The following supplement accompanies the article

Heme *b* in marine phytoplankton and particulate material from the North Atlantic Ocean

David J. Honey[1], Martha Gledhill[1,*], Thomas S. Bibby[1], François-Eric Legiret[1], Nicola J. Pratt[1], Anna E. Hickman[1], Tracy Lawson[2], Eric P. Achterberg[1]

[1]Ocean and Earth Science, University of Southampton, National Oceanography Centre, Southampton SO14 3ZH, UK
[2]Department of Biological Sciences, University of Essex, Wivenhoe Park, Colchester CO4 3SQ, UK

*Corresponding author. Email: martha@soton.ac.uc

Marine Ecology Progress Series 483: 1–17 (2013)

Supplement. Raw data from culture experiments and field studies

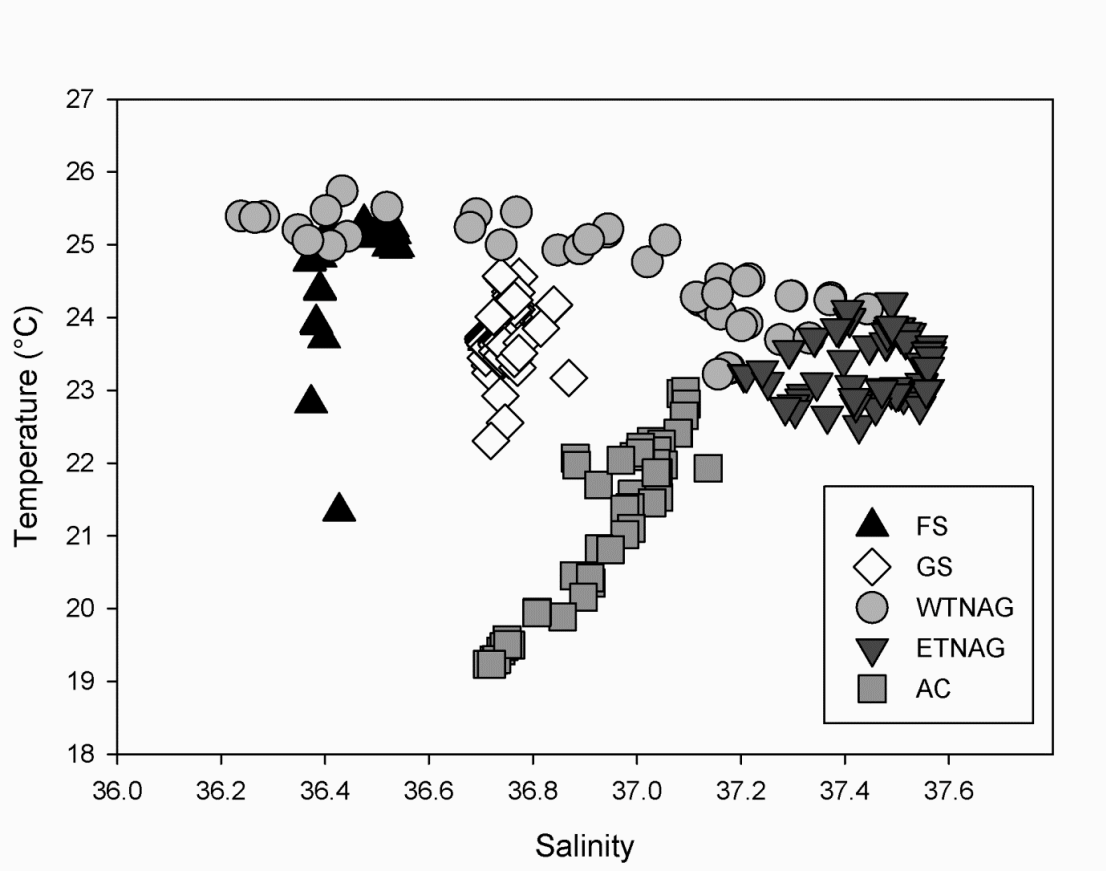

Fig. S1. Salinity against temperature (°C) for samples collected from the (sub-)tropical North Atlantic (NA transect; see Fig. 1 in the main text) indicating the 5 oceanographic regions used to assess analytical measurements: Florida Straits (FS, 27.2° N, 79.57° W to 27.2° N, 79.10° W), Gulf Stream (GS, 26.3° N, 76.56° W to 24.3° N, 68.24° W), West Tropical North Atlantic Gyre (WTNAG, 24.3° N, 67. 40° W to 23.43° N, 45.16° W), East Tropical North Atlantic Gyre (ETNAG, 23.38° N, 44.44° W to 24.31° N, 26.14° W) and Azores Current (AC, 24.31° N, 25.32° W to 27.56° N, 17.80° W)

Table S1. Cell numbers, cellular volume, carbon and nitrogen concentration per unit biovolume and chl *a* concentration and heme *b* concentrations in the culture media determined in the late exponential phase for *Dunaliella tertiolecta*, *Emiliania huxleyi*, *Thalassiosira weissflogii*, *T. oceanica*, *Phaeodactylum tricornutum* and *Synechococcus* sp. WH7803 cultures grown under varying iron concentrations and high light conditions. Fe_T: total dissolved iron. Data are mean ± SD

Species / treatment (in nmol l^{-1} Fe_T)	Cells ($\times 10^5$ ml^{-1})	Mean cell volume (μm^3)	C per unit biovolume (mol l^{-1})	N per unit biovolume (mol l^{-1})	Chl *a* (nmol l^{-1})	Heme *b* (nmol l^{-1})
Dunaliella tertiolecta						
5	0.98 ± 0.15	113 ± 7	15 ± 5	2.6 ± 1.0	41 ± 4.2	0.22 ± 0.06
45	2.33 ± 0.11	213 ± 2	13 ± 1	2.3 ± 0.1	258 ± 3.8	2.99 ± 0.58
1500	2.08 ± 0.11	276 ± 3	13 ± 1	2.2 ± 0.1	309 ± 27	3.76 ± 0.73
Emiliania huxleyi						
0.5	5.26 ± 0.55	22 ± 1	16 ± 1	2.2 ± 0.1	18.9 ± 2.4	0.07 ± 0.02
5	15.4 ± 1.2	28 ± 1	16 ± 2	2.0 ± 0.2	67 ± 1.6	0.47 ± 0.02
45	21.2 ± 0.3	28 ± 1	15 ± 1	2.1 ± 0.1	138 ± 2.4	1.59 ± 0.25
1500	17.2 ± 0.1	29 ± 4	15 ± 0.3	2.0 ± 0.1	129 ± 0.8	1.60 ± 0.10
Thalassiosira weissflogii						
45	0.28 ± 0.01	920 ± 20	10 ± 2	1.1 ± 0.2	51 ± 6.1	0.76 ± 0.30
188	0.36 ± 0.01	1100 ± 40	12 ± 4	1.3 ± 0.4	81 ± 15	1.84 ± 0.14
1500	0.38 ± 0.01	1190 ± 10	12 ± 3	1.4 ± 0.3	91 ± 9.0	1.42 ± 0.08
Thalassiosira oceanica						
5	0.10 ± 0.01	87 ± 2	32 ± 5	5.0 ± 0.5	1.8 ± 0.2	0.07 ± 0.02
45	1.00 ± 0.07	87 ± 1	18 ± 1	2.8 ± 0.2	29 ± 4.0	0.57 ± 0.05
188	1.89 ± 0.43	89 ± 1	15 ± 1	2.2 ± 0.1	59 ± 14	1.03 ± 0.13
1500	1.12 ± 0.21	82 ± 1	22 ± 2	2.9 ± 0.2	38 ± 1.6	0.99 ± 0.06
Phaeodactylum tricornutum						
0.5	2.62 ± 0.28	55 ± 2	11 ± 2	1.8 ± 0.4	2.9 ± 0.4	0.13 ± 0.04
5	6.31 ± 0.55	80 ± 4	14 ± 0.4	1.9 ± 0.1	18 ± 0.9	0.90 ± 0.82
45	9.46 ± 0.25	83 ± 2	16 ± 0.2	1.8 ± 0.1	100 ± 45	2.83 ± 0.59
1500	9.02 ± 0.42	84 ± 1	15 ± 1	1.8 ± 0.1	123 ± 13	3.41 ± 1.09
Synechococcus sp. WH7803						
12	76.0 ± 15.2	1.5 ± 0.3	85 ± 8	20.9 ± 6.0	12 ± 0.7	0.59 ± 0.22
120	313 ± 177	1.8 ± 0.3	37 ± 2	6.0 ± 0.3	88 ± 32	4.26 ± 2.15
1200	262 ± 207	2.5 ± 0.8	34 ± 1	5.6 ± 0.5	119 ± 50	3.69 ± 1.67

Table S2. *Emiliania huxleyi* and *Thalassiosira oceanica.* Cell numbers, cellular volume, carbon and nitrogen concentration per unit biovolume and chl *a* concentration and heme *b* concentrations in the culture media determined in the late exponential phase grown under varying iron concentrations and low light or low nitrate conditions. Fe_T: total dissolved iron. Data are mean ± SD

Species / treatment (in nmol l^{-1} Fe_T)	Cell ($\times 10^5$ ml^{-1})	Mean cell volume (μm^3)	C per unit biovolume (mol l^{-1})	N per unit biovolume (mol l^{-1})	Chl *a* (nmol l^{-1})	Heme *b* (nmol l^{-1})
Emiliania huxleyi (low nitrate)						
5	6.64 ± 0.21	25 ± 1	25 ± 1	1.3 ± 0.1	26.6 ± 4.7	0.13 ± 0.04
45	6.05 ± 0.16	28 ± 0.5	28 ± 0.5	1.2 ± 0.1	26.5 ± 2.6	0.15 ± 0.01
1500	4.95 ± 0.08	32 ± 0.04	32 ± 0.04	1.2 ± 0.1	27.5 ± 0.5	0.14 ± 0.01
Emiliania huxleyi (low light)						
0.5	1.24 ± 0.08	22 ± 2	19.2 ± 0.4	2.97 ± 0.08	6.72	0.02 ± 0.01
5	6.09 ± 0.01	25 ± 1	17 ± 0.1	2.19 ± 0.01	38 ± 1.2	0.18 ± 0.03
45	13.0 ± 0.2	28 ± 1	16 ± 4	2.04 ± 0.5	133 ± 2.0	0.89 ± 0.11
1500	10.5 ± 0.5	32 ± 1	18.5	2.28	117 ± 2.0	0.92 ± 0.03
Thalassiosira oceanica (low nitrate)						
188	0.92 ± 0.07	96 ± 3	18 ± 1	0.86 ± 0.03	23.3 ± 1.7	0.59 ± 0.03
1500	1.26 ± 0.07	77 ± 1	15 ± 1	1.2 ± 0.1	23.2 ± 2.1	0.43 ± 0.08
Thalassiosira oceanica (low light)						
45	0.21 ± 0.03	83 ± 1	26 ± 3	5.11 ± 0.44	4.0 ± 0.1	0.17 ± 0.01
188	0.61 ± 0.03	85 ± 1	19.5 ± 0.4	2.71 ± 0.11	16.3 ± 1.9	0.44 ± 0.04
1500	1.03 ± 0.16	80 ± 1	15 ± 2	2.23 ± 0.34	33.7 ± 6.5	0.54 ± 0.06

Table S3. Chl *a*, heme *b*, particulate organic carbon (POC) and nitrogen (PON), total photosynthetic pigments excluding chl *a* (PSP) and non-photosynthetic carotenoids (NPC) obtained for samples collected in the Celtic Sea. Dates are given as dd/mm/yyyy

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	PSP (pmol l^{-1})	NPC (pmol l^{-1})
Celtic Sea												
B21	27/07/2005	2[a]	49.89	7.88	17.76	35.36	0.38	3.5	12.2	1.58	384	155
		11[a]			17.76	35.36	0.36	3.3				
		22[a]			17.69	35.36	0.40	5.0				
		31			15.34	35.40	0.56	3.9			1020	308
		51			10.66	35.39	0.53	2.2				
		100			10.44	35.39		2.7				
B22	31/07/2005	2[a]	49.90	7.87	17.41	35.33	0.50	4.4	11.5	1.54		
		12[a]			17.41	35.33	0.49	4.3	10.1	1.27	528	181
		27			17.35	35.33	0.54	4.7	8.4	1.13	585	214
		52			10.40	35.38	0.30	2.6				
		62			10.37	35.39	0.28	2.1				
		102			10.37	35.39		2.5				
OB1	01/08/2005	2[a]	49.75	7.67	17.98	35.34	0.43	3.2	10.4	1.28	427	236
		12[a]			17.38	35.34	0.44	3.4				
		23[a]			15.17	35.38	0.57	6.6				
		33			11.12	35.39	1.05	8.9	10.4	1.56	1212	227
		37			10.47	35.38	0.35	2.3				
		83			10.46	35.38	0.21	1.9				
OB2	02/08/2005	2[a]	49.75	7.67	17.83	35.35	0.31	3.8	8.8	1.15	329	176
		22[a]			17.39	35.33	0.48	5.3	10.4	1.35	509	211
		37			13.53	35.40	0.56	2.9	8.6	1.30	591	248
		47			10.74	35.40	1.04	6.6	10.0	1.49	1270	226
		62			10.47	35.39	0.21	1.6				
		121			10.48	35.39	0.19	2.1				
U2	03/08/2005	3[a]	49.23	6.17	17.96	35.28	0.26	3.1	8.4	1.31	246	134
		22[a]			17.51	35.27	0.30	4.9	8.6	1.33	347	137
		27			11.29	35.33	1.58	4.1	15.5	2.73	1456	446
		28			10.80	35.34	1.42	5.2				
		30			10.73	35.34	0.82	2.2				
		107			10.70	35.34		1.8				

[a]Surface mixed layer samples

Table S4. Chl *a*, heme *b*, particulate organic carbon (POC) and nitrogen (PON), nitrate +nitrite (NO_3^{2-}) and phosphate (PO_4^{3-}) obtained for samples collected on a transect of the (sub-)tropical North Atlantic. Dates are given as dd/mm/yyyy; <dl: below detection limit

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
Florida Straits												
002	07/01/2010	8[a]	27.20	79.57	23.71	36.40	0.35	2.5	3.8	0.46	320	12.5
		52			22.82	36.37	0.58	4.4	4.7	0.54	452	4.4
		103			21.34	36.43	0.87	5.0			56	48.2
003	07/01/2010	7[a]	27.21	79.51	23.90	36.38	0.37	2.8	3.2	0.38	177	10.7
		52[a]			23.93	36.38	0.43	3.2	3.5	0.38	185	3.9
		152			19.66	36.46	0.03	0.6	3.1	0.33	12900	480
004	07/01/2010	7[a]	27.21	79.45	24.37	36.39	0.30	0.4	2.9	0.33	61	3.1
		52[a]			24.39	36.39	0.29	1.2	3.5	0.37	73	3.2
		102			23.76	36.39	0.40	1.6	2.5	0.32	348	10.3
005	07/01/2010	6[a]	27.20	79.40	24.77	36.37	0.25	2.5	2.6	0.30	66	2.4
		52[a]			24.79	36.37	0.23	2.1	2.2	0.26	54	<dl
		152			20.74	36.62	0.09	0.8	1.0	0.08	12400	390
006	07/01/2010	12[a]	27.21	79.35	24.83	36.39	0.29	2.3	3.1	0.39	119	6.1
		52[a]			24.83	36.39	0.29	2.6	2.9	0.40	96	2.6
		202			18.33	36.43		0.6	0.9	0.08	14500	580
007	07/01/2010	6[a]	27.21	79.33	25.24	36.53	0.33	0.5	3.1	0.38	285	2.7
		51[a]			25.23	36.53	0.34	0.8	2.6	0.34	158	1.3
		151			20.68	36.64	0.02	0.3	0.7	0.05	11500	300
008	07/01/2010	12[a]	27.21	79.25	25.28	36.51	0.32	1.7	3.6	0.42	272	2.1
		52[a]			25.26	36.52	0.38	2.1	2.8	0.38	239	7.6
		102			24.63	36.73	0.17	1.2	1.7	0.22	6900	30
009	07/01/2010	7[a]	27.20	79.20	25.35	36.51	0.33	1.8	3.6	0.34	225	2.9
		52[a]			25.32	36.52	0.40	2.1	2.6	0.29	80	2.1
		152			21.42	36.81		0.3	2.6	0.30	8850	210
010	07/01/2010	11[a]	27.20	79.15	25.21	36.41	0.29	0.7	4.0	0.51	125	3.5
		51[a]			25.15	36.53	0.35	1.3	2.7	0.33	168	7.7
		101			24.87	36.57	0.30	1.3	2.3	0.31	229	3.4
011	08/01/2010	6[a]	27.20	79.13	25.30	36.48	0.28	2.8	3.1	0.30	56	1.7
		51[a]			24.97	36.54	0.32	1.6	2.3	0.27	150	1.9
		151			22.35	36.85	0.00	0.4	0.8	0.09	5540	40

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
012	08/01/2010	12[a]	27.20	79.11	25.17	36.48	0.37	1.9	3.2	0.38		
		52[a]			24.98	36.52	0.35	2.1	2.5	0.34		
		102			24.13	36.64	0.18	1.5	2.8	0.41	254	9.9
013	08/01/2010	6[a]	27.20	79.10	25.10	36.48	0.37	2.4	2.7	0.33		
		52[a]			24.95	36.54	0.31	1.8	2.2	0.28		
		168			20.74	36.74	0.01	0.5	1.2	0.11		
Gulf Stream												
014	08/01/2010	6[a]	26.30	76.56	23.73	36.71	0.16	0.3	2.8	0.26	36	<dl
		26[a]			23.70	36.71	0.16	1.4	2.4	0.27	72	1.3
		51[a]			23.68	36.71	0.17	1.1	2.5	0.32	38	1.7
015	08/01/2010	6[a]	26.30	76.52	23.73	36.71	0.13	1.2	2.8	0.27	46	1.2
		26[a]			23.73	36.71	0.14	1.0	2.4	0.23	49	<dl
		51[a]			23.70	36.70	0.16	1.6	2.6	0.30	47	2.6
016	09/01/2010	7[a]	26.32	76.49	23.70	36.71	0.09	0.9	2.3	0.22		
		52[a]			23.71	36.71	0.13	1.5	2.3	0.24		
		102			23.28	36.75	0.14	1.2	1.7	0.22	5200	10
017	09/01/2010	9[a]	26.30	76.47	23.66	36.71	0.16	1.2	2.3	0.25	29	3.1
		54[a]			23.67	36.71	0.17	1.8	2.4	0.29	19	1.0
		104[a]			23.34	36.72	0.15	1.2	2.0	0.24		
019	09/01/2010	5[a]	26.30	76.46	23.64	36.71	0.15	1.5	2.4	0.27	43	5.4
		49[a]			23.65	36.71	0.17	1.3	2.1	0.26	34	5.9
		100[a]			23.24	36.72	0.13	1.3	2.0	0.29	103	6.0
020	09/01/2010	3[a]	26.30	76.41	23.63	36.71	0.16	1.6	2.7	0.28	20	4.4
		50[a]			23.66	36.71	0.16	2.0	2.5	0.31		
		101[a]			23.45	36.71	0.17	1.6	2.0	0.27	44	8.1
021	10/01/2010	6[a]	26.30	76.38	23.62	36.71	0.15	0.5	2.1	0.27	27	3.4
		62[a]			23.63	36.71	0.16	0.9	2.0	0.24	15	14.7
		112[a]			23.59	36.72	0.16	1.0	2.6	0.40	14	3.7
022	10/01/2010	4[a]	26.30	76.32	23.63	36.73	0.12	0.9	2.4	0.32	32	12.1
		50[a]			23.66	36.73	0.13	0.8	2.3	0.31	27	16.5
		121			22.72	36.83	0.24	1.2	1.5	0.21	344	7.0
023	10/01/2010	6[a]	26.29	76.27	23.61	36.73	0.14	0.9	1.9	0.22	12	57.0
		50[a]			23.63	36.73	0.15	0.9	1.8	0.22	10	4.2
		123			22.44	36.83	0.19	1.3	1.2	0.17	406	9.6

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
024	10/01/2010	4[a]	26.30	76.18	23.64	36.74	0.12	0.9	2.2	0.23		
		121			22.83	36.85	0.20	0.9	1.4	0.19	190	7.6
		177			20.58	36.75	0.02	0.6	0.9	0.11	954	24.9
025	11/01/2010	8[a]	26.29	76.14	23.41	36.74	0.14	0.9	1.7	0.24	17	4.4
		54[a]			23.43	36.74	0.14	1.1	1.6	0.21	24	3.6
		120			22.70	36.83	0.19	1.1	1.4	0.20	312	6.8
026	11/01/2010	11[a]	26.30	76.07	23.42	36.75	0.14	1.1	2.1	0.26	26	7.7
		51[a]			23.43	36.75	0.15	1.3	2.0	2.66	23	4.7
		107[a]			23.39	36.76	0.15	1.1	2.2	0.33	30	3.4
027	11/01/2010	12[a]	26.30	75.55	23.68	36.75	0.13	1.0	1.9	0.22	3	3.3
		53[a]			23.69	36.75	0.12	1.1	1.7	0.22	4	1.8
		103[a]			23.54	36.73	0.13	1.1	7.7	0.49	10	2.0
028	12/01/2010	11[a]	26.30	75.44	23.96	36.77	0.10	0.8	2.0	0.25	8	1.0
		52[a]			23.96	36.77	0.10	0.8	2.0	0.24	2	1.3
		102			23.22	36.81	0.23	1.5	2.3	0.40	60	3.6
029	12/01/2010	10[a]	26.30	75.31	23.79	36.76	0.13	1.0	1.6	0.22	10	1.4
		50[a]			23.71	36.75	0.12	1.1	1.8	0.23	9	1.1
		121			22.75	36.86	0.23	1.0	1.3	0.17	158	2.2
030	12/01/2010	51[a]	26.30	75.19	24.01	36.76	0.13	0.7	2.1	0.25	20	<dl
		101			22.91	36.86	0.30	0.6	1.6	0.18	122	1.1
031	12/01/2010	4[a]	26.30	75.04	24.17	36.77	0.11	1.1	2.2	0.26	2	1.1
		101[a]			24.12	36.76	0.14	0.8	1.8	0.22	2	1.0
		179			20.05	36.72	0.03	0.5	0.8	0.20	964	13.8
032	13/01/2010	4[a]	26.30	74.48	24.11	36.77	0.10	0.7	1.9	0.22	11	1.0
		51[a]			24.11	36.77	0.11	0.9	1.7	0.21	7	2.5
		101			22.83	36.83	0.33	1.4	1.6	0.27	4	<dl
033	13/01/2010	4[a]	26.30	74.31	24.17	36.76	0.13	0.9	2.0	0.25	27	1.1
		51[a]			24.18	36.76	0.12	1.0	2.2	0.29	13	<dl
		102			23.29	36.84	0.25	0.9	1.6	0.21	387	2.0
034	13/01/2010	11[a]	26.30	74.15	24.35	36.76	0.13	0.7	1.8	0.23	36	1.1
		102			23.71	36.85	0.27	1.1	1.5	0.22	114	<dl
		177			20.57	36.76	0.06	0.6	1.0	0.19	775	5.3
035	13/01/2010	177	26.30	73.56	20.72	36.77	0.01	0.3	0.7	0.09	881	11.8
036	14/01/2010	11[a]	26.31	73.35	24.55	36.74	0.15	0.8	1.9	0.26	12	1.6
		52[a]			24.55	36.74	0.15	0.8	1.8	0.17	3	2.5
		122			23.17	36.87	0.16	0.7	1.1	0.15	449	4.3

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
037	14/01/2010	6[a]	26.31	73.12	24.50	36.75	0.14	1.0	2.0	0.26	21	1.0
		53[a]			24.51	36.75	0.15	0.6	2.2	0.32	5	
		144			23.14	36.85	0.09	0.7	1.3	0.21		
038	14/01/2010	4[a]	26.30	72.50	23.95	36.75	0.11	0.8	2.1	0.25	39	1.3
		50[a]			23.95	36.75	0.12	0.6	2.1	0.26	32	1.4
		101[a]			23.85	36.75	0.15	1.0	1.8	0.24	16	1.2
039	14/01/2010	5[a]	26.30	72.28	23.67	36.75	0.09	0.8			46	1.1
		50[a]			23.48	36.74	0.14	0.8	2.2	0.23	34	<dl
		81[a]			23.31	36.77	0.26	1.0	2.3	0.30	70	2.3
040	15/01/2010	5[a]	26.31	72.06	24.30	36.76	0.08	0.8	1.8	0.24	4	<dl
		51[a]			23.91	36.74	0.10	0.6	2.1	0.29	7	2.2
		111			23.48	36.79	0.18	1.0	1.6	0.25	26	<dl
041	15/01/2010	4[a]	26.31	71.43	24.11	36.76	0.12	0.8	1.7	0.19	18	1.0
		50[a]			23.68	36.76	0.14	0.9	2.1	0.28	25	<dl
		121			23.01	36.82	0.21	0.9	1.9	0.23	100	1.5
042	15/01/2010	10[a]	26.30	71.22	23.65	36.74	0.13	0.8			20	1.4
		103[a]			23.61	36.75	0.15	1.3	2.1	0.23	7	1.4
		177			20.74	36.78	0.02	0.4	1.0	0.09	529	5.6
043	16/01/2010	3[a]	26.29	71.00	23.43	36.76	0.12	0.8	2.4	0.26	47	2.0
		50			22.92	36.74	0.18	1.2	1.8	0.22	49	2.5
		105			22.30	36.72	0.20	1.1	2.4	0.30	38	2.0
044	16/01/2010	5[a]	26.06	70.38	22.56	36.75	0.10	0.8	2.0	0.28	7	<dl
		50[a]			22.31	36.72	0.17	0.9	2.0	0.27	5	<dl
		75			22.18	36.73	0.19	1.4	2.6	0.37	8	<dl
045	16/01/2010	6[a]	25.42	70.16	23.66	36.78	0.08	0.6			18	1.9
		50[a]			23.51	36.77	0.09	0.8	2.2	0.37	11	2.3
		101			23.04	36.80	0.29	1.1			12	1.1
046	17/01/2010	6[a]	25.18	69.54	24.17	36.84	0.10	0.9	1.9	0.22	25	1.4
		64[a]			24.18	36.84	0.10	1.0	2.3	0.28	27	1.7
		115[a]			23.85	36.82	0.15	1.2	2.0	0.24	<dl	<dl
047	17/01/2010	6[a]	24.54	69.32	24.16	36.75	0.06	0.8	1.9	0.22	7	1.1
		52[a]			24.16	36.75	0.06	0.9	2.0	0.21	3	1.6
		116			21.73	36.80	0.02	0.4	1.2	0.10	177	<dl
048	17/01/2010	5[a]	24.30	69.09	24.35	36.77	0.06				17	1.0
		51[a]			24.24	36.76	0.06	0.8	2.0	0.22	21	<dl
		101			21.92	36.85	0.31		2.8	0.27	10	1.5

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
049	18/01/2010	5[a]	24.31	68.24	24.57	36.74	0.06	0.8	2.0	0.21	27	2.3
		52			24.01	36.72	0.08		2.2	0.25	24	1.1
		111			21.98	36.78	0.28	1.4	1.9	0.25	3	<dl
Western Tropical North Atlantic Gyre												
050	18/01/2010	5[a]	24.31	67.40	25.33	36.49	0.06	1.0	1.9	0.24	42	3.2
		51[a]			25.45	36.77	0.13	1.0	1.9	0.22	26	<dl
		101			24.11	36.90	0.31	1.3	1.9	0.27	25	1.9
051	18/01/2010	5[a]	24.30	66.56	25.02	36.72	0.06	0.9	2.3	0.26	54	1.7
		52[a]			24.80	36.75	0.08	0.8	2.1	0.27	17	
		102			23.88	36.85	0.36	1.6	1.9	0.24		2.3
052	19/01/2010	5[a]	24.30	66.13	24.45	36.77	0.05	0.5	2.2	0.25	25	3.0
		51			23.58	36.79	0.08		2.3	0.25	21	1.5
		112			22.32	36.84	0.33	1.6	1.5	0.23	72	1.9
053	19/01/2010	5[a]	24.30	65.29	25.12	36.44	0.08	1.8	2.3	0.27	46	1.2
		51			23.69	36.80	0.07	1.2	1.8	0.25	36	<dl
		102			21.86	36.83	0.34	1.5	1.6	0.21	6	1.1
054	19/01/2010	5[a]	24.30	64.46	25.21	36.35	0.14	1.9			45	1.1
		101			24.43	36.64	0.37	2.3			726	55.4
		178					0.01	0.6	0.7	0.07	17700	830
055	20/01/2010	51[a]	24.31	64.01	25.74	36.43	0.09	1.7	2.2	0.25	241	1.4
		111			21.68	36.86	0.22	1.1	1.2	0.15		
		176			19.40	36.66	0.02	0.4	0.7	0.09		
056	20/01/2010	5[a]	24.30	63.18	25.39	36.28	0.09	1.3	2.3	0.28	17	1.7
		50[a]			25.47	36.40	0.12	1.8	2.6	0.25	18	1.6
		101			24.24	36.89	0.31	2.1	1.7	0.30	4	<dl
057	20/01/2010	5[a]	24.30	62.33	25.40	36.24	0.09	1.2	2.7	0.33	32	2.1
		52[a]			25.52	36.52	0.12	1.1	2.1	0.25	26	2.0
		102			24.82	37.11	0.37	2.2	2.1	0.25	4	2.4
058	21/01/2010	6[a]	24.31	61.48	25.38	36.27	0.06	1.4	2.2	0.29	30	<dl
		51[a]			24.98	36.41	0.09	1.8	2.3	0.32	20	1.6
		110			23.96	37.17	0.38	2.1	2.0	0.29	9	1.5
059	21/01/2010	6[a]	24.30	61.05	25.06	36.37	0.07	0.8			30	3.2
		102			23.51	37.01	0.29	1.8			127	3.1
		177			20.26	36.81	0.02	0.7	2.0	0.32	6000	80

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
060	21/01/2010	49[a]	24.30	60.21	24.93	36.85	0.06	1.0	2.6	0.29	27	<dl
		114			23.54	37.14	0.36	1.6	1.8	0.25	16	<dl
		177			20.65	36.85	0.03	0.7	0.7	0.11	1340	15.9
061	22/01/2010	5[a]	24.30	59.38	25.00	36.74	0.07	1.3	2.5	0.31	48	2.5
		51[a]			24.76	37.02	0.11	1.1	2.4	0.32	24	<dl
		111			23.71	37.11	0.28	1.4	1.7	0.25	10	<dl
062	22/01/2010	49[a]	24.30	58.54	25.06	37.05	0.09	1.0	2.1	0.26	39	1.7
		102			24.36	37.22	0.15	1.3	1.6	0.23	3	1.2
063	22/01/2010	50[a]	24.30	58.09	24.53	37.22	0.09	0.8	2.6	0.28	44	3.5
		117			22.44	37.06	0.33	1.3	1.7	0.25	5	1.3
		176			19.30	36.65	0.03	0.5	0.9	0.15	1560	15.1
064	23/01/2010	6[a]	24.30	57.24	24.53	37.16	0.06	1.0	4.5	0.49	17	1.7
		50[a]			24.50	37.21	0.08	0.9	1.8	0.25	8	5.5
		116			22.67	37.06	0.35	1.8	2.0	0.28	2	1.3
065	23/01/2010	4[a]	24.29	56.41	24.25	37.13	0.07	0.9	2.2	0.29	21	1.6
		51[a]			24.23	37.12	0.08	1.1	1.9	0.26	14	1.6
		101			22.47	37.06	0.32	1.2	1.8	0.24	42	
066	24/01/2010	12[a]	24.29	55.57	24.20	37.14	0.07	1.0	2.1	0.28		
		52[a]			24.16	37.14	0.07	0.5	1.4	0.20		
		103[a]			24.05	37.16	0.08	0.6	1.2	0.18		
067	24/01/2010	10[a]	24.30	55.14	25.43	36.69	0.06	1.0			26	2.6
		51[a]			25.24	36.68	0.07	1.1	3.0	0.34	17	<dl
		100			23.56	37.21	0.38	1.8			66	<dl
068	25/01/2010	6[a]	24.31	54.27	25.17	36.94	0.09	1.3	2.3	0.31	40	1.7
		50[a]			25.22	36.94	0.10	1.3	1.9	0.27	19	<dl
		102			23.92	37.22	0.33	1.5	2.0	0.31	40	<dl
069	25/01/2010	5[a]	24.31	53.56	25.07	36.91	0.09	1.5			22	1.1
		102[a]			24.72	37.28	0.19	1.6	2.6	0.35	3	1.3
070	26/01/2010	10[a]	24.50	53.24	24.28	37.11	0.09	1.3	2.1	0.27		
		52[a]			24.33	37.16	0.10	1.3	2.1	0.28		
		102			23.04	37.14	0.36	1.6	2.1	0.32		
071	26/01/2010	11[a]	25.07	52.50	24.30	37.30	0.10	1.0	2.5	0.34	24	8.1
		53[a]			24.30	37.30	0.11	1.0	2.6	0.36	21	2.0
		103[a]			24.30	37.30	0.11	1.2			19	1.6
072	26/01/2010	5[a]	25.05	52.17	23.92	37.21	0.08	1.1			29	1.3
		51[a]			23.89	37.20	0.12	1.4	2.0	0.28	20	1.7
		127			22.87	37.15	0.34	1.7	2.2	0.32	4	1.3

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
073	27/01/2010	6[a]	25.01	51.45	23.30	37.18	0.08				34	2.1
		51[a]			23.31	37.18	0.09	0.9	1.9	0.23	33	<dl
		102[a]			23.22	37.16	0.12	1.2			61	<dl
074	27/01/2010	5[a]	24.56	51.11	23.70	37.28	0.10	1.2	2.5	0.36	36	2.1
		117[a]			22.32	37.05	0.26	1.2	1.7	0.24	26	3.4
		175			19.21	36.70	0.02		0.9	0.11	5880	50
075	28/01/2010	4[a]	24.48	50.38	24.27	37.37	0.17	1.5	2.1	0.30	78	1.9
		48[a]			24.24	37.37	0.13	1.2	1.9	0.25	42	2.0
		139			23.07	37.13	0.17	0.8	1.9	0.25	49	<dl
076	28/01/2010	5[a]	24.40	50.05	24.12	37.44	0.15	1.1	1.7	0.22	54	3.2
		52[a]			24.12	37.44	0.15	1.1	1.8	0.24	42	3.1
		103[a]			24.12	37.44	0.15	1.7			62	
077	28/01/2010	5[a]	24.31	49.32	23.72	37.33	0.12	1.0	2.1	0.27	10	1.5
		119			23.20	37.26	0.19	1.0	1.9	0.26	117	3.9
		176			20.46	37.00	0.04	0.8	0.7	0.10	5370	10
078	29/01/2010	5[a]	24.21	49.00	23.98	37.41	0.16	1.3	1.8	0.26	14	3.0
		50[a]			23.99	37.41	0.16	1.3	2.1	0.29	20	3.7
		132			22.72	37.36	0.23	1.3	1.4	0.21	387	3.8
079	29/01/2010	5[a]	24.12	48.28	23.71	37.34	0.13	1.0	1.9	0.26	28	1.3
		49[a]			23.72	37.34	0.14	1.0	2.1	0.30	29	1.9
		100[a]			23.72	37.34	0.14	1.5	2.1	0.26	19	<dl
080	29/01/2010	4[a]	24.04	47.57	23.55	37.29	0.11	1.2	2.3	0.28	3	4.6
		24[a]			23.55	37.29	0.11	0.9	2.1	0.25	21	5.3
		99[a]			23.27	37.24	0.16	1.2	2.0	0.25	32	3.5
082	30/01/2010	5[a]	23.54	46.53	24.10	37.41	0.14	1.3	1.9	0.25	26	2.0
		25[a]			24.10	37.41	0.14	1.4	2.1	0.28	34	2.7
		51[a]			24.10	37.41	0.14	1.1	2.3	0.33	38	1.3
083	30/01/2010	11[a]	23.52	46.20	23.84	37.39	0.12	1.1	2.4	0.30	37	1.2
		103[a]			23.85	37.38	0.15	1.2	2.2	0.31	39	<dl
		176			21.22	37.14	0.05	1.0	1.0	0.16	5440	10
084	31/01/2010	5[a]	23.46	45.48	24.20	37.49	0.13		1.9	0.30	29	2.4
		28[a]			24.21	37.49	0.13	1.3	1.7	0.25	29	1.6
		120			22.50	37.32	0.27	1.5	2.0	0.28	282	1.1
085	31/01/2010	4[a]	23.44	45.16	23.87	37.49	0.12	1.2	2.4	0.34	21	2.1
		49[a]			23.89	37.49	0.12	1.1	2.3	0.32	3	<dl
		124			22.33	37.30	0.33	1.3	2.0	0.29	343	3.1

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
Eastern Tropical North Atlantic Gyre												
086	31/01/2010	10[a]	23.38	44.44	23.86	37.51	0.16	1.2			16	1.3
		51[a]			23.86	37.50	0.16	1.3	2.2	0.34	23	<dl
		101[a]			23.87	37.50	0.17	1.5			15	
087	31/01/2010	6[a]	23.32	44.13	23.60	37.45	0.13	1.1	1.9	0.27	16	2.0
		51[a]			23.62	37.45	0.13	1.1	1.8	0.23	22	3.0
		126[a]			23.42	37.40	0.16	1.4	1.9	0.27	33	<dl
088	01/02/2010	5[a]	23.27	43.40	23.66	37.48	0.12	1.1	1.9	0.26	23	1.4
		50[a]			23.66	37.48	0.13	1.1	2.1	0.29	5	1.5
		123			21.34	37.10	0.25	1.4	1.3	0.19	593	4.8
089	01/02/2010	5[a]	23.22	43.08	23.85	37.49	0.10	2.0	1.8	0.22	43	1.3
		52[a]			23.83	37.49	0.12	1.6	1.8	0.24	24	2.6
		102[a]			23.78	37.48	0.14	2.3	1.8	0.24	22	
090	01/02/2010	5[a]	23.15	42.36	23.84	37.49	0.12	1.4	2.1	0.25	29	1.2
		51[a]			23.86	37.49	0.12	1.4	2.1	0.26	22	1.1
		116			21.94	37.19	0.36	2.3	2.0	0.32	205	<dl
091	02/02/2010	5[a]	23.23	41.46	23.76	37.51	0.15	1.6	2.0	0.32	10	2.0
		52[a]			23.77	37.51	0.15	1.3	1.6	0.22	2	<dl
		116			21.58	37.16	0.27	1.9	1.6	0.22	165	1.8
092	02/02/2010	51[a]	23.31	40.57	23.79	37.53	0.12	1.3	1.9	0.31	3	1.7
		125			22.03	37.24	0.31	1.6	1.8	0.30	182	<dl
093	02/02/2010	5[a]	23.40	40.07	23.79	37.51	0.14	1.3	1.8	0.24	19	2.0
		50[a]			23.80	37.52	0.16	1.2	2.1	0.25	13	1.0
		178			20.49	37.08	0.03	0.5	2.0	0.25		150
094	03/02/2010	5[a]	23.48	39.16	23.68	37.52	0.12	1.2	1.9	0.27	18	1.9
		51[a]			23.69	37.52	0.12	1.2	2.3	0.31	14	4.8
		129			21.42	37.16	0.24	1.4	1.3	0.18	329	
095	03/02/2010	52[a]	23.56	38.26	23.54	37.56	0.14	1.3	2.0	0.26	4	2.9
		138			21.50	37.23	0.26	1.5			253	2.5
096	03/02/2010	5[a]	24.05	37.37	23.53	37.56	0.09	1.0	1.9	0.27	15	2.0
		52[a]			23.38	37.55	0.15	1.1	1.9	0.26	11	<dl
		120			22.77	37.41	0.33	1.8	1.7	0.27	36	
097	04/02/2010	5[a]	24.13	36.46	23.09	37.55	0.12	0.9	1.9	0.28	22	<dl
		51[a]			23.10	37.55	0.13	1.1	2.0	0.30	16	1.6
		130[a]			22.92	37.51	0.18	1.5	1.9	0.30	35	<dl

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
098	04/02/2010	6[a]	24.22	35.56	23.46	37.57	0.08	0.7			36	1.4
		51[a]			23.31	37.56	0.11	1.0	2.9	0.49	22	1.7
		132			22.58	37.46	0.29	1.6			25	<dl
099	05/02/2010	5[a]	24.30	35.05	23.32	37.56	0.10	1.1	2.5	0.38	37	2.1
		50[a]			22.99	37.49	0.24	1.4	2.0	0.31	20	2.2
		109			22.27	37.40	0.24	1.5	2.1	0.33	29	<dl
100	05/02/2010	7[a]	24.30	34.25	22.85	37.54	0.07	0.8	2.2	0.31	32	<dl
		53[a]			22.79	37.54	0.09	0.8	1.8	0.25	42	
		180			19.26	36.88	0.02	0.5	0.8	0.12		80
101	05/02/2010	4[a]	24.30	33.44	23.02	37.56	0.11	1.1	2.5	0.38	7	1.2
		50[a]			23.01	37.56	0.14	0.8	2.2	0.39	7	1.9
		151			21.04	37.19	0.17	1.2	2.1	0.23	13	3.9
102	06/02/2010	6[a]	24.30	33.03	23.00	37.50	0.09	1.5	2.1	0.31	7	2.5
		51[a]			22.97	37.50	0.11	0.8	2.2	0.35	8	1.6
		118[a]			22.52	37.43	0.30	1.6	2.0	0.33	873	43.1
103	06/02/2010	52[a]	24.30	32.21	22.96	37.50	0.13	1.4	2.4	0.35	11	<dl
		122			21.09	37.15	0.24	1.4	1.9	0.35	845	70.9
104	06/02/2010	6[a]	24.30	31.41	22.84	37.46	0.12	1.2	2.0	0.28	18	3.8
		50[a]			22.77	37.46	0.10	0.9			13	1.9
		92			21.80	37.27	0.35	1.8			15	
105	07/02/2010	5[a]	24.30	31.00	23.03	37.47	0.21	1.1	2.1	0.34	15	
		50[a]			23.01	37.47	0.16	1.0	2.2	0.34	17	
		130			20.65	37.10	0.13	1.1	2.0	0.31	333	13.7
106	07/02/2010	4[a]	24.30	30.19	22.86	37.42	0.11	0.8			27	4.6
		49[a]			22.81	37.42	0.13	0.8	3.0	0.42	5	3.3
		110			21.26	37.17	0.24	1.5			113	
107	07/02/2010	5[a]	24.30	29.40	23.07	37.41	0.10		2.4	0.38	19	3.6
		51[a]			22.89	37.42	0.12	1.1	2.2	0.36	<dl	3.5
		99			21.76	37.18	0.38	1.6	2.6	0.48	306	
108	08/02/2010	6[a]	24.30	28.58	22.95	37.32	0.13	1.1	2.6	0.45	28	8.8
		52[a]			22.89	37.32	0.16	1.5	2.2	0.38	18	11.4
		78			21.19	37.09	0.38	2.1	2.5	0.46	65	20.4
109	08/02/2010	6[a]	24.30	28.18	23.11	37.35	0.11	1.2			28	8.6
		53[a]			22.65	37.37	0.12	1.0	2.2	0.34	16	<dl
		128			19.96	37.00	0.16	0.8				

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
110	09/02/2010	4[a]	24.30	27.36	22.81	37.30	0.13	1.1	2.4	0.38	24	
		51[a]			22.73	37.30	0.13	1.2	2.4	0.39	31	2.5
		102			20.81	37.06	0.37	1.9	2.1	0.37	335	21.4
111	09/02/2010	4[a]	24.31	26.55	23.22	37.21	0.15	1.0	2.2	0.34	58	
		51[a]			23.22	37.21	0.25	1.3	1.8	0.26	46	
		102			22.12	37.19	0.02	0.5	0.7	0.11	282	
112	09/02/2010	6[a]	24.31	26.14	23.12	37.25	0.12	0.9			55	13.9
		51[a]			22.77	37.29	0.19	1.3	2.6	0.39	31	7.4
		85			21.66	37.16	0.48	1.9	2.2	0.36	118	20.2
Azores Current												
113	10/02/2010	4[a]	24.31	25.32	22.96	37.08	0.19	1.5	3.1	0.53	45	36.8
		50[a]			22.99	37.09	0.21	1.3	3.0	0.48	42	33.6
		102			20.39	36.92	0.26	1.1	2.1	0.33	5900	90
114	10/02/2010	5[a]	24.31	24.51	22.81	37.09	0.17	0.7	2.3	0.34	79	31.6
		65[a]			22.81	37.10	0.20	1.6	2.3	0.37	60	29.3
		177			18.69	36.74	0.02	0.6	0.7	0.14	6180	370
115	10/02/2010	5[a]	24.30	24.10	22.66	37.09	0.17	1.0	0.2	0.41	52	28.2
		50[a]			22.65	37.09	0.21	0.9	3.1	0.48	13	31.6
		99			22.17	37.04	0.38	2.0	2.3	0.36	461	58.9
116	11/02/2010	5[a]	24.30	23.30	22.30	37.03	0.25	1.7	2.4	0.34	57	33.5
		70[a]			22.11	37.04	0.43	1.5	4.2	0.65	265	125.9
		101			19.60	36.79	0.25	1.5	2.5	0.42	5220	40
117	11/02/2010	4[a]	24.43	22.53	22.41	37.08	0.14	1.3	2.1	0.29	59	32.4
		50[a]			22.42	37.08	0.16	1.6	2.8	0.37	12	30.7
		112[a]			21.93	37.14	0.14	1.2	1.2	0.19	748	
118	11/02/2010	5[a]	24.55	22.16	22.07	36.88	0.23	1.0	4.0	0.54		
		50[a]			21.97	36.88	0.31	2.0	3.3	0.48	38	47.7
		102			19.22	36.54	0.42	1.2	3.1	0.40	8200	100
119	11/02/2010	3[a]	25.08	21.39	22.26	37.05	0.14	1.2	4.5	0.67	38	16.7
		25[a]			22.17	37.04	0.14	1.3	2.9	0.28	15	11.2
		94[a]			21.98	37.05	0.36	1.4				
120	12/02/2010	3[a]	25.20	21.02	22.09	36.99	0.20	1.4	2.6	0.36	28	18.3
		76[a]			22.00	37.04	0.17	1.2	1.8	0.24	612	42.2
		102[a]			21.57	36.99	0.23	1.2	1.8	0.24		

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
121	12/02/2010	4[a]	25.33	20.25	22.22	37.01	0.19	1.1	2.5	0.28	14	12.1
		51[a]			22.14	37.01	0.24	1.6	2.5	0.31	25	<dl
		97[a]			21.70	36.93	0.22	0.9			1266	107
122	12/02/2010	5[a]	25.45	19.48	22.04	36.97	0.14	2.0	2.7	0.32	45	30.8
		76			21.31	37.02	0.20	2.8	2.5	0.32	17	3.3
		119			18.97	36.71	0.20	1.3	1.4	0.18	5560	70
123	13/02/2010	5[a]	25.58	19.11	21.53	37.04	0.13	0.9	2.0	0.27	33	<dl
		26[a]			21.46	37.03	0.13	1.9	2.4	0.34	22	3.4
		94			19.39	36.76	0.35	2.0	1.6	0.24	1040	60
124	13/02/2010	4[a]	26.10	18.34	21.87	37.04	0.24	2.1	3.0	0.42	29	23.3
		48[a]			21.87	37.04	0.26	2.5	3.1	0.46	26	20.5
		94			21.29	36.95	0.28	1.9	2.2	0.33	1300	80
125	13/02/2010	5[a]	26.23	17.58	21.39	36.99	0.13	2.3	3.1	0.42	36	6.7
		175			17.62	36.59	0.01	1.0	3.1	0.44		
126	13/02/2010	6[a]	26.35	17.20	21.37	36.98	0.12	1.5	2.8	0.66	45	5.2
		76[a]			21.11	36.99	0.30	2.4	5.1	0.64	51	6.0
		86[a]			21.02	36.98	0.25	2.1	4.4	0.69	275	16.8
127	14/02/2010	5[a]	26.47	16.43	20.82	36.93	0.13	1.5	5.0	0.30	52	6.9
		51[a]			20.45	36.88	0.19	2.1	2.3	0.33	<dl	7.5
		76			19.50	36.75	0.39	2.3	2.8	0.35	605	30
128	14/02/2010	5[a]	26.59	16.06	20.81	36.95	0.17	1.9	3.1	0.39	46	8.7
		26[a]			20.35	36.91	0.17	1.8	2.4	0.21	53	6.0
		88			20.30	36.90	0.32	2.0	3.1	0.38	38	8.8
129	14/02/2010	6[a]	27.12	15.29	20.42	36.91	0.13	1.7	3.5	0.45	42	7.4
		51[a]			20.16	36.90	0.23	1.8	3.1	0.43	44	6.2
		97[a]			19.89	36.86	0.40	2.2	2.9	0.38	145	12.9
130	14/02/2010	6[a]	27.25	14.52	19.95	36.81	0.18	2.2	3.1	0.45	6	21.2
		26[a]			19.94	36.81	0.18	2.0	1.5	0.23	<dl	22.6
		101			19.37	36.73	0.17	1.7	3.1	0.38	9190	60
131	15/02/2010	5[a]	27.37	14.14	19.57	36.75	0.26	3.4	3.1	0.38	13	35.9
		63[a]			19.24	36.71	0.50	3.2	2.2	0.40	446	84.6
		176			16.52	36.39	0.01	0.8	3.0	0.39	9340	280
132	15/02/2010	5[a]	27.47	13.47	19.50	36.76	0.19	2.5			6	27.7
		99			17.92	36.56	0.09	1.6	3.2	0.46	9340	280
133	15/02/2010	5[a]	27.52	13.33	19.42	36.74	0.26	2.8	1.5	0.26	24	35.1
		64[a]			19.29	36.73	0.38	1.7	1.9	0.41	146	61.5
		104			17.87	36.55	0.16	2.1	2.0	0.40	9580	320

Station	Date	Depth (m)	Lat (˚N)	Long (˚W)	Temp (˚C)	Salinity	Chl *a* (nmol l^{-1})	Heme *b* (pmol l^{-1})	POC (µmol l^{-1})	PON (µmol l^{-1})	NO_3^{2-} (nmol l^{-1})	PO_4^{3-} (nmol l^{-1})
134	15/02/2010	6[a]	27.55	13.25	19.48	36.74	0.28	2.5	1.9	0.34	6	38.5
		42[a]			19.30	36.73	0.42	3.1	2.5	0.35	193	51.3
		101			16.90	36.43	0.06	2.0	2.4	0.37	6300	400
135	15/02/2010	7[a]	27.56	13.22	19.51	36.75	0.22	1.9	2.0	0.28	36	31.3
		63[a]			19.24	36.72	0.44	2.1	1.8	0.25	253	61.2
		103			17.80	36.55	0.11	2.1	2.1	0.34	4240	270

[a]Surface mixed layer samples