

No.	Station No.	Latitude	Longitude	Date	Time	Operations
1	CTD_001	00-00.161N	80-30.036E	20110925	03:45	CTD up to 500m. Water samples at SCM (70m) and surface.
2	CTD_002	00-00.122S	80-30.152E	20110925	06:05	CTD up to 1000 m. Mid-day Deep cast Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60m, and 55m (SCM) for biological and chemical analysis.
3	CTD_003	00-00.318N	80-29.934E	20110925	09:17	CTD up to 500m. 3-hourly cast combined with Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m) (shallow cast), SCM (50m) and surface (3-hourly cast).
4	CTD_004	00-00.468N	80-30.172E	20110925	12:24	CTD up to 500 m. Water sampling up to 150m. Water samples collected at 150, 120, 100, 80, 60m, 57 (SCM) 40, 20, 10m, surface.
5	CTD_005	00-00.048N	80-30.029E	20110925	15:35	CTD up to 500 m. Water samples at SCM (70m) and surface.
6	CTD_006	00-00.054N	80-29.953E	20110925	18:30	CTD up to 500 m. Water sampling up to 150m at standard depths and SCM (68).
7	CTD_007	00-00.151N	80-29.917E	20110925	21:45	CTD up to 500 m. Water sampling at SCM (60m) and surface.
8	CTD_008	00-00.055N	80-20.940E	20110926	01:05	CTD up to 500m. Water sampling up to 150m at standard depths and SCM (58m).
9	CTD_009	00-00.126N	80-30.066E	20110926	03:59	CTD up to 500 m. Water sampling at SCM (55m) and surface.
10	CTD_010	00-00.111N	80-30.079E	20110926	06:50	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60, and 55m (SCM).
11	CTD_010S	00-00.286N	80-30.262E	20110926	08:35	CTD up to 50 m. Water samples were collected at 40, 20, 10m & surface.
12	CTD_011	00-00.020N	80-29.860E	20110926	10:50	CTD up to 500 m. Water sampling SCM (61m) and surface.
13	CTD_012	00-00.029N	80-29.988E	20110926	12:35	CTD up to 500 m. Water sampling up to 150m.
14	CTD_013	00-00.104N	80-30.037E	20110926	15:36	CTD up to 500 m. Water sampling SCM (52m) and surface.
15	CTD_014	00-00.026N	80-30.050E	20110926	18:40	CTD up to 500 m. Water sampling up to 150m and SCM (58m).
16	CTD_015PP	00-00.101N	80-29.950E	20110926	21:45	CTD up to 500 m. Water sampling up to 120m for PP (deck incubation) and for chemical and biological analysis and SCM (57m).
17	CTD_015TBC	00-00.065S	80-30.068E	20110926	23:05	CTD up to 120 m. Water sampling for TBC at standard depths and SCM (53).
18	CTD_015GZ	00-00.010N	80-30.082E	20110927	00:11	CTD up to 100 m. Water samples were collected at SCM (54m) (60 litre) for grazing experiment.

19	CTD_016 CTD_016T	00-00.053N	80-30.089E	20110927	01:35 02:45	CTD up to 500 m. Water sampling up to 150m for biological and chemical parameters. SCM (53m). CTD up to 120 m. Since the sampling bottle at 120m depth did not close, the CTD was lowered again up to 120m.
20	CTD_017	00-00.022N	80-30.032E	20110927	03:55	CTD up to 500 m. Water sampling SCM (50m) and surface.
21	CTD_018	00-00.066S	80-30.059E	20110927	06:33	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60, and 56m (SCM).
22	CTD_018S	00-00.059S	80-30.066E	20110927	08:29	CTD up to 40 m. Shallow cast. Water samples were collected at 40, 20, 10, surface (~2m).
23	CTD_019	00-00.044S	80-30.151E	20110927	10:52	CTD up to 500 m. Water sampling SCM (52m) and surface.
24	CTD_020	00-00.070N	80-30.076E	20110927	12:59	CTD up to 500 m. Water sampling up to 150m at standard depths and SCM (55m).
25	CTD_021	00-00.006N	80-29.995E	20110927	15:37	CTD up to 500m. Water sampling SCM (49m) and surface.
26	CTD_022	00-00.017N	80-30.090E	20110927	18:45	CTD up to 500 m. Water sampling up to 150m at standard depths and SCM (56m).
27	CTD_023	00-00.073N	80-29.813E	20110927	21:36	CTD up to 500 m. Water sampling at SCM (65m) and surface.
28	CTD_024	00-00.200N	80-30.070E	20110928	00:50	CTD up to 500 m. Water sampling up to 150m at standard depths and at SCM (55m).
29	CTD_025	00-00.010N	80-30.012E	20110928	03:35	CTD up to 500 m. Water sampling at SCM (57m) and surface.
30	CTD_026	00-00.037N	80-30.095E	20110928	06:40	CTD up to 1000 m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60, and 55m (SCM) for biological and chemical analysis.
31	CTD_026S	00-00.030N	80-29.923E	20110928	08:29	CTD up to 60 m. Water samples were collected at 40, 20, 10, surface (~2m).
32	CTD_027	00-00.259N	80-30.096E	20110928	10:37	CTD up to 500 m. Water sampling at SCM (56m) and surface.
33	CTD_028 CTD_028T	00-00.242N	80-30.116E	20110928	12:00 12:51	CTD up to 5000 m. Water sampling up to 150m at standard depths and at SCM (57m). CTD up to 2m for surface sampling only.
34	CTD_029	00-00.084N	80-30.160E	20110928	15:31	CTD up to 500m. Water sampling at SCM (60m) and surface.
35	CTD_030	00-00.037N	80-29.983E	20110928	19:10	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (63m).

36	CTD_031	00-00.078N	80-30.343E	20110928	23:07	CTD up to 500m. Water sampling at 150m (the missed sample at CTD 030), SCM (72m) and surface.
37	CTD_032	00-00.161N	80-30.348E	20110929	00:40	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (65m).
38	CTD_033	00-00.012N	80-30.307E	20110929	06:28	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60, and 55m (SCM) for biological and chemical analysis.
39	CTD_033S	00-00.116N	80-30.578E	20110929	11:10	CTD up to 500m. Shallow cast. Water samples were collected at SCM (59m) 40, 20, 10m, surface (~2m).
40	CTD_034	00-00.168N	80-30.247E	20110929	12:36	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (58m).
41	CTD_035	00-00.038S	80-30.072E	20110929	15:40	CTD up to 500m. Water sampling at SCM (65m) and surface.
42	CTD_036	00-00.067N	80-30.168E	20110929	18:40	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (73m). Water sample at 20m was not collected as the bottle opening mechanism got stuck.
	CTD_036S				01:42	CTD up to 20m. Water sampling at 20m.
43	CTD_037	00-00.024N	80-30.103E	20110929	22:25	CTD up to 500m. Water sampling at SCM (70m) and surface.
44	CTD_038	00-00.010S	80-30.356E	20110930	00:46	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (65m).
45	CTD_039	00-00.013S	80-30.010E	20110930	03:38	CTD up to 500m. Water sampling at SCM (68m) and surface.
46	CTD_040	00-00.008N	80-29.999E	20110930	06:39	CTD040 up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60m (SCM) for biological and chemical analysis.
47	CTD_040S	00-00.062N	80-30.053E	20110930	08:17	CTD up to 50m. Shallow cast. Water samples were collected at 40, 20, 10m, surface (~2m).
48	CTD_041	00-00.101N	80-30.053E	20110930	10:05	CTD up to 500m. Water sampling at SCM (60m) and surface.
49	CTD_042	00-00.085N	80-30.072E	20110930	12:25	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (67m).
50	CTD_043	00-00.071N	80-03.059E	20110930	15:42	CTD up to 500m. Water sampling at SCM (60m) and surface.
51	CTD_044	00-00.035N	80-29.995E	20110930	18:50	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (67m).

52	CTD_045	00-00.197N	80-29.971E	201109	21:25	CTD up to 500m. Water sampling for PP up to 120m and regular SCM (76m) and surface.
53	CTD_045G	00-00.026N	80-30.014E	201109	22:37	CTD up to 100m. Water sampling from SCM (73m) 60 litres.
54	CTD_046	00-00.198N	80-30.200E	20111001	00:35	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (70m).
55	CTD_047	00-00.084N	80-30.050E	20111001	03:35	CTD up to 500m. Water sampling at SCM (74m) and surface.
56	CTD_048	00-00.015N	80-30.077E	20111001	06:40	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 69m (SCM), 60m for biological and chemical analysis.
57	CTD_048S	00-00.014N	80-30.077E	20111001	08:09	CTD048S up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
58	CTD_049	00-00.024N	80-30.053E	20111001	09:53	CTD up to 500m. Water sampling at SCM (73m) and surface.
59	CTD_050	00-00.090N	80-30.013E	20111001	12:32	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (69m).
60	CTD_051	00-00.019N	80-30.072E	20111001	15:34	CTD up to 500m. Water sampling at SCM (70m) and surface.
61	CTD_052	00-00.048N	80-30.010E	20111001	18:50	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (76m).
62	CTD_053	00-00.196N	80-29.974E	20111001	21:45	CTD up to 500m. Water sampling was for SCM (68m) and surface. CTD went up to 500m and while coming up it stopped, a sound came from deck unit and showed a "timeout communication" at 0335 hrs. Data acquisition was terminated and restarted. There was fume from the deck unit and hence CTD operation was abandoned and underwater unit was brought to deck at 03:57 hrs without collecting water samples. (00:20 CTD was rectified.)
63	CTD_054	00-00.122N	80-29.801E	20111002	02:19	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (73m).
64	CTD_055	00-00.008N	80-30.025E	20111002	06:37	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 65 (SCM), 60m for biological and chemical analysis.
65	CTD_055s	00-00.342N	80-30.383E	20111002	08:50	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).

66	CTD_056	00-00.252N	80-30.653E	20111002	11:13	CTD up to 500m. Water sampling at SCM (64m) and surface.
67	CTD_057	00-00.012N	80-30.053E	20111002	12:36	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (65m).
68	CTD_058	00-00.036N	80-30.157E	20111002	15:55	CTD up to 500m. Water sampling at SCM (66m) and surface.
69	CTD_059	00-00.106N	80-30.114E	20111002	18:48	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (62m).
70	CTD_060	00-00.185N	80-30.151E	20111002	21:49	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (65m).
71	CTD_061	00-00.068N	80-30.337E	20111003	00:53	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (65m).
72	CTD_062	00-00.323N	80-30.226E	20111003	03:40	CTD up to 500m. Water sampling at SCM (63m) and surface. Down cast SCM (63m), Up cast SCM (60m).
73	CTD_063	00-00.173N	83-00.059E	20111004	03:45	CTD up to 500,. Water sampling at SCM (68m) and surface.
74	CTD_064	00-00.019N	83-00.077E	20111004	06:42	CTD up to 1000m. Mid-day deep cast. Water samples were collected at 1000m, 800, 600, 400, 300, 200, 150, 120, 100, 80, 76m (SCM) for biological and chemical analysis. By mistake bottle No. 8 was fired at 410m depth; hence bottle No. 10 was fired at 400m to get the sample.
75	CTD_064S	00-00.203N	83-00.048E	20111004	08:42	CTD up to 80m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).
76	CTD_065	00-00.203N	83-00.145E	20111004	11:07	CTD up to 500m. Water sampling at SCM (76m) and surface.
77	CTD_066	00-00.114N	83-00.140E	20111004	12:35	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (77m). After stabilization at 10m when CTD was brought to surface it came out of the water. Hence it was sent to 10m again for stabilization.
78	CTD_067	00-00.001N	83-00.031E	20111004	15:37	CTD up to 500m. Water sampling at SCM (76m) and surface. Down cast SCM at 76m and Up cast SCM at 70m. Water samples for biology and chemistry was collected. SCM samples were collected from the location of SCM obtained from both down and up cast.
79	CTD_068	00-00.068N	83-00.005E	20111004	18:40	CTD068 up to 500m. Water sampling up to 150m at standard depths and at SCM (81m). Down cast SCM at 81m and up cast SCM at 76m. Water samples for biology and chemistry was collected at 76m. Vertical spike in the pressure sensor at nearly 70m while heaving.

80	CTD_069	00-00.041N	82-59.998E	20111004	21:42	CTD up to 500m. Water sampling at SCM (80m) and surface. Down cast SCM at 80m and Up cast SCM at 71m. Samples were collected for biology and chemistry at 71m.
81	CTD_070	00-00.197N	83-00.017E	20111005	00:35	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (75m).
82	CTD_071	00-00.010N	83-00.065E	20111005	03:35	CTD up to 500m. Water sampling at SCM (72m) and surface. Down cast SCM at 72m and Up cast SCM at 71m. Samples were collected for biology and chemistry at 71m.
83	CTD_072	00-00.037N	83-00.012E	20111005	06:35	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, SCM (72m) for biological and chemical analysis. SCM was at 81m during down cast and 72m during up cast.
84	CTD_072S	00-00.294N	83-00.079E	20111005	09:10	CTD up to 100m. Shallow cast. Water samples were collected at 60m, 40m, 20m, 10m, surface (~2m).
85	CTD_073	00-00.294N	83-00.079E	20111005	11:38	CTD up to 500m. Water sampling at SCM (64m) and surface. Down cast SCM at 68m and Up cast SCM at 64m.
86	CTD_074	00-00.089S	83-00.074E	20111005	12:55	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (67m). Downcast SCM was at 70m and up cast SCM was at 67m.
87	CTD_075	00-00.041S	83-00.023E	20111005	15:27	CTD up to 500m. Water sampling at SCM (60m) and surface. Down cast SCM at 67m and Up cast SCM at 60m.
88	CTD_076	00-00.059S	83-00.054E	20111005	18:37	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (69m). Down cast SCM was and up cast SCM was at 69m. There was problem of large wire angle throughout the operation. CTD was stopped at ~ 350m and then it came up to ~250m. It was again lowered up to 500m.
89	CTD_077	00-00.043N	83-00.079E	20111005	21:50	CTD up to 500m. Water sampling at SCM (64m) and surface. Both down cast as well as up cast SCM was at 64m.
90	CTD_078	00-00.077N	83-00.124E	20111006	00:34	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (64m). Down cast SCM was at 68m and up cast SCM was at 64m.
91	CTD_079	00-00.059N	83-00.102E	20111006	03:34	CTD up to 500m. Water sampling at SCM (66m) and surface. SCM down cast at 69m and up cast SCM at 66m.
92	CTD_080	00-00.022N	83-00.069E	20111006	06:40	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at

						1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, SCM (67m) for biological and chemical analysis. SCM was at 80m during down cast and 67m during up cast.
93	CTD_080S	00-00.024N	83-00.076E	20111006	08:10	CTD up to 100m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
94	CTD_081	00-00.001S	82-59.992E	20111006	09:51	CTD up to 500m. Water sampling at SCM (65m) and surface. SCM down cast at 70m and up cast SCM at 65m.
95	CTD_082	00-00.022N	83-00.056E	20111006	12:27	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (68m). Down cast SCM was at 74m and up cast SCM was at 68m.
96	CTD_083	00-00.078N	83-00.052E	20111006	15:35	CTD up to 500m. Water sampling at SCM (74m, 71m) and surface. SCM down cast at 74m and up cast SCM at 71m.
97	CTD_084	00-00.023N	83-00.014E	20111006	18:41	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (72m & 68m). Down cast SCM was at 72m and up cast SCM was at 68m.
98	CTD_085	00-00.198N	83-00.067E	20111006	21:37	CTD up to 500m. Water sampling at SCM (68m) and surface. SCM both down cast and up cast SCM at 68m.
99	CTD_086	00-00.029N	83-00.136E	20111007	00:35	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (72m & 68m). Down cast SCM was at 72m and up cast SCM was at 68m.
100	CTD_087	00-00.012N	83-00.096E	20111007	03:30	CTD up to 500m. Water sampling at SCM (77 & 68m) and surface. Down cast SCM was at 77m and up cast SCM was at 68m.
101	CTD_088	00-00.052N	83-00.224E	20111007	07:03	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, SCM (83m & 80m) for biological and chemical analysis. SCM was at 83m during down cast and 80m during up cast.
102	CTD_88S	00-00.038N	83-00.023E	20111007	08:39	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
103	CTD_089	00-00.031N	83-00.077E	20111007	10:36	CTD up to 500m. Water sampling at SCM (84 & 77m) and surface. Down cast SCM was at 84m and up cast SCM was at 77m.
104	CTD_090	00-00.031N	83-00.114E	20111007	12:32	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (83m & 75m). Down cast SCM was at 83m and up cast SCM was at 75m.

105	CTD_091	00-00.070N	83-00.092E	20111007	15:49	CTD up to 500m. Water sampling at SCM (84 & 78m) and surface. Down cast SCM was at 84m and up cast SCM was at 78m.
106	CTD_092	00-00.085N	83-00.064E	20111007	18:35	CTD092 up to 500m. Water sampling up to 150m at standard depths and at SCM (86m & 76m). Down cast SCM was at 86m and up cast SCM was at 76m. Time of operation 00:05 to 00:35hrs. A spike at 60m in the pressure while heaving up.
107	CTD_093	00-00.006S	83-00.035E	20111007	21:40	CTD up to 500m. Water sampling at SCM (75) and surface. Down cast and up cast SCM was at 75m.
108	CTD_094	00-00.029S	83-00.025E	20111008	00:23	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (79m & 77m). Down cast SCM was at 79m and up cast SCM was at 77m.
109	CTD_095	00-00.100N	83-00.050E	20111008	03:36	CTD up to 500m. Water sampling at SCM (78) and surface. Down cast and up cast SCM was at 78m.
110	CTD_096	00-00.022S	83-00.035E	20111008	06:40	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, SCM (80m & 76m) for biological and chemical analysis. SCM was at 80m during down cast and 76m during up cast.
111	CTD_096S	00-00.078N	82-59.980E	20111008	08:40	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
112	CTD_097	00-00.125N	83-00.007E	20111008	10:28	CTD up to 500m. Water sampling at SCM (76m & 71m) and surface. Down cast 76m and up cast SCM 71m.
113	CTD_098	00-00.019N	83-00.044E	20111008	12:29	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (75m). Down cast SCM was at 75m.
114	CTD_099	00-00.012N	83-00.053E	20111008	15:34	CTD up to 500m. Water sampling at SCM (82m & 80m) and surface.
115	CTD_100	00-00.017N	83-00.034E	20111008	18:34	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (80m & 73m). Down cast SCM was at 80m and up cast SCM at 73m.
116	CTD_101	00-00.032S	83-00.023E	20111008	21:30	CTD up to 500m. Water sampling at SCM (77m & 74m) and surface.
117	CTD_102	00-00.034S	83-00.014E	20111009	00:30	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (83m & 79m). Down cast SCM was at 83m and up cast SCM at 79m.
118	CTD_103	00-00.119S	83-00.077E	20111009	03:44	CTD up to 500m. Water sampling at SCM (84m & 81m) and surface.
119	CTD_104	00-00.001S	83-00.037E	20111009	06:44	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at

						1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, SCM (82m & 74m) for biological and chemical analysis. SCM was at 82m during down cast and 74m during up cast.
120	CTD_104S	00-00.150N	83-00.222E	20111009	08:12	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
121	CTD_105	00-00.082N	82-59.994E	20111009	09:39	CTD up to 500m. Water sampling at SCM (77m & 76m) and surface.
122	CTD_106	00-00.016S	83-00.074E	20111009	12:25	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (77m). Down cast and up cast SCM was at 77m.
123	CTD_107	00-00.029N	83-00.025E	20111009	15:32	CTD up to 500m. Water sampling at SCM (76 & 70m) and surface. SCM samples were collected for both down cast (76m) and up cast (70m).
124	CTD_108	00-00.082N	83-00.025E	20111009	19:30	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (72m). Down cast and up cast SCM was at 72m.
125	CTD_109	00-00.132N	83-00.106E	20111009	21:37	CTD up to 500m. Water sampling at SCM (70m & 62m) and surface. SCM Samples were collected for both down cast (70m) and up cast (62m).
126	CTD_110	00-00.046N	83-00.037E	20111010	00:29	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (68m & 59m). Down cast SCM was at 68m and up cast SCM was at 59m.
127	CTD_111	00-00.016S	83-00.044E	20111010	03:39	CTD up to 500m. Water sampling at SCM (75m & 71m) and surface. SCM Samples were collected for both down cast (75m) and up cast (71m).
128	CTD_112	00-00.012S	83-00.034E	20111010	06:34	CTD up to 1000m. Mid-day Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, SCM (3m) for biological and chemical analysis. SCM was at 73m during both down cast and up cast.
129	CTD_112S	00-00.042N	83-00.005E	20111010	08:10	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
130	CTD_113	00-00.001N	83-00.000E	20111010	09:16	CTD up to 500m. Water sampling at SCM (73m & 69m) and surface. SCM Samples were collected for both down cast (73m) and up cast (69m).
131	CTD_114	00-00.031N	83-00.041E	20111010	12:28	CTD up to 500m. Water sampling up to 150m at standard depths and at SCM (67m & 62m). Down cast SCM was at 67m and up cast SCM was at 62m.
132	CTD_115	00-00.001N	83-00.012E	20111010	15:32	CTD up to 500m. Water sampling at SCM (76m & 78m) and surface. SCM Samples were collected for both down cast (76m) and up cast (78m).

133	CTD_116	00-00.132N	83-00.162E	20111010	18:37	CTD115 up to 500m. Water sampling up to 150m at standard depths and at SCM (82m & 77m). Down cast SCM was at 82m and up cast SCM was at 77m.
134	CTD_117P	00-00.082N	82-59.977E	20111010	22:12	CTD up to 500m. Water sampling up to 120m for PP at standard depths and at SCM (81m & 75m). Down cast SCM was at 81m and up cast SCM was at 75m.
135	CTD_117G	00-00.174N	83-00.163E	20111010	23:25	CTD up to 100m. Water sampling at SCM (76m) for Grazing 60Litre.
136	CTD_118	00-00.044N	83-00.112E	20111011	17:52	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800m, 600, 400, 300, 200, 150, 120, 100, 80m, SCM (71m) for biological and chemical analysis. SCM was at 67m during both down cast and 71m during up cast.
137	CTD_118S	00-00.005N	83-00.068E	20111011	19:45	CTD up to 50m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
138	CTD_119	00-29.995S	83-00.064E	20111012	05:00 06:44	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, SCM (60m), and 40m for biological and chemical analysis. SCM was at 66m during down cast and 60m during up cast. CTD up to 50m. Shallow cast. Water samples were collected at 20m, 10m, surface (~2m).
139	CTD_120	01-00.059S	83-00.109E	20111012	10:39 12:01	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100m, 80m, and 60m (SCM) for biological and chemical analysis. SCM was at 84m during down cast and 80-60m during up cast. CTD up to 50m. Shallow cast. Water samples were collected at 40, 20m, 10m, surface (~2m).
140	CTD_121	01-29.922S	83-00.068E	20111012	16:55 18:28	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, 68 (SCM) and 60m for biological and chemical analysis. SCM was at 80m during down cast and 68m during up cast. Bottle at position 24 (60m) was leaking due to breakage of bottle while heaving up. CTD up to 70m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).

141	CTD_122	02-00.150S	82-59.869E	20111012	22:39	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 77 (SCM) for biological and chemical analysis. SCM was at 90m during down cast and 77m during up cast.
		01-59.968S	83-00.012E	20111013	00:06	CTD up to 70m. Shallow cast. Water samples were collected at 60, 40, 20m, 10m, surface (~2m).
142	CTD_123	02-30.024S	83-00.001E	20111013	05:45	CTD123 up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 63 (SCM) for biological and chemical analysis. SCM was at 71m during down cast and 63m during up cast.
		02-29.948S	82-59.918E	20111013	07:04	CTD123S up to 80m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).
143	CTD_124	02-59.953S	82-59.898E	20111013	10:57	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 54 (SCM) for biological and chemical analysis. SCM was at 67m during down cast and 54m during up cast.
		03-00.068S	83-00.056E	20111013	12:18	CTD up to 700m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).
144	CTD_125	04-00.151S	83-00.000E	20111013	20:28	CTD up to 1000m. Deep cast. Water samples were collected at 1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, 60m, and 53 (SCM) for biological and chemical analysis. SCM was at 65m during down cast and 53m during up cast.
		04-00.080S	83-00.109E	20111013	21:59	CTD up to 100m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m).
145	CTD_126MPN	05-00.186S	82-59.794E	20111014	07:07	CTD MPN up to 300m. CTD cast to identify sampling depths for MPN. Isothermal depth 69m & bottom of thermocline 220m.
		05-00.226S	82-59.891E	20111014	11:56	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 71 (SCM) for biological and chemical analysis. SCM was at 70m during down cast and 71m during up cast.
		05-00.058S	82-59.861E	20111014	13:22	CTD up to 70m. Shallow cast. Water samples were collected at 60m, 40, 20, 10m, surface (~2m).

		05-00.199S	82-59.936E	20111014	14:01	CTD up to 60m. Shallow cast Repeat. Water samples were collected at 60m.
		04-59.945S	82-59.944E	20111014	18:50	CTD up to 300m. CTD cast to identify sampling depths for MPN. Isothermal depth 78m & bottom of thermocline 215m.
		05-00.120S	83-00.029E	20111014	20:43	CTD up to 500m. Water sampling up to 120m for PP at standard depths and at SCM (80m & 80m).
		05-00.048S	83-00.042E	20111014	21:50	CTD up to 100m. Water sampling at SCM (80-81m) for Grazing 60Litre.
146	CTD_127	00-30.029N	83-00.042E	20111017	03:42	CTD up to 1000m. Deep cast. Water samples were collected at 1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, and 66 (SCM) for biological and chemical analysis. SCM was at 70m during down cast and 66m during up cast. Vertical spike in all parameters at 300m while heaving up. 80m spike in the fluorescence data.
		00-30.048N	83-00.006E	20111017	05:09	CTD up to 80m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).
147	CTD_128	01-00.137N	82-59.904E	20111017	08:57	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 61 (SCM) for biological and chemical analysis. SCM was at 65m during down cast and 61m during up cast.
		00-59.903N	82-59.894E	20111017	10:15	CTD up to 70m. Shallow cast. Water samples were collected at 60m, 40, 20, 10m, surface (~2m)
148	CTD_129	01-30.071N	82-59.914E	20111017	14:59	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 64 (SCM) for biological and chemical analysis. SCM was at 67m during down cast and 64m during up cast.
		01-30.026N	82-59.987	20111017	16:16	CTD up to 80m. Shallow cast. Water samples were collected at 60m, 40m, 20m, 10m, surface (~2m).
149	CTD_130	02-00.038N	82-59.993E	20111017	20:00	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 62-63 (SCM) for biological and chemical analysis. SCM was at 66m during down cast and 62-63m during up cast.
		01-59.959N	82-59.963E	20111017	21:32	CTD up to 1000m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m) and 800m & 1000m.

150	CTD_131	02-30.246N	83-00.047E	20111018	03:24	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80m, and 53 (SCM) for biological and chemical analysis. SCM was at 63m during down cast and 53m during up cast. Two vertical spikes while heaving up in all parameters at 200m and only in fluorescence at 120m.
		03-30.058N	82-59.962E	20111018	05:07	CTD up to 80m. Shallow cast. Water samples were collected at 60, 40, 20, 10m, surface (~2m).
151	CTD_132	03-00.194N	83-00.049E	20111018	08:43	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800m, 600, 400, 300, 200, 150, 120, 100, 80m, and 64 (SCM) for biological and chemical analysis. Double SCM was noticed at 42m and 66m during down cast and 35m and 64m during up cast.
		02-59.966N	83-00.107E	20111018	09:56	CTD up to 80m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m) and at secondary SCM (38-39m).SCM during down cast was 43m and during up cast 38-39m.
152	CTD_133	04-00.058N	82-59.987E	20111018	18:18	CTD up to 1000m. Deep cast. Water samples were collected at 1000m, 800m, 600m, 400m, 300m, 200m, 150m, 120m, 100m, 80m, 60 and 55 (SCM) for biological and chemical analysis. Double SCM was noticed at 30m and 57m during down cast and 23m and 55m during up cast. CTD was stopped at 20m during down cast and 104 while up cast as the unit went under the hull.
		04-00.030N	83-00.167E	20111018	19:52	CTD up to 80m. Shallow cast. Water samples were collected at 40m, 20m, 10m, surface (~2m) .Double SCM during down cast was 29m and 60m and during up cast 26m and 56m.
153	CTD_134	05-00.152N	82-59.936E	20111019	04:03	CTD up to 1000m. Deep cast. Water samples were collected at 1000, 800, 600, 400, 300, 200, 150, 120, 100, 80, 60m and 45-46 (SCM) for biological and chemical analysis. SCM was at 50m during down cast and 45-46m during up cast.
		05-00.047N	83-00.085E	20111019	05:43	CTD up to 300m. Shallow cast. Isothermal layer depth 80m and thermocline depth was 280m. Water samples were collected at 40, 20, 10m, surface (~2m). Down cast SCM was at 58m and up cast at 50m.