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Supplement of

Effects of nitrate and phosphate supply on chromophoric and fluorescent dissolved organic matter in the Eastern Tropical North Atlantic: a mesocosm study

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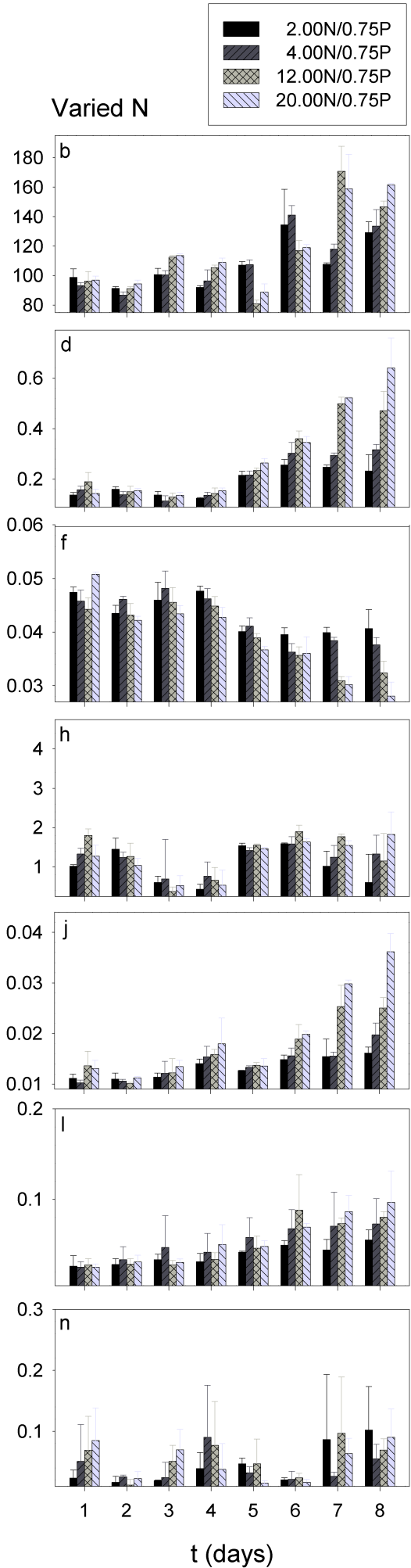
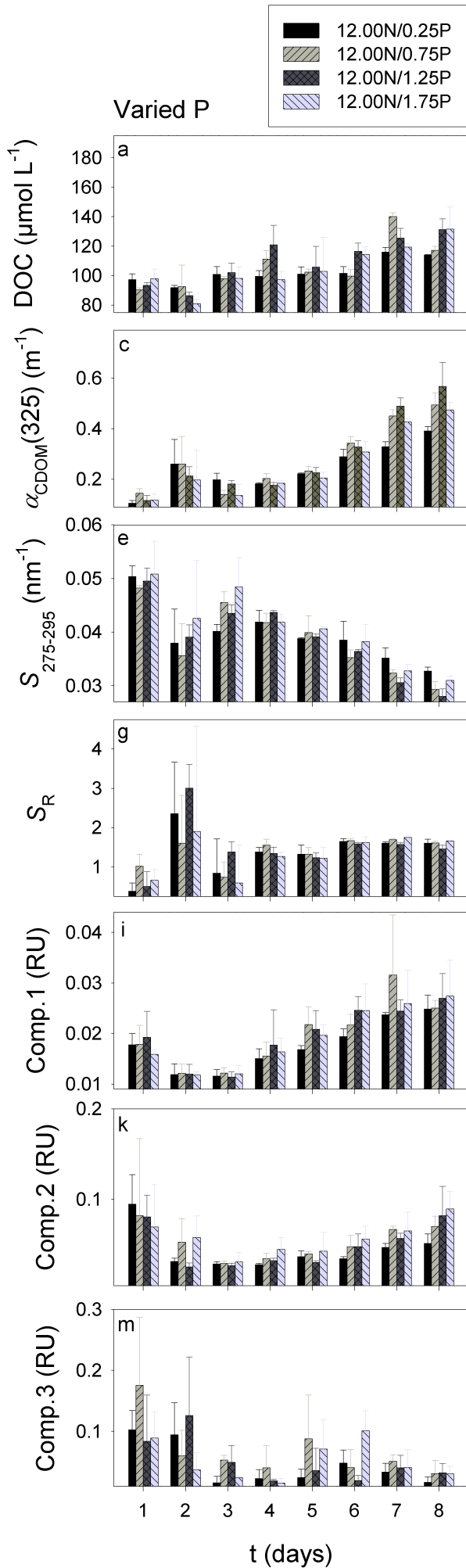


Fig.S1 The development over time: of DOC **(a)** during the Varied P and **(b)** during the Varied N, of CDOM at 325nm ($a_{\text{CDOM}(325)}$) **(c)** during the Varied P and **(d)** during the Varied N, of Spectral Slope within 275-295 nm spectral range ($S_{275-295}$) **(e)** during the Varied P and **(f)** during the Varied N, of spectral slope ratio ($S_{275-295}/S_{350-400}$) S_R **(g)** during the Varied P and **(h)** during the Varied N, of first FDOM component fluorescence intensity (Comp.1) **(i)** during the Varied P and **(j)** during the Varied N, of second FDOM component fluorescence intensity (Comp.2) **(k)** during the Varied P and **(l)** during the Varied N, of third FDOM component fluorescence intensity (Comp.3) **(m)** during the Varied P and **(n)** during the Varied N.

Table S2 $\Sigma_{chl\ a}$ and Σ_{bac} and Δ -values of DOC, CDOM at 325nm ($a_{CDOM}(325)$), humic-like fluorescent component (Comp.1), proteinaceous amino acid-like fluorescent component (Comp.2), peptide amino acid-like fluorescent component (Comp.3) at day 8 (Δ_8), used for linear regression statistical tests.

Mesocosm ID	$\Sigma_{chl\ a}$ ($\mu\text{g L}^{-1}$)	Σ_{bac} ($\# \text{mL}^{-1}$)	$\Delta_8\text{DOC}$ ($\mu\text{mol L}^{-1}$)	$\Delta_8 a_{CDOM}(325)$ (m^{-1})	$\Delta_8\text{Comp.1}$ (RU)	$\Delta_8\text{Comp.2}$ (RU)	$\Delta_8\text{Comp.3}$ (RU)
Varied P							
1	8.1	1.22×10^7	21	0.39	0.014	0.055	-0.043
2	10.0	9.78×10^6	16	0.38	0.012	0.032	0.007
3	10.0	9.75×10^6	21	0.29	0.013	0.036	-0.030
4	7.4	9.68×10^6	15	0.25	0.010	0.043	0.006
6	9.9	1.04×10^7	31	0.27	0.011	0.038	-0.061
7	11.0	9.73×10^6	20	0.40	0.017	0.038	-0.005
8	12.8	9.31×10^6	37	0.49	-	-	-
9	10.7	8.72×10^6	57	0.28	0.009	0.050	-0.007
10	10.2	1.28×10^7	19	0.27	0.007	-	0.029
11	11.5	9.74×10^6	25	0.32	0.017	0.058	0.016
12	7.5	9.66×10^6	18	0.42	0.020	0.068	0.010
13	7.5	9.23×10^6	17	0.23	0.015	0.037	-0.006
14	7.7	9.92×10^6	15	0.15	0.012	0.016	-0.013
15	14.1	1.31×10^7	41	0.40	0.017	0.040	0.010
16	7.3	9.47×10^6	7	0.20	0.013	0.015	0.021
Varied N							
1	16.5	8.15×10^6	58	0.38	0.017	0.056	0.086
2	17.1	1.04×10^7	52	0.37	0.016	0.051	0.039
3	20.3	1.04×10^7	56	0.21	0.012	0.048	0.046
4	11.3	1.05×10^7	49	0.18	0.007	0.073	0.009
5	11.3	1.05×10^7	52	0.39	0.017	0.073	-0.053
6	22.7	1.08×10^7	65	0.36	0.022	0.040	0.036
7	23.7	1.10×10^7	65	0.61	0.028	0.098	0.088
8	25.7	1.05×10^7	71	0.49	-	-	-
9	10.3	9.09×10^6	41	0.17	0.017	0.050	0.061
10	22.6	8.88×10^6	79	0.34	0.019	0.041	0.046
11	8.2	8.80×10^6	38	0.16	0.012	0.060	0.006
12	13.5	8.88×10^6	62	0.21	0.009	0.041	0.048
13	7.2	8.25×10^6	37	0.09	0.007	0.021	0.150
14	10.1	7.80×10^6	47	0.36	0.010	0.030	-0.057
15	7.0	7.99×10^6	32	0.01	0.004	0.024	-0.006
16	6.5	7.75×10^6	45	0.12	0.004	0.036	0.113