

Appendix

Table S1. Hydrographic properties in both the deep chlorophyll maximum layer and SPM sampling layer investigated in this study.

Station	Long. (°E)	Lat. (°N)	Chlorophyll Maximum Layer		SPM Sampling Layer				
			Depth (m)	Chlorophyll Fluorescence ($\mu\text{g L}^{-1}$)	Depth (m)	Chlorophyll Fluorescence ($\mu\text{g L}^{-1}$)	Temp. (°C)	Sal.	Tur. (FTU)
DH1-1	123.00	30.00	5	1.90	20	0.68	20.26	33.64	0.46
DH1-2	123.50	30.00	10	1.47	30	0.57	21.24	34.17	1.97
DH2-1	123.10	29.47	10	3.92	20	1.12	22.09	33.92	0.18
DH2-2	123.40	29.32	3	3.03	30	0.37	20.16	33.96	0.19
Con2	122.15	28.50	2	7.40	20	0.15	19.33	32.70	4.75
DH3-1	122.50	29.00	3	17.46	20	0.59	19.09	33.60	0.60
DH3-2	122.80	28.80	20	1.64	30	0.68	26.14	33.60	1.07
DH3-3	123.20	28.60	50	0.75	50	0.75	26.72	33.78	0.12
DH3-4	123.50	28.40	50	1.39	50	1.39	27.26	33.68	0.14
DH4-3	122.80	28.04	50	0.88	30	0.37	28.20	33.58	0.08
DH4-4	123.21	27.78	50	1.23	50	1.23	26.50	33.75	0.24
DH5-1	121.90	27.80	30	4.07	30	4.07	25.47	33.79	3.45
DH5-2	122.11	27.63	30	1.47	50	0.17	24.43	33.86	1.26
DH5-3	122.40	27.46	50	0.57	50	0.57	24.61	34.14	0.07
DH5-4	122.70	27.30	50	1.43	50	1.43	25.16	34.17	0.27
DH5-5	123.00	27.13	50	0.81	50	0.81	21.91	34.31	0.14
DH5-6	123.20	26.96	50	1.62	50	1.62	22.90	34.50	0.25
DH5-7	123.50	26.80	50	2.66	50	2.66	23.00	34.21	0.21

DH5-8	123.81	26.63	70	0.72	70	0.72	22.16	34.52	0.12
DH5-9	124.06	26.44	50	0.89	50	0.89	24.58	34.44	0.17
DH6-1	121.20	27.38	No data	No data	10	No data	25.52	33.77	No data
DH6-2	121.50	27.18	30	1.66	30	1.66	26.11	33.81	1.54
DH6-3	121.79	26.99	50	1.19	50	1.19	26.84	33.74	0.45
DH6-4	122.20	26.79	50	1.08	50	1.08	27.38	33.55	0.13
DH6-5	122.50	26.59	50	1.37	50	1.37	21.71	34.20	0.30
DH6-6	122.80	26.39	50	0.95	50	0.95	22.02	34.33	0.19
DH6-7	123.20	26.20	20	0.99	50	0.64	20.67	34.56	0.09
DH7-1	120.80	26.76	3	1.58	20	0.75	24.39	33.92	5.53
DH7-2	121.11	26.58	30	2.49	30	2.49	26.39	33.80	0.49
DH7-3	121.50	26.40	50	1.14	50	1.14	27.55	33.70	0.31
DH7-4	121.80	26.23	50	0.77	50	0.77	26.12	33.75	0.18
DH7-5	122.10	26.05	50	3.15	50	3.15	22.41	34.23	0.45
DH7-6	122.40	25.87	22	1.54	50	0.44	20.07	34.49	0.14
DH7-7	122.67	25.71	21	1.08	50	0.41	20.79	34.42	0.12
DH7-8	123.00	25.52	20	0.63	85	0.18	21.01	34.67	0.05
DH7-9	123.20	25.34	75	1.12	130	0.11	21.70	34.68	0.04