

Methods and Data

Ocean Drilling Program site 847, located beneath the equatorial cold-tongue to the west of the Galapagos Islands (0°N, 95° W, 3373 m water depth) is used to monitor conditions in the Eastern Equatorial Pacific Ocean. Site 847 is ideal for this purpose because it possesses a high quality age model (1, 2) and because its backtrack path is zonal, and so does not cross the strong meridional gradients in SST in the region. ODP site 806, located on the Ontong Java Plateau (0°N, 159°E, 2520 m water depth) is used to monitor conditions in the Western Equatorial Pacific Ocean. Site 806 is the shallowest, hence best preserved, site to have been located under the western Pacific warm pool over the past 5 myr. It also possesses a high quality age model (3, 4).

We analyzed fossil shells of *Globogerinoides sacculifer* (w/o sac, 355-425µm), a planktonic foraminifera that has been the subject of extensive calibration work (5, 6, 7). Prior to analysis, samples were crushed, weighed, subjected to multiple sonication steps to remove fines, to reductive cleaning to remove oxy-hydroxide coatings, and to oxidative cleaning to remove organics using the “Boyle protocol” (8, 9). Measurements of Mg/Ca were made using a Perkin-Elmer Optima 8300 inductively coupled plasma optical emission spectrometer. We employed a ratio intensity calibration method (10, 11). Over the period during which the records at sites 847 and 806 were generated, we observed long term precision for Mg/Ca in liquid and foraminiferal consistency standards of 0.051 mmol/mol (1s, n=250) and 0.232 mmol/mol (1s, n=45), respectively (11). Simultaneous with our measurements of Mg/Ca, we monitored Mn/Ca in order to check for the presence of authigenic MnCO₃ overgrowths that the Boyle Method cannot remove (12). Prior to crushing, we determined the mass and number of foraminifera in each sample from which we calculated average shell mass, which can be a proxy for preservation state

(5). Splits of the crushed sample were separated and analyzed for oxygen ($\delta^{18}\text{O}$) isotopic composition using a Fisons Prism dual inlet gas source ratio mass spectrometer. Precision of NBS-19 and an in house standard were better than 0.08‰ for $\delta^{18}\text{O}$. Measurements of $\delta^{18}\text{O}$ are reported relative to Vienna Pee Dee Belemnite (V-PDB).

As with earlier studies of the EEP (12), we observed high Mn/Ca ratios even with reductive cleaning to remove oxy-hydroxide coatings, with mean Mn/Ca values of 1.45 ± 0.31 mmol/mol for site 847 samples. Mn/Ca ratios were significantly lower for site 806 samples (0.10 ± 0.5 mmol/mol), consistent with the site differences in interstitial water geochemistry. Mg/Ca and Mn/Ca ratios for the site 847 data have a weak but nevertheless statistically significant correlation ($r=0.25$, $n = 194$). Nevertheless, four separate lines of argument lead us to conclude that Mg associated with authigenic coatings is not significantly altering the SST estimates. First, the concentration of Mg in Mn carbonate overgrowths has been estimated to be 0.1 mol mol⁻¹ (13 and references therein). These relative concentrations imply that at most, Mn-associated Mg could be contributing 0.2 mmol/mol to observed Mg/Ca ratios at site 847 which is equivalent to a potential warm bias of less than 1°C, roughly equivalent to our external (foram replicate) reproducibility. Second, the correlation between Mg and Mn is inconsistent with an origin in authigenic manganese carbonate overgrowths because its slope is ~ 1.3 mol Mg/mol Mn (geometric mean regression slope calculated as Model I linear regression slope/ r), or more than ten times the observed concentration of Mg in Mn precipitates (13). Third, temporal trends in the two records are dissimilar. The Mg/Ca record at site 847 remains relatively *constant* from 5 Ma until approximately 2.5 Ma and then decreases toward the present. In contrast, the Mn/Ca record *increases* from 5 to 3 Ma and then decreases towards the present. Fourth, alkenone paleotemperature estimates measured in splits of site 847 samples indicate the same magnitude

of change and absolute SSTs as do our Mg/Ca based estimates (14). For these reasons, we conclude, that samples from site 847 with high Mn/Ca (>100 $\mu\text{mol/mol}$) preserve a sufficiently accurate primary Mg/Ca signal to reconstruct SSTs.

Because *G. sacculifer* (w/o sac) mostly calcifies in the mixed layer but adds some calcite at depth (5, 7, 15), its Mg/Ca values are consistent with temperatures at 20m water depth (7). The application of a suite of calibrations (5, 6, 7, 8), relating *G. sacculifer* (w/o sac) Mg/Ca to temperature, to our Mg/Ca dataset results in a range of absolute temperature estimates at our two sites but does not influence the difference between them, which is what we aim to resolve in this study. We applied a temperature calibration that takes dissolution into account (7) and monitored the size-normalized average shell mass (ASM) of our specimens (5). Because the ASM records from the two sites are similar while the Mg/Ca records are quite different, correcting for dissolution (5) does not influence, within error, the record of the SST difference between the two sites. The SST estimates used in this study are calculated using the calibration (7, 16), relating Mg/Ca to SST, that produced the most accurate Holocene temperature estimates at both sites, and represents the mid-range of temperature estimates with culture calibrations predicting lower SST (6) and field calibrations predicting higher SST (5, 7).

(1) A. C Mix, *Proc. Ocean Drill. Prog. Sci. Res.* **138**, 371 (1995).

(2) N. J. Shackleton, S. Crowhurst, T. Hagelberg, N. J. Pisias, D. A. Schneider, D. A., *Proc. Ocean Drill. Prog. Sci. Res.* **138**, 73 (1995).

(3) W. H. Berger, T. Bickert, H. Schmidt, G. Wefer, M. Yasuda, *Proc. Ocean Drill. Prog. Sci. Res.* **130**, 381 (1993).

(4) E. Jansen, L. A. Mayer, J. Backman, R. M. Leckie, T. Takayana, *Proc. Ocean Drill. Prog. Sci. Res.* **130**, 349 (1993).

(5) Y. Rosenthal, G. P. Lohmann, *Paleoceanography* **17**, 1044 (2002).

-
- (6) D. Nurnberg, J. Bijma, C. Hemleben, *Geochim. Cosmochim. Acta* **60**, 803 (1996).
- (7) P. S. Dekens, D. W. Lea, D. K. Pak, H. J. Spero, *Geochem. Geophys. Geosys.* **3**, 1022 (2002).
- (8) E. A. Boyle, L.D. Keigwin, *Earth Planet. Sci. Lett.* **76**, 135 (1986).
- (9) E. A. Boyle, Y. Rosenthal, in *Present and Past Circulation*, G. Wefer et al., Eds., (Springer-Verlag, New York, 1996), 423-443.
- (10) S. de Villiers, M. Greaves, H. Elderfield, *Geochem. Geophys. Geosys.* **3**, (2002); doi:10.1029/2001GC000169, 2002.
- (11) M. W. Wara et al., *Geochem. Geophys. Geosys.* **4**, 8404 (2003); doi:10.1029/2003GC000525.
- (12) E. A. Boyle, *Geochim. Cosmochim. Acta* **47**, 1815 (1983).
- (13) S. Barker, M. Greaves, H. Elderfield, *Geochem. Geophys. Geosys.* **4**, 8407 (2003); doi:10.1029/2003GC000559.
- (14) A. M. Haywood, P. Dekens, A.C. Ravelo, M. Williams, *Geochem. Geophys. Geosystems* **6**, (2005); doi:10.1029/2004GC000799.
- (15) A. C. Ravelo, R. G. Fairbanks, R. G., *Paleoceanography* **7**, 815 (1992).
- (16) We apply the dissolution corrected equation for *G. sacculifer* given in Ref. 7: $Mg/Ca = 0.31 \exp 0.084 [SST + 0.048(DCO32-)]$ where SST = sea surface temperature, and DCO32- = -10.3 for Site 847 and -10.5 for Site 806. These DCO32- values were chosen by selecting the nearest station locations to our sites used by Ref. 7.

***G. sacculifer* (w/o sac) isotope and Mg/Ca data from ODP 806**

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 A	1 H 1 6	0.36	0.019	-2.04	4.06	37.3
806 A	1 H 1 15	0.45	0.024	-1.82	4.02	36.5
806 A	1 H 1 59	0.89	0.047	-1.05	3.22	33.8
806 A	1 H 1 99	1.29	0.068	-1.19	3.41	34.0
806 A	1 H 1 99	1.29	0.068	-1.19	3.34	34.0
806 A	1 H 1 138	1.68	0.088	-1.54	3.34	31.9
806 A	1 H 1 138	1.68	0.088	-1.54	3.50	31.9
806 A	1 H 2 31	2.11	0.111	-1.62	3.69	32.2
806 A	1 H 2 69	2.49	0.131	-1.62	3.85	35.2
806 A	1 H 2 109	2.89	0.152	-0.84	3.44	35.5
806 A	1 H 2 148	3.28	0.172	-1.14	3.29	30.1
806 A	1 H 2 148	3.28	0.172	-1.14	3.26	30.1
806 A	1 H 3 40	3.70	0.194	-1.04	3.15	27.0
806 A	1 H 3 76	4.06	0.213	-1.57	3.88	29.9
806 A	1 H 3 113	4.43	0.233	-1.29	3.64	34.1
806 A	1 H 3 113	4.43	0.233	-1.29	3.64	34.1
806 A	1 H 4 7	4.87	0.256	-1.47	4.06	36.5
806 A	1 H 4 46	5.26	0.276	-1.11	3.74	30.6
806 A	1 H 4 88	5.68	0.298	-1.14	3.09	27.3
806 A	1 H 4 129	6.09	0.320	-1.15	3.41	27.3
806 A	1 H 4 129	6.09	0.320	-1.15	3.34	27.3
806 A	1 H 5 7	6.37	0.334	-1.22	3.93	27.7
806 A	1 H 5 46	6.76	0.355	-1.37	3.69	31.3
806 A	1 H 5 88	7.18	0.377		3.85	32.3
806 A	1 H 5 127	7.57	0.398		3.17	29.1
806 A	1 H 5 127	7.57	0.398		3.07	29.1
806 A	1 H 6 7	7.87	0.413	-1.11	3.43	29.0
806 A	2 H 1 7	8.08	0.424	-0.98	3.30	29.7
806 A	2 H 1 46	8.47	0.445	-0.81	4.70	31.6
806 A	2 H 1 88	8.89	0.466	-0.68	3.54	28.9
806 A	2 H 1 127	9.28	0.483	-0.58	3.49	31.7
806 A	2 H 2 16	9.67	0.501	-0.58	3.41	22.1
806 A	2 H 2 58	10.09	0.519	-1.43	4.20	26.2
806 A	2 H 2 58	10.09	0.519	-1.43	4.50	26.2
806 A	2 H 2 97	10.48	0.537	-1.19	4.09	29.3
806 A	2 H 2 136	10.87	0.554	-0.91	3.65	31.9
806 A	2 H 3 28	11.29	0.573	-1.04	3.62	28.2
806 A	2 H 3 67	11.68	0.591	-1.37	3.82	27.5
806 A	2 H 3 106	12.07	0.608	-1.34	4.19	29.5
806 A	2 H 3 145	12.46	0.625	-1.36	3.64	33.4
806 A	2 H 3 145	12.46	0.625	-1.36	3.88	33.4
806 A	2 H 4 37	12.88	0.644	-1.61	3.82	35.7
806 A	2 H 4 76	13.27	0.662	-0.60	3.58	37.7
806 A	2 H 4 116	13.67	0.679	-0.72	3.78	35.4
806 A	2 H 4 116	13.67	0.679	-0.72	3.69	35.4
806 A	2 H 5 6	14.07	0.697	-0.85	3.54	31.8
806 A	2 H 5 46	14.47	0.715	-1.07	3.56	34.0
806 A	2 H 5 86	14.87	0.733	-1.39	4.25	33.9
806 A	2 H 5 126	15.27	0.751	-0.87	3.78	37.7
806 A	2 H 6 16	15.67	0.769	-1.33	3.65	35.5
806 A	2 H 6 59	16.10	0.788	-0.83	3.33	36.1
806 A	2 H 6 106	16.57	0.809	-1.33	3.43	34.8
806 A	2 H 6 136	16.87	0.823	-1.50	4.31	33.5
806 A	2 H 6 136	16.87	0.823	-1.50	4.05	33.5
806 A	2 H 7 26	17.27	0.840	-0.64	3.28	33.1
806 A	2 H 7 54	17.55	0.853	-0.82	3.18	33.4
806 A	3 H 1 6	17.90	0.869	-0.96	3.55	36.2

Sample ID			Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 A	3 H	1	46	18.30	0.886	-1.34	3.79	33.4
806 A	3 H	1	86	18.70	0.904	-0.94	3.91	33.3
806 A	3 H	1	126	19.10	0.922	-0.54	3.27	36.7
806 A	3 H	1	126	19.10	0.922	-0.54	3.29	36.7
806 A	3 H	2	16	19.50	0.940	-0.75	3.38	34.6
806 A	3 H	2	56	19.90	0.958	-1.13	3.61	28.1
806 A	3 H	2	96	20.30	0.976	-1.35	3.71	32.6
806 A	3 H	2	136	20.70	0.994	-1.07	3.87	32.7
806 A	3 H	2	136	20.70	0.994	-1.07	3.90	32.7
806 A	3 H	3	26	21.10	1.012	-1.13	3.92	30.9
806 A	3 H	3	66	21.50	1.029	-1.41	3.38	29.9
806 A	3 H	3	106	21.90	1.047	-1.16	3.48	28.5
806 A	3 H	3	146	22.30	1.065	-1.39	3.92	35.7
806 A	3 H	3	146	22.30	1.065	-1.39	3.87	35.7
806 A	3 H	4	36	22.70	1.083	-1.08	3.46	36.1
806 A	3 H	4	76	23.10	1.101	-1.25	3.39	27.8
806 A	3 H	4	116	23.50	1.119	-1.34	4.67	32.0
806 A	3 H	4	116	23.50	1.119	-1.34	4.53	32.0
806 A	3 H	5	6	23.90	1.137	-1.05	3.75	35.7
806 A	3 H	5	46	24.30	1.155	-1.36	4.00	33.5
806 A	3 H	5	86	24.70	1.173	-1.19	3.61	34.6
806 A	3 H	5	126	25.10	1.190	-1.37	3.72	28.6
806 A	3 H	6	16	25.50	1.208	-1.16	4.33	34.6
806 A	3 H	6	56	25.90	1.226	-1.00	3.88	38.4
806 A	3 H	6	106	26.40	1.249	-1.08	3.27	30.7
806 A	4 H	1	6	27.29	1.288	-1.26	3.24	32.5
806 A	3 H	6	136	26.70	1.262	-1.38	3.97	34.7
806 A	3 H	6	136	26.70	1.262	-1.38	4.12	34.7
806 A	4 H	1	46	36.09	1.682	-1.14	3.60	36.3
806 A	3 H	7	26	27.10	1.280	-1.00	3.66	38.2
806 A	4 H	1	86	36.09	1.682	-1.21	3.13	27.0
806 A	3 H	7	66	27.50	1.298	-1.26	3.73	37.6
806 A	3 H	7	66	27.50	1.298	-1.26	3.57	37.6
806 A	4 H	1	126	27.69	1.306	-1.30	4.07	33.5
806 A	4 H	1	126	27.69	1.306	-1.30	4.00	33.5
806 A	4 H	2	16	28.09	1.324	-1.13	3.13	30.9
806 A	4 H	2	56	28.49	1.342	-1.28	3.93	36.8
806 A	4 H	2	96	28.89	1.360	-1.11	3.39	30.8
806 A	4 H	2	136	29.29	1.378	-1.39		35.7
806 A	4 H	2	136	29.29	1.378	-1.39	3.96	35.7
806 A	4 H	3	26	29.69	1.396		4.47	38.5
806 A	4 H	3	66	30.09	1.413	-1.34	3.66	31.3
806 A	4 H	3	106	30.49	1.431	-1.14	3.74	36.9
806 A	4 H	3	146	30.89	1.449	-1.10	3.52	31.2
806 A	4 H	3	146	30.89	1.449	-1.10	3.06	31.2
806 A	4 H	4	36	31.29	1.467	-1.39	3.74	36.7
806 A	4 H	4	76	31.69	1.485	-1.25	3.13	32.9
806 A	4 H	4	119	32.12	1.504	-1.45	3.60	31.4
806 A	4 H	4	119	32.12	1.504	-1.45	3.51	31.4
806 A	4 H	5	6	32.49	1.521	-1.17	3.60	33.3
806 A	4 H	5	46	32.89	1.539	-1.27	3.49	33.7
806 A	4 H	5	86	33.29	1.556	-1.31	3.60	37.2
806 A	4 H	5	86	33.29	1.556	-1.31	3.80	37.2
806 A	4 H	6	16	34.09	1.592	-1.13	4.09	
806 A	4 H	6	56	34.49	1.610	-1.02	3.75	34.4
806 A	4 H	6	106	34.99	1.632	-1.23	3.94	36.7
806 A	4 H	6	136	35.29	1.646	-1.08	3.64	31.6
806 A	4 H	6	136	35.29	1.646	-1.08	3.58	31.6

Sample ID			Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 A	4 H	7	26	35.69	1.664	-1.32	3.62	33.8
806 A	5 H	1	8	36.43	1.674	-1.02	3.43	37.1
806 A	4 H	7	64	26.51	1.253	-1.01	2.99	37.3
806 A	4 H	7	64	36.07	1.681	-1.01	3.33	37.3
806 A	5 H	1	46	36.81	1.686	-1.00	2.84	38.2
806 A	5 H	1	86	37.21	1.700	-1.27	3.14	35.7
806 A	5 H	1	126	37.61	1.713	-1.05	3.30	34.8
806 A	5 H	1	126	37.61	1.713	-1.05	3.26	34.8
806 A	5 H	2	16	38.01	1.727	-1.04	3.06	38.7
806 A	5 H	2	56	38.41	1.740	-1.08	3.13	33.3
806 A	5 H	2	96	38.81	1.754	-0.98	3.38	37.7
806 A	5 H	2	136	39.21	1.767	-1.10	3.55	39.2
806 A	5 H	2	136	39.21	1.767	-1.10	3.44	39.2
806 A	5 H	3	26	39.61	1.781	-0.89	3.01	39.5
806 A	5 H	3	66	40.01	1.794	-0.92	2.71	38.3
806 A	5 H	3	106	40.41	1.807	-1.17	3.30	37.6
806 A	5 H	3	146	40.81	1.821	-0.94	3.18	37.2
806 A	5 H	3	146	40.81	1.821	-0.94	3.13	37.2
806 A	5 H	4	36	41.21	1.834	-1.05	3.14	36.0
806 A	5 H	4	76	41.61	1.848	-1.20	3.38	37.2
806 A	5 H	4	116	42.01	1.861	-1.32	3.27	31.7
806 A	5 H	4	116	42.01	1.861	-1.32	3.25	31.7
806 A	5 H	5	6	42.41	1.875	-1.18	3.23	37.4
806 A	5 H	5	6	42.41	1.875	-1.18	3.20	37.4
806 A	5 H	5	46	42.81	1.888	-1.21	3.40	34.3
806 A	5 H	5	86	43.21	1.902	-1.12	3.35	35.8
806 A	5 H	5	126	43.61	1.915	-1.31	3.47	37.4
806 A	5 H	5	126	43.61	1.915	-1.31	3.79	37.4
806 A	5 H	6	16	44.01	1.928	-1.10	3.08	36.9
806 A	5 H	6	56	44.41	1.942	-1.37	3.14	34.2
806 A	5 H	6	106	44.91	1.982	-1.30	3.30	32.0
806 A	5 H	6	136	45.21	2.018	-1.31	3.42	40.4
806 A	5 H	6	136	45.21	2.018	-1.31	3.22	40.4
806 A	6 H	1	6	45.49	2.052	-1.04	2.84	38.9
806 A	5 H	7	26	45.61	2.067	-1.22	3.19	42.6
806 A	6 H	1	46	45.89	2.101	-1.35	3.55	34.3
806 A	5 H	7	66	46.01	2.116	-0.93	3.08	39.5
806 A	5 H	7	66	46.01	2.116	-0.93	3.17	39.5
806 A	6 H	1	86	46.29	2.150	-1.35	3.14	34.4
806 A	6 H	1	126	46.69	2.199	-1.09	3.26	35.5
806 A	6 H	1	126	46.69	2.199	-1.09	3.13	35.5
806 B	6 H	1	3	45.73	2.214	-0.93	3.21	38.3
806 A	6 H	2	16	47.09	2.223	-1.17	3.26	34.5
806 B	6 H	1	43	107.66	2.227	-1.17	3.05	42.7
806 A	6 H	2	56	47.49	2.238	-1.32	3.45	37.6
806 B	6 H	1	84	46.54	2.242	-1.02	2.98	39.9
806 A	6 H	2	96	47.89	2.254	-1.37	3.22	36.7
806 B	6 H	1	124	46.94	2.255	-0.86	3.09	28.1
806 B	6 H	1	124	46.94	2.255	-0.86	2.73	28.1
806 B	6 H	2	3	47.23	2.265	-1.17	3.20	43.0
806 A	6 H	2	136	48.29	2.269	-1.29	3.44	39.1
806 A	6 H	2	136	48.29	2.269	-1.29	3.49	39.1
806 B	6 H	2	43	47.63	2.279	-1.32	3.09	36.8
806 A	6 H	3	26	48.69	2.285	-1.17	3.10	38.0
806 B	6 H	2	84	48.04	2.293	-1.23	3.21	36.0
806 A	6 H	3	66	49.09	2.301	-1.31	3.49	38.3
806 B	6 H	2	124	48.44	2.307	-1.36	3.25	31.2
806 A	6 H	3	106	49.49	2.316	-1.32	3.58	35.0

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
806 B	6 H 3 13	48.83	2.320	-0.97	3.46
806 A	6 H 3 146	49.89	2.332	-1.37	3.52
806 A	6 H 3 146	49.89	2.332	-1.37	3.68
806 B	6 H 3 53	49.23	2.334	-1.16	3.09
806 A	6 H 4 36	50.29	2.347	-1.31	3.11
806 B	6 H 3 93	49.63	2.348	-1.47	3.61
806 B	6 H 3 133	50.03	2.361	-0.90	2.89
806 B	6 H 3 133	50.03	2.361	-0.90	2.84
806 A	6 H 4 76	50.69	2.363	-1.43	3.42
806 B	6 H 4 23	50.43	2.375	-1.37	3.36
806 A	6 H 4 116	51.09	2.378	-1.36	3.40
806 A	6 H 4 116	51.09	2.378	-1.36	3.36
806 B	6 H 4 63	50.83	2.389	-1.70	3.16
806 A	6 H 5 6	51.49	2.394	-1.14	2.94
806 B	6 H 4 102	51.22	2.402	-1.23	3.40
806 B	6 H 4 102	51.22	2.402	-1.23	3.44
806 B	6 H 4 114	51.34	2.406	-1.28	3.31
806 A	6 H 5 46	51.89	2.410	-1.32	3.40
806 A	6 H 5 46	51.89	2.410	-1.32	3.24
806 B	6 H 5 3	51.73	2.420	-1.44	3.52
806 A	6 H 5 86	52.29	2.425	-1.32	3.68
806 B	6 H 5 43	52.13	2.433	-1.28	3.40
806 A	6 H 5 126	52.69	2.441	-0.85	2.84
806 B	6 H 5 84	52.54	2.448	-1.02	3.11
806 A	6 H 6 16	53.09	2.456	-0.99	3.03
806 B	6 H 5 124	52.94	2.461	-1.33	3.61
806 B	6 H 6 3	53.23	2.471	-1.45	3.48
806 A	6 H 6 56	53.49	2.472	-1.41	3.17
806 B	6 H 6 43	53.63	2.485	-1.15	3.15
806 A	6 H 6 106	53.99	2.491	-1.17	3.60
806 B	6 H 6 84	54.04	2.499	-1.23	3.49
806 B	6 H 6 84	54.04	2.499	-1.23	3.45
806 A	6 H 6 136	54.29	2.503	-1.01	3.39
806 A	6 H 6 136	54.29	2.503	-1.01	3.37
806 B	6 H 6 124	54.44	2.513	-1.10	3.50
806 B	7 H 1 43	54.43	2.516	-0.83	3.15
806 A	6 H 7 26	54.69	2.519	-0.69	3.24
806 B	6 H 7 3	54.73	2.522	-0.70	3.02
806 B	7 H 1 83	54.83	2.524	-1.13	3.35
806 B	6 H 7 43	55.13	2.531	-0.78	2.94
806 A	6 H 7 58	55.01	2.531	-0.17	3.53
806 A	6 H 7 58	55.01	2.531	-0.17	3.41
806 B	7 H 1 123	55.23	2.533	-0.71	2.86
806 B	7 H 1 123	55.23	2.533	-0.71	2.43
806 B	6 H 7 83	55.53	2.539	-1.08	3.33
806 B	6 H 7 83	55.53	2.539	-1.08	3.57
806 B	7 H 2 3	55.53	2.542	-1.21	3.04
806 B	7 H 2 3	55.53	2.542	-1.21	3.01
806 B	7 H 2 43	55.93	2.555	-1.31	3.40
806 B	7 H 2 83	56.33	2.568	-1.26	2.94
806 B	7 H 2 123	56.73	2.581	-1.30	3.25
806 B	7 H 2 123	56.73	2.581	-1.30	3.46
806 B	7 H 2 133	56.83	2.584	-1.16	3.66
806 B	7 H 3 23	57.23	2.597	-1.25	3.24
806 B	7 H 3 63	57.63	2.612	-1.27	3.58
806 B	7 H 3 103	58.03	2.627	-1.05	3.77
806 B	7 H 3 143	58.43	2.643	-1.05	2.86
806 B	7 H 4 3	58.53	2.646	-1.28	3.16

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 B	7 H 4 43	58.93	2.662	-1.49	3.26	35.1
806 B	7 H 4 83	59.33	2.677	-1.47	4.04	33.8
806 B	7 H 4 123	59.73	2.692	-1.25	3.10	34.9
806 B	7 H 4 123	59.73	2.692	-1.25	3.19	34.9
806 B	7 H 5 3	60.03	2.703	-1.21	3.27	30.4
806 B	7 H 5 3	60.03	2.703	-1.21	3.43	30.4
806 B	7 H 5 33	60.33	2.715	-1.04	3.28	38.7
806 B	7 H 5 83	60.83	2.734	-1.13	2.48	29.7
806 B	7 H 5 83	60.83	2.734	-1.13	2.70	29.7
806 B	7 H 5 123	61.23	2.749	-1.57	3.21	31.0
806 B	7 H 6 3	61.53	2.760	-1.39	3.36	36.7
806 B	7 H 6 43	61.93	2.776	-1.09	3.31	35.3
806 B	7 H 6 43	61.93	2.776	-1.09	3.13	35.3
806 B	7 H 6 83	62.33	2.791	-1.13	3.02	33.6
806 B	7 H 6 83	62.33	2.791	-1.13	2.97	33.6
806 B	7 H 6 123	62.73	2.806	-1.35	3.43	31.4
806 B	7 H 6 123	62.73	2.806	-1.35	3.42	31.4
806 B	7 H 7 3	63.03	2.818	-1.03	3.36	31.9
806 B	7 H 7 43	63.43	2.833	-1.04	3.10	32.7
806 B	8 H 1 3	63.53	2.837	-1.24	3.41	27.0
806 B	8 H 1 43	63.93	2.852	-1.10	3.40	31.7
806 B	8 H 1 83	64.33	2.867	-1.33	3.55	27.6
806 B	8 H 1 123	64.73	2.879	-1.41	3.04	29.1
806 B	8 H 1 123	64.73	2.879	-1.41	3.38	29.1
806 B	8 H 2 3	65.03	2.888	-1.59	3.26	31.4
806 B	8 H 2 43	65.43	2.899	-1.44	3.27	30.3
806 B	8 H 2 83	65.83	2.911	-1.44	3.13	31.7
806 B	8 H 2 123	66.23	2.922	-1.60	3.18	32.3
806 B	8 H 3 3	66.53	2.931	-1.77	3.54	28.7
806 B	8 H 3 3	66.53	2.931	-1.77	3.61	28.7
806 B	8 H 3 43	66.93	2.942	-1.94	3.95	33.8
806 B	8 H 3 83	67.33	2.954	-1.34	3.67	32.9
806 B	8 H 3 83	67.33	2.954	-1.34	4.19	32.9
806 B	8 H 3 123	67.73	2.965			28.0
806 B	8 H 4 3	68.03	2.974	-1.59	3.50	40.7
806 B	8 H 4 43	68.43	2.985	-1.27	2.98	29.7
806 B	8 H 4 83	68.83	2.997	-1.41	2.99	36.7
806 B	8 H 4 123	69.23	3.008	-1.63	3.27	32.6
806 B	8 H 5 3	69.53	3.017	-1.21	3.27	30.7
806 B	8 H 5 3	69.53	3.017	-1.21	3.42	30.7
806 B	8 H 5 43	69.93	3.028		3.70	36.0
806 B	8 H 5 83	70.33	3.040	-1.60	3.49	29.9
806 B	8 H 5 123	70.73	3.051	-1.47	3.45	33.5
806 B	8 H 6 3	71.03	3.060	-1.38	3.38	31.8
806 B	8 H 6 43	71.43	3.071	-1.24	3.35	35.4
806 B	8 H 6 83	71.83	3.083	-1.30	3.57	34.6
806 B	8 H 6 123	72.23	3.094	-1.26	3.45	35.9
806 B	8 H 7 3	72.53	3.103	-0.92	3.69	35.6
806 B	8 H 7 3	72.53	3.103	-0.92	3.43	35.6
806 B	8 H 7 43	72.93	3.114	-1.30	3.57	36.3
806 B	9 H 1 3	73.03	3.117	-1.23	3.75	32.8
806 B	9 H 1 43	73.43	3.129	-1.21	3.64	33.8
806 B	9 H 1 83	73.83	3.140	-1.22	3.67	35.0
806 B	9 H 1 123	74.23	3.152	-1.25	3.77	35.3
806 B	9 H 1 123	74.23	3.152	-1.25	3.79	
806 B	9 H 2 3	74.53	3.160	-1.56	3.46	39.4
806 B	9 H 2 43	74.93	3.172	-1.33	3.24	33.3
806 B	9 H 2 83	75.33	3.183	-1.36	3.91	36.6

Sample ID			Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 B	9 H	2	123	75.73	3.195	-1.46	3.80	35.8
806 B	9 H	2	123	75.73	3.195	-1.46	3.48	35.8
806 B	9 H	3	3	76.03	3.203	-1.44	3.93	32.4
806 B	9 H	3	43	76.43	3.215	-1.52	4.03	38.1
806 B	9 H	3	83	76.83	3.226	-1.13	3.26	33.7
806 B	9 H	3	113	77.13	3.235	-1.25	3.97	34.8
806 B	9 H	3	113	77.13	3.235	-1.25	4.00	34.8
806 B	9 H	4	3	77.53	3.246	-1.59	3.60	33.9
806 B	9 H	4	43	77.93	3.258		3.38	33.1
806 B	9 H	4	43	77.93	3.258		3.48	33.1
806 B	9 H	4	83	78.33	3.269	-1.44	3.78	30.0
806 B	9 H	4	83	78.33	3.269	-1.44	3.57	30.0
806 B	9 H	5	3	79.03	3.289	-1.41	3.62	33.3
806 B	9 H	5	43	79.43	3.301	-1.40	3.72	36.0
806 B	9 H	5	43	79.43	3.301	-1.40	3.82	36.0
806 B	9 H	5	83	79.83	3.312	-1.42	3.31	30.5
806 B	9 H	5	123	80.23	3.324	-1.41	3.07	31.6
806 B	9 H	6	3	80.53	3.332	-1.51	3.76	36.3
806 B	9 H	6	43	80.93	3.344	-1.84	3.80	38.5
806 B	9 H	6	83	81.33	3.355	-1.59	3.57	37.2
806 B	9 H	6	123	81.73	3.367	-1.45	3.75	36.0
806 B	9 H	7	3	82.03	3.375	-1.50	3.50	33.0
806 B	9 H	7	43	82.43	3.387	-1.32	3.70	35.4
806 B	9 H	7	43	82.43	3.387	-1.32	3.60	35.4
806 B	9 H	7	83	82.83	3.398	-1.40	3.57	32.6
806 B	10 H	1	53	83.03	3.404	-1.32	3.86	31.9
806 B	10 H	1	93	83.43	3.415	-1.32	3.71	30.8
806 B	10 H	1	133	83.83	3.427	-1.36	3.83	33.7
806 B	10 H	1	133	83.83	3.427	-1.36	3.95	33.7
806 B	10 H	2	3	84.03	3.433	-1.55	3.62	32.4
806 B	10 H	2	43	84.43	3.444	-1.55	3.73	33.1
806 B	10 H	2	83	84.83	3.456	-1.51	3.81	30.7
806 B	10 H	2	123	85.23	3.467	-1.42	4.28	34.9
806 B	10 H	2	123	85.23	3.467	-1.42	3.78	34.9
806 B	10 H	3	3	85.53	3.476	-1.36	3.53	33.0
806 B	10 H	3	43	85.93	3.487	-1.46	3.64	29.5
806 B	10 H	3	83	86.33	3.499	-1.39	3.69	32.1
806 B	10 H	3	123	86.73	3.510	-1.55	3.66	34.3
806 B	10 H	3	123	86.73	3.510	-1.55	4.29	34.3
806 B	10 H	4	3	87.03	3.519	-1.45	3.68	35.4
806 B	10 H	4	43	87.43	3.530	-1.49	3.47	32.8
806 B	10 H	4	83	87.83	3.542	-1.31	3.45	31.4
806 B	10 H	4	123	88.23	3.553		3.70	32.2
806 B	10 H	4	123	88.23	3.553		3.71	32.2
806 B	10 H	5	3	88.53	3.562	-1.40	3.69	35.2
806 B	10 H	5	23	88.73	3.567	-1.34	3.42	37.2
806 B	10 H	5	43	88.93	3.573	-1.10	3.17	35.6
806 B	10 H	5	83	89.33	3.585	-1.43	3.57	29.2
806 B	10 H	5	123	89.73	3.596	-1.43	3.83	32.9
806 B	10 H	5	123	89.73	3.596	-1.43	4.14	32.9
806 B	10 H	6	3	90.03	3.605	-1.33	4.07	32.0
806 B	10 H	6	43	90.43	3.616	-1.43	3.93	32.6
806 B	10 H	6	83	90.83	3.628	-1.40	4.48	36.6
806 B	10 H	6	83	90.83	3.628	-1.40	4.26	36.6
806 B	10 H	6	123	91.23	3.639	-1.47	3.87	34.4
806 B	10 H	7	3	91.53	3.648	-1.30	3.42	33.8
806 B	10 H	7	43	91.93	3.659	-1.28	2.93	28.3
806 B	11 H	1	63	92.63	3.679	-1.42	3.87	36.8

Sample ID			Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
806 B	11 H	1	103	93.03	3.691	-1.54	4.14	34.7
806 B	11 H	1	143	93.43	3.702	-1.44	3.77	31.6
806 B	11 H	1	143	93.43	3.702	-1.44	3.55	31.6
806 B	11 H	2	4	93.54	3.705		3.61	32.1
806 B	11 H	2	43	93.93	3.717		4.07	36.3
806 B	11 H	2	83	94.33	3.728	-1.64	4.04	33.8
806 B	11 H	2	123	94.73	3.740	-1.51	3.92	37.6
806 B	11 H	2	123	94.73	3.740	-1.51	4.16	37.6
806 B	11 H	3	4	95.04	3.746	-1.53	3.62	34.5
806 B	11 H	3	53	95.53	3.756	-1.40	4.20	31.1
806 B	11 H	3	93	95.93	3.764	-1.60	3.54	32.0
806 B	11 H	3	133	96.33	3.772	-1.38	4.68	34.0
806 B	11 H	3	133	96.33	3.772	-1.38	3.57	34.0
806 B	11 H	4	13	96.63	3.778		3.23	32.1
806 B	11 H	4	53	97.03	3.787		3.69	39.5
806 B	11 H	4	93	97.43	3.795		3.47	34.0
806 B	11 H	4	133	97.83	3.803		3.60	33.8
806 B	11 H	5	63	98.63	3.819	-2.03	3.65	32.3
806 B	11 H	5	103	99.03	3.828	-1.85	3.50	34.7
806 B	11 H	5	143	99.43	3.836	-1.56	3.54	
806 B	11 H	5	143	99.43	3.836	-1.56	3.81	
806 B	11 H	6	23	99.73	3.842	-1.66	3.43	35.2
806 B	11 H	6	63	100.13	3.850	-1.55	3.46	31.9
806 B	11 H	6	63	100.13	3.850	-1.55	3.51	31.9
806 B	11 H	6	143	100.93	3.867	-1.56	3.38	33.6
806 B	11 H	7	33	101.33	3.875	-1.45	3.35	32.0
806 B	11 H	7	73	101.73	3.883	-1.56	3.53	34.7
806 B	11 H	7	73	101.73	3.883	-1.56	3.54	34.7
806 B	12 H	1	23	101.73	3.883	-1.39	3.32	32.4
806 B	12 H	1	63	102.13	3.891	-1.71	3.91	37.5
806 B	12 H	1	103	102.53	3.899	-1.56	3.45	32.3
806 B	12 H	1	143	102.93	3.907	-1.54	3.67	34.0
806 B	12 H	1	143	102.93	3.907	-1.54	3.76	34.0
806 B	12 H	2	33	103.33	3.916	-1.64	3.27	32.0
806 B	12 H	2	73	103.73	3.924	-1.88	3.51	38.0
806 B	12 H	2	113	104.13	3.932	-1.55	3.70	31.3
806 B	12 H	2	113	104.13	3.932	-1.55	3.35	31.3
806 B	12 H	3	3	104.53	3.940	-1.53	3.92	32.2
806 B	12 H	3	43	104.93	3.948	-1.56	3.39	30.1
806 B	12 H	3	83	105.33	3.957	-1.53	3.55	35.4
806 B	12 H	3	124	105.74	3.965	-1.48		33.2
806 B	12 H	3	124	105.74	3.965	-1.48	3.72	33.2
806 B	12 H	4	23	106.23	3.975	-1.50	3.77	34.5
806 B	12 H	4	23	106.23	3.975	-1.50	3.75	34.5
806 B	12 H	4	63	106.63	3.983	-1.52	3.71	31.7
806 B	12 H	4	103	107.03	3.991	-1.53	3.38	33.9
806 B	12 H	4	103	107.03	3.991	-1.53	3.61	33.9
806 B	12 H	5	23	107.73	4.006	-1.43	3.28	33.2
806 B	12 H	5	63	108.13	4.014	-1.37	3.33	35.8
806 B	12 H	5	103	108.53	4.022	-1.43	3.38	31.6
806 B	12 H	5	103	108.53	4.022	-1.43	3.35	31.6
806 B	12 H	5	143	108.93	4.030	-1.63	3.47	31.8
806 B	12 H	6	3	109.03	4.032	-1.47	3.49	37.9
806 B	12 H	6	3	109.03	4.032	-1.47	3.48	37.9
806 B	12 H	6	43	109.43	4.040	-1.44	3.51	33.9
806 B	12 H	6	83	109.83	4.049	-1.54	3.62	39.8
806 B	12 H	6	83	109.83	4.049	-1.54	3.29	39.8
806 B	12 H	6	124	110.24	4.057	-1.38	3.30	38.4

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
806 B 12 H 7 13	110.63	4.065	-1.42	3.11	38.7
806 B 12 H 7 53	111.03	4.073	-1.42	3.56	35.1
806 B 12 H 7 53	111.03	4.073	-1.42	3.43	35.1
806 B 13 H 1 3	111.03	4.073	-1.49	3.21	36.3
806 B 13 H 1 43	111.43	4.081	-1.33	3.51	35.4
806 B 13 H 1 83	111.83	4.090		4.72	28.0
806 B 13 H 1 123	112.23	4.098	-1.28	3.16	35.4
806 B 13 H 1 123	112.23	4.098	-1.28	2.99	35.4
806 B 13 H 2 13	112.63	4.106	-1.51	3.14	31.9
806 B 13 H 2 53	113.03	4.114	-1.40	3.33	35.7
806 B 13 H 2 93	113.43	4.122	-1.29	3.43	36.4
806 B 13 H 2 133	113.83	4.131	-1.59	3.02	28.5
806 B 13 H 2 133	113.83	4.131	-1.59	3.14	28.5
806 B 13 H 3 23	114.23	4.139	-1.43	3.44	35.4
806 B 13 H 3 63	114.63	4.147	-1.37	3.66	38.6
806 B 13 H 3 103	115.03	4.155	-1.46	3.40	35.0
806 B 13 H 3 103	115.03	4.155	-1.46	3.40	35.0
806 B 13 H 3 143	115.43	4.163	-1.53	3.04	32.5
806 B 13 H 4 33	115.83	4.172	-1.25	3.64	35.6
806 B 13 H 4 73	116.23	4.180	-1.27	3.50	35.7
806 B 13 H 4 113	116.63	4.188	-1.61	3.32	35.9
806 B 13 H 4 113	116.63	4.188	-1.61	3.67	35.9
806 B 13 H 5 3	117.03	4.196	-1.49	3.41	29.5
806 B 13 H 5 43	117.43	4.204	-1.52	3.19	38.1
806 B 13 H 5 83	117.83	4.212	-1.38	3.03	31.9
806 B 13 H 5 124	118.24	4.221	-1.48	3.07	31.6
806 B 13 H 5 124	118.24	4.221	-1.48	3.05	31.6
806 B 13 H 6 23	118.73	4.231	-1.38	3.07	31.4
806 B 13 H 6 63	119.13	4.239	-1.66	3.23	35.1
806 B 13 H 6 103	119.53	4.247	-1.33	3.22	32.8
806 B 13 H 6 103	119.53	4.247	-1.33	3.31	32.8
806 B 13 H 6 143	119.93	4.255	-1.46	3.07	32.9
806 B 13 H 7 33	120.33	4.264	-1.43	3.11	31.8
806 B 13 H 7 73	120.73	4.272	-1.25	3.18	32.4
806 B 14 H 1 33	120.83	4.274	-1.19	2.88	32.8
806 B 14 H 1 73	121.23	4.282	-1.31	2.89	38.0
806 B 14 H 1 124	121.74	4.292	-0.96	2.92	32.1
806 B 14 H 2 3	122.03	4.298	-1.23	3.18	33.7
806 B 14 H 2 43	122.43	4.307	-1.16	3.26	34.7
806 B 14 H 2 83	122.83	4.315	-1.36	3.19	35.8
806 B 14 H 2 133	123.33	4.325	-1.38	3.85	34.5
806 B 14 H 2 133	123.33	4.325	-1.38	3.51	34.5
806 B 14 H 3 3	123.53	4.329	-1.32	3.41	38.1
806 B 14 H 3 3	123.53	4.329	-1.32	3.36	38.1
806 B 14 H 3 43	123.93	4.337	-1.40	2.99	29.7
806 B 14 H 3 83	124.33	4.346	-1.37	3.16	33.5
806 B 14 H 3 124	124.74	4.354	-1.33	3.40	32.2
806 B 14 H 4 33	125.33	4.366	-1.19	3.55	38.7
806 B 14 H 4 73	125.73	4.374	-1.33	3.37	32.9
806 B 14 H 4 103	126.03	4.380	-1.33	2.92	35.5
806 B 14 H 4 103	126.03	4.380	-1.33	2.94	35.5
806 B 14 H 4 143	126.43	4.388	-1.38	3.01	29.5
806 B 14 H 5 3	126.53	4.391	-1.19	3.01	35.3
806 B 14 H 5 43	126.93	4.399	-1.38	3.83	37.7
806 B 14 H 5 83	127.33	4.407	-1.22	3.59	38.2
806 B 14 H 5 103	127.53	4.411	-1.11	3.47	39.6
806 B 14 H 5 103	127.53	4.411	-1.11	3.43	39.6
806 B 14 H 6 3	128.03	4.421	-1.18	3.34	38.0

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
806 B 14 H 6 43	128.43	4.429	-1.48	2.79	32.0
806 B 14 H 6 83	128.83	4.438	-1.15	2.95	34.9
806 B 14 H 6 124	129.24	4.446	-1.12	3.24	35.3
806 B 14 H 7 19	129.69	4.455	-1.21	3.29	34.6
806 B 15 H 1 43	130.43	4.470	-1.13	2.94	32.7
806 B 15 H 1 43	130.43	4.470	-1.13	2.89	32.7
806 B 15 H 1 83	130.83	4.479	-1.08	3.26	34.1
806 B 15 H 1 103	131.03	4.483	-1.06	3.53	36.8
806 B 15 H 1 143	131.43	4.491	-1.20	3.67	38.8
806 B 15 H 1 143	131.43	4.491	-1.20	3.53	38.8
806 B 15 H 2 3	131.53	4.493	-1.17	3.36	32.5
806 B 15 H 2 43	131.93	4.501	-1.11	3.37	41.6
806 B 15 H 2 83	132.33	4.509	-0.95	2.80	35.6
806 B 15 H 2 123	132.73	4.517	-1.37	3.14	34.4
806 B 15 H 2 123	132.73	4.517	-1.37	3.09	34.4
806 B 15 H 3 3	133.03	4.524	-1.13	3.39	33.3
806 B 15 H 3 43	133.43	4.532	-1.09	3.36	37.1
806 B 15 H 3 43	133.43	4.532	-1.09	3.42	37.1
806 B 15 H 3 83	133.83	4.540	-1.35	3.74	34.2
806 B 15 H 3 123	134.23	4.548	-0.94	3.27	35.1
806 B 15 H 4 3	134.53	4.554	-1.17	3.20	33.2
806 B 15 H 4 43	134.93	4.562	-1.00	3.57	36.4
806 B 15 H 4 83	135.33	4.571	-1.21	3.38	34.2
806 B 15 H 4 83	135.33	4.571	-1.21	3.55	34.2
806 B 15 H 5 3	136.03	4.585	-1.29	3.64	33.7
806 B 15 H 5 43	136.43	4.593	-1.25	3.41	34.4
806 B 15 H 5 83	136.83	4.601	-1.24	3.69	39.4
806 B 15 H 5 83	136.83	4.601	-1.24	3.68	39.4
806 B 15 H 5 123	137.23	4.610	-0.90	3.72	38.7
806 B 15 H 6 3	137.53	4.616	-1.15	3.73	40.4
806 B 15 H 6 43	137.93	4.624	-1.27	3.80	36.2
806 B 15 H 6 83	138.33	4.632	-1.40	2.90	32.4
806 B 15 H 6 123	138.73	4.640	-1.17	3.46	36.9
806 B 15 H 6 123	138.73	4.640	-1.17	3.50	36.9
806 B 15 H 7 3	139.03	4.646	-1.06	3.70	33.7
806 B 15 H 7 43	139.43	4.655	-1.12	3.88	36.8
806 B 16 H 1 3	139.53	4.657	-0.87	3.65	36.3
806 B 16 H 1 43	139.93	4.665	-1.14	3.68	37.1
806 B 16 H 1 83	140.33	4.673	-0.96	3.83	40.0
806 B 16 H 1 123	140.73	4.681	-1.02	3.62	37.1
806 B 16 H 1 123	140.73	4.681	-1.02	3.96	37.1
806 B 16 H 2 3	141.03	4.687	-1.16	3.74	39.5
806 B 16 H 2 43	141.43	4.696	-1.07	3.45	40.2
806 B 16 H 2 83	141.83	4.704	-1.33	3.01	35.6
806 B 16 H 2 103	142.03	4.708	-1.43	2.90	35.3
806 B 16 H 2 103	142.03	4.708	-1.43	3.02	35.3
806 B 16 H 3 3	142.53	4.718	-1.23	3.42	35.1
806 B 16 H 3 21	142.71	4.722	-1.23	3.57	45.1
806 B 16 H 3 43	142.93	4.726	-1.14	3.53	35.0
806 B 16 H 3 83	143.33	4.734	-1.21	3.08	36.1
806 B 16 H 3 123	143.73	4.743	-1.32	3.52	34.9
806 B 16 H 3 123	143.73	4.743	-1.32	3.56	34.9
806 B 16 H 4 23	144.23	4.753	-1.45	3.55	36.2
806 B 16 H 4 63	144.63	4.761	-1.41	3.24	36.3
806 B 16 H 4 103	145.03	4.769	-1.17	3.61	35.4
806 B 16 H 4 143	145.43	4.777	-1.52	3.45	36.8
806 B 16 H 4 143	145.43	4.777	-1.52	3.79	36.8
806 B 16 H 5 3	145.53	4.779	-1.41	3.60	36.4

Sample ID	Depth (mcd)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
806 B 16 H 5 43	145.93	4.788	-1.35	3.00	33.2
806 B 16 H 5 83	146.33	4.796	-1.30	3.32	28.8
806 B 16 H 5 123	146.73	4.804	-1.02	3.46	32.4
806 B 16 H 6 3	147.03	4.810	-1.24	3.48	42.3
806 B 16 H 6 43	147.43	4.818	-1.05	3.50	39.9
806 B 16 H 6 83	147.83	4.827	-1.35	3.43	40.8
806 B 16 H 6 124	148.24	4.835	-1.26	3.14	38.0
806 B 16 H 6 124	148.24	4.837	-1.26	3.06	38.0
806 B 16 H 7 13	148.63	4.848	-1.04	3.48	43.2
806 B 16 H 7 13	148.63	4.848	-1.04	3.30	43.2
806 B 16 H 7 53	149.03	4.860	-1.08	3.10	42.7
806 B 16 H 7 53	149.03	4.860	-1.08	3.27	42.7
806 B 17 H 1 3	149.03	4.860	-1.21	3.75	41.4
806 B 17 H 1 43	149.43	4.871	-1.12	3.42	44.2
806 B 17 H 1 83	149.83	4.883	-1.10	3.19	43.8
806 B 17 H 1 123	150.23	4.895	-1.31	3.27	40.5
806 B 17 H 1 123	150.23	4.895	-1.31	3.56	40.5
806 B 17 H 2 13	150.63	4.906	-1.33	3.46	42.5
806 B 17 H 2 53	151.03	4.918	-1.31	3.34	42.8
806 B 17 H 2 93	151.43	4.929	-1.20	3.42	45.1
806 B 17 H 2 133	151.83	4.941	-1.12	3.38	41.4
806 B 17 H 2 133	151.83	4.941	-1.12	3.41	41.4
806 B 17 H 3 23	152.23	4.953	-1.32	3.05	44.3
806 B 17 H 3 63	152.63	4.964	-1.08	3.30	39.4
806 B 17 H 3 103	153.03	4.976	-1.02	3.22	42.6
806 B 17 H 3 143	153.43	4.987	-1.25	2.90	42.1
806 B 17 H 3 143	153.43	4.987	-1.25	2.93	42.1
806 B 17 H 4 33	153.83	4.999	-1.02	3.44	38.9
806 B 17 H 4 73	154.23	5.010	-1.09	3.47	37.0
806 B 17 H 4 113	154.63	5.022	-1.01	3.57	41.1
806 B 17 H 4 113	154.63	5.022	-1.01	3.67	41.1
806 B 17 H 5 3	155.03	5.034	-1.21	3.37	37.4
806 B 17 H 5 43	155.43	5.045	-1.07	3.87	41.6
806 B 17 H 5 43	155.43	5.045	-1.07	3.68	41.6
806 B 17 H 5 83	155.83	5.057	-1.02	3.62	36.7
806 B 17 H 5 83	155.83	5.057	-1.02	3.62	33.3
806 B 17 H 5 123	156.23	5.068	-1.03	3.53	43.3
806 B 17 H 5 123	156.23	5.068	-1.03	3.79	43.3
806 B 17 H 6 13	156.63	5.080	-1.22	3.53	39.7
806 B 17 H 6 53	157.03	5.092	-1.24	3.42	38.8
806 B 17 H 6 93	157.43	5.103	-1.14	3.32	38.2
806 B 17 H 6 133	157.83	5.115	-1.09	3.53	39.5
806 B 17 H 6 133	157.83	5.115	-1.09	3.50	39.5
806 B 17 H 7 23	158.23	5.126	-1.13	3.35	40.5
806 B 17 H 7 23	158.23	5.126	-1.13	3.87	40.5
806 B 17 H 7 63	158.63	5.138	-1.18	3.22	42.8

***G. sacculifer* (w/o sac) isotope and Mg/Ca data from ODP 847**

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
847 B	1 h	1	0	0.00	0.000	-1.38	3.11	19.4
847 B	1 h	1	45	0.45	0.010	-0.69	1.87	27.7
847 B	1 h	1	90	0.90	0.020		1.93	27.0
847 B	1 h	2	0	1.50	0.033		1.89	18.0
847 B	1 h	2	35	1.85	0.041		2.21	25.0
847 C	1 h	1	15	2.55	0.070	-0.73		28.6
847 B	1 h	2	135	2.85	0.082		1.98	
847 C	1 h	1	45	2.85	0.082		2.17	20.0
847 B	1 h	3	0	3.00	0.088		2.20	26.0
847 B	1 h	3	0	3.00	0.088		1.92	26.0
847 C	1 h	1	75	3.15	0.093		2.10	26.0
847 B	1 h	3	45	3.45	0.103	-1.12		22.3
847 C	1 h	1	120	3.60	0.109	-0.71		21.3
847 B	1 h	3	90	3.90	0.119		2.55	18.3
847 B	1 h	3	135	4.35	0.135	-0.94		25.6
847 C	1 h	2	45	4.35	0.135	-0.54		25.4
847 C	1 h	2	90	4.80	0.149		2.28	25.8
847 C	1 h	3	0	5.40	0.160		2.14	13.0
847 C	1 h	3	90	6.30	0.176		2.37	20.5
847 C	1 h	3	135	6.75	0.185		2.22	16.0
847 C	1 h	4	45	7.35	0.215		2.34	24.7
847 C	1 h	4	90	7.80	0.230		2.29	15.0
847 C	1 h	4	135	8.25	0.241	0.65	2.46	26.1
847 C	1 h	5	45	8.85	0.248		2.24	26.7
847 C	1 h	5	135	9.75	0.288	-0.89		19.7
847 C	1 h	6	45	10.35	0.310		2.38	20.0
847 C	1 h	6	90	10.80	0.327	-1.31		19.0
847 C	1 h	6	135	11.25	0.336	-0.63		22.1
847 C	1 h	7	45	11.85	0.350	-0.97	2.04	22.5
847 D	2 h	3	60	12.00	0.354	-0.46		22.3
847 D	2 h	4	0	12.90	0.375			20.0
847 C	2 h	1	15	13.33	0.392		2.28	25.0
847 C	2 h	1	45	13.63	0.401	-1.63	2.71	23.5
847 C	2 h	1	90	14.08	0.424	0.02		23.5
847 C	2 h	1	135	14.53	0.447	-0.46	2.24	19.4
847 C	2 h	2	0	14.68	0.450	-0.79		19.6
847 C	2 h	2	45	15.13	0.462	-0.83		19.1
847 C	2 h	2	90	15.58	0.475	-0.71	2.28	19.0
847 C	2 h	3	90	17.08	0.527	-0.67		20.6
847 C	2 h	3	135	17.53	0.548	-0.50		22.0
847 C	2 h	4	0	17.68	0.554	-1.00		22.8
847 C	2 h	4	45	18.13	0.575	-1.97		21.3
847 C	2 h	4	135	19.03	0.612	-1.18	2.27	20.6
847 C	2 h	5	0	19.18	0.618	-1.30	2.47	32.4
847 C	2 h	5	45	19.63	0.637	-0.11		24.7
847 C	2 h	5	90	20.08	0.651	-0.22		25.5
847 C	2 h	5	135	20.53	0.664	-0.41		29.0
847 C	2 h	6	0	20.68	0.667			26.8
847 C	2 h	6	45	21.13	0.678	-0.75		23.3
847 C	2 h	6	90	21.58	0.696			25.0
847 C	2 h	6	135	22.03	0.710	-0.44		23.5

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
847 D	3 h	3	105	23.15	0.765	-0.56	25.9	
847 C	3 h	1	0	23.40	0.772	-1.20	2.36	20.6
847 C	3 h	1	45	23.85	0.778		2.80	19.0
847 C	3 h	1	90	24.30	0.783	-0.37	2.22	21.3
847 C	3 h	1	135	24.75	0.805		2.08	22.3
847 C	3 h	1	135	24.75	0.805	-0.57	2.56	23.7
847 C	3 h	2	0	24.90	0.812	-0.84	2.28	23.6
847 C	3 h	2	45	25.35	0.830	-1.07	2.21	26.5
847 C	3 h	3	0	26.40	0.859	-0.28	2.61	25.6
847 C	3 h	3	45	26.85	0.872	0.02	1.99	26.4
847 C	3 h	3	90	27.30	0.884		2.14	22.8
847 C	3 h	3	135	27.75	0.897		2.32	27.0
847 C	3 h	4	0	27.90	0.901	-0.37	2.29	26.0
847 C	3 h	4	45	28.35	0.918	-0.64	2.18	22.3
847 C	3 h	4	135	29.25	0.961	-0.81	2.74	24.9
847 C	3 h	4	135	29.25	0.961	-0.81	2.58	24.9
847 C	3 h	4	135	29.25	0.961	-0.81	2.78	24.9
847 C	3 h	5	0	29.40	0.968		3.15	25.0
847 C	3 h	5	45	29.85	0.984	-1.01		23.4
847 C	3 h	5	90	30.30	0.997	-0.99	1.78	20.0
847 C	3 h	5	90	30.30	0.997	-0.99	1.79	20.0
847 C	3 h	5	135	30.75	1.015		1.79	25.0
847 C	3 h	6	0	30.90	1.021		2.12	24.1
847 C	3 h	6	28	31.18	1.034	-0.41		
847 C	3 h	6	45	31.35	1.042	-1.03	2.29	22.4
847 C	3 h	6	45	31.35	1.042	-1.03	2.27	22.4
847 C	3 h	6	90	31.80	1.052		2.13	21.4
847 C	3 h	6	90	31.80	1.052		2.08	21.4
847 C	3 h	6	90	31.80	1.052		2.27	21.4
847 C	3 h	7	0	32.40	1.065		2.43	24.0
847 C	3 h	7	45	32.85	1.077	-1.27	2.71	22.5
847 C	3 h	7	45	32.85	1.077	-1.27	2.75	22.5
847 D	4 h	3	45	33.05	1.082	-1.06		21.3
847 D	4 h	3	90	33.50	1.095	-0.72		21.6
847 D	4 h	3	135	33.95	1.107			20.3
847 C	4 h	1	45	34.25	1.115	-1.11	2.32	23.7
847 C	4 h	1	90	34.70	1.128	-0.36	2.35	21.7
847 C	4 h	1	133	35.13	1.140	-0.68		18.3
847 C	4 h	1	135	35.15	1.141	-1.08	2.04	21.7
847 C	4 h	1	135	35.15	1.141	-1.08	1.95	21.7
847 C	4 h	2	22	35.52	1.150	-1.13	2.61	29.0
847 C	4 h	2	68	35.98	1.163	-0.87	2.28	21.8
847 C	4 h	2	101	36.31	1.172	-0.94	2.70	24.1
847 C	4 h	2	141	36.71	1.183	-0.89	2.88	24.2
847 C	4 h	3	36	37.16	1.195	-0.48	2.10	
847 C	4 h	3	73	37.53	1.206	-0.70	2.33	25.8
847 C	4 h	3	113	37.93	1.230	-0.76	2.23	21.9
847 C	4 h	4	6	38.36	1.249	-1.46	2.54	21.1
847 C	4 h	4	41	38.71	1.260	-1.00	2.50	23.3
847 C	4 h	4	81	39.11	1.272	-0.51		29.1
847 C	4 h	4	126	39.56	1.280	-0.81	2.27	25.0
847 C	4 h	5	13	39.93	1.288	-0.87	2.44	24.6

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
847 C	4 h	5	53	40.33	1.301	-0.87	2.49	28.1
847 C	4 h	5	96	40.76	1.316	-0.51	1.72	22.8
847 C	4 h	5	133	41.13	1.328	-0.88	2.74	23.5
847 C	4 h	6	21	41.51	1.334	-0.91	1.95	21.7
847 C	4 h	6	41	41.71	1.337	-0.92	2.96	23.6
847 C	4 h	6	81	42.11	1.360	-0.73		24.3
847 C	4 h	6	125	42.55	1.381	-0.76	2.28	23.1
847 C	4 h	7	11	42.91	1.387	-1.48	2.59	25.6
847 C	4 h	7	53	43.33	1.393	-0.95	2.87	22.9
847 C	5 h	1	11	44.61	1.426			23.0
847 C	5 h	1	57	45.07	1.455	-0.77	2.14	20.2
847 C	5 h	1	131	45.81	1.497	-1.44	2.61	23.8
847 C	5 h	2	21	46.21	1.504	-1.14	2.77	23.8
847 C	5 h	2	67	46.67	1.512			21.0
847 C	5 h	2	101	47.01	1.518		2.90	31.0
847 C	5 h	2	141	47.41	1.526		2.36	22.5
847 C	5 h	2	141	47.41	1.526	-2.05		33.0
847 C	5 h	3	36	47.86	1.541			25.0
847 C	5 h	3	71	48.21	1.553			31.5
847 C	5 h	3	111	48.61	1.567	-1.07	2.41	19.0
847 C	5 h	4	6	49.06	1.575		2.14	31.5
847 C	5 h	4	6	49.06	1.575			19.0
847 C	5 h	4	41	49.41	1.581		2.84	28.7
847 C	5 h	4	81	49.81	1.588			18.0
847 C	5 h	4	81	49.81	1.588		2.28	27.0
847 C	5 h	4	126	50.26	1.596			20.3
847 C	5 h	5	11	50.61	1.601			22.0
847 C	5 h	5	51	51.01	1.611	-1.04	2.71	27.3
847 C	5 h	5	96	51.46	1.630	-1.01	2.58	25.5
847 C	5 h	6	21	52.21	1.661	-0.44	2.11	20.6
847 C	5 h	6	41	52.41	1.669	-0.90	2.70	25.0
847 C	5 h	6	81	52.81	1.685		2.38	38.0
847 C	5 h	7	11	53.61	1.702		2.93	21.0
847 C	6 h	1	11	55.31	1.725	-1.11	2.95	27.5
847 C	6 h	1	51	55.71	1.743	-1.05	2.56	29.0
847 C	6 h	1	96	56.16	1.760	-1.42	2.66	30.2
847 C	6 h	1	131	56.51	1.772	-0.90	2.68	27.8
847 C	6 h	2	21	56.91	1.786	-1.04		25.1
847 C	6 h	2	66	57.36	1.801	-0.91	2.74	28.2
847 C	6 h	2	101	57.71	1.812			28.0
847 C	6 h	2	141	58.11	1.819			24.0
847 C	6 h	3	6	58.26	1.822	-0.76	3.13	25.2
847 C	6 h	3	71	58.91	1.834	-1.21	3.03	25.7
847 C	6 h	3	111	59.31	1.841	-1.10	3.14	24.5
847 C	6 h	4	6	59.76	1.849	-1.38	3.40	30.3
847 C	6 h	4	50	60.20	1.857	-1.57	2.70	20.9
847 C	6 h	4	81	60.51	1.862		2.56	29.3
847 C	6 h	4	126	60.96	1.870	-1.01		25.2
847 C	6 H	5	11	61.31	1.878		3.33	26.7
847 C	6 h	5	56	61.76	1.897	-1.01	2.50	21.5
847 C	6 h	5	96	62.16	1.910	-0.70	3.22	19.6
847 C	6 H	5	131	62.51	1.918		2.76	26.5

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
847 C	6 H	6	21	62.91	1.928	2.42	26.0
847 C	6 h	6	41	63.11	1.933	-1.47	24.0
847 C	6 h	6	81	63.51	1.942	-1.21	22.8
847 C	6 h	6	121	63.91	1.949	-1.15	25.4
847 C	6 H	7	11	64.31	1.954		25.0
847 C	7 h	1	96	67.76	2.036	-0.73	24.2
847 C	7 h	1	131	68.11	2.041	-1.05	24.0
847 C	7 h	2	21	68.51	2.050	-0.85	24.5
847 C	7 h	2	67	68.97	2.064	-0.97	23.9
847 C	7 h	2	101	69.31	2.074	-1.13	25.8
847 C	7 h	2	141	69.71	2.086		23.0
847 C	7 h	3	37	70.17	2.101	-1.08	28.1
847 C	7 h	3	71	70.51	2.116	-1.10	27.5
847 C	7 h	3	111	70.91	2.132		27.0
847 C	7 h	4	6	71.36	2.146	-0.23	29.0
847 C	7 h	4	41	71.71	2.158	-0.92	28.4
847 C	7 h	4	126	72.56	2.186	-1.08	30.0
847 C	7 h	5	11	72.91	2.197	-1.18	29.7
847 C	7 h	5	51	73.31	2.210	-1.05	30.9
847 C	7 h	5	96	73.76	2.225	-1.34	26.8
847 C	7 h	5	131	74.11	2.235	-1.27	29.0
847 C	7 h	6	21	74.51	2.244	-1.27	34.7
847 C	7 h	6	41	74.71	2.249	-1.48	32.8
847 C	7 h	6	82	75.12	2.261		26.5
847 C	7 h	6	126	75.56	2.280	-1.03	33.8
847 C	7 h	7	11	75.91	2.295	-1.28	28.2
847 C	7 h	7	51	76.31	2.311	-1.37	31.0
847 C	8 h	1	11	76.81	2.327	-1.59	29.3
847 C	8 h	1	53	77.23	2.341	-1.11	26.1
847 C	8 h	1	96	77.66	2.355	-1.23	24.0
847 C	8 h	1	131	78.01	2.364	-0.67	24.5
847 C	8 h	2	21	78.41	2.376	-1.30	24.0
847 C	8 h	2	68	78.88	2.389	-1.26	26.2
847 C	8 h	2	101	79.21	2.402	-0.63	23.5
847 C	8 h	2	141	79.61	2.419	-0.67	29.7
847 C	8 h	3	36	80.06	2.430	-1.03	22.9
847 C	8 h	3	71	80.41	2.438	-0.92	28.8
847 C	8 h	3	111	80.81	2.446	-0.54	22.7
847 C	8 h	4	6	81.26	2.455	-1.03	25.0
847 C	8 h	4	41	81.61	2.462		21.2
847 C	8 h	4	81	82.01	2.470	-0.99	26.2
847 C	8 h	4	126	82.46	2.480	-0.68	24.8
847 C	8 h	5	11	82.81	2.493		30.5
847 C	8 h	5	51	83.21	2.508		20.0
847 C	8 h	5	96	83.66	2.524	-0.98	26.7
847 C	8 h	5	131	84.01	2.533	-0.94	24.6
847 C	8 h	6	41	84.61	2.554		32.0
847 C	8 h	6	81	85.01	2.572	-1.18	27.2
847 C	9 h	1	11	88.01	2.659	-1.08	25.1
847 C	9 h	1	51	88.41	2.671		26.3
847 C	9 h	1	89	88.79	2.682	-1.26	26.2
847 C	9 h	1	131	89.21	2.697	-0.80	25.5

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
847C	9h	2	21	89.61	2.714	-1.18	3.31	27.4
847C	9h	2	58	89.98	2.731	-0.77	3.10	25.6
847C	9h	2	97	90.37	2.739	-0.79		22.5
847C	9h	2	140	90.80	2.748	-0.79	2.54	27.2
847C	9h	3	35	91.25	2.763	-1.19	2.79	28.5
847C	9h	3	71	91.61	2.780	-0.83	2.74	24.2
847C	9h	3	111	92.01	2.790			25.6
847C	9h	4	6	92.46	2.798			30.3
847C	9h	4	41	92.81	2.807			24.5
847C	9h	4	86	93.26	2.818	-1.27	3.16	24.7
847C	9h	5	51	94.41	2.857			27.4
847C	9h	5	96	94.86	2.877			21.0
847C	9h	5	131	95.21	2.894			25.7
847C	9h	6	21	95.61	2.909	-1.36	3.36	23.5
847C	9h	6	41	95.81	2.914			23.9
847C	9h	6	81	96.21	2.923	-1.56	2.79	29.2
847C	9h	6	126	96.66	2.932		2.70	28.0
847C	9h	7	11	97.01	2.939		2.66	27.4
847C	9h	7	51	97.41	2.956		3.30	25.0
847C	10h	1	11	98.31	2.994	-1.74	2.79	28.1
847C	10h	1	51	98.71	3.007	-1.18	2.63	25.5
847C	10h	1	91	99.11	3.020		3.28	28.7
847C	10h	1	131	99.51	3.034	-1.56	3.05	27.2
847C	10h	2	21	99.91	3.053	-1.15	2.47	28.0
847C	10h	2	61	100.31	3.071		3.06	28.3
847C	10h	2	101	100.71	3.088	-1.56	2.76	30.3
847C	10h	2	141	101.11	3.104	-1.43	3.67	25.8
847C	10h	3	31	101.51	3.117	-1.60	2.92	30.8
847C	10h	3	71	101.91	3.129	-1.61	2.71	26.4
847C	10h	3	111	102.31	3.141	-1.73		26.5
847C	10h	4	6	102.76	3.154	-1.70	2.80	34.0
847C	10h	4	41	103.11	3.166			22.3
847C	10h	4	81	103.51	3.181	-1.71	3.28	27.8
847C	10h	4	121	103.91	3.198	-1.23		23.7
847C	10h	5	11	104.31	3.215			28.0
847C	10h	5	51	104.71	3.232	-1.62		27.8
847C	10h	5	91	105.11	3.240	-1.55	2.49	27.0
847C	10h	5	131	105.51	3.248			27.0
847C	10h	6	21	105.91	3.258	-1.63	2.81	25.4
847C	10h	6	41	106.11	3.265		3.26	28.0
847C	10h	6	81	106.51	3.281	-1.21	5.73	26.0
847C	10h	6	121	106.91	3.294	-1.12	3.59	27.7
847C	10h	7	11	107.31	3.304		3.12	33.5
847C	10h	7	51	107.71	3.318	-1.62	2.67	26.4
847C	11h	1	11	109.01	3.361	-1.62	3.68	26.8
847C	11h	1	51	109.41	3.378	-1.57	2.66	27.6
847C	11h	1	91	109.81	3.394		3.14	27.0
847C	11h	1	131	110.21	3.405	-1.17	2.82	27.3
847C	11h	2	21	110.61	3.417		3.22	27.3
847C	11h	2	61	111.01	3.429		2.62	26.3
847C	11h	2	141	111.81	3.462		3.00	24.5
847C	11h	3	31	112.21	3.479		3.22	31.9

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)
847 C	11 h	3	71	112.61	3.496	3.30	27.0
847 C	11 h	3	111	113.01	3.512	2.76	29.6
847 C	11 h	4	6	113.46	3.528	-1.62	27.6
847 C	11 h	4	41	113.81	3.540	-1.57	32.5
847 C	11 h	4	81	114.21	3.553		28.9
847 C	11 h	4	121	114.61	3.567	-1.17	
847 C	11 h	4	121	114.61	3.567	-1.59	28.1
847 C	11 h	5	11	115.01	3.580		28.5
847 C	11 h	5	51	115.41	3.593		28.6
847 C	11 h	5	91	115.81	3.606	-1.57	27.4
847 C	11 h	5	91	115.81	3.606		34.0
847 C	11 h	5	131	116.21	3.616		21.7
847 C	11 h	6	21	116.61	3.627		31.0
847 C	11 h	6	41	116.81	3.632		26.6
847 C	11 h	6	81	117.21	3.647		27.6
847 C	11 h	6	21	116.61	3.627		31.0
847 C	11 h	6	41	116.81	3.632		26.6
847 C	11 h	6	81	117.21	3.647		27.6
847 C	11 h	6	121	117.61	3.663		27.2
847 C	11 h	7	11	118.01	3.679	-1.07	27.8
847 C	11 h	7	51	118.41	3.693		24.0
847 C	12 h	1	11	118.91	3.706		24.9
847 C	12 h	1	51	119.31	3.718		31.0
847 C	12 h	1	91	119.71	3.736		26.3
847 C	12 h	1	131	120.11	3.754	-1.13	27.5
847 C	12 h	2	21	120.51	3.768	-0.95	24.1
847 C	12 h	2	61	120.91	3.781	-1.73	25.8
847 C	12 h	2	101	121.31	3.795	-1.29	27.4
847 C	12 h	2	141	121.71	3.809		31.0
847 C	12 h	3	33	122.13	3.824	-1.19	24.8
847 C	12 h	3	76	122.56	3.839		28.0
847 C	12 h	3	113	122.93	3.853	-1.71	28.3
847 C	12 h	4	6	123.36	3.868	-1.54	27.1
847 C	12 h	4	46	123.76	3.883	-1.72	26.5
847 C	12 h	4	86	124.16	3.899	-1.84	26.6
847 C	12 h	4	126	124.56	3.916	-1.25	31.6
847 C	12 h	5	13	124.93	3.933	-1.54	23.8
847 C	12 h	5	53	125.33	3.948		25.5
847 C	12 h	5	133	126.13	3.980	-1.59	26.6
847 C	12 h	6	23	126.53	3.999	-1.42	30.1
847 C	12 h	6	43	126.73	4.009		24.5
847 C	12 h	6	81	127.11	4.027	-1.34	24.8
847 C	12 h	6	121	127.51	4.041		26.0
847 C	12 h	7	11	127.91	4.053	-1.62	27.7
847 C	12 h	7	51	128.31	4.074	-1.63	28.0
847 C	13 h	1	11	129.96	4.147		29.0
847 C	13 h	1	51	130.36	4.165		29.0
847 C	13 h	1	91	130.76	4.184	-1.41	24.8
847 C	13 h	1	131	131.16	4.199	-1.30	26.8
847 C	13 h	2	21	131.56	4.213		25.0
847 C	13 h	2	61	131.96	4.226	-1.49	29.8
847 C	13 h	2	101	132.36	4.240	-1.12	25.9

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/ mol)	Shell Mass (μg)	
847 C	13 h	3	31	133.16	4.271	-1.35	3.37	26.3
847 C	13 h	3	71	133.56	4.286			24.0
847 C	13 h	3	111	133.96	4.302		4.14	24.0
847 C	13 h	4	6	134.41	4.319	-1.20	2.97	26.6
847 C	13 h	4	46	134.81	4.327		2.68	37.5
847 C	13 h	4	86	135.21	4.335			29.0
847 C	13 h	4	126	135.61	4.346	-1.01	2.64	29.8
847 C	13 h	5	16	136.01	4.361		3.06	27.3
847 C	13 h	5	56	136.41	4.369	-1.34		21.1
847 C	13 h	5	96	136.81	4.376	-1.18	2.77	27.2
847 C	13 h	5	136	137.21	4.391	-1.51	3.39	26.6
847 C	13 h	6	22	137.57	4.405	-1.33	4.37	24.3
847 C	13 h	6	46	137.81	4.416		3.13	26.8
847 C	13 h	6	86	138.21	4.439	-1.30	3.48	26.7
847 C	13 h	6	126	138.61	4.451	-1.41	3.14	22.0
847 C	13 h	7	16	139.01	4.464	-1.22		23.6
847 C	13 h	7	56	139.41	4.476		3.50	26.7
847 c	14 x	1	11	139.41	4.476		2.78	21.5
847 C	14 x	1	51	139.81	4.489	-1.44	3.68	24.8
847 C	14 x	1	91	140.21	4.499		2.81	23.7
847 C	14 x	1	131	140.61	4.508	-1.13	3.27	28.5
847 C	14 x	2	21	141.01	4.517	-1.59	3.02	24.4
847 C	14 x	2	61	141.41	4.527		3.28	25.3
847 C	14 x	2	101	141.81	4.536			20.0
847 C	14 x	2	141	142.21	4.542			
847 C	14 x	3	76	143.06	4.556			20.0
847 C	14 x	3	116	143.46	4.563			29.0
847 C	14 x	4	6	143.86	4.573			22.0
847 C	14 x	4	46	144.26	4.583			21.0
847 C	14 x	4	86	144.66	4.587			23.0
847 C	14 x	4	126	145.06	4.591	-1.48	3.80	25.0
847 C	14 x	5	16	145.46	4.594	-1.82	3.36	24.9
847 C	14 x	5	136	146.66	4.606			21.5
847 C	14 x	6	26	147.06	4.610	-1.72	3.38	27.8
847 C	14 x	6	46	147.26	4.613		6.57	23.5
847 C	14 x	6	86	147.66	4.617		3.08	33.5
847 C	14 x	6	126	148.06	4.622	-1.26	2.97	28.5
847 C	15 x	1	16	151.16	4.649		3.24	22.0
847 C	15 x	1	96	151.96	4.657		3.20	34.3
847 C	15 x	1	136	152.36	4.662		3.04	24.0
847 C	15 x	2	146	153.96	4.680		98.73	15.0
847 C	15 x	3	29	154.29	4.683	-1.34	2.76	26.5
847 C	15 x	3	71	154.71	4.688		3.66	30.0
847 C	15 x	4	6	155.56	4.698	-1.41	2.77	22.9
847 C	15 x	4	46	155.96	4.706	-1.34	2.92	26.4
847 C	15 x	4	86	156.36	4.715	-1.10	3.36	25.8
847 C	15 x	4	126	156.76	4.724		5.82	23.0
847 C	15 x	5	16	157.16	4.739	-0.25	3.35	28.0
847 C	15 x	5	56	157.56	4.749	-0.95	3.07	28.8
847 C	15 x	6	26	158.76	4.773		2.99	32.0
847 C	15 x	6	46	158.96	4.781		28.58	21.0
847 C	15 x	6	86	159.36	4.798		2.95	33.0

Sample ID	Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	Mg/Ca (mmol/mol)	Shell Mass (μg)		
847C	15 x 6	126	159.76	4.815	-1.25	3.04	23.4
847C	15 x 7	46	160.46	4.829		2.65	32.0
847C	16 x 1	56	164.76	4.880	-0.51	2.71	27.1
847C	16 x 1	96	165.16	4.884	-1.27	2.92	25.8
847C	16 x 1	136	165.56	4.889		3.03	25.0
847C	16 x 2	26	165.96	4.893	-0.88	2.39	26.3
847C	16 x 2	68	166.38	4.900	-1.13	2.56	28.6
847C	16 x 2	145	167.15	4.918		2.26	35.5
847C	16 x 3	39	167.59	4.933	-0.75	2.90	24.5
847C	16 x 3	76	167.96	4.947	-0.99	2.79	27.1
847C	16 x 3	116	168.36	4.964	-1.07	2.64	25.0
847C	16 x 4	6	168.76	4.976	-1.08	2.84	26.3
847C	16 x 4	46	169.16	4.988	-1.12	3.16	32.8
847C	16 x 4	86	169.56	4.999	-1.16	3.22	34.7
847C	16 x 4	126	169.96	5.010	-0.50	2.07	28.6
847C	16 x 5	16	170.36	5.021	-0.84	6.18	25.1
847C	16 x 5	56	170.76	5.032		2.93	23.0
847C	16 x 5	96	171.16	5.049	-0.74	3.98	28.8
847C	16 x 5	136	171.56	5.060		2.88	34.5
847C	16 x 6	26	171.96	5.067		2.86	25.0
847C	16 x 6	66	172.36	5.074	-1.26	3.27	27.4
847C	16 x 6	101	172.71	5.081	-1.30	3.39	28.4
847C	16 x 6	145	173.15	5.089	-0.83	3.09	25.8
847C	16 x 7	6	173.26	5.091	-0.95	2.84	27.8
847C	17 x 1	16	174.56	5.172	-0.63	2.97	29.0
847C	17 x 1	56	174.96	5.182	-0.85	3.24	28.9
847C	17 x 1	96	175.36	5.192		2.90	28.0
847C	17 x 2	106	176.96	5.228		2.99	22.5
847C	17 x 3	76	178.16	5.243	-1.07	5.47	29.0
847C	17 x 3	116	178.56	5.250	-0.92	3.86	28.2
847C	17 x 4	46	179.36	5.266		2.97	23.3
847C	17 x 4	86	179.76	5.279		3.82	27.0
847C	17 x 4	126	180.16	5.292		2.80	16.0
847C	17 x 5	16	180.56	5.305		3.82	24.0
847C	17 x 5	56	180.96	5.310		3.45	21.7
847C	17 x 5	136	181.76	5.321		3.57	23.3
847C	17 x 6	56	182.46	5.339		6.96	24.0
847C	17 x 6	106	182.96	5.358		3.49	24.0
847C	17 x 7	36	183.76	5.393		3.29	31.0

***G. tumida* isotope data from ODP 847**

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 B	1 h	1	0	0.00	0.000	0.41
847 B	1 h	1	17	0.17	0.004	0.95
847 B	1 h	1	28	0.28	0.006	0.77
847 B	1 h	1	45	0.45	0.010	1.22
847 B	1 h	1	57	0.57	0.012	1.78
847 B	1 h	1	75	0.75	0.016	1.98
847 B	1 h	1	90	0.90	0.020	1.84
847 B	1 h	1	105	1.05	0.023	1.91
847 B	1 h	1	121	1.21	0.026	1.49
847 B	1 h	1	135	1.35	0.029	0.78
847 B	1 h	2	0	1.50	0.033	1.42
847 B	1 h	2	22	1.72	0.037	1.38
847 B	1 h	2	35	1.85	0.041	1.35
847 B	1 h	2	50	2.00	0.047	1.20
847 B	1 h	2	90	2.40	0.064	1.77
847 B	1 h	2	105	2.55	0.070	1.05
847 B	1 h	2	121	2.71	0.076	1.12
847 B	1 h	2	135	2.85	0.082	0.98
847 B	1 h	3	0	3.00	0.088	0.85
847 B	1 h	3	15	3.15	0.093	0.78
847 B	1 h	3	28	3.28	0.097	1.21
847 B	1 h	3	45	3.45	0.103	1.18
847 B	1 h	3	62	3.62	0.109	1.25
847 B	1 h	3	75	3.75	0.114	1.08
847 B	1 h	3	90	3.90	0.119	0.91
847 B	1 h	3	105	4.05	0.125	0.30
847 B	1 h	3	121	4.21	0.130	0.97
847 B	1 h	3	135	4.35	0.135	0.80
847 C	1 h	1	0	2.40	0.064	1.89
847 C	1 h	1	15	2.55	0.070	1.90
847 C	1 h	1	30	2.70	0.076	1.45
847 C	1 h	1	45	2.85	0.082	1.72
847 C	1 h	1	60	3.00	0.088	2.07
847 C	1 h	1	75	3.15	0.093	1.38
847 C	1 h	1	90	3.30	0.098	1.05
847 C	1 h	1	105	3.45	0.103	1.11
847 C	1 h	1	120	3.60	0.109	1.41
847 C	1 h	1	135	3.75	0.114	1.31
847 C	1 h	2	0	3.90	0.119	0.20
847 C	1 h	2	15	4.05	0.125	0.61
847 C	1 h	2	30	4.20	0.130	0.76
847 C	1 h	2	45	4.35	0.135	0.85
847 C	1 h	2	63	4.53	0.141	0.66
847 C	1 h	2	90	4.80	0.149	1.77
847 C	1 h	2	105	4.95	0.152	1.20
847 C	1 h	2	120	5.10	0.154	1.28
847 C	1 h	2	135	5.25	0.157	1.16
847 C	1 h	3	0	5.40	0.160	1.57
847 C	1 h	3	45	5.85	0.168	1.41
847 C	1 h	3	60	6.00	0.171	1.26
847 C	1 h	3	90	6.30	0.176	1.35

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	1 h	3	105	6.45	0.179	1.24
847 C	1 h	3	120	6.60	0.182	0.75
847 C	1 h	3	135	6.75	0.185	0.82
847 C	1 h	4	0	6.90	0.193	0.69
847 C	1 h	4	30	7.20	0.208	0.92
847 C	1 h	4	45	7.35	0.215	0.99
847 C	1 h	4	60	7.50	0.221	1.06
847 C	1 h	4	75	7.65	0.226	1.23
847 C	1 h	5	45	8.85	0.248	1.23
847 C	1 h	5	60	9.00	0.255	0.93
847 C	1 h	5	75	9.15	0.262	1.66
847 C	1 h	5	90	9.30	0.269	0.97
847 C	1 h	5	105	9.45	0.276	1.04
847 C	1 h	5	120	9.60	0.282	0.89
847 C	1 h	5	135	9.75	0.288	0.66
847 C	1 h	6	0	9.90	0.294	1.02
847 C	1 h	6	15	10.05	0.299	1.33
847 C	1 h	6	30	10.20	0.305	0.46
847 C	1 h	6	45	10.35	0.310	0.86
847 C	1 h	6	60	10.50	0.316	0.84
847 C	1 h	6	75	10.65	0.322	0.01
847 C	1 h	6	90	10.80	0.327	0.50
847 C	1 h	6	105	10.95	0.330	0.23
847 C	1 h	6	120	11.10	0.332	0.42
847 C	1 h	6	135	11.25	0.336	1.61
847 C	1 h	7	0	11.40	0.339	1.36
847 C	1 h	7	15	11.55	0.343	0.83
847 C	1 h	7	30	11.70	0.346	2.03
847 C	1 h	7	45	11.85	0.350	1.86
847 C	1 h	7	60	12.00	0.354	2.06
847 C	1 h	7	76	12.16	0.359	1.33
847 C	2 h	1	0	13.18	0.388	0.16
847 C	2 h	1	15	13.33	0.392	0.67
847 C	2 h	1	28	13.46	0.396	0.44
847 C	2 h	1	45	13.63	0.401	0.83
847 C	2 h	1	60	13.78	0.406	0.91
847 C	2 h	1	75	13.93	0.415	1.41
847 C	2 h	1	90	14.08	0.424	1.58
847 C	2 h	1	105	14.23	0.431	2.14
847 C	2 h	1	120	14.38	0.439	2.00
847 C	2 h	1	135	14.53	0.447	2.06
847 C	2 h	2	0	14.68	0.450	1.60
847 C	2 h	2	15	14.83	0.454	1.10
847 C	2 h	2	28	14.96	0.457	1.71
847 C	2 h	2	45	15.13	0.462	1.90
847 C	2 h	2	62	15.30	0.466	1.70
847 C	2 h	2	75	15.43	0.470	1.18
847 C	2 h	2	90	15.58	0.475	1.49
847 C	2 h	2	105	15.73	0.479	1.40
847 C	2 h	2	120	15.88	0.482	1.17
847 C	2 h	2	135	16.03	0.484	0.77
847 C	2 h	3	0	16.18	0.489	0.93

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	2 h	3	15	16.33	0.495	1.05
847 C	2 h	3	28	16.46	0.500	1.16
847 C	2 h	3	45	16.63	0.507	1.26
847 C	2 h	3	60	16.78	0.513	1.08
847 C	2 h	3	75	16.93	0.520	1.03
847 C	2 h	3	90	17.08	0.527	1.28
847 C	2 h	3	105	17.23	0.534	1.45
847 C	2 h	3	120	17.38	0.541	0.70
847 C	2 h	3	135	17.53	0.548	1.36
847 C	2 h	4	0	17.68	0.554	0.94
847 C	2 h	4	15	17.83	0.561	1.04
847 C	2 h	4	30	17.98	0.568	1.00
847 C	2 h	4	45	18.13	0.575	0.86
847 C	2 h	4	60	18.28	0.581	0.86
847 C	2 h	4	75	18.43	0.587	0.97
847 C	2 h	4	90	18.58	0.593	0.21
847 C	2 h	4	105	18.73	0.599	0.62
847 C	2 h	4	120	18.88	0.605	1.32
847 C	2 h	4	135	19.03	0.612	0.81
847 C	2 h	5	0	19.18	0.618	0.63
847 C	2 h	5	15	19.33	0.625	1.27
847 C	2 h	5	28	19.46	0.630	1.11
847 C	2 h	5	45	19.63	0.637	1.72
847 C	2 h	5	60	19.78	0.642	1.96
847 C	2 h	5	75	19.93	0.647	1.68
847 C	2 h	5	90	20.08	0.651	1.67
847 C	2 h	5	105	20.23	0.656	1.37
847 C	2 h	5	135	20.53	0.664	1.10
847 C	2 h	6	0	20.68	0.667	0.87
847 C	2 h	6	15	20.83	0.671	1.61
847 C	2 h	6	28	20.96	0.674	0.62
847 C	2 h	6	45	21.13	0.678	0.68
847 C	2 h	6	62	21.30	0.683	1.11
847 C	2 h	6	75	21.43	0.690	1.29
847 C	2 h	6	90	21.58	0.696	0.84
847 C	2 h	6	105	21.73	0.701	1.22
847 C	2 h	6	120	21.88	0.705	1.26
847 C	2 h	6	135	22.03	0.710	1.21
847 C	2 h	7	0	22.18	0.715	1.28
847 C	2 h	7	15	22.33	0.721	1.48
847 C	2 h	7	28	22.46	0.727	1.38
847 C	2 h	7	45	22.63	0.734	0.93
847 C	2 h	7	60	22.78	0.742	1.03
847 C	3 h	1	0	23.40	0.772	1.39
847 C	3 h	1	15	23.55	0.774	1.00
847 C	3 h	1	30	23.70	0.776	0.82
847 C	3 h	1	45	23.85	0.778	0.56
847 C	3 h	1	60	24.00	0.779	1.04
847 C	3 h	1	75	24.15	0.781	1.14
847 C	3 h	1	90	24.30	0.783	1.80
847 C	3 h	1	105	24.45	0.791	1.78
847 C	3 h	1	120	24.60	0.798	1.25

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	3 h	1	135	24.75	0.805	1.65
847 C	3 h	2	0	24.90	0.812	1.28
847 C	3 h	2	15	25.05	0.819	0.91
847 C	3 h	2	28	25.18	0.825	1.00
847 C	3 h	2	63	25.53	0.835	0.22
847 C	3 h	2	105	25.95	0.846	0.93
847 C	3 h	2	120	26.10	0.851	0.99
847 C	3 h	2	135	26.25	0.855	1.12
847 C	3 h	3	0	26.40	0.859	1.22
847 C	3 h	3	15	26.55	0.863	1.70
847 C	3 h	3	30	26.70	0.867	1.50
847 C	3 h	3	45	26.85	0.872	1.18
847 C	3 h	3	60	27.00	0.876	1.88
847 C	3 h	3	74	27.14	0.880	1.51
847 C	3 h	3	90	27.30	0.884	1.73
847 C	3 h	3	105	27.45	0.888	1.32
847 C	3 h	3	120	27.60	0.893	1.32
847 C	3 h	3	135	27.75	0.897	1.23
847 C	3 h	4	0	27.90	0.901	0.81
847 C	3 h	4	15	28.05	0.905	1.46
847 C	3 h	4	45	28.35	0.918	1.16
847 C	3 h	4	60	28.50	0.925	1.13
847 C	3 h	4	74	28.64	0.931	0.85
847 C	3 h	4	90	28.80	0.939	0.88
847 C	3 h	4	105	28.95	0.946	0.52
847 C	3 h	4	120	29.10	0.954	0.95
847 C	3 h	4	135	29.25	0.961	0.25
847 C	3 h	5	0	29.40	0.968	0.55
847 C	3 h	5	15	29.55	0.975	1.19
847 C	3 h	5	30	29.70	0.980	1.12
847 C	3 h	5	45	29.85	0.984	0.63
847 C	3 h	5	60	30.00	0.988	0.95
847 C	3 h	5	74	30.14	0.992	1.07
847 C	3 h	5	90	30.30	0.997	1.38
847 C	3 h	5	105	30.45	1.001	1.19
847 C	3 h	5	120	30.60	1.008	1.32
847 C	3 h	5	135	30.75	1.015	0.87
847 C	3 h	6	0	30.90	1.021	0.95
847 C	3 h	6	15	31.05	1.028	0.95
847 C	3 h	6	28	31.18	1.034	0.80
847 C	3 h	6	45	31.35	1.042	0.68
847 C	4 h	2	101	36.31	1.172	0.73
847 C	4 h	2	141	36.71	1.183	1.16
847 C	4 h	3	36	37.16	1.195	1.36
847 C	4 h	3	73	37.53	1.206	1.56
847 C	4 h	3	113	37.93	1.230	1.02
847 C	4 h	4	6	38.36	1.249	1.09
847 C	4 h	4	41	38.71	1.260	0.84
847 C	4 h	4	81	39.11	1.272	1.10
847 C	4 h	4	126	39.56	1.280	1.47
847 C	4 h	5	13	39.93	1.288	1.30
847 C	4 h	5	53	40.33	1.301	1.25

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	4 h	5	96	40.76	1.316	1.29
847 C	4 h	5	133	41.13	1.328	1.12
847 C	4 h	6	21	41.51	1.334	1.13
847 C	4 h	6	41	41.71	1.337	0.91
847 C	4 h	6	81	42.11	1.360	0.97
847 C	4 h	6	125	42.55	1.381	1.24
847 C	4 h	7	53	43.33	1.393	0.64
847 C	5 h	1	11	44.61	1.426	0.96
847 C	5 h	1	57	45.07	1.455	0.76
847 C	5 h	1	93	45.43	1.482	0.61
847 C	5 h	1	131	45.81	1.497	0.37
847 C	5 h	1	141	45.91	1.499	0.36
847 C	5 h	2	21	46.21	1.504	0.53
847 C	5 h	2	141	47.41	1.526	0.50
847 C	5 h	3	71	48.21	1.553	0.30
847 C	5 h	3	111	48.61	1.567	0.47
847 C	5 h	4	6	49.06	1.575	0.79
847 C	5 h	4	81	49.81	1.588	0.26
847 C	5 h	5	11	50.61	1.601	0.32
847 C	5 h	5	51	51.01	1.611	0.40
847 C	5 h	5	131	51.81	1.644	0.77
847 C	5 h	6	21	52.21	1.661	0.66
847 C	5 h	6	41	52.41	1.669	0.65
847 C	5 h	6	81	52.81	1.685	0.77
847 C	5 h	6	123	53.23	1.698	0.56
847 C	5 h	7	11	53.61	1.702	0.62
847 C	6 h	1	11	55.31	1.725	0.61
847 C	6 h	1	51	55.71	1.743	-0.35
847 C	6 h	1	96	56.16	1.760	0.94
847 C	6 h	1	131	56.51	1.772	0.92
847 C	6 h	2	21	56.91	1.786	0.82
847 C	6 h	2	66	57.36	1.801	1.00
847 C	6 h	2	101	57.71	1.812	0.85
847 C	6 h	2	141	58.11	1.819	0.88
847 C	6 h	3	6	58.26	1.822	0.97
847 C	6 h	3	71	58.91	1.834	0.76
847 C	6 h	3	111	59.31	1.841	0.67
847 C	6 h	4	6	59.76	1.849	0.58
847 C	6 h	4	50	60.20	1.857	0.78
847 C	6 h	4	81	60.51	1.862	0.87
847 C	6 h	4	126	60.96	1.870	0.85
847 C	6H	5	11	61.31	1.878	1.01
847 C	6 h	5	56	61.76	1.897	0.98
847 C	6 h	5	96	62.16	1.910	0.97
847 C	6H	5	131	62.51	1.918	1.11
847 C	6H	6	21	62.91	1.928	1.03
847 C	6 h	6	41	63.11	1.933	0.77
847 C	6 h	6	81	63.51	1.942	0.89
847 C	6 h	6	121	63.91	1.949	0.77
847 C	6H	7	11	64.31	1.954	0.65
847 C	7 h	1	11	66.91	2.024	0.92
847 C	7 h	1	96	67.76	2.036	1.05

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	7h	1	131	68.11	2.041	1.06
847 C	7h	2	21	68.51	2.050	1.01
847 C	7h	2	67	68.97	2.064	0.86
847 C	7h	2	101	69.31	2.074	0.89
847 C	7h	2	141	69.71	2.086	0.38
847 C	7h	3	37	70.17	2.101	0.64
847 C	7h	3	71	70.51	2.116	0.76
847 C	7h	3	111	70.91	2.132	0.66
847 C	7h	4	6	71.36	2.146	0.97
847 C	7h	4	41	71.71	2.158	1.00
847 C	7h	4	81	72.11	2.171	-0.23
847 C	7h	4	126	72.56	2.186	0.70
847 C	7h	5	11	72.91	2.197	0.67
847 C	7h	5	51	73.31	2.210	0.69
847 C	7h	5	96	73.76	2.225	0.75
847 C	7h	5	131	74.11	2.235	0.70
847 C	7h	6	21	74.51	2.244	-0.04
847 C	7h	6	41	74.71	2.249	0.38
847 C	7h	6	82	75.12	2.261	0.64
847 C	7h	6	126	75.56	2.280	0.54
847 C	7h	7	11	75.91	2.295	0.63
847 C	7h	7	51	76.31	2.311	0.49
847 C	8h	1	11	76.81	2.327	0.60
847 C	8h	1	53	77.23	2.341	0.58
847 C	8h	1	96	77.66	2.355	0.81
847 C	8h	1	131	78.01	2.364	0.50
847 C	8h	2	21	78.41	2.376	0.77
847 C	8h	2	68	78.88	2.389	0.66
847 C	8h	2	101	79.21	2.402	0.59
847 C	8h	2	141	79.61	2.419	0.61
847 C	8h	3	36	80.06	2.430	0.46
847 C	8h	3	71	80.41	2.438	0.36
847 C	8h	3	111	80.81	2.446	0.87
847 C	8h	4	6	81.26	2.455	0.26
847 C	8h	4	41	81.61	2.462	0.28
847 C	8h	4	81	82.01	2.470	0.48
847 C	8h	4	126	82.46	2.480	0.53
847 C	8h	5	11	82.81	2.493	0.64
847 C	8h	5	51	83.21	2.508	0.37
847 C	8h	5	96	83.66	2.524	0.58
847 C	8h	5	131	84.01	2.533	0.57
847 C	8h	6	21	84.41	2.545	0.74
847 C	8h	6	41	84.61	2.554	0.23
847 C	8h	6	81	85.01	2.572	0.75
847 C	9h	1	11	88.01	2.659	-0.52
847 C	9h	1	51	88.41	2.671	0.26
847 C	9h	1	89	88.79	2.682	0.79
847 C	9h	1	131	89.21	2.697	0.02
847 C	9h	2	21	89.61	2.714	0.78
847 C	9h	2	58	89.98	2.731	0.73
847 C	9h	2	97	90.37	2.739	0.91
847 C	9h	2	140	90.80	2.748	0.82

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	9 h	3	35	91.25	2.763	0.56
847 C	9 h	3	71	91.61	2.780	0.66
847 C	9 h	3	111	92.01	2.790	0.74
847 C	9 h	4	6	92.46	2.798	0.75
847 C	9 h	4	41	92.81	2.807	0.82
847 C	9 h	4	86	93.26	2.818	0.70
847 C	9 h	5	51	94.41	2.857	0.70
847 C	9 h	5	96	94.86	2.877	0.52
847 C	9 h	5	131	95.21	2.894	0.69
847 C	9 h	6	21	95.61	2.909	1.00
847 C	9 h	6	41	95.81	2.914	0.83
847 C	9 h	6	81	96.21	2.923	0.69
847 C	9 h	6	126	96.66	2.932	0.58
847 C	9 h	7	11	97.01	2.939	0.24
847 C	9 h	7	51	97.41	2.956	0.31
847 C	10 h	1	11	98.31	2.994	0.38
847 C	10 h	1	51	98.71	3.007	0.50
847 C	10 h	1	91	99.11	3.020	0.57
847 C	10 h	1	131	99.51	3.034	0.57
847 C	10 h	2	21	99.91	3.053	0.23
847 C	10 h	2	61	100.31	3.071	0.47
847 C	10 h	2	101	100.71	3.088	0.63
847 C	10 h	2	141	101.11	3.104	0.30
847 C	10 h	3	31	101.51	3.117	0.55
847 C	10 h	3	71	101.91	3.129	0.71
847 C	10 h	3	111	102.31	3.141	0.46
847 C	10 h	4	6	102.76	3.154	0.18
847 C	10 h	4	41	103.11	3.166	-0.18
847 C	10 h	4	81	103.51	3.181	0.78
847 C	10 h	4	121	103.91	3.198	-0.02
847 C	10 h	5	11	104.31	3.215	0.68
847 C	10 h	5	51	104.71	3.232	0.49
847 C	10 h	5	91	105.11	3.240	0.94
847 C	10 h	5	131	105.51	3.248	0.58
847 C	10 h	6	21	105.91	3.258	0.67
847 C	10 h	6	41	106.11	3.265	0.56
847 C	10 h	6	81	106.51	3.281	0.67
847 C	10 h	6	121	106.91	3.294	0.35
847 C	10 h	7	11	107.31	3.304	0.67
847 C	10 h	7	51	107.71	3.318	1.16
847 C	11 h	1	11	109.01	3.361	0.67
847 C	11 h	1	51	109.41	3.378	1.14
847 C	11 h	1	91	109.81	3.394	0.82
847 C	11 h	1	131	110.21	3.405	0.60
847 C	11 h	2	21	110.61	3.417	0.31
847 C	11 h	2	61	111.01	3.429	0.59
847 C	11 h	2	101	111.41	3.442	0.13
847 C	11 h	2	141	111.81	3.462	0.32
847 C	11 h	3	31	112.21	3.479	0.47
847 C	11 h	3	71	112.61	3.496	0.42
847 C	11 h	3	111	113.01	3.512	0.51
847 C	11 h	4	6	113.46	3.528	0.67

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	11 h	4	41	113.81	3.540	1.14
847 C	11 h	4	41	113.81	3.540	0.56
847 C	11 h	4	81	114.21	3.553	0.82
847 C	11 h	4	81	114.21	3.553	0.13
847 C	11 h	4	121	114.61	3.567	0.60
847 C	11 h	4	121	114.61	3.567	0.59
847 C	11 h	5	11	115.01	3.580	0.31
847 C	11 h	5	11	115.01	3.580	0.59
847 C	11 h	5	51	115.41	3.593	0.59
847 C	11 h	5	51	115.41	3.593	-0.08
847 C	11 h	5	91	115.81	3.606	0.13
847 C	11 h	5	91	115.81	3.606	0.58
847 C	11 h	5	131	116.21	3.616	0.32
847 C	11 h	5	131	116.21	3.616	0.39
847 C	11 h	6	21	116.61	3.627	0.47
847 C	11 h	6	21	116.61	3.627	0.36
847 C	11 h	6	41	116.81	3.632	0.42
847 C	11 h	6	41	116.81	3.632	0.91
847 C	11 h	6	81	117.21	3.647	0.52
847 C	11 h	6	121	117.61	3.663	0.66
847 C	11 h	7	11	118.01	3.679	0.96
847 C	11 h	7	51	118.41	3.693	0.38
847 C	12 h	1	11	118.91	3.706	0.52
847 C	12 h	1	51	119.31	3.718	0.65
847 C	12 h	1	91	119.71	3.736	0.57
847 C	12 h	1	131	120.11	3.754	0.91
847 C	12 h	2	21	120.51	3.768	0.77
847 C	12 h	2	61	120.91	3.781	0.51
847 C	12 h	2	101	121.31	3.795	0.85
847 C	12 h	2	141	121.71	3.809	0.62
847 C	12 h	3	33	122.13	3.824	0.53
847 C	12 h	3	76	122.56	3.839	0.81
847 C	12 h	3	113	122.93	3.853	0.31
847 C	12 h	4	6	123.36	3.868	0.56
847 C	12 h	4	46	123.76	3.883	0.83
847 C	12 h	4	86	124.16	3.899	0.52
847 C	12 h	4	126	124.56	3.916	0.49
847 C	12 h	5	53	125.33	3.948	0.40
847 C	12 h	5	93	125.73	3.960	0.53
847 C	12 h	5	133	126.13	3.980	0.52
847 C	12 h	6	23	126.53	3.999	0.67
847 C	12 h	6	43	126.73	4.009	0.83
847 C	12 h	6	81	127.11	4.027	0.59
847 C	12 h	6	121	127.51	4.041	0.72
847 C	12 h	7	11	127.91	4.053	0.44
847 C	12 h	7	51	128.31	4.074	0.03
847 C	13 h	1	51	130.36	4.165	0.74
847 C	13 h	1	91	130.76	4.184	0.49
847 C	13 h	1	131	131.16	4.199	0.39
847 C	13 h	2	21	131.56	4.213	0.47
847 C	13 h	2	61	131.96	4.226	0.35
847 C	13 h	2	101	132.36	4.240	0.48

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	13 h	2	141	132.76	4.255	0.41
847 C	13 h	3	31	133.16	4.271	0.31
847 C	13 h	3	71	133.56	4.286	0.26
847 C	13 h	3	111	133.96	4.302	0.40
847 C	13 h	4	6	134.41	4.319	0.31
847 C	13 h	4	46	134.81	4.327	0.23
847 C	13 h	4	86	135.21	4.335	0.07
847 C	13 h	4	126	135.61	4.346	0.12
847 C	13 h	5	16	136.01	4.361	0.05
847 C	13 h	5	56	136.41	4.369	0.34
847 C	13 h	5	96	136.81	4.376	0.37
847 C	13 h	5	136	137.21	4.391	0.41
847 C	13 h	6	22	137.57	4.405	0.29
847 C	13 h	6	46	137.81	4.416	0.16
847 C	13 h	6	86	138.21	4.439	0.13
847 C	13 h	6	126	138.61	4.451	0.15
847 C	13 h	7	16	139.01	4.464	0.14
847 C	13 h	7	56	139.41	4.476	0.10
847 C	14 x	1	51	139.81	4.489	-0.16
847 C	14 x	1	91	140.21	4.499	-0.34
847 C	14 x	1	131	140.61	4.508	-0.39
847 C	14 x	2	21	141.01	4.517	-0.72
847 C	14 x	2	61	141.41	4.527	-0.17
847 C	14 x	2	101	141.81	4.536	-0.16
847 C	14 x	3	36	142.66	4.550	-0.95
847 C	14 x	3	76	143.06	4.556	-0.09
847 C	14 x	3	116	143.46	4.563	-0.45
847 C	14 x	4	6	143.86	4.573	0.04
847 C	14 x	4	46	144.26	4.583	0.25
847 C	14 x	4	86	144.66	4.587	-0.39
847 C	14 x	4	126	145.06	4.591	0.15
847 C	14 x	5	16	145.46	4.594	-0.54
847 C	14 x	5	56	145.86	4.598	-0.22
847 C	14 x	5	136	146.66	4.606	0.24
847 C	14 x	6	26	147.06	4.610	-0.06
847 C	14 x	6	46	147.26	4.613	-0.30
847 C	14 x	6	86	147.66	4.617	-0.34
847 C	14 x	6	126	148.06	4.622	-0.32
847 C	14 x	7	11	148.41	4.626	0.12
847 C	15 x	1	96	151.96	4.657	0.07
847 C	15 x	1	136	152.36	4.662	0.11
847 C	15 x	2	146	153.96	4.680	0.03
847 C	15 x	3	29	154.29	4.683	-0.41
847 C	15 x	3	71	154.71	4.688	-0.18
847 C	15 x	4	6	155.56	4.698	-0.03
847 C	15 x	4	46	155.96	4.706	-0.35
847 C	15 x	4	86	156.36	4.715	-0.19
847 C	15 x	4	126	156.76	4.724	-0.23
847 C	15 x	5	16	157.16	4.739	-0.41
847 C	15 x	5	56	157.56	4.749	-0.11
847 C	15 x	5	91	157.91	4.755	-0.34
847 C	15 x	5	131	158.31	4.763	-0.36

Sample ID			Depth (MCD)	Age (Ma)	$\delta^{18}\text{O}$ (‰)	
847 C	15 x	6	26	158.76	4.773	-0.09
847 C	15 x	6	46	158.96	4.781	-0.09
847 C	15 x	6	86	159.36	4.798	-0.24
847 C	15 x	6	126	159.76	4.815	0.16
847 C	15 x	7	16	160.16	4.825	0.28
847 C	15 x	7	46	160.46	4.829	0.08
847 C	16 x	1	16	164.36	4.876	-0.10
847 C	16 x	1	56	164.76	4.880	0.09
847 C	16 x	1	96	165.16	4.884	0.07
847 C	16 x	1	136	165.56	4.889	0.24
847 C	16 x	2	26	165.96	4.893	0.24
847 C	16 x	2	68	166.38	4.900	0.16
847 C	16 x	2	145	167.15	4.918	0.07
847 C	16 x	3	39	167.59	4.933	0.02
847 C	16 x	3	116	168.36	4.964	-0.11
847 C	16 x	4	6	168.76	4.976	-0.16
847 C	16 x	4	46	169.16	4.988	0.08
847 C	16 x	4	86	169.56	4.999	-0.04
847 C	16 x	4	126	169.96	5.010	0.11
847 C	16 x	5	16	170.36	5.021	-0.31
847 C	16 x	5	56	170.76	5.032	0.29
847 C	16 x	5	96	171.16	5.049	-0.15
847 C	16 x	5	136	171.56	5.060	0.03
847 C	16 x	6	26	171.96	5.067	0.01
847 C	16 x	6	66	172.36	5.074	0.04
847 C	16 x	6	101	172.71	5.081	-0.02
847 C	16 x	6	145	173.15	5.089	0.09
847 C	16 x	7	6	173.26	5.091	0.05
847 C	17 x	1	16	174.56	5.172	-0.13
847 C	17 x	1	56	174.96	5.182	-0.22
847 C	17 x	1	96	175.36	5.192	-0.19
847 C	17 x	2	26	176.16	5.213	-0.29
847 C	17 x	2	66	176.56	5.223	0.07
847 C	17 x	2	106	176.96	5.228	-0.10
847 C	17 x	3	36	177.76	5.238	-0.08
847 C	17 x	3	76	178.16	5.243	-0.22
847 C	17 x	3	116	178.56	5.250	-0.03
847 C	17 x	4	46	179.36	5.266	-0.32
847 C	17 x	5	16	180.56	5.305	-0.24
847 C	17 x	5	56	180.96	5.310	-0.35
847 C	17 x	5	96	181.36	5.315	-0.19
847 C	17 x	5	136	181.76	5.321	-0.32
847 C	17 x	6	56	182.46	5.339	0.10
847 C	17 x	6	106	182.96	5.358	-0.24
847 C	17 x	7	36	183.76	5.393	-0.38