

Supplemental Table 1. Sampling information and GDGT analysis of the filter samples collected during the April-May 2010 cruise in the South China Sea.

Sample	GPS		Depth (m)	Total Vol. (L)	Total GDGTs (ng/L)	Rel. Abundance (%)						TEX ₈₆	TEX ₈₆ ^{II}	SST-TEX ₈₆	SST-TEX ₈₆ ^b	SST-TEX ₈₆ ^c	Temp. CTD	Satellite SST				
	Lat. (N)	Lon. (E)				GDGT-0	GDGT-1	GDGT-2	GDGT-3	Cren. ^d	Cren. ^e								TEX ₈₆ ^a	TEX ₈₆ ^b	TEX ₈₆ ^c	TEX ₈₆ ^d
JJW10-2	21.956	116.553	94.6	630	0.031	14.40	7.75	8.25	2.74	63.95	2.90	0.59	-0.23	20.78	22.47	23.01	24.60	25.87				
JJW10-3	21.602	116.901	306.6	630	0.066	18.22	9.42	8.42	2.91	59.10	1.93	0.58	-0.23	20.32	22.09	22.66	24.05	26.59				
JJW10-4	21.248	117.252	365.3	630	0.063	24.89	11.46	10.36	3.13	48.63	1.54	0.57	-0.25	19.16	21.10	21.76	25.53	26.41				
JJW10-5	20.899	117.606	850.5	750	0.017	28.35	9.82	10.22	2.27	47.79	1.55	0.59	-0.23	20.57	22.29	22.85	25.48	26.65				
JJW10-6	20.550	117.901	1968.0	750	0.047	26.89	10.58	10.19	3.66	47.12	1.56	0.59	-0.23	20.86	22.54	23.07	25.39	26.81				
JJW10-7	20.204	118.285	2733.0	1100	0.014	21.86	9.42	8.64	3.57	54.46	2.06	0.60	-0.22	21.50	23.08	23.55	25.58	26.86				
JJW10-8	19.870	118.601	3074.0	800	0.057	19.87	9.49	9.79	3.79	54.58	2.47	0.63	-0.20	23.23	24.54	24.80	26.42	27.04				
JJW10-9	19.503	119.003	3210.0	700	0.046	18.72	8.96	9.93	4.62	54.79	2.99	0.63	-0.20	23.41	24.69	24.93	26.30	27.18				
JJW10-10	20.504	119.002	2807.0	1000	0.016	21.42	9.91	10.01	3.12	53.65	1.90	0.60	-0.22	21.50	23.08	23.55	25.87	27.21				
JJW10-11	21.493	118.990	2801.0	700	0.020	17.09	8.67	8.28	3.03	60.06	2.87	0.61	-0.21	22.09	23.58	23.98	26.57	27.08				
JJW10-12	21.503	120.007	2996.0	750	0.049	26.08	9.52	9.79	3.19	49.55	1.88	0.61	-0.22	21.97	23.47	23.89	26.24	27.18				
JJW10-13	21.001	120.000	3378.0	750	0.042	18.57	8.98	10.11	3.83	55.86	2.65	0.65	-0.19	24.58	25.68	25.74	25.64	27.50				
JJW10-14	20.505	120.004	3399.0	650	0.077	21.06	10.28	9.57	3.41	53.54	2.14	0.60	-0.23	21.02	22.67	23.19	25.86	27.56				
JJW10-15	20.002	120.005	3806.0	200	0.128	25.76	8.59	8.16	2.24	53.74	1.52	0.58	-0.24	20.07	21.88	22.47	26.99	27.50				
JJW10-22	15.997	118.004	4002.0	600	0.002	30.87	7.18	6.08	2.94	50.73	2.20	0.61	-0.21	21.98	23.49	23.90	30.77	27.56				
JJW10-23	16.002	117.011	3939.0	750	0.004	20.45	5.40	9.09	5.02	59.54	0.51	0.73	-0.14	30.02	30.26	29.26	30.97	27.56				
JJW10-28	14.994	118.501	4176.0	750	0.002	23.34	6.41	7.89	4.96	54.73	2.67	0.71	-0.15	28.52	29.00	28.33	29.69	28.31				
JJW10-29	14.005	118.496	3692.0	500	0.002	24.36	4.44	6.00	3.44	58.33	3.44	0.74	-0.13	30.91	31.02	29.80	30.16	28.38				
JJW10-30	13.000	118.501	3147.0	750	0.006	20.80	7.50	7.91	1.41	60.43	1.95	0.60	-0.22	21.38	22.98	23.46	30.21	28.46				
JJW10-31	12.000	118.502	2488.0	750	0.002	19.77	9.95	10.87	3.62	54.67	1.12	0.61	-0.21	22.06	23.56	23.96	29.71	28.45				
JJW10-32	12.003	118.005	2939.0	750	0.004	15.79	5.98	8.73	5.10	62.16	2.24	0.73	-0.14	29.93	30.19	29.21	30.39	28.55				
JJW10-36	11.248	115.751	2875.0	750	0.001	21.74	6.00	7.28	5.18	56.79	3.01	0.72	-0.14	29.36	29.70	28.86	30.28	28.28				
JJW10-37	10.502	116.486	1107.8	750	0.010	5.86	4.81	9.67	9.40	67.40	2.86	0.82	-0.09	36.00	35.30	32.70	30.30	28.43				
JJW10-38	9.799	115.980	1911.0	750	0.006	10.10	5.59	9.92	5.30	64.50	4.59	0.78	-0.11	33.33	33.06	31.22	30.19	28.38				
JJW10-39	9.151	115.053	2200.0	750	0.005	11.57	7.89	11.83	5.42	61.20	2.08	0.71	-0.15	28.69	29.14	28.44	29.83	28.33				
JJW10-40	9.321	113.757	2316.0	750	0.002	15.81	6.33	6.72	5.84	61.00	4.29	0.73	-0.14	29.79	30.07	29.13	30.24	28.23				
JJW10-42	10.245	113.248	2036.0	750	0.001	13.76	7.44	7.76	5.69	63.50	1.85	0.67	-0.17	26.19	27.03	26.83	30.21	28.24				
JJW10-46	11.000	111.001	2453.0	750	0.001	33.04	7.01	9.87	3.08	42.82	4.18	0.71	-0.15	28.64	29.10	28.41	30.45	27.64				
JJW10-47	11.006	110.502	1516.0	750	n.a.†	21.24	13.31	17.11	22.61	25.11	0.62	0.75	-0.12	31.46	31.48	30.13	30.38	27.65				
JJW10-48	11.499	110.500	2340.0	750	0.894	45.47	5.09	2.85	0.37	45.44	0.78	0.44	-0.36	10.65	13.93	14.19	30.47	27.59				
JJW10-49	11.998	110.502	2588.0	500	0.023	22.25	6.73	9.38	1.73	57.98	1.94	0.66	-0.18	25.31	26.29	26.24	30.53	27.55				
JJW10-50	12.497	110.501	2611.0	750	0.003	25.01	8.71	8.99	6.49	47.12	3.68	0.69	-0.16	27.16	27.85	27.46	30.30	27.57				
JJW10-51	12.997	110.516	2745.0	750	0.002	20.59	7.72	11.33	4.97	54.62	0.77	0.69	-0.16	27.24	27.92	27.52	30.25	27.32				
JJW10-53	14.008	110.482	1720.0	700	0.001	19.53	10.58	11.86	7.39	45.03	5.61	0.70	-0.15	28.09	28.64	28.06	29.76	27.29				
JJW10-54	14.521	110.499	1059.9	750	0.200	21.67	9.71	8.82	2.81	54.79	2.20	0.59	-0.23	20.50	22.24	22.80	27.43	27.22				
JJW10-55	14.518	111.005	1351.9	750	0.047	22.32	9.86	8.01	4.83	53.17	1.82	0.60	-0.22	21.18	22.81	23.31	28.79	27.31				
JJW10-56	14.520	112.002	1695.3	1100	0.009	14.16	7.84	9.41	8.55	57.86	2.18	0.72	-0.14	29.33	29.68	28.84	29.91	27.44				
JJW10-57	14.523	112.999	4217.0	750	0.004	11.43	7.50	13.26	10.46	55.82	1.53	0.77	-0.11	32.74	32.55	30.88	30.47	27.67				
JJW10-58	14.522	114.001	3754.0	800	0.140	4.19	6.72	13.35	10.73	62.70	2.31	0.80	-0.10	34.47	34.02	31.86	30.00	27.73				
JJW10-59	14.517	114.998	4061.0	750	0.069	22.13	8.47	8.44	2.83	56.42	1.71	0.61	-0.22	21.68	23.23	23.68	29.91	27.71				
JJW10-60	15.999	115.001	1638.0	750	0.044	37.98	7.79	8.11	9.01	35.88	1.24	0.70	-0.15	28.13	28.67	28.09	29.56	27.29				
JJW10-61	16.002	114.002	1073.0	750	0.058	18.10	6.17	10.47	5.12	57.86	2.28	0.74	-0.13	30.90	31.01	29.80	30.48	27.34				
JJW10-62	16.001	112.998	1652.9	600	0.007	20.02	9.40	9.85	4.05	54.87	1.80	0.63	-0.20	23.03	24.37	24.66	29.76	27.34				
JJW10-63	15.995	112.005	1162.2	600	0.017	27.30	7.75	8.88	2.69	52.80	0.59	0.61	-0.21	22.06	23.55	23.96	29.67	27.30				
JJW10-64	16.000	110.996	654.3	500	0.032	8.48	5.53	10.83	8.84	64.99	1.33	0.79	-0.10	34.10	33.70	31.65	29.62	27.09				
JJW10-65	15.997	109.998	864.7	600	0.011	9.44	6.27	11.02	8.40	62.95	1.92	0.77	-0.11	32.87	32.66	30.95	29.64	26.93				
JJW10-66	16.497	109.995	1164.0	840	0.006	21.86	7.09	8.84	3.51	57.64	1.06	0.65	-0.18	24.95	25.99	26.00	29.49	26.83				
JJW10-67	16.994	110.003	1108.0	580	0.017	20.00	11.04	9.40	12.09	42.19	5.27	0.71	-0.15	28.53	29.00	28.34	29.49	26.87				
JJW10-68	17.494	110.008	159.2	690	0.006	25.29	4.26	6.71	1.63	61.27	0.84	0.68	-0.17	26.87	27.61	27.28	29.18	26.59				
JJW10-69	17.996	109.992	93.7	400	0.045	27.12	8.07	7.35	1.63	55.24	0.59	0.54	-0.27	17.50	19.71	20.44	29.34	26.21				
JJW10-73	18.997	111.504	154.0	300	0.033	26.82	6.94	7.77	1.91	56.36	0.20	0.59	-0.23	20.48	22.22	22.78	29.03	26.27				
JJW10-75	19.498	111.005	42.4	400	0.159	23.77	8.58	7.18	2.67	57.79	n.d.†	0.53	-0.27	16.98	19.27	20.00	26.64	26.90				
JJW10-76	20.249	111.757	74.8	300	0.252	23.29	8.03	5.68	1.93	60.95	0.12	0.49	-0.31	14.03	16.78	17.43	27.61	25.58				
JJW10-80	18.851	113.145	969.0	600	0.002	27.84	6.88	8.89	2.81	52.66	0.92	0.65	-0.19	24.49	25.60	25.68	28.90	26.48				
JJW10-82	18.499	114.251	3196.0	800	0.007	24.95	8.87	8.80	2.75	53.32	1.31	0.59	-0.23	20.79	22.48	23.02	29.65	26.60				
JJW10-85	19.500	114.403	1056.0	800	0.014	23.40	8.94	8.00	2.81	56.61	0.25	0.55	-0.26	18.19	20.29	20.99	29.42	26.54				
JJW10-86	20.011	114.082	395.0	600	0.011	20.56	7.10	11.26	1.67	58.13	1.28	0.67	-0.18	25.79	26.69	26.56	28.70	26.36				

†n.a. = not available; n.d. = not detected

Under TEX₈₆-Temp.^a = Schouten et al. (2002), ^b = Kim et al. (2008), and ^c = Kim et al. (2010).Kim, J.-H., S. Schouten, E. C. Hoppmans, B. Donner, and J. S. Sinningh Damsté. *Geochim. Cosmochim. Acta* 72:1154-1173, 2008.Kim, J.-H., J. van der Meer, S. Schouten, P. Helmke, V. Willmott, F. Sangiorgi, N. Koç, E. C. Hoppmans, and S. S. Damsté Jaap. *Geochim. Cosmochim. Acta* 74:4639-4654, 2010.Schouten, S., E. C. Hoppmans, E. Schefuß, and J. S. Sinningh Damsté. *Earth Planet. Sci. Lett.* 204:265-274, 2002.