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Supplement of

Biogeochemical characteristics of suspended particulate matter in deep chlorophyll maximum layers in the southern East China Sea

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Supplement

Table S1. Hydrographic parameters (temperature, salinity and turbidity), chlorophyll fluorescence concentration and elemental (POC, PN) and isotopic ($\delta^{13}\text{C}_{\text{POC}}$ and $\delta^{15}\text{N}_{\text{PN}}$) compositions of particulate organic matter around the water depths of deep chlorophyll maximum in the southern East China Sea. Chl *a* is the converted value using the linear relationship between measured Chl *a* and Chl fluorescence obtained using in situ fluorometer onboard.

Station	Long. (° E)	Lat. (° N)	Sampling Depth (m)	Temp. (°C)	Sal.	Tur. (FTU)	Chl Fluorescence ($\mu\text{g L}^{-1}$)	POC ($\mu\text{g L}^{-1}$)	PN ($\mu\text{g L}^{-1}$)	$\delta^{13}\text{C}_{\text{POC}}$ (‰)	$\delta^{15}\text{N}_{\text{PN}}$ (‰)	C/N Molar	POC/Chl <i>a</i> (g g ⁻¹)
DH1-1	123.00	30.00	20	20.26	33.64	0.46	0.68	98.4	19.3	-20.7	5.8	5.9	144.6
DH1-2	123.50	30.00	30	21.24	34.17	1.97	0.57	81.2	19.7	-22.9	7.4	4.8	134.8
DH2-1	123.10	29.47	20	22.09	33.92	0.18	1.12	110.2	24.5	-21.9	6.3	5.3	111.1
DH2-2	123.40	29.32	30	20.16	33.96	0.19	0.37	67.4	13.2	-22.3	6.0	6.0	147.4
CON02	122.15	28.50	20	19.33	32.70	4.75	0.15	92.6	20.5	-20.7	8.0	5.3	303.3
DH3-1	122.50	29.00	20	19.09	33.60	0.60	0.59	91.2	21.0	-20.9	7.2	5.1	148.7
DH3-2	122.80	28.80	30	26.14	33.60	1.07	0.68	98.8	20.0	-22.9	6.6	5.8	145.1
DH3-3	123.20	28.60	50	26.72	33.78	0.12	0.75	71.5	15.3	-23.7	6.9	5.4	98.3
DH3-4	123.50	28.40	50	27.26	33.68	0.14	1.39	72.2	13.5	-23.5	5.8	6.2	60.9
DH4-3	122.80	28.04	30	28.20	33.58	0.08	0.37	49.8	9.7	-23.8	6.1	6.0	108.7
DH4-4	123.21	27.78	50	26.50	33.75	0.24	1.23	82.4	17.4	-22.8	6.1	5.5	77.0
DH5-1	121.90	27.80	30	25.47	33.79	3.45	4.07	263.0	52.8	-18.2	6.0	5.8	85.5
DH5-2	122.11	27.63	50	24.43	33.86	1.26	0.17	62.6	13.1	-23.2	7.3	5.6	196.1
DH5-3	122.40	27.46	50	24.61	34.14	0.07	0.57	52.4	10.6	-23.7	5.6	5.8	87.4
DH5-4	122.70	27.30	50	25.16	34.17	0.27	1.43	80.2	17.8	-22.9	5.7	5.2	66.2
DH5-5	123.00	27.13	50	21.91	34.31	0.14	0.81	49.0	10.1	-23.0	5.8	5.6	63.4
DH5-6	123.20	26.96	50	22.90	34.50	0.25	1.62	81.9	16.0	-23.4	4.8	6.0	61.0

DH5-7	123.50	26.80	50	23.00	34.21	0.21	2.66	69.3	13.6	-23.6	4.7	5.9	33.3
DH5-8	123.81	26.63	70	22.16	34.52	0.12	0.72	44.2	10.3	-24.2	5.3	5.0	62.2
DH5-9	124.06	26.44	50	24.58	34.44	0.17	0.89	70.0	14.5	-23.7	5.9	5.6	84.4
DH6-1	121.20	27.38	10	25.52	33.77	No data	No data	225.0	46.6	-21.2	7.6	5.6	No data
DH6-2	121.50	27.18	30	26.11	33.81	1.54	1.66	177.8	35.9	-23.0	6.5	5.8	129.2
DH6-3	121.79	26.99	50	26.84	33.74	0.45	1.19	98.4	18.1	-22.8	5.9	6.3	94.7
DH6-4	122.20	26.79	50	27.38	33.55	0.13	1.08	54.0	14.7	-24.6	7.1	4.3	56.0
DH6-5	122.50	26.59	50	21.71	34.20	0.30	1.37	84.2	15.7	-24.2	3.8	6.3	72.1
DH6-6	122.80	26.39	50	22.02	34.33	0.19	0.95	80.9	17.9	-23.5	5.9	5.3	92.6
DH6-7	123.20	26.20	50	20.67	34.56	0.09	0.64	54.4	11.5	-22.7	6.0	5.5	83.7
DH7-1	120.80	26.76	20	24.39	33.92	5.53	0.75	130.8	27.6	-21.6	7.8	5.5	179.2
DH7-2	121.11	26.58	30	26.39	33.80	0.49	2.49	104.6	19.9	-24.6	5.1	6.1	53.3
DH7-3	121.50	26.40	50	27.55	33.70	0.31	1.14	60.4	12.4	-24.6	5.6	5.7	60.2
DH7-4	121.80	26.23	50	26.12	33.75	0.18	0.77	69.5	14.3	-23.2	4.5	5.7	93.4
DH7-5	122.10	26.05	50	22.41	34.23	0.45	3.15	118.8	22.0	-22.7	5.3	6.3	48.9
DH7-6	122.40	25.87	50	20.07	34.49	0.14	0.44	41.6	8.1	-23.7	5.8	6.0	81.4
DH7-7	122.67	25.71	50	20.79	34.42	0.12	0.41	37.7	8.0	-24.6	5.2	5.5	77.5
DH7-8	123.00	25.52	85	21.01	34.67	0.05	0.18	31.1	8.8	-25.8	6.7	4.1	95.4
DH7-9	123.20	25.34	130	21.70	34.68	0.04	0.11	20.4	4.4	-25.2	7.8	5.4	73.8

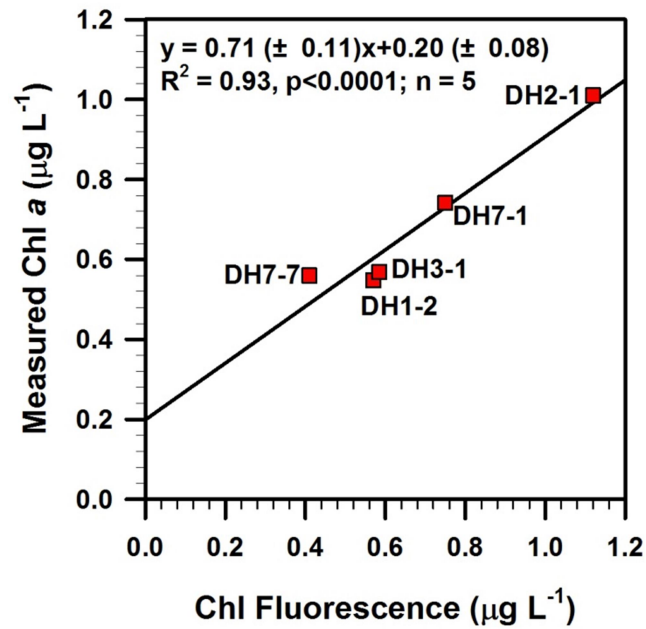


Figure S1. The relationship between the concentration of Chl a measured in the laboratory and the chlorophyll fluorescence values (Chl Fluorescence) obtained using *in situ* fluorometer onboard. A significant positive correlation between these two values in five suspended particulate matters around the water depths of deep chlorophyll maximum in the southern East China Sea was used to convert the fluorescence values to Chl a in this study.