

APPENDIX 3

Physical and chemical properties of sediment samples collected in the Torres Strait in pre-monsoon (PM) and monsoon (M) seasons. Locations of stations are shown in figure 1.1. Values shown for particle size distribution are percentages of total sample weight. Ca = calcium; Si = silicon; Org C = organic carbon; CaCO₃ = calcium carbonate. Mean value for each station is based on pooled data from three sites and three replicates per site (i.e. a total of nine replicate samples); SD = standard deviation.

Particle Size Distribution										
Station	Season	Value	> 2.0 mm	2.0-0.2 mm	0.2-0.063 mm	< 0.063 mm	Ca %	Si %	Org C %	CaCO ₃ %
S1	PM	Mean	0	1	61	38	0.97	29.82	0.8	1
		SD	0	0	9	9	0.083	0.433	0.1	0.5
		Max	1	1	71	58	1.15	30.47	1.0	2
		Min	0	1	40	29	0.89	29.08	0.8	1
	M	Mean	0	3	42	55	0.73	28.76	1.1	< 1
		SD		2	12	13	0.037	0.280	0.1	
		Max		6	63	70	0.78	29.09	1.2	
		Min		1	26	33	0.68	28.21	1.0	
S5	PM	Mean	14	43	22	20	31.86	4.99	0.7	77
		SD	5	3	4	3	0.617	0.165	0	2
		Max	20	48	27	22	32.48	5.26	0.7	79
		Min	7	40	17	15	30.74	4.79	0.7	75
	M	Mean	15	46	19	20	31.64	3.84	0.7	74
		SD	4	2	2	2	0.132	0.138	0	17
		Max	22	49	22	24	31.80	4.13	0.8	86
		Min	9	43	15	18	31.39	3.70	0.7	31
S6	PM	Mean	18	52	15	15	23.18	11.41	0.7	51
		SD	12	8	3	4	0.702	0.617	0.2	2
		Max	37	60	18	20	24.11	12.32	1.0	54
		Min	8	41	9	10	21.85	10.55	0.4	48
	M	Mean	11	53	19	16	20.68	12.06	0.6	49
		SD	3	5	3	4	0.895	1.009	0.1	4
		Max	18	58	24	24	21.44	13.94	0.7	54
		Min	8	45	15	12	18.84	11.07	0.5	40
S7	PM	Mean	30	54	4	12	34.14	3.81	0.7	80
		SD	6	6	1	2	0.621	0.261	0	4
		Max	41	64	5	15	34.90	4.25	0.7	86
		Min	24	43	3	9	33.14	3.45	0.6	76
	M	Mean	27	55	7	12	32.90	2.56	0.6	84
		SD	7	8	1	5	1.075	0.123	0.1	6
		Max	37	64	8	25	33.55	2.83	0.7	91
		Min	18	40	5	7	30.08	2.44	0.6	72

Particle Size Distribution

Station	Season	Value	> 2.0 mm	2.0-0.2 mm	0.2-.063 mm	< 0.063 mm	Ca %	Si %	Org C %	CaCO ₃ %
S8	PM	Mean	27	50	6	16	18.63	13.94	0.9	42
		SD	15	14	2	9	5.246	4.126	0.2	15
		Max	49	78	8	35	29.39	19.83	1.2	75
		Min	6	30	1	8	11.81	5.32	0.5	23
	M	Mean	31	50	6	12	17.42	13.68	0.8	42
		SD	11	10	3	6	5.474	4.169	0.2	16
		Max	50	71	10	18	27.47	18.06	1.1	70
		Min	16	35	2	2	12.30	6.18	0.5	27
S10	PM	Mean	1	9	74	17	12.90	19.45	0.5	27
		SD	0	3	3	2	0.599	0.616	0.1	1
		Max	1	14	78	19	13.66	20.30	0.5	30
		Min	0	4	69	13	12.17	18.75	0.4	26
	M	Mean	2	15	71	11	14.55	17.48	0.5	30
		SD	1	2	5	4	0.445	0.479	0	4
		Max	4	18	77	18	15.21	18.26	0.5	36
		Min	1	11	63	6	13.85	16.91	0.4	24
S11	PM	Mean	39	31	13	17	15.55	14.67	0.5	38
		SD	4	2	1.5	2	0.451	0.638	0	1
		Max	44	34	15	20	16.25	15.78	0.5	40
		Min	32	28	10	14	14.80	13.55	0.5	37
	M	Mean	39	28	15	18	17.10	14.70	0.6	39
		SD	11	5	3	5	0.948	0.624	0	3
		Max	55	35	19	24	18.08	15.77	0.6	43
		Min	25	23	11	9	15.74	13.85	0.6	33
S12	PM	Mean	29	23	11	37	10.43	19.80	0.7	21
		SD	11	6	2	14	0.640	2.733	0.1	4
		Max	47	34	14	55	11.27	22.70	0.9	26
		Min	15	16	9	17	9.39	15.89	0.6	16
	M	Mean	57	15	10	18	15.87	16.37	0.8	35
		SD	6	4	2	5	2.388	1.774	0.1	6
		Max	64	20	12	27	18.72	18.72	1.1	44
		Min	47	9	6	8	12.20	14.24	0.6	25

Particle Size Distribution

Station	Season	Value	> 2.0 mm	2.0-0.2 mm	0.2-.063 mm	< 0.063 mm	Ca %	Si %	Org C %	CaCO ₃ %
S13	PM	Mean	33	31	17	19	11.67	18.39	0.7	26
		SD	16	11	3	11	0.527	1.458	0.2	3
		Max	62	57	24	41	12.51	20.22	1.0	31
		Min	10	21	13	2	10.53	15.23	0.4	22
	M	Mean	38	30	13	18	15.10	17.18	0.6	33
		SD	25	14	8	9	3.293	2.295	0.1	9
		Max	83	53	22	36	20.48	21.44	0.8	50
		Min	15	10	2	5	9.62	13.71	0.4	19
S14	PM	Mean	16	60	7	17	32.10	4.98	0.4	80
		SD	6	9	2	5	0.446	0.363	0	1
		Max	23	76	10	24	32.72	5.52	0.4	82
		Min	9	52	5	10	31.48	4.51	0.3	77
	M	Mean	18	57	9	16	32.43	3.69	0.6	81
		SD	8	8	1	2	0.568	0.303	0.1	5
		Max	32	65	11	21	32.92	4.26	0.6	86
		Min	11	42	7	14	31.11	3.36	0.5	73
S15	PM	Mean	4	45	35	16	14.99	17.65	0.5	30
		SD	2	4	3	4	0.875	0.843	0.1	2
		Max	8	51	40	23	16.22	19.65	0.6	33
		Min	1	35	30	10	12.95	16.82	0.4	28
	M	Mean	5	47	36	11	13.79	17.36	0.5	31
		SD	2	2	3	2	0.962	0.758	0	5
		Max	11	51	40	15	15.04	18.65	0.6	40
		Min	3	44	32	9	12.10	16.48	0.5	24
S16	PM	Mean	7	43	21	29	29.57	7.34	0.6	70
		SD	2	3	1	2	0.727	0.395	0.1	3
		Max	10	50	23	31	31.12	7.81	0.7	76
		Min	5	39	18	24	28.75	6.62	0.5	67
	M	Mean	8	45	22	26	28.91	6.48	0.7	67
		SD	1	3	1	2	0.281	0.251	0	5
		Max	9	51	24	29	29.49	6.89	0.7	72
		Min	6	42	20	23	28.59	6.00	0.7	56

Particle Size Distribution

Station	Season	Value	> 2.0 mm	2.0-0.2 mm	0.2-.063 mm	< 0.063 mm	Ca %	Si %	Org C %	CaCO ₃ %
S17	PM	Mean	19	49	7	24	32.07	5.40	0.5	79
		SD	6	4	2	5	0.422	0.227	0	2
		Max	34	55	9	33	32.48	5.75	0.6	82
		Min	14	43	4	16	31.06	5.09	0.5	76
	M	Mean	21	49	7	23	31.33	4.34	0.7	74
		SD	6	5	1	3	0.222	0.190	0	5
		Max	36	54	8	26	31.66	4.72	0.7	79
		Min	15	40	6	18	31.12	4.13	0.6	62
S18	PM	Mean	10	56	19	15	22.63	9.69	0.6	56
		SD	4	10	5	4	1.400	1.543	0.1	6
		Max	18	80	24	19	26.12	11.76	0.7	70
		Min	5	48	9	5	21.46	6.61	0.5	49
	M	Mean	8	50	28	14	23.74	9.82	0.4	57
		SD	3	5	6	2	0.332	0.363	0	2
		Max	12	56	37	17	24.26	10.46	0.5	60
		Min	4	42	22	12	23.31	9.31	0.4	54