65-15

ENVIRONMENTAL OBSERVATIONS ON CONTINENTAL SHELF NOVA SCOTIA TO LONG ISLAND, MARCH, 1965

ALBATROSS IV CRUISE 65-3

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

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Introduction

This report lists results obtained during an environmental survey of Continental Shelf waters in an area bounded by longitudes 62°30' W and 72°30' W (Albatross IV Cruise 65-3, 9-22 March 1965). This is the third 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 Figure 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 parameters 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 Figure 2. The surface salinity and density distributions are shown in Figure 3. Vertical profiles of temperature, salinity, dissolved oxygen, chlorophyll, and density for sections A through J are presented in Figures 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.

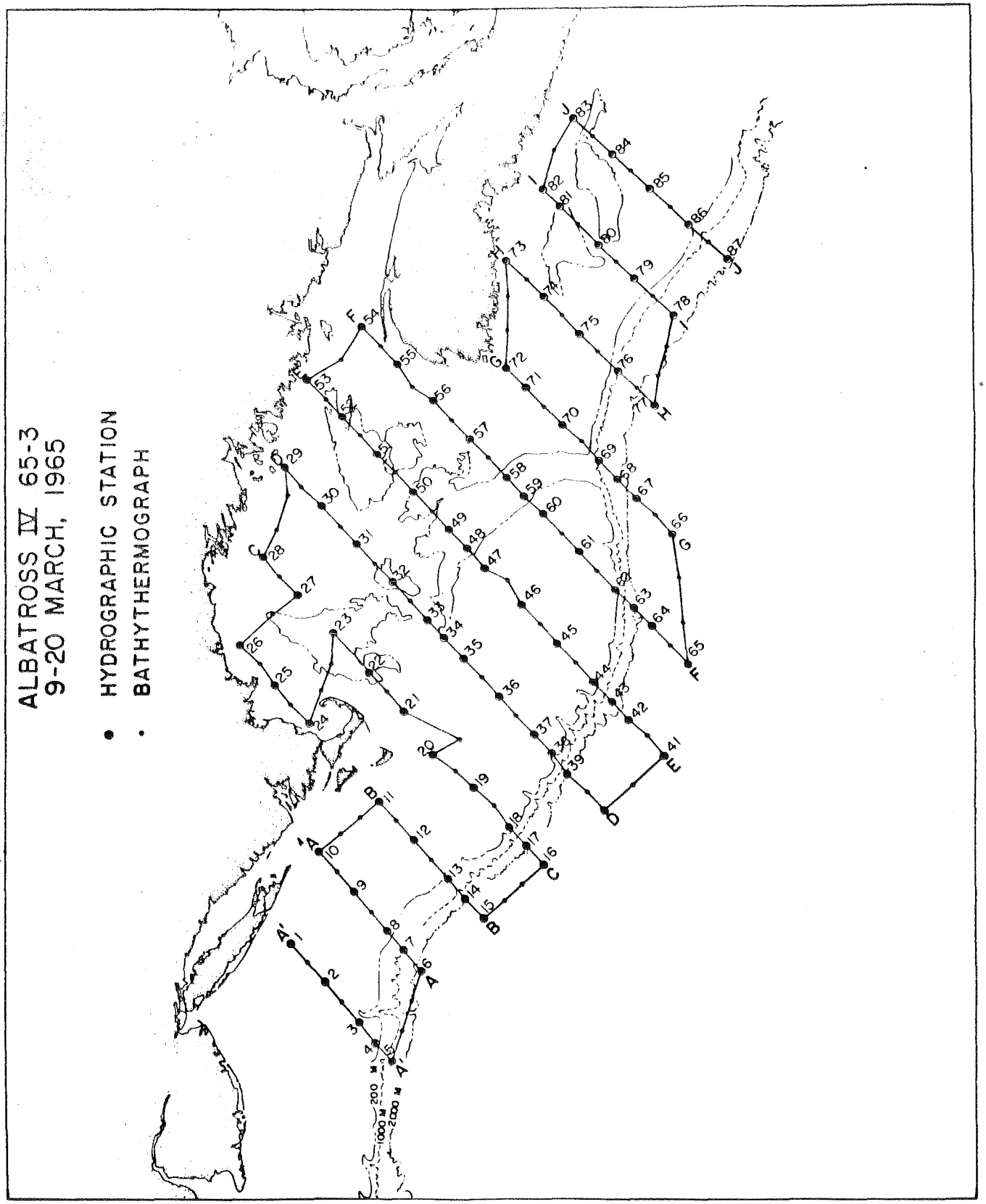
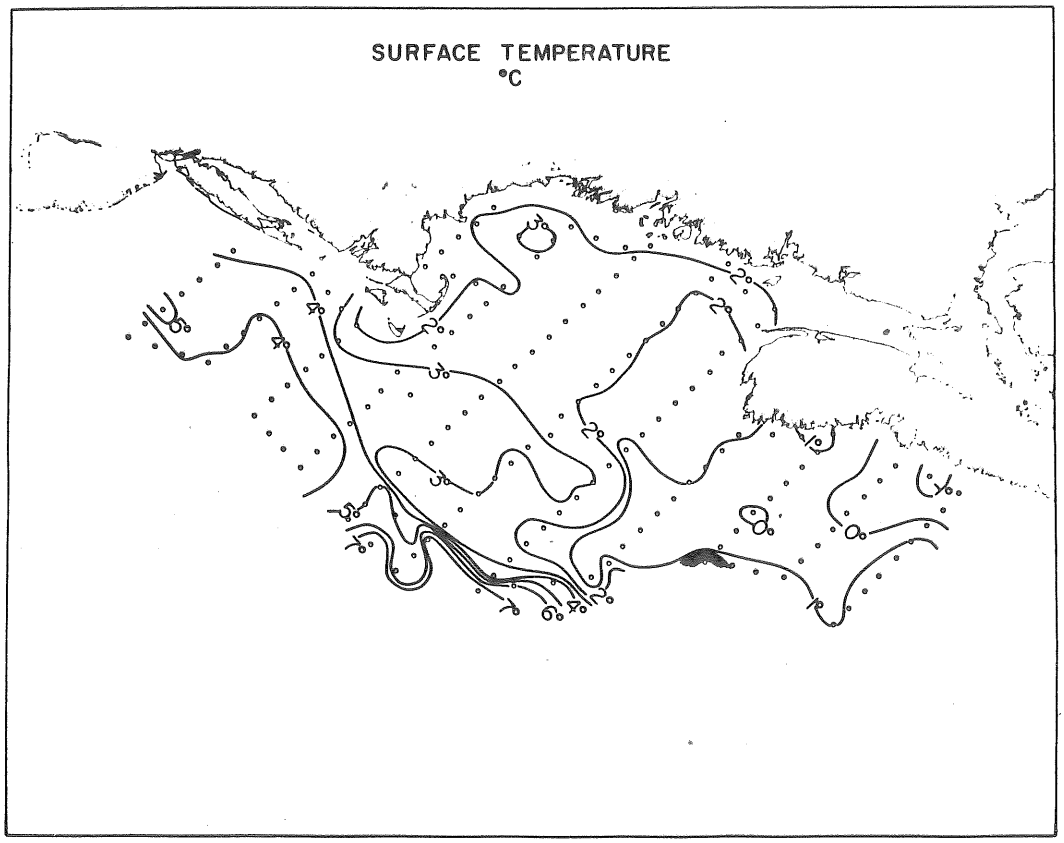

ALBATROSS IV 65-3
9-20 MARCH, 1965
• HYDROGRAPHIC STATION
· BATHYTHERMOGRAPH
200 M
1000 M
2000 M

FIGURE I.



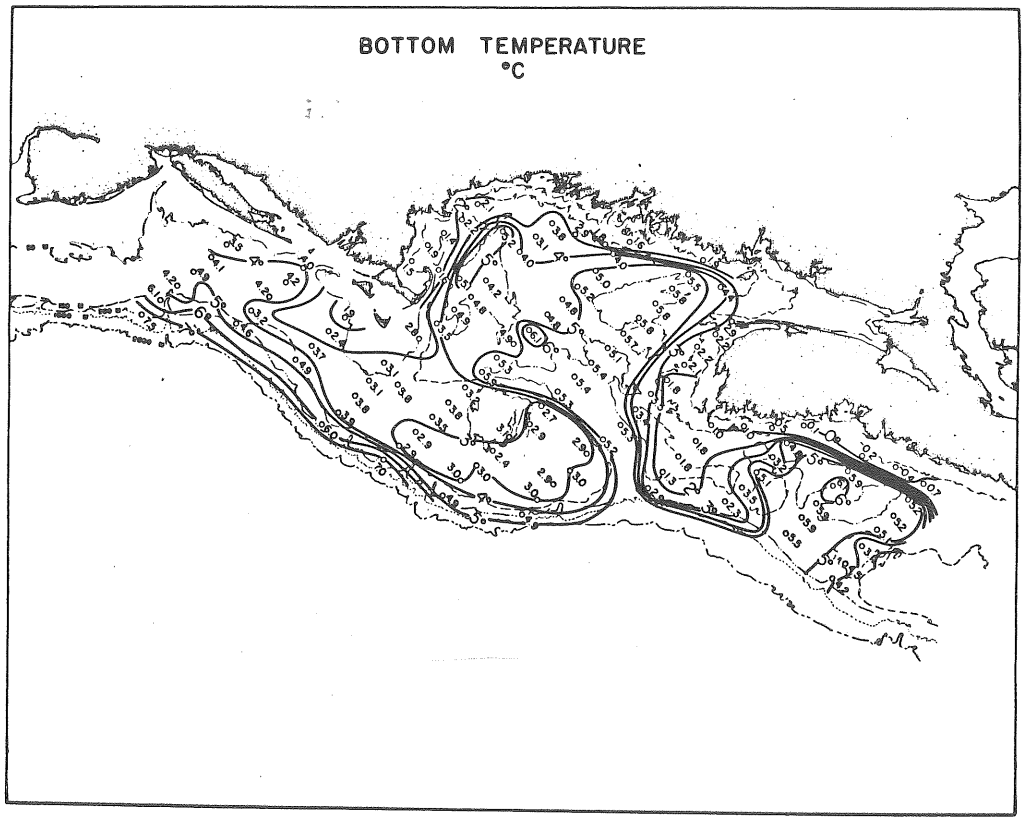
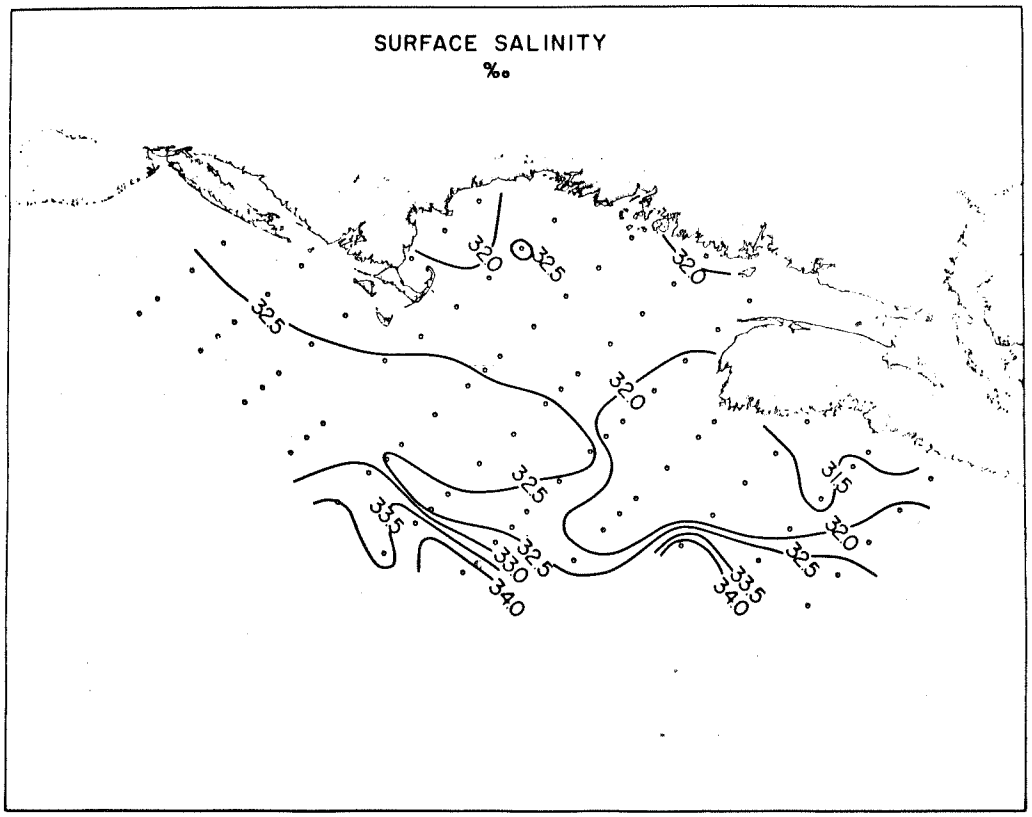


FIGURE 2.


SURFACE SALINITY
‰
32.0
32.5
32.0
32.5
32.0
32.5
33.5
33.0
32.5
34.0
31.5
32.0
32.5
33.5
34.0

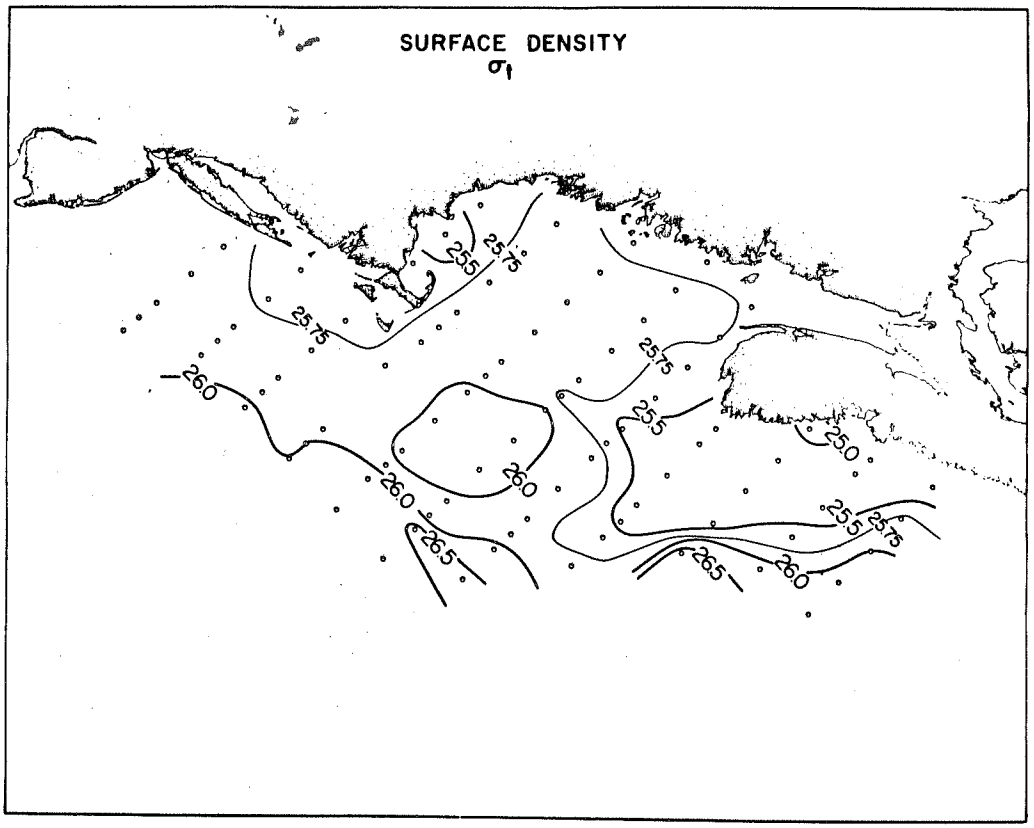

SURFACE DENSITY
σ_t
25.5
25.75
25.75
26.0
26.0
26.0
26.5
25.75
25.5
26.0
25.5
25.75
26.5
26.0

FIGURE 3.

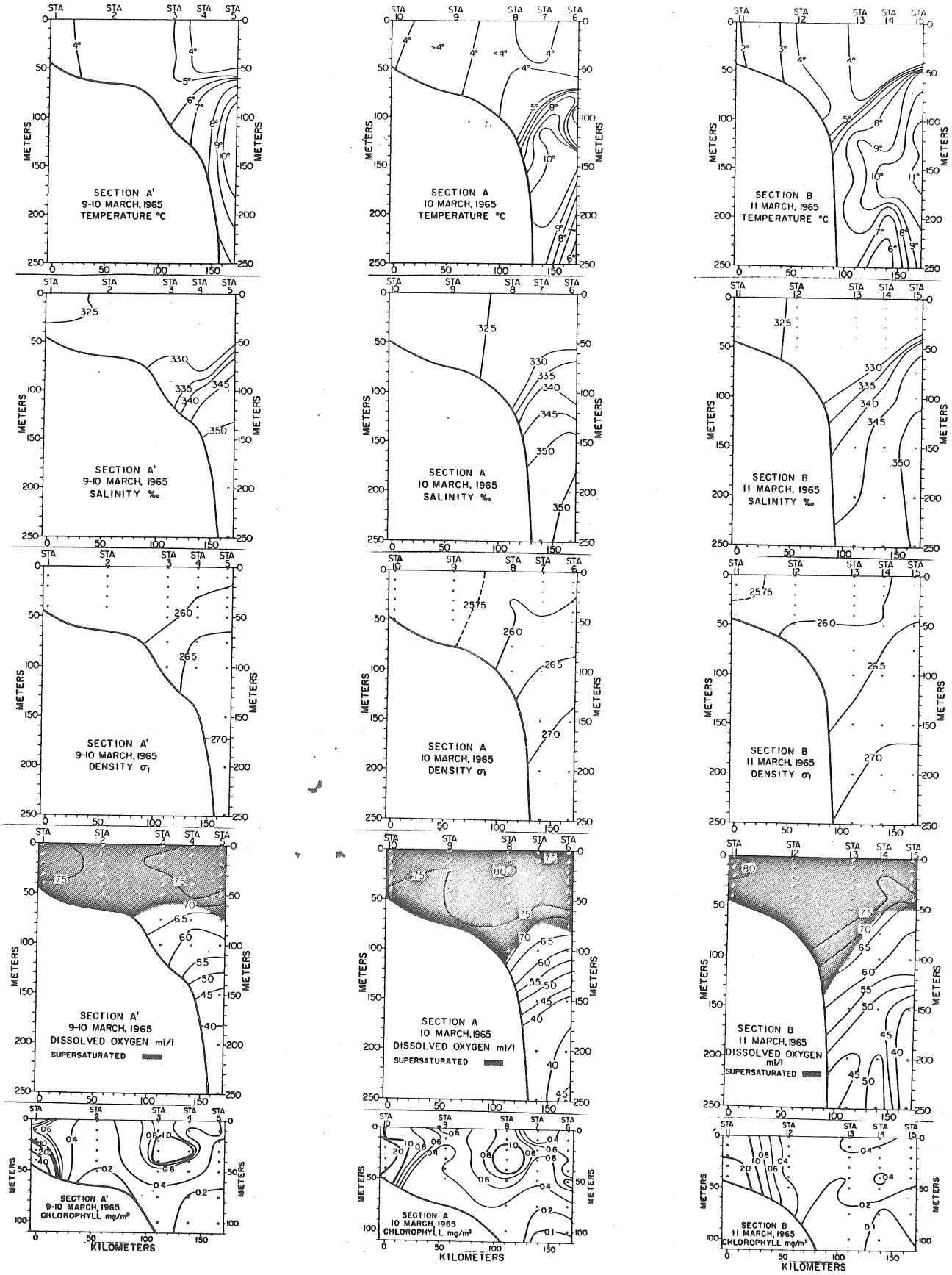

SECTION A'
9-10 MARCH, 1965
TEMPERATURE °C
SECTION A
10 MARCH, 1965
TEMPERATURE °C
SECTION B
11 MARCH, 1965
TEMPERATURE °C
SECTION A'
9-10 MARCH, 1965
SALINITY ‰
SECTION A
10 MARCH, 1965
SALINITY ‰
SECTION B
11 MARCH, 1965
SALINITY ‰
SECTION A'
9-10 MARCH, 1965
DENSITY σt
SECTION A
10 MARCH, 1965
DENSITY σt
SECTION B
11 MARCH, 1965
DENSITY σt
SECTION A'
9-10 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION A
10 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION B
11 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION A'
9-10 MARCH, 1965
CHLOROPHYLL mg/m³
SECTION A
10 MARCH, 1965
CHLOROPHYLL mg/m³
SECTION B
11 MARCH, 1965
CHLOROPHYLL mg/m³
METERS
KILOMETERS

FIGURE 4.

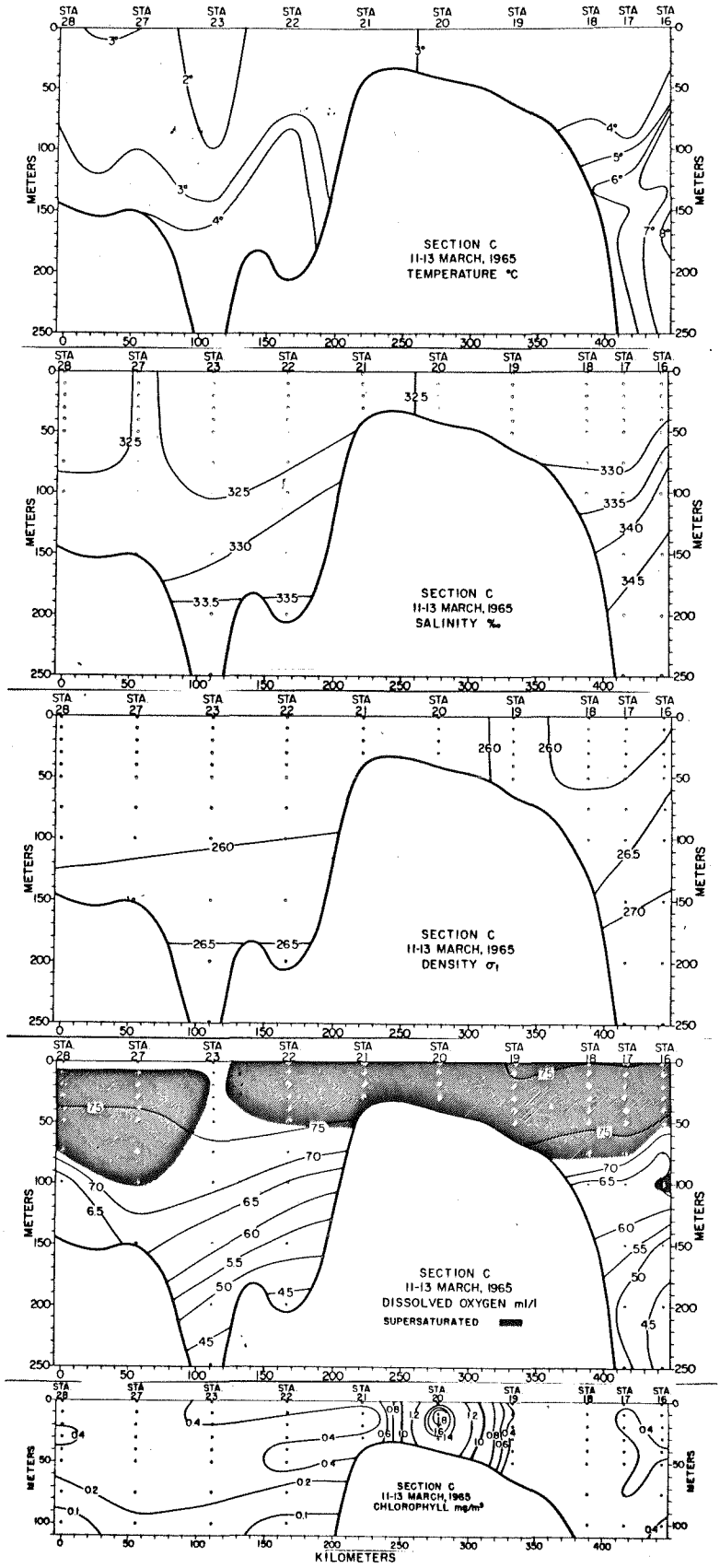

SECTION C
11-13 MARCH, 1965
TEMPERATURE °C
SECTION C
11-13 MARCH, 1965
SALINITY ‰
SECTION C
11-13 MARCH, 1965
DENSITY σ_t
SECTION C
11-13 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION C
11-13 MARCH, 1965
CHLOROPHYLL mg/m³
METERS
KILOMETERS

FIGURE 5.

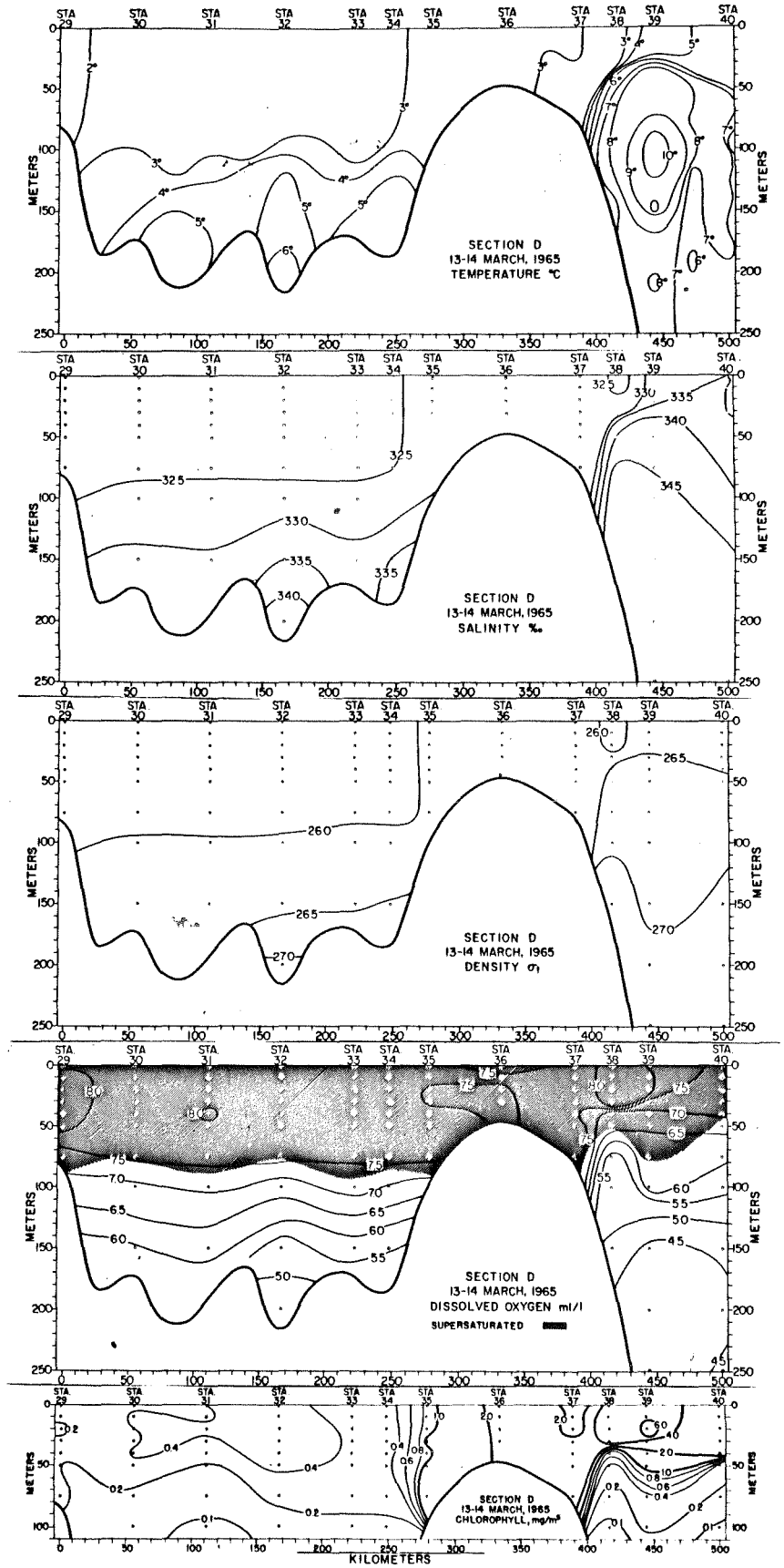

SECTION D
13-14 MARCH, 1965
TEMPERATURE °C
SECTION D
13-14 MARCH, 1965
SALINITY ‰
SECTION D
13-14 MARCH, 1965
DENSITY σt
SECTION D
13-14 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION D
13-14 MARCH, 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 6.

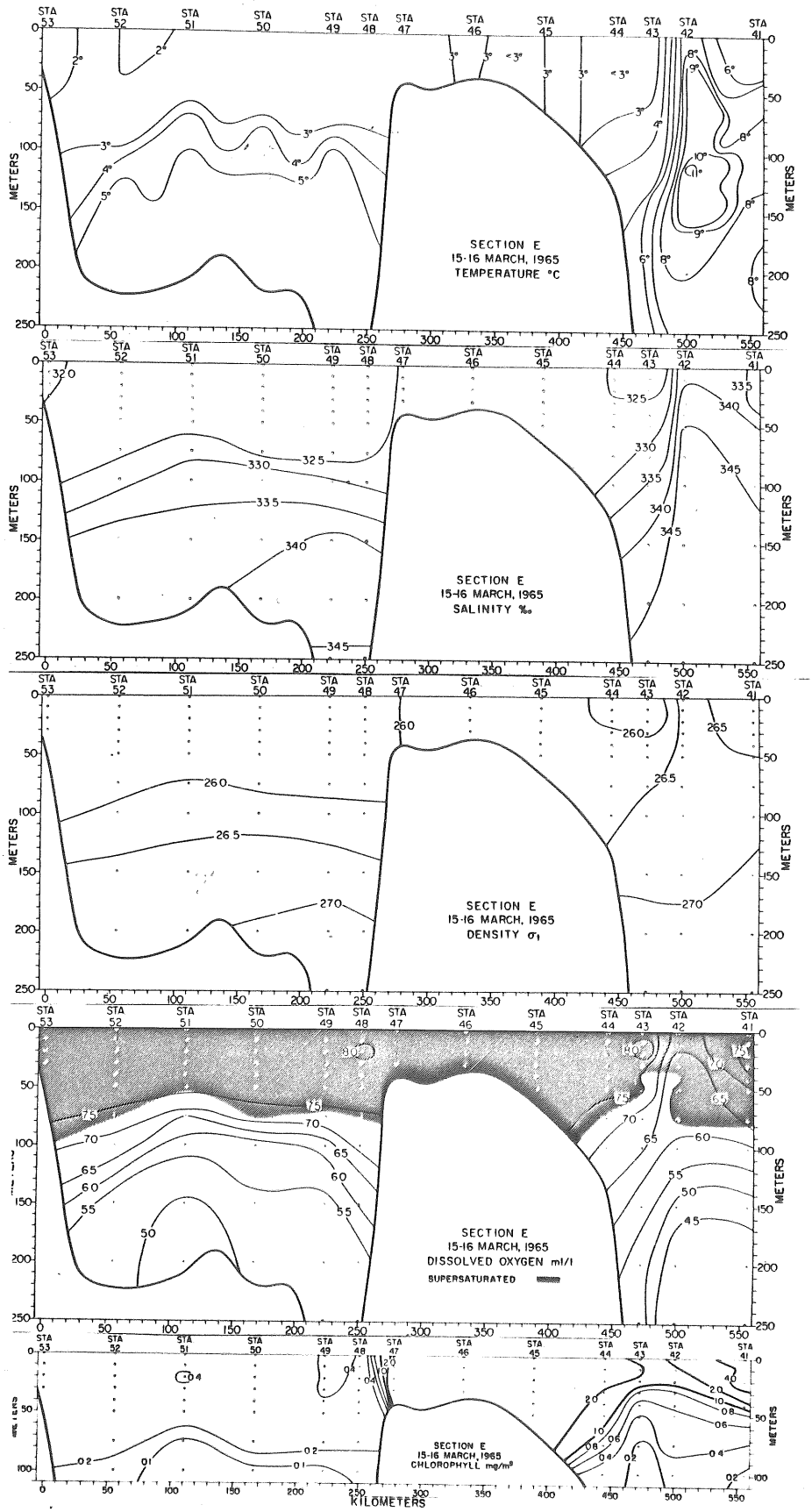

SECTION E
15-16 MARCH, 1965
TEMPERATURE °C
SECTION E
15-16 MARCH, 1965
SALINITY ‰
SECTION E
15-16 MARCH, 1965
DENSITY σ_t
SECTION E
15-16 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION E
15-16 MARCH, 1965
CHLOROPHYLL mg/m³
METERS
KILOMETERS

FIGURE 7.

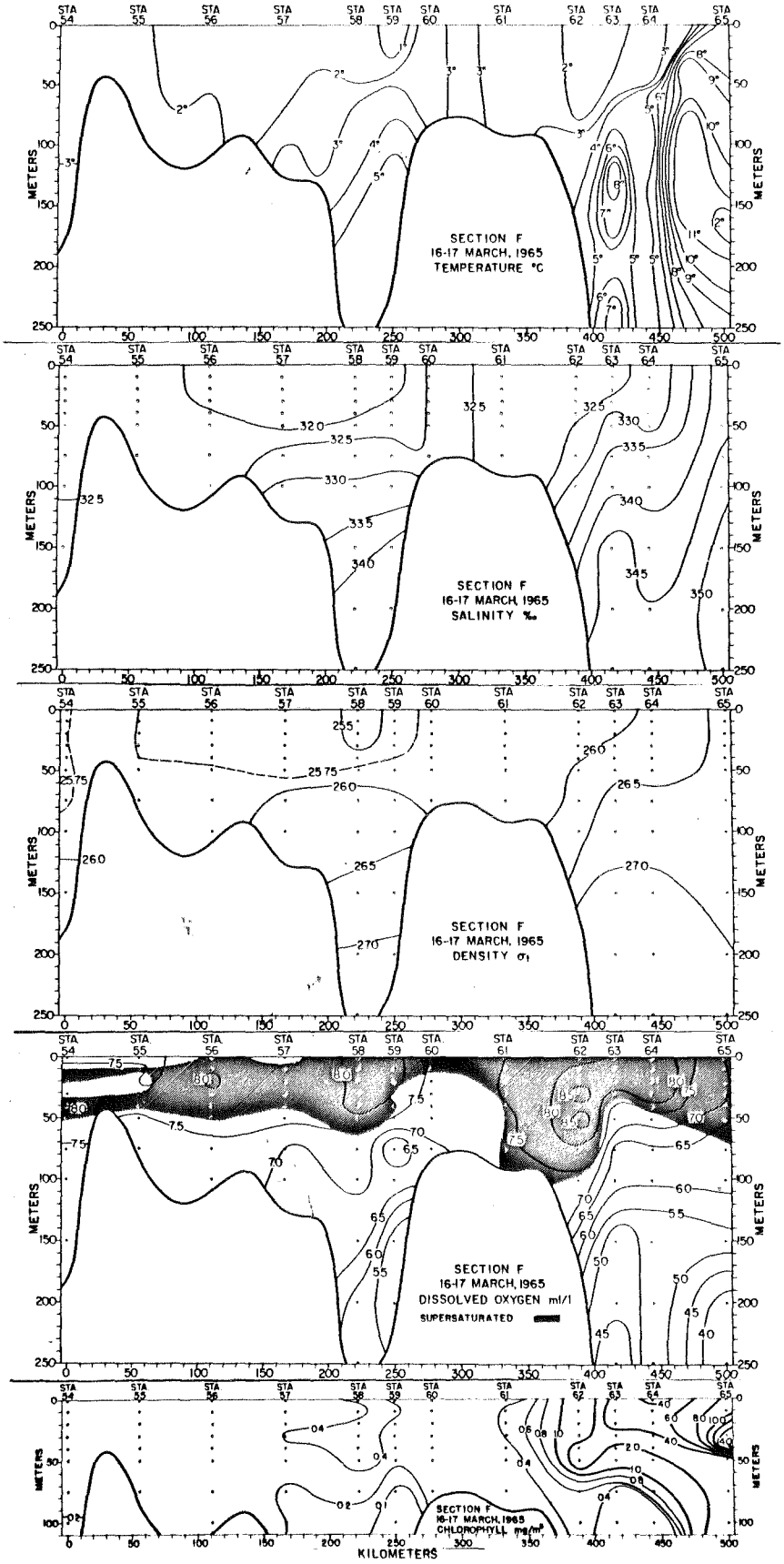

SECTION F
16-17 MARCH, 1965
TEMPERATURE °C
SECTION F
16-17 MARCH, 1965
SALINITY ‰
SECTION F
16-17 MARCH, 1965
DENSITY σ_t
SECTION F
16-17 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION F
16-17 MARCH, 1965
CHLOROPHYLL mg/m³
METERS
KILOMETERS

FIGURE 8.

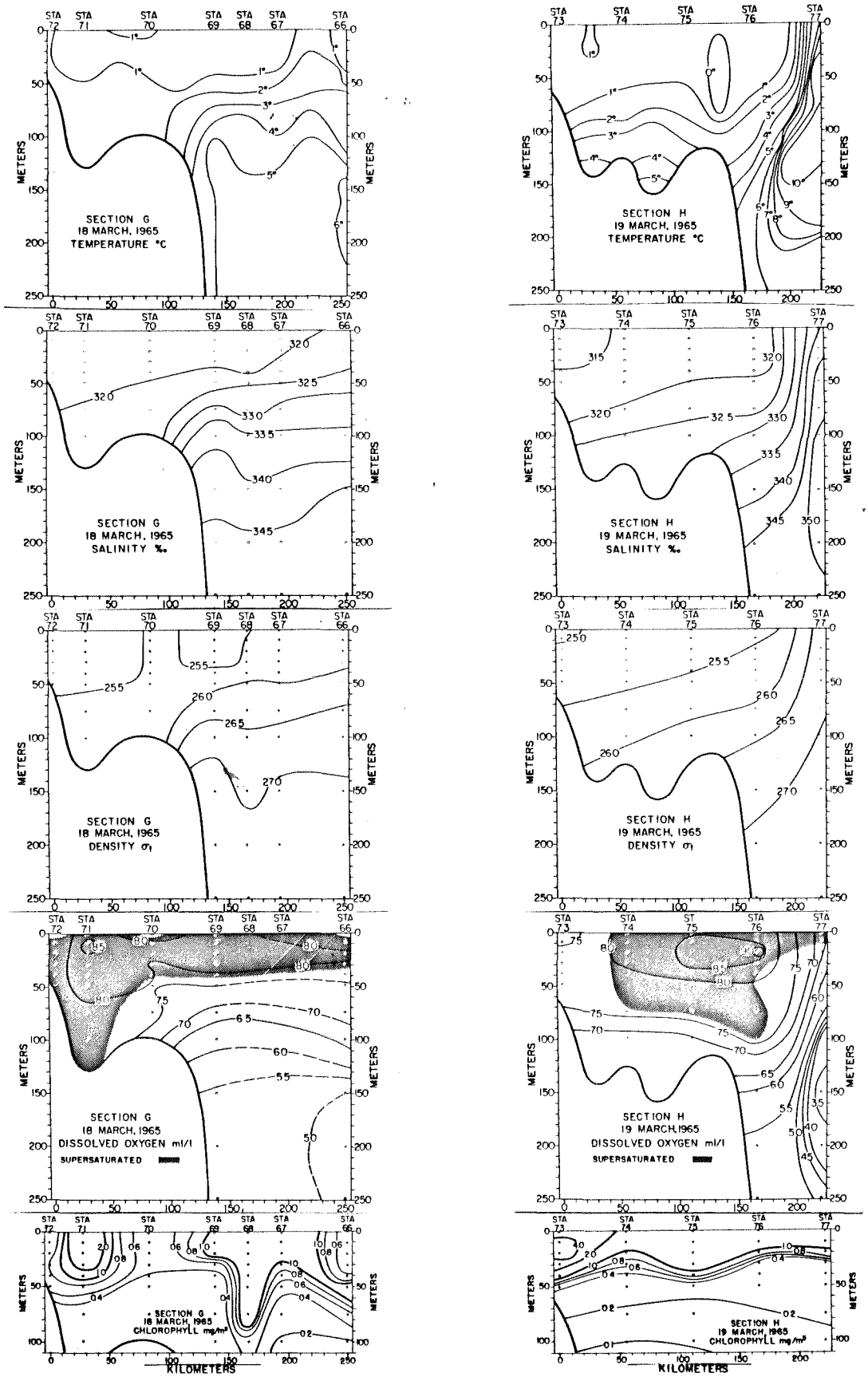

SECTION G
18 MARCH, 1965
TEMPERATURE °C
SECTION H
19 MARCH, 1965
TEMPERATURE °C
SECTION G
18 MARCH, 1965
SALINITY ‰
SECTION H
19 MARCH, 1965
SALINITY ‰
SECTION G
18 MARCH, 1965
DENSITY σ_t
SECTION H
19 MARCH, 1965
DENSITY σ_t
SECTION G
18 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION H
19 MARCH, 1965
DISSOLVED OXYGEN ml/l
SUPERSATURATED
SECTION G
18 MARCH, 1965
CHLOROPHYLL mg/m³
SECTION H
19 MARCH, 1965
CHLOROPHYLL mg/m³
METERS
KILOMETERS

FIGURE 9.

ALB. IV CRUISE NO. 65-3

TABLE 1

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	10.III.65	0210	40°30'	72°30'	1	3.5	32.40	7.60	1.13	
					10	3.2	32.39	7.83	0.69	
					20	3.2	32.48	7.70	0.92	
					30	3.4	32.50	7.63	3.07	
					40	3.5	32.51	7.43	5.64	
					50					
					75					
					100					
					150					
					200					
					250					
					BOTTOM	3.5(47m)				
2	10.III.65	0505	40°00'	72°30'	1	4.9	32.57	7.36	0.33	
					10	4.9	32.63	7.36	0.29	
					20	4.9	32.57	7.47	0.27	
					30	4.9	32.65	7.43	0.30	
					40	4.9	32.60	7.32	0.34	
					50	4.9	32.60	7.22	0.19	
					75					
					100					
					150					
					200					
					250					
					BOTTOM	4.9(65m)				
3	10.III.65	0805	39°30'	72°30'	1	5.0	32.75	7.32	0.92	
					10	5.0	32.73	7.56	0.82	
					20	4.9	32.74	7.20	1.21	
					30	4.9	32.73	7.44	1.08	
					40	4.9	32.74	7.36	1.13	
					50	4.9	32.76	7.29	0.51	
					75	5.7	33.17	6.55	0.32	
					100	6.1	33.29	6.41	0.25	
					150					
					200					
					250					
					BOTTOM	6.2(112m)				
4	10.III.65	0935	39°15'	72°30'	1	3.5	32.61	7.53	0.71	
					10	3.6	32.63	7.76	0.57	
					20	3.4	32.58	7.95	0.74	
					30	3.2	32.62	7.74	1.29	
					40	3.3	32.68	7.56	0.48	
					50	3.3	32.84	7.54	0.46	
					75	6.7	33.86	6.14	0.18	
					100	7.1	34.03	5.76	0.16	
					150					
					200					
					250					
					BOTTOM	7.5(140m)				

ALB. IV CRUISE NO. 65 - 3 TABLE 1

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	10.III.65	1110	39°00'	72°30'	1	3.5	32.61	7.65	0.60				
					10	3.6	32.62	7.05	0.74				
					20	3.8	32.71	7.73	0.29				
					30	3.5	32.73	7.55	0.30				
					40	3.9	32.78	7.51	0.27				
					50	4.0	32.93	7.46	0.34				
					75	8.5	34.29	6.78	0.14				
					100	10.5	34.80	5.69	0.13				
					150	10.9	35.12	4.44					
					200	9.2	35.16	3.71					
					250	7.8	35.08	3.75					
					BOTTOM								
6	10.III.65	1645	39°30'	71°30'	1	3.8	32.66	7.54	0.50				
					10	3.8	32.66	7.65	0.54				
					20	3.7	32.66	7.65	0.50				
					30	3.1	32.63	7.64	0.60				
					40	3.1	32.63	7.70	0.53				
					50	3.3	32.90	7.77	0.81				
					75	7.5	33.73	6.73	0.29				
					100	5.9	33.94	6.02	0.11				
					150	10.5	35.30	3.76					
					200	7.7	34.95	4.24					
					250	6.0	34.87	4.56					
					BOTTOM								
7	10.III.65	1845	39°45'	71°30'	1	4.1	32.61	7.38	0.29				
					10	4.1	32.60	7.51	0.34				
					20	4.1	32.62	7.73	0.76				
					30	4.1	32.67	7.59	0.55				
					40	4.1	32.66	7.61	0.53				
					50	4.0	32.79	7.55	0.42				
					75	4.7	33.21	6.91	0.24				
					100	8.2	34.13	6.32	0.10				
					150	9.3	34.89	4.63					
					200	10.3	35.27	3.70					
					250	9.7	35.13	3.72					
					BOTTOM								
8	10.III.65	2015	40°00'	71°30'	1	4.0	32.62	7.95	0.98				
					10	3.8	32.61	7.95	0.86				
					20	3.8	32.60	8.01	1.43				
					30	3.8	32.74	7.96	1.56				
					40	3.8	32.62	7.70	1.18				
					50	4.0	32.67	7.67	0.76				
					75	4.1	32.78	7.48	0.39				
					100	4.2	32.90	7.15					
					150								
					200								
					250								
					BOTTOM	4.5 (115M)							

ALB. IV CRUISE NO. 65-3

TABLE 1

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	10.III.65	2325	40°30'	71°30'	1	4.7	32.40	7.67	0.37				
					10	4.7	32.39	7.57	0.56				
					20	4.7	32.39	7.50	0.34				
					30	4.4	32.41	7.57	0.39				
					40	4.3	32.41	7.51	0.45				
					50	4.2	32.41	7.51	0.37				
					75								
					100								
					150								
					200								
					250								
					BOTTOM	4.2(75M)							
10	11.III.65	0230	41°00'	71°30'	1	3.7	32.19	7.96	1.00				
					10	3.8	32.21	7.96	1.00				
					20	3.6	32.31	7.61	2.34				
					30	3.7	32.31	7.54	2.43				
					40	3.8	32.32	7.47	2.03				
					50	4.0	32.38	7.50	1.47				
					75								
					100								
					150								
					200								
					250								
					BOTTOM	4.0(51M)							
11	11.III.65	0640	41°00'	70°30'	1	2.0	32.03	7.98	1.43				
					10	1.9	32.03	8.16	1.51				
					20	1.4	32.13	8.04	1.95				
					30	1.7	32.19	7.90	2.69				
					40	1.9	32.33	7.91	2.94				
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM	1.9(46M)							
12	11.III.65	0920	40°30'	70°30'	1	4.1	32.65	7.51	0.29				
					10	4.1	32.65	7.54	0.34				
					20	4.1	32.65	7.59	0.35				
					30	4.1	32.65	7.67	0.35				
					40	3.9	32.67	7.66	0.33				
					50	3.7	32.69	7.67	0.41				
					75								
					100								
					150								
					200								
					250								
					BOTTOM	3.8(72M)							

ALB. IV CRUISE NO. 65-3 TABLE 1

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			
13	11.III.65	1220	40°00'	70°30'	1	3.9	32.62	7.54	0.42				
					10	3.8	32.62	7.62	0.48				
					20	3.8	32.62	7.64	0.27				
					30	3.7	32.64	7.64	0.26				
					40	3.6	32.65	7.51	0.21				
					50	3.5	32.65	7.58	0.30				
					75	3.8	32.70	7.47					
					100	7.1	33.50	6.62	0.15				
					150	8.7	34.47	5.60					
					200	8.3	34.46	4.42					
					250	7.0	34.91	4.57					
					BOTTOM								
14	11.III.65	1345	39°45'	70°30'	1	3.5	32.65	7.60	0.44				
					10	3.4	32.62	7.61	0.39				
					20	3.4	32.63	7.40	0.37				
					30	3.3	32.63	7.50	0.37				
					40	3.3	32.63	7.56	0.42				
					50	3.2	32.63	7.49	0.34				
					75	7.3	33.85	6.24	0.09				
					100	8.5	34.32	6.07	0.08				
					150	10.1	34.88	4.59					
					200	6.2	34.65	5.02					
					250	5.2	34.52	5.16					
					BOTTOM								
15	11.III.65	1530	39°30'	70°30'	1	3.3	32.68	7.66	0.32				
					10	3.2	32.67	7.70	0.33				
					20	3.2	32.67	7.71	0.42				
					30	3.2	32.68	7.64	0.30				
					40	3.5	33.15	7.28	0.32				
					50	8.8	34.34	6.39	0.17				
					75	10.1	34.70	5.96	0.11				
					100	10.9	34.89	5.87	0.10				
					150	11.7	35.38	3.98					
					200	10.1	35.22	3.80					
					250	8.9	35.12	3.86					
					BOTTOM								
16	11.III.65	2020	39°30'	69°30'	1	3.2	32.64	7.63	0.33				
					10	3.2	32.63	7.81	0.29				
					20	3.2	32.63	7.67	0.29				
					30	3.2	32.66	7.65	0.33				
					40	3.9	32.97	7.56	0.46				
					50	4.8	33.29	7.13	0.30				
					75	6.3	33.85	6.50	0.21				
					100	7.8	34.20	6.55	0.42				
					150	7.5	34.58	4.93					
					200	7.8	34.89	4.27					
					250	7.0	34.91	4.23					
					BOTTOM								

ALB. IV CRUISE NO. 65-3

TABLE I

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	12 III 65	0030	39°45	69°30'	1	3.2	32.64	7.48	0.39				
					10	3.2	32.63	7.73	0.41				
					20	3.2	32.64	7.72	0.41				
					30	3.2	32.64	7.66	0.39				
					40	3.2	32.64	7.72	0.35				
					50	3.2	32.64	7.65	0.34				
					75	3.2	32.73	7.37	0.40				
					100	4.7	33.40	6.45	0.18				
					150	5.5	34.15	5.87					
					200	6.3	34.64	4.92					
					250	5.7	34.55	5.23					
					BOTTOM								
18	12.III.65	0220	40°00'	69°30'	1	3.9	32.65	7.50	0.28				
					10	3.9	32.62	7.53	0.29				
					20	3.9	32.62	7.57	0.33				
					30	3.9	32.62	7.57	0.36				
					40	3.9	32.62	7.63	0.29				
					50	3.9	32.62	7.63	0.32				
					75	4.0	32.89	7.18	0.35				
					100	4.8	33.32	6.89	0.25				
					150								
					200								
					250								
					BOTTOM	6.0(130M)							
19	12.III.65	0550	40°30'	69°30'	1	3.5	32.73	7.47	0.33				
					10	3.5	32.73	7.47	0.41				
					20	3.7	32.73	7.73	0.29				
					30	3.7	32.73	7.64	0.39				
					40	3.7	32.73	7.69	0.37				
					50	3.8	32.74	7.66	0.33				
					75								
					100								
					150								
					200								
					250								
					BOTTOM	3.8(64M)							
20	12.III.65	0900	41°00'	69°36'	1	3.1	32.54	7.93	1.39				
					10	3.1	32.53	7.79	1.86				
					20	3.1	32.54	7.78	1.77				
					30	3.1	32.54	7.78	1.39				
					40	3.1							
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM	3.1(41M)							

ALB. IV CRUISE NO. 65 - 3

TABLE 1

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	12.III.65	1620	41°30'	69°30'	1	2.8	32.44	7.64	0.42				
					10	2.8	32.44	7.64	0.35				
					20	2.8	32.44	7.72	0.35				
					30	2.8	32.45	7.58	0.42				
					40								
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM	2.8 (39m)							
22	12.III.65	1925	42°00'	69°30'	1	2.3	32.28	7.76	0.45				
					10	2.3	32.28	7.87	0.41				
					20	2.3	32.29	7.72	0.30				
					30	2.2	32.28	7.73	0.39				
					40	2.2	32.28	7.73	0.47				
					50	2.2	32.27	7.59	0.46				
					75	3.2	32.47	7.25	0.14				
					100	4.8	32.83	6.49	0.08				
					150	5.1	33.34	5.21					
					200	5.1	33.64	4.24					
					250								
					BOTTOM	5.1 (207m)							
23	12.III.65	2245	42°30'	69°30'	1	1.2	32.22	7.67	0.49				
					10	1.1	32.21	7.75	0.55				
					20	1.1	32.21	7.75	0.40				
					30	1.1	32.20	7.75	0.32				
					40	1.1	32.20	7.68	0.24				
					50	1.1	32.21	7.68	0.24				
					75	1.2	32.26	7.41	0.25				
					100	1.9	32.47	7.07	0.12				
					150	3.8	32.91	6.20					
					200	4.2	33.65	4.98					
					250	4.2	33.81	4.29					
					BOTTOM								
24	13.III.65	0430	42°00'	70°30'	1	1.5	32.05	8.73	10.28				
					10	1.5	32.03	8.73	9.98				
					20	1.5	32.05	8.87	9.98				
					30	1.5	32.12	8.85	9.32				
					40								
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM	1.4 (38m)							

ALB. IV CRUISE NO. 65-3

TABLE 1

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	13.III.65	0730	42°30'	70°30'	1	1.3	31.68	8.18	2.55	
					10	1.3	31.68	8.30	2.46	
					20	1.4	31.78	8.36	2.81	
					30	1.4	32.13	8.19	2.69	
					40	1.5	32.46	8.03	1.73	
					50	1.5	32.46	8.01	0.87	
					75					
					100					
					150					
					200					
					250					
					BOTTOM	1.5 (56m)				
26	13.III.65	1045	43°00'	70°30'	1	1.8	31.98	7.55	0.46	
					10	1.8	31.98	7.63	0.39	
					20	1.9	32.14	7.76	0.27	
					30	1.9	32.23	7.80	0.27	
					40	2.0	32.33	7.65	0.38	
					50	2.0	32.35	7.58	0.30	
					75	2.1	32.38	7.51	0.32	
					100					
					150					
					200					
					250					
					BOTTOM	2.2 (93m)				
27	13.III.65	1515	43°00'	69°30'	1	3.0	32.53	7.29	0.24	
					10	2.9	32.51	7.42	0.26	
					20	2.9	32.51	7.49	0.29	
					30	2.9	32.51	7.58	0.22	
					40	2.9	32.51	7.49	0.30	
					50	2.9	32.51	7.49	0.28	
					75	2.9	32.52	7.42	0.25	
					100	3.0	32.54	7.42	0.18	
					150	4.0	32.82	6.56		
					200					
					250					
					BOTTOM	4.0 (152m)				
28	13.III.65	1800	43°30'	69°30'	1	2.5	32.39	7.30	0.38	
					10	2.5	32.38	7.42	0.32	
					20	2.5	32.37	7.49	0.39	
					30	2.4	32.38	7.58	0.45	
					40	2.4	32.38	7.49	0.36	
					50	2.4	32.38	7.42	0.35	
					75	2.8	32.49	7.42	0.11	
					100	3.0	32.55	6.20	0.09	
					150					
					200					
					250					
					BOTTOM	3.9 (147m)				

ALB. IV CRUISE NO. 65-3 TABLE 1

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	13.III.65	2300	44°00'	68°30'	1	1.1	32.07	7.96	0.30				
					10	1.2	32.08	8.27	0.26				
					20	1.2	32.11	8.13	0.15				
					30	1.2	32.11	8.06	0.26				
					40	1.3	32.12	8.06	0.24				
					50	1.3	32.12	8.06	0.20				
					75	1.5	32.16	7.77	0.23				
					100								
					150								
					200								
					250								
					BOTTOM								
30	14.III.65	0150	43°30'	68°30'	1	2.1	32.27	7.77	0.38				
					10	2.1	32.27	7.83	0.45				
					20	2.1	32.27	7.98	0.40				
					30	2.1	32.27	7.91	0.35				
					40	2.1	32.27	7.89	0.44				
					50	2.1	32.27	7.89	0.36				
					75	2.2	32.38	7.57	0.15				
					100	3.0	32.66	6.93	0.11				
					150	4.0	33.17	5.97					
					200								
					250								
					BOTTOM	4.9(172m)							
31	14.III.65	0430	43°00'	68°30'	1	2.1	32.27	7.89	0.40				
					10	2.1	32.27	7.94	0.34				
					20	2.1	32.28	7.94	0.45				
					30	2.1	32.27	7.86	0.38				
					40	2.2	32.27	8.00	0.35				
					50	2.2	32.35	7.91	0.17				
					75	2.7	32.44	7.70	0.17				
					100	2.9	32.61	7.18	0.09				
					150	4.2	33.05	6.10					
					200								
					250								
					BOTTOM	4.9(195m)							
32	14.III.65	0715	42°30'	68°30'	1	2.3	32.33	7.66	0.45				
					10	2.2	32.32	7.70	0.44				
					20	2.2	32.31	7.76	0.48				
					30	2.2	32.31	7.76	0.49				
					40	2.2	32.31	7.74	0.49				
					50	2.2	32.31	7.74	0.44				
					75	2.3	32.37	7.60	0.24				
					100	3.8	32.81	6.66	0.11				
					150	5.3	32.50	5.28					
					200	6.0	34.34	4.77					
					250								
					BOTTOM	6.0(215m)							

ALB. IV CRUISE NO. 65 - 3

TABLE 1

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	14.III.65	1125	42°00'	68°30'	1	2.6	32.48	7.64	0.30	
					10	2.6	32.46	7.64	0.32	
					20	2.6	32.46	7.82	0.36	
					30	2.6	32.47	7.79	0.39	
					40	2.6	32.45	7.73	0.37	
					50	2.6	32.46	7.63	0.29	
					75	2.7	32.46	7.61	0.34	
					100	2.8	32.54	7.36	0.11	
					150	5.1	33.19	5.85		
					200					
					250					
					BOTTOM	5.3 (172 m)				
34	14.III.65	1200	41°46'	68°30'	1	2.9	32.48	7.93	0.35	
					10	2.9	32.46	7.85	0.34	
					20	2.9	32.46	7.93	0.35	
					30	2.9	32.48	7.87	0.30	
					40	2.9	32.49	7.87	0.39	
					50	2.9	32.49	7.79	0.39	
					75	2.9	32.50	7.75	0.33	
					100	3.9	32.80	6.98	0.13	
					150	5.4	33.56	5.53		
					200					
					250					
					BOTTOM	5.9 (185 m)				
35	14.III.65	1400	41°30'	68°30'	1	3.3	32.75	7.56	0.96	
					10	3.3	32.74	7.56	0.92	
					20	3.3	32.74	7.49	0.94	
					30	3.3	32.74	7.49	1.01	
					40	3.3	32.74	7.57	0.85	
					50	3.3	32.73	7.57	1.02	
					75	3.3	32.74	7.57	1.34	
					100					
					150					
					200					
					250					
					BOTTOM	3.2 (99 m)				
36	14.III.65	1820	41°00'	68°30'	1	3.7	32.71	7.21	2.46	
					10	3.7	32.70	7.55	2.34	
					20	3.7	32.71	7.48	2.08	
					30	3.6	32.71	7.49	2.08	
					40	3.6				
					50					
					75					
					100					
					150					
					200					
					250					
					BOTTOM	3.5 (47 m)				

ALB. IV CRUISE NO. 65-3

TABLE 1

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	14.III.65	2045	40°30'	68°30'	1	3.0	32.73	7.57	1.77	
					10	3.0	32.73	7.71	1.99	
					20	3.0	32.73	7.86	1.82	
					30	3.0	32.73	7.77	2.25	
					40	3.0	32.72	7.51	2.34	
					50	3.0	32.72	7.75	2.21	
					75	3.0	32.72	7.64	2.46	
					100					
					150					
					200					
					250					
					BOTTOM	2.9 (69 M)				
38	14.III.65	2230	40°15'	68°30'	1	2.5	32.46	8.49	4.32	
					10	2.7	32.47	8.49	5.46	
					20	3.3	32.62	8.48	5.31	
					30	3.7	32.94	8.12	4.81	
					40	6.2	33.73	6.99	0.66	
					50	6.7	34.01	6.73	0.35	
					75	8.4	34.57	5.47	0.12	
					100	8.3	34.67	5.13	0.09	
					150	6.9	34.67	4.95		
					200					
					250					
					BOTTOM	6.9 (170 M)				
39	14.III.65	2400	40°00'	68°31'	1	4.9	33.20	7.97	5.81	
					10	4.9	33.19	8.12	5.32	
					20	5.0	33.21	8.12	6.64	
					30	7.1	33.94	7.40	3.98	
					40	8.5	34.23	6.83	1.56	
					50	8.7	34.40	6.59	1.13	
					75	9.1	34.48	6.29	0.39	
					100	10.3	34.68	6.05	0.21	
					150	10.2	34.93	4.43		
					200	7.9	34.82	4.42		
					250	8.0	34.93	4.19		
					BOTTOM					
40	15.III.65	0255	39°30'	68°30'	1	5.7	33.50	7.40	3.32	
					10	5.7	33.49	7.39	3.32	
					20	5.7	33.49	7.39	3.32	
					30	5.6	33.50	7.38	3.82	
					40	5.8	33.58	7.05	2.08	
					50	6.0	33.99	6.63	0.26	
					75	7.4	33.98	6.21	0.15	
					100	6.9	34.09	5.64	0.09	
					150	7.1	34.80	4.57		
					200	6.8	34.85	4.39		
					250	6.8	34.86	4.57		
					BOTTOM					

ALB. IV CRUISE NO. 65-3

TABLE 1

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	15.III.65	0725	39°30'	67°30'	1	5.4	33.42	7.32	4.82	
					10	5.3	33.41	7.58	4.13	
					20	5.3	33.41	7.58	5.14	
					30	5.4	33.43	7.52	3.64	
					40	7.0	33.73	7.04	1.18	
					50	7.7	34.08	6.68	0.68	
					75	8.1	34.22	6.51	0.30	
					100	8.3	34.44	5.90	0.15	
					150	7.9	34.78	4.57		
					200	8.1	34.92	4.20		
					250	7.1	34.88	4.30		
					BOTTOM					
42	15.III.65	1030	40°00'	67°30'	1	7.5	33.97	6.89	2.12	
					10	7.9	33.99	6.84	1.95	
					20	8.6	34.28	6.48	1.08	
					30	9.1	34.41	6.34	0.78	
					40	9.2	34.44	6.26	0.66	
					50	9.3	34.50	6.26	0.51	
					75	9.8	34.55	6.25	0.48	
					100	9.9	34.64	5.84	0.26	
					150	10.5	34.93	4.64		
					200	8.1	34.84	4.33		
					250	7.8	34.95	4.16		
					BOTTOM					
43	15.III.65	1230	40°15'	67°30'	1	2.7	32.36	7.91	1.43	
					10	2.7	32.35	8.05	2.21	
					20	2.7	32.45	8.09	1.39	
					30	2.8	32.55	7.72	0.73	
					40	2.8	32.63	7.39	0.46	
					50	2.9	32.66	7.52	0.39	
					75	3.9	33.33	6.60	0.18	
					100	4.1	33.51	6.55	0.16	
					150	5.2	34.04	5.87		
					200	5.9	34.49	5.23		
					250	5.2	34.66	5.12		
					BOTTOM					
44	15.III.65	1405	40°30'	67°30'	1	2.2	32.46	7.89	2.43	
					10	2.2	32.47	7.92	2.28	
					20	2.2	32.49	7.92	2.34	
					30	2.3	32.53	7.83	1.65	
					40	2.4	32.53	7.70	1.47	
					50	2.5	32.57	7.62	1.26	
					75	3.2	32.77	7.29	0.62	
					100	3.7	33.06	6.97	0.26	
					150					
					200					
					250					
					BOTTOM	5.0 (1331)				

ALB. IV CRUISE NO. 65-3 TABLE 1

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	15 III 65	1715	41°00'	67°30'	1	3.0	32.70	7.76	2.98	
					10	3.0	32.70	7.76	2.81	
					20	3.0	32.70	7.65	3.65	
					30	3.0	32.70	7.90	2.12	
					40	3.0	32.70	7.83	2.51	
					50	3.0	32.71	7.90	2.51	
					75					
					100					
					150					
					200					
					250					
					BOTTOM	3.0(65M)				
46	15.III.65	2025	41°30'	67°30'	1	3.1	32.63	7.92	2.38	
					10	3.1	32.63	7.83	2.64	
					20	3.1	32.63	7.92	2.64	
					30	3.0	32.63	7.90	3.98	
					40					
					50					
					75					
					100					
					150					
					200					
					250					
					BOTTOM	3.0(37M)				
47	15.III.65	2315	42°00'	67°30'	1	2.8	32.58	7.67	2.08	
					10	2.8	32.58	7.87	2.55	
					20	2.8	32.58	7.87	2.51	
					30	2.8	32.58	7.93	2.21	
					40	2.8				
					50					
					75					
					100					
					150					
					200					
					250					
					BOTTOM	2.8(42M)				
48	16.III.65	0040	42°15'	67°30'	1	1.9	32.17	7.80	0.39	
					10	1.9	32.15	7.95	0.33	
					20	1.9	32.16	8.04	0.34	
					30	2.0	32.23	7.97	0.26	
					40	2.2	32.29	7.80	0.29	
					50	2.3	32.34	7.80	0.33	
					75	2.7	32.47	7.45	0.23	
					100	3.8	32.63	7.16	0.12	
					150	4.2	33.59	6.08		
					200	5.5	34.26	5.25		
					250	5.3	34.54	5.30		
					BOTTOM					

ALB. IV CRUISE NO. 65-3 TABLE 1

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	16.III.65	0220	42°30'	67°30'	1	2.2	32.33	7.63	0.42	
					10	2.2	32.31	7.68	0.42	
					20	2.2	32.32	7.68	0.41	
					30	2.2	32.32	7.64	0.48	
					40	2.2	32.32	7.57	0.37	
					50	2.2	32.33	7.65	0.39	
					75	2.9	32.42	7.38	0.24	
					100	5.1	33.02	6.12	0.09	
					150	5.8	34.21	5.19		
					200	5.2	34.29	5.14		
					250	5.1	34.54	5.13		
					BOTTOM					
50	16.III.65	0525	43°00'	67°30'	1	2.1	32.28	7.60	0.25	
					10	2.1	32.27	7.75	0.30	
					20	2.1	32.27	7.75	0.32	
					30	2.1	32.27	7.78	0.26	
					40	2.1	32.27	7.80	0.25	
					50	2.2	32.28	7.74	0.27	
					75	3.6	32.46	7.32	0.34	
					100	4.8	33.32	5.80	0.07	
					150	5.7	33.93	5.44		
					200	5.1	34.21	5.14		
					250					
					BOTTOM					
51	16.III.65	0815	43°30'	67°30'	1	2.1	32.32	7.60	0.27	
					10	2.1	32.31	7.78	0.30	
					20	2.1	32.31	7.75	0.41	
					30	2.2	32.31	7.65	0.32	
					40	2.3	32.31	7.59	0.32	
					50	2.8	32.33	7.67	0.30	
					75	4.2	32.91	6.50	0.09	
					100	5.0	33.26	5.68	0.06	
					150	5.7	33.74	4.97		
					200	5.8	33.99	4.58		
					250					
					BOTTOM	5.8 (210m)				
52	16.III.65	1140	44°00'	67°30'	1	1.9	32.30	7.64	0.32	
					10	2.0	32.29	7.63	0.38	
					20	2.0	32.29	7.63	0.39	
					30	2.0	32.29	7.51	0.38	
					40	2.1	32.29	7.58	0.28	
					50	2.2	32.29	7.61	0.27	
					75	2.6	32.38	7.48	0.30	
					100	4.3	32.86	6.76	0.13	
					150	5.2	33.74	5.16		
					200	5.8	33.96	5.27		
					250					
					BOTTOM	5.8 (222m)				

ALB. IV CRUISE NO. 65-3

TABLE 1

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
53	16.III.65	1525	44°28'	67°30'	1	1.6	31.96	7.73	0.24	
					10	1.6	31.96	7.73	0.24	
					20	1.7	31.99	7.81	0.27	
					30	1.8	32.03	7.81	0.28	
					40	1.9				
					50	1.9				
					75					
					100					
					150					
					200					
					250					
					BOTTOM	1.9 (52 m)				
54	16.III.65	2000	44°30'	66°30'	1	2.0	32.19	7.48	0.25	
					10	2.0	32.19	7.69	0.29	
					20	2.0	32.20	7.58	0.29	
					30	2.0	32.19	7.56	0.32	
					40	2.0	32.19	8.61	0.24	
					50	2.1	32.19	7.70	0.32	
					75	2.2	32.20	7.43	0.29	
					100	2.7	32.41	7.05	0.18	
					150	3.9	32.90	7.19		
					200					
					250					
					BOTTOM					
55	17.III.65	0040	44°00'	66°30'	1	2.0	32.20	7.44	0.27	
					10	2.1	32.18	7.58	0.25	
					20	2.1	32.18	7.50	0.25	
					30	2.1	32.18	7.58	0.27	
					40	2.2	32.21	7.58	0.25	
					50	2.2	32.23	7.44	0.27	
					75	2.2	32.27	7.44	0.32	
					100					
					150					
					200					
					250					
					BOTTOM	2.2 (85 m)				
56	17.III.65	0350	43°30'	66°30'	1	1.1	31.87	7.79	0.31	
					10	1.1	31.87	7.97	0.32	
					20	1.1	31.87	8.04	0.33	
					30	1.2	31.92	7.87	0.36	
					40	1.4	32.03	7.71	0.36	
					50	1.9	32.21	7.62	0.28	
					75	2.0	32.30	7.40	0.26	
					100	2.1	32.33	7.35	0.24	
					150					
					200					
					250					
					BOTTOM	2.1 (110 m)				

ALB. IV CRUISE NO. 65-3

TABLE 1

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	17.III.65	0630	43°00'	66°30'	1	1.4	31.88	7.56	0.33				
					10	1.4	31.87	7.93	0.39				
					20	1.4	31.88	7.67	0.35				
					30	1.4	31.89	7.80	0.40				
					40	1.5	31.95	7.73	0.29				
					50	1.5	31.97	7.55	0.32				
					75	2.3	32.74	6.95	0.17				
					100	3.0	33.06	6.92	0.20				
					150								
					200								
					250								
					BOTTOM	3.6 (127m)							
58	17.III.65	0920	42°30'	66°30'	1	1.6	31.84	8.09	0.44				
					10	1.6	31.83	8.10	0.34				
					20	1.6	31.83	8.05	0.44				
					30	1.5	31.83	8.06	0.44				
					40	1.4	31.94	8.17	0.49				
					50	2.1	32.31	7.87	0.51				
					75	3.0	32.82	7.21	0.28				
					100	3.3	33.02	7.21					
					150	4.9	33.60	6.62					
					200	5.8	34.37	5.71					
					250	5.8	34.45	5.92					
					BOTTOM	5.8 (262m)							
59	17.III.65	1110	42°15'	66°30'	1	0.7	31.85	8.03	0.39				
					10	0.7	31.84	8.10	0.41				
					20	0.7	31.84	8.10	0.39				
					30	1.6	32.10	7.62	0.25				
					40	2.0	32.19	7.70	0.25				
					50	2.2	32.35	7.37	0.21				
					75	3.9	32.76	6.08	0.08				
					100	5.6	33.22	6.73	0.06				
					150	5.2	34.08	5.20					
					200	5.2	34.38	5.28					
					250								
					BOTTOM	5.2 (220m)							
60	17.III.65	1245	42°00'	66°30'	1	2.9	32.52	7.41	0.29				
					10	2.9	32.51	7.40	0.30				
					20	2.9	32.50	7.33	0.29				
					30	2.9	32.51	7.26	0.33				
					40	2.9	32.50	7.26	0.37				
					50	2.9	32.52	7.26	0.34				
					75	2.9	32.52	6.86	0.32				
					100								
					150								
					200								
					250								
					BOTTOM	2.9 (83m)							

ALB. IV CRUISE NO. 65-3

TABLE 1

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	17.III.65	1600	41°30'	66°30'	1	2.8	32.48	7.50	0.32	
					10	2.8	32.47	7.55	0.44	
					20	2.8	32.47	7.55	0.43	
					30	2.8	32.47	7.55	0.42	
					40	2.8	32.49	7.42	0.32	
					50	2.8	32.48	7.44	0.37	
					75	2.8	32.49	7.44	0.30	
					100					
					150					
					200					
					250					
					BOTTOM	2.9(92M)				
62	17.III.65	1855	41°00'	66°30'	1	1.6	32.20	7.84	1.47	
					10	1.5	32.21	8.19	1.56	
					20	1.5	32.21	8.45	1.51	
					30	1.4	32.22	8.58	1.65	
					40	1.3	32.26	8.45	2.60	
					50	1.2	32.61	8.57	2.51	
					75	1.8	32.62	7.93	0.60	
					100	3.2	32.16	7.26	0.48	
					150	4.2				
					200					
					250					
					BOTTOM	5.0(170M)				
63	17.III.65	2055	40°45'	66°30'	1	1.8	32.42	8.10	4.81	
					10	1.8	32.43	8.13	5.30	
					20	1.8	32.46	8.25	4.98	
					30	1.7	32.73	7.78	3.65	
					40	2.0	33.01	7.34	1.69	
					50	2.5	33.08	7.42	1.73	
					75	5.0	33.62	6.27	0.33	
					100	6.0	33.93	6.08	0.24	
					150	7.7	34.74	4.58		
					200	5.9	34.63	4.77		
					250	7.2	34.95	4.09		
					BOTTOM					
64	17.III.65	2245	40°30'	66°30'	1	2.8	32.64	8.15	3.82	
					10	2.8	32.62	8.32	4.33	
					20	2.8	32.62	8.28	5.30	
					30	2.8	32.62	8.28	3.99	
					40	2.2	32.81	7.72	3.49	
					50	3.0	32.96	7.22	1.43	
					75	4.5	33.62	6.48	0.87	
					100	4.7	33.86	6.02	0.16	
					150	5.1	34.37	5.25		
					200	4.9	34.54	5.29		
					250	4.8	34.66	5.22		
					BOTTOM					

ALB. IV CRUISE NO. 65-3 TABLE 1

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	18.III.65	0140	40° 00'	66° 30'	1	7.6	34.13	7.00	8.66	
					10	7.6	34.12	7.00	9.92	
					20	7.6	34.12	7.03		
					30	7.6	34.13	7.04	14.60	
					40	7.9	34.29	6.73		
					50	8.2	34.56	6.60	3.49	
					75	9.6	34.72	6.18	2.17	
					100	9.8	34.74	6.12	2.49	
					150	11.7	35.23	5.33		
					200	10.7	35.33	3.63		
					250	8.4	35.09	3.88		
					BOTTOM					
66	18.III.65	0830	41° 00'	65° 30'	1	0.6	32.13	7.84	0.45	
					10	0.7	32.11	7.98	0.42	
					20	0.7	32.12	8.03	0.53	
					30	0.8	32.19	7.94	0.49	
					40	2.0	32.63	7.52	0.74	
					50	2.1	32.91	7.49	1.56	
					75	3.2	33.28	7.31	0.50	
					100	3.8	33.59	6.61	0.19	
					150	6.2	34.51	5.01		
					200	6.2	34.76	4.77		
					250	5.0	34.67	4.88		
					BOTTOM					
67	18.III.65	1205	41° 30'	65° 30'	1	0.2	31.79		1.26	
					10	0.3	31.81		1.18	
					20	0.4	31.93		1.29	
					30	0.7	32.10		0.95	
					40	1.1	32.27		0.65	
					50	1.8	32.49		0.44	
					75	3.5	33.21		0.26	
					100	4.0	33.58		0.18	
					150	5.8	34.39			
					200	5.8	34.55			
					250	5.2	34.66			
					BOTTOM					
68	18.III.65	1400	41° 45'	65° 30'	1	0.1	31.73		1.21	
					10	0.1	31.77		1.29	
					20	0.1	31.77		1.60	
					30	0.2	31.78		1.56	
					40	0.7	31.99		1.34	
					50	1.2	32.45		1.39	
					75	3.8	32.86		1.73	
					100	4.2	33.51		0.52	
					150	5.7	34.03			
					200	5.8	34.57			
					250	5.6	34.63			
					BOTTOM					

ALB. IV CRUISE NO. 65-3 TABLE I

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	18 III 65	1150	42°00'	65°30'	1	01	31.68	817	1.03	
					10	01	31.65	843	134	
					20	01	31.65	843	126	
					30	03	31.86	823	058	
					40	09	32.11	793	032	
					50	13	32.39	750	027	
					75	30	33.17	673	034	
					100	48	33.91	609	024	
					150	60	34.33	545		
					200	49	34.64	541		
					250	49	34.68	555		
					BOTTOM					
70	18 III 65	1845	42°30'	65°30'	1	1.1	31.84	775	0.46	
					10	10	31.83	800	045	
					20	09	31.83	801	045	
					30	09	31.83	796	051	
					40	09	31.82	803	039	
					50	1.2	32.11	751	028	
					75	13	32.14	755	024	
					100					
					150					
					200					
					250					
					BOTTOM	13 (99m)				
71	18 III 65	2155	43°00'	65°30'	1	09	31.55	816	399	
					10	0.8	31.56	852	3.82	
					20	03	31.57	849	3.65	
					30	03	31.57	847	212	
					40	0.5	31.65	837	1.29	
					50	1.1	31.75	823	078	
					75	1.8	32.15	777	021	
					100	18	32.15	768	0.21	
					150					
					200					
					250					
					BOTTOM	18 (130m)				
72	18 III 65	2325	43°15'	65°30'	1	1.1	31.67	774	0.65	
					10	11	31.68	791	066	
					20	1.1	31.70	791	064	
					30	10	31.71	790	085	
					40	1.0	31.71	789	0.77	
					50	1.0	31.70	789	067	
					75					
					100					
					150					
					200					
					250					
					BOTTOM	10 (55m)				

ALB. IV CRUISE NO. 65-3 TABLE 1

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	19 III 65	0510	44°00'	64°30'	1	07	31.14	7.43	3.82				
					10	05	31.16	7.43	4.66				
					20	02	31.21	7.83	5.30				
					30	02	31.43	7.85	2.17				
					40	02	31.54	7.72	1.13				
					50	01	31.69	7.66	044				
					75								
					100								
					150								
					200								
					250								
					BOTTOM	01 (70M)							
74	19.III.65	0815	43°30'	64°30'	1	04	31.58	8.28	1.69				
					10	02	31.61	8.26	1.18				
					20	02	31.64	8.11	0.92				
					30	02	31.65	8.15	0.74				
					40	0.2	31.65	7.49	0.33				
					50	0.3	31.68		0.30				
					75	1.7	32.08	7.63	0.17				
					100	2.9	32.54	6.86	010				
					150								
					200								
					250								
					BOTTOM	3.1 (125M)							
75	19.III.65	1120	43°00'	64°30'	1	0.1	31.61	8.37	1.77				
					10	0.1	31.60	8.71	1.69				
					20	0.1	31.61	8.71	1.95				
					30	0.1	31.63	8.63	1.60				
					40	0.2	31.75	8.49	095				
					50	0.3	32.01	7.98	0.26				
					75	1.2	32.32	7.84	0.14				
					100	2.7	32.73	7.03	011				
					150								
					200								
					250								
					BOTTOM	3.5 (124M)							
76	19.III.65	1445	42°30'	64°30'	1	01	31.68	8.49	1.95				
					10	01	31.68	8.49	1.99				
					20	01	31.82	9.19	092				
					30	01	31.91	8.45	029				
					40	0.1	31.95	8.04	0.23				
					50	0.2	32.04	7.91	0.23				
					75	1.3	32.48	7.76					
					100	2.1	33.10	7.54					
					150	4.9	33.89	5.93					
					200	5.9	34.51	5.31					
					250	5.2	34.54	5.35					
					BOTTOM								

ALB. IV CRUISE NO. 65-3 TABLE 1

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	19.III.65	1825	42°00'	64°30'	1	6.5	33.96	6.76	1.21	
					10	6.7	34.03	6.72	1.08	
					20	7.0	34.13	6.60	0.95	
					30	8.5	34.45	6.27	0.34	
					40	9.2	34.59	6.01	0.26	
					50	9.4	34.82	6.00	0.23	
					75	9.0	34.72	5.72	0.25	
					100	10.8	35.22	3.93	0.11	
					150	9.8	35.26	3.40		
					200	7.8	35.16	3.70		
					250	5.2	34.71	4.88		
					BOTTOM					
78	19.III.65	2350	42°30'	63°30'	1	1.7	32.73	8.17	1.99	
					10	1.7	32.71	8.67	1.99	
					20	1.7	32.73	8.93	2.69	
					30	1.8	32.76	9.14	3.38	
					40	1.8	32.78	9.07	3.78	
					50	1.8	32.79	9.24	3.42	
					75	2.3	33.08	8.80	2.90	
					100	4.0	33.57	8.24	1.03	
					150	5.7	34.26	6.69		
					200	6.2	34.67	5.81		
					250	5.3	34.70	5.89		
					BOTTOM					
79	20.III.65	0235	43°00'	63°30'	1	0.2	31.98	8.68	0.29	
					10	0.2	31.97	9.14	0.32	
					20	0.2	32.07	8.81	0.32	
					30	0.2	32.08	8.94	0.35	
					40	0.9	32.16	8.63	0.21	
					50	1.2	32.37	9.09	0.32	
					75	2.1	32.85	7.59	0.13	
					100	4.0	33.36	6.68	0.08	
					150	5.1	34.35	6.12		
					200					
					250					
					BOTTOM	5.0 (165M)				
80	20.III.65	0530	43°30'	63°30'	1	-0.8	31.40	8.39	0.33	
					10	-0.8	31.38	8.67	0.38	
					20	0.1	31.99	8.74	0.44	
					30	0.1	32.02	8.68	0.47	
					40	0.2	32.26	8.51	0.41	
					50	1.0	32.41	8.21	0.21	
					75	1.7	32.59	7.84	0.14	
					100	4.5	33.57	5.85	0.08	
					150	6.1	34.31	4.88		
					200					
					250					
					BOTTOM	6.1 (150M)				

ALB. IV CRUISE NO. 65-3

TABLE 1

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	20 III 65	0850	44°00'	63°30'	1	-0.8	31.58	8.40	0.26	
					10	-0.8	31.56	8.59	0.19	
					20	-0.9	31.59	8.76	0.25	
					30	-0.9	31.65	8.65	0.33	
					40	-0.4	31.90	8.30	0.39	
					50	0.3	32.11	8.38	0.39	
					75	1.0	32.15	7.77	0.15	
					100	3.3	33.18	6.41	0.08	
					150	5.5	34.07	5.10		
					200	4.9	34.30	4.89		
					250					
					BOTTOM	4.9 (210M)				
82	20 III 65	1050	44°15'	63°30'	1	-1.0	31.34	8.32	0.32	
					10	-1.0	31.32	8.47	0.29	
					20	-1.0	31.32	8.56	0.30	
					30	-1.0	31.40	8.50	0.25	
					40	-1.0	31.82	8.32	0.16	
					50	-0.7	31.99	8.17	0.17	
					75	-0.6	32.00	8.12	0.15	
					100	-0.3				
					150					
					200					
					250					
					BOTTOM	-0.2 (105M)				
83	20 III 65	1545	44°30'	62°30'	1	-0.6	31.56	8.44	0.25	
					10	-0.7	31.57	8.37	0.18	
					20	-0.8	31.71	8.54	0.35	
					30	-0.8	31.73	8.45	0.28	
					40	-0.8	31.79	8.38	0.22	
					50	-0.7	31.88	8.17	0.18	
					75	-0.1	32.12	7.99	0.20	
					100	0.2	32.28	7.74	0.16	
					150					
					200					
					250					
					BOTTOM	0.7 (143M)				
84	20 III 65	1835	44°00'	62°30'	1	0.7	32.11	7.95	0.61	
					10	0.8	32.37	8.01	0.48	
					20	0.9	32.39	8.07	0.29	
					30	1.0	32.42	7.94	0.24	
					40	1.1	32.49	7.69	0.25	
					50	1.2	32.55	6.97	0.23	
					75	3.0	33.26	6.06	0.08	
					100	4.8	33.91	5.15	0.03	
					150					
					200					
					250					
					BOTTOM	5.1 (140M)				

ALB. IV CRUISE NO. 65-3

TABLE 1

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	20 III 65	1955	43°30'	62°30'	1	12	3244	795	046				
					10	12	3240	805	040				
					20	11	3242	794	046				
					30	11	3248	787	058				
					40	11	3250	786	038				
					50	12	3263	760	019				
					75	30	3329	637	010				
					100								
					150								
					200								
					250								
					BOTTOM	3.1 (86 M)							
86	21 III 65	0040	43°00'	62°30'	1	16	3257	797	058				
					10	15	3257	820	129				
					20	13	3257	819	095				
					30	13	3257	803	129				
					40	13	3257	794	139				
					50	14	3281	759	143				
					75	32	3354	612	050				
					100	40							
					150								
					200								
					250								
					BOTTOM	4.1 (106 M)							
87	21 III 65	0350	42°30'	62°30'	1	10	3269	863	572				
					10	10	3269	868	684				
					20	10	3270	880	780				
					30	09	3270	865	546				
					40	08	3271	856	640				
					50	08	3282	814	450				
					75	58	3394	703	151				
					100	81	3439	625	018				
					150	60	3449	525					
					200	63	3477	463					
					250	52	3479	482					
					BOTTOM								
					1								
					10								
					20								
					30								
					40								
					50								
					75								
					100								
					150								
					200								
					250								
					BOTTOM								