

Appendix A

Data for all of the cruises, stations and depths used in this study. It also includes, for relevant samples, the average and standard deviation of paired estimates of total Chl *a* (µg/l), Chl *a* >10 µm (µg/l), % Chl *a* >10 µm, euphotic zone depth (m), integrated Chl *a* (mg/m²), integrated nitrate (mmol/m²), temperature (°C), salinity (psu), and concentrations of the inorganic nutrients phosphate, ammonium, silicate and nitrate (all in µM). “ND” denotes missing data.

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)									
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		(mg/m ²)	S.D.																
Aug-98	NH-05	1	17.81	0.67	16.83	0.75	94.7	7.8	9	144	5	133	10.3	33.24	1.32	0.62	12.06	7.66									
		5	17.89	0.56																10.4	33.23	1.45	0.77	15.13	11.50		
		10	12.32	0.56	11.07	0.72	90.1	10.0														10.2	33.25	1.89	1.15	24.46	18.64
		15	6.13	1.23																		9.8	33.29	2.08	0.88	30.50	22.89
		20	2.07	0.07	1.46	0.15	70.7	9.7														8.8	33.37	1.84	0.83	30.60	20.61
		25	0.76	0.00																		8.2	33.61	2.20	0.30	35.54	26.27
		30	0.73	0.03																		8.0	33.69	2.32	0.00	42.57	28.85
		40	2.09	0.10																		7.8	33.81	2.60	0.05	54.54	30.34
		52	4.04	0.20																		7.8	33.81	2.63	0.21	56.61	30.11
Aug-98	NH-15	1	12.92	0.13	11.97	0.21	92.7	2.5	11	139	5	27	12.0	32.42	0.60	0.52	5.93	1.88									
		5	14.27	0.77																	11.6	32.54	0.60	0.36	7.02	2.39	
		10	14.18	0.38	12.92	0.44	91.2	5.6														11.5	32.60	0.63	0.36	7.45	2.88
		20	2.28	0.26	0.79	0.32	35.9	18.2														9.6	32.55	1.11	0.25	16.22	9.57
		30	0.82	0.09																		8.9	32.79	1.36	0.07	17.64	14.02
		50	0.49	0.00																		8.8	33.27	1.97	0.09	31.03	25.51
		60	0.07	0.00																		8.5	33.56	2.09	0.08	33.76	26.97
		70	0.05	0.02																		8.4	33.66	2.63	0.24	50.68	30.56
		85	0.13	0.00																		7.9	33.79	1.07	0.43	10.65	5.82
Aug-98	NH-25	1	0.59	0.01	0.16	0.02	26.6	3.4	57	40	2	356	14.3	31.86	0.43	0.20	1.25	1.86									
		10	0.73	0.01	0.04	0.04	5.0	5.1														10.4	32.50	0.50	0.00	1.02	2.35
		20	1.70	0.13	0.07	0.10	4.6	6.5														10.2	32.54	0.62	0.00	2.44	3.59
		25	1.27	0.01																		9.9	32.56	0.73	0.04	3.20	5.49
		30	0.77	0.06																		9.4	32.61	0.98	0.43	6.93	8.61

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Aug-98	NH-25	40	0.26	0.06									9.1	32.78	1.15	0.12	10.66	11.61
		50	0.23	0.00									8.7	33.34	1.82	0.44	25.29	21.87
		70	0.14	0.02									8.1	33.70	2.29	0.49	37.94	28.16
		100	0.16	0.01									7.4	33.95	2.41	ND	47.72	31.25
		200	0.08	0.02														
Aug-98	NH-35	1	0.65	0.00	0.23	0.04	35.8	6.1	46	56	4	58	15.2	31.60	0.17	0.09	0.00	0.41
		10	0.61	0.01	0.13	0.01	22.1	1.7					15.2	31.61	0.20	0.15	0.03	0.44
		20	0.88	0.04									11.6	32.28	0.46	0.12	1.40	0.00
		25	2.63	0.14	0.46	0.22	17.8	9.4					10.8	32.43	0.51	0.12	2.45	0.00
		30	2.58	0.25									10.4	32.50	0.59	0.11	2.52	1.18
		40	0.87	0.08									9.9	32.55	0.71	0.14	3.90	3.77
		50	0.09	0.41									9.6	32.58	0.85	0.14	5.93	6.06
		70	0.17	0.01									9.4	33.03	1.29	0.05	13.88	13.42
		100	0.08	0.01									8.4	33.51	1.96	0.12	30.03	23.86
		150	0.07	0.01									7.9	33.89	2.34	0.19	35.35	30.83
		235	0.09	0.04									7.2	33.97	2.40	ND	49.63	30.86
410	0.05	0.03									6.0	34.02	2.70	ND	65.07	35.83		
Aug-98	NH-45	0	0.73					46	43	ND	64	15.8	31.29	0.08	0.09	3.01	0.23	
		20	0.95									10.6	32.49	0.44	0.13	3.04	0.25	
		25	1.18									10.1	32.54	0.47	0.10	3.08	1.27	
		30	1.30									10.0	32.55	0.52	0.14	2.78	1.22	
		40	0.83									9.6	32.59	0.74	0.09	4.79	5.08	
		50	0.39									9.4	32.70	0.87	0.14	6.81	2.43	
		70	0.05									8.8	33.41	2.20	0.15	35.92	28.48	
		150	0.04									7.5	33.93	2.42	0.09	43.55	31.48	
500	0.02									5.7	34.06	2.84	ND	72.22	36.91			
680	0.01									4.6	34.21	3.06	ND	94.10	40.68			
Aug-98	NH-65	0	0.29					58	30	ND	94	16.8	30.76	0.10	0.31	1.27	0.00	

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Aug-98	NH-65	10	0.29										16.7	30.83	0.04	0.09	3.64	0.00
		20	0.36										13.6	32.22	0.30	0.08	0.09	0.00
		30	0.50										10.9	32.62	0.42	0.24	1.14	0.13
		40	0.71										10.6	32.61	0.58	0.14	1.86	2.00
		45	0.82										10.3	32.59	0.64	0.14	2.26	3.18
		50	0.74										9.8	32.57	0.70	0.13	3.31	4.59
		70	0.47										9.2	32.89	1.04	0.10	8.95	10.42
		100	0.03										8.9	33.53	1.77	0.10	23.14	22.45
		150	0.02										8.1	33.83	2.10	0.05	34.04	29.13
1005	0.01										3.5	34.43	3.20		129.46	42.16		
Aug-98	NH-85	0	0.21						66	23	ND	72	17.5	31.46	0.04	0.13	2.37	0.00
		20	0.27										15.8	31.80	0.11	0.19	5.64	0.00
		30	0.37										12.7	32.41	0.34	0.08	1.36	0.00
		40	0.47										11.2	32.56	0.39	0.12	1.68	0.00
		50	0.49										10.9	32.59	0.53	0.14	4.62	2.11
		60	0.34										10.3	32.59	0.63	0.08	4.28	3.93
		70	0.21										9.9	32.58	0.79	0.08	5.91	6.82
		100	0.19										9.4	33.10	1.84	0.08	27.89	24.27
		150	0.09										8.0	33.79	2.00	0.05	31.16	27.93
1000	0.00										3.5	34.41	3.22	ND	126.54	42.01		
Sep-98	NH-05	5	2.93	0.05	2.34	ND	80.9	ND	44	49	2	915	10.2	32.89	1.50	0.62	16.62	15.06
		10	1.51	0.01	0.96	ND	64.3	ND					9.4	32.96	1.61	0.56	20.61	16.94
		15	1.83	0.05									9.1	33.10	1.61	0.57	20.32	16.84
		20	0.69	0.03									9.1	33.23	1.85	0.74	25.97	21.49
		30	0.80	0.04	0.44	0.06	55.8	10.6					9.0	33.40	1.97	1.05	31.62	22.34
		40	1.24	0.09									8.8	33.70	2.32	0.89	39.91	26.99
		47	1.92	0.19									8.5	33.73	2.48	0.53	46.22	28.31
		49	2.51	0.02									8.5	33.73	2.48	0.61	44.60	28.20
		55	2.63	0.08									8.5	33.73	2.48	0.58	45.96	28.21

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Sep-98	NH-15	3	3.67	0.25	2.87	ND	82.0	ND	40	55	2	225	14.0	31.95	0.28	0.12	2.02	0.00
		5	3.33	0.10	0.00	0.00	0.0	0.0										
		10	3.57	0.08	1.02	0.25	28.8	7.8										
		20	0.75	0.02														
		29	0.56	0.05														
		39	0.30	0.02														
		49	0.19	0.02														
		61	0.09	0.02														
		70	0.18	0.03														
84	0.35	0.02																
Sep-98	NH-25	1	0.71	0.01	0.00	0.00	0.3	0.4	60	37	1	233	15.2	32.17	0.16	0.30	0.00	0.30
		10	0.75	0.03														
		15	0.77	0.00	0.00	0.00	0.0	0.0										
		20	0.95	0.01	0.04	0.06	4.4	6.3										
		30	0.74	0.04														
		40	0.47	0.01														
		50	0.35	0.01														
		99	0.04	0.00														
		149	0.04	0.00														
200	0.03	0.00																
210	0.03	0.00																
Sep-98	NH-35	1	0.57	0.02	0.01	0.02	2.2	3.0	59	37	1	79	16.0	32.03	0.07	0.16	0.00	0.00
		10	0.67	0.00	0.04	0.02	5.8	2.9										
		20	1.06	0.06	0.28	0.33	27.3	32.7										
		25	1.15	0.05														
		30	0.67	0.02														
		40	0.43	0.01														
		50	0.36	0.01														
		70	0.19	0.00														

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Sep-98	NH-35	100	0.08	0.01									9.0	33.37	1.44	0.09	15.41	17.82
		150	0.03	0.00									8.1	33.86	2.30	0.14	36.63	30.49
		275	0.02	0.00									7.2	33.99	2.51	ND	52.75	33.16
		430	0.02	0.00									5.3	34.09	3.06	ND	70.36	40.60
Sep-98	NH-45	1	0.74	0.01	0.04	ND	5.3	ND	56	38	6	14	16.3	31.98	0.00	0.14	0.00	0.00
		10	0.38	0.53	0.04	0.05	0.0	ND					16.3	31.98	0.00	0.15	0.00	0.00
		20	0.93	0.04									16.0	32.00	0.01	0.27	0.00	0.00
		27	1.27	0.13									14.4	32.30	0.62	0.30	0.00	0.00
		30	1.12	0.02	0.02	0.03	2.0	2.8					13.4	32.42	0.73	0.35	0.00	0.05
		40	0.48	0.02									11.6	32.52	0.43	0.66	0.00	0.91
		50	0.41	0.00									10.4	32.57	0.57	0.25	0.58	2.89
		70	0.16	0.02									9.6	32.70	1.40	0.15	16.19	17.11
100	0.07	0.00									8.9	33.32	1.73	0.09	20.89	21.69		
Sep-98	NH-65	1	0.59	0.02	0.04	0.03	6.7	5.7	58	38	1	207	16.2	32.06	0.02	0.20	0.00	0.00
		10	0.60	0.01	0.02	0.01	3.5	2.3					16.2	32.06	0.02	0.15	0.00	0.00
		20	0.74	0.03									15.8	32.07	0.06	0.17	0.00	0.06
		30	1.23	0.02	0.08	0.07	6.7	5.5					13.5	32.26	0.39	0.61	0.00	1.85
		35	0.86	0.06									12.0	32.47	0.53	0.67	0.00	3.31
		40	0.53	0.01									11.2	32.58	0.68	0.80	1.16	6.28
		50	0.38	0.02									10.5	32.59	0.79	0.94	2.96	6.81
		70	0.16	0.01									9.8	32.78	2.11	0.19	31.60	28.23
100	0.08	0.00									9.0	33.47	1.95	0.11	23.93	25.08		
Nov-98	NH-05	1	0.84	0.02	0.16	0.04	18.6	5.0	51	27	2	139	12.2	32.25	0.50	0.00	6.50	2.40
		5	0.82	0.01	0.13	0.06	15.7	7.7					12.2	32.26	0.49	0.05	6.58	2.34
		10	0.84	0.03	0.10	0.01	10.7	1.4					12.2	32.28	0.50	0.05	6.49	2.40
		15	0.92	0.01									12.2	32.28	0.49	0.06	6.39	2.34
		20	0.91	0.01									12.1	32.30	0.48	0.00	5.95	2.23
		25	0.81	0.06									12.2	32.32	0.47	0.00	5.68	2.23

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Nov-98	NH-05	30	0.70	0.03									12.2	32.33	0.46	0.00	5.41	2.23
		40	0.48	0.02									12.2	32.35	0.55	0.03	7.05	3.29
		50	0.47	0.02									12.0	32.46	0.81	0.03	12.16	6.42
		55	0.40	0.02									11.4	32.81	1.06	0.00	16.05	10.04
Nov-98	NH-15	1	0.91	0.04	0.26	0.05	29.1	6.2	53	34	1	265	13.0	32.37	0.29	0.00	1.99	0.28
		5	0.97	0.03									13.0	32.37	0.29	0.00	1.90	0.28
		10	0.90	0.02	0.20	0.05	22.7	6.6					13.0	32.37	0.29	0.00	1.98	0.35
		20	0.87	0.06									13.0	32.36	0.30	0.00	2.05	0.42
		30	0.81	0.00	0.18	0.02	22.5	2.0					12.3	32.45	0.32	0.00	2.31	0.61
		40	0.29	0.01									10.3	32.99	1.03	0.00	11.75	11.23
		50	0.19	0.01									9.9	33.15	1.39	0.00	17.90	16.56
		60	0.18	0.00									9.9	33.18	1.43	0.00	19.02	17.31
		70	0.18	0.00									9.8	33.23	1.45	0.00	19.44	17.50
80	0.17	0.01									9.8	33.25	1.53	0.00	22.47	18.66		
Nov-98	NH-25	1	0.66	0.01	0.02	0.03	3.6	5.1	56	31	0	74	12.8	32.40	0.32	0.00	1.91	0.25
		10	0.68	0.01	0.06	0.02	8.5	2.7					12.8	32.40	0.33	0.00	1.81	0.19
		20	0.64	0.01									12.8	32.40	0.33	0.00	1.89	0.19
		30	0.66	0.00									12.8	32.40	0.33	0.00	1.79	0.19
		40	0.59	0.01	0.00	0.00	0.0	0.0					12.8	32.40	0.34	0.00	2.05	0.36
		45	0.45	0.00									12.5	32.43	0.48	0.00	3.34	2.16
		50	0.23	0.00									11.5	32.53	0.80	0.00	6.19	6.43
		70	0.08	0.00									9.6	33.04	1.28	0.00	14.25	14.74
		100	0.07	0.00									9.0	33.55	1.95	0.00	32.71	24.96
		150	0.02	0.00									8.4	33.85	2.14	0.00	35.57	28.97
200	0.01	0.00									7.6	33.92	2.23	ND	43.06	30.35		
Nov-98	NH-35	1	0.58	0.00	0.02	0.00	3.9	0.5	63	25	1	201	12.8	32.36	0.29	0.00	4.93	0.00
		10	0.56	0.03	0.02	0.02	3.1	4.3					12.8	32.36	0.29	0.00	4.66	0.05

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Nov-98	NH-35	20	0.55	0.02									12.8	32.36	0.29	0.00	4.74	0.00
		30	0.55	0.01									12.8	32.36	0.30	0.00	4.82	0.24
		40	0.28	0.01	0.02	0.01	6.1	5.6					11.1	32.56	0.62	0.00	4.03	4.31
		50	0.21	0.01									10.3	32.67	0.78	0.00	5.84	6.67
		70	0.14	0.00									9.6	32.92	1.20	0.00	12.86	13.63
		100	0.02	0.00									8.9	33.65	1.89	0.00	28.55	25.24
		150	0.01	0.00									8.2	33.82	2.06	0.00	34.35	28.77
		420	0.01	0.00									5.5	34.07	2.96	ND	78.42	39.83
Nov-98	NH-45	1	0.55	0.02	0.01	0.02	2.5	3.5	62	26	1	192	12.9	32.33	0.24	0.15	0.00	0.00
		10	0.56	0.01	0.02	0.02	3.5	3.9					12.9	32.34	0.26	0.15	0.00	0.00
		20	0.60	0.01									12.9	32.36	0.27	0.15	0.00	0.16
		30	0.59	0.01	0.03	0.04	4.9	7.0					13.0	32.37	0.26	0.13	0.00	0.00
		40	0.33	0.00									12.1	32.44	0.51	0.11	0.16	2.59
		50	0.20	0.02									10.2	32.67	0.82	0.10	3.77	6.85
		70	0.08	0.00									9.6	33.20	1.52	0.09	15.66	17.50
		100	0.03	0.00									9.1	33.59	1.98	0.10	24.11	24.36
150	0.02	0.00									8.4	33.86	2.20	0.11	31.52	27.51		
500	0.01	0.00									5.2	34.13	3.10	ND	84.21	41.80		
Nov-98	NH-65	1	0.56	0.01	0.04	0.02	7.9	3.3	61	26	1	113	12.9	32.27	0.28	0.00	1.07	0.05
		10	0.52	0.03	0.05	0.05	9.7	10.4					12.9	32.27	0.28	0.00	1.12	0.05
		20	0.54	0.01									12.9	32.27	0.28	0.00	1.16	0.00
		31	0.49	0.05									12.9	32.27	0.30	0.00	1.20	0.21
		36	0.52	0.04	0.04	0.06	8.0	11.4					12.8	32.29	0.28	0.00	1.07	0.10
		41	0.55	0.00									12.8	32.29	0.31	0.00	1.29	0.27
		50	0.21	0.00									9.9	32.61	0.76	0.00	6.76	6.16
		69	0.14	0.01									9.8	32.92	1.05	0.00	11.19	11.41
		102	0.03	0.00									8.8	33.46	1.77	0.00	26.64	23.07
148	0.01	0.00									7.9	33.84	2.02	0.00	36.32	28.34		

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Nov-98	NH-65	1006	0.01	0.00									3.6	34.42	3.31	ND	119.50	44.98
Nov-98	NH-85	2	0.35	0.01	0.01	0.01	1.6	2.3	68	20	1	179	13.7	32.51	0.26	0.00	0.75	0.00
		10	0.36	0.07	0.04	0.05	12.2	17.3					13.7	32.53	0.25	0.00	0.21	0.00
		20	0.35	0.02									13.7	32.53	0.26	0.00	0.18	0.00
		30	0.38	0.04									13.7	32.53	0.26	0.00	1.54	0.00
		40	0.36	0.00									13.7	32.53	0.26	0.00	1.69	0.00
		45	0.35	0.00	0.04	0.06	11.8	16.7					13.7	32.53	0.29	0.00	1.14	0.01
		51	0.25	0.01									13.6	32.52	0.59	0.00	4.76	4.12
		70	0.10	0.01									9.8	33.02	1.29	0.00	14.79	15.64
		101	0.02	0.00									8.5	33.40	1.74	0.00	25.87	23.53
		149	0.02	0.00									7.9	33.88	2.27	0.00	40.24	30.94
		1005	0.00	0.00								3.5	34.42	3.31	ND	123.92	44.98	
Feb-99	NH-05	1	0.70	0.01	0.20	0.04	28.9	6.1	50	38	1	421	9.3	32.51	0.88	0.07	9.64	7.73
		5	0.71	0.02									9.3	32.52	0.88	0.08	8.75	8.34
		10	0.73	0.00	0.23	0.01	31.5	1.6					9.3	32.52	0.88	0.09	8.82	8.44
		15	0.74	0.04									9.2	32.56	0.90	0.17	8.90	8.54
		20	0.70	0.02	0.19	0.04	26.5	6.5					9.2	32.56	0.89	0.21	8.97	8.44
		25	0.72	0.01									9.3	32.57	0.88	0.17	9.04	8.45
		30	0.69	0.01									9.3	32.59	0.89	0.13	9.11	8.45
		40	0.72	0.04									9.3	32.61	0.89	0.22	9.19	8.58
		50	1.21	0.03									9.3	32.61	0.95	0.30	9.90	8.74
Feb-99	NH-15	1	0.70	0.00	0.00	0.00	0.0	0.0	54	33	1	408	9.3	32.73	0.88	0.23	10.17	8.38
		5	0.78	0.01									9.3	32.73	0.87	0.00	10.12	8.29
		10	0.71	0.01	0.00	0.00	0.0	0.0					9.3	32.73	0.91	0.43	10.39	8.29
		20	0.72	0.03	0.00	0.00	0.0	0.0					9.3	32.74	0.87	0.00	10.34	8.20
		30	0.70	0.00									9.3	32.75	0.87	0.14	10.61	8.30
		40	0.70	0.00									9.3	32.75	0.88	0.00	10.88	8.29

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Feb-99	NH-15	50	0.67	0.02									9.3	32.75	0.88	0.03	10.20	8.29
		60	0.64	0.05									9.3	32.76	0.89	0.00	10.47	8.39
		70	0.69	0.02									9.3	32.76	0.88	0.11	10.74	8.49
		83	0.70	0.02									9.3	32.76	0.89	0.00	10.38	8.49
Feb-99	NH-25	1	0.60	0.01	0.13	0.01	18.5	1.2	51	30	1	486	9.3	32.72	0.91	0.11	9.70	8.90
		10	0.63	0.00	0.13	0.02	18.6	2.8					9.3	32.72	0.91	0.07	9.69	8.90
		20	0.61	0.00	0.13	0.05	18.7	7.5					9.3	32.72	0.92	0.09	10.00	8.94
		30	0.62	0.01									9.3	32.72	0.92	0.09	9.99	9.02
		40	0.67	0.00									9.3	32.72	0.92	0.07	9.98	8.90
		50	0.63	0.02									9.3	32.73	0.92	0.04	10.29	8.84
		70	0.53	0.02									9.3	32.75	0.93	0.00	10.28	9.10
		100	0.23	0.00									9.3	33.12	1.30	0.00	16.90	14.91
		150	0.06	0.01									8.6	33.75	2.02	0.01	31.50	26.58
		199	0.03	0.01									7.7	33.95	2.22	ND	39.61	30.21
		286	0.02	0.00									6.6	34.00	2.49	ND	55.10	34.40
Feb-99	NH-35	5	0.61	0.01	0.06	0.02	10.7	4.0	54	37	1	364	9.3	32.73	0.75	0.00	7.45	6.48
		10	0.63	0.02	0.10	0.00	15.2	0.7					9.3	32.73	0.74	0.00	6.46	6.30
		20	0.63	0.00	0.04	0.02	6.2	2.6					9.3	32.74	0.76	0.00	6.73	6.58
		30	0.62	0.00									9.3	32.75	0.77	0.00	6.99	6.58
		40	0.65	0.00									9.3	32.75	0.76	0.00	6.95	6.58
		50	0.65	0.00									9.3	32.75	0.77	0.03	7.21	6.58
		70	0.50	0.01									9.3	32.76	0.83	0.00	8.74	7.52
		100	0.11	0.00									9.1	33.45	1.71	0.00	25.68	21.89
		130	0.08	0.00									8.9	33.64	1.83	0.00	28.78	24.01
		150	0.08	0.01									8.8	33.67	1.93	0.04	28.79	24.77
430	0.01	0.00									5.5	34.09	2.98	ND	77.37	39.66		

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Apr-99	NH-05	1	3.75	0.17	2.53	0.24	67.6	9.4	24	77	4	137	10.2	31.84	0.16	0.47	0.00	0.00
		5	4.38	0.40									10.2	31.84	0.14	0.33	0.00	0.00
		10	4.19	0.10	3.08	0.17	73.4	5.9					10.2	31.85	0.32	0.33	0.00	0.00
		15	4.93	0.12									10.2	31.90	0.62	0.35	1.27	4.73
		20	0.98	0.06	0.57	0.09	58.6	12.3					9.6	32.35	1.34	0.23	33.43	15.56
		25	0.65	0.03									8.7	33.13	1.36	0.65	34.53	16.12
		30	0.30	0.01									8.7	33.21	1.28	0.64	31.33	15.14
		40	0.25	0.01									8.3	33.50	1.77	0.86	28.28	23.06
		50	0.33	0.02									8.1	33.72	2.05	0.13	34.48	27.32
56	0.44	0.02									8.1	33.74	2.07	0.64	34.94	27.44		
Apr-99	NH-15	1	1.77	0.10	0.21	0.12	12.0	7.3	40	49	1	183	10.1	31.70	0.39	0.36	2.10	2.24
		5	1.60	0.02									10.1	31.71	0.39	0.37	1.96	2.30
		10	1.42	0.02	0.22	0.04	15.6	3.2					9.8	31.94	0.43	0.37	2.63	2.71
		15	1.64	0.02	0.12	0.09	7.1	5.7					9.5	32.20	0.52	0.34	2.68	3.26
		20	1.71	0.00									9.2	32.56	0.50	0.36	3.15	3.53
		30	0.92	0.03									9.1	32.74	0.76	0.44	6.08	6.79
		40	0.37	0.01									8.9	32.77	0.80	0.35	6.55	7.02
		50	0.31	0.00									8.9	32.78	0.72	1.09	6.40	6.94
		60	0.17	0.01									8.9	32.84	0.91	0.34	9.54	9.09
70	0.17	0.00									8.9	32.90	0.99	0.33	11.65	10.36		
85	0.18	0.00									8.8	33.03	1.19	0.27	15.00	13.55		
Apr-99	NH-25	1	1.30	0.04	0.12	0.04	9.1	3.5	37	53	0	366	10.0	32.05	0.68	0.33	0.47	3.02
		10	1.44	0.03	0.07	0.04	4.7	3.1					9.9	32.25	0.46	0.29	2.57	6.15
		20	1.53	0.02									9.4	32.46	0.58	0.30	4.66	10.35
		25	2.00	0.06	0.00	0.00	0.1	0.1					9.1	32.54	0.65	0.36	6.55	12.52
		30	1.65	0.03									9.0	32.62	0.73	0.27	6.98	15.27
		40	0.50	0.00									9.0	32.71	0.78	0.40	6.79	15.88
		50	0.33	0.02									9.0	32.75	0.81	0.43	7.02	16.52
		70	0.24	0.00									8.9	32.77	0.84	0.42	7.86	17.44

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Apr-99	NH-25	100	0.14	0.00									8.8	33.12	1.33	0.44	18.08	37.33
		150	0.04	0.00									8.0	33.88	2.12	0.05	34.05	29.01
		200	0.04	0.02									7.0	33.99	2.39	ND	46.83	33.11
		260	0.03	0.00									6.5	34.02	2.57	ND	56.41	35.42
Apr-99	NH-35	1	1.51	0.08	0.09	0.13	6.2	8.8	42	47	2	189	9.8	32.64	0.51	0.45	4.71	3.47
		10	1.56	0.04	0.10	0.14	6.4	9.0					9.7	32.64	0.51	0.38	4.61	3.41
		15	1.52	0.06	0.14	0.07	9.3	5.0					9.6	32.64	0.52	0.00	4.77	3.55
		20	1.28	0.04									9.4	32.69	0.57	0.32	4.80	4.23
		30	0.90	0.03									9.4	32.70	0.62	0.12	5.23	4.81
		40	0.53	0.01									9.3	32.71	1.02	1.22	7.09	6.87
		50	0.22	0.01									9.1	32.78	0.89	0.00	8.43	9.02
		70	0.11	0.00									8.9	32.99	1.13	0.00	12.77	12.58
		100	0.07	0.00									8.5	33.47	1.80	0.00	27.04	22.67
		150	0.03	0.00									7.6	33.93	2.23	0.05	39.24	31.51
425	0.05	0.00									5.3	34.13	3.11		79.89	40.55		
Apr-99	NH-45	1	0.85	0.02	0.14	0.03	16.4	3.7	50	36	1	206	9.6	32.76	0.61	0.36	5.58	3.76
		10	0.86	0.04									9.6	32.76	0.58	0.02	5.44	3.71
		15	0.87	0.02									9.6	32.76	0.61	1.05	5.45	3.63
		20	0.86	0.01									9.6	32.76	0.58	0.02	6.10	3.58
		25	0.80	0.00	0.04	0.03	5.1	3.7					9.4	32.76	0.59	0.05	5.64	3.66
		30	0.59	0.00									9.1	32.77	0.62	0.10	5.66	4.02
		40	0.65	0.01									9.0	32.78	0.64	0.16	6.30	4.36
		50	0.59	0.02									8.9	32.79	0.66	0.12	5.37	4.71
		70	0.31	0.02									8.8	32.79	0.72	0.19	5.86	5.39
		100	0.08	0.00									8.7	33.35	1.54	0.00	19.55	18.90
150	0.02	0.00									7.8	33.89	2.12	0.94	33.92	30.10		
688	0.01	0.00									4.4	34.29	3.24			44.72		
Apr-99	NH-65	2	0.53	0.00	0.13	0.01	25.1	2.1	61	27	0	244	9.4	32.81	0.54	0.00	3.14	3.62

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)	
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.								
Apr-99	NH-65	10	0.53	0.01	0.19	0.02	36.5	4.4					9.4	32.81	0.54	0.00	3.30	3.62	
		20	0.46	0.00	0.10	0.01	22.3	1.6					9.4	32.81	0.55	0.01	3.33	3.64	
		30	0.43	0.00										9.2	32.80	0.59	0.14	3.50	3.79
		40	0.42	0.02										8.9	32.80	0.57	0.00	3.53	3.88
		50	0.41	0.00										8.9	32.80	0.57	0.03	3.56	4.10
		70	0.36	0.01										8.8	32.81	0.54	0.04	3.07	3.82
		100	0.19	0.01										8.7	32.85	0.70	0.13	4.67	5.86
		150	0.02	0.00										7.9	33.78	2.01	0.07	31.88	28.44
		465	0.00	0.00										5.2	34.10	2.97	ND	79.54	41.62
		830	0.01	0.00										4.1	34.36	3.31	ND	113.50	45.45
		1004	0.01	0.00								3.6	34.43	3.31	ND	128.35	45.85		
Apr-99	NH-85	1	0.46	0.02	0.03	0.03	6.6	7.8	45	19	1	312	9.5	32.78	0.66	0.31	4.88	4.98	
		10	0.49	0.00	0.03	0.01	5.5	2.5					9.4	32.78	0.66	0.24	4.94	4.98	
		20	0.44	0.03										9.4	32.78	0.65	0.25	5.00	4.98
		30	0.39	0.01										9.0	32.79	0.66	0.46	5.46	5.39
		40	0.42	0.01										8.9	32.79	0.67	0.31	5.31	5.40
		50	0.44	0.00										8.8	32.79	0.66	0.28	4.75	5.47
		60	0.43	0.02	0.01	0.01	1.6	2.2						8.8	32.79	0.69	0.62	4.81	5.66
		70	0.33	0.01										8.8	32.80	0.71	0.45	5.28	5.86
		100	0.07	0.00										8.5	33.41	1.59	0.41	21.36	20.96
		150	0.02	0.00										7.6	33.88	2.08	0.21	34.66	29.72
		970	0.01	0.00								3.5	34.43	3.27	ND	ND	45.58		
		1000	0.01	0.00								3.4	34.44	3.29	ND	ND	45.57		
Jul-99	NH-05	1	2.96	0.00	1.60	0.25	54.0	8.3	24	68	1	457	13.2	30.37	0.05	0.02	0.00	0.00	
		5	5.42	0.18										11.8	31.33	0.82	0.39	7.32	6.51
		10	5.08	0.04	3.79	0.08	74.5	2.2						9.5	32.38	1.33	0.72	15.20	13.31
		13	3.10	0.01	1.85	0.06	59.7	2.0						8.9	32.85	1.95	0.75	27.31	22.78
		15	2.21	0.04										8.3	33.12	2.21	1.07	34.09	26.81
		20	0.58	0.05										7.9	33.63	2.32	0.20	40.39	31.12

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Jul-99	NH-05	25	0.43	0.04									7.6	33.74	2.30	0.01	40.88	31.70
		30	0.31	0.02									7.5	33.82	2.34	0.01	41.99	32.22
		40	0.33	0.03									7.3	33.90	2.58	0.00	53.32	33.99
		50	0.46	0.01									7.2	33.94	2.73	0.01	62.14	34.71
		53	0.53	0.05									7.2	33.94	2.73	0.01	62.31	34.66
Jul-99	NH-15	1	1.13	0.05	0.64	0.06	57.0	8.1	48	35	1	258	15.8	24.64	0.00	0.00	27.00	0.00
		5	1.04	0.01									14.2	29.80	0.00	0.00	4.76	0.00
		10	1.04	0.00	0.25	0.00	24.3	0.0					12.0	31.88	0.04	0.00	2.79	0.00
		18	1.24	0.00	0.34	0.03	27.2	2.7					10.0	32.40	0.54	0.00	7.78	2.12
		20	1.03	0.06									10.0	32.49	0.62	0.19	9.15	4.11
		30	0.60	0.01									8.7	32.75	0.81	0.61	10.51	6.84
		34	0.49	0.00									8.5	32.75	0.84	0.60	10.66	7.32
		40	0.26	0.01									8.3	32.80	0.92	0.00	12.17	9.56
		50	0.13	0.00									8.1	33.03	1.35	0.00	19.59	16.71
		60	0.14	0.03									7.8	33.22	1.95	0.00	31.69	25.11
		71	0.06	0.00									8.0	33.50	1.90	0.00	32.15	25.53
80	0.06	0.00									7.9	33.61	2.03	0.00	34.87	26.86		
Jul-99	NH-25	1	0.69	0.01	0.00	0.00	0.0	0.0	43	40	0	141	16.2	26.32	0.00	0.00	15.46	0.00
		10	0.77	0.01	0.08	0.03	10.7	4.3					13.9	31.15	0.04	0.00	5.30	0.00
		20	1.69	0.01									10.1	32.23	0.54	0.00	7.99	1.52
		22	1.78	0.01	1.28	0.01	72.2	1.0					9.6	32.43	0.69	0.00	9.65	3.41
		30	0.85	0.02									9.1	32.71	0.81	0.45	13.84	5.80
		40	0.36	0.00									8.8	32.77	0.81	0.00	12.50	6.94
		49	0.19	0.00									8.5	32.78	0.87	0.00	12.96	8.26
		70	0.07	0.01									8.2	33.13	1.42	0.00	22.39	17.54
		100	0.03	0.00									8.0	33.77	2.08	0.00	37.64	28.75
		150	0.03	0.00									7.2	33.95	2.36	0.00	48.73	33.11
160	0.03	0.01									7.1	33.96	2.39	0.00	50.11	33.34		
200	0.02	0.00									6.6	33.99	2.54	ND	56.79	35.27		

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Jul-99	NH-35	1	0.31	0.00	0.00	0.00	0.0	0.0	52	32	2	183	16.2	27.48	0.00	0.00	12.33	0.03
		10	0.38	0.05	0.08	0.05	21.5	17.4					15.8	29.55	0.13	0.00	4.31	0.05
		20	0.59	0.02	0.25	0.03	42.5	5.8					11.6	32.26	0.37	0.00	5.84	0.00
		30	1.19	0.10									9.8	32.64	0.66	0.00	8.64	3.91
		35	0.90	0.01									9.4	32.71	0.73	0.00	9.74	5.49
		40	0.66	0.06									9.2	32.73	0.89	0.00	10.69	7.87
		50	0.32	0.01									8.7	32.75	0.94	0.00	11.93	9.18
		70	0.10	0.01									8.4	32.90	1.17	0.00	15.87	13.58
		100	0.03	0.01									8.2	33.65	2.00	0.00	33.78	27.33
		150	0.02	0.00									7.5	33.92	2.18	0.00	41.24	30.89
		225	0.01	0.00									6.6	33.99	2.46	ND	54.58	34.72
430	0.02	0.00					5.6	34.10	2.91	ND	76.09	39.88						
Jul-99	NH-45	1	0.41	0.04	0.07	0.05	17.2	14.0	49	34	1	38	15.9	27.00	0.00	0.02	7.82	0.00
		10	0.29	0.00	0.03	0.01	11.1	5.2					15.1	31.21	0.15	0.02	0.00	0.00
		20	0.55	0.01									12.6	32.73	0.29	0.01	0.00	0.00
		30	1.15	0.02	0.19	0.04	16.4	3.9					11.8	32.80	0.38	0.04	0.60	0.06
		35	1.14	0.06									11.4	32.79	0.42	0.03	1.55	0.88
		40	0.97	0.03									10.6	32.79	0.48	0.05	2.19	1.82
		50	0.62	0.08									9.8	32.84	0.64	0.11	3.14	4.41
		70	0.16	0.01									8.8	32.82	0.77	0.01	5.01	6.95
		100	0.02	0.00									8.7	33.36	1.48	0.01	18.17	18.88
		150	0.01	0.00									8.0	33.85	2.03	0.00	36.51	28.16
870	0.01	0.00					4.0	34.36	3.29	ND	114.69	44.59						
Jul-99	NH-65	1	0.24	0.01	0.06	0.00	25.4	2.6	53	28	3	66	15.6	30.73	0.00	0.02	0.00	0.00
		10	0.22	0.00	0.06	0.01	26.7	2.7					14.9	32.13	0.15	0.02	0.00	0.00
		20	0.30	0.00									14.0	32.51	0.23	0.07	0.00	0.00
		30	0.46	0.00									13.2	32.72	0.27	0.02	0.00	0.00
		40	1.24	0.00									11.2	32.69	0.35	0.06	1.85	0.00
		44	1.20	0.14	0.27	0.17	23.7	17.2					10.7	32.72	0.48	0.08	3.42	1.29

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Jul-99	NH-65	50	0.02	1.02									10.3	32.77	0.53	0.12	3.45	2.47
		70	0.33	0.02									9.3	32.85	0.76	0.12	5.16	6.16
		99	0.08	0.01									9.1	33.04	1.04	0.07	9.47	11.62
		150	0.01	0.00									8.0	33.82	1.82	0.00	33.26	25.61
		240	0.01	0.01									6.6	33.95	2.29	ND	49.93	32.24
		1005	0.01	0.00									3.6	34.42	3.29	ND	126.08	44.33
Jul-99	NH-85	1	0.26	0.01	0.11	0.01	40.6	6.7	45	39	2	52	15.4	30.22	0.00	0.00	0.00	0.00
		10	0.27	0.01	0.06	0.02	20.8	9.8					15.1	31.11	0.04	0.00	0.00	0.00
		20	0.48	0.01									11.4	32.47	0.28	0.00	0.00	0.00
		30	1.99	0.03	0.76	0.23	38.1	12.3					10.0	32.73	0.42	0.00	0.07	0.00
		35	1.80	0.23									9.6	32.75	0.66	0.13	5.04	2.93
		40	0.94	0.13									9.2	32.76	0.71	0.16	7.16	4.20
		50	0.24	0.02									8.9	32.79	0.80	0.00	6.14	6.71
		70	0.10	0.00									8.5	32.85	0.88	0.00	7.51	8.21
		100	0.02	0.00									8.5	33.41	1.63	0.00	21.18	20.98
		150	0.01	0.00									7.7	33.85	1.96	0.00	36.07	27.52
		885	0.00	0.00									3.8	34.37	3.30	ND	121.01	44.61
		1005	0.00	0.00									3.6	34.43	3.27	ND	131.67	44.18
Sep-99	NH-05	3	9.16	2.06	7.81	3.30	91.7	56.7	22	86	11	342	9.4	33.14	0.96	0.41	12.01	3.47
		7	9.23	0.95	7.33	0.95	80.4	18.6					9.1	33.19	1.45	0.38	20.12	13.86
		12	6.83	0.76	5.42	0.77	80.4	20.3					8.7	33.26	1.66	0.62	23.92	17.07
		14	2.06	0.00									8.4	33.22	1.73	0.08	25.75	20.66
		17	0.40	0.05									8.1	33.24	1.85	0.05	27.93	22.61
		22	0.14	0.06									8.1	33.41	1.94	0.05	29.93	24.35
		27	0.08	0.01									8.2	33.52	2.02	0.06	31.74	25.63
		32	0.12	0.00									8.2	33.58	2.18	0.04	35.72	27.81
		42	0.17	0.00									8.0	33.74	2.35	0.51	45.27	29.85
		52	0.34	0.00									8.0	33.77	2.38	0.38	47.45	30.12
55	0.41	0.08									8.0	33.77	2.37	0.21	47.65	30.12		

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Sep-99	NH-15	3	2.25	0.11	0.06	0.09	2.8	4.0	60	29	1	517	12.6	32.29	0.51	0.14	12.38	1.59
		7	2.14	0.14	0.09	0.12	4.2	5.9					12.4	32.33	0.53	0.10	12.41	1.89
		12	1.06	0.03	0.06	0.08	5.5	7.8					11.2	32.57	0.80	0.72	11.71	4.84
		22	0.36	0.01									9.4	32.76	0.94	0.52	11.21	7.60
		32	0.18	0.01									8.7	32.79	0.97	0.27	11.23	8.81
		42	0.13	0.00									8.4	32.81	0.98	0.08	11.45	9.04
		51	0.07	0.01									8.3	32.88	1.27	0.08	16.70	13.80
		62	0.07	0.01									8.3	33.13	1.54	0.07	21.93	18.23
		71	0.08	0.01									8.3	33.42	2.20	0.18	40.27	27.35
82	0.09	0.01					8.0	33.73	2.37	0.21	48.02	30.50						
Sep-99	NH-25	3	1.24	0.03	0.36	0.12	29.4	10.3	44	45	1	300	11.5	32.46	0.82	0.25	16.34	6.10
		12	1.48	0.01	0.24	0.05	16.3	3.6					11.2	32.50	0.86	0.36	15.47	6.47
		20	2.34	0.06	0.54	0.12	23.1	5.9					10.5	32.61	ND	ND	ND	ND
		22	1.69	0.05									10.3	32.66	0.92	0.54	12.62	6.86
		32	0.37	0.02									8.9	32.78	0.94	0.08	11.04	8.07
		42	0.28	0.00									8.5	32.80	0.97	0.04	11.06	8.68
		52	0.16	0.01									8.3	32.85	0.97	0.07	12.34	8.68
		72	0.13	0.00									8.2	33.06	1.45	0.06	20.44	16.65
		102	0.10	0.00									8.2	33.58	2.35	0.07	43.28	29.67
		152	0.04	0.00									7.9	33.88	2.34	0.04	41.87	31.02
		202	0.02	0.00									7.4	33.94	2.47	0.07	48.36	33.10
275	0.03	0.00					7.0	33.98	2.61	0.04	53.95	34.79						
Sep-99	NH-35	3	0.65	0.04	0.04	0.06	6.5	9.2	63	26	0	310	15.0	31.59	0.18	0.07	13.10	0.00
		12	0.83	0.00	0.10	0.02	12.6	2.2					14.0	31.90	0.23	0.28	11.19	0.00
		17	1.24	0.00	0.08	0.01	6.6	1.0					13.2	32.37	0.29	0.18	11.42	0.00
		22	0.75	0.00									11.3	32.69	0.63	0.29	8.53	1.67
		32	0.24	0.01									10.0	32.75	0.82	0.04	9.25	5.28
		42	0.16	0.01									9.1	32.77	0.92	0.00	9.95	8.01
		52	0.09	0.00									8.5	32.79	0.98	0.34	10.43	9.05

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.			S.D.							
Sep-99	NH-35	72	0.04	0.00									8.3	32.99	1.30	0.00	15.96	14.09
		102	0.02	0.00									8.3	33.58	2.02	0.10	30.64	26.00
		152	0.02	0.00									7.7	33.90	2.30	0.03	41.60	30.93
		427	0.02	0.00									5.8	34.05	3.00	0.03	69.89	39.88
Sep-99	NH-45	3	0.52	0.01	0.06	0.04	12.1	8.6	70	20	1	410	15.7	31.66	0.16	0.01	9.99	0.00
		12	0.57	0.04	0.07	0.05	13.1	9.2					15.5	31.71	0.17	0.04	9.99	0.00
		20	0.76	0.02	0.14	0.03	18.7	4.7					12.4	32.56	ND	ND	ND	ND
		22	0.56	0.00									12.1	32.59	0.73	0.01	8.29	3.69
		32	0.32	0.01									10.5	32.73	0.84	0.03	9.24	6.15
		42	0.13	0.01									9.7	32.76	0.91	0.17	9.48	7.93
		52	0.07	0.00									9.0	32.79	0.93	0.00	9.71	8.56
		72	0.02	0.00									8.5	32.93	1.19	0.19	13.80	12.59
		102	0.03	0.00									8.4	33.75	2.07	0.02	31.84	26.88
		152	0.02	0.01									8.2	33.96	2.53	0.09	42.92	33.22
		502	0.01	0.00									5.4	34.09	3.16	0.18	80.96	42.22
		693	0.01	0.00									4.4	34.26	3.46	0.09	106.72	45.59
Sep-99	NH-65	3	0.63	0.02	0.11	0.02	17.6	3.5	55	33	1	317	14.6	31.97	0.28	0.05	12.16	0.00
		12	1.27	0.01	0.06	0.02	4.4	1.7					11.8	32.45	0.48	0.07	14.56	1.43
		20	1.16	0.02	0.18	0.04	16.0	3.4					10.2	32.72	0.74	0.21	13.83	4.96
		22	1.15	0.02									9.8	32.75	0.77	0.08	13.34	5.19
		32	0.21	0.30									8.9	32.78	0.91	0.00	9.72	7.48
		42	0.17	0.01									8.4	32.82	1.00	0.29	10.68	9.20
		53	0.13	0.00									8.6	32.97	1.11	0.01	12.83	11.09
		72	0.14	0.00									8.5	33.23	1.57	0.01	21.02	18.47
		102	0.03	0.00									8.4	33.67	2.03	0.02	31.11	26.38
		153	0.03	0.00									7.7	33.91	2.36	0.01	41.70	31.85
		765	0.01	0.00									4.5	34.27	3.46	0.00	109.60	45.59
1007	0.01	0.00									3.8	34.39	3.49	0.00	128.14	46.63		

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Sep-99	NH-85	3	0.71	0.31	0.05	0.06	9.3	13.1	67	22	3	694	12.5	32.57	0.49	0.22	12.71	1.61
		12	0.68	0.01	0.21	0.30	30.7	43.5					11.7	32.96	0.69	0.00	12.47	3.88
		18	0.41	0.01	0.18	0.25	43.7	61.7					11.4	33.04	0.88	0.00	12.91	6.13
		22	0.65	0.03									11.1	33.02	0.99	0.00	14.07	7.65
		32	0.27	0.04									10.3	33.02	1.11	0.00	15.95	9.70
		42	0.21	0.02									9.1	33.13	1.32	0.00	17.32	13.96
		52	0.05	0.17									8.3	33.66	1.54	0.01	21.79	17.89
		92	0.04	0.00									8.1	33.81	1.85	1.18	28.14	22.94
		102	0.02	0.00									7.9	33.85	2.19	1.46	36.62	28.23
		152	0.01	0.00									7.4	33.95	2.42	1.19	45.31	31.90
		527	0.01	0.00									5.0	34.17	3.28	0.48	90.80	42.24
1007	0.00	0.01					3.6	34.42	3.45	0.06	122.14	45.05						
Nov-99	NH-05	1	1.10	0.03	0.38	0.06	34.8	6.8	47	41	1	575	10.1	33.02	1.15	0.23	16.69	12.45
		5	1.08	0.06	0.43	0.10	39.8	11.8					10.0	33.01	1.15	0.18	15.32	12.38
		10	1.03	0.02	0.35	0.04	33.8	4.7					10.0	33.02	1.14	0.21	15.32	12.45
		15	1.02	0.02									10.0	33.02	1.13	0.20	15.55	12.45
		20	1.04	0.00									10.0	33.02	1.14	0.20	15.32	12.46
		25	0.97	0.00									10.0	33.00	1.14	0.22	15.55	12.44
		30	0.90	0.06									10.0	33.05	1.20	0.28	16.00	12.73
		39	0.61	0.00									10.0	33.06	1.22	0.43	16.91	13.23
		52	0.68	0.04									9.9	33.09	1.31	0.54	17.82	13.88
Nov-99	NH-15	1	1.64	0.06	0.56	0.12	34.2	8.6	42	47	2	424	11.1	32.58	0.69	0.26	9.36	5.36
		5	1.59	0.03	0.25	0.12	15.9	8.1					11.1	32.58	0.68	0.06	9.13	5.21
		10	1.60	0.02									11.1	32.58	0.65	0.10	8.90	4.77
		17	1.43	0.06	0.31	0.08	21.8	6.8					11.0	32.60	0.76	0.10	10.28	6.44
		21	1.28	0.18									10.8	32.70	0.82	0.10	10.97	7.39
		30	0.85	0.02									10.1	32.99	1.30	0.39	18.71	14.70
		40	0.51	0.02									9.3	33.29	1.62	0.38	23.95	19.30
		61	0.38	0.00									8.5	33.51	1.93	0.10	31.92	24.19

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)		
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.									
Nov-99	NH-15	71	0.16	0.00									8.2	33.65	2.18	0.05	40.35	27.84		
		84	0.14	0.01										8.2	33.60	2.10	0.05	36.70	26.83	
Nov-99	NH-25	2	1.01	0.03	0.24	0.06	24.1	6.7	57	30	1	557	10.9	32.55	0.65	0.25	8.86	4.64		
		10	ND	ND										10.9	32.55	0.65	0.21	10.67	4.77	
		20	0.94	0.03	0.12	0.04	12.8	4.5						10.8	32.56	0.68	0.17	9.55	5.22	
		30	0.41	0.01	0.03	0.01	6.6	3.2						10.4	32.74	1.05	0.06	12.51	10.88	
		40	0.25	0.01											9.4	32.96	1.24	0.05	15.25	14.22
		50	0.17	0.00											8.8	33.10	1.41	0.05	17.98	17.22
		70	0.08	0.00											8.3	33.50	1.98	0.05	30.73	ND
		100	0.04	0.00											8.1	33.82	2.26	0.44	38.48	30.28
		116	0.04	0.00											8.0	33.84	2.30	0.05	40.53	30.65
		149	0.03	0.00											7.9	33.89	2.40	0.22	44.05	31.30
		200	0.03	0.00											7.7	33.94	2.40	0.06	44.98	31.75
276	0.03	0.00											7.5	33.96	2.44	0.14	48.27	32.36		
Nov-99	NH-35	1	0.91	0.00	0.06	0.03	6.1	3.1	60	28	1	618	11.2	32.54	0.62	0.18	7.51	4.38		
		10	0.94	0.01	0.35	0.07	37.2	7.7						11.2	32.54	0.66	0.09	10.45	4.32	
		15	0.94	0.04	0.63	0.43	67.8	48.8						11.2	32.54	0.65	0.10	10.47	4.25	
		21	0.85	0.01										11.2	32.54	0.57	0.22	7.27	3.63	
		30	0.48	0.01										10.4	32.72	0.83	0.09	9.13	7.73	
		40	0.08	0.01										9.0	32.86	1.23	0.00	16.35	13.50	
		50	0.04	0.00										8.5	33.05	1.78	0.00	24.45	20.00	
		70	0.04	0.00										8.4	33.47	1.69	0.03	25.15	22.27	
		101	0.07	0.00										8.3	33.81	2.17	0.00	38.25	28.95	
		150	.	.										7.9	33.93	2.35	0.00	44.37	31.52	
411	0.01	0.00										5.5	34.07	2.98	0.11	73.82	39.78			
440	0.01	0.00										5.3	34.09	3.01	0.09	74.76	40.16			
Nov-99	NH-45	1	0.80	0.02	0.23	0.06	29.1	8.5	59	29	2	363	11.5	32.55	0.58	0.00	7.75	3.10		
		10	0.77	0.03	0.38	0.06	48.9	9.2						11.5	32.55	0.52	0.18	5.07	2.54	

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)	
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.								
Nov-99	NH-45	14	0.84	0.08	0.31	0.11	38.1	17.3						11.4	32.55	0.59	0.07	7.84	3.17
		20	0.74	0.01										11.2	32.52	0.65	0.19	11.24	4.11
		30	0.59	0.03										10.3	32.62	0.60	0.25	8.06	3.99
		40	0.30	0.04										9.1	32.80	0.84	0.22	12.10	6.71
		50	0.15	0.00										8.4	32.93	1.08	0.00	14.49	10.97
		71	0.08	0.01										8.3	33.19	1.46	0.04	19.23	17.81
		101	0.03	0.00										8.2	33.57	1.94	0.04	30.48	26.25
		151	0.02	0.00										7.6	33.92	2.21	0.00	40.57	29.92
		500	0.00	0.00										5.0	34.12	3.08	0.00	84.21	41.59
755	0.01	0.00	4.2	34.31	3.35	0.07	105.93	43.90											
Nov-99	NH-65	2	0.72	0.01	0.07	0.02	9.2	2.5	61	27	2	168		13.2	32.55	0.29	0.06	5.02	0.36
		10	0.73	0.01										13.2	32.55	0.38	0.00	8.04	0.88
		20	0.74	0.02										13.2	32.55	0.38	0.00	7.86	0.89
		30	0.60	0.14										13.2	32.55	0.31	0.10	5.03	0.44
		40	0.26	0.00										13.2	32.55	0.69	0.70	9.99	3.87
		50	0.13	0.00										10.5	32.70	0.86	0.73	8.25	6.14
		70	0.08	0.00										8.3	32.82	0.97	0.00	12.16	8.85
		100	0.04	0.00										8.0	33.17	1.43	0.06	19.47	17.12
		150	0.02	0.00										7.7	33.88	2.03	0.06	40.07	30.96
		735	0.01	0.00										4.3	34.28	3.33	0.08	101.95	43.74
		861	0.00	0.00										4.0	34.35	3.34	0.07	95.15	44.50
1005	0.01	0.01	3.6	34.42	3.36	0.07	108.04	44.65											
Nov-99	NH-85	2	0.70	0.04	0.24	0.06	34.7	10.8	60	28	1	261		12.2	32.59	0.44	0.20	1.23	1.56
		10	0.73	0.01										12.2	32.59	0.44	0.23	1.25	1.64
		20	0.72	0.03										12.2	32.59	0.44	0.20	1.50	1.57
		29	0.67	0.04										12.2	32.60	0.46	0.25	1.52	1.95
		39	0.35	0.00										12.1	32.61	0.65	0.19	4.05	4.61
		50	0.12	0.00										9.8	32.82	0.86	0.04	7.95	8.28
		100	0.03	0.00										8.3	33.38	1.80	0.05	26.95	23.67

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.							
Nov-99	NH-85	150	0.02	0.00									7.8	33.88	2.16	0.05	39.59	29.24
		780	0.01	0.00									4.2	34.31	3.35	0.06	102.65	44.11
		1006	0.01	0.00									3.6	34.42	3.37	0.07	109.68	44.56
Feb-00	NH-05	1	0.85	0.00	0.23	0.02	27.1	2.4	50	37	1	357	9.7	31.69	0.86	0.12	16.56	0.85
		5	0.83	0.05	0.25	0.08	29.9	10.7					9.7	31.80	0.86	0.10	16.33	0.83
		10	0.79	0.06	0.22	0.10	27.9	14.6					9.7	31.80	0.85	0.13	16.32	0.79
		15	0.76	0.00									9.7	31.79	0.86	0.12	16.31	0.76
		20	0.72	0.02									9.7	31.80	0.85	0.07	16.52	0.72
		25	0.74	0.02									9.7	31.85	0.86	0.07	16.29	0.74
		30	0.73	0.01									9.7	31.86	0.86	0.13	16.06	0.73
		40	0.76	0.01									9.7	31.95	0.85	0.15	15.39	0.76
		50	0.74	0.01									9.8	32.04	0.86	0.00	14.71	0.74
		52	0.78	0.02									9.8	32.05	0.82	0.00	14.69	0.78
Feb-00	NH-15	1	0.47	0.04	0.07	0.04	15.2	10.3	61	25	1	480	10.0	32.69	0.86	0.00	12.71	7.85
		5	0.00	0.00									10.0	32.68	0.85	0.00	12.70	7.85
		10	0.46	0.05	0.06	0.06	13.6	14.7					10.0	32.69	0.86	0.00	12.91	7.85
		20	0.43	0.00									10.0	32.69	0.86	0.00	12.90	7.85
		30	0.43	0.02									10.0	32.68	0.86	0.00	12.89	7.92
		40	0.43	0.02									10.0	32.68	0.85	0.00	12.88	7.91
Feb-00	NH-15	50	0.44	0.01									10.0	32.68	0.86	0.00	12.86	7.93
		60	0.44	0.01									10.0	32.69	0.86	0.00	12.85	7.91
		70	0.44	0.01									10.0	32.68	0.86	0.00	12.84	7.99
		85	0.48	0.04														
Feb-00	NH-25	1	0.80	0.10	0.07	0.10	9.7	13.7	51	37	3	357	9.9	32.65	0.82	0.00	10.88	7.33
		10	0.84	0.02	0.06	0.02	6.6	2.1					9.9	32.65	0.82	0.00	10.88	7.41
		20	0.80	0.02									9.9	32.65	0.82	0.00	10.88	7.41
		25	0.70	0.10	0.01	0.01	1.2	1.8					9.9	32.66	0.82	0.00	11.11	7.35
		30	0.73	0.01									10.0	32.67	0.82	0.00	10.88	7.33

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Feb-00	NH-25	40	0.71	0.14									10.0	32.68	0.80	0.00	10.65	7.34
		50	0.49	0.02									10.0	32.68	0.88	0.00	11.33	8.11
		70	0.08	0.00									9.5	33.20	1.37	0.00	18.39	16.17
		100	0.03	0.00									9.0	33.49	1.70	0.00	24.99	21.58
		150	0.02	0.00									8.3	33.86	2.09	0.00	36.14	28.45
		200	0.01	0.01									7.7	33.95	2.30	0.00	43.19	30.86
		275	0.01	0.00									6.9	33.99	2.48	0.00	53.21	33.53
Feb-00	NH-35	2	0.74	0.02	0.10	0.05	13.7	7.6	52	35	0	343	9.9	32.65	0.77	0.00	9.97	0.74
		10	0.73	0.00	0.09	0.01	12.0	1.4					9.9	32.65	0.77	0.00	9.74	0.73
		20	0.74	0.01									9.9	32.64	0.77	0.00	9.74	0.74
		29	0.72	0.01									9.8	32.64	0.75	0.00	9.51	0.72
		41	0.68	0.00									9.8	32.65	0.76	0.00	9.51	0.68
		50	0.65	0.00									9.8	32.65	0.75	0.00	9.29	0.65
		61	0.47	0.01	0.06	0.02	13.8	4.0					9.7	32.65	0.75	0.00	9.06	0.47
		70	0.06	0.00									9.4	33.21	1.34	0.00	17.93	0.06
		101	0.02	0.00									8.8	33.64	1.90	0.00	29.77	0.02
		150	0.02	0.00									8.2	33.87	2.15	0.00	36.60	0.02
		314	0.01	0.00									6.6	34.01	2.56	0.00	56.85	0.01
425	0.01	0.00									5.9	34.03	2.77	0.00	67.09	0.01		
Feb-00	NH-45	1	0.68	0.09	0.07	0.10	12.1	16.4	53	35	2	298	9.7	32.67	0.71	0.05	9.45	5.43
		10	0.64	0.10	0.07	0.11	13.1	18.6					9.7	32.67	0.71	0.05	9.42	5.50
		20	0.70	0.03	0.14	0.07	20.7	11.2					9.7	32.67	0.73	0.06	9.38	5.50
		30	0.72	0.01									9.7	32.67	0.72	0.06	9.35	5.43
		40	0.65	0.02									9.7	32.67	0.72	0.07	9.55	5.50
		50	0.68	0.00									9.7	32.67	0.74	0.10	9.51	5.57
		60	0.69	0.02									9.7	32.67	0.73	0.13	9.71	5.57
		70	0.59	0.00									9.7	32.67	0.74	0.09	10.14	5.73
		100	0.02	0.00									9.0	33.59	1.85	0.15	28.71	23.74
		150	0.01	0.00									8.0	33.90	2.24	0.03	61.95	29.80

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)	
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.								
Feb-00	NH-45	500	0.01	0.00									5.1	34.12	3.13	0.04	83.32	41.92	
		689	0.00	0.00										4.4	34.27	3.31	0.09	101.89	43.58
Feb-00	NH-65	2	0.54	0.01	0.09	0.02	17.5	4.7	60	28	1	348	9.4	32.63	0.75	0.07	9.85	5.70	
		6	0.55	0.01	0.09	0.03	16.6	5.4					9.4	32.63	0.74	0.08	9.82	5.70	
		11	0.58	0.03	0.13	0.04	22.3	7.3					9.4	32.63	0.74	0.08	9.79	5.71	
		20	0.52	0.01										9.4	32.63	0.74	0.09	9.76	5.71
		31	0.46	0.02										9.4	32.63	0.74	0.09	9.73	5.64
		39	0.46	0.02										9.4	32.63	0.74	0.13	9.93	5.72
		49	0.44	0.00										9.4	32.63	0.74	0.17	10.13	5.80
		70	0.39	0.00										9.4	32.65	0.76	0.11	10.79	6.18
		101	0.02	0.00										8.3	33.62	1.93	0.09	30.06	25.48
		150	0.01	0.00										7.7	33.92	2.26	0.08	41.20	30.71
		802	0.01	0.00									4.1	34.33	3.19	0.07	93.47	44.27	
Feb-00	NH-85	3	0.50	0.01	0.08	0.02	17.0	3.6	58	29	0	336	9.3	32.64	0.76	0.20	11.04	6.17	
		10	0.50	0.02	0.07	0.02	14.8	5.5					9.3	32.65	0.75	0.11	11.02	6.17	
		20	0.55	0.00										9.4	32.65	0.74	0.11	10.99	6.15
		30	0.56	0.01										9.4	32.65	0.77	0.11	10.97	5.86
		42	0.58	0.01	0.09	0.02	15.2	4.1						9.4	32.66	0.75	0.11	10.95	5.95
		45	0.59	0.00										9.4	32.66	0.75	0.12	10.92	5.95
		50	0.54	0.00										9.4	32.66	0.75	0.12	10.90	5.96
		69	0.25	0.03										9.3	32.75	0.94	0.12	13.45	9.22
		100	0.01	0.00										8.3	33.63	1.97	0.05	31.95	25.99
		152	0.01	0.00										7.8	33.89	2.26	0.06	41.07	30.49
		900	0.00	0.00									3.8	34.39	3.34	0.06	90.04	44.76	
		1000	0.01	0.00									3.5	34.43	3.35	0.07	87.91	44.69	
Apr-00	NH-03	1.5											10.8	32.60					
		20												9.9	32.86				

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Apr-00	NH-05	2	8.99	0.29					17	102	11	101	11.1	32.26	0.19	0.09	4.90	0.01
		5	6.20	1.21									10.8	32.29	0.31	0.10	8.88	1.10
		10	8.11	0.06									9.9	32.42	0.72	0.19	14.04	5.96
		15	5.92	1.30									9.2	32.87	1.29	0.34	22.71	12.86
		20	1.10	0.09									8.9	33.14	1.52	0.16	27.61	16.85
		26	0.40	0.01									8.7	33.34	1.66	0.08	30.40	19.32
		30	0.28	0.00									8.5	33.55	1.88	0.06	34.36	22.77
		41	0.20	0.02									8.2	33.77	2.15	0.05	39.26	27.64
		43	0.16	0.00									8.2	33.78	2.19	0.09	39.47	28.27
		50	0.30	0.02									7.8	33.85	2.36	0.10	48.34	29.96
		55	0.36	0.03								7.8	33.85	2.34	0.09	48.59	30.20	
Apr-00	NH-10	1.3											11.2	30.36				
		15											9.5	32.19				
Apr-00	NH-15	2	0.40	0.02					32	64	8	108	11.1	29.61	0.10	0.00	13.73	0.28
		5	0.75	0.04									10.9	30.25	0.15	0.00	12.62	0.28
		10	4.56	1.37									10.2	31.53	0.42	0.00	9.16	1.38
		15	5.31	0.17									9.5	32.53	0.69	0.00	9.47	4.46
		20	1.00	0.01									9.4	32.59	0.74	0.00	10.25	5.61
		30	0.53	0.02									9.2	32.61	0.76	0.21	10.55	5.42
		35	0.33	0.01									9.1	32.62	0.74	0.22	10.15	5.22
		41	0.34	0.01									9.0	32.62	0.77	0.01	10.22	5.67
		50	0.25	0.00									9.0	32.63	0.78	0.00	10.29	5.98
		61	0.16	0.02									9.1	32.80	0.99	0.00	13.89	9.89
		70	0.10	0.01								9.2	33.06	1.23	0.00	17.73	13.56	
		86	0.05	0.00								8.5	33.62	1.88	0.00	31.22	23.48	
Apr-00	NH-20	1.5											11.3	29.09				
		26											9.9	32.64				

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Apr-00	NH-25	2	0.36	0.01					57	30	4	241	11.3	29.43	0.10	0.08	14.08	0.09
		10	1.03	0.01									10.4	31.18	0.33	0.08	10.58	0.66
		21	0.82	0.34									9.8	32.44	0.67	0.27	10.81	4.22
		30	0.56	0.01									9.8	32.56	0.77	0.27	11.04	5.78
		40	0.32	0.00									9.7	32.64	0.77	0.18	11.04	5.97
		50	0.22	0.00									9.7	32.67	0.78	0.11	11.04	6.15
		70	0.14	0.01									9.0	32.69	0.80	0.28	11.28	6.08
		101	0.06	0.00									9.1	33.14	1.44	0.03	22.49	16.48
		151	0.02	0.00									8.2	33.93	2.44	0.04	47.71	32.24
201	0.02	0.00									6.9	33.98	2.57	0.04	54.48	34.40		
289	0.01	0.00									6.1	34.03	2.77	0.08	64.06	36.77		
Apr-00	NH-35	1	0.00	0.00					103	3	1	717	11.3	29.92	0.11	0.07	12.21	0.09
		10	0.02	0.01									10.4	31.36	0.36	0.08	9.64	0.47
		15	0.03	0.03									10.0	32.22	0.48	0.07	10.34	1.73
		20	0.10	0.05									9.8	32.40	0.63	0.10	10.81	3.99
		31	0.06	0.01									9.8	32.55	0.74	0.10	10.81	5.33
		40	0.03	0.03									9.7	32.61	0.73	0.37	10.58	4.82
		50	0.01	0.00									9.7	32.67	0.73	0.45	10.34	4.81
		70	0.01	0.00									9.0	32.62	0.82	0.32	11.74	6.20
		100	0.01	0.00									9.1	33.38	1.58	0.08	23.19	18.87
		150	0.00	0.00									8.3	33.85	2.13	0.00	36.37	28.58
400	0.00	0.00									5.6	34.08	ND	ND	ND	ND		
445	0.01	0.00									5.5	34.10	3.03	0.07	79.01	39.74		
Apr-00	NH-45	2	0.31	0.07					58	30	2	152	11.0	31.57	0.25	0.08	8.03	0.22
		10	0.40	0.20									10.6	31.83	0.30	0.07	8.26	0.30
		11	0.81	0.01									10.4	32.01	0.42	0.13	9.67	1.31
		20	0.78	0.04									10.1	32.39	0.52	0.20	9.91	2.28
		31	0.71	0.03									9.8	32.67	0.52	0.30	8.50	2.08
		40	0.42	0.03									9.7	32.70	0.62	0.43	9.20	3.50

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Apr-00	NH-45	50	0.31	0.02									9.6	32.70	0.71	0.47	10.14	4.69
		70	0.15	0.00									9.3	32.79	0.77	0.34	10.61	5.62
		101	0.05	0.00									8.6	33.33	1.62	0.09	24.59	20.18
		151	0.01	0.00									8.2	33.81	2.10	0.07	34.87	27.73
		500	0.01	0.00									5.0	34.16	3.18	0.04	85.78	42.00
		580	0.01	0.00									4.7	34.22	3.25	0.08	87.88	42.76
Apr-00	NH-55	1											11.0	31.95				
		20											10.5	32.59				
Apr-00	NH-65	1	0.32	0.03					61	27	1	239	11.3	31.84	0.26	0.11	30.34	0.18
		10	0.55	0.00									11.0	32.04	0.31	0.11	31.05	0.26
		19	0.82	0.02									10.3	32.51	0.48	0.13	31.75	1.84
		25	0.68	0.01									10.0	32.66	0.58	0.28	32.69	2.97
		29	0.63	0.00									10.1	32.69	0.64	0.29	33.16	3.87
		40	0.30	0.08									10.0	32.73	0.70	0.43	33.39	4.81
		50	0.22	0.00									9.7	32.71	0.74	0.57	33.86	5.43
		70	0.10	0.01									9.5	32.77	0.93	0.10	35.74	8.66
		100	0.03	0.00									9.0	33.22	1.67	0.02	.	20.63
		150	0.02	0.00									8.3	33.76	2.15	0.02	36.45	28.74
		300	0.01	0.00									6.5	34.00	2.62	0.03	57.35	35.57
830	0.01	0.00									4.1	34.33	3.28	0.06	110.43	43.91		
Apr-00	NH-85	1	0.72	0.03					65	23	1	252	11.0	32.67	0.43	0.00	6.81	1.77
		10	0.69	0.01									10.7	32.66	0.46	0.00	7.52	2.08
		13	0.62	0.03									10.5	32.68	0.50	0.00	7.52	2.55
		20	0.29	0.02									10.2	32.69	0.60	0.00	7.99	3.95
		30	0.29	0.00									9.9	32.69	0.62	0.16	7.99	4.11
		40	0.28	0.01									9.3	32.68	0.65	0.07	8.06	4.42
		50	0.25	0.00									9.2	32.67	0.66	0.18	8.13	4.74
		90	0.19	0.03									8.8	32.76	0.70	0.13	8.44	5.05

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)		
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.									
Apr-00	NH-85	100	0.08	0.00									8.6	32.93	1.07	0.00	13.68	11.57		
		150	0.01	0.01										8.1	33.79	2.08	0.00	34.70	28.01	
		849	0.00	0.00											3.8	34.33	3.35	0.00	100.66	44.40
		1005	0.00	0.00											3.5	34.40	3.31	0.08	103.32	44.33
Jul-00	NH-03	2	6.07	0.00										11.0	33.14	1.13	1.34	7.44	4.04	
		9	10.09	1.11											9.7	33.52	2.11	0.40	32.04	25.93
Jul-00	NH-05	1	6.26	0.67	5.27	0.49	87.0	14.1	42	44	6	1316		10.9	32.61	1.11	0.28	15.57	11.13	
		5	3.52	0.21											10.9	32.62	1.75	0.64	26.97	20.04
		7.2	2.74	0.89											10.1	32.83	2.22	0.51	37.52	27.62
		10.1	2.26	1.56	0.65	0.05	58.7	7.2							9.2	33.12	2.36	0.44	41.95	30.04
		14.9	2.01	1.92											8.4	33.40	2.57	0.30	49.76	33.40
		20.1	1.87	2.12	0.00	0.00	0.2	0.3							8.1	33.55	2.61	0.00	49.97	34.53
		25.9	1.83	2.18											7.8	33.78	2.60	0.00	49.54	34.47
		29.4	1.78	2.25											7.7	33.83	2.74	0.00	53.97	35.84
		40	1.81	2.21											7.4	33.93	2.74	0.00	53.75	36.11
		45.7	1.92	2.05											7.3	33.93	2.75	0.00	55.44	36.38
		50.2	2.15	1.73											7.3	33.93	2.76	0.00	57.33	36.35
		55.2	2.19	1.67											7.2	33.94	2.76	0.08	56.90	36.17
Jul-00	NH-10	1.2	3.50	0.14										13.2	31.52	0.41	0.73	3.81	0.00	
		6.4	2.80	1.43											12.7	31.59	0.47	0.54	5.81	0.88
Jul-00	NH-15	1	2.34	1.41	0.87	0.14	63.3	13.3	58	28	5	814		14.0	31.20	0.10	0.00	2.64	1.51	
		5	2.30	1.46	0.40	0.29	30.0	25.2							14.0	31.21	0.16	0.00	2.87	1.55
		10	2.21	1.59	0.35	0.01	32.4	0.6							11.4	31.97	0.77	0.00	9.44	1.18
		20	1.80	2.18											8.8	32.58	0.93	0.00	10.94	0.49
		27	1.85	2.10											8.4	32.65	1.02	0.00	11.39	0.47
		30	1.84	2.12											8.4	32.66	1.20	0.00	14.97	0.36
		40	1.74	2.26											8.1	32.92	1.68	0.00	24.26	0.21

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.			S.D.							
Jul-00	NH-15	50	1.71	2.29									8.0	33.29	2.08	0.00	36.08	0.10
		60	1.68	2.34									7.9	33.66	2.32	0.00	41.14	0.04
		70	1.75	2.25									7.7	33.82	2.55	0.00	48.11	0.19
		76	1.70	2.32									7.6	33.85	2.60	0.00	49.79	0.08
		84.7	1.70	2.31									7.4	33.89	2.71	0.00	53.59	0.10
Jul-00	NH-20	1.5	1.06	0.01									14.6	31.11	0.28	0.62	4.84	0.00
		16	1.67	0.06									9.7	32.33	0.88	0.23	12.00	3.35
Jul-00	NH-25	1	1.91	1.98	0.05	0.07	9.5	13.5	61	24	1	398	14.9	31.17	0.05	0.00	0.45	0.00
		10	1.91	1.97	0.11	0.15	21.5	29.4					14.3	31.33	0.07	0.00	0.68	0.00
		20	1.98	1.88	0.33	0.15	50.2	24.4					10.1	32.39	0.24	0.00	3.87	0.00
		25	1.96	1.90									9.3	32.51	0.38	0.02	6.22	0.35
		30	1.89	2.00									8.9	32.58	0.78	0.00	10.47	5.05
		40	1.77	2.16									8.6	32.67	1.04	0.00	12.60	10.01
		50	1.74	2.21									8.3	32.80	1.24	0.00	15.80	13.80
		70	1.67	2.31									8.2	33.32	1.79	0.00	26.38	23.09
		100	1.72	2.25									7.7	33.81	2.53	0.00	46.46	34.08
		150	1.69	2.29									6.9	33.99	2.61	0.00	52.82	36.62
		200	1.66	2.32									6.5	34.01	2.67	0.00	56.44	37.61
230	1.66	2.33									6.4	34.01	2.71	0.00	56.67	38.16		
Jul-00	NH-35	1.5	1.91	2.30	0.06	0.07	21.1	24.7	70	19	2	386	15.6	30.94	0.07	0.86	2.29	0.70
		10	1.92	2.27	0.08	0.02	25.0	6.6					15.5	30.94	0.09	0.00	4.73	0.70
		20	1.88	2.33									12.6	32.05	0.35	0.00	5.14	0.71
		30	2.07	2.07									10.4	32.54	0.54	0.07	6.76	1.96
		32	1.95	2.24	0.00	0.00	0.0	0.0					10.0	32.59	0.63	0.55	7.16	2.91
		40	1.89	2.32									9.3	32.65	0.82	0.00	9.19	6.24
		50	1.86	2.37									8.7	32.68	0.99	0.04	11.22	9.42
		70	1.83	2.41									8.4	32.89	1.28	0.00	16.30	14.24
100	1.78	2.48									8.2	33.59	1.88	0.03	28.02	25.30		

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)		
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.									
Jul-00	NH-35	150	1.77	2.49									7.1	33.97	2.66	0.00	47.05	35.04		
		397	1.77	2.49										6.0	34.04	2.86	0.00	66.08	40.09	
		425	1.77	2.49										5.9	34.05	2.89	0.00	66.73	40.18	
Jul-00	NH-45	1	1.84	2.30	0.03	0.01	15.5	3.0	69	19	2	307	.	29.79	0.05	0.00	3.51	0.00		
		10	1.87	2.26	0.00	0.00	0.0	0.0						15.5	30.41	0.20	0.00	7.16	0.00	
		20	2.02	2.05											12.9	31.90	0.37	0.11	6.96	0.00
		25	1.98	2.10	ND	ND	ND	ND							10.9	32.39	0.47	0.20	9.19	0.55
		30	1.89	2.24											10.0	32.54	0.60	0.10	8.79	2.56
		40	1.86	2.27											9.3	32.64	0.79	0.66	9.19	5.65
		50	1.81	2.34											8.9	32.70	0.86	0.00	9.19	7.14
Jul-00	NH-45	70	1.78	2.39										8.6	32.84	1.12	0.06	13.66	11.93	
		100	1.74	2.44										8.3	33.36	1.76	0.00	25.43	22.31	
		150	1.74	2.44										7.7	33.89	2.37	0.00	42.07	31.99	
		500	1.74	2.44										5.2	34.12	2.83	0.00	62.57	38.97	
		664	1.74	2.45										4.6	34.26	3.32	0.00	81.03	44.64	
Jul-00	NH-55	1	0.12	0.01										16.5	29.48	0.15	0.28	4.84	0.00	
		36	0.60	0.04											10.7	32.39	0.59	0.28	9.11	0.29
Jul-00	NH-65	1	1.79	2.38	0.00	0.01	0.5	5.3	80	12	1	171		16.5	29.66	0.02	0.10	1.79	0.00	
		10	1.79	2.37	0.02	0.02	13.3	18.8							16.0	30.76	0.15	0.59	4.77	0.00
		20	1.79	2.36											15.3	31.52	0.22	0.00	3.49	0.00
		31	1.80	2.35											14.2	32.51	0.27	0.00	1.81	0.00
		40	1.81	2.34											12.5	32.64	0.42	0.08	2.77	0.00
		50	1.80	2.35											10.4	32.72	0.52	0.28	4.53	1.56
		60	1.83	2.32	0.04	0.03	21.9	14.5							10.0	32.76	0.67	0.18	5.90	4.12
		69	1.81	2.34											9.4	32.80	0.76	0.15	6.45	5.77
		100	1.76	2.41											8.7	33.10	1.24	0.02	14.30	14.19
		150	1.74	2.45											8.1	33.76	2.06	0.00	32.91	28.16
		860	1.74	2.45											4.0	34.35	3.41	0.00	95.97	45.96

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.							
Jul-00	NH-65	1004	1.74	2.45									3.7	34.41	3.39	0.00	117.22	46.32
Jul-00	NH-85	1.5	1.83	2.41	0.01	0.01	6.6	7.6	76	16	1	94	16.1	31.48	0.24	0.50	6.05	0.00
		10	1.82	2.42	0.00	0.00	0.0	0.0					16.0	31.52	0.29	0.26	7.14	0.00
		20	1.77	2.50									15.9	31.66				
		30	1.84	2.39									15.0	32.24	0.38	0.29	5.39	0.00
		40	1.84	2.39									13.9	32.58	0.42	0.21	4.82	0.00
		50	2.02	2.15									12.7	32.61	0.53	0.40	5.72	0.11
		60	1.94	2.26	0.10	0.01	30.8	1.8					10.6	32.67	0.72	0.44	7.48	2.85
		70	1.85	2.38									9.6	32.71	0.87	1.06	8.79	5.13
		100	1.80	2.45									8.9	33.00	1.39	0.42	16.43	14.22
		150	1.77	2.49									8.1	33.72	2.11	0.40	32.04	25.93
		800	1.77	2.49									4.2	34.32	3.47	0.27	109.76	43.73
		1006	1.77	2.49									3.7	34.41	3.52	0.42	125.77	44.75
Sep-00	NH-03	1	3.15	0.14	1.83	0.18	58.1	8.2					11.8	33.29	1.71	2.60	14.52	12.60
		15	4.12	0.23	2.18	0.22	52.9	8.2					10.1	33.33	0.99	0.57	9.40	4.81
Sep-00	NH-05	1	2.64	0.36	1.33	0.44	52.2	24.0	24	82	5	232	12.7	33.14	0.82	0.71	4.36	0.42
		5	2.80	0.04									12.7	33.14	0.71	0.53	3.76	0.46
		10	3.10	0.45	1.54	0.51	51.5	23.9					12.6	33.14	0.82	0.60	4.00	0.80
		15	4.34	0.21									12.5	33.14	1.65	2.42	13.35	11.57
		21	4.27	0.00									12.4	33.17	2.53	3.43	30.61	23.97
		22	3.83	0.10									12.2	33.17	2.64	3.67	32.89	25.26
		25	3.13	0.15	2.04	0.29	65.5	12.4					9.9	33.40	2.89	3.59	37.44	27.17
		30	1.53	0.19									9.3	33.65	2.85	2.72	43.86	30.36
		41	1.06	0.07									8.1	33.71	2.78	0.91	47.44	32.36
		50	0.78	0.01									7.8	33.77	2.84	0.81	53.81	32.80
		51	0.73	0.00									7.8	33.77	2.83	0.74	53.81	32.68
Sep-00	NH-10	1	1.75	0.04	0.43	0.02	24.6	1.8					13.0	32.83	0.42	0.22	1.47	0.00

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)	
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.								
Sep-00	NH-10	20	4.12	0.18	3.39	0.49	82.3	15.5					9.2	33.25	2.20	2.14	19.99	21.25	
Sep-00	NH-15	2	1.86	0.23	0.00	0.00	0.0	0.0	47	41	3	506	13.9	32.34	0.53	0.22	6.59	0.72	
		5	2.13	0.15									13.4	32.38	0.50	2.04	6.39	1.07	
		10	2.58	0.17	0.61	0.18	23.9	8.4					12.9	32.40	0.82	0.13	10.05	3.96	
		15	1.39	0.15	0.02	0.03	1.6	2.3					8.5	32.71	1.60	0.11	22.26	15.56	
		20	0.69	0.04										8.2	32.93	1.59	0.09	23.97	15.60
		30	0.44	0.02										8.0	33.22	1.90	1.68	22.93	18.97
		40	0.14	0.01										8.0	33.46	2.09	0.26	31.18	24.25
		50	0.05	0.01										8.1	33.67	2.25	0.20	35.63	27.46
		60	0.04	0.00										8.1	33.75	2.37	0.11	39.02	29.03
		70	0.10	0.01										7.8	33.84	2.68	0.24	51.27	31.77
		85	0.33	0.26										7.7	33.86	2.94	0.10	62.98	33.01
		90	0.16	0.01										7.7	33.86	2.92	0.06	63.03	33.08
Sep-00	NH-20	1	0.78	0.01	0.00	0.00	0.0	0.0					15.4	31.80	0.27	0.50	4.64	0.00	
		8	1.81	0.01	0.00	0.00	0.0	0.0					11.2	32.34	0.50	0.43	7.38	1.00	
Sep-00	NH-25	2	0.04	0.01	0.00	0.00	0.0	0.0	102	3	1	723	15.6	31.54	0.24	0.12	4.64	0.00	
		10	0.15	0.05	0.05	0.07	43.9	62.1					14.9	31.71	0.91	0.16	9.90	5.00	
		15	0.10	0.04	0.03	0.04	39.0	55.1					14.3	31.94	1.07	0.32	11.64	7.56	
		20	0.06	0.02										11.5	32.34	1.15	0.27	12.62	8.99
		30	0.03	0.00										8.7	32.63	1.44	0.10	17.81	13.98
		40	0.03	0.02										8.2	32.83	1.69	1.24	18.49	16.75
		50	0.02	0.00										8.2	33.07	1.97	0.09	27.17	22.42
		70	0.00	0.00										8.1	33.51	2.19	0.15	33.59	26.64
		100	0.00	0.00										7.9	33.83	2.39	0.14	40.44	30.27
		150	0.00	0.00										7.5	33.96	2.62	0.14	47.23	33.42
		200	0.00	0.00										7.1	33.99	2.70	0.16	51.45	34.60
270	0.00	0.00										6.9	34.01	2.78	0.10	54.64	35.21		

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Sep-00	NH-35	1	0.25	0.00	0.03	0.01	13.7	4.0	72	19	1	1117	16.0	32.08	0.38	0.08	4.90	0.00
		10	0.02	0.00	0.00	0.00	0.0	0.0					16.0	32.09	ND	0.13	ND	ND
		20	0.23	0.03									11.6	32.53	0.53	0.45	5.17	0.00
		23	0.39	0.04	0.08	0.04	19.7	12.3					11.2	32.58	0.57	0.45	5.41	0.18
		30	0.47	0.01									9.8	32.63	0.64	0.63	5.88	1.12
		40	0.43	0.01									9.0	32.67	0.90	0.20	9.29	5.71
		50	0.29	0.02									8.5	32.75	1.06	0.11	11.16	8.67
		69	0.10	0.00									8.5	33.11	1.44	0.18	17.73	15.07
		100	0.04	0.00									8.2	33.70	1.99	0.16	28.63	24.02
		149	0.01	0.00									7.7	33.92	2.47	0.08	42.76	31.40
		310	0.01	0.00									6.6	34.03	2.80	0.08	58.29	35.81
374	0.01	0.00					6.3	34.05	2.92	0.08	63.16	36.97						
Sep-00	NH-45	1	0.14	0.05	0.00	0.00	0.2	0.3	75	16	1	445	16.7	32.13	0.37	ND	3.89	0.00
		10	0.14	0.00	0.02	0.03	11.9	18.2					16.7	32.13	0.38	ND	3.90	0.00
		20	0.25	0.01									13.6	32.50	0.48	ND	3.83	0.00
		26	0.27	0.04	0.03	0.04	11.2	15.5					12.4	32.57	0.51	ND	4.11	0.00
		30	0.27	0.02									11.6	32.62	0.55	ND	4.51	0.01
		40	0.43	0.05									10.0	32.67	0.78	ND	7.16	3.46
		50	0.19	0.00									9.4	32.69	0.90	ND	8.53	6.10
		70	0.12	0.00									8.7	32.77	1.30	ND	14.49	12.54
		100	0.02	0.00									8.4	33.39	1.96	ND	28.19	23.10
		150	0.01	0.00									7.9	33.85	2.39	ND	39.72	30.15
		500	0.00	0.00									5.3	34.11	3.25	ND	85.03	41.43
650	0.01	0.00					4.6	34.24	3.44	ND	103.51	43.44						
Sep-00	NH-55	4	0.14	0.01	0.00	0.00	0.0	0.0					16.7	32.10	0.35	0.17	4.91	0.00
		36	0.60	0.00	0.27	0.01	44.9	1.3					10.7	32.65	0.60	0.29	5.58	0.57
Sep-00	NH-65	1	0.19	0.04	0.01	0.01	5.8	8.2	59	28	3	133	16.2	32.08	0.36	ND	4.33	0.00
		10	0.24	0.04	0.05	0.07	22.5	31.9					16.1	32.08	0.37	ND	4.49	0.00

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)	
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.								
Sep-00	NH-65	15	0.67	0.03	0.14	0.08	20.4	12.9						13.0	32.35	0.48	ND	4.68	0.00
		20	1.35	0.01										12.0	32.48	0.59	ND	5.48	0.18
		30	0.56	0.00										10.2	32.60	0.86	ND	8.40	4.18
		40	0.48	0.22										8.9	32.66	0.99	ND	9.61	7.13
		48	0.16	0.01										8.7	32.70	1.04	ND	10.06	8.20
		70	0.10	0.01										8.4	32.93	1.44	ND	16.82	14.79
		100	0.02	0.00										8.4	33.40	2.01	ND	28.59	24.24
		150	0.01	0.00										8.0	33.89	2.43	ND	41.35	31.51
Sep-00	NH-85	1	0.32	0.12	0.01	0.02	4.1	5.7	70	20	2	396	16.1	31.93	0.30	0.08	4.86	0.00	
		10	0.36	0.06	0.07	0.10	20.9	29.6					16.1	31.94	0.32	0.10	5.03	0.00	
		20	0.57	0.05									14.2	32.33	0.52	0.13	6.55	0.86	
		25	0.44	0.03	0.11	0.12	27.1	29.6					12.9	32.39	0.66	0.21	8.69	2.33	
		30	0.38	0.05									12.6	32.53	0.88	0.31	10.31	4.91	
		40	0.25	0.01									10.2	32.72	1.21	0.49	13.14	9.71	
		50	0.19	0.02									9.3	32.89	1.41	0.10	15.90	13.60	
		70	0.03	0.04									8.9	33.27	1.79	0.06	23.55	19.95	
		100	0.02	0.00									8.4	33.53	2.06	0.06	30.22	24.58	
		150	0.01	0.00									7.8	33.91	2.42	0.07	41.50	30.60	
		900	0.00	0.00									3.8	34.35	3.54	0.04	115.45	44.55	
		1004	0.00	0.00									3.5	34.39	3.52	0.07	97.73	44.56	
Jan-01	NH-03	3	0.60	0.05	0.34	0.05	56.5	7.6					9.8	32.22	0.81	0.59	6.98	3.91	
		23	0.69	0.00	0.52	0.07	75.0	7.0					10.2	32.64	0.73	0.46	5.66	4.32	
Jan-01	NH-05	2	0.30	0.61	0.08	0.01	27.2	4.3	51	25	2	ND							
		5	0.28	0.01															
		10	0.28	0.01	0.08	0.02	29.4	6.9											
		15	0.29	0.04															
		20	0.34	0.01															
		25	0.38	0.06															

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)		
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.									
Jan-01	NH-05	30	0.40	0.02																
		38	0.67	0.06	0.46	0.08	69.9	18.3												
		40	0.69	0.04																
		50	1.06	0.03																
		51	1.04	0.08																
Jan-01	NH-10	1	0.29	0.01	0.06	0.00	21.1	0.6					10.5	32.70	0.59	0.11	4.68	3.74		
		65	0.47	0.02	0.34	0.02	72.7	3.3					10.2	32.77	0.86	0.27	9.82	6.56		
Jan-01	NH-15	1	0.16	0.00	0.00	0.01	3.7	5.3	80	13	1	ND								
		5	0.22	0.03																
		10	0.18	0.02	0.02	0.02	13.2	12.6												
		20	0.21	0.03																
		29	0.18	0.01																
		40	0.21	0.02	0.02	0.02	9.0	11.0												
		45	0.15	0.01																
		50	0.16	0.01																
		60	0.12	0.01																
		65	0.13	0.00																
Jan-01	NH-20	1	0.32	0.00	0.01	0.00	2.6	0.0					10.3	32.70	0.61	0.06	4.05	3.99		
		10	0.33	0.00	0.02	0.00	5.7	0.0					10.3	32.70	0.61	0.10	3.99	3.99		
Jan-01	NH-25	1	0.36	0.08	0.02	0.04	7.2	10.1	66	23	1	ND								
		10	0.38	0.01	0.07	0.03	19.0	9.2												
		15	0.38	0.01	0.05	0.02	13.2	5.7												
		20	0.37	0.01																
		30	0.37	0.04																
		37	0.37	0.03																

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)			
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.										
Jan-01	NH-25	50	0.38	0.01																	
		71	0.19	0.01																	
		100	0.02	0.00																	
Jan-01	NH-35	2	0.29	0.04	0.00	0.01	1.7	2.4	74	16	3	ND									
		10	0.19	0.13	0.01	0.01	7.4	10.5													
		20	0.28	0.04																	
		25	0.29	0.02	0.01	0.02	4.1	5.8													
		31	0.31	0.03																	
		40	0.28	0.02																	
		50	0.27	0.04																	
		68	0.09	0.01																	
100	0.02	0.00																			
Jan-01	NH-45	1	0.26	0.05	0.01	0.01	3.5	5.0	71	19	1	ND									
		10	0.27	0.04	0.02	0.03	8.4	11.8													
		20	0.30	0.01	0.04	0.01	12.6	4.6													
		25	0.30	0.00																	
		30	0.30	0.02																	
		40	0.22	0.00																	
		50	0.31	0.00																	
		70	0.22	0.01																	
		100	.	.																	
150	0.01	0.00																			
Jan-01	NH-55	1	0.14	0.00	0.01	0.00	8.0	0.1					9.6	32.63	0.77	0.18	6.10	6.40			
		19	0.14	0.00	0.02	0.00	17.8	0.3					9.6	32.63	0.73	0.17	7.39	6.31			
Jan-01	NH-65	1	0.15	0.02	0.01	0.02	11.6	16.4	36	5	1	ND									
		10	0.13	0.03	0.01	0.01	5.4	7.7													
		20	0.15	0.05																	

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)	
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.								
Jan-01	NH-65	24	0.16	0.01	0.02	0.02	15.1	16.5											
		30	0.13	0.01															
		40	0.13	0.00															
		50	0.15	0.02															
		70	0.05	0.01															
		100	0.01	0.00															
Jan-01	NH-85	3	0.13	0.03	0.04	0.03	28.8	26.1	87	7	0	ND							
		10	0.09	0.01	0.00	0.00	0.0	0.0											
		20	0.10	0.01	0.01	0.01	10.2	14.4											
		28	0.10	0.01															
		30	0.10	0.00															
		40	0.10	0.01															
		50	0.12	0.01															
		70	0.04	0.00															
		100	0.01	0.00															
Mar-01	NH-03	3	2.06	0.01	1.81	0.01	87.8	0.0					10.0	32.26	0.41	0.25	0.00	0.00	
		23	3.08	0.04	2.83	0.33	91.9	0.4					9.7	32.57	0.39	0.14	0.00	0.00	
Mar-01	NH-05	2	1.98	0.04	1.70	0.04	85.9	3.7	35	59	2	ND							
		5	2.01	0.03															
		10	1.99	0.01	1.67	0.03	83.8	1.9											
		13	1.94	0.03	1.59	0.06	81.9	4.3											
		15	2.18	0.04															
		20	1.87	0.09															
		25	1.52	0.17															
		30	1.29	0.00															
		40	1.97	0.02															
		50	0.74	0.02															

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)	
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.								
Mar-01	NH-05	55	1.11	0.38															
Mar-01	NH-10	1	1.27	0.12	0.98	0.11	76.6	0.2					9.8	32.65	0.48	0.20	0.45	0.84	
		65	1.37	0.01	1.07	0.03	77.9	0.0					9.8	32.65	0.48	0.21	0.51	0.93	
Mar-01	NH-15	1	0.45	0.04	0.04	0.02	8.5	3.8	68	22	1								
		5	0.43	0.02															
		10	0.40	0.05	0.04	0.06	11.4	16.1											
		20	0.44	0.00															
		23	0.44	0.02															
		31	0.44	0.01	0.03	0.01	6.3	2.5											
		40	0.40	0.01															
		49	0.20	0.00															
		60	0.12	0.00															
		70	0.09	0.00															
87	0.05	0.00																	
Mar-01	NH-20	1	0.45	0.00	0.10	0.01	21.4	0.0					9.7	32.71	0.57	ND	3.64	3.28	
		10	0.43	0.01	ND	ND	ND	ND					9.7	32.71	0.57	0.02	4.53	3.52	
Mar-01	NH-25	2	0.33	0.06	0.00	0.00	0.5	0.7	71	19	1								
		10	0.35	0.00	0.03	0.01	7.4	1.9											
		20	0.35	0.00															
		30	0.35	0.01	0.02	0.01	5.3	3.6											
		41	0.32	0.02															
		44	0.30	0.01															
		51	0.26	0.00															
		71	0.05	0.00															
		101	0.01	0.00															
150	0.01	0.00																	

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)	
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		S.D.	S.D.								
Mar-01	NH-35	3	0.48	0.04	0.07	0.01	15.5	2.8	66	22	4								
		10	0.45	0.01	0.06	0.02	13.4	5.2											
		20	0.43	0.02															
		25	0.42	0.03	0.03	0.04	7.4	10.4											
		30	0.42	0.00															
		40	0.45	0.01															
		50	0.19	0.27															
		70	0.16	0.00															
		100	0.02	0.00															
		150	0.01	0.00															
Mar-01	NH-45	2	0.22	0.01	0.02	0.02	10.9	11.2	78	14	2								
		10	0.22	0.01	0.03	0.01	12.3	6.0											
		20	0.22	0.00															
		30	0.21	0.00															
		40	0.21	0.00															
		45	0.21	0.01	0.03	0.02	13.1	11.8											
		50	0.25	0.11															
		70	0.05	0.00															
		100	0.02	0.00															
		150	0.01	0.00															
		500	0.00	0.00															
615	0.00	0.00																	
Mar-01	NH-55	1	0.24	0.02	0.06	0.01	26.8	0.0				9.9	32.80	0.59	0.15	3.17	3.67		
		19	0.23	0.01	0.04	0.00	18.3	0.0				9.9	32.80	0.60	0.16	3.36	3.63		
Mar-01	NH-65	2	0.24	0.00	0.03	0.00	12.5	1.7	75	17	0								
		10	0.25	0.01	0.03	0.01	11.7	3.5											
		20	0.23	0.01															
		30	0.24	0.02															

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)					
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.												
Mar-01	NH-65	35	0.24	0.00	0.03	0.01	10.6	3.5															
		40	0.24	0.00																			
		50	0.23	0.01																			
		65	0.22	0.01																			
		100	0.02	0.00																			
		150	0.01	0.00																			
Mar-01	NH-85	2	0.17	0.01	0.01	0.01	6.8	4.3	82	12	0												
		10	0.16	0.00																			
		20	0.16	0.00																			
		30	0.16	0.00																			
		40	0.16	0.00																			
		50	0.18	0.01																			
		53	0.19	0.01																0.02	0.01	12.7	3.8
		70	0.12	0.00																			
		100	0.04	0.00																			
		150	0.00	0.00																			
Jul-01	NH-03	1	1.05	0.01	0.93	0.01	89.0	2.0					8.4	33.73	2.66	0.24	51.90	31.20					
		11	1.07	0.08															0.93	0.08	86.8	14.2	8.0
Jul-01	NH-05	1	6.08	0.42	5.70	0.51	94.2	14.8	40	51	2												
		5	6.03	0.26																ND	ND	ND	ND
		15	4.81	0.08																4.40	0.10	91.5	3.6
		20	0.50	0.06																			
		25	0.28	0.01																			
		30	0.12	0.01																			
		40	0.14	0.01																			
		50	0.14	0.01																			
		56	0.18	0.01																			

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)		
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.									
Jul-01	NH-10	1	2.24	0.01	2.05	0.03	91.5	1.8					9.7	33.08	2.05	0.93	28.93	22.12		
		13	2.53	0.05	2.27	0.13	90.0	6.8					8.7	33.11	2.08	0.73	29.95	22.86		
Jul-01	NH-15	1	2.20	0.04	1.22	0.11	55.3	5.9	43	47	1									
		5	2.55	0.05																
		10	5.60	0.14	4.84	0.15	86.6	4.7												
		12	5.64	0.16	5.52	0.17	97.9	5.9												
		20	6.97	0.53																
		24	8.20	0.31																
		30	2.96	0.02																
		40	0.16	0.01																
		50	0.09	0.01																
		60	0.09	0.01																
		69	0.06	0.03																
86	0.10	0.01																		
Jul-01	NH-20	1	1.36	0.02	0.51	0.06	37.3	5.3					11.4	32.39	0.87	0.46	5.36	6.02		
		26	2.20	0.01	1.66	0.03	75.2	1.7					9.5	32.71	1.44	0.31	14.24	13.68		
Jul-01	NH-25	2	2.73	0.04	1.20	ND	44.5	ND	49	40	1									
		10	2.89	0.03	1.44	ND	50.1	ND												
		15	2.63	0.09	1.37	ND	53.4	ND												
		20	1.92	0.03																
		30	0.55	0.00																
		40	0.55	0.01																
		50	0.52	0.01																
		70	0.19	0.01																
100	0.03	0.00																		
Jul-01	NH-35	1	0.52	0.02	0.04	0.05	7.6	10.8	71	20	1									
		10	0.55	0.00	0.08	0.04	14.3	6.7												

Cruise	Station	Z (m)	Total Chl		Chl>10µm		%Chl>10µm		Euph Z (m)	Int. Chl (mg/m ²)		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (µM)	NH ₄ (µM)	SiO ₂ (µM)	NO ₃ (µM)			
			(µg/l)	S.D.	(µg/l)	S.D.	%	S.D.		S.D.	S.D.										
Jul-01	NH-35	20	0.49	0.02																	
		30	0.30	0.04																	
		40	0.96	0.01	0.21	0.03	21.7	3.7													
		50	0.86	0.02																	
		55	0.76	0.02																	
		70	0.41	0.01																	
		100	0.06	0.01																	
Jul-01	NH-45	2.5	0.18	0.00	0.01	0.01	5.3	7.5	76	16	2										
		10	0.18	0.00	0.02	0.00	12.8	1.1													
		20	0.19	0.00	0.02	0.03	9.4	13.3													
		30	0.17	0.00																	
		40	0.28	0.00																	
		49	0.41	0.00																	
		55	0.83	0.00																	
		70	0.34	0.01																	
		100	0.07	0.00																	
		643	0.01	0.00																	
Jul-01	NH-55	1	0.08	0.00	0.01	0.00	13.1	4.1					15.4	31.20	0.25	0.06	0.00	0.00			
		45	0.33	0.02	0.09	0.03	26.9	10.7					9.9	32.49	0.61	0.12	1.15	0.54			
Jul-01	NH-65	1.7	0.15	0.01	0.15	0.01	97.0	13.8	79	14	0										
		10	0.15	0.00	0.03	0.01	18.8	5.9													
		20	0.17	0.01																	
		30	0.25	0.00																	
		40	0.33	0.01																	
		50	0.46	0.00																	
		56	0.62	0.04	0.06	0.08	9.7	13.7													

Cruise	Station	Z (m)	Total Chl		Chl>10 μ m		%Chl>10 μ m		Euph Z (m)	Int. Chl		Int.NO ₃ (mmol/m ²)	Temp (°C)	Salinity (psu)	PO ₄ (μ M)	NH ₄ (μ M)	SiO ₂ (μ M)	NO ₃ (μ M)
			(μ g/l)	S.D.	(μ g/l)	S.D.	%	S.D.		(mg/m ²)	S.D.							
Jul-01	NH-65	71	0.30	0.00														
		100	0.13	0.00														
Jul-01	NH-85	10	0.14	0.00	ND	ND	ND	ND	78	14	0							
		20	0.15	0.00	0.02	0.00	12.5	2.5										
		30	0.23	0.01														
		40	0.43	0.00														
		50	0.75	0.01														
		59	0.62	0.02														
		70	0.38	0.01	0.12	0.04	20.1	7.9										
		101	0.10	0.00														

Appendix B

Numerical abundance (cells/ml) of cyanobacteria and various sizes of flagellates and diatoms in the surface and subsurface Chlorophyll maximum of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises.

Cruise	Station	Depth(m)	Cells/ml																				
			Cyanos			Flags1-10 μ m			Diats1-10 μ m			Flags10-20 μ m			Diats10-20 μ m			Flags>20 μ m			Diats>20 μ m		
			Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n
Apr-00	NH-03	2	5594	1173	2	1188	646	2	1236	667	2	29	17	2	1520	376	2	2	1	2	15	9	2
		20	4818	1157	2	1211	101	2	1113	1374	2	29	29	2	103	47	2	1	0	2	28	8	2
	NH-10	1	13459	908	2	2094	189	2	225	121	2	7	.	1	34	.	1	0	0	2	5	3	2
		15	19846	2902	2	2766	1459	2	132	53	2	18	9	2	34	6	2	0	0	2	2	1	2
	NH-20	2	9060	2442	2	2768	467	2	31	8	2	34	12	2	5	7	2	1	1	2	2	2	2
		26	14862	1049	2	4554	484	2	30	21	2	90	11	2	14	8	2	1	1	2	1	1	2
NH-55	1	24771	7092	2	3764	983	2	23	32	2	26	1	2	8	7	2	1	0	2	0	0	2	
	20	17519	2921	2	4294	1901	2	343	478	2	20	5	2	3	2	2	0	0	2	0	0	2	
Jul-00	NH-03	2	4682	2207	2	313	14	2	121	171	2	25	7	2	626	81	2	1	1	2	119	56	2
		9	5629	1338	2	230	4	2	0	0	2	8	2	2	340	257	2	0	0	2	2	3	2
	NH-10	1	15514	300	2	540	121	2	126	150	2	10	10	2	246	62	2	0	0	2	66	11	2
		6	11862	150	2	194	85	2	29	29	2	12	7	2	190	2	2	1	0	2	18	16	2
	NH-20	2	14531	880	2	1167	350	2	35	21	2	8	8	2	21	6	2	0	0	2	4	3	2
		16	28952	8077	2	848	314	2	116	164	2	13	15	2	7	11	2	0	0	2	3	1	2
NH-55	2	268	316	2	1061	0	2	10	0	2	2	2	2	3	5	2	0	0	2	1	1	2	
	36	16665	5870	2	1252	300	4	20	0	4	5	7	2	0	0	2	0	0	2	1	1	2	
Sep-00	NH-03	1	12862	1264	2	1889	500	2	47	20	2	338	217	2	15	17	2	3	0	2	3	2	2
		11	9347	878	2	3035	186	2	0	0	2	2018	583	2	125	176	2	1	0	2	9	0	2
	NH-10	1	22574	128	2	1941	383	2	0	0	2	268	2	2	42	27	2	2	1	2	2	2	2
		20	4439	235	2	1463	127	2	59	27	2	549	86	2	306	119	2	0	.	1	13	.	1
	NH-20	1	11681	5549	2	3712	107	2	0	0	2	147	12	2	0	0	2	0	0	2	1	1	2
		8	15205	21464	2	6671	1078	2	0	0	2	163	60	2	3	4	2	0	0	2	0	0	2
NH-55	4	1061	1029	2	601	236	2	0	0	2	72	69	2	0	0	2	0	0	2	3	4	2	
	36	6059	1327	2	672	507	2	0	0	2	24	24	2	7	10	2	0	0	2	2	3	2	

Cruise	Station	Depth(m)	#Cells/ml																				
			<u>Cyano</u>			<u>Flags1-10µm</u>			<u>Diats1-10µm</u>			<u>Flags10-20µm</u>			<u>Diats10-20µm</u>			<u>Flags>20µm</u>			<u>Diats>20µm</u>		
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Jan-01	NH-03	3	343	29	2	212	29	2	0	0	2	17	5	2	7	0	2	0	0	2	13	11	2
		23	2081	71	2	364	314	2	0	0	2	42	2	2	0	0	2	0	0	2	7	3	2
	NH-10	1	2258	235	2	586	69	2	0	0	2	7	0	2	24	33	2	0	0	2	0	0	2
		65	4333	614	2	1283	43	2	0	0	2	41	13	2	0	0	2	0	0	2	1	1	2
	NH-20	1	6081	4328	2	1293	1000	2	0	0	2	32	7	2	0	0	2	0	0	2	0	0	2
		10	4298	2493	2	1123	2	2	0	0	2	37	34	2	0	0	2	0	0	2	0	0	2
	NH-55	1	3303	742	2	596	29	2	0	0	2	30	29	2	0	0	2	0	0	2	0	0	2
19		2364	371	2	450	50	2	0	0	2	19	6	2	0	0	2	0	0	2	0	0	2	
Mar-01	NH-03	3	4636	157	2	1919	657	2	10	14	2	121	19	2	7	10	2	3	0	2	37	1	2
		19	3980	514	2	1576	771	2	51	71	2	7	9	2	310	371	2	1	0	2	60	6	2
	NH-10	2	4810	730	2	1170	212	2	0	0	2	96	60	2	194	50	2	0	0	2	42	4	2
		21	6955	1066	2	1922	389	2	35	50	2	52	41	2	51	62	2	1	1	2	41	1	2
	NH-20	2	4810	731	2	1180	197	2	0	0	2	145	33	2	7	10	2	0	0	2	0	0	2
		27	3400	4676	2	1778	429	2	0	0	2	178	62	2	27	0	2	0	0	2	0	0	2
	NH-55	1	5833	921	2	1545	71	2	0	0	2	88	10	2	91	71	2	0	0	2	0	0	2
		60	6424	2256	2	1820	83	2	0	0	2	46	8	2	51	4	2	0	0	2	0	0	2
Jul-01	NH-03	2	1172	500	2	414	57	2	44	0	2	181	7	2	42	41	2	1	0	2	23	7	2
		11	1940	71	2	439	107	2	71	0	2	203	75	2	94	36	2	1	1	2	21	1	2
	NH-10	1	1995	264	2	460	7	2	273	186	2	241	17	2	333	101	2	1	0	2	62	6	2
		13	2152	556	2	957	303	2	264	83	2	397	257	2	177	64	2	1	0	2	57	19	2
	NH-20	1	ND	.	0	4038	350	2	56	79	2	887	41	2	35	7	2	2	0	2	14	3	2
		26	8646	.	1	2606	214	2	147	150	2	518	96	2	99	94	2	2	0	2	22	3	2
	NH-55	1	ND	.	0	160	46	2	3	5	2	165	43	2	0	0	2	1	0	2	2	1	2
		45	ND	.	0	542	67	2	3	5	2	434	214	2	3	5	2	1	0	2	1	0	2

Appendix C

Biomass estimates ($\mu\text{g C/l}$) of cyanobacteria and various sizes of flagellates and diatoms in the surface and subsurface Chlorophyll maximum of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises. ND denotes missing data

Cruise	Station	Depth (m)	Biomass ($\mu\text{g C/l}$)																				
			Cyanos			Flags1-10 μm			Diats1-10 μm			Flags10-20 μm			Diats10-20 μm			Flags>20 μm			Diats>20 μm		
			Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n	Avg	SD	n
Apr-00	NH-03	2	0.64	0.13	2	3.3	0.0	2	22.7	12.5	2	1.0	0.4	2	135.3	19.4	2	3.67	2.95	2	0.32	0.28	2
		20	0.55	0.13	2	4.3	0.2	2	20.2	24.7	2	1.1	1.1	2	6.4	4.1	2	8.76	2.85	2	8.76	2.85	2
	NH-10	1	1.54	0.10	2	9.9	2.7	2	3.9	2.2	2	0.3	.	1	6.9	.	1	0.03	0.01	2	1.10	0.25	2
		15	2.27	0.34	2	7.4	2.6	2	2.0	0.4	2	0.6	0.3	2	0.9	0.7	2	0.02	0.00	2	0.67	0.45	2
	NH-20	2	1.03	0.28	2	15.3	0.2	2	0.4	0.4	2	1.2	0.4	2	0.3	0.4	2	0.17	0.09	2	0.57	0.80	2
		26	1.71	0.12	2	14.3	2.9	2	0.3	0.1	2	3.4	0.4	2	0.4	0.0	2	0.15	0.17	2	0.62	0.77	2
NH-55	1	2.83	0.81	2	9.3	0.3	2	0.1	0.1	2	3.3	3.4	2	0.1	0.1	2	0.48	0.26	2	0.00	0.00	2	
	20	2.01	0.33	2	14.1	6.4	2	5.9	8.1	2	0.7	0.2	2	0.0	0.0	2	0.52	0.65	2	0.06	0.02	2	
Jul-00	NH-03	2	0.54	0.25	2	4.4	0.3	2	2.2	3.1	2	0.9	0.3	2	108.3	40.6	2	0.15	0.11	2	20.4	10.80	2
		9	0.64	0.15	2	3.1	0.1	2	0.0	0.0	2	0.3	0.1	2	39.6	10.9	2	0.02	0.02	2	0.23	0.30	2
	NH-10	1	1.78	0.04	2	5.3	0.8	2	6.1	8.1	2	0.4	0.4	2	41.0	0.3	2	0.15	0.02	2	12.8	1.45	2
		6	1.36	0.02	2	1.8	1.8	2	0.5	0.5	2	0.4	0.2	2	35.7	10.3	2	0.09	0.05	2	2.67	2.14	2
	NH-20	2	1.68	0.13	2	12.7	5.9	2	0.6	0.4	2	0.3	0.3	2	4.7	2.0	2	0.23	0.24	2	0.79	0.66	2
		16	3.32	0.93	2	7.0	1.6	2	2.1	2.9	2	0.5	0.5	2	1.5	2.1	2	0.65	0.26	2	0.04	0.01	2
NH-55	2	0.05	0.00	2	8.6	0.0	2	0.0	0.0	2	0.1	0.1	2	0.1	0.1	2	0.03	0.02	2	0.20	0.23	2	
	36	1.91	0.67	2	9.3	2.9	4	0.2	0.2	4	0.2	0.3	2	0.0	0.0	2	0.01	0.01	2	0.04	0.05	2	
Sep-00	NH-03	1	1.47	0.14	2	11.9	3.3	2	0.8	0.4	2	8.7	5.1	2	2.1	1.9	2	0.39	0	2	1.04	0.60	2
		11	1.07	0.1	2	31.1	1.0	2	0.0	0.0	2	54.3	22.8	2	2.4	3.4	2	0.24	0.02	2	3.35	0.18	2
	NH-10	1	2.58	0.01	2	10.7	5.5	2	0.0	0.0	2	7.4	0.7	2	8.5	11.4	2	0.61	0.25	2	0.28	0.06	2
		20	0.51	0.03	2	10.1	3.0	2	1.1	0.5	2	14.8	2.0	2	45.9	15.5	2	0.00	.	1	7.38	.	1
	NH-20	1	1.34	0.64	2	6.8	2.7	2	0.0	0.0	2	4.5	0.6	2	0.0	0.0	2	0.06	0.01	2	0.43	0.60	2
		8	3.32	0.23	2	19.3	4.6	2	0.0	0.0	2	3.4	1.2	2	0.1	0.1	2	0.17	0.15	2	0.02	0.01	2
NH-55	4	0.12	0.11	2	0.9	0.6	2	0.0	0.0	2	1.2	0.6	2	0.0	0.0	2	0.05	0.03	2	0.33	0.42	2	
	36	0.70	0.15	2	1.0	0.7	2	0.0	0.0	2	0.8	0.8	2	1.9	2.7	2	0.04	0.01	2	0.22	0.28	2	

Cruise	Station	Depth(m)	<u>Biomass (µg C/l)</u>																				
			<u>Cyanos</u>			<u>Flags1-10</u>			<u>Diats1-10µm</u>			<u>Flags10-20µm</u>			<u>Diats10-20µm</u>			<u>Flags>20µm</u>			<u>Diats>20µm</u>		
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Jan-01	NH-03	3	0.04	0.00	2	1.5	0.3	2	0.0	0.0	2	0.4	0.2	2	1.9	0.0	2	0.35	0.43	2	2.78	1.79	2
		23	0.24	0.01	2	4.7	4.6	2	0.0	0.0	2	0.7	0.1	2	0.0	0.0	2	0.07	0.05	2	1.34	0.66	2
	NH-10	1	0.26	0.03	2	3.6	0.5	2	0.0	0.0	2	0.1	0.0	2	3.9	5.6	2	0.08	0.03	2	0.05	0.02	2
		65	0.50	0.07	2	8.0	0.3	2	0.0	0.0	2	0.7	0.1	2	0.0	0.0	2	0.18	0.19	2	0.00	0.00	2
	NH-20	1	0.70	0.50	2	7.3	5.2	2	0.0	0.0	2	0.4	0.2	2	0.0	0.0	2	0.00	0.00	2	0.06	0.07	2
		10	0.49	0.28	2	7.1	3.3	2	0.0	0.0	2	0.5	0.6	2	0.0	0.0	2	0.07	0.07	2	0.00	0.00	2
NH-55	1	0.38	0.08	2	6.7	1.5	2	0.0	0.0	2	0.3	0.3	2	0.0	0.0	2	0.04	0.01	2	0.00	0.00	2	
	19	0.27	0.04	2	3.0	1.7	2	0.0	0.0	2	0.4	0.1	2	0.0	0.0	2	0.02	0.03	2	0.01	0.01	2	
Mar-01	NH-03	3	0.53	0.02	2	16.9	8.5	2	0.2	0.3	2	1.7	0.7	2	0.1	0.2	2	0.76	0.23	2	22.8	0.45	2
		19	0.46	0.06	2	13.7	6.6	2	1.3	1.9	2	0.1	0.1	2	41.3	43.4	2	0.54	0.01	2	63.8	7.60	2
	NH-10	2	0.55	0.08	2	9.5	3.9	2	0.0	0.0	2	6.5	2.6	2	24.3	10.7	2	0.29	0.30	2	21.7	0.89	2
		21	0.80	0.12	2	16.0	2.7	2	0.6	0.9	2	1.0	0.7	2	3.0	4.0	2	2.26	3.08	2	23.6	6.48	2
	NH-20	2	0.55	0.08	2	9.9	3.3	2	0.0	0.0	2	2.3	0.1	2	0.1	0.2	2	0.01	0.00	2	0.00	0.01	2
		27	0.92	0.21	2	25.9	1.9	2	0.0	0.0	2	5.0	1.1	2	0.9	0.2	2	0.06	0.00	2	0.00	0.00	2
NH-55	1	0.67	0.10	2	14.6	4.9	2	0.0	0.0	2	2.1	0.9	2	2.3	1.5	2	0.10	0.09	2	0.04	0.03	2	
	60	0.74	0.26	2	15.4	0.9	2	0.0	0.0	2	0.7	0.3	2	1.1	0.0	2	0.03	0.02	2	0.04	0.04	2	
Jul-01	NH-03	2	0.13	0.06	2	3.7	0.2	2	15.5	16.4	2	1.6	0.4	2	2.2	2.5	2	0.34	0.26	2	5.99	2.55	2
		11	0.22	0.01	2	5.1	2.6	2	2.9	0.2	2	3.4	1.1	2	5.8	5.1	2	0.29	0.00	2	5.23	0.55	2
	NH-10	1	0.23	0.03	2	2.2	0.1	2	4.4	2.6	2	2.9	0.7	2	38.4	6.5	2	0.44	0.16	2	7.02	3.07	2
		13	0.25	0.06	2	6.1	5.9	2	21.5	25.2	2	5.0	1.5	2	18.3	1.8	2	8.69	0.04	2	0.16	0.09	2
	NH-20	1	ND	ND	0	6.6	1.0	2	1.1	1.5	2	7.0	0.1	2	4.1	2.2	2	2.72	0.21	2	1.59	0.45	2
		26	1.00		1	9.4	6.9	2	2.9	2.9	2	5.3	0.3	2	10.4	10.7	2	1.11	0.18	2	5.09	0.45	2
NH-55	1	ND	ND	0	0.7	0.2	2	0.1	0.1	2	1.2	0.2	2	0.0	0.0	2	0.21	0.09	2	0.49	0.37	2	
	45	ND	ND	0	1.1	0.4	2	0.1	0.1	2	2.3	1.1	2	0.1	0.1	2	0.52	0.13	2	0.35	0.24	2	

Appendix D

Numerical abundance (Cells/ml) of various sizes of unidentifiable diatoms in the surface and subsurface Chlorophyll maximum of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises.

		<u>Cells/ml</u>																		
		<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Chains</u>			
		<u><10 μm</u>			<u>10-20 μm</u>			<u>>20 μm</u>			<u>Centric>20 μ</u>			<u>Pennate>20 μm</u>			<u>UnID Chains</u>			
		<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	
Apr-00	NH-03	2	24	9	2	33	10	2	2	2	2	4	2	2	0	0	2	0	0	2
		20	25	35	2	12	10	2	3	4	2	14	4	2	0	0	2	0	0	2
	NH-10	1	0	.	1	0	.	1	0	0	1	0	0	2	0	0	2	0	0	2
		15	10	0	2	8	11	2	0	0	2	0	0	2	0	0	2	0	0	2
	NH-20	2	0	0	2	0	0	2	0	0	2	1	1	2	0	0	2	0	0	2
		26	6	4	2	2	3	2	0	0	2	0	1	2	0	0	2	0	0	2
NH-55	1	2	2	2	0	1	2	0	0	2	0	0	2	0	0	2	0	0	2	
	20	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
Jul-00	NH-03	2	0	0	2	0	0	2	0	2	2	0	2	2	0	0	2	0	3	2
		9	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
	NH-10	1	34	48	2	0	0	2	0	1	2	5	0	2	0	0	2	7	2	2
		6	0	0	2	0	0	2	5	0	2	3	0	2	0	0	2	2	2	2
	NH-20	2	0	0	2	7	10	2	0	0	2	1	0	2	0	0	2	0	0	2
		16	0	0	2	6	9	2	8	0	2	12	0	2	0	0	2	5	0	2
NH-55	2	0	0	2	0	0	2	0	0	2	0	1	2	0	0	2	0	0	2	
	36	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	1	0	2	
Sep-00	NH-03	1	0	0	2	2	2	2	0	0	2	1	1	2	0	0	2	3	0	2
		11	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	1	2
	NH-10	1	0	0	2	3	4	2	0	0	2	0	0	2	0	0	2	2	0	2
		20	0	0	2	0	0	2	0	0	2	1	1	2	0	0	2	0	3	2
	NH-20	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		8	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	1	0	2
NH-55	4	0	0	2	0	0	2	0	0	2	1	0	2	0	0	2	0	0	2	
	36	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	

		<u>Cells/ml</u>																		
		<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Chains</u>			
		<u><10 μm</u>			<u>10-20 μm</u>			<u>>20 μm</u>			<u>Centric>20 μ</u>			<u>Pennate>20 μm</u>						
		<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	
Jan-01	NH-03	3	0	0	2	0	0	2	0	0	2	2	0	2	0	0	2	0	1	2
		23	0	0	2	0	0	2	0	0	2	0	1	2	0	0	2	0	0	2
	NH-10	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		65	0	0	2	0	0	2	0	0	2	1	0	2	0	0	2	1	0	2
	NH-20	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		10	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
NH-55	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
	19	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
Mar-01	NH-03	3	0	0	2	0	0	2	3	3	2	1	1	2	1	1	2	7	1	2
		19	0	0	2	0	0	2	2	2	2	0	0	2	0	0	2	8	4	2
	NH-10	2	0	0	2	0	0	2	1	0	2	1	1	2	0	0	2	15	2	2
		21	0	0	2	0	0	2	1	1	2	1	0	2	0	0	2	14	3	2
	NH-20	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		27	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
NH-55	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
	60	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
Jul-01	NH-03	2	4	0	2	0	0	2	0	1	2	5	1	2	0	0	2	1	1	2
		11	5	7	2	13	9	2	0	0	2	5	1	2	1	0	2	1	1	2
	NH-10	1	0	0	2	38	6	2	0	0	2	6	2	2	0	0	2	3	0	2
		13	3	5	2	2	3	2	1	1	2	12	3	2	0	0	2	1	2	2
	NH-20	1	0	0	2	10	10	2	0	0	2	4	1	2	0	0	0	2	0	0
		26	0	0	2	41	54	2	0	0	2	4	0	2	0	0	1	2	0	1
NH-55	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	
	45	0	0	2	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	

Appendix E

Numerical abundance estimates (Cells/ml) of various diatom genera in the surface and subsurface Chlorophyll maximum of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises.

			<u>Cells/ml</u>																	
			<u>Chaetoceros</u>			<u>Skeletonema</u>			<u>Thalassiosira</u>			<u>Thalassionema</u>			<u>Nitzschia</u>			<u>Rhizosolenia</u>		
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Apr-00	NH-03	2	690	683	2	4414	308	2	770	281	2	0	0	2	36	36	2	0	0	2
		20	56	9	2	1192	552	2	18	24	2	0	0	2	47	2	2	0	0	2
	NH-10	1	26	.	1	197	.	1	1	.	1	0	0	2	10	.	1	0	0	2
		15	1	1	2	389	64	2	3	5	2	0	0	2	23	0	2	0	0	2
	NH-20	2	2	3	2	7	10	2	3	4	2	0	0	2	1	1	2	0	0	2
		26	9	6	2	26	7	2	0	0	2	0	0	2	5	4	2	0	0	2
	NH-55	1	0	0	2	2	3	2	0	0	2	0	0	2	7	7	2	0	0	2
		20	0	0	2	0	0	2	0	0	2	0	0	2	3	2	2	0	0	2
Jul-00	NH-03	2	595	143	2	175	105	2	0	11	2	0	1	2	33	19	2	0	0	2
		9	260	144	2	732	145	2	81	115	2	0	0	2	23	32	2	0	0	2
	NH-10	1	172	42	2	273	48	2	66	65	2	1	0	2	20	28	2	0	0	2
		6	161	82	2	263	0	2	100	83	2	2	1	2	44	48	2	0	0	2
	NH-20	2	14	16	2	29	14	2	1	0	2	0	0	2	0	0	2	0	0	2
		16	16	2	2	9	12	2	15	0	2	0	0	2	2	0	2	0	0	2
	NH-55	2	3	5	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		36	1	0	2	0	0	2	1	0	2	0	0	2	0	0	2	0	0	2
Sep-00	NH-03	1	238	332	2	5	7	2	60	84	2	0	0	2	1	0	2	0	0	2
		11	125	177	2	86	55	2	0	0	2	0	0	2	0	1	2	0	0	2
	NH-10	1	41	23	2	0	0	2	0	0	2	0	0	2	1	1	2	0	0	2
		20	242	58	2	94	48	2	64	67	2	0	0	2	1	1	2	0	0	2
	NH-20	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		8	3	4	2	0	0	2	0	0	2	0	0	2	1	0	2	0	0	2
	NH-55	4	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2
		36	7	10	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2

			<u>Cells/ml</u>																		
			<u>Chaetoceros</u>			<u>Skeletonema</u>			<u>Thalassiosira</u>			<u>Thalassionema</u>			<u>Nitzschia</u>			<u>Rhizosolenia</u>			
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	
Jan-01	NH-03	3	9	12	2	0	0	2	1	0	2	0	0	2	0	0	2	0	0	2	
		23	0	0	2	5	7	2	3	5	2	0	0	2	0	0	2	0	0	2	
	NH-10	1	10	14	2	0	0	2	14	19	2	0	0	2	0	0	2	0	0	2	
		65	10	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
	NH-20	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
		10	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
NH-55	1	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2		
	19	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2		
Mar-01	NH-03	3	19	11	2	3	5	2	78	110	2	1	2	2	6	2	2	0	0	2	
		19	135	89	2	12	17	2	307	149	2	0	1	2	10	6	2	0	0	2	
	NH-10	2	80	37	2	24	33	2	128	15	2	0	0	2	5	2	2	0	0	2	
		21	37	20	2	15	7	2	32	44	2	1	1	2	4	1	2	0	0	2	
	NH-20	2	7	10	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
		27	27	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	
NH-55	1	91	72	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2		
	60	51	4	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2		
Jul-01	NH-03	2	86	13	2	159	34	2	79	111	2	1	1	2	15	21	2	0	0	2	
		11	70	15	2	75	5	2	25	34	2	0	0	2	67	17	2	0	0	2	
	NH-10	1	102	14	2	116	164	2	17	17	2	1	0	2	5	7	2	0	0	2	
		13	102	47	2	102	6	2	48	13	2	1	1	2	6	3	2	0	0	2	
	NH-20	1	63	12	2	57	81	2	10	12	2	0	0	0	2	2	2	2	0	0	0
		26	134	86	2	196	79	2	20	25	2	0	0	1	0	0	2	0	0	1	
NH-55	1	3	0	2	3	5	2	0	0	2	0	0	0	9	12	2	0	0	0		
	45	3	5	2	3	5	2	0	0	2	0	0	0	0	0	2	0	0	0		

Appendix F

Biomass estimates ($\mu\text{g C/l}$) of various sizes of unidentifiable diatom groups in the surface and subsurface Chlorophyll maxima of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises.

			<u>Biomass ($\mu\text{g C/l}$)</u>																	
			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Chains</u>		
			<u><10 μm</u>			<u>10-20 μm</u>			<u>>20 μm</u>			<u>Centric>20 μm</u>			<u>Pennate>20 μm</u>					
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Apr-00	NH-03	2	1.17	1.60	2	1.55	0.62	2	0.22	0.30	2	1.56	1.46	2	0.00	0.00	2	0.00	0.00	2
		20	0.20	0.29	2	0.72	0.35	2	0.67	0.94	2	6.14	0.18	2	0.00	0.00	2	0.00	0.00	2
	NH-10	1	0.00	.	1	0.00	.	1	0.01	0.01	1	0.01	0.01	2	0.00	0.00	2	0.05	0.07	2
		15	183.65	259.68	2	0.27	0.38	2	0.03	0.04	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
	NH-20	2	0.00	0.00	2	0.00	0.00	2	0.19	0.28	2	0.24	0.34	2	0.00	0.00	2	0.00	0.00	2
		26	0.05	0.05	2	0.11	0.15	2	0.24	0.34	2	0.15	0.17	2	0.00	0.00	2	0.00	0.00	2
	NH-55	1	0.00	0.01	2	0.02	0.03	2	0.02	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		20	0.00	0.00	2	0.00	0.00	2	0.01	0.02	2	0.02	0.01	2	0.00	0.00	2	0.00	0.00	2
Jul-00	NH-03	2	0.00	0.00	2	0.00	0.00	2	0.02	0.09	2	0.00	0.85	2	0.00	0.05	2	3.00	0.00	2
		9	0.00	0.00	2	0.00	0.00	2	0.02	0.02	2	0.00	0.01	2	0.00	0.00	2	0.00	0.00	2
	NH-10	1	0.08	0.11	2	0.00	0.00	2	0.02	0.59	2	1.93	0.21	2	0.00	0.32	2	2.66	0.37	2
		6	0.00	0.00	2	0.00	0.00	2	0.52	0.03	2	1.25	0.23	2	0.03	0.00	2	2.12	0.21	2
	NH-20	2	0.00	0.00	2	1.61	2.27	2	0.00	0.09	2	0.32	0.04	2	0.01	0.00	2	0.04	0.10	2
		16	0.00	0.00	2	1.45	2.05	2	1.14	0.00	2	3.60	0.01	2	0.42	0.02	2	2.02	0.01	2
	NH-55	2	0.00	0.00	2	0.00	0.00	2	0.06	0.00	2	0.11	0.10	2	0.00	0.00	2	0.00	0.00	2
		36	0.00	0.00	2	0.00	0.00	2	0.06	0.09	2	0.13	0.11	2	0.00	0.00	2	0.17	0.00	2
Sep-00	NH-03	1	0.00	0.00	2	0.40	0.56	2	0.38	0.17	2	0.65	0.42	2	0.03	0.02	2	1.42	0.07	2
		11	0.00	0.00	2	0.00	0.00	2	0.03	0.53	2	0.07	0.14	2	0.00	0.04	2	0.00	0.61	2
	NH-10	1	0.00	0.00	2	0.68	0.96	2	0.00	0.00	2	0.06	0.00	2	0.00	0.00	2	3.34	0.03	2
		20	0.00	0.00	2	0.00	0.00	2	0.13	0.00	2	0.46	0.08	2	0.01	0.00	2	0.14	4.72	2
	NH-20	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.02	0.02	2	0.00	0.00	2	0.00	0.00	2
		8	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.05	0.01	2	0.00	0.00	2	0.13	0.00	2
	NH-55	4	0.00	0.00	2	0.00	0.00	2	0.07	0.00	2	0.30	0.01	2	0.00	0.00	2	0.01	0.00	2
		36	0.00	0.00	2	0.00	0.00	2	0.00	0.10	2	0.02	0.01	2	0.00	0.00	2	0.00	0.01	2

			Biomass (ug C/l)																	
			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Single</u>			<u>UnID Chains</u>		
			<u><10 μm</u>			<u>10-20 μm</u>			<u>>20 μm</u>			<u>Centric>20 μ</u>			<u>Pennate>20 μm</u>					
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Jan-01	NH-03	3	0.00	0.00	2	0.00	0.00	2	0.08	0.07	2	0.16	0.20	2	0.00	0.00	2	0.07	0.40	2
		23	0.00	0.00	2	0.00	0.00	2	0.03	0.11	2	0.16	0.07	2	0.00	0.00	2	0.00	0.07	2
	NH-10	1	0.00	0.00	2	0.00	0.00	2	0.00	0.01	2	0.13	0.04	2	0.00	0.00	2	0.00	0.00	2
		65	0.00	0.00	2	0.00	0.00	2	0.05	0.00	2	0.21	0.17	2	0.00	0.00	2	0.28	0.00	2
	NH-20	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.06	2	0.00	0.00	2	0.00	0.00	2
		10	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.04	0.00	2	0.00	0.00	2	0.00	0.00	2
NH-55	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	
	19	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.05	0.00	2	0.00	0.00	2	0.00	0.00	2	
Mar-01	NH-03	3	0.00	0.00	2	0.00	0.00	2	16.21	1.60	2	0.74	0.82	2	0.01	0.01	2	3.13	1.90	2
		19	0.00	0.00	2	0.00	0.00	2	35.76	41.26	2	0.31	0.13	2	0.00	0.00	2	2.81	0.63	2
	NH-10	2	0.00	0.00	2	0.00	0.00	2	9.44	3.81	2	0.20	0.04	2	0.00	0.00	2	8.33	3.69	2
		21	0.00	0.00	2	0.00	0.00	2	10.70	0.16	2	0.30	0.03	2	0.00	0.00	2	5.93	3.19	2
	NH-20	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		27	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
NH-55	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.01	0.01	2	0.00	0.00	2	0.00	0.00	2	
	60	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	
Jul-01	NH-03	2	0.01	0.00	2	0.00	0.00	2	0.06	0.08	2	2.36	0.80	2	0.10	0.13	2	0.22	0.31	2
		11	0.02	0.02	2	0.63	0.46	2	0.00	0.00	2	2.98	0.47	2	0.34	0.09	2	0.37	0.07	2
	NH-10	1	0.00	0.00	2	8.52	0.85	2	0.00	0.00	2	2.20	0.65	2	0.03	0.02	2	0.76	0.20	2
		13	0.01	0.02	2	0.43	0.61	2	1.84	2.60	2	2.98	1.91	2	0.02	0.01	2	0.32	0.45	2
	NH-20	1	0.00	0.00	2	2.38	2.24	2	0.00	0.00	2	1.17	0.06	2	0.02	0.01	2	0.70	0.05	2
		26	0.00	0.00	2	75.18	106.29	2	0.13	0.17	2	1.46	0.12	2	0.08	0.01	2	0.99	0.74	2
NH-55	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.33	0.27	2	0.01	0.02	2	0.08	0.09	2	
	45	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.14	0.03	2	0.00	0.00	2	0.20	0.28	2	

Appendix G

Biomass estimates ($\mu\text{g C/l}$) of various diatom genera in the surface and subsurface Chlorophyll maximum of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises.

			<u>Biomass ($\mu\text{g C/l}$)</u>																	
			<u>Chaetoceros</u>			<u>Skeletonema</u>			<u>Thalassiosira</u>			<u>Thalassionema</u>			<u>Nitzschia</u>			<u>Rhizosolenia</u>		
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Apr-00	NH-03	2	118.35	12.52	2	71.47	13.18	2	24.13	20.71	2	0.00	0.00	2	0.17	0.22	2	0.02	0.03	2
		20	4.97	3.01	2	21.80	10.31	2	1.68	2.18	2	0.00	0.00	2	0.70	0.64	2	0.42	0.47	2
	NH-10	1	7.41	.	1	2.74	.	1	0.10	.	1	0.00	0.00	2	0.35	.	1	0.04	0.06	2
		15	0.21	0.18	2	6.74	0.98	2	0.12	0.17	2	0.00	0.00	2	0.53	0.49	2	0.00	0.00	2
	NH-20	2	0.14	0.20	2	0.07	0.10	2	0.26	0.36	2	0.00	0.00	2	0.03	0.05	2	0.00	0.00	2
		26	0.48	0.38	2	0.41	0.19	2	0.00	0.00	2	0.00	0.00	2	0.02	0.01	2	0.00	0.00	2
	NH-55	1	0.00	0.00	2	0.04	0.06	2	0.00	0.00	2	0.00	0.00	2	0.07	0.07	2	0.00	0.00	2
		20	0.01	0.01	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.03	0.01	2	0.00	0.00	2
Jul-00	NH-03	2	107.81	41.40	2	3.90	2.51	2	0.04	1.64	2	0.00	0.03	2	325.26	460.19	2	0.00	0.00	2
		9	32.95	1.45	2	14.05	3.66	2	6.79	9.60	2	0.00	0.00	2	597.96	845.64	2	0.00	0.00	2
	NH-10	1	36.58	3.88	2	4.46	0.89	2	4.98	4.61	2	0.02	0.01	2	0.86	1.28	2	0.00	0.03	2
		6	34.48	17.29	2	5.60	0.12	2	11.41	7.42	2	0.05	0.03	2	0.36	0.14	2	0.00	0.00	2
	NH-20	2	3.20	4.37	2	0.59	0.13	2	0.13	0.03	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		16	1.92	0.14	2	0.23	0.32	2	1.73	0.10	2	0.01	0.00	2	0.10	0.00	2	0.06	0.00	2
	NH-55	2	0.08	0.10	2	0.00	0.00	2	0.03	0.03	2	0.00	0.00	2	0.00	0.07	2	0.00	0.01	2
		36	0.13	0.01	2	0.00	0.00	2	0.06	0.03	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
Sep-00	NH-03	1	32.55	45.41	2	0.09	0.13	2	0.11	0.02	2	0.00	0.00	2	0.19	0.00	2	0.07	0.00	2
		11	2.44	3.61	2	1.68	1.18	2	0.02	0.04	2	0.00	0.00	2	0.00	0.19	2	0.00	0.06	2
	NH-10	1	8.07	10.50	2	0.00	0.00	2	0.05	0.02	2	0.00	0.00	2	0.04	0.02	2	0.00	0.00	2
		20	40.42	20.82	2	1.69	0.85	2	5.35	5.64	2	0.00	0.00	2	0.02	0.04	2	0.00	0.00	2
	NH-20	1	0.00	0.00	2	0.00	0.00	2	0.00	0.02	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		8	0.10	0.08	2	0.00	0.00	2	0.01	0.00	2	0.00	0.00	2	0.04	0.00	2	0.00	0.00	2
	NH-55	4	0.01	0.00	2	0.00	0.00	2	0.01	0.00	2	0.01	0.00	2	0.01	0.00	2	0.00	0.00	2
		36	1.88	2.66	2	0.00	0.00	2	0.02	0.00	2	0.00	0.01	2	0.00	0.01	2	0.00	0.00	2

			<u>Biomass (ug C/l)</u>																	
			<u>Chaetoceros</u>			<u>Skeletonema</u>			<u>Thalassiosira</u>			<u>Thalassionema</u>			<u>Nitzschia</u>			<u>Rhizosolenia</u>		
			<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>	<u>Avg</u>	<u>SD</u>	<u>n</u>
Jan-01	NH-03	3	1.24	3.70	2	2.46	3.48	2	0.34	0.16	2	0.14	0.01	2	0.02	0.01	2	0.12	0.00	2
		23	0.00	0.11	2	0.13	0.19	2	0.29	0.41	2	0.01	0.20	2	0.00	0.02	2	0.00	0.17	2
	NH-10	1	2.84	3.99	2	0.00	0.00	2	1.15	1.59	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		65	2.04	0.03	2	0.00	0.00	2	0.12	0.01	2	0.01	0.00	2	0.01	0.00	2	0.00	0.00	2
	NH-20	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
		10	0.01	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
	NH-55	1	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
19		0.00	0.01	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	
Mar-01	NH-03	3	2.05	0.47	2	0.09	0.13	2	6.50	9.19	2	0.03	0.05	2	0.25	0.09	2	0.05	0.08	2
		19	27.32	21.48	2	0.21	0.30	2	26.35	13.98	2	0.01	0.02	2	0.35	0.23	2	0.11	0.07	2
	NH-10	2	15.80	9.55	2	0.62	0.88	2	11.36	2.16	2	0.01	0.01	2	0.26	0.04	2	0.06	0.07	2
		21	3.24	0.64	2	0.31	0.07	2	5.61	7.30	2	0.04	0.02	2	0.37	0.18	2	0.22	0.09	2
	NH-20	2	0.13	0.19	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.01	2
		27	0.89	0.17	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
	NH-55	1	2.35	1.52	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2	0.00	0.00	2
60		1.07	0.02	2	0.00	0.00	2	0.00	0.00	2	0.03	0.03	2	0.00	0.00	2	0.00	0.00	2	
Jul-01	NH-03	2	1.28	0.69	2	2.83	1.09	2	1.88	2.66	2	0.03	0.02	2	184.49	260.90	2	0.00	0.00	2
		11	3.52	2.83	2	1.72	0.08	2	2.34	2.97	2	0.01	0.01	2	152.41	52.78	2	0.00	0.00	2
	NH-10	1	21.28	4.32	2	2.07	2.93	2	2.16	2.37	2	0.03	0.01	2	0.04	0.04	2	0.00	0.00	2
		13	14.26	3.83	2	1.94	0.11	2	4.26	1.30	2	0.01	0.01	2	0.22	0.17	2	0.00	0.00	2
	NH-20	1	1.25	1.15	2	1.06	1.51	2	0.89	1.00	2	0.01	0.00	2	0.08	0.11	2	0.00	0.00	2
		26	9.62	8.99	2	3.26	2.30	2	2.29	2.70	2	0.01	0.01	2	0.01	0.01	2	0.00	0.00	2
	NH-55	1	0.01	0.01	2	0.06	0.09	2	0.02	0.01	2	0.00	0.00	2	0.01	0.00	2	0.00	0.00	2
45		0.07	0.10	2	0.06	0.09	2	0.00	0.00	2	0.00	0.00	2	0.01	0.00	2	0.00	0.00	2	

Appendix H

Shape, size, biovolume estimates and abundances in cells/ml of cyanobacteria, flagellates, and diatoms in the surface and subsurface chl max of stations NH-03, 10, 20 and 55 during the April 00, July 00, September 00, January 01, March 01 and July 01 GLOBEC LTOP cruises. Data from each replicate are presented. The corresponding equations of volume for each shape are located in Table 3. A and B refer to the linear dimensions of each cell. The radius used in calculations of volume is equivalent to A/2, the height is represented by B, and in the calculation of volume for the oblate spheroid (Ob. Sphere) “a” and “b” are equivalent to A/2 and B/2. ND indicates no data.

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	Shape	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Apr-00	NH-03	1.5	Cyanos	Sphere	1.0	1.0	1	4765.00	Sphere	1.0	1.0	1	6424.00	
				Flagellates	Sphere	1.4	1.4	1	356.10	Sphere	1.4	1.4	1	1278.59
			Sphere		2.8	2.8	12	185.42	Sphere	2.8	2.8	12	203.11	
			Sphere		3.5	3.5	22	113.06	Sphere	3.5	3.5	22	96.56	
			Sphere		4.9	4.9	192	45.22	Sphere	4.9	4.9	192	19.98	
			Sphere		7.0	7.0	180	9.04	Sphere	7.0	7.0	180	19.98	
			Sphere		8.4	8.4	49	13.57	Sphere	8.4	8.4	49	26.64	
			Teardrop		8.4	3.5	44	9.04	Cylinder	10.5	7.0	230	17.00	
			Cylinder		14.0	10.0	181	41.00	Sphere	21.5	21.5	484	1.58	
			Sphere		21.5	21.5	484	0.38	Sphere	30.1	30.1	948	0.42	
			Sphere		30.1	30.1	948	0.20	Sphere	51.6	51.6	2787	0.06	
			Sphere		51.6	51.6	2787	0.06	Sphere	77.4	77.4	6270	0.06	
			Ob.Sphere		21.5	8.6	832	0.30	Sphere	86.0	86.0	7741	0.02	
			Cone		43.0	25.8	12483	0.02	Ob.Sphere	86.0	64.5	187239	0.02	
									Ob.Sphere	43.0	21.5	10402	0.02	
			Diatoms		Cylinder	4.2	7.0	162	746.00	Cylinder	14.0	2.8	431	26.12
					Cylinder	10.5	2.1	182	234.65	Cylinder	21.0	17.5	6061	174.14
				Cylinder	14.0	2.8	431	510.10	Cylinder	4.2	7.0	162	3865.86	
				Cylinder	21.0	17.5	6061	234.65	Cylinder	7.0	7.0	269	243.79	
				Cylinder	17.5	7.0	1683	183.64	Cylinder	4.2	4.2	58	87.07	
				Cylinder	4.2	7.0	162	4356.26	Cylinder	14.0	10.5	1235	731.38	
				Cylinder	7.0	7.0	269	30.61	Cylinder	7.0	14.0	538	8.71	
				Cylinder	4.2	4.2	58	244.85	Cylinder	15.4	2.8	390	235.09	
				Cylinder	14.0	10.5	1235	377.47	Sphere	10.5	10.5	606	26.12	
				Cylinder	15.4	2.8	390	193.84	Cylinder	21.0	3.5	202	52.24	
				Sphere	10.5	10.5	606	40.81	Cylinder	7.0	1.4	11	17.41	
				Cylinder	7.0	1.4	1078	30.61	Cylinder	21.5	4.3	1560	0.56	
				Cylinder	21.0	3.5	202	10.20	Cylinder	30.1	8.6	6116	1.84	
Cylinder	21.5	4.3		1560	0.60	Cylinder	43.0	21.5	31206	2.04				
Cylinder	30.1	8.6		6116	0.92	Cylinder	51.6	25.8	53925	0.50				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Apr-00	NH-03	1.5	Diatoms	Cylinder	43.0	21.5	31206	0.60	Cylinder	64.5	34.4	112343	0.44	
				Cylinder	21.5	8.6	3121	0.04	Cylinder	21.5	12.9	4681	3.16	
				Cylinder	51.6	12.9	26962	0.20	Cylinder	30.1	17.2	12233	5.06	
				Cylinder	30.1	8.6	6116	2.88	Cylinder	21.5	12.9	4681	4.94	
				Cylinder	21.5	12.9	4681	2.24	Cylinder	21.5	4.3	1560	0.68	
				Cylinder	21.5	4.3	1560	1.34	Cylinder	30.1	21.5	15291	1.44	
				Cylinder	30.1	21.5	15291	0.06	Cylinder	21.5	86.0	31206	0.20	
				Cylinder	21.5	86.0	31206	0.02	Cylinder	4.3	21.5	312	0.34	
				Cylinder	8.6	43.0	2497	0.06						
				Cylinder	8.6	430.0	24965	0.10						
Apr-00	NH-03	20	Cyanos	Sphere	1.0	1.0	1	4000.00	Sphere	1.0	1.0	1	5636.00	
				Flagellates	Sphere	1.4	1.4	1	746.19	Sphere	1.4	1.4	1	58.79
					Sphere	2.8	2.8	12	239.69	Sphere	2.8	2.8	12	13.57
					Sphere	3.5	3.5	22	54.27	Sphere	4.9	4.9	192	2044.12
					Sphere	4.9	4.9	192	54.27	Sphere	7.0	7.0	180	36.18
					Sphere	7.0	7.0	180	27.13	Sphere	8.4	8.4	49	180.90
					Sphere	8.4	8.4	49	18.09	Cylinder	10.5	7.0	230	5.05
					Cylinder	10.5	7.0	230	43.05	Cylinder	14.0	10.0	181	3.37
					Cylinder	14.0	10.0	181	6.62	Sphere	21.5	21.5	484	0.56
					Sphere	30.1	30.1	948	0.32	Sphere	30.1	30.1	948	0.44
			Sphere		51.6	51.6	2787	0.29	Sphere	215.0	215.0	48382	0.04	
			Sphere	77.4	77.4	6270	0.11	Teardrop	30.1	21.5	20862	0.04		
			Ob.Sphere	236.5	150.5	2803384	0.03							
			Diatoms	Cylinder	10.5	2.1	182	9.93	Cylinder	4.2	7.0	182	33.67	
				Cylinder	14.0	2.8	431	31.46	Cylinder	14.0	2.8	431	3.37	
				Cylinder	21.0	17.5	6061	3.31	Cylinder	21.0	17.5	6061	15.15	
				Cylinder	4.2	7.0	162	781.51	Cylinder	4.2	7.0	162	1491.43	
				Cylinder	7.0	7.0	269	19.87	Cylinder	7.0	7.0	269	90.90	
				Cylinder	14.0	11.0	1235	1.66	Cylinder	14.0	11.0	1235	33.67	
				Cylinder	4.0	4.0	58	49.67	Cylinder	21.0	2.1	73	28.62	
Cylinder	7.0	14.0		538	3.31	Cylinder	7.0	14.0	538	16.83				
Sphere	10.5			606	19.87	Sphere	14.0	14.0	1437	5.05				
Cylinder	21.5	4.3		1560	4.67	Cylinder	21.5	4.3	1560	1.28				
Cylinder	30.1	8.6	6116	3.36	Cylinder	30.1	8.6	6116	2.56					

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Apr-00	NH-03	20	Diatoms	Cylinder	43.0	21.5	31206	6.80	Cylinder	43.0	21.5	31206	4.00
				Cylinder	51.6	25.8	53925	1.17	Cylinder	51.6	25.8	53925	2.36
				Cylinder	64.5	34.4	112343	0.19	Cylinder	64.5	34.4	112343	0.96
				Cylinder	21.5	12.9	4681	3.07	Cylinder	21.5	8.6	3121	5.64
				Cylinder	21.5	4.3	1560	2.21	Cylinder	30.1	21.5	15291	0.04
				Cylinder	12.9	86.0	11234	0.40	Cylinder	193.5	107.5	3159658	0.04
				Cylinder	8.6	430.0	24965	0.16	Cylinder	30.1	8.6	6116	4.80
				Cylinder	8.6	236.5	13731	0.03	Cylinder	21.5	12.9	4681	6.92
									Cylinder	21.5	4.3	1560	2.84
									Cylinder	30.1	21.5	15291	1.00
									Cylinder	21.5	21.5	7802	0.40
									Cylinder	21.5	86.0	31206	0.20
									Cylinder	8.6	43.0	2497	0.16
									Cylinder	430.0	8.6	1248260	0.08
				Apr-00	NH-10	1.3	Cyanos	Sphere	1.0	1.0	1	21899.00	Missing Filter
								Flagellates	Sphere	1.4	1.4	1	
Sphere	2.8	2.8	12					1272.60					
Sphere	3.5	3.5	22					303.00					
Sphere	4.9	4.9	192					181.80					
Sphere	7.0	7.0	180					3.19					
Sphere	8.4	8.4	49					22.33					
Teardrop	8.4	3.5	44					3.19					
Cylinder	10.5	7.0	230					6.80					
Sphere	30.1	30.1	948					0.11					
Diatoms	Sphere	51.6	51.6				2787	0.01					
	Sphere	86.0	86.0				7741	0.01					
	Cylinder	21.0	17.5				6061	23.81					
	Cylinder	4.2	7.0				162	153.06					
	Cylinder	21.0	3.5				262	10.20					
	Cylinder	30.1	8.6				6116	0.02					
	Cylinder	64.5	34.4				112343	0.01					
	Cylinder	51.6	12.9				26962	0.79					
	Cylinder	30.1	21.5				15291	1.07					
	Cylinder	21.5	12.9				4681	1.15					
Cylinder	21.5	4.3	1560	0.18									

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Cells/ml	Shape	Replicate 2			
					A (μm)	B (μm)	Biovolume (μm^3)				A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
Apr-00	NH-10	1.3	Diatoms	Cylinder	4.3	64.5	936	3.16						
				Cylinder	21.5	86.0	31206	0.21						
				Cylinder	64.5	64.5	210644	0.04						
Apr-00	NH-10	15	Cyanos	Sphere	1.0	1.0	1	14101.00	Sphere	1.0	1.0	1	14120.00	
				Flagellates	Sphere	1.4	1.4	1	1148.37	Sphere	1.4	1.4	1	2051.41
			Sphere		2.8	2.8	12	271.57	Sphere	2.8	2.8	12	1174.31	
			Sphere	3.5	3.5	22	186.22	Sphere	3.5	3.5	22	478.42		
			Sphere	4.9	4.9	192	81.47	Sphere	4.9	4.9	192	57.99		
			Sphere	7.0	7.0	180	7.76	Sphere	7.0	7.0	180	6.61		
			Sphere	8.4	8.4	49	31.04	Sphere	8.4	8.4	49	24.24		
			Teardrop	8.4	3.5	44	7.76	Teardrop	8.4	3.5	44	4.41		
			Cylinder	10.5	7.0	230	16.83	Cylinder	10.5	7.0	230	7.65		
			Cylinder	14.0	10.0	181	6.73	Cylinder	14.0	10.0	181	3.83		
			Diatoms	Sphere	21.5	21.5	484	0.04	Sphere	30.1	30.1	948	0.13	
				Cylinder	4.2	7.0	162	387.17	Cylinder	4.2	7.0	162	325.19	
				Cylinder	7.0	7.0	269	6.73	Cylinder	7.0	7.0	269	3.83	
				Cylinder	4.2	4.2	58	40.40	Cylinder	4.2	4.2	58	15.30	
				Cylinder	3.5	14.0	54	23.57	Cylinder	7.0	14.0	538	15.30	
				Cylinder	7.0	1.4	11	10.10	Cylinder	21.0	3.5	262	7.65	
				Cylinder	15.4	2.8	390	6.73	Cylinder	15.4	2.8	390	15.30	
				Cylinder	30.1	12.9	9175	0.05	Cylinder	51.6	12.9	26962	0.61	
				Cylinder	30.1	21.5	15291	0.13	Cylinder	21.5	12.9	4681	0.15	
				Cylinder	51.6	12.9	26962	0.16	Cylinder	21.5	4.3	1560	0.17	
					Cylinder	8.6	43.0	2497	0.05					
					Cylinder	8.6	43.0	2497	0.01					
Apr-00	NH-20	1.5	Cyanos	Sphere	1.0	1.0	1	7333.00	Sphere	1.0	1.0	1	10787.00	
				Flagellates	Sphere	1.4	1.4	1	707.00	Sphere	1.4	1.4	1	1010.00
			Sphere		2.8	2.8	12	1070.60	Sphere	2.8	2.8	12	1323.10	
			Sphere	3.5	3.5	22	313.10	Sphere	3.5	3.5	22	333.30		
			Sphere	4.9	4.9	192	282.80	Sphere	4.9	4.9	192	262.60		
			Sphere	7.0	7.0	180	11.48	Sphere	7.0	7.0	180	2.33		
			Sphere	8.4	8.4	49	25.25	Sphere	8.4	8.4	49	20.98		
			Teardrop	8.4	3.5	44	27.55	Teardrop	8.4	3.5	44	53.61		
			Cylinder	10.5	7.0	230	15.78	Cylinder	10.5	7.0	230	10.10		

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Apr-00	NH-20	1.5	Flagellates	Cylinder	14.0	10.0	181	26.83	Cylinder	14.0	10.0	181	15.15
				Sphere	21.5	21.5	484	0.46	Sphere	21.5	21.5	484	0.02
				Sphere	30.1	30.1	948	0.06	Sphere	30.1	30.1	948	0.68
				Sphere	51.6	51.6	2787	0.08	Sphere	51.6	51.6	2787	0.34
				Sphere	77.4	77.4	6270		Sphere	77.4	77.4	6270	0.02
				Sphere	86.0	86.0	7741		Sphere	86.0	86.0	7741	0.02
Apr-00	NH-20	1.5	Diatoms	Cylinder	10.5	2.1	182	2.91	Cylinder	21.5	4.3	1560	0.22
				Cylinder	4.2	4.2	58	10.93	Cylinder	30.1	8.6	6116	0.80
				Cylinder	4.2	7.0	162	2.91	Cylinder	43.0	21.5	31206	0.32
				Cylinder	14.0	11.0	1235	5.83	Cylinder	51.6	25.8	53925	0.04
				Cylinder	7.0	14.0	538	1.46	Cylinder	64.5	34.4	112343	0.08
				Cylinder	8.6	36.1	2097	0.02	Cylinder	43.0	8.6	12483	0.04
				Cylinder	21.5	90.3	32767	0.02	Cylinder	193.5	107.5	3159658	0.02
				Cylinder	12.9	54.2	7078	0.10	Cylinder	51.6	12.9	26962	0.16
				Cylinder	12.9	54.2	7078	0.50	Cylinder	30.1	12.9	9175	0.20
				Cylinder	4.3	18.1	262	0.10	Cylinder	21.5	12.9	4681	0.40
				Cylinder	21.5	90.3	32767	0.06	Cylinder	21.5	4.3	1560	0.76
					Cylinder	30.1	21.5	15291	0.08				
Apr-00	NH-20	26	Cyanos	Sphere	1.0	1.0	1	14101.00	Sphere	1.0	1.0	1	14120.00
				Flagellates	Sphere	1.4	1.4	1	2377.06	Sphere	1.4	1.4	1
				Sphere	2.8	2.8	12	1873.48	Sphere	2.8	2.8	12	1957.85
				Sphere	3.5	3.5	22	264.59	Sphere	4.9	4.9	192	116.54
				Sphere	4.9	4.9	192	192.04	Sphere	7.0	7.0	180	10.10
				Sphere	7.0	7.0	180	17.68	Sphere	8.4	8.4	49	5.05
				Sphere	8.4	8.4	49	90.90	Teardrop	8.4	3.5	44	164.13
				Teardrop	8.4	3.5	44	80.80	Cylinder	10.5	7.0	230	80.54
				Cylinder	10.5	7.0	230	75.53	Cylinder	14.0	10.0	181	17.41
				Cylinder	14.0	10.0	181	6.47	Sphere	21.0	21.0	4849	2.18
				Sphere	30.1		948	0.18	Sphere	51.6	51.6	2787	0.02
Apr-00	NH-20	26	Diatoms	Cylinder	14.0	2.8	431	4.35	Cylinder	10.5	2.1	182	5.15
				Cylinder	4.2	7.0	162	26.12	Cylinder	14.0	2.8	431	6.43
				Cylinder	4.2	4.2	58	2.18	Cylinder	4.2	7.0	162	10.29
				Cylinder	7.0	7.0	269	2.18	Cylinder	4.0	4.0	58	10.29
				Cylinder	7.0	2.1	24	2.18	Cylinder	0.7	30.0	8	7.72
				Cylinder	7.0	1.4	11	8.71	Cylinder	7.0	1.4	390	2.57

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Apr-00	NH-20	26	Diatoms	Sphere	10.5	10.5	606	4.35	Cylinder	51.6	25.8	53925	0.20
				Cylinder	4.3	18.1	262	0.03	Cylinder	30.1	12.9	9175	0.24
				Cylinder	8.6	36.1	2097	0.01	Cylinder	21.5	4.3	1560	0.16
				Cylinder	21.5	90.3	32767	0.01					
				Cylinder	25.8	108.4	56621	0.03					
				Cylinder	21.5	90.3	32767	0.06					
				Cylinder	12.9	54.2	7078	0.14					
				Cylinder	43.0	180.6	262135	0.10					
				Cylinder	86.0	361.2	2097077	0.01					
Apr-00	NH-55	1	Cyanos	Sphere	1.0	1.0	1	19756.00	Sphere	1.0	1.0	1	29785.00
				Flagellates	Sphere	1.4	1.4	1	1494.80	Sphere	1.4	1.4	1
			Sphere		2.8	2.8	12	1242.30	Sphere	2.8	2.8	12	1545.30
			Sphere		3.5	3.5	22	202.00	Sphere	3.5	3.5	22	191.90
			Sphere		4.9	4.9	192	101.00	Sphere	4.9	4.9	192	47.98
			Sphere		7.0	7.0	180	4.93	Sphere	7.0	7.0	180	10.10
			Sphere		8.4	8.4	49	14.78	Sphere	8.4	8.4	49	30.30
			Teardrop		8.4	3.5	44	9.85	Teardrop	8.4	3.5	44	68.18
			Cylinder		10.5	7.0	230	8.02	Cylinder	10.5	7.0	230	10.10
			Cylinder		14.0	10.0	181	8.02	Cylinder	14.0	10.0	181	16.83
			Sphere		3.5	3.5	22	1.60	Sphere	21.5	21.5	484	0.05
			Sphere		21.0	21.0	4849	9.62	Sphere	30.1	30.1	948	0.69
			Sphere		30.1	30.1	948	0.25	Sphere	43.0	43.0	1935	0.17
			Sphere		43.0	43.0	1935	0.32	Sphere	51.6	51.6	2787	0.22
			Sphere		51.6	51.6	2787	0.19	Sphere	64.5	64.5	4354	0.14
			Sphere		64.5	64.5	4354	0.01	Sphere	77.4	77.4	6270	0.01
			Sphere		77.4	77.4	6270	0.03	Sphere	86.0	86.0	7741	0.01
			Sphere		86.0	86.0	7741	0.07					
			Sphere		129.0	129.0	1123434	0.02					
			Apr-00	NH-55	1	Diatoms	Cone	64.5	30.1	32767	0.46		
Cylinder	2.1	21.0					73	2.53	Cylinder	4.2	7.0	162	2.53
									Cylinder	7.0	7.0	269	1.68
									Cylinder	3.5	14.0	54	0.84
									Cylinder	21.0	2.1	73	10.94
									Sphere	10.5	10.5	606	0.84
					Cylinder	7.0	1.4	11	3.37				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Apr-00	NH-55	20	Cyanos	Sphere	1.0	1.0	1	15453.00	Sphere	1.0	1.0	1	19585.00
				Flagellates	Sphere	1.4	1.4	1	1414.00	Sphere	1.4	1.4	1
			Sphere	2.8	2.8	12	1030.20	Sphere	2.8	2.8	12	2033.03	
			Sphere	3.5	3.5	22	343.40	Sphere	3.5	3.5	22	478.94	
			Sphere	4.9	4.9	192	111.10	Sphere	4.9	4.9	192	254.13	
			Sphere	7.0	7.0	180	2.42	Sphere	7.0	7.0	180	10.10	
			Sphere	8.4	8.4	49	7.27	Sphere	8.4	8.4	49	1.77	
			Teardrop	8.4	3.5	44	41.21	Teardrop	8.4	3.5	44	25.25	
			Sphere	7.0	7.0	180	303.00	Sphere	21.5	21.5	484	0.68	
			Sphere	30.1	30.1	948	0.20	Sphere	30.1	30.1	948	0.10	
			Sphere	51.6	51.6	2787	0.23	Sphere	51.6	51.6	2787	0.06	
			Sphere	64.5	64.5	4354	0.01	Sphere	64.5	64.5	4354	0.38	
			Sphere	77.4	77.4	6270	0.03	Sphere	77.4	77.4	6270	0.10	
			Cone	86.0	43.0	83217	0.37	Sphere	86.0	86.0	7741	0.18	
			Cone	64.5	30.1	32767	0.20	Cone	129.0	43.0	187239	0.06	
			Diatoms	Cylinder	3.5	21.0	262	1.00	Cylinder	21.0	2.1	73	4.00
			Cylinder	21.5	4.3	1560	0.07	Cylinder	21.5	4.3	1560	0.08	
			Cylinder	30.1	8.6	6116	0.01	Cylinder	30.1	8.6	6116	0.10	
			Cylinder	43.0	21.5	31206	0.01						
			Cylinder	64.5	12.9	42129	0.03						
Cylinder	21.5	12.9	4681	0.09									
Cylinder	21.5	4.3	1560	0.05									
Jul-00	NH-03	1.5	Cyanos	Sphere	1.0	1.0	1	3121.00	Sphere	1.0	1.0	1	6242.00
				Flagellates	Sphere	1.4	1.4	1	20.20	Sphere	1.4	1.4	1
			Sphere	2.8	2.8	12	30.30	Sphere	2.8	2.8	12	90.90	
			Sphere	4.9	4.9	192	80.80	Sphere	4.9	4.9	192	111.10	
			Sphere	7.0	7.0	180	10.10	Teardrop	8.4	3.5	44	30.30	
			Sphere	8.4	8.4	49	70.70	Cylinder	10.5	7.0	230	20.20	
			Teardrop	8.4	3.5	44	90.90	Cylinder	14.0	10.0	181	10.10	
			Cylinder	10.5	7.0	230	10.10	Sphere	30.1	30.1	948	1.31	
			Cylinder	14.0	10.0	181	10.10	Sphere	43.0	43.0	1935	0.07	
			Sphere	21.5	21.5	484	0.04	Sphere	51.6	51.6	2787	0.07	
			Flagellates	Sphere	30.1	30.1	948	0.04	Sphere	77.4	77.4	6270	0.04
			Sphere	51.6	51.6	2787	0.12						
			Sphere	77.4	77.4	6270	0.04						

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2								
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml					
Jul-00	NH-03	1.5	Diatoms	Cylinder	14.0	2.8	431	10.10	Cylinder	14.0	2.8	431	20.20				
				Cylinder	21.0	17.5	6061	47.13	Cylinder	21.0	17.5	6061	484.80				
				Cylinder	17.5	7.0	1683	626.20	Cylinder	4.2	7.0	162	63.97				
				Cylinder	4.2	7.0	162	104.37	Cylinder	7.0	7.0	269	37.03				
				Cylinder	7.0	7.0	269	144.77	Cylinder	21.5	4.3	1560	0.11				
				Cylinder	21.5	4.3	1560	0.88	Cylinder	43.0	21.5	31206	1.13				
				Cylinder	30.1	8.6	6116	1.44	Cylinder	43.0	21.5	31206	0.25				
				Cylinder	43.0	21.5	31206	0.56	Cylinder	21.5	8.6	3121	3.13				
				Cylinder	51.6	25.8	53925	1.16	Cylinder	51.6	12.9	26962	0.73				
				Cylinder	107.5	30.1	273057	0.08	Cylinder	30.1	8.6	6116	4.47				
				Cylinder	86.0	21.5	124826	0.04	Cylinder	21.5	21.5	7802	3.13				
				Cylinder	21.5	8.6	3121	5.92	Cylinder	21.5	12.9	4681	6.51				
				Cylinder	30.1	21.5	15291	2.44	Cylinder	21.5	4.3	1560	15.49				
				Cylinder	30.1	12.9	9175	4.64	Cylinder	43.0	21.5	31206	4.04				
				Cylinder	21.5	12.9	4681	15.64	Cylinder	30.1	21.5	15291	0.25				
				Cylinder	21.5	4.3	1560	30.80	Cylinder	21.5	21.5	7802	1.64				
				Cylinder	86.0	21.5	124826	0.44	Cylinder	21.5	8.6	3121	17.78				
				Cylinder	43.0	21.5	31206	3.20	Cylinder	4.3	43.0	624	2.62				
				Cylinder	21.5	21.5	7802	7.36	Cone	64.5	21.5	23405	17.35				
				Cylinder	21.5	8.6	3121	28.00	Cylinder	21.5	86.0	31206	0.15				
				Cylinder	4.3	43.0	624	1.12	Cylinder	4.3	43.0	624	1.13				
				Cone	64.5	21.5	23405	40.00									
				Cone	64.5	8.6	9362	5.48									
				Cylinder	21.5	86.0	31206	0.04									
				Cylinder	8.6	43.0	2497	5.24									
				Cylinder	43.0	43.0	62413	4.40									
				Jul-00	NH-03	9.2	Cyanos	Sphere	1.0	1.0	1	6575.00	Sphere	1.0	1.0	1	4683.00
								Flagellates	Sphere	1.4	1.4	1	70.70	Sphere	1.4	1.4	1
Sphere	2.8	2.8	12						70.70	Sphere	2.8	2.8	12	75.75			
Sphere	4.9	4.9	192						90.90	Sphere	4.9	4.9	192	84.17			
Jul-00	NH-03	9.2	Flagellates	Cylinder	10.5	7.0	230	3.37	Cylinder	14.0	10.0	181	10.10				
				Cylinder	14.0	10.0	181	3.37	Sphere	21.5	21.5	484	0.26				
				Sphere	29.4	29.4	948	0.02	Sphere	30.1	30.1	948	0.08				
				Sphere	50.4	50.4	2787	0.02	Sphere	51.6	51.6	2787	0.02				
				Diatoms	Cylinder	14.0	2.8	431	50.50	Cylinder	14.0	2.8	431	276.07			

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-00	NH-03	9.2	Diatoms	Cylinder	21.0	17.5	6061	107.73	Cylinder	21.0	17.5	6061	84.17	
				Cylinder	4.2	7.0	162	632.93	Cylinder	4.2	7.0	162	606.00	
				Cylinder	7.0	7.0	269	202.00	Cylinder	7.0	7.0	269	23.57	
				Cone	51.6	8.6	5992	0.26	Cylinder	14.0	11.0	1235	161.60	
				Cylinder					Cylinder	30.1	8.6	6116	0.06	
				Cylinder					Cylinder	21.5	12.9	4681	0.24	
				Cylinder					Cylinder	30.1	12.9	9175	0.26	
				Cylinder					Cylinder	21.5	12.9	4681	0.42	
				Cylinder					Cylinder	21.5	4.3	1560	0.48	
				Cylinder					Cylinder	30.1	21.5	15291	0.10	
				Cylinder					Cylinder	21.5	8.6	3121	0.54	
				Cone					Cone	64.5	21.5	70215	0.52	
				Cylinder					Cylinder	4.3	86.0	1248	1.32	
				Jul-00	NH-10	1.2	Cyanos	Sphere	1.0	1.0	1	15302.00	Sphere	1.0
Flagellates	Sphere	1.4	1.4					1	70.70	Sphere	1.4	1.4	1	131.30
	Sphere	2.8	2.8				12	111.10	Sphere	2.8	2.8	12	121.20	
	Sphere	3.5	3.5				22	141.40	Sphere	3.5	3.5	22	222.20	
	Sphere	4.9	4.9				192	101.00	Sphere	4.9	4.9	192	111.10	
	Sphere	8.4	8.4				49	10.10	Sphere	7.0	7.0	180	10.10	
	Teardrop	8.4	3.5				44	20.20	Sphere	8.4	8.4	49	20.20	
	Cylinder	10.5	7.0				230	3.37	Teardrop	8.4	3.5	44	10.10	
	Sphere	21.5	21.5				484	0.04	Cylinder	10.5	7.0	230	16.83	
	Sphere	30.1	30.1				948	0.16	Sphere	21.5	21.5	484	0.04	
	Sphere	51.6	51.6				2787	0.12	Sphere	30.1	30.1	948	0.08	
	Sphere	77.4	77.4				6270	0.04	Sphere	77.4	77.4	6270	0.08	
	Cone	86.0	21.5				41609	0.08	Sphere	107.5	107.5	650135	0.08	
	Diatoms	Cylinder	10.5				2.1	182	70.70	Cylinder	14.0	2.8	431	10.10
		Cylinder	21.0				17.5	6061	117.83	Cylinder	21.0	17.5	6061	134.67
		Cylinder	4.2				7.0	162	154.87	Cylinder	4.0	7.0	162	215.47
		Cylinder	7.0				7.0	269	40.40	Cylinder	7.0	7.0	269	47.13
		Cylinder	14.0				10.5	1235	63.97	Cylinder	14.0	11.0	1235	20.20
		Cylinder	15.4				2.8	390	37.03	Cylinder	7.0	14.0	538	37.03
Cylinder		7.0	1.4				11	67.33	Cylinder	21.5	4.3	1560	3.16	
Cylinder		21.5	4.3	1560	3.20	Cylinder	30.1	8.6	6116	6.72				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-00	NH-10	1.2	Diatoms	Cylinder	30.1	8.6	6116	2.80	Cylinder	43.0	21.5	31206	4.12	
				Cylinder	43.0	21.5	31206	0.68	Cylinder	51.6	25.8	53925	1.24	
				Cylinder	51.6	25.8	53925	0.96	Cylinder	64.5	34.4	112343	0.16	
				Cylinder	64.5	34.4	112343	0.24	Cylinder	86.0	21.5	124826	0.08	
				Cylinder	86.0	21.5	124826	0.12	Cylinder	150.5	43.0	764559	0.08	
				Cylinder	21.5	8.6	3121	7.24	Cylinder	21.5	8.6	3121	1.32	
				Cylinder	43.0	21.5	31206	0.44	Cylinder	21.5	21.5	7802	7.16	
				Cylinder	30.1	8.6	6116	1.12	Cylinder	30.1	12.9	9175	2.40	
				Cylinder	21.5	12.9	4681	2.88	Cylinder	21.5	21.5	7802	3.00	
				Cylinder	21.5	4.3	1560	2.48	Cylinder	21.5	12.9	4681	8.00	
				Cylinder	21.5	8.6	3121	9.40	Cylinder	21.5	4.3	1560	9.20	
				Cylinder	8.6	43.0	2497	0.16	Cylinder	43.0	21.5	31206	0.24	
				Cone	64.5	21.5	23405	12.84	Cylinder	21.5	21.5	7802	4.24	
				Cylinder	4.3	86.0	1248	3.64	Cylinder	21.5	8.6	3121	15.40	
				Cylinder	8.6	430.0	24965	0.08	Cone	64.5	21.5	3901	5.48	
				Cylinder	43.0	43.0	62413	1.76	Cone	64.5	4.3	156	0.56	
				Cylinder	43.0	21.5	31206	1.32	Cylinder	4.3	43.0	624	0.72	
				Cylinder	21.5	21.5	7802	7.24	Cylinder	8.6	430.0	24965	0.16	
									Cylinder	30.1	30.1	21408	0.32	
				Jul-00	NH-10	6.4	Cyanos	Sphere	1.0	1.0	1	11969.00	Sphere	1.0
Flagellates	Sphere	1.4	1.4					1	50.50	Sphere	1.4	1.4	1	78.19
	Sphere	2.8	2.8				12	75.75	Sphere	2.8	2.8	12	78.19	
	Sphere	7.0	7.0				180	8.42	Sphere	4.9	4.9	192	78.19	
	Cylinder	10.5	7.0				230	3.37	Teardrop	8.4	3.5	44	19.55	
	Cylinder	14.0	3.5				181	3.37	Cylinder	10.5	7.0	230	3.37	
	Sphere	21.5	21.5				484	0.09	Cylinder	14.0	3.5	181	13.47	
	Sphere	30.1	30.1				948	0.47	Sphere	21.5	21.5	484	0.24	
	Sphere	51.6	51.6				2787	0.09	Sphere	30.1	30.1	948	0.07	
	Sphere	77.4	77.4				6270	0.04	Sphere	51.6	51.6	2787	0.04	
									Sphere	77.4	77.4	6270	0.04	
	Diatoms	Cylinder	21.5				4.3	1560	3.20	Cylinder	21.5	4.3	1560	3.16
		Cylinder	30.1				8.6	6116	2.80	Cylinder	30.1	8.6	6116	6.72
		Cylinder	43.0				21.5	31206	0.68	Cylinder	43.0	21.5	31206	4.12
		Cylinder	51.6				25.8	53925	0.96	Cylinder	51.6	25.8	53925	1.24
Cylinder		64.5	34.4				112343	0.24	Cylinder	64.5	34.4	112343	0.16	

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-00	NH-10	6.4	Diatoms	Cylinder	86.0	21.5	124826	0.12	Cylinder	86.0	21.5	124826	0.08
				Cylinder	21.5	8.6	3121	7.24	Cylinder	150.5	43.0	764559	0.08
				Cylinder	43.0	21.5	31206	0.44	Cylinder	21.5	8.6	3121	1.32
				Cylinder	30.1	8.6	6116	1.12	Cylinder	21.5	21.5	7802	7.16
				Cylinder	21.5	12.9	4681	2.88	Cylinder	30.1	12.9	9175	2.40
				Cylinder	21.5	4.3	1560	2.48	Cylinder	21.5	21.5	7802	3.00
				Cylinder	21.5	8.6	3121	9.40	Cylinder	21.5	12.9	4681	8.00
				Cylinder	8.6	43.0	2497	0.16	Cylinder	21.5	4.3	1560	9.20
				Cone	64.5	21.5	23405	12.84	Cylinder	43.0	21.5	31206	0.24
				Cylinder	4.3	86.0	1248	3.64	Cylinder	21.5	21.5	7802	4.24
				Cylinder	8.6	430.0	24965	0.08	Cylinder	21.5	8.6	3121	15.40
				Cylinder	43.0	43.0	62413	1.76	Cone	64.5	21.5	3901	5.48
				Cylinder	43.0	21.5	31206	1.32	Cone	64.5	4.3	156	0.56
				Cylinder	21.5	21.5	7802	7.24	Cylinder	4.3	43.0	624	0.72
									Cylinder	8.6	430.0	24965	0.16
									Cylinder	30.1	30.1	21408	0.32
Jul-00	NH-20	1.5	Cyanos	Sphere	1.0	1.0	1	34663.00	Sphere	1.0	1.0	1	15453.00
				Flagellates	Sphere	1.4	1.4	1	252.50	Sphere	1.4	1.4	1
				Sphere	2.8	2.8	12	171.70	Sphere	2.8	2.8	12	292.90
				Sphere	3.5	3.5	22	242.40	Sphere	3.5	3.5	22	575.70
				Sphere	4.9	4.9	192	181.80	Sphere	4.9	4.9	192	383.80
				Sphere	8.4	8.4	49	70.70	Sphere	7.0	7.0	180	10.10
				Cylinder	10.5	7.0	230	2.73	Sphere	8.4	8.4	49	10.10
				Sphere	21.5	21.5	484	0.05	Cylinder	10.5	7.0	230	13.65
				Sphere	30.1	30.1	948	0.05	Sphere	21.5	21.5	484	0.29
				Sphere	51.6	51.6	2787	0.02	Sphere	30.1	30.1	948	0.14
				Sphere	77.4	77.4	6270	0.02	Sphere	51.6	51.6	2787	0.04
				Cone	86.0	43.0	83217	0.01	Sphere	77.4	77.4	6270	0.02
									Sphere	129.0	129.0	7741	0.01
									Ob.Sphere	43.0	8.6	1664	0.03
									Cone	129.0	43.0	187239	0.02
									Cone	86.0	43.0	83217	0.02
						Cone	215.0	64.5	780162	0.03			
			Diatoms	Cylinder	14.0	2.8	431	2.73	Cylinder	10.5	2.1	182	2.73
				Cylinder	7.0	7.0	269	19.11	Cylinder	21.0	17.5	6061	21.84

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-00	NH-20	1.5	Diatoms	Sphere	21.0	21.0	4849	13.65	Cylinder	4.2	7.0	162	38.22
				Cylinder	21.5	4.3	1560	0.28	Cylinder	21.5	4.3	1560	0.12
				Cylinder	30.1	8.6	6116	0.15	Cylinder	30.1	8.6	6116	0.13
				Cylinder	43.0	21.5	31206	0.06	Cylinder	43.0	21.5	31206	0.03
				Cylinder	51.6	25.8	53925	0.07	Cylinder	51.6	25.8	53925	0.02
				Cylinder	64.5	34.4	112343	0.01	Cylinder	64.5	34.4	112343	0.03
				Cylinder	193.5	107.5	3159658	0.01	Cylinder	21.5	21.5	7802	0.04
				Cylinder	30.1	12.9	9175	0.17	Cylinder	21.5	12.9	4681	0.29
				Cylinder	21.5	21.5	7802	0.15	Cylinder	21.5	4.3	1560	0.14
				Cylinder	21.5	12.9	4681	0.81	Cylinder	21.5	8.6	3121	0.35
				Cylinder	21.5	4.3	1560	0.43	Cone	64.5	8.6	9362	0.47
				Cylinder	21.5	21.5	7802	0.07	Cylinder	8.6	43.0	2497	0.01
				Cylinder	21.5	8.6	3121	0.63	Cylinder	4.3	21.5	312	0.02
				Cylinder	8.6	43.0	2497	0.01	Cylinder	30.1	21.5	15291	0.25
				Cone	64.5	21.5	23405	2.07	Cylinder	21.5	8.6	3121	0.22
				Cone	64.5	8.6	9362	0.73					
				Cylinder	21.5	86.0	31206	0.01					
				Cylinder	4.3	86.0	1248	0.02					
				Cylinder	4.3	43.0	624	0.08					
				Cylinder	8.6	430.0	24965	0.01					
				Cylinder	43.0	43.0	62413	0.03					
				Cylinder	43.0	21.5	31206	0.11					
				Cylinder	30.1	21.5	15291	0.25					
				Cylinder	21.5	8.6	3121	0.61					
Jul-00	NH-20	16	Cyanos	Sphere	1.0	1.0	1	15726.00	Sphere	1.0	1.0	1	23240.00
				Flagellates	Sphere	1.4	1.4	1	131.30	Sphere	1.4	1.4	1
				Sphere	2.8	2.8	12	121.20	Sphere	2.8	2.8	12	217.78
				Sphere	3.5	3.5	22	222.20	Sphere	3.5	3.5	22	94.69
				Sphere	4.9	4.9	192	111.10	Sphere	4.9	4.9	192	142.03
				Sphere	7.0	7.0	180	10.10	Sphere	7.0	7.0	180	37.88
				Sphere	8.4	8.4	49	20.20	Sphere	8.4	8.4	49	56.81
				Teardrop	10.5	7.0	44	10.10	Teardrop	10.5	7.0	44	37.88
				Cylinder	10.5	7.0	230	17.31	Cylinder	10.5	7.0	230	2.46
				Cylinder	14.0	3.5	181	5.77	Sphere	21.5	21.5	484	0.03
				Sphere	21.5	21.5	484	0.03	Sphere	30.1	30.1	948	0.08

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-00	NH-20	16	Flagellates	Sphere	30.1	30.1	948	0.02	Sphere	51.6	51.6	2787	0.01	
				Sphere	64.5	64.5	4354	0.01	Sphere	77.4	77.4	6270	0.02	
				Sphere	77.4	77.4	6270	0.03						
				Cone	86.0	43.0	83217	0.01						
			Diatoms	Cylinder	21.5	4.3	1560	0.27	Cylinder	14.0	2.8	431	2.46	
				Cylinder	30.1	8.6	6116	0.17	Cylinder	7.0	7.0	269	17.24	
				Cylinder	43.0	21.5	31206	0.05	Sphere	21.0	21.0	4849	12.32	
				Cylinder	51.6	25.8	53925	0.16	Cylinder	21.5	4.3	1560	0.59	
				Cylinder	64.5	34.4	112343	0.07	Cylinder	30.1	8.6	6116	0.37	
				Cylinder	86.0	21.5	124826	0.01	Cylinder	43.0	21.5	31206	0.13	
				Cylinder	86.0	21.5	124826	0.01	Cylinder	51.6	25.8	53925	0.11	
				Cylinder	30.1	12.9	9175	0.09	Cylinder	64.5	34.4	112343	0.03	
				Cylinder	21.5	21.5	7802	0.25	Cylinder	21.5	21.5	7802	0.07	
				Cylinder	21.5	12.9	4681	0.36	Cylinder	21.5	4.3	1560	0.13	
				Cylinder	21.5	4.3	1560	0.22	Cylinder	43.0	8.6	12483	0.03	
				Cylinder	64.5	21.5	70215	0.15	Cylinder	21.5	21.5	7802	0.01	
				Cylinder	21.5	21.5	7802	0.07	Cylinder	21.5	8.6	3121	0.51	
				Cylinder	21.5	8.6	3121	0.33	Cone	64.5	21.5	23405	0.11	
				Cone	64.5	21.5	23405	0.37	Cone	64.5	4.3	4681	0.15	
				Cone	64.5	4.3	4681	1.15	Cylinder	8.6	430.0	24965	0.01	
Cylinder	4.3	43.0	624	0.11	Cylinder	43.0	43.0	62413	0.03					
Cylinder	4.3	430.0	6241	0.03										
Cylinder	21.5	21.5	7802	0.23										
Jul-00	NH-55	1.5	Cyanos	Sphere	1.0	1.0	1	12514.00	Sphere	1.0	1.0	1	12514.00	
				Flagellates	Sphere	1.4	1.4	1	282.80	Sphere	1.4	1.4	1	282.80
			Flagellates	Sphere	2.8	2.8	12	484.80	Sphere	2.8	2.8	12	484.80	
				Sphere	3.5	3.5	22	40.40	Sphere	3.5	3.5	22	40.40	
				Sphere	4.9	4.9	192	171.70	Sphere	4.9	4.9	192	171.70	
				Sphere	7.0	7.0	180	20.20	Sphere	7.0	7.0	180	20.20	
				Sphere	8.4	8.4	49	50.50	Sphere	8.4	8.4	49	50.50	
				Teardrop	10.5	7.0	44	10.10	Teardrop	10.5	7.0	44	10.10	
				Sphere	21.5	21.5	484	0.02	Sphere	51.6	51.6	2787	0.08	
				Sphere	30.1	30.1	948	0.05	Cone	129.0	34.4	149791	0.01	
				Sphere	77.4	77.4	6270	0.01						
				Diatoms	Cylinder	21.5	4.3	1560	0.49	Cylinder	10.5	2.1	182	6.73

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-00	NH-55	1.5	Diatoms	Cylinder	30.1	8.6	6116	0.17	Cylinder	21.5	4.3	1560	0.03
				Cylinder	43.0	21.5	31206	0.17	Cylinder	30.1	8.6	6116	0.03
				Cylinder	51.6	25.8	53925	0.01	Cylinder	64.5	34.4	112343	0.01
				Cylinder	64.5	34.4	112343	0.01	Cylinder	21.5	12.9	4681	0.01
				Cylinder	21.5	12.9	4681	0.10	Cylinder	21.5	8.6	3121	0.07
				Cylinder	21.5	8.6	3121	0.43	Cone	64.5	4.3	4681	0.07
				Cone	64.5	8.6	28086	0.43	Cone	64.5	8.6	9362	0.03
				Cylinder	21.5	86.0	15603	0.01	Cylinder	4.3	86.0	1248	0.05
				Cylinder	8.6	86.0	24965	0.12					
				Cylinder	8.6	43.0	1248	0.01					
				Cylinder	8.6	430.0	12483	0.02					
				Jul-00	NH-55	36	Cyanos	Sphere	1.0	1.0	1	13908.00	Sphere
Flagellates	Sphere	1.4	1.4					1	181.80	Sphere	1.4	1.4	1
	Sphere	2.8	2.8				12	353.50	Sphere	2.8	2.8	12	444.40
	Sphere	3.5	3.5				22	212.10	Sphere	3.5	3.5	22	171.70
	Sphere	4.9	4.9				192	272.70	Sphere	4.9	4.9	192	101.00
	Sphere	8.4	8.4				49	10.10	Sphere	7.0	7.0	180	30.30
	Teardrop	10.5	7.0				44	10.10	Sphere	8.4	8.4	49	50.50
	Cylinder	10.5	7.0				230	6.73	Sphere	21.5	21.5	484	0.02
	Cylinder	14.0	3.5				181	3.37	Sphere	30.1	30.1	948	0.02
	Sphere	21.5	21.5				484	0.04	Sphere	51.6	51.6	2787	0.01
	Sphere	30.1	30.1				948	0.02	Cone	64.5	30.1	32767	0.01
	Sphere	51.6	51.6				2787	0.02					
	Cone	172.0	64.5				499304	0.01					
	Cone	129.0	43.0				187239	0.01					
Jul-00	NH-55	36	Diatoms	Cylinder	21.5	4.3	1560	0.07	Cylinder	21.5	4.3	1560	0.07
				Cylinder	30.1	8.6	6116	0.14	Cylinder	30.1	8.6	6116	0.11
				Cylinder	43.0	21.5	31206	0.08	Cylinder	43.0	21.5	31206	0.03
				Cylinder	51.6	25.8	53925	0.13	Cylinder	21.5	12.9	4681	0.05
				Cylinder	193.5	107.5	3159658	0.01	Cylinder	21.5	8.6	3121	0.11
				Cylinder	21.5	21.5	7802	0.04	Cylinder	4.3	21.5	312	0.01
				Cylinder	21.5	12.9	4681	0.07	Cone	8.6	64.5	1248	0.53
				Cylinder	21.5	4.3	1560	0.05	Cone	4.3	64.5	312	0.05
				Cylinder	21.5	8.6	3121	0.57					
				Cylinder	4.3	43.0	624	0.03					

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Cells/ml	Shape	Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)				A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-00	NH-55	36	Diatoms	Cone	64.5	8.6	9362	0.45								
				Cylinder	8.6	43.0	2497	0.01								
				Cylinder	8.6	430.0	24965	0.01								
Sep-00	NH-03	1	Cyanos	Sphere	1.0	1.0	1	11969.00	Sphere	1.0	1.0	1	13456.00			
				Flagellates	Sphere	1.4	1.4	1	1030.20	Sphere	1.4	1.4	1	636.30		
			Sphere		2.8	2.8	12	565.60	Sphere	2.8	2.8	12	333.30			
			Sphere	3.5	3.5	22	222.20	Sphere	3.5	3.5	22	303.00				
			Sphere	4.9	4.9	192	171.70	Sphere	4.9	4.9	192	131.30				
			Sphere	7.0	7.0	180	131.30	Sphere	7.0	7.0	180	50.50				
			Sphere	8.4	8.4	49	101.00	Sphere	8.4	8.4	49	50.50				
			Teardrop	10.5	7.0	44	20.20	Teardrop	10.5	7.0	44	30.30				
			Cylinder	14.0	3.5	181	3.37	Cylinder	10.5	7.0	230	10.10				
			Sphere	21.5	21.5	484	1.16	Sphere	21.5	21.5	484	1.35				
			Sphere	30.1	30.1	948	1.23	Sphere	30.1	30.1	948	0.97				
			Sphere	51.6	51.6	2787	0.31	Sphere	43.0	43.0	1935	0.27				
			Sphere	64.5	64.5	4354	0.04	Sphere	51.6	51.6	2787	0.09				
			Sphere	77.4	77.4	6270	0.03	Sphere	64.5	64.5	4354	0.03				
								Sphere	77.4	77.4	6270	0.01				
								Sphere	86.0	86.0	7741	0.01				
								Cone	86.0	43.0	83217	0.01				
								Cone	86.0	21.5	41609	0.01				
						Diatoms	Cylinder	21.0	17.5	6061	3.37	Cylinder	4.2	7.0	162	10.10
							Cylinder	17.5	7.0	1683	23.57	Cylinder	21.5	4.3	1560	0.04
							Cylinder	21.5	4.3	1560	0.12	Cylinder	30.1	8.6	6116	0.03
							Cylinder	30.1	8.6	6116	0.04	Cylinder	43.0	21.5	31206	0.04
							Cylinder	43.0	21.5	31206	0.29	Cylinder	51.6	25.8	53925	0.08
							Cylinder	51.6	25.8	53925	0.64	Cylinder	129.0	34.4	449374	0.01
							Cylinder	64.5	34.4	112343	0.01	Cylinder	43.0	21.5	31206	0.01
							Cylinder	86.0	21.5	124826	0.01	Cylinder	64.5	43.0	140429	0.07
							Cylinder	193.5	107.5	3159658	0.01	Cylinder	30.1	12.9	9175	0.08
							Cylinder	30.1	12.9	9175	0.91	Cylinder	21.5	21.5	7802	0.08
				Cylinder	21.5	21.5	7802	0.07	Cylinder	21.5	12.9	4681	0.49			
				Cylinder	21.5	12.9	4681	0.51	Cylinder	21.5	4.3	1560	0.21			
				Cylinder	21.5	4.3	1560	0.33	Cylinder	8.6	86.0	4993	0.01			
				Cylinder	21.5	21.5	7802	0.11	Cylinder	4.3	43.0	624	0.61			

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Sep-00	NH-03	1	Diatoms	Cylinder	4.3	86.0	1248	0.03	Cylinder	8.6	430.0	24965	0.01	
				Cylinder	4.3	43.0	624	0.72	Cylinder	43.0	43.0	62413	0.20	
				Cylinder	21.5	21.5	7802	0.45						
Sep-00	NH-03	11	Cyanos	Sphere	1.0	1.0	1	9969.00	Sphere	1.0	1.0	1	8726.00	
				Flagellates	Sphere	1.4	1.4	1	811.26	Sphere	1.4	1.4	1	799.58
					Sphere	2.8	2.8	12	693.97	Sphere	2.8	2.8	12	824.83
			Sphere	3.5	3.5	22	742.84	Sphere	3.5	3.5	22	479.75		
			Sphere	4.9	4.9	192	557.13	Sphere	4.9	4.9	192	496.58		
			Sphere	7.0	7.0	180	175.94	Sphere	7.0	7.0	180	277.75		
			Sphere	8.4	8.4	49	136.84	Sphere	8.4	8.4	49	8.42		
			Teardrop	10.5	7.0	44	48.87	Teardrop	10.5	7.0	44	16.83		
			Cylinder	10.5	7.0	230	6.73	Cylinder	10.5	7.0	230	16.83		
			Sphere	21.5	21.5	484	0.35	Cylinder	14.0	3.5	181	6.73		
			Sphere	30.1	30.1	948	0.47	Sphere	21.5	21.5	484	0.45		
			Sphere	51.6	51.6	2787	0.16	Sphere	30.1	30.1	948	0.64		
			Sphere	77.4	77.4	6270	0.04	Sphere	51.6	51.6	2787	0.23		
			Cone	86.0	43.0	83217	0.01	Sphere	77.4	77.4	6270	0.04		
			Cone	43.0	25.8	12483	0.04	Ob.Sphere	43.0	8.6	1664	0.01		
			Cone	129.0	34.4	149791	0.03	Cone	43.0	25.8	12483	0.03		
			Diatoms	Cylinder	4.2	7.0	162	47.13	Cylinder	10.5	2.1	182	249.13	
				Cylinder	21.5	4.3	1560	0.13	Cylinder	4.2	7.0	162	90.90	
				Cylinder	30.1	8.6	6116	0.15	Cylinder	7.0	7.0	269	33.67	
				Cylinder	43.0	21.5	31206	0.28	Cylinder	21.5	4.3	1560	0.11	
				Cylinder	51.6	25.8	53925	0.27	Cylinder	30.1	8.6	6116	0.21	
				Cylinder	64.5	34.4	112343	0.01	Cylinder	43.0	21.5	31206	0.45	
				Cylinder	129.0	34.4	449374	0.03	Cylinder	51.6	25.8	53925	0.16	
				Cylinder	30.1	8.6	6116	0.68	Cylinder	64.5	34.4	112343	0.09	
				Cylinder	21.5	21.5	7802	0.31	Cylinder	129.0	34.4	449374	0.04	
				Cylinder	21.5	12.9	4681	1.17	Cylinder	64.5	12.9	42129	0.08	
				Cylinder	21.5	4.3	1560	0.47	Cylinder	193.5	107.5	3159658	0.04	
				Cylinder	21.5	8.6	3121	0.88	Cylinder	30.1	12.9	9175	1.44	
				Cone	64.5	8.6	9362	0.13	Cylinder	21.5	21.5	7802	0.17	
				Cylinder	21.5	193.5	70215	0.01	Cylinder	21.5	12.9	4681	1.21	
Cylinder	8.6	86.0		4993	0.35	Cylinder	21.5	4.3	1560	1.31				
Cylinder	21.5	43.0		15603	0.01	Cylinder	21.5	21.5	7802	0.41				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Sep-00	NH-03	11	Diatoms	Cylinder	4.3	43.0	624	0.61	Cylinder	21.5	8.6	3121	0.57	
				Cylinder	8.6	430.0	24965	0.07	Cylinder	86.0	8.6	49930	0.03	
				Cylinder	43.0	43.0	62413	1.64	Cylinder	43.0	4.3	6241	0.17	
				Cylinder	21.5	21.5	7802	1.36	Cylinder	21.5	430.0	156032	0.05	
				Cylinder					Cylinder	4.3	430.0	6241	0.08	
				Cylinder					Cylinder	43.0	43.0	62413	0.77	
				Cylinder					Cylinder	21.5	21.5	7802	1.24	
Sep-00	NH-10	1	Cyanos Flagellates	Sphere	1.0	1.0	1	22664.00	Sphere	1.0	1.0	1	22483.00	
				Sphere	1.4	1.4	1	545.40	Sphere	1.4	1.4	1	808.00	
				Sphere	2.8	2.8	12	813.77	Sphere	2.8	2.8	12	636.30	
				Sphere	3.5	3.5	22	207.77	Sphere	3.5	3.5	22	404.00	
				Sphere	4.9	4.9	192	69.26	Sphere	4.9	4.9	192	292.90	
				Sphere	7.0	7.0	180	25.97	Sphere	8.4	8.4	49	20.20	
				Teardrop	10.5	7.0	44	8.66	Teardrop	10.5	7.0	44	50.50	
				Sphere	21.5	21.5	484	0.91	Cylinder	10.5	7.0	230	6.73	
				Sphere	30.1	30.1	948	0.11	Sphere	21.5	21.5	484	0.43	
				Sphere	43.0	43.0	1935	0.12	Sphere	30.1	30.1	948	0.43	
				Sphere	51.6	51.6	2787	0.12	Sphere	43.0	43.0	1935	0.16	
				Sphere	77.4	77.4	6270	0.04	Sphere	51.6	51.6	2787	0.11	
				Ob.Sphere	34.4	17.2	5326	0.03	Sphere	64.5	64.5	4354	0.04	
				Ob.Sphere	43.0	8.6	1664	0.53	Sphere	77.4	77.4	6270	0.03	
				Cone	129.0	43.0	187239	0.01	Ob.Sphere	43.0	17.2	6657	0.07	
				Cone	64.5	30.1	32767	0.27	Cone	64.5	30.1	32767	0.12	
				Cone	43.0	25.8	12483	0.19	Cone	43.0	25.8	12483	0.07	
				Cone	129.0	34.4	149791	0.07	Cone	107.5	43.0	130027	0.01	
				Cone	64.5	12.9	14043	0.12	Cone	64.5	12.9	14043	0.15	
				Diatoms	Cylinder	21.0	17.5	6061	54.83	Cylinder	11.0	2.0	182	23.09
					Cylinder	129.0	34.4	449374	0.01	Cylinder	21.5	4.3	1560	0.20
					Cylinder	30.1	12.9	9175	0.12	Cylinder	30.1	8.6	6116	0.15
					Cylinder	21.5	21.5	7802	0.01	Cylinder	43.0	21.5	31206	0.03
					Cylinder	21.5	12.9	4681	0.09	Cylinder	30.1	12.9	9175	0.04
					Cylinder	21.5	4.3	1560	0.21	Cylinder	21.5	12.9	4681	0.12
					Cylinder	8.6	43.0	2497	0.29	Cylinder	21.5	4.3	1560	0.07
					Cylinder	21.5	21.5	7802	0.52	Cylinder	21.5	21.5	7802	0.15
					Cylinder					Cylinder	4.3	43.0	624	1.89

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2							
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml				
Sep-00	NH-10	1	Diatoms						Cylinder	4.3	430.0	6241	0.03			
									Cylinder	21.5	21.5	7802	0.76			
Sep-00	NH-10	20	Cyanos	Sphere	1.0	1.0	1	4606.00	Sphere	1.0	1.0	1	4272.00			
				Flagellates	Sphere	1.4	1.4	1	388.22	Sphere	1.4	1.4	1	424.20		
				Sphere	2.8	2.8	12	435.56	Sphere	2.8	2.8	12	454.50			
				Sphere	3.5	3.5	22	426.09	Sphere	3.5	3.5	22	343.40			
				Sphere	4.9	4.9	192	217.78	Sphere	4.9	4.9	192	131.30			
				Sphere	7.0	7.0	180	28.41	Sphere	7.0	7.0	180	10.10			
				Sphere	8.4	8.4	49	37.88	Sphere	8.4	8.4	49	10.10			
				Teardrop	10.5	7.0	44	18.94	Cylinder	10.5	7.0	230	3.37			
				Cylinder	10.5	7.0	230	3.37	Cylinder	14.0	3.5	181	16.83			
				Sphere	21.5		484	0.04	Sphere	21.5	21.5	484	0.16			
									Sphere	30.1	30.1	948	0.04			
									Sphere	43.0	43.0	1935	0.04			
									Ob.Sphere	86.0	21.5	20804	0.04			
									Ob.Sphere	43.0	8.6	1664	0.08			
								Ob.Sphere	21.5	8.6	832	4.50				
						Diatoms	Cylinder	10.5	2.1	182	87.53	Cylinder	14.0	2.8	431	6.73
							Cylinder	14.0	2.8	431	94.27	Cylinder	21.0	17.5	6061	195.27
							Cylinder	21.0	17.5	6061	63.97	Cylinder	4.2	7.0	162	60.60
							Cylinder	4.2	7.0	162	127.93	Cylinder	14.0	10.5	1235	16.83
							Cylinder	14.0	10.5	1235	111.10	Sphere	21.0		4849	3.37
							Cylinder	14.0	7.0	1077	33.67	Cylinder	21.5	4.3	1560	0.04
							Cylinder	21.5	4.3	1560	0.44	Cylinder	21.5	4.3	1560	0.28
							Cylinder	30.1	8.6	6116	0.32	Cylinder	4.3	43.0	624	0.08
							Cylinder	51.6	25.8	53925	0.04	Cylinder	4.3	43.0	624	0.48
							Cylinder	21.5	21.5	7802	0.08					
							Cylinder	21.5	12.9	4681	1.76					
							Cylinder	21.5	4.3	1560	2.40					
							Cylinder	21.5	21.5	7802	0.16					
				Cylinder	21.5	8.6	3121	0.72								
				Cone	64.5	8.6	9362	0.52								
				Cylinder	12.9	107.5	14043	0.04								
				Cylinder	4.3	43.0	624	2.08								
				Cylinder	64.5	43.0	140429	3.56								

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Shape	Replicate 2			
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
				Cylinder	43.0	21.5	31206	0.48					
				Cylinder	12.9	21.5	2809	0.48					
Sep-00	NH-20	1	Cyanos	Sphere	1.0	1.0	1	7757.00	Sphere	1.0	1.0	1	15605.00
			Flagellates	Sphere	1.4	1.4	1	1818.00	Sphere	1.4	1.4	1	2686.60
				Sphere	2.8	2.8	12	979.70	Sphere	2.8	2.8	12	555.50
				Sphere	3.5	3.5	22	989.80	Sphere	3.5	3.5	22	393.90
				Sphere	4.9	4.9	192	90.90	Sphere	4.9	4.9	192	222.20
				Sphere	7.0	7.0	180	40.40	Sphere	7.0	7.0	180	10.10
				Sphere	8.4	8.4	49	10.10	Teardrop	10.5	7.0	44	20.20
				Cylinder	8.4	3.5	44	16.83	Cylinder	8.4	3.5	44	6.73
				Sphere	21.5	21.5	484	0.07	Sphere	21.5	21.5	484	0.02
				Sphere	30.1	30.1	948	0.01	Sphere	30.1	30.1	948	0.03
				Sphere	43.0	43.0	1935	0.02	Sphere	64.5	64.5	4354	0.01
				Ob.Sphere	34.4	17.2	5326	0.03	Sphere	77.4	77.4	6270	0.01
				Ob.Sphere	21.5	8.6	832	0.02	Ob.Sphere	64.5	21.5	15603	0.01
				Ob.Sphere	51.6	25.8	17975	0.02	Ob.Sphere	43.0	8.6	1664	0.03
				Ob.Sphere	43.0	8.6	1664	0.01	Cone	64.5	30.1	32767	0.01
				Cone	64.5	30.1	32767	0.01	Cone	43.0	25.8	12483	0.01
				Cone	30.1	21.5	5097	0.01	Cone	86.0	21.5	41609	0.03
			Diatoms	Cylinder	21.5	4.3	1560	0.03	Cylinder	21.5	4.3	1560	0.33
				Cylinder	51.6	25.8	53925	0.01	Cylinder	30.1	8.6	6116	0.10
				Cylinder	21.5	4.3	1560	0.03	Cylinder	43.0	21.5	31206	0.01
									Cylinder	21.5	12.9	4681	0.04
									Cylinder	21.5	4.3	1560	0.03
									Cylinder	21.5	8.6	3121	0.33
									Cone	64.5	21.5	23405	0.03
									Cylinder	8.6	86.0	4993	0.01
Sep-00	NH-20	8	Cyanos	Sphere	1.0	1.0	1	30383.00	Sphere	1.0	1.0	1	27603.00
			Flagellates	Sphere	1.4	1.4	1	3454.20	Sphere	1.4	1.4	1	4716.70
				Sphere	2.8	2.8	12	686.80	Sphere	2.8	2.8	12	1555.40
				Sphere	3.5	3.5	22	1343.30	Sphere	3.5	3.5	22	1030.20
				Sphere	4.9	4.9	192	343.40	Sphere	4.9	4.9	192	121.20
				Sphere	8.4	8.4	49	20.20	Sphere	8.4	8.4	49	10.10
				Cylinder	8.4	3.5	44	60.60	Sphere	21.5	21.5	484	0.02

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Shape	Replicate 2			
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
				Cylinder	21.5	8.6	3121	0.09					
				Cylinder	4.3	25.8	374	0.06					
				Cone	64.5	12.9	14043	0.69					
				Cone	30.1	4.3	1019	2.17					
				Cylinder	4.3	86.0	624	0.01					
				Cylinder	4.3	43.0	312	0.03					
				Cylinder	30.1	30.1	10704	0.03					
Sep-00	NH-55	36	Cyanos	Sphere	1.0	1.0	1	5121.00	Sphere	1.0	1.0	1	6997.00
			Flagellates	Sphere	1.4	1.4	1	707.00	Sphere	1.4	1.4	1	161.60
				Sphere	2.8	2.8	12	212.10	Sphere	2.8	2.8	12	151.50
				Sphere	3.5	3.5	22	111.10	Sphere	4.9	4.9	192	30.30
				Sphere	4.9	4.9	192	20.20	Sphere	8.4	8.4	49	10.10
				Cylinder	8.4	3.5	44	10.10	Sphere	21.5	21.5	484	0.07
				Sphere	21.5	21.5	484	0.07	Sphere	30.1	30.1	948	0.03
				Sphere	30.1	30.1	948	0.01	Sphere	51.6	51.6	2787	0.01
				Cone	150.5	51.6	305824	0.01	Ob.Sphere	86.0	17.2	13314	0.01
				Cylinder	21.5	430.0	156032	0.01	Ob.Sphere	43.0	8.6	1664	0.02
									Cone	107.5	43.0	130027	0.01
			Diatoms	Cylinder	21.0	17.5	6061	13.47	Cylinder	21.5	4.3	1560	0.19
				Cylinder	21.5	4.3	1560	0.05	Cylinder	30.1	8.6	6116	0.14
				Cylinder	30.1	8.6	6116	0.12	Cylinder	43.0	21.5	31206	0.30
				Cylinder	43.0	21.5	31206	0.11	Cylinder	51.6	25.8	53925	0.08
				Cylinder	51.6	25.8	53925	0.11	Cylinder	64.5	34.4	112343	0.02
				Cylinder	64.5	34.4	112343	0.09	Cylinder	21.5	12.9	4681	0.06
				Cylinder	21.5	21.5	7802	0.05	Cylinder	21.5	4.3	1560	0.05
				Cylinder	193.5	107.5	3159658	0.01	Cylinder	21.5	8.6	3121	0.09
				Cylinder	30.1	12.9	9175	0.01	Cylinder	4.3	25.8	374	0.06
				Cylinder	21.5	4.3	1560	0.06	Cone	64.5	12.9	14043	0.69
				Cylinder	21.5	8.6	3121	0.08	Cone	30.1	4.3	1019	2.17
				Cylinder	4.3	51.6	749	0.56	Cylinder	4.3	86.0	1248	0.01
				Cone	64.5	12.9	14043	1.11	Cylinder	4.3	43.0	624	0.03
				Cone	30.1	4.3	1019	2.97	Cylinder	30.1	30.1	21408	0.03
				Cylinder	21.5	86.0	31206	0.03					
				Cylinder	4.3	43.0	624	0.05					
				Cylinder	8.6	430.0	24965	0.01					

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jan-01	NH-03	3	Cyanos	Sphere	1.0	1.0	1	323.00	Sphere	1.0	1.0	1	364.00
				Flagellates	Sphere	3.0	3.0	14	202.00	Sphere	3.0	3.0	14
			Sphere	4.9	4.9	192	20.20	Sphere	4.9	4.9	192	10.10	
			Sphere	7.0	7.0	180	10.10	Teardrop	8.4	3.5	44	10.10	
			Sphere	21.5	21.5	484	0.07	Sphere	7.0	7.0	180	10.10	
			Sphere	30.1	30.1	948	0.06	Sphere	30.1	30.1	948	0.01	
			Sphere	43.0	43.0	1935	0.01	Ob.Sphere	43.0	21.5	10402	0.01	
			Sphere	51.6	51.6	2787	0.03	Cone	30.1	107.5	25485	0.01	
			Sphere	77.4	77.4	6270	0.02	Cone	43.0	150.5	72815	0.01	
			Ob.Sphere	43.0	21.5	10402	0.09						
			Ob.Sphere	43.0	12.9	3744	0.01						
			Cone	129.0	64.5	280858	0.03						
			Cone	107.5	43.0	130027	0.01						
			Cylinder	215.0	64.5	2340487	0.02						
			Cylinder	21.5	344.0	124826	0.01						
			Cone	150.5	43.0	254853	0.06						
			Diatoms	Cylinder	21.0	17.5	6061	6.73	Cylinder	21.0	17.5	6061	6.73
		Cylinder		21.5	4.3	1560	1.13	Cylinder	21.5	4.3	1560	1.05	
		Cylinder		30.1	8.6	6116	0.04	Cylinder	30.1	8.6	6116	0.03	
		Cylinder		43.0	21.5	31206	0.30	Cylinder	43.0	21.5	31206	0.01	
		Cylinder		51.6	25.8	53925	0.05	Cylinder	21.5	21.5	7802	18.48	
		Cylinder		64.5	34.4	112343	0.01	Cylinder	21.5	12.9	4681	0.23	
		Cylinder		107.5	30.1	273057	0.02	Cylinder	30.1	21.5	15291	0.55	
		Cylinder		64.5	43.0	140429	0.04	Cylinder	43.0	12.9	18724	0.13	
		Cylinder		64.5	21.5	70215	0.02	Cylinder	4.3	64.5	936	0.33	
		Cylinder		43.0	43.0	62413	0.03	Cylinder	4.3	21.5	312	0.15	
		Cylinder		30.1	12.9	9175	0.78	Cylinder	4.3	43.0	624	0.01	
		Cylinder		21.5	21.5	7802	0.26						
		Cylinder		21.5	12.9	4681	0.75						
		Cylinder		21.5	4.3	1560	0.21						
		Cylinder		21.5	8.6	3121	0.10						
		Cylinder		4.3	43.0	624	0.13						
		Cone	86.0	21.5	41609	0.46							
Cylinder	4.3	86.0	1248	0.11									
Cylinder	4.3	43.0	624	0.27									
Cylinder	43.0	43.0	62413	0.40									

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jan-01	NH-03	3	Diatoms	Cylinder	43.0	21.5	31206	0.25					
Jan-01	NH-03	23	Cyanos	Sphere	1.0	1.0	1	2030.00	Sphere	1.0	1.0	1	2131.00
			Flagellates	Sphere	3.0	3.0	14	60.60	Sphere	3.0	3.0	14	303.00
				Sphere	4.9	4.9	192	20.20	Cylinder	14.0	3.5	181	10.10
				Teardrop	8.4	3.5	44	50.50	Sphere	4.9	4.9	192	161.60
				Teardrop	10.5	7.0	230	10.10	Teardrop	8.4	3.5	44	80.80
				Sphere	8.4	8.4	49	10.10	Sphere	8.4	8.4	49	20.20
				Sphere	21.5	21.5	5201	0.02	Sphere	7.0	7.0	180	20.20
				Sphere	30.1	30.1	14272	0.04	Sphere	21.5	21.5	5201	0.01
				Ob.Sphere	34.4	17.2	5326	0.03	Ob.Sphere	25.8	12.9	2247	0.01
				Cone	215.0	64.5	780162	0.01					
			Diatoms	Cylinder	21.5	4.3	1560	2.04	Cylinder	7.0	7.0	1235	6.73
				Cylinder	30.1	8.6	6116	0.23	Cylinder	21.5	4.3	1560	0.98
				Cylinder	43.0	21.5	31206	0.02	Cylinder	30.1	8.6	6116	0.25
				Cylinder	51.6	25.8	53925	0.04	Cylinder	51.6	25.8	53925	0.01
				Cylinder	193.5	107.5	3159658	0.01	Cylinder	43.0	12.9	18724	0.50
				Cylinder	30.1	12.9	9175	0.54	Cylinder	30.1	12.9	9175	0.43
				Cylinder	21.5	21.5	7802	0.13	Cylinder	21.5	12.9	4681	0.25
				Cylinder	21.5	12.9	4681	0.14	Cylinder	21.5	4.3	1560	0.94
				Cylinder	21.5	4.3	1560	0.88	Cylinder	86.0	86.0	499304	0.03
				Cylinder	30.1	21.5	15291	0.70	Cylinder	30.1	21.5	15291	0.50
				Cylinder	21.5	21.5	7802	0.22	Cylinder	30.1	4.3	3058	0.25
				Cylinder	21.5	8.6	3121	0.50	Cylinder	4.3	86.0	1248	0.16
				Cylinder	4.3	43.0	624	0.24	Cylinder	4.3	21.5	312	0.03
				Cylinder	150.5	43.0	764559	0.04	Cylinder	8.6	430.0	24965	0.01
				Cone	107.5	12.9	39008	1.74	Cylinder	21.5	21.5	7802	0.11
				Cone	43.0	8.6	4161	0.11					
				Cylinder	21.5	86.0	31206	0.02					
				Cylinder	4.3	64.5	936	0.20					
				Cylinder	8.6	43.0	2497	0.15					
				Cylinder	21.5	645.0	234049	0.09					
				Cylinder	43.0	21.5	31206	0.13					
				Cylinder	30.1	4.3	3058	0.45					

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jan-01	NH-10	1	Cyanos	Sphere	1.0	1.0	1	2092.00	Sphere	1.0	1.0	1	2424.00	
				Flagellates	Sphere	3.0	3.0	14	478.94	Sphere	3.0	3.0	14	558.66
				Cylinder	14.0	3.5	181	9.77	Sphere	4.9	4.9	192	56.81	
				Sphere	4.9	4.9	192	29.32	Teardrop	8.4	3.5	44	9.47	
				Teardrop	8.4	3.5	44	9.77	Teardrop	10.5	7.0	230	9.47	
				Sphere	7.0	7.0	180	19.55	Sphere	8.4	8.4	49	9.47	
				Ob.Sphere	43.0	21.5	10402	0.02	Sphere	21.5	21.5	5201	0.02	
				Cone	43.0	21.5	10402	0.02	Sphere	30.1	30.1	14272	0.01	
				Cone	215.0	64.5	780162	0.01	Sphere	43.0	43.0	41609	0.01	
									Ob.Sphere	43.0	21.5	10402	0.04	
									Ob.Sphere	43.0	12.9	3745	0.02	
									Ob.Sphere	21.5	8.6	832	0.01	
									Cone	30.1	17.2	4078	0.01	
				Diatoms	Cylinder	7.0	7.0	1235	26.93	Cylinder	21.5	4.3	1560	0.21
					Cylinder	21.0	17.5	6061	20.20	Cylinder	30.1	8.6	6116	0.07
					Cylinder	21.5	4.3	1560	0.03	Cylinder	43.0	21.5	31206	0.02
					Cylinder	30.1	8.6	6116	0.03	Cylinder	51.6	25.8	53925	0.01
					Cylinder	43.0	43.0	62413	0.01	Cylinder	64.5	34.4	112343	0.02
					Cylinder	30.1	12.9	9175	0.06	Cylinder	8.6	86.0	4993	0.02
		Cylinder	21.5	4.3	1560	0.08	Cylinder	4.3	43.0	624	0.01			
Jan-01	NH-10	65	Cyanos	Sphere	1.0	1.0	1	3899.00	Sphere	1.0	1.0	1	4767.00	
				Flagellates	Sphere	3.0	3.0	14	1121.10	Sphere	3.0	3.0	14	1100.90
				Sphere	4.9	4.9	192	80.80	Sphere	4.9	4.9	192	101.00	
				Teardrop	8.4	3.5	44	60.60	Teardrop	8.4	3.5	44	20.20	
				Teardrop	10.5	7.0	230	60.60	Sphere	7.0	7.0	180	30.30	
				Sphere	8.4	8.4	49	40.40	Sphere	30.1	30.1	14272	0.01	
				Sphere	7.0	7.0	180	10.10						
				Sphere	21.5	21.5	5201	0.01						
				Sphere	30.1	30.1	14272	0.01						
				Diatoms	Cylinder	21.5	4.3	1560	0.28	Cylinder	21.5	4.3	1560	0.01
					Cylinder	30.1	8.6	6116	0.26	Cylinder	30.1	8.6	6116	0.09
					Cylinder	43.0	21.5	31206	0.01	Cylinder	30.1	12.9	9175	0.01
					Cylinder	51.6	25.8	53925	0.16	Cylinder	21.5	21.5	7802	0.04
					Cylinder	64.5	34.4	112343	0.02	Cylinder	51.6	8.6	17975	0.07
		Cylinder	107.5	30.1	273057	0.01								

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	Shape	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
				Cylinder	30.1	8.6	6116	0.15					
				Cylinder	21.5	21.5	7802	0.04					
				Cylinder	21.5	4.3	1560	0.25					
				Cylinder	30.1	21.5	15291	0.05					
				Cylinder	4.3	43.0	624	0.05					
				Cylinder	4.3	21.5	312	0.01					
				Cylinder	4.3	43.0	624	0.04					
Jan-01	NH-20	1	Cyanos	Sphere	1.0	1.0	1	9141.00	Sphere	1.0	1.0	1	3020.00
			Flagellates	Sphere	3.0	3.0	14	1818.00	Sphere	3.0	3.0	14	515.10
				Sphere	4.9	4.9	192	70.70	Sphere	4.9	4.9	192	20.20
				Teardrop	8.4	3.5	44	30.30	Teardrop	8.4	3.5	44	10.10
				Teardrop	10.5	7.0	230	10.10	Sphere	8.4	8.4	49	10.10
				Sphere	8.4	8.4	49	20.20	Sphere	7.0	7.0	180	30.30
				Sphere	7.0	7.0	180	60.60	Sphere	30.1	30.1	14272	0.01
				Sphere	30.1	30.1	14272	0.01	Ob.Sphere	43.0	12.9	3745	0.01
				Sphere	43.0	43.0	41609	0.01	Ob.Sphere	21.5	8.6	832	0.01
			Diatoms	Cylinder	21.5	4.3	1560	0.06	Cylinder	21.5	4.3	1560	0.02
				Cylinder	30.1	8.6	6116	0.01	Cylinder	51.6	25.8	53925	0.11
				Cylinder	21.5	21.5	7802	0.01	Cylinder	30.1	8.6	6116	0.01
									Cylinder	21.5	12.9	4681	0.02
									Cylinder	21.5	4.3	1560	0.05
									Cylinder	30.1	8.6	6116	0.04
									Cylinder	4.3	43.0	624	0.07
									Cylinder	4.3	21.5	312	0.01
Jan-01	NH-20	10	Cyanos	Sphere	1.0	1.0	1	6060.00	Sphere	1.0	1.0	1	2535.00
			Flagellates	Sphere	3.0	3.0	14	840.58	Sphere	3.0	3.0	14	1040.30
				Sphere	4.9	4.9	192	127.06	Teardrop	8.4	3.5	44	30.30
				Teardrop	8.4	3.5	44	68.42	Sphere	8.4	8.4	49	30.30
				Teardrop	10.5	7.0	230	19.55	Sphere	7.0	7.0	180	20.20
				Sphere	8.4	8.4	49	48.87	Sphere	30.1	30.1	14272	0.01
				Sphere	7.0	7.0	180	39.10	Ob.Sphere	86.0	64.5	187239	0.01
				Sphere	21.5	21.5	5201	0.02	Ob.Sphere	64.5	21.5	15603	0.01
				Ob.Sphere	43.0	21.5	10402	0.02					
				Ob.Sphere	21.5	12.9	1872	0.02					

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Cells/ml	Shape	Replicate 2			
					A (μm)	B (μm)	Biovolume (μm^3)				A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
Jan-01	NH-20	10	Diatoms	Cylinder	21.5	4.3	1560	0.01						
				Cylinder	30.1	8.6	6116	0.01						
				Cylinder	4.3	86.0	1248	0.01						
Jan-01	NH-55	1	Cyanos	Sphere	1.0	1.0	1	2101.00	Sphere	1.0	1.0	1	2626.00	
				Flagellates	Sphere	3.0	3.0	14	393.90	Sphere	3.0	3.0	14	424.20
			Flagellates	Sphere	4.9	4.9	192	90.90	Sphere	4.9	4.9	192	50.50	
				Teardrop	8.4	3.5	44	20.20	Teardrop	8.4	3.5	44	20.20	
				Sphere	8.4	8.4	49	10.10	Sphere	8.4	8.4	49	10.10	
				Sphere	7.0	7.0	180	101.00	Sphere	7.0	7.0	180	70.70	
				Sphere	21.5	21.5	5201	0.01	Sphere	21.5	21.5	5201	0.01	
				Sphere	30.1	30.1	14272	0.02	Ob.Sphere	43.0	21.5	10402	0.03	
				Ob.Sphere	43.0	21.5	10402	0.03	Ob.Sphere	21.5	12.9	1872	0.03	
				Ob.Sphere	43.0	12.9	3745	0.03						
				Cylinder	43.0	21.5	31206	0.01						
				Cylinder	4.3	43.0	624	0.02						
Jan-01	NH-55	19	Cyanos	Sphere	1.0	1.0	1	3828.00	Sphere	1.0	1.0	1	2778.00	
				Flagellates	Sphere	3.0	3.0	14	373.70	Sphere	3.0	3.0	14	383.80
			Flagellates	Sphere	4.9	4.9	192	60.60	Sphere	4.9	4.9	192	10.10	
				Teardrop	8.4	3.5	44	10.10	Teardrop	10.5	7.0	230	20.20	
				Sphere	8.4	8.4	49	20.20	Sphere	8.4	8.4	49	20.20	
				Sphere	7.0	7.0	180	20.20	Sphere	21.5	21.5	5201	0.02	
				Sphere	21.5	21.5	5201	0.02	Sphere	51.6	51.6	71900	0.01	
				Sphere	30.1	30.1	14272	0.02						
				Ob.Sphere	43.0	21.5	10402	0.01						
				Ob.Sphere	21.5	12.9	1872	0.01						
				Diatoms	Cylinder	4.3	43.0	624	0.03	Cylinder	21.5	4.3	1560	0.01
					Cylinder					Cylinder	30.1	12.9	9175	0.04
				Mar-01	NH-03	2	Cyanos	Sphere	1.0	1.0	1	4525.00	Sphere	1.0
Flagellates	Sphere	3.0	3.0					14	1656.40	Sphere	3.0	3.0	14	1090.80
Flagellates	Cylinder	14.0	3.5				181	60.60	Cylinder	14.0	3.5	181	40.40	
	Sphere	4.9	4.9				192	444.40	Sphere	4.9	4.9	192	141.40	
	Teardrop	8.4	3.5				44	262.60	Teardrop	8.4	3.5	44	161.60	
	Teardrop	10.5	7.0				230	40.40	Teardrop	10.5	7.0	230	40.40	

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	Shape	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml
				Sphere	8.4	8.4	49	20.20	Sphere	8.4	8.4	49	40.40
				Sphere	10.5	10.5	4849	20.20	Sphere	7.0	7.0	180	20.20
				Sphere	21.5	21.5	5201	0.96	Sphere	10.5	10.5	4849	20.20
				Sphere	30.1	30.1	14272	1.16	Sphere	21.5	21.5	5201	1.04
				Sphere	51.6	51.6	71900	0.08	Sphere	30.1	30.1	14272	0.72
				Sphere	77.4	77.4	242662	0.04	Sphere	43.0	43.0	41609	0.12
				Sphere	86.0	86.0	332869	0.04	Sphere	51.6	51.6	71900	0.16
				Ob.Sphere	43.0	21.5	10402	0.04	Sphere	64.5	64.5	140429	0.08
				Ob.Sphere	21.5	12.9	1872	0.04	Sphere	77.4	77.4	242662	0.08
				Cone	43.0	30.1	14563	0.12	Cone	150.5	43.0	254853	0.08
				Cone	150.5	43.0	254853	0.16					
			Diatoms	Cylinder	21.5	4.3	1560	0.12	Cylinder	14.0	2.8	182	13.47
				Cylinder	30.1	8.6	6116	0.24	Cylinder	10.5	2.1	269	6.73
				Cylinder	43.0	21.5	31206	0.16	Cylinder	14.0	10.5	1235	154.87
				Cylinder	51.6	25.8	53925	0.04	Cylinder	30.1	8.6	6116	0.20
				Cylinder	64.5	34.4	112343	0.76	Cylinder	43.0	21.5	31206	0.16
				Cylinder	107.5	150.5	1365284	0.56	Cylinder	51.6	25.8	53925	0.04
				Cylinder	64.5	12.9	42129	4.36	Cylinder	4.3	21.5	312	1.16
				Cylinder	193.5	107.5	3159658	0.60	Cylinder	107.5	150.5	1365284	0.60
				Cylinder	30.1	12.9	9175	1.96	Cylinder	193.5	107.5	3159658	0.48
				Cylinder	21.5	21.5	7802	3.96	Cylinder	30.1	12.9	9175	1.16
				Cylinder	21.5	12.9	4681	5.92	Cylinder	21.5	21.5	7802	3.28
				Cylinder	21.5	4.3	1560	1.44	Cylinder	21.5	12.9	4681	5.32
				Cone	64.5	8.6	9362	1.48	Cylinder	21.5	4.3	1560	1.32
				Cylinder	4.3	86.0	1248	0.76	Cylinder	21.5	8.6	3121	0.76
				Cylinder	4.3	64.5	936	6.80	Cylinder	4.3	43.0	624	2.20
				Cylinder	12.9	430.0	56172	0.12	Cone	64.5	12.9	14043	5.16
				Cylinder	21.5	30.1	10922	3.16	Cone	64.5	8.6	9362	3.84
				Cylinder	21.5	21.5	7802	4.88	Cylinder	4.3	86.0	1248	2.04
									Cylinder	4.3	64.5	936	2.12
									Cylinder	64.5	43.0	140429	1.80
									Cylinder	21.5	30.1	10922	4.88
Mar-01	NH-03	19	Cyanos	Sphere	1.0	1.0	1	3616.00	Sphere	1.0	1.0	1	4343.00
			Flagellates	Sphere	3.0	3.0	14	808.00	Sphere	3.0	3.0	14	1676.60
				Cylinder	14.0	3.5	181	40.40	Cylinder	14.0	3.5	181	20.20

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2						
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml			
Mar-01	NH-03	19	Flagellates	Sphere	4.9	4.9	192	141.40	Sphere	4.9	4.9	192	262.60		
				Teardrop	8.4	3.5	44	40.40	Teardrop	8.4	3.5	44	40.40		
				Teardrop	10.5	7.0	230	20.20	Sphere	8.4	8.4	49	40.40		
				Sphere	7.0	7.0	180	40.40	Sphere	7.0	7.0	180	101.00		
				Sphere	30.1	30.1	14272	0.16	Sphere	10.5	10.5	4849	20.20		
				Sphere	43.0	43.0	41609	0.12	Sphere	21.5	21.5	5201	0.08		
				Sphere	51.6	51.6	71900	0.08	Sphere	30.1	30.1	14272	0.16		
				Ob.Sphere	43.0	21.5	10402	0.44	Sphere	77.4	77.4	242662	0.12		
									Ob.Sphere	43.0	21.5	10402	0.04		
							Cone	172.0	51.6	399443	0.08				
		Diatoms	Cylinder	14.0	2.8	431	6.73	Cylinder	14.0	2.8	431	30.30			
				10.5	2.1	182	3.37	Cylinder	14.0	10.5	162	23.57			
				14.0	10.5	1235	202.00	Cylinder	14.0	10.5	1235	410.73			
				21.0	17.5	6061	37.03	Cylinder	21.0	17.5	6061	131.30			
				43.0	21.5	31206	0.52	Cylinder	21.5	4.3	1560	0.16			
				51.6	25.8	53925	0.52	Cylinder	64.5	34.4	112343	0.04			
				4.3	21.5	312	0.04	Cylinder	107.5	30.1	273057	0.04			
				107.5	150.5	1365284	0.88	Cylinder	107.5	150.5	1365284	0.92			
				64.5	43.0	140429	0.44	Cylinder	193.5	107.5	3159658	2.60			
				193.5	107.5	3159658	2.08	Cylinder	30.1	12.9	9175	4.72			
				30.1	12.9	9175	4.08	Cylinder	21.5	21.5	7802	6.56			
				21.5	21.5	7802	3.80	Cylinder	21.5	12.9	4681	14.28			
				21.5	12.9	4681	15.88	Cylinder	21.5	4.3	1560	1.12			
				21.5	4.3	1560	1.64	Cylinder	64.5	43.0	140429	1.32			
				64.5	12.9	14043	2.68	Cylinder	4.3	51.6	749	1.04			
				64.5	8.6	9362	0.88	Cone	64.5	12.9	14043	5.84			
				4.3	86.0	1248	3.72	Cone	64.5	8.6	9362	2.48			
				4.3	43.0	624	6.56	Cylinder	4.3	86.0	1248	4.12			
				8.6	430.0	24965	0.08	Cylinder	4.3	43.0	624	9.84			
				30.1	43.0	30582	1.00	Cylinder	8.6	430.0	24965	0.20			
				21.5	64.5	23405	2.64	Cylinder	21.5	64.5	23405	1.16			
				21.5	30.1	10922	7.04	Cylinder	21.5	30.1	10922	8.04			
				Mar-01	NH-10	2	Cyanos	Sphere	1.0	1.0	1	5327.00	Sphere	1.0	1.0
Flagellates	Sphere						3.0	3.0	14	967.65	Sphere	3.0	3.0	14	787.80

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Mar-01	NH-10	2	Flagellates	Cylinder	14.0	3.5	181	9.77	Sphere	4.9	4.9	192	50.50
				Sphere	4.9	4.9	192	175.94	Teardrop	8.4	3.5	44	70.70
				Teardrop	8.4	3.5	44	78.19	Sphere	8.4	8.4	49	80.80
				Teardrop	10.5	7.0	230	39.10	Sphere	7.0	7.0	180	30.30
				Sphere	8.4	8.4	49	29.32	Sphere	10.5	10.5	4849	10.10
				Sphere	7.0	7.0	180	68.42	Sphere	30.1	30.1	14272	0.04
				Sphere	10.5	10.5	4849	19.55	Sphere	43.0	43.0	41609	0.04
				Sphere	21.5	21.5	5201	0.20	Sphere	77.4	77.4	242662	0.04
				Sphere	30.1	30.1	14272	0.12	Sphere	86.0	86.0	332869	0.04
				Sphere	51.6	51.6	71900	0.16					
				Sphere	77.4	77.4	242662	0.04					
				Ob.Sphere	43.0	30.1	20388	0.16					
				Cone	107.5	43.0	130027	0.04					
				Diatoms	Cylinder	14.0	2.8	431	13.47				
					Cylinder	10.5	2.1	182	6.73	Cylinder	10.5	2.1	182
			Cylinder		7.0	7.0	269	47.13	Cylinder	14.0	10.5	1235	117.83
			Cylinder		14.0	10.5	1235	138.03	Cylinder	21.0	17.5	6061	23.57
			Cylinder		21.0	17.5	6061	70.70	Cylinder	21.5	4.3	1560	0.12
			Cylinder		21.5	4.3	1560	0.68	Cylinder	43.0	21.5	31206	0.08
			Cylinder		30.1	8.6	6116	0.16	Cylinder	64.5	34.4	112343	0.08
			Cylinder		43.0	21.5	31206	0.16	Cylinder	21.5	4.3	1560	0.64
			Cylinder		51.6	25.8	53925	0.08	Cylinder	193.5	107.5	3159658	0.64
			Cylinder		86.0	107.5	624130	0.48	Cylinder	30.1	12.9	9175	1.24
			Cylinder		107.5	43.0	390081	0.08	Cylinder	30.1	21.5	15291	0.24
			Cylinder		193.5	107.5	3159658	0.20	Cylinder	21.5	21.5	7802	2.40
			Cylinder		30.1	12.9	9175	3.92	Cylinder	21.5	12.9	4681	8.36
			Cylinder		21.5	4.3	1560	0.28	Cylinder	21.5	4.3	1560	3.04
			Cylinder		21.5	21.5	7802	1.80	Cylinder	86.0	86.0	499304	0.28
			Cylinder		21.5	12.9	4681	6.92	Cylinder	21.5	8.6	3121	0.60
			Cylinder		21.5	4.3	1560	0.24	Cylinder	4.3	43.0	624	0.48
			Cone		64.5	12.9	14043	7.00	Cone	64.5	12.9	14043	4.60
			Cylinder	4.3	86.0	1248	3.92	Cylinder	8.6	86.0	4993	0.96	
			Cylinder	4.3	64.5	936	2.32	Cylinder	4.3	64.5	936	2.52	
Cylinder	8.6	64.5	3745	0.08	Cylinder	12.9	430.0	56172	0.12				
Cylinder	64.5	21.5	70215	7.68	Cylinder	64.5	21.5	70215	1.92				
Cylinder	30.1	21.5	15291	8.44	Cylinder	30.1	21.5	15291	10.96				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1			Cells/ml	Shape	Replicate 2			Cells/ml
					A (μm)	B (μm)	Biovolume (μm^3)			A (μm)	B (μm)	Biovolume (μm^3)	
Mar-01	NH-10	2	Diatoms	Cylinder	21.5	8.6	3121	0.28	Cylinder	30.1	12.9	9175	0.20
Mar-01	NH-10	21	Cyanos	Sphere	1.0	1.0	1	7708.00	Sphere	1.0	1.0	1	6201.00
			Flagellates	Sphere	3.0	3.0	14	1704.38	Sphere	3.0	3.0	14	1292.80
				Sphere	4.9	4.9	192	227.25	Sphere	4.9	4.9	192	222.20
				Teardrop	8.4	3.5	44	132.56	Teardrop	8.4	3.5	44	50.50
				Teardrop	10.5	7.0	230	37.88	Sphere	8.4	8.4	49	30.30
				Sphere	8.4	8.4	49	37.88	Sphere	7.0	7.0	180	50.50
				Sphere	7.0	7.0	180	94.69	Sphere	21.5	21.5	5201	0.08
				Sphere	10.5	10.5	4849	18.94	Sphere	30.1	30.1	14272	0.12
				Sphere	21.5	21.5	5201	0.16	Sphere	43.0	43.0	41609	0.04
				Sphere	30.1	30.1	14272	0.08	Sphere	51.6	51.6	71900	0.16
				Sphere	43.0	43.0	41609	0.04					
				Sphere	51.6	51.6	71900	0.12					
				Sphere	77.4	77.4	242662	0.04					
				Ob.Sphere	30.1	12.9	2621	0.04					
				Cone	150.5	43.0	254853	1.40					
			Diatoms	Cylinder	14.0	2.8	431	6.73	Cylinder	10.5	2.1	182	6.73
				Cylinder	10.5	2.1	182	26.93	Cylinder	7.0	7.0	269	10.10
				Cylinder	4.2	7.0	162	20.20	Cylinder	21.5	4.3	1560	0.20
				Cylinder	14.0	10.5	1235	60.60	Cylinder	30.1	8.6	6116	1.12
				Cylinder	21.5	4.3	1560	0.60	Cylinder	43.0	21.5	31206	0.08
				Cylinder	30.1	8.6	6116	0.52	Cylinder	51.6	25.8	53925	0.04
				Cylinder	43.0	21.5	31206	0.12	Cylinder	193.5	107.5	3159658	0.56
				Cylinder	51.6	25.8	53925	0.08	Cylinder	30.1	12.9	9175	2.20
				Cylinder	64.5	34.4	112343	0.04	Cylinder	30.1	21.5	15291	0.36
				Cylinder	64.5	43.0	140429	0.04	Cylinder	21.5	30.1	10922	0.72
				Cylinder	107.5	150.5	1365284	0.08	Cylinder	21.5	21.5	7802	3.68
				Cylinder	21.5	4.3	1560	0.80	Cylinder	21.5	12.9	4681	7.76
				Cylinder	193.5	107.5	3159658	0.52	Cylinder	21.5	4.3	1560	1.20
				Cylinder	43.0	17.2	24965	1.16	Cylinder	107.5	150.5	1365284	0.56
				Cylinder	21.5	21.5	7802	5.52	Cylinder	30.1	8.6	6116	0.68
				Cylinder	21.5	12.9	4681	8.36	Cylinder	4.3	43.0	624	1.80
				Cylinder	21.5	4.3	1560	2.16	Cone	64.5	21.5	23405	1.48
				Cylinder	30.1	21.5	15291	0.48	Cylinder	8.6	107.5	6241	1.00
				Cylinder	30.1	8.6	6116	1.72	Cylinder	4.3	86.0	1248	1.52

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Mar-01	NH-10	21	Diatoms	Cylinder	4.3	43.0	624	1.04	Cylinder	8.6	645.0	37448	0.24	
				Cone	64.5	12.9	14043	0.28	Cylinder	64.5	21.5	70215	3.68	
				Cylinder	8.6	111.8	6491	2.40	Cylinder	43.0	21.5	31206	0.68	
				Cylinder	4.3	64.5	936	2.20	Cylinder	30.1	21.5	15291	11.60	
				Cylinder	12.9	430.0	56172	0.32	Cylinder	21.5	8.6	3121	0.56	
				Cylinder	64.5	21.5	70215	0.48						
				Cylinder	43.0	21.5	31206	1.20						
				Cylinder	30.1	21.5	15291	3.16						
				Cylinder	21.5	12.9	4681	0.52						
				Cylinder	21.5	21.5	7802	6.80						
Mar-01	NH-20	2	Cyanos Flagellates	Sphere	1.0	1.0	1	5327.00	Sphere	1.0	1.0	1	4293.00	
				Sphere	3.0	3.0	14	967.65	Sphere	3.0	3.0	14	787.80	
				Cylinder	14.0	3.5	181	9.77	Sphere	4.9	4.9	192	50.50	
				Sphere	4.9	4.9	192	175.94	Teardrop	8.4	3.5	44	60.60	
				Teardrop	8.4	3.5	44	78.19	Sphere	8.4	8.4	49	80.80	
				Teardrop	10.5	7.0	230	39.10	Sphere	7.0	7.0	180	60.60	
				Sphere	8.4	8.4	49	29.32	Sphere	10.5	10.5	4849	10.10	
				Sphere	7.0	7.0	180	68.42	Sphere	21.5	21.5	5201	0.01	
				Sphere	10.5	10.5	4849	19.55	Sphere	30.1	30.1	14272	0.01	
				Sphere	30.1	30.1	14272	0.02	Sphere	43.0	43.0	41609	0.01	
				Sphere	43.0	43.0	41609	0.01	Sphere	51.6	51.6	71900	0.01	
				Cone	64.5	43.0	46810	0.01	Teardrop	43.0	34.4	67542	0.01	
				Cone	43.0	21.5	10402	0.01						
				Teardrop	30.1	12.9	12707	0.01						
				Diatoms	Cylinder	10.5	2.1	182	13.47					
					Cylinder	8.6	645.0	37448	0.01	Cylinder	21.5	4.3	1560	0.01
Mar-01	NH-20	27	Cyanos Flagellates	Sphere	1.0	1.0	1	6706.00	Sphere	1.0	1.0	1	9312.00	
				Sphere	3.0	3.0	14	606.00	Sphere	3.0	3.0	14	606.00	
				Sphere	4.9	4.9	192	666.60	Sphere	4.9	4.9	192	666.60	
				Teardrop	8.4	3.5	44	121.20	Teardrop	8.4	3.5	44	121.20	
				Teardrop	10.5	7.0	230	20.20	Teardrop	10.5	7.0	230	20.20	
				Sphere	8.4	8.4	49	20.20	Sphere	8.4	8.4	49	20.20	
				Sphere	7.0	7.0	180	60.60	Sphere	7.0	7.0	180	60.60	
				Sphere	21.5	21.5	5201	0.01	Sphere	21.5	21.5	5201	0.03	

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Mar-01	NH-20	27	Flagellates	Sphere	30.1	30.1	14272	0.01	Ob.Sphere	43.0	21.5	10402	0.02	
				Sphere	43.0	43.0	41609	0.01	Cone	129.0	64.5	280858	0.01	
				Ob.Sphere	43.0	30.1	20388	0.01						
				Ob.Sphere	30.1	12.9	2621	0.01						
				Cone	129.0	64.5	280858	0.01						
				Cone	43.0	43.0	20804	0.01						
			Diatoms	Cylinder	14.0	2.8	431	26.93	Cylinder	14.0	2.8	431	13.47	
									Cylinder	10.5	2.1	182	13.47	
									Cylinder	30.1	8.6	6116	0.01	
			Mar-01	NH-55	1	Cyanos	Sphere	1.0	1.0	1	5181.00	Sphere	1.0	1.0
Flagellates	Sphere	3.0					3.0	14	1212.00	Sphere	3.0	3.0	14	1111.00
	Cylinder	14.0				3.5	181	20.20	Cylinder	14.0	3.5	181	20.20	
	Sphere	4.9				4.9	192	90.90	Sphere	4.9	4.9	192	303.00	
	Teardrop	8.4				3.5	44	60.60	Teardrop	8.4	3.5	44	40.40	
	Sphere	8.4				8.4	49	30.30	Sphere	8.4	8.4	49	20.20	
	Sphere	7.0				7.0	180	101.00	Sphere	7.0	7.0	180	121.20	
	Sphere	10.5				10.5	4849	10.10	Sphere	21.5	21.5	5201	0.10	
	Sphere	21.5				21.5	5201	0.03	Sphere	30.1	30.1	14272	0.02	
	Sphere	30.1				30.1	14272	0.02	Sphere	43.0	43.0	41609	0.01	
	Sphere	43.0				43.0	41609	0.01	Ob.Sphere	51.6	43.0	49930	0.03	
	Ob.Sphere	51.6				30.1	24466	0.01	Ob.Sphere	30.1	21.5	7282	0.01	
	Ob.Sphere	43.0				21.5	10402	0.01	Ob.Sphere	25.8	12.9	2247	0.01	
									Ob.Sphere	43.0	25.8	14979	0.01	
									Cone	51.6	43.0	29958	0.02	
	Diatoms	Cylinder				14.0	2.8	431	26.93	Cylinder	14.0	2.8	431	33.67
		Cylinder				10.5	2.1	182	13.47	Cylinder	10.5	2.1	182	107.73
		Cylinder				21.5	4.3	1560	0.01	Cylinder	30.1	12.9	9175	0.10
		Cylinder				64.5	34.4	112343	0.01	Cylinder	21.5	21.5	7802	0.12
Cylinder		4.3				64.5	936	0.18	Cylinder	21.5	12.9	4681	0.10	
Cylinder		8.6	430.0	24965	0.01	Cylinder	4.3	43.0	624	0.05				
						Cylinder	4.3	43.0	624	0.01				
Mar-01	NH-55	60	Cyanos	Sphere	1.0	1.0	1	8019.00	Sphere	1.0	1.0	1	4829.00	
				Flagellates	Sphere	3.0	3.0	14	1494.80	Sphere	3.0	3.0	14	1344.56
			Cylinder		14.0	3.5	181	20.20	Cylinder	14.0	3.5	181	18.94	

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Mar-01	NH-55	60	Flagellates	Sphere	4.9	4.9	192	181.80	Sphere	4.9	4.9	192	321.94	
				Teardrop	8.4	3.5	44	101.00	Teardrop	8.4	3.5	44	94.69	
				Teardrop	10.5	7.0	230	40.40	Sphere			5201	0.05	
				Sphere	8.4	8.4	49	20.20	Sphere			14272	0.01	
				Sphere	7.0	7.0	180	80.80	Ob.Sphere	12.9	54.2	2621	0.01	
				Sphere	10.5	10.5	4849	40.40	Teardrop	30.1	126.4	120357	0.01	
				Sphere	21.5	21.5	5201	0.05						
				Sphere	30.1	30.1	14272	0.01						
				Sphere	43.0	43.0	41609	0.01						
				Ob.Sphere	51.6	30.1	242662	0.01						
				Cone	64.5	270.9	294901	0.01						
				Cone	21.5	90.3	10922	0.01						
				Diatoms	Cylinder	11.0	2.1	182	53.87	Cylinder	14.0	2.8	431	6.52
					Cylinder	8.6	36.1	2097	0.01	Cylinder	11.0	2.1	182	42.35
					Cylinder	21.5	90.3	32767	0.01	Cylinder	8.6	36.1	2097	0.01
					Cylinder	12.9	54.2	7078	0.03	Cylinder	64.5	270.9	884704	0.02
					Cylinder	86.0	361.2	2097077	0.35	Cylinder	430.0	1806.0	262134579	0.01
				430.0	1806.0	262134579	0.01							
Jul-01	NH-03	2	Cyanos	Sphere	1.0	1.0	1	1525.00	Sphere	1.0	1.0	1	818.00	
				Flagellates	Sphere	1.4	1.4	1	272.70	Sphere	1.4	1.4	1	222.20
			Flagellates	Sphere	2.8	2.8	12	70.70	Sphere	2.8	2.8	12	151.50	
				Sphere	3.5	3.5	22	40.40	Sphere	3.5	3.5	22	20.20	
				Sphere	4.9	4.9	192	90.90	Sphere	4.9	4.9	192	90.90	
				Teardrop	8.4	2.0	49	30.30	Teardrop	8.4	2.0	49	10.10	
				Teardrop	8.0	4.0	44	20.20	Teardrop	8.0	4.0	44	30.30	
				Sphere	21.5	21.5	5201	0.20	Sphere	21.5	21.5	5201	0.48	
				Sphere	30.1	30.1	14272	0.20	Sphere	30.1	30.1	14272	0.36	
				Sphere	43.0	43.0	41609	0.08	Sphere	43.0	43.0	41609	0.24	
				Sphere	51.6	51.6	71900	0.08	Sphere	51.6	51.6	71900	0.08	
				Sphere	64.5	64.5	140429	0.08	Sphere	64.5	64.5	140429	0.08	
				Sphere	77.4	77.4	242662	0.04	Cone	193.5	64.5	631932	0.04	
				Diatoms	Cylinder	10.5	2.1	182	14.96	Cylinder	14.0	2.8	431	13.47
					Cylinder	14.0	2.8	431	14.96	Cylinder	4.2	7.0	162	60.60
					Cylinder	4.2	7.0	162	145.89	Cylinder	7.0	7.0	269	20.20

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-01	NH-03	2	Diatoms	Cylinder	7.0	7.0	269	37.41	Cylinder	4.2	4.2	58	53.87
				Cylinder	14.0	10.5	1235	37.41	Cylinder	4.9	2.1	17	3.37
				Cylinder	4.9	2.1	17	3.74	Cylinder	21.5	4.3	1560	1.76
				Cylinder	14.0	1.4	22	3.74	Cylinder	30.1	8.6	6116	0.36
				Cylinder	21.5	4.3	1560	1.96	Cylinder	43.0	21.5	31206	1.20
				Cylinder	30.1	8.6	6116	1.76	Cylinder	51.6	25.8	53925	0.40
				Cylinder	43.0	21.5	31206	1.00	Cylinder	64.5	34.4	112343	0.40
				Cylinder	51.6	25.8	53925	0.32	Cylinder	21.5	107.5	39008	0.20
				Cylinder	64.5	34.4	112343	0.48	Cylinder	17.2	86.0	19972	0.12
				Cylinder	86.0	21.5	124826	0.16	Cylinder	21.5	12.9	4681	0.88
				Cylinder	12.9	107.5	14043	0.16	Cylinder	30.1	12.9	9175	0.24
				Cylinder	43.0	12.9	18724	0.04	Cylinder	21.5	21.5	7802	0.28
				Cylinder	30.1	12.9	9175	1.72	Cylinder	21.5	12.9	4681	0.88
				Cylinder	21.5	21.5	7802	1.48	Cylinder	21.5	4.3	1560	0.88
				Cylinder	21.5	12.9	4681	1.68	Cylinder	4.3	43.0	624	1.56
				Cylinder	64.5	43.0	140429	0.16	Cone	64.5	21.5	3901	8.68
				Cylinder	30.1	21.5	15291	0.40	Cylinder	4.3	107.5	1560	0.36
				Cylinder	21.5	21.5	7802	1.08	Cylinder	4.3	43.0	624	0.20
				Cylinder	4.3	64.5	936	0.52					
				Cone	64.5	21.5	23405	14.28					
Cylinder	64.5	21.5	70215	0.32									
Cylinder	21.5	12.9	4681	0.76									
Jul-01	NH-03	11	Cyanos Flagellates	Sphere	1.0	1.0	1	1889.00	Sphere	1.0	1.0	1	1990.00
				Sphere	1.4	1.4	1	222.20	Sphere	1.4	1.4	1	202.00
				Sphere	2.8	2.8	12	272.70	Sphere	2.8	2.8	12	30.30
				Sphere	3.5	3.5	22	50.50	Sphere	3.5	3.5	22	10.10
				Sphere	4.9	4.9	192	181.80	Sphere	4.9	4.9	192	70.70
				Sphere	7.0	7.0	180	20.20	Sphere	7.0	7.0	180	10.10
				Teardrop	8.4	2.0	49	20.20	Teardrop	8.4	2.0	49	20.20
				Teardrop	8.0	4.0	44	40.40	Teardrop	8.0	4.0	44	60.60
				Teardrop	10.5	7.0	230	9.47	Teardrop	10.5	7.0	230	9.77
				Teardrop	14.0	3.5	181	3.16	Teardrop	14.0	3.5	181	13.03
				Sphere	21.5	21.5	5201	0.32	Sphere	21.5	21.5	5201	0.80
				Sphere	30.1	30.1	14272	0.16	Sphere	30.1	30.1	14272	0.12
				Sphere	64.5	64.5	140429	0.04	Sphere	43.0	43.0	41609	0.04

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-01	NH-03	11	Flagellates	Sphere	77.4	77.4	242662	0.04	Sphere	51.6	51.6	71900	0.32	
				Ob.Sphere	21.5	8.6	832	0.04	Sphere	64.5	64.5	140429	0.04	
				Cone	64.5	30.1	7646	0.08	Sphere	77.4	77.4	242662	0.12	
				Teardrop	30.1	21.5	20862	0.04						
				Cone	150.5	43.0	254853	0.04						
			Diatoms	Cylinder	10.5	2.1	182	22.09	Cylinder	10.5	2.1	182	22.81	
				Cylinder	14.0	2.8	431	28.41	Cylinder	14.0	2.8	431	19.55	
				Cylinder	21.0	17.5	6061	12.63	Cylinder	4.2	7.0	162	26.06	
				Cylinder	4.2	7.0	162	34.72	Cylinder	7.0	7.0	269	45.61	
				Cylinder	7.0	7.0	269	44.19	Cylinder	4.9	2.1	17	9.77	
				Cylinder	14.0	10.5	1235	47.34	Cylinder	7.0	14.0	16	6.52	
				Cylinder	4.9	2.1	17	3.16	Sphere	10.5	10.5	606	19.55	
				Cylinder	7.0	14.0	538	3.16	Cylinder	21.5	4.3	1560	1.44	
				Sphere	10.5	10.5	606	6.31	Cylinder	30.1	8.6	6116	1.40	
				Cylinder	21.5	4.3	1560	1.44	Cylinder	43.0	21.5	31206	0.44	
				Cylinder	30.1	8.6	6116	0.32	Cylinder	51.6	25.8	53925	1.20	
				Cylinder	43.0	21.5	31206	0.12	Cylinder	64.5	34.4	112343	0.92	
				Cylinder	51.6	25.8	53925	0.64	Cylinder	86.0	21.5	124826	0.20	
				Cylinder	64.5	34.4	112343	1.08	Cylinder	129.0	21.5	280858	0.36	
				Cylinder	86.0	21.5	124826	0.16	Cylinder	43.0	12.9	18724	0.32	
				Cylinder	150.5	21.5	382280	0.32	Cylinder	30.1	12.9	9175	0.48	
				Cylinder	30.1	12.9	9175	0.64	Cylinder	21.5	21.5	7802	0.68	
				Cylinder	21.5	21.5	7802	0.24	Cylinder	21.5	12.9	4681	0.48	
				Cylinder	21.5	12.9	4681	2.32	Cylinder	21.5	4.3	1560	0.60	
				Cylinder	30.1	21.5	15291	1.48	Cylinder	30.1	21.5	15291	0.64	
				Cylinder	4.3	64.5	936	0.48	Cylinder	21.5	8.6	3121	0.24	
				Cone	64.5	8.6	9362	9.80	Cone	64.5	12.9	14043	5.72	
				Cylinder	8.6	86.0	4993	0.20	Cone	64.5	8.6	9362	3.32	
				Cylinder	8.6	43.0	2497	0.72	Cylinder	8.6	129.0	7490	1.00	
				Cylinder	64.5	21.5	70215	0.28	Cylinder	4.3	64.5	936	0.24	
				Cylinder	21.5	12.9	4681	0.20	Cylinder	64.5	21.5	70215	0.24	
									Cylinder	21.5	12.9	4681	1.24	
Jul-01	NH-10	1	Cyanos	Sphere	1.0	1.0	1	1808.00	Sphere	1.0	1.0	1	2182.00	
				Flagellates	Sphere	1.4	1.4	1	292.90	Sphere	1.4	1.4	1	323.20
					Sphere	2.8	2.8	12	272.70	Sphere	2.8	2.8	12	171.70

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2								
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml					
Jul-01	NH-10	1	Flagellates	Sphere	3.5	3.5	22	40.40	Sphere	3.5	3.5	22	30.30				
				Sphere	4.9	4.9	192	30.30	Sphere	4.9	4.9	192	30.30				
				Teardrop	8.4	2.0	49	60.60	Sphere	7.0	7.0	180	40.40				
				Teardrop	8.0	4.0	44	30.30	Teardrop	8.4	2.0	49	40.40				
				Teardrop	14.0	3.5	181	25.25	Teardrop	8.0	4.0	44	40.40				
				Sphere	21.5	21.5	5201	0.44	Teardrop	10.5	7.0	230	3.37				
				Sphere	30.1	30.1	14272	0.20	Teardrop	14.0	3.5	181	26.93				
				Sphere	43.0	43.0	41609	0.24	Sphere	21.5	21.5	5201	0.12				
				Sphere	51.6	51.6	71900	0.08	Sphere	30.1	30.1	14272	0.28				
				Ob.Sphere	43.0	21.5	10402	0.04	Sphere	43.0	43.0	41609	0.12				
				Ob.Sphere	43.0	30.1	20388	0.04	Sphere	51.6	51.6	71900	0.04				
				Cone	150.5	21.5	9101	0.04	Sphere	64.5	64.5	140429	0.04				
				Cone	86.0	21.5	5201	0.04	Sphere	77.4	77.4	242662	0.12				
									Sphere	86.0	86.0	332869	0.08				
									Teardrop	30.1	21.5	20862	0.08				
									Cone	107.5	43.0	130027	0.12				
							Diatoms	Cylinder	10.5	2.1	182	58.92	Cylinder	10.5	2.1	182	33.67
								Cylinder	14.0	2.8	431	67.33	Cylinder	14.0	2.8	431	121.20
							Cylinder	21.0	17.5	6061	71.54	Cylinder	21.0	17.5	6061	60.60	
							Cylinder	4.2	7.0	162	231.46	Cylinder	4.2	7.0	162	282.80	
							Sphere	21.0	21.0	4849	37.88	Cylinder	7.0	7.0	269	3.37	
							Cylinder	14.0	10.5	1235	12.63	Cylinder	14.0	10.5	1235	154.87	
							Sphere	10.5	10.5	606	4.21	Sphere	21.0	21.0	4849	33.67	
							Cylinder	14.0	1.4	22	8.42	Cylinder	21.5	4.3	1560	3.16	
							Cylinder	21.5	4.3	1560	1.80	Cylinder	30.1	8.6	6116	2.48	
							Cylinder	30.1	8.6	6116	1.96	Cylinder	43.0	21.5	31206	0.60	
							Cylinder	43.0	21.5	31206	0.76	Cylinder	51.6	25.8	53925	0.24	
							Cylinder	51.6	25.8	53925	0.52	Cylinder	64.5	34.4	112343	0.48	
							Cylinder	64.5	34.4	112343	0.28	Cylinder	86.0	21.5	124826	0.48	
							Cylinder	21.5	43.0	15603	0.04	Cylinder	17.2	107.5	24965	0.08	
							Cylinder	30.1	21.5	15291	0.20	Cylinder	30.1	12.9	9175	2.64	
							Cylinder	21.5	4.3	1560	1.40	Cylinder	21.5	12.9	4681	0.12	
							Cylinder	21.5	8.6	3121	4.80	Cylinder	21.5	4.3	1560	1.64	
				Cylinder	4.3	64.5	936	0.60	Cylinder	30.1	21.5	15291	1.04				
				Cone	43.0	12.9	6241	9.28	Cylinder	43.0	12.9	18724	0.20				
				Cone	43.0	8.6	4161	31.72	Cylinder	21.5	17.2	6241	11.76				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-01	NH-10	1	Diatoms	Cylinder	4.3	43.0	624	1.36	Cylinder	21.5	8.6	3121	3.76	
				Cylinder	43.0	21.5	31206	0.20	Cylinder	4.3	64.5	936	0.96	
				Cylinder	21.5	21.5	7802	2.56	Cone	43.0	12.9	6241	27.64	
									Cone	43.0	8.6	4161	5.24	
									Cylinder	4.3	43.0	624	0.32	
									Cylinder	43.0	21.5	31206	1.08	
									Cylinder	21.5	12.9	4681	2.12	
Jul-01	NH-10	13	Cyanos	Sphere	1.0	1.0	1	8646.00	Sphere	1.0	1.0	1	ND	
				Flagellates	Sphere	1.4	1.4	1	818.10	Sphere	1.4	1.4	1	488.71
				Sphere	2.8	2.8	12	505.00	Sphere	2.8	2.8	12	195.48	
				Sphere	3.5	3.5	22	10.10	Sphere	3.5	3.5	22	166.16	
				Sphere	4.9	4.9	192	282.80	Sphere	7.0	7.0	180	19.55	
				Sphere	7.0	7.0	180	10.10	Teardrop	8.4	2.0	49	58.65	
				Teardrop	8.4	2.0	49	20.20	Teardrop	8.0	4.0	44	29.32	
				Teardrop	8.0	4.0	44	40.40	Teardrop	10.5	7.0	230	32.78	
				Teardrop	10.5	7.0	230	20.20	Teardrop	14.0	3.5	181	18.21	
				Teardrop	14.0	3.5	181	16.83	Sphere	21.5	21.5	5201	0.16	
				Sphere	21.5	21.5	5201	0.28	Sphere	30.1	30.1	14272	0.24	
				Sphere	30.1	30.1	14272	0.24	Sphere	43.0	43.0	41609	0.12	
				Sphere	43.0	43.0	41609	0.08	Sphere	51.6	51.6	71900	0.12	
				Sphere	51.6	51.6	71900	0.08	Cone	86.0	43.0	83217	0.04	
									Cone	86.0	21.5	41609	0.08	
				Diatoms	Cylinder	10.5	2.1	182	40.06	Cylinder	14.0	2.8	431	37.03
					Cylinder	14.0	2.8	431	91.05	Cylinder	21.0	17.5	6061	53.87
					Cylinder	21.0	17.5	6061	25.49	Cylinder	4.2	7.0	162	84.17
					Cylinder	4.2	7.0	162	91.05	Cylinder	7.0	7.0	269	13.47
					Cylinder	7.0	7.0	269	14.57	Cylinder	14.0	10.5	1235	37.03
					Cylinder	14.0	10.5	1235	54.63	Cylinder	21.0	3.5	262	3.37
					Cylinder	7.0	14.0	538	7.28	Cylinder	4.9	2.1	17	6.73
					Sphere	21.0	21.0	4849	3.64	Cylinder	21.5	4.3	1560	5.92
					Cylinder	21.5	4.3	1560	6.36	Cylinder	30.1	8.6	6116	3.00
					Cylinder	30.1	8.6	6116	4.12	Cylinder	43.0	21.5	31206	0.56
					Cylinder	43.0	21.5	31206	1.52	Cylinder	51.6	25.8	53925	0.12
					Cylinder	51.6	25.8	53925	1.60	Cylinder	64.5	34.4	112343	0.24
					Cylinder	64.5	34.4	112343	0.64	Cylinder	12.9	43.0	5617	0.08

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-01	NH-10	13	Diatoms	Cylinder	86.0	21.5	124826	0.04	Cylinder	64.5	43.0	140429	0.28
				Cylinder	12.9	86.0	11234	0.08	Cylinder	21.5	12.9	4681	1.00
				Cylinder	21.5	21.5	7802	2.36	Cylinder	21.5	8.6	3121	0.24
				Cylinder	21.5	12.9	4681	0.16	Cylinder	193.5	107.5	3159658	0.16
				Cylinder	21.5	4.3	1560	1.28	Cylinder	30.1	12.9	9175	0.36
				Cylinder	30.1	21.5	15291	0.20	Cylinder	21.5	4.3	1560	2.76
				Cylinder	21.5	21.5	7802	0.88	Cylinder	30.1	21.5	15291	0.28
				Cylinder	43.0	64.5	93619	0.20	Cylinder	21.5	21.5	7802	0.80
				Cylinder	21.5	8.6	3121	1.20	Cylinder	4.3	43.0	624	0.12
				Cylinder	4.3	21.5	312	0.88	Cone	64.5	12.9	14043	16.00
				Cone	64.5	21.5	23405	10.72	Cone	43.0	8.6	4161	38.64
				Cone	43.0	8.6	4161	8.24	Cylinder	4.3	43.0	624	0.44
				Cylinder	4.3	43.0	624	0.48					
				Cylinder	21.5	30.1	10922	2.20					
				Cylinder	21.5	12.9	4681	0.56					
Jul-01	NH-20	1	Cyanos Flagellates	Sphere	1.0	1.0	1	ND	Sphere	1.0	1.0	1	ND
				Sphere	1.4	1.4	1	197.79	Sphere	1.4	1.4	1	255.87
				Sphere	2.8	2.8	12	159.92	Sphere	2.8	2.8	12	168.33
				Sphere	3.5	3.5	22	50.50	Sphere	3.5	3.5	22	6.73
				Sphere	4.9	4.9	192	46.29	Sphere	4.9	4.9	192	23.57
				Sphere	7.0	7.0	180	21.04	Sphere	7.0	7.0	180	6.73
				Teardrop	8.4	2.0	49	4.21	Teardrop	8.4	2.0	49	20.20
				Teardrop	8.0	4.0	44	33.67	Teardrop	8.0	4.0	44	26.93
				Teardrop	14.0	3.5	181	25.25	Teardrop	10.5	7.0	230	3.37
				Sphere	21.5	21.5	5201	0.37	Teardrop	14.0	3.5	181	26.93
				Sphere	30.1	30.1	14272	0.29	Sphere	21.5	21.5	5201	0.67
				Sphere	43.0	43.0	41609	0.12	Sphere	30.1	30.1	14272	0.42
				Sphere	51.6	51.6	71900	0.04	Sphere	43.0	43.0	41609	0.08
				Ob.Sphere	51.6	43.0	49930	0.08	Sphere	51.6	51.6	71900	0.07
				Cone	129.0	64.5	280858	0.04	Sphere	64.5	64.5	140429	0.07
				Cone	43.0	8.6	4161	0.01	Sphere	77.4	77.4	242662	0.02
				Teardrop	30.1	21.5	20862	0.09	Sphere	86.0	86.0	332869	0.02
				Cylinder	86.0	21.5	124826	0.04	Ob.Sphere	21.5	12.9	1872	0.05
				Cone	150.5	43.0	36408	0.04	Cone	129.0	43.0	187239	0.10
				Cone	107.5	43.0	26005	0.13	Teardrop	43.0	38.7	75863	0.10

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-01	NH-20	1	Flagellates	Cone	86.0	21.5	5201	0.19	Cone	172.0	51.6	399443	0.08
				Cone					Cone	107.5	43.0	130027	0.40
			Diatoms	Cylinder	14.0	2.8	431	6.73	Cylinder	14.0	2.8	431	20.20
				Cylinder	14.0	10.5	1235	16.83	Cylinder	21.0	17.5	6061	3.37
				Cylinder	7.0	14.0	538	3.37	Cylinder	4.2	7.0	162	97.63
				Sphere	21.0	21.0	4849	3.37	Cylinder	7.0	7.0	269	13.47
				Cylinder	21.5	4.3	1560	1.29	Cylinder	4.2	4.2	58	3.37
				Cylinder	30.1	8.6	6116	0.75	Sphere	21.0	21.0	4849	16.83
				Cylinder	43.0	21.5	31206	0.68	Cylinder	21.5	4.3	1560	1.73
				Cylinder	51.6	25.8	53925	0.29	Cylinder	30.1	8.6	6116	1.18
				Cylinder	64.5	34.4	112343	0.05	Cylinder	43.0	21.5	31206	0.85
				Cylinder	129.0	34.4	449374	0.07	Cylinder	51.6	25.8	53925	0.07
				Cylinder	12.9	64.5	8426	0.13	Cylinder	64.5	34.4	112343	0.10
				Cylinder	30.1	12.9	9175	0.20	Cylinder	86.0	21.5	124826	0.08
				Cylinder	30.1	8.6	6116	0.08	Cylinder	17.2	43.0	9986	0.07
				Cylinder	21.5	12.9	4681	0.49	Cylinder	30.1	12.9	9175	0.83
				Cylinder	21.5	4.3	1560	1.05	Cylinder	21.5	12.9	4681	1.20
				Cylinder	21.5	17.2	6241	1.08	Cylinder	21.5	4.3	1560	0.28
				Cylinder	4.3	51.6	749	0.19	Cylinder	30.1	8.6	6116	0.42
				Cone	64.5	8.6	9362	4.28	Cylinder	30.1	12.9	9175	0.15
				Cylinder	4.3	64.5	468	0.08	Cylinder	21.5	17.2	6241	0.52
				Cylinder	86.0	43.0	124826	0.09	Cylinder	4.3	64.5	936	0.13
				Cylinder	64.5	21.5	35107	0.13	Cone	64.5	12.9	14043	3.70
Cylinder	30.1	21.5	7646	1.03	Cone	64.5	8.6	9362	2.93				
					Cylinder	64.5	21.5	70215	0.18				
					Cylinder	30.1	21.5	15291	1.25				
					Cylinder	21.5	12.9	4681	0.40				
Jul-01	NH-20	8	Cyanos	Sphere	1.0	1.0	1	ND	Sphere	1.0	1.0	1	ND
				Flagellates	Sphere	1.4	1.4	1	1619.26	Sphere	1.4	1.4	1
				Sphere	2.8	2.8	12	309.52	Sphere	2.8	2.8	12	471.33
				Sphere	3.5	3.5	22	140.10	Sphere	3.5	3.5	22	127.93
				Sphere	4.9	4.9	192	117.29	Sphere	4.9	4.9	192	63.97
				Sphere	7.0	7.0	180	9.77	Sphere	7.0	7.0	180	33.67
				Teardrop	8.4	2.0	49	55.39	Teardrop	8.4	2.0	49	16.83
				Teardrop	8.0	4.0	44	19.55	Teardrop	8.0	4.0	44	57.23

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2							
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml				
Jul-01	NH-20	8	Flagellates	Teardrop	10.5	7.0	230	13.03	Teardrop	10.5	7.0	230	10.10			
				Sphere	21.5	21.5	5201	0.27	Teardrop	14.0	3.5	181	6.73			
				Sphere	30.1	30.1	14272	0.35	Sphere	21.5	21.5	5201	0.51			
				Sphere	43.0	43.0	41609	0.12	Sphere	30.1	30.1	14272	0.59			
				Sphere	51.6	51.6	71900	0.16	Sphere	43.0	43.0	41609	0.08			
				Sphere	64.5	64.5	140429	0.09	Sphere	64.5	64.5	140429	0.03			
				Sphere	77.4	77.4	242662	0.04	Sphere	86.0	86.0	332869	0.07			
				Ob.Sphere	43.0	21.5	10402	0.03	Ob.Sphere	64.5	43.0	62413	0.01			
				Cone	150.5	64.5	382280	0.01	Ob.Sphere	30.1	21.5	7282	0.07			
				Cone	107.5	64.5	195041	0.01	Cone	150.5	43.0	254853	0.03			
				Cone	86.0	43.0	83217	0.01	Teardrop	43.0	30.1	59220	0.20			
				Teardrop	43.0	30.1	59220	0.11	Cone	172.0	51.6	399443	0.13			
				Teardrop	30.1	21.5	20862	0.11	Cone	86.0	21.5	41609	0.13			
				Cone	193.5	64.5	631932	0.04	Cylinder	21.5	4.3	1560	0.04			
				Cone	107.5	43.0	130027	0.07	Cylinder	30.1	8.6	6116	0.04			
									Cylinder	43.0	21.5	31206	0.03			
							Diatoms	Cylinder	21.0	17.5	6061	9.77	Cylinder	10.5	2.1	182
							Cylinder	4.2	7.0	162	39.10	Cylinder	14.0	2.8	431	84.17
							Cylinder	4.2	4.2	58	19.55	Cylinder	21.0	17.5	6061	43.77
							Cylinder	7.0	7.0	269	29.32	Cylinder	4.2	7.0	162	208.73
							Cylinder	3.5	14.0	53	22.81	Cylinder	7.0	7.0	269	43.77
							Cylinder	21.5	4.3	1560	1.92	Cylinder	14.0	10.5	1235	30.30
							Cylinder	30.1	8.6	6116	0.92	Cylinder	3.5	14.0	53	3.37
							Cylinder	43.0	21.5	31206	0.45	Cylinder	21.5	4.3	1560	1.80
							Cylinder	51.6	25.8	53925	0.24	Cylinder	30.1	8.6	6116	0.80
							Cylinder	64.5	34.4	112343	0.27	Cylinder	43.0	21.5	31206	0.67
							Cylinder	86.0	21.5	124826	0.21	Cylinder	51.6	25.8	53925	0.39
							Cylinder	129.0	34.4	449374	0.01	Cylinder	64.5	34.4	112343	0.25
							Cylinder	43.0	12.9	18724	0.23	Cylinder	107.5	30.1	273057	0.01
							Cylinder	21.5	4.3	1560	0.08	Cylinder	43.0	12.9	18724	0.17
							Cylinder	30.1	12.9	9175	1.49	Cylinder	193.5	107.5	3159658	0.01
							Cylinder	21.5	21.5	7802	0.85	Cylinder	30.1	12.9	9175	1.65
							Cylinder	21.5	12.9	4681	0.29	Cylinder	21.5	12.9	4681	1.03
							Cylinder	30.1	30.1	21408	1.12	Cylinder	21.5	4.3	1560	0.37
				Cylinder	43.0	21.5	31206	0.19	Cylinder	21.5	17.2	6241	2.25			
				Cylinder	21.5	17.2	6241	6.44	Cylinder	4.3	64.5	936	0.11			

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2					
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml		
Jul-01	NH-20	8	Diatoms	Cylinder	4.3	43.0	624	0.48	Cone	64.5	12.9	1404	5.43	
				Cone	64.5	21.5	23405	4.75	Cone	64.5	8.6	624	2.80	
				Cone	64.5	8.6	9362	2.08	Cylinder	4.3	43.0	624	0.15	
				Cylinder	8.6	86.0	4993	0.09	Cylinder	129.0	43.0	561717	0.07	
				Cylinder	107.5	43.0	390081	0.05	Cylinder	64.5	43.0	140429	0.28	
				Cylinder	21.5	12.9	4681	1.33	Cylinder	43.0	21.5	31206	1.12	
				Cylinder	21.5	30.1	10922	0.33	Cylinder	21.5	8.6	3121	0.36	
Jul-01	NH-55	4	Cyanos Flagellates	Sphere	1.0	1.0	1	ND	Sphere	1.0	1.0	1	ND	
				Sphere	1.4	1.4	1	175.94	Sphere	1.4	1.4	1	101.00	
				Sphere	2.8	2.8	12	179.19	Sphere	2.8	2.8	12	104.37	
				Sphere	4.9	4.9	192	13.03	Sphere	4.9	4.9	192	20.20	
				Teardrop	8.0	4.0	44	3.26	Sphere	7.0	7.0	180	3.37	
				Teardrop	14.0	3.5	181	3.26	Teardrop	8.0	4.0	44	6.73	
				Sphere	21.5	21.5	5201	0.31	Teardrop	10.5	7.0	230	6.73	
				Sphere	30.1	30.1	14272	0.27	Sphere	21.5	21.5	5201	0.13	
				Sphere	51.6	51.6	71900	0.01	Sphere	30.1	30.1	14272	0.09	
				Sphere	64.5	64.5	140429	0.01	Sphere	43.0	43.0	41609	0.01	
				Sphere	77.4	77.4	242662	0.01	Sphere	51.6	51.6	71900	0.01	
				Ob.Sphere	43.0	21.5	10402	0.02	Ob.Sphere	64.5	21.5	15603	0.02	
				Ob.Sphere	34.4	17.2	5326	0.02	Ob.Sphere	43.0	12.9	3745	0.01	
				Ob.Sphere	51.6	17.2	7989	0.01	Cone	43.0	43.0	20804	0.01	
				Cone	64.5	51.6	56172	0.01	Cone	258.0	86.0	1497912	0.02	
				Teardrop	43.0	30.1	59220	0.06	Cone	107.5	43.0	130027	0.02	
				Cone	258.0	86.0	1497912	0.02						
				Cylinder	258.0	8.6	7490	0.01						
				Cone	107.5	43.0	130027	0.10						
				Cylinder	86.0	21.5	124826	0.02						
				Diatoms	Cylinder	4.2	7.0	162	6.73	Cylinder	51.6	25.8	53925	0.06
					Cylinder	21.5	4.3	1560	0.26	Cylinder	64.5	34.4	112343	0.03
					Cylinder	30.1	8.6	6116	0.07	Cylinder	107.5	30.1	273057	0.01
					Cylinder	43.0	21.5	31206	0.07	Cylinder	43.0	12.9	18724	0.01
					Cylinder	51.6	25.8	53925	0.09	Cylinder	21.5	4.3	1560	0.05
					Cylinder	64.5	34.4	112343	0.19	Cylinder	21.5	17.2	6241	0.13
					Cylinder	86.0	21.5	124826	0.03	Cylinder	4.3	43.0	624	0.13
	Cylinder	129.0	34.4	449374	0.01	Cone	64.5	12.9	14043	0.35				

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-01	NH-55	4	Diatoms	Replicate 1					Replicate 2				
				Cylinder	86.0	21.5	124826	0.01	Cone	64.5	8.6	9362	0.19
				Cylinder	43.0	12.9	18724	0.03	Cylinder	4.3	43.0	624	0.09
				Cylinder	21.5	12.9	4681	0.13	Cylinder	8.6	645.0	37448	0.01
				Cylinder	21.5	17.2	6241	0.08	Cylinder	21.5	30.1	10922	0.03
				Cylinder	4.3	51.6	749	0.04					
				Cone	64.5	8.6	9362	0.45					
				Cylinder	4.3	64.5	936	0.13					
				Cylinder	4.3	43.0	624	0.10					
				Cylinder	4.3	430.0	6241	0.01					
				Cylinder	30.1	21.5	15291	0.43					
Jul-01	NH-55	36	Cyanos Flagellates	Sphere	1.0	1.0	1	ND	Sphere	1.0	1.0	1	ND
				Sphere	1.4	1.4	1	474.70	Sphere	1.4	1.4	1	538.67
				Sphere	2.8	2.8	12	259.23	Sphere	2.8	2.8	12	538.67
				Sphere	4.9	4.9	192	13.47	Sphere	4.9	4.9	192	26.93
				Sphere	7.0	7.0	180	3.37	Sphere	7.0	7.0	180	10.10
				Teardrop	8.4	2.0	49	3.37	Teardrop	8.4	2.0	49	6.73
				Teardrop	8.0	4.0	44	3.37	Teardrop	8.0	4.0	44	16.83
				Teardrop	10.5	7.0	230	3.37	Teardrop	10.5	7.0	230	10.10
				Teardrop	14.0	3.5	181	3.37	Sphere	21.5	21.5	5201	0.26
				Sphere	21.5	21.5	5201	0.22	Sphere	30.1	30.1	14272	0.07
				Sphere	30.1	30.1	14272	0.22	Sphere	43.0	43.0	41609	0.01
				Sphere	43.0	43.0	41609	0.05	Sphere	51.6	51.6	71900	0.04
				Sphere	51.6	51.6	71900	0.03	Sphere	64.5	64.5	140429	0.01
				Sphere	64.5	64.5	140429	0.01	Ob.Sphere	51.6	43.0	49930	0.02
				Ob.Sphere	86.0	43.0	83217	0.01	Ob.Sphere	34.4	17.2	5326	0.20
				Ob.Sphere	34.4	17.2	5326	0.18	Ob.Sphere	51.6	17.2	7989	0.03
				Cone	86.0	43.0	83217	0.01	Ob.Sphere	21.5	12.9	1872	0.03
				Cone	43.0	21.5	10402	0.05	Cone	129.0	86.0	374478	0.02
				Cone	107.5	43.0	26005	0.05	Cone	64.5	17.2	18724	0.06
									Cone	64.5	30.1	32767	0.01
									Teardrop	30.1	21.5	20862	0.13
									Cone	107.5	43.0	130027	0.04
							Diatoms	Cylinder	10.5	2.1	182	6.73	Cylinder
				Cylinder	4.2	7.0	162	6.73	Cylinder	30.1	8.6	6116	0.11

Cruise	Station	Depth (m)	Taxon	Shape	Replicate 1				Replicate 2				
					A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	A (μm)	B (μm)	Biovolume (μm^3)	Cells/ml	
Jul-01	NH-55	36	Diatoms	Cylinder	21.5	4.3	1560	0.03	Cylinder	43.0	21.5	31206	0.01
				Cylinder	30.1	8.6	6116	0.05	Cylinder	51.6	25.8	53925	0.01
				Cylinder	43.0	21.5	31206	0.07	Cylinder	64.5	34.4	112343	0.01
				Cylinder	51.6	25.8	53925	0.02	Cylinder	86.0	21.5	124826	0.01
				Cylinder	64.5	34.4	112343	0.02	Cylinder	107.5	30.1	273057	0.01
				Cylinder	107.5	30.1	273057	0.01	Cylinder	129.0	34.4	449374	0.01
				Cylinder	8.6	51.6	2996	0.10	Cylinder	17.2	43.0	9986	0.01
				Cylinder	4.3	43.0	624	0.30	Cylinder	21.5	12.9	4681	0.03
				Cylinder	4.3	645.0	9362	0.02	Cylinder	21.5	17.2	6241	0.03
				Cylinder	43.0	43.0	62413	0.39	Cylinder	4.3	64.5	936	0.06
				Cylinder	43.0	21.5	31206	0.02	Cone	64.5	8.6	9362	0.13
									Cylinder	4.3	51.6	749	0.23
									Cylinder	4.3	430.0	6241	0.01