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15. Data Report: Bulk Sediment Parameters ($CaCO_3$, TOC, and >63 µm) of Sites 1095, 1096, and 1101, and Coarse-Fraction Analysis of Site 1095 (ODP Leg 178, Western Antarctic Peninsula)[1]

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INTRODUCTION

The area west of the Antarctic Peninsula is a key region for studying and understanding the history of glaciation in the southern high latitudes during the Neogene with respect to variations of the western Antarctic continental ice sheet, variable sea-ice cover, induced eustatic sea level change, as well as consequences for the global climatic system (Barker, Camerlenghi, Acton, et al., 1999). Sites 1095, 1096, and 1101 were drilled on sediment drifts forming the continental rise to examine the nature and composition of sediments deposited under the influence of the Antarctic Peninsula ice sheet, which has repeatedly advanced to the shelf edge and subsequently released glacially eroded material on the continental shelf and slope (Barker et al., 1999). Mass gravity processes on the slope are responsible for downslope sediment transport by turbidity currents within a channel system between the drifts. Furthermore, bottom currents redistribute the sediments, which leads to final build up of drift bodies (Rebesco et al., 1998). The high-resolution sedimentary sequences on the continental rise can be used to document the variability of continental glaciation and, therefore, allow us to assess the main factors that control the sediment transport and the deposi-

tional processes during glaciation periods and their relationship to glacio-eustatic sea level changes.

Site 1095 lies in 3840 m of water in a distal position on the northwestern lower flank of Drift 7, whereas Site 1096 lies in 3152 m of water in a more proximal position within Drift 7. Site 1101 is located at 3509 m water depth on the northwestern flank of Drift 4. All three sites have high sedimentation rates. The oldest sediments were recovered at Site 1095 (late Miocene; 9.7 Ma), whereas sediments of Pliocene age were recovered at Site 1096 (4.7 Ma) and at Site 1101 (3.5 Ma).

The purpose of this work is to provide a data set of bulk sediment parameters such as $CaCO_3$, total organic carbon (TOC), and coarse-fraction mass percentage (>63 µm) measured on the sediments collected from the continental rise of the western Antarctic Peninsula (Holes 1095A, 1095B, 1096A, 1096B, 1096C, and 1101A). This information can be used to understand the complex depositional processes and their implication for variations in the climatic system of the western Pacific Antarctic margin since 9.7 Ma (late Miocene). Coarse-fraction particles (125–500 µm) from the late Pliocene and Pleistocene (4.0 Ma to recent) sediments recovered from Hole 1095A were microscopically analyzed to gather more detailed information about their variability and composition through time. These data can yield information about changes in potential source regions of the glacially eroded material that has been transported during repeated periods of ice-sheet movements on the shelf.

METHODS

Measurements were taken on Sites 1095 (325 samples), 1096 (407 samples), and 1101 (145 samples). One sample per section was used as a sample interval. Total carbon (TC) and TOC were determined using a LECO CS-125 analyzer. After drying two subsamples of approximately 30 mg for each bulk sample, TC was directly measured in the first subsample, whereas TOC was measured in the second subsample following treatment with 0.25-N HCl to remove inorganic carbon. Inorganic carbon (IC) was calculated and converted to weight percent $CaCO_3$ by using equations 1 and 2:

$$\text{IC (wt\%)} = \text{TC (wt\%)} - \text{TOC (wt\%)} \text{ and} \quad (1)$$

$$CaCO_3\,\text{(wt\%)} = \text{IC (wt\%)} \cdot 8.333, \quad (2)$$

where 8.333 is the stoichiometric calculation factor for $CaCO_3$. The precision of the TC and TOC measurements is within ±0.25% (Wolf, 1991).

On the same sample sets as mentioned above, the weight percent of the bulk parameter >63 µm (coarse fraction), which is used as a further proxy for ice-rafted debris (IRD), was measured. All bulk samples were dry frozen, and the total mass of the bulk sample was determined. There was no further disaggregation procedure used. In a second step, >63-µm content was determined after wet sieving an 8-cm^3 bulk sample into the <63-µm fine fraction and the >6-µm coarse fraction. The >63-µm fraction was subsequently dried, and the mass was determined by weighing the sample split.

The >63-µm fraction samples from Cores 178-1095A-1H through 10H were analyzed at a microscope to define quantitatively the compo-

sition of the coarse-fraction components. The >63-µm samples were dry sieved into five subsamples (63–125 µm, 125–250 µm, 250–500 µm, 500–1000 µm, and >1000 µm) using an AMT Sonic Sifter. Coarse-fraction compositional analysis was limited to the 125- to 500-µm interval. After a further subdivision by microsplitting into representative subsamples of countable grain amounts, 300 to 500 grains from each sample were analyzed microscopically, counted, and distinguished as follows:

Biogenic components (planktonic foraminifers; benthic foraminifers—calcareous and agglutinated; diatoms; and radiolarians);
Terrigenous components (quartz—angular to subrounded and rounded; feldspar; rock fragments—metamorphic, sedimentary, and igneous; and mica—biotite and muscovite);
Volcanic components (volcanic glass);
Authigenic components (glauconite and pyrite); and
Aggregates (diagenetic aggregates).

The component grain percent was calculated by referring the counts of each component to the total counts of a sample as equal to 100%.

RESULTS

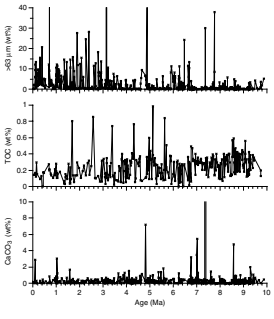
Bulk sediment parameters ($CaCO_3$, TOC, and >63 µm) are reported in Tables **T1, T2, T3, T4, T5,** and **T6**. The results of the coarse-fraction analysis at Site 1095 are given in Table **T7**. All data are plotted vs. age. The age-depth models used for calculating linear sedimentation rates are based on the paleomagnetic stratigraphy presented by Barker, Camerlenghi, Acton, et al. (1999).

Site 1095

At this site, $CaCO_3$ contents are generally low (Fig. **F1**); average values are <2 wt%. Four samples have higher values of up to 40 wt% from the upper Miocene sequence, whereas in the Pliocene and Quaternary sequence, only three samples have higher values between 3 and 7 wt%. The TOC average is ~0.3 wt% for the late Miocene and decreases upward to a value of 0.2 wt% in the Pliocene and Quaternary. Peak values of up to 1.0 wt% are restricted to single samples from the Pliocene and Quaternary. The >63-µm fraction shows significant peak values between 10 and 40 wt% in the upper Miocene. During the Pliocene, a large peak (~50 wt%) in the >63-µm fraction occurs ~4.9 Ma. Large peaks (between 10 and 40 wt%) can also be seen at 3.2 and 0.7 Ma. A general increase in weight percent of the coarse fraction (>63 µm) is characteristic for the past 3.2 Ma.

Site 1096

The contents of $CaCO_3$ are very low (average = 1.5 wt%) throughout Site 1096 (Fig. **F2**), with only three peaks (up to 40 wt%) in the Pliocene, whereas several maxima are documented in the Quaternary, where the $CaCO_3$ exceeds values of >30 wt%. The TOC shows average values of 0.25 wt%. During the Pliocene, one peak (7 wt%) occurred ~4.8 Ma, and during the Quaternary, three maxima (>1.0 wt%) took



place between 1.7 to 1.0 Ma. The weight percent of the >63-µm fraction increased uphole from ~2.8 Ma to present. There are several peaks that exceed values of up to 30 wt%.

Site 1101

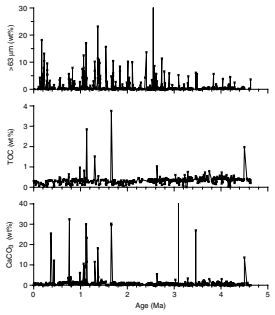
The $CaCO_3$ shows larger and more frequent peaks with respect to Sites 1095 and 1096 (Fig. F3). The average values exceed 2 wt%. In the Pliocene, one maximum occurs ~2.1 Ma (values >40 wt%), whereas during the Quaternary (between 1.8 to 0.77 Ma), the $CaCO_3$ peak values (between 10 to 30 wt%) seem to have occurred regularly every 2 and 0.5 m.y. TOC contents average 0.2 wt% at this site. The coarse fraction (>63 µm) was generally low during the Pliocene except for a peak of up to 15 wt% ~2.7 Ma. The coarse fraction increases uphole with a trend similar to the $CaCO_3$ and is highly variable in the samples with ages between 1.6 and 0.78 Ma.

Coarse-Fraction Particle Analysis of Site 1095

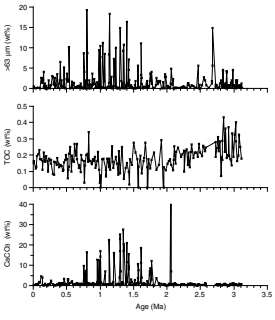
Significant differences in biogenic components (Fig. F4) occur within the 125- to 500-µm fraction. High amounts of biosiliceous particles, such as radiolarians and diatoms, characterize the Pliocene interval (4.5 to 3.2 Ma). Planktonic and benthic foraminifers (calcareous) occur within single samples that date to ~2.25 and 1.0 Ma, whereas the samples from ~3.3 Ma show greater numbers of agglutinated benthic foraminifers. The terrigenous particle input (Fig. F5) also documents significant changes in the composition of the particle assemblage. Angular quartz is present throughout the interval investigated. Greater numbers of the rounded quartz are present in samples dated between 4.2 and 0.8 Ma, with maxima ~3.2, 2.5, and 2.2 Ma. Feldspar is lower in samples with ages between 2.2 and 1.0 Ma. Mica is also variable. Biotite has two maxima, from 3.2 to 2.6 Ma and from 0.8 to 0.2 Ma. Higher contents of muscovite are found in samples from 4.4 to 4.1 Ma and from 0.8 to 0.2 Ma. Some igneous rock fragments (up to 4 grain%) were found mainly in samples with ages between 4.4 and 2.4, 2.1 to 1.6, and 0.8 Ma to present. Variations in the contents of metamorphic rock fragments are not well pronounced. It appears that in samples from 4.4 to 3.1 Ma and from 2.6 to 2.0 Ma, the amounts of this component are somewhat lower. Contents of sedimentary rock fragments are enhanced in samples with ages between 4.4 and 3.1 Ma as well as between 2.6 and 1.3 Ma, showing clear fluctuations in these two intervals. Volcanic glass and pyrite never exceed values of >20 grain%.

In summary, there are clear differences in both the bulk sediment parameters and in coarse-fraction composition through depth and time. $CaCO_3$ content of the sediment varies between the three site locations on the continental rise. At Site 1095, $CaCO_3$ contents were low during the Miocene. It appears that, in general, the $CaCO_3$ content decreases from the northeast (Site 1101) to the southwest (Site 1095) during the Pliocene and the Quaternary. The >63-µm fraction provides evidence that sedimentation on the continental rise was always influenced by a certain degree of ice rafting, which has varied through time since the Miocene. For the time interval of the Pliocene and Quaternary, where a record from all three sites is available, there is a significant positive correlation between the three sites with respect to the timing and occurrence of peaks in the >63-µm fraction. In the future, additional studies

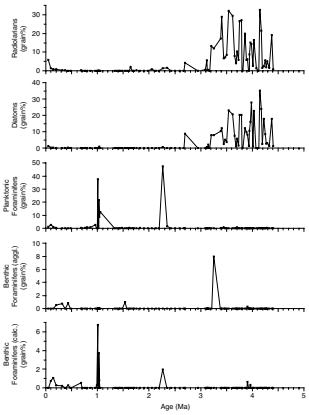
F2. Measured bulk sediment parameters vs. age, Site 1096, p. 8.



F3. Measured bulk sediment parameters vs. age, Site 1101, p. 9.



F4. Biogenic particle assemblages of coarse-fraction composition vs. age, Site 1095, p. 10.



need to be done to integrate these data sets in proposed sedimentation models for the rise area (e.g. Rebesco et al., 1998; Pudsey and Camerlenghi, 1998).

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F5. Terrigenous particle assemblages of the coarse-fraction composition vs. age, Site 1095, p. 11.

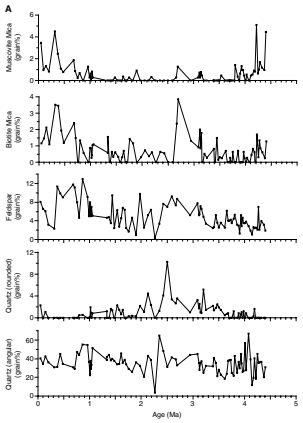

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Figure F1. Measured bulk sediment parameters for $CaCO_3$, TOC, and >63 µm vs. age from Site 1095.

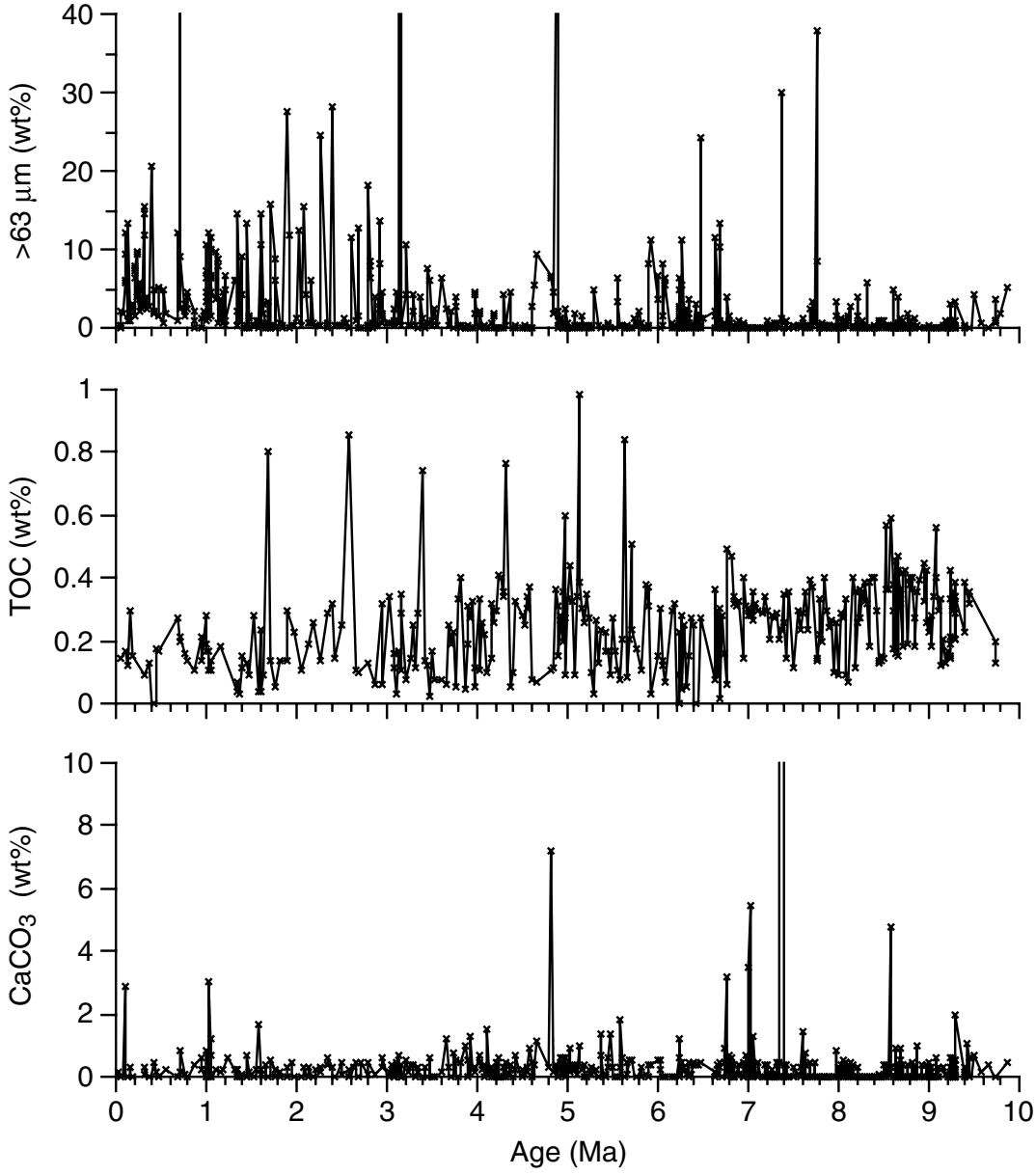

Figure F2. Measured bulk sediment parameters for $CaCO_3$, TOC, and >63 µm vs. age from Site 1096.

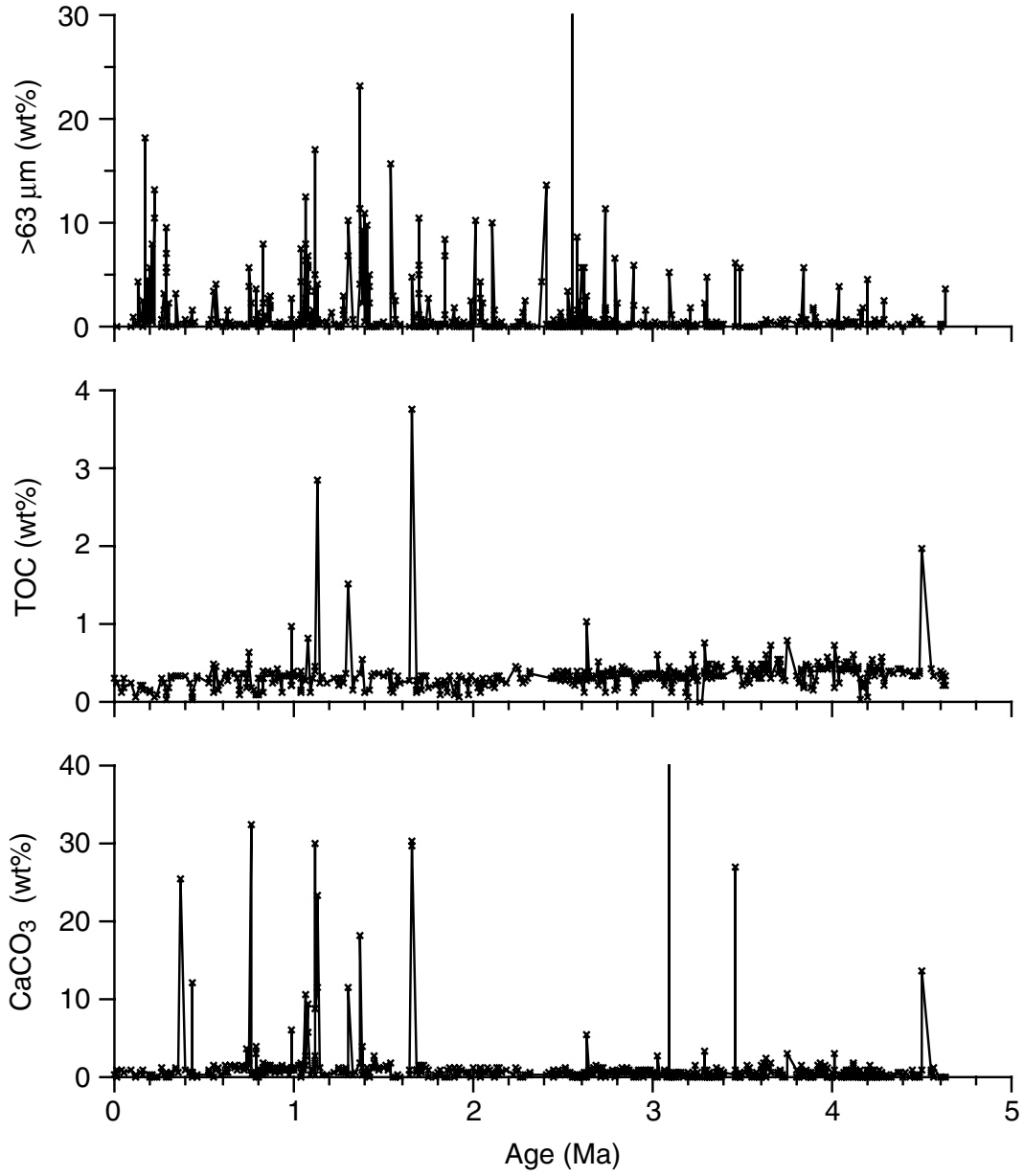

Figure F3. Measured bulk sediment parameters for $CaCO_3$, TOC, and >63 µm vs. age from Site 1101.

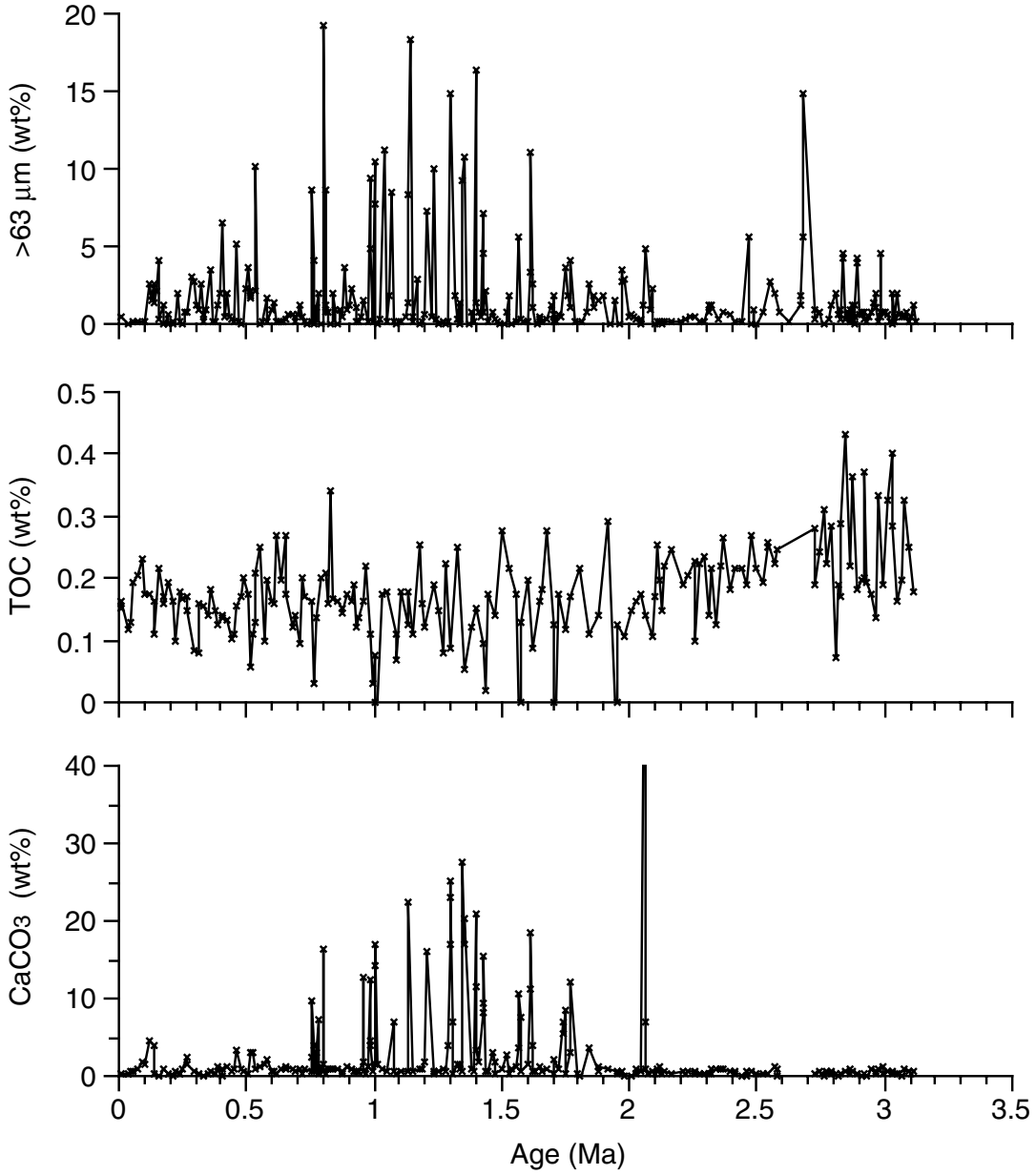

Figure F4. Biogenic particle assemblages of coarse-fraction composition vs. age from Site 1095.

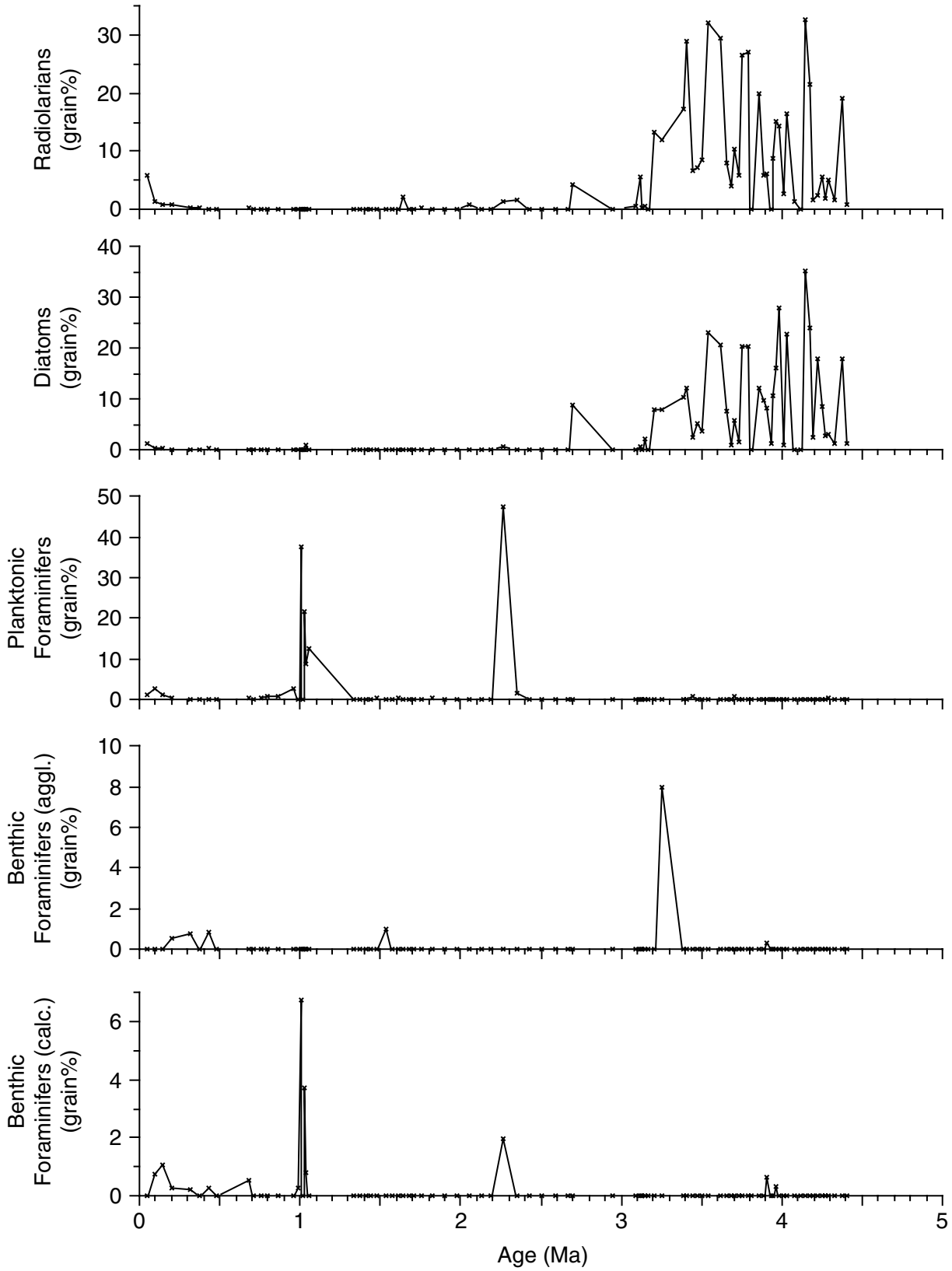

Figure F5. A. Terrigenous particle assemblages of the coarse-fraction composition vs. age from Site 1095. (Continued on next page.)

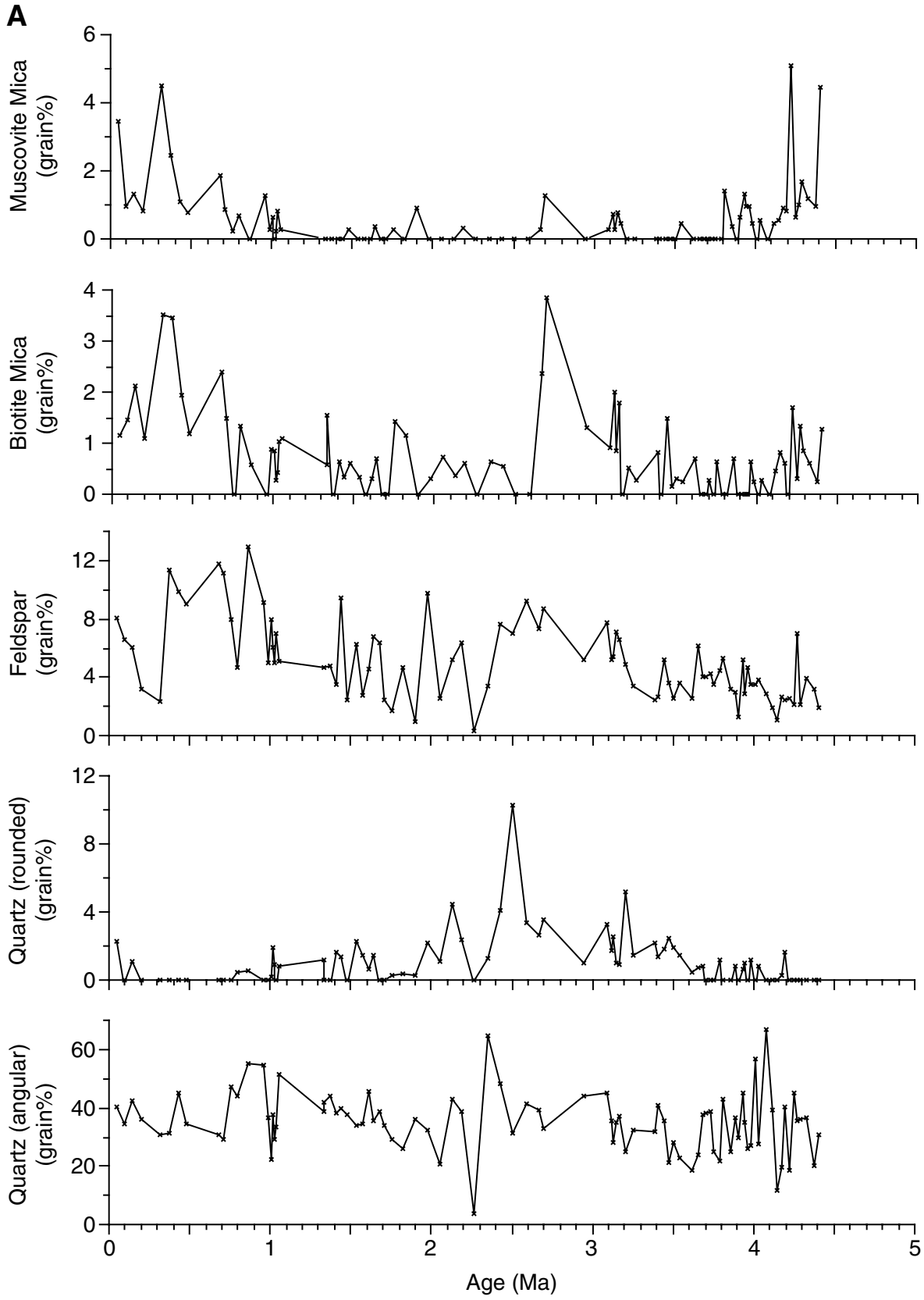

Figure F5 (continued). B. Terrigenous particle assemblages of the coarse-fraction composition vs. age from Site 1095.

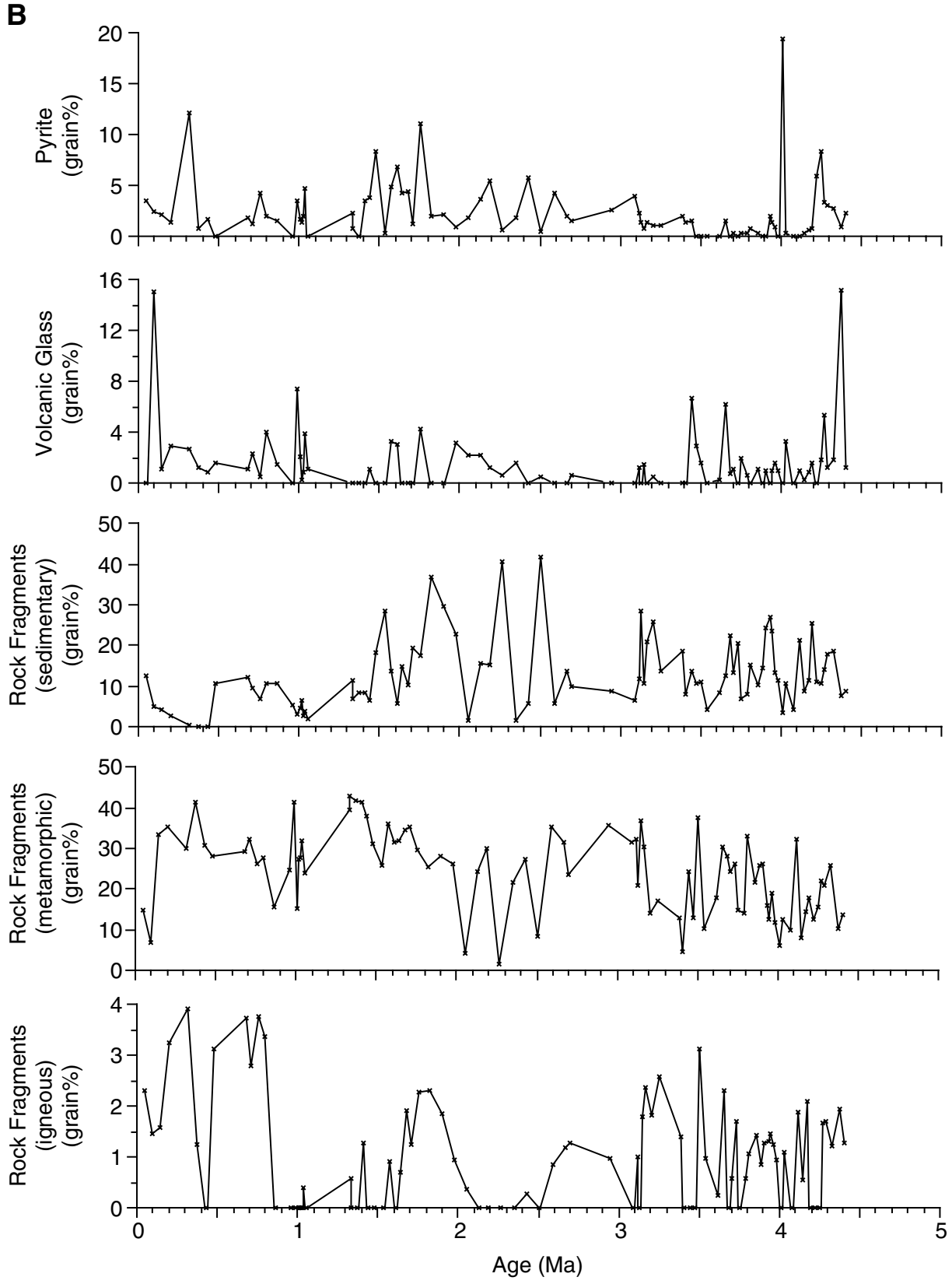

Table T1. Bulk sediment parameters $CaCO_3$ and TOC, ages, and linear sedimentation rates, Site 1095.

Core, section, interval (cm)	Depth (mbsf)	Depth* (mbsf)	Age (Ma)	LSR (cm/m.y.)	$CaCO_3$ (wt%)	TOC (wt%)
178-1095A-						
Paleomagnetic age fix		0.00	0.000	2194.90		
1H-1, 112-114	1.12	1.12	0.051	2194.90	0.02	0.15
1H-2, 70-72	2.16	2.16	0.098	2194.90	2.85	0.17
1H-3, 19-21	3.12	3.12	0.142	2194.90	0.00	0.12
1H-3, 140-142	4.33	4.33	0.197	2194.90	0.00	0.15
2H-1, 123-125	7.13	6.88	0.313	2194.90	0.11	0.10
2H-2, 133-135	8.73	8.15	0.371	2194.90	0.00	0.13
2H-3, 140-142	10.30	9.39	0.428	2194.90	0.43	0.00
2H-4, 142-144	11.82	10.60	0.483	2194.90	0.00	0.17
3H-4, 7-8	14.97	14.97	0.682	2194.90	0.00	0.28
3H-4, 68-69	15.58	15.58	0.710	2194.90	0.17	0.20
3H-5, 8-9	16.54	16.54	0.754	2194.90	0.09	0.16
Paleomagnetic age fix		17.12	0.780	2895.20		
3H-6, 82-83	17.60	17.60	0.797	2895.20	0.00	0.14
3H-8, 58-59	19.57	19.57	0.865	2895.20	0.37	0.11
4H-1, 147-149	22.27	22.27	0.958	2895.20	0.22	0.14
Paleomagnetic age fix		23.20	0.990	8187.50		
4H-2, 101-103	23.31	23.31	0.991	8187.50	0.00	0.28
4H-3, 47-48	24.27	24.27	1.003	8187.50	0.86	0.19
4H-4, 2-4	25.32	25.32	1.016	8187.50	0.00	0.17
4H-4, 103-105	26.33	26.33	1.028	8187.50	3.05	0.11
4H-5, 50-52	27.30	27.30	1.040	8187.50	0.66	0.11
4H-6, 50-52	28.30	28.30	1.052	8187.50	0.00	0.14
Paleomagnetic age fix		29.75	1.070	4377.10		
6H-1, 140-141	41.20	41.20	1.332	4377.10	0.22	0.04
6H-2, 20-21	41.50	41.50	1.338	4377.10	0.01	0.07
6H-3, 20-21	43.00	43.00	1.373	4377.10	0.01	0.03
6H-4, 20-21	44.50	44.50	1.407	4377.10	0.08	0.15
6H-5, 20-21	46.00	46.00	1.441	4377.10	0.00	0.13
6H-6, 20-21	47.50	47.50	1.476	4377.10	0.15	0.09
7H-1, 80-82	50.10	50.06	1.534	4377.10	0.00	0.28
7H-2, 130-132	52.10	51.97	1.578	4377.10	1.67	0.04
7H-3, 130-132	53.60	53.40	1.610	4377.10	0.12	0.04
7H-4, 130-132	55.10	54.83	1.643	4377.10	0.00	0.10
7H-5, 130-132	56.60	56.26	1.676	4377.10	0.00	0.80
7H-6, 130-132	58.10	57.69	1.708	4377.10	0.51	0.13
8H-1, 120-122	60.00	59.92	1.759	4377.10	0.01	0.05
Paleomagnetic age fix		60.39	1.770	1811.80		
8H-2, 120-122	61.50	61.33	1.822	1811.80	0.00	0.14
8H-3, 120-122	63.00	62.73	1.899	1811.80	0.00	0.13
8H-4, 120-122	64.50	64.14	1.977	1811.80	0.00	0.23
8H-5, 120-122	66.00	65.54	2.054	1811.80	0.01	0.11
8H-6, 120-122	67.50	66.94	2.132	1811.80	0.00	0.19
8H-7, 70-72	68.50	67.88	2.183	1811.80	0.00	0.26
9H-1, 111-113	69.41	69.37	2.266	1811.80	0.16	0.14
9H-2, 114-115	70.94	70.85	2.348	1811.80	0.65	0.29
9H-3, 113-115	72.43	72.30	2.427	1811.80	0.00	0.14
9H-4, 113-115	73.93	73.75	2.507	1811.80	0.07	0.25
9H-5, 113-115	75.43	75.20	2.587	1811.80	0.00	0.85
9H-6, 112-114	76.92	76.64	2.667	1811.80	0.44	0.11
9H-7, 19-21	77.49	77.19	2.697	1811.80	0.01	0.10
10H-1, 100-102	78.80	78.75	2.783	1811.80	0.08	0.13
10H-2, 99-101	80.29	80.17	2.862	1811.80	0.09	0.06
10H-3, 104-105.5	81.83	81.64	2.943	1811.80	0.58	0.06
10H-4, 99-101	83.29	83.02	3.019	1811.80	0.00	0.34
Paleomagnetic age fix		83.40	3.040	3257.40		
10H-5, 99-101	84.79	84.45	3.072	3257.40	0.02	0.16
1H-2, 56-58	85.06	84.99	3.0890	3257.40	0.02	0.11
10H-6, 99-101	86.29	85.87	3.116	3257.40	0.45	0.03
1H-3, 40-42	86.40	86.29	3.129	3257.40	0.72	0.17

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, TOC = total organic carbon. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T2. Bulk sediment parameters >63 µm, ages, and linear sedimentation rates, Site 1095.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf)*	Index	Age (Ma)	LSR (cm/m.y.)	>63 µm (wt%)
Paleomagnetic age fix		0.00		0.000	2194.90	
178-1095A-1H-1, 90-92	0.90	0.90	cjp	0.041	2194.90	0.14
178-1095D-1H-1, 137-139	1.12	1.12	tob	0.051	2194.90	2.05
178-1095A-1H-1, 112-114	1.12	1.12	wlf	0.051	2194.90	0.40
178-1095A-1H-2, 20-22	1.66	1.66	cjp	0.076	2194.90	1.80
178-1095A-1H-2, 66-68	2.12	2.12	cjp	0.097	2194.90	5.70
178-1095A-1H-2, 70-72	2.16	2.16	wlf	0.098	2194.90	6.23
178-1095D-1H-2, 71-73	2.17	2.17	tob	0.099	2194.90	9.53
178-1095A-1H-2, 113-115	2.59	2.59	cjp	0.118	2194.90	12.30
178-1095D-1H-3, 68-70	3.12	3.12	tob	0.142	2194.90	13.33
178-1095A-1H-3, 19-21	3.12	3.12	wlf	0.142	2194.90	0.81
178-1095A-1H-3, 48-50	3.41	3.41	cjp	0.155	2194.90	0.80
178-1095A-1H-3, 140-142	4.33	4.33	wlf	0.197	2194.90	3.15
178-1095D-1H-3, 141-143	4.33	4.34	tob	0.198	2194.90	1.66
178-1905A-1H-3, 148-150	4.41	4.41	cjp	0.201	2194.90	6.50
178-1095D-1H-4, 9-11	4.59	4.59	cjp	0.209	2194.90	7.90
178-1095D-1H-4, 19-21	4.69	4.69	cjp	0.214	2194.90	7.20
178-1095D-1H-4, 29-31	4.79	4.79	cjp	0.218	2194.90	7.60
178-1095D-1H-4, 44-46	4.94	4.94	cjp	0.225	2194.90	9.80
178-1095D-1H-4, 59-61	5.09	5.09	cjp	0.232	2194.90	9.30
178-1095D-1H-4, 82-84	5.32	5.32	cjp	0.242	2194.90	4.00
178-1095D-1H-4, 99-101	5.49	5.49	cjp	0.250	2194.90	2.30
178-1095D-1H-4, 109-111	5.59	5.59	cjp	0.255	2194.90	2.00
178-1095D-1H-4, 119-121	5.69	5.69	cjp	0.259	2194.90	4.80
178-1095D-1H-4, 130-132	5.80	5.80	cjp	0.264	2194.90	5.70
178-1095D-1H-4, 140-142	5.90	5.90	cjp	0.269	2194.90	5.00
178-1095D-1H-5, 4-6	6.04	6.01	cjp	0.274	2194.90	3.80
178-1095D-1H-5, 34-36	6.34	6.25	cjp	0.285	2194.90	3.00
178-1095D-1H-5, 64-66	6.64	6.49	cjp	0.296	2194.90	2.60
178-1095D-1H-5, 94-96	6.94	6.73	cjp	0.306	2194.90	15.50
178-1095A-2H-1, 123-125	7.13	6.88	wlf	0.313	2194.90	11.84
178-1095D-1H-5, 125-127	7.25	6.97	cjp	0.318	2194.90	3.60
178-1095D-1H-4, 67-69	7.13	7.14	tob	0.325	2194.90	14.62
178-1095D-1H-6, 4-6	7.54	7.20	cjp	0.328	2194.90	2.90
178-1095D-1H-6, 34-36	7.84	7.44	cjp	0.339	2194.90	4.00
178-1095D-1H-6, 69-71	8.19	7.72	cjp	0.352	2194.90	2.50
178-1095A-2H-2, 133-135	8.73	8.15	wlf	0.371	2194.90	2.72
178-1095D-1H-4, 136-138	8.73	8.74	tob	0.398	2194.90	20.54
178-1095D-2H-1, 142-144	10.02	9.17	cjp	0.418	2194.90	2.30
178-1095A-2H-3, 130-132	10.20	9.32	cjp	0.424	2194.90	1.80
178-1095A-2H-3, 140-142	10.30	9.39	wlf	0.428	2194.90	4.96
178-1095D-1H-5, 84-86	10.30	10.31	tob	0.470	2194.90	5.20
178-1095A-2H-4, 142-144	11.82	10.6	wlf	0.483	2194.90	1.46
178-1095A-2H-4, 96-98	11.36	11.36	cjp	0.518	2194.90	0.50
178-1095D-1H-6, 32-34	11.82	11.83	tob	0.539	2194.90	5.02
178-1095A-2H-5, 43-45	12.33	12.33	cjp	0.562	2194.90	1.80
178-1095D-2H-1, 133-135	14.97	14.97	tob	0.682	2194.90	0.98
178-1095A-3H-4, 7-8	14.97	14.97	wlf	0.682	2194.90	0.98
178-1095A-3H-4, 19-20	15.09	15.09	cjp	0.688	2194.90	12.00
178-1095A-3H-4, 66-67	15.56	15.56	cjp	0.709	2194.90	2.60
178-1095D-2H-2, 108-110	15.58	15.58	tob	0.710	2194.90	9.14
178-1095A-3H-4, 68-69	15.58	15.58	wlf	0.710	2194.90	52.08
178-1095A-3H-5, 6-7	16.52	16.52	cjp	0.753	2194.90	2.20
178-1095D-2H-3, 65-67	16.54	16.54	tob	0.754	2194.90	1.55
178-1095A-3H-5, 8-9	16.54	16.54	wlf	0.754	2194.90	3.16
Paleomagnetic age fix		17.12		0.780	2895.20	
178-1095D-2H-4, 49-51	17.60	17.60	tob	0.797	2895.20	2.31
178-1095A-3H-6, 82-83	17.60	17.60	wlf	0.797	2895.20	3.83
178-1095A-3H-6, 89-91	17.67	17.67	cjp	0.799	2895.20	4.70
178-1095A-3H-8, 34-35	19.33	19.33	cjp	0.856	2895.20	2.20
178-1095D-2H-5, 81-84	19.57	19.57	tob	0.865	2895.20	0.02
178-1095A-3H-8, 58-59	19.57	19.57	wlf	0.865	2895.20	0.99

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, wlf = Wolf-Welling, tob = Moerz, and cjp = Pudsey. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T3. Bulk sediment parameters $CaCO_3$ and TOC, ages, and linear sedimentation rates, Site 1096.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf)*	Index	Age (Ma)	LSR (cm/m.y.)	$CaCO_3$ (wt%)	TOC (wt%)
Paleomagnetic age fix		0.00		0.000	7049.00		
178-1096A-1H-1, 0-2	0.00	0.00	hill	0.000	7049.00	0.29	0.30
178-1096A-1H-1, 58-60	0.58	0.58	wlf	0.008	7049.00	0.17	0.23
178-1096A-1H-3, 59-61	3.59	3.57	wlf	0.051	7049.00	0.65	0.23
178-1096A-1H-3, 92-94	3.92	3.90	hill	0.055	7049.00	0.50	0.20
178-1096A-1H-5, 59-61	6.59	6.56	wlf	0.093	7049.00	0.84	0.15
178-1096A-2H-1, 26-28	7.96	7.95	wlf	0.113	7049.00	0.00	0.06
178-1096A-2H-2, 97-99	10.17	10.08	hill	0.143	7049.00	0.59	0.23
178-1096A-2H-3, 28-30	10.98	10.86	wlf	0.154	7049.00	0.22	0.17
178-1096A-2H-5, 10-12	13.80	13.57	wlf	0.193	7049.00	0.37	0.10
178-1096A-2H-5, 92-94	14.62	14.36	hill	0.204	7049.00	0.00	0.11
178-1096B-3H-2, 58-60	15.38	15.32	hill	0.217	7049.00	0.18	0.06
178-1096A-2H-7, 30-32	17.00	16.65	wlf	0.236	7049.00	0.02	0.08
178-1096A-3H-1, 139-141	18.59	18.59	wlf	0.264	7049.00	0.74	0.23
178-1096A-3H-2, 100-102	19.70	19.70	wlf	0.279	7049.00	0.37	0.19
178-1096A-3H-3, 3-5	20.23	20.23	hill	0.287	7049.00	0.04	0.13
178-1096A-3H-3, 34-36	20.54	20.54	wlf	0.291	7049.00	0.00	0.12
178-1096A-3H-3, 100-102	21.20	21.20	wlf	0.301	7049.00	0.00	0.19
178-1096A-3H-4, 90-92	22.60	22.60	hill	0.321	7049.00	0.23	0.33
178-1096A-3H-4, 100-102	22.70	22.70	wlf	0.322	7049.00	0.52	0.25
178-1096A-3H-5, 100-102	24.20	24.20	wlf	0.343	7049.00	1.12	0.19
178-1096A-3H-6, 30-32	25.00	25.00	wlf	0.355	7049.00	0.57	0.26
178-1096A-4H-1, 120-122	27.90	27.90	wlf	0.396	7049.00	0.83	0.23
178-1096A-4H-2, 120-122	29.40	29.40	wlf	0.417	7049.00	0.53	0.18
178-1096A-4H-3, 100-102	30.70	30.70	hill	0.436	7049.00	0.60	0.06
178-1096B-4H-6, 50-52	30.80	30.80	hill	0.437	7049.00	0.00	0.13
178-1096A-4H-3, 120-122	30.90	30.90	wlf	0.438	7049.00	0.50	0.07
178-1096A-4H-4, 110-112	32.30	32.30	hill	0.458	7049.00	0.00	0.31
178-1096A-4H-4, 120-122	32.40	32.40	wlf	0.460	7049.00	0.30	0.30
178-1096A-5H-1, 90-92	37.10	37.09	hill	0.526	7049.00	0.39	0.24
178-1096A-5H-1, 110-112	37.30	37.29	wlf	0.529	7049.00	0.56	0.23
178-1096A-5H-2, 110-112	38.80	38.77	wlf	0.550	7049.00	0.00	0.48
178-1096A-5H-3, 25-27	39.45	39.41	hill	0.559	7049.00	1.43	0.13
178-1096A-5H-3, 110-112	40.30	40.26	wlf	0.571	7049.00	1.07	0.32
178-1096A-5H-4, 110-112	41.80	41.74	wlf	0.592	7049.00	0.45	0.18
178-1096A-5H-5, 110-112	43.30	43.22	wlf	0.613	7049.00	0.75	0.26
178-1096A-5H-6, 110-112	44.80	44.71	wlf	0.634	7049.00	0.55	0.21
178-1096A-5H-7, 50-52	45.70	45.60	wlf	0.647	7049.00	1.56	0.22
178-1096A-6H-1, 120-122	46.90	46.90	wlf	0.665	7049.00	1.20	0.22
178-1096A-6H-2, 120-122	48.40	48.40	wlf	0.687	7049.00	0.92	0.19
178-1096A-6H-3, 65-67	49.35	49.35	hill	0.700	7049.00	1.39	0.14
178-1096B-6H-6, 56-58	49.86	49.48	hill	0.702	7049.00	1.19	0.16
178-1096A-6H-3, 120-122	49.90	49.90	wlf	0.708	7049.00	1.56	0.19
178-1096A-6H-4, 120-122	51.40	51.40	wlf	0.729	7049.00	0.95	0.24
178-1096A-6H-5, 60-62	52.30	52.30	hill	0.742	7049.00	1.21	0.30
178-1096B-7H-1, 120-122	52.50	52.44	wlf	0.744	7049.00	1.61	0.45
178-1096A-6H-5, 119-121	52.89	52.89	wlf	0.750	7049.00	2.31	0.22
178-1096B-7H-2, 120-122	53.94	53.82	wlf	0.763	7049.00	0.20	0.17
178-1096A-6H-6, 119-121	54.39	54.39	wlf	0.772	7049.00	0.63	0.09
Paleomagnetic age fix		54.98		0.780	8944.60		
178-1096B-7H-3, 120-122	55.44	55.25	wlf	0.783	8944.60	0.27	0.08
178-1096A-7H-1, 29-31	55.49	55.49	hill	0.786	8944.60	0.76	0.10
178-1096A-7H-1, 89-91	56.09	56.09	wlf	0.792	8944.60	0.24	0.06
178-1096B-7H-4, 90-92	56.70	56.45	hill	0.796	8944.60	0.11	0.10
178-1096B-7H-4, 120-122	56.94	56.68	wlf	0.799	8944.60	0.00	0.11
178-1096A-7H-2, 89-91	57.59	57.59	wlf	0.809	8944.60	0.61	0.24
178-1096B-7H-5, 118-120	58.42	58.09	wlf	0.815	8944.60	0.91	0.21
178-1096B-7H-6, 59-61	59.39	59.01	hill	0.825	8944.60	0.53	0.29
178-1096A-7H-3, 90-92	59.10	59.10	wlf	0.826	8944.60	0.79	0.21
178-1096A-7H-3, 116-116	59.36	59.36	hill	0.829	8944.60	1.20	0.31
178-1096B-7H-6, 119-121	59.93	59.53	wlf	0.831	8944.60	0.18	0.39
178-1096B-7H-7, 60-62	60.84	60.39	wlf	0.841	8944.60	0.58	0.30

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, TOC = total organic carbon, wlf = Wolf-Welling, hill = Hillenbrand. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T4. Bulk sediment parameters $CaCO_3$ and TOC, ages, and linear sedimentation rates, Site 1101A.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf)*	Age (Ma)	LSR (cm/m.y.)	$CaCO_3$ (wt%)	TOC (wt%)
178-1101A-						
Paleomagnetic age fix	0.00	0.00	0.000	7033.30		
1H-1, 88-90	0.88	0.88	0.013	7033.30	0.38	0.16
1H-3, 88-90	2.38	2.38	0.034	7033.30	0.30	0.12
1H-4, 88-90	3.88	3.88	0.055	7033.30	0.62	0.19
1H-5, 88-90	5.38	5.38	0.076	7033.30	1.05	0.21
1H-6, 80-82	6.88	6.88	0.098	7033.30	1.68	0.17
1H-2, 88-90	8.30	8.30	0.118	7033.30	4.48	0.17
2H-1, 75-77	9.45	9.42	0.134	7033.30	4.06	0.16
2H-2, 75-77	10.95	10.87	0.155	7033.30	0.02	0.22
2H-3, 75-77	12.45	12.32	0.175	7033.30	1.04	0.17
2H-4, 75-77	13.95	13.77	0.196	7033.30	0.45	0.20
2H-5, 75-77	15.45	15.22	0.216	7033.30	0.12	0.16
2H-6, 75-77	16.95	16.67	0.237	7033.30	0.27	0.18
2H-7, 30-32	18.00	17.69	0.251	7033.30	0.85	0.17
3H-1, 90-92	19.10	19.08	0.271	7033.30	1.69	0.15
3H-2, 89-91	20.59	20.55	0.292	7033.30	0.66	0.08
3H-3, 90-92	22.10	22.03	0.313	7033.30	0.27	0.16
3H-4, 90-92	23.60	23.50	0.334	7033.30	0.02	0.16
3H-5, 90-92	25.10	24.97	0.355	7033.30	0.70	0.18
3H-6, 89-91	26.59	26.43	0.376	7033.30	0.44	0.15
3H-7, 23-25	27.43	27.26	0.388	7033.30	1.29	0.13
4H-1, 85-86	28.55	28.48	0.405	7033.30	0.04	0.14
4H-2, 85-86	30.05	29.86	0.425	7033.30	1.37	0.13
4H-3, 85-86	31.55	31.24	0.444	7033.30	0.67	0.10
4H-4, 86-87	33.06	32.63	0.464	7033.30	3.51	0.16
4H-5, 85-86	34.55	34.00	0.483	7033.30	0.82	0.17
4H-6, 85-86	36.05	35.38	0.503	7033.30	0.31	0.17
4H-7, 35-36	37.05	36.30	0.516	7033.30	3.08	0.06
5H-1, 33-35	37.53	37.53	0.534	7033.30	0.87	0.13
6H-1, 87-89	39.07	39.02	0.555	7033.30	1.30	0.25
6H-2, 94-96	40.64	40.50	0.576	7033.30	2.10	0.20
6H-3, 84-86	42.04	41.82	0.595	7033.30	0.73	0.16
6H-4, 84-86	43.54	43.23	0.615	7033.30	0.42	0.27
6H-5, 84-86	45.04	44.65	0.635	7033.30	1.02	0.20
6H-6, 85-87	46.55	46.07	0.655	7033.30	1.20	0.18
7H-1, 84-86	48.54	48.51	0.690	7033.30	0.63	0.14
7H-2, 84-86	50.04	49.96	0.710	7033.30	0.81	0.10
7H-3, 85-87	51.55	51.42	0.731	7033.30	0.95	0.17
7H-4, 84-86	53.04	52.86	0.752	7033.30	0.75	0.16
7H-5, 84-86	54.54	54.32	0.772	7033.30	1.42	0.14
Paleomagnetic age fix	55.08	55.08	0.783	7781.00		
7H-6, 84-86	56.04	55.77	0.792	7781.00	0.91	0.20
7H-7, 64-66	57.34	57.02	0.808	7781.00	0.30	0.21
8H-1, 80-82	58.00	58.00	0.821	7781.00	0.97	0.16
8H-2, 79-81	59.49	59.48	0.840	7781.00	1.05	0.17
8H-3, 79-81	60.99	60.97	0.859	7781.00	1.07	0.17
8H-4, 80-82	62.50	62.47	0.878	7781.00	0.39	0.14
8H-5, 80-82	64.00	63.97	0.897	7781.00	1.24	0.18
8H-6, 79-81	65.49	65.45	0.916	7781.00	1.04	0.16
8H-7, 44-46	66.64	66.59	0.931	7781.00	0.50	0.12
9H-1, 84-86	67.54	67.54	0.943	7781.00	0.69	0.14
9H-2, 77-79	68.97	68.97	0.962	7781.00	0.72	0.16
9H-3, 80-82	70.50	70.50	0.981	7781.00	12.58	0.11
Paleomagnetic age fix	71.20	71.20	0.990	6187.50		
9H-4, 78-80	71.98	71.98	1.003	6187.50	14.28	0.08
9H-5, 78-80	73.48	73.48	1.027	6187.50	0.82	0.18
9H-6, 78-80	74.98	74.98	1.051	6187.50		
Paleomagnetic age fix	76.15	76.15	1.070	6391.40		
10H-1, 80-82	77.00	77.00	1.084	6391.40	0.44	0.11
10H-2, 80-82	78.50	78.50	1.107	6391.40	0.67	0.18
10H-3, 80-82	80.00	80.00	1.131	6391.40	0.75	0.13

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, TOC = total organic carbon. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T5. Bulk sediment parameters >63 µm, ages, and linear sedimentation rates, Site 1096.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf) *	Index	Age (Ma)	LSR (cm/m.y.)	> 63 µm (wt%)
Paleomagnetic age fix		0.00		0.000	7079.00	
178-1096A-1H-1, 58-60	0.58	0.58	wlf	0.008	7049.00	0.09
178-1096A-1H-5, 59-61	6.59	6.56	wlf	0.093	7049.00	0.08
178-1096A-2H-1, 19-21	7.89	7.88	cjp	0.112	7049.00	1.00
178-1096A-2H-1, 60-62	8.30	8.28	cjp	0.117	7049.00	0.16
178-1096A-2H-1, 110-112	8.80	8.76	cjp	0.124	7049.00	0.20
178-1096A-2H-2, 9-11	9.29	9.23	cjp	0.131	7049.00	0.20
178-1096A-2H-2, 59-61	9.79	9.71	cjp	0.138	7049.00	4.40
178-1096A-2H-2, 111-113	10.31	10.21	cjp	0.145	7049.00	0.60
178-1096A-2H-3, 10-12	10.80	10.68	cjp	0.152	7049.00	1.20
178-1096A-2H-3, 28-30	10.98	10.86	wlf	0.154	7049.00	2.49
178-1096A-2H-3, 59-61	11.29	11.16	cjp	0.158	7049.00	0.10
178-1096A-2H-3, 110-112	11.80	11.65	cjp	0.165	7049.00	18.30
178-1096A-2H-4, 9-11	12.29	12.12	cjp	0.172	7049.00	0.60
178-1096A-2H-4, 59-61	12.79	12.60	cjp	0.179	7049.00	3.30
178-1096A-2H-4, 109-111	13.29	13.08	cjp	0.186	7049.00	2.60
178-1096A-2H-4, 133-135	13.53	13.31	cjp	0.189	7049.00	4.50
178-1096A-2H-5, 25-27	13.95	13.72	cjp	0.195	7049.00	5.60
178-1096A-2H-5, 79-81	14.49	14.24	cjp	0.202	7049.00	2.20
178-1096A-2H-5, 130-132	15.00	14.73	cjp	0.209	7049.00	7.90
178-1096A-2H-6, 29-31	15.49	15.20	cjp	0.216	7049.00	0.50
178-1096A-2H-6, 70-72	15.90	15.59	cjp	0.221	7049.00	10.50
178-1096A-2H-6, 126-128	16.46	16.13	cjp	0.229	7049.00	13.30
178-1096A-3H-1, 130-132	18.50	18.50	cjp	0.262	7049.00	0.00
178-1096A-3H-1, 139-141	18.59	18.59	wlf	0.264	7049.00	0.03
178-1096A-3H-2, 30-32	19.00	19.00	cjp	0.270	7049.00	0.65
178-1096A-3H-2, 80-82	19.50	19.50	cjp	0.277	7049.00	3.10
178-1096A-3H-2, 100-102	19.70	19.70	wlf	0.279	7049.00	1.53
178-1096A-3H-2, 130-132	20.00	20.00	cjp	0.284	7049.00	0.90
178-1096A-3H-3, 6-8	20.26	20.26	cjp	0.287	7049.00	5.80
178-1096A-3H-3, 20-22	20.40	20.40	cjp	0.289	7049.00	5.30
178-1096A-3H-3, 34-36	20.54	20.54	wlf	0.291	7049.00	9.64
178-1096A-3H-3, 40-42	20.60	20.60	cjp	0.292	7049.00	7.10
178-1096A-3H-3, 86-87	21.06	21.06	cjp	0.299	7049.00	0.00
178-1096A-3H-3, 100-102	21.20	21.20	wlf	0.301	7049.00	2.39
178-1096A-3H-3, 130-132	21.50	21.50	cjp	0.305	7049.00	0.00
178-1096A-3H-5, 100-102	24.20	24.20	wlf	0.343	7049.00	0.05
178-1096A-3H-5, 130-132	24.50	24.50	cjp	0.348	7049.00	3.20
178-1096A-3H-6, 30-32	25.00	25.00	wlf	0.355	7049.00	0.14
178-1096A-4H-1, 120-122	27.90	27.90	wlf	0.396	7049.00	0.16
178-1096A-4H-1, 140-142	28.10	28.10	cjp	0.399	7049.00	0.60
178-1096A-4H-2, 50-52	28.70	28.70	cjp	0.407	7049.00	0.40
178-1096A-4H-2, 120-122	29.40	29.40	wlf	0.417	7049.00	0.19
178-1096A-4H-3, 51-53	30.21	30.21	cjp	0.429	7049.00	1.70
178-1096A-4H-3, 120-122	30.90	30.90	wlf	0.438	7049.00	0.32
178-1096A-4H-4, 50-52	31.70	31.70	cjp	0.450	7049.00	0.40
178-1096A-5H-1, 58-60	36.78	36.77	cjp	0.522	7049.00	0.00
178-1096A-5H-1, 110-112	37.30	37.29	wlf	0.529	7049.00	0.21
178-1096A-5H-2, 60-62	38.30	38.28	cjp	0.543	7049.00	0.70
178-1096A-5H-2, 110-112	38.80	38.77	wlf	0.550	7049.00	3.49
178-1096A-5H-3, 60-62	39.80	39.76	cjp	0.564	7049.00	0.16
178-1096A-5H-3, 110-112	40.30	40.26	wlf	0.571	7049.00	4.06
178-1096A-5H-4, 60-62	41.30	41.24	cjp	0.585	7049.00	0.50
178-1096A-5H-5, 60-62	42.80	42.73	cjp	0.606	7049.00	0.00
178-1096A-5H-5, 110-112	43.30	43.22	wlf	0.613	7049.00	0.43
178-1096A-5H-6, 75-77	44.45	44.36	cjp	0.629	7049.00	1.70
178-1096A-5H-7, 10-12	45.30	45.20	cjp	0.641	7049.00	0.40
178-1096A-5H-7, 50-52	45.70	45.60	wlf	0.647	7049.00	0.00
178-1096A-6H-1, 99-101	46.69	46.69	cjp	0.662	7049.00	0.30
178-1096A-6H-2, 38-40	47.58	47.58	cjp	0.675	7049.00	0.10

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, TOC = total organic carbon, wlf = Wolf-Welling, cjp = Pudsey. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T6. Bulk sediment parameters >63 µm, ages, and linear sedimentation rates, Site 1101.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf) *	Index	Age (Ma)	LSR (cm/m.y.)	>63 µm (wt%)
178-1101A-						
Paleomagnetic age fix	0.00	0.00		0.000	7033.30	
1H-1, 88-90	0.88	0.88	wlf	0.013	7033.30	0.50
1H-2, 88-90	2.38	2.38	wlf	0.034	7033.30	0.02
1H-3, 88-90	3.88	3.88	wlf	0.055	7033.30	0.18
1H-4, 88-90	5.38	5.38	wlf	0.076	7033.30	0.14
1H-5, 88-90	6.88	6.88	wlf	0.098	7033.30	0.16
1H-6, 80-82	8.30	8.30	wlf	0.118	7033.30	2.55
2H-1, 31-32	9.01	9.00	cjp	0.128	7033.30	1.50
2H-1, 60-62	9.30	9.28	cjp	0.132	7033.30	1.80
2H-1, 75-77	9.45	9.42	wlf	0.134	7033.30	2.60
2H-1, 90-92	9.60	9.57	cjp	0.136	7033.30	1.40
2H-1, 148-150	10.18	10.13	cjp	0.144	7033.30	2.20
2H-2, 60-62	10.80	10.73	cjp	0.153	7033.30	4.10
2H-2, 75-77	10.95	10.87	wlf	0.155	7033.30	0.28
2H-3, 40-42	12.10	11.99	cjp	0.170	7033.30	1.30
2H-3, 75-77	12.45	12.32	wlf	0.175	7033.30	0.04
2H-4, 40-42	13.60	13.43	cjp	0.191	7033.30	0.60
2H-4, 75-77	13.95	13.77	wlf	0.196	7033.30	0.05
2H-5, 40-42	15.10	14.88	cjp	0.212	7033.30	0.10
2H-5, 75-77	15.45	15.22	wlf	0.216	7033.30	0.04
2H-6, 40-42	16.60	16.33	cjp	0.232	7033.30	2.00
2H-6, 75-77	16.95	16.67	wlf	0.237	7033.30	0.23
2H-7, 30-32	18.00	17.69	wlf	0.251	7033.30	0.00
3H-1, 20-22	18.40	18.40	cjp	0.262	7033.30	0.70
3H-1, 90-92	19.10	19.08	wlf	0.271	7033.30	0.72
3H-2, 10-12	19.80	19.77	cjp	0.281	7033.30	3.00
3H-2, 89-91	20.59	20.55	wlf	0.292	7033.30	2.81
3H-3, 10-12	21.30	21.24	cjp	0.302	7033.30	1.30
3H-3, 90-92	22.10	22.03	wlf	0.313	7033.30	0.97
3H-4, 10-12	22.80	22.71	cjp	0.323	7033.30	2.60
3H-4, 70-72	23.40	23.30	cjp	0.331	7033.30	0.60
3H-4, 90-92	23.60	23.50	wlf	0.334	7033.30	0.11
3H-5, 9-11	24.29	24.18	cjp	0.344	7033.30	0.90
3H-5, 90-92	25.10	24.97	wlf	0.355	7033.30	3.53
3H-6, 10-12	25.80	25.66	cjp	0.365	7033.30	0.10
3H-6, 89-91	26.59	26.43	wlf	0.376	7033.30	0.17
3H-7, 23-25	27.43	27.26	wlf	0.388	7033.30	1.23
4H-1, 15-16	27.85	27.84	cjp	0.396	7033.30	2.00
4H-1, 85-86	28.55	28.48	wlf	0.405	7033.30	6.59
4H-2, 15-16	29.35	29.22	cjp	0.415	7033.30	0.45
4H-2, 85-86	30.05	29.86	wlf	0.425	7033.30	2.04
4H-3, 15-16	30.85	30.60	cjp	0.435	7033.30	0.50
4H-3, 85-86	31.55	31.24	wlf	0.444	7033.30	0.26
4H-4, 15-16	32.35	31.98	cjp	0.455	7033.30	0.10
4H-4, 86-87	33.06	32.63	wlf	0.464	7033.30	5.16
4H-5, 15-16	33.85	33.36	cjp	0.474	7033.30	0.10
4H-5, 85-86	34.55	34.00	wlf	0.483	7033.30	0.02
4H-6, 15-16	35.35	34.74	cjp	0.494	7033.30	2.30
4H-6, 85-86	36.05	35.38	wlf	0.503	7033.30	3.73
4H-7, 15-16	36.85	36.12	cjp	0.514	7033.30	1.70
4H-7, 35-36	37.05	36.30	wlf	0.516	7033.30	2.11
4H-7, 40-41	37.10	36.35	cjp	0.517	7033.30	1.90
4H-7, 80-81	37.50	37.50	cjp	0.533	7033.30	2.10
5H-1, 33-35	37.53	37.53	wlf	0.534	7033.30	10.23
6H-1, 87-89	39.07	39.02	wlf	0.555	7033.30	0.04
5H-1, 14-16	39.80	39.71	cjp	0.565	7033.30	0.10
6H-2, 94-96	40.64	40.50	wlf	0.576	7033.30	1.67
6H-2, 10-12	41.30	41.12	cjp	0.585	7033.30	0.10
6H-3, 84-86	42.04	41.82	wlf	0.595	7033.30	0.86

Notes: * = Janus compressed depth. LSR = linear sedimentation rate, wlf = Wolf-Welling, cjp = Pudsey. Only a portion of this table appears here. The complete table is available in **ASCII format.**

Table T7. Coarse-fraction particle counts, ages, and linear sedimentation rates, Site 1095.

Core, section, interval (cm)	Depth (mbsf)	Depth (mbsf)*	Age (Ma)	LSR (cm/m.y.)	Benthic Foraminifers (agglutinated) (grain%)	Benthic Foraminifers (calcareous) (grain%)	Planktonic Foraminifers (grain%)	Benthic Gastropods (grain%)	Mollusca (grain%)	Echinoderms (grain%)	Radiolarians (grain%)	Diatoms (grain%)	Sponge Spicules (grain%)	Dinoflagellates (grain%)	Quartz (angular to subrounded) (grain%)	Quartz (rounded) (grain%)	Plagioclase Feldspar (grain%)	Muscovite Mica (grain%)	Biotite Mica (grain%)	Rock Fragments (metamorphic) (grain%)	Rock Fragments (igneous) (grain%)	Rock Fragments (sedimentary) (grain%)	Volcanic Glass (grain%)	Glauconite (grain%)	Pyrite (grain%)	Aggregates (grain%)	Other Grains (grain%)
178-1095A-																											
Paleomagnetic age fix		0.00	0.000	2194.90																							
1H-1, 112-114	1.12	1.12	0.051	2194.90	0.00	0.00	1.15	0.00	1.15	0.00	5.75	1.15	0.00	0.00	40.23	2.30	8.05	3.45	1.15	14.94	2.30	12.64	0.00	0.00	3.45	1.15	1.15
1H-2, 70-72	2.16	2.16	0.098	2194.90	0.00	0.73	2.66	0.00	0.48	0.00	1.45	0.24	0.24	0.00	34.38	0.00	6.54	0.97	1.45	7.02	1.45	5.08	15.01	0.48	2.42	19.37	0.00
1H-3, 19-21	3.12	3.12	0.142	2194.90	0.00	1.06	1.33	0.00	0.00	0.00	0.80	0.27	0.00	0.00	42.44	1.06	6.10	1.33	2.12	33.42	1.59	4.24	1.06	0.27	2.12	0.80	0.00
1H-3, 140-142	4.33	4.33	0.197	2194.90	0.54	0.27	0.27	0.00	0.00	0.27	0.81	0.00	0.00	0.00	35.95	0.00	3.24	0.81	1.08	35.41	3.24	2.70	2.97	0.27	1.35	10.81	0.00
2H-1, 123-125	7.13	6.88	0.313	2194.90	0.78	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	30.86	0.00	2.34	4.49	3.52	29.88	3.91	0.59	2.73	0.00	12.11	8.40	0.00
2H-2, 133-135	8.73	8.15	0.371	2194.90	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	31.60	0.00	11.36	2.47	3.46	41.48	1.23	0.00	1.23	0.25	0.74	5.93	0.00
2H-3, 140-142	10.30	9.39	0.428	2194.90	0.83	0.28	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	44.9	0.00	9.92	1.10	1.93	30.58	0.00	0.00	0.83	0.00	1.65	7.71	0.00
2H-4, 142-144	11.82	10.60	0.483	2194.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.38	0.00	8.98	0.78	1.17	28.13	3.13	10.55	1.56	0.39	0.00	10.94	0.00
3H-4, 7-8	14.97	14.97	0.682	2194.90	0.00	0.53	0.27	0.00	0.00	0.00	0.27	0.00	0.00	0.00	30.93	0.00	11.73	1.87	2.40	29.07	3.73	12.27	1.07	0.27	1.87	3.73	0.00
3H-4, 68-69	15.58	15.58	0.710	2194.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.06	0.00	11.11	0.85	1.50	32.26	2.78	9.40	2.35	0.00	1.28	9.40	0.00
3H-5, 8-9	16.54	16.54	0.754	2194.90	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.25	0.00	8.00	0.25	0.00	26.00	3.75	6.75	0.50	0.00	4.25	3.00	0.00
		17.12	0.780	2895.20																							
3H-6, 82-83	17.60	17.60	0.797	2895.20	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.3	0.45	4.70	0.67	1.34	27.52	3.36	10.74	4.03	0.00	2.01	0.00	0.00
3H-8, 58-59	19.57	19.57	0.865	2895.20	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.29	0.59	12.94	0.00	0.59	15.59	0.00	10.59	1.47	0.00	1.47	0.59	0.00
4H-1, 147-149	22.27	22.27	0.958	2895.20	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.55	0.00	9.09	1.30	0.00	24.68	0.00	5.19	0.00	0.00	0.00	2.60	0.00
Paleomagnetic age fix		23.20	0.990	8187.50																							
4H-2, 101-103	23.31	23.31	0.991	8187.50	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.80	0.00	5.04	0.30	0.89	41.25	0.00	3.26	7.42	0.00	3.56	1.19	0.00
4H-3, 47-48	24.27	24.27	1.003	8187.50	0.00	6.72	37.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.48	0.21	7.98	0.63	0.84	15.13	0.00	4.41	2.10	0.00	1.68	0.42	0.00
4H-4, 2-4	25.32	25.32	1.016	8187.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.47	1.93	6.06	0.00	0.28	27.27	0.00	6.34	0.28	0.28	1.38	18.73	0.00
4H-4, 103-105	26.33	26.33	1.028	8187.50	0.00	3.73	21.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.17	0.88	5.04	0.22	0.44	27.85	0.00	2.63	0.88	0.22	1.97	5.48	0.00
4H-5, 50-52	27.30	27.30	1.040	8187.50	0.00	0.82	8.62	0.00	0.00	0.00	0.00	0.82	0.00	0.00	33.68	0.00	6.98	0.82	1.03	32.03	0.41	3.70	3.90	0.00	4.72	2.46	0.00
4H-6, 50-52	28.30	28.30	1.052	8187.50	0.00	0.00	12.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.62	0.81	5.14	0.27	1.08	24.05	0.00	1.89	1.08	0.00	0.00	1.35	0.00
Paleomagnetic age fix		29.75	1.070	4377.10																							
6H-1, 140-141	41.20	41.20	1.332	4377.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.53	1.18	4.71	0.00	0.59	39.41	0.59	11.47	0.00	0.00	2.35	1.18	0.00
6H-2, 20-21	41.50	41.50	1.338	4377.10	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	42.19	0.00	4.69	0.00	1.56	42.97	0.00	7.03	0.00	0.00	0.78	0.00	0.00
6H-3, 20-21	43.00	43.00	1.373	4377.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.03	0.00	4.83	0.00	0.00	41.76	0.00	8.24	0.00	0.00	0.00	1.14	0.00
6H-4, 20-21	44.50	44.50	1.407	4377.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.26	1.61	3.54	0.00	0.64	41.16	1.29	8.36	0.00	0.00	3.54	1.61	0.00
6H-5, 20-21	46.00	46.00	1.441	4377.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.65	1.40	9.47	0.00	0.35	37.89	0.00	6.32	1.05	0.00	3.86	0.00	0.00
6H-6, 20-21	47.50	47.50	1.476	4377.10	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.54	0.00	2.40	0.30	0.60	30.93	0.00	18.32	0.00	0.00	8.41	0.90	0.00
7H-1, 80-82	50.10	50.06	1.534	4377.10	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.77	2.32	6.29	0.00	0.33	25.83	0.00	28.48	0.00	0.00	0.33	1.66	0.00

Notes: * = Janus compressed depth. LSR = linear sedimentation rate. Only a portion of this table appears here. The complete table is available in **ASCII format.**