Seafloor mapping around the epicenter of the great Antarctic earthquake

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Intrroduction

The March 25, 1998 great Antarctic earthquake is one of the largest oceanic intraplate strike-slip events ever recorded. The mainshock occurred far from the nearest plate boundary and nearest recorded earthquake. The most of aftershock locations suggest E-W trending fault plane, which is almost perpendicular to the nearest fracture zones. Several authors have attempted to deduce the driving force of the great Antarctic Earthquake from the point of view of tectonic stress and postglacial rebound (e.g. Kreemer and Holt, 2000). However, the driving force of the great Antarctic earthquakes is still unknown because of lack of detailed geology and geophysical data around the area. Detailed marine geophysical surveys of the area are required for elucidating the cause of the earthquake.

A detailed swath bathymetry survey using SeaBeam 2120 system had been conducted around the mainshock epicenter of the great Antarctic earthquake during the Leg 2. The gravity and magnetic data had been also collected along the ship's track. The preliminary results of the survey are presented in this report.

Preliminary results

The results of the swath bathymetry survey are shown in Fig. 1. The gray scale image of the free-air gravity and magnetic anomalies are also indicated in Fig. 2.

The epicenter of the mainshock locates on a seamount, which have never been reported, where free-air gravity anomaly highs are also observed. Almost E-W tending structural lineaments, which is coincide with the strike of the fault plane of the earthquake, are observed in the seamount. Magnetic anomalies are almost bounded by this seamount, positive in the north and negative in the south, and their strike is almost E-W. Almost E-W trending magnetic anomaly lineations are surmised in this area. Observed magnetic anomalies are concordat with expected magnetic lineation trends. These suggest that E-W

trending structural lineaments in the seamount are preexisting structures such as the ridge parallel normal fault. The great Antarctic earthquake may occur along these preexisting structural lineaments.

In the north of the mainshock area, the epicenters of the aftershocks are almost aligned in NE-SW direction. NE-SW trending small seamount chain is observed in the area. Magnetic and gravity anomaly trends also indicate NE-SW in the area. Magnetic anomaly trend in this area is oblique to predicted magnetic anomaly lineation trends. These suggest change in crustal structure in the area where the aftershocks occurred. Evolution of seafloor in this area is possibly affected by particular tectonic event such as a propagation rift.

References

Kreemer, C.K. and W. Holt (2000): What caused the March 25, 1998 Antarctic Plate earthquake?: Inferences from regional stress and strain rate fields

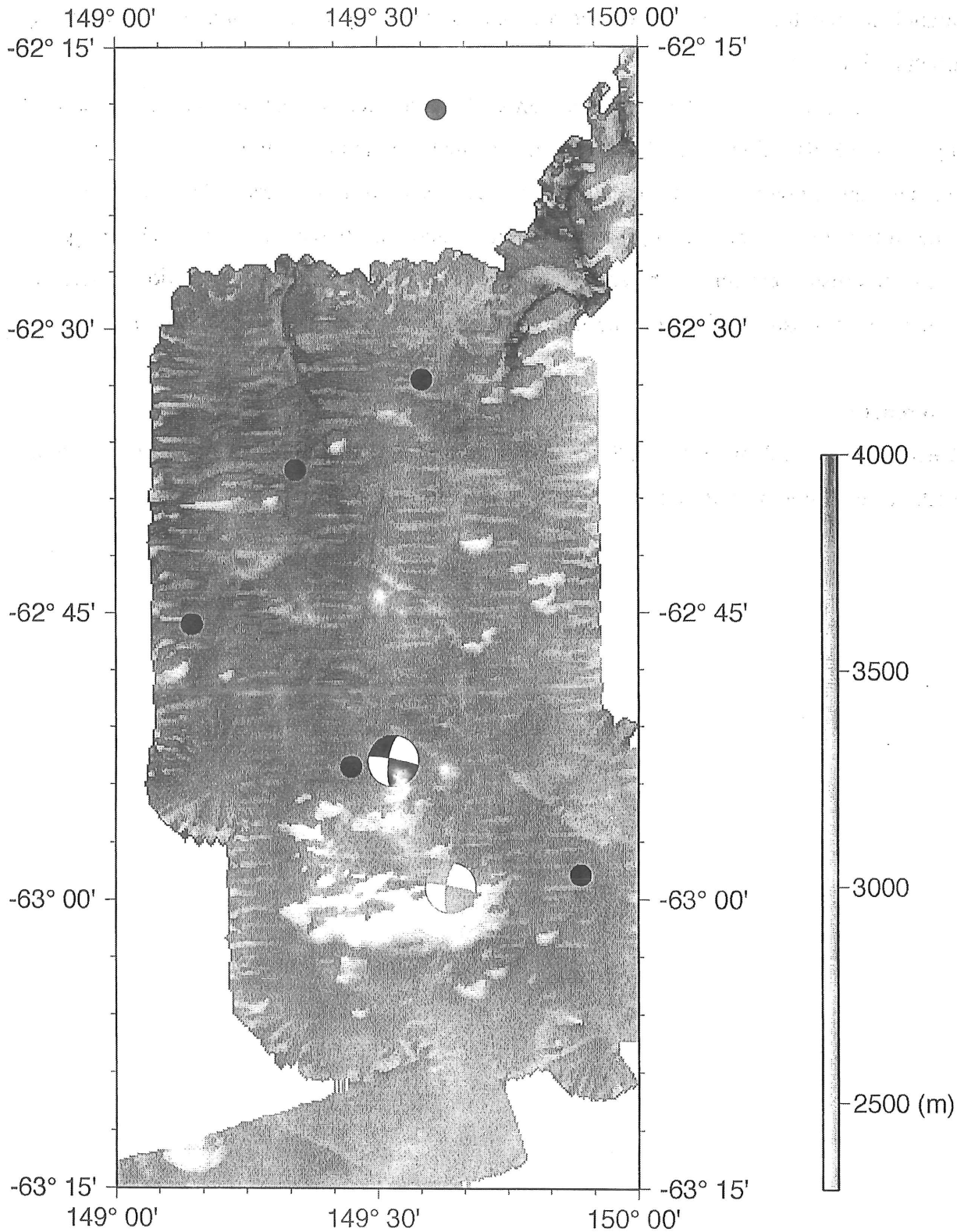
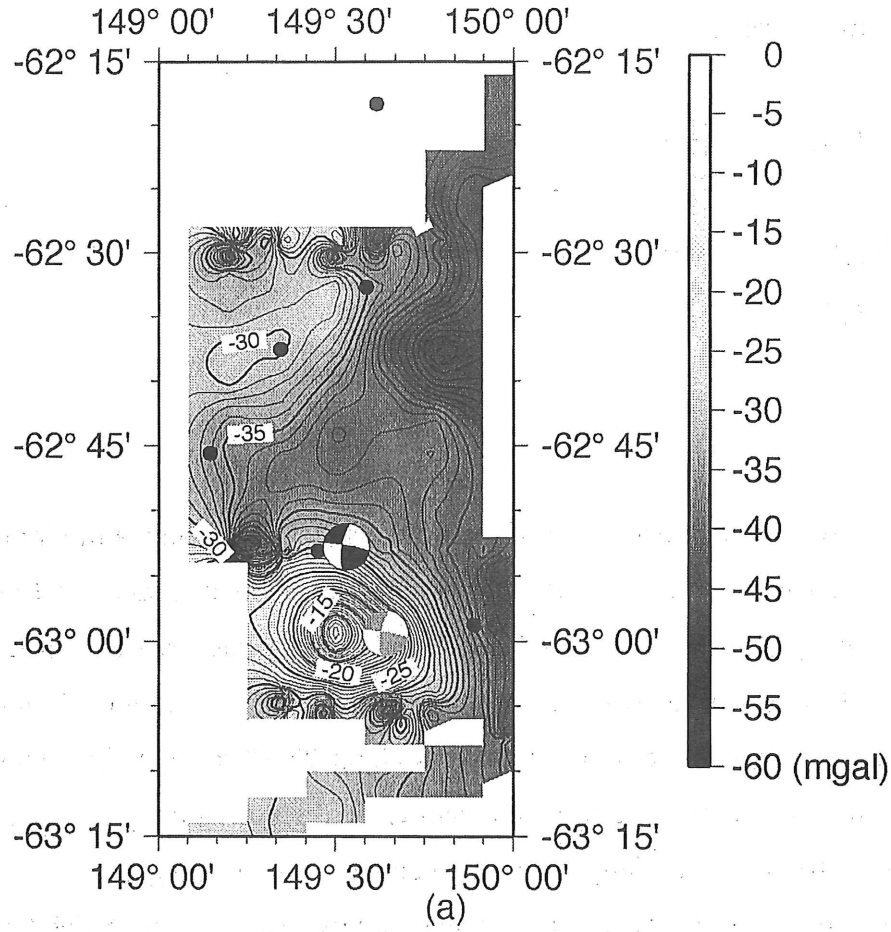


Figure 1. Gray scale image of bathymetry by SeaBeam 2120 system. Scale is lower right. Focal mechanisms of the mainshock of the great Antarctic earthquake with black and shaded are from USGS and Harvard, respectively. The epicenters of aftershock are shown in solid circles.



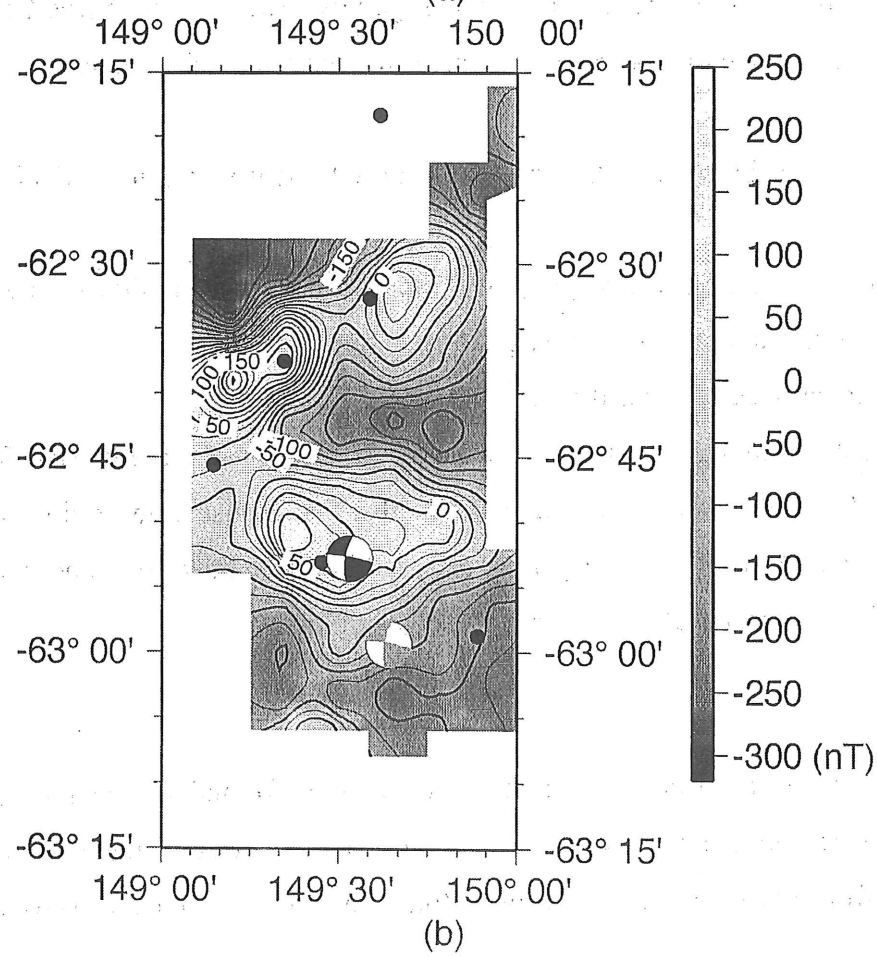


Figure 2. Gray scale image of gravity and magnetic anomalies. Focal mechanisms and the epicenters of aftershock are indicated as the same symbols in Fig. 1. Scales are shown in right side. (a) Gravity anomalies. Contour interval is 1 mgal. (b) Magnetic anomalies. Contour interval is 25 nT.

Sea surface gravity measurement

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Introduction

Sea surface gravity measurement is one of the fundamental observations in marine geophysics on board the research ship. Recently, fee air gravity anomalies derived from high-density satellite altimetry data (e.g. Sandwell and Smith, 1992) have revealed major tectonic and topographic features in the world's ocean. However, the resolution of short wavelength gravity anomalies by satellite altimetry data is about 23-30 km (Marks, 1996). Sea surface gravity measurement is required to obtain shorter wavelength gravity anomalies than those by satellite altimetry data, especially for detailed geophysical mapping.

During the previous cruise, the quality of the gravity data by the NIPR-ORI gravimeter on board R/V Hakuho-maru was poor because of the instrumental troubles. The instrumental troubles are followings.

1) It takes about one hour to stabilize the platform of the gravity sensor within ± 4' after ship's course change.
2) The compass, that controls the platform of the gravity sensor, does not provide accurate direction when the ship's roll and pitch is very large.

All instrumental troubles mentioned above had been fixed before KH-01-3.

The measurement of sea surface gravity had been carried out using the NIPR-ORI gravimeter throughout all legs of KH-01-3. KH-01-3 is the first cruise after fixing all instrumental trouble. The good quality of the gravity data had been obtained throughout all legs of KH-01-3 except for the periods of extreme rough sea conditions.

Drift correction

Calibrations for the sea surface gravimeter had been performed in the port of Harumi, Wellington, Hobart and Sydney using the Lacoste-Romberg gravity meter. The gravity values obtained from the ship and the Lacoste-Romberg gravity meter are listed in

Table 1. The difference between the gravity values of the ship and the Lacoste-Romberg gravity meter are also shown in Fig. 1. Those data are used to estimate drift rates of sea surface gravimeter by least square method. The result of linear fitting by least square method is also shown in Fig. 1. Assuming linear drift, the drift rate is estimated as 0.3591 mgal/day. This drift rate is applied to the gravity data during KH-01-3.

Table 1. Gravity values during the port of call used for drift corrections.

Station	Date	Time (GMT)	Ship (mgal)	Lacoste (mgal)	Difference Ship-Lacoste (mgal)
Harumi	2001 11/27	00:00	979772.900	979772.900	0.000
Wellington	2001 12/26	00:00	980299.000	980275.500	23.500
Wellington	2002 1/1	00:00	980300.800	980275.500	25.300
Hobart	2002 1/21	00:00	980451.900	980436.200	15.700
Hobart	2002 1/26	00:00	980457.100	980436.200	20.900
Sydney	2002 2/12	00:00	979704.400	979671.100	33.300
Harumi	2002 3/1	02:00	979814.870	979772.900	41.970

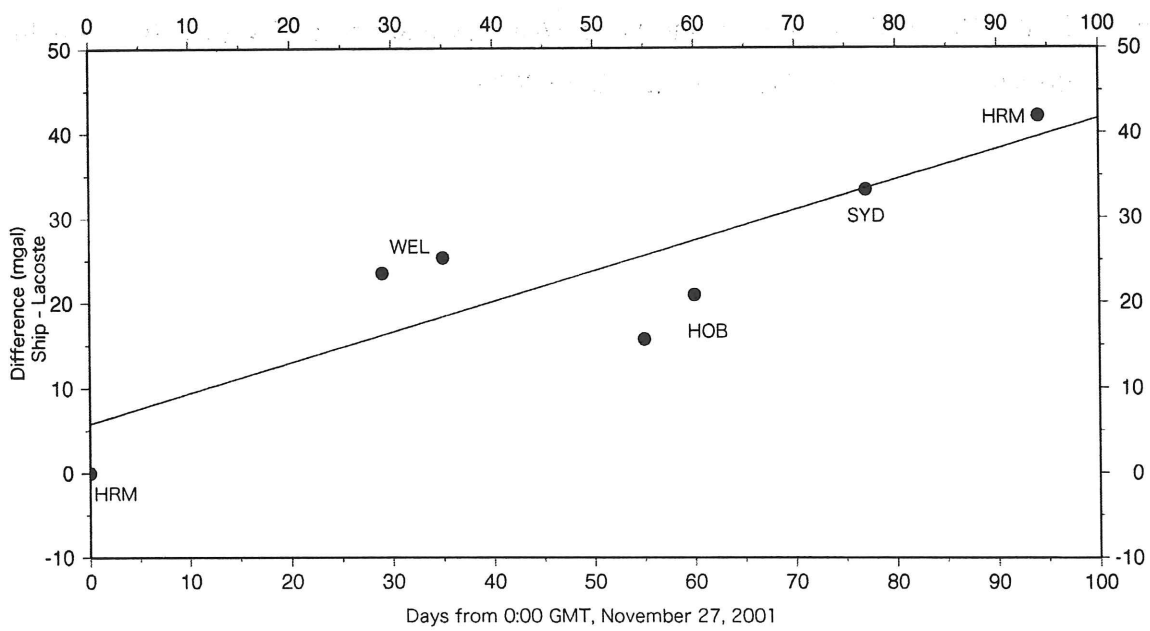


Figure 1. The difference between the gravity values of the ship and Lacoste-Romberg gravity meter (solid circles) during port of call. The port names are abbreviated HRM (Harumi), WEL (Wellington), HOB (Hobart) and SYD (Sydney). Solid line shows the result of linear fitting by least square method.

Free-air anomaly

Free-air gravity anomalies are obtained along the ship's tracks after drift corrections. Figure 2 shows a part of the free-air anomaly values obtained from the grid survey around the epicenter of the great Antarctic earthquake during the Leg 2. The discrepancies at the points where N-S and E-W oriented tracks intersect in Fig. 2 are about 1 mgal. The good data quality at the intersection points is attained.

The along-track ship gravity and topography profiles near the equator during the Leg1, and the corresponding satellite-derived gravity profiles, are shown in Figure 3. Free-air anomaly profile of the ship is good agreement with that of satellite. Short wavelength free-air anomalies, which is coherent with topography and is not observed by satellite, are detected. This result also indicates that the good quality gravity data have been obtained throughout all legs during KH-01-3.

References

Sandwell, D. T. and W. H. F. Smith (1992): Global marine gravity from ESR-1, Geosat and Seasat reveals new tectonic fabric. *EOS Trans. AGU*, **73**, 133.

Marks, K. M. (1996): Resolution of the Scripps/NOAA marine gravity field from satellite altimetry. *Geophys. Res. Lett.*, **23**, 2069-2072.

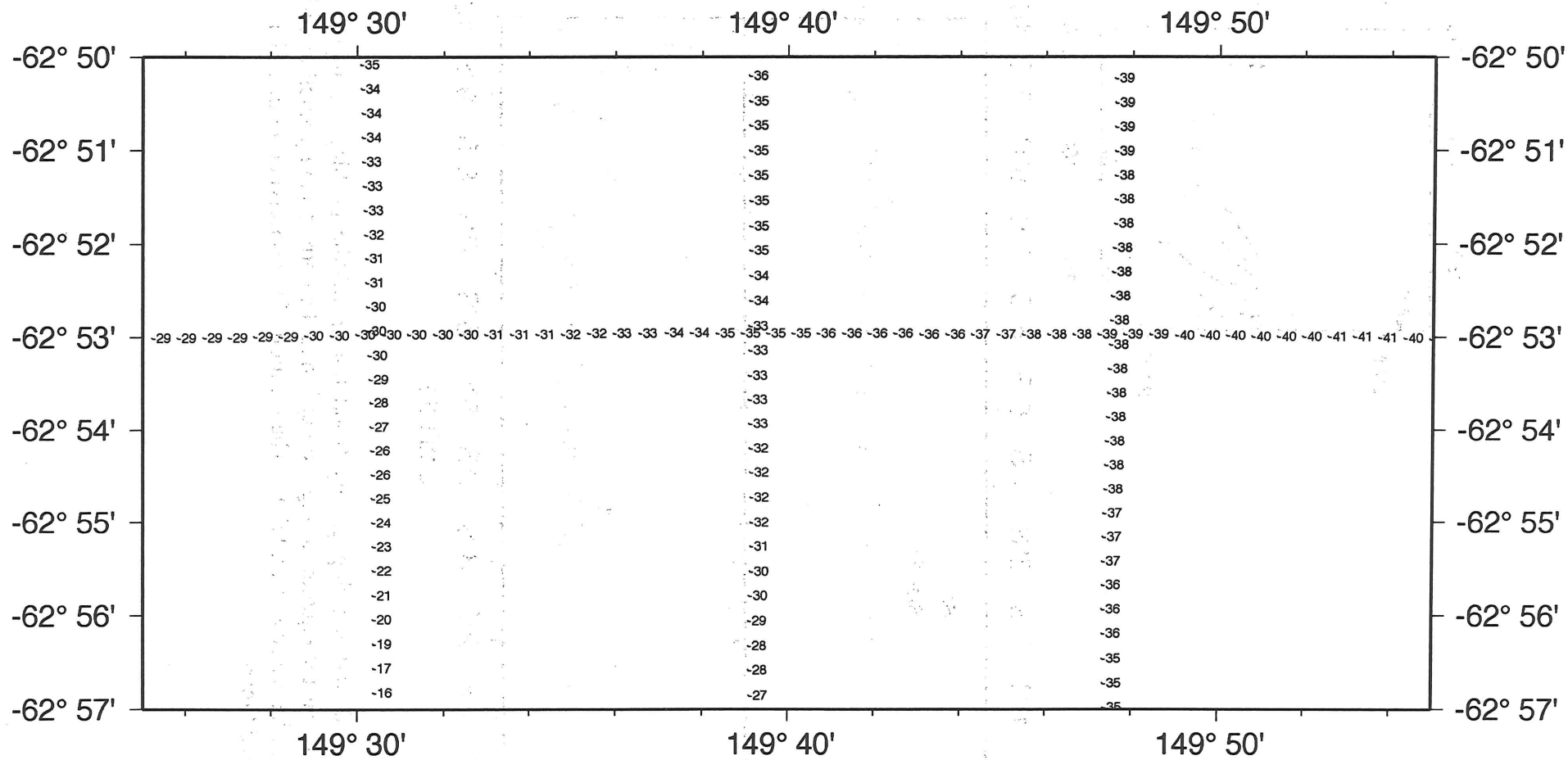


Figure 2. A part of the free-air anomaly values along the tracks of the grid survey around the epicenter of the great Antarctic earthquake during the Leg 2.

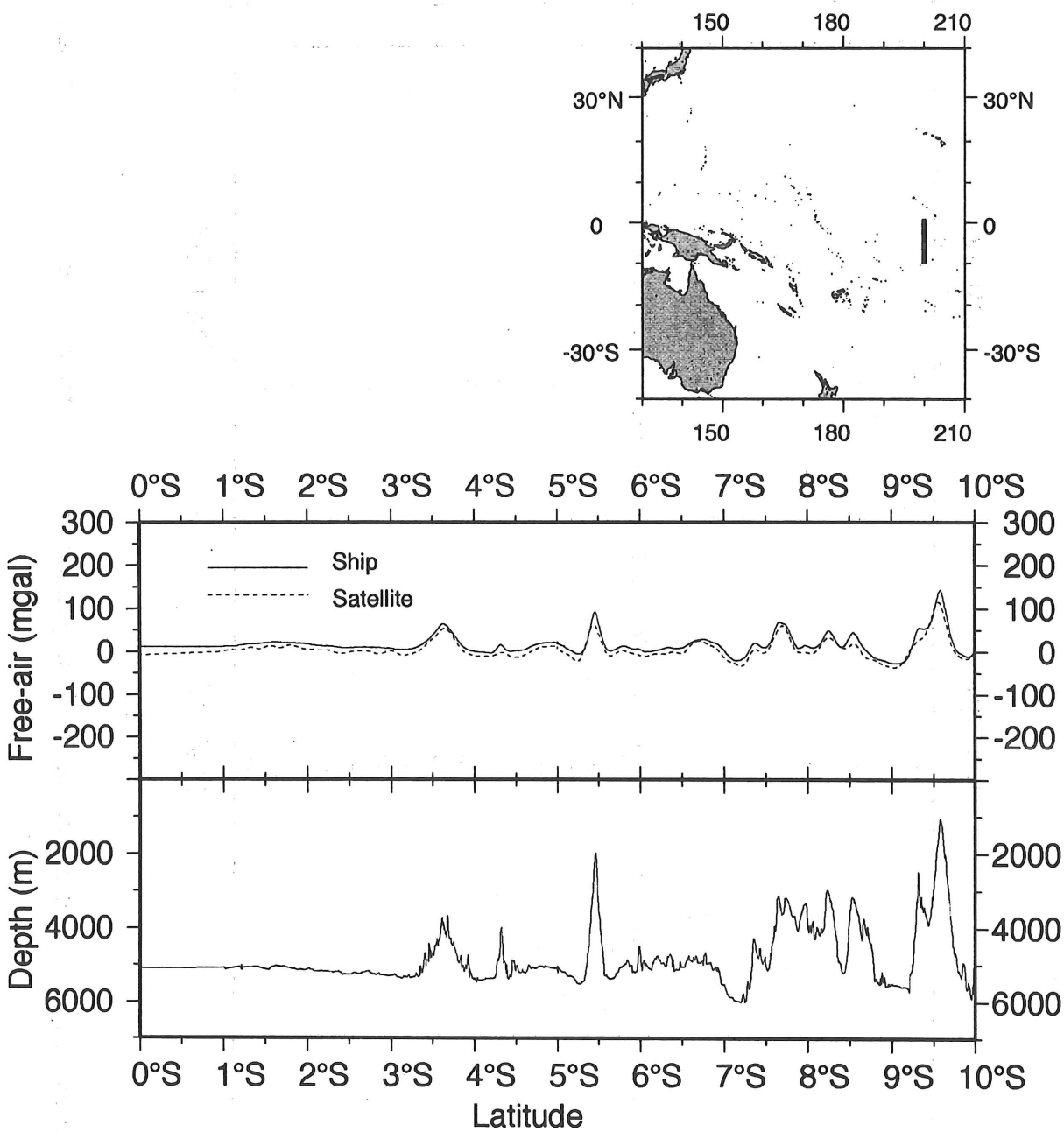


Figure 3. The along-track ship gravity (solid line in middle profile) and topography (lower) profiles near the equator during the Leg1, and the corresponding satellite-derived gravity profiles (dashed line in middle). The location of the observation line (thick solid line) in upper right map.

St. 01		Date	01.12.08				Lat.	0	0.05	N	Depth	5137m							
ST01S1		Time	19:10 – 20:44	(GMT)			Long.	159	59.93	W					CTD Up Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		27.3	****	****	35.355	4.35	5.16	0.51	< 0.05	1.94	0.55	0.30	5	26.883	35.341	4.32	0.132
20	R	10	10	26.871	4.33	35.340	35.352	4.37	5.12	0.49	0.07	2.15	0.55	0.29	10	26.869	35.340	4.32	0.166
13	R	21	21	26.834	4.31	35.339	35.347	4.33	5.14	0.49	< 0.05	1.98	0.54	0.32	20	26.840	35.340	4.32	0.259
18	R	31	31	26.826	4.30	35.339	35.348	4.33	5.13	0.49	< 0.05	2.01	0.54	0.32	30	26.825	35.339	4.30	0.316
17	R	41	41	26.797	4.28	35.337	35.344	4.31	5.25	0.47	< 0.05	2.18	0.54	0.45	40	26.798	35.337	4.28	0.340
16	R	51	51	26.661	4.18	35.328	35.337	4.24	5.53	0.44	0.08	2.25	0.56	0.36	50	26.648	35.326	4.16	0.345
15	R	61	61	26.551	4.08	35.321	34.434	4.17	5.77	0.43	0.06	1.88	0.56	0.35	60	26.532	35.318	4.06	0.300
14	R	71	71	26.397	3.97	35.314	35.322	3.97	6.02	0.41	0.09	2.25	0.59	0.95	70	26.399	35.314	3.98	0.239
19	R	79	79	26.343	3.94	35.312	35.324	3.99	6.09	0.40	0.07	2.29	0.60	0.25	80	26.338	35.312	3.92	0.172
12	R	101	101	26.048	3.74	35.339	34.899	3.85	6.93	0.29	< 0.05	2.52	0.63	0.17	90	26.209	35.307	3.79	0.134
11	R	125	126	22.045	3.08	35.040	34.681	3.04	10.1	0.03	< 0.05	6.15	0.75	0.04	100	26.059	35.337	3.74	0.115
10	R	151	152	20.224	2.94	35.380	35.388	3.06	11.9	< 0.02	0.07	5.49	0.89	0.02	125	22.074	35.044	3.08	0.044
9	R	200	201	14.800	3.08	35.110	35.159	3.02	17.4	< 0.02	< 0.05	10.7	1.25	0.00	150	20.195	35.372	2.98	0.035
8	R	249	251	12.659	2.78	34.909	34.913	2.75	22.4	< 0.02	< 0.05	18.3	1.56	0.00	175	17.171	35.114	3.04	0.025
7	R	299	301	11.820	2.26	34.850	34.858	2.26	26.0	< 0.02	< 0.05	21.8	1.79		200	15.274	35.158	3.05	0.023
6	R	398	401	9.968	1.51	34.732	34.739	1.57	32.7	< 0.02	0.07	28.9	2.20		250	12.649	34.910	2.81	0.032
5	R	497	501	8.611	0.79	34.645	34.647	0.85	38.6	< 0.02	< 0.05	41.6	2.65		300	11.815	34.848	2.17	0.035
4	R	597	601	7.052	1.34	34.579	34.582	1.45	39.3	< 0.02	< 0.05	50.4	2.72		400	9.983	34.732	1.50	0.039
3	R	696	701	6.104	1.66	34.552	34.555	1.72	39.6	< 0.02	< 0.05	60.5	2.75		500	8.613	34.648	0.76	0.046
2	R	795	801	5.315	1.85	34.543	34.551	1.91	40.0	< 0.02	< 0.05	73.3	2.80		600	7.054	34.579	1.34	0.043
1	R	996	1003	4.440	2.06	34.555	34.549	2.10	40.0	< 0.02	< 0.05	90.2	2.82		700	6.112	34.552	1.66	0.034
32		10	10	26.866	4.32	35.340									800	5.276	34.545	1.85	0.035
31		10	10	26.880	4.32	35.340									900	4.829	34.548	2.00	0.031
30		21	21	26.835	4.31	35.340									1000	4.447	34.554	2.06	0.032
29		30	30	26.828	4.30	35.339									1028	4.345	34.558	2.07	0.028
28		41	41	26.799	4.28	35.337													
33		52	52	26.684	4.19	35.329													
27		51	51	26.666	4.17	35.328													
26		59	60	26.557	4.10	35.321													
25		70	71	26.395	3.98	35.314													
24		80	80	26.343	3.93	35.312													
23		101	102	26.049	3.74	35.339													
22		124	125	22.034	3.07	35.040													
21		152	153	20.225	2.93	35.380													
36		995	1003	4.440	2.06	34.555													
35		996	1004	4.440	2.06	34.555													
34		995	1003	4.446	2.06	34.555													

St. 01		Date	01.12.08				Lat.	0	0.27	N	Depth	5140m							
ST01D1		Time	11:14 – 14:47	(GMT)			Long.	159	59.69	W	B-P	67m			CTD Up Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
		0		26.9	****	****									5	26.843	35.330	4.16	0.332
9	R	1240	1251	3.578	1.96	34.581	34.593	2.03	40.8	< 0.02	0.07	112.7	2.86		10	26.848	35.330	4.17	0.339
8	R	1485	1499	3.099	2.13	34.599	34.609	2.19	40.5	< 0.02	< 0.05	123.3	2.77		20	26.851	35.330	4.17	0.342
7	R	1979	1999	2.279	2.40	34.639	34.649	2.65	39.9	< 0.02	< 0.05	145.3	2.79		30	26.833	35.328	4.17	0.338
6	R	2471	2500	1.900	2.69	34.660	34.669	2.78	39.1	< 0.02	0.05	153.5	2.69		40	26.759	35.324	4.12	0.352
5	R	2961	2998	1.673	3.04	34.671	34.679	3.13	38.2	< 0.02	0.11	153.2	2.61		50	26.691	35.321	4.11	0.357
4	R	3451	3499	1.537	3.37	34.681	34.683	3.15	37.2	< 0.02	0.13	150.4	2.53		60	26.584	35.318	4.03	0.313
3	R	3941	4000	1.426	3.70	34.690	34.703	3.70	36.3	< 0.02	< 0.05	147.9	2.38		70	26.413	35.314	3.95	0.258
2	R	4428	4500	1.274	4.24	34.700	34.711	4.15	34.8	< 0.02	0.05	136.7	2.35		80	26.339	35.312	3.91	0.195
1	R	5091	5181	1.237	4.61	34.704	34.717	4.40	33.9	< 0.02	< 0.05	130.5	2.19		90	26.214	35.308	3.84	0.151
19		1484	1498	3.100	2.13	34.599									100	26.097	35.324	3.77	0.135
18		1485	1498	3.101	2.12	34.599									125	24.028	35.240	3.08	0.064
17		1979	1999	2.278	2.40	34.639									150	19.853	35.346	3.00	0.036
16		1979	1999	2.279	2.40	34.639									175	16.405	35.145	3.07	0.026
36		2963	3000	1.673	3.04	34.671									200	14.236	35.031	3.11	0.024
35		2963	3000	1.673	3.04	34.671									250	12.269	34.876	2.57	0.027
34		2962	3000	1.674	3.04	34.671									300	11.613	34.836	1.96	0.038
33		2962	3000	1.673	3.04	34.671									400	10.082	34.735	1.48	0.043
32		2963	3000	1.673	3.04	34.671									500	8.742	34.651	0.75	0.056
31		2962	3000	1.673	3.04	34.671									600	7.068	34.578	1.30	0.042
30		2962	3000	1.673	3.04	34.671									700	6.240	34.553	1.55	0.040
29		2962	3000	1.673	3.04	34.671									800	5.558	34.545	1.71	0.039
28		2962	3000	1.673	3.04	34.671									900	4.900	34.547	1.90	0.033
27		2962	3000	1.673	3.04	34.671									1000	4.498	34.554	1.93	0.039
26		2962	3000	1.673	3.04	34.671									1250	3.579	34.581	1.96	0.037
25		2962	2999	1.673	3.04	34.671									1500	3.071	34.600	2.13	0.032
24		2962	3000	1.673	3.04	34.671									2000	2.275	34.639	2.40	0.032
23		2962	3000	1.673	3.04	34.671									2500	1.900	34.660	2.70	0.024
22		2962	2999	1.673	3.04	34.671									3000	1.673	34.671	3.04	0.021
21		2962	3000	1.673	3.04	34.671									3500	1.537	34.681	3.36	0.025
20		2962	3000	1.673	3.04	34.671									4000	1.425	34.691	3.71	0.026
15		2962	2999	1.673	3.04	34.671									4500	1.268	34.700	4.25	0.023
14		2961	2999	1.673	3.04	34.671									5000	1.228	34.704	4.55	0.018
13		3941	4000	1.426	3.70	34.691									5178	1.237	34.704	4.60	0.007
12		3940	3999	1.426	3.70	34.690													
11		5095	5185	1.238	4.61	34.704													
10		5093	5183	1.238	4.61	34.704													

St. 02		Date	01.12.10				Lat.	5	0.25	S	Depth	5149m								
ST02D1		Time	10:28 – 12:52	(GMT)			Long.	160	0.29	W										
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	CTD Up Lay Data				
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	P	T	S	DO	FIC
	R	0		28.1	****	****	35.466	4.47	4.20	0.18	0.25	1.65	0.49	0.19	db	℃	(psu)	ml・l^{-1}	
18	R	10	10	27.968	4.37	35.535	35.411	4.39	4.17	0.18	0.18	1.62	0.49	0.17	5	27.965	35.536	4.37	0.285
17	R	20	20	27.963	4.37	35.533	35.542	4.36	4.17	0.18	0.18	1.71	0.49	0.22	10	27.967	35.535	4.34	0.273
16	R	31	31	27.965	4.38	35.533	35.542	4.39	4.21	0.18	0.24	1.62	0.49	0.18	20	27.964	35.533	4.38	0.283
15	R	39	40	27.969	4.36	35.533	35.541	4.32	4.24	0.18	0.26	1.68	0.49	0.19	30	27.969	35.535	4.37	0.283
14	R	50	51	27.943	4.31	35.525	35.535	4.28	4.22	0.19	0.23	1.62	0.49	0.19	40	27.963	35.532	4.37	0.278
13	R	70	71	27.921	4.28	35.596	35.607	4.38	4.17	0.14	0.30	1.71	0.47	0.17	50	27.948	35.527	4.32	0.295
12	R	100	100	27.822	4.25	35.601	35.611	4.31	4.23	0.16	0.31	1.80	0.51	0.14	60	27.902	35.523	4.30	0.262
11	R	149	150	25.954	3.57	35.835	35.777	3.65	7.05	0.49	< 0.05	1.94	0.66	0.09	70	27.921	35.594	4.27	0.276
10	R	200	201	17.029	2.70	35.339	35.344	2.62	13.9	< 0.02	< 0.05	6.29	1.20	0.01	80	27.928	35.599	4.25	0.279
9	R	299	301	10.539	2.15	34.792	34.791	2.16	28.5	< 0.02	0.16	23.0	1.99	0.00	90	27.919	35.598	4.25	0.272
8	R	397	400	8.976	1.73	34.676	34.671	1.65	33.5	< 0.02	0.05	31.2	2.32		100	27.823	35.601	4.24	0.245
7	R	497	500	7.953	1.56	34.618	34.615	1.55	36.7	< 0.02	< 0.05	38.6	2.46		125	27.356	35.607	3.93	0.155
6	R	596	601	6.777	1.62	34.567	34.570	1.59	39.1	< 0.02	< 0.05	49.2	2.70		150	26.129	35.792	3.52	0.072
5	R	795	801	5.779	1.91	34.541	34.541	1.85	39.2	< 0.02	0.08	59.7	2.70		175	22.815	35.894	3.07	0.044
4	R	993	1000	4.566	2.00	34.544	34.548	2.08	40.3	< 0.02	0.06	81.2	2.81		200	17.532	35.400	2.95	0.028
3	R	1487	1501	3.070	2.32	34.595	34.595	2.33	39.7	< 0.02	< 0.05	114.3	2.78		250	12.890	34.966	1.89	0.032
2	R	1982	2002	2.306	2.72	34.635	34.636	2.60	38.7	< 0.02	< 0.05	131.7	2.64		300	10.557	34.794	2.15	0.032
1	R	2962	3000	1.701	3.30	34.674	34.676	3.18	37.3	< 0.02	< 0.05	142.5	2.52		400	8.963	34.673	1.72	0.032
36		20	20	27.966	4.38	35.534									500	7.960	34.621	1.45	0.037
28		20	20	27.963	4.37	35.533									600	6.775	34.567	1.62	0.033
27		21	21	27.962	4.37	35.532									700	6.194	34.552	1.56	0.039
35		52	52	27.936	4.34	35.525									800	5.782	34.541	1.91	0.032
26		51	51	27.945	4.33	35.526									900	5.111	34.534	2.20	0.031
34		51	51	27.947	4.34	35.526									1000	4.565	34.544	2.01	0.029
25		70	71	27.920	4.28	35.591									1250	3.763	34.566	2.19	0.026
24		69	70	27.920	4.28	35.590									1500	3.070	34.595	2.32	0.025
23		70	71	27.921	4.28	35.592									2000	2.308	34.634	2.74	0.025
33		101	101	27.823	4.25	35.601									2500	1.926	34.660	2.99	0.019
22		101	102	27.822	4.23	35.601									3000	1.700	34.674	3.31	0.024
21		100	101	27.822	4.22	35.601									3031	1.700	34.674	3.32	0.020
32		200	201	17.422	2.86	35.390													
20		201	202	17.433	2.92	35.385													
19		200	202	17.284	2.73	35.360													
31		497	501	7.961	1.45	34.619													
30		993	1001	4.564	2.00	34.544													
29		2962	3000	1.700	3.30	34.674													

St. 03		Date	01.12.11				Lat.	10	0.18	S	Depth	4522m								
ST03D1		Time	12:11 – 14:28	(GMT)			Long.	160	0.02	W										
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	CTD Down Lay Data				
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	P	T	S	DO	FIC
	R	0		29.4	****	****	35.449	3.95	< 0.1	< 0.02	< 0.05	0.67	0.23	0.12	db	℃	(psu)	ml・l^{-1}	
18	R	10	11	29.237	4.24	35.441	35.445	3.92	< 0.1	< 0.02	< 0.05	0.69	0.25	0.06	1	29.274	35.442	4.34	0.133
17	R	20	20	29.258	4.24	35.440	35.445	3.91	< 0.1	< 0.02	< 0.05	0.64	0.22	0.01	5	29.284	35.442	4.34	0.130
16	R	30	30	29.261	4.24	35.439	35.444	3.92	< 0.1	< 0.02	< 0.05	0.61	0.22	0.12	10	29.282	35.443	4.35	0.132
15	R	40	40	29.263	4.22	35.438	35.446	3.92	< 0.1	< 0.02	< 0.05	0.58	0.22	0.12	20	29.280	35.443	4.33	0.135
14	R	49	50	29.246	4.21	35.441	35.458	3.92	< 0.1	< 0.02	0.14	0.72	0.24	0.16	30	29.288	35.442	4.31	0.136
13	R	70	70	28.929	4.19	35.638	35.712	3.87	< 0.1	0.04	0.23	0.96	0.24	0.24	40	29.281	35.442	4.32	0.137
12	R	100	100	27.751	3.79	35.925	35.956	3.47	1.01	1.36	0.35	1.25	0.44	0.17	50	29.248	35.446	4.34	0.172
11	R	150	151	24.354	3.42	36.222	36.230	3.15	5.62	0.03	< 0.05	1.36	0.63	0.07	60	29.194	35.453	4.34	0.222
10	R	197	198	21.204	3.72	35.967	35.982	3.34	5.06	< 0.02	< 0.05	1.30	0.56	0.01	70	29.118	35.523	4.33	0.251
9	R	298	299	14.659	2.59	35.052	35.039	2.33	16.7	< 0.02	< 0.05	8.70	1.44	0.00	80	28.852	35.690	4.31	0.275
8	R	398	400	10.302	2.20	34.727	34.725	1.97	27.8	< 0.02	< 0.05	21.2	2.04		90	28.546	35.765	4.28	0.268
7	R	497	500	7.930	2.80	34.591	34.586	2.46	31.1	< 0.02	< 0.05	29.7	2.20		100	28.423	35.797	4.14	0.260
6	R	595	599	6.500	2.58	34.534	34.544	2.27	35.1	< 0.02	< 0.05	42.5	2.44		125	27.336	36.014	3.83	0.158
5	R	793	799	5.376	2.36	34.520	34.523	2.16	37.9	< 0.02	< 0.05	58.1	2.62		150	25.754	36.237	3.56	0.080
4	R	992	1000	4.424	2.59	34.526	34.527	2.33	38.0	< 0.02	< 0.05	73.5	2.61		175	24.639	36.239	3.54	0.058
3	R	1485	1499	2.822	2.98	34.593	34.593	2.70	37.6	< 0.02	< 0.05	107.4	2.60		200	22.701	36.189	3.79	0.020
2	R	1979	1999	2.142	3.08	34.641	34.645	2.76	37.6	< 0.02	< 0.05	127.8	2.64		250	19.226	35.674	3.78	0.015
1	R	2961	2999	1.708	3.45	34.675	34.678	3.03	36.7	< 0.02	< 0.05	138.1	2.57		300	14.328	35.028	2.88	0.011
36		21	21	29.256	4.23	35.440									400	10.192	34.733	2.48	0.017
28		21	21	29.256	4.25	35.440									500	7.935	34.597	3.14	0.017
27		21	21	29.257	4.24	35.440									600	6.574	34.541	2.92	0.016
35		49	49	29.259	4.22	35.439									700	5.909	34.527	2.71	0.015
26		49	49	29.263	4.20	35.439									800	5.451	34.522	2.58	0.020
25		49	49	29.249	4.21	35.441									900	5.007	34.526	2.53	0.023
34		70	70	28.957	4.19	35.626									1000	4.516	34.526	2.75	0.016
24		70	71	28.952	4.18	35.628									1250	3.494	34.561	2.93	0.020
23		70	71	28.939	4.19	35.634									1500	2.821	34.593	3.10	0.018
33		100	101	27.958	3.83	35.888									2000	2.150	34.641	3.15	0.019
22		100	100	27.943	3.83	35.890									2500	1.869	34.663	3.29	0.020
21		100	100	27.783	3.78	35.920									3000	1.708	34.675	3.45	0.019
32		198	199	21.347	3.71	35.990									3009	1.705	34.675	3.46	0.020
20		197	198	21.283	3.71	35.981													
19		198	200	21.173	3.71	35.963													
31		497	501	7.936	2.79	34.591													
30		992	1000	4.431	2.60	34.526													
29		2962	3000	1.709	3.45	34.675													

St. 05		Date	01.12.13				Lat.	19	59.91	S	Depth	4646m							
ST05S1		Time	19:35 – 20:49	(GMT)			Long.	160	0.02	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	°C	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	°C	(psu)	ml·l^{-1}	
	R	0		25.9	****	****	35.836	4.55	< 0.1	< 0.02	< 0.05	1.40	0.15	0.10	1	25.913	35.821	4.61	0.014
20	R	11	11	25.943	4.53	35.831	35.833	4.57	< 0.1	< 0.02	< 0.05	0.72	0.15	0.03	5	25.914	35.821	4.62	0.013
19	R	19	19	25.946	4.54	35.832	35.833	4.56	< 0.1	< 0.02	< 0.05	0.68	0.15	0.03	10	25.915	35.821	4.61	0.011
18	R	31	31	25.947	4.53	35.833	35.839	4.57	< 0.1	< 0.02	< 0.05	0.65	0.16	0.03	20	25.917	35.821	4.62	0.015
17	R	40	40	25.949	4.54	35.832	35.836	4.57	< 0.1	< 0.02	< 0.05	0.80	0.15	0.05	30	25.915	35.822	4.61	0.019
16	R	49	49	25.868	4.56	35.823	35.828	4.58	< 0.1	< 0.02	0.06	0.62	0.15	0.02	40	25.915	35.823	4.62	0.019
15	R	60	60	24.856	4.68	35.757	35.761	4.70	< 0.1	< 0.02	< 0.05	0.71	0.14	0.07	50	25.916	35.824	4.59	0.020
14	R	70	71	24.769	4.63	35.813	35.821	4.57	< 0.1	< 0.02	< 0.05	0.62	0.16	0.05	60	25.865	35.822	4.60	0.025
13	R	80	80	24.630	4.60	35.821	35.838	4.53	< 0.1	< 0.02	0.25	0.74	0.30	0.06	70	24.888	35.801	4.70	0.030
12	R	100	100	23.855	4.47	35.798	35.797	4.47	< 0.1	< 0.02	< 0.05	< 0.5	0.17	0.10	80	24.711	35.829	4.67	0.038
11	R	124	125	22.342	4.83	35.529	35.541	4.79	< 0.1	< 0.02	< 0.05	< 0.5	0.11	0.20	90	24.433	35.844	4.58	0.058
10	R	150	151	21.523	4.84	35.542	35.556	4.77	< 0.1	< 0.02	< 0.05	< 0.5	0.10	0.13	100	23.762	35.741	4.71	0.064
9	R	197	199	20.340	4.25	35.712	35.712	4.22	2.22	0.03	< 0.05	0.73	0.29	0.05	125	22.286	35.532	4.92	0.116
8	R	247	249	19.000	4.24	35.646	35.652	4.16	3.71	< 0.02	< 0.05	0.85	0.38	0.01	150	21.420	35.537	5.00	0.121
7	R	297	299	17.252	4.50	35.494	35.495	4.39	4.18	< 0.02	< 0.05	1.13	0.39		175	21.211	35.672	4.69	0.084
6	R	397	399	12.987	4.39	34.978	34.978	4.23	12.0	< 0.02	< 0.05	3.52	0.92		200	20.474	35.677	4.59	0.043
5	R	496	499	8.780	4.55	34.529	34.527	4.28	21.4	< 0.02	< 0.05	8.16	1.52		250	18.884	35.654	4.41	0.015
4	R	595	600	6.835	4.43	34.395	34.393	4.21	27.3	< 0.02	< 0.05	15.8	1.89		300	17.128	35.507	4.75	0.012
3	R	695	700	5.812	4.45	34.359	34.357	4.30	29.4	< 0.02	< 0.05	21.6	2.02		400	13.066	34.997	4.68	0.012
2	R	793	800	5.056	4.01	34.388	34.390	3.78	32.5	< 0.02	< 0.05	36.0	2.28		500	8.794	34.539	4.90	0.009
1	R	993	1001	4.133	3.69	34.453	34.457	3.48	34.7	< 0.02	< 0.05	58.2	2.39		600	6.869	34.400	4.80	0.014
32		10	10	25.942	4.53	35.831									700	5.823	34.359	4.94	0.013
31		10	10	25.943	4.54	35.831									800	5.096	34.387	4.34	0.009
36		19	19	25.947	4.54	35.832									900	4.576	34.424	3.95	0.008
30		20	20	25.948	4.54	35.831									1000	4.134	34.454	3.80	0.015
29		30	30	25.947	4.54	35.833									1010	4.114	34.455	3.78	0.011
28		40	40	25.947	4.53	35.832													
35		49	49	25.883	4.54	35.828													
27		49	49	25.929	4.54	35.830													
26		60	61	24.908	4.68	35.753													
34		71	71	24.793	4.63	35.813													
25		71	71	24.779	4.62	35.813													
24		80	80	24.628	4.58	35.822													
23		100	101	23.920	4.49	35.796													
22		124	125	22.401	4.85	35.530													
33		138	139	22.157	4.62	35.621													
21		150	151	21.527	4.80	35.544													

St. 05		Date	01.12.13				Lat.	19	59.57	S	Depth	4626m							
ST05D1		Time	12:36 – 15:40	(GMT)			Long.	160	0.04	W	B-P	195m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	°C	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	°C	(psu)	ml·l^{-1}	
		0		25.9	****	****									3	25.951	35.825	4.61	0.020
9	R	1239	1250	3.097	3.43	34.533	34.535	3.21	35.6	< 0.02	< 0.05	84.2	2.49		5	25.953	35.825	4.60	0.021
8	R	1486	1500	2.603	3.35	34.585	34.587	3.21	36.1	< 0.02	< 0.05	100.9	2.52		10	25.955	35.825	4.61	0.017
7	R	1978	2000	2.128	3.31	34.634	34.635	3.16	36.2	< 0.02	< 0.05	117.2	2.54		20	25.964	35.825	4.61	0.020
6	R	2469	2499	1.861	3.40	34.657	34.658	3.24	36.0	< 0.02	< 0.05	126.0	2.49		30	25.958	35.826	4.61	0.020
5	R	2961	3001	1.677	3.61	34.673	34.676	3.43	35.6	< 0.02	< 0.05	127.3	2.44		40	25.969	35.826	4.57	0.020
4	R	3450	3500	1.544	3.85	34.684	34.694	3.61	34.9	< 0.02	0.05	126.0	2.44		50	25.624	35.809	4.63	0.023
3	R	3937	3999	1.414	4.17	34.694	34.697	3.86	33.8	< 0.02	< 0.05	123.5	2.29		60	25.015	35.792	4.71	0.032
2	R	4424	4498	1.242	4.57	34.704	34.707	4.17	32.9	< 0.02	< 0.05	119.9	2.27		70	24.679	35.823	4.68	0.041
19		1486	1500	2.603	3.35	34.585									80	24.399	35.836	4.62	0.054
18		1486	1500	2.603	3.35	34.585									90	24.251	35.835	4.59	0.075
17		1979	2000	2.129	3.31	34.634									100	23.637	35.746	4.59	0.088
16		1979	2000	2.129	3.31	34.634									125	22.299	35.539	4.92	0.132
36		2961	3000	1.677	3.61	34.673									150	21.638	35.626	4.73	0.132
35		2960	3000	1.677	3.61	34.673									175	21.037	35.591	4.94	0.089
34		2961	3000	1.677	3.61	34.673									200	20.574	35.647	4.75	0.046
33		2960	3000	1.677	3.61	34.673									250	19.216	35.682	4.39	0.020
32		2961	3000	1.677	3.61	34.673									300	17.513	35.500	4.55	0.015
31		2961	3000	1.677	3.61	34.673									400	12.939	34.977	4.65	0.010
30		2960	3000	1.677	3.61	34.673									500	9.658	34.616	4.74	0.012
29		2960	3000	1.677	3.61	34.673									600	6.913	34.402	4.68	0.010
28		2961	3000	1.677	3.61	34.673									700	5.938	34.368	4.75	0.010
27		2960	3000	1.677	3.61	34.673									800	5.171	34.384	4.29	0.010
26		2960	3000	1.677	3.61	34.673									900	4.509	34.429	3.89	0.014
25		2961	3000	1.678	3.61	34.673									1000	4.005	34.464	3.75	0.013
24		2960	3000	1.678	3.61	34.673									1250	3.101	34.534	3.63	0.011
23		2962	3001	1.677	3.61	34.673									1500	2.611	34.586	3.51	0.018
22		2961	3000	1.678	3.60	34.673									2000	2.141	34.633	3.41	0.018
21		2961	3000	1.678	3.61	34.673									2500	1.887	34.656	3.51	0.018
20		2961	3000	1.677	3.60	34.673									3000	1.676	34.673	3.71	0.023
15		2961	3000	1.678	3.60	34.673									3500	1.547	34.683	3.94	0.021
14		2961	3001	1.678	3.60	34.673									4000	1.420	34.694	4.22	0.014
13		3938	4000	1.414	4.17	34.695									4500	1.242	34.704	4.59	0.019
12		3938	4000	1.414	4.16	34.694									4512	1.243	34.704	4.59	0.016
11		4424	4498	1.243	4.57	34.704													
10		4424	4498	1.243	4.57	34.704													
1		4423	4498	1.243	4.57	34.704													

St. 06		Date	01.12.15				Lat.	25	0.33	S	Depth	5074m								
ST06D1		Time	07:53 – 10:07	(GMT)			Long.	160	0.09	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		23.2	****	****	35.649	4.86	< 0.1	< 0.02	< 0.05	0.56	0.11	0.03	2	22.947	35.634	5.13	0.015
18	R	9	10	22.793	4.92	35.631	35.636	4.87	< 0.1	< 0.02	< 0.05	< 0.5	0.11	0.03	5	22.942	35.635	5.59	0.014
17	R	19	20	22.646	4.93	35.622	35.628	4.89	< 0.1	< 0.02	< 0.05	< 0.5	0.09	0.03	10	22.732	35.631	5.86	0.015
16	R	30	30	22.586	4.91	35.620	35.627	4.89	< 0.1	< 0.02	< 0.05	< 0.5	0.19	0.04	20	22.599	35.622	5.41	0.020
15	R	40	40	22.583	4.93	35.622	35.626	4.88	< 0.1	< 0.02	< 0.05	< 0.5	0.10	0.04	30	22.588	35.622	5.08	0.018
14	R	50	50	22.575	4.90	35.621	35.623	4.89	< 0.1	< 0.02	< 0.05	< 0.5	0.09	0.04	40	22.582	35.623	5.09	0.020
13	R	69	70	22.508	4.93	35.616	35.615	4.87	< 0.1	< 0.02	< 0.05	< 0.5	0.09	0.04	50	22.566	35.621	5.08	0.021
12	R	100	100	21.196	5.04	35.592	35.577	4.99	< 0.1	< 0.02	< 0.05	0.53	0.09	0.08	60	22.556	35.620	5.05	0.025
11	R	149	150	20.182	4.92	35.576	35.583	4.87	< 0.1	< 0.02	0.05	< 0.5	0.11	0.20	70	22.531	35.619	5.05	0.029
10	R	198	199	19.271	4.55	35.621	35.627	4.49	2.10	0.03	0.08	< 0.5	0.30	0.06	80	21.384	35.590	5.25	0.041
9	R	298	300	17.107	4.63	35.514	35.502	4.55	3.79	< 0.02	0.14	0.81	0.42	0.01	90	21.155	35.568	5.22	0.058
8	R	397	400	14.103	4.48	35.144	35.126	4.38	9.82	< 0.02	< 0.05	2.27	0.92		100	20.911	35.559	5.24	0.068
7	R	497	500	10.319	4.49	34.691	34.724	4.29	17.8	< 0.02	0.05	5.47	1.26		125	20.584	35.586	5.19	0.197
6	R	596	600	7.932	4.82	34.459	34.465	4.60	22.7	< 0.02	< 0.05	8.17	1.66		150	20.232	35.580	5.13	0.231
5	R	793	800	5.771	4.84	34.332	34.332	4.67	28.5	< 0.02	< 0.05	17.4	2.03		175	19.653	35.601	4.91	0.123
4	R	991	1000	4.505	4.34	34.351	34.367	4.18	32.7	< 0.02	< 0.05	35.5	2.30		200	19.308	35.627	4.92	0.061
3	R	1485	1500	2.732	3.61	34.548	34.553	3.47	35.9	< 0.02	< 0.05	87.6	2.70		250	17.931	35.569	4.93	0.019
2	R	1979	2001	2.132	3.38	34.631	34.633	3.38	36.7	< 0.02	0.12	116.4	2.51		300	16.995	35.511	4.89	0.019
1	R	2960	3000	1.770	3.46	34.667	34.671	3.40	36.6	< 0.02	< 0.05	130.6	2.58		400	14.024	35.150	4.77	0.013
36		20	20	22.674	4.93	35.624									500	10.417	34.707	4.81	0.008
28		21	21	22.656	4.93	35.623									600	8.041	34.473	5.18	0.012
27		20	20	22.655	4.93	35.623									700	6.753	34.375	5.49	0.005
35		49	50	22.576	4.92	35.621									800	5.843	34.336	5.30	0.009
26		50	50	22.575	4.92	35.621									900	5.138	34.337	4.94	0.007
25		50	51	22.575	4.91	35.621									1000	4.647	34.356	4.66	0.013
34		71	71	22.558	4.91	35.620									1250	3.462	34.459	4.02	0.016
24		70	70	22.556	4.91	35.620									1500	2.719	34.550	3.78	0.016
23		70	70	22.534	4.92	35.618									2000	2.134	34.631	3.48	0.019
33		100	100	21.209	5.04	35.595									2500	1.926	34.654	3.41	0.016
22		99	100	21.211	5.02	35.596									3000	1.770	34.667	3.48	0.015
21		99	100	21.197	5.04	35.592									3010	1.768	34.667	3.48	0.016
32		199	201	19.272	4.55	35.626													
20		199	201	19.284	4.56	35.625													
19		199	200	19.297	4.55	35.623													
31		497	501	10.317	4.50	34.691													
30		991	1000	4.504	4.35	34.351													
29		2961	3001	1.770	3.46	34.667													

St. 07		Date	01.12.16				Lat.	29	59.53	S	Depth	4986m								
ST07D1		Time	13:11 – 15:17	(GMT)			Long.	159	59.94	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		21.7	****	****	35.547	4.99	< 0.1	< 0.02	< 0.05	< 0.5	0.07	0.03	1	21.370	35.538	5.33	0.014
18	R	9	9	20.923	5.13	35.532	35.537	5.04	< 0.1	< 0.02	< 0.05	< 0.5	0.06	0.03	5	21.157	35.538	5.33	0.175
17	R	20	20	20.880	5.12	35.533	35.537	5.02	< 0.1	< 0.02	< 0.05	< 0.5	0.06	0.03	10	20.889	35.535	5.35	0.018
16	R	28	29	20.870	5.12	35.534	35.537	5.03	< 0.1	< 0.02	< 0.05	< 0.5	0.06	0.03	20	20.867	35.534	5.32	0.017
15	R	39	39	20.865	5.12	35.533	35.538	5.04	< 0.1	< 0.02	< 0.05	< 0.5	0.05	0.03	30	20.864	35.534	5.32	0.020
14	R	49	50	20.841	5.14	35.531	35.532	5.02	< 0.1	< 0.02	< 0.05	< 0.5	0.05	0.03	40	20.857	35.534	5.32	0.025
13	R	70	70	19.233	5.33	35.485	35.497	5.19	< 0.1	< 0.02	< 0.05	< 0.5	0.06	0.06	50	20.682	35.523	5.34	0.025
12	R	100	100	18.531	5.16	35.534	35.543	5.02	< 0.1	< 0.02	< 0.05	< 0.5	0.11	0.14	60	19.416	35.484	5.55	0.035
11	R	149	150	17.543	4.87	35.541	35.544	4.75	2.00	0.12	< 0.05	0.71	0.29	0.11	70	19.139	35.506	5.55	0.045
10	R	199	201	16.726	5.27	35.467	35.470	5.14	0.72	0.22	0.05	0.65	0.19	0.05	80	18.946	35.528	5.46	0.067
9	R	297	300	14.214	4.49	35.204	35.189	4.36	9.34	< 0.02	< 0.05	2.24	0.84	0.00	90	18.582	35.540	5.45	0.099
8	R	397	400	11.495	4.62	34.887	34.882	4.44	14.5	< 0.02	< 0.05	3.64	1.03		100	18.439	35.565	5.28	0.266
7	R	496	500	8.868	5.02	34.584	34.613	4.79	19.3	< 0.02	< 0.05	4.98	1.31		125	17.809	35.526	5.41	0.234
6	R	595	600	7.664	5.36	34.456	34.457	5.11	21.6	< 0.02	< 0.05	5.95	1.46		150	17.351	35.529	5.12	0.097
5	R	793	800	6.323	5.41	34.352	34.358	5.15	25.2	< 0.02	< 0.05	10.8	1.70		175	16.888	35.489	5.24	0.062
4	R	992	1001	4.988	4.81	34.327	34.348	4.68	29.2	< 0.02	< 0.05	22.0	1.97		200	16.610	35.459	5.55	0.038
3	R	1485	1500	2.817	3.78	34.524	34.531	3.68	35.4	< 0.02	< 0.05	77.8	2.88		250	15.795	35.416	4.92	0.020
2	R	1977	2000	2.214	3.40	34.627	34.632	3.35	36.3	< 0.02	< 0.05	112.6	2.67		300	14.546	35.269	4.82	0.013
1	R	2958	3000	1.771	3.47	34.668	34.675	3.39	36.5	< 0.02	< 0.05	130.6	2.56		400	11.471	34.866	4.88	0.009
36		20	20	20.881	5.14	35.533									500	9.299	34.634	5.34	0.012
28		19	19	20.880	5.12	35.533									600	7.805	34.474	5.71	0.009
27		20	20	20.880	5.11	35.533									700	6.897	34.394	5.90	0.006
35		50	51	20.843	5.13	35.531									800	6.307	34.354	5.80	0.008
26		51	51	20.842	5.12	35.531									900	5.795	34.332	5.56	0.005
25		50	51	20.843	5.15	35.531									1000	5.062	34.329	5.20	0.014
34		71	71	19.340	5.34	35.477									1250	3.590	34.401	4.46	0.013
24		71	71	19.330	5.34	35.477									1500	2.819	34.524	3.97	0.013
23		71	72	19.317	5.32	35.478									2000	2.215	34.627	3.49	0.017
33		99	99	18.539	5.21	35.528									2500	1.948	34.653	3.40	0.018
22		99	99	18.535	5.20	35.530									3000	1.770	34.668	3.48	0.015
21		99	100	18.531	5.18	35.531									3006	1.770	34.668	3.49	0.017
32		199	201	16.722	5.28	35.467													
20		200	201	16.729	5.26	35.468													
19		199	201	16.725	5.28	35.467													
31		498	502	8.885	5.02	34.584													
30		992	1001	4.986	4.81	34.327													
29		2959	3000	1.770	3.47	34.668													

St. 08		Date	01.12.18				Lat.	34	59.76	S	Depth	5114m							
ST08S1		Time	08:34 – 09:48	(GMT)			Long.	159	59.96	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		18.6	****	****	35.394	4.35	< 0.1	< 0.02	0.10	< 0.5	0.12	0.03	2	18.691	35.388	5.58	0.044
20	R	10	10	18.687	5.43	35.388	35.391	4.37	< 0.1	< 0.02	< 0.05	< 0.5	0.10	0.04	5	18.692	35.388	5.56	0.043
19	R	20	21	18.691	5.42	35.389	35.391	4.33	< 0.1	< 0.02	< 0.05	< 0.5	0.12	0.05	10	18.692	35.389	5.58	0.050
18	R	30	30	18.677	5.45	35.386	35.392	5.28	< 0.1	< 0.02	< 0.05	< 0.5	0.10	0.04	20	18.694	35.389	5.56	0.049
17	R	40	40	18.140	5.61	35.298	35.197	5.56	< 0.1	< 0.02	< 0.05	< 0.5	0.12	0.07	30	18.692	35.388	5.55	0.045
16	R	51	51	15.725	6.08	35.001	35.048	5.78	< 0.1	< 0.02	< 0.05	< 0.5	0.15	0.07	40	18.693	35.388	5.54	0.048
15	R	60	60	14.486	6.36	34.770	34.762	6.04	< 0.1	< 0.02	< 0.05	< 0.5	0.18	0.08	50	18.557	35.366	5.57	0.053
14	R	69	70	14.168	6.34	34.764	34.806	5.93	< 0.1	< 0.02	< 0.05	< 0.5	0.17	0.07	60	16.507	35.097	6.03	0.103
13	R	80	80	14.283	6.24	34.891	34.902	5.88	< 0.1	< 0.02	< 0.05	< 0.5	0.17	0.10	70	14.176	34.724	6.47	0.154
12	R	100	101	14.095	6.16	34.946	34.944	5.84	< 0.1	< 0.02	< 0.05	< 0.5	0.18	0.14	80	14.009	34.744	6.49	0.172
11	R	125	126	13.677	6.11	34.880	34.881	5.81	0.46	0.02	0.11	< 0.5	0.20	0.12	90	14.434	34.942	6.32	0.153
10	R	149	150	13.005	6.07	34.774	34.764	5.73	1.51	0.11	0.28	< 0.5	0.29	0.14	100	13.838	34.854	6.40	0.231
9	R	199	200	11.769	5.72	34.715	34.723	5.40	7.20	0.20	< 0.05	0.84	0.60	0.08	125	13.588	34.884	6.27	0.225
8	R	248	250	10.963	5.34	34.759	34.763	5.05	11.7	< 0.02	< 0.05	2.10	0.85	0.01	150	12.819	34.755	6.29	0.191
7	R	298	300	10.080	5.19	34.696	34.676	4.91	15.7	< 0.02	< 0.05	3.37	1.08		175	12.213	34.713	6.30	0.121
6	R	397	400	8.428	5.32	34.534	34.524	5.04	19.7	< 0.02	< 0.05	4.88	1.33		200	11.777	34.737	5.96	0.081
5	R	496	500	7.571	5.56	34.448	34.450	5.22	21.5	< 0.02	< 0.05	5.74	1.44		250	10.972	34.773	5.55	0.027
4	R	595	600	7.112	5.62	34.412	34.410	5.28	22.9	< 0.02	< 0.05	7.19	1.53		300	10.083	34.706	5.39	0.016
3	R	694	701	6.686	5.59	34.380	34.382	5.15	24.2	< 0.02	< 0.05	8.89	1.61		400	8.492	34.544	5.50	0.013
2	R	793	800	6.186	5.46	34.345	–	5.10	26.0	< 0.02	< 0.05	11.9	1.74		500	7.601	34.454	5.77	0.011
1	R	991	1001	4.976	5.00	34.327	34.332	4.62	30.5	< 0.02	< 0.05	24.8	2.04		600	7.153	34.416	5.84	0.008
36		11	11	18.686	5.42	35.388									700	6.777	34.387	5.80	0.013
32		11	11	18.687	5.41	35.388									800	6.243	34.351	5.61	0.011
31		10	10	18.687	5.42	35.388									900	5.698	34.333	5.34	0.008
30		20	20	18.691	5.42	35.389									1000	4.980	34.329	5.05	0.012
29		31	31	18.685	5.45	35.387									1003	4.977	34.328	4.96	0.012
28		41	41	18.211	5.56	35.310													
27		51	51	16.177	6.03	35.064													
26		60	60	14.571	6.34	34.788													
25		70	71	14.190	6.33	34.768													
24		81	82	14.281	6.24	34.894													
23		101	102	14.077	6.15	34.942													
33		121	122	13.719	6.13	34.887													
22		124	125	13.695	6.12	34.883													
21		149	150	13.013	6.07	34.776													
35		496	500	7.572	5.56	34.449													
34		991	1001	4.970	5.00	34.328													

St. 08		Date	01.12.17				Lat.	34	59.72	S	Depth	5117m							
ST08D1		Time	14:50 – 17:59	(GMT)			Long.	160	0.11	W	B-P	210m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
		0		18.6	****	****									2	18.553	35.345	5.74	0.051
9	R	1237	1249	3.658	4.29	34.382	34.385	4.16	34.0	< 0.02	< 0.05	46.9	2.28		5	18.554	35.346	5.73	0.042
8	R	1484	1500	2.971	3.87	34.487	34.490	3.87	35.4	< 0.02	< 0.05	68.6	2.40		10	18.554	35.346	5.71	0.046
7	R	1976	2000	2.286	3.42	34.623	34.686	3.41	36.4	< 0.02	< 0.05	107.2	2.51		20	18.556	35.346	5.70	0.043
6	R	2468	2501	1.975	3.33	34.652	34.656	3.35	36.9	< 0.02	< 0.05	122.3	2.53		30	18.558	35.346	5.68	0.045
5	R	2956	2999	1.777	3.43	34.670	34.674	3.47	36.6	< 0.02	< 0.05	128.7	2.50		40	18.300	35.327	5.73	0.041
4	R	3445	3499	1.628	3.85	34.692	34.695	3.89	35.1	< 0.02	0.05	121.8	2.39		50	16.407	35.111	6.13	0.069
3	R	3933	3999	1.386	4.45	34.713	34.716	4.40	33.3	< 0.02	0.07	112.8	2.24		60	14.404	34.832	6.54	0.126
2	R	4420	4499	1.125	4.71	34.710	34.713	4.57	33.0	< 0.02	< 0.05	117.1	2.25		70	13.844	34.751	6.59	0.141
1	R	4906	4999	1.059	4.83	34.706	34.712	4.65	33.2	< 0.02	< 0.05	120.2	2.25		80	14.317	34.948	6.41	0.141
19		1484	1500	2.972	3.87	34.487									90	14.429	35.029	6.33	0.160
18		1484	1500	2.972	3.87	34.487									100	13.838	34.902	6.37	0.184
17		1975	1999	2.286	3.42	34.623									125	13.293	34.842	6.36	0.180
16		1976	2000	2.287	3.42	34.623									150	12.460	34.738	6.27	0.135
14		2959	3002	1.779	3.43	34.670									175	12.420	34.825	5.96	0.101
36		2959	3002	1.778	3.43	34.670									200	11.993	34.846	5.72	0.067
35		2959	3002	1.778	3.43	34.670									250	11.133	34.788	5.65	0.027
34		2959	3002	1.778	3.43	34.670									300	10.275	34.724	5.44	0.015
33		2958	3001	1.779	3.43	34.670									400	8.588	34.551	5.66	0.017
32		2958	3001	1.779	3.43	34.670									500	7.799	34.473	5.79	0.012
31		2958	3001	1.779	3.43	34.670									600	7.277	34.425	5.86	0.011
30		2958	3001	1.779	3.43	34.670									700	6.841	34.392	5.86	0.011
29		2958	3000	1.779	3.43	34.670									800	6.351	34.360	5.68	0.010
28		2958	3001	1.779	3.42	34.670									900	5.717	34.334	5.43	0.011
27		2958	3000	1.779	3.42	34.670									1000	5.150	34.330	5.17	0.012
26		2958	3000	1.779	3.42	34.670									1250	3.684	34.382	4.58	0.013
25		2958	3000	1.779	3.42	34.670									1500	2.918	34.503	4.06	0.016
24		2957	3000	1.779	3.42	34.670									2000	2.280	34.624	3.57	0.015
23		2957	3000	1.779	3.42	34.670									2500	1.969	34.653	3.45	0.018
22		2957	3000	1.779	3.42	34.670									3000	1.780	34.670	3.54	0.021
21		2957	3000	1.779	3.42	34.670									3500	1.633	34.691	3.94	0.019
20		2957	2999	1.779	3.42	34.670									4000	1.394	34.714	4.54	0.015
15		2957	3000	1.779	3.42	34.670									4500	1.129	34.710	4.79	0.020
13		3934	4000	1.386	4.45	34.713									5000	1.059	34.706	4.84	0.015
12		3934	4000	1.386	4.45	34.713									5011	1.060	34.706	4.85	0.014
11		4906	4999	1.059	4.83	34.706													
10		4906	4999	1.059	4.83	34.706													

St. 09		Date	01.12.19				Lat.	40	0.23	S	Depth	4724m								
ST09D1		Time	21:03 – 23:14	(GMT)			Long.	159	59.78	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		17.9	****	****	34.787	5.33	0.68	0.02	0.08	< 0.5	0.23	0.09	3	17.681	34.784	5.93	0.084
18	R	10	10	17.698	5.61	34.783	34.785	5.37	0.68	< 0.02	0.08	< 0.5	0.22	0.08	5	17.679	34.784	5.91	0.097
17	R	20	21	17.687	5.63	34.781	34.776	5.40	0.78	0.02	0.08	< 0.5	0.24	0.07	10	17.683	34.784	5.92	0.093
16	R	31	31	16.451	5.98	34.714	34.652	5.70	2.50	0.04	0.14	< 0.5	0.34	0.08	20	17.684	34.784	5.90	0.089
15	R	40	40	15.060	6.25	34.573	34.596	5.91	3.26	0.05	0.20	< 0.5	0.40	0.09	30	15.572	34.536	6.44	0.126
14	R	50	50	13.583	6.61	34.614	34.627	6.26	2.82	0.05	0.12	0.52	0.37	0.07	40	14.470	34.516	6.68	0.158
13	R	71	72	11.729	6.80	34.602	34.602	6.29	4.30	0.08	0.19	0.53	0.48	0.11	50	13.248	34.569	6.99	0.160
12	R	99	100	10.884	6.45	34.620	34.620	5.98	6.29	0.17	0.23	0.77	0.58	0.14	60	12.218	34.578	7.15	0.185
11	R	149	151	9.949	6.32	34.574	34.578	5.85	9.40	0.34	< 0.05	1.00	0.76	0.09	70	11.555	34.547	7.20	0.197
10	R	199	201	9.357	5.80	34.584	34.582	5.40	14.8	0.02	< 0.05	2.56	1.02	0.01	80	11.131	34.568	7.03	0.213
9	R	299	301	8.339	5.91	34.508	34.508	5.46	17.6	< 0.02	< 0.05	3.94	1.20	0.00	90	10.998	34.654	6.77	0.235
8	R	397	400	7.824	5.72	34.466	34.462	5.32	20.2	< 0.02	< 0.05	5.35	1.36		100	10.854	34.636	6.74	0.237
7	R	495	500	7.315	5.84	34.417	34.416	5.39	21.5	< 0.02	< 0.05	6.28	1.46		125	10.056	34.568	6.76	0.120
6	R	595	600	6.994	5.63	34.397	34.390	5.25	23.2	< 0.02	< 0.05	8.45	1.55		150	9.748	34.589	6.56	0.047
5	R	793	800	6.171	5.27	34.352	34.352	4.94	26.3	< 0.02	< 0.05	14.0	1.77		175	9.571	34.598	6.24	0.034
4	R	991	1001	4.988	4.80	34.336	34.338	4.51	30.4	< 0.02	< 0.05	26.4	2.04		200	9.220	34.580	6.16	0.024
3	R	1483	1500	3.031	3.86	34.504	34.505	3.76	35.2	< 0.02	< 0.05	72.5	2.41		250	8.777	34.538	6.22	0.016
2	R	1974	1999	2.419	3.49	34.611	34.667	3.38	36.2	< 0.02	< 0.05	105.5	2.50		300	8.292	34.502	6.24	0.017
1	R	2955	2999	1.883	3.54	34.667	34.669	3.38	36.4	< 0.02	< 0.05	126.2	2.50		400	7.853	34.464	6.04	0.018
36		21	21	17.662	5.63	34.782									500	7.412	34.424	5.96	0.011
28		21	21	17.654	5.63	34.780									600	7.084	34.402	5.93	0.015
27		21	21	17.632	5.64	34.781									700	6.723	34.375	5.81	0.010
35		49	50	13.793	6.59	34.634									800	6.222	34.356	5.54	0.016
26		50	50	13.769	6.59	34.632									900	5.662	34.338	5.33	0.013
25		49	50	13.724	6.59	34.631									1000	4.973	34.331	5.06	0.012
34		70	71	11.875	6.80	34.611									1250	3.743	34.403	4.52	0.013
24		70	71	11.816	6.80	34.608									1500	3.031	34.502	4.04	0.014
23		71	71	11.762	6.80	34.601									2000	2.420	34.610	3.59	0.015
33		100	101	10.888	6.49	34.602									2500	2.090	34.645	3.49	0.021
22		100	101	10.888	6.49	34.606									3000	1.883	34.666	3.54	0.014
21		100	101	10.889	6.47	34.601									3011	1.880	34.668	3.56	0.015
32		199	201	9.365	5.79	34.584													
20		199	201	9.360	5.80	34.585													
19		200	201	9.364	5.80	34.584													
31		495	500	7.327	5.84	34.418													
30		991	1001	5.006	4.80	34.337													
29		2955	2999	1.882	3.54	34.667													

St. 10		Date	01.12.21				Lat.	47	0.22	S	Depth	5117m								
ST10S1		Time	21:55 – 23:03	(GMT)			Long.	160	0.56	W					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		13.6	****	****	34.298	5.86	7.35	0.14	0.36	< 0.5	0.62	0.22	2	13.345	34.348	6.64	0.211
20	R	9	9	13.179	6.44	34.332	–	5.90	7.31	0.14	0.19	< 0.5	0.61	0.26	5	13.338	34.349	6.65	0.217
19	R	20	20	12.253	6.63	34.443	34.443	6.04	7.56	0.13	0.14	< 0.5	0.69	0.32	10	13.314	34.351	6.64	0.241
18	R	29	29	11.986	6.66	34.432	34.442	6.06	7.83	0.11	0.37	< 0.5	0.65	0.38	20	12.367	34.435	6.76	0.245
17	R	42	42	11.544	6.70	34.442	34.446	6.12	8.26	0.12	0.23	< 0.5	0.69	0.39	30	12.002	34.435	6.88	0.518
16	R	51	51	10.982	6.68	34.481	34.490	6.09	8.26	0.13	0.37	< 0.5	0.70	0.48	40	11.552	34.445	6.92	0.512
15	R	60	60	9.839	6.77	34.491	–	6.14	9.38	0.14	0.42	1.51	0.83	0.39	50	11.160	34.484	6.89	0.564
14	R	69	69	9.314	6.73	34.509	34.511	5.99	10.1	0.27	0.39	1.64	0.84	0.26	60	10.177	34.506	7.01	0.481
13	R	79	79	9.119	6.65	34.505	34.506	5.99	10.7	0.46	0.21	1.68	0.87	0.17	70	9.512	34.501	6.99	0.343
12	R	100	101	9.043	6.55	34.531	34.534	5.93	11.8	0.17	0.06	1.64	0.91	0.07	80	9.160	34.504	6.91	0.190
11	R	124	125	8.943	6.51	34.541	34.542	5.91	12.5	0.04	0.11	2.09	0.93	0.04	90	9.169	34.542	6.85	0.092
10	R	149	150	8.809	6.50	34.539	34.540	5.87	13.2	0.02	0.14	2.42	1.06	0.02	100	9.023	34.531	6.81	0.065
9	R	199	200	8.710	6.46	34.551	34.563	5.86	13.8	0.02	0.11	2.77	1.01	0.01	125	8.946	34.543	6.77	0.035
8	R	248	250	8.536	6.42	34.538	34.541	5.83	14.6	< 0.02	0.10	2.79	1.05	0.00	150	8.810	34.540	6.73	0.024
7	R	297	300	8.314	6.36	34.510	34.510	5.75	15.8	< 0.02	< 0.05	3.34	1.12		175	8.739	34.546	6.70	0.021
6	R	396	400	7.766	6.12	34.449	34.452	5.54	18.8	< 0.02	< 0.05	4.88	1.32		200	8.698	34.552	6.67	0.019
5	R	495	500	7.487	6.23	34.426	34.438	5.58	19.3	< 0.02	< 0.05	4.98	1.37		250	8.568	34.545	6.68	0.016
4	R	594	600	7.189	6.13	34.397	34.405	5.57	20.7	< 0.02	< 0.05	6.27	1.44		300	8.273	34.504	6.62	0.018
3	R	694	701	6.876	6.07	34.371	34.371	5.43	22.0	< 0.02	< 0.05	7.41	1.78		400	7.755	34.449	6.27	0.018
2	R	792	800	6.488	5.87	34.343	34.345	5.28	23.8	< 0.02	0.10	9.89	1.73		500	7.483	34.427	6.33	0.012
1	R	990	1000	5.596	5.36	34.326	34.327	4.80	27.8	< 0.02	< 0.05	18.7	1.91		600	7.162	34.395	6.29	0.011
32		9	9	13.185	6.43	34.338									700	6.891	34.373	6.19	0.018
31		10	10	13.176	6.44	34.336									800	6.493	34.345	5.96	0.014
30		19	19	12.255	6.61	34.442									900	6.090	34.332	5.68	0.015
29		30	30	12.015	6.63	34.433									1000	5.605	34.328	5.40	0.014
28		42	42	11.547	6.70	34.443									1002	5.603	34.327	5.38	0.011
33		50	50	11.162	6.67	34.484													
27		50	51	11.030	6.68	34.484													
26		59	60	9.961	6.78	34.491													
25		70	70	9.325	6.72	34.506													
24		79	80	9.154	6.67	34.505													
23		100	100	9.045	6.56	34.531													
22		123	125	8.947	6.53	34.539													
21		148	149	8.810	6.51	34.539													
36		990	1001	5.599	5.36	34.326													
35		990	1001	5.600	5.36	34.326													
34		990	1000	5.598	5.36	34.326													

St. 10		Date	01.12.22				Lat.	46	59.77	S	Depth	5115m			CTD Down Lay Data				
ST10D1		Time	04:42 – 08:34	(GMT)			Long.	159	59.79	W	B-P	3.5m							
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
		0		13.6	****	****									4	13.259	34.418	6.67	0.261
9	R	1236	1250	4.195	4.63	34.341	34.341	4.51	31.9	< 0.02	< 0.05	36.4	2.21		5	13.296	34.416	6.68	0.252
8	R	1482	1500	3.217	4.20	34.420	34.427	4.13	34.4	< 0.02	< 0.05	56.5	2.45		10	12.396	34.480	6.89	0.324
7	R	1973	1999	2.571	3.73	34.590	34.592	3.73	35.0	< 0.02	0.08	86.5	2.61		20	12.229	34.479	6.86	0.425
6	R	2465	2500	2.208	3.84	34.678	34.677	3.79	33.9	< 0.02	0.05	95.8	2.41		30	12.107	34.480	6.82	0.617
5	R	2953	2999	1.899	4.12	34.717	34.718	4.10	32.8	< 0.02	< 0.05	100.2	2.29		40	11.702	34.489	6.82	0.630
4	R	3442	3499	1.580	4.45	34.730	34.719	4.55	32.1	< 0.02	< 0.05	104.3	2.23		50	10.974	34.496	6.90	0.594
3	R	3930	4000	1.232	4.59	34.717	34.732	4.42	32.7	< 0.02	0.07	114.7	2.30		60	9.809	34.504	7.03	0.395
2	R	4416	4500	1.036	4.71	34.708	34.710	4.62	33.0	< 0.02	< 0.05	121.8	2.54		70	9.210	34.502	6.95	0.228
1	R	5016	5118	1.013	4.84	34.703	34.707	4.65	33.1	< 0.02	0.08	124.3	2.29		80	9.113	34.507	6.88	0.146
20	R	5041	5145	1.015	4.84	34.703	34.704	4.66	33.0	< 0.02	< 0.05	124.2	2.24		90	9.117	34.527	6.86	0.087
21	R	5065	5169	1.017	4.84	34.703	34.706	4.66	32.9	< 0.02	< 0.05	124.1	2.25		100	8.992	34.521	6.81	0.061
22	R	5076	5180	1.018	4.83	34.703	34.705	4.67	33.0	< 0.02	< 0.05	124.0	2.26		125	8.910	34.543	6.74	0.035
23	R	5080	5185	1.019	4.83	34.703	34.706	4.67	33.0	< 0.02	< 0.05	124.3	2.25		150	8.787	34.547	6.77	0.025
24	R	5085	5189	1.019	4.83	34.703	34.705	4.69	33.0	< 0.02	< 0.05	125.3	2.26		175	8.730	34.556	6.70	0.018
25	R	5091	5196	1.020	4.83	34.703	34.706	4.64	33.0	< 0.02	< 0.05	124.9	2.26		200	8.672	34.552	6.66	0.019
26	R	5096	5201	1.021	4.82	34.703	34.733	4.58	33.0	< 0.02	< 0.05	120.7	2.28		250	8.367	34.508	6.70	0.019
27	R	5103	5208	1.021	4.83	34.703	–	4.66	33.0	< 0.02	< 0.05	124.2	2.26		300	8.232	34.502	6.42	0.013
28	R	5108	5213	1.022	4.82	34.703	34.719	4.68	32.9	< 0.02	< 0.05	124.5	2.27		400	7.728	34.448	6.24	0.015
29	R	5114	5220	1.023	4.82	34.703	34.708	4.66	33.0	< 0.02	< 0.05	124.4	2.26		500	7.448	34.424	6.20	0.014
19		1483	1501	3.220	4.21	34.420									600	7.200	34.402	6.13	0.009
18		1482	1500	3.220	4.20	34.420									700	6.877	34.374	6.06	0.015
17		1974	2000	2.571	3.74	34.590									800	6.474	34.345	5.96	0.015
16		1974	2000	2.571	3.73	34.590									900	6.040	34.330	5.67	0.011
15		2954	3000	1.899	4.12	34.717									1000	5.530	34.330	5.34	0.014
14		2953	2999	1.899	4.12	34.717									1250	4.190	34.343	4.90	0.016
13		3930	4000	1.233	4.59	34.718									1500	3.309	34.408	4.50	0.017
12		3930	4000	1.233	4.59	34.718									2000	2.568	34.591	3.98	0.023
10		5016	5118	1.013	4.85	34.704									2500	2.245	34.684	4.05	0.019
11		5016	5119	1.013	4.84	34.703									3000	1.895	34.715	4.26	0.023
35		5085	5189	1.019	4.83	34.703									3500	1.592	34.730	4.62	0.023
36		5085	5189	1.019	4.83	34.703									4000	1.240	34.718	4.76	0.018
33		5096	5201	1.021	4.82	34.703									4500	1.036	34.708	4.84	0.016
34		5096	5201	1.021	4.82	34.703									5000	1.011	34.704	4.88	0.019
31		5108	5214	1.022	4.82	34.703									5220	1.023	34.703	4.82	0.018
32		5108	5214	1.022	4.82	34.703													
30		5114	5220	1.023	4.82	34.703													

St. 12		Date	02.01.08 – 09				Lat.	64	59.83	S	Depth	2735m			CTD Up Lay Data				
ST12S1		Time	23:24 – 00:31	(GMT)			Long.	140	0.37	E									
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		1.1	****	****	33.771	8.92	14.3	0.03	0.37	46.9	1.26	9.93	5	0.884	33.771	8.00	12.760
35	R	10	10	0.876	7.96	33.773	33.794	9.15	14.0	0.05	0.36	47.3	1.26	9.51	10	0.884	33.771	7.97	12.930
31	R	20	20	0.604	7.70	33.843	33.886	9.15	15.0	0.06	0.53	50.5	1.39	6.60	20	0.437	33.853	7.51	14.270
29	R	30	30	−1.072	7.04	34.196	34.188	8.08	27.0	0.12	0.66	44.9	1.89	2.22	30	−1.026	34.187	7.06	2.358
25	R	49	50	−1.259	6.75	34.267	34.260	7.78	28.6	0.11	0.70	54.6	2.07	4.23	40	−1.160	34.224	6.91	4.515
21	R	69	70	−1.414	6.36	34.317	34.309	7.21	29.8	0.12	0.39	55.7	2.05	0.86	50	−1.256	34.264	6.79	4.818
17	R	99	100	−1.390	6.07	34.365	34.360	6.82	30.9	0.11	0.12	61.1	2.09	0.32	60	−1.319	34.286	6.50	0.909
13	R	149	151	−0.622	5.39	34.481	34.483	5.95	31.9	0.05	< 0.05	71.0	2.33	0.08	70	−1.414	34.315	6.36	0.535
9	R	198	200	−0.242	5.13	34.537	34.538	5.66	32.0	0.02	< 0.05	76.4	2.14	0.03	80	−1.371	34.334	6.22	0.406
5	R	297	301	0.707	4.56	34.649	34.645	4.99	32.0	0.02	< 0.05	84.4	2.24	0.01	90	−1.441	34.349	6.17	0.212
3	R	494	499	1.106	4.31	34.712	34.702	4.74	31.7	0.02	0.10	94.4	2.11		100	−1.386	34.366	6.08	0.210
2	R	692	700	0.829	4.39	34.699	34.691	4.83	32.2	< 0.02	0.10	100.4	2.19		125	−1.113	34.417	5.67	0.129
1	R	988	1000	0.640	4.44	34.698	34.690	4.86	32.6	< 0.02	< 0.05	109.7	2.23		150	−0.626	34.480	5.42	0.091
36		10	10	0.886	7.96	33.771									175	−0.377	34.516	5.23	0.071
34		20	20	0.614	7.93	33.843									200	−0.236	34.537	5.14	0.065
33		19	20	0.599	7.83	33.844									250	0.382	34.612	4.73	0.057
32		19	20	0.592	7.79	33.843									300	0.712	34.649	4.57	0.059
30		30	30	−0.983	7.07	34.180									400	1.158	34.707	4.30	0.056
28		49	50	−1.255	6.81	34.263									500	1.108	34.712	4.31	0.042
27		49	50	−1.256	6.79	34.264									600	0.924	34.701	4.38	0.058
26		49	50	−1.256	6.77	34.264									700	0.829	34.699	4.39	0.053
24		69	70	−1.422	6.43	34.309									800	0.819	34.704	4.39	0.054
23		69	70	−1.424	6.42	34.309									900	0.740	34.701	4.41	0.052
22		69	70	−1.424	6.40	34.309									1000	0.641	34.698	4.44	0.052
20		99	100	−1.387	6.10	34.365									1017	0.634	34.698	4.45	0.050
19		99	100	−1.390	6.09	34.365													
18		99	100	−1.390	6.08	34.365													
16		149	150	−0.612	5.41	34.482													
15		149	151	−0.627	5.41	34.480													
14		149	150	−0.620	5.40	34.481													
12		198	200	−0.234	5.15	34.537													
11		198	200	−0.241	5.15	34.537													
10		198	200	−0.240	5.14	34.537	not closed												
8		298	301	0.709	4.56	34.649													
7		298	301	0.710	4.56	34.649													
6		298	301	0.708	4.56	34.649													
4		494	500	1.105	4.31	34.711													

St. 12		Date	02.01.08				Lat.	65	0.04	S	Depth	2718m								
ST12D1		Time	17:12 – 19:09	(GMT)			Long.	140	0.15	E	B-P	95m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
		0		0.9	****	****									2	0.701	33.843	7.98	17.300
5	R	1233	1249	0.447	4.44	34.691	34.680	4.90	32.9	< 0.02	0.05	113.8	2.24		5	0.757	33.841	8.01	16.120
4	R	1479	1499	0.291	4.54	34.684	34.674	5.01	32.8	< 0.02	0.06	114.8	2.24		10	0.677	33.847	8.05	16.810
3	R	1970	1999	−0.028	4.83	34.673	34.664	5.37	32.5	< 0.02	0.07	113.0	2.27		20	0.507	33.870	8.05	16.570
2	R	2460	2500	−0.469	5.35	34.650	34.641	5.76	32.1	0.03	< 0.05	97.4	2.21		30	−0.973	34.188	7.61	4.137
1	R	2572	2614	−0.467	5.38	34.650	34.642	5.72	32.3	0.03	< 0.05	98.1	2.20		40	−1.070	34.215	7.36	5.887
35		59	59	−1.370	6.53	34.281									50	−1.293	34.252	7.18	4.734
34		59	59	−1.370	6.53	34.280									60	−1.378	34.285	6.98	0.576
33		59	59	−1.370	6.52	34.280									70	−1.425	34.307	6.79	0.568
32		59	60	−1.371	6.52	34.281									80	−1.434	34.322	6.62	0.427
31		59	59	−1.370	6.51	34.280									90	−1.369	34.349	6.44	0.287
30		59	59	−1.370	6.51	34.280									100	−1.365	34.378	6.27	0.164
29		59	59	−1.370	6.50	34.280									125	−1.114	34.417	5.95	0.115
28		59	59	−1.370	6.50	34.280									150	−0.622	34.480	5.57	0.118
27		59	59	−1.370	6.49	34.280									175	−0.365	34.520	5.34	0.037
26		58	59	−1.372	6.48	34.281			29.2	0.12	0.43	53.5	2.02	0.96	200	−0.201	34.543	5.19	0.041
25		74	75	−1.427	6.33	34.303									250	0.252	34.598	4.88	0.055
24		74	75	−1.427	6.33	34.304									300	0.674	34.643	4.65	0.060
23		74	75	−1.428	6.33	34.304									400	1.094	34.697	4.37	0.054
22		75	75	−1.428	6.32	34.304									500	1.110	34.712	4.32	0.054
21		74	75	−1.429	6.32	34.304									600	0.911	34.701	4.39	0.056
20		74	75	−1.428	6.31	34.304									700	0.882	34.704	4.38	0.049
19		75	75	−1.428	6.30	34.304									800	0.886	34.711	4.36	0.052
18		74	75	−1.429	6.30	34.304									900	0.758	34.705	4.39	0.052
17		75	75	−1.428	6.29	34.303									1000	0.654	34.698	4.43	0.052
16		74	75	−1.430	6.28	34.305			29.8	0.12	0.36	55.6	2.07	0.94	1250	0.456	34.690	4.51	0.051
36		89	90	−1.371	6.01	34.357			30.6	0.13	0.21	59.8	2.13	0.34	1500	0.276	34.683	4.61	0.051
15		124	125	−0.950	5.56	34.432									2000	−0.048	34.672	4.90	0.055
14		124	125	−0.951	5.56	34.432									2500	−0.470	34.650	5.39	0.055
13		124	126	−0.951	5.56	34.432									2613	−0.467	34.650	5.39	0.055
12		124	125	−0.952	5.56	34.432													
11		124	125	−0.952	5.56	34.432													
10		124	125	−0.952	5.55	34.432													
9		124	125	−0.950	5.54	34.433													
8		124	125	−0.951	5.54	34.433													
7		124	125	−0.951	5.53	34.433													
6		124	125	−0.957	5.52	34.432			31.7	0.06	< 0.05	67.7	2.16	0.10					

St. 12B		Date	02.01.09 – 10				Lat.	65	41.33	S	Depth	325m							
ST12B1		Time	23:44 – 00:38	(GMT)			Long.	140	7.90	E	B-P	21m			CTD Up Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		−0.6	****	****	33.180	9.06	13.6	0.09	0.19	51.2	1.07	7.11	5	−0.772	33.524	7.91	6.406
12	R	10	10	−0.687	7.57	33.769	33.739	8.82	18.0	0.09	0.65	54.2	1.39	6.88	10	−0.655	33.704	7.46	5.978
16	R	20	20	−0.995	6.94	34.107	34.094	7.96	24.6	0.06	0.86	60.9	1.78	11.31	20	−1.004	34.115	6.85	4.078
18	R	29	29	−1.193	6.65	34.241	34.219	7.51	27.4	0.02	0.82	64.1	1.98	9.40	30	−1.214	34.254	6.60	3.056
1	R	40	40	−1.270	6.54	34.287	34.266	7.35	28.3	0.05	0.73	65.4	1.99	3.41	40	−1.279	34.295	6.43	1.318
21	R	48	49	−1.398	6.25	34.361	34.346	7.04	29.8	0.05	0.44	68.4	2.06	1.50	50	−1.384	34.354	6.22	0.617
22	R	69	69	−1.453	6.17	34.403	34.394	6.86	30.4	0.07	0.25	70.3	2.11	0.90	60	−1.446	34.392	6.19	0.514
26	R	100	101	−1.494	6.08	34.435	34.425	6.72	31.0	0.04	< 0.05	71.8	2.15	0.22	70	−1.454	34.403	6.15	0.459
4	R	124	125	−1.512	6.05	34.451	34.444	6.70	31.3	0.03	< 0.05	72.2	2.10	0.10	80	−1.488	34.417	6.10	0.284
9	R	149	151	−1.418	5.95	34.469	34.492	6.58	31.4	0.03	0.06	73.2	2.14	0.07	90	−1.475	34.429	6.08	0.191
31	R	198	200	−0.735	5.44	34.548	34.521	6.01	31.6	0.02	< 0.05	80.5	2.14	0.06	100	−1.495	34.435	6.08	0.207
33	R	248	251	−0.364	5.19	34.608	34.599	5.74	31.8	0.04	0.07	89.6	2.43	0.07	125	−1.510	34.452	6.03	0.101
36	R	297	300	−0.725	5.46	34.623	34.610	5.58	31.6	0.05	0.07	89.9	2.21	0.15	150	−1.419	34.468	5.97	0.095
10		10	10	−0.769	7.78	33.504									175	−1.029	34.508	5.77	0.389
11		10	10	−0.690	7.67	33.600									200	−0.741	34.546	5.44	0.082
13		20	20	−0.972	7.09	34.086									250	−0.383	34.606	5.21	0.092
14		20	20	−0.982	7.05	34.093									300	−0.725	34.624	5.46	0.115
15		21	21	−0.996	7.00	34.109									301	−0.726	34.624	5.46	0.110
17		28	29	−1.190	6.66	34.238													
2		40	40	−1.270	6.51	34.288													
3		39	40	−1.284	6.47	34.298													
19		50	50	−1.374	6.33	34.340													
20		50	50	−1.374	6.29	34.340													
34		69	70	−1.454	6.16	34.403													
23		102	103	−1.487	6.08	34.437													
24		100	101	−1.489	6.08	34.435													
25		99	100	−1.493	6.08	34.435													
5		124	125	−1.512	6.04	34.451													
6		123	124	−1.512	6.04	34.451													
7		149	151	−1.418	5.96	34.468													
8		148	150	−1.418	5.96	34.468													
27		199	201	−0.762	5.47	34.543													
28		199	201	−0.763	5.46	34.543													
29		197	200	−0.751	5.46	34.545													
30		197	199	−0.753	5.46	34.545													
32		249	252	−0.361	5.19	34.613													
35		297	300	−0.725	5.46	34.623													

St. 13		Date	02.01.12				Lat.	63	59.81	S	Depth	3659m			CTD Down Lay Data				
ST13S1		Time	22:33 – 23:35	(GMT)			Long.	139	57.57	E									
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	$ml \cdot l^{-1}$	(psu)	(psu)	$ml \cdot l^{-1}$	μM	μM	μM	μM	μM	$\mu g \cdot l^{-1}$	db	℃	(psu)	$ml \cdot l^{-1}$	
	R	0		0.9	****	****	33.608	8.27	20.9	0.19	0.22	25.2	1.34	2.17	4	0.747	33.604	7.83	1.894
28	R	10	10	0.751	7.45	33.605	33.610	8.18	20.8	0.29	0.22	25.3	1.35	2.04	5	0.747	33.604	7.81	1.666
25	R	19	19	0.739	7.41	33.606	33.608	8.18	20.8	0.29	0.27	25.2	1.33	2.82	10	0.751	33.605	7.78	2.319
22	R	29	30	0.389	7.26	33.649	33.678	8.12	21.9	0.28	0.40	27.6	1.55	–	20	0.754	33.605	7.74	2.351
19	R	39	40	−1.188	6.78	34.021	34.045	7.46	27.3	0.25	0.84	42.7	2.12	1.59	30	0.711	33.609	7.73	2.459
16	R	50	50	−0.684	5.95	34.211	34.185	6.70	30.4	0.24	0.77	53.1	2.26	0.59	40	0.235	33.684	7.83	3.226
13	R	69	70	0.983	4.40	34.454	34.459	4.70	33.8	0.22	0.20	68.6	2.37	0.21	50	−1.149	34.076	7.38	1.781
10	R	99	100	1.588	3.88	34.556	34.571	4.22	34.3	0.17	0.15	74.6	2.38	0.00	60	−0.902	34.177	6.59	0.532
7	R	197	199	1.767	3.83	34.640	34.641	4.13	33.2	0.12	< 0.05	78.6	2.35	0.03	70	0.304	34.335	5.45	0.266
5	R	296	300	1.880	3.83	34.689	34.683	4.16	32.5	0.13	< 0.05	80.5	2.25	0.03	80	0.910	34.434	4.68	0.174
3	R	495	500	1.739	4.02	34.721	34.711	4.30	31.6	0.11	< 0.05	84.7	2.16		90	1.144	34.472	4.44	0.191
2	R	692	700	1.621	4.14	34.736	34.728	4.42	31.0	0.11	< 0.05	88.4	2.11		100	1.523	34.530	4.15	0.114
1	R	988	1000	1.399	4.28	34.739	34.729	4.51	30.9	0.11	< 0.05	94.8	2.08		125	1.699	34.580	3.89	0.093
30		10	10	0.734	7.46	33.607									150	1.718	34.602	3.86	0.077
29		10	10	0.751	7.45	33.605									175	1.916	34.635	3.81	0.066
27		20	20	0.713	7.43	33.609									200	1.874	34.644	3.78	0.064
26		20	20	0.747	7.41	33.605									250	1.864	34.667	3.82	0.073
24		30	30	0.581	7.34	33.624									300	1.852	34.683	3.87	0.374
23		30	30	0.624	7.31	33.614									400	1.818	34.706	3.94	0.058
21		39	39	−1.096	7.02	33.985									500	1.750	34.720	4.03	0.061
20		39	39	−1.115	6.97	33.990									600	1.702	34.732	4.10	0.052
18		49	50	−0.828	6.17	34.180									700	1.586	34.732	4.19	0.054
17		50	51	−0.918	6.15	34.159									800	1.525	34.736	4.22	0.056
15		70	70	0.898	4.44	34.427									900	1.492	34.741	4.25	0.056
14		69	70	0.945	4.42	34.444									1000	1.389	34.738	4.29	0.055
12		99	100	1.589	3.89	34.556									1007	1.381	34.737	4.29	0.059
11		99	100	1.594	3.88	34.557													
9		197	199	1.770	3.83	34.640													
8		197	199	1.769	3.83	34.641													
6		297	300	1.881	3.83	34.689													
4		495	501	1.744	4.01	34.721													

St. 13		Date	02.01.12				Lat.	63	59.75	S	Depth	3700m			CTD Down Lay Data				
ST13D1		Time	10:47 – 13:13	(GMT)			Long.	139	56.62	E	B-P	95m							
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	$ml \cdot l^{-1}$	(psu)	(psu)	$ml \cdot l^{-1}$	μM	μM	μM	μM	μM	$\mu g \cdot l^{-1}$	db	℃	(psu)	$ml \cdot l^{-1}$	
		0		0.9	****	****									5	0.812	33.600	7.73	2.853
10	R	1480	1500	0.937	4.32	34.720	34.711	4.71	31.7	0.11	< 0.05	107.4	2.19		10	0.809	33.600	7.70	2.838
7	R	1971	2000	0.539	4.48	34.698	34.686	4.83	32.3	0.11	< 0.05	116.6	2.23		20	0.812	33.600	7.67	2.666
4	R	2949	2999	−0.011	4.93	34.677	34.663	5.20	32.1	0.12	< 0.05	114.2	2.20		30	0.792	33.600	7.64	2.724
1	R	3554	3620	−0.524	5.57	34.639	34.626	5.76	31.6	0.12	< 0.05	95.7	2.18		40	0.558	33.622	7.66	3.637
29		9	10	0.813	7.26	33.604									50	−1.311	34.026	7.71	2.674
28		20	21	0.782	7.17	33.601									60	−1.009	34.141	6.86	1.216
30		39	40	−1.273	6.74	34.048									70	−0.062	34.322	6.14	0.348
27		50	50	−0.886	6.18	34.176									80	0.414	34.391	5.25	0.325
26		70	70	−0.204	5.50	34.285									90	0.989	34.479	4.70	0.225
25		70	70	−0.125	5.42	34.302									100	1.369	34.538	4.21	0.154
24		101	102	−0.319	5.42	34.392									125	0.645	34.497	4.65	0.139
23		100	101	−0.319	5.24	34.398									150	1.519	34.589	4.15	0.109
22		197	199	1.803	3.74	34.648									175	1.796	34.628	3.82	0.069
21		199	201	1.830	3.74	34.651									200	1.805	34.642	3.82	0.076
20		297	300	1.842	3.81	34.683									250	1.490	34.639	3.87	0.066
19		297	300	1.840	3.82	34.683									300	1.649	34.664	3.97	0.065
18		494	500	1.758	3.96	34.722									400	1.835	34.709	3.93	0.057
17		494	500	1.762	3.96	34.723									500	1.692	34.715	4.04	0.055
16		692	700	1.643	4.07	34.737									600	1.689	34.729	4.11	0.057
15		692	700	1.642	4.07	34.737									700	1.653	34.739	4.16	0.057
14		989	1001	1.238	4.26	34.722									800	1.448	34.727	4.24	0.054
13		988	1000	1.238	4.26	34.721									900	1.274	34.720	4.31	0.054
12		1480	1500	0.940	4.32	34.720									1000	1.188	34.717	4.38	0.053
11		1480	1500	0.939	4.32	34.720									1250	1.106	34.725	4.38	0.083
9		1971	2000	0.539	4.48	34.698									1500	0.939	34.719	4.42	0.050
8		1971	2000	0.539	4.48	34.698									2000	0.526	34.697	4.58	0.051
6		2949	2999	−0.010	4.93	34.677									2500	0.237	34.687	4.77	0.056
5		2949	2999	−0.012	4.93	34.677									3000	−0.010	34.676	4.99	0.056
3		3554	3620	−0.524	5.56	34.639									3500	−0.417	34.648	5.43	0.054
2		3554	3620	−0.524	5.57	34.639									3620	−0.523	34.639	5.58	0.049

St. 14		Date	02.01.13				Lat.	62	59.97	S	Depth	3791m								
ST14S1		Time	10:05 – 11:08	(GMT)			Long.	140	1.16	E					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		1.6	****	****	33.538	8.02	23.0	0.38	0.22	17.8	1.43	0.97	4	1.383	33.541	7.70	0.871
29	R	10	10	1.284	7.26	33.534	33.539	8.06	23.0	0.38	0.20	17.8	1.39	0.73	5	1.383	33.541	7.66	0.883
27	R	19	19	1.247	7.23	33.558	33.562	8.04	22.8	0.37	0.19	14.5	1.42	0.67	10	1.375	33.543	7.60	0.913
25	R	29	29	1.230	7.20	33.559	33.564	8.06	22.8	0.37	0.18	15.0	1.47	0.83	20	1.336	33.555	7.54	0.930
23	R	40	40	0.673	7.25	33.663	33.713	8.13	25.0	0.35	0.17	30.2	1.72	1.14	30	1.281	33.565	7.49	1.164
21	R	50	50	−0.223	7.28	33.852	33.841	8.13	26.3	0.34	0.25	33.0	1.80	1.00	40	0.555	33.694	7.58	1.609
19	R	59	59	−1.045	7.23	33.979	33.967	8.14	27.1	0.27	0.25	42.9	1.89	0.87	50	0.262	33.772	7.59	1.293
17	R	70	70	−0.584	6.49	34.097	34.071	7.30	29.1	0.27	0.50	47.0	2.12	0.45	60	−0.238	33.861	7.60	1.294
15	R	79	80	−0.355	5.90	34.139	34.161	6.48	30.9	0.25	0.55	50.8	2.28	0.31	70	−1.147	33.988	7.67	1.206
13	R	99	100	−0.027	5.43	34.261	34.262	6.02	31.8	0.24	0.52	58.8	2.30	0.17	80	−0.906	34.056	7.26	0.997
11	R	148	150	1.809	3.74	34.564	34.567	4.11	34.6	0.16	< 0.05	77.2	2.43	0.05	90	−0.190	34.159	6.27	0.232
9	R	198	200	1.862	3.72	34.617	34.617	4.08	33.9	0.13	< 0.05	80.0	2.36	0.03	100	0.426	34.239	5.82	0.229
7	R	297	300	1.914	3.77	34.667	34.669	4.12	32.9	0.13	< 0.05	82.3	2.31	0.02	125	0.902	34.418	4.82	0.113
5	R	396	400	1.868	3.86	34.692	34.694	4.18	32.1	0.02	< 0.05	83.4	2.24		150	1.661	34.538	4.03	0.079
3	R	494	499	1.825	3.95	34.715	34.715	4.28	31.8	0.02	< 0.05	85.2	2.17		175	1.801	34.584	3.83	0.063
2	R	692	700	1.736	4.09	34.738	34.737	4.43	31.1	0.02	< 0.05	88.7	2.10		200	1.841	34.610	3.78	0.076
1	R	988	1000	1.495	4.24	34.740	34.739	4.57	30.7	0.02	< 0.05	94.6	2.14		250	1.948	34.652	3.76	0.059
30		9	9	1.285	7.27	33.535									300	1.910	34.670	3.80	0.063
28		19	19	1.256	7.24	33.558									400	1.878	34.696	3.89	0.060
26		29	30	1.232	7.21	33.559									500	1.820	34.715	3.98	0.061
24		39	40	0.673	7.26	33.669									600	1.780	34.730	4.06	0.103
22		49	49	−0.142	7.28	33.839									700	1.736	34.738	4.11	0.059
20		59	59	−0.946	7.29	33.940									800	1.657	34.740	4.17	0.056
18		69	70	−0.921	6.55	34.025									900	1.579	34.741	4.21	0.057
16		79	80	−0.426	5.96	34.131									1000	1.500	34.740	4.25	0.057
14		100	101	−0.171	5.51	34.244									1010	1.492	34.740	4.26	0.055
12		149	150	1.812	3.74	34.558													
10		198	200	1.851	3.73	34.613													
8		297	300	1.913	3.77	34.667													
6		396	400	1.864	3.86	34.691													
4		495	500	1.825	3.95	34.715													

St. 14		Date	02.01.13				Lat.	63	0.09	S	Depth	3790m								
ST14D1		Time	04:26 – 07:09	(GMT)			Long.	139	59.88	E	B-P	100m			CTD Up Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
		0		1.6	****	****									5	1.482	33.573	7.13	0.420
6	R	1479	1499	1.072	4.30	34.728	34.728	4.65	31.3	< 0.02	< 0.05	109.1	2.18		10	1.469	33.571	7.13	0.576
5	R	1972	2000	0.676	4.44	34.706	34.706	4.74	31.9	< 0.02	< 0.05	119.2	2.23		20	1.250	33.566	7.14	1.009
4	R	2461	2500	0.336	4.64	34.690	34.691	4.91	32.2	< 0.02	< 0.05	123.5	2.23		30	0.664	33.662	7.18	1.352
3	R	2950	3000	0.114	4.83	34.683	34.682	5.08	32.3	< 0.02	< 0.05	125.3	2.24		40	0.235	33.766	7.20	1.350
2	R	3438	3500	−0.080	5.08	34.673	34.671	5.28	32.1	< 0.02	< 0.05	120.6	2.20		50	−0.573	33.888	7.23	1.255
1	R	3637	3704	−0.199	5.25	34.664	34.663	5.40	32.0	< 0.02	< 0.05	117.8	2.21		60	−1.075	33.984	6.78	0.925
29		10	10	1.474	7.12	33.572									70	−0.846	34.076	6.08	0.305
28		20	20	1.353	7.13	33.567									80	0.062	34.203	5.45	0.201
27		20	20	1.336	7.14	33.565									90	0.336	34.276	5.14	0.167
26		20	20	1.333	7.13	33.564									100	0.589	34.349	4.68	0.158
25		30	30	0.772	7.18	33.626									125	1.197	34.475	4.12	0.110
24		39	40	0.193	7.20	33.774									150	1.517	34.537	3.93	0.078
23		49	50	−0.421	7.25	33.879									175	1.865	34.598	3.71	0.065
22		49	50	−0.420	7.25	33.878									200	1.844	34.615	3.73	0.062
21		48	49	−0.443	7.25	33.882									250	1.839	34.640	3.74	0.062
30		65	65	−0.987	7.07	34.003									300	1.910	34.670	3.75	0.062
20		69	70	−0.699	6.37	34.081									400	1.872	34.700	3.84	0.058
19		69	70	−0.588	6.15	34.100									500	1.831	34.718	3.92	0.066
18		69	70	−0.416	6.21	34.124									600	1.798	34.731	3.98	0.058
17		99	100	0.650	4.75	34.362									700	1.722	34.737	4.04	0.056
16		99	100	0.636	4.72	34.358									800	1.638	34.739	4.09	0.060
15		99	100	0.702	4.73	34.375									900	1.562	34.741	4.13	0.055
14		149	150	1.512	3.94	34.537									1000	1.487	34.741	4.17	0.059
13		149	151	1.510	3.94	34.538									1250	1.263	34.735	4.25	0.054
12		149	151	1.514	3.93	34.534									1500	1.069	34.728	4.30	0.050
11		198	200	1.859	3.71	34.614									2000	0.673	34.706	4.44	0.051
10		198	200	1.873	3.71	34.615									2500	0.334	34.690	4.64	0.051
9		198	200	1.856	3.72	34.615									3000	0.113	34.682	4.84	0.055
8		297	300	1.913	3.74	34.670									3500	−0.080	34.673	5.08	0.053
7		297	300	1.912	3.74	34.670									3693	−0.199	34.664	5.26	0.057

St. 15		Date	02.01.13				Lat.	62	0.11	S	Depth	4253m			CTD Down Lay Data				
ST15S1		Time	22:39 – 23:47	(GMT)			Long.	140	0.66	E									
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	$ml \cdot l^{-1}$	(psu)	(psu)	$ml \cdot l^{-1}$	μM	μM	μM	μM	μM	$\mu g \cdot l^{-1}$	db	℃	(psu)	$ml \cdot l^{-1}$	
	R	0		1.7	****	****	33.814	7.73	25.1	0.25	0.31	16.5	1.56	0.25	5	1.423	33.807	7.68	0.153
29	R	9	9	1.379	7.13	33.808	33.810	–	25.1	0.24	0.28	16.8	1.55	0.31	10	1.409	33.807	7.57	0.194
27	R	20	20	1.370	7.12	33.809	33.810	–	25.5	0.24	0.28	16.7	1.56	0.28	20	1.398	33.807	7.48	0.284
25	R	29	29	1.364	7.11	33.809	33.811	–	25.6	0.24	0.30	16.3	1.55	0.19	30	1.378	33.808	7.42	0.317
23	R	40	40	1.342	7.09	33.808	33.808	7.77	25.5	0.25	0.25	16.2	1.57	0.32	40	1.372	33.807	7.38	0.351
21	R	49	50	1.294	7.07	33.807	33.807	7.75	25.0	0.23	0.34	16.5	1.60	0.38	50	1.322	33.807	7.36	0.504
19	R	59	59	0.089	7.21	33.898	33.897	7.89	26.0	0.22	0.49	20.2	1.81	0.40	60	−0.169	33.936	7.56	0.482
17	R	69	69	−0.495	7.18	33.929	33.929	7.91	27.1	0.20	0.79	26.3	1.96	0.29	70	−0.517	33.936	7.55	0.438
15	R	100	101	−0.176	6.13	34.081	34.069	6.85	29.5	0.13	0.62	40.0	2.20	0.05	80	−0.764	33.950	7.47	0.262
13	R	148	149	1.873	3.94	34.431	34.433	4.23	34.8	0.02	< 0.05	66.1	2.45	0.04	90	−0.447	34.007	7.20	0.195
11	R	198	200	1.983	3.74	34.511	34.516	4.02	34.6	< 0.02	< 0.05	71.8	2.43	0.05	100	0.016	34.094	6.54	0.141
9	R	297	300	2.067	3.65	34.598	34.602	3.94	34.4	< 0.02	0.07	76.3	2.38	0.01	125	1.538	34.352	4.60	0.091
7	R	396	400	2.043	3.71	34.650	34.651	3.96	33.4	< 0.02	0.07	79.2	2.28		150	1.870	34.440	4.06	0.067
5	R	494	499	2.030	3.79	34.686	34.691	4.04	32.6	< 0.02	< 0.05	80.3	2.25		175	1.974	34.487	3.88	0.061
4	R	593	600	2.005	3.87	34.710	34.711	4.10	31.8	< 0.02	< 0.05	81.2	2.19		200	2.022	34.525	3.79	0.061
3	R	692	699	1.933	3.94	34.723	34.724	4.21	31.6	< 0.02	< 0.05	83.3	2.14		250	2.065	34.563	3.70	0.061
2	R	790	799	1.872	4.02	34.733	34.733	4.26	31.0	< 0.02	< 0.05	84.4	2.15		300	2.071	34.602	3.69	0.059
1	R	988	1000	1.738	4.15	34.745	34.749	4.41	30.7	< 0.02	< 0.05	88.0	2.13		400	2.043	34.649	3.74	0.060
30		9	9	1.381	7.13	33.809									500	2.031	34.685	3.82	0.063
28		19	20	1.369	7.12	33.809									600	2.005	34.711	3.89	0.058
26		29	29	1.363	7.11	33.808									700	1.933	34.723	3.97	0.057
24		40	41	1.350	7.09	33.808									800	1.874	34.733	4.04	0.034
22		49	50	1.285	7.08	33.809									900	1.813	34.741	4.11	0.053
20		59	60	0.406	7.16	33.871									1000	1.736	34.745	4.16	0.054
18		68	69	−0.414	7.21	33.924									1000	1.738	34.745	4.16	0.056
16		98	99	−0.291	6.24	34.062									1001	1.736	34.745	4.16	0.055
14		148	150	1.873	3.94	34.428													
12		198	200	1.984	3.75	34.511													
10		297	300	2.067	3.65	34.597													
8		396	400	2.042	3.71	34.650													
6		494	499	2.031	3.79	34.686													

St. 15		Date	02.01.13				Lat.	62	0.31	S	Depth	4253m			CTD Down Lay Data				
ST15D1		Time	16:33 – 19:35	(GMT)			Long.	140	0.02	E	B-P	70m							
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	$ml \cdot l^{-1}$	(psu)	(psu)	$ml \cdot l^{-1}$	μM	μM	μM	μM	μM	$\mu g \cdot l^{-1}$	db	℃	(psu)	$ml \cdot l^{-1}$	
		0		1.8	****	****									2	1.502	33.793	7.55	0.401
6	R	1480	1499	1.311	4.24	34.739	not closed								5	1.502	33.793	7.50	0.393
5	R	1971	2000	0.895	4.36	34.718	34.720	4.66	31.6	< 0.02	< 0.05	113.2	2.20		10	1.498	33.794	7.45	0.402
4	R	2461	2499	0.529	4.52	34.700	34.701	4.82	32.3	< 0.02	0.05	121.7	2.24		20	1.500	33.794	7.39	0.400
3	R	2950	3000	0.251	4.72	34.689	34.688	4.98	32.5	< 0.02	< 0.05	126.8	2.25		30	1.402	33.806	7.37	0.449
2	R	3437	3499	0.062	4.92	34.681	34.684	5.21	32.4	< 0.02	< 0.05	125.1	2.22		40	1.266	33.809	7.36	0.619
1	R	4151	4233	−0.334	5.49	34.649	34.650	5.61	31.6	< 0.02	< 0.05	104.8	2.20		50	0.263	33.888	7.49	0.650
29		11	11	1.437	7.02	33.790									60	−0.370	33.936	7.62	0.566
28		20	20	1.435	7.00	33.791									70	−0.583	33.940	7.51	0.415
27		20	20	1.438	6.99	33.790									80	−0.746	33.965	7.41	0.265
26		19	19	1.440	6.99	33.790									90	−0.707	34.004	7.15	0.221
25		29	29	1.439	6.97	33.791									100	−0.376	34.072	6.75	0.199
24		39	39	1.147	6.99	33.811									125	1.355	34.334	4.87	0.112
23		50	51	0.062	7.12	33.835									150	1.885	34.443	4.06	0.066
22		49	50	0.186	7.12	33.878									175	1.949	34.479	3.88	0.065
21		49	49	0.011	7.13	33.900									200	2.027	34.514	3.78	0.061
20		70	70	−0.678	7.09	33.941									250	2.056	34.564	3.70	0.060
19		70	71	−0.681	7.08	33.941									300	2.062	34.599	3.69	0.059
18		69	70	−0.682	7.06	33.941									400	2.046	34.646	3.74	0.061
30		88	89	−0.500	6.56	34.018									500	2.027	34.686	3.82	0.057
17		98	99	0.267	5.55	34.154									600	2.000	34.711	3.90	0.057
16		98	99	0.263	5.51	34.154									700	1.920	34.726	3.98	0.055
15		98	99	0.353	5.43	34.171									800	1.871	34.737	4.05	0.056
14		148	150	1.853	3.91	34.436									900	1.804	34.742	4.11	0.055
13		148	150	1.853	3.90	34.436									1000	1.740	34.746	4.15	0.049
12		148	150	1.871	3.88	34.442									1250	1.517	34.744	4.26	0.059
11		199	201	2.012	3.68	34.517									1500	1.324	34.739	4.33	0.052
10		199	201	2.015	3.68	34.519									2000	0.906	34.719	4.46	0.049
9		199	201	2.015	3.67	34.519									2500	0.522	34.700	4.63	0.052
8		297	300	2.078	3.62	34.601									3000	0.247	34.688	4.81	0.032
7		297	300	2.079	3.62	34.602									3500	0.071	34.681	4.99	0.050
															4000	−0.124	34.669	5.22	0.052
															4222	−0.314	34.651	5.47	0.053

St. 16		Date	02.01.14				Lat.	61	0.11	S	Depth	4350m								
ST16S1		Time	15:54 – 16:59	(GMT)			Long.	139	59.76	E					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		1.3	****	****	33.884	7.91	27.2	0.25	0.46	21.9	1.83	0.16	3	1.151	33.878	7.44	0.290
20	R	10	10	1.151	7.11	33.879	33.882	7.91	27.3	0.24	0.39	21.9	1.79	0.14	5	1.152	33.878	7.41	0.298
19	R	20	20	1.155	7.09	33.879	33.880	7.92	27.1	0.25	0.37	22.0	1.80	0.16	10	1.148	33.879	7.38	0.300
18	R	30	30	1.139	7.08	33.879	33.882	7.89	27.1	0.24	0.40	22.0	1.79	0.16	20	1.145	33.879	7.35	0.276
17	R	40	40	0.971	7.10	33.882	33.882	7.93	27.1	0.24	0.39	21.6	1.78	0.14	30	1.146	33.879	7.32	0.300
16	R	49	50	0.897	7.09	33.882	34.989	7.89	27.0	0.23	0.42	21.1	1.75	0.16	40	1.086	33.881	7.32	0.299
15	R	59	60	0.830	7.07	33.882	33.883	7.92	27.1	0.23	0.44	21.0	1.79	0.20	50	0.978	33.882	7.32	0.329
14	R	70	70	0.269	7.11	33.897	33.888	7.94	27.2	0.22	0.51	22.3	1.83	0.18	60	0.886	33.883	7.32	0.387
13	R	79	80	0.115	7.04	33.895	33.897	7.90	27.7	0.21	0.60	25.2	1.89	0.20	70	0.802	33.884	7.31	0.428
12	R	98	99	−0.297	6.38	34.000	34.004	7.32	30.0	0.15	0.73	35.3	2.10	0.15	80	0.267	33.898	7.35	0.356
11	R	123	125	1.228	4.66	34.269	–	5.18	34.9	0.07	< 0.05	54.6	2.36	0.09	90	−0.073	33.906	7.34	0.374
10	R	148	150	1.889	4.06	34.380	34.377	4.50	36.1	0.02	0.05	62.6	2.44	0.05	100	−0.405	33.932	7.32	0.310
9	R	198	200	2.090	3.78	34.461	34.462	4.19	36.2	< 0.02	< 0.05	68.8	2.51	0.02	125	0.941	34.222	5.46	0.122
8	R	247	250	2.113	3.70	34.511	34.503	4.09	35.9	< 0.02	0.06	72.2	2.44	0.01	150	1.807	34.358	4.35	0.079
7	R	297	300	2.126	3.67	34.551	34.550	4.04	35.5	< 0.02	< 0.05	74.3	2.42	0.01	175	2.001	34.417	4.03	0.072
6	R	396	400	2.168	3.66	34.618	34.616	4.02	34.6	< 0.02	0.07	77.4	2.37		200	2.080	34.454	3.88	0.064
5	R	495	500	2.132	3.72	34.657	34.656	4.07	34.0	< 0.02	0.08	79.4	2.31		250	2.097	34.501	3.77	0.059
4	R	593	600	2.110	3.80	34.690	34.690	4.12	33.2	< 0.02	0.12	80.7	2.34		300	2.122	34.547	3.71	0.062
3	R	692	700	2.021	3.87	34.705	34.705	4.24	32.8	< 0.02	0.06	82.3	2.18		400	2.161	34.613	3.69	0.059
2	R	790	799	1.987	3.95	34.722	34.720	4.30	32.2	< 0.02	< 0.05	83.7	2.16		500	2.139	34.655	3.74	0.059
1	R	989	1001	1.867	4.09	34.741	34.759	4.45	31.8	< 0.02	0.11	86.9	2.11		600	2.109	34.690	3.82	0.058
30		5	5	1.150	7.11	33.879									700	2.022	34.706	3.89	0.059
29		4	4	1.151	7.12	33.879									800	1.986	34.722	3.96	0.052
28		9	10	1.151	7.12	33.879									900	1.934	34.734	4.03	0.061
27		10	10	1.152	7.11	33.879									1000	1.873	34.741	4.09	0.057
26		15	15	1.154	7.10	33.879									1004	1.869	34.741	4.09	0.055
25		15	15	1.154	7.10	33.879													
24		20	20	1.155	7.10	33.879													
23		20	20	1.155	7.10	33.879													
22		25	25	1.140	7.09	33.879													
21		24	25	1.141	7.09	33.879													

St. 16		Date	02.01.14				Lat.	61	0.12	S	Depth	4398m								
ST16D1		Time	07:58 – 10:59	(GMT)			Long.	140	0.40	E	B-P	95m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
		0		1.5	****	****									4	1.170	33.879	7.45	0.195
8	R	1235	1250	1.649	4.14	34.747	34.746	4.52	31.6	< 0.02	0.09	92.8	2.12		5	1.140	33.880	7.44	0.233
7	R	1481	1500	1.444	4.21	34.743	34.743	4.63	31.6	< 0.02	0.07	98.6	2.11		10	1.149	33.879	7.42	0.206
6	R	1971	1999	1.047	4.33	34.726	not closed								20	1.137	33.880	7.39	0.289
5	R	2462	2500	0.661	4.47	34.705	34.704	4.78	32.9	< 0.02	0.09	120.0	2.20		30	1.024	33.881	7.39	0.303
4	R	2950	3000	0.351	4.66	34.692	34.692	4.96	33.0	< 0.02	0.05	127.7	2.25		40	0.921	33.882	7.39	0.341
3	R	3438	3500	0.190	4.83	34.686	34.685	5.09	33.3	< 0.02	0.12	132.0	2.30		50	0.874	33.883	7.38	0.351
2	R	3925	4000	0.040	5.03	34.680	34.679	5.26	33.2	< 0.02	0.15	130.4	2.23		60	0.734	33.886	7.37	0.352
1	R	4262	4347	−0.093	5.22	34.671	34.670	5.39	33.1	< 0.02	0.13	133.5	2.21		70	0.527	33.891	7.39	0.359
29		10	10	1.205	7.06	33.878									80	−0.006	33.906	7.42	0.355
28		20	21	1.167	7.06	33.879									90	−0.512	33.943	7.37	0.287
27		20	20	1.171	7.06	33.879									100	−0.518	33.997	7.14	0.236
26		20	20	1.175	7.05	33.879									125	0.841	34.195	5.72	0.105
25		30	30	1.151	7.05	33.879									150	1.799	34.354	4.35	0.075
24		39	39	1.032	7.05	33.880									175	1.992	34.410	4.07	0.071
23		49	50	0.928	7.06	33.881									200	2.041	34.440	3.93	0.056
22		49	50	0.934	7.05	33.881									250	2.092	34.499	3.79	0.059
21		49	49	0.930	7.05	33.881									300	2.118	34.544	3.72	0.057
20		70	71	0.731	7.03	33.885									400	2.167	34.618	3.70	0.059
19		69	70	0.733	7.02	33.884									500	2.128	34.655	3.76	0.058
18		70	70	0.707	7.01	33.885									600	2.115	34.687	3.82	0.048
30		79	80	0.378	6.99	33.890									700	2.034	34.709	3.90	0.054
17		100	101	−0.533	6.83	33.951									800	1.969	34.724	3.98	0.053
16		98	99	−0.526	6.76	33.948									900	1.921	34.736	4.05	0.051
15		99	100	−0.529	6.69	33.953									1000	1.854	34.741	4.11	0.059
14		148	149	1.888	4.03	34.378									1250	1.667	34.747	4.22	0.058
13		197	199	2.071	3.78	34.455									1500	1.444	34.743	4.31	0.056
12		198	200	2.073	3.78	34.456									2000	1.049	34.725	4.43	0.052
11		197	199	2.072	3.77	34.455									2500	0.665	34.705	4.57	0.055
10		297	300	2.126	3.64	34.552									3000	0.352	34.692	4.75	0.057
9		297	300	2.130	3.63	34.554									3500	0.192	34.686	4.91	0.054
															4000	0.039	34.680	5.08	0.051
															4347	−0.093	34.671	5.23	0.051

St. 17		Date	02.01.15				Lat.	59	59.67	S	Depth	4486m			CTD Up Lay Data				
ST17D1		Time	20:40 – 23:49	(GMT)			Long.	139	59.54	E	B-P	98m							
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		2.1	****	****	33.872	7.55	26.4	0.25	0.29	11.1	1.74		5	1.905	33.871	6.92	0.152
14	R	1234	1250	1.810	4.07	34.748	34.749	4.42	31.3	< 0.02	< 0.05	88.0	2.05		10	1.899	33.871	6.91	0.195
11	R	1481	1500	1.609	4.15	34.748	34.746	4.45	31.4	< 0.02	0.07	94.2	2.10		20	1.909	33.871	6.90	0.306
8	R	1971	1999	1.206	4.28	34.733	34.732	4.56	32.1	< 0.02	< 0.05	106.7	2.13		30	1.904	33.871	6.88	0.387
5	R	2950	2999	0.432	4.60	34.695	34.693	4.84	33.1	< 0.02	0.06	126.4	2.23		40	1.900	33.871	6.88	0.390
4	R	3926	4000	0.072	4.98	34.681	34.678	5.15	33.1	< 0.02	0.06	131.6	2.22		50	1.891	33.870	6.86	0.376
1	R	4345	4432	−0.071	5.20	34.672	34.670	5.27	33.0	< 0.02	0.05	131.5	2.22		60	1.695	33.873	6.89	0.602
30		20	20	1.909	6.90	33.871									70	1.530	33.876	6.88	0.768
29		20	20	1.908	6.89	33.871									80	1.433	33.878	6.85	0.584
28		50	50	1.890	6.87	33.871									90	0.949	33.889	6.88	0.451
27		49	49	1.889	6.86	33.870									100	0.395	33.908	6.76	0.314
26		69	70	1.542	6.89	33.876									125	−0.047	33.937	6.48	0.143
25		69	70	1.530	6.88	33.876									150	1.333	34.151	5.11	0.087
24		98	99	0.429	6.82	33.900									175	1.753	34.278	4.43	0.067
23		99	100	0.398	6.77	33.905									200	2.122	34.359	4.05	0.062
13		147	149	1.179	5.27	34.125									250	2.166	34.435	3.80	0.057
12		150	152	1.289	5.25	34.141									300	2.163	34.477	3.71	0.060
22		197	199	2.117	4.08	34.357									400	2.225	34.559	3.61	0.058
21		199	201	2.118	4.07	34.357									500	2.228	34.618	3.63	0.056
20		300	303	2.148	3.72	34.477									600	2.157	34.650	3.67	0.056
19		298	301	2.152	3.71	34.477									700	2.143	34.686	3.75	0.058
18		494	500	2.228	3.63	34.618									800	2.129	34.708	3.82	0.052
17		495	500	2.228	3.62	34.618									900	2.065	34.722	3.87	0.051
16		988	1000	2.002	3.94	34.732									1000	2.001	34.733	3.94	0.056
15		988	999	2.001	3.94	34.733									1250	1.810	34.748	4.07	0.051
10		1972	2000	1.203	4.29	34.733									1500	1.608	34.748	4.15	0.050
9		1972	2000	1.203	4.28	34.733									2000	1.201	34.733	4.28	0.050
7		2951	3000	0.434	4.60	34.695									2500	0.783	34.711	4.42	0.054
6		2951	3001	0.434	4.60	34.695									3000	0.431	34.695	4.60	0.050
3		4346	4433	−0.071	5.20	34.672									3500	0.222	34.687	4.79	0.050
2		4346	4433	−0.071	5.20	34.672									4000	0.073	34.681	4.98	0.051
															4432	−0.071	34.672	5.20	0.051

St. 18		Date	02.01.17				Lat.	54	44.91	S	Depth	3379m			CTD Down Lay Data				
ST18S1		Time	13:05 – 14:15	(GMT)			Long.	140	1.70	E									
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	R	0		5.9	****	****	33.827	7.11	22.7	0.28	0.12	1.18	1.47	0.32	3	5.718	33.819	6.78	0.417
27	R	9	9	5.694	6.47	33.821	33.822	7.13	22.6	0.28	< 0.05	1.16	1.48	0.30	5	5.709	33.820	6.74	0.442
24	R	19	19	5.684	6.45	33.821	33.822	7.13	22.6	0.28	0.06	1.06	1.44	0.30	10	5.710	33.820	6.72	0.448
21	R	30	30	5.629	6.45	33.820	33.823	7.14	22.7	0.27	0.05	1.18	1.42	0.29	20	5.695	33.820	6.69	0.473
18	R	49	49	4.856	6.56	33.821	33.821	7.28	23.0	0.25	0.07	1.50	1.50	0.50	30	5.674	33.820	6.67	0.478
15	R	68	69	3.760	6.68	33.841	33.838	7.46	23.9	0.23	0.16	2.10	1.53	0.44	40	5.459	33.822	6.70	0.625
12	R	100	101	2.770	6.61	33.845	33.846	7.31	25.2	0.24	0.82	8.56	1.76	0.34	50	5.101	33.823	6.75	0.678
9	R	198	200	2.140	6.03	33.962	33.967	6.71	29.0	< 0.02	< 0.05	20.1	1.91	0.02	60	4.609	33.829	6.84	0.858
7	R	298	301	2.779	4.94	34.188	34.194	5.48	32.1	< 0.02	< 0.05	34.5	2.12	0.01	70	3.583	33.861	6.99	1.054
5	R	394	398	2.648	4.48	34.277	34.275	4.88	33.9	< 0.02	< 0.05	44.3	2.24		80	3.040	33.848	7.01	0.637
3	R	495	500	2.589	4.04	34.378	34.379	4.57	35.1	< 0.02	< 0.05	55.0	2.35		90	2.874	33.841	7.04	0.988
2	R	692	700	2.462	3.75	34.510	34.509	4.20	35.0	< 0.02	< 0.05	67.2	2.32		100	2.701	33.840	6.98	0.703
1	R	988	1000	2.340	3.78	34.645	34.645	4.24	33.6	< 0.02	< 0.05	74.6	2.27		125	2.491	33.845	6.91	0.240
31		9	9	5.692	6.48	33.821									150	1.910	33.858	6.94	0.106
30		9	9	5.692	6.48	33.821									175	1.805	33.872	6.87	0.073
28		10	10	5.689	6.47	33.821									200	2.054	33.945	6.48	0.063
26		20	20	5.686	6.46	33.821									250	2.952	34.131	5.47	0.056
25		19	19	5.680	6.46	33.821									300	2.785	34.180	5.15	0.058
23		30	31	5.643	6.45	33.821									400	2.646	34.278	4.63	0.055
22		31	31	5.629	6.45	33.820									500	2.591	34.379	4.16	0.059
20		49	50	4.877	6.56	33.821									600	2.479	34.446	3.93	0.061
19		50	50	4.882	6.56	33.820									700	2.463	34.512	3.80	0.061
17		69	70	3.535	6.74	33.846									800	2.407	34.566	3.75	0.060
16		69	70	3.642	6.73	33.844									900	2.415	34.616	3.77	0.060
29		79	79	3.196	6.65	33.849									1000	2.342	34.645	3.79	0.057
14		100	101	2.777	6.63	33.846									1013	2.333	34.649	3.79	0.057
13		100	101	2.775	6.62	33.846													
11		197	199	2.140	6.07	33.961													
10		199	201	2.139	6.06	33.962													
8		297	300	2.779	4.95	34.188													
6		398	402	2.647	4.48	34.278													
4		495	500	2.588	4.04	34.376													

St. 18		Date	02.01.17				Lat.	54	44.83	S	Depth	3458m								
ST18D1		Time	06:39 – 09:10	(GMT)			Long.	140	0.96	E	B-P	100m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
		0		5.9	****	****									4	5.806	33.817	6.77	0.122
14	R	1235	1250	2.222	3.86	34.709	34.706	4.24	32.4	< 0.02	0.05	78.1	2.17		5	5.802	33.818	6.76	0.118
11	R	1480	1499	2.053	4.02	34.741	34.741	4.43	31.4	< 0.02	< 0.05	82.4	2.09		10	5.805	33.817	6.72	0.124
8	R	1973	2000	1.645	4.21	34.749	34.747	4.53	31.3	< 0.02	< 0.05	94.3	2.09		20	5.759	33.818	6.70	0.207
7	R	2461	2499	1.199	4.35	34.731	34.729	4.71	31.9	< 0.02	< 0.05	107.8	2.16		30	5.612	33.818	6.69	0.326
4	R	2952	3000	0.810	4.52	34.712	34.712	4.81	32.6	< 0.02	< 0.05	119.5	2.21		40	5.546	33.820	6.67	0.391
1	R	3291	3347	0.568	4.68	34.701	34.698	4.91	33.0	< 0.02	< 0.05	129.4	2.20		50	5.407	33.823	6.69	0.503
30		20	20	5.760	6.36	33.817									60	4.785	33.831	6.79	0.759
29		20	21	5.740	6.36	33.817									70	3.432	33.861	6.98	0.729
28		49	50	4.874	6.46	33.822									80	3.104	33.846	7.09	0.696
27		50	51	4.842	6.46	33.823									90	2.924	33.837	7.10	1.008
26		69	70	3.534	6.46	33.856									100	2.839	33.839	6.97	0.807
25		70	71	3.472	6.47	33.857									125	2.531	33.838	6.91	0.375
24		101	102	2.759	6.55	33.847									150	1.980	33.855	6.91	0.097
23		100	100	2.758	6.55	33.847									175	1.828	33.879	6.81	0.067
13		150	151	1.917	6.56	33.857									200	2.514	34.018	6.26	0.062
12		149	150	1.913	6.55	33.857									250	2.922	34.135	5.45	0.058
22		201	203	2.440	5.80	34.014									300	2.746	34.187	5.13	0.058
21		198	200	2.196	5.87	33.976									400	2.638	34.283	4.58	0.057
20		298	301	2.779	4.88	34.189									500	2.597	34.376	4.16	0.054
19		296	298	2.771	4.86	34.187									600	2.480	34.442	3.94	0.054
18		496	501	2.529	4.01	34.371									700	2.463	34.507	3.81	0.056
17		495	500	2.530	4.00	34.371									800	2.410	34.561	3.75	0.058
16		988	1000	2.339	3.71	34.645									900	2.416	34.614	3.76	0.057
15		989	1000	2.339	3.71	34.644									1000	2.337	34.646	3.79	0.057
10		1972	1999	1.649	4.21	34.749									1250	2.218	34.709	3.93	0.057
9		1973	2001	1.649	4.21	34.749									1500	2.058	34.740	4.08	0.048
6		2951	2999	0.809	4.52	34.712									2000	1.651	34.749	4.29	0.055
5		2952	3000	0.809	4.52	34.712									2500	1.192	34.731	4.44	0.053
3		3291	3347	0.568	4.68	34.701									3000	0.808	34.712	4.57	0.057
2		3292	3348	0.568	4.69	34.701									3348	0.565	34.701	4.69	0.049

St. 19		Date	02.01.18				Lat.	50	0.40	S	Depth	3656m							
ST19S1		Time	19:55 – 21:05	(GMT)			Long.	139	59.64	E					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		9.8	****	****	34.130	6.38	16.8	0.24	0.19	2.77	1.19	0.24	5	9.685	34.140	6.13	0.340
28	R	10	10	9.675	5.96	34.140	34.141	6.37	16.7	0.24	0.24	2.80	1.19	0.24	10	9.682	34.140	6.12	0.344
25	R	21	21	9.681	5.94	34.138	34.139	6.36	16.8	0.23	0.34	2.77	1.14	0.25	20	9.680	34.141	6.10	0.340
22	R	30	30	9.645	5.96	34.143	34.148	6.38	16.7	0.24	0.20	3.82	1.18	0.23	30	9.639	34.147	6.09	0.353
19	R	40	40	8.789	6.15	34.163	34.168	6.60	16.5	0.21	0.24	3.19	1.18	0.42	40	8.996	34.172	6.26	0.462
16	R	50	50	8.467	6.19	34.188	34.187	6.66	16.0	0.22	0.25	1.61	1.15	0.45	50	8.251	34.147	6.36	0.555
13	R	69	70	7.193	6.32	34.134	34.137	6.76	17.7	0.20	0.34	2.90	1.30	0.43	60	7.355	34.126	6.49	0.555
10	R	98	99	6.456	6.18	34.149	34.144	6.66	19.2	0.33	0.48	5.56	1.41	0.27	70	6.884	34.138	6.55	0.564
7	R	198	200	6.361	5.93	34.201	34.184	6.37	20.7	< 0.02	0.09	6.37	1.46	0.02	80	6.764	34.144	6.51	0.486
5	R	299	301	5.844	5.65	34.180	34.178	6.05	22.8	< 0.02	0.11	10.0	1.57	0.01	90	6.664	34.160	6.48	0.390
3	R	495	500	5.744	4.50	34.370	34.367	4.82	27.3	< 0.02	0.09	20.5	1.83		100	6.597	34.183	6.40	0.258
2	R	692	699	3.912	4.68	34.277	34.274	5.03	30.7	< 0.02	0.13	30.6	2.06		125	6.618	34.212	6.20	0.125
1	R	989	1000	3.158	4.09	34.406	34.404	4.28	33.6	< 0.02	0.16	53.0	2.30		150	6.394	34.196	6.16	0.085
30		10	10	9.678	5.96	34.139									175	6.333	34.193	6.12	0.071
29		10	10	9.676	5.96	34.139									200	6.116	34.169	6.13	0.060
27		21	21	9.680	5.95	34.139									250	5.653	34.115	6.17	0.056
26		21	22	9.682	5.94	34.138									300	5.876	34.188	5.81	0.054
24		30	30	9.642	5.95	34.144									400	6.157	34.339	4.92	0.053
23		30	31	9.633	5.96	34.145									500	5.635	34.362	4.63	0.052
21		40	40	9.059	6.12	34.167									600	4.785	34.313	4.78	0.055
20		40	40	8.808	6.15	34.164									700	3.897	34.279	4.80	0.054
18		50	50	8.476	6.20	34.189									800	3.553	34.313	4.59	0.055
17		50	51	8.466	6.20	34.188									900	3.353	34.367	4.33	0.058
15		70	71	7.033	6.35	34.126									1000	3.170	34.405	4.12	0.055
14		70	70	7.119	6.33	34.131									1002	3.163	34.406	4.11	0.051
12		99	99	6.390	6.21	34.144													
11		99	100	6.391	6.20	34.144													
9		198	200	6.314	5.93	34.196													
8		199	201	6.290	5.93	34.193													
6		299	302	5.845	5.66	34.181													
4		495	500	5.732	4.50	34.370													

St. 19		Date	02.01.18				Lat.	50	0.85	S	Depth	3658m							
ST19D1		Time	13:31 – 16:18	(GMT)			Long.	139	59.68	E	B-P	101m			CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
		0		9.9	****	****									4	9.704	34.147	6.10	0.392
12	R	1235	1249	2.694	3.74	34.512	34.508	4.00	34.3	< 0.02	0.08	66.5	2.39		5	9.705	34.147	6.08	0.390
11	R	1483	1501	2.521	3.71	34.617	34.613	3.93	33.4	< 0.02	0.05	77.9	2.34		10	9.701	34.147	6.06	0.385
8	R	1973	2000	2.221	4.00	34.732	34.730	4.23	31.1	< 0.02	0.06	85.4	2.18		20	9.701	34.147	6.06	0.396
7	R	2465	2501	1.727	4.23	34.749	34.745	4.49	30.9	< 0.02	0.06	97.0	2.15		30	9.581	34.177	6.07	0.437
4	R	2952	2999	1.426	4.36	34.738	34.737	4.58	31.4	< 0.02	0.07	107.2	2.39		40	8.724	34.180	6.25	0.594
1	R	3573	3634	1.158	4.47	34.724	34.722	4.56	32.1	< 0.02	0.10	119.4	2.37		50	8.485	34.185	6.33	0.678
30		9	9	9.683	5.90	34.146									60	7.331	34.113	6.42	0.690
28		20	20	9.683	5.88	34.145									70	6.778	34.117	6.50	0.538
27		20	20	9.682	5.89	34.145									80	6.794	34.151	6.45	0.590
29		49	50	8.472	6.10	34.192									90	6.938	34.197	6.39	0.475
26		49	49	8.475	6.10	34.192									100	6.831	34.204	6.30	0.368
25		49	50	8.477	6.10	34.192									125	6.582	34.202	6.21	0.183
24		70	70	6.804	6.24	34.126									150	6.718	34.238	6.07	0.110
23		69	69	6.808	6.24	34.128									175	6.440	34.204	6.11	0.092
22		100	101	6.641	6.03	34.197									200	6.252	34.183	6.10	0.069
21		99	100	6.646	6.02	34.198									250	5.773	34.128	6.14	0.051
20		198	200	6.204	5.91	34.178									300	5.818	34.166	5.88	0.049
19		199	200	6.190	5.90	34.176									400	6.258	34.351	4.84	0.057
18		297	299	5.753	5.62	34.162									500	5.640	34.361	4.61	0.052
17		297	300	5.739	5.61	34.161									600	4.649	34.307	4.74	0.055
16		496	501	5.304	4.63	34.317									700	3.922	34.276	4.78	0.062
15		495	500	5.288	4.63	34.315									800	3.677	34.321	4.55	0.055
14		988	999	3.109	4.01	34.398									900	3.368	34.363	4.34	0.059
13		990	1001	3.112	4.01	34.398									1000	3.140	34.405	4.13	0.059
10		1974	2001	2.223	4.00	34.732									1250	2.712	34.509	3.84	0.054
9		1974	2000	2.223	4.00	34.732									1500	2.519	34.610	3.79	0.055
6		2953	3000	1.426	4.36	34.738									2000	2.239	34.730	4.06	0.055
5		2953	3000	1.427	4.36	34.738									2500	1.719	34.749	4.31	0.052
3		3572	3634	1.160	4.47	34.724									3000	1.426	34.737	4.41	0.052
2		3573	3634	1.160	4.47	34.724									3500	1.290	34.730	4.49	0.048
															3635	1.151	34.724	4.48	0.053

St. 20		Date	02.01.20				Lat.	47	0.08	S	Depth	5188m							
ST20S1		Time	04:51 – 05:16	(GMT)			Long.	140	0.08	E					CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}	
	R	0		13.3	****	****	35.134	6.04	3.03	0.12	0.17	1.72	0.33	0.53	2	13.222	35.116	5.63	0.278
28	R	10	10	13.196	5.52	35.109	35.123	6.16	2.95	0.12	0.14	1.23	0.33	0.18	5	13.217	35.116	5.61	0.327
21	R	20	20	13.156	5.53	35.108	35.121	6.07	3.00	0.12	0.18	1.07	0.31	0.53	10	13.210	35.115	5.61	0.391
19	R	30	30	13.056	5.53	35.099	35.112	6.07	3.10	0.13	0.14	0.77	0.33	0.51	20	13.179	35.115	5.60	0.524
17	R	40	40	12.982	5.54	35.086	35.099	6.07	3.29	0.13	0.19	0.65	0.36	0.55	30	13.147	35.114	5.59	0.594
13	R	50	51	12.959	5.50	35.104	35.119	6.05	3.27	0.13	0.27	0.81	0.35	0.68	40	13.054	35.099	5.60	0.645
11	R	60	61	13.030	5.44	35.133	35.146	5.96	3.32	0.15	0.42	1.28	0.38	0.55	50	12.973	35.104	5.59	0.468
7	R	69	70	12.410	5.45	35.016	35.058	5.84	4.56	0.19	0.40	0.90	0.46	0.42	60	12.978	35.108	5.57	0.540
5	R	79	80	12.707	5.31	35.121	35.144	5.76	4.67	0.27	0.41	1.54	0.49	0.39	70	12.991	35.129	5.50	0.584
1	R	101	102	12.426	5.15	35.155	35.170	5.61	6.93	0.16	0.05	2.58	0.58	0.23	80	12.536	35.057	5.48	0.456
27		10	10	13.201	5.52	35.110									90	12.758	35.159	5.35	0.297
26		10	10	13.189	5.52	35.109									100	12.585	35.167	5.24	0.268
25		10	10	13.193	5.52	35.109									100	12.513	35.161	5.18	0.246
24		20	21	13.160	5.53	35.108									104	12.393	35.153	5.16	0.155
23		20	20	13.155	5.53	35.108													
22		20	20	13.154	5.53	35.108													
20		30	30	13.054	5.53	35.099													
18		39	40	12.979	5.53	35.086													
16		50	50	12.962	5.50	35.104													
15		50	50	12.962	5.50	35.104													
14		50	50	12.960	5.50	35.104													
12		60	60	13.023	5.44	35.132													
10		70	71	12.405	5.44	35.016													
9		69	70	12.412	5.45	35.016													
8		68	69	12.502	5.44	35.034													
6		79	80	12.646	5.33	35.103													
4		100	101	12.420	5.14	35.154													
3		100	101	12.421	5.14	35.154													
2		100	101	12.428	5.15	35.155													

St. 20		Date	02.01.19				Lat.	47	0.91	S	Depth	5276m								
ST20D1		Time	20:20 – 23:56	(GMT)			Long.	140	0.14	E	B-P	97m				CTD Down Lay Data				
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC	
No.		m	db	℃	ml・l^{-1}	(psu)	(psu)	ml・l^{-1}	μM	μM	μM	μM	μM	μg・l^{-1}	db	℃	(psu)	ml・l^{-1}		
		0		12.4	****	****									3	13.099	35.077	5.69	0.677	
27	R	124	125	11.978	5.11	35.094	35.106	5.68	7.87	0.15	< 0.05	–	0.64	0.16	5	13.103	35.077	5.68	0.667	
23	R	149	150	11.838	5.07	35.078	35.091	5.59	8.85	0.08	< 0.05	–	0.70	0.12	10	13.098	35.078	5.67	0.581	
19	R	199	201	10.893	5.10	34.923	34.931	5.64	11.2	0.02	< 0.05	–	0.84	0.02	20	13.102	35.081	5.65	0.626	
18	R	248	250	10.323	5.12	34.824	34.839	5.63	11.4	0.03	< 0.05	–	0.96	0.05	30	13.125	35.094	5.64	0.648	
15	R	296	299	9.579	5.23	34.701	34.713	5.74	14.3	< 0.02	< 0.05	–	1.15	0.01	40	13.195	35.137	5.61	0.528	
14	R	396	400	8.996	5.39	34.609	34.621	5.94	15.1	< 0.02	< 0.05	–	1.09		50	13.002	35.111	5.61	0.663	
13	R	495	500	8.819	5.09	34.593	34.601	5.63	17.1	< 0.02	0.08	4.95	1.21		60	12.900	35.090	5.60	0.485	
12	R	594	600	8.514	4.61	34.581	34.590	5.04	20.3	< 0.02	< 0.05	8.06	1.41		70	12.862	35.089	5.58	0.601	
11	R	693	700	7.975	4.40	34.535	34.545	4.82	22.6	< 0.02	0.05	11.1	1.54		80	12.749	35.081	5.55	0.660	
10	R	792	800	7.252	4.18	34.485	34.498	4.58	24.9	< 0.02	< 0.05	15.8	1.72		90	12.588	35.107	5.45	0.434	
9	R	990	1001	5.424	4.23	34.381	34.389	4.63	28.8	< 0.02	< 0.05	26.1	1.96		100	12.435	35.127	5.32	0.283	
8	R	1235	1249	3.971	3.95	34.402	34.419	4.29	32.1	< 0.02	< 0.05	47.9	2.27		125	12.003	35.105	5.21	0.151	
7	R	1482	1500	3.014	3.77	34.460	34.469	4.11	34.0	< 0.02	< 0.05	61.9	2.38		150	11.687	35.058	5.23	0.080	
6	R	1974	2000	2.457	3.65	34.659	not closed								175	11.075	34.952	5.29	0.081	
5	R	2464	2499	2.119	3.80	34.733	34.741	4.11	31.9	< 0.02	< 0.05	95.2	2.20		200	10.859	34.920	5.26	0.056	
4	R	2954	3000	1.774	3.94	34.740	34.746	4.26	31.9	< 0.02	< 0.05	106.9	2.31		250	10.207	34.806	5.30	0.055	
3	R	3443	3500	1.469	4.14	34.734	34.743	4.43	32.0	< 0.02	0.07	113.9	2.22		300	9.500	34.688	5.40	0.055	
2	R	3930	4000	1.216	4.31	34.725	34.733	4.57	32.2	< 0.02	< 0.05	120.3	2.21		400	9.017	34.613	5.49	0.054	
29	R	4418	4502	1.060	4.43	34.716	34.726	4.64	32.5	< 0.02	0.05	124.7	2.26		500	8.978	34.626	5.06	0.050	
1	R	5274	5385	1.083	4.63	34.712	34.719	4.67	32.5	< 0.02	0.06	126.1	2.23		600	8.554	34.580	4.95	0.053	
30		124	125	11.997	5.14	35.096									700	8.006	34.536	4.68	0.054	
28		124	125	12.007	5.13	35.096									800	7.248	34.492	4.42	0.053	
26		148	150	11.846	5.06	35.080									900	6.265	34.419	4.46	0.053	
25		149	150	11.846	5.06	35.079									1000	5.421	34.381	4.45	0.053	
24		148	150	11.840	5.06	35.078									1250	4.013	34.406	4.27	0.053	
22		199	200	10.893	5.12	34.924									1500	2.993	34.464	3.95	0.055	
21		199	201	10.893	5.12	34.924									2000	2.457	34.659	3.78	0.057	
20		198	200	10.898	5.11	34.925									2500	2.125	34.732	3.95	0.052	
17		298	300	9.582	5.23	34.701									3000	1.772	34.740	4.12	0.050	
16		298	301	9.577	5.23	34.701									3500	1.471	34.734	4.29	0.047	
															4000	1.214	34.724	4.44	0.048	
															4500	1.060	34.716	4.54	0.048	
															5000	1.092	34.715	4.57	0.049	
															5382	1.082	34.712	4.63	0.047	

St. 21		Date	02.02.03		Lat.	49	54.22	S	Depth	4126m	St. 23		Date	02.02.10		Lat.	41	48.87	S	Depth	5016m
ST21D1		Time	08:19 – 11:03		Long.	124	48.73	E	Down Lay		ST23D1		Time	10:43 – 12:01		Long.	140	1.62	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}		No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		8.9	****	****	4	8.779	34.195	5.47	0.34		0		15.3	****	****	6	15.234	35.192	5.08	0.33
4	2953	3000	1.352	4.17	34.736	5	8.778	34.195	5.40	0.33							10	15.236	35.192	5.02	0.33
3	3441	3499	0.871	4.36	34.713	10	8.785	34.195	5.34	0.34							20	15.243	35.192	5.01	0.34
2	3928	3999	0.515	4.58	34.696	20	8.669	34.198	5.27	0.36							30	15.240	35.192	5.02	0.36
1	4143	4220	0.516	4.64	34.695	30	8.655	34.197	5.22	0.38							40	14.144	35.174	5.20	0.48
						40	8.652	34.197	5.20	0.40							50	13.905	35.193	5.25	0.53
						50	8.648	34.197	5.18	0.39							60	13.856	35.259	5.18	0.47
						60	8.648	34.197	5.18	0.41							70	13.065	35.176	5.13	0.26
						70	8.646	34.197	5.17	0.40							80	13.147	35.290	4.99	0.18
						80	8.644	34.197	5.19	0.38							90	12.927	35.261	4.97	0.15
						90	8.469	34.260	5.21	0.39							100	12.710	35.230	4.95	0.12
						100	8.072	34.408	5.12	0.32							125	11.936	35.086	4.99	0.06
						125	8.152	34.449	5.04	0.08							150	11.500	35.026	5.02	0.05
						150	8.032	34.436	5.04	0.07							175	11.406	35.026	5.00	0.05
						175	7.815	34.410	5.06	0.06							200	11.143	34.983	4.98	0.04
						200	7.573	34.377	5.07	0.05							250	10.519	34.873	5.03	0.04
						250	6.838	34.271	5.20	0.05							300	9.990	34.782	5.10	0.04
						300	6.190	34.190	5.29	0.05							400	9.225	34.651	5.14	0.05
						400	6.210	34.279	4.93	0.05							500	8.880	34.606	5.09	0.04
						500	6.125	34.372	4.49	0.05							600	8.422	34.569	4.79	0.05
						600	5.242	34.337	4.44	0.05							700	7.696	34.516	4.47	0.05
						700	4.368	34.295	4.47	0.05							800	6.777	34.469	4.24	0.05
						800	3.987	34.332	4.33	0.05							900	5.800	34.435	4.12	0.04
						900	3.494	34.346	4.21	0.04							1000	4.777	34.408	4.11	0.04
						1000	3.261	34.389	4.02	0.05							1250	3.450	34.469	3.80	0.04
						1250	2.811	34.500	3.80	0.05							1500	2.735	34.559	3.67	0.04
						1500	2.545	34.597	3.62	0.05							1796	2.453	34.664	3.66	0.04
						2000	2.257	34.724	3.86	0.05											
						2500	1.849	34.751	4.09	0.05											
						3000	1.347	34.736	4.27	0.04											
						3500	0.875	34.713	4.44	0.05											
						4000	0.514	34.695	4.64	0.04											
						4216	0.516	34.695	4.65	0.04											
							B-P 25m														

St. 24		Date	02.02.22			Lat.	2	30.19	N	Depth 4722m		St. 25		Date	02.02.23			Lat.	12	34.03	N	Depth 5728m	
ST24D1		Time	03:02 – 04:38			Long.	151	31.67	E	Down Lay		ST25D1		Time	19:37 – 20:54			Long.	148	59.81	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Chl-a	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Chl-a	P	T	S	DO	FIC
No.	m	db	℃	ml·l^{-1}	(psu)	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}		No.	m	db	℃	ml·l^{-1}	(psu)	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
	0		30.1	****	****	0.09	2	30.016	34.319	3.30	0.04		0		27.9	****	****		3	27.936	34.218	3.51	0.03
24	10	10	29.876	3.39	34.317	0.09	5	29.992	34.319	3.31	0.05	24	10	10	27.924	3.58	34.221	0.06	5	27.936	34.219	3.52	0.03
30	21	21	29.870	3.40	34.316	0.09	10	29.971	34.318	3.34	0.06	30	20	20	27.933	3.58	34.220	0.04	10	27.941	34.219	3.52	0.03
23	20	20	29.868	3.40	34.316		20	29.888	34.316	3.34	0.04	23	19	19	27.933	3.58	34.221		20	27.943	34.219	3.53	0.02
22	30	30	29.862	3.40	34.316	0.10	30	29.866	34.316	3.33	0.06	22	31	31	27.936	3.59	34.220	0.04	30	27.945	34.219	3.53	0.04
29	39	39	29.853	3.40	34.318	0.11	40	29.860	34.316	3.35	0.05	29	41	41	27.936	3.58	34.229	0.05	40	27.946	34.219	3.53	0.04
28	39	40	29.850	3.39	34.319		50	29.728	34.375	3.35	0.10	28	41	41	27.935	3.58	34.233		50	27.935	34.238	3.54	0.04
20	50	50	29.554	3.36	34.456	0.29	60	29.137	34.709	3.29	0.47	20	50	50	27.925	3.59	34.261	0.05	60	27.897	34.309	3.53	0.04
19	60	61	29.123	3.30	34.722	0.45	70	29.138	34.817	3.25	0.45	19	60	60	27.893	3.59	34.313	0.06	70	27.848	34.333	3.55	0.05
18	70	70	29.116	3.25	34.832	0.29	80	29.018	34.856	3.22	0.38	18	69	70	27.831	3.60	34.345	0.07	80	27.717	34.496	3.59	0.06
17	80	80	28.955	3.15	34.874	0.31	90	28.169	35.246	3.06	0.27	17	79	80	27.677	3.61	34.535	0.09	90	27.746	34.635	3.57	0.07
14	99	100	26.771	2.69	35.108	0.18	100	27.139	35.226	2.80	0.17	14	100	101	27.506	3.64	34.734	0.12	100	27.668	34.683	3.59	0.08
13	124	125	25.593	2.60	35.120	0.06	125	25.953	35.150	2.69	0.10	13	124	125	25.863	3.66	34.982	0.19	125	25.834	34.996	3.77	0.15
12	150	151	22.667	2.59	35.038	0.02	150	22.803	35.064	2.71	0.07	12	150	151	24.688	3.47	35.219	0.20	150	24.277	35.233	3.64	0.24
27	199	201	14.324	2.59	34.570	0.00	175	18.841	34.825	2.78	0.06	27	199	200	18.066	3.13	34.797	0.05	175	21.400	35.093	3.52	0.10
26	198	200	13.983	2.59	34.557		200	13.113	34.593	2.80	0.05	26	198	199	17.982	3.11	34.791		200	18.171	34.819	3.38	0.07
10	248	250	10.480	2.51	34.724		250	10.343	34.730	2.61	0.05	10	249	250	13.407	3.01	34.460		250	13.487	34.480	3.27	0.04
9	298	300	10.014	2.04	34.726		300	9.892	34.718	2.18	0.06	9	298	300	10.545	1.73	34.453		300	10.625	34.450	2.41	0.03
25	397	400	9.017	2.27	34.655		400	8.880	34.648	2.35	0.04	25	397	400	8.763	1.18	34.502		400	9.094	34.512	1.39	0.04
8	397	400	9.030	2.27	34.655		500	8.339	34.616	2.38	0.05	8	397	400	8.746	1.18	34.502		500	7.749	34.519	1.35	0.04
7	497	500	8.372	2.30	34.617		600	7.551	34.576	2.17	0.05	7	497	500	7.728	1.29	34.520		600	6.993	34.508	1.41	0.04
6	596	600	7.581	2.10	34.576		700	6.408	34.545	2.00	0.06	6	595	600	6.987	1.37	34.508		700	6.264	34.513	1.45	0.04
5	695	700	6.455	1.84	34.542		800	5.548	34.542	1.82	0.05	5	695	700	6.243	1.42	34.512		800	5.686	34.516	1.53	0.03
4	794	800	5.558	1.75	34.541		900	4.916	34.550	1.87	0.05	4	794	800	5.623	1.49	34.517		900	5.292	34.525	1.50	0.04
3	992	1000	4.593	1.89	34.555		1000	4.585	34.556	1.93	0.04	3	992	1000	4.790	1.44	34.537		1000	4.865	34.537	1.44	0.03
2	1239	1250	3.704	2.00	34.580		1250	3.692	34.580	2.02	0.05	2	1239	1250	3.761	1.66	34.567		1250	3.795	34.567	1.66	0.03
1	1487	1500	3.068	2.09	34.602		1500	3.065	34.602	2.11	0.05	1	1486	1500	3.078	1.89	34.590		1500	3.081	34.591	1.88	0.03
							1503	3.065	34.602	2.10	0.04								1507	3.054	34.591	1.89	0.03

St. AR		Date	01.12.04				Lat.	15	30.44	N	Depth 5566m					CTD Up Lay Data				
ARCTD01		Time	13:15 – 15:10	(GMT)			Long.	176	0.77	W											
Bottle		Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	Sal	DO	NO_3	NO_2	NH_4	SiO_2	PO_4	Chl-a	P	T	S	DO	FIC
No.		m	db	℃	ml·l^{-1}	(psu)	(psu)	ml·l^{-1}	μM	μM	μM	μM	μM	μg·l^{-1}	db	℃	(psu)	ml·l^{-1}	
		0		25.2	****	****	34.781								5	27.070	34.767	4.49	0.028
36		10	10	27.073	4.48	34.767	34.778								10	27.072	34.766	4.49	0.025
35		10	10	27.070	4.49	34.767									20	27.076	34.766	4.47	0.028
34		10	10	27.070	4.48	34.767									30	27.075	34.765	4.46	0.033
33		29	29	27.073	4.47	34.766	34.778								40	27.074	34.765	4.44	0.036
32		30	30	27.075	4.46	34.765									50	27.076	34.765	4.41	0.037
31		30	30	27.075	4.46	34.765									60	27.076	34.765	4.43	0.039
30		49	49	27.075	4.43	34.765	34.791								70	27.074	34.779	4.38	0.044
29		50	50	27.077	4.43	34.765									80	27.086	34.810	4.39	0.063
28		50	51	27.078	4.42	34.765									90	27.086	34.833	4.39	0.071
27		69	69	27.071	4.41	34.775	34.790								100	27.059	34.833	4.44	0.082
26		70	71	27.073	4.39	34.778									125	25.038	34.929	4.59	0.172
25		70	71	27.073	4.39	34.778									150	23.763	35.124	4.46	0.110
24		99	99	27.068	4.40	34.837	34.851								175	21.938	35.142	4.29	0.065
23		100	100	27.066	4.41	34.837									200	19.763	35.023	4.26	0.039
22		99	100	27.065	4.43	34.834									250	16.132	34.607	4.08	0.023
21		198	199	19.875	4.24	35.036	35.046								300	12.426	34.315	3.42	0.029
20		198	200	19.872	4.24	35.035	35.051								400	8.475	34.169	2.71	0.032
19		199	200	19.792	4.25	35.027									500	6.740	34.266	1.15	0.038
18		299	301	12.463	3.41	34.315	34.323								600	6.119	34.399	1.02	0.035
17		299	301	12.433	3.40	34.313									700	5.598	34.472	1.10	0.032
16		299	301	12.421	3.39	34.312									800	5.046	34.509	1.07	0.037
15		495	498	6.781	1.27	34.259	34.276								900	4.645	34.521	1.10	0.034
14		495	499	6.776	1.27	34.259									1000	4.309	34.534	1.13	0.037
13		495	498	6.755	1.25	34.268									1250	3.557	34.560	1.41	0.033
12		697	703	5.594	1.09	34.473	34.484								1500	2.937	34.586	1.70	0.028
11		697	703	5.593	1.10	34.473									2000	2.197	34.629	2.25	0.025
10		697	702	5.592	1.09	34.473									2032	2.161	34.632	2.29	0.025
9		990	999	4.312	1.12	34.535	34.546												
8		990	998	4.312	1.12	34.535													
7		990	998	4.312	1.12	34.535													
6		1486	1500	2.950	1.68	34.586	34.598												
5		1485	1500	2.953	1.68	34.586													
4		1485	1499	2.951	1.68	34.586													
3		1984	2005	2.197	2.25	34.629	34.638												
2		1983	2004	2.197	2.25	34.629													
1		1982	2003	2.196	2.25	34.629													

St. 01		Date	01.12.09		Lat.	0	0.38	N	Depth 5142m	
ST01D2		Time	00:38 – 04:08		Long.	159	59.77	W	Up Lay	
Bottle No.	Depth m	Pres. db	CTD(T) ℃	CTD(DO) ml·l^{-1}	CTD(S) (psu)	P db	T ℃	S (psu)	DO ml·l^{-1}	FIC
	0		27.6	****	****	10	26.985	35.349	4.35	0.27
34	20	21	26.893	4.34	35.347	20	26.860	35.345	4.32	0.36
33	20	20	26.891	4.33	35.347	30	26.817	35.341	4.29	0.43
32	21	21	26.883	4.34	35.346	40	26.690	35.332	4.16	0.44
31	21	21	26.879	4.33	35.346	50	26.601	35.322	4.10	0.40
30	50	50	26.599	4.09	35.322	60	26.509	35.315	3.98	0.30
29	50	50	26.593	4.09	35.322	70	26.363	35.308	3.92	0.22
28	70	70	26.361	3.92	35.308	80	26.264	35.300	3.86	0.15
27	71	71	26.363	3.92	35.307	90	26.132	35.313	3.73	0.13
26	101	102	25.901	3.68	35.330	100	25.878	35.329	3.66	0.11
25	100	101	25.917	3.68	35.330	125	22.045	34.976	3.06	0.05
24	150	151	20.080	2.97	35.371	150	20.007	35.340	3.01	0.03
23	150	150	20.064	2.96	35.371	175	16.101	35.096	3.07	0.02
22	199	200	14.285	3.12	35.051	200	14.207	35.036	3.11	0.02
21	200	201	14.251	3.12	35.046	250	12.439	34.889	2.64	0.03
20	299	300	11.540	1.91	34.833	300	11.538	34.833	1.92	0.04
19	298	300	11.531	1.90	34.832	400	9.999	34.730	1.42	0.04
18	497	501	8.356	0.82	34.633	500	8.331	34.634	0.83	0.05
17	497	500	8.316	0.82	34.633	600	7.027	34.575	1.35	0.04
16	696	701	6.108	1.61	34.552	700	6.106	34.552	1.61	0.04
15	695	700	6.107	1.61	34.551	800	5.220	34.544	1.83	0.04
14	992	1000	4.459	1.97	34.554	900	4.850	34.547	1.95	0.04
13	993	1001	4.463	1.97	34.554	1000	4.462	34.554	1.97	0.03
12	1487	1501	3.137	2.01	34.599	1250	3.544	34.582	1.95	0.04
11	1487	1501	3.136	2.01	34.599	1500	3.140	34.599	2.00	0.03
10	1980	2000	2.317	2.37	34.636	2000	2.318	34.637	2.36	0.03
9	1980	2000	2.317	2.37	34.636	2500	1.901	34.660	2.67	0.03
8	2472	2500	1.901	2.67	34.660	3000	1.674	34.672	3.01	0.02
7	2472	2501	1.901	2.67	34.660	3500	1.549	34.680	3.33	0.02
6	2963	3000	1.675	3.01	34.671	4000	1.416	34.691	3.70	0.02
5	2963	3001	1.675	3.01	34.671	4500	1.278	34.700	4.19	0.02
35	3942	4002	1.416	3.70	34.691	5000	1.225	34.704	4.51	0.02
4	3941	4000	1.415	3.70	34.691	5183	1.237	34.704	4.57	0.02
3	3942	4001	1.415	3.69	34.691					
36	5093	5183	1.237	4.56	34.704					
2	5092	5182	1.237	4.56	34.704		B-P 63m			
1	5090	5180	1.237	4.56	34.704					

St. 01		Date	01.12.09		Lat.	0	0.14	N	Depth 5087m	
ST01S2		Time	07:21 – 08:28		Long.	159	59.73	W	Up Lay	
Bottle No.	Depth m	Pres. db	CTD(T) ℃	CTD(DO) ml·l^{-1}	CTD(S) (psu)	P db	T ℃	S (psu)	DO ml·l^{-1}	FIC
	0		27.0	****	****	5	26.931	35.353	4.36	0.35
36	10	10	26.930	4.36	35.353	10	26.928	35.353	4.36	0.35
35	20	20	26.927	4.34	35.352	20	26.924	35.351	4.33	0.35
34	30	30	26.888	4.31	35.348	30	26.849	35.345	4.27	0.42
33	40	40	26.719	4.22	35.337	40	26.717	35.337	4.22	0.43
32	50	50	26.639	4.14	35.326	50	26.627	35.323	4.12	0.37
31	59	60	26.467	4.02	35.311	60	26.452	35.309	3.98	0.28
30	79	80	26.252	3.83	35.296	70	26.349	35.302	3.90	0.19
29	99	100	25.898	3.65	35.320	80	26.237	35.296	3.84	0.15
28	144	145	20.256	2.98	35.370	90	26.096	35.310	3.74	0.14
27	200	201	14.290	3.15	35.054	100	25.860	35.319	3.65	0.12
26	199	200	14.210	3.15	35.041	125	22.224	34.976	3.07	0.05
25	298	300	11.713	2.12	34.848	150	19.743	35.336	3.02	0.03
24	297	299	11.700	2.10	34.846	175	16.458	35.144	3.07	0.03
23	496	500	8.351	0.84	34.635	200	14.234	35.045	3.15	0.03
22	496	499	8.344	0.85	34.634	250	12.610	34.902	2.74	0.03
21	694	699	6.110	1.67	34.552	300	11.661	34.840	2.05	0.04
20	694	699	6.110	1.66	34.552	400	10.053	34.733	1.45	0.04
19	995	1003	4.353	2.07	34.557	500	8.345	34.632	0.86	0.05
18	994	1002	4.356	2.07	34.557	600	6.873	34.571	1.43	0.04
17	993	1001	4.357	2.07	34.557	700	6.108	34.551	1.68	0.03
16	993	1001	4.359	2.07	34.557	800	5.168	34.545	1.90	0.04
15	993	1001	4.362	2.06	34.557	900	4.797	34.548	2.00	0.03
14	993	1001	4.356	2.07	34.557	1000	4.359	34.557	2.10	0.03
13	993	1000	4.358	2.06	34.557	1009	4.350	34.557	2.11	0.03
12	992	1000	4.356	2.07	34.557					
11	993	1001	4.357	2.08	34.557					
10	993	1001	4.357	2.08	34.557					
9	992	1000	4.356	2.09	34.557					
8	992	1000	4.363	2.09	34.557					
7	992	1000	4.362	2.09	34.557					
6	991	999	4.369	2.09	34.556					
5	991	999	4.373	2.09	34.556					
4	992	1000	4.366	2.09	34.557					
3	991	999	4.372	2.09	34.556					
2	991	999	4.373	2.10	34.556					
1	991	999	4.374	2.10	34.556					

St. 01		Date	01.12.09		Lat.	0	2.07	N	Depth 5078m	
ST01S3		Time	14:54 – 15:19		Long.	159	52.27	W	Down Lay	
Bottle No.	Depth m	Pres. db	CTD(T) ℃	CTD(DO) ml·l^{-1}	CTD(S) (psu)	P db	T ℃	S (psu)	DO ml·l^{-1}	FIC
	0		26.9	****	****	1	26.845	35.350	4.39	0.27
36	9	9	26.849	4.32	35.349	5	26.859	35.350	4.39	0.27
27	9	9	26.843	4.32	35.349	10	26.852	35.350	4.38	0.27
26	9	9	26.846	4.32	35.349	20	26.830	35.348	4.39	0.28
31	10	10	26.843	4.32	35.349	30	26.797	35.346	4.36	0.29
30	10	10	26.844	4.33	35.349	40	26.698	35.340	4.26	0.29
28	10	10	26.841	4.32	35.349	50	26.524	35.326	4.14	0.27
35	19	19	26.840	4.31	35.349	60	26.377	35.310	4.06	0.23
25	19	19	26.837	4.31	35.349	70	26.290	35.300	4.02	0.18
24	19	19	26.839	4.31	35.349	80	26.172	35.289	3.97	0.17
34	27	27	26.823	4.31	35.348	90	26.004	35.298	3.93	0.14
23	27	28	26.830	4.31	35.348	100	25.723	35.299	3.83	0.11
22	28	28	26.841	4.32	35.349	107	25.335	35.283	3.59	0.09
33	37	37	26.743	4.25	35.342					
21	37	37	26.743	4.25	35.342					
20	37	37	26.748	4.27	35.342					
32	47	47	26.558	4.15	35.329					
19	47	47	26.549	4.13	35.328					
18	47	47	26.529	4.13	35.325					
29	102	102	25.655	3.71	35.296					
17	101	102	25.669	3.72	35.295					
16	100	101	25.686	3.72	35.295					
15	100	101	25.711	3.73	35.295					
14	100	100	25.720	3.73	35.295					
13	100	100	25.717	3.74	35.295					
12	99	100	25.719	3.73	35.295					
11	101	101	25.693	3.73	35.296					
10	100	100	25.711	3.74	35.295					
9	99	100	25.718	3.73	35.295					
8	100	101	25.708	3.72	35.295					
7	99	100	25.722	3.73	35.295					
6	99	99	25.751	3.75	35.295					
5	98	98	25.735	3.74	35.294					
4	103	103	25.521	3.67	35.291					
3	101	102	25.574	3.69	35.293					
2	101	101	25.613	3.71	35.294					
1	100	101	25.618	3.71	35.293					

St. 05		Date	01.12.14		Lat.	19	59.63	S	Depth 4616m	
ST05D2		Time	03:09 – 06:18		Long.	159	59.60	W	Down Lay	
Bottle No.	Depth m	Pres. db	CTD(T) ℃	CTD(DO) ml·l^{-1}	CTD(S) (psu)	P db	T ℃	S (psu)	DO ml·l^{-1}	FIC
	0		26.2	****	****	3	26.013	35.842	4.67	0.01
36	20	20	26.044	4.49	35.846	5	26.016	35.842	4.87	0.02
35	20	20	26.045	4.49	35.846	10	26.015	35.843	4.89	0.02
32	19	20	26.044	4.48	35.845	20	26.019	35.843	4.66	0.02
31	19	19	26.044	4.49	35.845	30	26.022	35.843	4.59	0.02
30	49	50	25.445	4.58	35.793	40	26.024	35.843	4.60	0.02
29	49	50	25.398	4.57	35.787	50	26.023	35.843	4.60	0.02
28	69	69	24.488	4.44	35.845	60	25.724	35.821	4.64	0.03
27	69	70	24.442	4.44	35.846	70	24.810	35.829	4.69	0.04
26	101	101	22.816	4.72	35.591	80	24.414	35.845	4.60	0.06
25	100	101	22.867	4.62	35.646	90	24.281	35.853	4.52	0.08
24	149	150	21.081	4.79	35.582	100	23.716	35.777	4.56	0.10
23	148	149	21.089	4.76	35.583	125	22.271	35.531	4.94	0.12
22	200	201	20.086	4.23	35.705	150	21.321	35.542	5.04	0.11
21	200	201	20.081	4.21	35.704	175	20.993	35.733	4.41	0.07
20	299	301	17.174	4.51	35.508	200	20.291	35.718	4.43	0.04
19	298	300	17.222	4.49	35.505	250	18.844	35.641	4.44	0.01
18	496	499	8.996	4.46	34.548	300	17.319	35.491	4.63	0.01
17	495	499	8.963	4.46	34.545	400	13.422	35.038	4.65	0.01
16	694	699	5.887	4.46	34.356	500	8.876	34.540	4.82	0.01
15	694	700	5.889	4.46	34.356	600	6.915	34.402	4.67	0.01
14	991	999	4.125	3.53	34.454	700	5.901	34.364	4.73	0.01
13	990	999	4.125	3.53	34.454	800	5.222	34.381	4.28	0.01
12	1486	1500	2.656	3.37	34.580	900	4.630	34.421	3.91	0.01
11	1485	1500	2.656	3.37	34.580	1000	4.091	34.458	3.73	0.01
10	1978	2000	2.157	3.32	34.632	1250	3.116	34.532	3.64	0.01
9	1978	1999	2.157	3.32	34.632	1500	2.599	34.586	3.52	0.02
8	2470	2500	1.861	3.41	34.657	2000	2.124	34.635	3.45	0.01
7	2469	2499	1.861	3.41	34.657	2500	1.868	34.657	3.52	0.02
6	2961	3000	1.682	3.61	34.672	3000	1.689	34.672	3.70	0.02
5	2961	3000	1.682	3.61	34.672	3500	1.561	34.683	3.92	0.01
4	3940	4001	1.436	4.14	34.693	4000	1.442	34.693	4.18	0.01
3	3939	4001	1.436	4.14	34.693	4500	1.238	34.704	4.60	0.02
34	4425	4499	1.237	4.59	34.704	4505	1.238	34.704	4.60	0.02
33	4428	4502	1.237	4.59	34.704					
2	4427	4501	1.238	4.59	34.704		B-P 210m			
1	4426	4500	1.238	4.59	34.704					

St. 05		Date	01.12.14		Lat.	19	59.92	S	Depth 4582m	
ST05S2		Time	07:41 – 08:48		Long.	159	59.69	W	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		25.8	****	****	2	26.078	35.855	4.55	0.03
36	10	10	26.087	4.49	35.858	5	26.079	35.855	4.57	0.02
35	20	20	26.089	4.48	35.858	10	26.080	35.855	4.56	0.02
34	30	30	26.086	4.48	35.858	20	26.080	35.855	4.56	0.02
33	40	40	26.088	4.49	35.858	30	26.081	35.854	4.55	0.02
32	49	49	26.063	4.49	35.853	40	26.076	35.854	4.54	0.02
31	59	60	25.078	4.61	35.795	50	26.007	35.850	4.58	0.03
30	79	79	24.227	4.45	35.845	60	24.951	35.798	4.64	0.04
29	100	101	23.099	4.79	35.583	70	24.645	35.831	4.58	0.05
28	150	151	21.227	4.80	35.554	80	24.286	35.842	4.53	0.08
27	199	200	20.428	4.51	35.649	90	24.112	35.852	4.50	0.11
26	198	200	20.429	4.51	35.650	100	23.082	35.589	4.87	0.08
25	299	301	17.152	4.49	35.496	125	22.194	35.549	4.89	0.14
24	298	300	17.142	4.52	35.495	150	21.303	35.547	5.03	0.12
23	496	500	8.782	4.52	34.529	175	21.010	35.737	4.38	0.07
22	496	500	8.782	4.52	34.528	200	20.410	35.723	4.42	0.05
21	694	699	5.959	4.53	34.359	250	18.654	35.622	4.43	0.01
20	694	699	5.956	4.50	34.359	300	17.149	35.504	4.67	0.01
19	993	1001	4.157	3.65	34.451	400	12.534	34.936	4.66	0.01
18	993	1001	4.155	3.65	34.452	500	8.805	34.540	4.91	0.01
17	993	1001	4.157	3.65	34.452	600	7.020	34.408	4.73	0.01
16	993	1001	4.157	3.65	34.452	700	5.841	34.363	4.84	0.01
15	992	1001	4.160	3.65	34.451	800	5.293	34.379	4.39	0.01
14	992	1001	4.160	3.65	34.451	900	4.689	34.418	3.97	0.01
13	992	1000	4.162	3.65	34.451	1000	4.202	34.450	3.78	0.01
12	992	1000	4.157	3.65	34.452	1012	4.128	34.454	3.77	0.01
11	992	1000	4.158	3.65	34.452					
10	992	1000	4.160	3.65	34.451					
9	991	1000	4.166	3.65	34.451					
8	992	1000	4.158	3.67	34.452					
7	992	1000	4.159	3.67	34.452					
6	991	1000	4.163	3.67	34.451					
5	991	999	4.169	3.67	34.451					
4	991	999	4.169	3.68	34.451					
3	991	999	4.168	3.68	34.451					
2	992	1000	4.171	3.69	34.451					
1	991	1000	4.168	3.70	34.451					

St. 05		Date	01.12.14		Lat.	20	1.41	S	Depth 4659m	
ST05S3		Time	12:14 – 12:46		Long.	159	57.58	W	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		25.6	****	****	2	25.749	35.789	4.58	0.02
36	10	10	25.766	4.56	35.795	5	25.748	35.790	4.58	0.01
35	10	10	25.758	4.56	35.795	10	25.753	35.790	4.59	0.02
34	10	10	25.759	4.56	35.794	20	25.751	35.790	4.57	0.02
31	11	11	25.765	4.56	35.795	30	25.756	35.790	4.58	0.02
27	10	11	25.757	4.56	35.794	40	25.759	35.791	4.57	0.02
26	10	10	25.761	4.56	35.794	50	25.756	35.794	4.56	0.02
33	22	22	25.767	4.56	35.794	60	25.706	35.804	4.58	0.02
25	21	21	25.767	4.56	35.794	70	25.265	35.793	4.62	0.03
24	22	22	25.767	4.55	35.794	80	24.393	35.727	4.73	0.04
32	31	31	25.769	4.56	35.793	90	23.968	35.699	4.74	0.05
23	31	31	25.762	4.55	35.793	100	23.461	35.632	4.78	0.06
22	31	32	25.762	4.56	35.792	110	22.980	35.573	4.89	0.07
30	43	43	25.762	4.54	35.792					
21	43	43	25.763	4.54	35.792					
20	43	43	25.763	4.55	35.792					
29	53	53	25.735	4.56	35.805					
19	52	53	25.737	4.57	35.805					
18	53	53	25.734	4.57	35.804					
28	99	100	23.300	4.90	35.591					
17	99	99	23.282	4.90	35.589					
16	99	100	23.289	4.89	35.590					
15	99	100	23.288	4.88	35.590					
14	100	100	23.270	4.89	35.589					
13	99	100	23.309	4.89	35.593					
12	99	100	23.285	4.89	35.590					
11	99	99	23.339	4.89	35.598					
10	99	100	23.317	4.89	35.593					
9	98	98	23.359	4.89	35.601					
8	99	99	23.339	4.89	35.598					
7	99	100	23.323	4.88	35.595					
6	99	100	23.323	4.89	35.595					
5	99	99	23.352	4.88	35.600					
4	100	100	23.332	4.88	35.597					
3	99	100	23.346	4.89	35.599					
2	99	100	23.343	4.89	35.599					
1	99	100	23.362	4.89	35.602					

St. 08		Date	01.12.18		Lat.	34	59.71	S	Depth 5113m	
ST08D2		Time	04:47 – 08:00		Long.	160	0.04	W	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		18.9	****	****	4	18.642	35.365	5.66	0.04
32	20	20	18.645	5.41	35.375	5	18.642	35.365	5.64	0.04
31	20	21	18.646	5.40	35.375	10	18.640	35.366	5.64	0.04
30	51	51	18.221	5.53	35.316	20	18.645	35.366	5.62	0.04
29	50	51	18.251	5.51	35.317	30	18.633	35.368	5.60	0.04
28	70	70	14.645	6.25	34.830	40	18.541	35.364	5.60	0.04
27	69	70	14.639	6.25	34.829	50	17.622	35.255	5.80	0.06
26	99	100	14.095	6.21	34.864	60	14.331	34.736	6.46	0.12
25	101	102	14.080	6.20	34.869	70	14.189	34.813	6.45	0.13
24	147	149	13.026	6.01	34.779	80	14.133	34.909	6.39	0.14
23	147	149	13.026	6.01	34.782	90	14.134	34.955	6.35	0.16
22	197	199	11.963	5.33	34.847	100	13.906	34.936	6.36	0.22
21	198	199	11.958	5.33	34.847	125	13.213	34.817	6.29	0.18
20	298	300	9.917	5.15	34.675	150	12.543	34.731	6.30	0.13
19	298	300	9.914	5.14	34.674	175	12.082	34.768	5.90	0.09
18	496	500	7.599	5.47	34.451	200	11.812	34.834	5.63	0.05
17	495	499	7.602	5.47	34.451	250	10.688	34.743	5.57	0.02
16	693	699	6.718	5.48	34.381	300	9.819	34.672	5.42	0.01
15	692	698	6.716	5.48	34.381	400	8.444	34.542	5.54	0.01
14	990	1000	5.080	4.81	34.328	500	7.685	34.461	5.72	0.02
13	990	1000	5.082	4.80	34.328	600	7.222	34.420	5.87	0.01
12	1483	1499	2.969	3.87	34.489	700	6.782	34.389	5.78	0.01
11	1483	1499	2.972	3.86	34.488	800	6.319	34.357	5.65	0.01
36	1976	2000	2.306	3.43	34.621	900	5.735	34.334	5.40	0.01
10	1976	1999	2.307	3.43	34.620	1000	5.116	34.329	5.11	0.01
9	1975	1999	2.306	3.43	34.621	1250	3.705	34.380	4.55	0.01
8	2467	2500	1.979	3.33	34.652	1500	2.952	34.494	4.06	0.01
7	2466	2499	1.979	3.33	34.652	2000	2.294	34.623	3.57	0.02
35	2956	2999	1.798	3.40	34.668	2500	1.984	34.652	3.45	0.02
6	2956	2999	1.798	3.40	34.668	3000	1.794	34.669	3.51	0.02
5	2956	2999	1.798	3.40	34.668	3500	1.619	34.692	3.95	0.02
34	3934	4000	1.397	4.44	34.713	4000	1.386	34.713	4.56	0.02
4	3934	4000	1.397	4.44	34.713	4500	1.128	34.711	4.78	0.02
3	3933	3999	1.397	4.44	34.713	5000	1.061	34.706	4.84	0.02
33	4907	5000	1.060	4.82	34.706	5041	1.062	34.706	4.85	0.02
2	4907	5000	1.060	4.83	34.706					
1	4906	5000	1.060	4.83	34.706					

B-P 210m

St. 08		Date	01.12.18		Lat.	34	57.69	S	Depth 5138m	
ST08S3		Time	14:37 – 15:01		Long.	159	54.96	W	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		18.7	****	****	3	18.561	35.341	5.57	0.04
27	9	9	18.568	5.47	35.342	5	18.561	35.341	5.68	0.04
26	8	9	18.568	5.47	35.342	10	18.562	35.342	5.66	0.04
25	17	17	18.564	5.48	35.340	20	18.564	35.342	5.57	0.04
24	16	17	18.564	5.46	35.341	30	18.558	35.340	5.55	0.04
36	19	20	18.564	5.47	35.341	40	18.408	35.325	5.56	0.05
35	20	20	18.564	5.45	35.341	50	16.917	35.215	5.88	0.07
34	19	19	18.564	5.45	35.341	60	14.626	34.782	6.34	0.14
33	20	20	18.564	5.46	35.341	70	14.608	34.914	6.32	0.12
32	20	20	18.564	5.46	35.341	80	14.387	34.942	6.30	0.14
31	19	19	18.564	5.47	35.341	90	13.557	34.789	6.41	0.20
30	20	20	18.565	5.45	35.341	100	13.704	34.845	6.42	0.21
23	26	26	18.562	5.47	35.341	107	13.776	34.881	6.35	0.22
22	25	25	18.562	5.48	35.341					
21	33	34	18.549	5.49	35.339					
20	34	34	18.521	5.52	35.335					
19	41	41	17.699	5.73	35.242					
18	42	42	17.817	5.77	35.236					
29	50	50	16.089	6.11	35.056					
28	100	101	13.717	6.37	34.849					
17	100	101	13.718	6.37	34.849					
16	99	100	13.707	6.38	34.845					
15	100	101	13.706	6.38	34.845					
14	100	100	13.706	6.38	34.846					
13	99	99	13.704	6.37	34.844					
12	100	100	13.704	6.38	34.845					
11	99	100	13.705	6.38	34.845					
10	99	100	13.706	6.39	34.845					
9	99	99	13.703	6.40	34.844					
8	99	100	13.703	6.39	34.844					
7	99	100	13.707	6.40	34.845					
6	100	101	13.711	6.39	34.847					
5	100	100	13.704	6.41	34.844					
4	99	99	13.699	6.42	34.842					
3	99	100	13.702	6.40	34.844					
2	99	100	13.705	6.41	34.845					
1	98	99	13.708	6.41	34.847					

St. 08		Date	01.12.18		Lat.	35	0.14	S	Depth 5098m		St. 10		Date	01.12.21		Lat.	47	0.12	S	Depth 5118m	
ST08S2		Time	18:15 – 19:14		Long.	160	0.40	W	Down Lay		ST10D2		Time	01:10 – 04:28		Long.	160	0.41	W	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}		No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		18.8	****	****	3	18.593	35.349	5.57	0.04		0		13.6	****	****	2	13.484	34.349	6.83	0.29
36	9	9	18.615	5.43	35.361	5	18.594	35.349	5.57	0.04	32	20	20	12.044	6.66	34.423	5	13.367	34.376	6.84	0.29
35	19	19	18.618	5.41	35.361	10	18.594	35.349	5.57	0.04	31	20	20	11.890	6.68	34.431	10	12.991	34.442	6.90	0.29
34	29	30	18.617	5.39	35.360	20	18.596	35.349	5.56	0.04	30	50	50	9.890	6.78	34.488	20	12.418	34.460	6.99	0.41
33	38	38	18.608	5.42	35.358	30	18.597	35.349	5.56	0.04	29	49	50	9.651	6.77	34.486	30	12.291	34.465	6.96	0.65
32	49	49	18.592	5.45	35.353	40	18.598	35.349	5.55	0.04	28	70	70	9.149	6.64	34.518	40	11.464	34.450	7.07	0.62
31	59	60	16.526	5.91	35.115	50	17.599	35.251	5.79	0.06	27	70	70	9.139	6.62	34.518	50	10.510	34.461	7.16	0.55
30	79	80	13.993	6.28	34.795	60	14.905	34.858	6.27	0.10	26	99	100	8.960	6.52	34.534	60	9.848	34.481	7.17	0.42
29	99	100	13.860	6.15	34.887	70	14.212	34.769	6.48	0.13	25	99	100	8.940	6.52	34.536	70	9.362	34.488	7.09	0.29
28	148	150	12.563	6.01	34.732	80	14.028	34.796	6.44	0.13	24	149	151	8.809	6.54	34.556	80	9.171	34.493	7.05	0.22
27	199	200	11.767	5.40	34.828	90	14.045	34.890	6.34	0.14	23	148	150	8.804	6.54	34.557	90	9.128	34.519	7.00	0.15
26	198	200	11.777	5.37	34.835	100	13.854	34.891	6.40	0.17	22	198	199	8.718	6.50	34.562	100	9.010	34.527	6.98	0.11
25	297	299	9.640	5.23	34.648	125	13.441	34.858	6.28	0.19	21	197	199	8.720	6.49	34.562	125	8.891	34.544	6.85	0.04
24	297	299	9.643	5.23	34.648	150	12.593	34.741	6.25	0.15	20	297	300	8.145	6.15	34.489	150	8.808	34.555	6.90	0.03
23	495	499	7.551	5.58	34.446	175	11.912	34.715	6.05	0.08	19	297	300	8.141	6.14	34.488	175	8.787	34.563	6.87	0.02
22	495	499	7.551	5.58	34.446	200	11.619	34.769	5.75	0.06	18	495	500	7.468	6.13	34.424	200	8.740	34.563	6.83	0.02
21	693	700	6.735	5.57	34.384	250	10.758	34.745	5.55	0.02	17	495	500	7.462	6.12	34.423	250	8.530	34.540	6.72	0.02
20	693	699	6.715	5.57	34.383	300	9.695	34.662	5.44	0.01	16	693	700	6.893	5.85	34.374	300	8.247	34.505	6.54	0.02
19	992	1002	5.057	5.01	34.327	400	8.271	34.522	5.59	0.01	15	693	700	6.887	5.85	34.374	400	7.723	34.447	6.32	0.02
18	992	1002	5.056	5.00	34.327	500	7.564	34.449	5.84	0.02	14	989	1000	5.564	5.11	34.326	500	7.445	34.423	6.35	0.01
16	992	1001	5.058	5.00	34.327	600	7.188	34.417	5.85	0.01	13	989	1000	5.566	5.11	34.327	600	7.149	34.394	6.33	0.01
17	992	1002	5.057	5.00	34.327	700	6.763	34.388	5.79	0.01	12	1482	1500	3.234	4.22	34.418	700	6.854	34.371	6.22	0.02
15	992	1002	5.055	4.99	34.327	800	6.257	34.354	5.62	0.01	11	1482	1500	3.231	4.22	34.419	800	6.529	34.352	5.93	0.01
14	992	1001	5.056	5.00	34.327	900	5.652	34.334	5.37	0.00	10	1974	2000	2.569	3.82	34.586	900	6.067	34.332	5.69	0.01
13	992	1001	5.057	5.03	34.327	1000	5.063	34.328	5.09	0.01	9	1974	2000	2.568	3.81	34.587	1000	5.569	34.328	5.39	0.02
12	991	1001	5.058	5.03	34.327	1004	5.051	34.327	5.07	0.01	8	2464	2500	2.248	3.95	34.681	1250	4.249	34.343	4.95	0.02
11	991	1001	5.060	5.03	34.327						7	2464	2500	2.248	3.95	34.681	1500	3.277	34.413	4.49	0.02
9	991	1001	5.058	5.04	34.327						6	2954	3000	1.923	4.22	34.721	2000	2.560	34.588	4.01	0.02
8	991	1001	5.059	5.03	34.327						5	2954	3000	1.920	4.21	34.722	2500	2.208	34.674	3.96	0.02
7	991	1001	5.060	5.04	34.327						36	3929	3999	1.232	4.64	34.718	3000	1.924	34.722	4.36	0.02
10	990	1000	5.061	5.05	34.327						35	3929	3999	1.232	4.64	34.718	3500	1.563	34.729	4.64	0.02
6	991	1000	5.057	5.05	34.327						34	3929	3999	1.232	4.64	34.718	4000	1.225	34.717	4.76	0.02
5	990	1000	5.060	5.04	34.327						4	3929	3999	1.232	4.64	34.718	4500	1.032	34.708	4.85	0.02
4	990	1000	5.061	5.05	34.327						3	3929	3999	1.232	4.64	34.718	5000	1.008	34.704	4.89	0.02
3	990	999	5.059	5.04	34.327						33	5015	5118	1.012	4.88	34.704	5115	1.012	34.704	4.89	0.02
2	990	999	5.062	5.04	34.327						2	5015	5117	1.012	4.88	34.703					
1	989	998	5.049	5.04	34.327						1	5015	5117	1.012	4.88	34.704		B-P 101m			

St. 10		Date	01.12.21		Lat.	47	0.00	S	Depth 5056m		St.		Date			Lat.				Depth m	
ST10S2		Time	13:38 – 14:49		Long.	159	59.98	W	Down Lay				Time			Long.				Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}		No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		13.7	****	****	1	13.272	34.381	6.72	0.32		0			****	****					
29	6	6	13.322	6.48	34.407	5	13.339	34.374	6.71	0.32	36	0									
28	6	6	13.326	6.48	34.406	10	12.859	34.436	6.79	0.33	35	0									
27	9	10	12.961	6.55	34.426	20	12.437	34.430	6.86	0.41	34	0									
26	10	10	12.939	6.56	34.426	30	12.271	34.429	6.86	0.46	33	0									
19	10	11	12.989	6.57	34.424	40	11.993	34.436	6.85	0.71	32	0									
25	17	17	12.343	6.64	34.427	50	11.426	34.450	6.95	0.61	31	0									
24	17	18	12.325	6.64	34.427	60	10.305	34.467	7.08	0.52	30	0									
18	21	21	12.292	6.63	34.428	70	9.905	34.482	7.10	0.41	29	0									
23	23	23	12.296	6.62	34.428	80	9.287	34.511	6.95	0.24	28	0									
22	23	23	12.297	6.62	34.428	90	9.169	34.539	6.86	0.11	27	0									
21	29	29	12.246	6.61	34.428	100	9.193	34.563	6.80	0.08	26	0									
20	30	30	12.241	6.61	34.428	125	8.866	34.542	6.80	0.04	25	0									
17	30	30	12.178	6.62	34.428	150	8.760	34.548	6.75	0.03	24	0									
16	40	41	11.707	6.69	34.435	175	8.753	34.563	6.79	0.02	23	0									
15	51	52	11.066	6.77	34.444	200	8.718	34.563	6.76	0.02	22	0									
14	59	60	10.142	6.83	34.466	250	8.426	34.525	6.68	0.02	21	0									
36	80	81	9.252	6.69	34.521	300	8.212	34.500	6.51	0.02	20	0									
35	80	81	9.252	6.69	34.520	400	7.736	34.448	6.28	0.02	19	0									
34	80	81	9.243	6.67	34.523	500	7.476	34.426	6.21	0.01	18	0									
13	80	81	9.250	6.67	34.521	600	7.182	34.398	6.27	0.01	17	0									
12	100	101	9.157	6.53	34.558	700	6.864	34.373	6.18	0.01	16	0									
11	150	151	8.777	6.52	34.550	800	6.514	34.347	5.96	0.02	15	0									
10	200	201	8.722	6.55	34.563	900	6.088	34.332	5.69	0.01	14	0									
9	199	201	8.720	6.56	34.562	1000	5.564	34.329	5.35	0.01	13	0									
8	298	301	8.226	6.31	34.500	1003	5.549	34.329	5.33	0.01	12	0									
7	298	301	8.223	6.30	34.499						11	0									
6	496	501	7.468	6.07	34.425						10	0									
5	496	501	7.465	6.07	34.425						9	0									
4	693	700	6.847	6.02	34.370						8	0									
3	693	700	6.842	6.03	34.370						7	0									
33	989	1000	5.556	5.31	34.328						6	0									
32	990	1000	5.554	5.32	34.328						5	0									
31	989	1000	5.557	5.32	34.328						4	0									
30	989	1000	5.556	5.31	34.328						3	0									
2	990	1000	5.549	5.31	34.328						2	0									
1	989	1000	5.550	5.31	34.328						1	0									

St. 11		Date	02.01.07		Lat.	63	7.30	S	Depth 3859m		St. 12B		Date	02.01.10		Lat.	65	34.16	S	Depth 1464m	
ST11D3		Time	04:54 – 07:29		Long.	149	58.39	E	Down Lay		ST12B2		Time	04:54 – 05:22		Long.	140	7.54	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}		No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		1.7	****	****	2	1.568	33.797	8.54	0.35		0		0.8	****	****	2	0.675	33.777	8.67	7.54
16	10	10	1.570	8.15	33.793	5	1.552	33.798	8.53	0.31	1	70	71	−1.769	6.63	34.302	5	0.674	33.778	8.59	7.89
15	19	19	1.571	8.16	33.794	10	1.543	33.798	8.52	0.43	2	71	71	−1.771	6.63	34.303	10	0.674	33.778	8.54	9.64
14	29	29	1.555	8.20	33.790	20	1.540	33.798	8.51	0.50	3	69	70	−1.770	6.63	34.303	20	0.479	33.844	8.46	10.35
13	40	40	−0.361	8.69	33.915	30	1.507	33.801	8.50	0.50	4	70	70	−1.770	6.63	34.303	30	−0.370	33.972	8.16	5.73
12	49	50	−0.590	8.67	33.925	40	−0.099	33.924	8.91	1.23	5	70	70	−1.770	6.63	34.303	40	−1.325	34.243	7.71	4.88
11	58	59	−0.928	8.13	33.976	50	−0.639	33.928	9.03	1.96	6	69	69	−1.769	6.63	34.303	50	−1.648	34.287	7.15	0.86
10	69	69	−0.953	7.35	34.097	60	−0.971	34.019	8.37	0.90	7	69	70	−1.769	6.62	34.303	60	−1.713	34.295	6.98	0.56
9	78	79	−0.312	6.36	34.245	70	−0.764	34.163	7.50	0.47	8	69	70	−1.770	6.62	34.303	70	−1.754	34.301	6.91	0.35
8	99	100	0.926	4.85	34.439	80	0.051	34.289	6.36	0.31	9	69	69	−1.771	6.62	34.303	80	−1.763	34.306	6.84	0.22
7	124	125	1.728	4.19	34.559	90	1.125	34.445	5.15	0.18	10	70	70	−1.771	6.62	34.303	90	−1.764	34.309	6.81	0.17
6	148	149	1.791	4.13	34.581	100	1.304	34.486	4.87	0.16	11	69	70	−1.771	6.61	34.303	100	−1.780	34.313	6.78	0.13
5	197	199	1.881	4.11	34.628	125	1.743	34.562	4.33	0.06	12	68	69	−1.772	6.61	34.304	125	−1.736	34.324	6.66	0.29
4	247	250	1.906	4.12	34.653	150	1.792	34.584	4.25	0.05	13	99	100	−1.781	6.59	34.313	150	−1.707	34.345	6.52	0.14
3	296	299	1.911	4.15	34.673	175	1.830	34.601	4.22	0.04	14	99	100	−1.781	6.59	34.313	153	−1.702	34.347	6.49	0.08
2	396	400	1.906	4.23	34.699	200	1.847	34.618	4.23	0.03	15	99	100	−1.781	6.59	34.313					
1	494	499	1.825	4.31	34.711	250	1.897	34.649	4.22	0.03	16	100	101	−1.781	6.59	34.313					
36	3696	3766	−0.084	5.45	34.669	300	1.907	34.671	4.25	0.03	17	100	101	−1.781	6.58	34.313					
35	3696	3766	−0.084	5.46	34.669	400	1.910	34.696	4.31	0.03	18	100	101	−1.781	6.58	34.313					
34	3696	3766	−0.084	5.46	34.669	500	1.832	34.711	4.43	0.02	19	99	100	−1.780	6.58	34.313					
33	3696	3766	−0.085	5.46	34.669	600	1.780	34.722	4.49	0.02	20	100	101	−1.780	6.58	34.313					
32	3696	3766	−0.084	5.46	34.669	700	1.730	34.732	4.56	0.02	21	98	99	−1.780	6.58	34.313					
31	3696	3765	−0.084	5.46	34.669	800	1.650	34.735	4.61	0.02	22	98	99	−1.778	6.57	34.314					
30	3696	3766	−0.084	5.46	34.669	900	1.559	34.736	4.67	0.02	23	99	100	−1.778	6.57	34.314					
29	3696	3765	−0.084	5.46	34.669	1000	1.509	34.737	4.70	0.03	24	98	99	−1.771	6.56	34.315					
28	3696	3766	−0.084	5.46	34.669	1250	1.312	34.732	4.76	0.02	25	149	150	−1.706	6.42	34.346					
27	3696	3766	−0.084	5.46	34.670	1500	1.089	34.722	4.81	0.02	26	149	150	−1.706	6.42	34.347					
26	3696	3765	−0.083	5.46	34.669	2000	0.716	34.702	4.91	0.02	27	148	150	−1.706	6.42	34.346					
25	3696	3766	−0.082	5.46	34.669	2500	0.377	34.688	5.06	0.02	28	149	150	−1.706	6.42	34.346					
24	3696	3765	−0.081	5.46	34.670	3000	0.166	34.679	5.21	0.02	29	148	150	−1.706	6.43	34.346					
23	3696	3766	−0.081	5.46	34.670	3500	−0.026	34.672	5.40	0.01	30	149	150	−1.706	6.43	34.346					
22	3696	3765	−0.081	5.46	34.670	3766	−0.084	34.670	5.47	0.02	31	148	150	−1.706	6.43	34.347					
21	3696	3766	−0.081	5.46	34.670						32	149	151	−1.705	6.43	34.347					
20	3696	3766	−0.081	5.46	34.670						33	149	151	−1.704	6.43	34.347					
19	3696	3765	−0.081	5.46	34.670		B-P 106m				34	148	150	−1.705	6.44	34.346					
18	3696	3766	−0.081	5.46	34.670						35	148	150	−1.705	6.43	34.347					
17	3696	3765	−0.080	5.46	34.670						36	148	150	−1.703	6.44	34.348					

St. 13		Date	02.01.11		Lat.	64	0.13	S	Depth 3702m		St. 13		Date	02.01.12		Lat.	63	59.83	S	Depth 3705m	
ST13S2		Time	20:20 – 20:48		Long.	139	57.54	E	Up Lay		ST13D2		Time	17:04 – 19:17		Long.	139	56.85	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC	Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}		No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		0.8	****	****	5	0.687	33.599	7.46	3.09		0		0.9	****	****	1	0.747	33.602	8.00	2.88
36	3	3	0.686	7.47	33.599	10	0.687	33.599	7.44	2.66	28	20	20	0.785	7.33	33.599	5	0.746	33.602	7.88	2.74
22	3	3	0.687	7.47	33.599	20	0.684	33.599	7.34	2.78	27	20	20	0.783	7.32	33.600	10	0.744	33.603	7.82	2.81
21	3	3	0.687	7.47	33.599	30	0.650	33.596	7.14	2.97	26	20	20	0.784	7.31	33.599	20	0.733	33.606	7.76	2.95
35	5	5	0.687	7.47	33.599	40	−1.213	33.991	6.93	2.33	25	20	20	0.783	7.31	33.599	30	0.714	33.608	7.72	3.23
20	6	6	0.687	7.46	33.599	50	−1.176	34.100	6.44	0.62	20	40	40	0.274	7.27	33.671	40	−0.512	33.844	7.93	3.69
19	6	6	0.687	7.46	33.599	60	−0.706	34.209	5.88	0.51	19	40	40	0.312	7.26	33.663	50	−1.224	34.083	7.41	1.47
34	9	9	0.689	7.45	33.599	70	0.565	34.407	4.66	0.31	18	40	40	0.333	7.18	33.655	60	−0.768	34.191	6.67	1.23
18	9	9	0.686	7.45	33.599	80	1.133	34.467	4.35	0.27	17	40	40	0.309	7.13	33.659	70	−0.127	34.284	5.93	0.47
17	8	8	0.685	7.45	33.599	85	1.059	34.464	4.44	0.22	16	74	75	0.007	5.23	34.310	80	0.666	34.397	5.12	0.24
33	11	11	0.682	7.45	33.599	86	1.058	34.468	4.43	0.22	15	75	75	0.004	5.19	34.311	90	0.690	34.417	4.71	0.24
12	10	10	0.686	7.44	33.599						14	74	75	0.121	5.06	34.330	100	1.035	34.462	4.55	0.18
11	11	11	0.685	7.44	33.599						13	74	74	0.186	5.00	34.344	125	1.655	34.573	3.91	0.14
10	10	10	0.688	7.44	33.599						12	99	100	1.187	4.16	34.498	150	1.816	34.608	3.81	0.08
9	11	11	0.691	7.43	33.599						11	99	100	1.191	4.15	34.498	175	1.809	34.623	3.79	0.08
32	13	13	0.683	7.42	33.599						10	99	100	1.200	4.13	34.500	200	1.904	34.643	3.74	0.13
16	12	12	0.682	7.42	33.599						9	99	100	1.250	4.10	34.508	250	1.732	34.649	3.89	0.07
15	12	12	0.682	7.41	33.599						30	149	151	1.567	3.88	34.581	300	1.817	34.675	3.86	0.06
31	15	15	0.685	7.40	33.599						29	149	150	1.565	3.88	34.581	400	1.820	34.704	3.93	0.06
14	15	15	0.687	7.39	33.599						24	148	150	1.569	3.87	34.581	500	1.709	34.712	4.05	0.06
13	15	15	0.687	7.39	33.599						23	148	150	1.567	3.87	34.581	600	1.552	34.712	4.18	0.06
30	19	19	0.679	7.36	33.600						22	149	150	1.578	3.86	34.583	700	1.629	34.737	4.15	0.05
24	19	19	0.681	7.35	33.600						21	149	150	1.590	3.85	34.585	800	1.573	34.742	4.20	0.06
23	19	19	0.683	7.34	33.599						8	199	201	1.793	3.75	34.639	900	1.429	34.736	4.25	0.05
29	29	29	0.614	7.28	33.611						7	199	201	1.788	3.75	34.638	1000	1.357	34.736	4.28	0.05
8	29	29	0.578	7.25	33.618						6	198	200	1.797	3.75	34.639	1250	1.145	34.729	4.35	0.05
7	29	29	0.617	7.20	33.603						5	199	201	1.812	3.75	34.641	1500	0.940	34.719	4.42	0.05
28	49	49	−1.180	6.58	34.095						4	494	500	1.719	3.98	34.718	2000	0.519	34.696	4.57	0.05
6	50	50	−1.116	6.52	34.110						3	987	999	1.331	4.22	34.734	2500	0.231	34.685	4.76	0.05
5	49	49	−1.150	6.48	34.105						2	1970	1998	0.515	4.51	34.696	3000	0.004	34.677	4.98	0.05
27	59	60	−0.773	6.09	34.192						1	2950	3000	0.004	4.97	34.677	3009	0.001	34.677	4.99	0.05
4	60	61	−0.746	6.03	34.200																
3	59	60	−0.623	5.77	34.226																
26	81	82	1.112	4.37	34.467																
25	81	82	1.104	4.38	34.467																
2	81	82	1.126	4.38	34.466																
1	81	82	1.101	4.39	34.466																

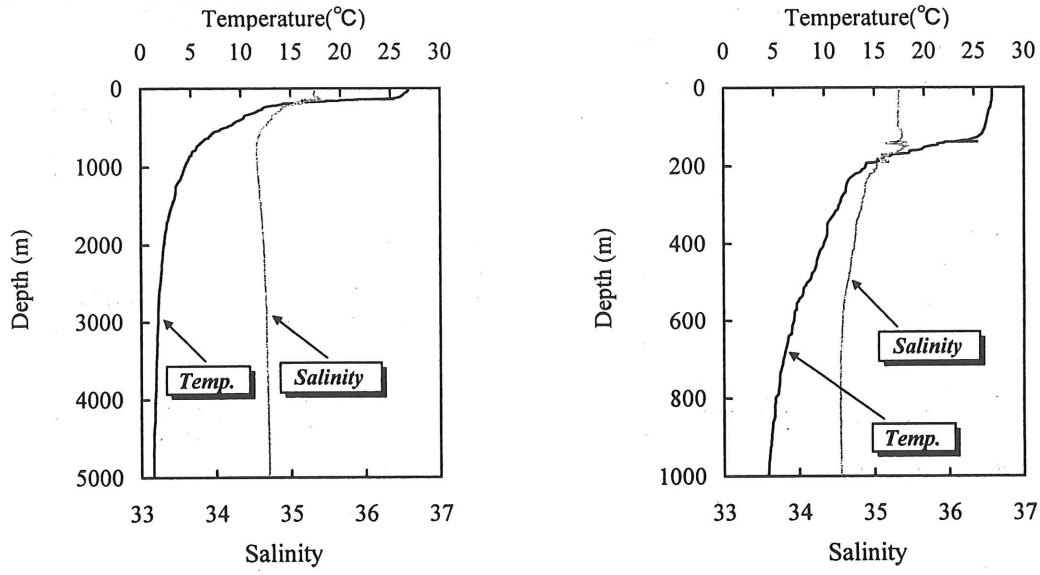
St. 16		Date	02.01.14		Lat.	61	0.50	S	Depth 4394m	
ST16S2		Time	05:10 – 05:40		Long.	139	59.87	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		1.5	****	****	5	1.186	33.880	7.59	0.08
17	9	9	1.177	7.20	33.881	10	1.172	33.880	7.49	0.09
12	10	10	1.179	7.19	33.881	20	1.133	33.881	7.45	0.13
11	10	10	1.182	7.20	33.880	30	1.079	33.881	7.42	0.18
10	10	10	1.181	7.19	33.880	40	0.952	33.881	7.42	0.30
9	9	9	1.171	7.19	33.881	50	0.854	33.882	7.41	0.33
16	29	29	1.075	7.20	33.881	60	0.807	33.881	7.40	0.35
8	30	30	1.079	7.20	33.880	70	0.729	33.882	7.39	0.35
7	30	31	1.061	7.20	33.880	80	0.449	33.891	7.42	0.34
15	50	51	0.843	7.24	33.881	90	−0.314	33.934	7.48	0.31
6	50	50	0.848	7.24	33.881	99	−0.416	33.987	7.21	0.25
5	50	51	0.851	7.24	33.881					
14	59	60	0.790	7.22	33.881					
4	60	61	0.782	7.23	33.881					
3	59	60	0.784	7.23	33.881					
30	79	80	0.360	7.25	33.892					
29	78	79	0.382	7.25	33.892					
28	79	80	0.365	7.25	33.892					
27	79	80	0.345	7.26	33.893					
26	78	79	0.388	7.25	33.891					
25	79	80	0.370	7.25	33.892					
24	78	79	0.390	7.25	33.891					
23	78	79	0.382	7.25	33.891					
22	79	80	0.341	7.26	33.893					
21	79	79	0.384	7.25	33.891					
20	79	80	0.367	7.25	33.892					
19	78	79	0.376	7.25	33.891					
18	78	79	0.363	7.25	33.892					
13	79	80	0.355	7.25	33.891					
2	79	80	0.350	7.26	33.892					
1	79	80	0.373	7.25	33.890					

St. 16		Date	02.01.14		Lat.	61	0.13	S	Depth 4399m	
ST16D2		Time	20:35 – 22:45		Long.	139	58.93	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		1.3	****	****	4	1.155	33.878	7.50	0.22
24	20	20	1.163	7.04	33.878	5	1.155	33.878	7.49	0.23
23	20	20	1.164	7.04	33.878	10	1.155	33.878	7.45	0.21
22	19	20	1.160	7.04	33.879	20	1.150	33.879	7.39	0.24
21	19	20	1.161	7.04	33.878	30	1.148	33.879	7.36	0.24
20	40	40	1.073	7.03	33.879	40	1.035	33.882	7.35	0.27
19	39	40	1.069	7.02	33.879	50	0.912	33.882	7.35	0.34
18	40	40	1.053	7.02	33.878	60	0.819	33.884	7.35	0.35
17	39	40	0.984	7.03	33.880	70	0.396	33.894	7.41	0.34
16	74	75	0.225	7.03	33.893	80	−0.374	33.919	7.41	0.32
15	74	74	0.187	7.02	33.894	90	−0.450	33.955	7.26	0.25
14	74	75	0.058	7.01	33.897	100	−0.106	34.039	6.70	0.21
13	74	75	−0.103	7.00	33.903	125	1.240	34.273	4.94	0.11
12	99	100	−0.275	6.48	34.009	150	1.910	34.383	4.25	0.08
11	100	101	−0.255	6.45	34.014	175	2.032	34.425	4.00	0.06
10	99	100	−0.196	6.14	34.029	200	2.090	34.462	3.88	0.06
9	99	100	−0.105	6.02	34.047	250	2.129	34.516	3.74	0.06
30	148	150	1.843	4.12	34.369	300	2.126	34.556	3.71	0.06
29	148	150	1.842	4.12	34.369	400	2.166	34.623	3.70	0.06
28	149	150	1.845	4.11	34.369	500	2.145	34.659	3.75	0.06
27	149	151	1.845	4.10	34.370	600	2.100	34.688	3.82	0.06
26	149	151	1.848	4.09	34.371	700	2.036	34.706	3.90	0.09
25	148	150	1.859	4.08	34.374	800	1.980	34.724	3.98	0.06
8	198	200	2.106	3.73	34.477	900	1.927	34.735	4.05	0.05
7	198	200	2.107	3.73	34.478	1000	1.862	34.742	4.11	0.06
6	198	200	2.108	3.73	34.479	1250	1.658	34.746	4.22	0.05
5	197	199	2.110	3.72	34.481	1500	1.447	34.743	4.31	0.05
4	495	500	2.140	3.70	34.660	2000	1.056	34.726	4.43	0.05
3	988	1000	1.851	4.05	34.743	2500	0.695	34.706	4.55	0.05
2	1971	1999	1.062	4.36	34.726	3000	0.358	34.692	4.75	0.05
1	2951	3000	0.357	4.74	34.692	3003	0.357	34.692	4.75	0.05

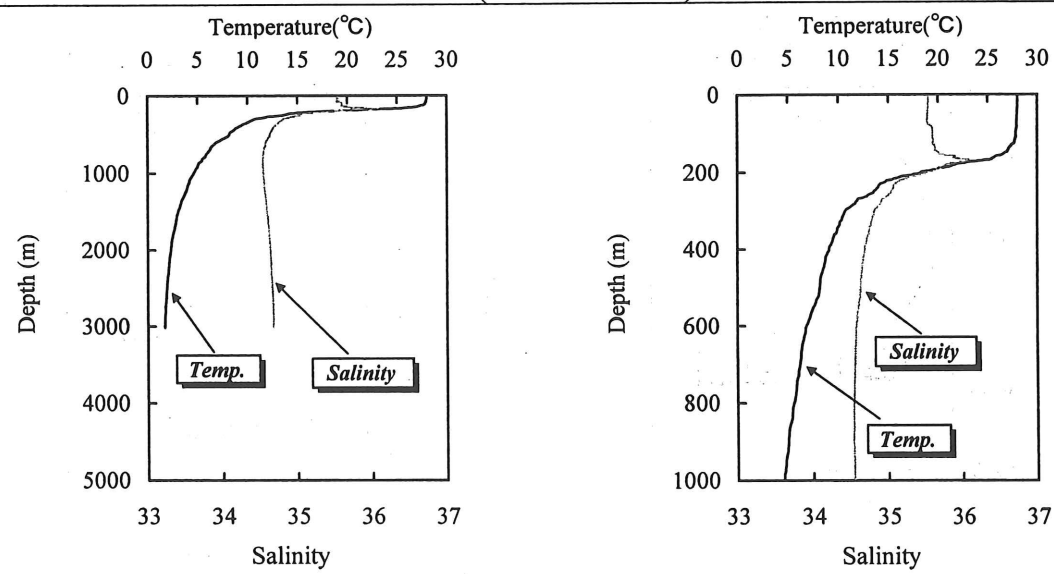
St. 16		Date	02.01.15		Lat.	61	0.58	S	Depth 4400m	
ST16S3		Time	09:00 – 09:52		Long.	139	59.44	E	Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0		1.4	****	****	6	1.185	33.874	7.62	0.25
17	10	10	1.194	7.11	33.873	10	1.177	33.875	7.54	0.25
16	10	10	1.195	7.11	33.873	20	1.156	33.876	7.44	0.31
15	20	20	1.183	7.11	33.875	30	1.162	33.875	7.40	0.27
14	29	29	1.082	7.12	33.877	40	1.134	33.877	7.37	0.27
30	40	40	1.033	7.12	33.879	50	0.872	33.884	7.39	0.36
13	40	41	1.005	7.12	33.878	60	0.842	33.883	7.37	0.37
29	49	50	0.883	7.13	33.882	70	0.670	33.887	7.36	0.34
12	49	50	0.888	7.13	33.882	80	−0.303	33.916	7.41	0.31
28	59	59	0.828	7.08	33.883	90	−0.362	33.954	7.24	0.24
11	59	59	0.808	7.06	33.882	100	−0.261	34.018	6.94	0.23
27	69	70	0.103	7.06	33.896	125	1.113	34.243	5.36	0.11
10	69	69	−0.078	7.05	33.904	150	1.797	34.357	4.39	0.08
26	79	80	−0.341	6.92	33.934	175	2.011	34.420	4.04	0.07
9	79	80	−0.346	6.87	33.937	200	2.085	34.462	3.88	0.06
25	98	99	0.033	6.10	34.071	250	2.142	34.518	3.73	0.06
8	99	100	0.028	6.08	34.071	300	2.170	34.558	3.69	0.06
24	124	125	1.299	4.68	34.279	400	2.164	34.617	3.69	0.06
7	124	125	1.298	4.68	34.279	500	2.148	34.656	3.74	0.06
23	149	150	1.906	4.06	34.384	500	2.149	34.655	3.74	0.06
6	149	150	1.906	4.05	34.384	502	2.148	34.656	3.74	0.06
22	197	199	2.090	3.79	34.466					
5	198	200	2.091	3.79	34.467					
21	247	250	2.143	3.68	34.523					
4	248	250	2.142	3.68	34.523					
20	296	299	2.170	3.66	34.559					
3	296	299	2.172	3.66	34.561					
19	396	400	2.164	3.68	34.621					
2	395	400	2.164	3.68	34.620					
18	495	500	2.148	3.74	34.656					
1	494	500	2.148	3.74	34.656					

St.		Date			Lat.				Depth m	
		Time			Long.				Down Lay	
Bottle	Depth	Pres.	CTD(T)	CTD(DO)	CTD(S)	P	T	S	DO	FIC
No.	m	db	℃	ml・l^{-1}	(psu)	db	℃	(psu)	ml・l^{-1}	
	0			****	****					
30	0									
29	0									
28	0									
27	0									
26	0									
25	0									
24	0									
23	0									
22	0									
21	0									
20	0									
19	0									
18	0									
17	0									
16	0									
15	0									
14	0									
13	0									
12	0									
11	0									
10	0									
9	0									
8	0									
7	0									
6	0									
5	0									
4	0									
3	0									
2	0									
1	0									

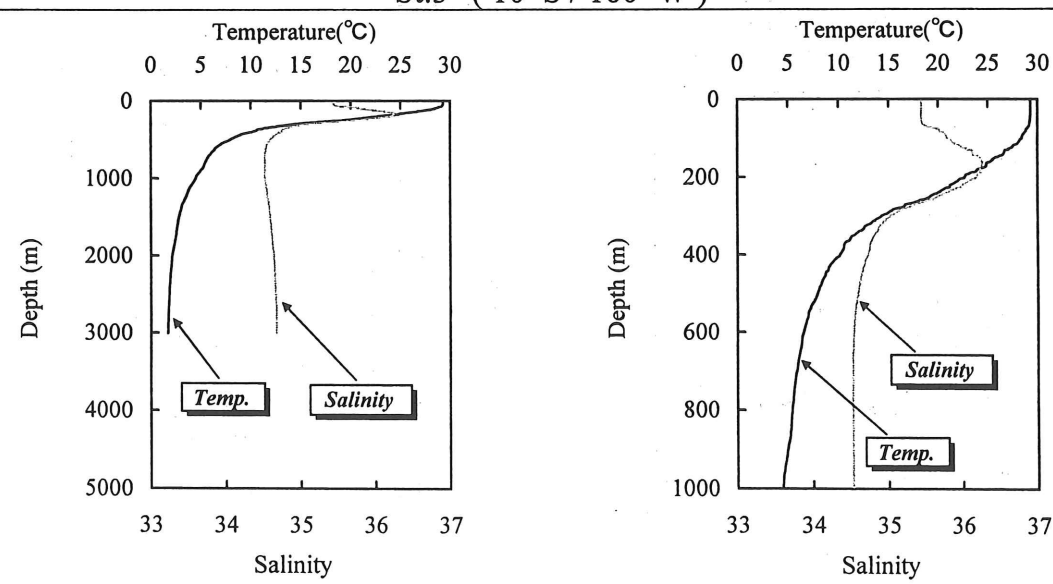
St.1 (0° N / 160° W)



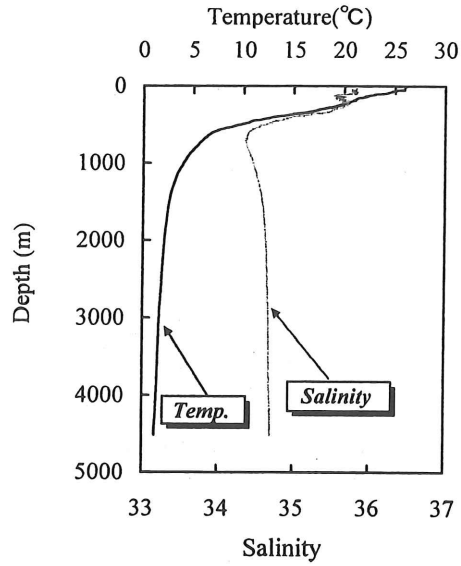
St.2 (5° S / 160° W)

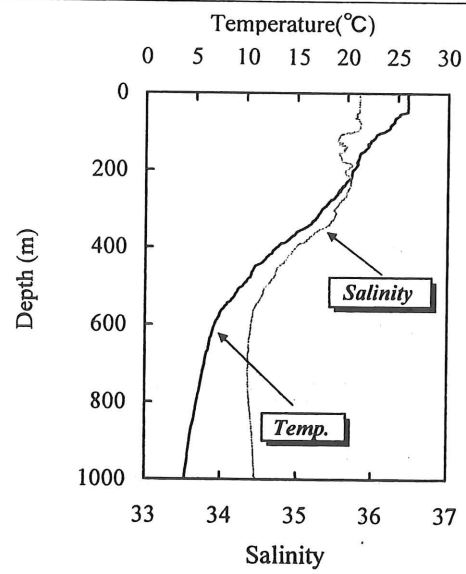


St.3 (10° S / 160° W)

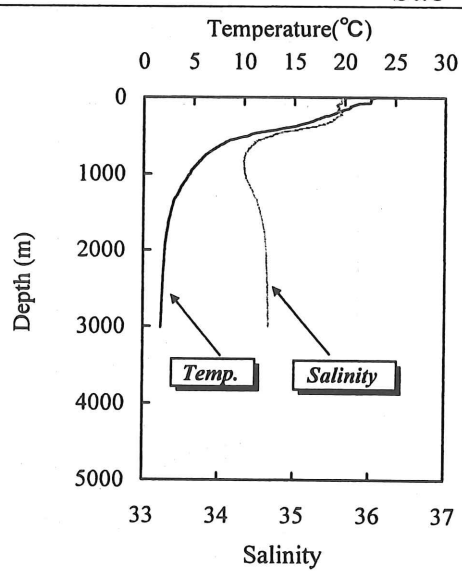


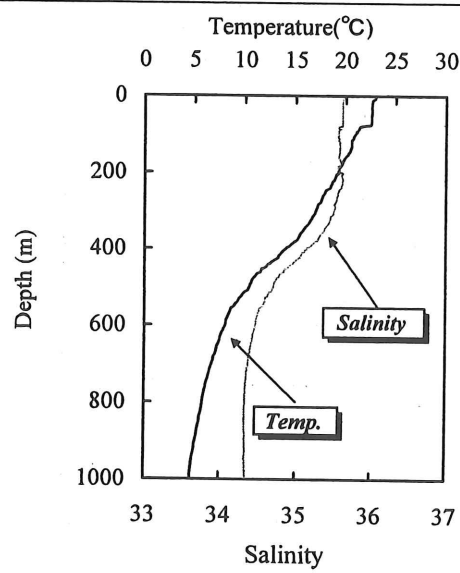
St.5 (20° S / 160° W)



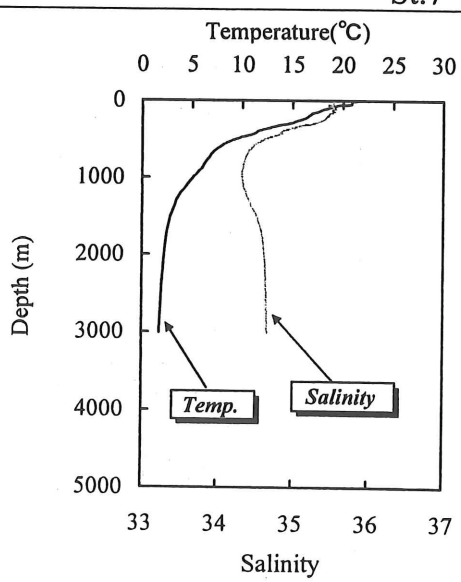


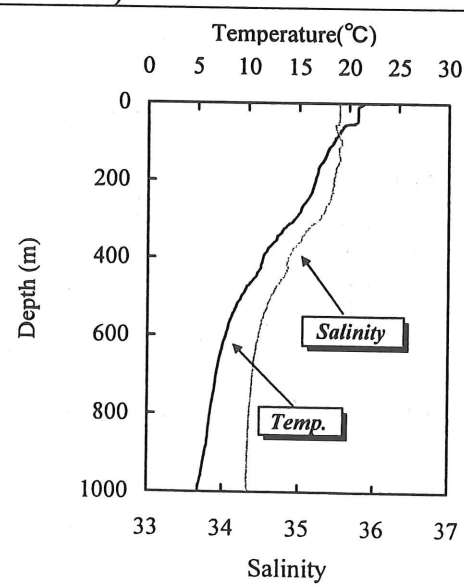
St.6 (25° S / 160° W)



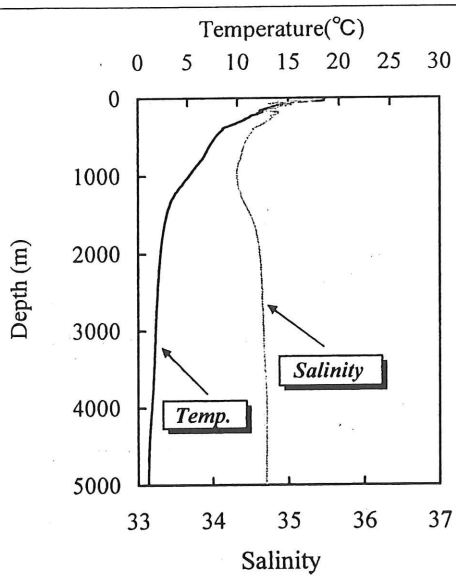


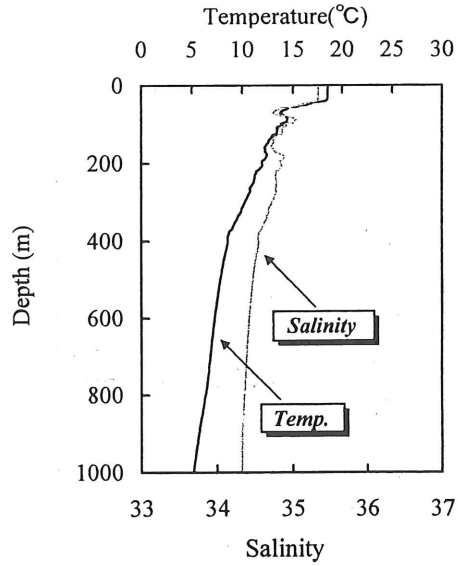
St.7 (30° S / 160° W)



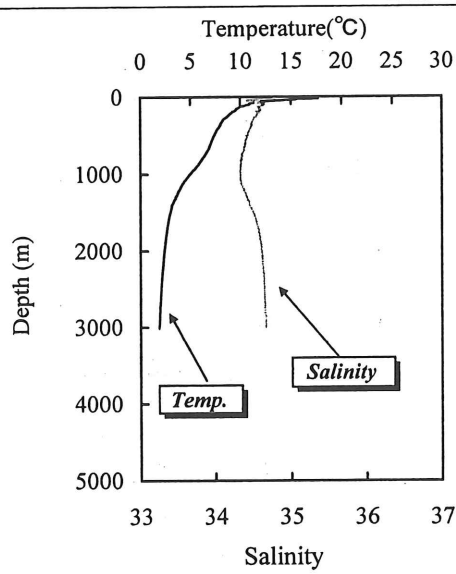


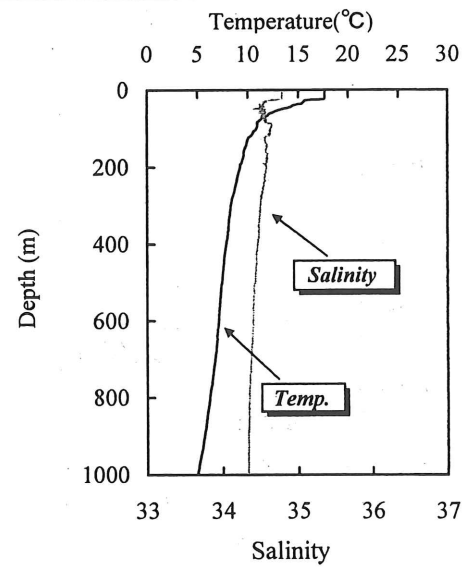
St.8 (35° S / 160° W)



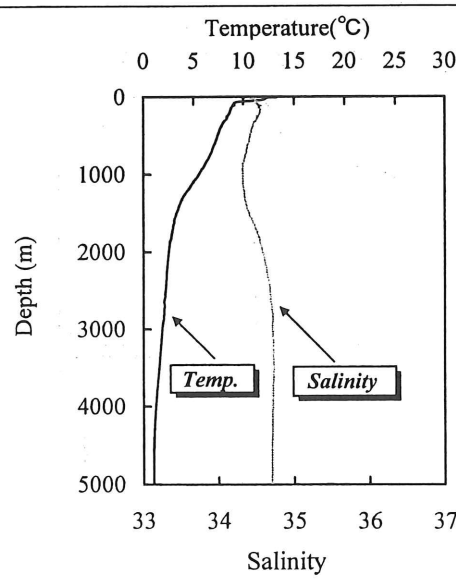


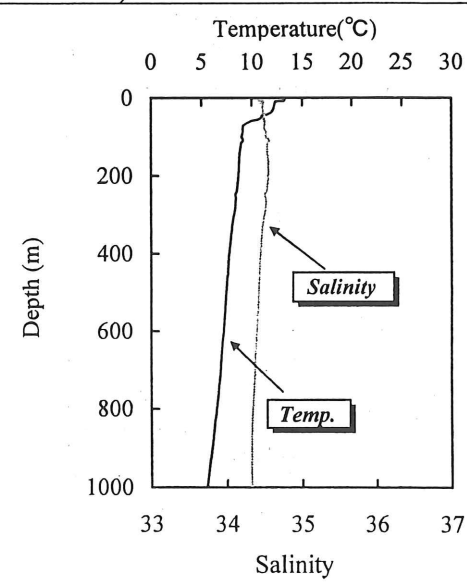
St.9 (40° S / 160° W)



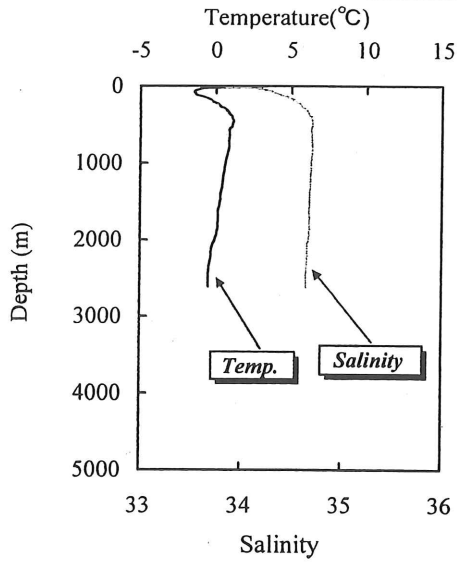


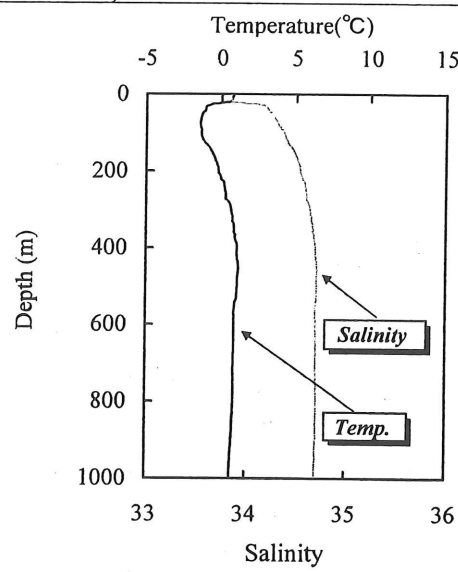
St.10 (47° S / 160° W)



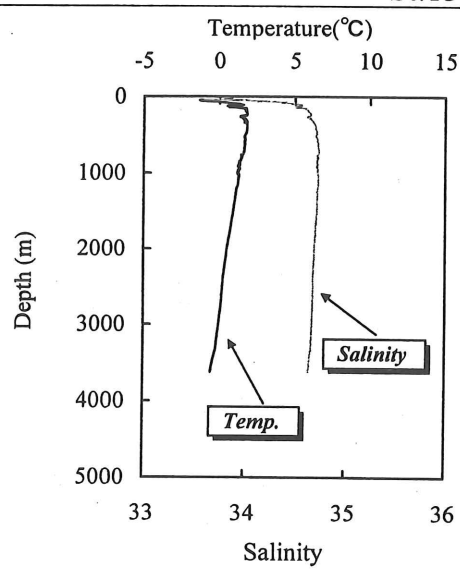


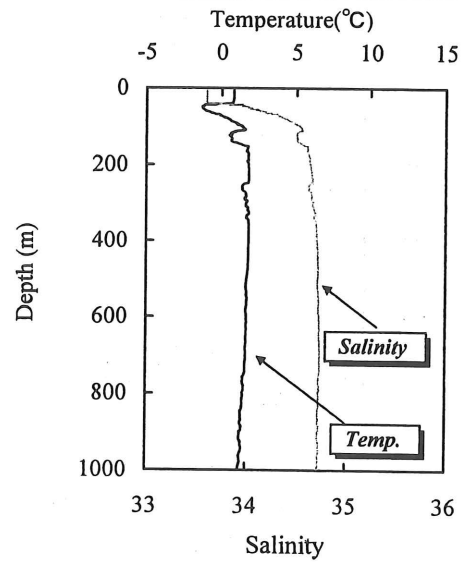
St.12 (65° S / 140° E)



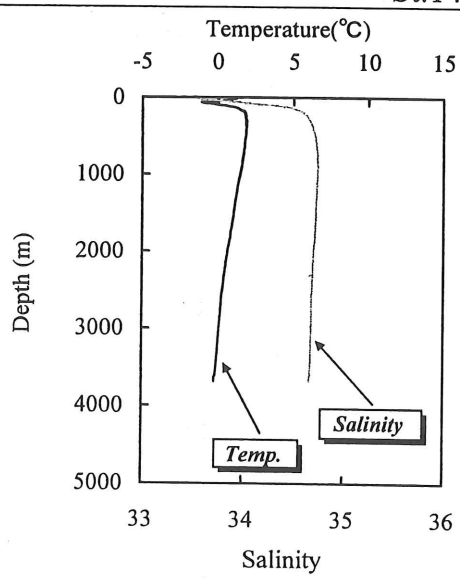


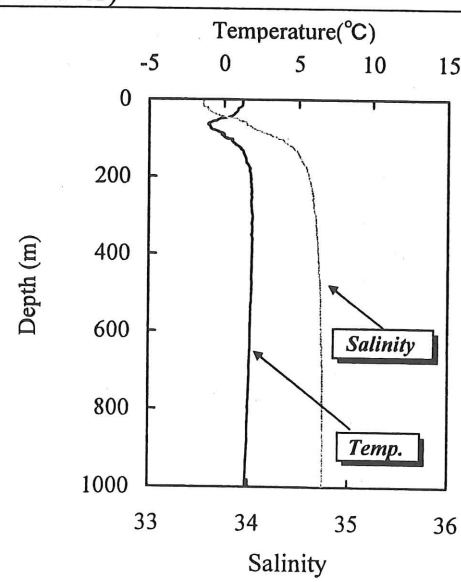
St.13 (64° S / 140° E)



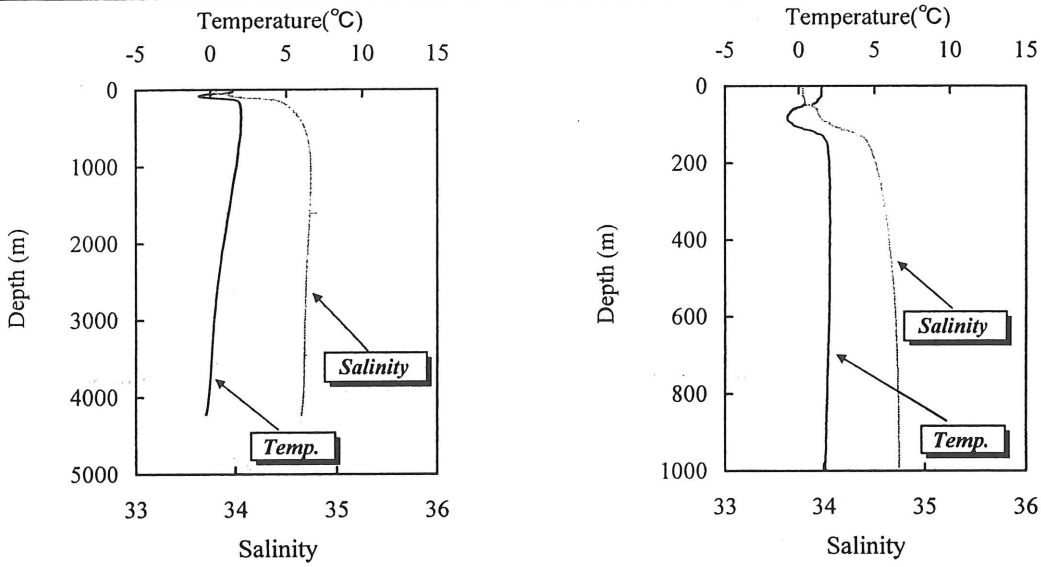


St.14 (63° S / 140° E)

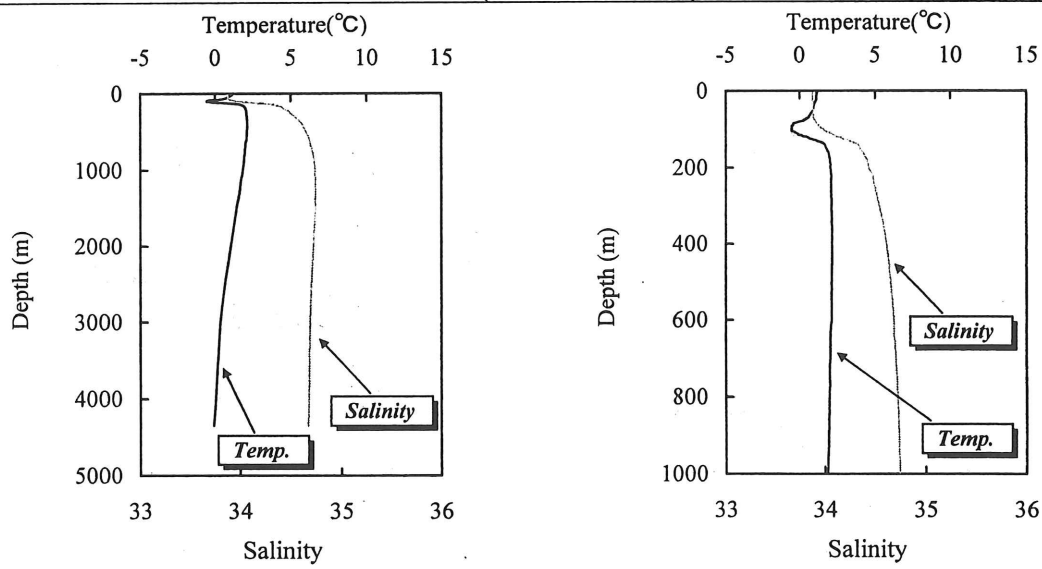




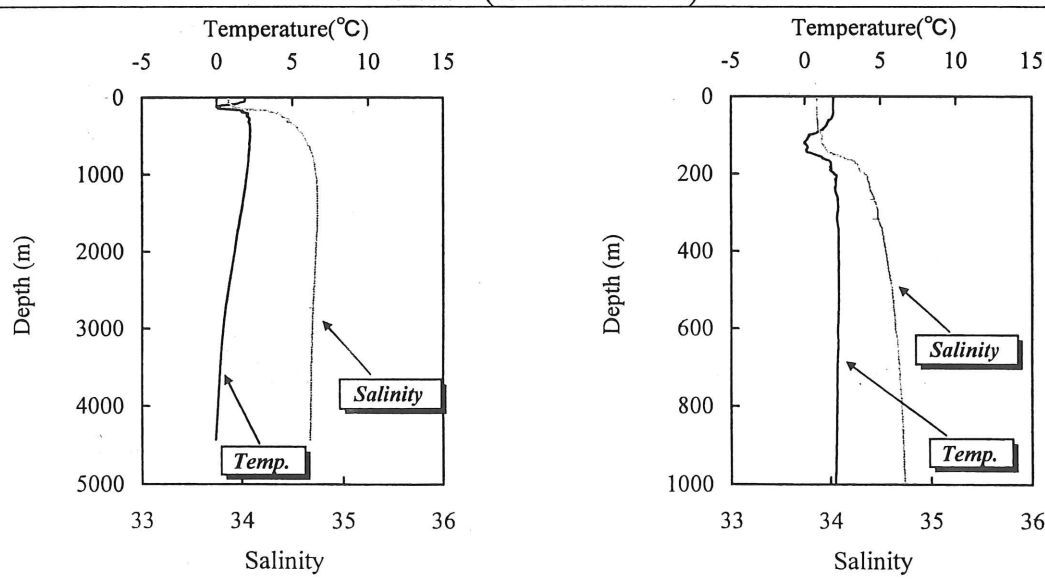
St.15 (62° S / 140° E)



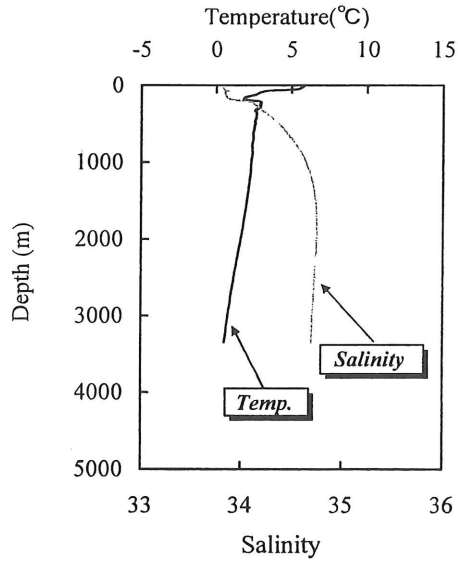
St.16 (61° S / 140° E)

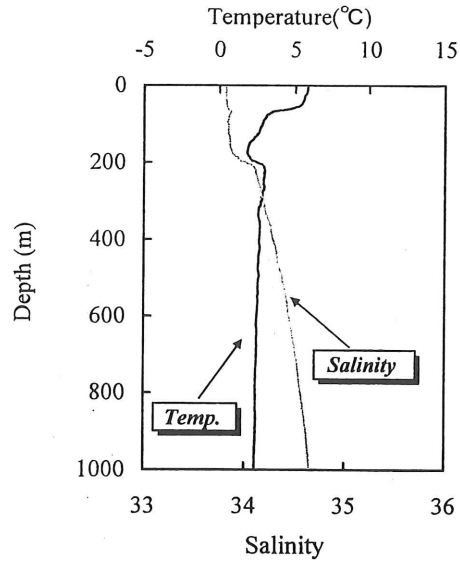


St.17 (60° S / 140° E)

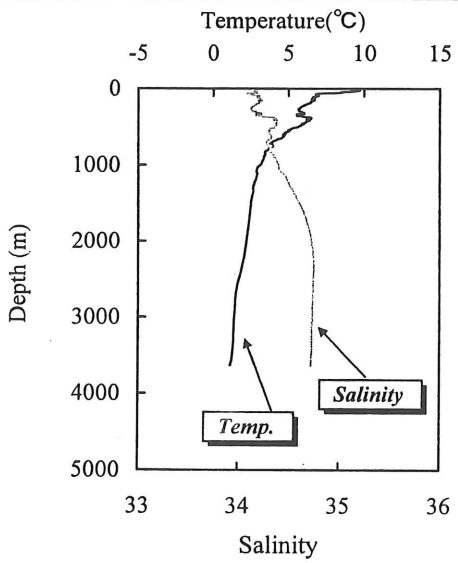


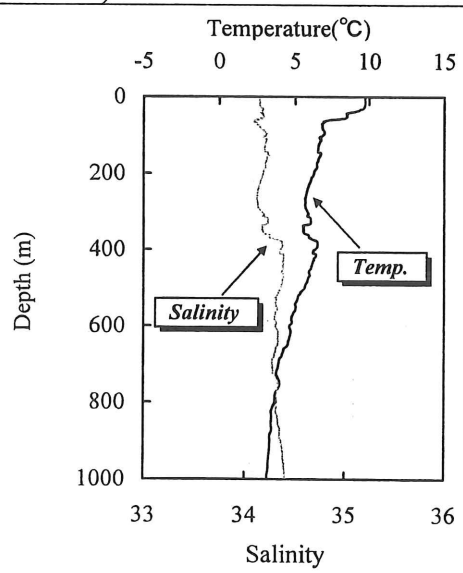
St.18 (54° S / 140° E)



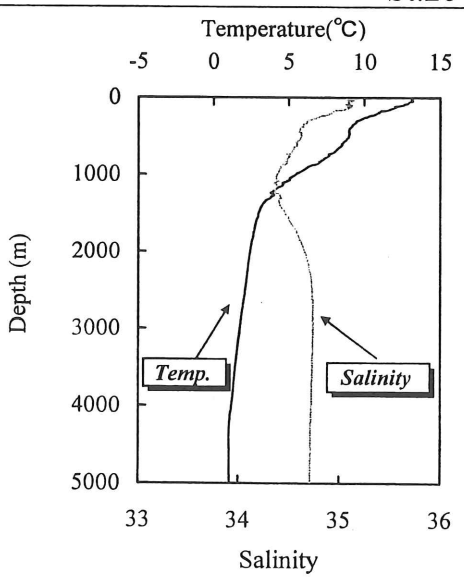


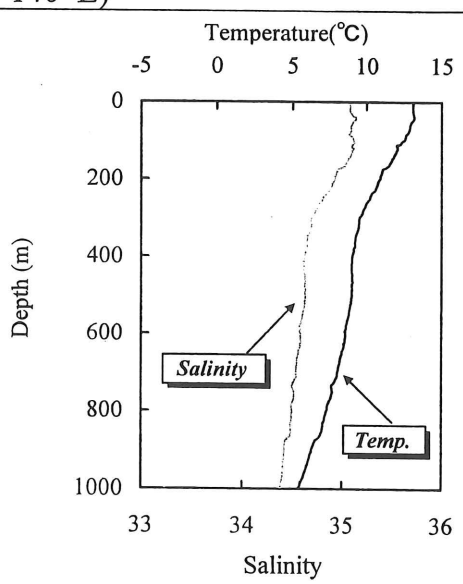
St.19 (50° S / 140° E)



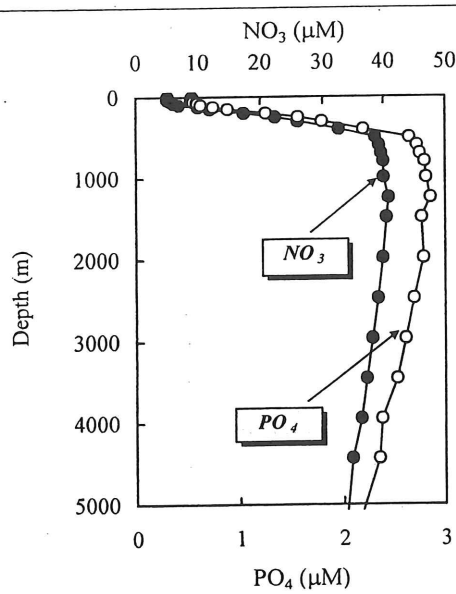


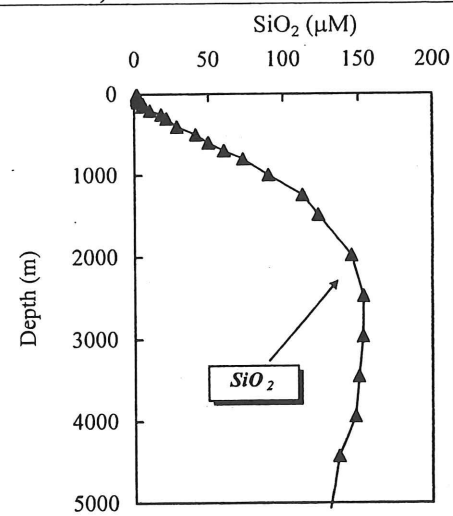
St.20 (47° S / 140° E)



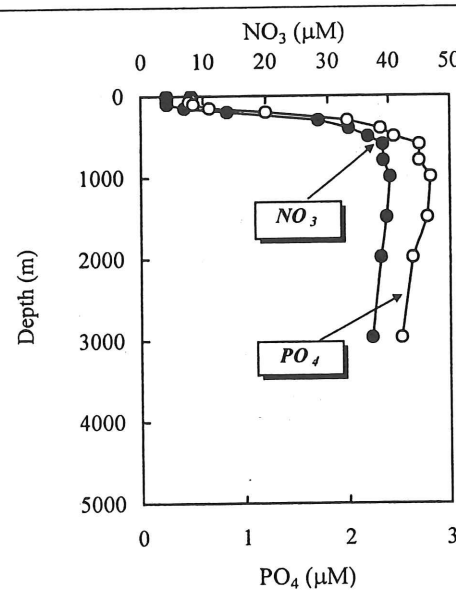


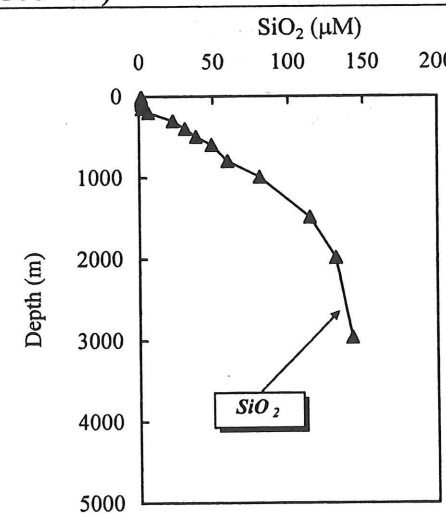
St.1 (0° N / 160° W)



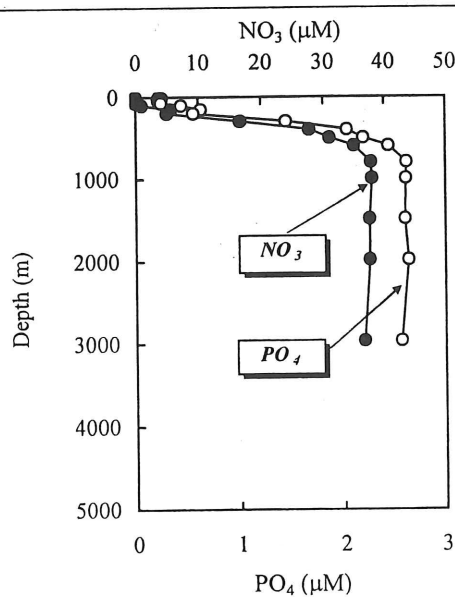


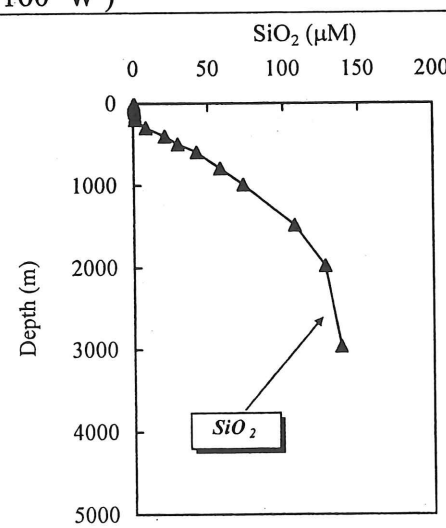
St.2 (5° S / 160° W)



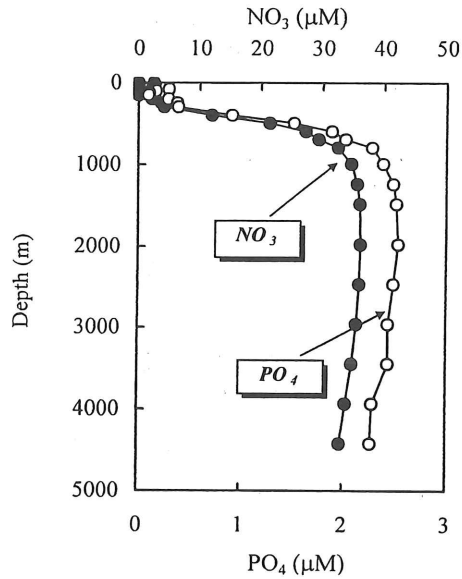


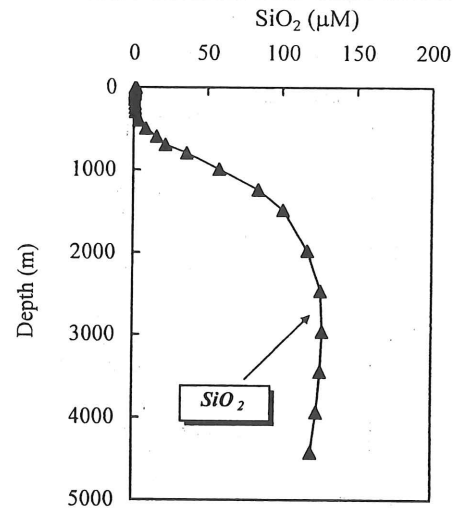
St.3 (10° S / 160° W)



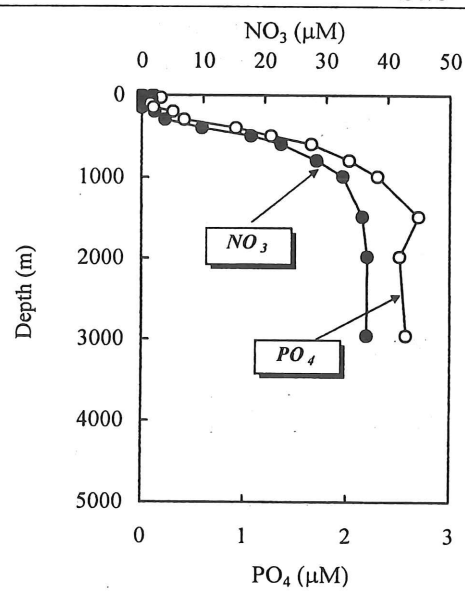


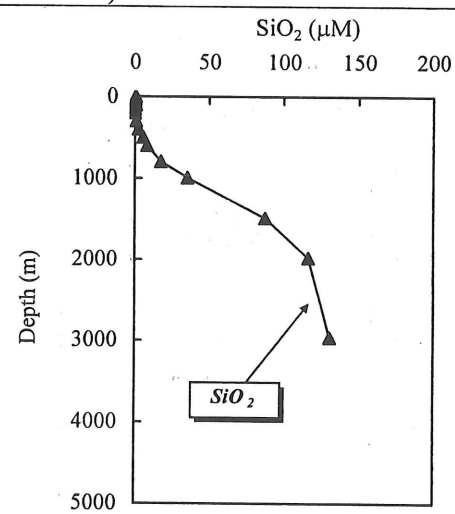
St.5 (20° S / 160° W)



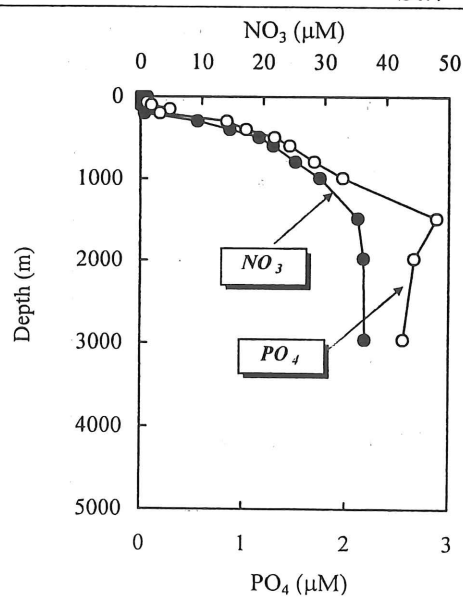


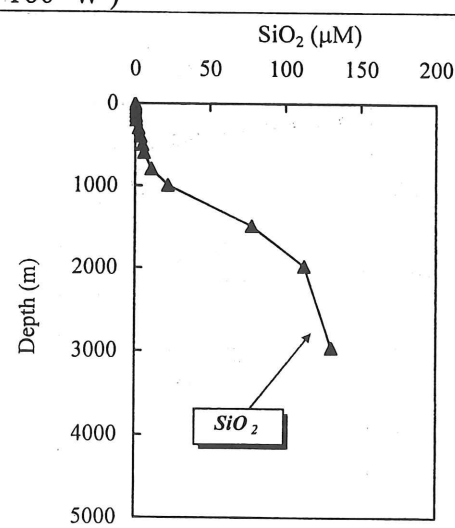
St.6 (25° S / 160° W)



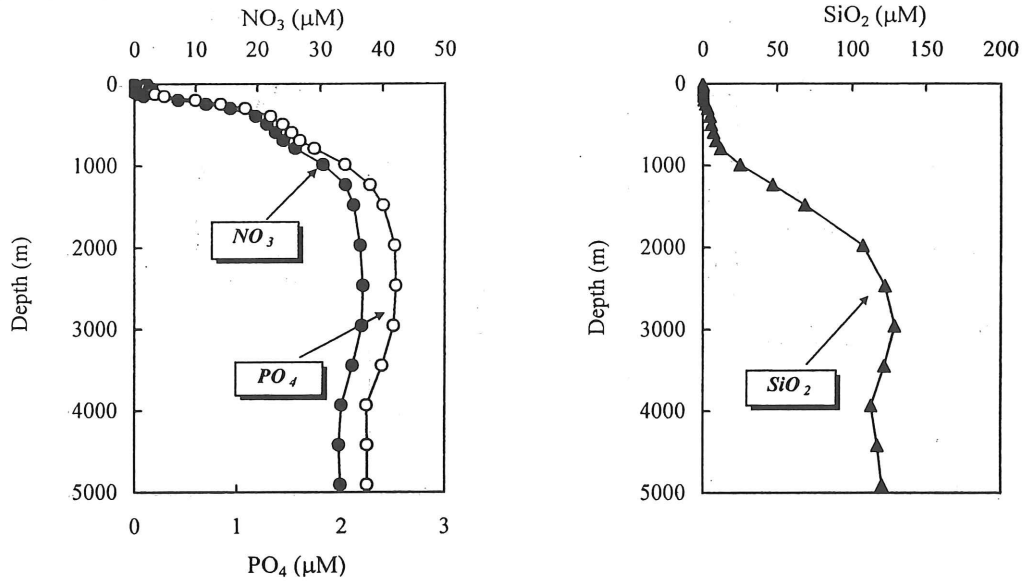


St.7 (30° S / 160° W)

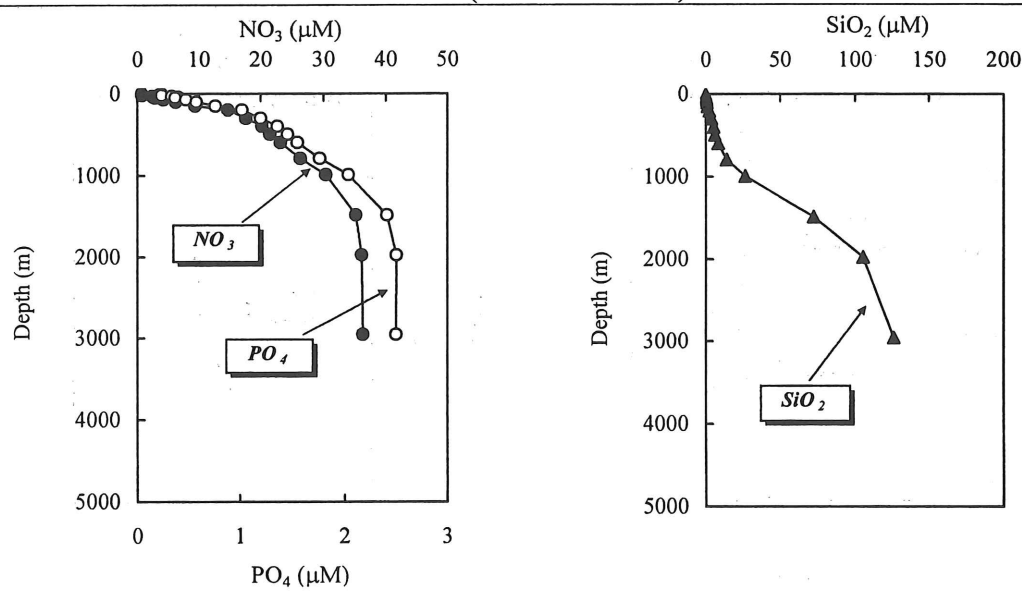




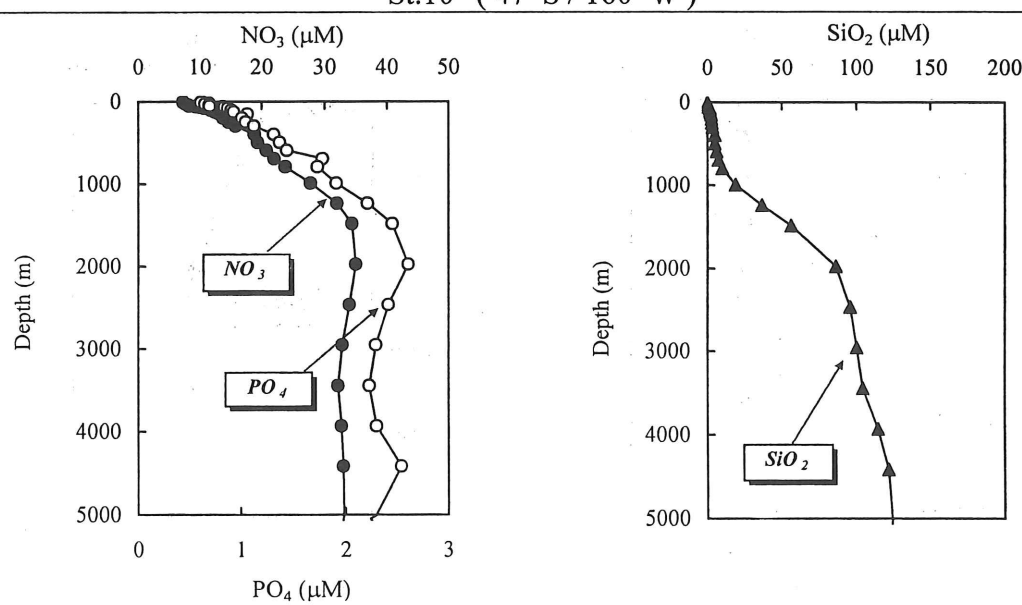
St.8 (35° S / 160° W)



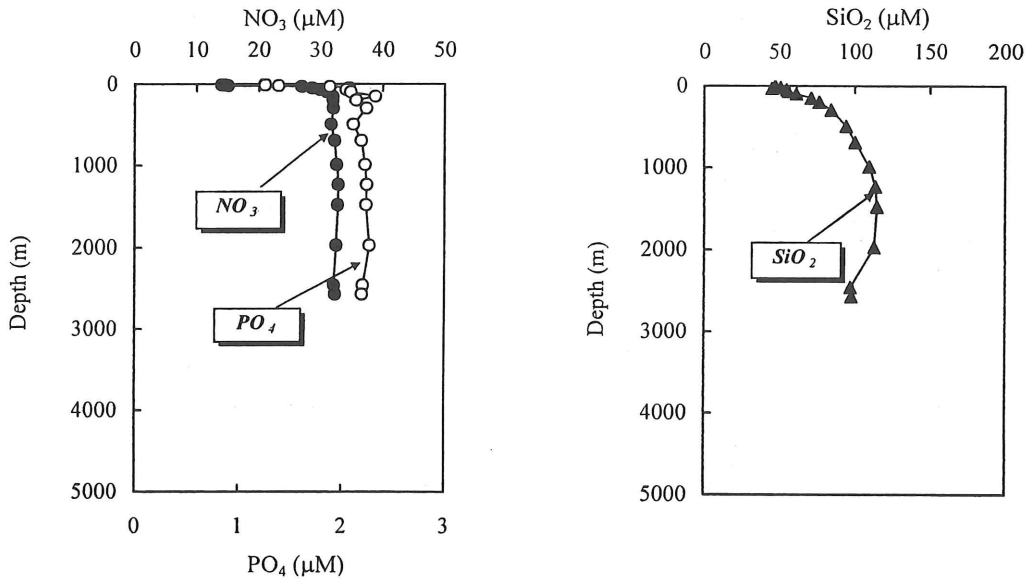
St.9 (40° S / 160° W)



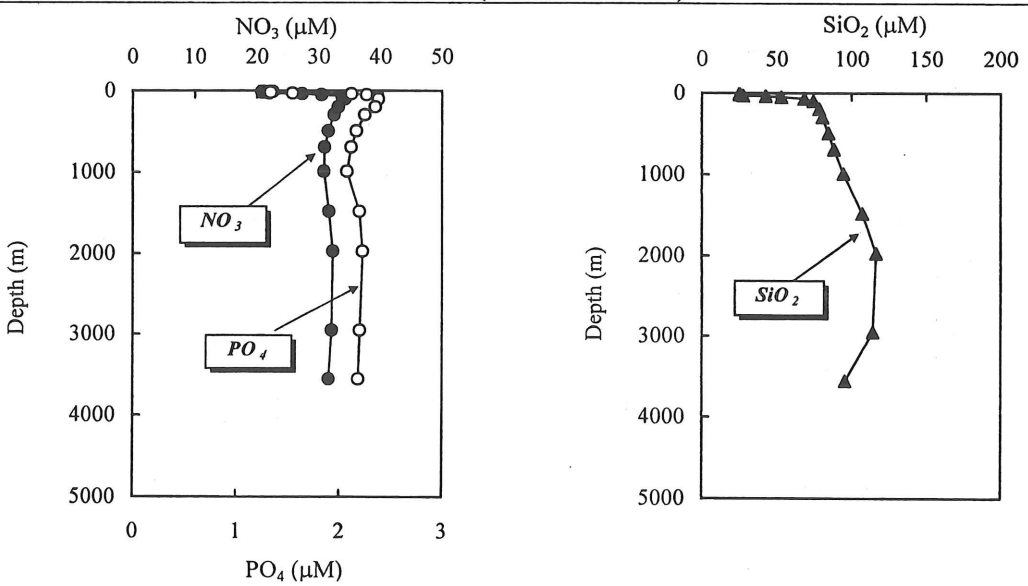
St.10 (47° S / 160° W)



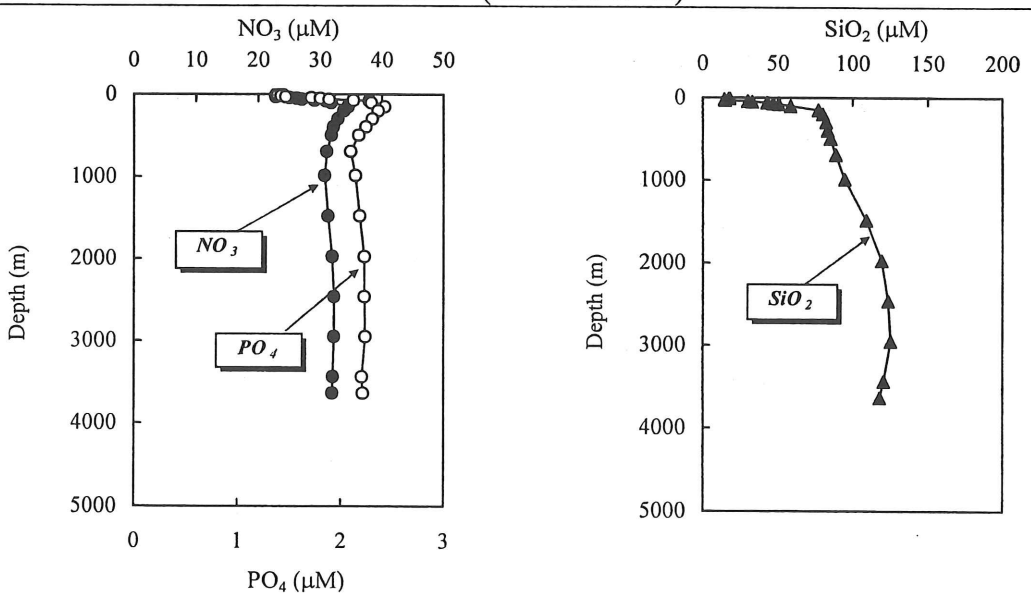
St.12 (65° S / 140° E)



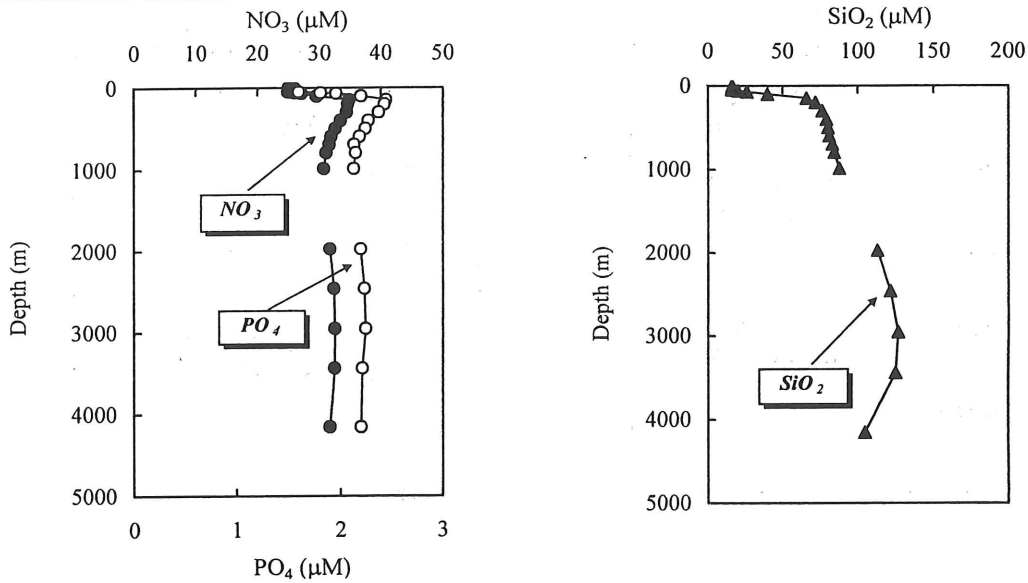
St.13 (64° S / 140° E)



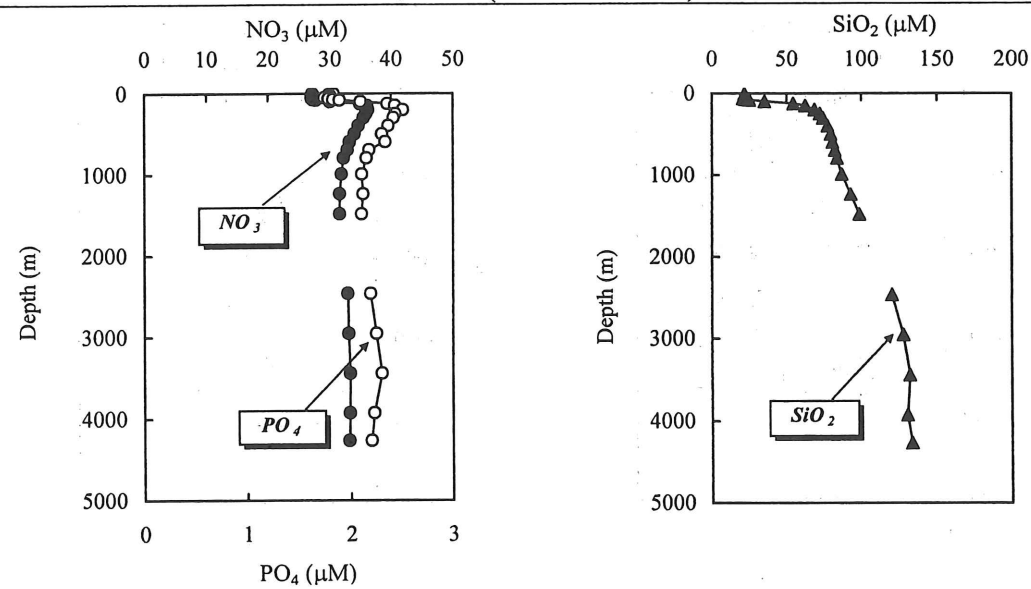
St.14 (63° S / 140° E)



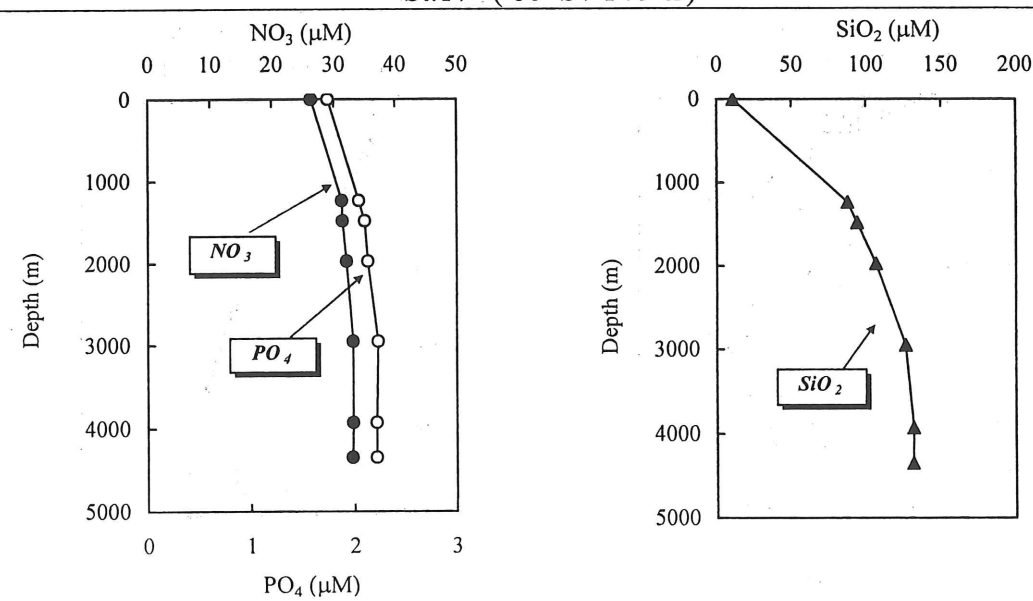
St.15 (62° S / 140° E)



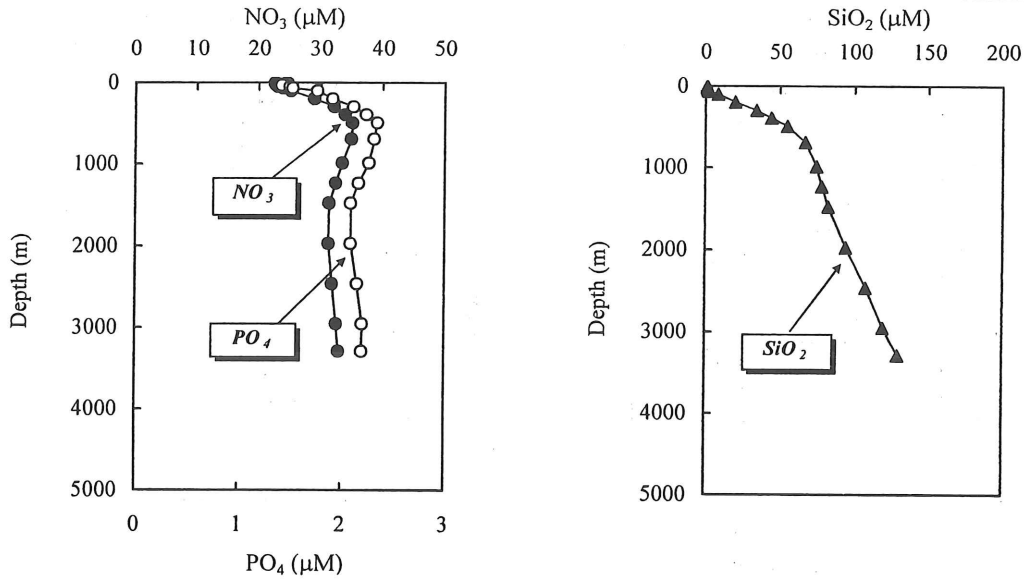
St.16 (61° S / 140° E)



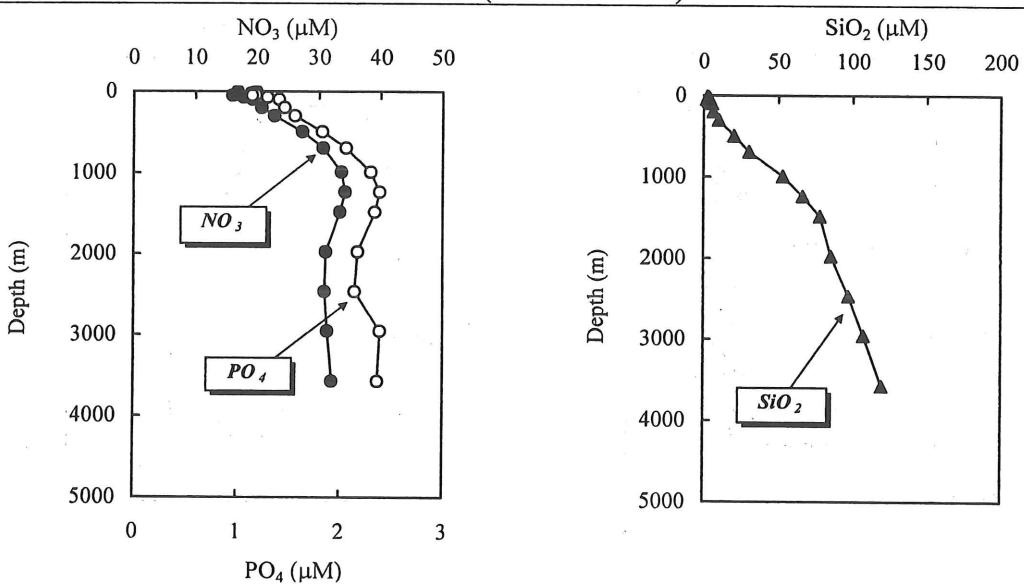
St.17 (60° S / 140° E)



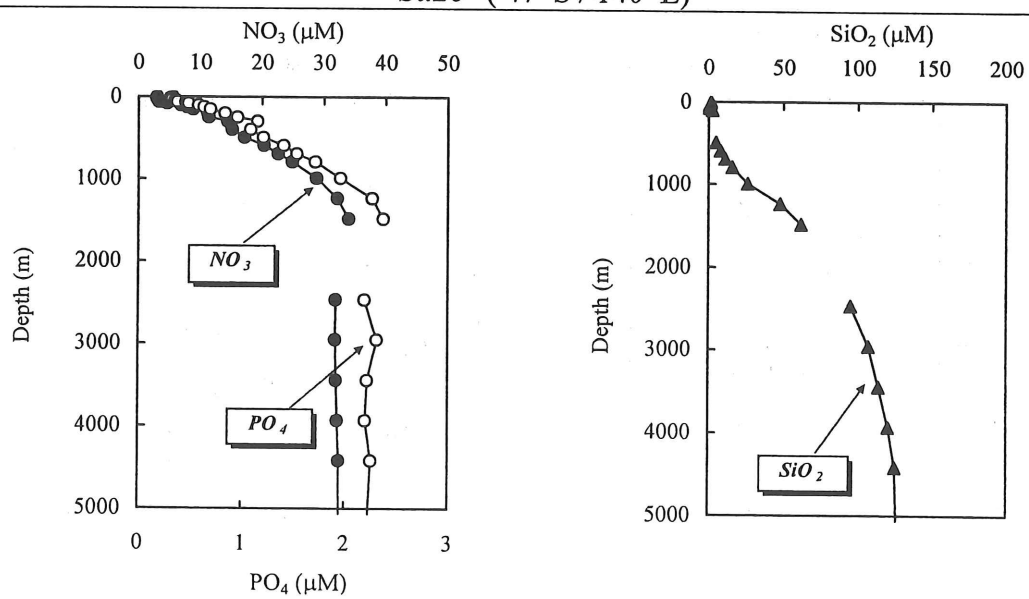
St.18 (54° S / 140° E)



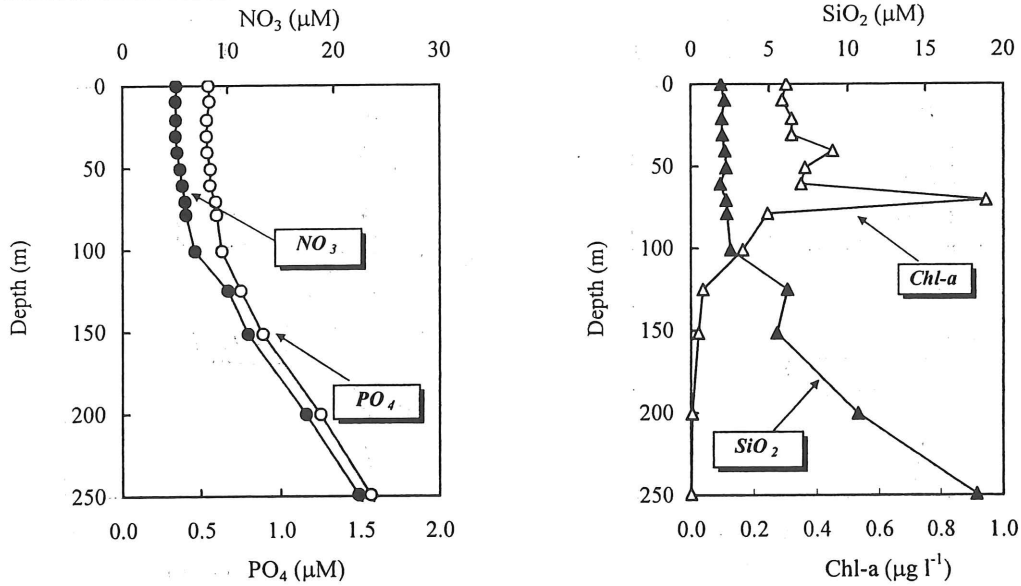
St.19 (50° S / 140° E)



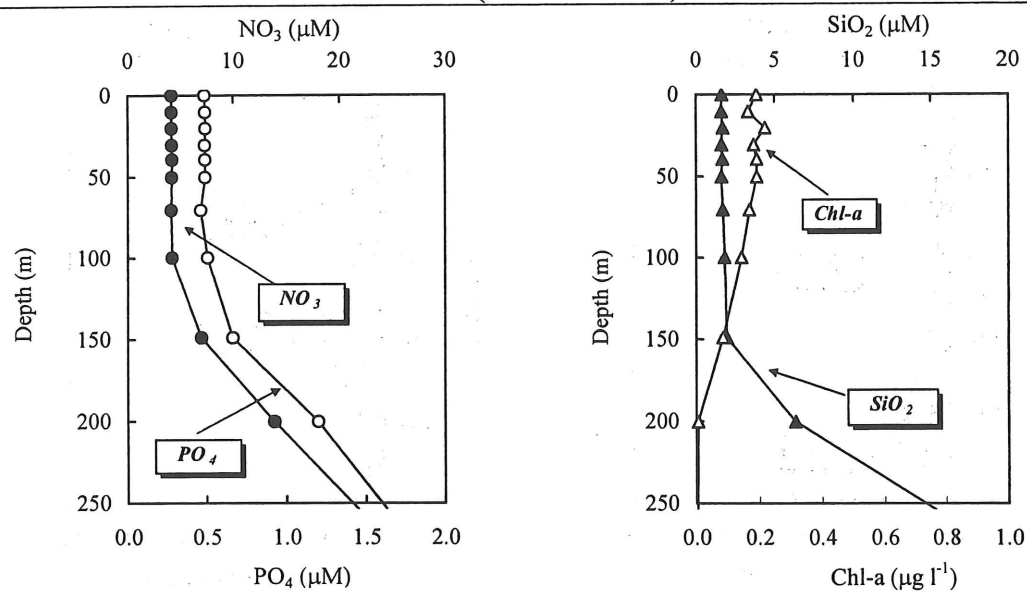
St.20 (47° S / 140° E)



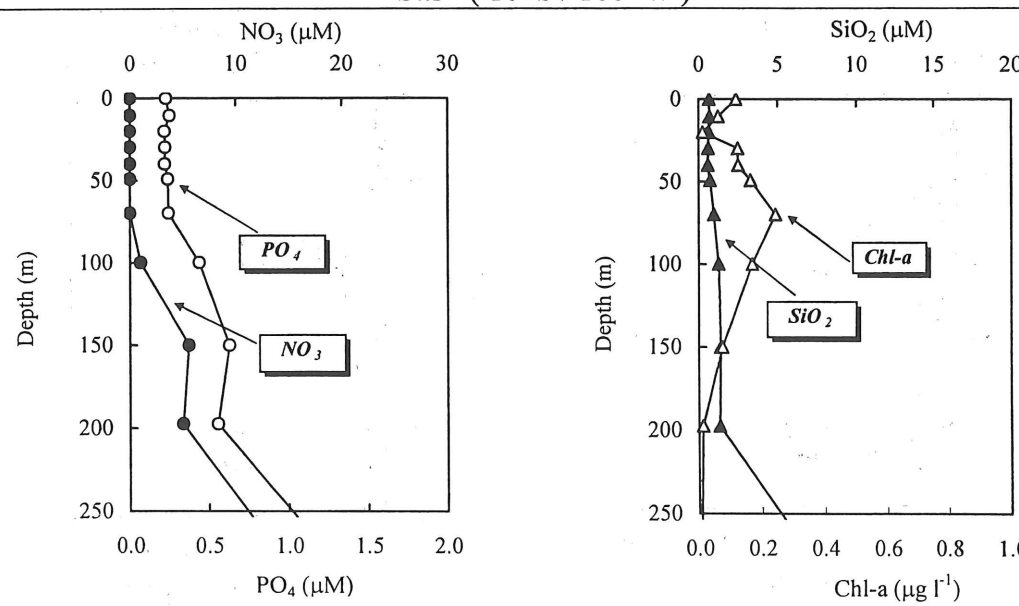
St.1 (0° N / 160° W)



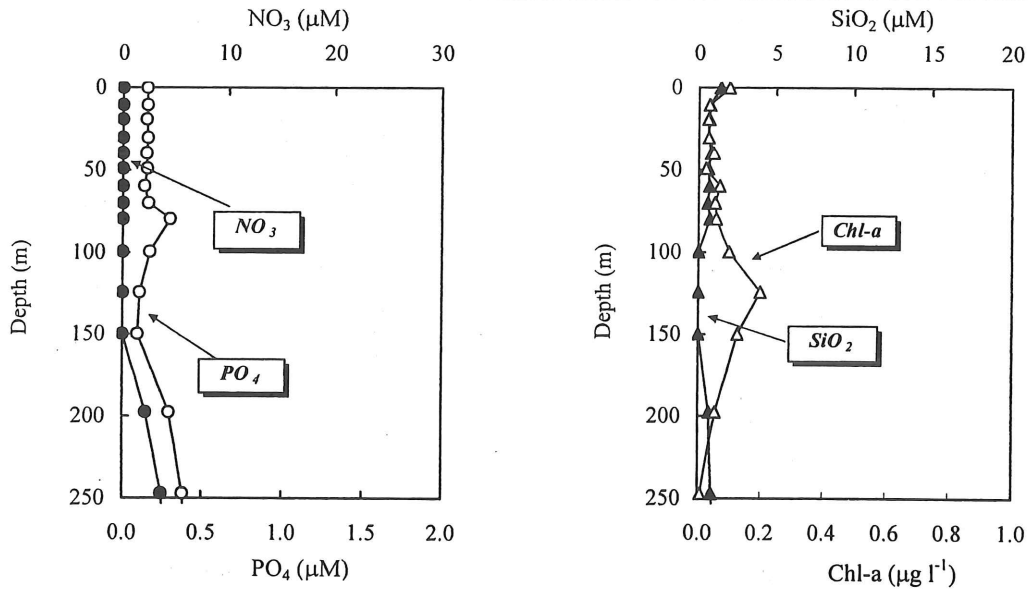
St.2 (5° S / 160° W)



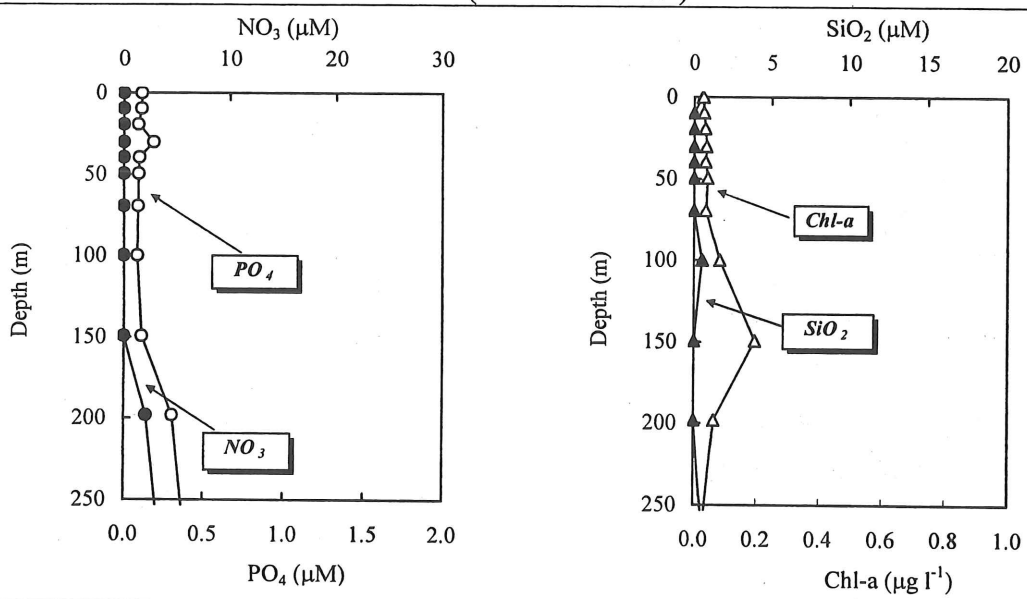
St.3 (10° S / 160° W)



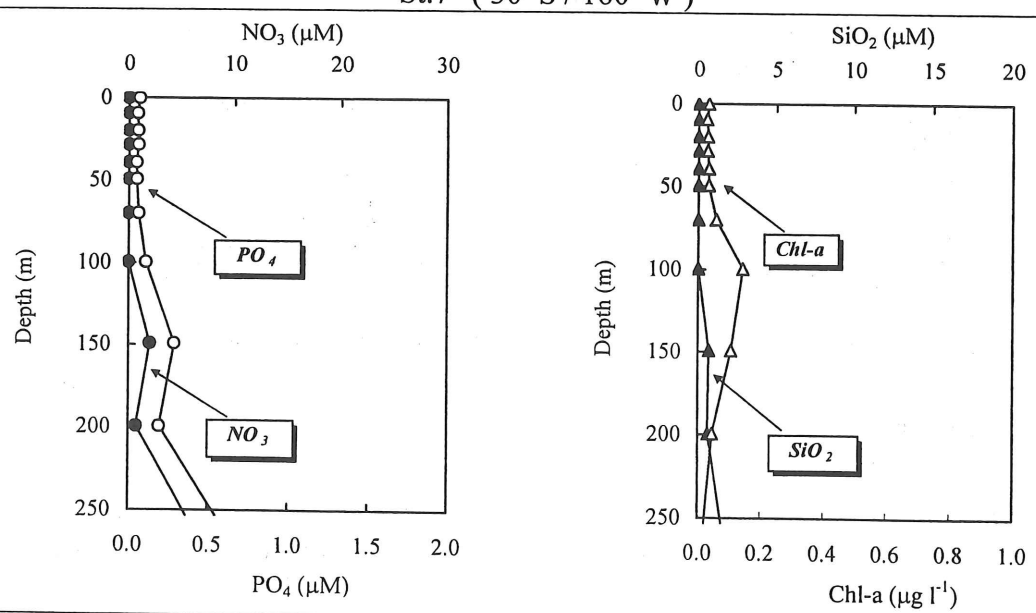
St.5 (20° S / 160° W)



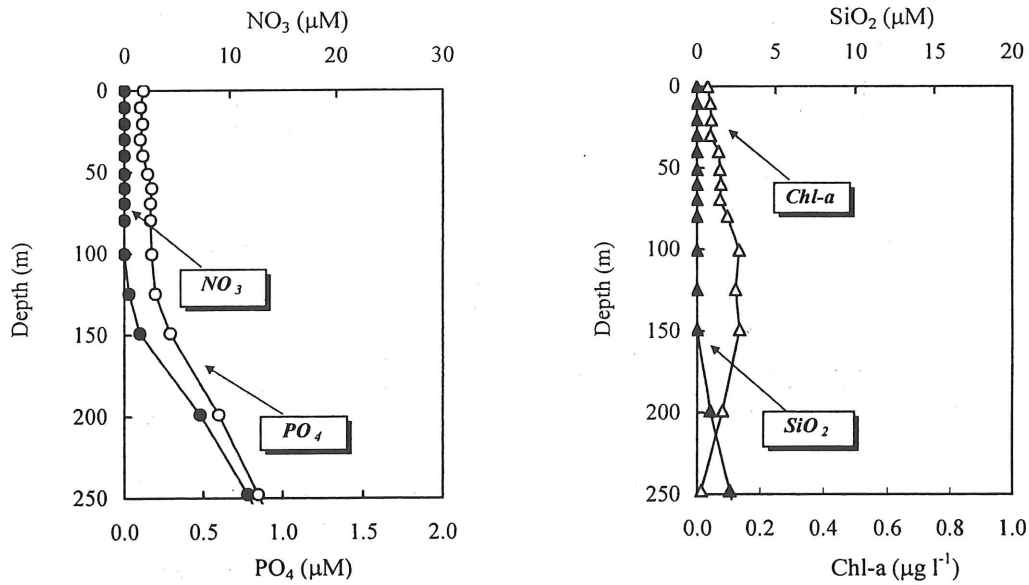
St.6 (25° S / 160° W)



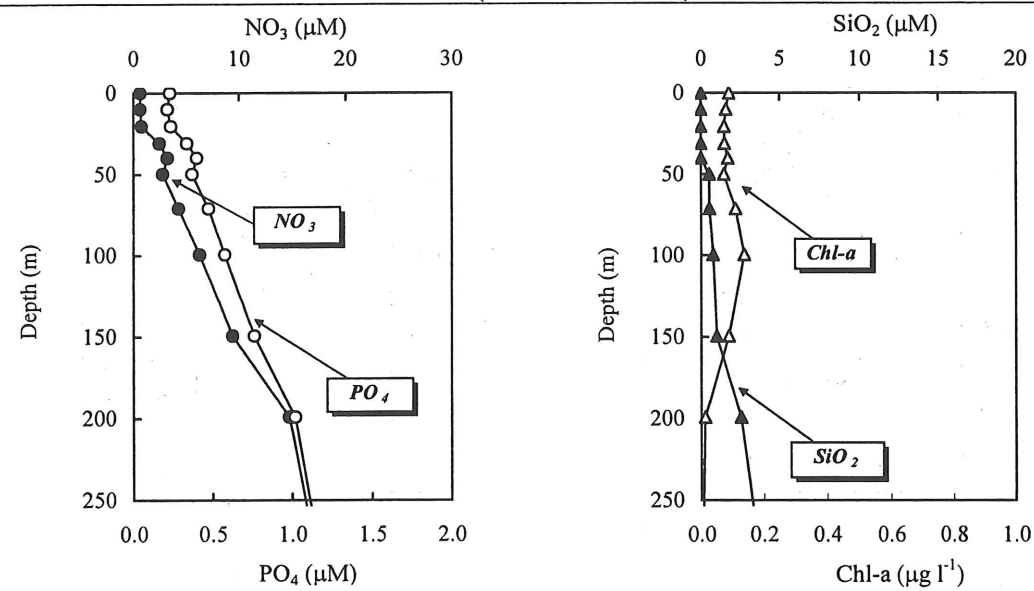
St.7 (30° S / 160° W)



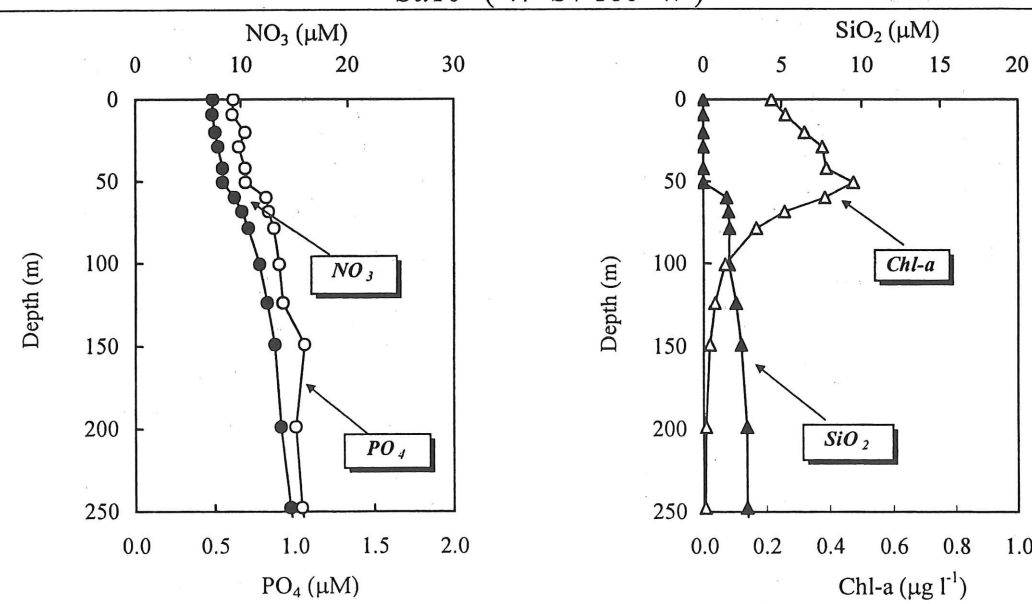
St.8 (35° S / 160° W)



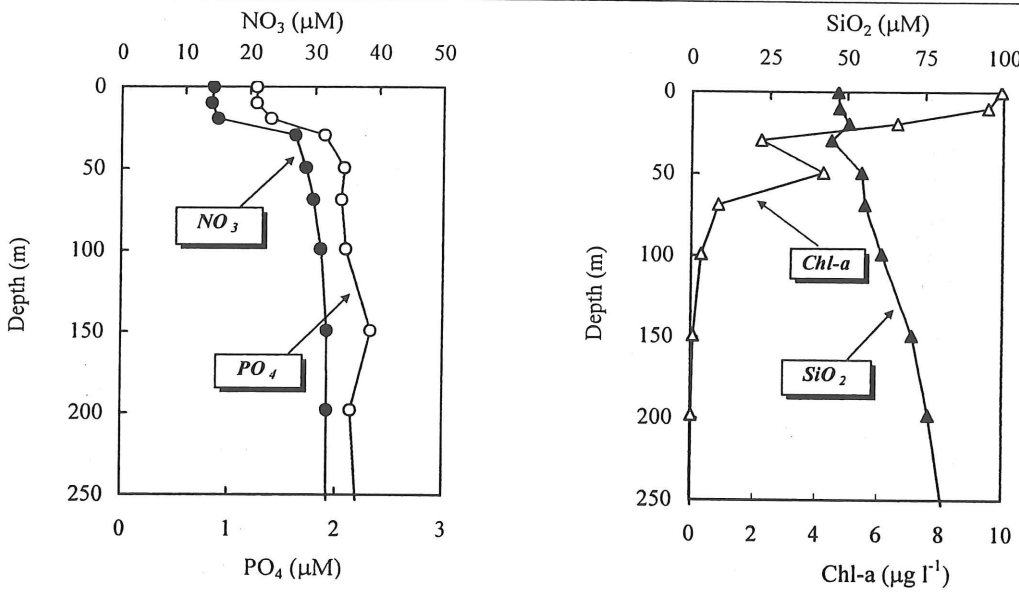
St.9 (40° S / 160° W)



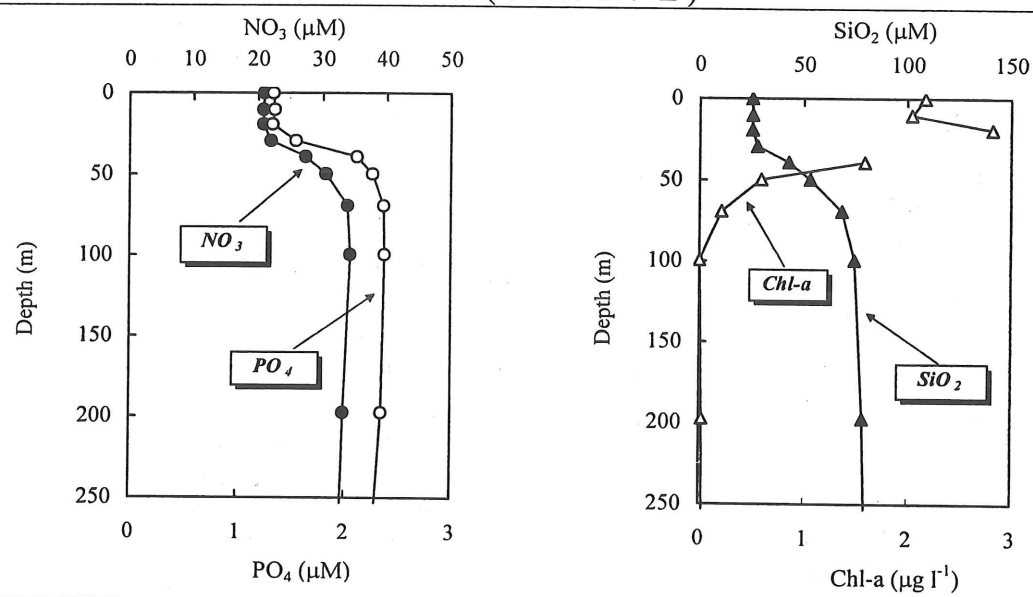
St.10 (47° S / 160° W)



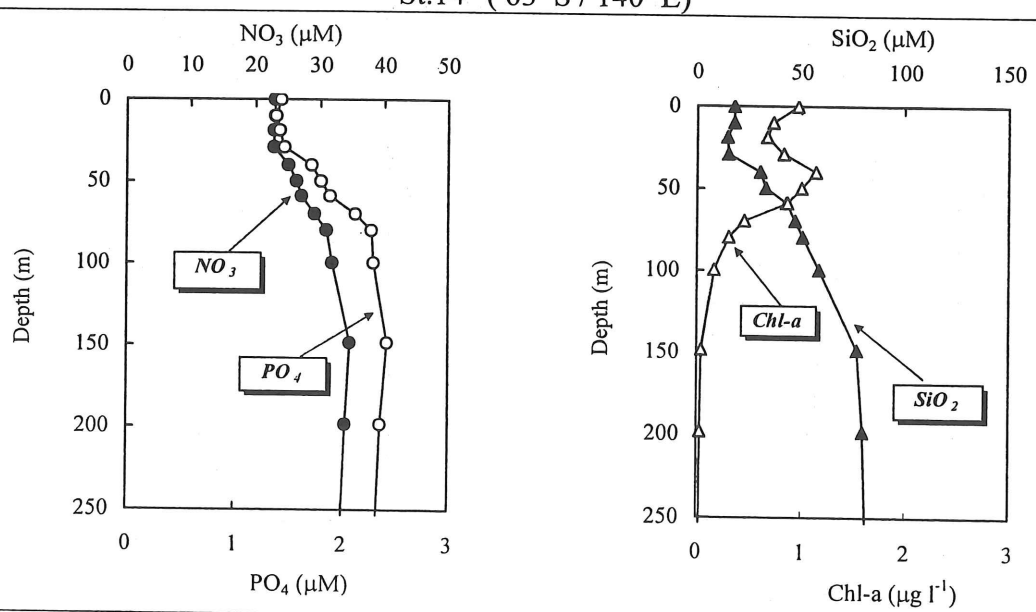
St.12 (65° S / 140° E)



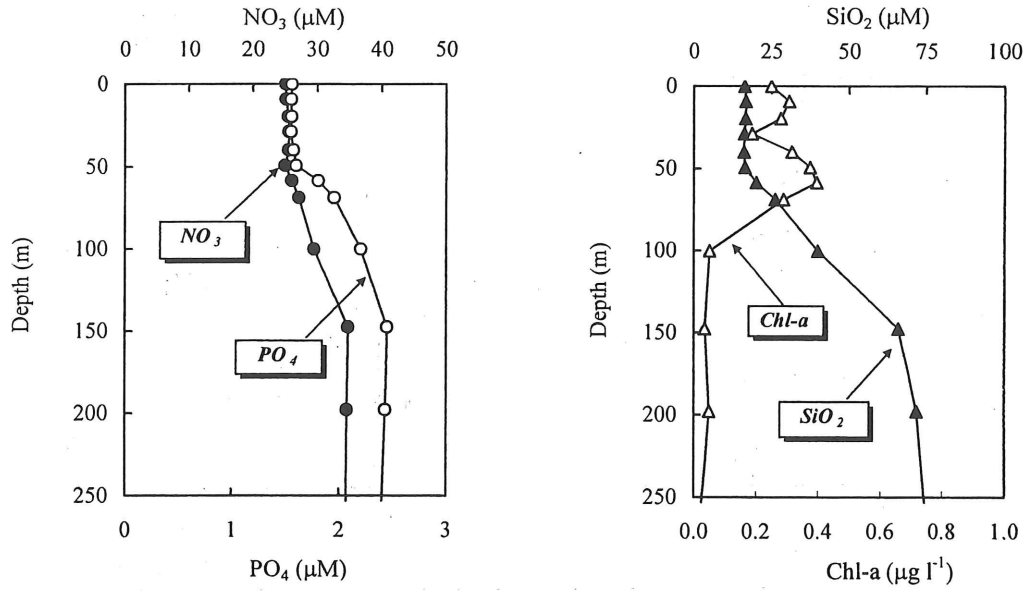
St.13 (64° S / 140° E)



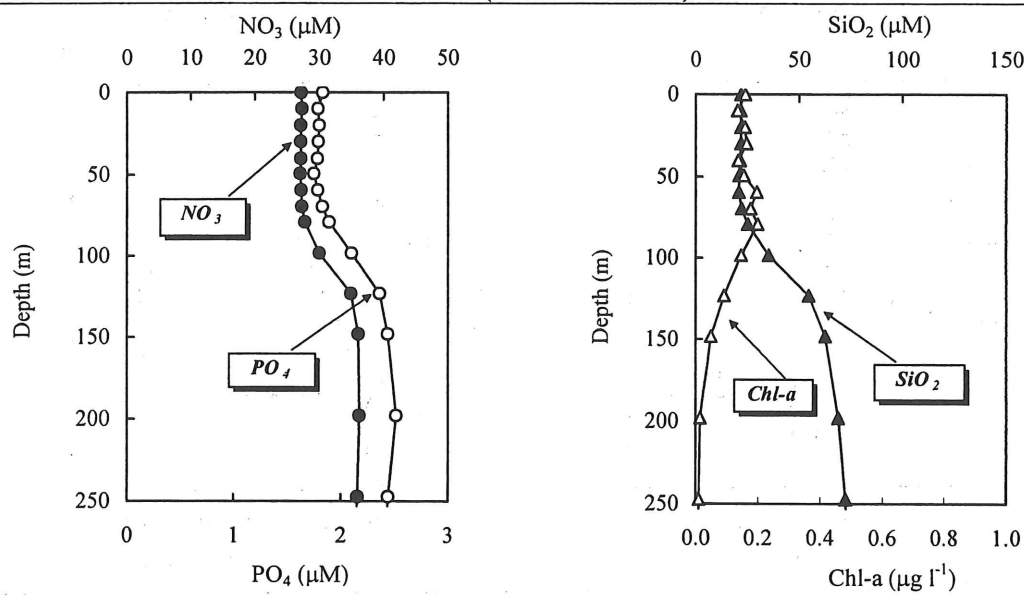
St.14 (63° S / 140° E)



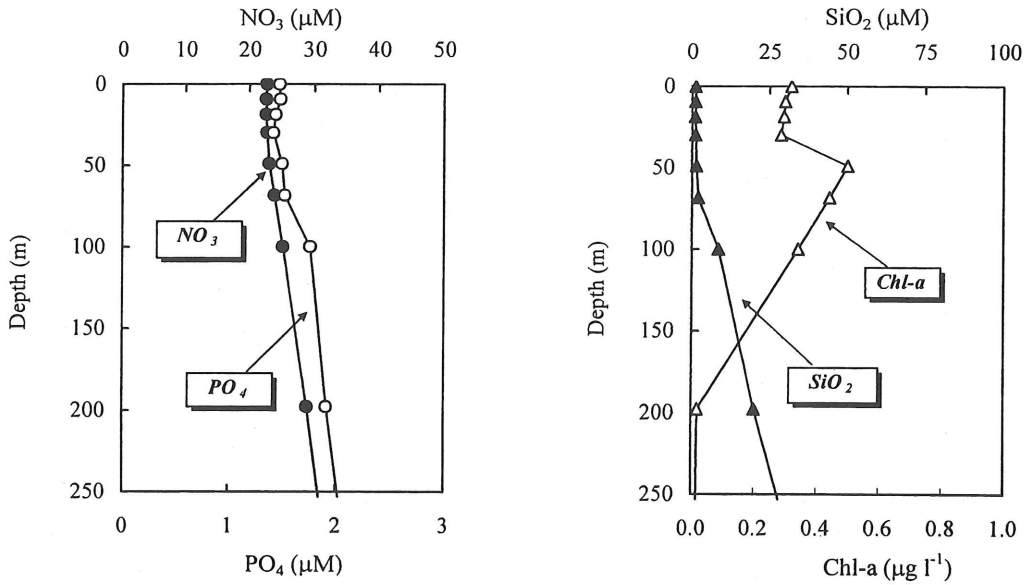
St.15 (62° S / 140° E)



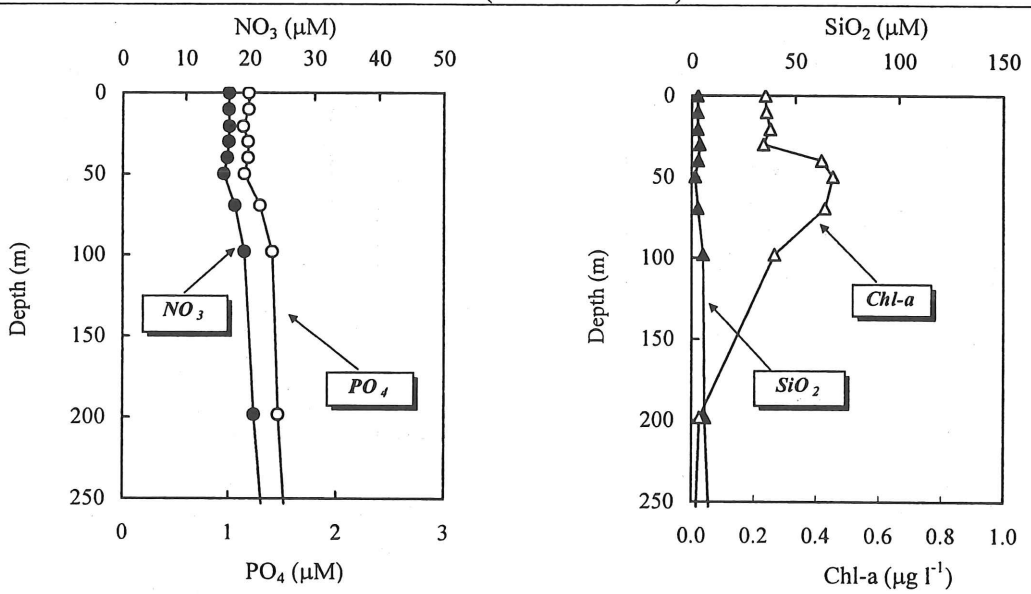
St.16 (61° S / 140° E)



St.18 (54° S / 140° E)



St.19 (50° S / 140° E)



St.20 (47° S / 140° E)