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Pacific Coast Data Record
Offshore Survey, 1936

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PACIFIC OCEANOGRAPHIC GROUP

Nanaimo, B.C.

PACIFIC COAST DATA RECORD

OFFSHORE SURVEY, 1936

PACIFIC OCEANOGRAPHIC GROUP

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DATA RECORD

OFFSHORE SURVEY 1936

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Introduction

Through the courtesy and personal interest of Lt. Commander H.W.S. Soulesby, R.C.N., Commanding Officer of H.M.C.S. Armentieres, the opportunity was afforded for a scientific party to make an offshore oceanographic cruise in June, and again in August.

Purpose

Since there were no previous oceanographic surveys of the region, it was desired to learn the temperature, salinity, and if possible dissolved oxygen concentration, and their changes with distance and depth, and to calculate the dynamic heights, and prepare a Gradient Current chart as outlined by Smith (1925).

Previous conversations with Dr. Helland-Hanson (1934) indicated that each station should be observed on opposite tidal phases to learn if there was any appreciable effect of tidal movement.

Plan

The June expedition undertook to observe a line of stations for 100 miles to seaward off Bamfield, at right angles to the Vancouver island coast, and return along the same line, observing each station twice. This procedure was to be repeated to seaward of Nootka. The final leg was to be 100 miles seaward from Quatsino, then parallel to the coast, and return to Bamfield along the first line.

The schedule was delayed by radio troubles and only the first line was accomplished in June. The second and third legs were made in August.

It was planned to observe the temperature, and salinity at 1, 10, 25, 50, 100, 150, 200, 300, 400, 600, and 800 meters depth. It was believed, on the basis of the Ice Patrol work in the Atlantic that a base level of 800 meters would be suitable for dynamic reference.

Temperatures were to be recorded, and seawater samples preserved and analysed on return to the base laboratory, at the Pacific Biological Station, Nanaimo, B.C.

2. Personnel and Contribution

Navigation, and observations of weather and sea

Lt. Cdr. H.W.S. Sculeby, R.C.N. (Captain)
Lt. F.E. Grub, R.C.N. (1st Officer)

Seawater observations and analyses of samples and processing data at the Pacific Biological Station, Nanaimo:

John P. Tully, Scientific Assistant in Chemistry
William Anderson, Laboratory Technician
H.J. Hollister, " "
R.N. Lague, " "

3. Publications

- Tully, J.P. Report on dynamic studies off the Pacific Coast, 1936. Trans. Amer. Geophys. Union 18 annual meeting 1937.
- Tully, J.P. Gradient Currents. Prog. Rept. 36 Pacific Coast Stations of Fish. Res. Bd. Can. Oct. 1937.
- Tully, J.P. Why is the water along the West Coast of Vancouver island so cold? Prog. Rept. 34. Pacific Coast Stations of Fish. Res. Bd. Can. Dec. 1937.

4. Procedure and Equipment

A plan of the survey, similar to the track chart was laid out and the ship advanced along the lines at about 9 knots. Arriving on station the ship was stopped, and if the position was over the continental shelf a sounding was taken. Water sampling bottles were placed at specified intervals on the sounding line, which was allowed to load off to windward of the ship. The line was lowered to the required depth, and brought to the vertical by maneuvering the ship, and three to five minutes allowed for the thermometers to come to equilibrium. The bottles were tripped by messenger allowing one minute for each 200 meters of fall.

There were seven Ekman deep sea reversing water sampling bottles; six were equipped with two Richter and Woise protected reversing thermometers each, and the deepest one was fitted with one protected, and one unprotected thermometer. The limited number of bottles necessitated making two casts. These are indicated in the data by the time of dropping the messenger.

The sounding line was 5/32 inch in diameter, 19 strand plough steel cable, galvanized, and kept well greased. It was spooled on a six foot diameter drum of steam operated, 3 ton minesweeping winch, and led overside from

a jury boom rigged on the forward, port, minesweeping galleys. All activity was on the fore deck under direct observation from the bridge. The bottles were carried in a rack on deck and were handled only by the scientific personnel. Assistance from the Ship's company was provided to spool the wire, and operate the winch.

The sampling bottles were recovered from the line, placed in the rack and two samples drawn into clean 8 ounce flat medicine bottles, after they were rinsed three times with the sample. These bottles were fitted with new, waxed corks, and at the end of each day's operation were sealed by dipping into hot paraffin wax. They were replaced in their fitted cases, containing 36 bottles, and returned to the base laboratory for salinity analyses.

After the samples were drawn from the Ekman bottles the temperatures on the reversing and auxiliary thermometers were read, using a watchmaker's lens. A flash lamp carried on the forehoop was used to facilitate this procedure in the darkness. These data were recorded on a special data sheet (Tully, 1950) in duplicate. Only the sheet in use was taken on deck, in a metal "clamp cover" book. As the recording of data at each station was completed the duplicates were separated and bound in filing folders. Whenever the ship reached a port, the duplicates were sent to the home laboratory by registered mail.

As soon as the last Ekman bottle was on board, the ship proceeded to the next station. The details of the navigation, observation of position, time at the station, and weather and sea were made by the officer of the watch and recorded in a special deck log (Tully, 1950). In addition the position of the observation was plotted on the navigating chart. At the conclusion of the expedition this was marked in ink and preserved as the original record of the navigation.

Bucket samples of surface water were taken every 10 minutes of run between stations, the temperature observed, (Hollister, 1949) and a sample taken for salinity analyses.

On conclusion of the expedition the samples were shipped to the home laboratory, and analyzed for salinity. Fifteen milliliter samples were titrated with Knudsen burettes, using standard procedure (Tully, 1950). Check values were required, from two operators, to a tolerance of 0.01 Cl⁻/‰. In this procedure each operator titrated the 36 samples in a case the next day they exchanged cases, and checked their values. Where the values did not check, additional titrations of the duplicate samples were made by both operators until checks were obtained.

The procedure was standardized with Copenhagen S-seawater, and this standard maintained by comparison with standard sodium chloride as described by Thompson (1928). A secondary seawater standard was made up from filtered residues of deep samples, and each operator checked with this about once during every hour of work.

The conversion of $Cl/1$ to $Cl^*/_{..}$ was made with the abecs of Carter and Tully (1937) and the conversion $Cl^*/_{..}$ to $S^*/_{..}$ was made in Knudsen's tables (1901). The correction of temperature was made by the graphical method of Tully (1937). Density was evaluated on the nomographs of Tully (1937). Dynamic height was then computed on the special forms (Tully 1950) according to the procedure outlined by Smith (1925) and by Barnes (1937). All calculations were checked by alternate operators, as the processing advanced. Dynamic heights were plotted and the isobaric chart interpolated.

5. Cruise Reports

First Cruise

Sunday, June 7

Proceed to H.M.C. Dockyard, 0800, join H.M.C.S. Armentieres, 1400, proceed. Stop for night in Port San Juan.

Monday, June 8

Proceed 0700, position A, 1000. Radio not working, Generators also out of order, took 3 stations. It is impossible to get D.F. or sight bearings. Turn back to Bamfield.

Tuesday, June 9

Electrics cannot be repaired here. Return to Esquimalt. Did some titrations on run up Juan de Fuca Strait. Not satisfactory in limited space in cabin or wardroom. A laboratory is required.

Wednesday, June 10

Repairs continue, remain in Esquimalt.

Thursday, June 11

Proceed 0945 for Bamfield, arrive p.m.

Friday, June 12

Proceed 0630 on line A, continue steadily. Wonderful weather.

Saturday, June 13

Still going strong. Arrive back at Bamfield 2200.

Sunday, June 14

Return to Esquimalt.

Monday, June 15

Clear out ship. Send gear and samples to P.B.S., Mensimo.

Second Cruise

Monday, July 27

Proceed at 1300 to Esquimalt and join H.M.C.S. Armentieres.

Tuesday, July 28

Load gear and proceed 1100 for West Coast. Arrive Bamfield 2000.

Wednesday, July 29

Proceed 0800, Arrive Nootka 1830.

Thursday, July 30

Proceed 0700 to section B.

Friday, July 31

Arrive 2250 from section B.

Saturday, August 1

Proceed 1000 to Queen's Cove via Tashis canal. Arrive 1500. Work up data enroute.

Sunday, August 2

Rest day in vicinity.

Monday, August 3

Proceed 0800 to Winter Harbour, arrive 1700. Work up data enroute.

Tuesday, August 4

Proceed 0500 for section C. Overcast and rough, so returned after station 2.

Wednesday, August 5

Proceed 0430 for section C (B). Continue to end of line then turned east (magnetic) on section D. Working continuously.

Thursday, August 6

Section D. Continue.

Friday, August 7

Section E, running for Juan de Fuca strait. Line completed 0730. Peck gear, arrive Esquimalt 1430. Shipped gear and return to home laboratory. Arrive 2130.

Comments

The trip was a pleasure. The long watches were compensated by the rests and adventures at the west coast ports.

Lt. Commander Soulsby and the ship's company were superb. They gave every care and help to the operation.

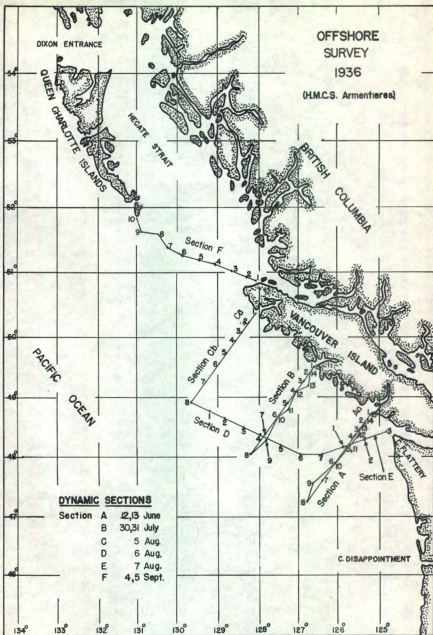
No attempt was made to analyze samples on board.

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OFFSHORE
SURVEY
1936

(H.M.C.S. Armentières)



DYNAMIC SECTIONS

Section A	12,13	June
Section B	30,31	July
Section C	5	Aug.
Section D	6	Aug.
Section E	7	Aug.
Section F	4,5	Sept.

Explanation of Data Tables

Column

<u>Depth</u>	(m) meters. Vertical length of wire measured over standardized metering pulley.
<u>S^o/‰</u>	Salinity. $(0.03 + 1.85 \text{ cl}^{\circ}/\text{‰})$ parts per thousand by weight.
<u>T °C</u>	Temperature in degrees centigrade, corrected for all thermometer errors.
<u>σ_t</u>	(Specific gravity - 1) 1000
<u>$(1 - \alpha)_{\text{stp}}$</u>	$(1 - \text{Specific volume}) 10^5$ corrected for salinity, temperature and pressure in situ.
<u>ΔE</u>	$\Sigma(1 - \alpha)$. Difference between depth and dynamic depth.
<u>pH</u>	Negative logarithm of hydrogen ion concentration.

OFFSHORE SURVEY - 1936

Depth (m)	S‰	T °C.	σ_t mg/cm ³	($\sigma_{\tau\rho}$) (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: Aal; 1010/8/VI/36; Lat: 48°45'15"N; Long: 125°15'30"W;
Sounding: 21; Weather: 81; Wind: S3; Sea: ---

0	31.18	12.36	23.58	2304	0	8.3
10	31.38	11.47	23.90	2339	0.2322	8.3
25	31.76	9.50	24.53	2405	0.5880	8.1
40	32.14	8.69	24.95	2452	0.9522	7.9

Station: Aa2; 1130/8/VI/36; Lat: 48°36'35"N; Long: 125°23'25"W;
Sounding: 60; Weather: 50; Wind: S3; Sea: ---

0	31.06	11.95	23.56	2302	0	8.2
10	31.58	10.34	24.25	2372	0.2337	8.0
25	32.09	8.75	24.90	2441	0.5947	8.0
50	32.99	7.62	25.77	2534	1.2166	8.0
90	33.62	6.89	26.37	2608	2.2450	7.9

Station: Aa3; 1308/8/VI/36; Lat: 48°28'32"N; Long: 125°32'23"W;
Sounding: 53; Weather: 81; Wind: S3; Sea: ---

0	31.06	12.48	23.46	2292	0	8.5
10	31.58	11.10	24.12	2360	0.2326	8.3
25	31.71	10.04	24.39	2392	0.5940	8.1
50	32.63	8.07	25.43	2502	1.2058	7.9
110	33.62	7.00	26.36	2615	2.7409	7.9

Station: Al; 0807/12/VI/36; Lat: 48°44'54"N; Long: 125°15'15"W;
Sounding: 27; Weather: 1; Wind: WNW1; Sea: ---

0	29.74	13.16	22.32	2183	0	8.5
10	30.21	12.76	22.76	2231	0.2207	8.4
25	31.51	11.88	23.93	2348	0.5641	8.3
45	31.96	9.48	24.69	2429	1.0418	7.9

Station: A2; 0951/12/VI/36; Lat: 48°36'5"N; Long: 125°23"W;
Sounding: 58; Weather: 1; Wind: WNW2; Sea: ---

0	31.31	13.12	23.55	2301	0	8.5
9.8	31.33	12.68	23.63	2314	0.2261	8.5
24.5	32.20	8.92	24.96	2446	0.5760	7.9
49.0	32.68	7.64	25.53	2512	1.1834	8.1
107.6	33.53	6.86	26.30	2610	2.6841	7.9

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Depth (m)	S‰	T °C.	σ_t mg/cm ³	($\frac{1-\sigma_{TP}}{\text{cm}^3/\text{g}}\text{10}^5$)	ΔE Dyn.m.	pH
<u>Station: A3; 1120/12/VI/36; Lat: 48°28'46"N; Long: 125°32'W;</u> Sounding: 69; Weather: 0; Wind: NW3; Sea: ---						
0	31.46	13.19	23.64	2310	0	8.5
10	31.64	12.16	23.97	2346	0.2328	8.5
25	32.18	9.45	24.06	2437	0.5915	8.1
50	33.12	7.34	25.91	2548	1.2022	7.9
80	33.60	6.77	26.37	2604	1.9397	7.8

<u>Station: A4; 1230/12/VI/36; Lat: 48°22'N; Long: 125°35'W;</u> Sounding: 70; Weather: 0; Wind: NW3; Sea: ---						
0	31.42	13.72	23.50	2296	0	8.5
10	31.71	10.85	24.26	2373	0.2335	8.3
24.9	32.30	8.60	25.09	2459	0.5934	8.0
49.6	32.94	7.59	25.73	2531	1.2097	7.9
99.6	33.66	6.80	26.40	2615	2.4962	7.8
129.5	33.80	6.58	26.55	2642	3.2821	7.8

<u>Station: A5; 1620/12/VI/36; Lat: 48°4'6"N; Long: 125°56'3"W;</u> Sounding: 505; Weather: 1; Wind: NW3; Sea: ---						
0	31.73	14.23	23.64	2310	0	8.5
10	31.76	14.11	23.69	2319	0.2315	8.4
25	32.23	10.44	24.74	2425	0.5873	8.2
50	32.54	7.95	25.37	2496	1.2024	8.1
94.6	33.19	7.53	25.94	2570	2.3321	8.0
189.1	33.95	6.48	26.68	2680	4.8127	7.9
378.2	34.09	5.38	26.93	2789	9.9837	7.8
567.3	34.22	4.61	27.11	2889	15.3522	7.7
756.4	34.33	4.06	27.26	2985	20.9061	7.7

<u>Station: A6; 1827/12/VI/36; Lat: 47°57'N; Long: 126°1'W;</u> Sounding: ---; Weather: 1; Wind: NW2; Sea: ---						
0	32.12	14.50	23.88	2350	0	8.4
10	32.27	13.55	24.20	2394	0.2350	8.3
25	32.30	11.02	24.69	2459.5	0.5941	8.3
50	32.57	7.91	25.40	2530.5	1.2090	8.2
87.5	33.13	7.52	25.89	2616.5	2.1580	8.1
174.9	33.93	6.57	26.65	2724.5	4.4447	7.9
349.8	34.13	5.45	26.95	2825.5	9.2098	7.8
524.8	34.25	4.54	27.15	2918.5	14.1545	7.6
699.7	34.34	4.02	27.28		19.2590	7.6

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Depth (m)	S°/∞	T °C.	σ_t mg/cm ³	(ρ_{JTP}) (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
<u>Station: A7; 2209/12/VI/36; Lat: 47°40'30"N; Long: 126°21'N;</u>						
Sounding: ---; Weather: 1; Wind: NW2; Sea: ---						
0	32.52	13.81	24.33	2375	0	8.6
10	32.52	13.80	24.33	2380	0.2377	8.6
25	32.52	11.94	24.67	2420	0.5977	8.6
50	32.61	8.41	25.36	2495	1.2121	8.5
100	33.26	7.46	26.02	2579	2.4806	8.3
165.8	33.86	6.75	26.57	2661	4.2045	8.3
248.7	34.02	6.07	26.80	2718	6.4341	8.1
414.5	34.13	5.20	26.98	2808	11.0152	7.9
580.3	34.23	4.32	27.16	2898	15.7455	7.9
746.1	34.40	3.90	27.34	2989		7.9

Station: A8; 0222/13/VI/36; Lat: 47°19'N; Long: 126°48'30"W;
Sounding: ---; Weather: 0; Wind: NNE3; Sea: ---

0	32.45	13.69	24.30	2372	0	8.6
10	32.48	13.32	24.40	2387	0.2379	8.6
25	32.48	12.55	24.53	2407	0.5975	8.5
50	32.52	8.35	25.30	2490	1.2096	8.3
100	33.10	8.02	25.80	2558	2.4716	8.3
200	33.96	6.98	26.62	2680	5.0906	8.1
400	34.13	5.40	26.95	2800	10.5706	7.9
600	34.22	4.46	27.13	2905	16.2756	7.8
800	34.36	3.92	27.30	3008	22.1886	7.7

Station: A9; 0626/13/VI/36; Lat: 47°40'25"N; Long: 126°29'38"W;
Sounding: ---; Weather: 2; Wind: NNW2; Sea: ---

0	32.48	13.88	24.29	2371	0	
10	32.57	13.72	24.39	2386	0.2378	
25	32.56	11.71	24.77	2428	0.5989	
50	32.56	8.31	25.33	2493	1.2140	
100	33.33	7.85	26.00	2577	2.4815	
200	33.95	6.75	26.64	2682	5.1110	
400	34.11	5.38	26.95	2800	10.5930	
600	34.31	4.49	27.20	2911	16.3010	
800	34.38	3.96	27.32	3010	22.2250	

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Depth (m)	S°/∞	T °C.	σ_t ng/cm ³	$(1-\alpha_{STP})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: A10; 1010/13/VI/36; Lat: 47°57'58"N; Long: 126°2'35"W;
Sounding: ---; Weather: 1; Wind: ---; Sea: ---

0	31.74	14.76	23.53	2299	0	
10	32.00	14.21	23.85	2334	0.2316	
25	32.38	11.70	24.63	2415	0.5878	
50	32.59	8.21	25.38	2497	1.2018	
100	33.12	7.59	25.87	2565	2.4673	
200	33.87	6.34	26.64	2682	5.0908	
400	34.16	5.28	27.00	2805	10.5778	
600	34.29	4.37	27.20	2911	16.2938	
800	34.38	3.90	27.33	3011	22.2158	

Station: All; 1203/13/VI/36; Lat: 48°4'N; Long: 125°55'30"W;
Sounding: ---; Weather: 2; Wind: NE1; Sea: ---

0	31.92	14.69	23.69	2314	0	
10	32.07	13.92	23.97	2346	0.2330	
25	32.20	11.22	24.58	2410	0.5897	
50	32.50	8.14	25.31	2491	1.2023	
100	33.40	7.32	26.14	2591	2.4728	
200	33.96	6.45	26.69	2686	5.1113	
400	34.13	5.23	26.97	2802	10.5993	
600	34.20	4.53	27.11	2902	16.3033	
800	34.38	3.98	27.31	3010	22.2153	

Station: A12; 1459/13/VI/36; Lat: 48°20'40"N; Long: 125°39'W;
Sounding: 73; Weather: 3; Wind: NO-1; Sea: ---

0	31.46	14.31	23.41	2287	0	
10	31.91	10.64	24.46	2392	0.2339	
12	32.27	8.49	25.09	2459	0.5977	
50	32.70	7.84	25.51	2510	1.2189	
100	33.53	7.01	26.28	2604	2.4974	
130	33.75	6.67	26.50	2638	3.2837	

Station: A13; 1632/13/VI/36; Lat: 48°27'45"N; Long: 125°28'W;
Sounding: 84; Weather: 3; Wind: NO1; Sea: ---

0	31.17	14.07	23.24	2271	0	
10	31.24	13.41	23.43	2294	0.2282	
24.9	32.05	9.71	24.72	2423	0.5796	
49.7	32.75	7.93	25.54	2512	1.1976	
99.5	33.69	6.83	26.43	2618	2.4689	
134.3	33.78	6.59	26.54	2644	3.3845	

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Depth (m)	S°/‰	T °C.	σ_t mg/cm ³	$(\rho - \rho_{37})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: A14; 1805/13/VI/36; Lat: 48°36'N; Long: 125°23'W;
Sounding: 58; Weather: 1; Wind: NNE1; Sea: ---

0	30.55	14.27	22.73	2223	0	
10	31.31	12.37	23.68	2318	0.2270	
25	31.91	10.69	24.45	2397	0.5806	
50	32.45	8.12	25.28	2488	1.1913	
100	33.48	6.88	26.26	2602	2.4638	
135	33.73	6.70	26.48	2639	3.3809	

Station: A15; 1946/13/VI/36; Lat: 48°44'20"N; Long: 125°15'30"W;
Sounding: 27; Weather: 2; Wind: ENE2; Sea: ---

0	27.25	15.21	20.00	1961	0	
10	30.79	11.24	23.48	2299	0.2130	
25	31.55	9.74	24.32	2385	0.5643	
50	32.20	8.47	25.03	2464	1.1704	

Station: B1; 0803/30/VII/36; Lat: 49°31'30"N; Long: 126°42'30"W;
Sounding: 27; Weather: 0; Wind: NNW1; Sea: ---

0	29.83	15.86	21.84	2137	0	
10	31.60	11.91	23.99	2348	0.2242	
25	32.18	9.20	24.90	2441	0.5834	
45	32.54	8.39	25.30	2488	1.0763	

Station: B2; 0930/30/VII/36; Lat: 49°22'40"N; Long: 126°51'30"W;
Sounding: 62; Weather: 1; Wind: WNW5; Sea: ---

0	30.81	17.07	22.31	2182	0	
10	31.11	15.65	22.87	2241	0.2211	
24.8	32.36	10.63	24.81	2432	0.5669	
49.6	32.95	7.34	25.78	2534	1.1827	
99.3	33.93	6.34	26.68	2642	2.4689	

Station: B3; 1100/30/VII/36; Lat: 49°14'50"N; Long: 126°59'15"W;
Sounding: 100; Weather: 1; Wind: NNW5; Sea: ---

0	30.84	17.14	22.32	2183	0	
10	31.18	16.45	22.74	2229	0.2206	
25	32.25	11.90	24.49	2401	0.5678	
50	32.65	7.52	25.51	2510	1.1817	
100	33.30	6.83	26.12	2589	2.4564	
170	33.98	6.12	26.76	2680	4.3006	

OFFSHORE SURVEY - 1936

Depth (m)	S°/∞	T °C.	σ_t mg/cm ³	($t - t_{surf}$) (cm ² /g)10 ⁵	ΔE Dyn.m.	pH
<u>Station: B4; 1335/30/VIII/36; Lat: 49°6'50"N; Long: 127°7'30"W;</u>						
<u>Sounding: 410; Weather: ---; Wind: NNW5; Sea: ---</u>						
0	31.17	17.60	22.46	2196	0	
9.9	31.17	17.58	22.46	2201	0.2176	
24.7	31.31	15.32	23.09	2268	0.5483	
49.4	32.56	8.23	25.35	2493	1.1363	
98.8	32.95	7.23	25.80	2557	2.3836	
199.2	33.89	5.82	26.71	2688	5.0166	
298.9	34.07	5.67	26.88	2748	7.7265	
398.5	34.13	5.13	26.98	2802	10.4904	
597.7	34.27	4.41	27.18	2908	16.177	
797	34.38	4.00	27.32	3009	22.073	

Station: B5; 1658/30/VII/36; Lat: 48°54'N; Long: 127°19'W;
Sounding: ---; Weather: 1; Wind: WNW4; Sea: ---

0	31.44	18.42	22.47	2197	0	
10	32.14	17.08	23.32	2284	0.2240	
25	32.30	14.12	24.10	2364	0.5726	
50	32.52	8.86	25.22	2482	1.1784	
100	33.12	7.22	25.93	2571	2.4416	
190	33.86	6.57	26.59	2672	4.8010	
290	34.07	5.80	26.86	2742	7.5080	
390	34.13	5.21	26.97	2797	10.2775	
590	34.27	4.36	27.19	2906	15.9805	
790	34.38	3.92	27.32	3006	21.892	

Station: B6; 2000/30/VII/36; Lat: 48°41'50"N; Long: 127°35'40"W;
Sounding: ---; Weather: 1; Wind: WNW4; Sea: ---

0	32.12	17.93	23.11	2259	0	
10	32.14	17.95	23.12	2265	0.2262	
25	32.32	15.39	23.85	2340	0.5715	
50	32.56	8.35	25.33	2493	1.1757	
100	33.26	7.17	26.04	2581	2.4442	
200	33.96	6.49	26.69	2686	5.0777	
300	34.07	5.77	26.87	2748	7.7947	
400	34.13	5.18	26.96	2803	10.570	
600	34.29	4.38	27.20	2911	16.284	
800	34.38	3.85	27.33	3011	22.206	

OFFSHORE SURVEY - 1936

Depth (m)	S°/∞	T °C.	σ_t mg/cm ³	(1- κ_{sro}) (cm ² /g)10 ³	ΔE Dyn.m.	pH
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Station: B7; 2318/30/VII/36; Lat: 48°25'35"N; Long: 127°52'30"W;
Sounding: ---; Weather: 1; Wind: NNW4; Sea: ---

0	32.39	17.75	23.36	2282	0
10	32.39	17.30	23.47	2298	0.2290
25	32.47	15.06	24.03	2358	0.5782
50	32.65	8.62	25.32	2492	1.1844
100	32.92	7.47	25.74	2553	2.4457
200	33.89	6.23	26.66	2683	5.0637
300	34.04	5.61	26.85	2746	7.7782
400	34.14	5.19	27.60	2805	10.553
590.9		4.32			16.107
787.8	34.40	3.38	27.39	3014	21.836

Station: B8; 0318/31/VII/36; Lat: 48°3'20"N; Long: 128°12'40"W;
Sounding: ---; Weather: 1; Wind: NNW4; Sea: ---

0	32.54	17.18	23.60	2306	0
10	32.56	17.19	23.62	2313	0.2309
25	32.66	15.87	24.00	2355	0.5810
50	32.79	9.19	25.38	2497	1.1875
100	32.77	8.04	25.54	2534	2.4453
197	33.86	6.35	26.62	2679	4.9736
295.4	33.98	5.44	26.84	2743	7.6412
393.9	34.07	4.96	26.97	2799	10.370
590.9	34.25	4.22	27.18	2905	15.989
787.8	34.40	3.88	27.34	3007	21.809

Station: B9; 0715/31/VII/36; Lat: 48°24'40"N; Long: 127°54'W;
Sounding: ---; Weather: 1; Wind: NNW4; Sea: ---

0	32.47	17.29	23.53	2299	0
10	32.43	17.28	23.56	2301	0.2300
25	32.48	15.93	23.85	2340	0.5780
50	32.65	8.78	25.33	2493	1.1822
100	33.08	7.32	25.88	2566	2.4469
200	33.91	6.14	26.70	2687	5.0734
300	34.05	5.71	26.85	2746	7.7899
400	34.16	5.24	27.00	2805	10.565
600	34.29	4.35	27.20	2911	16.281
800	34.40	3.88	27.34	3012	22.204

OFFSHORE SURVEY - 1936

Depth (m)	S‰	T °C.	σ_t mg/cm ³	$(1-\rho_{srp})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
<u>Station: B10; 0956/31/VII/36; Lat: 48°40'30"N; Long: 127°36'W;</u>						
Sounding: ---; Weather: 1; Wind: NNW4; Sea: ---						
0	32.21	17.76	23.22	2269	0	
10	32.21	17.71	23.23	2275	0.2272	
25	32.36	14.71	24.02	2357	0.5746	
50	32.59	8.34	25.36	2495	1.1811	
100	33.17	7.27	25.96	2573	2.4481	
200	33.91	6.26	26.68	2685	5.0771	
300	34.09	5.82	26.87	2748	7.7936	
400	34.14	5.22	26.99	2804	10.569	
590.9	34.27	4.28	27.20	2907	16.020	
787.8	34.38	3.90	27.33	3007	21.843	

Station: B11; 1404/31/VII/36; Lat: 48°51'N; Long: 127°21'40"W;
Sounding: ---; Weather: 1; Wind: WNW5; Sea: ---

0	31.71	17.99	22.78	2227	0	
10	31.71	17.97	22.78	2232	0.2229	
25	32.36	16.49	23.63	2320	0.5643	
50	32.54	9.21	25.18	2478	1.1641	
100	32.97	7.58	25.76	2554	2.4221	
187.9	33.95	6.56	26.67	2678	4.7215	
280.1	34.07	5.84	26.86	2738	7.2183	
370.9	34.11	5.31	26.95	2785	9.7257	
552.3	34.23	4.47	27.15	2885	14.868	
736.4	34.38	3.95	27.32	2983	20.269	

Station: B12; 1713/31/VII/36; Lat: 49°6'40"N; Long: 127°6'30"W;
Sounding: 410; Weather: 1; Wind: NNW6; Sea: ---

0	31.29	17.10	22.67	2217	0	
10	31.27	17.10	22.66	2221	0.2219	
25	32.30	14.55	24.01	2356	0.5651	
50	32.57	8.10	25.38	2497	1.1718	
100	33.10	7.26	25.90	2568	2.4380	
198.5	33.89	5.91	26.70	2686	5.0256	
298.4	34.07	5.63	26.88	2748	7.7399	
395	34.14	5.14	27.00	2803	10.421	
592.6	34.23	4.40	27.16	2904	16.059	
790.2	34.38	3.92	27.32	3006	21.898	

OFFSHORE SURVEY - 1936

Depth (m)	S ‰	T °C.	σ_t mg/cm ³	(σ_{3TP}) (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: B13; 1842/31/VII/36; Lat: 49°11'40"N; Long: 126°55'25"W;
Sounding: 85; Weather: 0; Wind: NNW5; Sea: ---

0	31.11	16.83	22.60	2210	0	
9.7	31.11	16.82	22.60	2215	0.2146	
24.3	32.34	13.83	24.18	2372	0.5494	
48.5	32.57	8.10	25.38	2496	1.1384	
97	33.66	6.62	26.42	2618	2.3786	
155.2	34.00	6.07	26.78	2676	3.9191	

Station: B14; 2026/31/VII/36; Lat: 49°22'35"N; Long: 126°51'45"W;
Sounding: 62; Weather: 0; Wind: NNW4; Sea: ---

0	31.26	15.67	22.93	2242	0	
10	31.22	14.46	23.20	2272	0.2257	
25	32.29	11.55	24.59	2411	0.5769	
50	33.15	7.42	25.93	2550	1.1970	
100	33.87	6.49	26.63	2638	2.4940	

Station: B15; 2150/31/VII/36; Lat: 49°31'30"N; Long: 126°42'30"W;
Sounding: 27; Weather: 0; Wind: NNW4; Sea: ---

0	31.36	12.57	23.69	2314	0	
10.5	31.42	12.30	23.77	2327	0.2436	
25	32.23	8.97	24.98	2448	0.5898	
45	32.50	8.37	25.28	2486	1.0832	

Station: Cal; 0616/4/VIII/36; Lat: -----; Long: -----;
Sounding: ---; Weather: 1; Wind: 1; Sea: ---

0	31.71	13.07	23.85	2329	0	8.4
10	32.12	12.64	24.26	2373	0.2351	8.3
25	32.54	9.74	25.09	2459	0.5975	8.05
50	33.31	7.30	26.07	2563	1.2252	7.9
80	33.77	6.48	26.53	2620	2.0027	7.85

OFFSHORE SURVEY - 1936

Depth (m)	S°/∞	T °C.	\bar{G}_t mg/cm ³	$(1 - \bar{X}_{STP})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
<u>Station: Ca2; 0830/4/VIII/36; Lat: -----; Long: -----;</u>						
Sounding: ---; Weather: 3; Wind: NW3; Sea: ---						
0	31.78	14.49	23.62	2308	0	8.4
10	31.80	14.45	23.65	2315	0.2311	8.5
25	32.27	10.45	24.78	2429	0.5869	8.1
50	32.99	8.14	25.70	2528	1.2065	8.0
100	33.64	6.42	26.44	2620	2.4935	8.0
200	33.93	5.27	26.81	2699	5.1530	7.9
300	34.05	5.00	26.94	2755	7.8800	7.8
400	34.18	4.95	27.06	2810	10.662	7.75
594.1	34.25	4.21	27.18	2907	16.210	7.85
792.2	34.36	3.89	27.31	3007	22.068	7.8

Station: Ca3; 1008/4/VIII/36; Lat: -----; Long: -----;
Sounding: ---; Weather: 0; Wind: NW3; Sea: ---

0	31.89	13.46	23.91	2335	0
10	32.25	12.41	24.39	2386	0.2360
25	32.61	9.67	25.16	2465	0.5998
50	33.01	8.16	25.71	2529	1.2241
75	33.77	6.57	26.53	2618	1.8675

Station: Cb1; 0612/5/VIII/36; Lat: 50°22'30"N; Long: 128°7'W;
Sounding: 50; Weather: ---; Wind: 0; Sea: ---

0	31.85	12.73	24.03	2347	0
10	32.10	12.35	24.29	2376	0.2361
25	32.32	9.64	24.94	2445	0.5977
50	32.65	7.66	25.50	2509	1.2169
90	33.68	6.59	26.45	2616	2.2419

Station: Cb2; 0804/5/VIII/36; Lat: 50°22'30"N; Long: 128°16'30"W;
Sounding: 140; Weather: 1; Wind: ENE1; Sea: ---

0	31.78	15.63	23.37	2283	0
10	31.80	12.42	24.05	2353	0.2318
25	32.16	9.95	24.77	2428	0.5903
50	32.92	8.66	25.56	2514	1.2081
100	33.68	6.29	26.49	2625	2.4928
200	34.00	5.45	26.85	2703	5.1568
300	34.11	5.18	26.97	2757	7.8868
398.5	34.18	4.84	27.07	2810	10.628
597.7	34.29	4.36	27.20	2910	16.325
797	34.38	3.84	27.33	3010	22.225

OFFSHORE SURVEY - 1936

Depth (m)	S°/‰	T °C.	σ_t mg/cm ³	$(1-\sigma_{TP})$ (cm ³ /g)10 ⁵	ΔE Dyn.cm.	pH
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Station: Cb3; 0957/5/VIII/36; Lat: 50°5'20"N; Long: 128°23'30"W;

Sounding: ---; Weather: 1; Wind: WNW1; Sea: ---

0	31.71	16.93	23.02	2250	0
10	31.89	15.50	23.49	2300	0.2275
25	32.29	12.13	24.48	2400	0.5800
50	32.66	7.63	25.51	2510	1.1937
100	33.42	6.74	26.23	2599	2.4710
199.2	33.93	5.56	26.78	2695	5.0968
298.9	34.02	4.86	26.94	2754	7.8131
398.5	34.13	4.60	27.05	2808	10.583
597.7	34.27	3.96	27.23	2913	16.281
797	34.40	3.65	27.36	3013	22.186

Station: Cb4; 1205/5/VIII/36; Lat: 49°58'30"N; Long: 128°34'20"W;

Sounding: ---; Weather: 0; Wind: WNW2; Sea: ---

0	31.96	17.73	23.04	2252	0
10	31.96	17.52	23.08	2261	0.2256
25	32.29	12.33	24.44	2397	0.5750
50	32.57	9.06	25.23	2483	1.1850
100	33.26	6.92	26.07	2584	2.4517
196.3	33.87	5.46	26.75	2691	4.9916
291.1	34.00	4.77	26.93	2750	7.5706
388.1	34.09	4.58	27.02	2801	10.262
589	34.29	4.04	27.23	2909	15.998
794.1	34.38	3.54	27.36	3013	22.071

Station: Cb5; 1438/5/VIII/36; Lat: 49°46'N; Long: 128°48W;

Sounding: ---; Weather: 1; Wind: WSW2; Sea: ---

0	31.73	17.09	23.01	2249	0
10	31.78	16.52	23.18	2270	0.2259
25	32.03	13.14	24.10	2364	0.5735
50	32.47	9.99	25.00	2461	1.1766
100	33.30	6.96	26.10	2587	2.4386
200	33.95	5.91	26.75	2692	5.0781
300	34.00	4.83	26.92	2753	7.8006
400	34.11	4.64	27.03	2808	10.581
600	34.27	4.08	27.22	2913	16.302
800	34.36	3.59	27.34	3012	22.227

OFFSHORE SURVEY - 1936

Depth (m)	S‰	T °C.	$\bar{\sigma}_t$ ng/cm ³	$(1-\sigma_{SP})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: Cb6; 1718/5/VIII/36; Lat: 49°32'35"N; Long: 128°59'W;
Sounding: ---; Weather: 3; Wind: WSW2; Sea: ---

0	31.82	17.31	23.02	2250	0	
10	32.09	17.01	23.30	2282	0.2266	
25	32.59	12.93	24.57	2409	0.5784	
50	32.72	7.81	25.53	2512	1.1935	
100	32.92	6.79	25.83	2561	2.4618	
200	33.89	5.75	26.72	2689	5.0868	
300	34.00	5.13	26.89	2750	7.8063	
400	34.11	4.87	27.00	2805	10.583	
600	34.23	4.02	27.20	2911	16.299	
800	34.38	3.56	27.36	3014	22.224	

Station: Cb7; 2026/5/VIII/36; Lat: 49°17'N; Long: 129°18'W;
Sounding: ---; Weather: 3; Wind: WSW3; Sea: ---

0	32.52	17.54	23.51	2297	0	
10	32.52	17.51	23.51	2302	0.2299	
25	32.52	15.14	24.05	2359	0.5795	
50	32.68	8.66	25.38	2497	1.1865	
100	32.97	7.68	25.75	2553	2.4490	
199.2	33.93	6.23	26.69	2686	5.0475	
299.6	34.04	5.50	26.87	2747	7.7749	
399.4	34.13	5.11	26.99	2804	10.544	
599.6	34.27	4.30	27.20	2911	16.265	
800	34.38	3.80	27.34	3012	22.206	

Station: Cb8; 0019/5/VIII/36; Lat: 48°56'N; Long: 129°37'20"W;
Sounding: ---; Weather: 3; Wind: WSW3; Sea: ---

0	32.56	17.39	23.57	2303	0	
10	32.56	17.41	23.57	2308	0.2305	
25	32.57	15.69	23.97	2352	0.5800	
50	32.66	8.66	25.36	2495	1.1859	
100	33.42	7.03	26.20	2596	2.4586	
197.5	33.89	6.54	26.62	2679	5.0302	
298.4	34.02	6.00	26.80	2740	7.7641	
397.8	34.14	5.50	26.96	2800	10.517	
596.7	34.23	4.54	27.14	2905	16.191	
797	34.36	4.03	27.29	3006	22.110	

OFFSHORE SURVEY - 1936

Depth (m)	S°/∞	T °C.	$\bar{\sigma}_t$ mg/cm ³	$(\frac{1-\rho_{s,1\rho}}{\rho})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
<u>Station: D1;</u> 0326/6/VIII/36; Lat: 48°47'20"N; Long: 129°9'W;						
Sounding: ---; Weather: 50; Wind: SW2; Sea: ---						
0	32.52	17.37	23.55	2301	0	
10	32.54	17.40	23.55	2306	0.2303	
25	32.57	13.14	24.51	2403	0.5835	
50	32.77	8.09	25.54	2513	1.1980	
100	33.73	6.96	26.44	2619	2.4810	
198.1	34.05	6.48	26.76	2692	5.0860	
297.8	34.11	6.16	26.85	2745	7.7964	
397.8	34.16	5.73	26.94	2798	10.567	
597.7	34.23	4.74	27.12	2702	16.265	
792.2	34.36	4.11	27.28	3003	22.007	

Station: D2; 0632/6/VIII/36; Lat: 48°39'15"N; Long: 128°44'20"W;
Sounding: ---; Weather: 3; Wind: SSW3; Sea: ---

0	32.47	17.38	23.51	2297	0	
10	32.48	17.41	23.51	2302	0.2299	
25	32.52	17.12	23.61	2318	0.5764	
50	32.63	8.40	25.38	2497	1.1783	
100	32.90	7.08	25.77	2555	2.4413	
200	33.93	6.16	26.71	2688	5.0628	
300	34.05	5.43	26.89	2750	7.7818	
400	34.14	5.04	27.02	2807	10.560	
600	34.29	4.31	27.20	2911	16.278	
800	34.38	3.79	27.34	3012	22.201	

Station: D3; 0927/6/VIII/36; Lat: 48°30'N; Long: 128°23'W;
Sounding: ---; Weather: 3; Wind: WSW3; Sea: ---

0	32.14	17.84	23.15	2262	0	
10	32.14	17.86	23.14	2267	0.2264	
25	32.47	16.96	23.61	2318	0.5703	
50	32.65	8.51	25.37	2496	1.1720	
100	32.75	7.14	25.66	2545	2.4323	
197	33.82	5.82	26.67	2683	4.9679	
297.8	33.96	5.09	26.87	2747	7.7046	
391.3	34.07	4.68	27.00	2802	10.298	
582.2	34.27	4.26	27.20	2904	15.745	
772.7	34.36	3.72	27.34	3001	21.369	

OFFSHORE SURVEY - 1936

Depth (m)	S‰	T °C.	σ_t mg/cm ³	(σ_{SP}) (cm ³ /g)10 ⁵	$\Delta \sigma$ Dyn.cm.	pH
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Station: D4; 1231/6/VIII/36; Lat: 48°23'N; Long: 127°55'30"W;
Sounding: ---; Weather: 2; Wind: WSW3; Sea: ---

0	32.05	18.18	22.99	2247	0
10	32.07	18.04	23.05	2258	0.2252
25	32.48	15.39	23.97	2352	0.5710
50	32.65	8.74	25.34	2494	1.1767
100	33.17	7.30	25.96	2573	2.4435
199.7	33.93	6.31	26.68	2685	5.0646
300	34.09	5.72	26.88	2749	7.7897
400	34.18	5.21	27.02	2807	10.567
600	34.29	4.35	27.20	2911	16.285
800	34.42	3.89	27.35	3013	22.209

Station: D5; 1536/6/VIII/36; Lat: 48°15'35"N; Long: 127°25'30"W;
Sounding: ---; Weather: 1; Wind: SSW2; Sea: ---

0	31.65	17.97	22.74	2224	0
10	31.67	17.86	22.79	2233	0.2228
25	32.50	14.78	24.11	2365	0.5677
50	32.65	8.48	25.38	2497	1.1754
100	32.94	7.44	25.75	2553	2.4379
200	33.95	6.54	26.67	2684	5.0645
300	34.09	5.86	26.87	2748	7.7724
400	34.14	5.19	27.00	2805	10.548
600	34.29	4.35	27.20	2911	16.264
800	34.40	3.81	27.34	3012	21.187

Station: D6; 1845/6/VIII/36; Lat: 48°7'N; Long: 126°58'15"W;
Sounding: ---; Weather: 1; Wind: WSW1; Sea: ---

0	31.74	18.03	22.86	2229	0
10	31.80	17.83	22.87	2243	0.2236
25	32.52	13.93	24.31	2384	0.5706
50	32.66	8.22	25.42	2501	1.1812
100	33.10	7.45	25.87	2565	2.4477
200	33.98	6.46	26.71	2688	5.0742
300	34.09	5.85	26.87	2748	7.7922
400	34.14	5.36	26.98	2803	10.567
600	34.29	4.33	27.20	2911	16.281
800	34.43	3.79	27.36	3016	22.208

Depth (m)	S ^o /..	T °C.	σ _t mg/cm ³	(1-α _{spp}) (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: D7; 2200/6/VIII/36; Lat: 48°3'20"N; Long: 126°27'15"W;
Sounding: ---; Weather: 1; Wind: WSW1; Sea: ---

0	31.60	18.46	22.59	2209	0	
10	31.85	18.39	22.79	2233	0.2221	
25	32.25	17.00	23.43	2300	0.5620	
50	32.59	9.45	25.19	2479	1.1594	
100	33.15	7.31	25.94	2572	2.4222	
197	33.86	6.16	26.65	2681	4.9699	
295.4	33.93	5.81	26.74	2733	7.6335	
395.1	34.13	5.16	26.98	2801	10.392	
594.2	34.27	4.43	27.18	2907	16.074	
794.1	34.42	3.91	27.34	3009	21.987	

Station: E1; 0136/7/VIII/36; Lat: 48°10'20"N; Long: 125°57'30"W;
Sounding: 520; Weather: 1; Wind: NW1; Sea: ---

0	31.51	17.14	22.83	2232	0	
10	31.62	16.90	22.97	2250	0.2241	
25	32.54	12.42	24.61	2413	0.5738	
50	32.65	8.09	25.44	2503	1.1883	
100	32.21	7.36	25.98	2575	2.4578	
200	33.69	6.42	26.48	2667	5.0788	
300	33.98	5.72	26.80	2741	7.7828	
400	34.14	5.16	27.00	2805	10.5558	
597.8	34.31	4.38	27.22	2912	16.210	
794.1	34.40	3.94	27.33	3008	22.020	

Station: E2; 0410/7/VIII/36; Lat: 48°17'25"N; Long: 125°27'W;
Sounding: 69; Weather: 1; Wind: 0; Sea: ---

0	30.90	14.68	22.90	2239	0	
10	31.62	15.48	23.28	2280	0.2259	
25	32.38	11.36	24.69	2510	0.5852	
50	32.77	7.72	25.58	2516	1.2134	
100	34.00	6.27	26.75	2649	2.5047	

OFFSHORE SURVEY - 1936

Depth (m)	S°/∞	T °C.	σ_t mg/cm ³	$(\rho - \rho_{STP})$ (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
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Station: E3; 0649/7/VIII/36; Lat: 48°24'15"N; Long: 124°55'W;
Sounding: 118; Weather: 40; Wind: SSEL; Sea: ---

0	31.49	10.96	24.07	2350	0	
10	32.30	9.06	25.02	2446	0.2398	
25	32.90	7.89	25.66	2513	0.6177	
50	33.68	6.71	26.43	2597	1.2564	
100	33.95	6.22	26.72	2646	2.5612	
190	34.04	5.93	26.82	2694	4.9642	

Station: F1; 1000/4/IX/36; Lat: 50°55'45"N; Long: 128°6'45"W;
Sounding: 13; Weather: 0; Wind: WNW2; Sea: ---

0	32.65	9.55	25.21	2459	0	7.9
15	32.70	9.19	25.31	2476	0.3701	7.9

Station: F2; 1118/4/IX/36; Lat: 50°58'30"N; Long: 128°21'15"W;
Sounding: 80; Weather: 0; Wind: WNW2; Sea: ---

0	30.99	11.65	23.56	2302	0	8.1
10	31.94	10.56	24.49	2395	0.2348	8.0
25	32.34	9.33	25.00	2450	0.5982	7.9
50	32.66	8.41	25.40	2499	1.2168	7.9

Station: F3; 1330/4/IX/36; Lat: 51°3'N; Long: 128°44'W;
Sounding: 34; Weather: 1; Wind: WNW4; Sea: ---

0	31.71	14.78	23.50	2296	0	8.1
10	31.64	14.42	23.53	2304	0.2300	8.1
25	31.62	13.30	23.74	2330	0.5775	8.0
50	32.27	9.62	24.91	2453	1.1754	7.9

Station: F4; 1529/4/IX/36; Lat: 51°7'15"N; Long: 129°6'30"W;
Sounding: 77; Weather: 0; Wind: WNW3; Sea: ---

0	31.65	14.10	23.61	2307	0	8.1
10	31.71	12.76	23.91	2340	0.2323	8.0
25	31.78	12.28	24.06	2360	0.5648	8.0
50	32.25	10.34	24.77	2439	1.1847	8.0
100	33.53	6.72	26.32	2608	2.4464	7.8
130	33.75	6.28	26.55	2642	3.2339	7.8

OFFSHORE SURVEY - 1936

Depth (m)	S ‰	T °C.	$\bar{\sigma}_t$ mg/cm ³	$(\sigma_t - \sigma_{10})$ (cm ³ /g)10 ⁵	$\Delta \Sigma$ Dyn.m.	pH
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Station: F5; 1757/4/IX/36; Lat: 51°9'40"N; Long: 129°27'30"W;
Sounding: 149; Weather: 0; Wind: WNW3; Sea: ---

0	31.71	13.58	23.75	2320	0	8.2
10	31.76	12.30	24.04	2353	0.2336	8.2
25	32.43	9.49	25.06	2456	0.5943	8.0
50	32.99	7.21	25.83	2540	1.2188	7.9
100	33.71	6.23	26.53	2629	2.5110	7.8
175	33.98	5.72	26.81	2688	4.5049	7.8
250	34.07	5.48	26.91	2730	6.5367	7.8

Station: F6; 2126/4/IX/36; Lat: 51°11'40"N; Long: 129°51'30"W;
Sounding: 450; Weather: 1; Wind: WNW4; Sea: ---

0	31.74	15.23	23.43	2289	0	
10	31.83	14.48	23.67	2317	0.2303	
25	32.20	11.85	24.46	2398	0.5839	
50	32.65	8.43	25.38	2497	1.1958	
100	33.35	6.11	26.26	2603	2.4708	
194.9	33.98	5.86	26.79	2693	4.9837	
292.3	34.13	5.41	26.95	2751	7.6349	
443.2	34.13	5.23	26.97	2821	11.839	
590.9	34.22	4.65	27.11	2898	16.062	
672.9	34.25	4.49	27.15	2949	18.459	

Station: F7; 0027/5/IX/36; Lat: 51°21'30"N; Long: 130°13'50"W;
Sounding: 795; Weather: 2; Wind: WNW3; Sea: ---

0	31.83	15.14	23.53	2299	0	
10	31.87	15.14	23.56	2307	0.2303	
25	32.45	10.31	24.93	2444	0.5866	
50	32.75	7.61	25.59	2517	1.2067	
100	33.42	6.58	26.26	2602	2.4865	
197	33.93	5.79	26.75	2690	5.0531	
297.1	34.11	5.60	26.92	2751	7.7763	
396.1	34.16	5.23	27.00	2803	10.525	
594.2	34.27	4.36	27.19	2908	16.182	
772.7	34.36	3.94	27.30	2997	21.452	

OFFSHORE SURVEY - 1936

Depth (m)	S ‰	T °C.	σ_t mg/cm ³	($t - t_{STP}$) (cm ³ /g)10 ⁵	ΔE Dyn.m.	pH
Station: F8; 0311/5/IX/36; Lat: 51°35'45"N; Long: 130°27'15"W;						
Sounding: 788; Weather: 3; Wind: WNW3; Sea: ---						
0	31.87	14.79	23.63	2309	0	
10	31.94	13.90	23.86	2335	0.2322	
25	32.43	9.56	25.04	2454	0.5913	
50	32.72	7.81	25.53	2514	1.2123	
100	33.28	6.65	26.13	2590	2.4883	
200	33.95	5.93	26.75	2692	5.1293	
300	34.09	5.53	26.91	2752	7.8513	
400	34.18	5.15	27.03	2808	10.631	
600	34.27	4.29	27.20	2911	16.350	
779.5	34.38	3.79	27.34	3012	22.258	

Station: F9; 0609/5/IX/36; Lat: 51°40'15"N; Long: 130°51'45"W;
Sounding: ---; Weather: 2, 49; Wind: WNW3; Sea: ---

0	32.12	14.44	23.90	2334	0	
10	32.16	14.45	23.93	2342	0.2338	
25	32.30	13.70	24.19	2373	0.5874	
50	32.75	7.54	25.60	2518	1.1988	
100	33.51	6.53	26.33	2609	2.4805	
200	33.93	5.96	26.73	2690	5.1300	
300	34.02	5.48	26.87	2748	7.8490	
396.1	34.11	5.06	26.98	2801	10.515	
594.2	34.25	4.43	27.16	2905	16.167	
779.5	34.11	5.21	26.96	2965	21.605	

Station: F10; 0835/5/IX/36; Lat: 51°53'30"N; Long: 131°2'45"W;
Sounding: ---; Weather: 2; Wind: WNW4; Sea: ---

0	32.34	13.90	24.17	2360	0	8.2
9.9	32.34	12.40	24.47	2393	0.2352	8.2
24.8	32.43	11.80	24.66	2417	0.5936	8.2
49.6	32.54	10.61	24.94	2455	1.1977	8.1
99.3	33.03	8.13	25.73	2552	2.4419	8.0
188.6	33.93	5.59	26.77	2689	4.7820	7.8

SURFACE OBSERVATIONS TAKEN BETWEEN
DYNAMICS STATIONS
1936

Station	Time	S°/∞	Temp °C	σ_t^3 mg/cm ³
Aa 1 8 June	0957-1020	31.18	12.36	23.58
	1028	31.20	11.20	23.82
	1038	30.99	12.33	23.43
	1048	31.15	13.09	23.42
	1058	31.13	13.30	23.37
	1108	31.02	13.10	23.32
Aa 2 8 June	1118	31.02	12.90	23.35
	1126-1150	31.06	11.95	23.56
	1158	31.04	13.28	23.30
	1208	31.15	12.90	23.45
	1218	31.08	12.98	23.39
	1230	31.09	12.82	23.43
Aa 3 8 June	1241	30.95	12.74	23.34
	1252	31.09	12.54	23.48
	1253-1321	31.06	12.48	23.46
End of Section				
A 1 12 June	0800-0818	29.74	13.16	22.32
	0830	29.87	13.72	22.30
	0840	29.92	13.72	22.35
	0850	30.05	13.80	22.43
	0900	30.35	13.52	23.35
	0910	30.68	13.36	23.01
	0920	31.29	13.20	23.54
A 2 12 June	0938-1000	31.31	13.12	23.55
	1011	31.55	13.40	23.51
	1021	31.35	13.42	23.50
	1031	31.38	13.25	23.57
	1041	31.42	13.66	31.42
	1051	31.44	13.38	23.59
A 3 12 June	1101	31.44	13.60	23.54
	1107-1130	31.46	13.19	23.64
	1140	31.56	13.48	23.66
	1150	31.47	13.52	23.59
	1200	31.42	13.60	23.52
	1210	31.36	13.57	23.49
	1220	31.40	13.70	23.49
	1230	31.42	13.78	23.49
A 4 12 June	1236-1302	31.42	13.72	23.50
	1312	31.51	14.08	23.50
	1322	31.38	13.47	23.52
	1332		13.70	
	1342	31.44	13.66	23.53
	1352	31.49	13.91	23.52
	1402	31.64	14.27	23.56
	1412	32.18	14.44	23.94
	1422	32.09	14.33	23.89
	1432	32.00	14.40	23.81
	1442	32.00	14.46	23.80
A 5 12 June	1452	31.92	14.54	23.72
	1505-1627	31.73	14.23	23.64

Station	Time	S°/∞	Temp °C	C_t mg/cm ³
A 5	1505-1627	31.73	14.23	23.64
12 June	1636	31.92	14.40	23.75
	1646	31.94	14.42	23.76
	1656	31.94	14.50	23.74
	1706	31.98	14.46	23.78
	1716	31.85	14.61	23.65
	1726	32.09	14.39	23.88
A 6	1735-1838	32.12	14.50	23.88
12 June	1845	32.14	14.38	23.92
	1855	31.96	14.40	23.78
	1905	31.92	14.56	23.72
	1915	31.94	14.60	23.72
	1925	32.03	14.65	23.79
	1935	32.29	14.43	24.02
	1945	32.50	14.09	24.26
	1955	32.57	13.87	24.36
	2005	32.65	13.84	24.42
	2015	32.56	13.86	24.35
	2025	32.59	13.90	24.37
	2035	32.57	13.80	24.37
	2045	32.59	13.99	24.35
	2055	32.61	13.85	24.39
A 7	2110-2222	32.52	13.81	24.33
12 June	2230	32.57	13.79	24.37
	2240	32.57	13.98	24.34
	2250	32.57	13.90	24.35
	2300	32.57	13.88	24.35
	2310	32.56	13.68	24.39
	2320	32.56	13.76	24.37
	2330	32.48	13.82	24.30
	2340	32.59	13.83	24.38
	2350	32.48	13.76	24.31
	2400	32.54	13.68	24.37
	0010	32.54	13.78	24.35
	0020	32.54	13.90	24.32
	0030	32.50	13.93	24.29
	0040	32.52	13.67	24.36
	0050	32.61	13.70	24.42
	0100	32.52	13.69	24.36
0110	32.52	13.60	24.37	
A 8	0120-0231	32.45	13.69	24.30
13 June	0240	32.56	13.65	24.39
	0250	32.54	13.66	24.37
	0300	32.52	13.58	24.38
	0310	32.59	13.70	24.41
	0320	32.56	13.77	24.37
	0330		13.80	
	0340	32.54	13.72	24.36
	0350	32.54	13.65	24.37
	0400	32.63	13.68	24.44
	0410	32.56	13.70	24.38
0420	32.59	13.61	24.43	

Station	Time	S°/..	Temp °C	σ_t mg/cm ³
A 8	0420	32.59	13.61	24.43
13 June	0430	32.61	13.59	24.44
Cont'd.	0440	32.56	13.65	24.39
	0450	32.54	13.51	24.40
	0500	32.57	13.48	24.44
	0510	32.61	13.53	24.46
	0520	32.57	13.66	24.40
A 9	0530-0638	32.48	13.88	24.29
13 June	0645	32.63	13.81	24.42
	0655	32.63	13.70	24.44
	0705	32.65	13.81	24.43
	0715	32.63	13.75	24.43
	0725	32.61	13.80	24.40
	0735	32.61	13.86	24.39
	0745	32.63	13.89	24.40
	0755	32.59	13.78	24.40
	0805	32.63	13.72	24.44
	0815	32.59	13.92	24.37
	0825	32.20	14.27	23.99
	0835	32.00	14.37	23.82
	0845	31.87	14.44	23.71
	0855	31.92	14.40	23.75
	0905	31.83	14.51	23.83
	0915	31.73	14.55	23.57
A 10	0922-1020	31.74	14.76	23.53
13 June	1030	31.87	14.89	23.61
	1040	32.21	14.92	23.86
	1050	31.87	15.16	23.55
	1100	32.05	15.19	23.70
	1110	32.00	15.12	23.69
A 11	1113-1212	31.92	14.69	23.69
13 June	1222	31.85	15.31	23.50
	1232	31.87	15.36	23.53
	1242	31.91	15.25	23.60
	1252	32.05	15.61	23.60
	1302	31.96	15.41	23.58
	1312	31.94	15.26	23.60
	1322	31.78	15.40	23.45
	1332	31.64	15.52	23.33
	1342	31.55	15.69	23.20
	1352	31.56	15.20	23.32
	1402	31.47	14.91	23.32
	1412	31.53	15.03	23.35
	1422	31.55	14.71	23.43
	1432	31.51	14.78	23.40
A 12	1438-1511	31.46	14.31	23.41
13 June	1524	31.55	14.73	23.41
	1534	31.47	14.61	23.48
	1544	31.42	14.19	23.45
	1554	31.44	13.92	23.50
	1604	31.44	14.15	23.47
A 13	1615-1644	31.17	14.07	23.24
13 June				

Station	Time	S ^o /∞	Temp °C	σ_t mg/cm ²
A 13	1615-1644	31.17	14.07	23.24
13 June	1655	31.18	14.00	23.28
	1705	31.11	14.08	23.22
	1715	31.20	14.07	23.30
	1725	30.86	14.09	23.00
	1735	30.81	14.24	22.95
	1745		14.36	
A 14	1748-1817	30.55	14.27	22.73
13 June	1830	30.35	14.55	22.52
	1840	29.81	14.65	22.11
	1850	29.11	14.73	21.53
	1900	28.26	14.89	20.83
	1910	27.57	14.05	20.49
	1920	27.16	15.22	19.94
	1930	28.64	15.32	21.04
A 15	1942-1952	27.25	15.21	20.00
13 June	2005	27.43	15.19	20.16
End of Section				
B 1	0750-0814	29.83	15.86	21.84
30 July	0821	29.79	16.21	21.73
	0831	29.85	15.99	21.82
	0841	30.17	15.96	22.07
	0851	30.64	15.87	22.46
	0901	30.90	15.92	22.64
	0911	30.95	16.53	22.55
B 2	0918-0941	30.81	17.14	22.32
30 July	0953	30.64	17.35	22.12
	1003	30.37	17.25	21.94
	1013	30.43	17.22	21.98
	1023	30.59	17.30	22.08
	1033	30.82	16.92	22.35
	1043	30.84	17.12	22.33
B 3	1042-1110	30.84	17.14	22.32
30 July	1125	31.06	17.20	22.47
	1133	31.06	17.27	22.45
	1143	31.09	17.52	22.42
	1153	31.17	17.52	22.48
	1203	31.26	17.54	22.54
B 4	1214-1346	31.17	18.42	22.47
30 July	1358	31.08	17.68	22.37
	1408	31.09	17.74	22.37
	1418	31.11	17.82	22.37
	1428	31.17	17.73	22.43
	1438	31.15	17.96	22.36
	1448	31.20	18.13	22.36
	1458	31.40	18.25	22.48
	1508	31.47	18.11	22.57
	1518	31.42	18.33	22.47
B 5	1523-1709	31.44	18.42	22.47
30 July				

Station	Time	S°/..	Temp °C	$\delta +$ mg/cm ³	
B 5 30 July	1523-1709	31.44	18.42	22.47	
	1718	31.64	18.18	22.68	
	1728	31.78	18.13	22.80	
	1738	32.03	17.98	23.03	
	1748	32.01	17.79	23.06	
	1758	32.00	17.94	23.02	
	1808	32.09	17.87	23.10	
	1818	31.91	17.87	22.97	
	1828	32.00	17.91	23.02	
	1838	32.10	18.03	23.07	
	1848	32.12	17.96	23.11	
	B 6 30 July	1851-2012	32.12	17.93	23.11
		2020	32.25	17.90	23.21
		2030	32.34	17.73	23.32
2040		32.27	17.45	23.34	
2050		32.16	17.77	23.18	
2100		32.18	17.84	23.17	
2110		32.25	17.70	23.26	
2120		32.29	17.69	23.29	
2130		32.27	17.57	23.31	
2140		32.36	17.79	23.33	
2150		32.32	17.73	23.31	
2200		32.36	17.62	23.36	
2210		32.38	17.56	23.39	
B 7 30 July		2217-2330	32.39	17.75	23.56
	2341	32.43	17.60	23.43	
	2351	32.50	17.30	23.54	
	0001	32.50	17.11	23.59	
	0011	32.52	17.21	23.58	
	0021	32.52	17.09	23.61	
	0031	32.48	17.21	23.56	
	0041	32.48	17.20	23.56	
	0051	32.50	17.14	23.56	
	0101	32.54	17.13	23.61	
	0111	32.54	17.05	23.63	
	0121	32.50	17.12	23.59	
	0131	32.48	17.11	23.58	
	0141	32.54	17.13	23.61	
0151	32.52	17.04	23.63		
0201	32.50	17.19	23.57		
0211	32.50	17.14	23.56		
B 8 31 July	0218-0329	32.54	17.18	23.60	
	0337	32.56	17.06	23.65	
	0347	32.54	16.85	23.68	
	0357	32.50	17.01	23.61	
	0407	32.50	17.14	23.58	
	0417	32.52	17.04	23.63	
	0427	32.52	16.93	23.65	
	0437	32.52	17.10	23.61	
	0447	32.50	17.17	23.58	
	0457	32.50	17.12	23.59	
0507	32.50	17.08	23.60		

Station	Time	S°/..	Temp °C	ρ_t mg/cm ³
B 8	0507	32.50	17.08	23.60
31 July	0517	32.50	17.06	23.60
Cont'd	0527	32.45	17.08	23.56
	0537	32.45	17.05	23.57
	0547	32.47	17.12	23.57
	0557	32.47	17.33	23.52
	0607	32.47	17.38	23.51
B 9	0612-0725	32.47	17.29	23.53
31 July	0734	32.41	17.34	23.47
	0744	32.34	17.41	23.40
	0754	32.34	17.46	23.38
	0804	32.32	17.47	23.37
	0814	32.30	17.39	23.37
	0824	32.29	17.44	23.35
	0834	32.27	17.59	23.31
	0844	32.20	17.76	23.21
	0854	32.18	17.59	23.23
	0904	32.27	17.75	23.27
	0914	32.29	17.45	23.28
	0924	32.30	17.58	23.33
B 10	0934-1046	32.21	17.76	23.22
31 July	1055	32.12	17.87	23.13
	1105	32.05	17.93	23.06
	1115	31.91	17.96	22.94
	1125	31.76	18.11	22.79
	1135	31.74	18.21	22.75
	1145	31.76	18.08	22.80
	1155	31.78	18.09	22.81
	1205	31.76	17.93	22.84
	1215	31.76	18.02	22.82
	1225	31.76	18.00	22.82
B 11	1232-1415	31.71	17.99	22.78
31 July	1422	31.73	17.97	22.80
	1432	31.74	17.93	22.82
	1442	31.80	17.85	22.89
	1452	31.76	17.87	22.85
	1502	31.74	17.81	22.85
	1512	31.71	17.64	22.86
	1522	31.56	17.77	22.73
	1532	31.40	17.86	22.58
	1542	31.29	17.61	22.55
	1552	31.29	17.48	22.58
	1602	31.31	17.45	22.61
	1612	31.27	17.29	22.62
	1622	31.26	17.20	22.62
B 12	1624-1725	31.29	17.10	22.67
31 July	1732	31.29	17.01	22.69
	1742	31.31	16.94	22.73
	1752	31.40	16.85	22.82
	1802	31.26	16.77	22.72
	1812	31.27	16.55	22.79
	1822	31.27	16.48	22.80
B 13	0828-1855	31.11	16.83	22.60
31 July				

Station	Time	S ^o /.	Temp °C	$\frac{d}{t}$ mg/cm ³
B 13	0828-1855	31.11	16.83	22.60
31 July	1903	31.08	16.77	22.59
	1913	30.86	16.94	22.38
	1923	30.93	16.81	22.47
	1933	31.04	16.08	22.71
	1943	31.13	15.62	22.88
	1953	31.18	15.34	22.98
	2003	31.18	14.64	23.13
	2013	31.24	14.50	23.21
B 14	2018-2035	31.26	15.67	22.93
31 July	2042	31.26	13.78	23.36
	2052	31.35	13.23	23.54
	2102	31.27	13.12	23.51
	2112	31.33	13.12	23.55
	2122	31.38	13.26	23.56
	2132	31.22	13.27	23.44
B 15	2142-2155	31.36	12.57	23.69
31 July	2204	31.56	11.98	23.95
	2214	31.38	12.18	23.77

End of Section

Ca 1	4 August	0607-0625	31.71	13.07	23.85
		0634	31.76	13.35	23.84
		0644	32.05	13.64	24.00
		0654	32.03	13.73	23.98
		0704	31.85	14.13	23.75
		0714		14.13	
		0724	31.78	14.44	23.63
Ca 2	4 August	0729-0840	31.78	14.49	23.62
		0850	31.76	14.46	23.62
		0900	31.92	13.83	23.87
		0910	31.98	14.16	23.84
		0920	32.00	14.10	23.87
		0930	32.05	13.54	24.02
		0940	32.09	13.63	24.03
Ca 3	4 August	0951	32.09	13.60	24.04
		1000-1018	31.89	13.46	23.91
		1027	31.24	12.76	23.35
		1037	31.09	12.18	23.55

End of Section

Cb 1	5 August	0602-0620	31.85	12.73	24.03
		0629	31.73	13.69	23.74
		0639	31.69	14.35	23.58
		0649	31.71	14.61	23.54
		0659	31.69	14.61	23.53
		0709	31.71	14.50	23.56
Cb 2	5 August	0719	31.76	15.11	23.48
		0721-0812	31.78	15.63	23.37

Station	Time	S [°] /∞	Temp °C	σ_t^3 mg/cm ³
Cb 2 5 August	0721-0812	31.78	15.63	23.37
	0824	31.71	15.81	23.28
	0834	31.71	15.01	23.45
	0844	31.71	15.37	23.38
	0854	31.69	15.03	23.44
	0904	31.71	16.06	23.22
	0914	31.87	17.17	23.10
Cb 3 5 August	0915-1005	31.71	16.93	23.02
	1015	31.69	15.97	23.23
	1025	31.94	17.65	23.04
	1035	31.94	17.66	23.03
	1045	32.05	17.57	23.14
	1055	31.96	17.53	23.08
	1105	31.96	17.70	23.04
Cb 4 5 August	1110-1213	31.96	17.73	23.04
	1223	31.94	17.22	23.14
	1233	31.94	17.70	23.02
	1243	31.96	17.79	23.02
	1253	32.03	17.93	23.05
	1303	32.03	17.90	23.05
	1313	31.74	17.18	22.99
	1323	31.85	17.66	22.97
	1333	31.73	17.07	23.01
	1343	31.73	17.07	23.01
	1353	31.71	17.02	23.00
Cb 5 5 August	1356-1502	31.73	17.09	23.01
	1513	31.83	18.03	22.87
	1523	31.85	18.09	22.86
	1533	31.82	17.98	22.86
	1543	31.85	18.06	22.87
	1553	31.87	17.95	22.92
	1603	31.87	17.58	23.00
	1613	31.64	16.91	22.98
	1623	31.60	17.00	22.93
	1633	31.74	17.23	22.98
	Cb 6 5 August	1639-1727	31.82	17.31
1736		32.01	17.50	23.13
1746		32.20	17.69	23.23
1756		32.21	17.78	23.21
1806		32.34	17.81	23.30
1816		32.34	17.60	23.35
1826		32.34	17.57	23.36
1836		32.30	17.58	23.33
1846		32.32	17.63	23.33
1856		32.36	17.50	23.39
1906		32.47	17.49	23.48
1916		32.48	17.57	23.47
1926		32.50	17.45	23.51
Cb 7 5 August	1936	32.54	17.47	23.53
	1937-2036	32.52	17.54	23.51

Station	Time	S [*] /..	Temp °C	σ_t mg/cm ³	
Cb 7 5 August	1937-2036	32.52	17.54	23.51	
	2046	32.56	17.41	23.57	
	2056	32.56	17.48	23.55	
	2106	32.56	17.45	23.56	
	2116	32.56	17.34	23.58	
	2126	32.56	17.44	23.56	
	2136	32.54	17.45	23.54	
	2146	32.54	17.49	23.53	
	2157	32.56	17.46	23.55	
	2206	32.56	17.53	23.54	
	2216	32.56	17.34	23.58	
	2226	32.56	17.34	23.58	
	2236	32.56	17.33	23.59	
	2246	32.57	17.29	23.60	
	2256	32.56	17.33	23.59	
	2306	32.57	17.36	23.59	
	2316	32.57	17.44	23.57	
	Cb 8 5-6 August	2320-0030	32.56	17.39	23.57
		0040	32.56	17.39	23.57
		0050	32.57	17.37	23.59
0100		32.56	17.43	23.56	
0110		32.56	17.36	23.58	
0120		32.56	17.40	23.57	
0130		32.54	17.35	23.56	
0140		32.52	17.25	23.58	
0150		32.52	17.34	23.56	
0200		32.52	17.37	23.55	
0210		32.52	17.34	23.56	
0220		32.52	17.39	23.54	
D 1 6 August		0230-0336	32.52	17.37	23.55
	0347	32.59	17.32	23.62	
	0357	32.54	17.31	23.57	
	0407	32.52	17.39	23.54	
	0417	32.52	17.41	23.54	
	0427	32.52	17.42	23.54	
	0437	32.50	17.53	23.49	
	0447	32.47	17.68	23.44	
	0457	32.45	17.70	23.41	
	0507		17.61		
	0517	32.41	17.65	23.40	
	0527	32.39	17.52	23.42	
	D 2 6 August	0536-0641	32.47	17.38	23.51
0652		32.50	17.39	23.52	
0702		32.50	17.44	23.51	
0712		32.50	17.34	23.54	
0722		32.50	17.42	23.52	
0732		32.50	17.41	23.52	
0742		32.48	17.56	23.47	
0752		32.45	17.70	23.41	
0802		32.43	17.77	23.39	
0812		32.23	17.90	23.21	
0822		32.14	17.94	23.12	
D 3 6 August	0832	32.12	18.19	23.05	
	0841-0938	32.14	17.84	23.15	

Station	Time	S°/∞	Temp °C	σ_t mg/cm ³	
D 3	0841-0938	32.14	17.84	23.15	
6 August	0948	32.12	17.89	23.12	
	0958	32.16	17.99	23.11	
	1008	32.16	17.89	23.15	
	1018	32.12	17.87	23.13	
	1028	32.18	17.89	23.16	
	1038	32.12	18.02	23.09	
	1048	32.20	17.84	23.19	
	1058	32.29	17.92	23.24	
	1108	32.27	17.74	23.27	
	1118	32.30	17.97	23.24	
	1128	32.16	18.22	23.07	
	1138	32.10	18.16	23.04	
	D 4	1147-1242	32.05	18.18	22.99
	6 August	1251	32.00	18.34	22.92
1301		31.94	18.36	22.86	
1311		31.92	18.29	22.87	
1321		31.85	18.24	22.83	
1331		31.92	18.29	22.87	
1341		31.83	18.31	22.80	
1351		31.83	18.27	22.81	
1401		31.89	18.40	22.82	
1411		31.91	18.24	22.88	
1421		31.80	18.29	22.78	
1431		31.69	18.21	22.71	
1441		31.76	18.19	22.77	
D 5		1451-1548	31.65	17.97	22.74
6 August		1558	31.60	18.01	22.70
	1608	31.56	18.31	22.59	
	1618	31.62	18.21	22.66	
	1628	31.56	18.22	22.61	
	1638	31.55	18.17	22.61	
	1648	31.53	18.06	22.63	
	1658	31.55	18.06	22.64	
	1708	31.53	18.21	22.59	
	1718	31.56	18.08	22.65	
	1728	31.71	18.11	22.75	
	1738	31.71	17.92	22.79	
	1748	31.69	18.16	22.72	
	D 6	1757-1856	31.74	18.03	22.86
	6 August	1905	31.74	18.16	22.76
1915		31.74	18.09	22.78	
1925		31.67	17.93	22.77	
1935		31.64	18.07	22.71	
1945		31.46	18.00	22.58	
1955		31.42	18.03	22.55	
2005		31.49	17.90	22.64	
2015		31.55	17.96	22.66	
2025		31.49	18.40	22.51	
2035		31.46	18.48	22.47	
2045		31.49	18.41	22.51	
2055		31.56	18.56	22.53	
2105		31.58	18.47	22.56	
D 7		2110-2214	31.60	18.46	22.59
6 August					

Station	Time	S°/..	Temp °C	σ_t mg/cm ³	
D 7	2110-2214	31.60	18.46	22.59	
6 August	2222		18.37		
	2232		18.44		
	2242	31.58	18.35	22.59	
	2252	31.55	18.33	22.57	
	2302	31.49	18.24	22.55	
	2312		18.05		
	2322	31.46	17.99	22.59	
	2332	31.60	17.85	22.73	
	2342	31.60	17.63	22.78	
	2352	31.62	17.34	22.86	
	0002	31.65	17.35	22.89	
	0012	31.51	17.01	22.86	
	0022	31.53	17.19	22.83	
	E 1	0023-0146	31.51	17.14	22.83
7 August	0157	31.51	16.83	22.91	
	0207	31.60	16.90	22.96	
	0217	31.65	16.74	23.03	
	0227	31.67	16.56	23.09	
	0237	31.65	16.70	23.04	
	0247	31.60	16.80	22.98	
	0257	31.55	16.68	22.96	
	0307	31.67	16.21	23.17	
	0317	31.69	16.46	23.12	
	0327	31.46	16.72	22.88	
	0337	31.35	16.83	22.77	
	0347	31.29	17.07	22.68	
	E 2	0355-0419	30.90	14.68	22.90
	7 August	0430	30.81	13.15	23.15
0440		30.82	12.84	23.21	
0450		30.88	12.67	23.29	
0500		30.93	13.06	23.26	
0510		31.00	12.72	23.38	
0520		31.27	12.05	23.72	
0530		31.33	12.64	23.64	
0540		31.46	11.57	23.94	
0550		31.53	11.71	23.97	
0600		31.64	11.27	24.14	
0610		31.53	11.88	23.94	
0620		31.46	11.69	23.90	
E 3		0630-0700	31.49	10.96	24.07
7 August		0710	31.56	11.17	24.10
	0720	31.83	11.31	24.28	
End of Section					
F 1	0950-1004	32.65	9.55	25.21	
4 September	1025	31.46	11.51	23.95	
	1035	31.40	11.52	23.91	
	1045	31.36	11.52	23.88	
	1055	31.18	12.75	23.51	
	1105	30.84	12.26	23.34	
F 2	1109-1125	30.99	11.65	23.56	
4 September					

Station	Time	S°/..	Temp °C	d_e mg/cm ³	
F 2 4 September	1109-1125	30.99	11.65	23.56	
	1134	30.97	12.08	23.47	
	1144	31.18	12.66	23.52	
	1200	31.13	13.07	23.41	
	1210	31.26	14.03	23.31	
	1220	31.27	13.91	23.35	
	1230	31.29	13.53	23.44	
	1240	31.26	13.05	23.31	
	1250	31.17	12.75	23.50	
	1300	31.24	12.81	23.34	
	1310	31.44	13.89	23.48	
	F 3 4 September	1315-1335	31.71	14.78	23.50
		1343	31.69	14.90	23.46
1353		31.67	15.01	23.43	
1403		31.60	15.00	23.38	
1413		31.56	14.39	23.48	
1423		31.56	14.39	23.48	
1433		31.55	15.13	23.30	
1443		31.47	13.45	23.60	
1453		31.53	13.63	23.61	
1503		31.56	14.17	23.53	
F 4 4 September	1515-1540	31.65	14.10	23.61	
	1549	31.62	13.95	23.60	
	1559	31.89	15.93	23.39	
	1609	31.94	13.80	23.88	
	1619	32.05	14.88	23.74	
	1629	32.09	14.81	23.79	
	1639	32.07	14.62	23.82	
	1649	31.92	14.58	23.71	
	1659	31.83	14.41	23.68	
	1709	31.68	13.17	23.74	
	F 5 4 September	1720-1804	31.71	13.58	23.75
1815		31.71	14.09	23.65	
1825		31.65	14.07	23.61	
1835		31.64	14.47	23.52	
1845		31.65	14.50	23.52	
1855		31.69	14.68	23.51	
1905		31.69	14.90	23.46	
1915		31.71	15.08	23.44	
1925		31.67	15.29	23.37	
1935		31.69	15.66	23.30	
1945		31.69	15.27	23.39	
F 6 4 September		1949-2135	31.74	15.23	23.43
	2141	31.74	15.17	23.45	
	2151	31.78	15.14	23.48	
	2201	31.76	15.20	23.46	
	2211	31.80	15.31	23.46	
	2221	31.82	15.10	23.52	
	2231	31.80	15.10	23.51	
	2241	31.83	15.08	23.54	
	2251	31.82	15.06	23.53	
	2301	31.83	15.11	23.54	
F 7 4-5 September	2311	31.83	15.10	23.54	
	2332-0039	31.83	15.14	23.53	

Station	Time	S ^o /..	Temp °C	σ_t mg/cm ³
F 7	2332-0039	31.83	15.14	23.55
4-5 September	0049	31.89	14.95	23.61
	0106	31.82	14.83	23.57
	0116	31.82	14.76	23.59
	0126	31.83	14.79	23.60
	0136	31.78	14.75	23.57
	0146	31.87	14.92	23.60
	0156	31.91	14.86	23.64
	0206	31.91	14.85	23.64
F 8	0219-0318	31.87	14.79	23.63
5 September	0330	31.80	14.85	23.56
	0340	31.80	14.91	23.55
	0350		14.88	
	0400	31.83	14.67	23.63
	0410	31.80	14.68	23.60
	0420	31.87	14.55	23.68
	0430	32.01	14.43	23.81
	0440	32.10	14.41	23.88
	0450	32.12	14.57	23.87
F 9	0458-0617	32.12	14.44	23.90
5 September	0628	32.14	14.56	23.88
	0638	32.14	14.53	23.89
	0648	32.10	14.48	23.87
	0658		14.41	
	0708	32.20	13.77	24.09
	0718	32.20	14.08	24.03
	0728	32.29	12.63	24.38
	0738	32.32	12.39	24.46
	0748	31.76	14.71	23.56
F 10	0820-0846	32.34	13.90	24.17
5 September	0858	32.30	14.03	24.12
	0908	32.32	13.67	24.21

End of Section

