ENVIRONMENTAL OBSERVATIONS ON CONTINENTAL SHELF NOVA SCOTIA TO LONG ISLAND, DECEMBER 1965 ALBATROSS IV CRUISE 65-15

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 65-15, 8-22 December 1965). This is the sixth 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 65.0 (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 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^1 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.

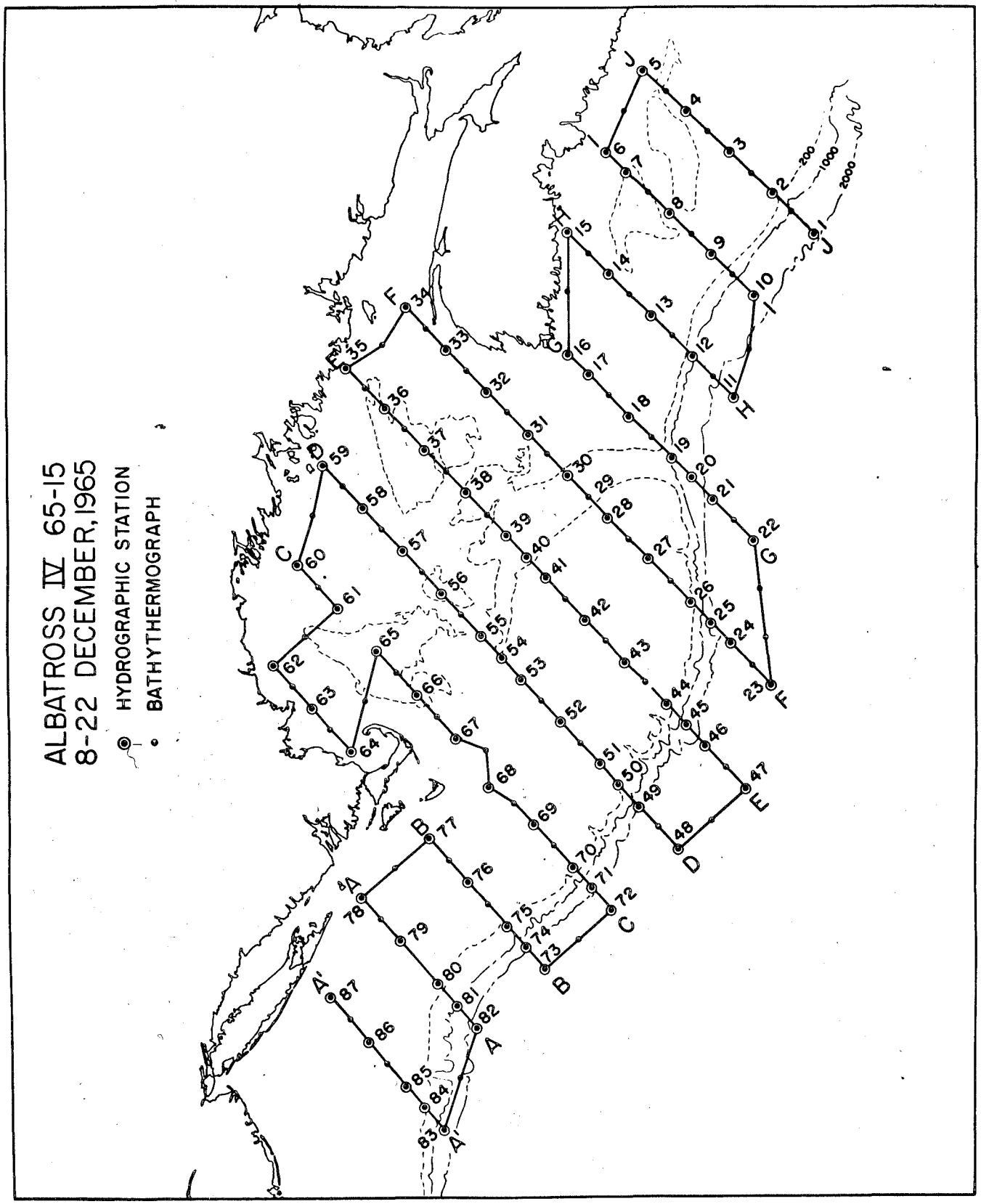
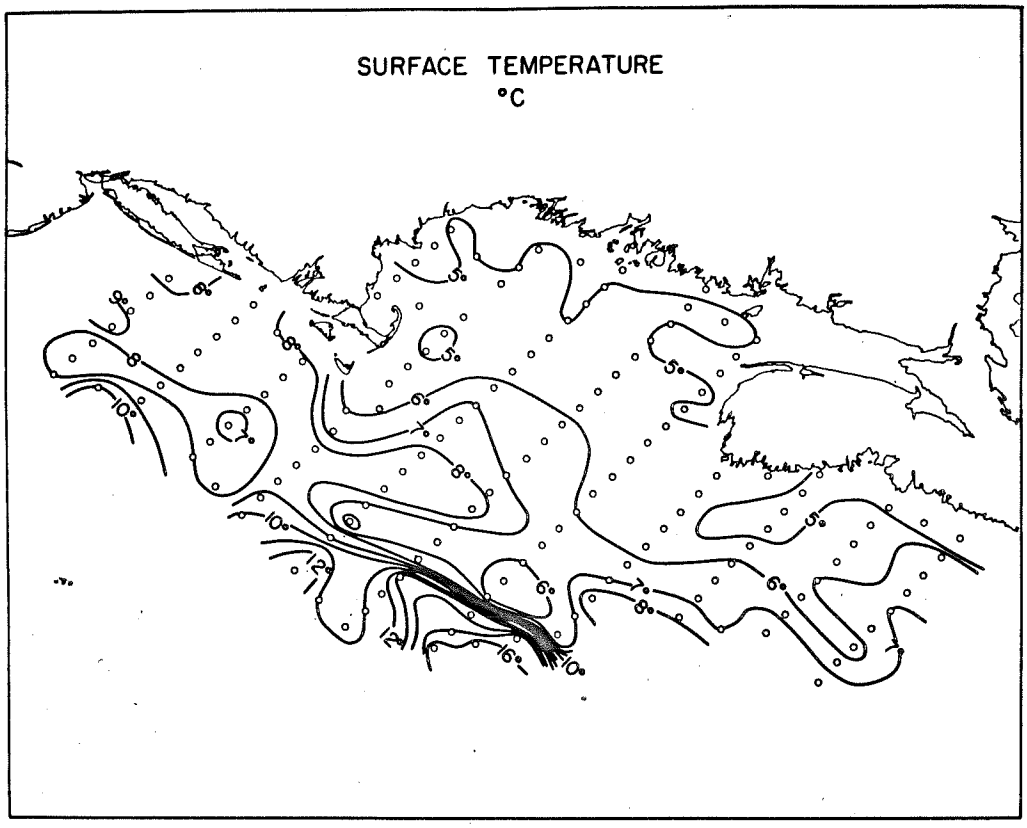

ALBATROSS IV 65-15
8-22 DECEMBER, 1965
HYDROGRAPHIC STATION
BATHYTHERMOGRAPH
200
1000
2000

FIGURE I.



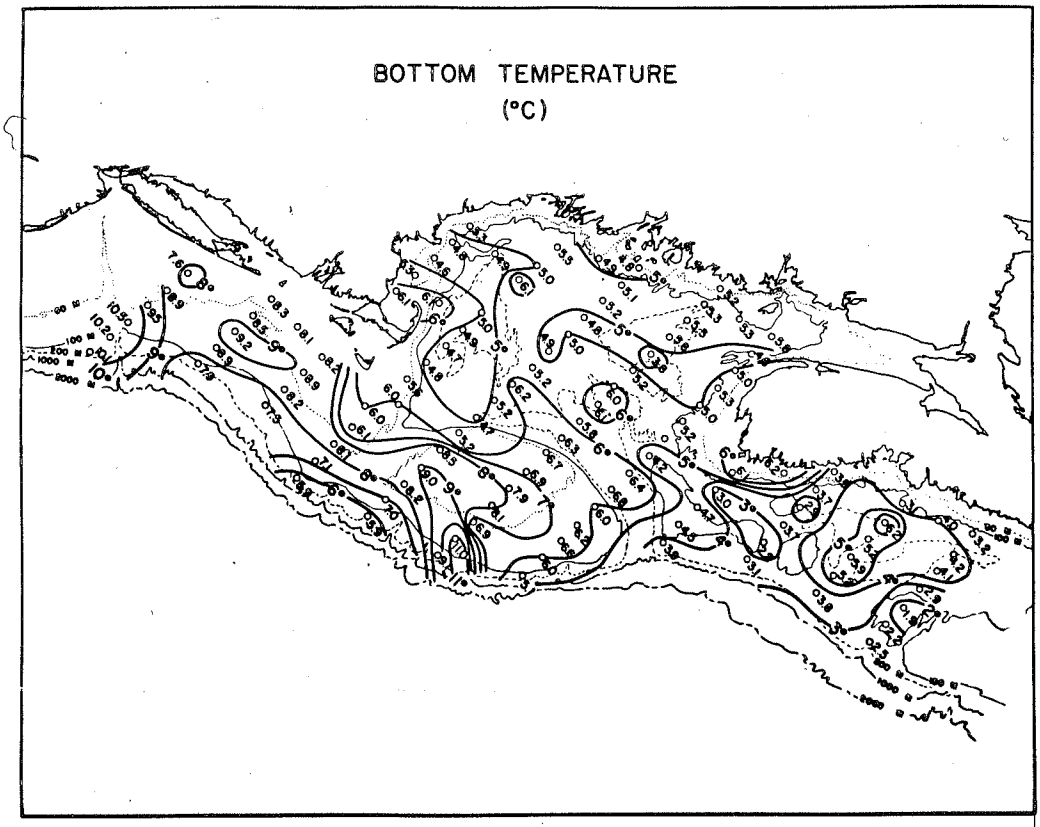
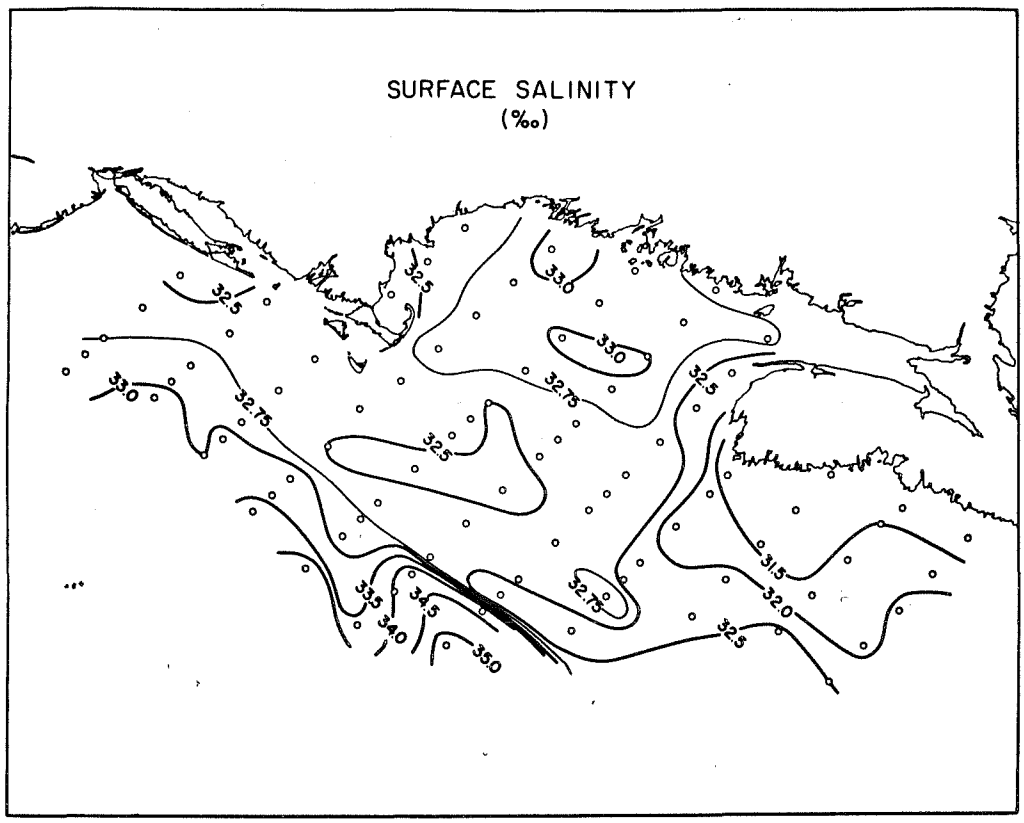


FIGURE 2


SURFACE SALINITY
(‰)
32.5
32.5
33.0
33.0
33.0
32.75
32.75
32.5
32.5
32.5
31.5
32.0
32.5
32.75
35.5
34.5
34.0
35.0

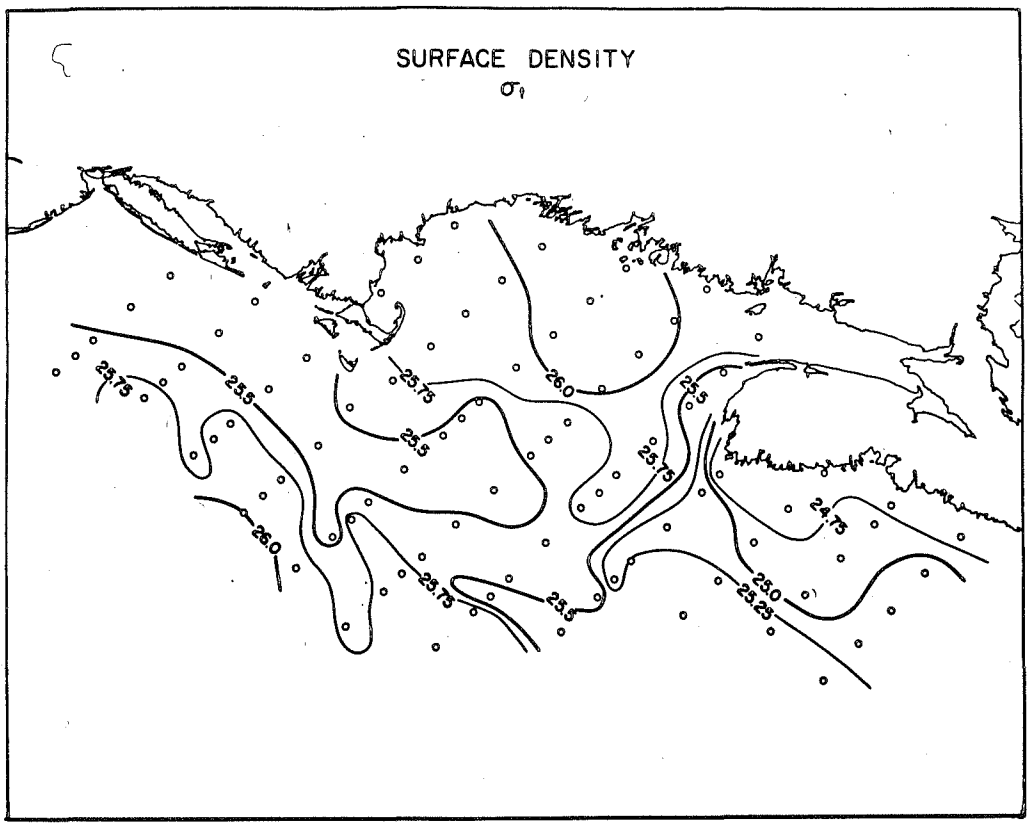

SURFACE DENSITY
σ_t
25.75
23.5
25.75
26.0
25.5
25.5
25.75
24.75
26.0
25.75
23.5
25.0
25.25

FIGURE 3

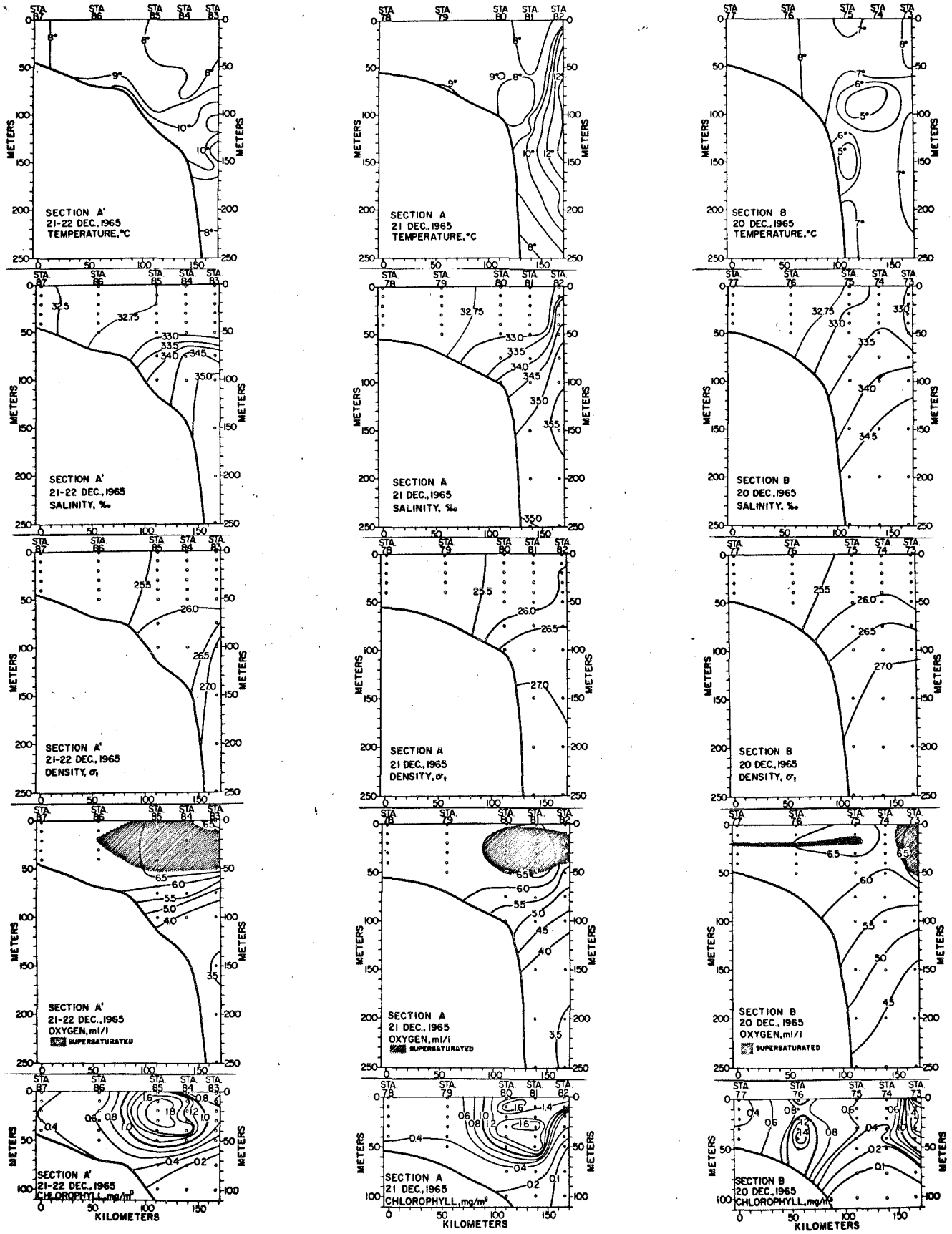

SECTION A'
21-22 DEC., 1965
TEMPERATURE, °C
SECTION A
21 DEC., 1965
TEMPERATURE, °C
SECTION B
20 DEC., 1965
TEMPERATURE, °C
SECTION A'
21-22 DEC., 1965
SALINITY, ‰
SECTION A
21 DEC., 1965
SALINITY, ‰
SECTION B
20 DEC., 1965
SALINITY, ‰
SECTION A'
21-22 DEC., 1965
DENSITY, σ_t
SECTION A
21 DEC., 1965
DENSITY, σ_t
SECTION B
20 DEC., 1965
DENSITY, σ_t
SECTION A'
21-22 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION A
21 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION B
20 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION A'
21-22 DEC., 1965
CHLOROPHYLL, mg/m³
SECTION A
21 DEC., 1965
CHLOROPHYLL, mg/m³
SECTION B
20 DEC., 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 4

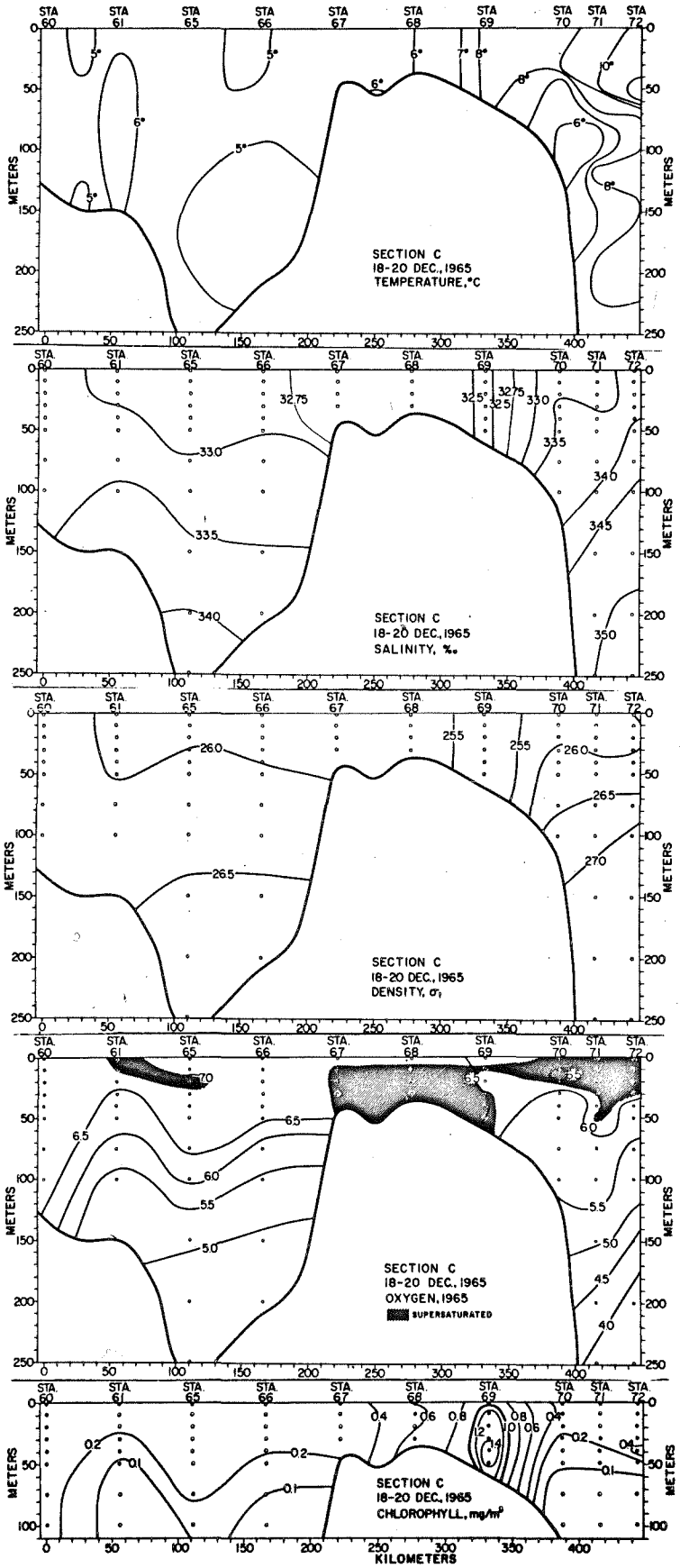

SECTION C
18-20 DEC., 1965
TEMPERATURE, °C
SECTION C
18-20 DEC., 1965
SALINITY, ‰
SECTION C
18-20 DEC., 1965
DENSITY, σ_t
SECTION C
18-20 DEC., 1965
OXYGEN, 1965
SUPERSATURATED
SECTION C
18-20 DEC., 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 5

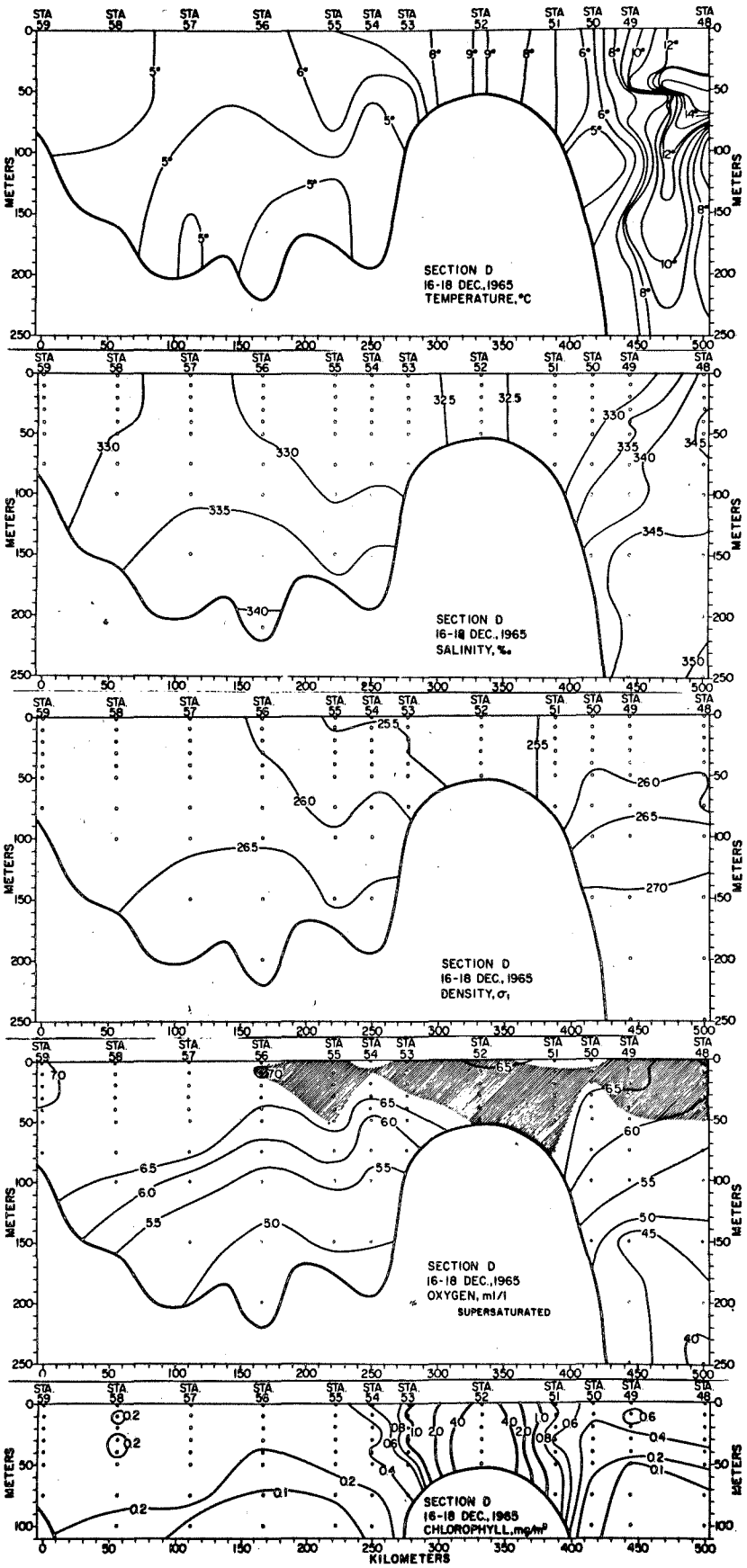

SECTION D
16-18 DEC.,1965
TEMPERATURE,°C
SECTION D
16-18 DEC.,1965
SALINITY,‰
SECTION D
16-18 DEC.,1965
DENSITY, σt
SECTION D
16-18 DEC.,1965
OXYGEN, ml/l
SUPERSATURATED
SECTION D
16-18 DEC.,1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 6

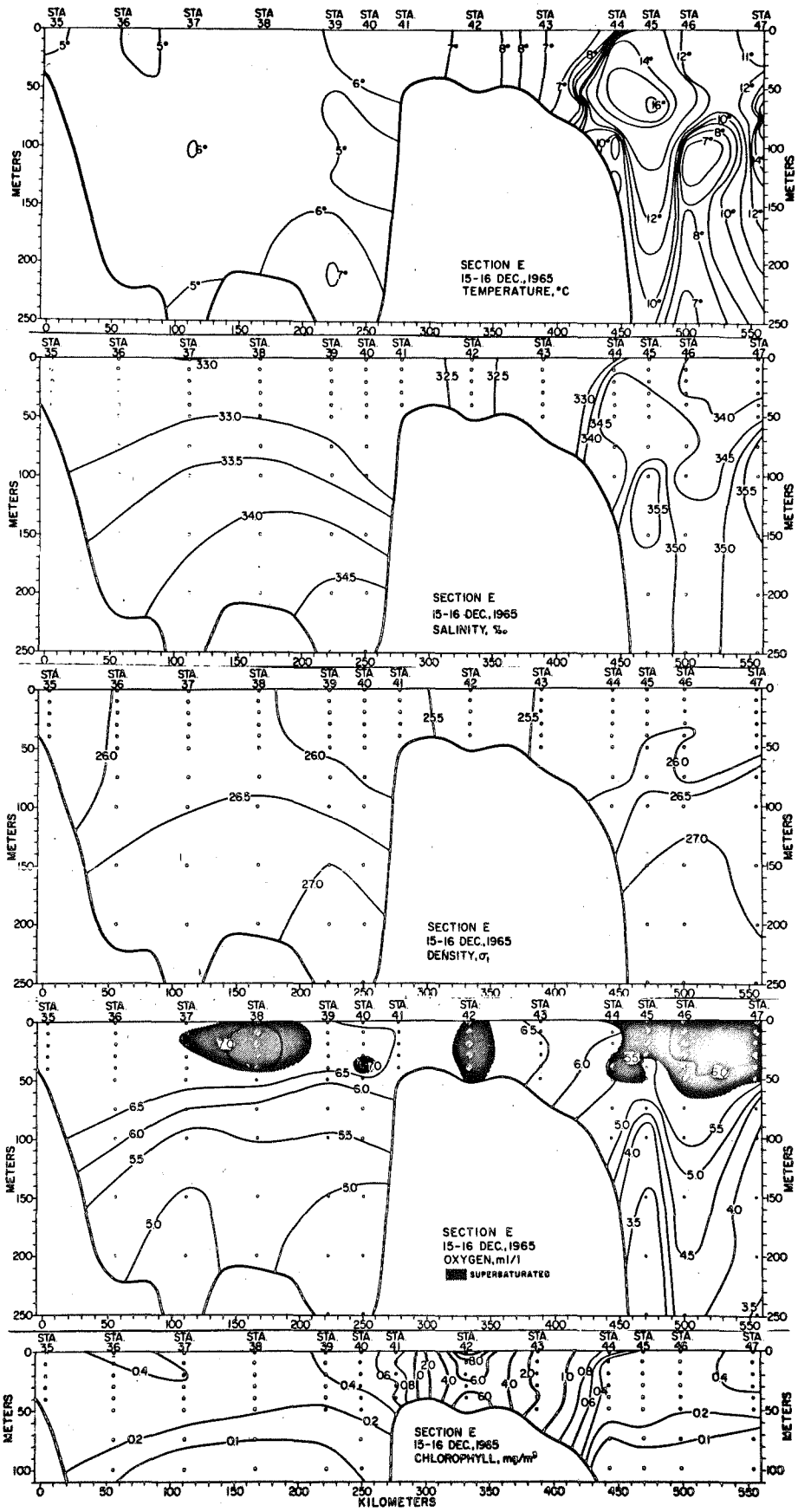

SECTION E
15-16 DEC., 1965
TEMPERATURE, °C
SECTION E
15-16 DEC., 1965
SALINITY, ‰
SECTION E
15-16 DEC., 1965
DENSITY, σt
SECTION E
15-16 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION E
15-16 DEC., 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 7

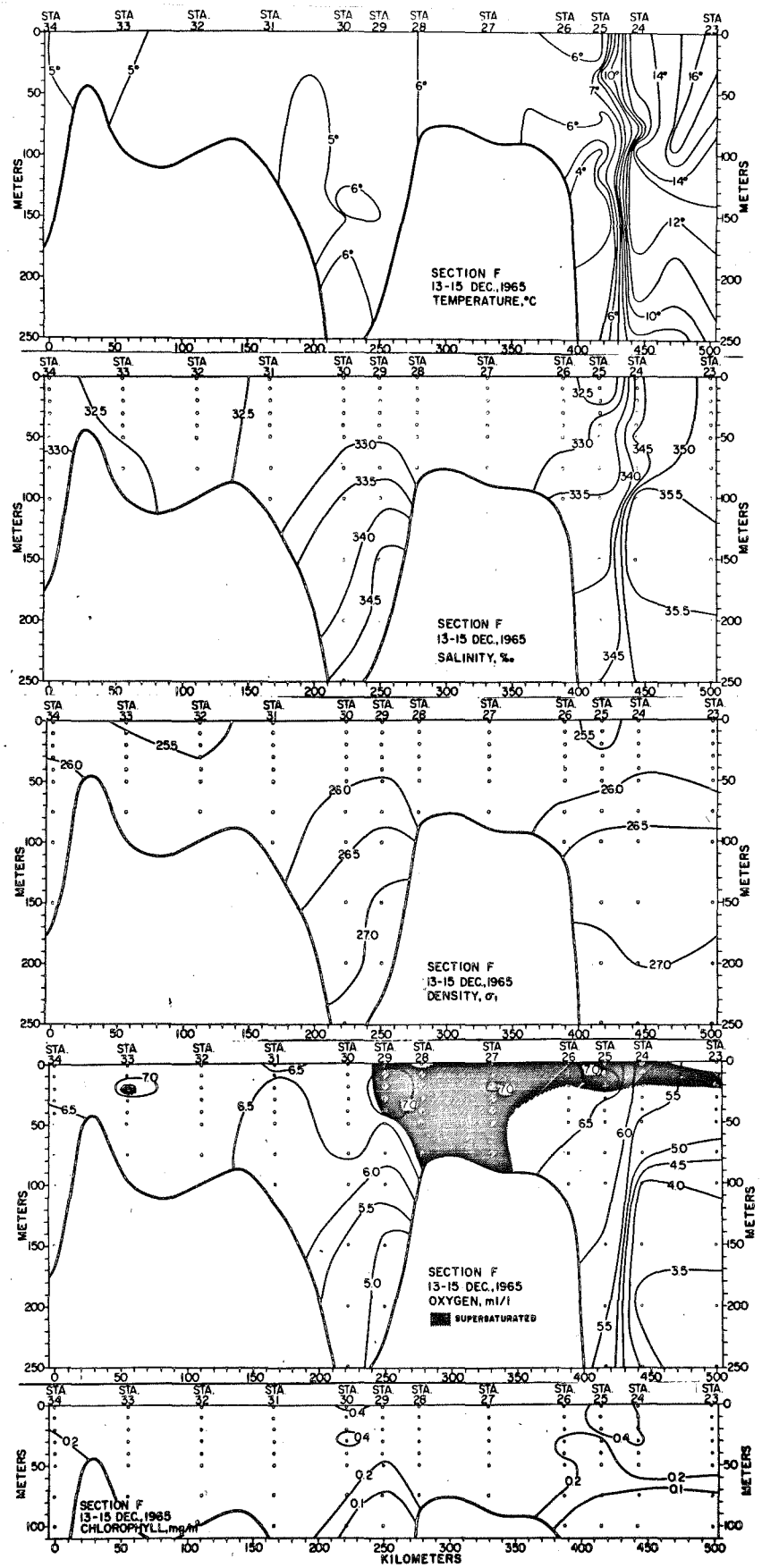

SECTION F
13-15 DEC., 1965
TEMPERATURE, °C
SECTION F
13-15 DEC., 1965
SALINITY, ‰
SECTION F
13-15 DEC., 1965
DENSITY, σt
SECTION F
13-15 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION F
13-15 DEC., 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 8

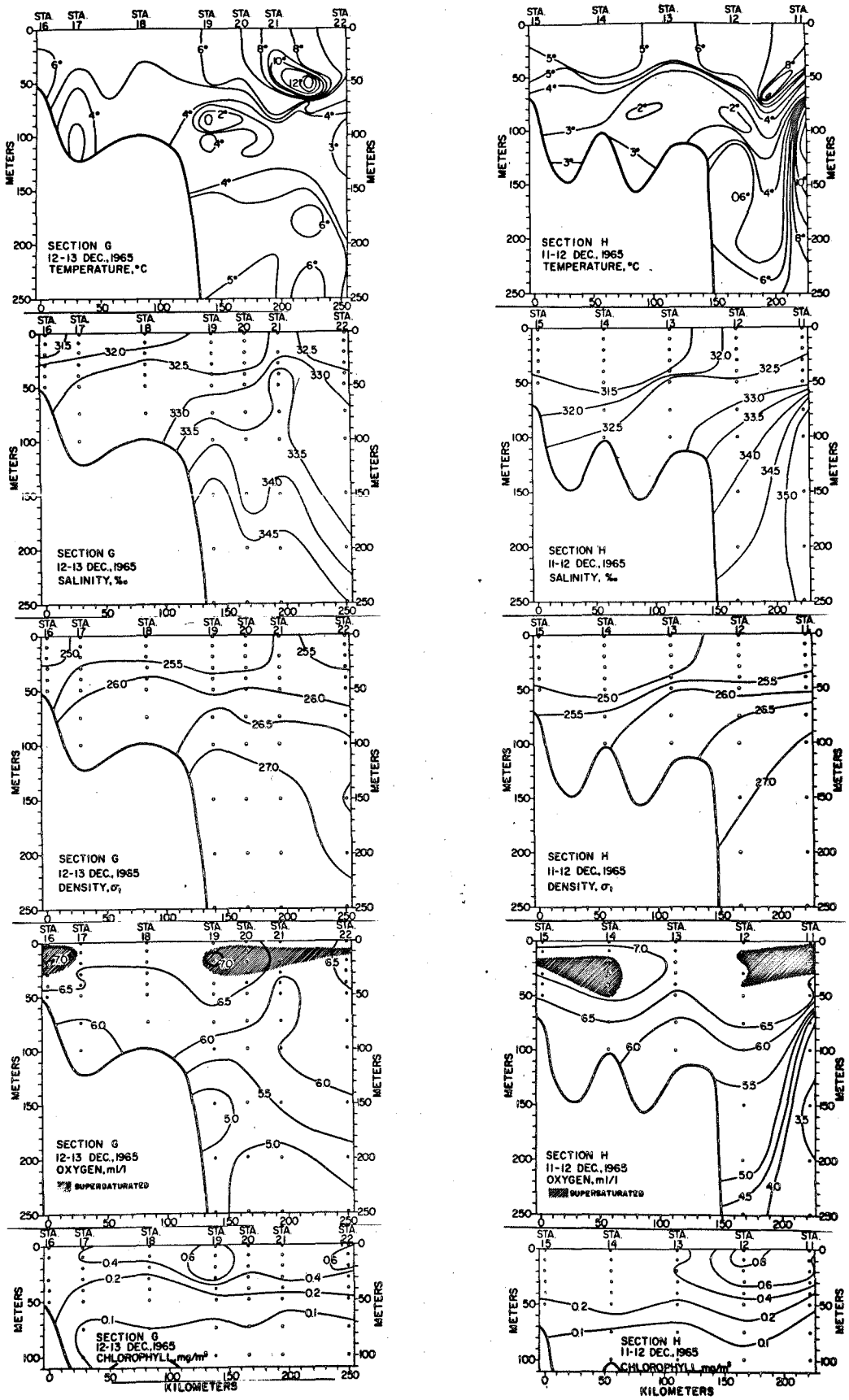

SECTION G
12-13 DEC., 1965
TEMPERATURE, °C
SECTION H
11-12 DEC., 1965
TEMPERATURE, °C
SECTION G
12-13 DEC., 1965
SALINITY, ‰
SECTION H
11-12 DEC., 1965
SALINITY, ‰
SECTION G
12-13 DEC., 1965
DENSITY, σ_t
SECTION H
11-12 DEC., 1965
DENSITY, σ_t
SECTION G
12-13 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION H
11-12 DEC., 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION G
12-13 DEC., 1965
CHLOROPHYLL, mg/m³
SECTION H
11-12 DEC., 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 9

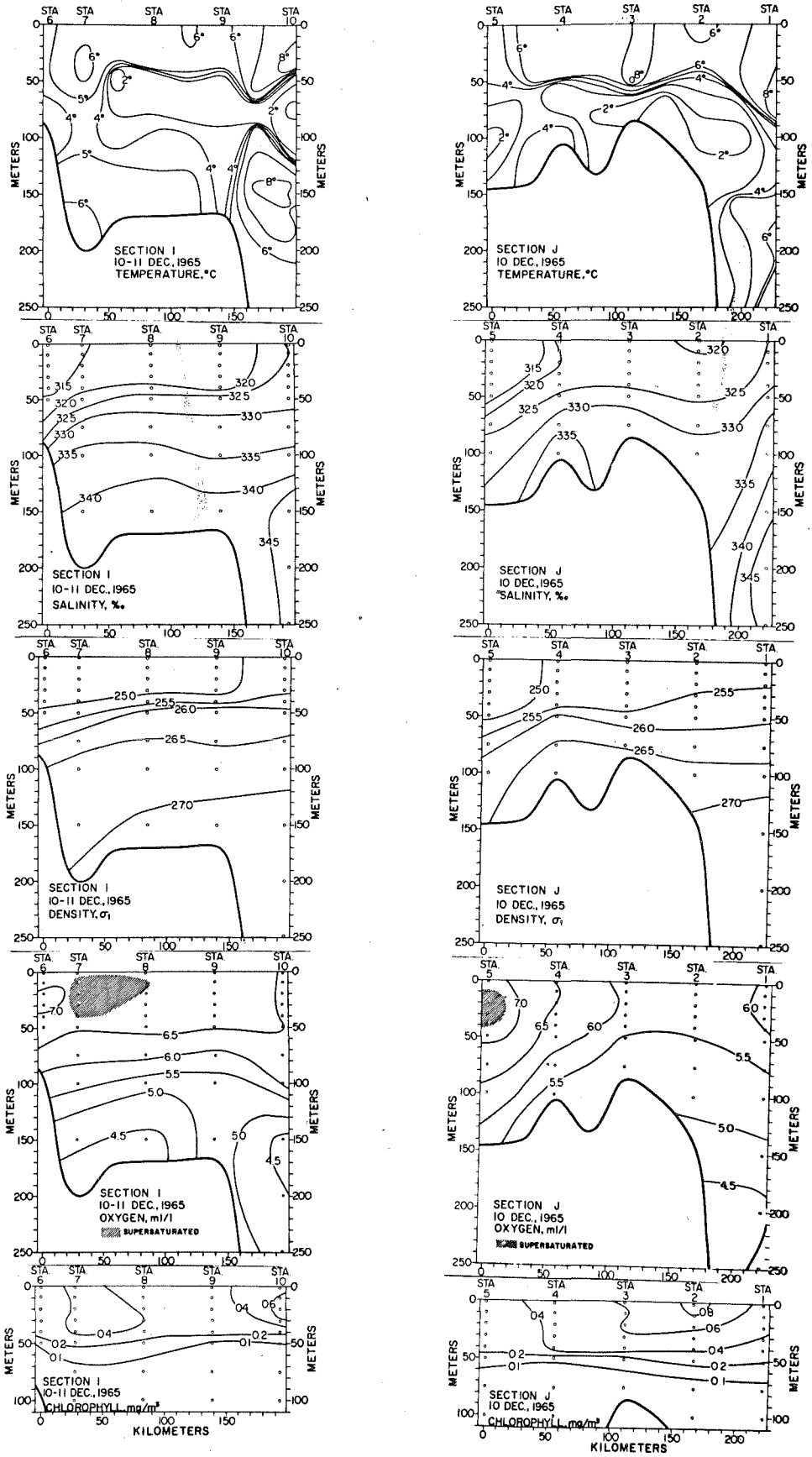

SECTION I
10-11 DEC, 1965
TEMPERATURE, °C
SECTION J
10 DEC, 1965
TEMPERATURE, °C
SECTION I
10-11 DEC, 1965
SALINITY, ‰
SECTION J
10 DEC, 1965
SALINITY, ‰
SECTION I
10-11 DEC, 1965
DENSITY, σt
SECTION J
10 DEC, 1965
DENSITY, σt
SECTION I
10-11 DEC, 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION J
10 DEC, 1965
OXYGEN, ml/l
SUPERSATURATED
SECTION I
10-11 DEC, 1965
CHLOROPHYLL, mg/m³
SECTION J
10 DEC, 1965
CHLOROPHYLL, mg/m³
METERS
KILOMETERS

FIGURE 10

ALB. IV CRUISE NO. 65 - 15

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-XII-65	0800	42°30'	62°30'	1	7.8	32.50	6.05	.54	
					10	7.8	32.52	6.17	.45	
					20	7.7	32.53	6.16	.51	
					30	7.5			.37	
					40	7.6	32.82	6.00	.28	
					50	7.8	33.25	5.62	.20	
					75	8.3	33.54	5.50	.08	
					100	4.0	33.66	5.42	.04	
					150	4.5	34.42	4.74		
					200	5.8	34.92	4.13		
					250	7.1	34.61	4.83		
					BOTTOM					
2	10-XII-65	1130	43°00'	62°30'	1	5.9	31.91	5.83	.81	
					10	5.9	31.98	5.90	.80	
					20	6.0	32.23	5.85	.72	
					30	6.7	32.26	5.81	.49	
					40	5.5	32.33	5.55	.41	
					50	4.0	32.42	5.48	.26	
					75	2.5	32.89	5.31	.06	
					100	1.2	33.24	5.19	.04	
					150					
					200					
					250					
				(137M)	BOTTOM	2.6				
3	10-XII-65	1425	43°30'	62°30'	1	7.0	32.12	5.79	.60	
					10	7.0	32.12	5.94	.58	
					20	7.1	32.14	5.97	.61	
					30	7.1	32.14	5.82	.59	
					40	7.1	32.17	5.76	.50	
					50	8.2	32.95	5.41	.15	
					75	1.9	33.05	5.24	.06	
					100					
					150					
					200					
					250					
				(85M)	BOTTOM	1.9				
4	10-XII-65	1800	44°00'	62°30'	1	6.8	31.99	6.39	.54	
					10	6.8	32.00	6.53	.43	
					20	6.8	31.99	6.50	.42	
					30	6.8	32.11	6.31	.45	
					40	6.7	32.13	6.39	.45	
					50	3.3	32.66	6.27	.12	
					75	2.9	33.31	5.74	.04	
					100	4.1	33.81	5.31	.05	
					150					
					200					
					250					
				(103M)	BOTTOM	4.1				

ALB. IV CRUISE NO. 65-15

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·XII·65	2125	44°30'	62°30'	1	4.1	31.09	7.16	.26	
					10	4.1	31.07	7.22	.29	
					20	4.1	31.07	7.34	.30	
					30	4.1	31.07	7.41	.31	
					40	4.1	31.09	7.30	.25	
					50	4.1	31.41	7.13	.16	
					75	2.7	32.40	6.66	.05	
					100	1.9			.06	
					150					
					200					
					250					
				(143M)	BOTTOM	3.5				
6	11·XII·65	0220	44°15'	63°30'	1	4.9	31.15	6.76	.28	
					10	4.9	31.13	6.94	.28	
					20	4.9	31.13	7.01	.31	
					30	4.9	31.14	7.06	.29	
					40	4.9	31.15	6.92	.28	
					50	4.8	31.62	6.70	.12	
					75	3.5				
					100					
					150					
					200					
					250					
				(95M)	BOTTOM	3.1				
7	11·XII·65	0405	44°00'	63°30'	1	5.6	31.51	6.91	.47	
					10	5.8	31.48	6.96	.42	
					20	6.0	31.56	6.87	.41	
					30	6.7	31.73	6.80	.52	
					40	7.1	31.83	6.73	.47	
					50	6.2	32.21	6.54	.22	
					75	4.9	33.24	6.21	.07	
					100	4.3	33.69	5.65	.02	
					150	5.8	34.09	4.75		
					200	6.1				
					250					
				(200M)	BOTTOM	6.1				
8	11·XII·65	0730	43°30'	63°30'	1	5.9	31.59	6.73	.31	
					10	5.9	31.56	6.89	.33	
					20	5.9	31.56	6.84	.33	
					30	5.9	31.56	6.75	.40	
					40	5.0	32.05	6.65	.30	
					50	2.3	32.72	6.68	.13	
					75	2.8	33.25	6.16	.08	
					100	4.1	33.69	5.20	.02	
					150	5.6	34.32	4.44		
					200					
					250					
				(170M)	BOTTOM	5.9				

ALB. IV CRUISE NO. 65-15

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	11·XII·65	1040	43°00'	63°30'	1	5.9	31.58	6.66	.37	
					10	5.9	31.56	6.77	.37	
					20	5.9	31.56	6.84	.32	
					30	5.8	31.56	6.77	.31	
					40	4.9	31.81	6.69	.25	
					50	2.6	32.73	6.54	.09	
					75	2.7	33.15	5.94	.04	
					100	3.2	33.47	5.31	.02	
					150	3.8	34.17	5.47		
					200					
					250					
				(169m)	BOTTOM	3.8				
10	11·XII·65	1355	42°30'	63°30'	1	7.8	32.55	6.42	.53	
					10	7.9	32.50	6.47	.61	
					20	8.0	32.61	6.46	.63	
					30	8.0	32.65	6.40	.59	
					40	8.2	32.90	6.19	.21	
					50	2.7	32.87	6.51	.10	
					75	0.8	33.21	6.17	.07	
					100	1.4	33.57	6.02	.06	
					150	7.7	34.79	4.47		
					200	6.2	34.65	4.53		
					250	5.3	34.64	4.78		
					BOTTOM					
11	11·XII·65	1940	42°00'	64°30'	1	7.8	32.43	6.50	.61	
					10	7.8	32.41	6.66	.60	
					20	7.8	32.42	6.73	.64	
					30	8.0	32.52	6.59	.46	
					40	8.2	32.86	6.39	.21	
					50	7.0	32.90	6.55	.13	
					75	3.2	34.93	4.55	.03	
					100	10.8	35.32	3.76	.03	
					150	10.0	35.23	3.39		
					200	8.3	35.11	3.51		
					250	7.5	35.04	3.76		
					BOTTOM					
12	11·XII·65	2320	42°30'	64°30'	1	6.4	32.15	6.58	.85	
					10	6.4	32.13	6.86	.90	
					20	6.4	32.13	6.88	.69	
					30	6.4	32.15	6.73	.64	
					40	6.5	32.19	6.78	.54	
					50	6.1	32.52	6.70	.31	
					75	2.5	33.12	6.61	.13	
					100	2.7	33.66	6.00	.07	
					150	5.2	34.03	5.25		
					200	5.1	34.42	5.18		
					250	6.3	34.81	4.32		
					BOTTOM					

ALB. IV CRUISE NO. 65-15

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	12-XII-65	0245	43°00'	64°30'	1	5.6	31.42	6.75	.37	
					10	5.5	31.40	6.85	.34	
					20	5.5	31.39	6.91	.41	
					30	5.5	31.40	6.85	.34	
					40	3.6	31.51	6.73	.31	
					50	2.8	32.57	6.43	.14	
					75	2.1	32.87	5.97	.07	
					100	2.2	32.94	5.77	.07	
					150					
					200					
					250					
				(115M)	BOTTOM	2.2				
14	12-XII-65	0630	43°30'	64°30'	1	4.7	31.16	6.96	.33	
					10	4.8	31.13	7.08	.28	
					20	4.8	31.14	7.16	.33	
					30	4.8	31.15	7.16	.39	
					40	4.8	31.13	7.11	.30	
					50	4.9	31.15	7.14	.31	
					75	3.2	32.17	6.50	.09	
					100	2.9	32.58	6.19	.06	
					150					
					200					
					250					
				(102M)	BOTTOM	2.9				
15	12-XII-65	1000	44°00'	64°30'	1	4.8	31.23	6.86	.38	
					10	4.9	31.12	7.03	.39	
					20	4.9	31.24	7.07	.39	
					30	5.1	31.27	7.02	.37	
					40	5.2	31.33	6.98	.27	
					50	5.5	31.71	6.53	.15	
					75	3.8				
					100					
					150					
					200					
					250					
				(75M)	BOTTOM	3.8				
16	12-XII-65	1605	43°15'	65°30'	1	5.8	31.17	6.85	.34	
					10	5.9	31.16	7.35	.34	
					20	6.0	31.33	6.95		
					30	6.9	32.03	6.68	.28	
					40	6.2	32.18	6.53	.25	
					50	6.1	32.22	6.45	.24	
					75					
					100					
					150					
					200					
					250					
				(58M)	BOTTOM	6.0				

ALB. IV CRUISE NO. 65-15

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·XII·65	1755	43°00'	65°30'	1	5.2	31.87	6.81	.38	
					10	5.1	31.88	6.94	.43	
					20	5.1	31.90	6.87	.31	
					30	5.1	32.35	6.40	.22	
					40	4.9	32.48	6.52	.18	
					50	4.2	32.66	6.38	.13	
					75	3.2	32.88	5.98	.08	
					100	2.9	32.97	5.64	.10	
					150					
					200					
					250					
				(123M)	BOTTOM	3.0				
18	12·XII·65	2105	42°30'	65°30'	1	5.3	31.84	6.53	.43	
					10	5.3	31.93	6.94	.53	
					20	5.3	32.08	6.83	.24	
					30	5.1	32.62	6.35	.18	
					40	4.7	32.77	6.16	.13	
					50	4.6	32.76	6.20	.13	
					75	4.5	32.77	6.15	.10	
					100					
					150					
					200					
					250					
				(98M)	BOTTOM	4.5				
19	13·XII·65	0410	42°00'	65°30'	1	6.1	32.12	6.62	.63	
					10	6.1	32.10	6.99	.74	
					20	6.2	32.11	7.03	.71	
					30	6.3	32.13	6.83	.75	
					40	6.5	32.50	6.71	.28	
					50	6.3	32.73	6.70	.17	
					75	2.9	33.44	6.20	.07	
					100	4.5	33.98	5.80	.03	
					150	4.7	34.63	4.72		
					200	5.1	34.61	5.07		
					250	5.0	34.64	5.14		
					BOTTOM					
20	13·XII·65	0600	41°45'	65°30'	1	7.0	32.18	6.64	.54	
					10	7.0	32.15	6.77	.54	
					20	7.0	32.16	6.80	.50	
					30	6.8	32.29	6.82	.33	
					40	6.3	32.72	6.55	.21	
					50	5.8	32.99	6.28	.19	
					75	3.7	33.17	6.07	.10	
					100	3.3	33.75	5.80	.04	
					150	4.8	34.38	5.34		
					200	5.2	34.65	4.90		
					250	5.9	34.80	4.68		
					BOTTOM					

ALB. IV CRUISE NO. 65-15

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			
21	13·XII·65	0800	41°30'	65°31'	1	8.7	32.88	6.25	.54				
					10	8.7			.52				
					20	8.9	32.93	6.34	.56				
					30	9.9	33.20	6.17	.47				
					40	10.2	33.61	5.95	.25				
					50	10.1	33.74	5.78	.13				
					75	6.3	33.64	5.79	.06				
					100	3.0	33.58	6.07	.06				
					150	4.2	34.19	5.63					
					200	5.1	34.67	4.83					
					250	5.0	34.67	4.95					
					BOTTOM								
22	13·XII·65	1130	41°00'	65°30'	1	6.2	32.10	6.59	.57				
					10	6.2	32.08	6.85	.75				
					20	6.2	32.10	6.78	.68				
					30	6.5	32.30	6.73	.32				
					40	6.3	32.51	6.70	.25				
					50	7.0	32.78	6.35	.18				
					75	4.8	33.06	6.17	.08				
					100	2.5	33.37	6.34	.05				
					150	3.2	33.15	5.97					
					200	3.8	33.60	5.28					
					250	4.9	34.66	4.91					
					BOTTOM								
23	13·XII·65	2015	40°00'	66°30'	1	16.3	35.17	5.29	.24				
					10	16.1	35.18	5.36	.28				
					20	16.1	35.18	5.41	.25				
					30	16.1	35.17	5.29	.19				
					40	16.0	35.18	5.27	.36				
					50	15.9	35.18	5.27	.32				
					75	15.0	35.35	4.76	.09				
					100	13.5	35.45	4.19	.02				
					150	12.8	35.58	3.66					
					200	11.5	35.49	3.36					
					250	10.4	35.36	3.36					
					BOTTOM								
24	13·XII·65	2352	40°30'	66°30'	1	13.7	34.49	5.72	.39				
					10	13.5	34.48	5.74	.40				
					20	13.4	34.47	5.71	.40				
					30	13.3	34.47	5.67	.42				
					40	13.2	34.49	5.70	.37				
					50	13.0	34.58	5.48	.34				
					75	10.0	34.15	5.45	.07				
					100	14.0	35.59	4.00	.02				
					150	12.7	35.58	3.69					
					200	11.8	35.45	3.31					
					250	8.8	35.03	3.83					
					BOTTOM								

ALB. IV CRUISE NO. 65-15

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	14-XII-65	0135	40°45'	66°30'	1	6.0	32.10	6.84	.49	
					10	6.0	32.12	7.05	.54	
					20	6.0	32.18	7.13	.46	
					30	7.0	32.96	6.51	.19	
					40	8.0	33.21	6.33	.19	
					50	7.9	33.09	6.38	.17	
					75	6.0	33.36	6.25	.10	
					100	4.0	33.51	6.04	.05	
					150	3.1	33.79	5.99		
					200	4.8	34.28	5.55		
					250	4.8	34.50	5.29		
					BOTTOM					
26	14-XII-65	0340	41°00'	66°30'	1	5.9	32.54	6.99	.24	
					10	5.8	32.54	6.99	.20	
					20	6.1	32.61	6.81	.22	
					30	6.4	32.75	6.71	.18	
					40	6.4	32.78	6.60	.14	
					50	6.3	32.79	6.67	.37	
					75	6.0	33.11	6.34	.18	
					100	5.3	33.52	6.03	.08	
					150					
					200					
					250					
				(118M)	BOTTOM	5.1				
27	14-XII-65	0715	41°31'	66°30'	1	6.6	32.65	6.81	.29	
					10	6.6	32.65	6.92	.29	
					20	6.6	32.65	7.01	.28	
					30	6.6	32.66	6.92	.34	
					40	6.6	32.66	6.85	.36	
					50	6.6	32.65	6.82	.27	
					75	6.6	32.66	6.84	.37	
					100					
					150					
					200					
					250					
				(90M)	BOTTOM	6.6				
28	14-XII-65	1030	42°00'	66°30'	1	6.1	32.71	6.77	.28	
					10	6.1	32.71	6.87	.28	
					20	6.1	32.71	6.85	.31	
					30	6.1	32.72	6.87	.31	
					40	6.1	32.72	6.87	.29	
					50	6.1	32.72	6.87	.28	
					75	6.1	32.72	6.90	.25	
					100					
					150					
					200					
					250					
				(87M)	BOTTOM	6.1				

ALB. IV CRUISE NO. 65-15

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	14·XII·65	1235	42°15'	66°30'	1	5.8	32.75	6.93	.37				
					10	5.8	32.75	7.12	.27				
					20	5.8	32.75	7.17	.37				
					30	5.8	32.76	7.03	.37				
					40	5.7	32.85	7.02	.30				
					50	5.6	32.97	6.50	.16				
					75	5.7	33.40	6.15	.08				
					100	5.2	33.68	5.75	.04				
					150	6.9	34.63	4.84					
					200	6.8	34.75	4.69					
					250								
				(229M)	BOTTOM	6.8							
30	14·XII·65	1540	42°30'	66°30'	1	5.7	32.68	6.69	.43				
					10	5.7	32.67	6.71	.34				
					20	5.7	32.67	6.72	.39				
					30	5.7	32.70	6.69	.42				
					40	5.8	32.73	6.69	.35				
					50	5.8	32.91	6.68	.34				
					75	5.8	33.18	6.53	.22				
					100	5.8	33.52	6.13	.10				
					150	4.6	33.74	5.49					
					200	6.2	34.13	5.49					
					250	6.4	34.56	5.07					
				(265M)	BOTTOM	6.5							
31	14·XII·65	1950	43°00'	66°30'	1	5.3	32.62	6.26	.21				
					10	5.3	32.62	6.51	.22				
					20	5.3	32.62	6.39	.22				
					30	5.3	32.64	6.47	.21				
					40	5.3	32.66	6.44	.22				
					50	5.3	32.67	6.47	.22				
					75	5.3	32.69	6.39	.22				
					100	5.3	32.72	6.34	.23				
					150								
					200								
					250								
				(115M)	BOTTOM	5.3							
32	14·XII·65	2255	43°30'	66°30'	1	4.9	32.15	6.80	.27				
					10	4.9	32.15	6.86	.26				
					20	5.0	32.18	6.89	.32				
					30	5.0	32.23	6.81	.28				
					40	5.0	32.26	6.74	.29				
					50	5.0	32.27	6.81	.36				
					75	5.0	32.30	6.74	.25				
					100								
					150								
					200								
					250								
				(98M)	BOTTOM	5.0							

ALB. IV CRUISE NO. 65-15

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	15·XII·65	0245	44°00'	66°30'	1	4.8	32.11	6.75	.28	
					10	4.9	32.11	6.98	.32	
					20	4.9	32.26	7.04	.30	
					30	4.9	32.33	6.98	.26	
					40	4.9	32.37	6.95	.28	
					50	5.0	32.49	6.88	.27	
					75	5.0	32.55	6.81	.29	
					100					
					150					
					200					
					250					
				(97M)	BOTTOM	5.0				
34	15·XII·65	0610	44°31'	66°30'	1	5.0	32.77	6.72	.22	
					10	5.0	32.77	6.80	.24	
					20	5.0	32.77	6.78	.21	
					30	5.1	32.85	6.61	.16	
					40	5.4	32.95	6.41	.15	
					50	5.5	32.98	6.33	.16	
					75	5.7	33.02	6.26	.15	
					100	5.7	33.04	6.26	.16	
					150	5.8	33.04	6.31		
					200					
					250					
				(161M)	BOTTOM	5.8				
35	15·XII·65	1100	44°28'	67°30'	1	4.8	32.70	6.54	.31	
					10	4.9	32.69	6.85	.28	
					20	5.0	32.69	6.85	.31	
					30	5.1	32.73	6.85	.33	
					40	5.2	32.74	6.85	.33	
					50	5.2				
					75					
					100					
					150					
					200					
					250					
				(59M)	BOTTOM	5.2				
36	15·XII·65	1340	44°00'	67°30'	1	5.0	32.86	6.58	.46	
					10	5.0	32.87	6.88	.40	
					20	5.1	32.92	6.79	.28	
					30	5.1	32.92	6.64	.25	
					40	5.1	32.93	6.59	.25	
					50	5.1	32.94	6.63	.24	
					75	5.2	32.95	6.58	.24	
					100	5.2	33.20	6.05	.12	
					150	5.5	33.67	5.34		
					200	5.2	33.82	5.01		
					250					
				(221M)	BOTTOM	5.2				

ALB. IV CRUISE NO. 65-15

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	15·XII·65	1710	43°30'	67°30'	1	5.3	33.00	6.85	.37	
					10	5.3	32.98	6.94	.38	
					20	5.3	32.98	6.94	.41	
					30	5.3	32.98	6.89	.39	
					40	5.3	32.98	6.89	.37	
					50	5.3	32.98	6.89	.34	
					75	5.9	33.26	6.00	.12	
					100	6.0	33.62	5.29	.03	
					150	5.5	33.93	4.95		
					200	5.4	34.13	4.98		
					250	4.2				
				(275m)	BOTTOM	3.9				
38	15·XII·65	2020	43°00'	67°30'	1	5.3	32.92	6.98	.27	
					10	5.3	32.92	7.05	.29	
					20	5.3	32.92	7.03	.27	
					30	5.3	32.92	7.11	.25	
					40	5.3	32.94	7.03	.27	
					50	5.3	32.99	6.89	.21	
					75	5.2	33.42	5.78	.10	
					100	5.2	33.58	5.52	.04	
					150	5.8	34.14	5.25		
					200	6.0	34.20	5.15		
					250					
				(211m)	BOTTOM	6.0				
39	16·XII·65	0015	42°30'	67°29'	1	6.2	32.57	6.53	.43	
					10	6.2	32.56	6.75	.40	
					20	6.1	32.56	6.75	.40	
					30	6.0	32.61	6.62	.35	
					40	5.8	32.69	6.77	.26	
					50	5.2	32.81	6.03	.16	
					75	4.8	33.03	5.62		
					100	5.2	33.37	5.48	.06	
					150	5.3	34.17	5.02		
					200	7.0	34.65	4.67		
					250	6.2	34.76	4.60		
					BOTTOM					
40	16·XII·65	0155	42°15'	67°30'	1	6.7	32.53	6.38	.44	
					10	6.7	32.51	6.56	.46	
					20	6.8	32.51	6.64	.52	
					30	6.7	32.51	6.64	.44	
					40	6.4	32.55	7.15	.26	
					50	6.1	32.63	6.43	.30	
					75	5.1	32.82	5.77	.12	
					100	4.8	32.99	5.53	.12	
					150	5.0	33.82	5.14		
					200	6.2	34.53	4.82		
					250	6.3	34.66	4.71		
				(275m)	BOTTOM	6.3				

ALB. IV CRUISE NO. 65-15

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	16·XII·65	0350	42°00'	67°30'	1	6.9	32.56	6.28	.77	
					10	6.8	32.55	6.49	.80	
					20	6.8	32.60	6.36	.66	
					30	6.7	32.60	6.29	.59	
					40	6.7	32.60	6.23	.61	
					50	6.7				
					75					
					100					
					150					
					200					
					250					
				(52M)	BOTTOM	6.7				
42	16·XII·65	0730	41°30'	67°30'	1	7.7	32.46	6.65	11.70	
					10	7.8	32.47	6.75	6.17	
					20	7.8	32.47	6.80	6.56	
					30	7.8	32.48	6.75	5.62	
					40	7.8	32.48	6.71	6.26	
					50	7.9				
					75					
					100					
					150					
					200					
					250					
				(54M)	BOTTOM	7.9				
43	16·XII·65	1120	41°00'	67°30'	1	7.0	32.64	6.33	1.87	
					10	7.0	32.65	6.45	1.42	
					20	7.0	32.65	6.54	1.34	
					30	7.0	32.65	6.54	1.73	
					40	7.0	32.65	6.50	2.04	
					50	7.0	32.65	6.45	1.25	
					75					
					100					
					150					
					200					
					250					
				(68M)	BOTTOM	6.9				
44	16·XII·65	1435	40°30'	67°30'	1	7.5	32.69	6.36	.77	
					10	13.0	33.78	6.13	.31	
					20	14.8	34.91	5.51	.33	
					30	15.0	34.93	5.51	.38	
					40	15.0	34.94	5.47	.35	
					50	15.1	34.95	5.52	.30	
					75	13.9	34.47	5.11	.10	
					100	8.4	34.37	5.03	.09	
					150					
					200					
					250					
				(132M)	BOTTOM	9.0				

ALB. IV CRUISE NO. 65-15

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	16-XII-65	1625	40°16'	67°31'	1	13.4	34.43	5.64	.30				
					10	13.4	34.44	5.74	.34				
					20	13.5	34.46	5.82	.37				
					30	13.6	34.52	5.71	.38				
					40	14.3	34.75	5.36	.26				
					50	15.3	35.33	5.46	.33				
					75	15.2	35.25	4.80	.15				
					100	13.5	35.63	3.77	.05				
					150	12.3	35.54	3.54					
					200	10.9	35.39	3.41					
					250	9.2	35.28	3.31					
					BOTTOM								
46	16-XII-65	1810	40°00'	67°30'	1	11.8	34.00	6.16	.27				
					10	11.8	33.99	6.19	.35				
					20	11.8	33.99	6.30	.36				
					30	11.8	33.99	6.25	.36				
					40	12.0	34.38	5.91	.24				
					50	13.2	34.45	5.95	.22				
					75	12.7	34.35	5.69	.11				
					100	7.1	34.14	5.65	.03				
					150	8.0	34.83	4.64					
					200	7.1	34.80	4.50					
					250	6.8	34.89	4.27					
					BOTTOM								
47	16-XII-65	2130	39°30'	67°30'	1	10.6	33.54	6.24	.46				
					10	10.6	33.52	6.31	.51				
					20	10.7	33.52	6.37	.51				
					30	11.0	33.72	6.14	.49				
					40	12.7	34.06	5.93	.37				
					50	13.0	34.21	5.82	.35				
					75	13.5	35.70	4.31	.05				
					100	14.4	35.85	3.91	.02				
					150	12.7	35.50	3.66					
					200	11.1	35.21	3.82					
					250	9.7	35.21	3.45					
					BOTTOM								
48	17-XII-65	0230	39°30'	68°30'	1	12.2	34.12	5.95	.58				
					10	12.2	34.12	6.11	.50				
					20	12.2	34.15	6.11	.51				
					30	12.4	34.21	6.02	.50				
					40	14.6	34.80	5.70	.32				
					50	14.8	34.94	5.60	.21				
					75	13.0	34.40	5.50	.09				
					100	6.9	34.16	5.43	.02				
					150	8.0	34.74	4.79					
					200	7.6	34.90	4.34					
					250	8.1	35.10	3.79					
					BOTTOM								

ALB. IV CRUISE NO. 65-15

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	17-XII-65	0605	40°00'	68°30'	1	8.5	32.74	6.82	.47	
					10	9.3	32.87	6.76	.65	
					20	9.6	32.97	6.84	.58	
					30	9.8	33.32	6.42	.25	
					40	10.8	33.53	6.25	.28	
					50	9.0	33.32	6.28	.10	
					75	8.3	33.95	5.65	.05	
					100	5.2	33.84	5.60	.03	
					150	9.5	34.95	4.37		
					200	6.9	34.58	4.82		
					250	6.8	34.61	4.83		
					BOTTOM					
50	17-XII-65	0810	40°15'	68°30'	1	6.1	32.76	6.53	.47	
					10	5.9	32.74	6.88	.44	
					20	5.8	32.78	6.86	.35	
					30	5.7	32.86	6.49	.31	
					40	5.7	32.93	6.37	.35	
					50	5.7	32.98	6.36	.24	
					75	5.2	33.26	6.03	.15	
					100	5.0	33.51	5.85	.13	
					150	5.7	34.26	5.21		
					200					
					250					
				(173M)	BOTTOM	5.9				
51	17-XII-65	1000	40°30'	68°30'	1	7.0	32.73	6.53	.77	
					10	7.0	32.72	6.72	.80	
					20	7.0	32.72	6.72	.68	
					30	7.0	32.72	6.72	.56	
					40	7.0	32.73	6.69	.68	
					50	7.0	32.73	6.72	.87	
					75	7.0	32.74	6.68	.87	
					100					
					150					
					200					
					250					
				(87M)	BOTTOM	7.0				
52	17-XII-65	1250	41°00'	68°30'	1	9.1	32.47	6.44	4.26	
					10	9.1	32.47	6.51	4.43	
					20	9.1	32.47	6.62	4.63	
					30	9.1	32.47	6.56	5.43	
					40	9.1	32.47	6.53	5.96	
					50	9.1	32.47	6.53	5.63	
					75					
					100					
					150					
					200					
					250					
				(55M)	BOTTOM	9.1				

ALB. IV CRUISE NO. 65-15

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			
53	17·XII·65	1615	41°30'	68°30'	1	7.3	32.54	6.66	.94				
					10	7.3	32.54	6.78	1.15				
					20	7.2	32.55	6.78	.84				
					30	7.1	32.55	6.65	1.02				
					40	6.2	32.58	6.56	.94				
					50	6.0	32.64	6.33	.52				
					75	5.3	32.84	5.76	.40				
					100								
					150								
					200								
					250								
				(90m)	BOTTOM	5.1							
54	17·XII·65	1810	41°45'	68°30'	1	7.3	32.55	6.51	.61				
					10	6.8	32.55	6.70	.47				
					20	6.2	32.57	6.64	.36				
					30	6.1	32.60	6.53	.24				
					40	5.9	32.65	6.32	.42				
					50	5.3	32.80	5.91	.33				
					75	4.8	32.90	5.60	.18				
					100	4.5	33.03	5.43	.13				
					150	4.3	33.54	5.01					
					200								
					250								
				(195m)	BOTTOM	4.6							
55	17·XII·65	2010	42°00'	68°30'	1	7.0	32.50	6.71	.34				
					10	6.9	32.49	6.86	.32				
					20	6.9	32.53	6.86	.26				
					30	6.8	32.57	6.83	.28				
					40	6.8	32.58	6.83	.35				
					50	6.8	32.59	6.72	.27				
					75	6.3	32.68	6.27	.12				
					100	5.2	32.96	5.69	.04				
					150	5.0	33.37	5.04					
					200								
					250								
				(175m)	BOTTOM	5.2							
56	17·XII·65	2310	42°30'	68°30'	1	5.2	32.79	6.85	.33				
					10	5.2	32.80	7.03	.26				
					20	5.2	32.83	6.89	.28				
					30	5.2	32.89	6.76	.22				
					40	5.2	32.95	6.48	.19				
					50	5.2	32.99	6.35	.15				
					75	4.9	33.13	5.83	.09				
					100	4.3	33.32	5.26	.02				
					150	4.9	33.88	4.94					
					200	5.1	34.05	4.87					
					250								
				(221m)	BOTTOM	5.1							

ALB. IV CRUISE NO. 65-15

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	18·XII·65	0235	43°00'	68°30'	1	5.1	33.04	6.77	.29	
					10	5.2	33.03	6.87	.34	
					20	5.2	33.03	6.87	.36	
					30	5.2	33.03	6.82	.35	
					40	5.2	33.03	6.82	.31	
					50	5.2	33.04	6.82	.31	
					75	5.2	33.04	6.72	.31	
					100	5.3	33.42	5.70	.06	
					150	5.0	33.78	5.13		
					200	5.0				
					250					
				(200m)	BOTTOM	5.0				
58	18·XII·65	0630	43°30'	68°30'	1	5.1	32.98	6.81	.22	
					10	5.1	32.97	6.63	.16	
					20	5.1	32.97	6.71	.20	
					30	5.1	32.98	6.68	.18	
					40	5.1	32.98	6.71	.17	
					50	5.0	33.00	6.66	.20	
					75	5.0	33.06	6.61	.21	
					100	5.1	33.08	6.45	.18	
					150	5.2				
					200					
					250					
				(159m)	BOTTOM	5.2				
59	18·XII·65	1040	44°00'	68°30'	1	4.2	32.81	7.01	.27	
					10	4.2	32.79	7.06	.28	
					20	4.2	32.79	7.06	.31	
					30	4.2	32.79	7.10	.30	
					40	4.2	32.80	6.99	.28	
					50	4.2	32.81	6.99	.33	
					75	4.8	32.87	6.91	.22	
					100					
					150					
					200					
					250					
				(90m)	BOTTOM	4.9				
60	18·XII·65	1600	43°30'	69°30'	1	5.2	33.10	6.59	.28	
					10	5.2	33.10	6.76	.26	
					20	5.2	33.10	6.78	.27	
					30	5.2	33.10	6.76	.27	
					40	5.2	33.10	6.88	.27	
					50	5.2	33.11	6.81	.27	
					75	5.2	33.11	6.75	.22	
					100	5.1	33.12	6.65	.22	
					150					
					200					
					250					
				(132m)	BOTTOM	5.7				

ALB. IV CRUISE NO. 65-15

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	18·XII·65	1920	43°00'	69°30'	1	5.9	32.90	6.83	.31				
					10	6.0	32.89	6.81	.26				
					20	6.1	32.94	6.71	.24				
					30	6.3	33.00	6.44	.16				
					40	6.7	33.06	6.36	.12				
					50	6.7	33.07	6.36	.09				
					75	6.7	33.31	5.75	.03				
					100	6.3	33.36	5.37	.03				
					150	6.2							
					200								
					250								
				(150m)	BOTTOM	6.2							
62	18·XII·65	2350	43°00'	70°30'	1	5.2	32.69	6.69	.34				
					10	5.2	32.66	6.80	.33				
					20	5.2	32.66	6.78	.31				
					30	5.2	32.67	6.75	.33				
					40	5.2	32.66	6.82	.34				
					50	5.2	32.66	6.79	.29				
					75	5.5	32.72	6.38	.21				
					100								
					150								
					200								
					250								
				(92m)	BOTTOM	5.3							
63	19·XII·65	0255	42°30'	70°30'	1	4.4	32.59	6.60	.44				
					10	4.4	32.59	6.74	.39				
					20	4.4	32.60	6.69	.35				
					30	4.4	32.60	6.60	.34				
					40	4.4	32.61	6.47	.31				
					50	4.4	32.64	6.46	.33				
					75	4.7	32.68	6.13	.25				
					100								
					150								
					200								
					250								
				(75m)	BOTTOM	4.7							
64	19·XII·65	0600	42°00'	70°30'	1	5.5	32.33	6.81	.56				
					10	5.7	32.32	7.00	.71				
					20	5.9	32.32	7.14	.61				
					30	5.9	32.32	7.04	.64				
					40								
					50								
					75								
					100								
					150								
					200								
					250								
				(38m)	BOTTOM	5.9							

ALB. IV CRUISE NO. 65-15

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	19·XII·65	1115	42°30'	69°30'	1	5.0	32.00	6.79	.37				
					10	5.1	32.79	6.86	.33				
					20	5.2	32.79	7.01	.29				
					30	5.2	32.91	6.87	.28				
					40	5.2	32.92	6.81	.35				
					50	5.2	32.93	6.83	.30				
					75	5.3	33.02	6.62	.23				
					100	5.3	33.22	6.01	.12				
					150	4.7	33.64	5.05					
					200	5.0	34.01	4.83					
					250	5.0	34.11	4.65					
				(152m)	BOTTOM	5.0							
66	19·XII·65	1425	42°00'	69°30'	1	5.0	32.84	6.78	.32				
					10	5.0	32.83	6.91	.39				
					20	5.0	32.83	6.91	.37				
					30	5.0	32.84	6.94	.32				
					40	5.1	32.83	6.88	.21				
					50	5.3	32.99	6.58	.16				
					75	5.2	33.15	5.86	.10				
					100	4.7	33.22	5.47	.07				
					150	4.5	33.53	4.95					
					200	4.8	33.81	4.69					
					250								
				(211m)	BOTTOM	4.9							
67	19·XII·65	1740	41°30'	69°30'	1	5.7	32.60	6.71	.31				
					10	5.7	32.58	6.89	.30				
					20	5.7	32.57	6.89	.30				
					30	5.7	32.57	6.89	.31				
					40	5.7							
					50								
					75								
					100								
					150								
					200								
					250								
				(43m)	BOTTOM	5.7							
68	19·XII·65	2110	41°00'	69°30'	1	6.0	32.56	6.66	.61				
					10	6.0	32.53	6.81	.50				
					20	6.0	32.54	6.81	.59				
					30	6.0	32.55	6.81	.68				
					40								
					50								
					75								
					100								
					150								
					200								
					250								
				(36m)	BOTTOM	6.0							

ALB. IV CRUISE NO. 65-15

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	20-XII-65	0045	40°30'	69°30'	1	8.2	32.50	6.39	.89	
					10	8.2	32.50	6.49	1.28	
					20	8.2	32.50	6.44	1.34	
					30	8.2	32.50	6.48	1.34	
					40	8.2	32.50	6.51	1.50	
					50	8.2	32.50	6.50	1.42	
					75					
					100					
					150					
					200					
					250					
				(72M)	BOTTOM	8.2				
70	20-XII-65	0345	40°00'	69°30'	1	8.8	33.22	6.36	.34	
					10	8.8	33.23	6.50	.38	
					20	8.9	33.24	6.50	.34	
					30	10.7	33.96	5.98	.18	
					40	7.0	33.54	5.90	.15	
					50	6.2	33.56	5.91	.11	
					75	6.0	33.59	5.76	.08	
					100	5.9	33.76	5.55	.08	
					150					
					200					
					250					
				(117M)	BOTTOM	5.9				
71	20-XII-65	0530	39°45'	69°30'	1	9.2	33.40	6.29	.33	
					10	9.2	33.40	6.45	.30	
					20	9.2	33.39	6.39	.38	
					30	9.2	33.39	6.33	.28	
					40	9.3	33.75	6.06	.18	
					50	9.3	33.70	6.25	.12	
					75	7.0	33.85	5.88	.06	
					100	5.5	34.02	5.90	.05	
					150	7.0	34.64	5.02		
					200	8.1	34.95	4.26		
					250	7.9	35.00	3.96		
					BOTTOM					
72	20-XII-65	0730	39°30'	69°30'	1	10.2	33.78	6.15	.31	
					10	10.2	33.77	6.17	.30	
					20	10.2	33.79	6.23	.26	
					30	10.3	33.79	6.13	.26	
					40	10.3	33.94	5.96	.40	
					50	11.6	34.17	5.77	.18	
					75	8.1	34.20	5.38	.04	
					100	7.5	34.57	4.94	.02	
					150	7.7	34.74	4.52		
					200	8.8	35.10	3.73		
					250	7.4	35.03	3.74		
					BOTTOM					

ALB. IV CRUISE NO. 65-15

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	20·XII·65	1305	39°30'	70°30'	1	8.0	33.00	6.54	2.04				
					10	8.0	32.99	6.66	1.73				
					20	8.0	32.99	6.73	1.55				
					30	8.0	32.99	6.73	1.73				
					40	8.0	32.99	6.64	1.32				
					50	8.0	33.00	6.67	1.07				
					75	6.5	33.69	5.77	.16				
					100	6.8	34.36	5.18	.04				
					150	7.7	34.78	4.45					
					200	7.2	34.85	4.27					
					250	6.1	34.85	4.43					
					BOTTOM								
74	20·XII·65	1515	39°45'	70°30'	1	7.9	33.19	6.39	.45				
					10	7.8	33.17	6.46	.42				
					20	7.7	33.17	6.40	.52				
					30	7.7	33.17	6.31	.40				
					40	7.8	33.18	6.31	.59				
					50	7.9	33.85	5.83	.19				
					75	4.8	33.47	5.78	.06				
					100	5.2	34.06	5.37	.02				
					150	6.8	34.58	4.76					
					200	6.5	34.76	4.49					
					250	6.6	34.88	4.24					
					BOTTOM								
75	20·XII·65	1730	40°00'	70°30'	1	6.5	32.80	6.64	.61				
					10	6.6	32.80	6.64	.48				
					20	7.0	32.93	6.79	.52				
					30	7.8	33.09	6.55	.69				
					40	7.8	33.16	6.41	.41				
					50	7.7	33.20	6.15	.31				
					75	5.9	33.49	5.85	.10				
					100	4.7	33.74	5.62	.06				
					150	4.8	34.03	5.43					
					200	7.2	34.60	4.80					
					250	7.1	34.80	4.39					
					BOTTOM								
76	20·XII·65	2100	40°30'	70°30'	1	8.1	32.60	6.31	1.15				
					10	8.1	32.58	6.41	.84				
					20	8.1	32.58	6.53	1.02				
					30	8.1	32.60	6.44	1.32				
					40	8.2	32.60	6.44	1.46				
					50	8.2	32.65	6.39	1.19				
					75								
					100								
					150								
					200								
					250								
				(71M)	BOTTOM	8.2							

ALB. IV CRUISE NO. 65-15

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	21-XII-65	2330	39°30'	72°30'	1	7.9	32.75	6.66	1.55	
					10	7.9	32.75	6.74	1.81	
					20	7.9	32.75	6.91	1.87	
					30	7.9	32.77	6.85	1.87	
					40	7.9	32.77	6.85	1.64	
					50	8.2	32.86	6.69	1.25	
					75	8.5	33.52	5.80	.40	
					100	9.7	34.16	4.80	.15	
					150					
					200					
					250					
				(1157)	BOTTOM	10.1				
86	22-XII-65	0240	40°00'	72°30'	1	8.9	32.72	6.27	.53	
					10	8.9	32.71	6.28	.49	
					20	8.8	32.71	6.38	.60	
					30	8.8	32.71	6.26	.74	
					40	8.8	32.73	6.25	.59	
					50	8.8	32.75	6.21	.52	
					75					
					100					
					150					
					200					
					250					
				(7211)	BOTTOM	8.9				
87	22-XII-65	0620	40°30'	72°30'	1	7.5	32.46	6.41	.29	
					10	7.4	32.42	6.45	.37	
					20	7.4	32.42	6.47	.41	
					30	7.5	32.46	6.28	.40	
					40	7.5	32.46	6.28	.35	
					50					
					75					
					100					
					150					
					200					
					250					
				(4611)	BOTTOM	7.6				
					1					
					10					
					20					
					30					
					40					
					50					
					75					
					100					
					150					
					200					
					250					
					BOTTOM					

ALB. IV CRUISE NO. 65-15

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	21·XII·65	0015	41°00'	70°30'	1	8.1	32.56	6.25	.38	
					10	8.1	32.56	6.37	.35	
					20	8.1	32.56	6.51	.35	
					30	8.1	32.56	6.38	.41	
					40	8.1	32.56	6.38	.43	
					50	8.1				
					75					
					100					
					150					
					200					
					250					
				(50m)	BOTTOM	8.1				
78	21·XII·65	0502	41°00'	71°30'	1	8.4	32.59	6.25	.43	
					10	8.3	32.59	6.34	.40	
					20	8.2	32.59	6.31	.45	
					30	8.2	32.59	6.23	.42	
					40	8.2	32.59	6.24	.42	
					50	8.2				
					75					
					100					
					150					
					200					
					250					
				(55m)	BOTTOM	8.2				
79	21·XII·65	0810	40°30'	71°30'	1	8.7	32.67	6.13	.47	
					10	8.7	32.66	6.22	.47	
					20	8.7	32.65	6.25	.41	
					30	8.7	32.65	6.22	.41	
					40	8.7	32.66	6.22	.42	
					50	8.7	32.65	6.22	.30	
					75	9.2				
					100					
					150					
					200					
					250					
				(75m)	BOTTOM	9.2				
80	21·XII·65	1105	40°00'	71°30'	1	8.2	32.87	6.43	1.36	
					10	8.2	32.88	6.59	1.74	
					20	8.2	32.88	6.69	1.36	
					30	8.2	32.88	6.58	1.59	
					40	8.3	32.90	6.57	1.42	
					50	8.3	32.97	6.49	1.02	
					75	7.8	33.45	5.72	.34	
					100	7.9	34.13	5.19	.14	
					150					
					200					
					250					
				(102m)	BOTTOM	7.9				

ALB. IV CRUISE NO. 65-15

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	21·XII·65	1245	39°45'	71°30'	1	7.5	32.91	6.51	1.59	
					10	7.6	32.91	6.67	1.42	
					20	7.7	32.90	6.64	1.36	
					30	7.7	32.91	6.63	1.68	
					40	7.7	32.92	6.63	1.42	
					50	7.7	32.95	6.63	1.46	
					75	7.6	33.89	5.54	.24	
					100	8.8	34.52	4.85	.15	
					150	10.1	35.21	3.77		
					200	9.0	35.13	3.60		
					250	7.7	34.99	3.83		
					BOTTOM					
82	21·XII·65	1435	39°30'	71°30'	1	8.2	33.22	6.35	1.50	
					10	9.0	33.37	6.34	1.28	
					20	11.0	34.13	6.05	.56	
					30	11.6	34.19	5.94	.52	
					40	12.0	34.37	5.87	.26	
					50	12.5	34.72	5.46	.11	
					75	13.2	35.16	4.80	.06	
					100	12.5	35.46	4.26	.02	
					150	12.9	35.63	3.68		
					200	11.1	35.41	3.47		
					250	8.9	35.18	3.37		
					BOTTOM					
83	21·XII·65	2000	39°00'	72°30'	1	8.0	32.87	6.10	.62	
					10	8.0	32.85	6.52	.59	
					20	7.9	32.85	6.73	.85	
					30	7.9	32.85	6.51	.85	
					40	7.9	32.85	6.57	.64	
					50	8.0	32.86	6.57	.59	
					75	9.2	34.18	4.94	.14	
					100	10.3	35.31	4.13	.07	
					150	9.9	35.26	3.49		
					200	8.3	35.07	3.62		
					250	7.7	35.05	3.64		
					BOTTOM					
84	21·XII·65	2140	39°15'	72°30'	1	7.7	32.84	6.59	.75	
					10	7.5	32.82	6.88	1.56	
					20	7.4	32.83	6.99	1.25	
					30	7.3	32.82	6.86	1.42	
					40	7.3	32.83	6.85	1.77	
					50	7.3	32.93	6.72	1.11	
					75	7.3	34.73	5.69	.20	
					100	9.9	34.82	4.22	.13	
					150					
					200					
					250					
				(145m)	BOTTOM	10.2				