ENVIRONMENTAL OBSERVATIONS ON CONTINENTAL SHELF NOVA SCOTIA TO LONG ISLAND, SEPTEMBER 1966 ALBATROSS IV CRUISE 66-12

John B. Colton, Robert R. Marak, Samuel R. Nickerson
and Ruth R. Stoddard

66-08

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Biological Laboratory
Woods Hole, Massachusetts
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Introduction

This report lists results obtained during an environmental survey of Continental Shelf waters in an area bounded by longitudes 64°30' W and 72°30' W (Albatross IV Cruise 66-12, September 8-23, 1966). This is the ninth of a series of cruises being undertaken on a quarterly basis to measure the seasonal and annual variations in temperature, salinity, dissolved oxygen, and chlorophyll. The cruise track and station and section locations are shown in Fig. 1.

Procedures

A surface temperature reading, bathythermograph lowering and Nansen bottle cast were made at each station. The Nansen bottle depths were 1, 10, 20, 30, 40, 50, 75, 100, 150, 200, and 250 meters. A bathythermograph lowering was made midway between stations separated by a distance greater than 15 miles. Five drift bottles were released at all stations and 5 sea-bed drifters were released at stations shoaler than 275 meters. Dissolved oxygen determinations were made at sea. All other determinations were made ashore.

Methods

Temperature

Temperature was measured with a bucket thermometer and bathythermographs.

Salinity

Salinity was determined by electrical conductivity using a Hytech Model 621 Salinometer.

Dissolved Oxygen

Dissolved oxygen was determined polarographically (Carritt and Kanwisher, 1959) using a Jarrell Ash Model 26-601 dissolved oxygen analyzer.

Chlorophyll

Chlorophyll (total pigment) within the upper 100 meters of the water column was determined by fluorescence according to the method of Yentsch and Menzel (1963) from frozen extracts of 125 ml. sea water. The specific absorption value (k) used was 66.7 (Richards, 1952). A G.K. Turner Model 110 fluorometer was used for these determinations.

Data

Values of all properties measured are tabulated by station and depth in Table 1. In addition, the bottom temperature is included where obtained.

The surface temperature and bottom temperature distributions are shown in Fig. 2. The surface salinity and density distributions are shown in Fig. 3. Vertical profiles of temperature, salinity, dissolved oxygen, chlorophyll, and density for sections A[1] through J are presented in Figs. 4-10.

References

Carritt, D. E. and J. W. Kanwisher (1959). An electrode system for measuring dissolved oxygen. Analytical Chemistry, 31: 5-9.

Richards, F. A. (1952). The estimation and characterization of plankton populations by pigment analysis. I. The absorption spectra of some pigments in diatoms, dinoflagellates, and brown algae. J. Mar. Res., 11: 147-155.

Yentsch, C. S. and D. W. Menzel (1963). A method for the determination of phytoplankton chlorophyll and phaeophytin by fluorescence. Deep-Sea Res., 10: 221-231.

12/15/66

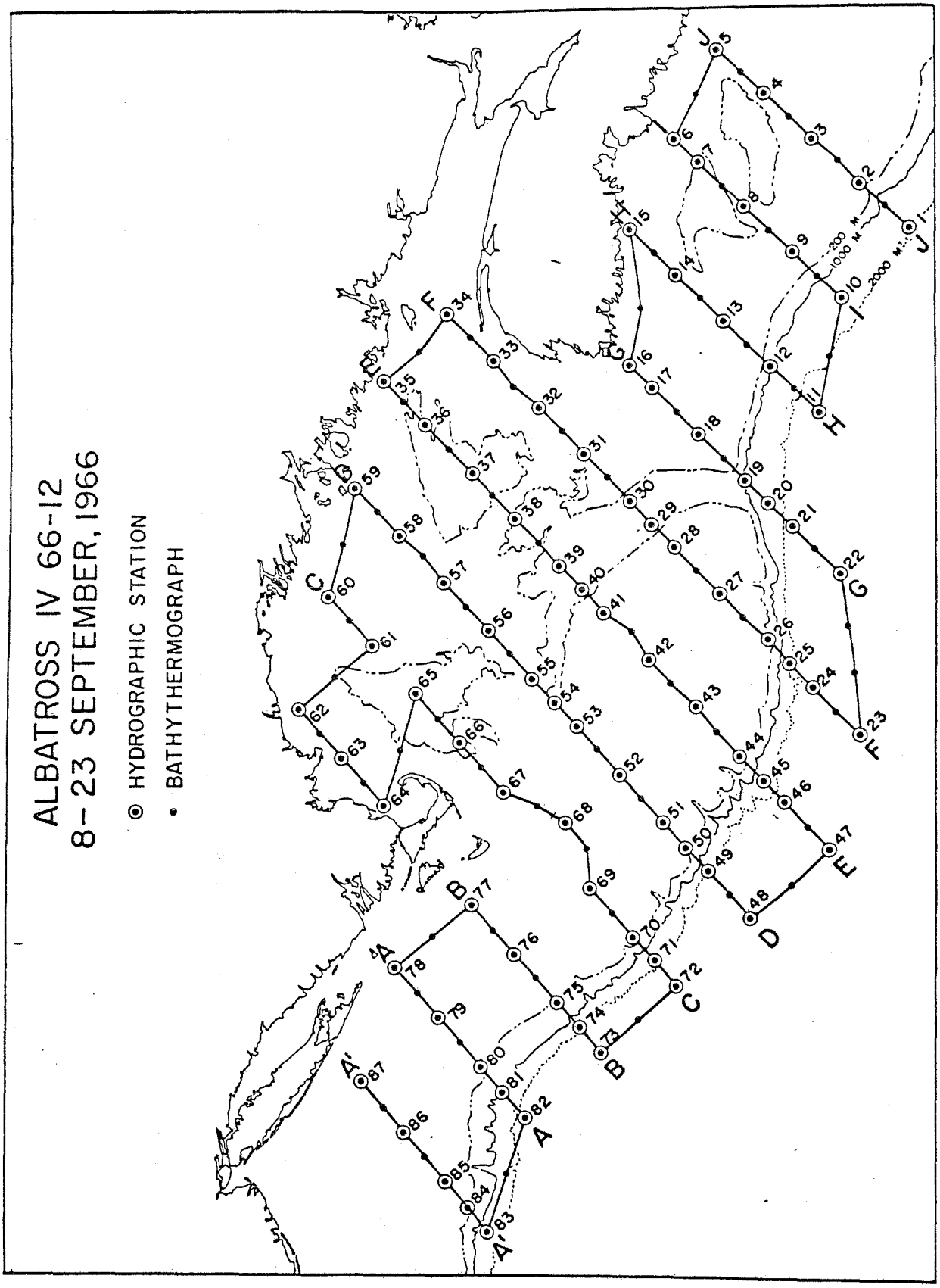
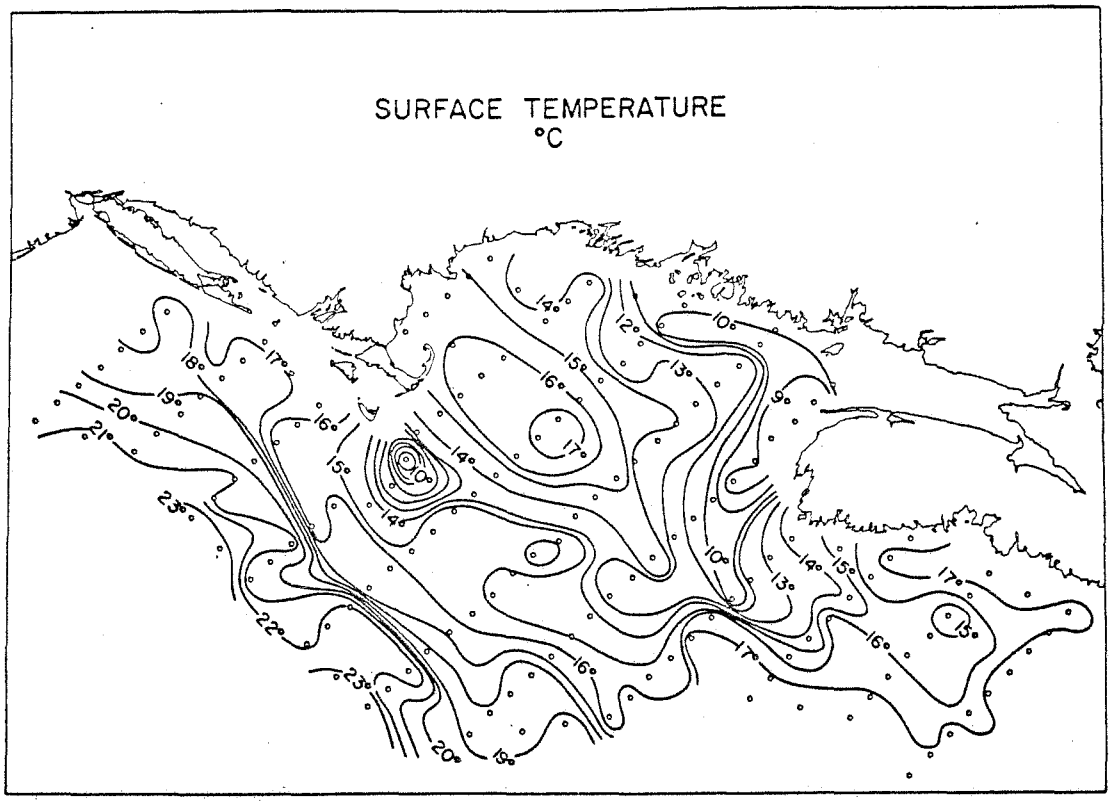

ALBATROSS IV 66-12
8-23 SEPTEMBER, 1966
HYDROGRAPHIC STATION
BATHYTHERMOGRAPH
200 M
1000 M
2000 M

FIGURE 1



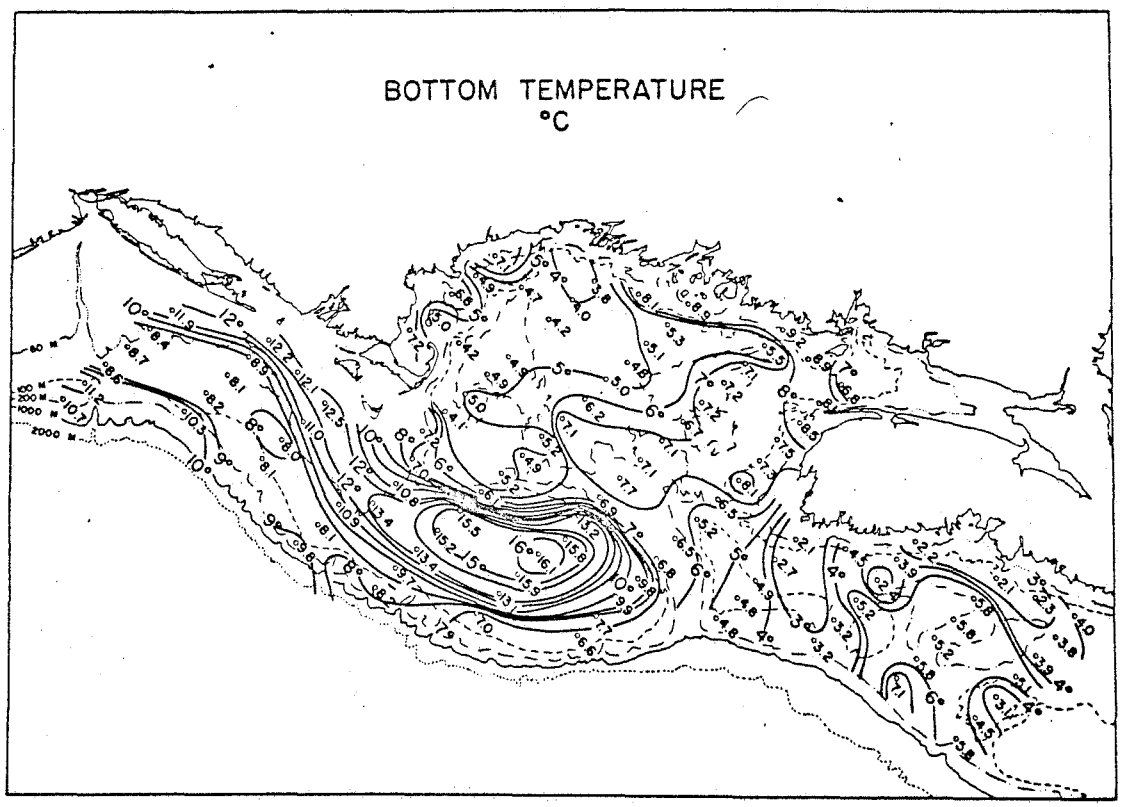
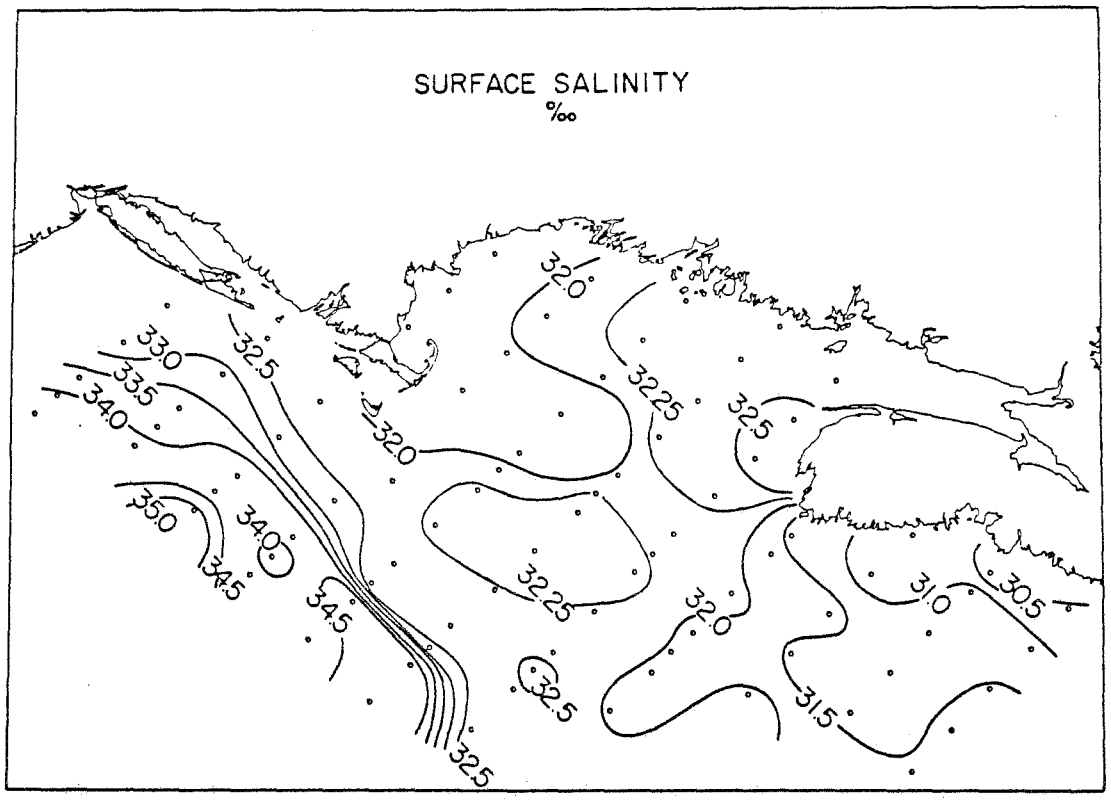


FIGURE 2


SURFACE SALINITY
‰
32.0
33.0
32.5
33.5
34.0
32.0
32.25
32.5
35.0
34.0
34.5
32.25
32.0
31.0
30.5
34.5
32.5
31.5
32.5

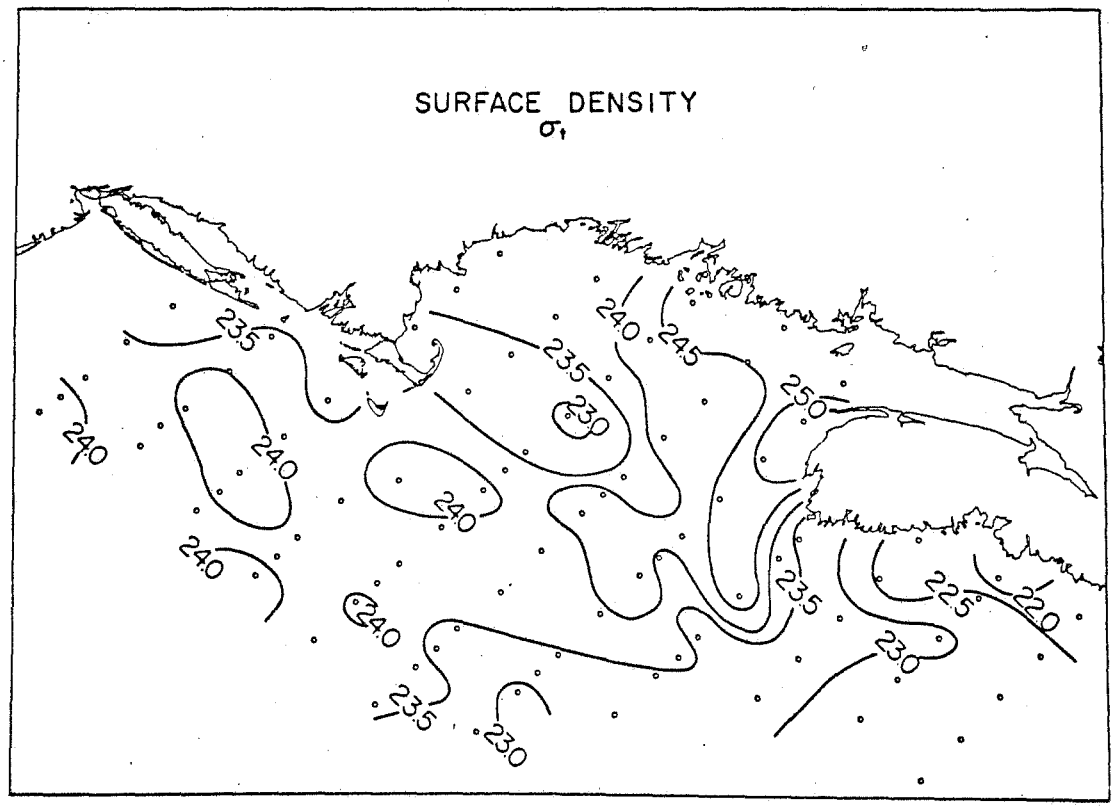

SURFACE DENSITY
σ_t
23.5
24.0
24.5
23.5
23.0
25.0
24.0
24.0
24.0
24.0
23.5
22.5
22.0
24.0
23.0
23.5
23.0

FIGURE 3

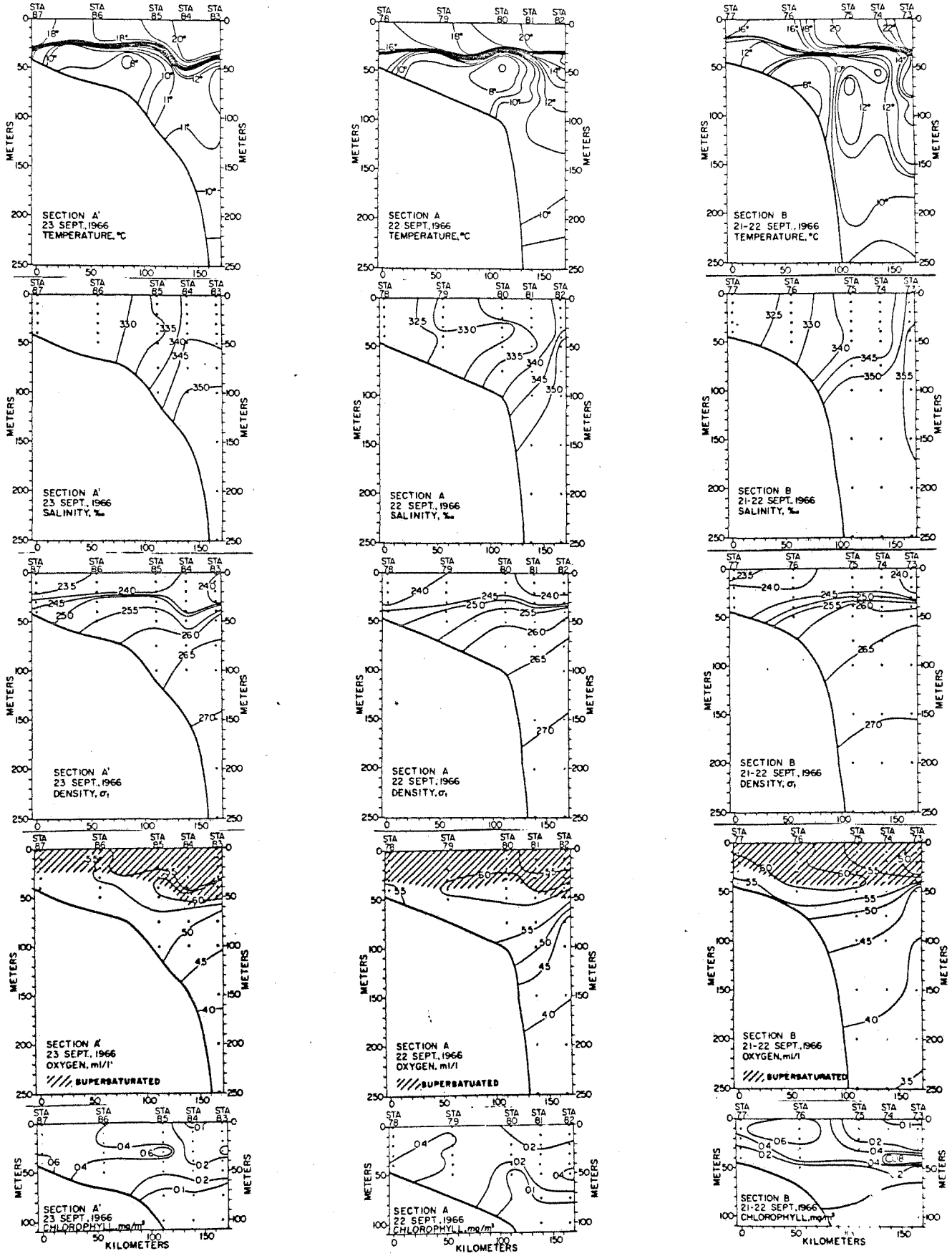

SECTION A'
23 SEPT. 1966
TEMPERATURE, °C
SECTION A
22 SEPT. 1966
TEMPERATURE, °C
SECTION B
21-22 SEPT. 1966
TEMPERATURE, °C
SECTION A'
23 SEPT. 1966
SALINITY, ‰
SECTION A
22 SEPT. 1966
SALINITY, ‰
SECTION B
21-22 SEPT. 1966
SALINITY, ‰
SECTION A'
23 SEPT. 1966
DENSITY, σt
SECTION A
22 SEPT. 1966
DENSITY, σt
SECTION B
21-22 SEPT. 1966
DENSITY, σt
SECTION A'
23 SEPT. 1966
OXYGEN, ml/l
SECTION A
22 SEPT. 1966
OXYGEN, ml/l
SECTION B
21-22 SEPT. 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION A'
23 SEPT. 1966
CHLOROPHYLL, mg/m³
SECTION A
22 SEPT. 1966
CHLOROPHYLL, mg/m³
SECTION B
21-22 SEPT. 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 4

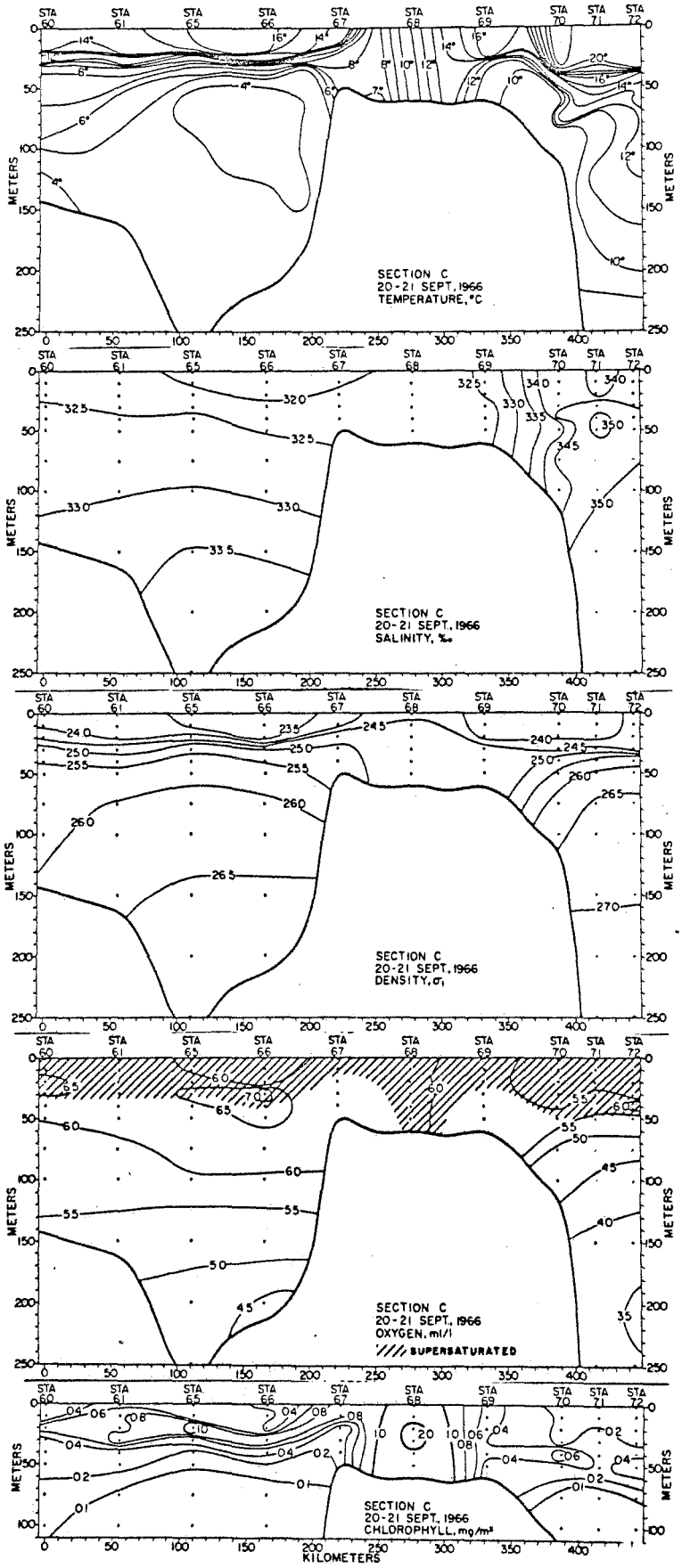

SECTION C
20-21 SEPT. 1966
TEMPERATURE, °C
SECTION C
20-21 SEPT. 1966
SALINITY, ‰
SECTION C
20-21 SEPT. 1966
DENSITY, σt
SECTION C
20-21 SEPT. 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION C
20-21 SEPT. 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 5

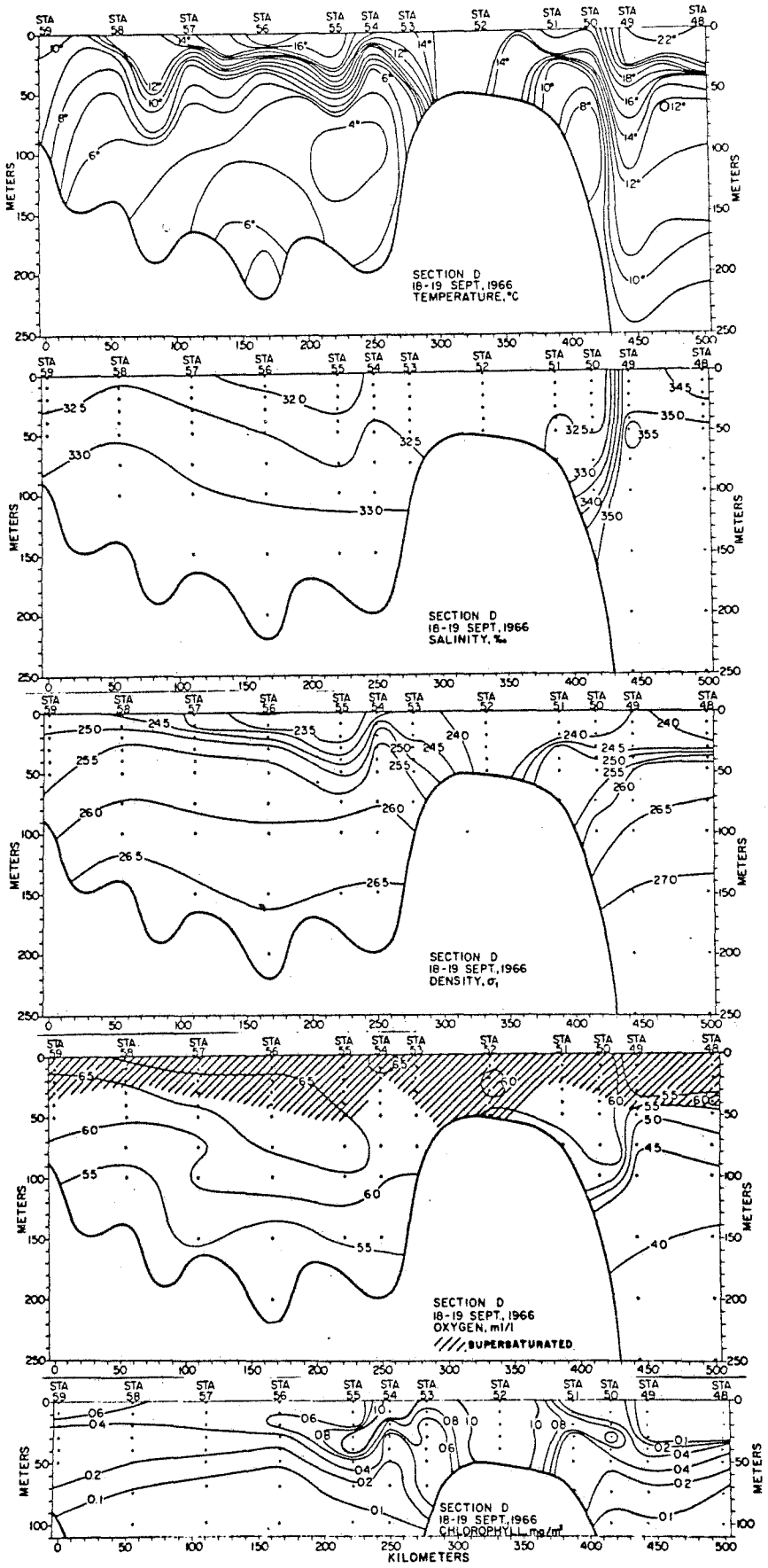

SECTION D
18-19 SEPT, 1966
TEMPERATURE, °C
SECTION D
18-19 SEPT, 1966
SALINITY, ‰
SECTION D
18-19 SEPT, 1966
DENSITY, σt
SECTION D
18-19 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION D
18-19 SEPT, 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 6

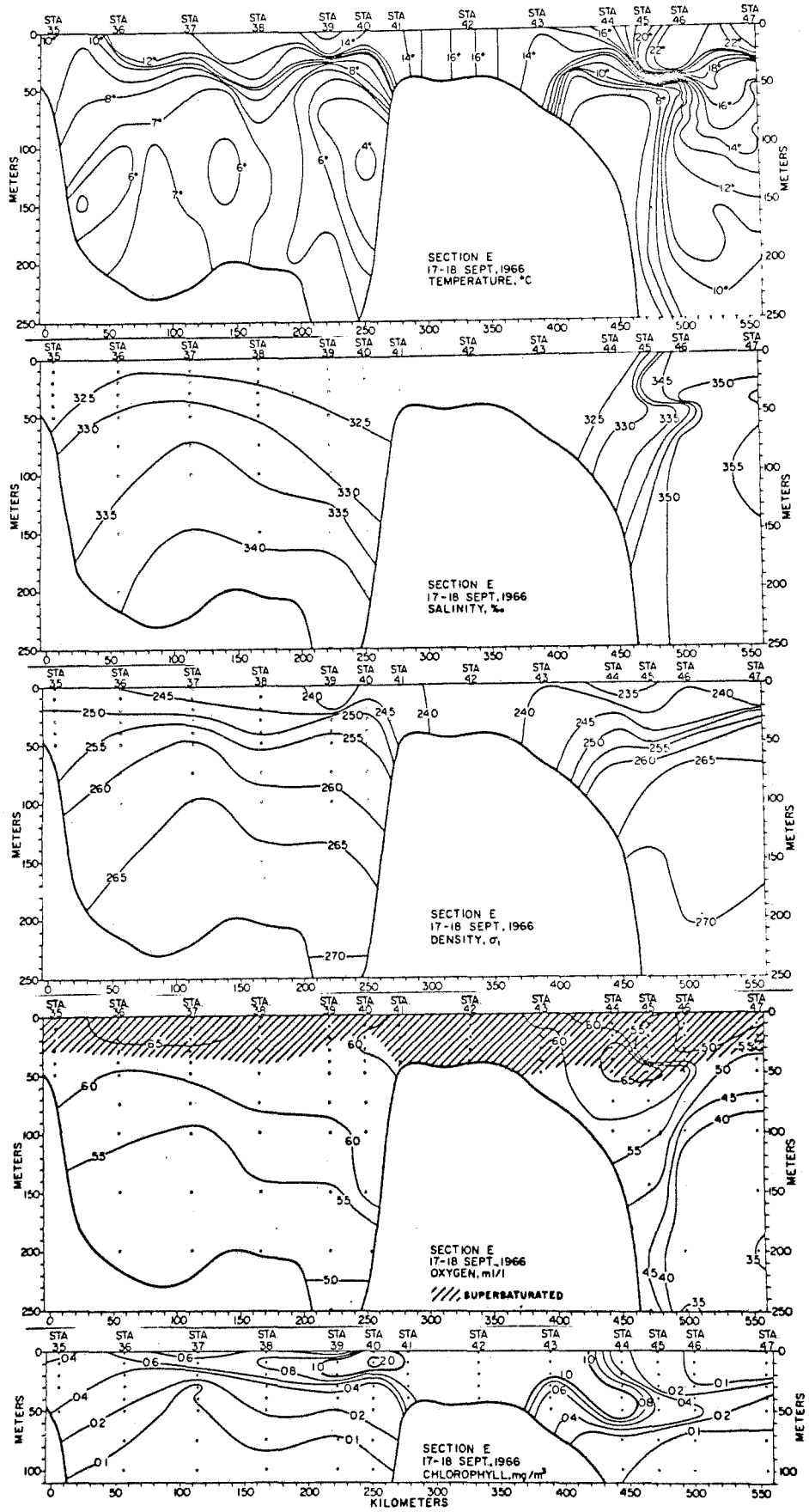

SECTION E
17-18 SEPT, 1966
TEMPERATURE, °C
SECTION E
17-18 SEPT, 1966
SALINITY, ‰
SECTION E
17-18 SEPT, 1966
DENSITY, σt
SECTION E
17-18 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION E
17-18 SEPT, 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 7

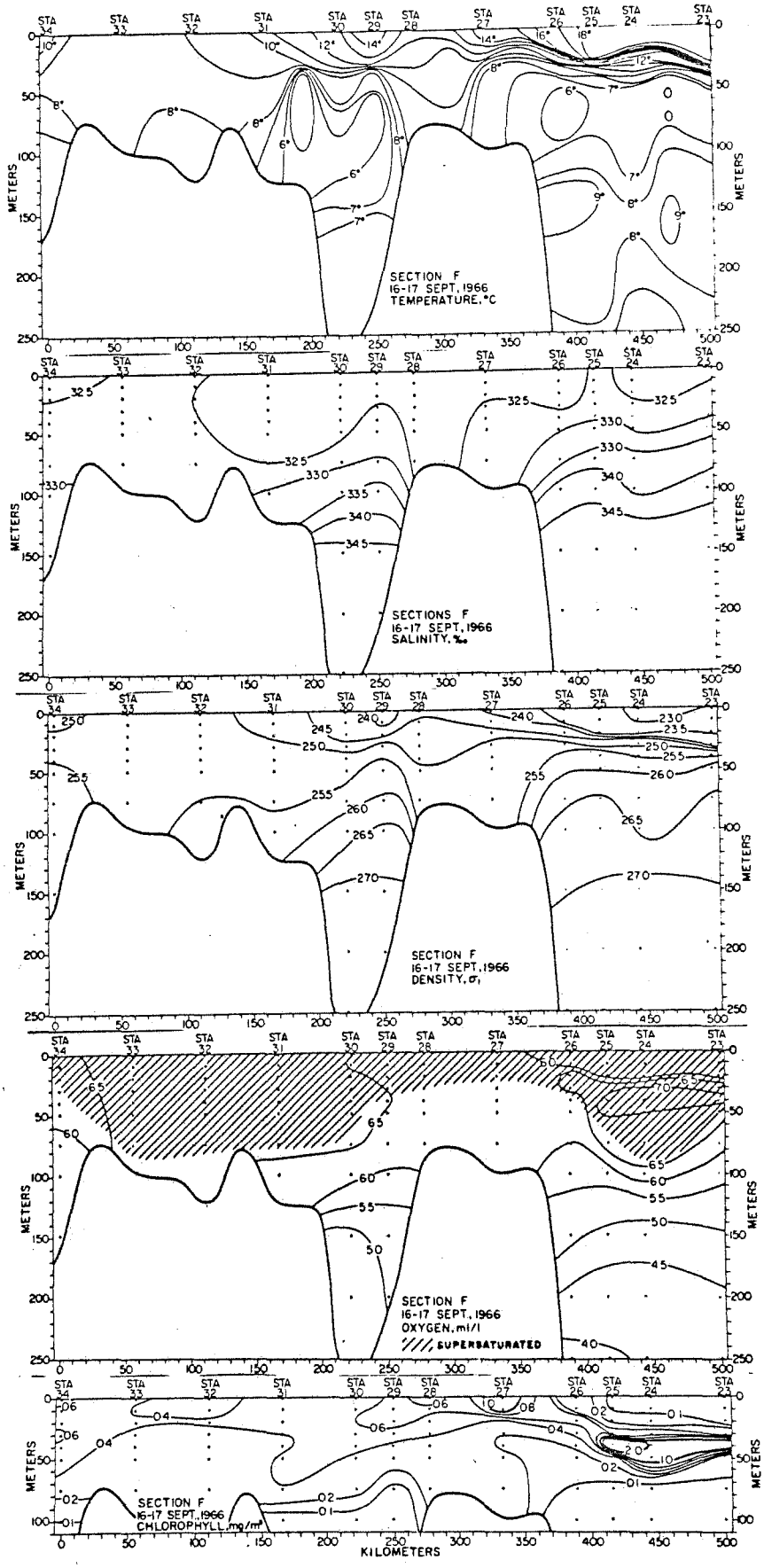

SECTION F
16-17 SEPT, 1966
TEMPERATURE, °C
SECTIONS F
16-17 SEPT, 1966
SALINITY, ‰
SECTION F
16-17 SEPT, 1966
DENSITY, σt
SECTION F
16-17 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION F
16-17 SEPT, 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 8

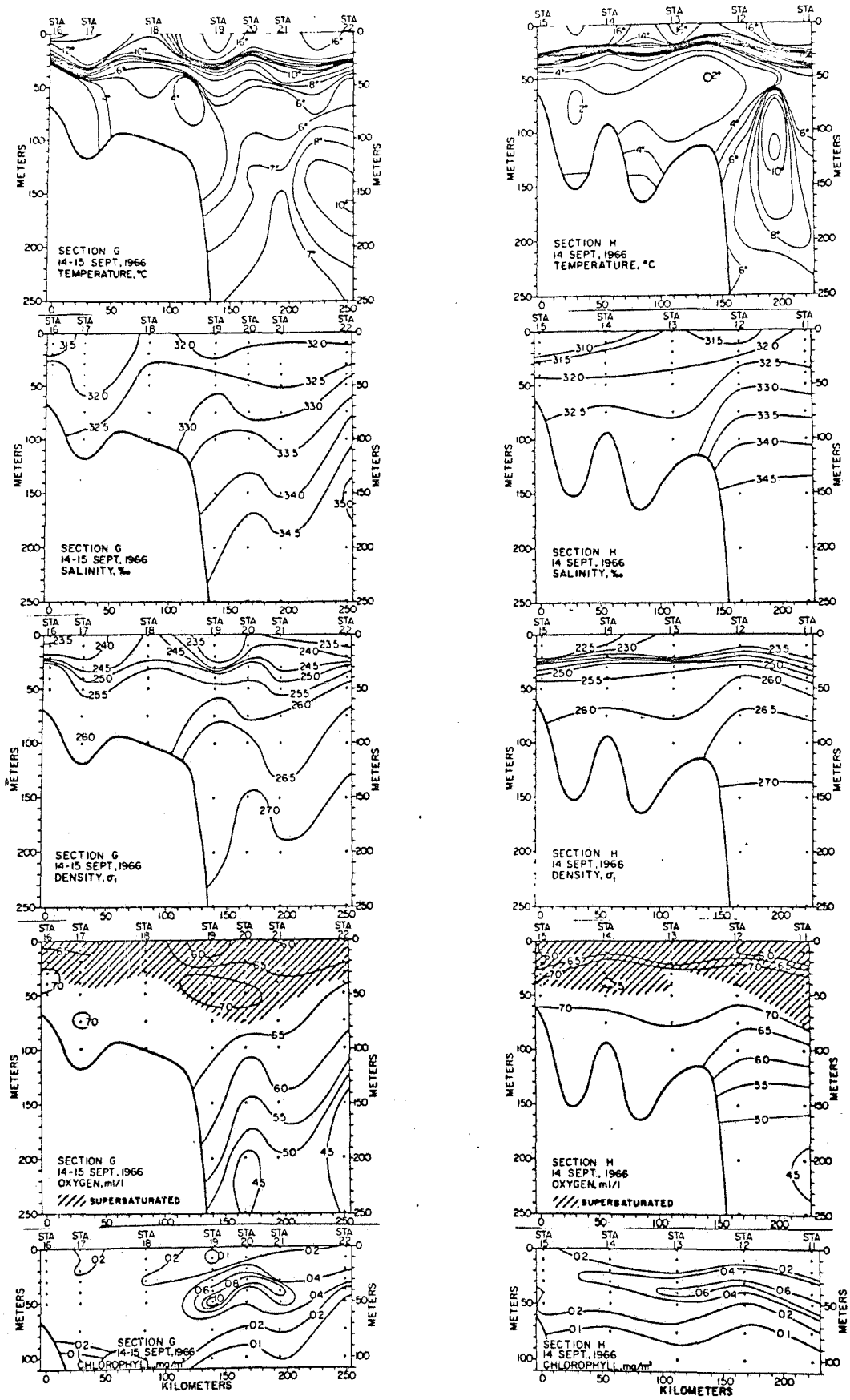

SECTION G
14-15 SEPT, 1966
TEMPERATURE, °C
SECTION H
14 SEPT, 1966
TEMPERATURE, °C
SECTION G
14-15 SEPT, 1966
SALINITY, ‰
SECTION H
14 SEPT, 1966
SALINITY, ‰
SECTION G
14-15 SEPT, 1966
DENSITY, σ_t
SECTION H
14 SEPT, 1966
DENSITY, σ_t
SECTION G
14-15 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION H
14 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION G
14-15 SEPT, 1966
CHLOROPHYLL, mg/m³
SECTION H
14 SEPT, 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 9

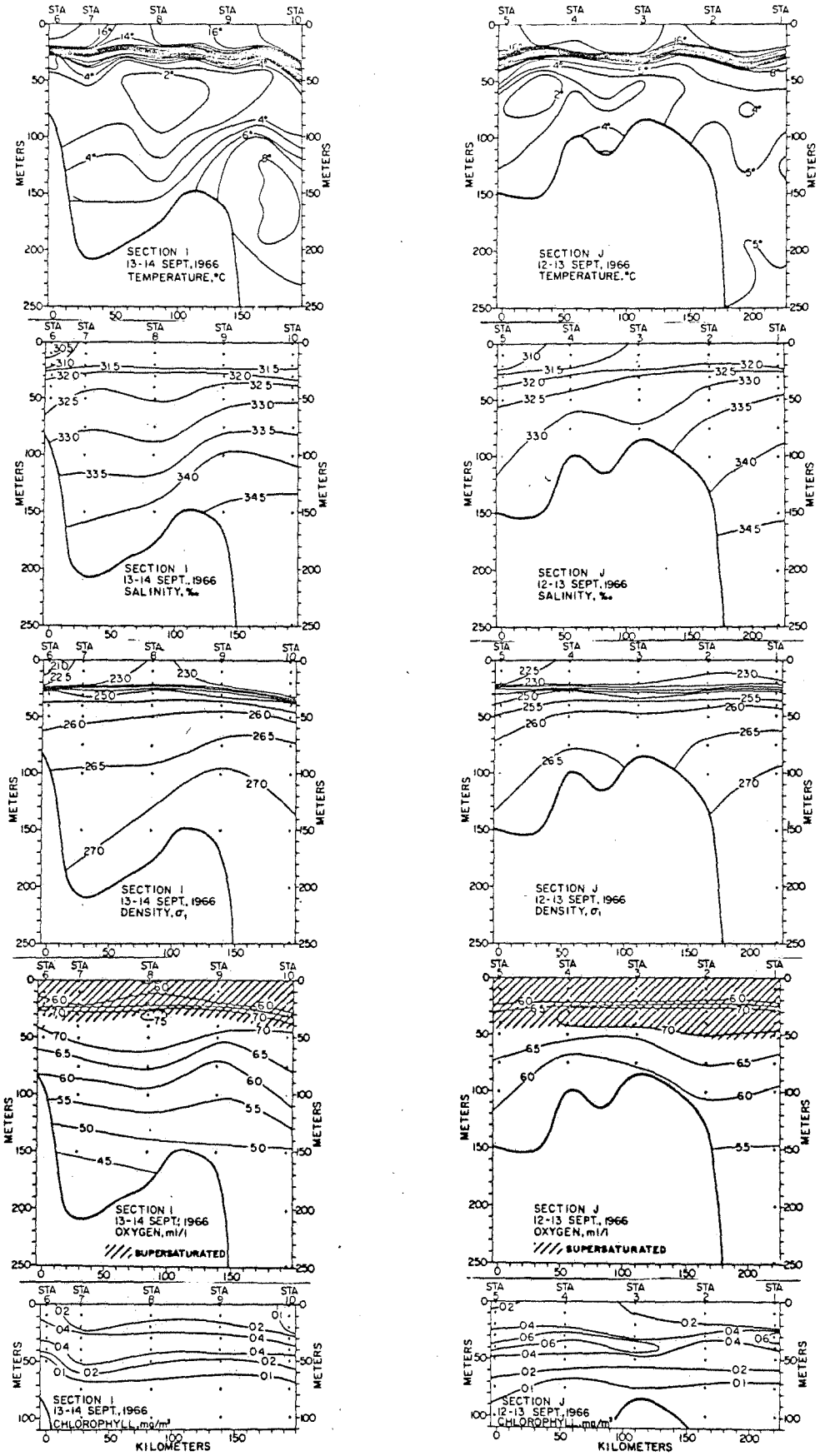

SECTION I
13-14 SEPT, 1966
TEMPERATURE, °C
SECTION J
12-13 SEPT, 1966
TEMPERATURE, °C
SECTION I
13-14 SEPT., 1966
SALINITY, ‰
SECTION J
12-13 SEPT, 1966
SALINITY, ‰
SECTION I
13-14 SEPT, 1966
DENSITY, σ_t
SECTION J
12-13 SEPT, 1966
DENSITY, σ_t
SECTION I
13-14 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION J
12-13 SEPT, 1966
OXYGEN, ml/l
SUPERSATURATED
SECTION I
13-14 SEPT, 1966
CHLOROPHYLL, mg/m³
SECTION J
12-13 SEPT, 1966
CHLOROPHYLL, mg/m³
METERS
KILOMETERS
STA 1
STA 2
STA 3
STA 4
STA 5
STA 6
STA 7
STA 8
STA 9
STA 10

FIGURE 10

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
1	13-IX-66	0530	42°30'	62°30'	1	17.1	31.62	5.58	0.15				
					10	17.0	31.62	5.58	0.15				
					20	17.0	31.71	5.62	0.15				
					30	11.0	32.90	7.06	0.66				
					40	8.1	33.22	7.24	0.41				
					50	6.0	33.52	6.86	0.24				
					75	4.8	33.83	6.30	0.07				
					100	4.3	34.09	5.97	0.02				
					150	5.1	34.47	5.49					
					200	5.1	34.63	5.35					
					250	4.5	34.64	5.75					
					BOTTOM								
2	13-IX-66	0845	43°00'	62°30'	1	17.9	31.86	5.70	0.14				
					10	17.9	31.85	5.70	0.13				
					20	17.0	32.02	6.00	0.20				
					30	10.0	32.89	7.35	0.45				
					40	6.7	33.09	7.33	0.24				
					50	5.2	33.34	7.01	0.27				
					75	4.3	33.57	6.58	0.07				
					100	5.5	33.85	6.18	0.06				
					150								
					200								
					250								
				(130 m)	BOTTOM	5.8							
3	13-IX-66	1145	43°30'	62°30'	1	17.2	31.53	5.59	0.18				
					10	17.2	31.53	5.60	0.20				
					20	17.1	31.74	5.97	0.24				
					30	13.0	32.55	7.24	0.28				
					40	5.1	32.58	7.33	0.72				
					50	3.4	32.74	6.62	0.23				
					75	3.1	33.02	6.03	0.10				
					100								
					150								
					200								
					250								
				(84 m)	BOTTOM	3.1							
4	13-IX-66	1440	44°00'	62°30'	1	17.0	31.28	5.57	0.26				
					10	17.0	31.27	5.57	0.25				
					20	17.0	31.27	5.57	0.30				
					30	6.7	32.24	7.28	0.60				
					40	4.0	32.47	7.24	0.52				
					50	3.0	32.69	6.70	0.35				
					75	3.9	33.33	5.62	0.02				
					100								
					150								
					200								
					250								
				(99 m)	BOTTOM	3.9							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
5	13-IX-66	1735	44°30'	62°30'	1	16.9	30.53	5.59	0.18	
					10	16.8	30.50	5.63	0.23	
					20	16.8	30.52	5.58	0.30	
					30	11.5	31.88	6.50	0.53	
					40	7.5	32.05	6.70	0.60	
					50	4.9	32.42	6.66	0.39	
					75	2.0	32.68	6.47	0.13	
					100	2.0	32.88	6.25	0.07	
					150					
					200					
					250					
				(149m)	BOTTOM	4.0				
6	13-IX-66	2120	44°15'	63°30'	1	17.1	30.35	5.81	0.22	
					10	17.1	30.34	5.81	0.28	
					20	16.3	30.81	6.06	0.50	
					30	4.3	31.94	7.18	0.43	
					40	4.2	32.20	7.11	0.28	
					50	2.2	32.38	6.77	0.12	
					75	2.1				
					100					
					150					
					200					
					250					
				(90m)	BOTTOM	2.1				
7	13-IX-66	2245	44°00'	63°30	1	16.9	31.26	5.81	0.13	
					10	16.8	31.25	5.83	0.17	
					20	16.7	31.25	5.85	0.16	
					30	8.0	32.01	7.14	0.49	
					40	5.0	32.44	7.48	0.53	
					50	3.7	32.61	7.20	0.41	
					75	2.5	32.95	6.39	0.04	
					100	3.1	33.30	5.61	0.03	
					150	4.7	33.98	4.51		
					200	5.8				
					250					
				(209m)	BOTTOM	5.8				
8	14-IX-66	0125	43°30'	63°30'	1	15.1	31.21	6.01	0.20	
					10	15.1	31.21	5.98	0.17	
					20	15.0	31.26	6.14	0.26	
					30	7.0	32.01	7.61	0.55	
					40	3.0	32.29	7.37	0.47	
					50	1.9	32.47	7.20	0.23	
					75	1.3	32.76	6.72	0.03	
					100	2.1	33.20	5.88	0.02	
					150	4.7	34.05	4.86		
					200					
					250					
				(179m)	BOTTOM	5.2				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
9	14·IX·66	0430	43°00'	63°30'	1	16.7	31.25	5.74	0.16	
					10	16.8	31.24	5.73	0.13	
					20	16.8	31.34	6.00	0.25	
					30	11.0	32.18	7.41	0.47	
					40	4.4	32.54	7.43	0.52	
					50	2.5	32.84	6.75	0.18	
					75	2.9	33.36	5.78	0.02	
					100	4.6	34.11	5.65	0.02	
					150	7.2	34.57	4.90		
					200					
					250					
				(165 m)	BOTTOM	7.1				
10	14·IX·66	0700	42°30'	63°30'	1	17.7	31.46	5.60	0.09	
					10	17.8	31.45	5.62	0.09	
					20	17.8	31.45	5.73	0.09	
					30	17.7	31.69	6.16	0.28	
					40	9.0	32.54	7.28	0.54	
					50	5.8	32.93	6.89	0.24	
					75	3.2	33.33	6.53	0.05	
					100	4.1	33.75	6.32	0.03	
					150	8.0	34.71	4.93		
					200	7.2	34.80	4.57		
					250	6.3	34.78	4.65		
					BOTTOM					
11	14·IX·66	1155	42°00'	64°30'	1	17.9	32.05	5.60	0.13	
					10	17.9	32.04	5.63	0.13	
					20	17.9	32.18	5.96	0.13	
					30	13.5	32.39	6.86	0.41	
					40	9.0	32.62	7.44	0.43	
					50	6.0	32.84	7.43	0.67	
					75	5.1	33.41	7.15	0.17	
					100	5.7	33.92	6.38	0.02	
					150	7.3	34.72	5.08		
					200	8.0	34.84	4.47		
					250	6.0	34.77	4.59		
					BOTTOM					
12	14·IX·66	1455	42°30'	64°30'	1	15.7	31.48	6.03	0.10	
					10	15.6	31.46	6.00	0.11	
					20	9.9	31.82	6.92	0.52	
					30	5.3	32.45	7.45	0.61	
					40	3.5	32.65	7.45	0.36	
					50	3.0	32.98	7.16	0.18	
					75	3.2	33.41	6.76	0.05	
					100	5.2	33.93	6.15	0.02	
					150	7.1	34.64	5.06		
					200	7.0	34.71	4.83		
					250	6.1	34.74	4.79		
					BOTTOM					

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLORO PHYLL mg./m³	PO_4-P µg.at/l			
13	14-IX-66	1745	43°00'	64°30'	1	16.1	31.56	6.05	0.14				
					10	16.0	31.56	6.12	0.13				
					20	15.1	31.59	6.33	0.17				
					30	4.2	31.82	7.15	0.49				
					40	3.0	32.08	7.44	0.68				
					50	2.6	32.25	7.30	0.26				
					75	2.1	32.45	7.05	0.17				
					100	2.2	32.63	6.78	0.02				
					150								
					200								
					250								
				(127 M)	BOTTOM	3.2							
14	14-IX-66	2045	43°30'	64°30'	1	16.3	30.74	6.09	0.15				
					10	16.2	30.75	6.14	0.15				
					20	14.0	31.52	7.13	0.39				
					30	4.9	32.16	7.44	0.43				
					40	3.9	31.95	7.51	0.22				
					50	3.4	32.23	7.18	0.26				
					75	2.5	32.68	6.84	0.07				
					100								
					150								
					200								
					250								
				(93 m)	BOTTOM	2.5							
15	14-IX-66	2340	44°00'	64°30'	1	16.6	30.72	6.00	0.23				
					10	16.6	30.74	6.02	0.28				
					20	16.4	30.73	5.96	0.36				
					30	9.1	31.47	6.86	0.33				
					40	4.7	31.98	7.06	0.20				
					50	3.0	32.17	7.08	0.22				
					75								
					100								
					150								
					200								
					250								
				(59 m)	BOTTOM	2.8							
16	15-IX-66	0505	43°15'	65°30'	1	14.5	31.30	6.30	0.29				
					10	12.2	31.42	6.56	0.37				
					20	11.1	31.47	6.65	0.28				
					30	3.9	32.20	7.17	0.26				
					40	2.5	32.29	7.15	0.28				
					50	2.1	32.36	6.95	0.23				
					75								
					100								
					150								
					200								
					250								
				(73 M)	BOTTOM	2.1							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
17	15-IX-66	0645	43°00'	65°30'	1	13.3	31.75	6.46	0.17				
					10	12.9	31.75	6.44	0.20				
					20	12.8	31.78	6.59	0.18				
					30	12.1	31.79	6.69	0.24				
					40	7.0	31.79	6.75	0.25				
					50	3.8	31.80	6.69	0.26				
					75	2.3	32.23	7.06	0.28				
					100	2.4	32.61	6.64	0.09				
					150								
					200								
					250								
				(118 m)	BOTTOM	2.7							
18	15-IX-66	0930	42°30'	65°30'	1	11.0	32.11	6.77	0.34				
					10	10.9	32.11	6.84	0.39				
					20	10.0	32.17	6.97	0.25				
					30	6.9	32.50	6.91	0.15				
					40	5.1	32.64	6.74	0.26				
					50	5.0	32.65	6.76	0.33				
					75	5.0	32.62	6.61	0.35				
					100	4.8	32.62	6.72	0.31				
					150								
					200								
					250								
				(101 m)	BOTTOM	4.8							
19	15-IX-66	1230	42°00'	65°30'	1	17.1	31.84	5.70	0.11				
					10	17.1	31.84	5.72	0.09				
					20	17.0	31.78	6.05	0.17				
					30	14.5	32.29	6.70	0.43				
					40	9.1	32.69	7.29	0.66				
					50	7.8	32.83	7.34	1.03				
					75	5.2	33.40	6.74	0.26				
					100	4.0	33.55	6.68	0.08				
					150	5.2	33.95	6.34					
					200	7.0	34.34	5.76					
					250	7.2	34.72	4.83					
					BOTTOM								
20	15-IX-66	1435	41°45'	65°30'	1	15.6	31.98	6.12	0.17				
					10	15.6	31.97	6.06	0.16				
					20	12.7	32.09	6.38	0.50				
					30	8.8	32.43	6.93	0.83				
					40	7.2	32.26	6.97	0.50				
					50	6.2	32.68	7.09	0.43				
					75	5.9	32.92	6.91	0.19				
					100	6.1	33.73	6.08	0.05				
					150	6.9	34.46	5.49					
					200	7.1	34.82	4.48					
					250	6.3	34.82	4.50					
					BOTTOM								

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
21	15-IX-66	1635	41°30'	65°30'	1	15.6	31.90	6.00	0.19				
					10	15.7	—		—				
					20	15.2	—		—				
					30	12.1	32.02	6.26	0.26				
					40	9.5	32.20	6.71	0.84				
					50	8.0	32.34	6.78	0.73				
					75	5.9	32.99	6.68	0.21				
					100	5.9	33.25	6.40	0.11				
					150	6.9	33.94	5.90					
					200	6.8	34.70	4.95					
					250	6.0	34.78	4.68					
					BOTTOM								
22	16-IX-66	0015	41°00'	65°30'	1	15.9	31.99	6.38	0.20				
					10	15.9	31.99	6.36	0.26				
					20	15.8	32.13	6.46	0.37				
					30	10.0	32.47	6.84	0.46				
					40	7.3	32.97	6.52	0.15				
					50	5.6	33.53	6.43	0.07				
					75	6.2	33.86	6.29	0.03				
					100	7.2	34.34	5.82	0.02				
					150	9.7	35.08	4.38					
					200	8.5	34.94	4.30					
					250	7.1	34.89	4.45					
					BOTTOM								
23	16-IX-66	0840	40°00'	66°30'	1	18.8	32.27	5.74	0.08				
					10	18.9	32.38	5.76	0.09				
					20	18.9	32.90	5.72	0.09				
					30	17.3	32.78	6.61	0.39				
					40	10.0	32.99	7.09	1.46				
					50	7.7	33.25	6.81	0.19				
					75	6.1	33.85	6.11	0.05				
					100	7.1	34.28	5.69	0.02				
					150	8.8	34.82	5.02					
					200	8.5	34.95	4.42					
					250	7.8	34.93	4.18					
					BOTTOM								
24	16-IX-66	1200	40°30'	66°30'	1	18.6	32.12	5.60	0.09				
					10	18.6	32.11	5.57	0.09				
					20	17.4	32.20	5.81	0.12				
					30	11.7	32.68	7.00	0.59				
					40	9.1	32.90	7.08	1.95				
					50	7.0	32.97	7.00	1.02				
					75	7.1	33.66	6.73	0.08				
					100	7.8	33.89	6.44	0.05				
					150	8.1	34.84	4.93					
					200	7.2	34.96	4.21					
					250	6.2	34.88	4.46					
					BOTTOM								

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
25	16-IX-66	1345	40°45'	66°30'	1	18.9	32.72	5.51	0.09				
					10	18.9	32.72	5.56	0.09				
					20	18.9	32.81	5.61	0.14				
					30	13.0	32.82	6.80	0.53				
					40	8.1	32.94	7.12	3.19				
					50	6.9	33.11	7.03	0.35				
					75	6.3	33.70	6.56	0.08				
					100	7.5	34.38	5.76	0.03				
					150	9.1	34.94	4.84					
					200	8.0	34.93	4.34					
					250	7.9	34.99	3.97					
					BOTTOM								
26	16-IX-66	1525	41°00'	66°29'	1	16.9	32.10	5.78	0.29				
					10	16.9	32.09	5.78	0.33				
					20	13.9	32.31	6.52	0.65				
					30	9.5	32.49	6.69	0.43				
					40	7.0	32.76	6.39	0.24				
					50	6.1	32.97	6.19	0.13				
					75	5.2	33.39	6.00	0.09				
					100	6.8	34.17	5.79	0.03				
					150	9.5	34.90	5.08					
					200	8.2	34.90	4.32					
					250	7.6	34.96	3.92					
					BOTTOM								
27	16-IX-66	1820	41°30'	66°30'	1	14.3	32.23	6.23	1.17				
					10	14.0	32.24	6.29	1.01				
					20	12.0	32.37	6.16	0.40				
					30	9.0	32.57	6.19	0.21				
					40	7.9	32.59	6.20	0.15				
					50	7.9	32.59	6.10	0.28				
					75	7.8	32.59	6.10	0.27				
					100								
					150								
					200								
					250								
				(98 M)	BOTTOM	7.7							
28	16-IX-66	2125	42°00'	66°30'	1	12.3	32.29	6.19	0.53				
					10	11.9	32.32	6.11	0.61				
					20	11.7	32.35	6.01	0.44				
					30	11.1	32.38	6.06	0.41				
					40	10.2	32.43	6.04	0.37				
					50	10.0	32.46	6.06	0.35				
					75	9.8	32.47	6.08	0.31				
					100								
					150								
					200								
					250								
				(84M)	BOTTOM	9.8							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
29	16-IX-66	2315	42°15'	66°30'	1	14.2	32.12	6.24	0.65				
					10	14.1	32.12	6.34	0.75				
					20	13.3	32.17	6.27	0.68				
					30	10.0	32.52	6.43	0.44				
					40	7.4	32.55	6.52	0.39				
					50	6.9	32.61	6.41	0.27				
					75	5.1	33.02	6.17	0.07				
					100	6.0	33.73	5.95	0.07				
					150	7.0	34.57	5.19					
					200	6.5	34.72	5.01					
					250								
				(215M)	BOTTOM	6.8							
30	17-IX-66	0100	42°30'	66°30'	1	12.9	32.02	6.52	0.47				
					10	12.8	32.01	6.49	0.48				
					20	12.6	32.10	6.61	0.60				
					30	11.2	32.32	6.89	0.45				
					40	8.8	32.37	6.90	0.45				
					50	8.7	32.39	6.89	0.31				
					75	6.5	32.86	6.54	0.23				
					100	5.9	33.46	6.07	0.07				
					150	7.3	34.66	4.93					
					200	6.5	34.76	4.97					
					250	6.6	34.76	4.90					
					BOTTOM								
31	17-IX-66	0415	43°00'	66°30'	1	10.7	32.31	6.65	0.49				
					10	10.0	32.30	6.62	0.55				
					20	9.7	32.34	6.62	0.47				
					30	9.3	32.38	6.64	0.40				
					40	9.0	32.40	6.58	0.37				
					50	8.8	32.39	6.73	0.45				
					75	7.8	32.50	6.66	0.39				
					100	6.9	33.02	6.33	0.25				
					150								
					200								
					250								
				(123M)	BOTTOM	6.5							
32	17-IX-66	0705	43°30'	66°30'	1	9.1	32.54	6.78	0.32				
					10	8.9	32.52	6.79	0.32				
					20	8.8	32.49	6.94	0.40				
					30	8.8	32.50	6.94	0.36				
					40	8.6	32.52	6.91	0.30				
					50	8.2	32.55	6.78	0.24				
					75	7.9	32.70	6.65	0.22				
					100	7.9							
					150								
					200								
					250								
				(123M)	BOTTOM	7.4							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
33	17-IX-66	0945	44°00'	66°30'	1	8.6	32.55	6.78	0.42				
					10	8.4	32.56	6.72	0.39				
					20	8.4	32.57	6.72	0.41				
					30	8.5	32.59	6.73	0.34				
					40	8.6	32.58	6.72	0.36				
					50	8.6	32.58	6.72	0.34				
					75	8.5	32.60	6.67	0.57				
					100								
					150								
					200								
					250								
				(96M)	BOTTOM	8.5							
34	17-IX-66	1315	44°30'	66°30'	1	10.1	32.35	6.43	0.66				
					10	10.0	32.38	6.29	0.49				
					20	9.9	32.46	6.29	0.43				
					30	8.9	32.57	6.12	0.62				
					40	8.1	32.74	6.13	0.49				
					50	8.0	32.75	6.07	0.49				
					75	7.4	32.88	5.91	0.28				
					100	6.8	33.06	5.86	0.10				
					150	6.8	33.12	5.71					
					200								
					250								
				(165M)	BOTTOM	6.8							
35	17-IX-66	1715	44°38'	67°30'	1	10.4	32.38	6.41	0.29				
					10	9.8	32.39	6.36	0.43				
					20	9.7	32.43	6.25	0.43				
					30	9.7	32.44	6.25	0.42				
					40	9.5	32.45	6.20	—				
					50	9.3	32.47	6.18	0.38				
					75								
					100								
					150								
					200								
					250								
				(64 m)	BOTTOM	9.2							
36	17-IX-66	2050	44°00'	67°30'	1	12.9	32.45	6.60	0.65				
					10	12.8	32.46	6.65	0.58				
					20	11.6	32.55	6.51	0.33				
					30	9.8	32.80	6.30	0.37				
					40	9.1	32.95	6.15	0.31				
					50	8.4	33.11	5.97	0.16				
					75	7.2	33.20	5.76	0.11				
					100	6.0	33.21	5.59	0.09				
					150	6.0	33.64	5.28					
					200	7.0	33.97	5.19					
					250								
				(215M)	BOTTOM	7.1							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
37	17-IX-66	2240	43°29'	67°30'	1	13.2	32.43	6.57	0.45	
					10	12.9	32.47	6.58	0.73	
					20	11.8	32.57	6.53	0.28	
					30	9.3	32.82	6.48	0.09	
					40	7.9	33.04	6.32	0.12	
					50	7.1	33.18	6.09	0.06	
					75	6.8	33.52	5.75	0.02	
					100	6.9	33.76	5.43	0.02	
					150	6.8	34.04	5.23		
					200	7.1	34.24	5.05		
					250					
				(222M)	BOTTOM	7.2				
38	18-IX-66	0115	43°00'	67°30'	1	13.5	32.34	6.47	0.63	
					10	13.3	32.38	6.41	0.87	
					20	13.0	32.46	6.40	0.63	
					30	12.3	32.63	6.40	0.37	
					40	12.1	32.82	6.30	0.35	
					50	10.2	32.93	6.27	0.24	
					75	8.3	33.17	6.08	0.13	
					100	7.0	33.41	5.71	0.07	
					150	6.7	33.91	5.44		
					200	7.1	34.32	5.12		
					250					
				(205M)	BOTTOM	7.1				
39	18-IX-66	0415	42°30'	67°30'	1	15.5	32.02	6.25	0.45	
					10	14.9	32.08	6.32	1.15	
					20	14.4	32.10	6.26	1.12	
					30	8.0	32.27	6.38	0.49	
					40	6.5	32.42	6.47	0.27	
					50	5.2	32.52	6.39	0.20	
					75	4.9	32.70	6.16	0.08	
					100	5.2	33.00	5.87	0.05	
					150	6.5	33.90	5.47		
					200	7.2	34.32	5.19		
					250	7.8	34.69	4.85		
					BOTTOM					
40	18-IX-66	0740	42°00'	67°30'	1	14.3	32.25	6.33	1.31	
					10	13.9	32.25	6.42	2.10	
					20	10.0	32.30	5.85	0.68	
					30	9.0	32.36	5.95	0.28	
					40	8.2	32.41	6.05	0.31	
					50	7.0	32.45	6.08	0.24	
					75	4.6	32.53	6.23	0.17	
					100	4.0	32.58	6.29	0.07	
					150	4.2	33.10	6.02		
					200	5.7	34.05	5.35		
					250					
				(239M)	BOTTOM	6.9				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
41	18 IX 66	0740	42° 00'	67°30'	1	13.8	32.32	5.86	0.86				
					10	13.6	32.31	5.84	0.90				
					20	13.5	32.31	5.80	0.83				
					30	13.4	32.33	5.92	0.87				
					40	13.2	32.33	5.92	0.73				
					50								
					75								
					100								
					150								
					200								
					250								
				(46 M)	BOTTOM	13.2							
42	18 IX 66	1030	41° 30'	67°30'	1	16.1	32.30	5.76	1.14				
					10	16.1	32.30	5.69	1.12				
					20	16.1	32.30	5.65	1.38				
					30	16.1	32.30	5.68	1.36				
					40	16.1	32.30	5.74	1.65				
					50								
					75								
					100								
					150								
					200								
					250								
				(42 M)	BOTTOM	16.1							
43	18 IX 66	1230	41° 00'	67°29'	1	14.9	32.24	6.16	1.87				
					10	13.6	32.28	6.07	1.55				
					20	13.3	32.32	5.84	1.04				
					30	13.2	32.32	5.81	.63				
					40	13.1	32.32	5.86	.56				
					50	13.1	32.32	5.81	.54				
					75								
					100								
					150								
					200								
					250								
				(69 M)	BOTTOM	13.1							
44	18 IX 66	1510	40° 30'	67°30'	1	16.9	32.17	5.80	0.23				
					10	16.9	32.17	5.77	0.30				
					20	14.5	32.25	6.06	0.43				
					30	11.7	32.43	6.54	0.93				
					40	10.5	32.53	6.58	1.46				
					50	9.3	32.68	6.73	1.46				
					75	6.1	33.24	6.06	0.12				
					100	7.0	33.31	5.99	0.11				
					150								
					200								
					250								
					BOTTOM								

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
45	18 IX 66	1630	40°15'	67°30'	1	18.2	32.51	5.63	0.13				
					10	20.0	33.38	5.45	0.13				
					20	20.7	34.03	5.24	0.15				
					30	20.9	34.27	5.13	0.16				
					40	18.8	33.97	5.70	0.55				
					50	12.0	32.94	6.63	0.58				
					75	6.3	33.46	6.04	0.11				
					100	7.1	33.99	5.58	0.03				
					150	7.5	34.56	5.03					
					200	8.0	34.87	4.50					
					250	6.3	34.89	4.57					
					BOTTOM								
46	18 IX 66	1815	40°00'	67°30'	1	22.6	34.93	4.90	0.09				
					10	22.5	34.93	4.98	0.09				
					20	22.5	34.93	4.94	0.09				
					30	22.4	34.93	4.95	0.11				
					40	20.9	35.20	5.42	0.30				
					50	11.0	33.73	6.05	0.45				
					75	11.9	35.17	4.71	0.05				
					100	13.0	35.40	4.10	0.03				
					150	11.8	35.42	3.70					
					200	10.9	35.19	3.63					
					250	9.4	35.13	3.46					
					BOTTOM								
47	18 IX 66	2115	39°30'	67°30'	1	23.9	34.82	4.91	0.07				
					10	23.9	34.81	4.97	0.07				
					20	22.9	34.65	5.05	0.09				
					30	18.7	35.39	5.61	0.28				
					40	16.5	35.80	4.58	0.19				
					50	15.0	35.39	4.81	0.17				
					75	14.6	35.60	4.38	0.05				
					100	14.2	35.84	3.65	0.00				
					150	12.0	35.42	3.72					
					200	10.3	35.24	3.44					
					250	9.0	35.48	3.71					
					BOTTOM								
48	19 IX 66	0120	39°30'	68°30'	1	21.9	34.29	5.25	0.09				
					10	21.8	34.30	5.26	0.08				
					20	21.7	34.30	5.26	0.08				
					30	21.0	34.77	5.48	0.07				
					40	14.5	34.56	6.31	0.55				
					50	14.2	35.30	5.20	0.31				
					75	12.9	35.19	4.89	0.08				
					100	12.0	35.32	4.42	0.02				
					150	11.2	35.39	3.98					
					200	9.3	35.19	3.79					
					250	8.1	35.11	3.85					
					BOTTOM								

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
49	19 IX 66	0425	40°00'	68°30'	1	22.0	34.70	5.22	0.09				
					10	21.9	34.67	5.07	0.09				
					20	21.8	34.67	5.17	0.08				
					30	21.2	34.71	5.10	0.09				
					40	18.5	35.13	5.59	0.30				
					50	16.9	35.61	5.23	0.51				
					75	15.0	35.48	4.60	0.18				
					100	13.7	35.49	4.31	0.09				
					150	11.1	35.30	4.20					
					200	10.2	35.23	3.76					
					250	8.8	35.10	3.77					
					BOTTOM								
50	19 IX 66	0620	40°15'	68°30'	1	16.2	32.16	6.19	0.26				
					10	15.9	32.16	6.19	0.24				
					20	14.3	32.21	6.32	0.41				
					30	13.5	32.26	6.29	0.85				
					40	10.0	32.37	6.15	0.55				
					50	9.0	32.49	6.05	0.22				
					75	7.2	32.71	6.10	0.16				
					100	7.1	33.62	5.92	0.07				
					150	8.2							
					200								
					250								
				(152m)	BOTTOM	8.2							
51	19 IX 66	0750	40°30'	68°30'	1	16.2	32.17	6.08	0.23				
					10	16.0	32.17	6.15	0.40				
					20	15.1	32.25	6.24	0.73				
					30	10.0	32.48	6.06	0.29				
					40	9.9	32.51	6.06	0.23				
					50	9.8	32.52	6.03	0.22				
					75	9.8	32.53	5.89	0.24				
					100								
					150								
					200								
					250								
				(76M)	BOTTOM	9.7							
52	19 IX 66	1030	41°00'	68°30'	1	15.3	32.27	6.18	1.34				
					10	15.3	32.27	6.01	1.42				
					20	15.3	32.27	5.97	1.34				
					30	15.3	32.27	5.86	1.52				
					40	15.2	32.27	6.02	1.38				
					50	15.2	32.27	5.86	—				
					75								
					100								
					150								
					200								
					250								
				(53m)	BOTTOM	15.2							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
55	19 IX 66	1335	41°30'	68°30'	1	13.5	32.29	6.27	0.92				
					10	13.2	32.30	6.17	0.68				
					20	12.5	32.29	6.12	0.49				
					30	11.8	32.32	6.16	0.55				
					40	10.0	32.36	6.23	0.57				
					50	7.1	32.45	6.49	0.44				
					75	6.1	32.53	6.39	0.53				
					100								
					150								
					200								
					250								
				(100M)	BOTTOM	6.1							
54	19 IX 66	1510	41°45	68°30'	1	14.3	32.08	6.64	1.07				
					10	10.9	32.21	6.73	1.87				
					20	8.7	32.65	6.40	0.74				
					30	6.1	32.43	6.47	0.27				
					40	5.3	32.50	6.30	0.27				
					50	5.0	32.55	6.37	0.20				
					75	4.0	32.68	6.31	0.16				
					100	3.7	32.86	6.11	0.08				
					150	4.2	33.43	5.63					
					200								
					250								
				(199m)	BOTTOM	5.2							
55	19 IX 66	1650	42°00'	68°30'	1	16.3	31.90	6.06	0.50				
					10	16.1	31.90	6.02	0.50				
					20	16.0	31.90	6.00	0.52				
					30	15.3	31.93	6.14	1.11				
					40	13.1	32.05	6.23	1.27				
					50	9.0	32.18	6.50	0.56				
					75	4.7	32.49	6.79	0.16				
					100	3.3	32.82	6.49	0.04				
					150	4.2	33.43	5.52					
					200								
					250								
				(180m)	BOTTOM	4.9							
56	19 IX 66	1945	42°30'	68°30'	1	17.7	31.88	6.05	0.46				
					10	17.1	31.90	6.25	0.59				
					20	12.0	32.19	6.65	0.66				
					30	8.0	32.43	6.85	0.35				
					40	6.3	32.44	6.87	0.19				
					50	5.7	32.50	6.64	0.11				
					75	4.7	32.64	6.53	0.04				
					100	4.8	32.94	6.26	0.00				
					150	5.7	33.46	5.27					
					200	7.1	34.34	5.18					
					250								
				(221 M)	BOTTOM	7.1							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
57	19 IX 66	2240	43°00'	68°30'	1	14.8	32.65	6.33	0.54	
					10	14.0	32.05	6.36	0.58	
					20	9.5	32.34	6.58	0.47	
					30	7.8	32.54	6.61	0.26	
					40	7.1	32.63	6.54	0.24	
					50	6.3	32.76	6.33	0.14	
					75	5.6	32.92	5.99	0.07	
					100	5.0	33.04	6.08	0.05	
					150	4.6	33.47	5.63		
					200					
					250					
				(164 m)	BOTTOM	5.0				
58	20 IX 66	0155	43°30'	68°30'	1	12.8	32.44	6.42	0.62	
					10	11.5	32.55	6.59	0.52	
					20	9.2	32.74	6.54	0.39	
					30	8.1	32.86	6.22	0.25	
					40	7.3	32.92	6.10	0.20	
					50	7.1	32.98	6.05	0.11	
					75	6.4	33.20	5.68	0.07	
					100	5.1	33.37	5.43		
					150					
					200					
					250					
				(139 m)	BOTTOM	5.1				
59	20 IX 66	0430	44°00'	68°30'	1	10.5	32.39	6.61	0.65	
					10	10.4	32.41	6.57	0.71	
					20	9.9	32.46	6.37	0.40	
					30	9.3	32.50	6.32	0.34	
					40	9.1	32.56	6.36	0.29	
					50	9.1	32.61	6.29	0.26	
					75	9.0				
					100					
					150					
					200					
					250					
				(95 m)	BOTTOM	8.9				
60	20 IX 66	0855	43°30'	69°30'	1	14.7	32.06	6.13	0.33	
					10	14.7	32.07	6.17	0.30	
					20	12.5	32.20	6.59	0.66	
					30	9.2	32.60	6.51	0.38	
					40	8.0	32.69	6.21	0.24	
					50	7.5	32.71	6.09	0.26	
					75	6.4	32.81	5.98	0.15	
					100	5.0	32.83	5.85	0.13	
					150					
					200					
					250					
				(145 m)	BOTTOM	3.9				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
61	20 IX 66	1140	43°00'	69°55'	1	14.6	32.11	6.18	0.54	
					10	14.6	32.10	6.18	0.75	
					20	14.3	32.11	6.18	0.69	
					30	10.9	32.35	6.45	0.93	
					40	8.0	32.52	6.31	0.30	
					50	6.8	32.63	6.26	0.25	
					75	5.2	32.86	5.93	0.09	
					100	4.7	32.99	5.73	0.03	
					150	4.2	33.27	5.23		
					200					
					250					
				(162 m)	BOTTOM	4.2				
62	20 IX 66	1530	43°00'	70°30'	1	14.9	31.77	6.23	0.43	
					10	14.9	31.77	6.17	0.58	
					20	14.9	31.77	6.14	0.50	
					30	13.3	31.95	6.39	1.19	
					40	9.9	32.15	6.24	0.63	
					50	9.0	32.26	6.08	0.26	
					75	7.9	32.37	6.19	0.25	
					100					
					150					
					200					
					250					
				(83 M)	BOTTOM	7.1				
63	20 IX 66	1820	42°30'	70°30'	1	15.2	31.85	6.12	0.43	
					10	15.1	31.84	6.09	0.45	
					20	13.5	31.84	5.96	0.56	
					30	9.1	32.21	6.40	0.56	
					40	8.4	32.31	6.23	0.49	
					50	8.0	32.40	6.05	0.23	
					75	6.8	32.38	5.92	0.16	
					100					
					150					
					200					
					250					
				(84 M)	BOTTOM	6.8				
64	20 IX 66	2102	42°00'	70°30'	1	14.9	31.74	6.25	1.77	
					10	14.9	31.72	6.17	2.17	
					20	12.0	31.85	5.69	1.46	
					30	8.8	32.02	5.95	0.36	
					40	7.2				
					50					
					75					
					100					
					150					
					200					
					250					
				(44 M)	BOTTOM	7.2				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
65	21 IX 66	0220	42°30'	69°30'	1	16.1	31.95	5.97	0.55				
					10	16.0	31.94	5.89	0.43				
					20	12.0	32.15	6.35	1.00				
					30	7.7	32.35	6.68	0.49				
					40	6.0	32.65	6.37	0.19				
					50	4.3	32.55	6.66	0.12				
					75	3.1	32.77	6.30	0.02				
					100	3.6	33.02	5.99	0.00				
					150	4.1	33.53	5.12					
					200	4.8	33.82	4.89					
					250	4.9	33.92	5.07					
					BOTTOM								
66	21 IX 66	0520	42°00'	69°30'	1	16.2	31.80	5.81	0.37				
					10	16.2	31.79	5.92	0.44				
					20	16.0	31.79	5.78	0.39				
					30	9.0	32.12	7.12	0.91				
					40	5.9	32.31	6.90	0.54				
					50	4.0	32.47	6.60	0.20				
					75	3.2	32.74	6.27	0.03				
					100	3.3	32.94	5.95	0.02				
					150	4.2	33.47	5.14					
					200	4.9	33.77	4.46					
					250								
				(215M)	BOTTOM	5.0							
67	21 IX 66	0825	41°30'	69°30'	1	13.5	—	—	0.84				
					10	13.2	31.92	6.12	0.97				
					20	9.0	32.18	6.06	0.27				
					30	8.2	32.23	6.13	0.37				
					40	7.5	32.28	6.15	0.38				
					50	7.3							
					75								
					100								
					150								
					200								
					250								
				51 M	BOTTOM	7.3							
68	21 IX 66	1205	41°00'	69°14'	1	11.3	32.13	6.34	1.46				
					10	11.2	32.13	6.19	1.65				
					20	10.9	32.10	6.21	2.10				
					30	10.9	32.10	6.33	2.19				
					40	10.8	32.11	6.23	1.79				
					50	10.8	32.11	6.20	1.83				
					75								
					100								
					150								
					200								
					250								
				(61 M)	BOTTOM	10.8							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
69	21 IX 66	1515	40°30'	69°30'	1	16.5	32.69	5.74	0.47	
					10	16.8	32.69	5.65	0.45	
					20	16.8	32.69	5.59	0.50	
					30	12.0	32.44	5.75	0.40	
					40	11.0	32.49	5.67	0.43	
					50	10.9	32.48	5.61	0.36	
					75					
					100					
					150					
					200					
					250					
				(61 M)	BOTTOM	10.9				
70	21 IX 66	1930	40°00'	69°30'	1	21.3	34.40	5.04	0.17	
					10	21.3	34.40	5.06	0.18	
					20	21.3	34.41	5.01	0.18	
					30	21.3	34.46	5.10	0.16	
					40	16.0	34.53	5.47	0.61	
					50	13.0	33.86	5.78	0.27	
					75	12.1	34.63	4.86	0.11	
					100	9.9	34.28	4.96	0.06	
					150					
					200					
					250					
				(114 M)	BOTTOM	9.7				
71	21 IX 66	2115	39°45'	69°30'	1	20.1	33.83	5.28	0.16	
					10	20.1	33.82	5.29	0.15	
					20	20.1	33.82	5.19	0.22	
					30	20.0	34.68	5.53	0.26	
					40	17.1	35.05	5.71	0.22	
					50	15.2	35.14	5.26	0.39	
					75	10.5	34.67	4.77	0.03	
					100	10.9	34.97	4.46	0.02	
					150	10.9	35.18	3.89		
					200	9.8	35.14	3.61		
					250	8.1	35.03	3.63		
					BOTTOM					
72	21 IX 66	2300	39°30'	69°30'	1	20.8	34.35	5.20	0.13	
					10	20.8	34.35	5.32	0.14	
					20	20.8	34.35	5.22	0.11	
					30	20.7	34.35	5.22	0.14	
					40	15.5	34.93	6.05	0.35	
					50	13.7	34.88	5.42	0.46	
					75	11.6	34.93	4.75	0.11	
					100	12.2	35.35	4.18	0.00	
					150	11.7	35.36	3.85		
					200	10.1	35.22	3.36		
					250	8.2	35.11	3.52		
					BOTTOM					

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
73	22 IX 66	0335	39°30'	70°30'	1	23.7	35.22	4.96	0.09	
					10	23.7	35.22	4.93	0.13	
					20	23.7	35.23	4.85	0.11	
					30	23.5	35.25	4.83	0.15	
					40	15.0	34.55	5.62	0.65	
					50	15.9	35.75	4.20	0.17	
					75	16.3	—	—	0.02	
					100	14.2	35.85	4.06	0.00	
					150	12.9	35.68	3.85		
					200	9.7	35.14	3.86		
					250	8.6	35.16	3.34		
					BOTTOM					
74	22 IX 66	0515	39°45'	70°30'	1	21.0	34.42	5.17	0.09	
					10	21.0	34.41	5.14	0.14	
					20	20.5	34.41	5.16	0.13	
					30	17.0	34.27	5.38	0.33	
					40	13.0	34.07	5.89	0.83	
					50	11.0	34.12	5.64	0.23	
					75	11.1	34.67	4.82	0.04	
					100	11.0	35.11	4.17	0.02	
					150	10.8	35.18	4.22		
					200	9.8	35.21	3.68		
					250	8.3	35.11	3.54		
					BOTTOM					
75	22 IX 66	0655	40°00'	70°30'	1	20.9	34.41	5.35	0.14	
					10	20.9	34.40	5.32	0.15	
					20	20.9	34.41	5.35	0.16	
					30	17.0	34.28	5.84	0.36	
					40	12.8	34.52	6.24	0.46	
					50	11.0	34.05	5.83	0.17	
					75	13.2	34.94	4.92	0.14	
					100	12.9	35.22	4.64	0.05	
					150	10.9	35.22	4.20		
					200	10.2	35.24	3.88		
					250	8.9	35.15	3.63		
					BOTTOM					
76	22 IX 66	0950	40°30'	70°30'	1	15.7	32.64	6.07	0.62	
					10	15.7	32.62	6.09	0.68	
					20	15.7	32.62	6.02	0.67	
					30	14.9	32.70	6.10	0.54	
					40	11.2	32.66	6.25	0.46	
					50	8.1	32.75	5.91	0.15	
					75					
					100					
					150					
					200					
					250					
				(70 M)	BOTTOM	8.0				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l
77	22 IX 66	1235	41°00'	70°30'	1	16.6	32.24	6.10	0.52	
					10	16.6	32.24	6.05	0.59	
					20	13.8	32.29	5.92	0.31	
					30	13.0	32.31	5.69	0.19	
					40	12.7	32.33	5.47	0.18	
					50					
					75					
					100					
					150					
					200					
					250					
				(47 M)	BOTTOM	12.5				
78	22 IX 66	1735	41°00'	71°30'	1	16.6	32.26	5.74	0.31	
					10	16.6	32.26	5.73	0.28	
					20	16.5	32.26	5.64	0.34	
					30	15.6	32.29	5.70	0.24	
					40	12.4	32.38	5.37	0.44	
					50					
					75					
					100					
					150					
					200					
					250					
				(49 M)	BOTTOM	12.2				
79	22 IX 66	2025	40°30'	71°30'	1	17.2	33.03	5.93	0.34	
					10	17.2	33.16	5.87	0.40	
					20	17.2	33.16	5.87	0.40	
					30	16.8	33.10	5.87	0.31	
					40	9.2	32.59	6.29	0.37	
					50	8.4	32.69	5.86	0.27	
					75					
					100					
					150					
					200					
					250					
				(74 M)	BOTTOM	8.1				
80	22 IX 66	2320	40°00'	71°30'	1	19.3	33.84	5.56	0.17	
					10	19.3	33.83	5.63	0.20	
					20	19.3	33.93	5.52	0.28	
					30	11.0	32.80	6.45	0.37	
					40	7.1	32.94	6.17	0.14	
					50	7.0	33.12	6.09	0.08	
					75	8.5	33.83	5.53	0.10	
					100	10.3				
					150					
					200					
					250					
				(102 M)	BOTTOM	10.3				

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
81	23 IX 66	0055	39°45'	71°30'	1	20.1	33.75	5.40	0.13				
					10	20.1	33.76	5.35	0.15				
					20	20.1	33.79	5.36	0.11				
					30	18.6	33.88	5.63	0.36				
					40	10.3	—	—	—				
					50	9.8	33.42	6.16	0.35				
					75	9.8	34.07	5.58	0.11				
					100	11.1	34.69	5.04	0.05				
					150	10.8	35.05	4.24					
					200	10.0	35.16	3.87					
					250	8.0	35.04	3.83					
					BOTTOM								
82	23 IX 66	0255	39°30'	71°30'	1	20.9	34.23	5.25	0.15				
					10	20.9	34.23	5.35	0.16				
					20	20.8	34.23	5.25	0.21				
					30	19.0	34.07	5.78	0.28				
					40	16.2	34.96	6.13	0.27				
					50	14.8	35.08	5.67	0.50				
					75	12.8	35.26	4.49	0.11				
					100	11.8	35.26	4.33	0.02				
					150	10.6	35.24	4.05					
					200	9.5	35.22	3.62					
					250	8.3	35.11	3.53					
					BOTTOM								
83	23 IX 66	0910	39°00'	72°30	1	20.7	34.32	5.33	0.13				
					10	20.7	34.03	5.34	0.13				
					20	20.7	34.03	5.36	0.13				
					30	20.5	34.03	5.30	0.09				
					40	14.6	34.23	6.40	0.27				
					50	11.8	34.47	6.06	0.36				
					75	10.7	34.69	4.85	0.02				
					100	11.1	35.06	4.65	0.03				
					150	10.3	35.20	4.13					
					200	9.5	35.16	3.67					
					250	8.1	35.09	3.59					
					BOTTOM								
84	23 IX 66	1055	39°15'	72°30'	1	20.2	34.07	5.32	0.09				
					10	20.2	34.06	5.32	0.11				
					20	20.2	34.06	5.26	0.11				
					30	20.2	34.07	5.32	0.13				
					40	20.3	34.17	5.33	0.15				
					50	16.0	34.54	6.04	0.30				
					75	12.5	34.85	5.02	0.09				
					100	11.0	35.01	4.73	0.00				
					150								
					200								
					250								
				(149M)	BOTTOM	10.7							

ALB. IV CRUISE NO. 66-12

STA. NO.	DATE	TIME G.C.T	LOCATION N. LAT	LOCATION W LONG	DEPTH m.	T. °C	S. ‰	O_2 ml/l	CHLOROPHYLL mg./m³	PO_4-P µg.at/l			
85	23 IX 66	1240	39°30'	72°30'	1	19.8	33.60	5.41	0.22				
					10	19.8	33.59	5.36	0.27				
					20	19.1	33.61	5.44	0.27				
					30	13.0	33.42	5.97	0.73				
					40	10.2	33.39	6.13	0.33				
					50	9.2	33.51	5.99	0.23				
					75	10.0	33.97	5.28	0.06				
					100	10.9	34.12	5.23	0.04				
					150								
					200								
					250								
				(112M)	BOTTOM	11.2							
86	23 IX 66	1555	40°00'	72°30'	1	18.1	32.66	5.51	0.42				
					10	18.1	32.65	5.60	0.27				
					20	18.1	32.66	5.51	0.30				
					30	10.7	32.87	5.88	0.52				
					40	9.1	32.84	5.29	0.34				
					50	9.0	32.86	5.29	0.35				
					75								
					100								
					150								
					200								
					250								
				(73 M)	BOTTOM	8.7							
87	23 IX 66	1850	40°30'	72°30'	1	18.9	32.73	5.41	0.48				
					10	18.9	32.73	5.37	0.44				
					20	18.9	32.72	5.36	0.49				
					30	15.0	32.55	5.27	0.59				
					40	11.9	32.50	5.19	0.64				
					50								
					75								
					100								
					150								
					200								
					250								
				(45M)	BOTTOM	11.9							
					1								
					10								
					20								
					30								
					40								
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM								