Table 8. Distribution and relative abundances of diatoms, Hole 1018A.

Geologic age	North Pacific diatom zone	Numeric age (Ma)*	Core, section	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	*Actinocyclus curvatulus*	*Actinocyclus ehrenbergii*	*Actinocyclus elliptic*us f. *elongatus*	*Actinocyclus ingens*	*Actinocyclus oculatus*	*Actinocyclus tenellus*	*Actinoptychus senarius*	*Actinoptychus splendens*	*Amphora* sp.	*Asteromphalus robustus*	*Aulacoseira granulata*	*Aulacoseira italica*	*Auliscus* sp.	*Azpeitia nodulifera*	*Biddulphia aurita*	*Cocconeis californica*	*Cocconeis* cf. *californica*	*Cocconeis costata*	*Cocconeis decipiens*	*Cocconeis scutellum*	*Cocconeis* sp.	*Coscinodiscus asteromphalus*	*Coscinodiscus lewisianus*	*Coscinodiscus marginatus*	*Coscinodiscus radiatus*	*Coscinodiscus* sp.	*Cyclotella* sp.	*Cymbella* sp.	*Delphineis* spp.	*Denticula* sp.	*Denticulopsis hyalina*	*Denticulopsis lauta*	*Denticulopsis lauta* s.l.	*Denticulopsis simonsenii*	*Epithemia* sp.	*Eunotia* sp.	*Fragilariopsis doliola*	*Gomphonema* sp.	*Grammatophora* sp.	*Hemiaulus polymorphus*
			167-1018A-																																															
			1H-CC	4.90	–0.12	4.78	T	P								C				R				R											F	R													
			2H-CC	14.40	1.04	15.44	R	P								F		R		R										R															T		T		
			3H-CC	23.90	3.05	26.95	F	P								R				R	R					R																							
	NPD 12		4H-CC	33.40	4.41	37.81	C	M	Coastal	R						R				R																															
			5H-CC	42.90	4.99	47.89	T	P																												T									T					
			6H-CC	52.40	5.55	57.95	R	P					T		T	R	T			R																T							T							T
			7H-CC	61.90	6.61	68.51	R	P																						T										T			T				T		
		0.30	8H-CC	71.40	7.44	78.84	C	M	Coastal	R														T			T						T													T			
	NPD 11		9H-CC	80.90	8.64	89.54	R	P								R															T								T										
			10H-CC	90.40	8.94	99.34	C	M								R				T		T		T	R		T																			T			
		1.01	11X-CC	99.10	10.17	109.27	A	M	Coastal/oceanic	T				T			T			R				T																					R			
			12X-CC	108.70	10.80	119.50	F	M	Coastal							R				F	R																			T	T			R					
Pleistocene			13X-CC	118.30	13.62	131.92	A	M	Coastal	T						R				R			R		F				R						R	T		R							T			
			14X-CC	128.00	14.05	142.05	R	P					T																				T								T				T		T	
			15X-CC	137.70	14.31	152.01	A	M/G	Coastal/oceanic	T	R					R	T												T		T				R									R		R			
			16X-CC	147.30	14.48	161.78	A	M	Coastal/oceanic	R						F				T				R									R																
			17X-CC	156.90	13.39	170.29	F	P	Coastal				T							T																							T						
	NPD 10		18X-CC	166.50	17.41	183.91	C	M	Coastal/oceanic	R						T	T			T													R																
			19X-CC	176.10	17.41	193.51	C	M	Coastal	R						R																												R					
		1.58	20X-CC	185.70	16.97	202.67	C	M	Coastal/oceanic					R		R	T			T													R															R	
			21X-CC	195.30	16.97	212.27	A	P	Coastal	R						R															T		R	R															
			22X-CC	204.90	18.47	223.37	A	P	Coastal							R																		R															
			23X-CC	214.50	18.47	232.97	A	M	Coastal/oceanic	R						R								R									R																
			24X-CC	224.20	18.47	242.67	R	P	Coastal				R	R				R									R										R							R					
			25X-CC	233.80	20.23	254.03	A	P/M	Coastal/oceanic	R						R							F	R							T		R	R										R					
		2.00	26X-CC	243.50	20.23	263.73	A	M/G	Coastal/oceanic					R										R			R						R											R					
			27X-CC	253.00	20.32	273.32	A	P/M	Coastal/oceanic							R							R						R					R															
			28X-CC	262.50	19.71	282.21	R	P								R											R		R				R	R												R			
			29X-CC	272.20	19.71	291.91	C	P/M	Coastal	R					R								R						R				R											R			R		
			30X-CC	281.80	19.69	301.49	A	M	Oceanic							R											R						R	R															
			31X-CC	291.50	19.69	311.19	C	P/M	Coastal	R				R		R				R													R											R					
	NPD 9	2.35	32X-CC	301.10	19.69	320.79	A	M	Coastal	C													C										A																
			33X-CC	310.70	19.69	330.39	A	P/M	Coastal																			T					C																
			34X-CC	320.30	19.69	339.99	A	M/G	Coastal							R				R													C											R				R	
			35X-CC	330.00	19.69	349.69	C	P	Coastal										R	R													C																
late Pliocene			36X-CC	339.70	19.69	359.39	C	M	Coastal					R		R											R	R				R	C				R							R					
			37X-CC	349.40	19.69	369.09	C	P	Coastal														R										C											R				R	
			38X-CC	359.00	19.69	378.69	C	P/M	Coastal	R													R								R		C	R			R												
		2.68	39X-CC	368.70	19.69	388.39	A	M	Coastal							R							R						R				C	R															
			40X-CC	378.30	19.69	397.99	F	P	Coastal			R				R		R									R	R	R	R			C																
			41X-CC	387.90	19.69	407.59	R	P								R				R							R		R				F	R								R							
	NPD 8		42X-CC	397.50	19.69	417.19	R	P					R	R		R											R		R				R																
			43X-CC	407.00	19.69	426.69	R	P								R														R			R																
			44X-CC	416.70	19.69	436.39	C	P															R						R				R							R									
			45X-CC	426.20	19.69	445.89	F	P/M							R	R			R				R	R									F							R				R					R	

Notes: * = Cande and Kent, 1995. Abundance: A = abundant, C = common, F = few, R = rare, and T = trace. Preservation: G = good, M = moderate, and P = poor. For complete definition of terms, see "Techniques" section of this chapter.

Table 8 (continued).

Geologic age	North Pacific diatom zone	Numeric age (Ma)*	Core, section	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	*Hemidiscus cuneiformis*	*Hyalodiscus* sp.	*Navicula* sp.	*Neodenticula kamtschatica*	*Neodenticula koizumii*	*Neodenticula seminae*	*Neodenticula* cf. *seminae*	*N.* sp. A sensu Akiba and Yanagisawa	*Nitzschia fossilis*	*Nitzschia granulata*	*Nitzschia marina*	*Nitzschia porteri*	*Nitzschia punctata*	*Nitzschia reinholdii*	*Nitzschia* sp.	*Opephora* sp.	*Paralia sulcata*	*Proboscia barboi*	*Proboscia curvirostris*	*Rhaphoneis* spp.	*Rhopalodia* sp.	*Rhizosolenia styliformis*	*Stephanopyxis dimorpha*	*Stephanopyxis turris*	*Stictodiscus* sp.	*Surirella* sp.	*Thalassionema nitzschioides*	*Thalassionema nitzschioides* v. *parva*	*Thalassionema robusta*	*Thalassionema schraderi*	*Thalassiosira antiqua*	*Thalassiosira convexa*	*Thalassiosira eccentrica*	*Thalassiosira leptopus*	*Thalassiosira nidulus*	*Thalassiosira oestrupii*	*Thalassiosira* spp.	*Thalassiothrix longissima*	*Thalassiothrix* spp.
			167-1018A-																																															
			1H-CC	4.90	–0.12	4.78	T	P				R			T								R			R							R			R										F			
			2H-CC	14.40	1.04	15.44	R	P							R											R				R		R	C			R							R	R						
			3H-CC	23.90	3.05	26.95	F	P																		F						R	C			F								R						
	NPD 12		4H-CC	33.40	4.41	37.81	C	M	Coastal			R																				C	A																R	
			5H-CC	42.90	4.99	47.89	T	P				T			T																																			
			6H-CC	52.40	5.55	57.95	R	P																									T																	
			7H-CC	61.90	6.61	68.51	R	P							F					T						T			T			T	R				T													
		0.30	8H-CC	71.40	7.44	78.84	C	M	Coastal						F					R							T	F				C	A			R							T	R						
	NPD 11		9H-CC	80.90	8.64	89.54	R	P				T			R													C				F	F																	
			10H-CC	90.40	8.94	99.34	C	M				T			F					R	T					T					T		R											T					F	
		1.01	11X-CC	99.10	10.17	109.27	A	M	Coastal/oceanic			R			C					R						T	R	F				F	C											R					C	C
			12X-CC	108.70	10.80	119.50	F	M	Coastal						R																	C	C	T		R								R				T			
Pleistocene			13X-CC	118.30	13.62	131.92	A	M	Coastal					T	C					R			R				R	R				A	A																R	
			14X-CC	128.00	14.05	142.05	R	P					T		T									T								R	R			T														
			15X-CC	137.70	14.31	152.01	A	M/G	Coastal/oceanic				R	T	A					R			R				R	F				A	A			R								R					R	
			16X-CC	147.30	14.48	161.78	A	M	Coastal/oceanic			R		T	C								R					F	R			A	A											R					R	
			17X-CC	156.90	13.39	170.29	F	P	Coastal	R		T	T		R										R	T						C	C																	
	NPD 10		18X-CC	166.50	17.41	183.91	C	M	Coastal/oceanic				T		C		T			T							T	F				C	F															R	F	F
			19X-CC	176.10	17.41	193.51	C	M	Coastal						R												R	R	R			C	C														R			
		1.58	20X-CC	185.70	16.97	202.67	C	M	Coastal/oceanic					T	C													F				C	C			R														
			21X-CC	195.30	16.97	212.27	A	P	Coastal						F												R					C	C																	
			22X-CC	204.90	18.47	223.37	A	P	Coastal						F								R				R					A	A											R	R				R	
			23X-CC	214.50	18.47	232.97	A	M	Coastal/oceanic	C				T	C		R			R			R			R	F					R	R			R											R		F	
			24X-CC	224.20	18.47	242.67	R	P	Coastal	R		R			R		R															C	C			R														
			25X-CC	233.80	20.23	254.03	A	P/M	Coastal/oceanic	F					C					R				R				F		R			F	F										R			R		R	
		2.00	26X-CC	243.50	20.23	263.73	A	M/G	Coastal/oceanic					R	A		R						R			R	F					F	F											R						
			27X-CC	253.00	20.32	273.32	A	P/M	Coastal/oceanic	F				R	C		R						R				F					F	F			R								R						
			28X-CC	262.50	19.71	282.21	R	P		R		R			T								R			R	R					C	F								T								R	
			29X-CC	272.20	19.71	291.91	C	P/M	Coastal					R	R					R							C					C	C								T				R					
			30X-CC	281.80	19.69	301.49	A	M	Oceanic	C				R	F												C					F	F			R					T								R	
			31X-CC	291.50	19.69	311.19	C	P/M	Coastal						R			R					R				R					A	A								T						R			R
	NPD 9	2.35	32X-CC	301.10	19.69	320.79	A	M	Coastal	T					F		R										C					C	C			R						F		R		T		R	
			33X-CC	310.70	19.69	330.39	A	P/M	Coastal					R	R								R				C				T	A	A			R							R					F	
			34X-CC	320.30	19.69	339.99	A	M/G	Coastal					R	R												C					D	C								T	R							C	
			35X-CC	330.00	19.69	349.69	C	P	Coastal	R				T	R								R	R			F					C	C							R	T								F	C
late Pliocene			36X-CC	339.70	19.69	359.39	C	M	Coastal						R		R	R						R		R	C					T	C			R					T	R							F	
			37X-CC	349.40	19.69	369.09	C	P	Coastal			R		R	R												C			R		F	C									F							F	
			38X-CC	359.00	19.69	378.69	C	P/M	Coastal	R					R			R								R	C					F	C		R									R					C	
		2.68	39X-CC	368.70	19.69	388.39	A	M	Coastal	R			R	F	F		R						R				C					F	C									R				R		C	R
			40X-CC	378.30	19.69	397.99	F	P	Coastal			R												R			F					F	C									F				R		R	
			41X-CC	387.90	19.69	407.59	R	P							R												F		R			F	F			R		R			R	R			R		F	
	NPD 8		42X-CC	397.50	19.69	417.19	R	P						R	R				R				R			R	F					R	F		R							R					R	
			43X-CC	407.00	19.69	426.69	R	P		R			R	R												R	R					R						R		T	R						R	
			44X-CC	416.70	19.69	436.39	C	P		R	R											R				R	R		R			R				R		R		R	R				R		R	
			45X-CC	426.20	19.69	445.89	F	P/M					F			R										R					R	F			R	R	R			R				F			