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Supplement of

Tidal variability of nutrients in a coastal coral reef system influenced by groundwater

Guizhi Wang et al.

Correspondence to: Guizhi Wang (gzhwang@xmu.edu.cn)

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Table S1. Data collected in the time-series investigation at the coral reef Station CT (latitude: 18.2124; longitude: 109.4744) in Sanya Bay in February 6-13, 2012.

Sampling time yyyy-mm-dd	Depth m	Salinity	Nutrients					NO _x	²²⁸ Ra	²²⁸ Ra dpm 100L ⁻¹
			Nitrite	Nitrate	Phosphate	Silicate	Sampling time yyyy-mm-dd			
2012/2/6 15:13	1.2611	33.6196	0.247	0.547	0.132	5.904	0.794	2/6/2012 15:16	27.75	
2012/2/6 17:58	1.6264	33.6140	0.347	1.373	0.217	6.056	1.720	2/6/2012 18:10	29.77	
2012/2/6 21:00	2.0078	33.6518	0.354	0.673	0.130	5.871	1.027	2/6/2012 21:02	26.26	
2012/2/7 0:00	1.7891	33.6462	0.349	0.611	0.110	5.934	0.960	2/6/2012 23:55	27.02	
2012/2/7 3:00	1.1051	33.5975	0.235	0.642	0.148	5.777	0.877	2/7/2012 3:02	26.27	
2012/2/7 6:02	0.7047	33.5035	0.107	0.880	0.181	5.113	0.987	2/7/2012 6:04	35.23	
2012/2/7 8:00	0.8203	33.4686	0.124	0.958	0.181	5.564	1.082	2/7/2012 8:02	38.74	
2012/2/7 10:00	1.0194	33.4998	0.191	1.202	0.204	6.338	1.393	2/7/2012 10:00	36.31	
2012/2/7 12:02	1.1363	33.5670	0.227	1.440	0.194	6.375	1.667	2/7/2012 12:04	33.28	
2012/2/7 14:00	1.1286	33.5935	0.194	1.071	0.186	7.019	1.265	2/7/2012 14:02	41.35	
2012/2/7 15:57	1.1476	33.6225	0.162	0.972	0.219	6.842	1.134	2/7/2012 16:00	22.96	
2012/2/7 18:00	1.4370	33.6254	0.158	1.912	0.160	5.888	2.070	2/7/2012 18:05	13.98	
2012/2/7 20:00	1.8260	33.6531	0.266	0.370	0.110	6.174	0.636	2/7/2012 20:02	16.90	
2012/2/7 22:00	2.0721	33.6352	0.248	0.447	0.100	5.894	0.695	2/7/2012 22:02	26.01	
2012/2/8 0:00	1.9841	33.6315	0.245	0.449	0.107	5.839	0.694	2/8/2012 0:02	26.29	
2012/2/8 2:00	1.5808	33.6316	0.282	0.500	0.124	6.122	0.782	2/8/2012 2:06	31.68	
2012/2/8 4:05	1.0926	33.6060	0.264	0.912	0.135	5.616	1.176	2/8/2012 4:04	29.67	
2012/2/8 5:58	0.8167	33.6261	0.155	0.744	0.168	5.207	0.899	2/8/2012 6:02	39.86	
2012/2/8 9:00	1.0519	33.4924	0.175	1.342	0.196	7.135	1.517	2/8/2012 9:00	45.28	
2012/2/8 12:00	1.3462	33.6360	0.199	0.830	0.139	6.882	1.029	2/8/2012 12:01	33.78	
2012/2/8 15:00	1.2829	33.6140	0.163	0.774	0.196	6.094	0.937	2/8/2012 14:58	35.32	
2012/2/8 18:00	1.4010	33.6252	0.406	1.010	0.189	5.424	1.416	2/8/2012 18:02	29.62	
2012/2/8 21:05	1.9859	33.6703	0.583	0.710	0.135	4.898	1.293	2/8/2012 21:02	25.60	
2012/2/9 0:00	2.1465	33.6601	0.623	0.682	0.133	5.485	1.305	2/9/2012 0:02	32.32	
2012/2/9 3:00	1.6791	33.5696	0.615	0.806	0.139	5.110	1.421	2/9/2012 3:02	27.23	
2012/2/9 6:00	1.0887	33.5802	0.363	0.980	0.162	4.678	1.343	2/9/2012 6:02	27.21	
2012/2/9 9:00	1.2258	33.5719	0.320	1.121	0.170	4.988	1.441	2/9/2012 9:02	29.05	
2012/2/9 12:00	1.5989	33.4511	0.321	1.083	0.159	7.251	1.404	2/9/2012 12:02	38.82	
2012/2/9 15:02	1.4530	33.5975	0.367	0.957	0.152	5.462	1.324	2/9/2012 15:02	27.94	
2012/2/9 18:04	1.3926	33.5891	0.405	1.088	0.170	5.248	1.493	2/9/2012 18:02	29.28	
2012/2/9 21:00	1.8400	33.5708	0.541	1.069	0.146	4.588	1.610	2/9/2012 21:02	25.63	
2012/2/10 0:00	2.0494	33.6463	0.712	0.803	0.133	4.570	1.515	2/10/2012 0:02	24.32	
2012/2/10 3:00	1.6602	33.6536	0.741	0.837	0.129	5.205	1.578	2/10/2012 3:04	23.71	
2012/2/10 6:08	1.0035	33.6482	0.563	0.980	0.140	4.740	1.543	2/10/2012 6:06	25.62	
2012/2/10 9:05	1.1413	33.6369	0.420	1.026	0.146	5.047	1.446	2/10/2012 9:06	25.31	
2012/2/10 12:00	1.5075	33.6310	0.488	0.927	0.141	5.043	1.415	2/10/2012 12:02	27.62	
2012/2/10 15:00	1.3977	33.6449	0.623	0.911	0.149	5.282	1.534	2/10/2012 15:02	25.97	
2012/2/10 18:05	1.1377	33.6474	0.396	1.162	0.164	4.553	1.558	2/10/2012 18:10	23.99	
2012/2/10 21:10	1.4732	33.6469	0.445	1.317	0.178	4.699	1.762	2/10/2012 21:12	24.69	
2012/2/11 0:05	1.8800	33.6472	0.546	0.942	0.142	5.589	1.488	2/11/2012 0:05	29.02	
2012/2/11 3:11	1.7242	33.6495	0.616	0.711	0.106	4.537	1.327	2/11/2012 3:12	23.88	
2012/2/11 6:02	1.2086	33.6398	0.516	0.787	0.117	4.521	1.303	2/11/2012 6:03	22.84	
2012/2/11 9:05	1.1170	33.5976	0.364	0.948	0.129	4.500	1.312	2/11/2012 9:08	25.75	
2012/2/11 12:10	1.5433	33.5954	0.381	0.867	0.129	4.731	1.248	2/11/2012 12:02	27.36	
2012/2/11 15:03	1.5057	33.5913	0.477	0.787	0.128	5.330	1.264	2/11/2012 15:03	25.50	
2012/2/11 18:00	1.1649	33.6216	0.319	0.928	0.132	4.511	1.247	2/11/2012 18:02	31.28	
2012/2/11 20:00	1.1295	33.6162	0.275	1.061	0.130	4.021	1.336	2/11/2012 22:03	29.07	
2012/2/11 22:00	1.4023	33.5713	0.425	1.031	0.153	5.305	1.456	2/12/2012 0:02	27.12	
2012/2/12 0:00	1.7078	33.6247	0.573	0.754	0.125	4.921	1.327	2/12/2012 2:02	24.14	
2012/2/12 2:00	1.8072	33.6619	0.542	0.555	0.103	4.345	1.097	2/12/2012 4:02	24.95	
2012/2/12 4:00	1.6096	33.6592	0.573	0.526	0.100	4.981	1.099	2/12/2012 6:02	26.16	
2012/2/12 7:58	1.1778	33.6535	0.366	0.635	0.102	4.592	1.001	2/12/2012 7:58	22.51	
2012/2/12 10:00	1.3227	33.6353	0.260	0.439	0.102	4.174	0.699	2/12/2012 10:02	22.17	
2012/2/12 12:00	1.6063	33.6231	0.255	0.394	0.096	4.434	0.649	2/12/2012 12:03	26.86	
2012/2/12 13:58	1.8009	33.6299	0.262	0.369	0.092	4.134	0.631	2/12/2012 13:59	26.02	
2012/2/12 16:00	1.6299	33.6300	0.228	0.272	0.084	3.954	0.500	2/12/2012 16:02	25.04	
2012/2/12 18:00	1.3690	33.6389	0.197	0.303	0.086	4.009	0.500	2/12/2012 18:00	24.66	
2012/2/12 20:03	1.1454	33.6365	0.118	0.396	0.101	3.133	0.514	2/12/2012 20:02	29.72	
2012/2/12 22:00	1.2353	33.6301	0.123	0.406	0.104	2.894	0.529	2/12/2012 22:02	32.72	
2012/2/13 0:00	1.4703	33.5742	0.403	0.578	0.111	4.486	0.981	2/13/2012 0:02	29.42	
2012/2/13 3:00	1.6848	33.6148	0.321	0.397	0.112	3.486	0.718	2/13/2012 3:01	27.13	
2012/2/13 6:00	1.3632	33.6365	0.335	0.405	0.090	3.662	0.740	2/13/2012 6:04	24.37	