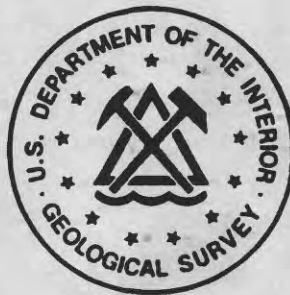

**DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY**

**Pliocene planktic foraminifer census data from
the North Atlantic region**

PRISM Project Members
US Geological Survey, Reston, VA 20192



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INTRODUCTION

The U.S. Geological Survey is conducting a long-term study of the climatic and oceanographic conditions of the Pliocene known as PRISM (Pliocene Research, Interpretation, and Synoptic Mapping). One of the major elements of the study involves the use of quantitative composition of planktic foraminifer assemblages to estimate sea-surface temperatures and identify major oceanographic boundaries and water masses (Dowsett, 1991; Dowsett and Poore, 1991; Dowsett et al., 1992; Dowsett et al., 1994). We have analyzed more than 900 samples from 19 core sites in the North Atlantic Basin (Fig. 1) resulting in a large volume of raw census data. These data are presented here together to facilitate comparison of North Atlantic faunal assemblages.

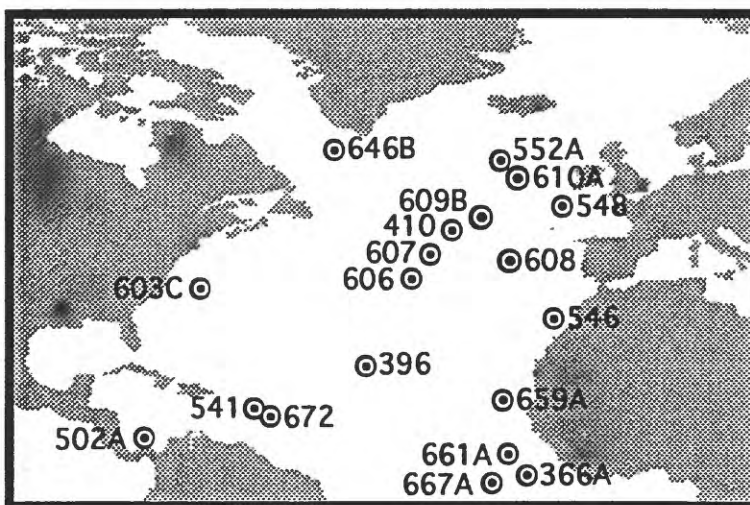


Figure 1. Location of sites discussed in text.

Latitude, longitude, water depth, source of faunal data and source of data used to construct age model (or publication from which age model was taken) are provided for each locality in Table 1. All ages refer to the geomagnetic polarity time scale of Berggren et al. (1985). Counts of species tabulated in each sample are given in Tables 2-20. DSDP and ODP sample designations are abbreviated in Tables 2-20 as core-section, depth within section in centimeters (eg. 10-5, 34 = core 10, section 5, 34 cm below top of section 5).

Table 1. Location and water depth of sites included in this report, original sources of faunal data, and reference for age models included with faunal data sets.

Site	Latitude	Longitude	Water depth (m)	Original faunal data source	Age model
366A	5.68	-19.85	2860	Dowsett et al., 1988	Cepek et al., 1978
396	22.90	-43.50	4450	Wiggs & Dowsett, 1992	Bukry, 1978
410	45.51	-29.48	2975	Dowsett et al., 1988	Poore, 1978
502A	11.49	-79.38	3051	Wiggs & Poore, 1991	Dowsett, 1989
541	15.50	-58.73	4940	Dowsett & Polanco, 1992	Wilson, 1984
546	33.80	-9.60	3958	Dowsett & Polanco, 1992	Hinz et al., 1984
548	48.50	-12.00	1251	Loubere & Moss, 1986	Dowsett & Loubere, 1992
552A	56.04	-23.23	2301	Dowsett & Poore, 1990	Dowsett & Poore, 1990
603C	35.49	-70.03	4633	Poore, 1991	Canninga et al., 1986
606	37.34	-35.50	3007	Dowsett et al., 1988	Dowsett, 1989
607	41.00	-32.96	3427	Dowsett & West, 1992	Baldauf et al., 1986
608	42.90	-23.10	3526	This paper	Baldauf et al., 1986
609B	49.88	-24.24	3883	This paper	Baldauf et al., 1986
610A	53.22	-18.89	2417	This paper	Baldauf et al., 1986
646B	58.25	-48.33	3451	Dowsett et al., 1988	Baldauf et al., 1989
659A	18.00	-21.10	3070	Foley & Dowsett, 1992	Weaver et al., 1989
661A*	9.45	-19.39	4006	Dowsett & West, 1992	Weaver et al., 1989
667A	4.55	-21.90	3529	Foley and Dowsett, 1992	Weaver et al., 1989
672A	15.50	-58.50	4975	Wiggs and Dowsett, 1992	Moore, Mascle, et al., 1988

*R.Z. Poore responsible for faunal data

METHODS

The samples used in this study were processed using low temperature (isotopic) techniques. This includes sample disaggregation in water, drying at $\leq 50^{\circ}\text{C}$, and sieving into $63\ \mu\text{m}$ - $149\ \mu\text{m}$ and $\geq 149\ \mu\text{m}$ size fractions. Following standard procedures, some samples required additional treatment with Calgon or H_2O_2 added to the wash to obtain clean specimens.

A split of 300-350 planktic foraminifer specimens was obtained from the $\geq 149\ \mu\text{m}$ size fraction using a Carpc sample splitter. Specimens were identified, sorted, and fixed to a standard 60-square micropaleontological slide.

COUNTING CATEGORIES

Taxa included in Tables 2-20 are summarized in a comprehensive list below. In general, our taxonomic concepts follow Parker (1962; 1967) and Blow (1969); exceptions to their practices are noted below.

Candeina nitida d'Orbigny

Dentoglobigerina altispira (Cushman and Jarvis)

Globoquadrina venezuelana (Hedberg)

Globigerina bulloides (d'Orbigny)

We include *Globigerina praebulloides* Blow in this category.

Globigerina calida Parker

Globigerina conglomerata (Schwager)

Globigerina decoraperta Takayanagi and Saito

Globigerina digitata Brady

Globigerina eamesi Blow

Globigerina falconensis Blow

Globigerina incisa (Bronnimann and Resig)

Globigerina nepenthes Todd

Globigerina praedigitata Parker

Globigerina pseudobesa (Salvatorini)

Globigerina pseudobulloides (Plummer)

Globigerina sp. 1

Taxon resembles *G. falconensis* but has reticulate surface texture similar to *G. woodi* group.

Globigerina woodi Jenkins

We include specimens of *Globigerina apertura* Cushman in this category.

Globigerinella aequilateralis (Brady)

Globigerinella siphonifera (d'Orbigny)

Globigerinita glutinata (Egger)

Globigerinoides conglobatus (Brady)

Globigerinoides obliquus Bolli

We include *G. extremus* Bolli and Bermudez in this category.

Globigerinoides ruber (d'Orbigny)

Globigerinoides sacculifer (Brady) s.l.
This category includes *G. quadrilobatus* (d'Orbigny) and *G. trilobus* (Reuss).

Globigerinoides spp.

Representatives of *Globigerinoides* (usually small) that could not be confidently assigned to *G. ruber*, *G. obliquus* (s.l.) or *G. conglobatus* are included in this category.

Globorotalia cibaoensis Bermudez

Globorotalia conomiozea Kennett

Globorotalia crassaformis (Galloway and Wissler) For the purpose of this report we have combined the census data of a number of taxa including *G. ronda* Blow, *G. oceanica* Cushman and Bermudez, *G. viola* Blow, and *G. crassula* Blow into this category.

Globorotalia hirsuta (d'Orbigny)

Globorotalia margaritae Bolli and Bermudez

Globorotalia menardii (Parker, Jones, and Brady) This category includes various members of the *G. menardii* lineage such as *G. limbata* (Fornasini) and *G. miocenica* Palmer.

Globorotalia praepumilio (Parker)

Globorotalia pumilio Parker

This category includes small forms with 5-7 chambers in the ultimate whorl that are similar to *Globorotalia pumilio* Parker, *G. praepumilio* (Parker) and *G. pseudopumilio* Bronnimann and Resig.

Globorotalia puncticulata (Deshayes) s.l.
This category includes *G. inflata* (d'Orbigny).

Globorotalia scitula (Brady) s.l.

This category includes various members of the *G. scitula* group, for example *G. subscitula* Conato.

Globorotalia spp.

This category includes rare *Globorotalia* not assigned to the other taxa listed here.

Globorotalia tosaensis Takayanagi and Saito We include occurrences of *Globorotalia truncatulinoides* (d'Orbigny) in this category.

Globorotalia tumida (Brady) s.l.

This category includes *G. plesiotumida* Blow and Banner.

Globorotaloides hexagona (Natland)

Neogloboquadrina acostaensis (Blow)
We include *N. continuosa* (Blow) in this category.

Neogloboquadrina atlantica (Berggren)
We separate sinistral and dextral coiled specimens. See Poore and Berggren (1975) for discussion of this highly variable taxon.

Neogloboquadrina humerosa
(Takayanagi and Saito)

Neogloboquadrina pachyderma (Ehrenberg) Sinistral variety includes relatively small, compact *Neogloboquadrina* with 4-5 chambers in the ultimate whorl, kummerform ultimate chamber, and a slightly to distinct oval equatorial outline. Separating small sinistral *N. atlantica* from large sinistral *N. pachyderma* is arbitrary in many North Atlantic high-latitude sites. Dextral variety is confined to 4 chambers in the final whorl. Dextral coiled specimens with 4 1/2 chambers in the final whorl are tabulated in a "dupac" category.

Neogloboquadrina spp.

This category includes *Neogloboquadrina* that were not identified to specific level but generally does not include representatives of *N. atlantica*.

Orbulina universa d'Orbigny

Pulleniatina obliquiloculata (Parker and Jones)

Sphaeroidinellopsis spp.

This category includes members of the genera *Sphaeroidinella* and *Sphaeroidinellopsis*.

Turborotalita quinqueloba (Natland)

OTHER

This category includes unidentified specimens and taxa that are rare within assemblages from the cores.

TOTAL PLANKTICS

Total number of planktic forams in the counting split

FRAGMENTS

Fragments of planktic foraminifers

BENTHICS

Number of benthic foraminifers in planktic counting split

ACKNOWLEDGMENTS

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REFERENCES

- Baldauf, J.G., Aksu, A.E., et al., 1989. Magnetostratigraphic and biostratigraphic synthesis of Ocean Drilling Program Leg 105: Labrador Sea and Baffin Bay. *Proceedings of the Ocean Drilling Program, Scientific Results* 105: 935-956.
- Baldauf, J.G., Thomas, E., Clement, B., Takayama, T., Weaver, P.P.E., Backman, J., Jenkins, G., Mudie, P.J. and Westberg-Smith, M.J., 1986. Magnetostratigraphic and biostratigraphic synthesis, Deep Sea Drilling Project Leg 94. *Initial Reports of the Deep Sea Drilling Project* 94: 1159-1205.
- Berggren, W.A., Kent, D.V. and Van Couvering, J.A., 1985. Neogene geochronology and chronostratigraphy. *The Chronology of the Geological Record*. London, Blackwell Scientific Publications. 211-260.
- Blow, W. H., 1969, Late middle Eocene to Recent planktonic foraminiferal biostratigraphy. In Bronnimann, P. and Renz, H. H., (Eds), *Proceedings of First Planktonic Conference*: Leiden (E. J. Brill), p. 199-422.
- Bukry, D., 1977. Cenozoic coccolith and silicoflagellate stratigraphy, offshore northwest Africa, Leg 41, Deep Sea Drilling Project. *Initial Reports of the Deep Sea Drilling Project* 41: 689-708.
- Bukry, D., 1978. Neogene coccolith stratigraphy, mid-Atlantic Ridge, Deep Sea Drilling Project, Leg 45. *Initial Reports of the Deep Sea Drilling Project* 45: 307-312.
- Canninga, G., Zijdeveld, J.D.A. and van Hinte, J.E., 1986. Late Cenozoic magnetostratigraphy of Deep Sea Drilling Project Hole 603C, Leg 93, On the North American Continental Rise of Cape Hatteras. *Initial Reports of the Deep Sea Drilling Project* 93: 839-848.
- Cepek, P., Johnson, D., Krasheninnikov, V., and Pflaumann, U., 1978. Synthesis of the Leg 41 biostratigraphy and paleontology, Deep Sea Drilling Project. *Initial Reports of the Deep Sea Drilling Project* 41: 1181-1198.
- Dowsett, H.J., 1989. Application of the graphic correlation method to Pliocene marine sequences. *Marine Micropaleontology* 14: 3-32.
- Dowsett, H. J., 1991, The development of a long-range foraminifer transfer function and application to Late Pleistocene North Atlantic climatic extremes. *Paleoceanography* 6: 259-273.
- Dowsett, H.J., Cronin, T.M., Poore, R.Z., Thompson, R.S., Whatley, R.C. and Wood, A.M., 1992. Micropaleontological evidence for increased meridional heat transport in the North Atlantic Ocean during the Pliocene. *Science* 258: 1133-1135.
- Dowsett, H.J., Gosnell, L.B. and Poore, R.Z., 1988. Pliocene planktic foraminifer census data from Deep Sea Drilling Project Holes 366A, 410, 606, and 646B. *U.S. Geological Survey Open File Report* 88-654: 14.

- Dowsett, H.J. and Loubere, P., 1992. High resolution Late Pliocene sea-surface temperature record from the Northeast Atlantic Ocean. *Marine Micropaleontology* 20: 91-105.
- Dowsett, H.J. and Polanco, E.F. 1992, Pliocene planktic foraminifer census data from Deep Sea Drilling Project Holes 541 and 546: *U.S. Geological Survey Open File Report* 92-418, 4p.
- Dowsett, H.J. and Poore, R.Z., 1990. A new planktic foraminifer transfer function for estimating Pliocene through Holocene Sea Surface temperatures. *Marine Micropaleontology* 16(1/2): 1-23.
- Dowsett, H. J. and R. Z. Poore, 1991, Pliocene sea surface temperatures of the North Atlantic Ocean at 3.0 Ma, *Quaternary Science Reviews* 10: 189-204.
- Dowsett, H.J. and West, S.M. 1992, Pliocene planktic foraminifer census data from Deep Sea Drilling Project Hole 607 and Ocean Drilling Program Hole 661A: *U.S. Geological Survey Open File Report* 92-413, 4p.
- Dowsett, H.J., Thompson, R.S., Barron, J.A., Cronin, T.M., Fleming, R.F., Ishman, S.E., Poore, R.Z., Willard, D.A. and Holtz, T.R., 1994. Joint investigations of the middle Pliocene climate I: PRISM paleoenvironmental reconstructions. *Global and Planetary Change* 9(4): 169-195.
- Foley, K.M. and Dowsett, H.J., 1992. Pliocene planktic foraminifer census data from Ocean Drilling Program Holes 667 and 659A. *U.S. Geological Survey Open File Report* 92-434, 8p.
- Hinz, K., Winterer, E.L., et al., 1984. Site 546. *Initial Reports of the Deep Sea Drilling Project* 79: 179-221.
- Loubere, P. and Moss, K., 1986. Late Pliocene climatic change and the onset of Northern Hemisphere glaciation as recorded in the northeast Atlantic Ocean. *Geological Society of America Bulletin* 97: 818-828.
- Moore, J.C., Mascle, A., et al., 1988. Site 672. *Proceedings of the Ocean Drilling Program, Initial Reports* 110: 205-310.
- Parker, F. L., 1962, Planktonic foraminiferal species in Pacific sediments, *Micropaleontology* 8: 219-254.
- Parker, F. L., 1967, Late Tertiary biostratigraphy (Planktonic Foraminifera) of tropical Indo-Pacific deep-sea cores: *Bulletins of American Paleontology* 52: 115-208.
- Poore, R.Z., 1978. Oligocene through Quaternary planktonic foraminiferal biostratigraphy of the North Atlantic: DSDP Leg 49. *Initial Reports of the Deep Sea Drilling Project* 49: 447-517.
- Poore, R.Z., 1991. Pliocene planktic foraminifer census data from Deep Sea Drilling Project Hole 603C. *U.S. Geological Survey Open File Report* 91-309, 7p.
- Poore, R. Z., and Berggren, W. A., 1975, The morphology and classification of *Neoglobobulimina atlantica* (Berggren), *Journal of Foraminiferal Research* 5: 77-84.

Weaver, P.P.E., Backman, J., et al.,
1989. Biostratigraphic synthesis, Leg
108, Eastern Equatorial Atlantic.
*Proceedings of the Ocean Drilling
Program, Scientific Results* 108: 455-
462.

Wiggs, L.B. and Dowsett, H.J., 1992.
Pliocene planktic foraminifer census
data from Deep Sea Drilling Project
Hole 396 and Ocean Drilling
Program Hole 672. *U.S. Geological
Survey Open File Report* : 92-414,
5p.

Wiggs, L.B. and Poore, R.Z., 1991.
Pliocene planktic foraminifer census
data from Deep Sea Drilling Project
Holes 502A, B, C. *U.S. Geological
Survey Open File Report* 91-325.

Wilson, D.S., 1984. Paleomagnetic
results from Deep Sea Drilling
Project Leg 78A. *Initial Reports of
the Deep Sea Drilling Project* 78:
583-591.

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Table 2. Planktic foraminifer census data, DSDP Hole 365A.

SAMPLE	DEPTH	AGE	<i>Candaina nitida</i>	<i>Dentoglobigena altispira</i>	<i>Globigena bulloides</i>	<i>Globigena decoraperta</i>	<i>Globigena falconensis</i>	<i>Globigena incisa</i>	<i>Globigena nepenthes</i>	<i>Globigena praedigitata</i>	<i>Globigena pseudobulloides</i>	<i>Globigena sp. 1</i>	<i>Globigena woodi</i>	<i>Globigeninella aequilata</i>	<i>Globigeninita glutinata</i>	<i>Globigerinoides conglobatus</i>	<i>Globigerinoides obliquus</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides sacculifer</i>	<i>Globigerinoides spp.</i>	<i>Globobulimina venezuelana</i>	<i>Globorotalia cibacensis</i>	<i>Globorotalia crassatiformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardii</i>	<i>Globorotalia pumilio</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia tumida</i>	<i>Globorotaloides hexagona</i>	<i>Neoglobobulimina acostaensis</i>	<i>Neoglobobulimina humerosa</i>	<i>Neoglobobulimina pachyderma (d)</i>	"dupac"	<i>Neoglobobulimina spp.</i>	<i>Orbulina universa</i>	<i>Sphaeroidinellopsis spp.</i>	Other	Total planktics	Fragments		
5-2,86	36.85	2.53	0	0	7	3	1	0	0	0	1	1	6	2	14	0	18	54	43	0	0	0	0	1	0	0	71	10	7	5	0	0	3	26	1	1	0	4	3	3	285	42	
5-4,86	39.86	2.69	0	0	4	5	0	1	0	1	4	0	19	7	16	1	25	39	56	0	0	0	0	0	0	0	56	11	1	4	0	0	3	19	0	0	9	0	3	284	85		
6-3,93	47.93	3.16	1	15	5	2	3	0	0	1	0	0	11	3	7	9	58	18	29	7	3	0	0	0	0	0	37	3	11	0	3	8	9	20	1	3	0	5	5	3	284	57	
7-3,86	56.86	3.76	2	26	10	0	0	4	2	0	1	0	4	2	11	3	45	0	53	13	1	0	0	0	0	0	37	0	0	0	4	9	20	19	0	1	11	2	10	2	301	73	
8-4,121	68.71	4.34	1	8	19	16	4	0	13	1	2	0	8	6	5	3	26	0	39	7	0	0	0	0	0	0	69	0	0	0	4	1	25	4	1	0	1	0	8	11	4	295	55
8-6,127	71.77	4.47	3	14	6	10	0	0	1	1	0	0	16	5	7	5	47	0	49	4	1	0	0	0	0	7	66	0	0	0	2	3	8	9	0	1	0	2	17	2	286	70	
9-2,146	75.46	4.62	0	15	3	6	0	1	9	0	4	0	6	6	9	1	45	4	49	7	2	0	0	0	0	9	40	0	0	2	14	0	10	7	0	3	0	13	20	3	288	88	
9-5,121	79.71	4.80	1	8	1	8	0	0	1	1	3	0	2	8	3	0	44	0	79	7	4	0	0	0	0	9	51	0	0	0	9	5	1	5	0	4	0	27	15	4	300	33	
10-1,189	83.89	4.93	4	13	9	5	0	0	2	0	5	0	8	5	0	1	71	2	76	0	9	0	0	0	0	0	44	0	0	2	15	0	2	0	0	0	0	25	15	2	315	75	
11-2,131	94.31	5.41	1	8	3	0	2	0	7	1	1	0	6	3	4	0	42	1	50	2	2	11	0	0	0	0	87	0	0	3	0	0	4	0	0	0	2	13	12	0	265	175	
11-5,94	98.44	5.58	6	23	1	0	0	0	4	0	3	0	3	2	4	0	56	4	50	10	0	11	0	0	0	0	33	0	0	2	0	9	5	0	0	0	0	20	17	0	263	165	

Table 3. Planktic foraminifer census data, DSDP Hole 396A.

SAMPLE	DEPTH	AGE																									Total planktics	Fragments	
			<i>Candeina nitida</i>	<i>Dentoglobigenina altispira</i>	<i>Globigenina bulloides</i>	<i>Globigenina falconensis</i>	<i>Globigenina woodi</i>	<i>Globigenella aequilateralis</i>	<i>Globigeninella glutinata</i>	<i>Globigeninoides conglobatus</i>	<i>Globigeninoides obliquus</i>	<i>Globigeninoides ruber</i>	<i>Globigeninoides sacculifer</i>	<i>Globorotalia crassatiformis</i>	<i>Globorotalia menardii</i>	<i>Globorotalia puncticulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia tosaensis</i>	<i>Globorotalia tumida</i>	<i>Neoglobobquadrina acostaeensis</i>	<i>Neoglobobquadrina humerosa</i>	<i>Orbulina universa</i>	<i>Pulleniatina obliquiloculata</i>	<i>Sphaeroidinellopsis</i> spp.	Other				
8-6,71	69.37	2.95	0	0	5	1	8	9	8	3	121	85	45	1	1	0	0	0	0	13	7	4	0	0	0	5	6	316	75
8-6,126	69.92	2.97	0	0	1	0	8	6	12	0	130	93	54	1	1	0	0	0	0	0	0	5	0	0	0	3	3	314	100
9-5,79	77.20	3.06	0	0	0	0	12	2	7	2	91	121	23	1	3	1	1	0	3	4	5	6	2	0	0	2	0	286	49
9-5,131	77.72	3.11	1	0	2	0	12	7	5	5	131	78	57	0	0	0	0	0	0	7	6	5	0	1	0	0	2	317	55
10-1,133	80.97	3.15	0	6	1	0	4	5	6	0	88	125	48	1	1	1	0	3	0	2	2	6	1	2	1	1	3	303	76
10-2,41	81.55	3.20	0	2	5	0	10	7	8	6	93	111	41	1	1	0	0	0	2	0	6	4	0	1	3	2	301	100	
10-2,121	82.35	3.21	0	3	0	0	2	8	8	5	107	109	59	0	1	0	0	0	0	7	5	7	0	0	5	1	326	100	
10-3,41	83.05	3.26	1	5	1	0	1	5	7	4	110	105	48	1	1	2	0	3	0	8	6	5	0	1	2	2	316	185	
10-3,136	84.00	3.30	0	0	3	0	3	4	9	6	100	114	54	1	1	0	0	0	3	0	8	3	1	0	2	5	312	69	
10-4,41	84.55	3.31	0	1	8	0	1	6	12	3	125	98	57	0	0	0	0	0	0	2	5	4	0	5	1	4	328	75	
10-4,111	85.25	3.34	0	0	7	2	5	1	3	3	121	101	29	1	4	3	0	5	0	3	4	9	0	1	0	8	302	45	
10-5,51	86.15	3.40	1	2	4	0	0	5	5	2	109	105	53	0	1	0	0	0	1	6	3	5	0	3	0	5	305	40	
10-5,111	86.75	3.51	0	8	1	0	2	11	6	1	127	87	35	1	1	0	0	0	0	19	0	4	0	1	1	3	305	75	
10-6,71	87.85	3.59	0	16	0	0	8	2	4	7	119	96	46	1	1	0	0	0	5	0	2	4	0	4	2	2	317	154	

Table 5. Penicillin sensitivity counts data. DSDP Hole 502A.

[illegible]

Table 6. Planktonic foraminiferal census data, DSDP Hole 541.

SAMPLE	DEPTH	AGE	Denitobulimina allispira	Globobulimina bulioides	Globobulimina conglomerata	Globobulimina falconensis	Globobulimina pseudobesa	Globobulimina indisa	Globobulimina praedigitata	Globobulimina woodi	Globobulimina decoraperta	Globobulimella aequilalateralis	Globobulimina gutturalis	Globobulimoides conglobatus	Globobulimoides obliquus	Globobulimoides ruber	Globobulimoides sacculifer	Globobulimina crassaformis	Globobulimina hirsuta	Globobulimina punctulata	Globobulimina margaritae	Globobulimina menardi	Globobulimina scitula	Globobulimina losanensis	Globobulimina tumida	Globobulimoides hexagona	Neoglobobulimina acostaensis	Neoglobobulimina humerosa	Neoglobobulimina pachyderma (s)	Neoglobobulimina pachyderma (d)	"dupac"	Orbulina universa	Pulleniatina obliquiloculata	Sphaeroidenellopsis spp.	Turborotalia quinqueloba	Globobulimina spp.	Other	Benthics	Total planktics	Fragments		
13-6-27	113.27	2.330	0	17	1	4	0	9	0	16	0	0	6	26	36	114	8	11	0	0	6	0	0	1	0	0	0	2	1	2	6	3	7	2	36	0	1	9	17	324	866	
14-2-36	116.86	2.400	39	5	1	3	0	1	0	30	2	0	12	3	23	83	27	7	0	0	0	0	2	11	0	12	0	0	32	0	2	4	4	2	0	36	0	1	12	3	329	111
14-4-93	120.43	2.469	49	2	0	3	0	0	0	17	3	0	18	2	31	90	20	4	0	0	0	0	0	0	0	13	0	18	1	2	8	11	1	24	1	1	18	0	332	119		
14-4-121	120.71	2.501	85	1	2	2	0	0	0	10	1	0	21	3	21	77	26	8	0	0	0	0	3	0	12	0	19	6	2	2	12	2	2	25	2	0	14	1	359	204		
14-5-19	121.19	2.519	69	1	0	2	0	0	0	13	0	0	9	2	31	66	17	9	0	0	0	2	2	0	5	0	23	16	1	0	11	2	1	55	1	3	10	1	349	174		
14-5-57	121.57	2.531	55	3	1	3	0	0	0	6	0	1	8	2	41	75	12	9	0	0	0	0	6	0	9	0	24	6	2	1	15	3	0	60	0	5	5	2	331	173		
14-5-85	121.85	2.544	31	2	0	0	0	0	0	1	0	0	12	6	45	64	33	11	1	0	0	0	8	0	4	0	12	9	1	1	5	2	0	71	0	5	5	2	331	173		
14-5-114	122.14	2.557	41	8	0	5	0	1	0	6	0	0	18	5	34	29	8	11	1	0	0	0	2	0	12	0	14	13	5	5	9	1	0	104	0	8	10	3	358	209		
14-5-142	122.42	2.571	34	1	0	1	0	1	0	4	0	0	3	6	43	39	24	12	1	0	0	0	6	2	0	9	0	17	14	0	4	8	2	0	88	0	10	11	3	329	238	
14-6-23	122.73	2.583	26	3	0	0	0	0	0	4	0	1	10	5	53	44	28	15	0	1	0	1	15	3	0	8	0	17	14	0	4	6	1	0	100	0	4	10	3	329	205	
14-6-50	123.00	2.595	31	1	0	0	0	0	0	2	0	2	3	10	39	25	41	8	1	0	0	10	2	0	4	0	17	13	1	1	4	9	1	84	1	4	9	3	324	283		
14-6-76	123.26	2.609	33	4	0	0	0	0	0	7	0	0	3	25	45	30	30	14	0	0	0	11	6	0	1	0	12	5	0	2	6	9	0	87	0	5	7	10	343	188		
14-6-108	123.56	2.622	44	0	0	0	0	0	0	0	0	0	17	22	54	45	40	16	3	1	0	9	1	1	1	0	13	15	0	4	5	9	0	14	0	2	8	1	331	168		
14-6-135	123.85	2.635	49	0	0	0	0	0	0	1	0	1	18	25	54	46	34	12	2	1	0	8	7	1	0	0	12	20	0	2	5	12	1	3	0	10	9	5	369	332		
14-7-13	124.13	2.647	35	1	0	4	0	0	0	0	0	6	23	31	25	58	52	26	24	0	0	14	1	2	1	0	26	28	3	1	8	4	0	14	0	1	24	0	380	255		
14-7-41	124.41	2.660	44	2	0	3	0	0	0	11	0	0	19	33	28	52	26	24	0	0	0	9	1	0	1	0	36	22	1	3	9	9	0	17	0	2	13	3	347	237		
15-1-18	124.68	2.680	33	1	1	0	0	0	0	12	0	0	11	26	37	52	35	4	5	0	0	17	0	1	0	0	31	31	0	1	4	7	0	15	0	9	14	4	347	159		
15-1-64	125.14	2.700	4	1	0	0	0	0	0	4	0	0	7	41	47	56	53	11	2	0	0	8	1	0	0	0	31	22	4	1	2	34	10	48	0	7	20	74	344	376		
15-1-108	125.58	2.731	12	0	0	0	0	0	0	5	0	0	8	30	31	45	72	1	1	0	0	6	0	0	0	0	26	23	2	0	4	0	1	19	0	24	16	2	354	241		
15-2-25	126.25	2.742	29	2	0	0	0	0	0	12	0	0	5	32	29	44	55	0	2	0	0	9	9	0	1	0	30	23	0	0	1	5	0	38	0	3	14	6	341	439		
15-2-90	126.90	2.760	37	0	0	0	0	0	0	3	0	0	10	28	22	35	64	0	2	1	0	15	7	0	1	0	24	24	1	2	3	2	1	15	0	15	20	8	322	303		
15-2-133	127.38	2.800	17	1	0	0	0	0	0	7	0	0	4	17	16	15	74	0	4	0	0	5	5	0	0	0	27	1	3	4	3	18	2	26	0	8	13	42	325	1045		
15-3-27	127.77	2.821	24	1	0	1	0	0	0	2	0	0	10	15	33	24	48	0	5	1	0	3	7	0	0	0	28	7	3	2	5	7	0	119	0	4	11	29	337	444		
15-3-74	128.24	2.840	12	1	0	0	0	0	0	5	0	0	8	15	10	22	33	0	0	0	0	0	2	0	0	0	22	7	1	2	3	11	0	54	0	6	16	6	343	228		
15-3-115	128.65	2.879	29	0	0	0	0	0	0	6	2	1	0	10	15	33	24	48	0	5	1	0	3	7	0	0	22	7	1	2	5	4	0	13	2	17	18	5	355	218		
15-4-52	129.52	2.900	12	1	0	0	0	0	0	2	0	0	8	15	10	22	33	0	0	0	0	0	2	0	0	0	23	15	5	1	1	7	1	42	0	4	18	9	344	553		
15-4-97	129.97	2.908	52	0	0	0	0	0	0	1	0	0	14	11	22	30	90	8	1	0	0	5	2	0	0	0	18	5	4	1	2	21	2	38	1	0	10	19	322	1110		
15-4-116	130.16	2.940	30	0	0	0	0	0	0	2	0	0	0	20	24	33	41	81	7	3	0	0	3	0	0	0	26	13	2	0	1	3	0	25	0	12	8	3	356	193		
15-5-35	130.85	2.960	10	1	0	0	0	0	0	6	2	0	0	30	53	24	67	2	0	0	0	1	1	0	0	0	18	5	4	1	2	8	1	60	1	22	13	4	375	303		
15-5-81	131.31	3.278	32	0	0	0	0	0	0	19	2	1	0	12	14	55	16	66	2	0	0	0	0	14	0	0	42	17	0	1	2	6	1	80	1	22	13	4	375	303		
16-2-127	138.27	3.380	26	0	0	0	0	0	0	7	1	0	8	11	81	5	40	0	0	0	0	0	0	14	0	0	19	15	0	0	0	2	0	39	0	4	17	4	331	341		
16-6-75	142.25	3.420	58	1	0	0	0	0	0	10	0	7	0	8	11	81	5	40	0	0	0	0	0	14	0	0	19	15	0	0	0	2	0	39	0	4	17	4	331	341		

Table 8. Planktic foraminifer percent count, DSDP Hole 548.

SAMPLE	DEPTH	AGE	<i>Globigerina bulloides</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisa</i>	<i>Globigerina woodi</i>	<i>Globigerinella sequentalis</i>	<i>Globigerinita glutinata</i>	<i>Globorotalia crassiformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia acuta</i>	<i>Neoglobobulimina acostaensis (d)</i>	<i>Neoglobobulimina acostaensis (s)</i>	<i>Neoglobobulimina atlantica (d)</i>	<i>Neoglobobulimina atlantica (s)</i>	<i>Neoglobobulimina pachyderma (d)</i>	<i>Neoglobobulimina pachyderma (s)</i>	"dupac"	<i>Orbulina universa</i>	<i>Turborotalita quinqueloba</i>
16-4-82	114	1.93	9.04	2.39	1.06	3.72	0.00	1.86	0.00	0.00	0.00	3.46	0.27	0.00	50.27	1.33	25.90	0.00	0.53	0.27	0.00
16-4-120	114.2	1.940	9.03	1.91	3.81	0.00	0.00	2.03	0.00	0.00	0.00	2.71	0.00	0.00	51.24	1.58	24.36	0.23	1.35	1.81	0.23
16-5-17	114.7	1.950	7.70	1.04	2.08	0.28	0.00	2.87	0.00	0.00	0.00	0.81	0.00	0.00	57.31	1.04	22.85	0.13	0.85	1.70	1.44
16-5-80	115.3	1.964	1.59	0.00	0.43	0.87	0.29	2.16	0.43	0.00	0.00	0.43	0.00	0.00	65.22	0.87	22.37	0.43	1.44	2.89	0.56
16-5-122	115.7	1.973	9.30	2.28	2.61	0.65	0.82	3.43	0.73	0.16	0.16	1.14	0.16	0.00	43.88	0.49	25.94	0.16	0.93	2.94	0.16
16-6-23	116.2	1.985	7.46	1.71	1.92	0.21	0.64	3.20	1.71	0.00	0.00	0.64	0.00	0.00	46.06	1.07	30.70	0.21	0.85	3.62	0.00
17-1-36	118.4	2.032	4.06	0.88	1.94	2.29	0.53	5.11	6.17	0.35	0.00	0.88	0.00	0.00	44.97	2.29	24.87	0.00	2.12	3.17	0.35
17-1-80	118.8	2.042	0.18	0.00	0.99	4.97	0.36	7.28	2.31	0.16	0.18	1.95	0.53	0.00	42.81	2.13	29.66	0.18	1.95	2.31	2.13
17-1-120	119.2	2.051	0.41	0.00	0.21	1.03	0.21	4.54	4.12	0.00	0.41	2.06	0.00	0.00	33.61	30.31	16.49	0.41	1.65	1.03	3.51
17-2-16	119.7	2.061	1.04	0.00	1.04	0.00	0.00	2.22	0.74	0.00	0.44	0.44	0.00	0.00	12.15	76.89	3.11	0.44	0.00	0.74	0.74
17-2-79	120.3	2.075	2.40	0.00	1.68	0.00	0.00	2.16	0.00	0.00	0.46	0.72	0.00	0.00	27.64	47.36	14.90	0.24	1.92	0.48	0.00
17-2-122	120.7	2.084	0.48	0.00	0.96	0.00	0.00	2.66	0.86	0.00	1.92	0.48	0.00	0.00	20.18	61.06	6.73	0.96	0.46	2.40	0.46
17-3-16	121.2	2.094	2.74	0.00	0.59	0.39	0.00	3.52	0.00	0.00	0.31	0.39	0.39	0.00	34.64	9.78	34.83	0.38	2.15	5.68	0.20
17-3-79	121.8	2.108	2.21	0.55	0.92	0.92	0.16	4.43	0.37	0.00	16.42	2.95	2.40	0.00	30.23	7.75	27.12	0.18	1.85	0.37	1.11
17-3-121	122.2	2.117	5.33	0.55	3.51	0.55	1.42	8.22	1.85	0.00	17.56	2.59	0.00	0.00	9.98	37.34	6.10	0.00	1.29	3.14	0.37
17-4-20	122.7	2.128	3.72	0.00	0.47	0.00	0.00	6.68	0.00	0.00	1.86	2.33	0.47	0.00	14.42	60.00	7.44	0.47	1.40	0.47	0.00
17-4-75	123.3	2.140	3.42	1.51	3.99	0.18	0.00	1.80	0.00	0.00	21.86	0.19	0.19	0.00	9.13	48.86	5.70	0.19	1.52	0.76	0.57
17-4-120	123.7	2.150	17.48	2.75	8.64	1.18	0.00	4.81	0.20	0.00	9.43	1.77	0.39	0.20	15.32	8.08	24.17	0.00	3.34	1.77	0.20
17-5-18	124.2	2.161	2.80	0.52	0.00	0.00	0.00	2.08	0.00	0.00	2.60	2.06	0.00	0.00	0.52	28.02	0.00	1.04	0.00	0.52	0.00
17-5-59	124.6	2.170	6.88	1.42	3.04	0.10	0.00	3.10	0.40	0.00	1.01	0.20	0.40	0.00	14.78	47.17	13.77	0.40	1.01	1.21	0.00
17-5-99	125.0	2.179	10.81	4.56	9.96	0.33	0.33	6.68	1.14	0.00	6.84	0.00	1.95	0.00	14.99	15.34	25.73	0.16	0.81	0.46	0.49
17-5-141	125.4	2.188	3.02	2.45	3.40	2.26	0.19	8.86	2.82	0.57	18.91	4.52	8.30	0.00	6.42	13.02	21.51	0.38	0.18	0.94	1.51
18-1-36	128.4	2.209	0.99	0.46	0.16	1.44	0.32	4.15	15.47	0.48	0.00	2.23	0.32	0.00	43.70	10.53	15.63	0.32	0.32	2.71	0.80
18-1-75	128.8	2.216	1.17	0.00	1.56	0.00	0.00	4.87	0.39	0.00	0.76	0.78	0.00	0.00	13.62	65.78	8.58	0.39	0.39	0.00	1.95
18-1-121	127.2	2.228	1.46	0.99	3.26	0.00	0.00	4.15	0.59	0.00	0.30	0.59	0.59	0.00	16.91	52.82	15.62	0.30	0.89	0.30	0.30
18-2-15	127.7	2.236	0.24	0.00	0.24	0.48	0.00	6.73	0.00	0.00	1.20	1.92	0.72	0.00	17.55	62.26	6.73	0.00	0.24	1.44	0.24
18-2-59	128.1	2.246	2.52	0.42	3.35	0.21	0.00	7.55	0.00	0.00	5.87	0.63	1.66	0.00	42.77	2.10	27.25	0.42	1.89	2.73	0.63
18-2-103	126.5	2.258	1.93	0.00	1.83	0.00	0.00	9.26	0.92	0.00	2.75	1.36	0.00	0.00	11.01	59.26	13.30	0.46	0.00	0.00	0.00
18-3-18	129.2	2.272	4.82	1.05	3.14	1.05	1.26	5.24	0.84	0.00	18.66	3.77	0.63	0.00	20.75	28.51	6.92	0.42	0.63	1.25	1.05
18-3-65	129.7	2.263	2.65	0.00	1.18	0.00	0.29	13.24	0.00	0.00	10.68	2.95	0.00	0.00	16.62	33.24	13.53	0.00	0.00	2.65	0.59
18-3-105	130.1	2.291	0.00	2.11	1.41	0.70	0.00	11.27	0.00	0.00	7.75	1.41	0.00	0.00	16.20	45.07	13.38	0.00	0.00	0.00	0.70
18-3-141	130.4	2.299	7.83	3.39	4.24	0.00	0.00	2.97	0.42	0.00	13.98	2.97	1.27	0.00	22.88	22.03	12.71	0.65	1.69	2.12	0.85
19-1-59	131.6	2.326	7.88	12.86	4.56	2.49	0.00	3.73	2.07	0.41	14.11	3.32	2.90	0.00	6.64	8.30	24.48	0.41	1.24	1.66	2.90
19-1-103	132.0	2.335	3.91	1.42	2.14	1.42	0.36	6.76	2.49	0.00	3.56	1.07	2.85	0.00	11.74	18.86	35.94	0.00	4.27	0.71	2.49
19-1-141	132.4	2.344	5.59	1.95	2.26	0.41	0.62	5.76	1.44	0.21	2.06	0.92	1.03	0.00	16.05	17.08	37.45	0.82	2.98	2.86	0.82
19-2-36	132.9	2.354	1.67	0.48	1.67	0.95	1.67	5.25	1.81	0.00	25.06	0.24	0.95	0.00	6.44	26.97	19.33	0.48	1.43	3.10	2.39
19-2-60	133.3	2.364	1.15	1.54	1.15	3.26	0.77	8.64	10.56	0.96	4.99	0.98	2.30	0.00	7.68	27.83	23.99	1.15	0.00	2.99	0.19
19-2-121	133.7	2.373	2.02	1.77	2.02	5.05	1.01	6.82	3.54	0.76	12.88	0.25	3.28	0.00	11.11	18.44	25.00	2.02	0.00	2.53	0.51
19-3-16	134.2	2.383	0.62	0.62	0.62	1.85	0.41	4.32	2.47	0.00	11.73	0.82	5.56	0.21	12.96	10.08	45.47	0.21	0.82	0.41	0.82
19-3-60	134.6	2.392	0.85	1.41	0.29	0.00	0.56	2.54	0.28	0.00	6.50	0.00	11.58	0.00	11.02	31.92	27.97	1.69	0.00	1.98	1.41
19-3-97	135.0	2.401	0.85	0.21	0.85	0.64	0.85	4.45	0.00	0.21	2.12	0.64	6.14	0.21	10.38	15.04	50.21	1.69	0.00	2.97	2.54
19-3-140	135.4	2.410	2.87	3.50	0.32	0.32	0.00	5.10	1.59	0.32	0.64	1.27	9.55	0.32	9.97	50.32	11.46	0.00	0.00	1.27	1.27
19-4-25	135.8	2.418	6.30	3.81	4.82	1.52	1.02	5.33	0.56	0.76	12.94	1.02	9.90	0.25	2.29	38.83	2.54	0.25	0.00	1.78	0.76
20-1-17	136.2	2.427	8.52	4.48	5.04	0.64	0.00	5.86	1.96	0.00	11.76	1.40	3.36	0.00	7.00	28.85	9.52	0.29	5.60	2.52	1.96
20-1-59	136.6	2.437	6.90	3.25	4.87	1.01	0.41	2.64	0.61	0.00	6.11	0.00	6.90	0.00	19.68	12.99	20.89	0.20	5.68	4.67	1.22
20-1-97	137.0	2.445	4.21	3.86	5.81	3.18	0.70	5.26	3.51	0.00	15.79	0.35	7.02	0.00	19.85	5.61	16.25	0.35	2.11	2.46	2.11
20-1-141	137.4	2.455	7.29	5.26	6.68	3.44	0.31	6.48	7.09	0.61	29.24	1.01	5.26	0.00	4.25	3.24	17.61	0.20	0.81	0.81	0.81
20-2-37	137.9	2.465	6.97	2.88	6.27	1.19	0.30	5.07	3.58	0.30	24.48	0.30	21.79	0.30	8.06	5.37	8.08	0.00	0.80	2.69	1.49
20-2-80	138.3	2.475	6.40	4.75	6.82	0.41	0.83	5.17	6.20	0.62	31.40	0.00	8.68	0.00	3.93	14.46	3.31	0.62	0.62	4.34	1.24
20-2-120	138.7	2.483	6.56	1.54	3.29	0.66	0.00	3.73	0.00	0.00	19.06	1.32	18.86	0.44	7.46	23.46	9.43	0.44	1.54	1.54	0.66
20-3-18	139.2	2.494	4.73	2.55	2.18	0.73	0.00	2.16	0.36	0.00	28.73	0.00	2.91	0.00	1.82	50.18	1.82	0.36	0.36	1.09	0.00
20-3-60	139.6	2.503	8.88	0.86	0.29	2.29	0.57	4.56	0.00	0.00	16.62	0.86	9.74	0.29	4.87	41.26	6.02	0.57	1.72	0.00	0.57
20-3-94	139.9	2.511	11.33	1.48	3.98	0.00	0.00	5.45	0.00	0.00	7.43	0.25	15.35	0.00	5.45	36.88	7.92	0.25	0.99	2.48	0.50
20-3-141	140.4	2.521	8.77	2.05	0.88	0.88	0.29	4.09	0.86	0.00	8.16	0.00	19.30	0.00	10.53	31.87	9.65	0.88	0.58	0.56	0.58
21-1-67	141.7	2.549	9.35	3.48	2.17	0.87	0.65	8.04	1.30	0.00	3.70	0.43	8.48	0.00	33.70	17.39	7.39	0.22	0.00	2.93	0.00
21-1-109	142.1	2.559	10.77	6.35	7.50	8.27	1.73	5.58	3.09	0.58	9.62	0.36	3.27	0.00	6.95	20.77	10.19	0.77	0.00	0.96	1.35
21-2-20	142.7	2.572	10.16	9.89	7.62	3.17	1.77	7.62	0.63	0.00	3.81	0.00	4.44	0.00	7.62	27.94	5.71</				

Table 8 (cont). Planktic foraminifer percent count, DSDP Hole 848.

SAMPLE	DEPTH	AGE	<i>Globigerina bulloides</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisa</i>	<i>Globigerina woodi</i>	<i>Globigerinella aequilata</i>	<i>Globigerinita glutinata</i>	<i>Globobulimina crassilabris</i>	<i>Globobulimina hirsuta</i>	<i>Globobulimina punctulata</i>	<i>Globobulimina acuta</i>	<i>Neoglobobulimina acostaensis (d)</i>	<i>Neoglobobulimina acostaensis (s)</i>	<i>Neoglobobulimina atlantica (d)</i>	<i>Neoglobobulimina atlantica (s)</i>	<i>Neoglobobulimina pachyderma (d)</i>	<i>Neoglobobulimina pachyderma (s)</i>	"dupac"	<i>Obolus univerrsa</i>	<i>Turborotalita quinqueloba</i>
23 - 1, 146	152.5	2.789	3.94	2.25	2.25	5.35	0.00	4.79	3.38	0.00	13.52	1.97	23.10	0.00	20.56	7.89	9.90	0.28	0.00	0.28	1.13
23 - 2, 24	152.7	2.795	5.08	1.98	1.89	1.69	1.41	5.08	0.85	0.00	60.45	0.85	0.00	0.00	5.65	14.12	0.00	0.00	0.00	1.13	0.00
23 - 2, 101	153.5	2.812	3.32	1.53	4.09	4.86	0.00	8.18	2.30	0.26	10.23	0.00	21.89	0.26	13.55	13.81	11.51	0.77	0.00	0.00	3.32
23 - 2, 148	154.0	2.823	4.92	1.14	1.14	2.27	0.00	9.08	8.33	0.38	37.88	1.89	2.65	0.00	6.82	20.45	0.00	0.00	0.00	1.89	1.14
23 - 3, 25	154.3	2.829	6.61	1.39	1.04	2.78	0.35	9.22	1.74	0.52	23.13	1.74	24.35	0.52	10.09	4.00	8.70	0.35	0.00	0.17	3.30
23 - 3, 97	155.0	2.845	4.30	2.32	2.32	2.98	2.32	11.82	1.32	0.00	36.75	0.33	10.29	0.00	6.95	6.29	5.98	0.00	0.66	1.66	3.64
23 - 3, 125	155.3	2.851	4.75	0.34	1.02	0.00	0.38	5.76	0.00	0.00	36.61	0.68	29.49	0.00	2.37	3.73	6.44	0.00	0.88	1.02	6.44
24 - 1, 100	157.0	2.890	12.74	5.66	4.40	2.99	0.33	5.97	0.63	0.00	5.35	3.77	32.08	0.63	13.84	2.20	5.50	0.16	0.00	1.89	1.57
24 - 1, 146	157.5	2.900	9.61	4.37	2.18	0.87	1.75	4.37	1.75	0.00	23.58	0.44	33.19	0.44	6.99	4.37	2.18	0.00	0.00	2.62	1.31
24 - 2, 50	158.0	2.912	1.94	1.94	1.08	1.51	0.43	7.33	2.59	0.00	28.02	1.72	38.38	0.43	6.03	1.72	2.59	0.43	0.22	2.59	1.08
24 - 2, 102	158.5	2.924	3.53	5.41	1.18	10.35	1.18	8.94	0.84	0.00	29.24	3.29	22.35	0.24	1.35	0.47	8.71	0.24	0.00	0.00	3.29
24 - 3, 0	159.0	2.934	3.75	4.02	1.88	3.75	0.80	8.38	11.26	0.00	24.93	1.88	18.82	0.54	1.34	2.14	15.01	0.27	0.00	0.27	2.14
24 - 3, 45	159.5	2.944	5.70	1.80	1.80	6.88	0.71	9.98	13.30	0.24	0.00	0.95	20.80	0.48	3.08	0.71	23.52	0.24	0.00	1.43	8.08
24 - 3, 97	160.0	2.956	6.72	3.64	3.64	6.16	0.28	10.08	3.36	0.56	26.33	0.84	21.57	0.94	5.32	3.92	6.16	0.00	0.00	0.00	0.56
25 - 1, 21	161.2	2.983	5.04	5.57	7.89	2.92	0.00	5.84	3.18	0.27	28.85	2.95	10.61	0.27	3.71	18.57	2.92	0.00	0.00	1.06	1.06
25 - 1, 75	161.8	2.995	1.49	2.69	3.88	2.99	0.30	3.88	1.79	3.88	18.81	1.49	8.66	0.90	1.19	40.30	2.38	0.30	0.30	0.30	4.48
25 - 1, 125	162.3	3.006	3.30	2.97	3.30	3.63	0.33	6.27	0.85	2.64	7.28	1.35	25.74	0.66	3.96	24.75	7.28	0.33	0.99	0.23	3.86
25 - 2, 0	162.5	3.012	2.22	1.23	2.47	1.48	0.00	8.64	6.91	12.10	16.54	1.23	21.98	0.00	2.22	7.13	3.95	0.00	0.00	3.70	8.15
25 - 2, 26	162.8	3.018	3.74	1.35	3.50	2.16	1.62	8.09	9.89	2.43	5.93	1.89	25.07	1.08	3.50	5.88	14.82	0.27	0.00	3.50	3.50
25 - 2, 97	163.5	3.033	0.47	1.40	2.80	0.00	0.93	7.01	1.87	0.00	49.07	0.93	21.06	0.47	2.34	2.80	5.81	0.00	0.00	3.27	0.00
25 - 2, 148	164.0	3.045	2.54	2.22	1.27	5.71	0.63	7.62	8.21	0.32	46.03	0.95	10.16	0.00	3.17	4.44	3.17	0.32	0.32	1.90	0.00
25 - 3, 70	164.7	3.061	4.30	0.72	0.95	2.15	1.19	9.31	11.68	1.67	43.68	0.48	16.47	0.48	1.43	2.39	0.95	0.00	0.00	0.95	1.18
25 - 3, 139	165.4	3.076	2.99	1.79	2.35	1.49	1.18	3.28	4.76	0.00	11.04	1.49	21.18	1.18	5.07	21.19	14.03	0.90	1.79	3.26	0.90
25 - 4, 17	165.7	3.082	5.12	3.15	3.15	1.18	0.78	1.57	3.15	0.39	9.84	0.38	24.02	0.00	2.38	22.05	19.29	0.39	0.79	1.18	1.18
26 - 1, 40	166.4	3.098	5.17	2.25	3.15	3.80	0.90	10.58	2.02	0.45	15.86	2.47	33.48	0.22	3.82	1.80	9.21	0.00	0.00	1.35	3.50
26 - 1, 96	167.0	3.111	8.97	5.13	5.34	1.28	0.00	9.62	3.42	0.43	14.74	1.28	35.26	1.07	3.21	2.14	4.70	0.43	0.00	1.71	1.29
26 - 1, 148	167.5	3.122	3.69	1.85	2.37	1.85	0.26	7.65	0.78	0.28	34.30	0.78	23.22	0.53	3.17	10.29	5.28	0.00	0.00	0.78	2.90
26 - 2, 60	168.1	3.136	9.52	1.40	3.90	1.72	0.31	7.02	6.55	0.16	20.12	1.72	22.00	0.78	2.85	15.91	4.06	0.16	0.00	0.31	1.72
26 - 2, 125	168.6	3.151	8.77	1.97	2.15	1.07	3.22	4.47	2.68	0.00	7.51	2.15	42.22	0.72	2.50	5.72	6.98	0.36	0.00	1.79	5.72
26 - 3, 50	169.5	3.167	9.44	4.31	5.21	2.51	0.54	4.13	0.00	3.55	24.96	4.13	21.01	0.00	2.51	11.31	4.85	0.18	0.00	0.18	1.90
26 - 3, 100	170.0	3.178	8.87	3.08	2.81	0.71	0.24	3.55	0.00	5.21	41.00	0.00	11.61	0.24	4.74	17.06	1.42	0.24	0.24	0.47	0.71
26 - 4, 18	170.7	3.193	12.09	1.98	1.29	3.96	0.99	6.24	1.29	12.39	1.28	0.69	32.01	0.30	13.68	2.97	6.54	0.00	0.00	0.30	1.96
27 - 1, 4	171.0	3.201	7.43	4.00	3.71	2.29	1.71	5.71	0.00	0.57	0.00	0.00	34.86	0.00	26.29	7.71	4.00	0.57	0.00	0.00	1.14
27 - 1, 65	171.7	3.215	9.55	2.86	5.67	3.82	1.19	5.73	0.00	3.82	0.00	0.48	35.32	0.48	18.38	2.83	5.67	0.24	0.00	3.10	0.48
27 - 1, 85	171.9	3.219	16.55	2.16	8.00	5.28	1.92	6.95	0.24	6.15	0.24	0.48	20.62	0.24	20.86	2.40	6.00	0.00	0.00	1.44	0.48
27 - 1, 100	172.0	3.223	15.06	0.42	1.87	1.16	0.84	10.04	0.00	7.53	0.42	1.67	21.76	0.00	22.59	5.44	7.11	0.84	0.00	1.67	1.67
27 - 1, 120	172.2	3.227	22.61	4.35	11.30	6.52	1.74	6.09	0.00	2.17	0.00	0.43	13.91	0.87	11.30	11.30	5.65	0.43	0.00	1.30	0.00
27 - 2, 53	173.0	3.246	18.79	3.69	4.70	4.03	0.67	7.05	0.00	0.34	0.00	0.00	33.22	0.34	8.73	8.72	5.37	0.00	0.00	1.68	1.68
27 - 2, 74	173.2	3.250	16.84	2.66	5.26	7.02	2.11	15.09	0.00	2.11	1.05	2.81	19.30	0.35	11.23	6.32	4.21	0.35	0.00	2.48	1.05
27 - 2, 126	173.8	3.262	17.48	2.91	5.18	7.12	1.29	14.24	0.00	4.53	1.29	1.62	23.62	0.65	4.85	2.59	5.83	0.00	0.00	0.00	6.80
27 - 3, 20	174.2	3.272	48.15	5.58	4.07	9.52	0.37	3.33	0.00	1.11	0.00	3.70	0.74	0.00	1.48	20.74	0.37	0.00	0.00	0.37	1.48
27 - 3, 75	174.8	3.284	23.86	2.85	7.58	15.91	0.78	13.28	0.00	4.92	0.00	4.55	3.06	0.38	1.14	13.64	0.00	0.00	0.00	1.89	3.41
27 - 3, 149	175.5	3.300	24.80	5.20	5.20	10.00	0.00	15.60	0.00	6.80	0.00	3.60	11.20	0.00	2.00	9.30	1.20	0.00	0.00	0.30	4.00
27 - 4, 4	175.5	3.301	32.79	4.22	2.27	17.96	0.37	6.40	0.00	3.25	0.00	2.60	10.39	0.00	0.35	15.58	0.97	0.00	0.00	1.30	0.65
27 - 4, 25	175.8	3.306	13.57	8.58	5.15	14.71	1.10	8.82	0.00	0.00	0.00	0.74	21.32	0.00	1.47	16.54	2.94	0.37	1.10	1.10	3.31
28 - 1, 24	176.2	3.317	9.28	5.94	3.78	18.48	0.00	8.83	0.00	0.00	1.03	0.00	13.08	0.34	4.12	28.87	1.37	0.00	1.37	4.81	0.89
28 - 1, 51	176.5	3.323	10.94	6.78	9.63	10.72	4.19	11.16	0.22	0.44	0.44	1.31	12.47	0.00	1.31	21.23	3.50	0.00	0.22	3.72	1.75
28 - 1, 104	177.0	3.335	20.93	2.42	5.95	5.73	0.44	10.57	0.00	0.66	0.22	1.54	19.38	0.44	1.76	23.13	0.22	0.22	0.00	3.96	2.42
28 - 1, 145	177.5	3.344	18.36	2.30	7.54	0.66	0.88	8.85	0.00	1.87	0.00	5.90	13.11	0.00	3.28	28.52	0.33	0.00	0.00	5.90	2.30
28 - 2, 24	177.7	3.350	14.61	1.57	6.97	8.87	1.80	6.87	1.35	0.90	0.45	2.92	35.28	0.87	5.84	5.62	1.80	0.00	0.00	3.15	3.15
28 - 2, 75	178.3	3.362	17.96	1.76	2.48	14.44	1.41	6.34	3.17	2.82	2.82	1.79	28.41	0.00	1.78	6.34	2.11	0.00	0.00	3.52	4.83
28 - 2, 100	178.5	3.367	20.54	2.71	4.35	10.47	0.00	5.43	1.55	1.55	0.39	2.33	12.79	0.00	1.94	26.74	1.16	0.00	0.00	3.88	3.88
28 - 2, 117	178.7	3.371	20.07	2.63	2.30	8.55	0.49	6.41	1.32	0.00	1.84	0.66	36.68	0.86	7.24	1.15	2.96	0.00	0.00	3.62	3.62
28 - 3, 30	179.3	3.385	17.56	1.93	3.21	14.35	0.43	5.14	0.86	0.64	12.63	2.78	25.27	0.84	3.21	4.07	1.50	0.00	0.00	2.36	3.43
28 - 3, 73	179.7	3.394	23.74	0.72	3.24	7.19	1.44	12.59	1.08	0.36	2.16	2.88	11.15	0.36	1.09	24.10	0.72	0.00	0.00	3.24	3.96
28 - 3, 104	180.0	3.401	13.27	2.04	3.40	13.61	1.02	8.84	1.02	1.02	5.78	6.12	2.04	0.00	0.68	33.67	0.00	0.00	0.00	2.04	5.44
28 - 4, 1	180.5	3																			

Table 9. Planktic foraminifer census data, DSDP Hole 552A.

SAMPLE	DEPTH	AGE	<i>Globigerina bulloides</i>	<i>Globigerina falconensis</i>	<i>Globigerina pseudobuccella</i>	<i>Globigerina incisa</i>	<i>Globigerina digitata</i>	<i>Globigerina praedigitata</i>	<i>Globigerina eamesi</i>	<i>Globigerina woodi</i>	<i>Globigerina</i> sp. 1	<i>Globigerinella aequilateralis</i>	<i>Globigerinita glutinata</i>	<i>Globigerinoides oblique</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides</i> spp.	<i>Globorotalia crassaformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardi</i>	<i>Globorotalia scitula</i>	<i>Neoglobobulimina acostaensis</i>	<i>Neoglobobulimina atlantica (s)</i>	<i>Neoglobobulimina atlantica (d)</i>	<i>Neoglobobulimina pachyderma (s)</i>	<i>Neoglobobulimina pachyderma (d)</i>	*dupac*	<i>Obolus universa</i>	<i>Turborotalia quinqueloba</i>	Other	Reworked	Benthics	Total planktics	Fragments	
9-2,11	40.61	2.290	9	0	0	0	0	0	0	2	0	0	15	0	0	0	6	0	0	0	0	5	30	40	42	5	79	79	1	6	2	0	2	321	38	
9-2,31	40.81	2.296	59	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	104	27	15	39	22	0	4	7	0	6	282	61	
9-2,49	40.99	2.309	23	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	1	0	0	3	3208	23	5	19	17	1	2	3	0	12	314	275		
9-2,89	41.39	2.338	29	0	0	0	0	0	0	1	0	0	19	0	0	0	0	0	14	0	0	0	9	139	21	9	22	21	1	2	2	0	5	289	165	
9-2,109	41.59	2.353	30	3	0	0	0	0	0	0	0	0	8	0	0	0	3	0	24	0	0	1	27	98	22	2	26	46	1	7	3	0	1	301	30	
9-2,131	41.61	2.369	49	7	0	0	0	0	0	0	0	0	4	10	0	0	0	0	6	0	0	5	0	200	4	5	4	5	0	4	4	0	13	307	94	
9-2,148	41.98	2.381	8	1	0	0	0	0	0	0	0	5	16	0	0	0	0	0	1	0	0	10	10	225	11	9	7	10	0	1	0	0	9	314	75	
9-3,23	42.23	2.399	73	4	0	0	0	0	0	0	0	1	16	0	0	0	0	0	18	0	0	2	18	100	20	5	13	23	0	0	1	0	3	294	74	
9-3,39	42.39	2.411	19	0	2	0	0	0	0	4	0	3	8	0	0	0	8	0	58	0	0	2	22	134	27	4	13	33	5	2	4	0	2	348	65	
9-3,59	42.59	2.425	38	0	0	0	0	0	0	2	0	1	9	0	0	0	0	0	15	0	0	0	8	166	21	10	5	30	1	3	1	0	3	308	55	
9-3,78	42.78	2.439	26	1	0	0	0	0	0	3	0	0	11	0	0	0	10	0	4	0	0	1	22	140	13	8	6	21	2	22	2	0	1	294	52	
9-3,103	43.03	2.456	30	0	0	0	0	0	0	1	0	0	8	0	0	0	0	0	39	0	0	1	3	149	28	2	7	22	2	6	4	0	3	300	55	
9-3,119	43.19	2.469	10	0	1	0	0	0	0	5	0	2	15	0	0	0	5	1	19	0	0	2	46	126	28	4	20	38	2	1	2	0	3	327	62	
9-3,148	43.48	2.490	27	0	0	0	0	0	0	0	0	2	13	0	0	0	4	0	17	0	0	3	23	99	21	7	41	50	0	4	6	0	5	317	175	
9-4,21	43.71	2.510	47	5	3	0	0	0	0	1	0	0	17	0	0	0	8	0	35	0	0	1	13	148	10	2	4	10	2	1	4	0	8	309	85	
10-1,49	44.49	2.750	55	2	0	0	0	0	0	1	0	1	9	0	0	0	1	0	13	0	0	4	26	48	40	3	18	62	0	4	3	0	1	288	135	
10-1,69	44.69	2.765	41	5	2	0	0	0	0	3	0	1	10	0	0	0	2	0	21	0	0	1	73	57	8	4	23	68	2	0	2	0	6	323	130	
10-1,90	44.90	2.780	24	4	0	0	0	0	0	2	0	0	5	0	0	0	5	0	22	0	0	2	19	109	23	3	21	57	0	3	10	0	7	309	120	
10-1,111	45.11	2.795	24	1	0	0	0	0	0	0	0	0	8	0	0	0	0	1	9	0	0	4	89	97	10	3	35	38	0	0	2	0	4	299	95	
10-1,131	45.31	2.809	36	0	0	0	0	0	0	0	0	0	12	0	0	0	3	0	30	0	0	2	16	70	20	9	45	66	0	0	6	0	6	315	75	
10-2,11	45.61	2.831	32	4	0	0	0	1	0	3	0	0	17	0	0	0	7	0	34	0	0	0	40	106	19	2	29	25	0	1	4	0	3	324	103	
10-2,31	45.81	2.846	31	2	0	0	0	0	0	3	0	0	12	0	0	0	0	0	48	0	0	1	12	69	27	7	25	51	1	0	3	0	4	292	90	
10-2,50	46.00	2.859	28	4	1	0	0	0	0	2	0	0	16	0	0	0	2	1	57	0	0	0	35	67	10	2	47	40	1	0	2	0	2	313	100	
10-2,70	46.20	2.874	24	0	0	0	0	0	0	4	0	0	20	0	0	0	3	0	58	0	0	0	11	81	20	13	38	36	0	0	0	0	2	308	71	
10-2,91	46.41	2.889	41	5	2	0	0	0	0	7	0	0	32	0	0	0	4	0	59	0	0	0	8	130	4	4	8	2	1	2	4	0	1	313	79	
10-2,110	46.60	2.903	12	1	3	0	0	0	0	2	0	2	34	0	0	0	2	0	64	0	0	2	14	115	8	5	17	27	0	2	2	0	3	312	60	
10-2,132	46.82	2.919	15	2	2	0	0	0	0	3	0	8	23	0	0	0	0	0	65	0	0	1	28	140	4	3	2	14	1	0	5	0	7	314	95	
10-3,11	47.11	2.940	10	0	0	0	0	0	0	1	0	0	21	0	0	0	3	0	47	0	0	2	48	104	11	6	19	37	0	3	4	0	0	316	105	
10-3,31	47.31	2.954	18	2	0	0	0	1	0	3	1	0	32	0	0	0	4	0	84	0	0	4	36	83	8	7	6	30	0	2	3	0	3	324	110	
10-3,51	47.51	2.969	13	5	2	0	0	1	0	5	0	0	40	0	0	0	21	0	96	0	0	0	24	75	12	9	12	11	0	5	5	0	6	338	110	
10-3,75	47.75	2.986	27	2	0	0	0	0	0	7	0	0	24	0	0	0	14	0	35	0	0	1	25	87	7	13	7	27	0	7	4	0	3	287	90	
10-3,93	47.93	2.996	24	1	1	0	0	0	0	4	0	1	57	0	0	0	9	0	55	0	0	4	43	89	2	8	19	37	0	13	8	0	4	375	75	
10-3,114	48.14	3.006	23	2	1	0	0	1	0	5	0	1	34	0	0	1	18	0	32	0	0	2	49	61	6	5	14	40	0	13	6	0	2	314	84	
10-3,128	48.28	3.012	38	3	1	0	0	0	0	3	0	0	33	0	0	0	4	0	52	0	0	5	25	84	3	8	14	27	1	9	5	0	2	295	70	
10-4,19	48.69	3.031	17	7	0	0	0	0	0	2	0	0	13	0	0	0	12	8	80	0	0	2	20	100	5	5	10	15	0	18	6	0	2	320	77	
11-1,88	49.68	3.087	25	11	2	0	0	0	0	3	0	0	20	0	0	0	4	0	60	0	1	1	45	84	9	4	18	30	0	5	8	0	3	330	85	
11-1,109	50.09	3.097	32	0	2	0	0	0	0	2	0	0	18	0	0	0	3	0	85	0	0	1	38	58	5	9	11	28	1	11	2	0	6	305	67	
11-1,128	50.28	3.106	22	10	1	0	0	0	0	3	0	0	10	0	0	0	1	1	96	0	0	5	39	89	5	10	8	20	1	7	5	0	4	333	32	
11-2,11	50.81	3.121	56	2	0	0	0	0	0	0	0	0	7	0	0	0	3	0	59	0	0	2	3	118	9	7	18	38	1	6	3	0	2	330	51	
11-2,31	50.81	3.130	44	7	0	0	0	0	0	4	0	1	7	0	0	1	0	3	83	0	0	1	17	82	5	12	10	19	1	4	6	0	2	307	16	
11-2,54	51.04	3.141	122	0	0	0	0	0	0	1	0	0	9	0	0	0	0	0	51	0	0	2	8	86	3	6	1	9	0	1	0	0	1	299	85	
11-2,84	51.34	3.155	146	4	3	0	0	0	0	3	0	2	10	0	0	0	0	0	0	0	0	2	17	104	10	12	9	13	0	4	1	0	0	0	340	50
11-2,109	51.59	3.167	97	1	0	0	0	0	0	2	0	1	4	0	0	0	0	0	1	0	0	5	13	77	12	10	18	9	0	3	5	0	2	256	47	
11-2,131	51.81	3.177	115	2	0	0	0	0	0	4	0	1	8	0	0	0	0	8	1	0	0	3	22	78	8	9	14	26	0	0	6	0	7	327	82	
11-2,145	51.95	3.183	133	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	2	0	0	8	11	81	10	8	22	30	0	0	5	0	3	324	80	
11-3,22	52.22	3.196	98	5	2	0	0	1	4	4	1	0	14	0	0	0	2	2	0	0	0	4	17	112	11	11	23	19	0	0	7	0	1	335	57	
11-3,43	52.43	3.206	138	2	0	0	0	0	0	2	0	1	5	0	0	0	0	0	0	0	0	0	4	122	5	13	5	4	0	2	1	0	4	304	50	
11-3,59	52.59	3.213	103	3	0	0	0	1	0	4	0	0	10	0	0	0	0	0	0	0	0	6	2	147	4	5	3	2	0	3	6	0	3	299	65	
11-3,81																																				

Table 9 (cont). Planktic foraminifer census data, DSDP Hole 552A.

SAMPLE	DEPTH	AGE	<i>Globigerina bulbosus</i>	<i>Globigerina falconensis</i>	<i>Globigerina pseudobesa</i>	<i>Globigerina incisa</i>	<i>Globigerina digitata</i>	<i>Globigerina praedigitata</i>	<i>Globigerina eamesi</i>	<i>Globigerina woodi</i>	<i>Globigerina</i> sp. 1	<i>Globigerinella aequilateralis</i>	<i>Globigerinita glutinata</i>	<i>Globigerinoides obliquus</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides</i> spp.	<i>Globorotalia crassaformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardi</i>	<i>Globorotalia scitula</i>	<i>Neoglobobulimina acostaensis</i>	<i>Neoglobobulimina atlantica (s)</i>	<i>Neoglobobulimina atlantica (d)</i>	<i>Neoglobobulimina pachyderma (s)</i>	<i>Neoglobobulimina pachyderma (d)</i>	*dupac*	<i>Orbulina universa</i>	<i>Turborotalia quinqueloba</i>	Other	Reworked	Benthics	Total planktics	Fragments
12-3.89	57.89	3.441	35	22	3	0	0	0	0	0	0	0	3	0	0	0	5	0	145	0	0	4	0	90	4	1	0	0	0	3	4	0	5	319	51
12-3.131	58.31	3.454	26	0	0	1	0	1	0	1	0	0	14	0	0	0	0	1	88	0	0	8	0	129	5	3	2	2	1	7	4	0	3	302	55
12-4.11	58.61	3.464	27	0	0	0	0	0	0	5	0	1	18	0	0	0	0	0	79	0	0	3	0	151	8	5	3	2	2	12	0	0	6	318	75
12-4.31	58.81	3.470	16	15	0	0	0	2	0	12	0	0	15	0	0	0	0	3	38	0	0	9	4	148	6	5	6	7	1	21	5	0	4	313	95
13-1.140	60.43	3.522	68	0	0	0	0	0	0	4	0	0	11	0	0	0	1	0	82	0	0	8	12	119	20	9	8	19	1	8	6	0	4	354	94
14-1.41	62.41	3.584	51	0	0	0	0	1	0	0	0	0	10	0	0	0	0	1	116	0	0	7	6	79	11	5	6	4	4	1	3	0	4	305	60
14-1.79	62.79	3.597	68	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	127	0	0	4	0	80	13	4	5	3	1	0	0	0	6	312	72
14-1.125	83.25	3.611	47	0	0	0	0	1	0	6	0	0	9	0	0	0	0	2	76	0	0	1	5	120	17	11	10	10	2	1	3	0	2	321	45
14-2.13	83.61	3.623	40	1	0	0	0	0	0	7	0	0	17	1	0	0	0	1	71	0	0	3	10	125	7	8	15	8	1	0	6	0	2	321	60
14-2.51	84.01	3.635	48	3	0	0	0	0	0	5	0	0	7	0	0	0	0	1	105	0	0	1	2	130	16	7	7	2	2	0	0	0	2	336	31
14-2.90	84.40	3.648	92	0	0	0	0	0	0	0	0	0	10	0	0	0	0	1	55	0	0	2	0	124	5	4	2	3	0	0	7	0	8	305	37
14-2.130	84.80	3.880	59	1	0	0	0	0	0	2	0	0	12	0	0	0	0	0	77	1	0	4	8	102	15	5	11	7	2	2	1	0	4	307	30
14-3.20	85.20	3.673	23	1	0	0	0	0	0	2	0	0	19	0	0	0	0	0	95	0	0	2	12	96	8	10	13	19	0	1	4	0	4	307	40
14-3.80	85.80	3.886	28	0	0	0	0	0	0	11	0	0	16	0	0	0	3	1	100	0	0	5	11	121	7	6	7	4	2	1	2	0	5	325	60
14-3.100	88.00	3.898	30	0	1	0	0	3	0	17	0	0	15	0	0	0	11	0	65	1	0	6	10	120	10	5	10	5	2	1	8	0	5	318	60
14-3.139	86.39	3.711	19	2	0	0	0	2	0	3	0	0	31	0	0	0	4	0	74	0	0	1	4	138	14	7	17	8	0	0	3	0	2	323	80
15-1.53	87.53	3.747	21	0	0	0	0	0	0	4	0	0	6	0	0	0	2	4	83	0	0	5	9	136	8	10	11	13	1	0	8	0	5	321	85
15-1.88	87.88	3.758	26	3	0	0	0	0	0	3	0	0	7	0	0	0	2	4	79	0	0	5	2	124	31	7	18	9	2	0	2	0	5	322	85
15-1.130	88.30	3.771	74	10	1	0	0	0	0	2	0	0	18	0	0	0	2	0	92	0	0	3	9	90	8	10	15	4	1	1	5	0	7	346	30
15-2.20	88.70	3.784	78	2	0	0	1	0	0	7	0	1	10	0	0	0	1	0	95	0	0	5	7	84	8	0	9	10	1	0	2	0	2	317	30
15-2.60	89.10	3.797	64	2	0	0	0	0	0	3	0	0	11	0	0	0	3	0	78	0	0	1	7	110	5	7	10	9	0	0	8	0	3	318	80
15-2.100	89.50	3.810	57	4	0	0	0	0	0	6	0	2	7	0	0	0	0	0	49	0	0	6	14	115	7	4	2	10	0	0	11	0	3	298	59
15-2.138	89.88	3.822	52	2	0	0	1	0	5	0	1	12	0	0	0	0	0	0	66	0	0	5	11	108	17	6	9	10	2	0	4	0	5	311	53
15-3.39	70.39	3.838	94	6	0	0	0	1	0	25	0	0	9	0	0	0	0	0	72	0	0	3	2	47	26	2	16	12	1	1	9	0	4	326	74
15-3.80	70.80	3.851	79	0	0	0	0	0	0	11	0	0	17	0	0	0	2	0	47	0	0	3	19	65	14	5	12	26	0	0	7	0	2	307	69
15-3.119	71.19	3.863	100	6	0	0	0	2	0	7	0	0	16	0	0	0	0	3	70	0	0	1	7	56	27	0	16	19	0	1	1	0	0	332	75
15-4.10	71.80	3.878	87	3	0	0	0	0	0	12	0	0	19	0	0	0	0	0	40	0	0	3	16	81	12	4	7	24	1	1	5	0	4	295	90
18-1.103	73.03	3.922	48	10	0	0	0	1	0	9	0	1	27	0	0	0	2	0	61	0	0	5	6	82	36	2	6	25	0	0	1	2	5	324	70
18-2.49	73.99	3.952	55	7	0	0	0	0	0	8	0	0	25	0	0	0	12	0	53	0	0	0	0	88	30	4	8	8	0	1	9	0	3	308	57
18-2.131	74.81	3.978	67	8	0	0	0	1	0	4	0	0	7	0	0	0	2	0	61	0	0	1	7	77	27	3	7	11	0	0	5	0	3	308	57
18-3.21	75.21	3.991	70	2	0	0	0	0	0	5	0	0	22	0	0	0	0	0	62	0	0	5	7	89	13	3	7	13	0	0	2	21	9	300	60
18-3.139	78.39	4.028	59	4	0	0	0	0	0	1	0	0	4	0	0	0	0	10	0	0	0	6	1	121	46	7	16	22	0	1	1	0	2	299	120
17-1.53	77.53	4.064	96	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	2	0	6	8	88	44	9	23	12	2	0	9	0	3	304	98
17-1.130	78.30	4.089	112	0	0	0	0	1	0	2	0	0	10	0	0	0	0	0	0	0	0	3	4	72	27	11	34	40	0	1	6	0	6	323	100
17-2.80	79.10	4.114	62	4	0	0	0	0	0	4	0	0	9	0	0	0	0	0	0	1	0	4	2	129	59	4	11	25	2	0	3	0	4	319	185
17-2.140	79.90	4.140	72	0	0	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0	5	1	121	62	7	14	20	0	1	1	0	8	311	127
17-3.70	80.70	4.165	68	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	15	0	0	9	7	131	50	4	7	16	1	0	3	0	5	318	134
17-4.20	81.70	4.197	80	0	0	0	0	1	0	9	0	0	5	0	0	0	0	0	1	0	0	6	13	138	62	15	4	26	0	0	3	0	6	343	165
18-1.90	82.90	4.235	65	2	0	0	0	0	0	3	0	0	7	0	0	0	0	0	0	0	0	5	5	112	80	5	26	18	0	1	1	0	10	332	107
18-1.130	83.30	4.248	139	1	0	0	0	0	0	1	0	0	8	0	0	0	0	0	0	0	0	3	7	89	21	9	6	12	0	0	0	0	8	298	130
18-2.70	84.20	4.278	34	0	0	0	0	0	0	5	0	0	6	0	0	0	0	0	0	0	0	7	3	137	78	10	19	15	0	0	5	0	8	319	170
18-3.10	85.10	4.305	66	0	0	0	0	0	0	9	0	0	13	0	0	0	0	0	0	0	0	15	2	67	93	6	29	35	3	0	1	0	8	339	202
18-3.90	85.90	4.330	58	0	0	0	0	2	0	4	0	0	8	0	0	0	0	0	4	5	0	7	94	82	12	33	16	0	0	6	0	7	338	184	
18-4.20	86.70	4.356	99	0	0	0	0	0	0	4	0	0	10	0	0	0	2	2	0	0	4	0	96	69	18	20	11	0	0	2	0	15	337	185	
19-1.81	87.81	4.391	122	3	0	0	0	0	0	6	0	0	3	0	0	0	0	0	0	1	0	8	17	60	35	19	25	10	0	0	7	4	3	320	46
19-2.11	88.81	4.418	79	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	2	8	144	8	74	4	1	2	0	4	0	3	334	36
19-3.20	90.20	4.487	97	0	3	0	0	1	0	0	1	0	3	0	0	0	0	0	12	0	0	0	9	89	28	10	28	18	2	0	10	0	5	309	150
19-3.101	91.01	4.492	70	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	6	103	65	4	34	14	1	0	8	0	8	318	105
19-3.140	91.40	4.505	1																																

Table 11. Planktic foraminiferal census data, DSDP Hole 606.

SAMPLE	DEPTH	AGE	<i>Danobiogetina alpestris</i>	<i>Globigenina bulloides</i>	<i>Globigenina falconensis</i>	<i>Globigenina pseudobuccella</i>	<i>Globigenina indica</i>	<i>Globigenina praedictata</i>	<i>Globigenina woodi</i>	<i>Globigenina decorparata</i>	<i>Globigenina neperthes</i>	<i>Globigenina sp. 1</i>	<i>Globigenina gubalina</i>	<i>Globigeninoides conglobatus</i>	<i>Globigeninoides obliquus</i>	<i>Globigeninoides ruber</i>	<i>Globigeninoides sauculifer</i>	<i>Globigeninoides spp.</i>	<i>Globaquadina venezuelana</i>	<i>Globorotalia conomozensis</i>	<i>Globorotalia crassaformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardii</i>	<i>Globorotalia purpurata</i>	<i>Globorotalia aculeata</i>	<i>Globorotalia isosensis</i>	<i>Globorotalia humida</i>	<i>Neogloboquadrina acostaensis</i>	<i>Neogloboquadrina albanica (f)</i>	<i>Neogloboquadrina albanica (r)</i>	<i>Neogloboquadrina humerosa</i>	<i>Neogloboquadrina pachyi (f)</i>	<i>Neogloboquadrina pachyi (r)</i>	"Dupac"	<i>Orbulina universa</i>	<i>Sphaeroidinobulimina spp.</i>	<i>Turborotalia quinqueloba</i>	Other	Benthics	Total planktics	Fragments		
9-1-36	70-41	2-208	0-33	32	4	0	0	0	18	1	0	3	1	47	0	5	47	0	20	1	0	17	0	0	0	0	15	6	11	0	9	0	0	2	0	11	16	2	0	0	0	5	1	305	41
9-1-96	71-03	2-226	0-41	57	4	0	2	15	3	0	0	3	2	31	1	2	37	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	308	22
9-2-36	71-91	2-251	0-44	45	1	0	14	0	0	0	0	0	2	16	2	4	49	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	390	38
9-2-96	72-53	2-269	0-28	51	3	2	0	25	1	0	0	0	0	2	4	1	42	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	301	61
9-3-36	73-41	2-294	0-53	35	1	3	0	37	7	0	0	0	0	46	4	0	40	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	343	50
9-3-98	74-03	2-312	0-31	12	7	2	1	44	4	0	0	6	1	63	2	4	44	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	85
9-4-36	74-91	2-337	0-43	50	8	0	0	37	2	0	0	6	0	48	1	0	21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	339	25
9-5-38	75-53	2-355	0-43	57	6	3	0	20	0	0	0	6	0	67	1	1	18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304	22
9-5-98	77-03	2-398	0-37	33	10	0	1	48	6	1	4	2	45	0	1	34	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325	26
9-6-36	77-91	2-424	0-47	42	5	3	0	13	5	0	0	11	48	2	1	35	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310	60
9-6-98	78-53	2-441	0-35	27	6	1	0	33	0	0	0	5	2	51	1	2	28	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	324	42
10-1-98	80-53	2-504	0-38	19	7	1	1	28	3	0	7	1	48	1	2	10	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316	30
10-1-98B	80-53	2-504	0-22	12	4	0	2	20	4	0	2	6	0	37	0	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222	14
10-2-98	82-13	2-551	0-23	37	3	0	2	29	4	0	0	5	0	32	0	2	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	317	36
10-3-98	83-63	2-598	0-63	47	1	0	1	36	2	0	0	0	5	0	2	0	11	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	309	32	
10-4-96	85-13	2-645	0-35	34	3	1	1	42	10	0	0	0	0	27	0	0	31	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	313	36	
10-5-98	86-93	2-692	0-40	62	1	0	0	25	9	0	0	11	0	38	2	6	35	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308	30	
10-8-98	88-13	2-739	0-48	55	0	0	0	36	8	0	6	3	2	21	0	8	41	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	331	56	
11-1-9	89-34	2-777	0-47	29	6	0	0	30	8	0	0	6	3	2	0	8	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	321	39	
11-1-20	89-54	2-783	0-38	26	5	0	0	43	5	0	0	9	1	22	3	5	28	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	295	32
11-1-59	89-84	2-792	0-20	21	5	1	0	43	5	0	0	9	0	23	4	0	21	43	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294	55
11-1-98	89-84	2-804	0-21	24	2	2	0	47	5	0	0	8	1	26	0	13	29	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304	33
11-1-129	90-56	2-814	0-37	35	9	2	1	32	1	0	11	3	21	1	11	38	14	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	342	30	
11-1-37	90-66	2-818	0-38	32	4	4	0	35	2	0	0	0	4	11	2	9	44	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345	75	
11-2-21	90-96	2-827	0-26	30	2	0	0	55	3	0	11	2	20	0	0	12	36	15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	55
11-2-63	91-38	2-840	0-28	28	5	0	1	39	1	0	7	0	35	0	0	18	0	66	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	297	45
11-2-98	91-73	2-851	0-24	34	8	1	2	28	3	0	7	0	37	0	0	18	0	66	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	303	50
11-3-22	92-06	2-862	0-28	37	10	1	2	34	3	0	14	0	45	0	7	17	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	40
11-3-22	92-47	2-874	0-34	45	8	1	2	34	4	0	10	0	36	0	31	23	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	343	93
11-3-56	92-93	2-886	0-52	36	5	5	0	37	2	0	8	1	29	5	25	32	5	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	40
11-3-140	93-85	2-911	0-24	27	8	0	2	51	0	0	7	0	33	2	17	16	19	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	110
11-4-20	93-95	2-920	0-30	55	3	0	11	4	0	0	0	7	0	33	0	4	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	332	82
11-4-78	94-54	2-927	0-34	28	4	0	3	35	1	0	9	0	17	0	12	12	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	305	65
11-4-120	94-95	2-931	0-37	46	5	0	1	35	5	0	9	0	22	3	26	14	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	301	70
11-4-263	95-45	2-936	0-44	32	8	9	1	29	5	0	10	2	47	0	12	26	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	327	100
11-5-59	95-84	2-941	0-0	23	9	3	2	48	5	0	10	0	26	0	8	10	17	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	295	80
11-5-80	96-05	2-943	0-39	63	4	1	0	53	8	0	0	4	0	30	1	17	25	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	343	90
11-5-119	96-44	2-947	0-28	42	7	0	2	62	2	0	12	3	40	1	11	16	12	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	333	93
11-6-21	96-96	2-953	0-10	13	6	0	4	29	0	0	0	6	3	26	1	8	9	17	12	0	0	0	0	0	0	0																			

Table 11 (cont). Planktic foraminiferal census data, DSDP Hole 606.

[illegible]

Table 12. Planktic foraminifer census data, DSDP Hole 607.

SAMPLE	DEPTH	AGE	<i>Dentoglobigena altispira</i>	<i>Globigena bulloides</i>	<i>Globigena decaperta</i>	<i>Globigena falconensis</i>	<i>Globigena incisa</i>	<i>Globigena woodi</i>	<i>Globigenella aequilateralis</i>	<i>Globigenella glutinata</i>	<i>Globigeninoides conglobatus</i>	<i>Globigeninoides obliquus</i>	<i>Globigeninoides ruber</i>	<i>Globigeninoides sacculifer</i>	<i>Globorotalia crassatiformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia menardii</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia spp.</i>	<i>Globorotalia tosaeensis</i>	<i>Globorotalia tumida</i>	<i>Neoglobobiquadrina humerosa</i>	<i>Neoglobobiquadrina pachyderma (d)</i>	<i>Neoglobobiquadrina pachyderma (s)</i>	"dupac"	<i>Neoglobobiquadrina spp.</i>	<i>Orbulina universa</i>	<i>Sphaeroidinellopsis spp.</i>	<i>Turborotalia quinqueloba</i>	Other	Benthics	Total Planktics	Fragments	
11-5, 104	99.44	2.206	0	58	1	14	3	28	6	45	0	2	26	2	33	14	0	3	0	8	4	1	0	8	5	5	14	14	19	5	19	11	0	343	293
12-1, 19	102.19	2.276	0	50	2	5	6	47	3	42	0	4	28	1	8	8	0	4	20	10	3	2	0	15	3	3	6	14	19	3	24	12	5	306	77
14-3, 48	124.68	2.850	0	60	1	33	0	28	2	39	0	10	16	4	24	4	2	36	7	24	0	0	0	1	0	0	3	0	0	0	3	13	2	310	82
14-3, 88	125.08	2.860	1	52	1	18	5	33	6	60	0	7	15	6	35	11	1	32	8	13	2	0	0	3	0	0	15	0	1	0	10	14	0	349	213
14-4, 16	125.49	2.871	0	45	4	21	0	25	14	36	0	1	8	4	55	10	0	37	3	30	2	0	0	4	1	9	0	0	4	0	0	13	0	326	110
14-3, 129	125.86	2.880	0	47	3	24	1	21	10	23	0	6	18	14	18	3	0	55	6	23	3	0	0	5	3	12	0	4	0	0	12	2	311	41	
14-4, 55	126.25	2.890	0	54	5	10	3	19	12	19	0	1	18	4	18	9	0	87	1	17	1	0	0	2	2	12	0	5	0	0	19	0	312	87	
14-4, 94	126.64	2.900	0	41	3	10	0	20	9	24	0	2	13	2	16	3	0	111	2	17	0	1	0	0	1	7	5	3	0	0	18	1	308	90	
14-4, 135	127.05	2.910	0	83	9	14	3	26	12	49	0	8	18	4	25	11	0	10	5	5	3	0	0	0	0	6	5	3	0	5	12	2	316	110	
14-5, 73	127.43	2.920	0	59	7	3	8	22	9	53	0	3	10	3	22	7	0	38	5	16	2	0	0	0	0	1	12	29	4	0	10	2	323	89	
14-5, 23	127.93	2.931	0	60	3	8	0	30	11	30	0	4	20	1	27	18	0	60	11	22	1	0	0	0	2	9	0	0	0	1	13	1	331	150	
14-5, 126	128.46	2.942	0	62	8	13	2	45	22	38	0	6	14	4	29	13	0	42	4	13	0	0	0	3	1	12	12	1	2	0	17	2	363	163	
14-6, 24	128.94	2.952	0	75	0	3	1	24	12	47	1	11	18	6	35	13	0	9	9	10	0	0	0	1	0	15	21	5	1	0	13	0	330	232	
14-6, 84	129.54	2.965	0	46	5	3	5	26	15	34	0	5	16	12	43	14	0	10	2	9	0	0	0	0	0	42	46	9	0	0	6	2	348	170	
14-6, 120	129.90	2.972	0	44	2	1	0	29	9	21	0	3	12	5	37	12	4	39	4	12	11	1	0	3	0	49	38	5	0	0	9	1	350	170	
14-7, 9	130.29	2.981	0	63	5	4	0	32	7	17	0	1	9	1	37	4	0	31	4	15	9	2	0	2	0	39	28	0	0	0	17	2	327	143	
15-1, 24	131.04	2.998	0	45	0	2	0	20	1	43	0	0	3	1	27	10	0	47	7	15	6	2	0	8	1	26	25	5	0	0	10	2	304	177	
15-2, 19	132.49	3.036	1	69	3	6	3	27	5	41	1	6	13	4	34	5	1	41	7	9	10	1	0	0	0	17	14	3	0	0	17	3	338	204	
15-3, 13	133.93	3.074	0	78	2	2	2	35	5	50	0	2	10	6	30	6	0	25	8	5	2	0	0	3	0	7	20	1	0	0	13	0	312	198	
15-4, 24	135.54	3.111	15	85	1	8	3	18	5	33	0	1	15	2	13	0	0	90	4	5	2	1	0	4	0	24	27	2	1	0	10	0	369	157	
15-5, 34	137.14	3.148	1	68	2	8	3	44	2	27	0	4	6	4	18	11	11	2	7	5	5	4	0	17	2	45	30	0	7	0	4	3	337	118	
15-5, 43	138.73	3.187	19	91	2	0	4	27	3	32	0	7	2	3	6	0	7	3	9	1	2	0	10	10	4	32	38	0	0	0	16	2	321	110	
15-7, 21	140.01	3.229	3	76	1	7	4	30	8	69	0	4	22	5	1	9	0	4	1	18	0	5	0	1	0	24	29	3	0	0	14	2	338	97	
16-2, 12	142.02	3.296	0	103	0	9	2	66	3	30	0	7	18	3	0	2	0	5	4	8	0	0	0	1	0	26	34	2	1	0	17	5	341	111	
16-3, 21	143.61	3.349	1	106	3	6	5	37	0	41	0	3	28	7	3	1	0	3	2	8	0	0	0	5	0	17	32	0	0	0	19	6	327	113	
16-4, 23	145.13	3.400	0	90	4	4	3	44	0	48	0	7	26	2	1	5	2	4	7	11	0	3	0	6	0	26	34	1	0	0	15	4	343	171	
16-4, 58	145.48	3.405	0	106	6	13	1	43	2	36	0	5	20	0	15	11	0	1	1	15	0	4	0	2	0	10	18	0	0	4	4	0	317	121	
16-4, 100	145.90	3.412	0	71	3	5	4	39	4	61	0	10	14	1	19	2	0	1	0	16	0	3	1	2	0	25	24	0	0	0	15	2	320	109	
16-4, 127	146.17	3.416	0	94	4	4	16	39	9	37	0	4	15	1	26	4	1	1	4	10	0	0	4	1	0	9	13	0	0	0	11	1	307	65	
18-3, 115	163.75	3.689	0	62	11	0	0	38	5	29	0	3	14	3	0	12	2	89	2	23	0	0	0	16	14	0	23	2	0	0	7	4	355	140	
18-5, 126	163.86	3.691	0	72	8	0	0	43	2	13	0	14	14	0	0	17	6	49	4	18	0	0	0	5	3	16	17	0	0	0	12	4	313	127	

Table 13. Planktic foraminifer census data, ODP Hole 608.

SAMPLE	DEPTH	AGE
10-6, 61	91.91	2.838
10-6, 76	92.06	2.846
10-6, 91	92.21	2.855
10-6, 106	92.36	2.863
10-6, 121	92.51	2.872
10-6, 136	92.68	2.881
10-7, 1	92.81	2.889
10-7, 11	92.91	2.895
11-1, 103	94.43	2.930
11-1, 141	94.81	2.933
11-2, 31	95.21	2.937
11-2, 71	95.61	2.944
11-2, 111	96.01	2.944
11-2, 148	96.38	2.947
11-3, 39	96.79	2.951
11-3, 81	97.21	2.955
11-3, 124	97.64	2.959
11-4, 11	98.01	2.982
11-4, 51	98.41	2.986
11-4, 91	98.81	2.989
11-4, 131	99.21	2.973
11-5, 21	99.61	2.978
11-5, 61	100	2.980
11-5, 103	100.4	2.984
11-5, 141	100.8	2.987
11-6, 31	101.2	2.992
11-6, 52	101.4	2.999
11-8, 113	102.3	3.020
11-6, 131	102.2	3.026
12-1, 27	103.3	3.061
12-1, 66	103.7	3.074
12-1, 93	103.9	3.083
12-2, 31	104.8	3.105
12-2, 71	105.2	3.115
12-2, 111	105.6	3.126
12-3, 1	106.3	3.136
12-3, 41	106.4	3.146
12-3, 81	108.8	3.156
Denticlobigerina allispira	0.24	
Gloibigerina bulboides	0.31	
Gloibigerina conglomerata	0.25	
Gloibigerina decoraperta	0.40	
Gloibigerina falconensis	0.29	
Gloibigerina incisa	0.00	
Gloibigerina praedigitala	0.02	
Gloibigerina pseudobesa	0.06	
Gloibigerina sp. 1.	0.13	
Gloibigerina woodi	0.10	
Gloibigerinella siphonifera	0.19	
Gloibigerinita glutinata	0.27	
Gloibigerinoides conglobatus	0.01	
Gloibigerinoides obliquus	0.12	
Gloibigerinoides ruber	0.02	
Gloibigerinoides sacculifer	0.22	
Gloibigerinoides spp.	0.48	
Gloiborotalia crassaformis	0.30	
Gloiborotalia crassula	0.00	
Gloiborotalia hirsuta	0.01	
Gloiborotalia menardi	0.56	
Gloiborotalia punctilata	0.03	
Gloiborotalia schila	0.00	
Gloiborotalia spp.	0.00	
Gloiborotalia tumida	0.00	
Globorotaloides hexagona	0.16	
Neogloboquadrina acostaensis	0.04	
(d) Neogloboquadrina atlantica	0.18	
(s) Neogloboquadrina atlantica	0.15	
Neogloboquadrina humerosa	0.04	
(d) Neogloboquadrina pachyderma	0.10	
(s) Neogloboquadrina pachyderma	0.10	
"dupac"	0.47	
Orbulina universa	0.07	
Sphaeroidenellopsis spp.	0.02	
Turborotalia quinqueloba	0.01	
Other	0.00	
Benthics	2.311	57
Total planktics	1.306	49
Fragments	0.312	45
	2.322	55
	1.314	80
	0.329	45
	5.316	70
	4.306	70
	1.316	55
	6.314	70
	7.306	75
	2.317	75
	4.318	130
	5.311	65
	8.318	60
	3.327	55
	7.362	80
	6.356	125
	5.318	95
	3.308	85
	3.341	65
	6.320	105
	3.309	90
	5.325	70
	5.308	84
	1.316	95
	3.338	80
	2.307	70
	0.336	97
	5.336	63
	2.323	32
	6.324	25
	1.317	56
	4.351	39
	9.311	63
	2.336	47

Table 14. Planktic foraminiferal census data, ODP Hole 609B.

SAMPLE	DEPTH	AGE	<i>Dentoglobigerina alispira</i>	<i>Globigerina bulloides</i>	<i>Globigerina decaperta</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisla</i>	<i>Globigerina praeditata</i>	<i>Globigerina quinqueloba</i>	<i>Globigerina woodi</i>	<i>Globigerinella aequilata</i>	<i>Globigerinita glutinata</i>	<i>Globigerinoides conglobatus</i>	<i>Globigerinoides obliquus</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides sacculifer</i>	<i>Globorotalia crassatiformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia spp.</i>	<i>Neoglobobadrina acostensis</i>	<i>Neoglobobadrina atlantica (d)</i>	<i>Neoglobobadrina atlantica (s)</i>	<i>Neoglobobadrina humerosa</i>	<i>Neoglobobadrina pachyderma (d)</i>	<i>Neoglobobadrina pachyderma (s)</i>	"dupac"	<i>Orbulina universa</i>	<i>Sphaeroidinellopsis spp.</i>	Other	Benthics	Total planktics	Fragments
17 - 6, 75	151.75	2.1769	0	8	0	0	40	0	0	0	0	2	0	1	0	0	0	0	0	3	2	0	137	15	18	10	11	1	30	1	1	21	8	301	77
20 - 1, 16	172.46	2.4923	1	26	0	14	3	0	1	2	0	14	0	0	1	0	16	0	0	21	4	0	38	3	134	0	3	1	10	0	0	19	1	311	146
23 - 3, 29	204.39	2.8561	0	12	0	6	0	0	0	14	1	13	0	0	2	1	9	2	0	33	7	0	107	9	20	26	2	1	18	8	0	30	0	321	140
23 - 3, 118	205.28	2.8662	0	15	0	3	2	0	0	3	0	7	0	0	0	0	11	0	0	182	4	0	2	4	31	1	0	4	0	0	1	22	3	292	427
23 - 4, 57	206.17	2.8764	0	9	0	4	2	0	0	1	1	14	0	0	0	0	30	1	0	168	2	0	8	1	47	0	0	3	0	7	0	22	5	320	210
23 - 4, 135	206.95	2.8853	0	20	0	0	6	0	1	3	0	25	0	0	0	1	72	4	0	76	2	2	5	7	85	0	3	4	1	2	0	21	8	340	268
23 - 5, 86	207.96	2.8968	0	14	0	2	0	1	8	6	1	18	0	1	1	0	10	0	0	104	2	1	117	2	19	0	1	1	7	2	0	8	3	326	86
23 - 6, 25	208.85	2.9069	0	17	0	0	3	0	4	3	1	22	0	0	2	0	16	0	0	80	4	0	77	7	30	0	2	1	6	1	0	21	3	297	216
23 - 6, 115	209.75	2.9172	0	19	0	2	3	0	0	5	0	11	0	0	0	0	9	0	0	87	1	0	123	4	37	7	0	2	6	4	0	15	3	335	100
23 - 7, 36	210.46	2.9246	0	10	0	1	2	0	0	1	0	12	0	0	0	0	12	1	0	108	5	0	42	3	72	19	0	1	8	2	0	11	2	310	107
24 - 1, 85	211.55	2.9355	0	5	0	1	2	0	1	3	0	23	0	0	0	1	28	3	0	148	2	0	44	1	26	6	0	4	0	0	0	11	4	309	130
24 - 2, 6	212.26	2.9426	0	27	0	1	6	0	8	8	3	37	0	0	0	0	21	2	0	84	5	0	99	5	18	14	5	2	13	3	0	14	16	375	173
24 - 2, 116	213.36	2.9536	0	19	0	7	2	0	0	10	0	42	0	0	1	0	7	2	0	127	3	3	90	3	15	5	3	1	5	1	0	12	2	358	185
24 - 3, 56	214.26	2.9626	0	57	0	4	0	2	9	5	1	38	0	1	4	0	43	0	0	1	9	0	117	1	14	10	6	2	0	1	1	26	0	352	155
24 - 3, 135	215.05	2.9705	0	10	0	1	2	0	11	17	2	26	0	0	0	0	44	12	0	3	1	0	107	2	11	30	0	3	3	0	22	1	310	80	
24 - 4, 87	216.07	2.9807	0	17	0	2	0	0	5	11	0	28	0	0	1	0	29	4	0	1	1	0	158	2	10	21	1	0	6	6	0	15	2	318	108
24 - 6, 16	218.36	3.0011	0	6	0	6	3	0	0	11	0	21	0	0	0	0	1	0	0	51	3	0	124	7	59	8	1	1	1	0	0	17	4	320	202
24 - 6, 127	219.47	3.0102	0	19	0	6	8	0	9	1	1	20	0	0	1	0	2	0	0	90	4	0	73	7	103	12	1	3	8	2	0	11	6	381	74
25 - 1, 38	220.68	3.0201	0	27	0	8	3	0	2	13	1	34	0	2	0	0	61	0	1	117	11	0	28	3	124	0	0	3	0	6	0	14	13	458	170
25 - 2, 16	221.96	3.0306	0	8	0	3	0	0	1	2	0	25	0	0	1	0	26	0	0	160	3	0	46	1	5	0	2	3	0	4	0	8	2	298	34
25 - 2, 135	223.15	3.0403	1	2	0	5	12	0	0	5	0	22	1	0	0	1	19	1	0	76	1	1	103	3	25	0	1	1	0	2	0	5	13	287	200
25 - 3, 108	224.38	3.0504	0	7	0	3	0	0	0	10	1	57	0	0	0	1	34	2	0	147	1	0	0	4	12	0	0	1	31	0	0	6	4	317	170
25 - 4, 81	225.61	3.0604	1	21	0	4	1	0	0	1	2	36	0	0	1	0	0	0	0	90	7	0	85	2	68	0	0	2	0	0	0	13	7	334	188
25 - 5, 55	226.85	3.0706	0	8	0	1	0	0	1	5	0	23	0	0	0	0	23	0	0	63	0	0	137	1	12	1	2	2	8	1	0	17	3	305	139
25 - 6, 28	228.05	3.0806	0	16	0	7	5	0	1	2	0	25	0	0	0	0	30	0	0	99	4	0	99	5	15	3	0	4	1	0	0	8	2	324	1
25 - 6, 95	228.75	3.0890	0	32	0	2	2	0	3	7	0	45	0	0	0	0	78	0	0	12	10	0	134	7	27	0	0	3	2	3	0	7	6	374	132
25 - 7, 22	229.52	3.0983	0	34	0	9	4	0	3	1	0	36	0	0	1	1	31	0	0	89	9	0	92	6	18	0	1	3	1	1	0	8	4	348	48
26 - 1, 16	230.06	3.1048	2	12	0	3	1	0	5	4	1	34	0	0	0	0	3	0	0	108	7	0	123	6	24	0	1	2	1	9	0	3	2	349	300
26 - 1, 84	230.74	3.1130	0	24	0	1	1	0	2	2	0	21	0	0	0	0	10	0	0	202	4	0	11	3	23	1	0	5	0	7	0	8	0	325	138
26 - 1, 136	231.26	3.1193	0	22	0	8	3	0	1	0	0	43	0	0	0	0	24	0	0	104	6	0	96	8	30	0	5	4	0	3	0	3	2	360	225
26 - 2, 65	232.05	3.1288	0	8	0	1	2	0	5	7	0	27	0	0	0	0	19	0	0	106	4	0	155	14	21	0	0	0	0	7	0	15	1	391	400
26 - 2, 130	232.70	3.1366	0	22	0	4	6	0	5	1	0	37	0	2	0	0	9	0	0	53	5	0	136	9	12	0	6	3	7	2	0	6	3	325	0
28 - 6, 134	257.94	3.7301	0	14	2	0	1	0	0	17	0	20	0	2	0	0	9	0	0	116	11	0	57	9	38	0	1	1	23	0	15	4	337	175	
30 - 1, 16	268.46	4.0534	0	16	0	0	3	0	1	22	0	27	0	0	0	0	6	0	0	117	2	0	89	18	32	6	0	2	0	2	0	19	1	362	225

Table 15. Planktic foraminifer census data, ODP Hole 610A.

SAMPLE	DEPTH	AGE	Fragments																														
			<i>Globigerina bulloides</i>	<i>Globigerina decoraperta</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisa</i>	<i>Globigerina woodi</i>	<i>Globigerinella aequilateralis</i>	<i>Globigerinita glutinata</i>	<i>Globigerinoides conglobatus</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides sacculifer</i>	<i>Globorotalia conomiozea</i>	<i>Globorotalia crassatiformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia puncticulata</i>	<i>Globorotalia quinqueloba</i>	<i>Globorotalia scitula</i>	<i>Globorotalia tumida</i>	<i>Neoglobobquadrina acostaensis</i>	<i>Neoglobobquadrina atlantica (d)</i>	<i>Neoglobobquadrina atlantica (s)</i>	<i>Neoglobobquadrina humerosa</i>	<i>Neoglobobquadrina pachyderma (d)</i>	<i>Neoglobobquadrina pachyderma (s)</i>	"dupac"	<i>Orbulina universa</i>	<i>Sphaeroidinellopsis spp.</i>	Other	Total planktics	Fragments	
13-1, 50	115.10	2.219	23	1	2	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	66	141	11	2	11	2	17	7	0	20	328	17	
13-3, 126	118.86	2.291	19	0	0	0	5	0	6	0	0	0	0	4	0	0	0	0	3	0	65	140	20	2	4	0	17	1	0	25	311	46	
16-4, 39	148.29	2.851	39	0	5	0	1	3	30	0	1	0	0	24	0	0	55	1	0	0	2	5	129	0	0	1	6	1	0	13	316	61	
16-4, 95	148.85	2.862	14	0	0	0	4	1	18	1	0	0	0	2	0	0	100	4	6	0	47	82	42	0	0	0	9	0	0	17	347	32	
16-5, 18	149.58	2.876	22	0	3	0	0	3	19	0	0	0	0	8	0	0	135	2	0	0	8	23	87	0	0	3	1	1	0	16	331	30	
16-5, 56	149.96	2.883	27	0	2	0	0	0	1	26	0	0	0	4	0	0	45	0	0	0	64	43	85	2	0	2	9	0	0	16	326	49	
16-5, 111	150.51	2.893	14	0	1	0	0	0	32	0	0	0	0	4	0	0	94	0	1	0	30	19	120	2	1	0	2	2	0	28	350	75	
16-6, 18	151.08	2.903	16	1	2	0	1	1	27	0	0	0	0	6	0	0	41	2	1	0	60	47	83	3	0	1	6	0	0	15	313	41	
16-6, 72	151.65	2.915	4	0	1	0	2	0	35	0	0	0	0	12	0	1	68	0	6	0	66	67	27	3	0	4	6	0	0	8	310	28	
16-CC, 12	152.52	2.933	10	0	4	0	3	1	20	0	0	0	0	48	0	0	1	4	4	0	68	62	63	0	3	3	3	1	0	11	309	35	
17-1, 24	153.24	2.952	13	0	2	0	9	0	50	0	0	0	0	42	0	0	4	8	1	0	83	64	28	0	2	0	4	0	0	5	315	43	
17-1, 60	153.60	2.961	14	0	1	0	9	0	54	0	0	0	0	26	0	0	4	7	1	0	11	118	35	0	0	0	4	0	0	22	306	25	
17-1, 95	153.95	2.970	18	0	2	0	4	0	29	0	0	0	0	21	0	0	20	1	2	0	50	109	31	0	1	1	9	5	0	20	323	25	
17-1, 128	154.28	2.978	9	0	0	9	5	0	23	0	0	0	4	22	0	0	84	0	3	0	55	59	41	0	0	1	3	5	0	10	333	16	
17-2, 17	154.67	2.988	11	0	2	5	0	1	33	0	0	1	1	22	41	0	56	2	5	0	32	122	27	0	0	0	1	1	2	0	12	377	21
17-2, 42	154.92	2.995	10	0	0	6	0	0	35	0	0	0	0	11	2	2	110	0	3	0	10	73	47	0	0	0	1	1	0	22	333	22	
17-2, 68	155.18	3.003	1	0	0	5	1	0	10	0	0	0	1	7	0	0	116	3	3	0	15	19	127	0	0	0	0	0	0	13	321	77	
17-2, 100	155.50	3.013	33	0	0	3	2	0	19	0	0	0	1	22	1	0	74	3	1	0	24	33	114	0	0	0	1	1	0	21	353	36	
17-2, 130	155.80	3.022	5	0	0	0	2	0	27	0	0	0	3	49	0	2	71	6	3	0	21	61	57	0	0	1	3	2	0	16	329	66	
17-3, 19	156.19	3.033	29	0	9	0	6	3	35	0	2	0	0	28	0	3	52	7	0	0	52	53	0	0	3	1	12	3	0	10	308	63	
17-3, 36	156.36	3.038	22	0	4	3	13	0	27	0	0	0	0	13	0	2	131	7	0	0	50	28	0	0	0	0	9	3	0	14	326	49	
17-3, 64	156.64	3.047	18	0	12	7	5	3	32	0	0	0	0	26	0	7	79	9	0	0	33	79	0	6	4	0	4	1	1	11	337	80	
17-3, 94	156.94	3.056	15	0	8	7	5	0	6	2	0	0	0	23	0	3	80	3	0	0	86	57	0	7	2	0	17	2	0	14	337	126	
17-3, 123	157.23	3.064	0	0	0	0	4	3	13	0	1	0	0	29	0	0	119	3	0	0	65	59	0	0	3	2	7	1	0	19	328	88	
17-4, 16	157.66	3.077	14	1	2	1	2	4	25	0	0	0	0	6	0	1	139	1	0	0	32	63	0	1	1	0	6	0	0	10	309	66	
17-4, 33	157.83	3.082	9	0	0	4	1	3	8	0	0	0	0	10	0	0	53	0	2	0	18	49	116	0	2	0	0	3	0	20	298	81	
17-4, 59	158.09	3.087	17	0	0	0	4	4	10	0	0	0	0	5	0	0	53	1	2	0	30	77	75	0	1	0	2	1	0	31	313	101	
17-4, 87	158.37	3.093	16	0	11	0	0	6	19	0	0	0	0	13	0	0	80	3	0	0	71	41	53	0	2	0	7	0	0	7	329	86	
17-4, 117	158.67	3.099	13	0	8	0	1	3	19	0	0	0	0	45	0	0	86	0	2	0	45	20	39	0	1	0	8	1	0	4	295	95	
17-4, 143	158.93	3.108	57	0	2	0	0	0	17	0	0	0	0	21	0	0	104	5	1	0	51	31	35	0	0	0	3	1	0	5	333	64	
17-5, 23	159.23	3.117	24	0	2	0	0	0	27	0	0	0	0	11	0	0	83	3	2	0	30	38	30	0	3	0	3	1	0	4	261	53	
21-5, 106	198.46	4.403	21	0	5	0	5	0	22	0	1	0	0	30	1	0	60	0	0	0	21	41	40	0	0	0	4	8	0	16	275	25	
21-6, 52	199.42	4.445	30	0	1	0	9	0	12	0	0	0	0	31	0	0	85	2	4	7	18	30	28	0	1	0	7	0	0	0	265	30	

Table 16. Planktic foraminifer census data, ODP Hole 646B.

Table 16. Planktic Foraminifera, Censu Data, GDP Hole 6405.																						
SAMPLE	DEPTH	AGE	<i>Globigerina bulboides</i>	<i>Globigerina falconensis</i>	<i>Globigerina praedigitata</i>	<i>Globigerina woodi</i>	<i>Globigerina decoraperta</i>	<i>Globigerinita glutinata</i>	<i>Globorotalia crassaformis</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia schultzei</i>	<i>Neoglobobulimina acostaensis</i>	<i>Neoglobobulimina atlantica (s)</i>	<i>Neoglobobulimina atlantica (d)</i>	<i>Neoglobobulimina pachyderma (s)</i>	<i>Neoglobobulimina pachyderma (d)</i>	"dupac"	<i>Orbulina universa</i>	<i>Turborotalia quinqueloba</i>	Other	Total planktics
29-5,60	271.90	3.207	1	0	0	0	0	0	0	0	0	0	369	0	1	1	0	0	0	0	372	
29-6,10	272.90	3.217	0	0	0	2	0	0	0	0	0	1	312	0	4	0	0	0	0	0	319	
29-6,110	273.90	3.226	1	0	2	0	1	0	0	0	0	0	287	9	6	0	0	0	1	0	307	
30-2,50	277.00	3.254	0	0	0	0	0	0	0	0	0	0	298	10	7	0	0	0	0	0	315	
30-2,140	277.90	3.255	0	0	0	0	0	0	0	0	0	1	182	3	1	0	0	0	0	0	187	
33-3,59	307.69	3.610	5	1	0	0	0	0	0	5	0	2	225	0	0	0	0	0	0	0	236	
33-4,11	308.71	3.624	1	0	0	1	0	0	0	0	0	0	11	2	1	0	0	0	0	0	16	
33-4,130	309.90	3.641	4	0	1	0	0	0	0	2	0	0	40	2	1	0	0	0	1	0	51	
33-5,100	311.10	3.656	6	0	0	0	0	0	0	2	0	2	279	6	0	1	0	0	2	1	299	
33-cc,30	311.90	3.670	0	0	0	0	0	0	0	6	1	0	299	9	1	4	0	0	3	2	325	
36-2,11	334.71	3.993	0	0	4	0	0	0	0	0	0	0	326	6	4	0	0	0	0	0	340	
36-2,109	335.69	4.007	0	0	0	0	0	0	0	0	0	1	318	5	2	0	0	0	0	0	326	
36-3,59	336.69	4.021	5	1	0	0	0	0	0	0	0	0	375	4	12	0	0	0	0	0	397	
36-4,11	337.71	4.036	10	2	0	0	0	0	0	43	0	7	306	3	3	0	0	2	4	0	380	
36-4,110	338.70	4.050	29	0	0	1	0	0	0	17	0	2	239	16	0	0	0	2	10	0	316	
36-5,59	339.69	4.064	32	1	0	0	0	2	0	23	0	3	292	10	0	0	0	3	5	3	374	
36-6,110	341.70	4.092	0	1	0	0	0	0	0	8	0	3	393	7	2	2	0	4	2	0	422	
36-7,30	342.40	4.102	1	0	1	0	0	1	0	0	0	0	441	6	0	1	0	0	0	0	451	
37-1,39	343.19	4.114	0	0	0	0	0	0	0	0	0	0	859	4	1	0	0	0	0	0	864	
37-1,141	344.21	4.128	48	1	0	1	0	2	0	9	0	1	167	8	1	0	0	0	0	3	261	
37-2,92	345.22	4.142	77	5	0	1	0	2	0	1	0	0	321	3	2	1	0	0	0	1	414	
37-3,40	346.20	4.156	2	0	0	0	0	0	0	3	0	0	337	6	2	0	0	0	0	1	351	
37-3,142	347.22	4.171	0	0	0	0	0	0	0	0	0	0	360	10	0	0	0	0	0	0	370	
37-4,90	348.20	4.165	0	0	0	0	0	0	0	0	0	0	172	6	0	0	0	0	0	0	178	
37-5,41	349.21	4.199	7	0	0	0	0	0	0	0	0	26	372	4	10	0	0	0	0	0	419	
37-5,130	350.10	4.212	5	0	0	0	0	0	0	1	0	6	182	5	2	0	0	2	0	1	206	
37-6,95	351.25	4.228	3	0	0	0	0	0	0	2	0	19	366	4	0	0	0	0	0	0	414	
38-1,40	352.80	4.250	13	0	0	0	0	0	0	4	0	3	317	5	6	0	0	0	0	0	346	
38-1,141	353.81	4.264	9	0	0	0	0	1	0	8	0	4	394	5	3	0	0	0	0	1	425	
38-3,40	355.80	4.293	14	1	0	2	0	1	0	31	1	2	221	4	0	1	0	0	0	2	280	
38-3,141	356.81	4.307	24	0	0	0	0	0	0	31	0	3	246	6	0	5	4	0	0	0	319	
38-5,141	359.81	4.349	0	0	0	0	0	0	0	0	0	7	335	3	1	0	0	0	0	0	346	
38-6,90	360.60	4.364	3	1	0	0	0	0	0	1	0	7	322	7	3	0	0	0	0	3	347	
38-7,20	361.60	4.375	2	0	0	0	0	0	0	0	0	4	96	1	0	0	0	0	0	0	103	
39-1,23	362.23	4.364	5	0	0	0	0	0	0	2	0	1	320	5	1	0	0	0	0	2	336	
39-1,120	363.20	4.396	28	0	0	0	0	0	0	6	0	7	338	3	11	1	0	0	0	0	392	
39-2,70	364.20	4.412	34	0	0	0	0	0	0	20	2	3	277	13	2	1	0	0	0	2	355	
39-3,20	365.20	4.426	7	0	0	0	0	0	0	4	0	12	266	7	37	0	0	0	0	2	335	
39-3,120	366.20	4.440	3	0	0	0	0	0	0	3	0	6	326	4	7	0	1	0	0	1	351	
39-4,60	367.30	4.456	5	0	2	0	0	1	0	3	0	11	316	6	6	0	0	0	0	1	353	
39-5,20	368.20	4.469	41	0	0	0	0	4	0	6	0	8	346	3	6	0	0	0	0	1	415	
39-5,101	369.01	4.460	2	0	0	0	0	0	0	0	0	8	360	0	4	0	0	0	0	4	378	
39-6,50	370.00	4.494	2	0	0	0	0	0	0	1	0	3	403	1	5	0	0	0	0	6	421	
39-7,11	371.11	4.510	6	0	0	0	0	0	0	0	0	12	265	4	7	0	0	0	0	0	294	
40-1,39	372.09	4.524	24	1	0	0	0	0	0	15	0	26	279	5	2	1	0	0	0	0	353	
40-1,141	373.11	4.538	10	0	0	0	0	0	0	6	0	24	320	9	3	0	0	0	0	1	373	
40-2,90	374.10	4.552	4	0	0	0	0	0	0	2	0	10	126	3	1	0	0	0	0	1	147	
40-3,39	375.09	4.566	23	0	0	0	0	0	0	11	0	20	210	7	1	1	0	0	0	1	274	
40-3,139	376.09	4.574	0	0	0	0	0	0	0	3	0	6	326	5	6	0	0	1	0	0	349	
40-4,69	377.09	4.578	0	0	0	0	0	0	0	6	0	5	326	7	5	0	0	0	0	0	349	
40-5,40	378.10	4.583	3	0	0	0	0	0	0	7	0	9	357	2	3	0	0	0	0	2	383	
40-5,130	379.00	4.587	0	0	0	0	0	4	0	1	0	2	342	1	9	0	0	0	0	0	359	
40-6,90	380.10	4.593	3	0	0	0	0	2	0	43	0	1	322	5	9	0	1	0	0	0	386	
40-7,40	381.10	4.598	15	0	0	0	0	0	0	1	0	6	390	1	13	0	1	0	0	0	427	
41-2,39	383.19	4.608	56	2	0	0	0	0	1	16	0	7	267	3	12	0	0	0	1	0	365	
41-2,139	384.19	4.612	10	0	0	0	0	0	0	0	0	3	363	3	5	0	0	0	0	0	384	
41-3,91	385.21	4.617	18	0	0	1	0	0	0	0	0	6	326	22	0	0	0	0	1	0	376	
41-4,40	386.20	4.622	0	0	0	0	0	0	0	0	0	0	328	4	48	3	0	0	0	1	384	
41-4,142	387.22	4.627	1	0	0	0	0	0	0	0	0	1	97	1	29	0	0	0	0	2	131	
41-5,91	388.21	4.632	4	0	0	0	0	0	0	0	0	2	349	4	19	1	0	0	0	0	379	
41-6,40	389.20	4.636	3	0	0	0	0	0	1	0	0	1	355	5	9	0	1	0	2	1	376	
41-6,100	389.60	4.639	0	1	0	1	0	0	0	0	0	0	314	1	17	1	0	0	0	0	335	
42-1,40	391.40	4.647	15	0	0	0	0	1	0	0	1	5	406	0	20	0	0	0	0	0	446	
42-1,140	392.40	4.652	15	0	0	0	0	0	0	0	0	1	293	2	10	0	0	1	0	2	324	
42-2,90	393.40	4.656	11	0	0	0	0	0	0	0	0	3	90	7	2	0	0	0	0	2	115	
42-3,37	394.37	4.661	18	0	0	0	0	0	0	0	0	3	288	9	9	1	2	0	0	1	331	
42-4,91	396.41	4.671	15	0	0	0	0	0	0	0	0	2	324	6	4	2	0	0	1	0	354	
42-5,39	397.39	4.675	30	0	0	0	2	0	0	0	0	2	265									

Table 18. Planktic foraminiferal census data, ODP Hole 661A.

SAMPLE		DEPTH	AGE	Fragments																																			
				<i>Dentoglobigerina altispira</i>	<i>Globigerina bulloides</i>	<i>Globigerina decoraperta</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisa</i>	<i>Globigerina praeditata</i>	<i>Globigerina woodi</i>	<i>Globigenella aequilateralis</i>	<i>Globigeninita glutinata</i>	<i>Globigeninoides conglobatus</i>	<i>Globigeninoides obliquus</i>	<i>Globigeninoides ruber</i>	<i>Globigeninoides sacculifer</i>	<i>Globorotalia crassaliformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardii</i>	<i>Globorotalia pumilio</i>	<i>Globorotalia puncticulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia spp.</i>	<i>Globorotalia tumida</i>	<i>Neoglobobuadrina acostensis</i>	<i>Neoglobobuadrina humerosa</i>	<i>Neoglobobuadrina pachyderma (d)</i>	<i>Neoglobobuadrina pachyderma (s)</i>	<i>Neoglobobuadrina spp.</i>	"dupac"	<i>Orbulina universa</i>	<i>Pulleniatina obliquiloculata</i>	<i>Sphaeroidinellopsis spp.</i>	<i>Turborotalia quinqueloba</i>	Other			
5H-6-67	38.27	2.85		1	39	1	6	49	146	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
6H-2-80	41.91	2.86		0	37	6	0	0	0	0	3	6	2	21	70	60	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6H-5-15	45.75	2.87		31	27	0	0	2	0	0	4	11	2	22	23	53	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6H-5-34	45.94	2.88		22	21	0	0	0	0	5	6	12	0	37	20	37	14	0	0	31	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6H-5-58	46.18	2.89		34	8	0	0	0	0	8	3	19	1	34	31	48	3	0	0	25	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
6H-5-80	46.40	2.90		19	23	0	15	0	0	9	5	16	0	38	24	12	8	0	0	21	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
6H-5-104	46.64	2.91		32	16	0	0	2	0	13	0	7	3	32	18	58	13	0	0	30	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
6H-5-128	46.88	2.92		20	26	2	0	0	0	1	3	8	0	24	28	69	15	0	0	30	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
6H-6-15	47.25	2.93		19	47	0	1	0	0	6	4	14	1	21	33	46	9	0	0	17	0	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
6H-6-30	47.40	2.94		28	25	2	0	1	0	3	0	7	0	24	24	66	4	0	0	29	0	16	1	0	0	0	9	5	50	0	0	3	5	7	0	0	0	4	
6H-6-48	47.58	2.95		29	29	1	0	2	0	5	3	14	0	36	38	31	12	0	0	27	0	14	3	0	0	0	10	7	3	0	0	4	10	8	0	0	0	5	
6H-6-70	47.80	2.96		3	30	0	0	1	0	2	1	12	0	42	31	62	7	0	0	29	0	14	1	0	0	9	5	38	1	0	1	8	10	0	0	0	1		
6H-6-95	48.05	2.97		7	13	0	0	5	0	3	2	3	0	12	9	139	12	0	0	58	0	0	3	0	0	6	0	31	0	0	6	1	8	0	0	0	0	4	
6H-6-119	48.29	2.98		16	20	0	0	1	0	0	5	8	0	32	27	71	10	0	0	42	0	2	1	1	0	18	4	53	0	0	4	6	1	0	1	0	1		
6H-6-135	48.45	2.99		14	16	0	0	2	1	0	3	8	1	17	15	99	16	0	0	32	0	0	3	0	0	9	4	74	0	0	5	1	5	0	3	0	2		
6H-7-10	48.70	3.00		13	17	0	0	2	1	17	2	3	1	20	14	55	13	1	0	29	0	0	2	0	0	6	14	7	3	0	0	6	1	5	0	18	8	6	
7H-1-15	49.25	3.01		31	14	1	0	1	0	17	2	4	1	15	32	72	9	0	0	40	0	5	0	0	0	6	7	42	0	0	3	2	9	0	36	4	5		
7H-1-36	49.46	3.02		24	9	0	0	0	0	4	0	4	0	9	8	90	8	0	0	24	0	0	2	1	1	12	39	0	0	0	11	1	5	0	47	0	5		
7H-1-59	49.69	3.03		26	8	0	0	0	0	14	1	10	0	11	17	51	10	0	0	47	0	0	2	1	4	1	73	0	0	3	2	3	1	29	1	3	3		
7H-1-83	49.93	3.04		25	7	0	0	1	0	7	5	10	0	11	23	52	7	0	0	34	1	0	0	0	0	3	6	62	0	0	7	1	3	0	43	0	1		
7H-1-105	50.15	3.05		33	11	0	0	2	0	8	1	16	0	25	34	57	3	0	0	3	1	3	4	0	0	0	3	36	0	0	5	1	11	3	15	0	2		
7H-1-130	50.40	3.06		41	10	1	0	4	0	11	0	6	3	15	6	43	14	1	0	16	1	5	0	1	1	5	2	67	0	0	5	2	7	0	31	1	1		
7H-2-15	50.75	3.07		35	23	0	0	0	0	7	7	4	1	22	17	67	5	0	0	50	0	4	0	1	5	2	52	0	0	6	2	3	0	18	1	2	0		
7H-2-30	50.90	3.08		32	12	0	0	1	0	10	4	6	0	16	14	33	2	0	0	26	0	4	3	2	5	4	51	0	0	1	0	8	0	21	0	2			
7H-2-50	51.10	3.09		0	12	0	0	0	0	13	1	3	0	15	13	56	13	0	0	32	2	8	3	3	0	0	4	49	0	0	8	3	0	0	32	0	4		
7H-2-73	51.33	3.10		32	9	0	0	0	0	27	6	7	1	31	29	61	6	0	0	6	1	15	3	0	0	0	11	39	0	0	4	0	4	4	24	9	2		
7H-2-97	51.57	3.11		40	15	0	0	1	0	9	0	1	0	10	10	65	7	0	2	1	25	9	1	1	7	2	19	1	0	4	1	7	2	19	1	6			
7H-2-120	51.80	3.12		22	8	0	0	0	0	18	1	6	0	24	19	55	9	0	2	24	0	16	8	0	0	5	42	0	0	9	1	4	2	19	0	4			
7H-2-143	52.03	3.13		21	15	2	0	0	0	24	0	3	0	23	14	39	7	0	1	26	0	6	4	4	0	0	61	11	0	0	7	4	0	1	11	1	4		
7H-3-17	52.27	3.14		19	10	0	0	1	0	8	0	0	1	8	9	56	4	0	1	19	0	2	7	2	0	0	1	76	0	0	3	0	2	1	57	0	8		
7H-3-40	52.50	3.15		49	16	0	0	0	2	3	2	3	0	31	14	50	11	0	0	35	0	0	9	0	0	0	2	51	0	0	10	3	3	0	15	1	2		
7H-3-64	52.74	3.16		0	16	0	0	0	0	2	18	0	3	42	22	44	4	0	1	31	0	1	6	0	0	0	11	53	0	0	5	1	2	1	22	0	5		
7H-5-65	55.75	3.17		30	7	0	0	0	0	5	3	3	1	22	1	59	8	0	0	70	0	0	1	0	0	0	6	28	0	0	3	1	4	0	42	0	2		
8H-1-15	58.75	3.18		21	19	0	0	0	0	0	23	4	3	0	55	2	30	9	0	50	3	6	2	3	0	0	4	35	0	0	8	6	7	0	17	0	7		

Table 19. Planktic foraminifer census data, ODP Hole 667A.

DEPTH			AGE																																					Benthics	Total planktics	Fragments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Table 20. Planktic foraminifer census data, ODP Hole 672.

SAMPLE	DEPTH	AGE	<i>Candella nitida</i>	<i>Dentoglobigerina alispira</i>	<i>Globigerina bulloides</i>	<i>Globigerina conglomerata</i>	<i>Globigerina decoraperta</i>	<i>Globigerina falconensis</i>	<i>Globigerina incisa</i>	<i>Globigerina praedigitata</i>	<i>Globigerina pseudobesa</i>	<i>Globigerina sp. 1</i>	<i>Globigerina woodi</i>	<i>Globigerinella aequilata</i>	<i>Globigerinella glutinata</i>	<i>Globigerinoides conglobatus</i>	<i>Globigerinoides obliquus</i>	<i>Globigerinoides ruber</i>	<i>Globigerinoides sacculifer</i>	<i>Globigerinoides spp.</i>	<i>Globorotalia crassaliformis</i>	<i>Globorotalia hirsuta</i>	<i>Globorotalia margaritae</i>	<i>Globorotalia menardii</i>	<i>Globorotalia punctulata</i>	<i>Globorotalia scitula</i>	<i>Globorotalia spp.</i>	<i>Globorotalia tosaensis</i>	<i>Globorotalia tumida</i>	<i>Globorotaloides hexagona</i>	<i>Neoglobobuccadina acostaensis</i>	<i>Neoglobobuccadina humerosa</i>	<i>Neoglobobuccadina pachyderma (d)</i>	<i>Neoglobobuccadina spp.</i>	<i>Orbulina universa</i>	<i>Pulleniatina obliquiloculata</i>	<i>Sphaeroidinellopsis spp.</i>	Other	Benthics	Total planktics	Fragments				
7-2, 23	52.53	2.523	0	0	3	0	0	0	1	2	0	0	0	0	0	1	65	2	19	6	0	48	0	1	0	3	1	0	0	0	0	0	0	0	0	18	0	133	12	130	303	>3,000			
7-4, 101	56.31	2.638	0	0	23	0	0	0	1	2	0	0	7	0	4	19	55	102	61	0	23	0	0	0	0	23	2	0	0	0	0	0	7	31	0	0	12	0	0	1	4	372	>350		
7-5, 20	57.00	2.660	0	0	6	0	5	0	0	1	0	0	25	0	13	8	19	122	36	0	6	0	0	0	0	0	0	0	0	0	0	12	46	2	0	5	0	4	0	2	346	189			
8-1, 101	61.31	2.798	0	0	4	0	7	0	3	3	0	0	29	0	26	20	29	70	30	10	11	0	0	0	0	34	1	0	0	3	0	6	48	3	5	2	0	10	1	1	357	228			
8-3, 101	64.31	2.894	0	37	1	0	2	0	0	1	0	1	20	2	12	7	18	84	34	7	10	0	0	0	0	16	1	2	0	0	0	6	27	2	1	5	0	17	0	1	313	164			
8-5, 76	67.06	3.024	0	29	8	3	1	0	0	0	0	0	7	1	22	46	60	36	9	0	4	0	0	0	0	23	0	0	0	0	5	4	60	1	4	7	0	1	1	1	331	395			
8-5, 126	67.56	3.048	1	29	4	3	0	0	0	0	0	0	15	1	20	50	12	40	54	0	9	0	0	0	11	0	0	1	0	0	0	6	55	0	2	7	0	3	0	2	323	280			
8-6, 26	68.06	3.072	3	54	0	1	0	0	0	0	0	0	9	1	18	34	27	37	37	1	12	4	0	0	0	23	0	0	0	0	0	5	35	0	0	6	0	12	3	3	319	252			
8-6, 76	68.56	3.096	1	32	0	1	0	0	0	2	0	0	7	0	4	55	30	27	44	0	12	2	0	0	0	28	0	4	0	0	0	18	34	0	0	6	0	13	2	1	320	479			
8-6, 121	69.01	3.118	0	34	6	0	1	0	0	0	0	8	2	22	51	41	47	49	1	6	0	0	0	0	0	0	2	0	0	0	0	2	36	5	0	12	0	8	0	2	402	236			
8-7, 31	69.61	3.147	0	13	1	4	0	0	1	0	0	0	4	1	0	28	23	6	150	2	6	2	0	0	0	41	0	0	0	0	0	5	35	1	0	17	0	11	0	6	352	840			
9-1, 91	70.71	3.200	1	43	3	4	0	0	0	0	0	0	17	0	20	42	22	60	56	0	4	1	0	0	23	0	2	0	0	0	0	6	45	4	1	6	0	5	0	0	365	125			
9-1, 111	70.91	3.210	1	33	4	10	0	0	1	2	0	0	1	0	12	31	18	15	85	0	1	1	0	0	13	0	3	1	0	0	0	3	49	6	2	3	0	32	2	2	327	534			
9-1, 141	71.21	3.225	0	36	2	2	0	0	0	0	0	0	7	2	13	25	30	34	83	0	0	7	0	0	37	0	0	0	0	0	0	8	60	3	0	4	0	11	3	1	368	273			
9-2, 16	71.46	3.237	0	52	5	2	0	1	0	1	0	0	5	0	10	36	28	42	68	0	0	9	0	0	0	0	0	0	0	0	0	3	64	1	0	3	0	26	1	1	362	384			
9-2, 44	71.74	3.250	2	41	2	5	0	2	0	1	0	0	5	2	11	25	29	34	77	0	0	0	0	0	29	0	7	0	0	0	0	5	66	3	1	2	0	22	6	3	372	301			
9-2, 66	71.96	3.261	3	1	4	6	0	0	0	1	0	2	25	0	17	21	15	42	87	2	0	3	0	0	16	0	5	0	0	0	0	1	86	1	6	7	0	13	4	3	369	195			
9-2, 91	72.21	3.273	2	21	2	3	0	0	0	2	0	0	2	0	9	29	32	30	139	2	0	3	0	0	17	0	3	1	0	0	0	3	62	0	2	2	0	8	1	8	377	712			
9-2, 116	72.46	3.285	2	30	3	10	0	0	1	3	0	1	1	1	2	26	23	16	107	1	0	9	0	0	0	4	0	3	2	0	0	2	4	39	0	2	23	15	40	2	11	346	1604		
9-2, 141	72.71	3.297	0	10	4	5	0	0	1	14	0	0	1	0	4	12	17	10	24	72	0	0	10	0	15	0	3	0	1	2	0	1	48	1	1	48	1	2	23	15	40	2	42	381	2700
9-3, 16	72.96	3.309	3	34	2	6	0	0	1	2	0	1	0	4	12	17	10	24	72	0	0	0	0	0	0	0	0	0	0	0	0	6	1	46	2	3	4	4	49	5	3	331	439		
9-3, 43	73.23	3.322	0	34	9	3	0	0	0	11	2	0	1	0	8	11	15	37	59	0	0	2	0	0	23	0	3	0	0	0	0	10	1	65	0	2	2	20	45	1	8	363	683		
9-3, 66	73.46	3.333	0	2	1	1	0	0	2	8	0	0	1	0	17	16	16	56	7	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	20	3	170	1	34	336	1316			
9-3, 91	73.71	3.345	0	33	5	2	0	2	5	2	0	0	18	3	15	4	28	96	38	1	2	0	0	0	24	0	3	0	0	0	0	3	0	48	0	0	4	17	25	0	3	378	269		
9-3, 117	73.97	3.358	0	13	4	4	0	0	12	6	0	0	0	0	3	20	17	10	52	0	0	0	0	0	0	0	0	0	0	0	0	1	41	0	0	21	36	130	2	16	373	1920			
9-3, 141	74.21	3.370	3	45	2	2	0	10	3	0	0	1	7	2	12	8	10	40	113	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	47	0	0	5	0	7	3	0	378	423	
9-4, 16	74.46	3.382	0	50	1	3	0	0	16	1	0	0	7	2	12	8	10	40	113	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	11	0	27	2	6	376	872		
9-4, 41	74.71	3.394	0	1	3	2	0	0	2	11	0	0	4	0	0	32	27	31	48	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16	0	155	3	82	364	2832		
9-4, 66	74.96	3.406	1	23	7	3	0	0	1	2	0	0	4	1	17	12	29	50	91	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	25	1	10	366	734		
9-4, 91	75.21	3.418	0	11	2	7	0	0	13	9	0	0	0	0	7	16	44	46	97	3	10	0	0	0	8	0	3	0	0	0	0	2	3	4	0	0	20	0	26	0	6	361	1104		
9-4, 113	75.43	3.429	1	26	3	4	0	0	19	3	0	0	1	2	7	23	14	39	86	2	12	0	0	0	24	0	6	0	0	0	0	0	0	0	2	1	14	0	32	1	4	369	862		
9-5, 101	76.81	3.495	0	6	1	4	0	0	7	8	0	0	1	1	0	21	23	17	58	0	10	0	0	0	62	0	0	0	0																