

SUPPLEMENTARY DATA 2—Assemblage-level proportions of taphonomic alteration in 33 samples with rhynchonellid

Sample	Taxon	Genera	Depth (m)	Shelf-basin	Region	Sediment	Coded sediment	Sample size
005/19	Terebratulids	A, M	5.5	Shallow shelf	Dahab	Muddy sand	2	36
005/25	Terebratulids	A, M	9	Shallow shelf	Dahab	Muddy sand	2	54
005/15	Terebratulids	A, M	10	Shallow shelf	Dahab	Coarse sand	2	114
005/16	Terebratulids	A, M	11	Shallow shelf	Dahab	Coarse sand	2	23
005/21	Terebratulids	A, M	11.5	Shallow shelf	Dahab	Coarse sand	2	22
005/3	Terebratulids	A, M	12	Shallow shelf	Dahab	Muddy sand	2	36
005/11	Terebratulids	A, M	13	Shallow shelf	Dahab	Muddy sand	2	33
93/10	Terebratulids	A, M	56	Shallow shelf	Port Sudan	Mud	1	151
105/1	Rhynchonellids	Cryptopora	71	Shallow shelf	Gulf of Aden	Coarse sand	2	24
100/8	Terebratulids	A, M	90	Shallow shelf	Port Sudan	Mud	1	295
105/2	Rhynchonellids	Cryptopora	179	Shallow shelf	Gulf of Aden	Muddy sand	2	36
95/5	Terebratulids	A, M, P	237	Shallow shelf	Port Sudan	Mud	1	15
95/12	Rhynchonellids	Cryptopora	308	Deep shelf	Port Sudan	Muddy sand	2	41
95/13	Rhynchonellids	Cryptopora	311	Deep shelf	Port Sudan	Muddy sand	2	27
93/9	Rhynchonellids	Cryptopora	313	Deep shelf	Port Sudan	Mud	1	598
105/3	Rhynchonellids	Cryptopora	321	Deep shelf	Gulf of Aden	Mud	1	52
100/5	Terebratulids	A, M	343	Deep shelf	Port Sudan	Mud	1	82
100/2	Terebratulids	Megeria	404	Deep shelf	Port Sudan	Mud	1	15
105/4	Rhynchonellids	Cryptopora	506	Deep shelf	Gulf of Aden	Mud	1	13
100/3	Terebratulids	A, M	557	Deep shelf	Port Sudan	Mud	1	14
93/6	Terebratulids	A, M, P	567	Deep shelf	Port Sudan	Mud	1	78
95/9	Rhynchonellids	Cryptopora	569	Deep shelf	Port Sudan	Mud	1	25
95/7	Rhynchonellids	Cryptopora	575	Deep shelf	Port Sudan	Mud	1	39
95/8	Rhynchonellids	Cryptopora	580	Deep shelf	Port Sudan	Mud	1	25
100/6	Terebratulids	Argyrotheca	669	Deep shelf	Port Sudan	Mud	1	13
84/1	Terebratulids	Platidia	736	Trough	Hurghada	Mud	1	18
86	Terebratulids	Platidia	941	Trough	Hurghada	Mud	1	10
81-87	Rhynchonellids	Cryptopora	1014	Trough	Hurghada	Crust	3	20
81/2	Terebratulids	Platidia	1081	Trough	Hurghada	Crust	3	30
81/5	Terebratulids	Platidia	1126	Trough	Hurghada	Crust	3	21
81/3	Terebratulids	Platidia	1294	Trough	Hurghada	Crust	3	16
87/3	Terebratulids	Platidia	1422	Trough	Hurghada	Crust	3	12
87/1	Terebratulids	Platidia	1448	Trough	Hurghada	Crust	3	20

ls and terebratulids.

Disarticulation	Fragmentation	External encrustation	Internal encrustation	External bioerosion	Internal bioerosion	Internal fine-scale alteration	Cement
0.58	0.47	0.14	0.03	0.56	0.19	0.00	0.00
0.56	0.24	0.46	0.07	0.78	0.34	0.02	0.00
0.57	0.35	0.12	0.03	0.89	0.47	0.15	0.00
0.78	0.91	0.13	0.00	0.78	0.30	0.04	0.04
0.45	0.23	0.18	0.00	0.59	0.27	0.00	0.00
0.56	0.33	0.25	0.11	0.80	0.31	0.08	0.03
0.30	0.21	0.24	0.00	0.67	0.15	0.06	0.00
0.74	0.32	0.30	0.39	0.95	0.83	0.74	0.02
0.63	0.54	0.00	0.00	0.46	0.08	0.33	0.00
0.93	0.39	0.33	0.24	0.87	0.53	0.33	0.24
0.75	0.81	0.00	0.00	0.19	0.03	0.72	0.00
0.93	0.40	0.00	0.07	0.07	0.47	0.33	0.13
0.65	0.60	0.03	0.00	0.85	0.30	0.63	0.00
0.30	0.33	0.00	0.00	0.22	0.07	0.22	0.04
0.42	0.49	0.04	0.03	0.59	0.24	0.46	0.00
0.66	0.55	0.00	0.00	0.32	0.09	0.50	0.00
0.96	0.46	0.09	0.11	0.88	0.55	0.43	0.18
1.00	0.53	0.00	0.00	1.00	0.53	0.07	0.20
0.60	0.74	0.02	0.00	0.30	0.10	0.76	0.00
1.00	0.50	0.29	0.07	0.93	0.79	0.71	0.57
0.97	0.50	0.08	0.08	0.71	0.42	0.24	0.04
0.76	0.76	0.04	0.04	0.68	0.24	0.76	0.00
0.44	0.44	0.08	0.03	0.56	0.22	0.44	0.00
0.48	0.48	0.00	0.00	0.64	0.16	0.48	0.00
1.00	0.15	0.15	0.08	0.62	0.31	0.38	0.23
0.94	0.06	0.06	0.00	0.56	0.17	0.22	0.39
1.00	0.30	0.00	0.00	0.80	0.50	0.10	0.50
0.20	0.20	0.00	0.00	0.55	0.10	0.35	0.90
0.73	0.17	0.03	0.03	0.00	0.00	0.00	0.90
0.90	0.19	0.05	0.05	0.76	0.33	0.29	0.67
0.50	0.13	0.00	0.06	0.19	0.06	0.00	0.81
0.92	0.15	0.00	0.08	0.46	0.15	0.38	0.77
0.95	0.15	0.00	0.00	0.30	0.05	0.00	0.35