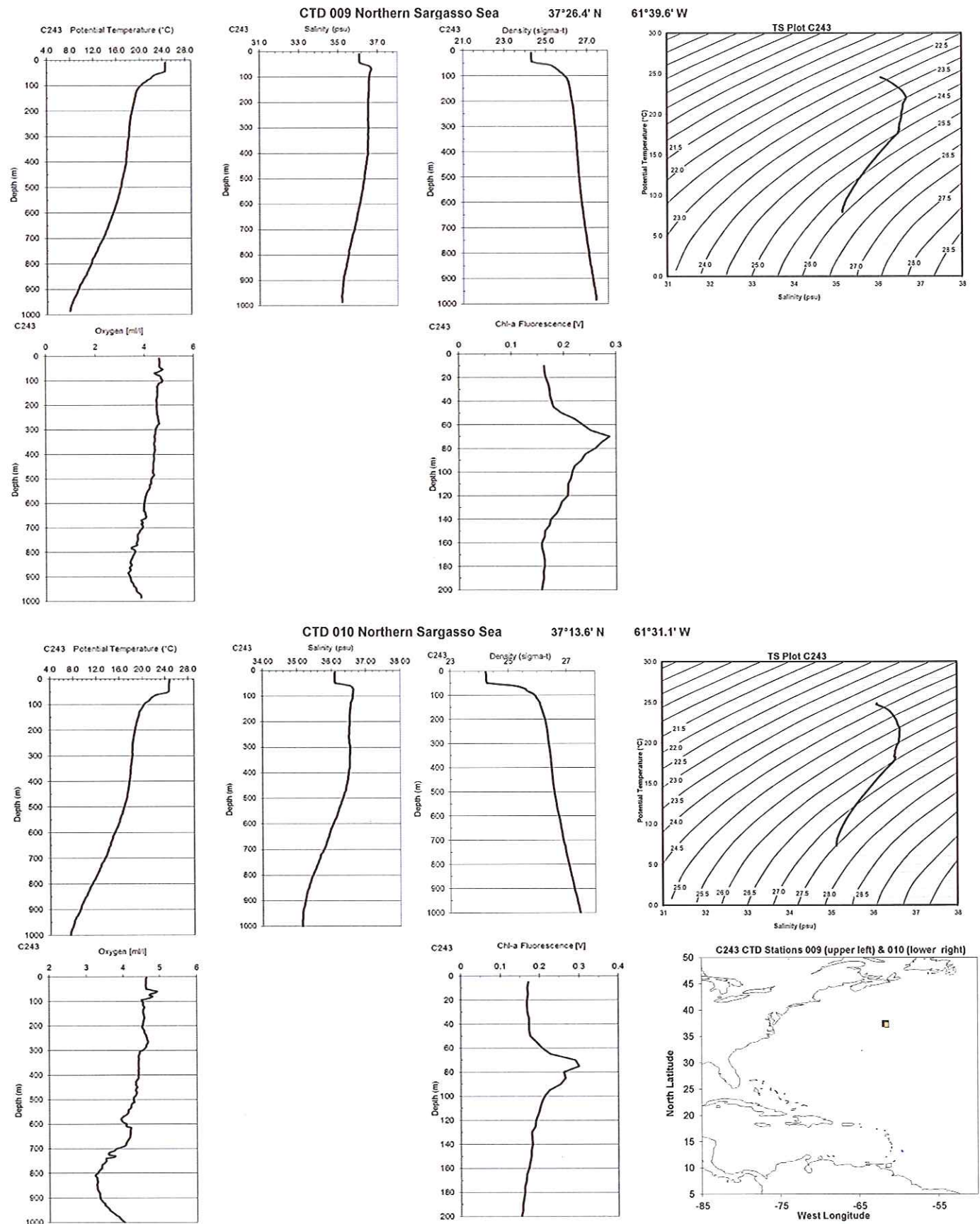
APPENDIX F. C243 CTD STATION PROFILES



APPENDIX F. C243 CTD STATION PROFILES



APPENDIX F. C243 CTD STATION PROFILES

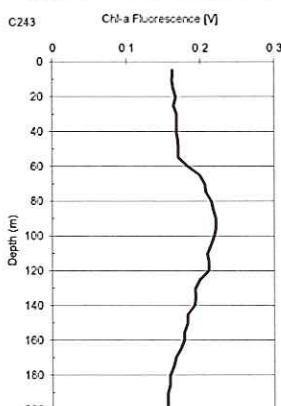
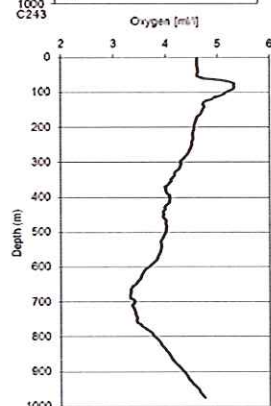
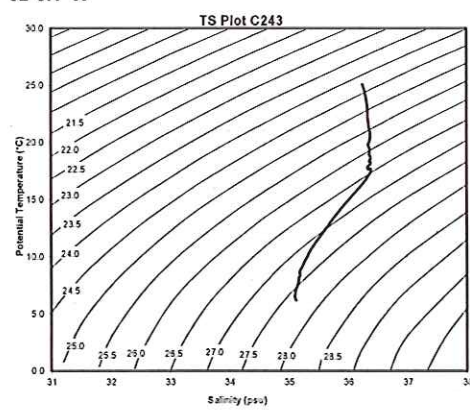
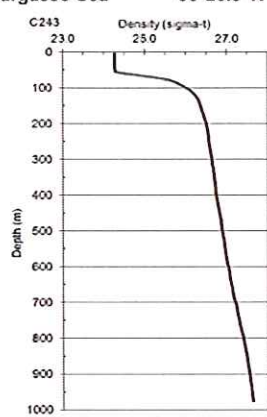
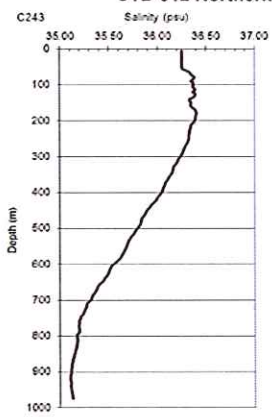
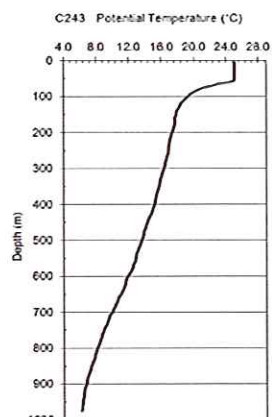


APPENDIX F. C243 CTD STATION PROFILES

CTD 012 Northern Sargasso Sea

36°26.5' N

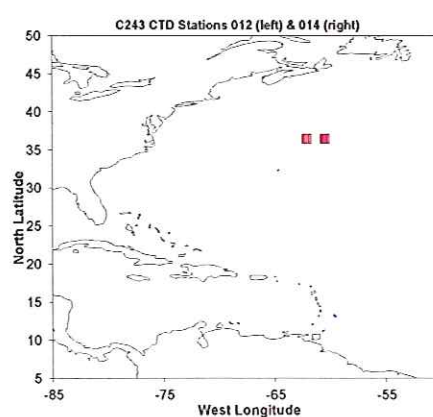
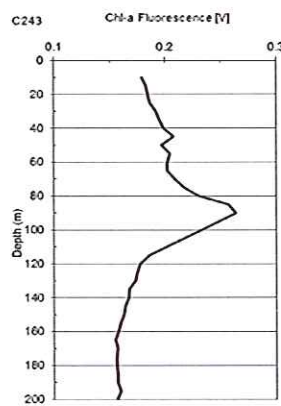
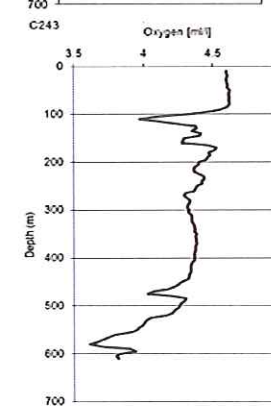
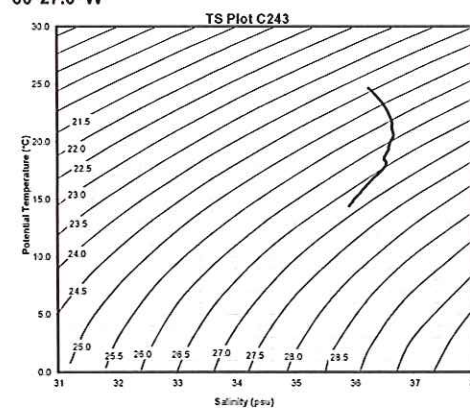
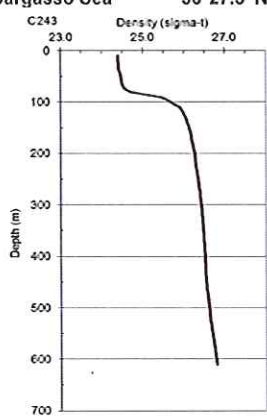
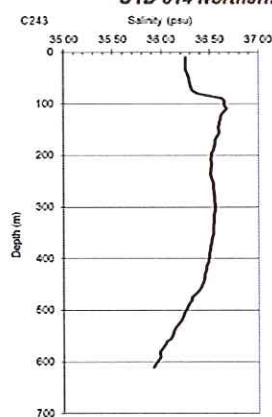
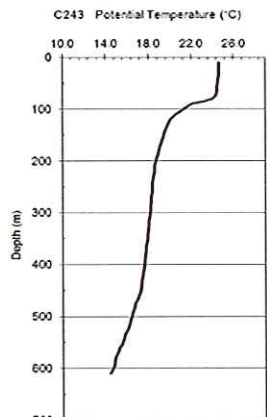
62°5.1' W



CTD 014 Northern Sargasso Sea

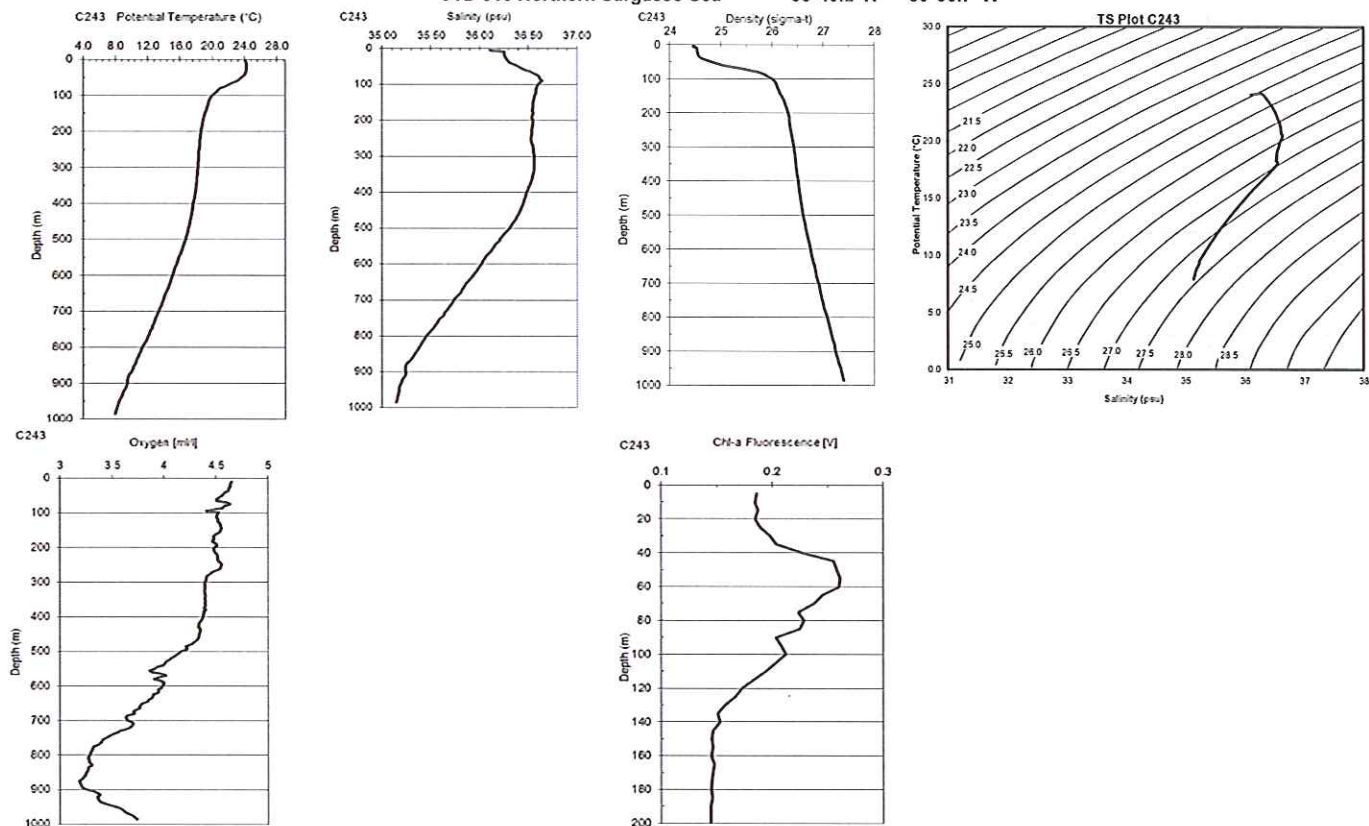
36°27.5' N

60°27.0' W

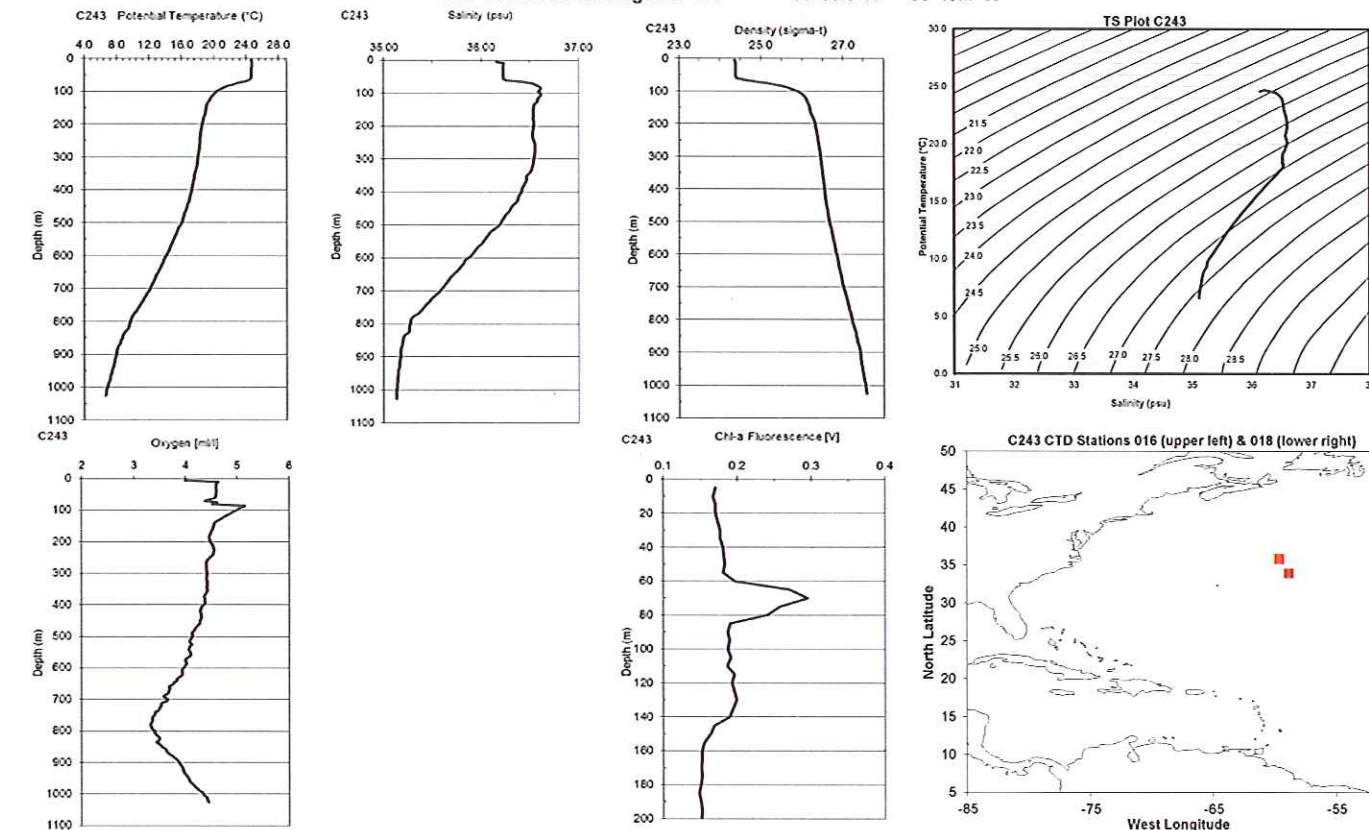


APPENDIX F. C243 CTD STATION PROFILES

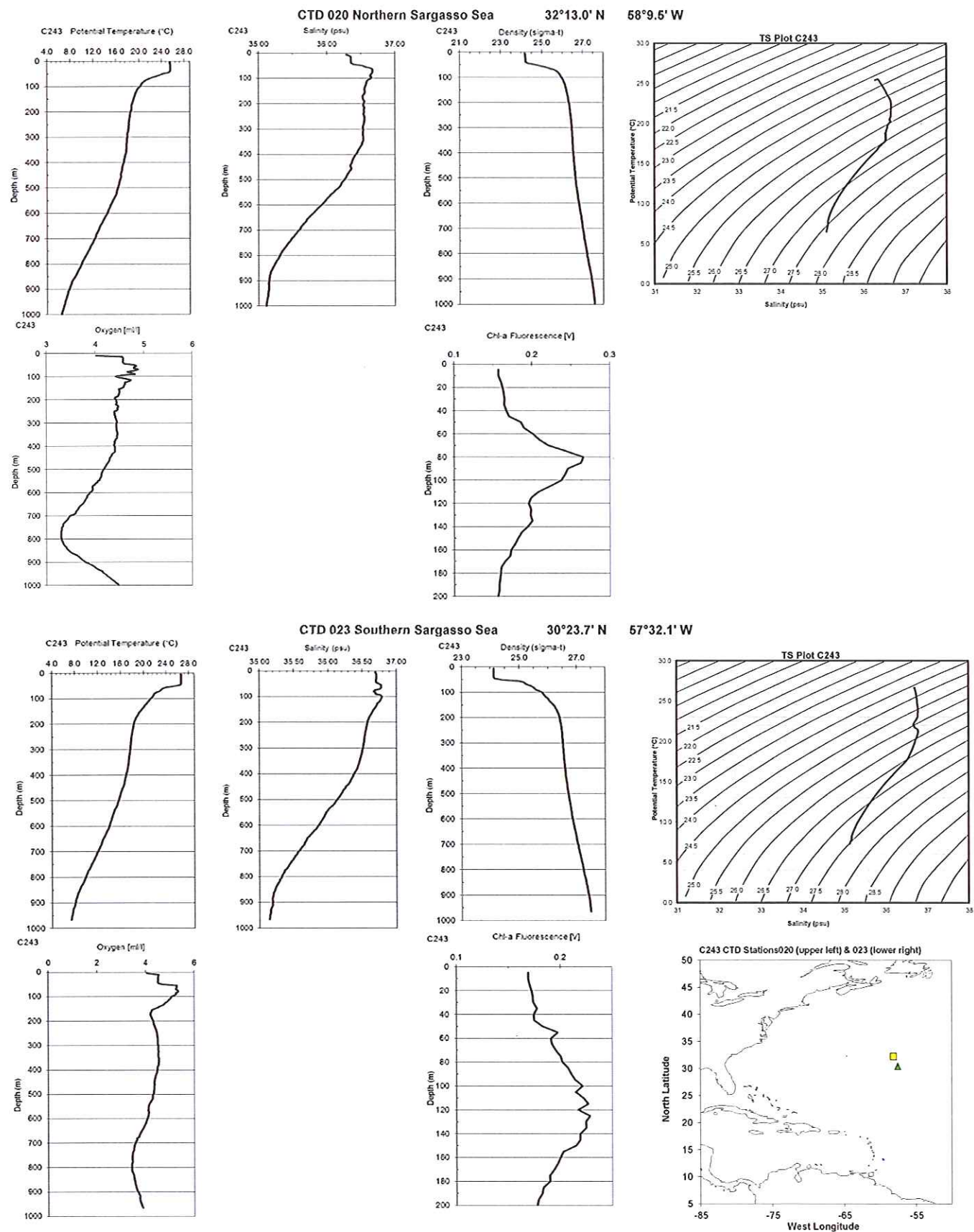
CTD 016 Northern Sargasso Sea 35°49.2' N 59°36.7' W



CTD 018 Northern Sargasso Sea 33°55.6' N 58°49.2' W

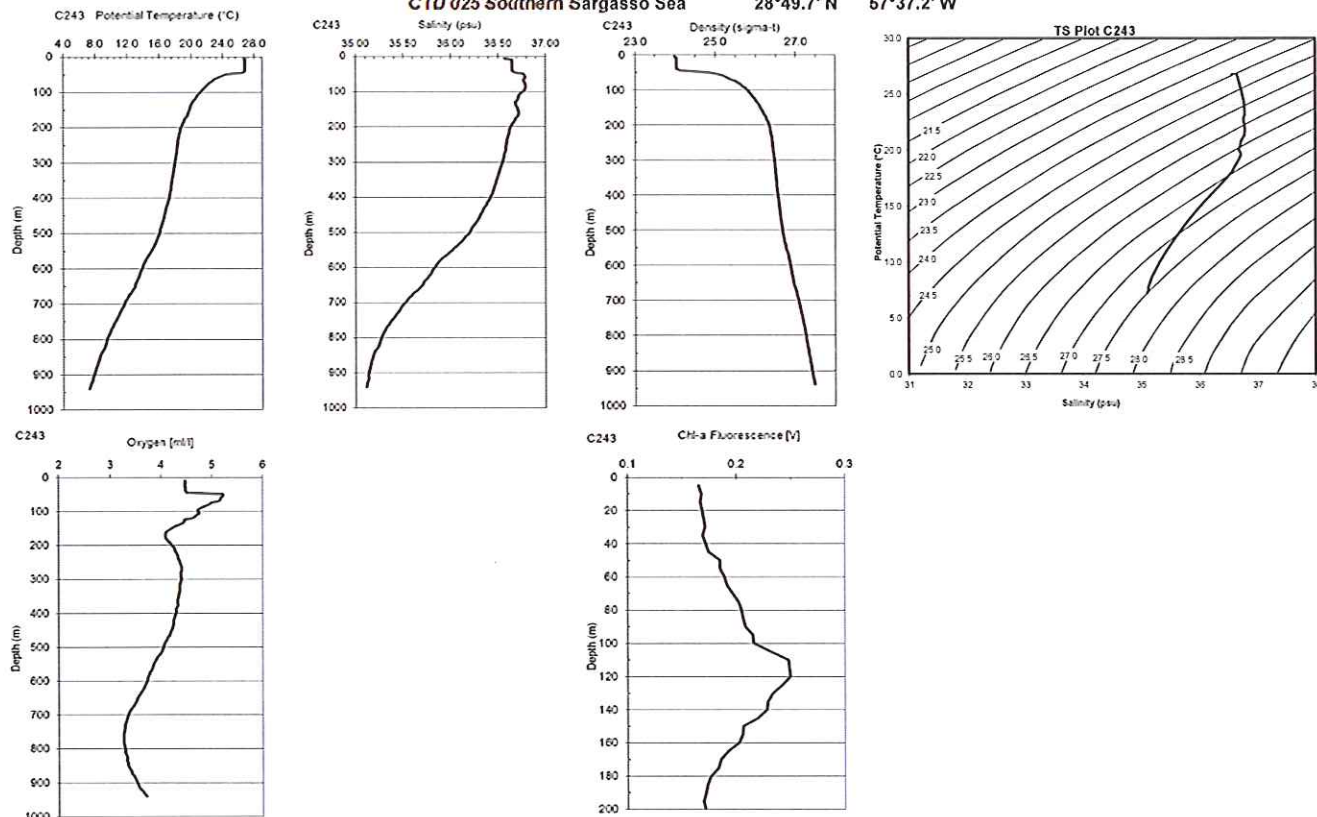


APPENDIX F. C243 CTD STATION PROFILES

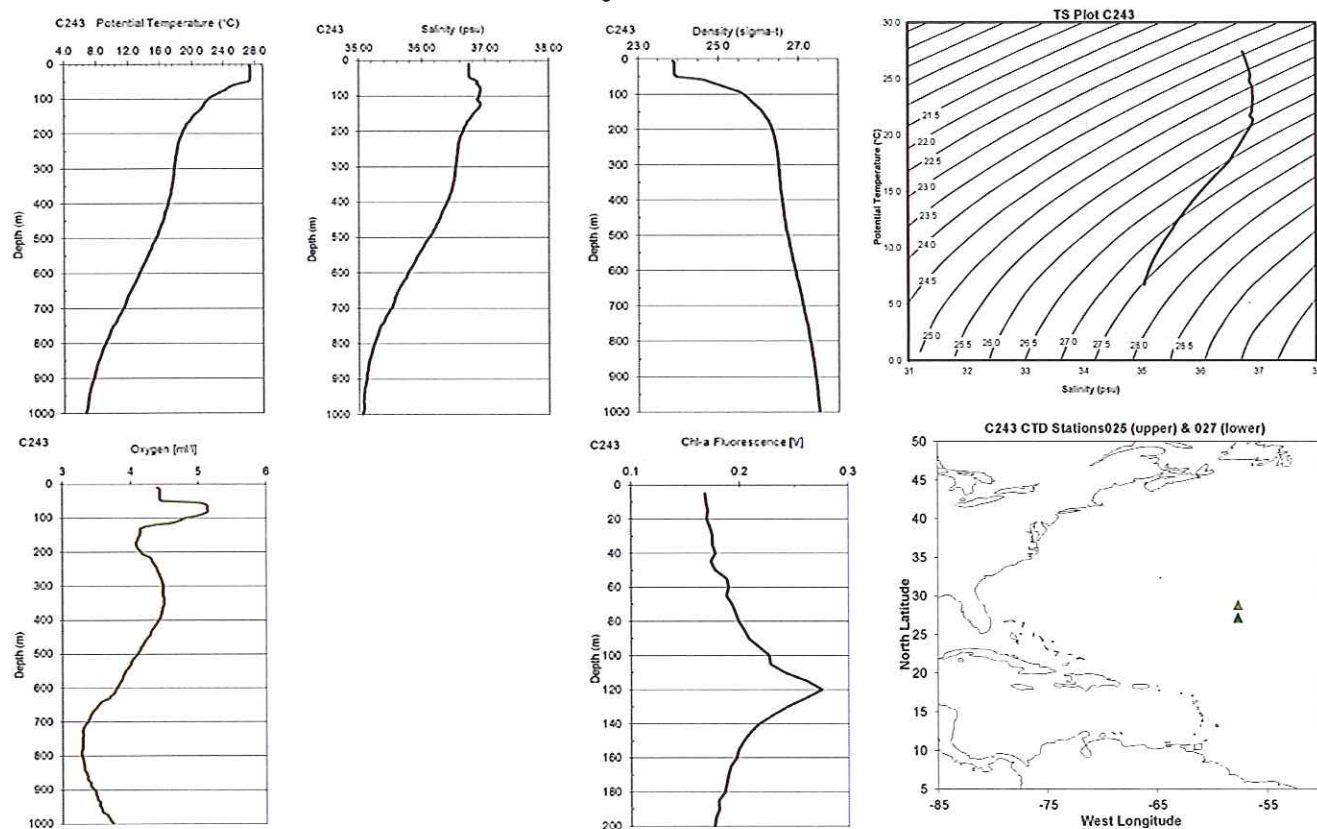


APPENDIX F. C243 CTD STATION PROFILES

CTD 025 Southern Sargasso Sea 28°49.7' N 57°37.2' W

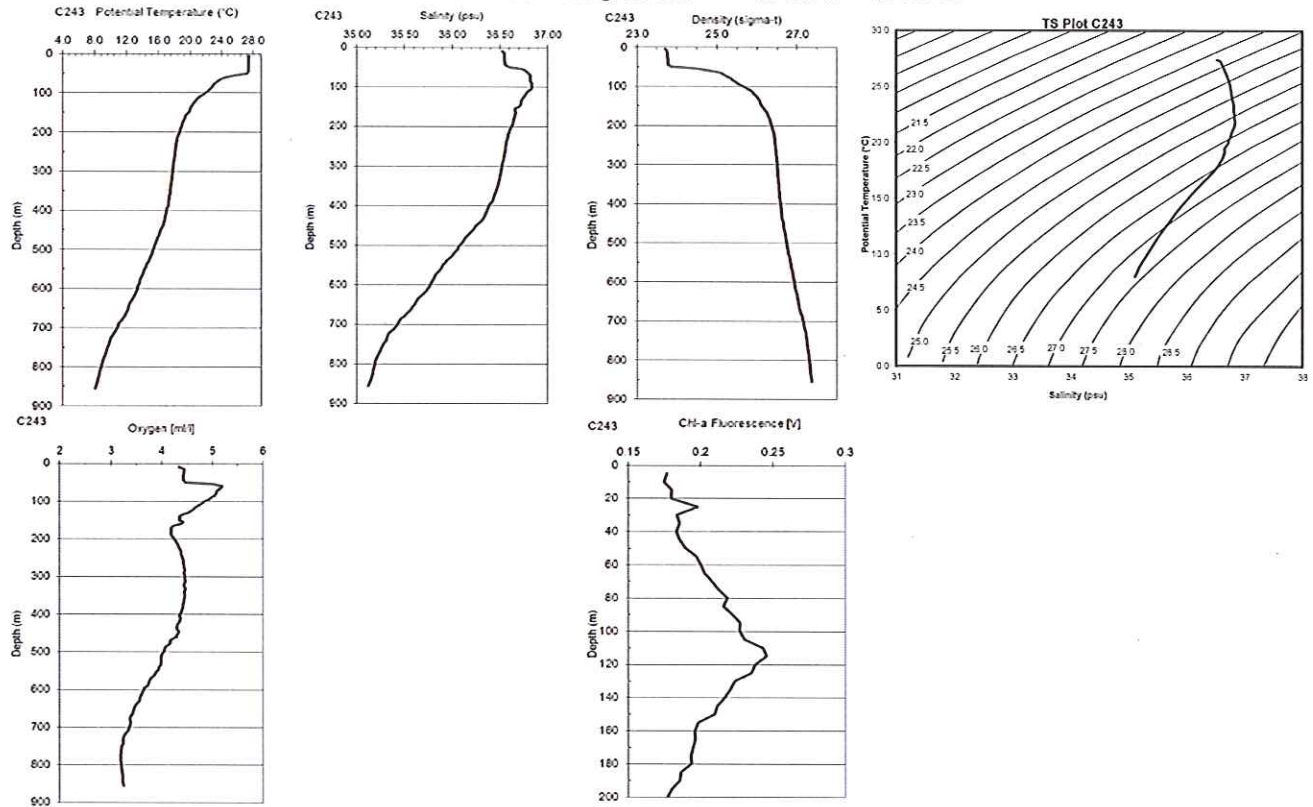


CTD 027 Southern Sargasso Sea 27°10.0' N 57°39.5' W



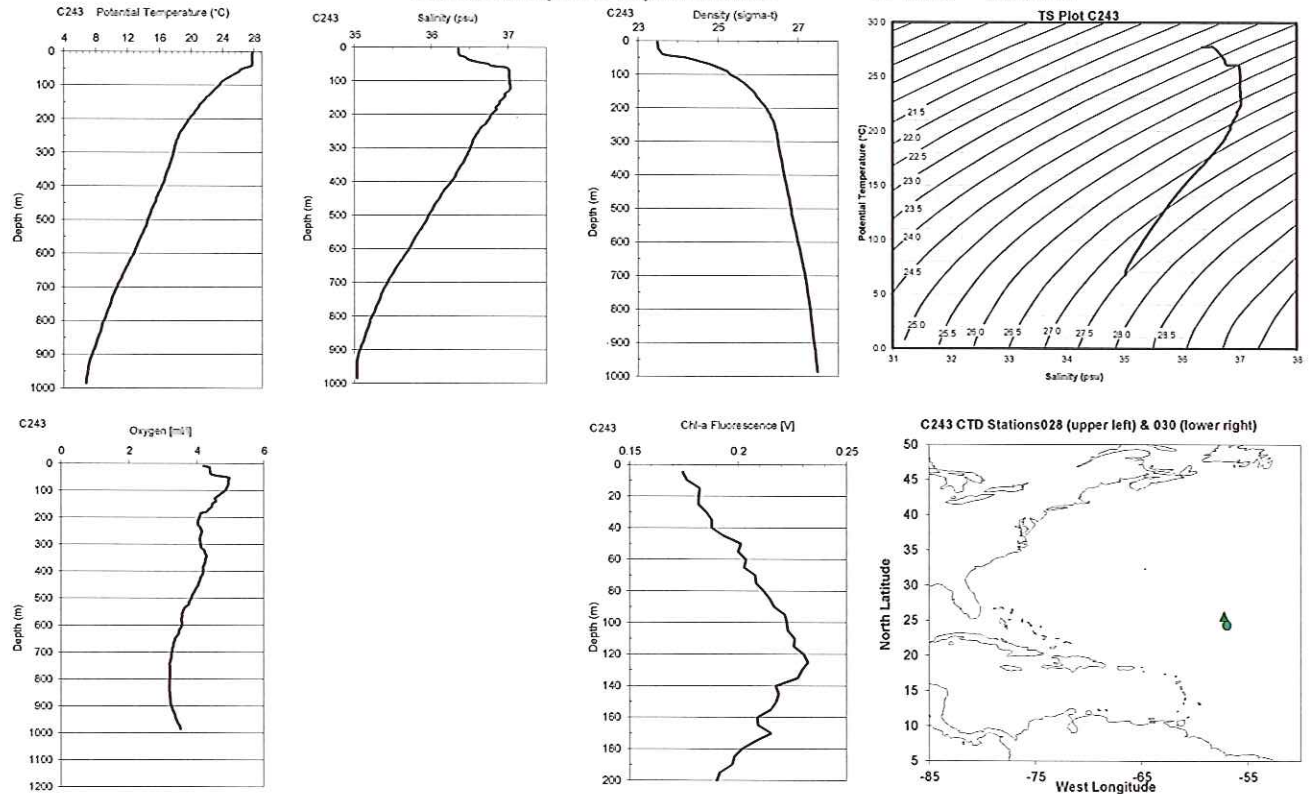
APPENDIX F. C243 CTD STATION PROFILES

CTD 028 Southern Sargasso Sea 25°36.1' N 57°14.5' W



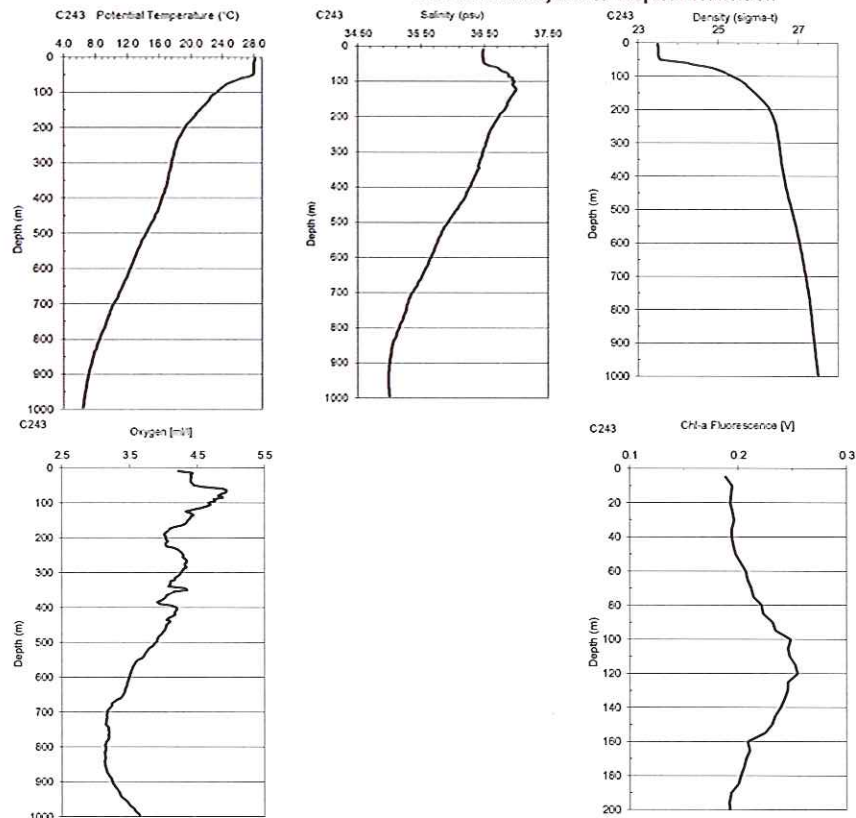
CTD 030 Subtropical to Tropical Transition

24°19.8' N 56°58.6' W

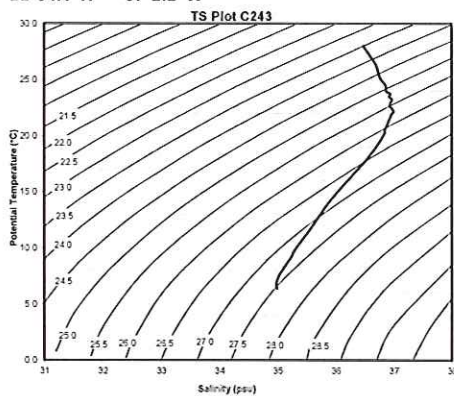


APPENDIX F. C243 CTD STATION PROFILES

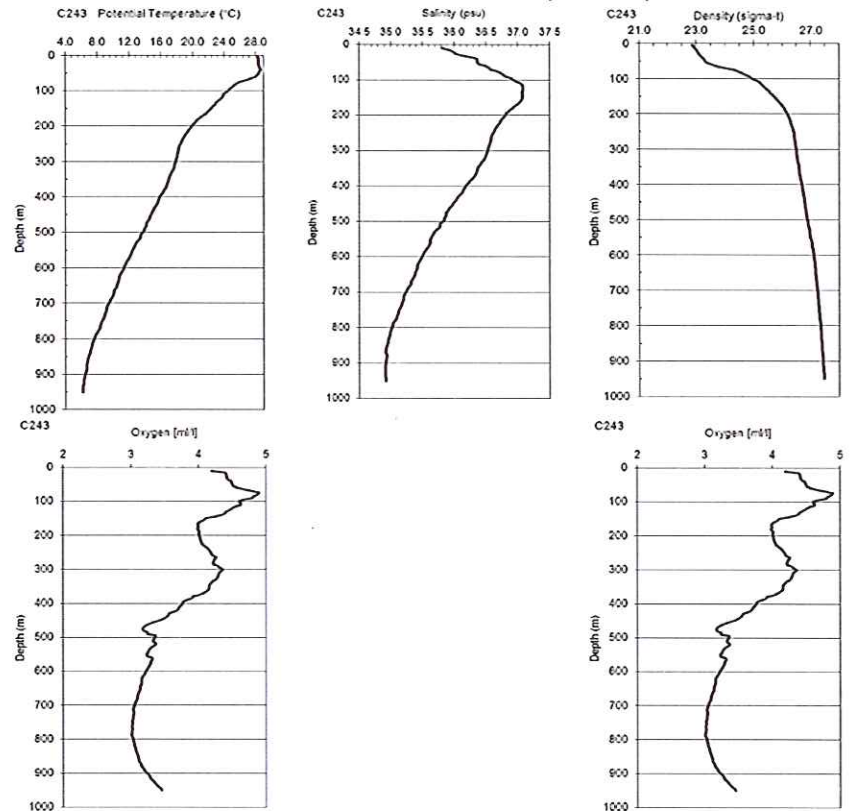
CTD 032 Subtropical to Tropical Transition



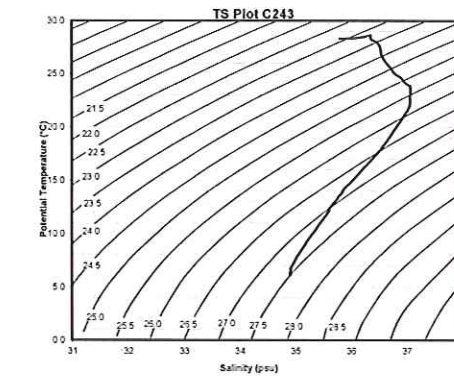
22°34.1' N 57°2.2' W



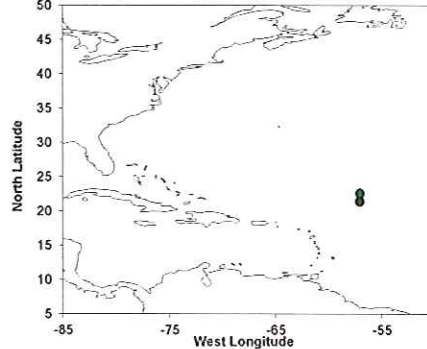
CTD 034 Subtropical to Tropical Transition



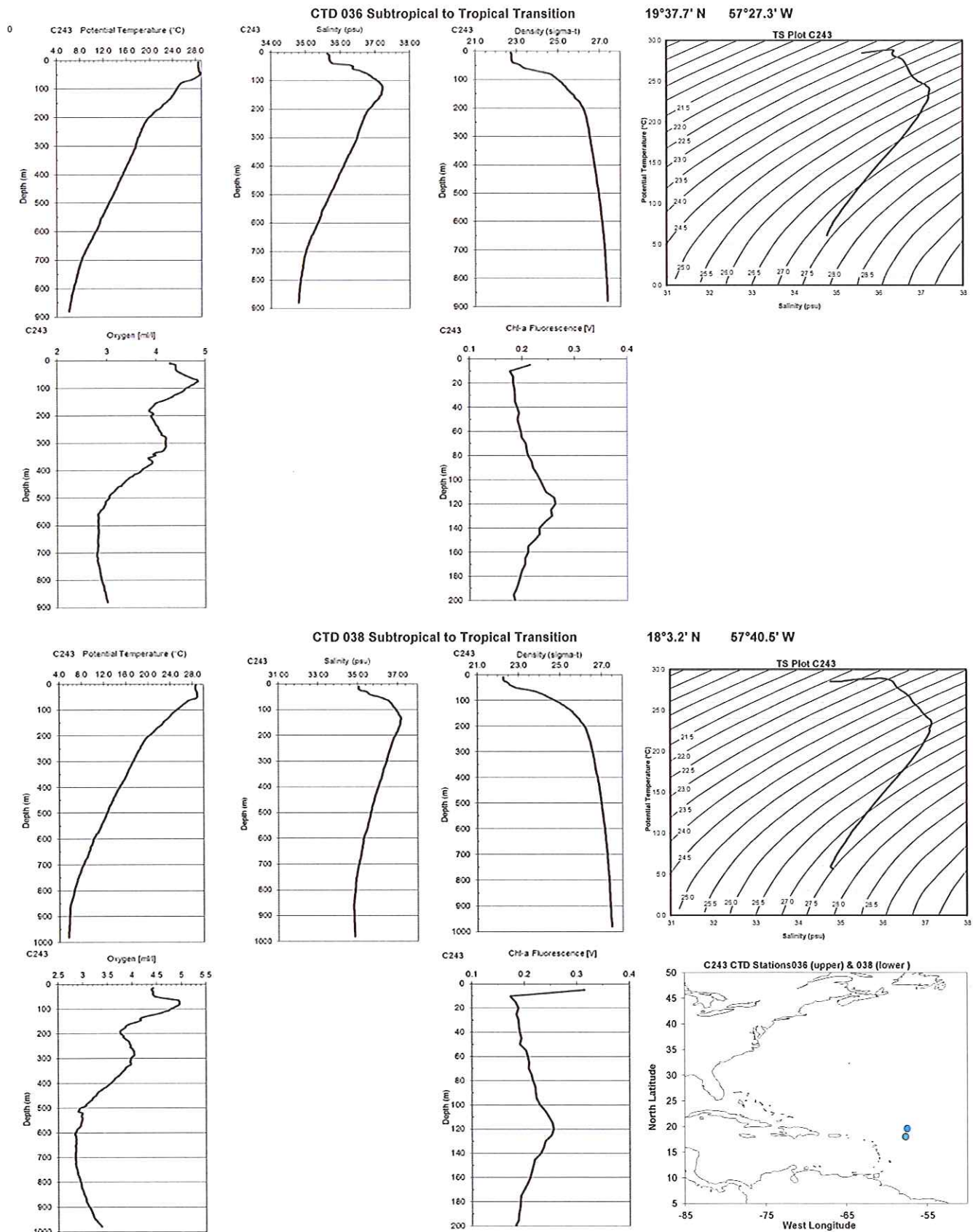
21°25.1' N 57°4.4' W



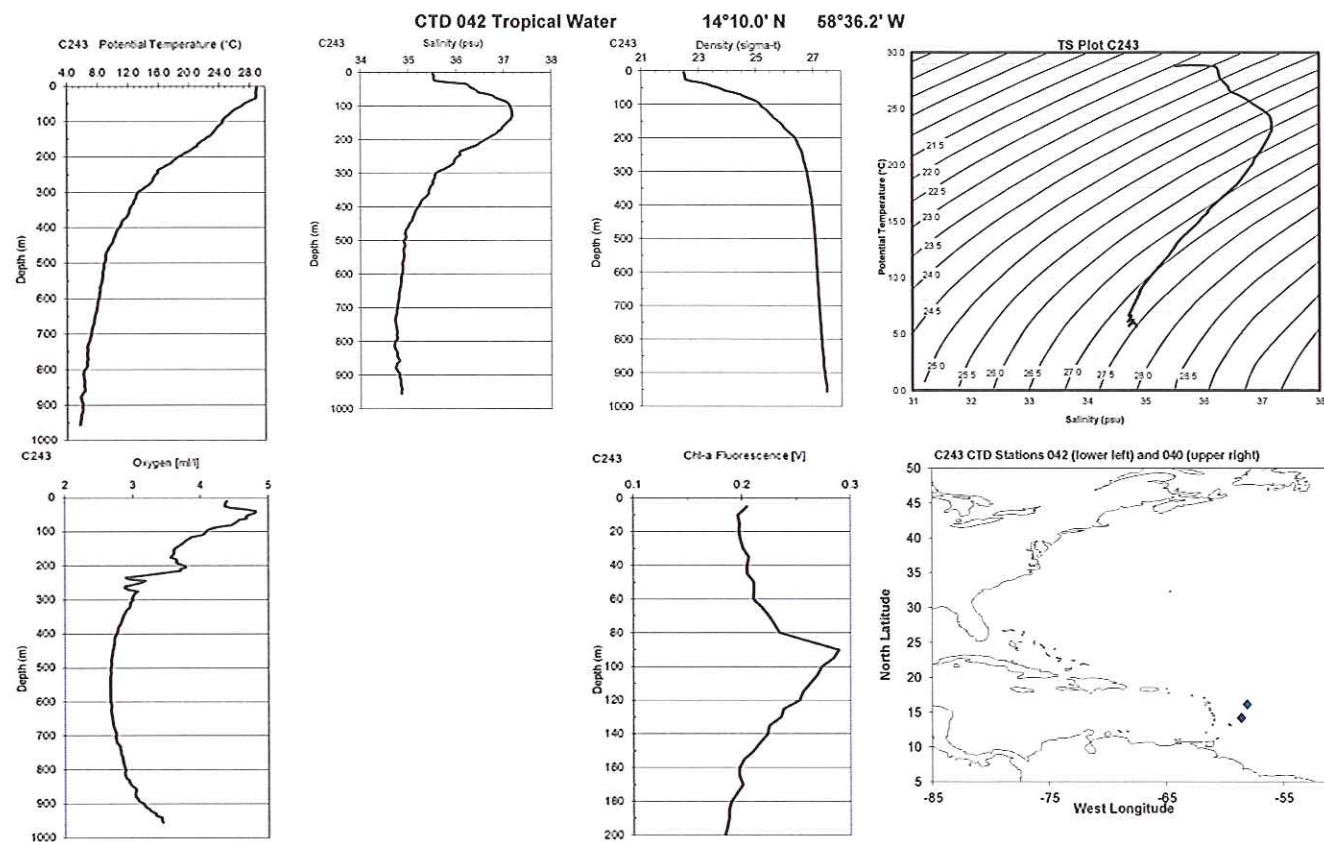
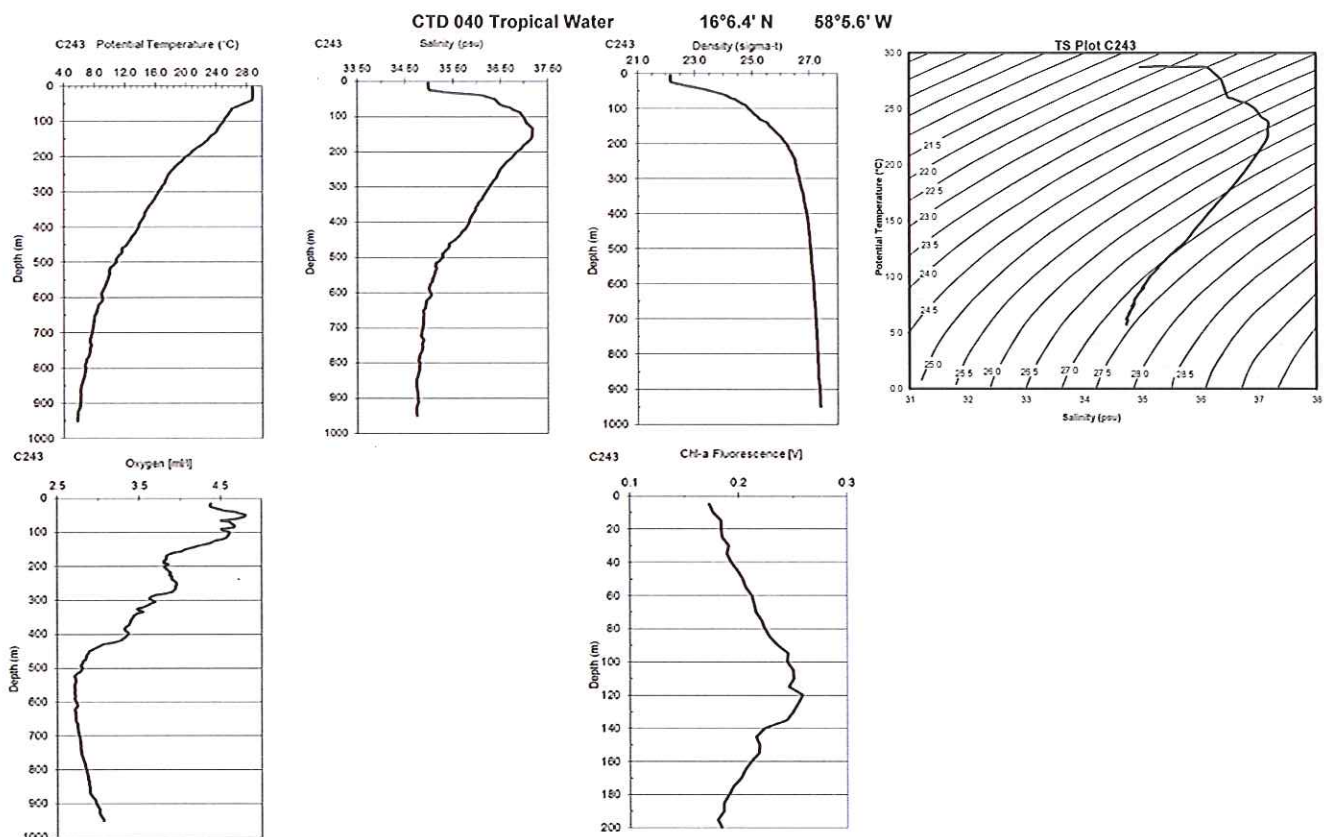
C243 CTD Stations 032 (upper left) & 034 (lower right)



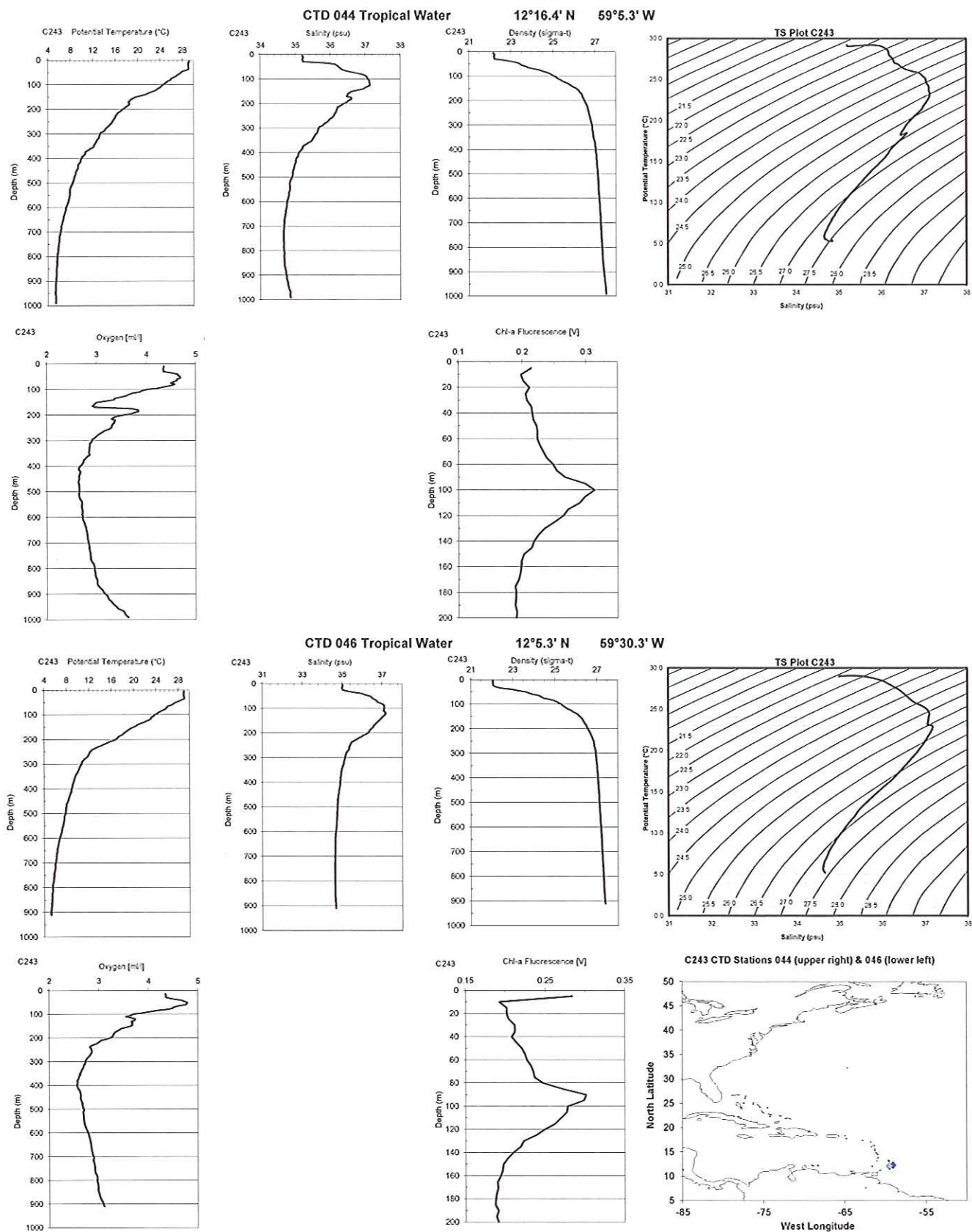
APPENDIX F. C243 CTD STATION PROFILES



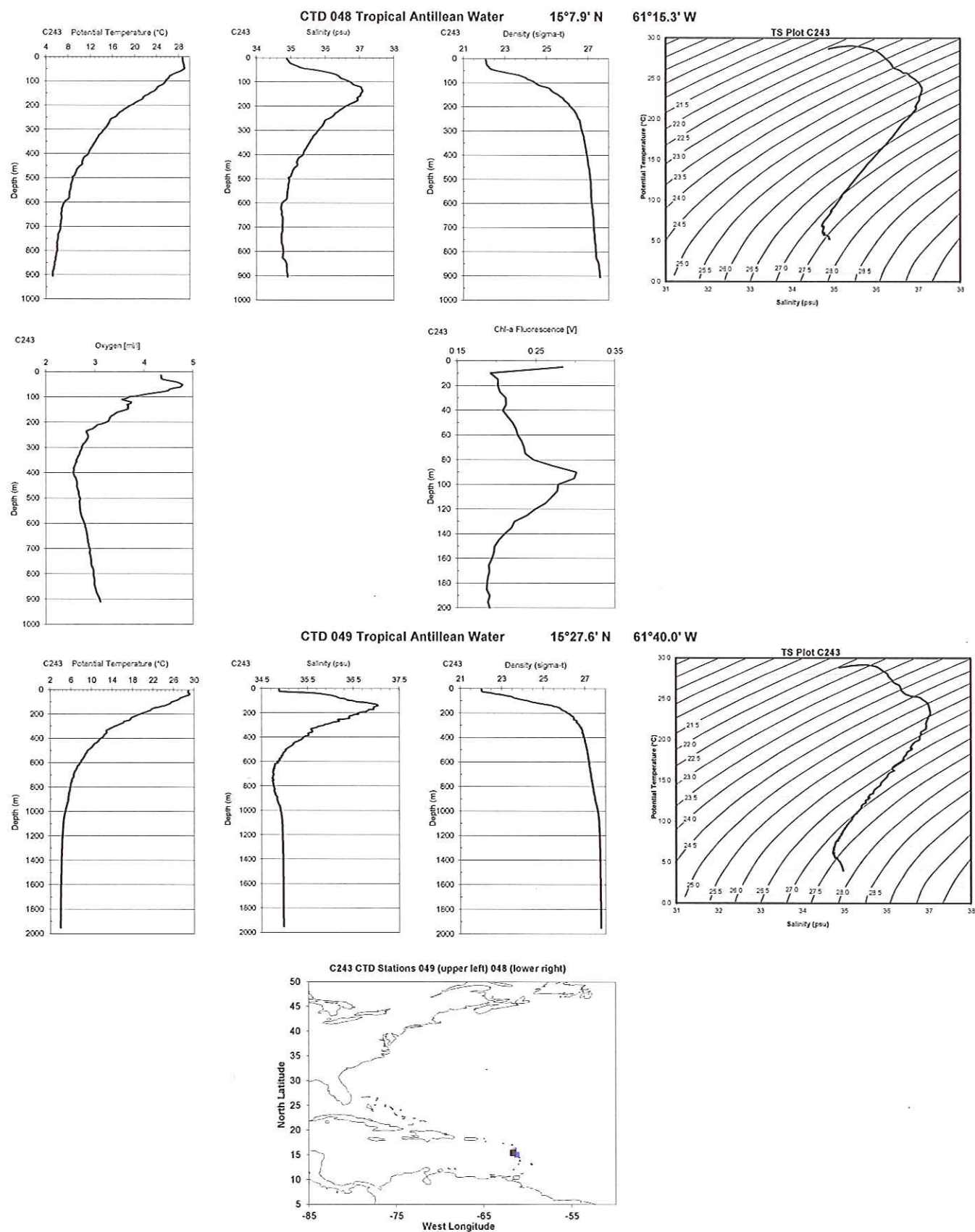
APPENDIX F. C243 CTD STATION PROFILES



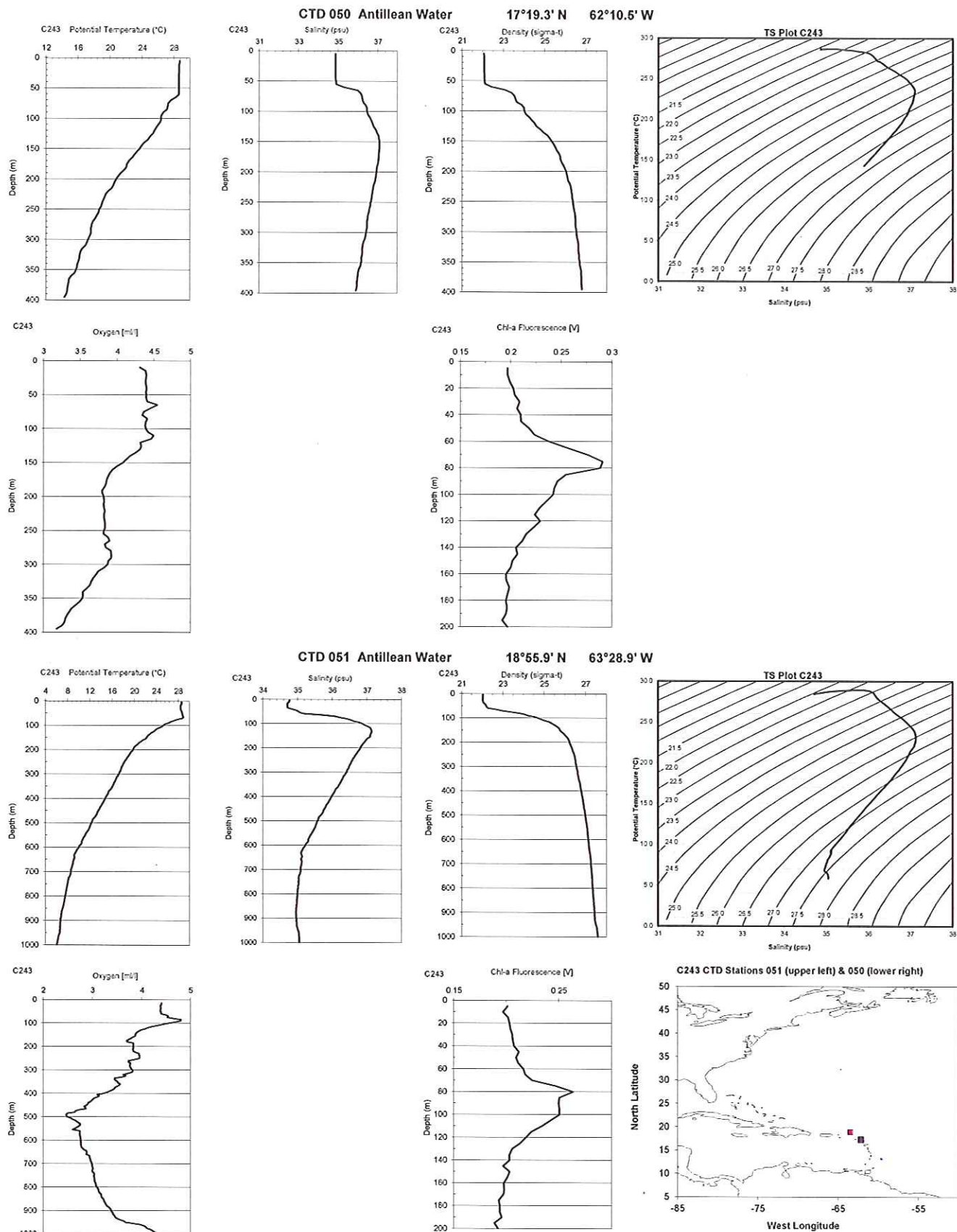
APPENDIX F. C243 CTD STATION PROFILES



APPENDIX F. C243 CTD STATION PROFILES

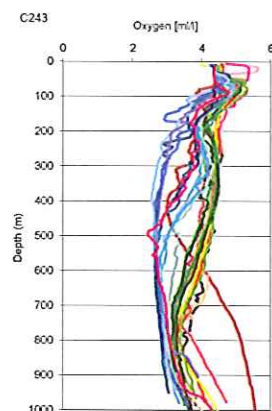
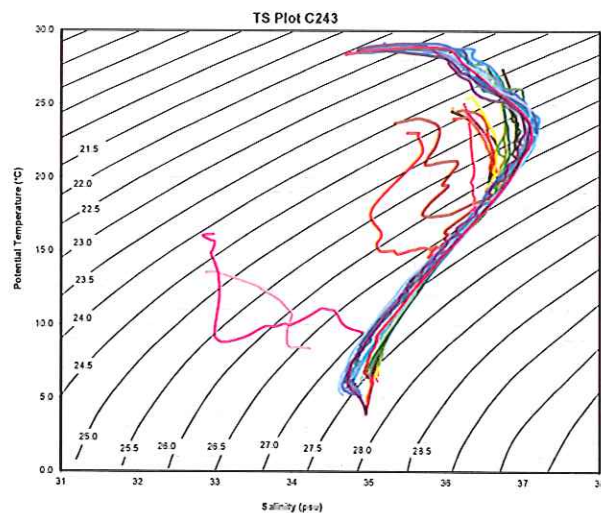
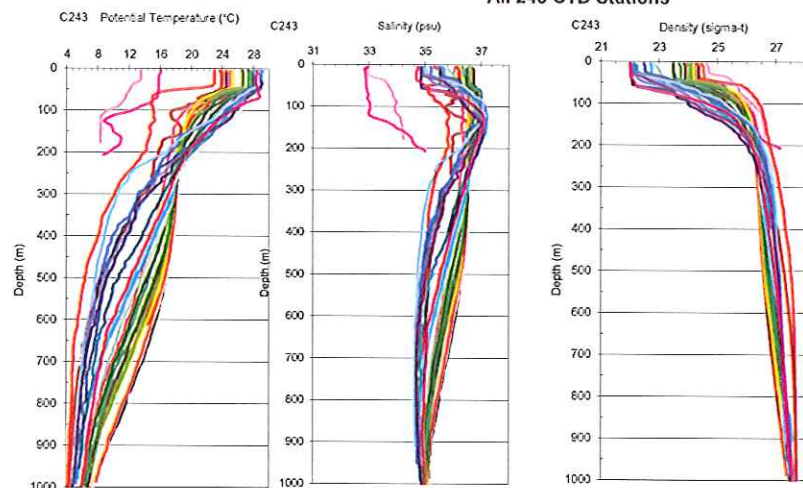


APPENDIX F. C243 CTD STATION PROFILES

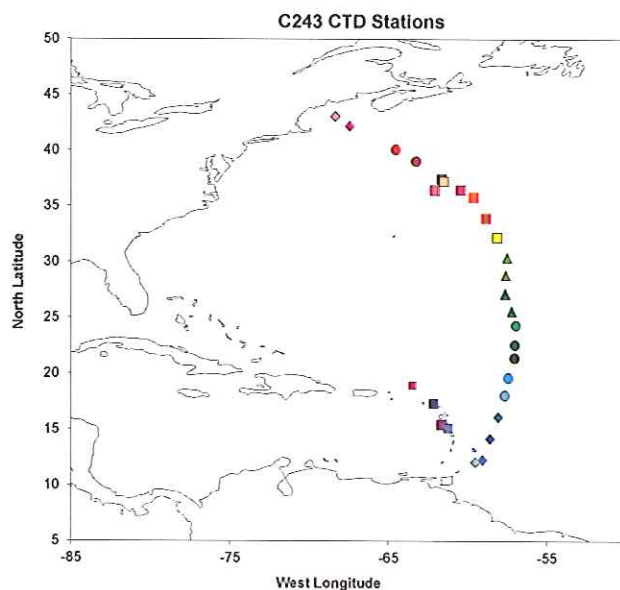
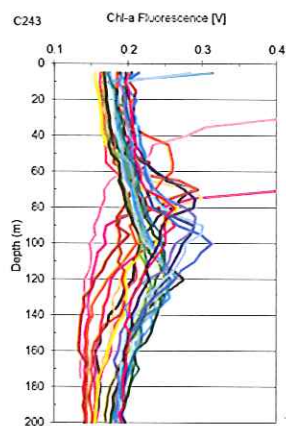


APPENDIX F. C243 CTD STATION PROFILES

All 243 CTD Stations



C243 002 S/GoM 1	C243 030 24.3° Tran
C243 003 S/GoM 2	C243 032 22.5° Tran
C243 004 40° Slope	C243 034 21.5° Tran
C243 005 39° Slope	C243 035 19.6° Tran
C243 009 37.5° NSS1	C243 038 18° Tran
C243 010 37° NSS2	C243 040 16° Trop1
C243 012 36.5° NSS3	C243 042 14° Trop2
C243 014 36.5° NSS4	C243 044 12.2° Trop3
C243 016 36° NSS5	C243 046 12° Trop4
C243 018 34° NSS6	C243 048 5° TropAnt
C243 020 32° NSS7	C243 049 5.5° TropAnt
C243 023 30.3° NSS8	C243 050 17.3° Anti
C243 025 29° NSS9	C243 051 19° Anti
C243 027 27° NSS10	
C243 028 25.5° NSS11	



C243 NET COLLECTIONS

NEUSTON DATA SUMMARY

STATION	DATE	TIME	LOG	LAT.	LONG.	GENERAL LOCAL	TEMP.	SURF. FLUOR.	SURF. SAL.	TOW DIST.	ZOOP. VOL.	ZOOP. IO-	PLASTIC	TAR	SARGASSUM	PHYLL. SOMA	LEPTO- CEPHALI	HALO- BATES
C243	2012	(local)	(mm)	(°N)	(°W)		(°C)	(μ)	(PSU)	(m)	(ml)	MASS ($\text{mg}/100\text{m}^3$)	(Pellets)	(Pieces)	(pieces)	<i>natans</i> (g)	<i>fluitans</i> (g)	
001	14-Oct-12	0037	N/A	43°38.9'N	69°18.8'W	Shell/Gulf of Maine	13.0	3515.1	32.86	2077	171.0	8.23	0	0	0	0	0	0
005	18-Oct-12	0100	75.0	39°11.7'N	63°35.8'W	Slope	25.0	1534.8	36.09	1160	9.0	0.78	0	3	1	84	20	0
006	18-Oct-12	1115	86.6	39°2.4'N	63°15.7'W	Slope	24.1	1040.2	35.56	1652	5.6	0.34	0	3	0	250	167	0
008	19-Oct-12	0007	159.4	38°14.5'N	62°17.4'W	Gulf Stream	25.1	831.1	36.27	2215	5.5	0.25	0	25	0	5	5	1
009	19-Oct-12	1112	208.4	37°26.3'N	61°40.7'W	North Sargasso Sea	24.8	663.3	36.09	1207	15.0	1.49	0	18	0	415	700	1
011	20-Oct-12	0032	249.7	36°51.5'N	61°32.0'W	North Sargasso Sea	25.3	695.2	36.22	1218	9.0	0.41	0	5	0	230	110	0
012	20-Oct-12	1133	278.2	36°27.7'N	62°7.0'W	North Sargasso Sea	25.2	418.6	36.24	1852	2.0	0.11	0	6	0	900	140	0
013	20-Oct-12	2238	307.7	36°33.6'N	61°19.8'W	North Sargasso Sea	25.2	742.1	36.28	-	4.0	-	0	1	0	61	65	1
014	21-Oct-12	1056	350.6	36°30.2'N	60°28.1'W	North Sargasso Sea	24.9	761.0	36.27	2765	14.5	0.53	0	1	0	1380	32	0
015	22-Oct-12	0007	376.7	36°10.9'N	59°40.7'W	North Sargasso Sea	24.4	986.7	36.20	1332	31.0	2.26	0	21	0	1405	1805	0
017	22-Oct-12	1142	402.5	35°48.2'N	59°32.9'W	North Sargasso Sea	24.2	940.8	36.20	2399	5.0	0.21	0	6	0	1030	500	0
018	23-Oct-12	1141	470.1	33°54.7'N	58°50.6'W	North Sargasso Sea	24.8	684.1	36.26	1125	20.0	1.78	0	14	0	1586	72	0
019	24-Oct-12	0006	513.9	32°56.9'N	58°18.4'W	North Sargasso Sea	25.5	726.0	36.41	2501	1.8	0.07	0	1	0	1690	365	0
020	24-Oct-12	1058	665.4	32°12.8'N	58°3.5'W	North Sargasso Sea	25.7	665.4	36.36	950	7.0	0.74	0	6	0	72	10	0
022	25-Oct-12	0000	666.6	31°28.7'N	57°29.1'W	North Sargasso Sea	27.8	697.8	36.39	2634	36.0	1.37	0	61	0	365	175	0
023	25-Oct-12	1225	655.7	30°22.1'N	57°31.7'W	North Sargasso Sea	26.8	596.3	36.72	1217	8.0	0.66	0	35	0	52	1	0
024	26-Oct-12	0008	701.8	29°41.5'N	57°34.8'W	South Sargasso Sea	26.7	674.9	36.74	1861	6.5	0.35	0	17	0	63	13	0
025	26-Oct-12	1153	756.2	28°49.1'N	57°34.8'W	South Sargasso Sea	26.9	618.5	36.63	1313	4.0	0.30	0	25	0	7	0	0
026	27-Oct-12	0000	793.4	28°8.6'N	57°33.6'W	South Sargasso Sea	27.2	688.2	36.77	2464	8.0	0.32	0	3277	0	0	10	0
027	27-Oct-12	1140	855.5	27°10.7'N	57°39.2'W	South Sargasso Sea	27.4	678.4	36.67	1268	3.0	0.24	0	3	0	0	25	0
028	28-Oct-12	1143	960.2	25°38.6'N	57°12.2'W	South Sargasso Sea	27.6	619.8	36.52	1815	1.0	0.06	0	10	0	0	15	0
029	28-Oct-12	2230	1003.3	25°0.5'N	57°1.9'W	South Sargasso Sea	28.0	637.0	36.43	1950	2.0	0.10	0	2	0	0	6	0
030	29-Oct-12	1110	1043.7	24°19.7'N	56°57.5'W	Transition Zone	27.9	559.0	36.35	940	0.5	0.05	0	7	0	0	0	0
031	30-Oct-12	0046	1095.2	23°21.9'N	56°54.3'W	Transition Zone	28.7	611.1	36.44	2361	4.0	0.17	0	45	0	0	0	0
032	30-Oct-12	1158	1141.0	22°32.3'N	57°1.0'W	Transition Zone	28.3	546.2	36.46	1663	48.0	2.89	0	27	0	0	24	0
033	31-Oct-12	0008	1161.0	21°58.2'N	57°2.8'W	Transition Zone	28.4	559.9	36.16	2116	2.0	0.11	0	5	0	0	2	0
034	31-Oct-12	1148	1187.8	21°22.2'N	57°5.1'W	Transition Zone	28.5	617.2	35.81	1759	2.0	0.11	0	11	0	0	0	0
035	1-Nov-12	0006	1242.9	20°21.1'N	57°15.2'W	Transition Zone	28.6	617.2	35.20	1948	3.0	0.15	0	1	0	0	0	0
036	1-Nov-12	1148	1282.6	19°35.2'N	57°29.9'W	Transition Zone	28.7	563.5	35.68	1776	0.8	0.04	0	1	0	0	0	0
037	1-Nov-12	2241	1328.2	18°51.7'N	57°31.1'W	Transition Zone	28.6	610.9	35.77	2730	1.0	0.04	0	0	0	2	0	0
038	2-Nov-12	1146	1378.0	18°0.8'N	57°40.4'W	Transition Zone	28.7	571.2	34.90	2122	2.3	0.11	0	5	0	0	0	0
039	3-Nov-12	0004	1442.8	16°55.1'N	57°53.0'W	Transition Zone	28.8	621.3	34.88	2267	3.5	0.15	0	1	0	0	0	0
040	3-Nov-12	1149	1484.0	16°6.6'N	58°5.5'W	Tropical	28.9	577.8	34.97	1698	2.0	0.12	0	0	0	0	0	0
041	3-Nov-12	2358	1546.9	15°2.4'N	58°18.4'W	Tropical	28.9	637.9	35.39	2609	5.0	0.19	0	0	0	0	0	0
042	4-Nov-12	1133	1601.3	14°8.3'N	58°38.3'W	Tropical	29.0	570.9	35.49	2071	0.8	0.04	0	2	0	0	9	0
043	4-Nov-12	2239	1661.5	13°14.0'N	58°48.6'W	Tropical	29.1	617.8	35.34	1895	11.0	0.65	0	0	0	0	7	0
044	5-Nov-12	1154	1723.9	12°14.2'N	59°7.1'W	Tropical	29.3	593.4	35.21	1930	1.2	0.06	0	1	0	0	0	0
045	5-Nov-12	2322	1780.2	11°20.6'N	59°3.3'W	Tropical	29.2	713.6	35.22	1334	21.0	1.57	0	0	0	0	0	0
046	6-Nov-12	1141	1835.6	12°3.3'N	59°32.6'W	Tropical	29.2	611.0	34.98	2537	3.5	0.14	0	1	0	0	7	0
047	7-Nov-12	0008	1892.9	12°30.8'N	60°21.4'W	Tropical	29.0	722.9	34.86	2045	15.0	0.73	0	0	0	0	21	0
048	#####	1200	2065.6	15°6.6'N	61°16.6'W	Tropical	28.8	740.5	34.94	3101	4.0	0.13	0	0	0	0	0	0
050	#####	1144	2242.0	17°18.4'N	62°10.7'W	Tropical	28.8	660.6	34.85	2308	2.0	0.09	0	2	0	0	0	0
051	#####	1159	2405.8	18°54.9'N	63°29.6'W	Tropical	28.7	735.7	34.71	1330	5.0	0.38	0	5	0	185	0	1

APPENDIX F (cont.) C243 NET COLLECTIONS
C243 METER NET AND 2-METER NET COLLECTIONS

STATION	DATE	TIME	LOG	LAT.	LONG.	GENERAL LOCALITY	NET TYPE/NUMBER	TOW TYPE	MESH SIZE	DEPTH	TOW VOL.	ZOOPLANK. VOL.	ZOOPLANK. DENSITY
C243		(local)	(NM)	(°N)	(°W)				(µ)	(m)	(m³)	(ml)	(ml/100m³)
007-MN	18-Oct-12	2130	148.5	38°22.9' N	62°28.4' W	Gulf Stream	meter net	stepped oblique	333	132	1216	54	4.44
013-MN	20-Oct-12	2221	306.5	36°33.3' N	61°15.4' W	North Sargasso Sea	2 meter net	stepped oblique	1000	74	3825	75	2.0
013-MN	20-Oct-12	2145	306.5	36°33.3' N	61°15.4' W	North Sargasso Sea	meter net	stepped oblique	333	67	1038	38	3.7
021-MN	24-Oct-12	2202	559.2	31°31.5' N	57°30.5' W	North Sargasso Sea	2 meter net	stepped oblique	1000	118	3645	38	1.0
023-MN	25-Oct-12	1150	655.7	30°22.5' N	57°31.9' W	South Sargasso Sea	meter net	vertical	200	25	162	-	-
025-MN	26-Oct-12	0929	756.0	28°49.9' N	57°37.4' W	South Sargasso Sea	meter net	vertical	200	25	74	-	-
027-MN	27-Oct-12	0910	855.2	27°59.9' N	57°39.5' W	South Sargasso Sea	meter net	vertical	200	25	30	-	-
028-MN	28-Oct-12	0914	959.1	25°35.9' N	57°14.7' W	South Sargasso Sea	meter net	vertical	200	25	51	-	-
029-MN	28-Oct-12	2127	1002.3	24°59.4' N	57°2.7' W	South Sargasso Sea	2 meter net	stepped oblique	1000	150	3199	22	0.69
030-MN	29-Oct-12	0858	1043.7	24°19.9' N	56°58.7' W	South Sargasso Sea	meter net	stepped oblique	333	140	886	13	1.47
032-MN	30-Oct-12	0911	1141.1	22°32.8' N	57°2.2' W	Transition Zone	meter net	vertical	200	25	48	-	-
034-MN	31-Oct-12	0912	1187.5	21°25.3' N	57°4.7' W	Transition Zone	meter net	vertical	200	25	32	-	-
036-MN	1-Nov-12	0914	1282.6	19°38.0' N	57°27.0' W	Transition Zone	meter net	vertical	200	25	40	-	-
037-MN	1-Nov-12	2131	1326.5	18°53.9' N	57°31.3' W	Transition Zone	meter net	stepped oblique	333	99	1553	31	2.00
038-MN	2-Nov-12	0913	1377.5	18°3.4' N	57°40.5' W	Transition Zone	2 meter net	stepped oblique	1000	106	5157	51	0.99
040-MN	3-Nov-12	0925	1484.0	16°59.5' N	58°4.6' W	Tropical	meter net	vertical	200	25	35	-	-
042-MN	4-Nov-12	0919	1600.9	14°59.8' N	58°36.4' W	Tropical	meter net	vertical	200	25	41	-	-
043-MN	4-Nov-12	2135	1660.8	13°15.3' N	58°47.5' W	Tropical	2 meter net	stepped oblique	1000	~110	4169	75	1.80
044-MN	5-Nov-12	2130	1660.8	13°15.3' N	58°47.5' W	Tropical	meter net	stepped oblique	333	~100	1309	48	3.67
045-MN	5-Nov-12	2126	1779.2	12°16.8' N	59°2.6' W	Tropical	meter net	vertical	200	25	82	-	-
046-MN	6-Nov-12	0912	1835.5	12°5.8' N	59°30.1' W	Tropical	2 meter net	stepped oblique	1000	147	4103	130	3.17

C243 PHYTOPLANKTON NET COLLECTIONS

STATION	DATE	TIME	LOG	LAT.	LONG.	GENERAL LOCALITY	SURF. TEMP.	SURF. SALINITY	CHLOR.
C243		(local)	(NM)	(°N)	(°W)		°C	PSU	<i>In situ</i> fluor.
002	14-Oct-12	1013	-	43°3.2' N	68°23.1' W	Gulf of Maine	13.7	33.02	4383.1
003	15-Oct-12	0856	-	42°11.9' N	67°27.7' W	Gulf of Maine	16.2	32.86	5481.0
006	18-Oct-12	0933	86.5	39°2.5' N	63°15.6' W	Slope Water	24.1	35.60	1153.5
009	19-Oct-12	0931	208.0	37°26.4' N	61°39.6' W	North Sargasso Sea	24.7	36.07	718.1
012	20-Oct-12	0950	-	36°26.3' N	62°4.5' W	North Sargasso Sea	25.2	36.25	633.7
014	21-Oct-12	0920	350.6	36°26.9' N	60°26.7' W	North Sargasso Sea	24.7	36.25	688.8
016	22-Oct-12	0933	402.5	35°49.2' N	59°36.7' W	North Sargasso Sea	24.3	36.26	960.5
018	22-Oct-12	0930	470.0	33°55.7' N	58°49.1' W	North Sargasso Sea	24.8	36.23	749.5
020	24-Oct-12	0934	543.1	32°13.1' N	58°9.4' W	North Sargasso Sea	25.6	36.36	650.5
023	25-Oct-12	0929	655.7	30°23.9' N	57°32.7' W	South Sargasso Sea	26.7	36.70	616.4
025	26-Oct-12	0909	756.0	28°50.0' N	57°37.7' W	South Sargasso Sea	26.9	36.68	642.9
027	27-Oct-12	0858	855.2	27°59.9' N	57°39.5' W	South Sargasso Sea	27.5	36.75	665.6
028	28-Oct-12	0900	959.1	25°35.9' N	57°15.1' W	South Sargasso Sea	27.9	36.56	664.5
030	28-Oct-12	0844	1043.7	24°19.9' N	56°58.8' W	Transition Zone	27.9	36.37	572.3
032	30-Oct-12	0900	1141.1	22°32.8' N	57°2.3' W	Transition Zone	28.4	36.48	569.5
034	31-Oct-12	0900	1187.5	21°25.3' N	57°4.7' W	Transition Zone	28.4	35.78	581.4
036	1-Nov-12	0904	1282.6	19°38.2' N	57°26.8' W	Transition Zone	28.6	35.88	589.6
038	2-Nov-12	0911	1377.5	18°3.6' N	57°40.5' W	Transition Zone	28.6	35.06	581.1
040	3-Nov-12	0911	1484.0	16°59.7' N	58°4.6' W	Tropical	28.8	34.99	600.9
042	4-Nov-12	0908	1600.9	14°59.8' N	58°36.2' W	Tropical	28.9	35.51	607.9
044	5-Nov-12	0904	1723.3	12°16.8' N	59°4.9' W	Tropical	29.2	35.23	641.9
046	6-Nov-12	0853	1835.5	12°5.8' N	59°29.8' W	Tropical	29.1	35.04	646.5

APPENDIX G
C243 McLANE PUMP STATION SUMMARY

STATION	DATE	LAT. (°N)	LONG. (°W)	DEPTH (m)	GENERAL LOCATION	Mesh filter	Flow (l)
C243	2012						
018	10/23	33°55.0'	58°50.6'	5	North Sargasso Sea	63um	46.4
023A	10/25	30°23.0'	57°31.8'	25	South Sargasso Sea	63um	46.4
023B	10/25	30°22.7'	57°31.8'	5	South Sargasso Sea	63um	46.4
025A	10/26	28°49.3'	57°36.1'	25	South Sargasso Sea	63um	46.4
025B	10/26	28°49.3'	57°35.8'	5	South Sargasso Sea	63um	46.4
027A	10/27	27°10.2'	57°39.9'	25	South Sargasso Sea	63um	46.4
027B	10/27	27°10.3'	57°39.8'	5	South Sargasso Sea	63um	46.4
028A	10/28	25°37.1'	57°13.3'	25	South Sargasso Sea	63um	46.4
028B	10/28	25°37.5'	57°12.7'	5	South Sargasso Sea	63um	46.4
030A	10/29	24°19.7'	56°58.0'	25	Transition Zone	63um	46.4
030B	10/29	24°19.7'	56°57.9'	5	Transition Zone	63um	46.6
032A	10/30	22°33.5'	57°1.7'	25	Transition Zone	63um	46.4
032B	10/30	22°33.3'	57°1.7'	5	Transition Zone	63um	46.4
034A	10/31	21°24.0'	57°5.1'	25	Transition Zone	63um	46.4
034B	10/31	21°23.5'	57°5.2'	5	Transition Zone	63um	46.4
036A	11/1	19°36.6'	57°28.5'	25	Transition Zone	63um	46.4
036B	11/1	19°36.1'	57°29.1'	5	Transition Zone	63um	46.4
038A	11/2	18°2.4'	57°40.6'	25	Transition Zone	63um	46.4
038B	11/2	18°1.9'	57°40.6'	5	Transition Zone	63um	46.4
040A	11/3	16°8.1'	58°5.1'	25	Tropical	63um	46.4
040B	11/3	16°7.2'	58°5.4'	5	Tropical	63um	46.4
042A	11/4	14°9.2'	58°38.0'	25	Tropical	63um	46.4
042B	11/4	14°8.9'	58°38.5'	5	Tropical	63um	46.4
044A	11/5	12°15.6'	59°6.2'	25	Tropical	63um	46.4
044B	11/5	12°15.2'	59°6.5'	5	Tropical	63um	46.4
046A	11/6	12°4.3'	59°31.6'	25	Tropical	63um	46.4
046B	11/6	12°4.0'	59°32.0'	5	Tropical	63um	46.4