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12. *DATA REPORT:* MIOCENE BENTHIC FORAMINIFERAL ABUNDANCES AND DISSOLUTION INDICES, SITE 1006, STRAITS OF FLORIDA[1]

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METHODS

Samples were washed with sodium metaphosphate (5.5 g/L) in tap water through a 63-µm sieve and air dried. Benthic foraminifers were picked from aliquots of the >150-µm size fraction and mounted on reference slides. We avoid the 63- to 150-µm size fraction preferred by some authors (e.g., Schröder et al., 1987) because of problems in identifying small taxa. While we lose information obtainable from the 63- to 150-µm size fraction, we gain information on larger taxa (i.e., in an aliquot picked from the >63-µm size fraction, many larger taxa are underemphasized, while small, difficult to identify taxa are emphasized).

In general, ~300 specimens were picked per sample. However, samples with as few as 130 specimens were used in the faunal analyses. Thirty-seven samples were examined for this study (Table 1). Our identifications of most of the benthic foraminifers follow the taxonomy of van Morkhoven et al. (1986); additional taxonomic references include Katz and Miller (1993a, 1993b), and references included therein. Not all species present were identified; for example, species of some common (*Lenticulina, Oridorsalis,* and *Gyroidinoides*) and some rare (*Lagena*, *Fissurina*, and *Oolina*) genera were not differentiated.

We performed Q-mode principal components and varimax factor analyses on the relative abundance (percentage) data using modifications of programs provided by Lohmann (1980). The Q-mode principal components and varimax factor programs utilize a cosine-theta matrix, standardizing each sample to unit length. Each factor represents a unique benthic foraminiferal biofacies. We used factor analysis to help identify trends in the benthic foraminiferal biofacies at Site 1006, using two analyses: (1) the first was run using the entire benthic foraminiferal data set (Fig. 1); and (2) the second analysis was run with the transported, shallow-water taxa deleted and only the in situ faunal components were used (Fig. 2).

Dissolution indices (Table 1) were based on counts of planktonic foraminifer fragments, whole planktonic foraminifer tests, and benthic foraminifer tests. Percentages of planktonic foraminifer fragments were calculated relative to fragments plus whole planktonic foraminifer tests. Percentages of planktonic foraminifers were calculated relative to whole planktonic plus benthic foraminifer tests.

RESULTS

Five factors explain 84% of the faunal variation at Site 1006 (37 samples and 134 taxa) (Table 1; Fig. 1). Benthic foraminifers indicate that sedimentation was primarily in situ at Site 1006, with periods of increased downslope transport of shallow-water material. Factor 3 is characterized by high abundances of transported, shallow-water taxa (dominated by *Reusella spinulosa, Elphidium* spp., and *Amphistegina/Asterigerina* spp.) (Fig. 3). The faunal distributions that characterize Factor 3 show that low numbers of shallow-water specimens were transported downslope and deposited at Site 1006 throughout the middle to late Miocene, punctuated by periods of increased downslope transport of shallow-water taxa (Figs. 1, 3). Comparison of the Factor 3 assemblage with the isotope and sequence stratigraphic records shows a probable correlation between downslope transport of shallow-water material and sea-level changes (M.E. Katz, J.D. Wright, and K.G. Miller, unpubl. data).

To evaluate circulation changes that may be reflected in the benthic foraminiferal biofacies changes, we deleted transported, shallow-water taxa (*Amphistegina/Asterigerina* spp., *Baculogypsinoides* sp., *Elphidium* spp., *Planorbulina* spp., *Reusella spinulosa*, and *Tretomphalus* spp.) from the dataset to identify patterns in the in situ benthic foraminiferal faunas. Changes in these in situ faunas do not appear to be closely related to sequence stratigraphy (Fig. 2). Rather, biofacies fluctuations may have resulted from circulation changes that are only indirectly related to sea-level variations on the m.y. scale (e.g., Wright et al., 1992; M.E. Katz, J.D. Wright, and K.G. Miller, unpubl. data).

Dissolution indices (percentages of planktonic foraminifer fragments and percentages of planktonic foraminifers) (Table 1) indicate the presence of an interval of increased dissolution in the middle Miocene section at Site 1006 (Fig. 4), possibly corresponding to isotope event Mi5 (M.E. Katz, J.D. Wright, and K.G. Miller, unpubl. data).

SUMMARY

Site 1006 provides a middle to late Miocene record of bathyal benthic foraminiferal abundance changes in the Straits of Florida. Benthic foraminifers indicate that sedimentation was primarily in situ at Site 1006, with periods of increased downslope transport of shallow-water material. Changes in the in situ faunas may have resulted from circulation changes. Dissolution indices identify a dissolution interval in the upper Miocene section at Site 1006 that may correspond to isotope event Mi5. The data presented here are intended to support a subsequent study (M.E. Katz, J.D. Wright, and K.G. Miller, unpubl. data) that integrates the benthic foraminiferal faunal record with the stable isotopic record, all within a sequence stratigraphic framework. The ultimate goal is to demonstrate that the Miocene faunal and isotopic changes at Site 1006 reflect global, regional, and local influences, and provide constraints on paleobathymetry, sediment provenance, and circulation changes that may reflect changing source regions and glacioeustatic changes.

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Table 1. Benthic foraminifer percentages and dissolution indices, Site 1006.

Depth (mbsf)	Number counted	*Alabamina wilcoxensis*	*Angulogerina illingi*	*Angulogerina selseyensis*	*Angulogerina* spp.	*Anomalinoides globulosus*	*Anomalinoides pseudogrosserugosus*	*Anomalinoides spissiformis*	*Anomalinoides* spp.	*Arenobulimina* spp.	*Asterigerina* and *Amphistegina*	*Astrononion* sp.	*Baculogypsinoides* sp.	*Bolivina advena*	*Bolivina aenariensiformis*	*Bolivina alata*	*Bolivina antegressa*	*Bolivina cancellata*	*Bolivina floridana*	*Bolivina peregrina*	*Bolivina rhomboidalis*	*Bolivina tortuosa*	*Bolivina* spp.	*Bulimina alazanensis*	*B. macilenta* and *B. mexicana*	*Cassidulina carapitana*	*Cassidulina crassa*	*Cassidulina laevigata*	*Cassidulina reflexa*	*Cassidulina* spp.	*Cibicides* spp.	*Cibicidina* spp.	*Cibicidoides bradyi*	*Cibicidoides dominicus*	*Cibicidoides incrassatus*	*Cibicidoides micrus*
496.60	302	0.00	0.33	1.66	0.00	0.33	0.00	0.00	1.32	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.66	0.00	0.00	0.33	0.00	0.66	0.00	0.00	3.31	0.00	1.66	0.00
502.60	305	0.00	0.98	4.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.33	1.64	0.00	0.00	0.33	0.33	0.66	0.00	0.00	1.97	0.00	0.66	0.00
505.70	318	0.00	0.31	0.00	0.00	0.31	0.00	14.15	0.00	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.31	0.00	2.52	0.00	0.00	0.00
511.70	177	0.00	0.00	1.13	0.00	0.00	0.00	3.95	0.00	0.00	3.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.56	2.26	0.56	0.00	5.65	0.00	0.56	0.00
515.30	280	0.00	0.00	0.71	0.00	0.00	0.00	2.14	0.00	0.00	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.07	0.00	0.00	0.00	1.43	0.36	0.00	3.21	0.00	0.71	0.00
521.30	356	0.00	0.00	1.12	0.00	0.00	0.00	2.25	1.69	0.00	4.78	3.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.56	0.00	0.00	0.28	0.84	0.00	0.00	0.00	0.00	0.56	0.00
525.00	303	0.00	0.00	0.99	0.00	0.66	0.00	2.31	1.65	0.00	1.65	2.97	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	0.00	0.00	0.33	0.66	0.00	0.00	0.00	0.99	0.00	0.66	0.00
530.95	303	0.00	0.00	0.66	0.00	0.00	0.00	3.63	1.32	0.00	3.63	2.97	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	0.00	0.00	0.33	0.00	0.33	0.00	0.00	2.64	0.66	0.00	0.00
534.60	268	0.00	0.00	1.87	0.00	0.00	0.00	0.00	3.36	0.00	1.12	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.87	1.12	0.00	0.00	0.00	1.49	0.00	0.00	2.24	0.75	1.12	0.00
544.16	300	0.00	0.00	3.00	0.00	0.00	0.00	1.33	0.33	0.00	3.00	5.33	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.67	0.33	0.00	0.00	0.00	1.33	0.00	0.00	2.00	2.00	1.00	0.00
548.70	270	0.00	0.00	0.74	0.00	0.00	0.00	5.56	0.00	0.00	2.59	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.37	0.37	0.37	5.93	0.00	0.37	0.00
555.30	279	0.36	0.00	5.38	0.36	1.43	0.00	5.02	0.36	0.00	0.72	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.72	0.00	0.72	0.00	0.72	0.00	0.36	0.00	0.72	0.00	1.43	0.00
558.30	275	0.00	0.36	2.18	0.00	1.45	0.00	1.45	0.36	0.36	1.82	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.36	0.36	0.00	0.00	2.91	0.36	0.73	0.00
563.50	393	0.00	0.00	0.51	0.00	0.00	0.00	2.04	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.51	0.00	0.00	0.76	0.25	0.00	0.00	4.83	0.00	0.51	0.00
569.50	426	0.00	0.00	3.76	0.00	0.47	0.00	5.63	0.00	0.00	1.17	0.00	0.23	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	2.11	0.00	0.00	0.00
573.10	297	0.00	0.34	5.05	0.00	0.34	0.00	4.71	0.00	0.00	2.69	0.34	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	1.35	1.01	0.00
576.10	281	0.00	0.36	2.49	0.00	0.36	0.00	3.56	0.00	0.00	0.36	3.56	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.07	0.00	0.00	0.00	0.00	0.71	0.00	0.00	3.91	2.49	1.07	0.00
580.60	246	0.00	0.00	0.41	0.00	0.00	0.00	4.07	0.00	0.00	1.63	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	0.41	0.00	0.00	0.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00
582.70	130	1.54	0.00	1.54	0.00	0.00	0.00	2.31	0.00	0.00	3.85	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.77	4.62	0.00	1.54	0.77	0.00	0.00	0.77	0.00	0.00	0.00	1.54	0.00	0.00	0.00
585.70	267	0.00	0.37	5.62	0.00	0.37	0.00	3.00	0.00	0.00	0.75	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.62	0.00	1.87	0.37
592.40	257	0.00	1.17	1.56	0.00	0.00	0.00	2.33	0.39	0.00	0.39	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.39	3.89	0.00	0.00	0.00	0.00	0.00	0.00	0.78	6.61	0.78	0.78	0.00
598.40	255	0.00	0.39	1.18	0.00	0.78	0.00	1.18	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.78	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.39	2.35	0.39	0.78	0.00
602.73	300	0.33	0.00	1.67	0.00	0.67	0.00	5.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.33	0.67	0.00
613.20	315	0.00	2.22	4.76	0.00	0.32	0.00	0.95	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	1.59	0.00	0.00	3.17	1.27	1.90	0.00
616.20	262	0.38	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.34	1.53	1.15	0.00
622.80	510	1.18	0.98	4.12	0.00	0.00	0.00	1.76	0.39	0.20	0.39	0.00	0.00	0.00	0.00	0.00	0.20	0.78	0.00	0.00	0.20	0.00	0.00	0.00	0.59	1.18	0.00	0.00	0.00	0.00	0.00	0.00	3.53	0.20	0.78	0.00
627.30	364	0.00	0.00	3.30	0.00	0.27	0.00	2.75	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.27	0.00	0.00	0.00	0.00	2.47	0.00	1.65	0.00
631.13	300	0.00	0.33	4.00	0.00	0.00	0.00	3.00	1.00	0.33	2.67	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.67	0.00	0.00	0.00	1.67	0.33	0.33	1.00	0.00	0.00	0.00	0.00	4.33	0.00	0.33	0.00
649.90	460	0.00	2.17	4.35	0.00	0.00	0.00	0.65	0.22	0.00	8.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.22	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.22	1.74	0.43	0.43	0.00
659.55	205	0.49	0.00	2.93	0.00	0.00	0.00	0.98	0.49	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.49	0.00	0.00	1.46	0.00	0.00	0.00	0.49	0.00	0.00	0.00	3.41	0.49	1.46	0.00
662.93	255	1.57	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	1.96	0.78	0.00	0.00	0.00	0.78	0.39	0.39	0.00	0.00	0.00	1.18	0.00
671.13	297	1.01	0.00	1.35	0.00	0.34	0.67	0.34	0.34	0.00	3.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.67	3.37	0.00	0.00	5.39	0.34	0.00	0.34	3.70	0.00	1.01	0.00
674.00	229	0.87	0.00	1.31	0.00	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	0.00	0.00	0.00	4.37	0.00	0.00	0.44	1.75	0.44	0.87	0.00
688.40	274	0.00	0.36	0.00	0.00	0.00	1.09	0.00	0.36	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.19	0.73	0.00	0.00	0.00	0.00	0.00	0.00	2.92	0.73	0.73	0.00
688.68	276	1.81	0.00	0.36	0.00	0.00	0.36	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.72	0.36	2.54	1.81	0.00	0.00	0.36	0.00	0.00	0.00	3.26	0.36	3.99	0.00
691.68	296	1.01	0.00	1.01	0.00	0.68	0.00	0.34	0.00	0.00	0.68	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.34	0.34	0.00	3.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.34	1.01	0.00
698.35	294	2.04	0.00	0.34	0.00	0.34	0.00	0.00	0.34	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.34	0.00	4.08	0.00	1.70	0.00

Table 1 (continued).

Depth (mbsf)	Number counted	*Cibicidoides mundulus*	*Cibicidoides pachyderma*	*Cibicidoides robertsonianus*	*Cibicidoides* sp. B	*Cibicidoides* spp.	*Compressigerina coartata*	*Dentalina* spp.	*Eggerella bradyi*	*Ehrenbergina caribbea*	*Ehrenbergina spinea*	*Ehrenbergina spinosissima*	*Elphidium* spp.	*Fissurina* spp.	*Fursenkoina* sp.	*Globobulimina* spp.	*Globocassidulina palmerae*	*Globocassidulina punctata*	*Globocassidulina subglobosa*	*Gravellina* spp.	*Gyroidinoides* spp.	*Hanzawaia mantaensis*	*Hanzawaia* spp.	*Heronallenina* spp.	*Hoeglundina elegans*	*Hyalinea* spp.	*Karreriella chapapotensis*	*Karreriella cubensis*	*Karreriella subglabra*	*Karreriella* spp.	*Lagena* spp.	*Laticarinina pauperata*	*Lenticulina americana spinosa*	*Lenticulina peregrina*	*Lenticulina* spp.	*Lenticulinids*
496.60	302	2.32	8.28	0.00	0.00	1.32	0.99	0.33	0.66	0.00	0.00	0.33	0.66	0.66	0.00	0.66	0.00	0.00	0.33	0.00	7.28	1.66	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.66	1.32	0.00	0.00	3.97	0.33
502.60	305	6.89	6.56	0.00	0.00	0.66	0.00	0.33	0.00	1.31	0.00	0.00	2.62	0.33	0.00	1.97	0.00	0.00	0.66	0.00	5.90	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.33	0.98	0.00	0.00	0.00	3.28	0.00
505.70	318	7.86	0.00	0.00	0.00	1.57	1.26	1.89	0.63	0.00	0.00	0.00	0.63	3.14	0.00	0.00	0.00	0.00	2.83	0.00	5.66	4.40	0.00	0.00	0.00	0.00	1.26	0.00	0.31	0.00	0.63	0.31	0.00	0.00	1.57	0.63
511.70	177	1.69	0.00	0.00	0.00	1.13	0.00	1.13	0.56	0.00	0.00	0.00	0.56	0.00	0.00	2.26	0.00	0.00	3.95	0.00	7.91	6.78	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.56	1.13	0.00	0.56	2.26	0.00
515.30	280	7.86	0.00	1.07	0.00	0.71	0.00	0.71	2.14	0.00	0.00	0.00	1.07	0.71	0.00	0.00	0.00	0.00	1.43	0.00	6.79	0.36	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.36	2.50	0.00	0.36	1.79	0.71
521.30	356	6.18	0.56	0.28	0.00	1.12	0.28	1.12	4.21	0.28	0.00	0.00	4.21	1.40	0.00	0.56	0.00	0.00	3.93	0.00	5.34	0.56	0.00	0.00	1.12	0.00	0.56	0.00	0.00	0.00	0.28	2.53	0.00	0.00	2.81	0.00
525.00	303	5.94	0.00	0.00	0.00	1.65	0.33	0.66	1.98	2.64	0.00	0.00	1.32	0.33	0.00	0.00	0.00	0.00	5.61	0.00	7.26	0.66	0.00	0.00	0.00	0.00	0.66	0.66	0.00	0.00	0.66	1.65	0.00	0.00	3.63	0.00
530.95	303	3.96	0.33	0.99	0.00	0.33	0.99	0.66	2.64	4.29	0.00	0.00	1.32	1.32	0.33	0.00	0.00	0.00	8.58	0.00	8.91	0.99	0.00	0.00	0.66	0.00	0.00	0.33	0.00	0.00	1.65	0.66	0.00	0.00	2.31	0.00
534.60	268	6.34	1.12	0.00	0.00	1.12	0.00	0.37	5.60	1.49	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	5.60	0.00	7.84	3.36	0.00	0.00	0.00	0.00	0.00	1.49	0.37	0.00	0.37	1.12	0.00	0.75	1.87	0.00
544.16	300	6.33	0.00	1.33	0.00	1.33	0.67	0.67	3.33	2.33	0.00	0.00	2.67	4.33	0.00	0.67	0.00	0.00	1.33	1.00	4.33	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.00	0.00	1.67	1.67	0.00	0.00	3.00	0.00
548.70	270	4.81	0.00	0.00	0.00	0.37	0.00	1.48	1.11	3.70	0.00	0.00	2.59	1.85	0.00	0.37	0.00	0.00	0.74	0.00	6.67	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.37	2.59	2.22	0.00	0.00	1.85	0.37
555.30	279	2.51	4.30	0.36	0.00	1.08	1.43	0.72	0.00	1.08	0.00	0.00	2.15	1.79	0.00	0.36	0.00	0.00	3.23	0.36	5.38	3.23	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.00	0.00	2.15	0.00	0.36	3.94	0.36
558.30	275	12.73	0.00	0.00	1.45	1.45	1.45	1.09	0.73	0.00	0.00	0.00	0.00	2.18	0.00	0.36	0.00	0.00	2.18	0.36	7.27	0.36	0.00	0.00	0.00	0.00	0.00	2.91	0.73	0.00	0.73	2.91	0.00	0.36	3.27	0.00
563.50	393	6.87	0.25	0.00	0.00	0.51	0.25	1.78	2.29	0.00	0.00	0.51	0.76	2.04	0.00	0.25	0.00	0.00	4.83	1.27	2.04	0.25	0.00	0.25	0.00	0.00	0.51	0.00	0.25	0.00	0.25	3.82	1.02	0.00	3.31	0.00
569.50	426	9.15	0.47	0.94	0.00	3.76	0.70	1.17	0.70	1.17	0.00	0.00	1.41	1.17	0.00	0.00	0.00	0.23	5.40	0.70	5.63	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.94	0.00	0.23	1.17	0.23	0.00	3.99	0.00
573.10	297	6.40	0.67	1.01	0.00	2.36	1.68	1.35	0.34	1.01	0.00	0.00	1.35	2.36	0.00	1.35	0.34	0.00	2.69	0.34	4.38	0.34	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	1.68	2.69	0.34	0.00	3.70	0.00
576.10	281	11.03	2.14	0.00	0.00	1.42	0.71	0.00	1.78	0.00	0.00	0.00	0.36	1.07	0.00	0.71	0.00	0.00	2.85	0.00	6.05	0.00	0.00	0.00	0.00	0.00	0.71	0.36	0.00	0.00	0.00	1.07	0.71	0.36	2.85	0.00
580.60	246	9.76	0.81	0.00	0.00	4.07	0.00	2.44	0.41	0.00	0.00	0.00	1.22	0.81	0.00	0.00	0.00	0.00	2.85	0.00	8.94	0.41	0.00	0.00	0.00	0.00	2.85	0.00	0.00	0.00	0.81	0.81	0.41	0.81	2.85	0.00
582.70	130	3.85	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.77	0.00	0.00	10.77	0.77	0.00	0.00	0.00	0.00	5.38	0.00	3.08	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.77	3.08	0.00
585.70	267	1.87	6.74	1.50	0.00	1.12	0.75	0.00	1.50	0.37	0.00	0.00	0.75	0.75	0.00	0.37	0.00	0.00	0.00	0.37	4.87	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.37	0.37	1.87	0.00	0.37	0.37	4.12	0.00
592.40	257	2.33	5.06	0.00	0.00	5.45	0.00	0.39	1.17	1.17	0.00	0.00	3.50	1.56	0.00	0.39	0.00	0.00	2.33	0.78	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.39	0.39	0.78	1.56	0.00
598.40	255	12.55	1.57	0.00	0.00	1.18	0.00	0.00	6.67	0.78	0.00	0.00	0.39	2.75	0.00	0.39	0.00	0.00	2.35	0.00	7.84	0.00	0.00	0.39	0.00	0.00	0.00	1.18	0.00	0.00	1.18	0.00	0.00	0.00	3.14	0.00
602.73	300	2.00	0.00	0.00	1.00	1.67	0.00	2.00	10.67	0.00	0.00	0.00	1.33	1.00	0.67	0.00	0.00	0.00	4.67	0.00	6.00	0.00	0.00	0.00	0.00	0.00	2.67	1.33	0.00	0.00	1.00	2.00	0.00	0.33	6.00	0.67
613.20	315	3.81	0.32	0.00	0.32	1.59	1.90	0.63	0.95	0.00	0.00	0.00	0.63	0.63	0.00	0.63	0.63	0.00	4.76	0.00	7.30	0.63	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.95	0.32	0.00	3.49	0.00
616.20	262	2.67	2.67	0.76	0.00	1.53	0.76	0.00	1.15	0.00	0.00	0.00	1.15	1.53	0.00	0.00	0.00	0.00	6.87	0.00	7.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	2.29	0.38	0.00	5.34	0.00
622.80	510	4.31	4.12	0.00	0.00	5.69	0.39	0.00	0.98	0.39	0.00	0.00	1.18	0.98	0.00	0.20	1.57	0.00	5.88	0.00	7.25	0.78	0.20	0.00	0.00	0.00	0.20	0.20	0.00	0.00	1.37	2.75	0.00	0.00	2.55	0.00
627.30	364	12.64	1.65	0.00	0.00	1.92	1.65	0.00	0.00	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.00	0.00	2.47	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.27	2.47	0.00	0.00	2.47	0.00
631.13	300	6.00	1.33	0.00	0.00	5.67	1.67	0.00	3.00	0.67	0.00	0.00	3.00	1.00	0.00	0.00	0.33	0.00	3.67	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	2.33	0.00	0.00	3.67	0.00
649.90	460	1.09	2.17	0.00	0.00	4.13	0.87	0.00	0.65	0.22	0.43	0.00	2.61	1.09	0.00	0.00	0.87	0.00	3.91	0.00	1.52	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.43	0.65	0.00	0.43	0.43	0.00
659.55	205	3.41	0.00	0.98	0.00	0.98	3.41	0.00	0.49	0.49	0.00	0.00	1.95	0.49	0.00	0.49	0.00	0.00	4.88	0.00	5.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	0.98	0.98	0.00	0.00	3.41	0.00
662.93	255	6.67	3.92	0.00	0.00	1.57	0.00	1.18	0.78	1.96	0.00	0.00	1.96	2.75	0.00	0.00	0.39	0.00	3.14	0.00	2.35	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.39	0.39	0.00	0.00	4.31	0.39
671.13	297	1.35	2.69	0.67	0.00	1.01	0.34	0.67	0.34	1.01	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.00	2.36	0.00	5.72	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	1.35	1.35	0.00	0.00	4.71	0.00
674.00	229	1.75	6.11	0.00	0.00	0.87	0.44	0.44	0.00	0.00	0.00	0.00	0.44	1.75	0.00	0.00	0.00	0.00	3.06	0.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.44	1.75	0.00	0.00	5.68	0.00
688.40	274	3.65	8.39	0.00	0.00	1.46	1.82	0.73	0.73	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	1.82	0.00	6.20	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	2.92	0.00
688.68	276	5.43	5.80	0.36	0.72	0.00	1.45	1.09	0.00	0.00	0.00	0.00	0.36	0.36	0.36	1.45	0.00	0.00	3.62	0.00	7.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.36	0.00	0.00	2.54	0.00
691.68	296	5.07	10.47	0.34	1.35	2.36	1.35	0.00	0.34	1.01	0.00	0.00	0.00	0.68	0.00	1.01	0.00	0.00	1.35	0.00	6.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.68	0.00	0.00	3.38	0.34
698.35	294	4.42	5.10	0.00	0.00	0.00	1.02	1.02	0.00	0.68	0.00	0.00	0.34	0.68	0.00	1.02	0.00	0.00	4.08	0.00	8.50	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	1.70	0.00	0.00	2.04	1.02

Table 1 (continued).

Depth (mbsf)	Number counted	*Marginulinids*	*Marginulina hirsuta*	*Martinotiella communis*	*Martinotiella* spp.	*Melonis barleeanum*	*Melonis pompilioides*	*Neocornubina* sp.	*Nodosaria* spp.	*Nonion havanense*	*Nonion* spp.	*Nonionella* spp.	*Nonionellina* spp.	*Nuttallides umbonifera*	*Oolina* spp.	*Oridorsalis* spp.	*Orthomorphina* spp.	*Osangularia mexicana*	*Pararotalia* sp.	*Planorbulina* sp.	*Planularia* spp.	*Planulina renzi*	*Planulina subtenuissima*	*Planulina wuellerstorfi*	*Planulina* spp.	*Plectofrondicularia kerni*	*Plectofrondicularia parri*	*Plectofrondicularia* spp.	*Pleurostomella* spp.	*polymorphinids*	*Pullenia bulloides*	*Pullenia eocenica*	*Pullenia quinqueloba*	*Pyrgo* spp.	*Quinqueloculina* spp.	*Rectuvigerina mexicana*
496.60	302	0.00	1.66	0.00	1.66	4.30	2.32	0.00	0.33	0.00	0.99	0.00	0.00	0.00	0.33	1.99	0.00	1.32	0.66	0.00	0.00	0.00	0.00	7.28	0.00	0.00	0.00	0.33	1.32	0.00	0.33	0.00	1.66	0.66	0.33	0.00
502.60	305	0.00	0.66	0.33	0.98	1.97	1.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	0.33	0.00	0.00	0.00	0.98	0.00	0.66	0.00	1.64	0.33	0.33	0.00
505.70	318	0.00	0.00	0.00	0.94	0.94	2.20	0.00	0.00	0.63	2.20	0.63	0.00	0.00	0.00	6.29	0.63	0.31	0.00	0.00	0.00	0.00	0.00	9.12	0.00	0.00	0.00	0.00	0.94	0.63	2.20	0.00	0.94	0.00	1.26	0.00
511.70	177	0.00	1.13	1.13	0.56	2.82	0.56	0.00	0.00	0.00	2.82	0.00	0.56	0.00	0.00	3.39	0.56	0.00	0.00	0.00	0.00	0.00	0.00	11.30	0.00	0.00	0.00	0.00	1.13	0.56	1.13	1.13	1.13	1.69	1.13	0.00
515.30	280	0.00	0.00	0.00	0.71	2.14	1.07	0.00	0.00	0.36	3.21	0.00	0.00	0.00	0.71	7.86	0.00	0.36	1.07	0.00	0.00	0.00	0.00	17.50	0.36	0.00	0.00	0.00	0.36	0.00	2.86	0.00	0.71	0.00	1.07	0.00
521.30	356	0.00	0.56	0.00	0.84	0.00	1.69	0.00	0.00	0.00	3.37	0.28	0.00	0.00	0.28	5.90	0.28	0.00	0.00	0.00	0.00	0.00	0.00	6.74	0.00	0.00	0.00	0.56	1.97	0.28	3.65	0.00	1.12	0.28	1.12	0.00
525.00	303	0.66	0.00	0.00	1.32	1.65	1.98	0.00	0.00	0.00	0.99	0.33	0.00	0.66	0.66	2.64	0.66	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.33	0.00	0.00	0.33	1.98	0.00	3.96	0.00	0.99	0.00	0.99	0.00
530.95	303	0.66	0.00	0.00	0.33	2.97	1.32	0.00	0.00	0.00	1.98	0.33	0.00	0.66	0.33	2.31	0.33	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.33	0.66	0.33	1.98	0.00	1.32	0.00	1.65	0.00
534.60	268	0.00	0.00	0.00	2.24	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.37	1.49	0.00	7.84	0.00	0.37	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00	2.99	0.00	2.24	1.12	1.49	0.00	0.37	0.00
544.16	300	0.00	0.67	0.00	0.33	2.00	2.33	0.00	0.00	0.67	3.67	0.00	0.00	1.00	0.00	1.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	4.67	0.33	0.00	0.00	0.33	0.67	1.33	1.67	1.33	0.67	1.00	1.00	0.00
548.70	270	0.00	0.00	0.00	0.00	1.48	1.85	0.00	0.00	0.74	1.11	0.74	0.00	0.37	0.00	1.85	0.00	0.74	0.74	0.00	0.00	0.37	0.00	5.56	0.00	0.00	0.00	0.00	2.22	1.48	2.22	2.22	0.74	0.74	0.37	0.00
555.30	279	0.36	0.36	0.72	0.00	0.36	0.36	0.00	0.00	0.00	2.15	0.00	0.00	0.00	0.00	3.23	1.08	1.79	0.00	0.00	0.00	0.00	0.00	7.53	0.00	0.00	0.00	0.00	0.36	0.00	1.43	0.36	1.43	0.36	0.00	0.00
558.30	275	0.73	0.36	0.36	0.00	0.00	0.73	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00	5.09	0.73	1.09	0.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	0.00	1.45	0.36	2.18	0.36	1.45	0.36	1.09	0.00
563.50	393	0.00	0.76	0.25	0.00	1.53	0.25	1.27	0.00	0.00	0.00	0.00	0.00	0.76	0.51	5.85	0.00	1.53	0.25	0.00	0.00	0.00	0.00	14.50	0.00	0.00	0.00	0.00	2.04	0.25	3.05	1.02	1.53	0.51	0.00	0.00
569.50	426	0.00	0.00	1.41	0.00	6.34	3.05	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.47	7.04	1.17	0.70	0.00	0.00	0.00	0.00	0.00	5.63	0.00	0.47	0.00	0.47	1.88	0.47	2.82	0.70	0.00	0.23	0.23	0.00
573.10	297	0.34	0.00	0.67	0.00	4.38	1.68	0.00	0.00	0.00	0.00	0.34	0.00	1.01	0.67	4.38	1.68	2.36	1.01	0.00	0.00	0.00	0.00	7.07	0.00	0.00	0.00	0.67	1.35	0.00	1.01	0.34	0.34	0.00	0.34	0.00
576.10	281	0.00	0.00	2.49	0.00	4.63	0.36	0.00	0.00	0.00	1.07	0.00	0.00	2.14	0.36	7.83	0.71	0.36	0.36	0.00	0.36	0.00	0.00	7.83	1.42	0.00	0.00	0.36	1.42	0.36	0.71	0.00	0.71	0.00	0.36	0.00
580.60	246	0.41	0.00	1.63	0.00	6.10	0.41	0.00	0.00	0.00	0.81	0.00	0.00	1.22	0.81	4.47	0.41	0.81	0.00	0.00	0.00	0.00	0.00	13.82	0.41	0.00	0.00	0.41	2.85	0.41	1.22	0.81	0.41	0.41	0.81	0.00
582.70	130	0.00	0.00	0.77	0.00	3.85	1.54	0.00	0.00	0.00	3.08	0.00	0.00	1.54	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.46	0.77	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.77	0.00	0.00	0.00
585.70	267	0.37	0.00	0.00	0.00	4.12	3.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	1.12	0.37	1.12	1.12	0.00	0.00	0.00	0.00	9.74	0.37	0.00	0.00	0.00	1.12	0.75	4.49	0.00	0.00	0.00	0.00	0.37
592.40	257	0.00	0.00	0.39	0.00	5.45	0.39	0.00	0.00	0.00	0.39	0.00	1.17	0.39	0.39	6.61	0.39	0.78	0.39	0.00	0.00	0.00	0.00	7.78	1.56	0.39	0.00	0.39	0.39	0.39	1.56	0.00	1.17	0.39	0.00	0.78
598.40	255	0.00	0.00	1.57	0.00	3.92	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.39	0.39	3.53	0.00	0.00	1.18	0.00	0.00	0.00	0.00	12.16	0.00	0.00	0.00	0.39	1.18	0.00	0.39	0.00	1.96	0.00	0.39	0.39
602.73	300	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	2.00	1.00	0.67	2.00	0.67	2.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.67	3.00	1.00	1.00	0.67	0.33	0.67	0.00	0.00
613.20	315	0.00	0.00	0.00	0.00	0.63	0.32	0.00	0.00	0.00	1.90	0.00	0.00	2.54	0.00	4.13	0.63	0.00	0.00	0.00	0.00	0.00	0.00	6.98	0.00	0.00	0.00	0.00	0.32	0.00	1.59	0.32	0.63	0.00	0.00	0.00
616.20	262	0.76	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00	3.05	0.00	0.00	0.76	0.76	7.63	0.38	0.00	0.38	0.00	0.00	0.00	0.00	8.02	0.00	0.00	0.38	0.38	0.38	0.00	2.67	0.76	0.00	0.76	1.53	0.00
622.80	510	0.20	0.00	1.57	0.00	1.57	2.16	0.00	0.00	0.00	1.57	0.20	0.00	0.59	0.00	3.73	0.00	0.39	1.37	0.00	0.00	0.00	0.00	7.06	0.00	0.00	0.00	0.59	0.39	0.00	1.76	0.98	0.39	0.00	0.00	0.00
627.30	364	0.00	0.00	1.10	0.00	3.85	1.10	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.55	10.99	0.00	0.55	0.00	0.00	0.00	0.00	0.00	14.56	0.27	0.00	0.00	0.27	1.10	0.00	2.75	0.00	1.10	0.00	0.27	0.27
631.13	300	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	5.33	0.00	1.67	0.00	0.00	0.00	0.00	0.00	11.67	0.67	0.00	0.00	0.00	0.33	0.00	1.33	0.00	0.00	0.00	0.00	0.33
649.90	460	0.00	0.65	0.00	0.00	1.30	0.87	0.00	0.22	0.00	0.87	0.43	0.00	0.00	0.22	3.70	0.00	0.87	0.22	0.43	0.00	0.00	0.00	3.04	0.00	0.00	0.00	0.22	0.00	0.00	1.52	0.00	0.00	0.00	0.00	0.00
659.55	205	0.00	0.00	0.00	0.00	1.46	0.49	0.00	0.00	0.00	1.46	0.00	0.49	0.00	0.00	4.39	0.00	0.98	0.49	0.00	0.00	0.00	0.00	15.61	0.98	0.00	0.00	0.49	0.49	0.00	2.93	0.49	0.00	0.00	1.46	0.49
662.93	255	0.00	0.39	0.00	0.00	4.31	2.75	0.00	0.39	0.00	1.96	0.00	0.39	0.00	0.00	6.27	0.00	1.57	0.00	0.00	0.00	0.00	0.00	6.27	0.78	0.39	0.00	0.78	0.39	0.00	1.96	0.00	0.78	0.00	0.00	0.00
671.13	297	0.00	0.67	0.00	0.00	1.68	1.68	0.00	0.67	0.00	0.67	0.00	0.00	1.01	0.00	4.04	0.00	0.00	0.34	0.00	0.00	0.00	0.00	20.20	0.00	0.00	0.00	0.34	1.01	0.00	0.67	0.00	0.67	0.00	0.00	0.00
674.00	229	0.44	0.00	0.00	0.44	0.44	1.75	0.00	0.00	0.44	0.44	0.00	0.00	0.44	0.00	2.62	0.44	0.00	1.75	0.00	0.00	0.00	0.00	20.52	0.00	0.00	0.00	0.44	0.87	0.00	1.75	0.44	0.44	0.00	1.31	0.00
688.40	274	0.00	0.00	0.00	0.73	1.09	4.74	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00	6.57	0.00	0.73	1.09	0.00	0.00	0.36	0.00	16.79	0.00	0.00	0.73	0.00	0.00	0.00	1.09	0.00	1.09	0.00	0.36	0.00
688.68	276	0.00	0.36	0.00	0.36	2.90	0.72	0.00	0.00	0.00	1.09	0.00	0.00	0.72	0.00	9.78	0.00	0.36	6.16	0.00	0.00	0.00	0.00	4.35	0.00	0.00	0.36	0.36	0.36	0.00	0.72	0.00	0.36	0.00	0.72	0.00
691.68	296	0.34	0.00	0.00	0.00	3.04	1.69	0.34	0.00	0.00	2.70	0.00	0.00	0.68	0.34	13.51	0.00	1.01	0.00	0.00	0.00	0.00	0.00	3.72	0.00	0.00	0.00	0.34	0.68	0.00	1.69	0.00	1.69	0.00	0.00	0.00
698.35	294	0.00	0.00	0.00	0.00	3.40	2.04	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.34	6.8	0.00	0.68	0.34	0.00	0.00	0.68	0.00	18.37	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.00	0.34	0.00	1.36	0.00

Table 1 (continued).

Depth (mbsf)	Number counted	*Rectuvigerina multicostata*	*Rectuvigerina striata*	*Rectuvigerina* cf. *transversa*	*Reusella spinulosa*	*Rosalina* spp.	*Sigmoilopsis schlumbergeri*	*Siphoninella* sp.	*Siphonina tenuicarinata*	*Sphaeroidina bulloides*	*Spiroloculina* spp.	*Spirosigmoilina tenuis*	*Stilostomella curvatura*	*Stilostomella modesta*	*Stilostomella nuttalli*	*Stilostomella subspinosa*	*Stilostomella* sp. 2C	*Stilostomella* spp.	*Textularia* spp.	*Tretomphalus* sp.	*Trifarina* spp.	*Tritaxia* spp.	*Turrilina brevispira*	*Uvigerina hispida*	*Uvigerina pigmea*	*Uvigerina proboscidea*	*Uvigerina* spp.	*Vaginulina* sp.	*Vulvulina spinosa*	*Vulvulina* sp. T	Fragments (%)	Planktonic foraminifers (%)
496.60	302	0.00	0.00	0.33	0.33	0.66	1.32	0.00	0.66	1.66	1.66	0.66	0.33	0.00	0.00	0.00	0.33	1.66	0.00	0.00	0.00	0.00	0.00	0.00	8.61	6.29	1.32	0.33	0.00	1.32	5.27	98.68
502.60	305	0.00	0.00	0.00	2.30	1.97	3.28	0.00	2.3	3.93	0.00	0.00	0.00	0.00	0.33	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.33	0.33	8.85	10.16	0.33	0.00	0.98	0.33	8.89	98.70
505.70	318	0.00	0.31	0.31	0.94	1.26	1.26	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.03	0.00	0.00	0.00	4.09	14.13	99.23
511.70	177	0.00	0.00	0.00	0.56	1.69	1.13	0.00	0.00	3.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.56	3.95	0.00	0.00	0.00	3.95	14.59	99.16
515.30	280	0.00	0.00	0.36	1.07	0.71	0.71	0.00	1.43	0.00	0.36	0.00	0.00	0.36	0.36	0.00	0.00	2.50	0.36	0.00	0.00	0.00	0.00	0.00	0.00	7.14	0.71	0.00	0.71	2.14	10.65	97.66
521.30	356	0.00	0.00	0.56	4.21	0.56	1.69	0.00	4.21	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81	0.00	0.00	0.28	1.40	11.09	98.30
525.00	303	0.00	0.99	0.00	0.99	0.66	1.65	0.00	0.99	0.33	0.99	0.00	0.00	0.00	0.00	0.00	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.66	0.66	9.57	0.00	0.00	0.00	1.98	10.87	98.41
530.95	303	0.00	0.66	0.00	1.98	0.00	1.32	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.64	0.00	0.00	0.00	0.33	0.00	0.00	0.66	4.29	0.00	0.00	0.33	1.65	10.96	98.93
534.60	268	0.00	0.00	1.12	1.49	0.00	0.37	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.75	11.59	98.86
544.16	300	0.00	2.00	1.00	3.67	0.67	0.00	0.00	2.33	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.67	2.33	0.00	0.00	0.00	0.33	9.94	98.58
548.70	270	0.00	0.00	0.00	4.07	0.37	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	3.70	0.37	3.33	0.37	0.00	0.00	0.00	0.37	4.81	0.00	0.00	0.00	0.00	10.09	99.08
555.30	279	1.43	0.00	0.36	1.79	0.72	0.72	0.00	1.43	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.36	2.15	0.00	0.00	0.00	2.87	0.00	0.00	0.36	5.38	0.00	0.00	0.00	3.23	7.89	98.37
558.30	275	0.00	0.73	0.00	3.27	0.00	2.55	0.00	0.73	0.36	0.00	0.00	1.09	0.00	0.73	0.00	0.00	2.18	0.36	0.00	0.00	0.73	0.00	0.00	0.00	4.36	0.36	0.00	0.00	0.00	5.76	98.28
563.50	393	0.00	0.00	0.00	0.51	0.00	0.51	0.00	4.07	0.76	0.25	0.00	0.00	0.00	0.51	0.00	0.00	5.09	0.00	0.51	0.00	0.00	0.00	0.76	0.76	2.04	0.51	0.25	0.00	2.54	9.75	97.47
569.50	426	0.00	0.47	0.00	0.47	0.00	0.94	0.00	4.23	0.70	0.23	0.00	0.00	0.00	0.00	0.47	0.00	1.17	0.23	0.23	0.00	0.00	0.00	1.17	0.00	2.58	0.00	0.00	0.00	0.00	7.86	98.43
573.10	297	0.00	0.00	0.00	1.35	0.00	0.34	0.00	1.68	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00	0.67	0.34	5.39	0.00	0.00	0.00	2.02	9.48	99.20
576.10	281	0.00	1.42	0.36	0.71	0.00	1.07	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.71	0.00	0.36	0.36	4.27	0.00	0.00	0.36	0.00	14.87	99.27
580.60	246	0.00	0.41	0.00	1.22	0.00	1.22	0.00	1.22	0.41	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.44	0.00	0.41	0.00	0.00	10.16	98.64
582.70	130	0.00	0.00	0.00	16.15	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.85	0.77	1.54	0.00	0.00	7.37	98.70
585.70	267	0.00	0.00	0.00	1.12	0.00	0.00	0.00	4.12	2.62	0.00	0.00	0.00	0.75	0.00	0.37	0.00	1.50	1.12	0.00	0.00	1.50	0.00	1.12	0.00	2.62	0.37	0.00	4.49	0.00	11.21	97.64
592.40	257	0.00	1.56	0.78	3.50	0.00	0.39	0.00	0.00	0.39	0.00	0.00	0.00	0.78	0.00	1.17	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.06	0.00	0.00	0.00	0.78	10.10	98.59
598.40	255	0.00	0.39	0.78	1.57	0.00	1.18	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.39	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.39	3.14	0.00	13.51	98.69
602.73	300	0.00	0.00	0.67	1.00	0.00	1.33	0.00	1.00	1.00	0.67	0.33	0.00	0.00	0.00	0.00	0.00	5.33	0.00	0.00	0.00	1.00	0.00	0.00	0.00	5.00	0.33	0.00	0.00	0.00	14.59	98.31
613.20	315	0.00	0.63	0.32	0.63	0.32	1.27	0.00	11.11	0.95	0.00	0.00	0.00	0.00	0.95	0.00	0.00	4.76	0.00	0.00	0.00	0.95	0.00	0.00	0.00	6.98	0.32	0.00	0.95	0.95	14.22	98.62
616.20	262	0.00	0.00	0.00	4.20	0.00	0.38	0.00	5.34	0.76	0.00	0.38	0.00	0.00	0.38	0.00	0.00	2.29	0.00	0.00	0.00	0.38	0.38	0.00	0.00	4.96	0.00	0.00	0.76	0.00	14.47	97.59
622.80	510	0.00	0.00	0.00	0.78	0.59	0.59	0.00	6.27	1.18	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.59	0.00	0.00	0.00	1.18	0.00	0.00	0.00	3.53	0.00	0.00	0.20	2.55	23.46	87.83
627.30	364	0.00	0.00	0.00	0.00	0.00	1.37	0.27	3.02	0.55	0.00	0.27	0.00	0.00	0.00	0.00	0.00	4.95	0.00	0.00	0.00	0.27	0.00	0.00	0.00	2.75	0.00	0.27	0.27	1.92	21.27	87.80
631.13	300	0.00	0.00	0.00	2.67	1.33	1.00	0.00	2.67	0.00	0.00	0.00	0.00	0.33	0.67	0.00	0.33	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	3.00	0.67	0.33	0.67	1.67	28.90	93.26
649.90	460	0.00	0.00	0.22	28.48	0.22	0.87	0.00	2.61	0.00	0.22	0.22	0.00	0.00	0.65	0.00	0.00	0.65	0.00	0.00	0.00	0.43	0.00	0.00	2.83	4.57	0.22	0.00	0.22	1.30	9.47	94.13
659.55	205	0.00	0.00	0.00	1.95	0.00	0.00	0.00	2.44	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	2.44	0.00	0.00	0.00	1.95	0.00	0.98	0.49	7.32	0.49	0.00	0.49	0.98	10.52	98.41
662.93	255	0.00	0.00	0.00	2.75	0.00	0.39	0.00	3.92	0.39	0.39	0.00	0.00	0.78	0.00	0.00	0.00	2.75	0.00	0.00	0.00	1.18	0.00	0.78	0.00	7.84	0.39	0.00	1.57	3.53	13.16	96.96
671.13	297	0.00	0.00	0.00	1.35	0.00	0.00	0.00	3.03	1.01	0.00	0.00	0.00	0.34	1.01	0.00	0.00	1.35	0.34	0.00	0.00	0.67	0.00	0.34	0.34	7.41	0.00	0.00	0.34	1.68	8.73	97.08
674.00	229	0.87	0.44	0.00	1.31	0.00	0.44	0.00	4.80	1.75	0.44	0.00	0.00	0.00	1.75	0.00	0.00	1.75	0.44	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.44	0.44	16.20	97.55
688.40	274	1.09	0.00	0.00	0.36	0.00	1.46	0.00	5.47	0.36	0.00	0.36	0.00	0.00	2.19	0.36	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.36	0.00	10.95	0.00	0.00	0.73	0.00	4.28	97.13
688.68	276	0.36	0.00	0.36	0.00	0.00	0.72	0.00	5.07	0.36	0.00	0.00	0.00	0.00	0.36	0.00	0.00	3.26	0.00	0.00	0.00	0.00	0.00	0.36	0.00	6.52	0.36	0.00	0.72	1.81	8.64	97.07
691.68	296	0.34	0.00	0.34	0.00	0.00	0.68	0.00	3.04	0.34	0.00	0.68	0.00	0.00	3.04	0.00	0.00	0.68	0.34	0.00	0.00	0.34	0.00	1.69	0.00	5.07	0.00	0.00	0.00	2.36	8.57	98.03
698.35	294	1.02	0.00	0.00	0.34	0.00	0.00	0.00	3.40	0.68	0.00	0.00	0.00	0.00	1.36	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.68	0.00	2.72	0.34	0.00	0.00	1.36	7.69	97.55

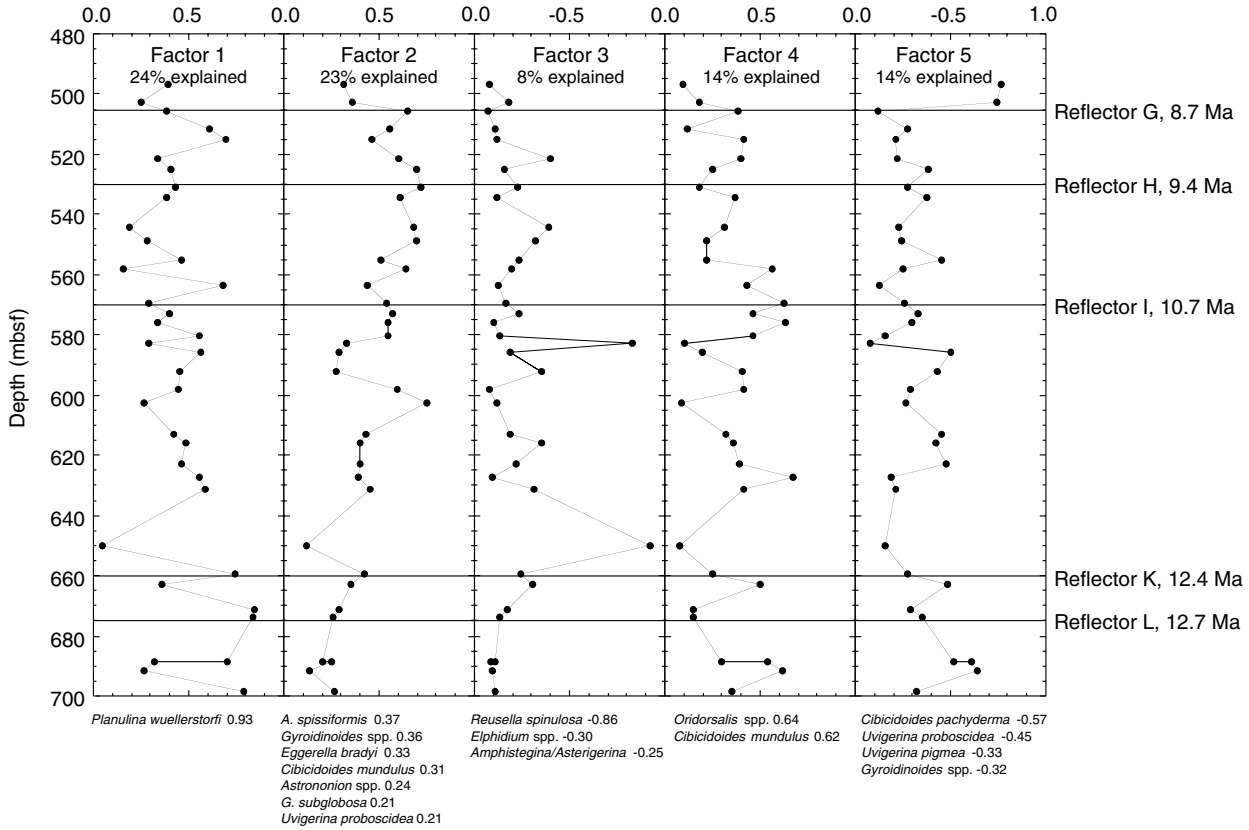

Figure 1. Q-mode varimax factor analysis of Site 1006 (Straits of Florida) benthic foraminiferal relative abundance data. Species contributing to each factor and their factor scores are indicated under each column.

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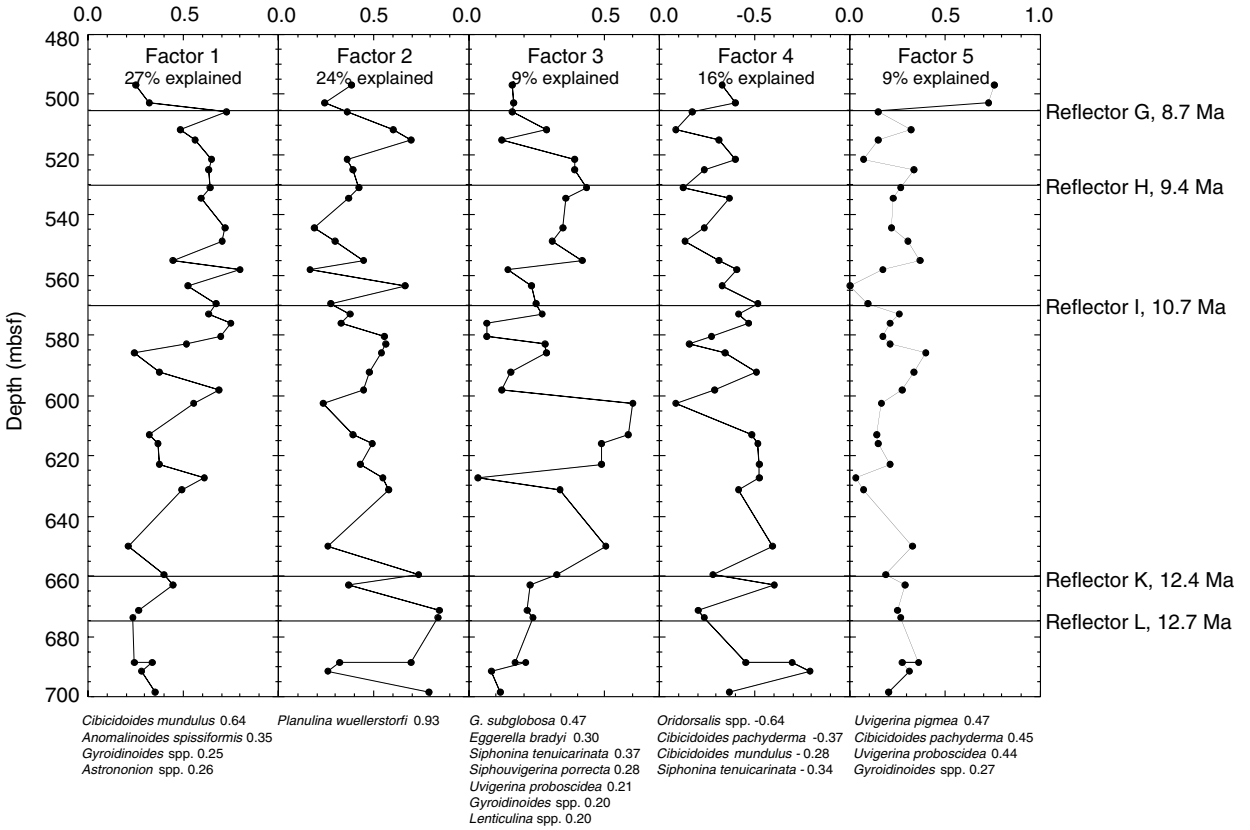

Figure 2. Q-mode varimax factor analysis of Site 1006 (Straits of Florida) in situ benthic foraminiferal relative abundance data (transported shallow-water taxa were deleted from this data set). Species contributing to each factor and their factor scores are indicated under each column.

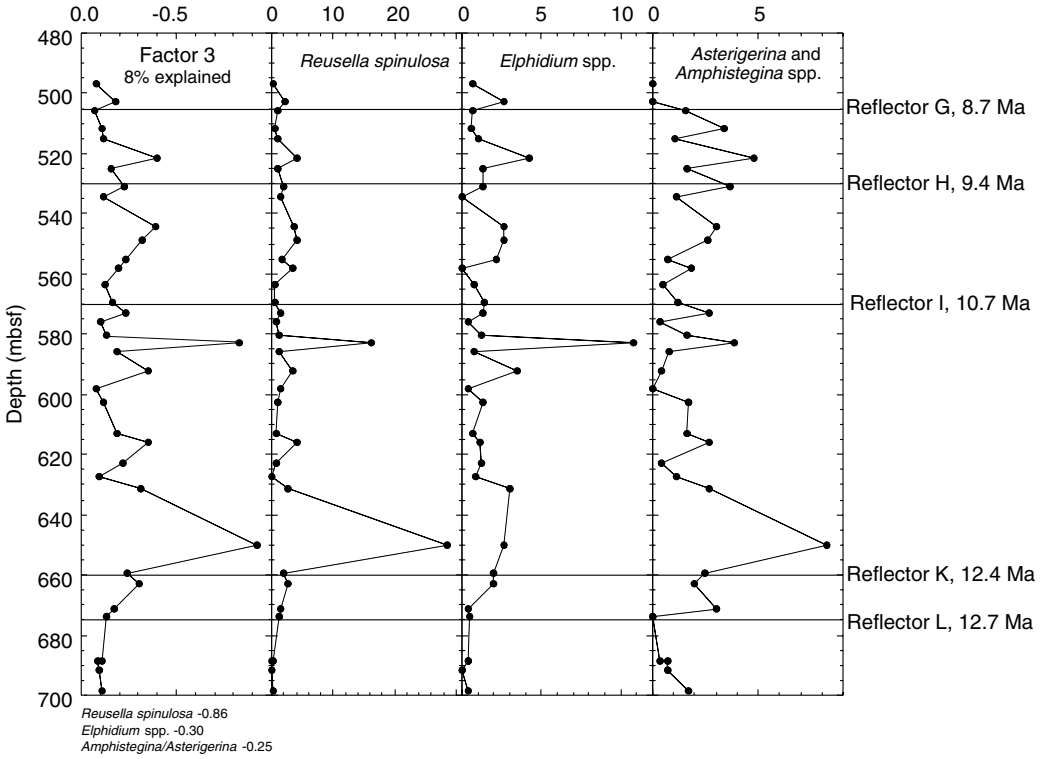

Figure 3. Site 1006 (Straits of Florida) Q-mode varimax factor 3 compared with percentage benthic foraminifer plots that contribute to this factor.

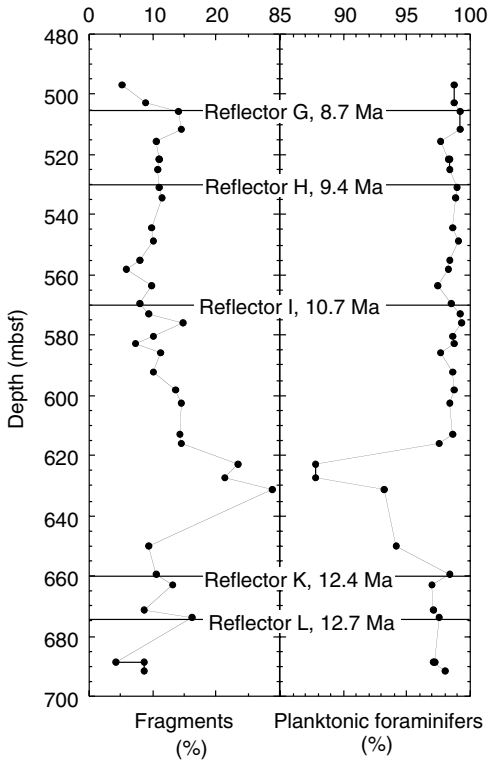

Figure 4. Dissolution indices (percentages of planktonic foraminifer fragments and percentages of planktonic foraminifers) from the Miocene section at Site 1006 (Straits of Florida).