UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

Physical and Chemical Data

Cruise 34

Marine Life Research Program

6-23 February 1952

Prepared by

Marine Life Research Program Division of Oceanography

Sponsored by

Marine Research Committee

Reference 52-24 1 May 1952

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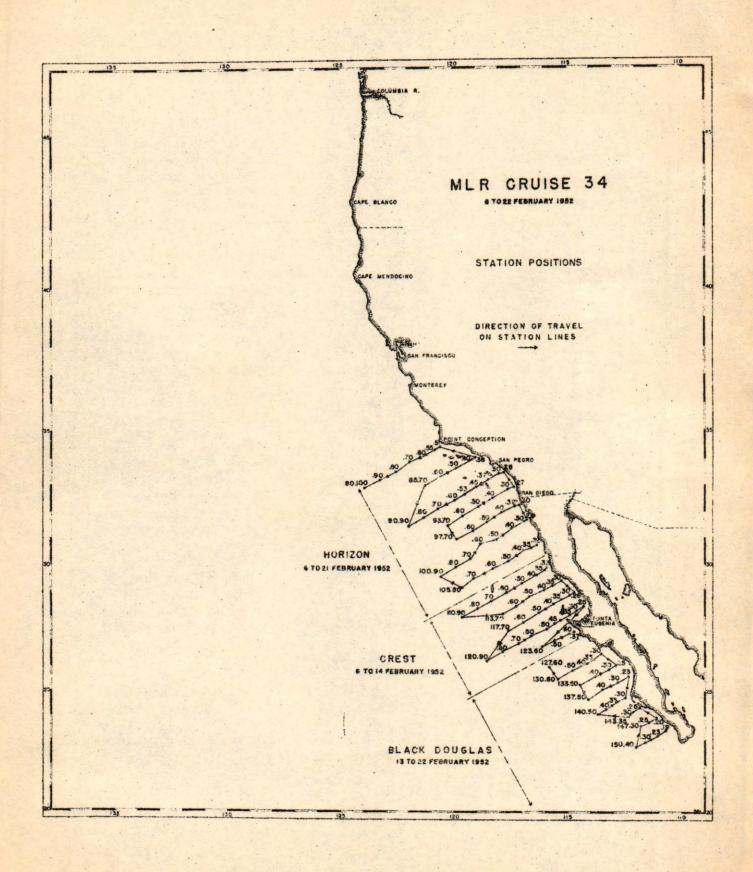
Marine Research Committee

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INTRODUCTION

The data presented in this report were collected on the thirty-fourth full-scale cruise conducted in the Marine Life Research Program. The three ships participating were the MV BLACK DOUGLAS, of the U.S. Fish and Wildlife Service, and the MV CREST and the MV HORIZON, of the Scripps Institution of Oceanography.

Data are presented in the form of values tabulated at standard depths and at observed depths and of charts of horizontal distributions. On the charts of horizontal distributions a circle is drawn around the station dot if the quantity is missing for that station. An "x" is drawn through the station dot if the value observed does not conform to the field and was not used in drawing the contours.

Bathythermographs were used to measure temperatures in the upper 100 meters on all casts which extended below 300 meters. Their results were checked on each cast by reversing thermometers at wire lengths of 10, 100 and (sometimes) 50 meters. When one of these thermometers reversed at exactly its proper standard depth the value of temperature at that level is tabulated to hundredths of a degree. If the temperature at a standard depth was read from the corrected bathythermograph slide, it is tabulated to tenths of degrees.

In the tabulated data extrapolated values are indicated by parentheses. The time given is the time that the messenger was released. When more than one cast was made on a station, both messenger times and both wire angles are given; the time and the wire angle given first are for the shallow cast. Horizontal lines signify the depth to which each cast reached.

Because of Nansen bottle pre-tripping on stations 80.60, 80.80, 80.100, 90.53, 90.70 and 90.80, it was difficult to ascertain depths of observations on those stations. In processing data given in this report and in all previous reports of this series an effort has been made to correct for pre-tripping whenever it has occurred.

The original data and the data as modified during various steps in processing are on file with the Division of Oceanography. Copies may be made available. The data are processed on the six standard forms of this division.

The presentation of data in these Physical and Chemical Data Reports does not constitute publication, and this information may be subject to modification as the program continues. Results of various phases of the investigations will be published in scientific journals for general distribution.

Roger R. Revelle, Director of Scripps Institution of Oceanography

Oceanographers

Horrer, Paul L., Assistant Oceanographer Lewis, George J., Jr., Associate in Oceanography Reid, Joseph L., Jr., Associate in Oceanography

Marine Superintendent

Stose, Clemens W.

Ships' Captains

Davis, L. E., MV HORIZON Ferris, N. L., MV CREST Hovde, H., MV BLACK DOUGLAS

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

MV BLACK DOUGLAS

Beckwith, Warren W., Jr., Senior Marine Technician, Scripps Institution Widrig, Theodore M., Statistician, in charge of observations Morris, Robert W., Marine Biologist O'Connell, Charles P., Biological Aid Bovbjerg, Richard V., Assistant Professor of Zoology, Washington, St. Louis, Missouri

MV CREST

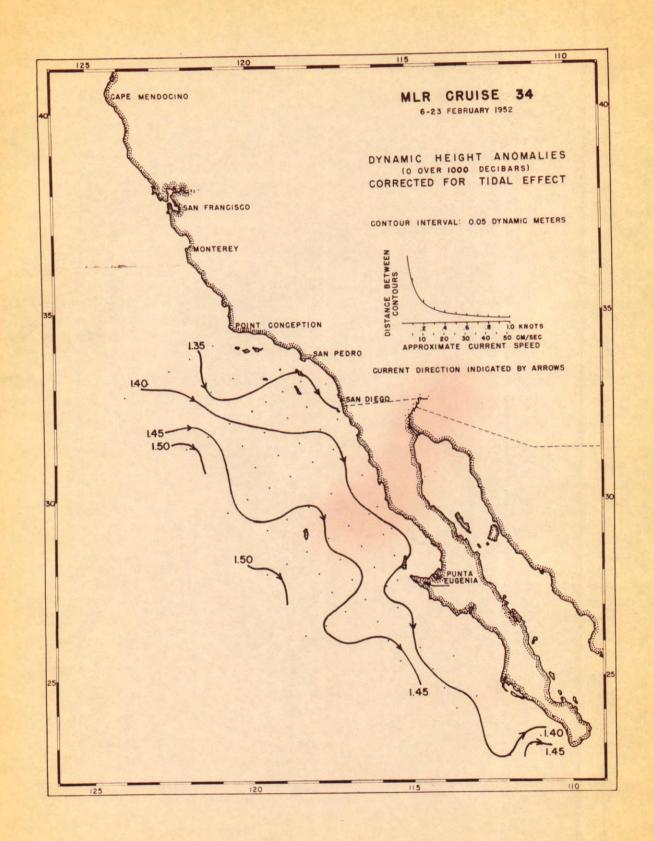
Cunningham, Leonard M., Jr., Senior Marine Technician
Gilkey, Robert W., Marine Technician
Herreshoff, Karl F., Marine Technician, Chemical
Messner, Gordon P., Marine Technician
Counts, Robert C., Marine Biologist, U. S. Fish & Wildlife Service
DeLauney, James A., Meteorological Aid, U. S. Weather Bureau
Kennedy, John C., Meteorological Aid, U. S. Weather Bureau

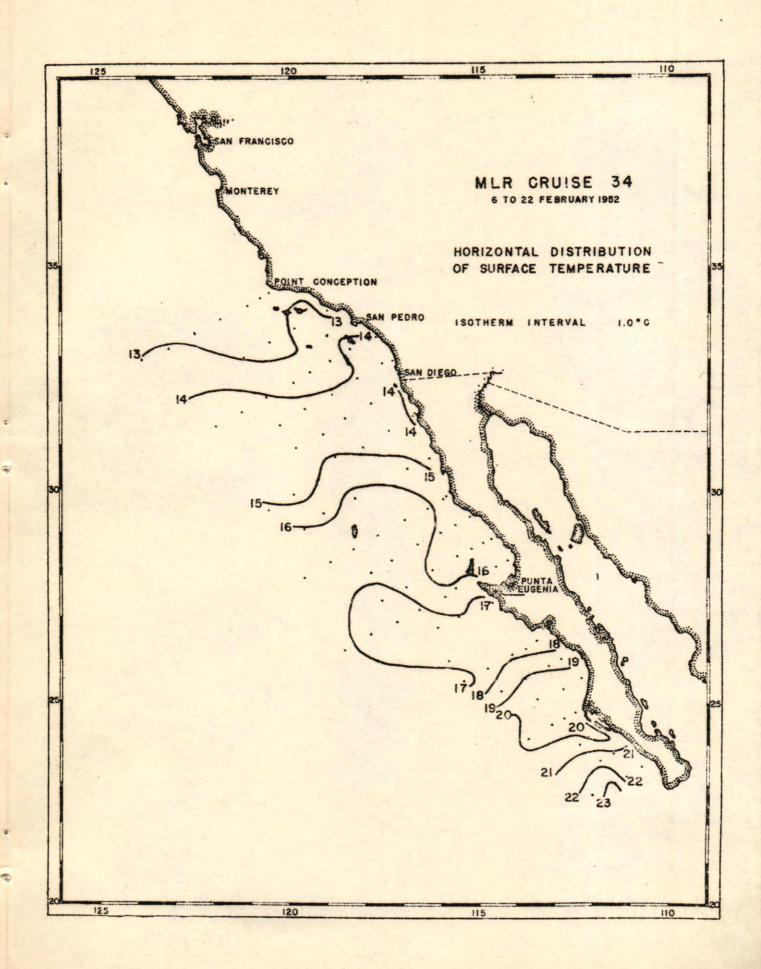
MV HORIZON

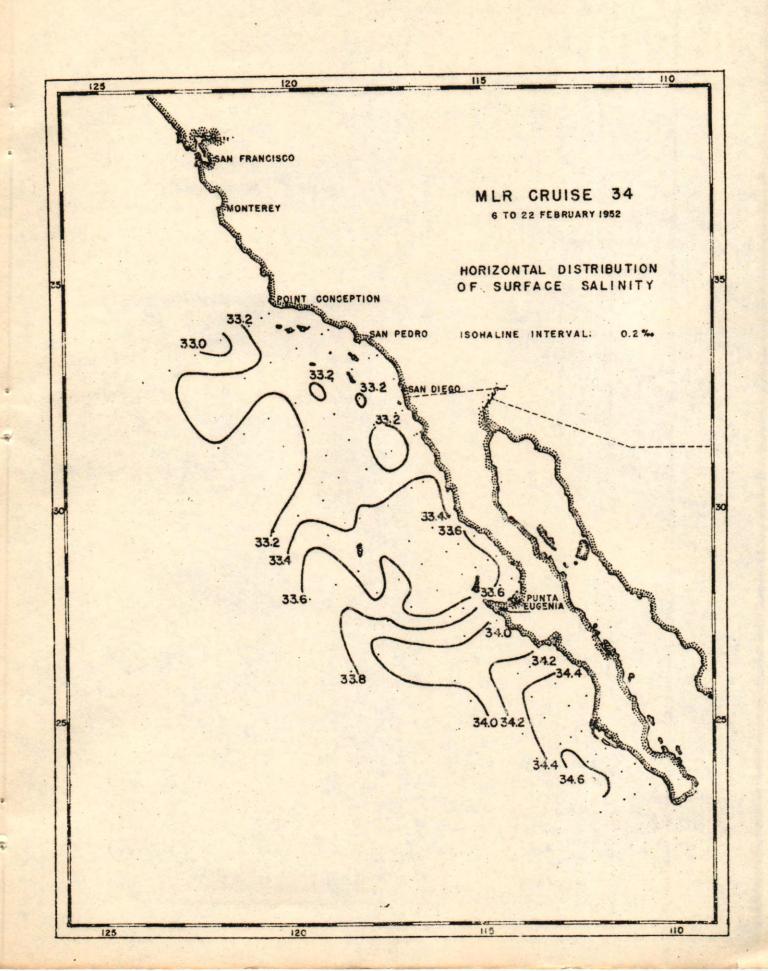
Lewis, George J., Jr., Associate in Oceanography Smith, Alan C., Senior Marine Technician Larimore, Wayne H., Marine Technician McClendon, Robert I., Marine Technician Payne, Miles M., Marine Technician Brinton, Edward, Student McGowan, Robert A., Student

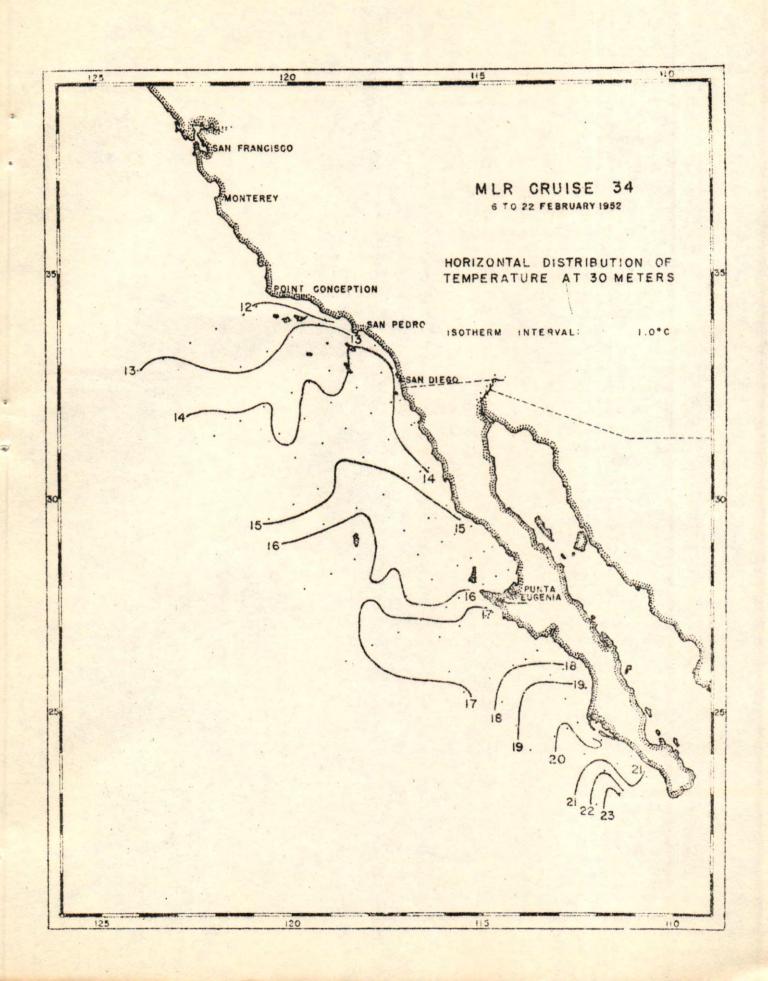
PERSONNEL PARTICIPATING IN PREPARATION OF DATA

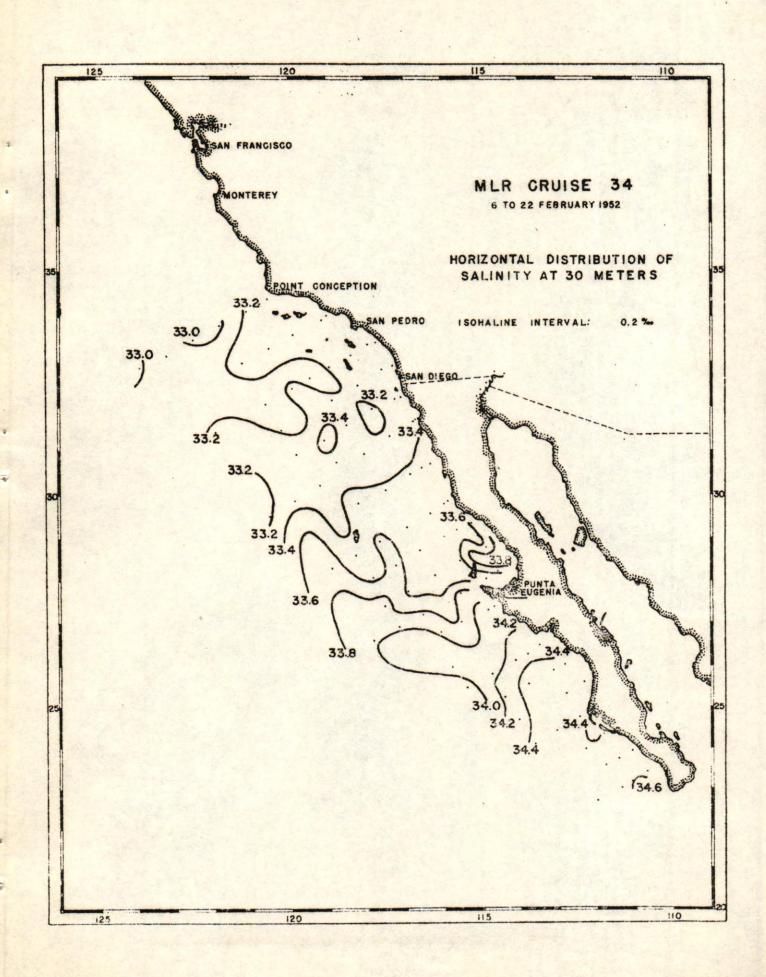
Barney, Ruth M., Stenographer Barstow, Mary C., Laboratory Technician Berkey, Max L., Jr., Marine Technician Brown, Curthie F., Engineering Aid Browne, Geneva S., Engineering Aid Coolidge, Richard N., Marine Technician Cunningham, Leonard M., Jr., Senior Marine Technician Doerr, William A., Marine Technician Gilkey, Robert W., Marine Technician Gossett, David A., Senior Marine Technician Haddow, Robert W., Senior Marine Technician Hanson, Robert E., Laboratory Technician Haulman, Doris V., Engineering Aid Hazelbaker, Bernard R., Engineering Aid Howell, Robert W., Marine Technician Hutchins, Dorsey M., Typist-Clerk James, Lois L., Laboratory Technician Kircher, Robert J., Marine Technician Klein, Hans T., Principal Laboratory Technician Larimore, Wayne H., Senior Laboratory Technician La Rue, Doris K., Laboratory Technician Love, Cuthbert M., Research Assistant McClendon, Robert I., Marine Technician McCoy, Willis M., Engineering Aid Madden, Dorothy A., Laboratory Technician Mao, Han-Lee, Research Assistant Marquardt, Helen N., Typist-Clerk Mead, Richard V., Principal Marine Technician Metzger, June C., Typist-Clerk Miller, Bernadette L., Engineering Aid Moyer, John S., Marine Technician Payne, Miles M., Marine Technician Propsner, Ruth O., Engineering Aid Ratty, Donald K., Marine Technician Rogers, William F., Marine Technician Schwartzlose, Richard A., Laboratory Technician Smith, Alan C., Senior Marine Technician Whitney, Alice D., Senior Engineering Aid Wilburn, Virginia A., Principal Clerk Wilkes, Frances C., Engineering Aid Worrall, Charles G., Senior Marine Technician

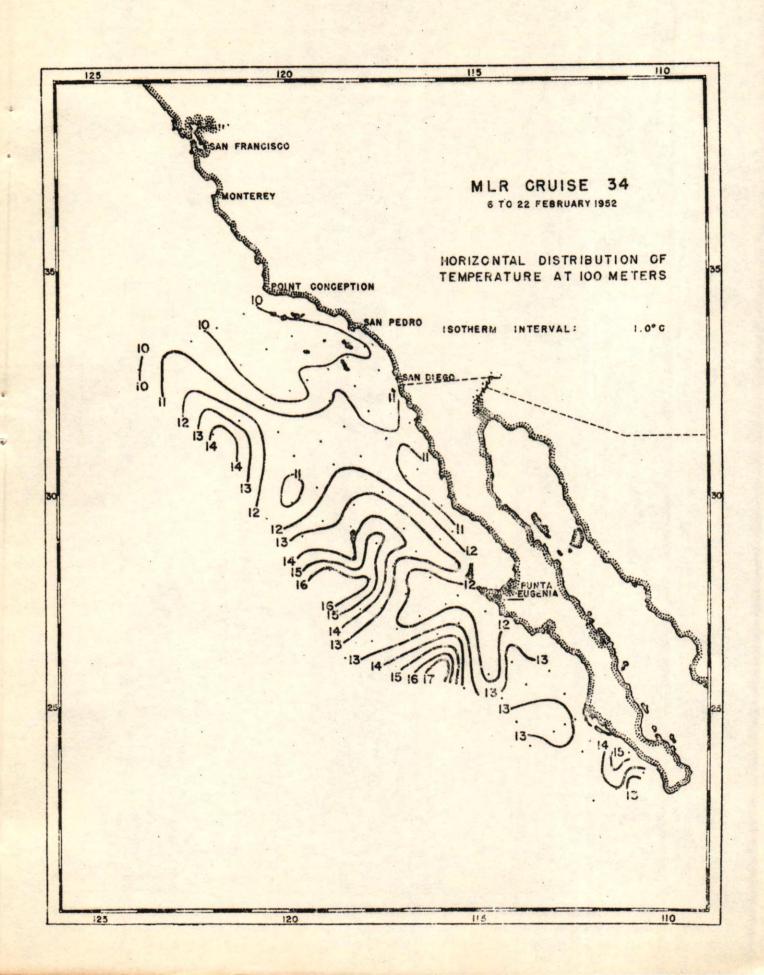


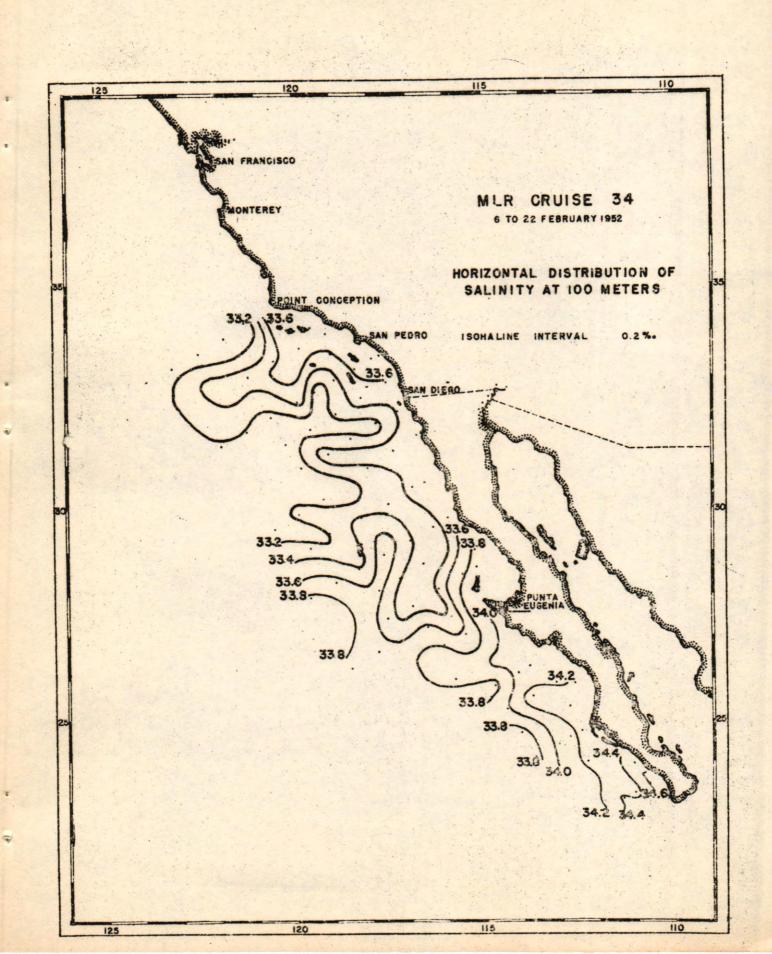












MARINE LIFE RESEARCH CRUISE C-34 6-14 February 1952 JOG LOG CURRENTS Scale of Current Speed 5 25 50 75 100 CM-/SEC. 2 KNOTS 1150

STATION 80.51 (Interpolated Values at Standard Depths)

HORIZON: 34°27'N 120°33.5'W; February 20, 1952; 1243 GCT; wire angle: 5°; sounding: 50 fms; depth of observation: 75 m; weather: missing: sea; slight; wind; 330°, force 4.

Depth (m)	(°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	O ₂ (ml/L)
0 0	1 2.3 3	3 3.3 0	25.227	274.99	. 000 .0275 .0544 .0807 .1310 .1891 .444	5.9 5
1 0	1 2.2 1	3 3.3 0	25.250	273.06		5.8 5
2 0	1 1.7 7	3 3.3 3	25.356	263.20		5.7 5
3 0	1 1.7 4	3 3.3 5	25.377	261.43		5.6 8
5 0	1 1.0 4	3 3.4 9	25.613	239.38		4.2 5
7 5	1 0.5 2	3 3.6 0	25.791	223.02		3.6 5

STATION 80.55 (Interpolated Values at Standard Depths)

HCRIZON: 34°19.5'N 120°48.5'W; February 20. 1952; 1509 GCT; wire angle:7°; sounding: 400 fms; depth of observation: 583 m; weather: overcast; sea; moderate wind: 260°, force 2.

00 12.70	33.21	25.086	288.41		5.30	
10 12.57	33.24	25.135	284.05		5.29	
20 12.60	33.23	25.1.21	285.58	.0573	5.27	
30 12.50	33.22	25,133	284.71	.0859	5.24	
50 12.50	33.30	25.195	279.31		5.1 4	.6481
75 11.30	33.31	25.427	257.67	.2101-	4.13	
100 10.10	33.62	25.878	215.14	.2696	3.62	
150 09.02	3 3.9 7	26.329	173.14	.3673	0 6.5	
200 0863	34.06	26.461	161.46	.4516	0 8.5	
250 0818	34.12	26.577	151.20	5303	1.95	
300 0737	3 4.1 4	26.711	138.87	.6034	1.50	
400 06.38	34.16	26.861	125.37	.7366	0.98	
500 05.82	34.21	26,972	115.67	8582.	0.62	
600 (05.48)	(34.28)	(27.069)	(107.36)	(9707)		
,	,	,	,	1		

HORIZON: 34°09.5'N 121°10'W; February 20, 1952; 1842 GCT; wire angle: 11°; sounding: 1200 fms; depth of observation: 1,139 m; weather: overcast; sea: rough; wind: 280°, force 4.

Depth (m)	T (°C)	S (%)	$\sigma_{\rm t}$ $({\rm mg/cm}^3)$	10 ⁵ 8	(dyn.m.)	(ml/L)
00 10 20 30 50 75 100 250 250 400 500 600 700 800 000	12.90 12.85 12.80 12.80 12.80 11.50 09.20 08.65 08.23 07.58 07.02 06.25 05.75 04.85 04.48 03.85	33.24 33.21 33.24 33.24 33.23 33.23 33.23 33.23 34.00 34.00 34.00 34.07 34.31 34.35 34.35 34.35 34.35 34.35 34.35	25.070 25.090 25.0990 25.0990 25.0990 25.3644 26.67990 26.4710 26.67990 27.264 27.272 27.273	28 9.9 3 2 9 1.4 4 28 8.5 7 28 8.8 1 28 9.2 9 26 7.7 9 23 7.1 5 1 7 9.3 7 1 5 9.9 4 1 4 7.7 0 1 3 9.2 1 1 2 2.1 6 1 0 7.3 5 9 9.2 7 9 4.6 8 8 9.6 9 8 0.2 4	000 000 000 000 000 000 000 000 000 00	5.1 2 3.1 8 2.7 5 2.4 0 1.7 5 0.8 0

STATION 80.70 (Interpolated Values at Standard Depths)

HORIZON: 33°50'N 121°50.5'W; February 21, 1952; OO11 GCT; wire angle: 35°; sounding: 1,950 fms; depth of observation: 943 m; weather: partly cloudy; sea: moderate; wind: 270°, force 4.

	00	1250	32.95	24.924	303.86		5.28
	10	1250	32.94	24.916	304.83		5.28
	50	1250	32.99	24.955	301.39	.0610	5.27
	30	1230	32.97	24.978	299.45	.0912	5.28
	50	1220	32.95	24.981	299.57	.1514	5.30
	75	11.30	32.93	25.132	285.68	2850	5.92
.1	00	0970	3 3.0 5	25.501	250.86	.2925	5.88
1	150	0868	3 3.7 5	26.211	184.26	.4020	3.50
2	008	08.38	3 3.9 8	26.437	163.63	.4896	2.25
2	250	08.12	3 4.1 5	26.609	148.10	.5681	1.30
-	300	07.70	34.20	26.710	139.12	.6405	1.12
4	100	0683	34.15	26.794	132.16	.7772	0.98
5	500	05:72	34.17	26.953	117.35	.9030-1	0.60
6	500	05.11	34.28	27.113	102.71	1.0140	0.39
,	700	04.72	34.34	27.205	94.56	1.1136	0.35
	300	0 4.4 3	34.38	27.269	8 9.0 9	1.2064	0.39
	000	(03.88)	(3447)	(27.399)	(77.64)	(13750)	
200	110	3			,		

HORIZON: 33°30.5'N 122°32.5'W; February 21, 1952; 0715 GCT; wire angle: 12°; sounding: 2,200 fms; depth of observation: 1,145m; weather: clear; sea: slight; wind: 320°, force 3.

Depth ((m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ δ	ΔD (dyn.m.)	⁰ 2 (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800	12.80 12.74 12.70 12.70 12.70 12.10 10.50 09.47 08.52 07.88 07.34 06.43 05.52 05.05 04.76 04.43 03.80	33.04 33.03 32.98 32.97 33.03 32.99 33.62 33.62 34.00 34.10 34.10 34.10 34.19 34.26 34.38 34.47	24935 24939 24909 24901 249062 253280 25360 25360 266808 266808 266808 27185 27185 27185 27187	302.77 302.63 305.82 306.78 302.85 292.46 268.23 206.04 170.92 155.70 145.86 130.48 113.34 103.46 96.53 89.09 76.69	000 0304 0609 0917 1530 2278 2983 4177 5126 5948 6708 8101 9331 10435 11435 12373	6.28 6.28 6.28 6.25 6.07 5.42 3.60 2.95 2.11 0.68 0.35 0.35 0.60

STATION 80.90 (Interpolated Values at Standard Depths)

HORIZON: 33°09'N 123°13'W; February 21, 1952; 1246 GCT; wire angle: 12°; sounding: 2,300 fms; depth of observation: 1,151 m; weather: intermittent light drizzle; sea: slight; wind: 360°, force 3.

	00	1310	3317	24977	20884	000	6.26	
	10	1309	3317	24979	29890	0300	6.25	
	50	1310	3317	24.977	29934	0600	6.25	
	30	13.10	3317	24,977	29959	0901	6.26	
	50	13.00	3315	24,981	299.66	1503	6.28	
	75	1 3.0 0	3324	25.051	293,67	2249	6.20	
	100	11.10	3312	25.315	268,77	2957	5.25	
	150	08.89	3364	26.092	195.57	4126	3.90	
	200	08.18	33.9.2	26.420	165.14	5034	3.40	
	250	07.53	33.94	26.531	155.16	.5841	3.03	
	300	06.94	3398	26.645	144.80	6597	2.30	
	400	05.98	34.12	26.881	123.12	7947	1.03	
	500	05.74	34.23	26.998	113.16	9139-	0.50	
	600	05.21	34.31	27.125	101.73	1.0223	0.35	
	700	0 4.7 7	34.36	27.216	93.69	1.1209	0.35	
	800	0 4.3 8	34.37	27.267	89.22	1:2133	0.37	
1	000	0 3.7 9	34.44	27.384	78.79	1.3832	0.58	

HORIZON: 32°53'N 123°54'W; February 21, 1952; 1801 GCT; wire angle: 16° sounding: 2,300 fms; depth of observation: 1,133 m; weather: partly cloudy; sea: moderate; wind: 30°, force 2.

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD ⁰ 2 (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800 100	13.10 13.08 13.10 13.00 13.00 11.90 10.00 09.36 08.91 08.35 07.72 06.68 05.95 05.95 05.46 05.95 04.59 03.90	3301 32997 3297 3297 3309 3309 3309 3309 3407 34116 3423 34448	24.8 4 2 24.8 4 2 24.8 4 2 24.8 4 2 24.8 4 2 25.4 2 6 26.0 5 4 26.3 5 4 26.6 7 8 2 27.1 5 5 27.1 5 7 27.2 7 7 27.4 0	31060 31195 31404 31238 31288 31288 28371 258514 17164 17164 17164 13309 12105 11081 9974 8881 7714	. 000 6.21 .0313 6.23 .0627 6.22 .0941 6.20 .1569 6.21 .2319 5.85 .3001 5.58 .4153 3.25 .5087 2.30 .5919 1.97 .6695 1.83 .8117 1.30 .9399 0.69 1.0569 0.42 1.1632 0.34 1.2584 0.37 1.4262 0.57

STATION 85.38 (Interpolated Values at Standard Depths)

HORIZON: 34°02'N 119°02'W; February 20, 1952; 0451 GCT; wire angle: 6°; sounding: 75 fms; depth of observation: 75 m; weather: clear; sea: slight; wind: 290°, force 3.

00	1211	3337	25.323	265.86	. 000	5.40
10	12.08	33.37	25.329	265.55	.0267	5.40
30	11.95	33.37	25.354	263.46	.0533	5.27
30	11.15	33.37	25.501	249.68	.0791	4.63
50	10.54	33.30	25.554	244.97	.1288	4.09
75	10.30	3 3.5 8	25.813	220.85	.1874	3.80

HORIZON: 33°57'N 119°10'W; February 20, 1952; 0226, 0254 GCT; wire angle: 35°, 45°; sounding: 350 fms; depth of observation: 192, 474 m; weather: partly cloudy; sea: rough; wind: 280°, force 4.

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	△D (dyh.m.)	⁰ 2 (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500	13.10 13.10 13.10 13.00 12.70 10.50 10.00 09.10 08.61 08.10 07.80 07.19 (06.46)	33.30 33.26 33.26 33.28 33.53 33.70 34.00 34.10 34.16 34.20 34.24 (34.32)	25.077 25.046 25.046 25.046 25.140 25.740 25.958 26.355 26.495 26.696 26.815 (26.977)	289.28 292.48 292.73 291.09 284.48 227.86 207.60 170.68 158.20 147.05 140.57 130.50 (115.98)	.000 .0292 .0586 .0879 .1457 .2101 .2649 .3601 .4429 .51983 .7289 (8532)	6.1 3 6.1 2 6.0 8 6.0 0 5.6 2 4.4 8 3.3 0 2.7 3 2.2 7 1.5 5 1.3 0 0.7 8

STATION 85.50 (Interpolated Values at Standard Depths)

HORIZON: 33°37'N 119°52.5'W; February 19, 1952; 2005 GCT; wire angle: 20°; sounding: 130 fms; depth of observation: 143 m; weather: partly cloudy; sea: rough; wind: 300°, force 4.

00	1 3.2 0	33.28	25.042	292.64	. 000	6.24
10	1 3.2 0	33.26	25.026	294.37	.0295	6.28
20	13.20	33.28	25.042	293.15	.0590	6.27
30	13.20	33.38	25.042	293.40	0884	6.20
50	11.70	3 3.3 1	25.354	264.12	1444	5.45
75	10.10	33.66	25.910	211.68	2042	3.95
	0 9.8 0	3 3.7 8	26.054	198.47	2558	3.27
150	(08.85)	(33.84)	(26.254)	(180.16)	(3511)	

HORIZON: 33°19'N 120°32'W; February 19, 1952; 1435 GOT; wire angle: 30°; sounding 625 fms; depth of observation 881 m; weather: partly cloudy; sea: moderate; wind: 320°, force 4.

Depth (m)	T (°C)	S (%)	σ _t (mg/cm ³)	10 ⁵ 8	△D (dyn.m.)	O ₂ (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800 000 (12.90 12.90 12.80 12.90 13.00 10.20 09.70 08.73 08.20 07.60 07.28 06.58 06.54 05.54 05.54 04.63 04.63	3 3.2 4 3 3.2 8 3 3.2 8 3 3.2 9 3 3.5 6 3 3.5 6 3 3.5 6 3 3.5 6 3 4.1 4 3 4.2 2 3 4.4 2 3 4.3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	25.070 25.070 25.070 25.101 25.089 25.57699 25.57699 26.6778 26.6778 26.6778 27.1086 2	28 9.9 3 29 0.1 9 28 5.6 3 28 7.7 3 28 9.3 8 22 5.1 3 21 70.9 4 1 70.9 6 1	. 000 0291 0588 00588 1448 20646 3613 4438 51878 5163 93368 1130 1130	6.1 8 6.1 7 6.1 6 6.1 4 5.6 0 3.8 9 1.6 9 2.1 6 9 1.6 9 0.3 7 0.4 0

STATION 85.70 (Interpolated Values at Standard Depths)

HORIZON: 32°58'N 121°14'W; February 19, 1952; 0919 GCT; wire angle: 35°; sounding; 1700 fms; depth of observation: 1,098; weather: clear; sea: moderate; wind: 320°, force 4

00	12,90	33.28	25.101	286.99	000	6.19
10	12.90	33.26	25.086	288.71	0289	6.18
20	12.90	3 3, 3 0	25.117	286.02	0578	6.17
30	1 2.9 0	3 3. 2 9	25.109	286.99	0866	6.1 3
50	12.90	33.27	25.094	288.96	.1 4 4 5	5.94
75	12.00	3 3.3 5	25.329	267.11	2144	5.79
100	09.90	3 3.5 6	25.865	216.34	2752	3.80
150	08.90	3 3.8 6	26.263	179.45	3748	3.00
200	08.19	34.02	26.497	157.87	4597	2.44
250	07.50	34.06	26.629	1 4 5.8 3	.5362	2.09
300	07.13	34.10	26.713	138.49	.6078	1.56
400	06.50	34.33	26.980	114.36	7352	0.76
500	05.75	34.31	27.060	107.35	8470	0.50
600	05.20	34.28	27.103	103.84	9535	0.42
						0.35
700	0 4.7 8	34.33	27.191	96.03	1.0544	
800	04.48	34.38	27.264	89.69	1.1 482	0.37
000	0397	3445	27.373	80.20	13200	0.59
	0 0 0 1	2 1 7 0	~ 1.2 1 2	00.20	1 2 0 0	

1

HORIZON: 33°28.5'N 117°46.5'W; February 17, 1952; 0310 GCT; wire angle: 5°; sounding: 280 fms; depth of observation 385 m; weather: cloudy; sea: missing; wind: 80°; force 2

Depth T (m) (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ δ	ΔD 0 ₂ (dyn.m.) (ml/L)
00 14.50 10 14.18 20 14.12 30 13.45 50 11.53 75 10.40 100 10.45 150 09.55 200 08.93 250 08.40 300 07.89 400 (07.01)	33.22 33.24 33.23 33.24 33.31 33.49 33.63 34.16 34.20 34.20 (34.20)	24,728 24,811 24,816 24,961 25,385 25,726 25,826 26,169 26,492 26,690 (26,808)	322.52 314.92 314.72 301.13 261.13 229.15 220.17 186.61 158.65 148.55 141.13 (130.95)	000 6.15 0320 6.17 0636 6.19 0945 6.14 1510 5.05 2126 4.07 2691 3.75 3715 2.90 4584 2.03 5358 169 6088 140 (7459)

.336

STATION 90.30 (Interpolated Values at Standard Depths)

HORIZON: 33°24.5'N 117°56'W; February 17, 1952; 0553 GCT; wire angle: 0°; sounding: 300 fms; depth of observation: 254 m; weather: clear; sea: slight; wind: 240°, force 2

00 14.60	33.24	24.722	3 2 3.0 8	. 000	6.10
10 14.27	33.24	24.792	316.71	0321	6.17
20 14.11	33.25	24.833	313,06	.0637	6.1. 9
30 14.00	33.27	24.871	309.67	.0950	6.15
50 11.90	3 3.3 1.	25.316	267.67	1530	5.61
75 10.70	33.39	25596	241.53	2170	4.65
100 09.95	33.62	25.904	21271	2741	3.71
150 09.32	3 3.9 9	26.296	176.32	3720	2.81
300 08.98	34.13	26.460	161.64	4571	2.08
250 (08.25)	(3 4.1 8)	(26.613)	(147.79)	(5350)	(1.59)
			,	.336	,
				1	

871

HORIZON: 33°11'N 118°23.5'W; February 17, 1952; 1004 GCT; wire angle: 10° sounding: 650 fms; depth of observation 948 m; weather: partly cloudy; sea: moderate; wind: 270°, force 2

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	(dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800	1 4.1 0 1 4.1 0 1 4.1 0 1 4.0 0 1 2.7 0 1 0.5 0 1 0.2 0 0 9.2 5 0 8.6 0 0 8.1 7 0 7.6 0 0 6.8 5 0 6.2 8 0 5.7 1 0 5.1 7 0 4.7 3 (0 4.1 9)	33.28 33.35 33.35 33.28 33.45 33.65 33.65 34.16 34.28 34.28 34.37 34.37 34.37 34.37 34.39	24.843 24.812 24.804 24.903 25.678 25.677 26.677 26.679 26.679 26.6869 27.178 27.230 27.30	311.59 314.78 306.26 303.81 284.48 237.51 178.18 158.06 142.13 125.78 116.51 106.61 97.92 98.75 (87.30)	. 000 6.05 .0314 6.08 .0626 6.10 .0932 6.07 .1523 5.42 .2174 4.45 .2742 3.82 .3738 2.62 .4585 2.43 .5356 1.60 .6087 1.30 .7437 0.80 .8659 0.43 .9785 0.31 1.0817 0.30 1.1780 0.32 (1.3600)

STATION 90.45 (Interpolated Values at Standard Depths)

HORIZON: 32°54.5'N 118°56.5'W; February 17, 1952; 1450, 1735 GCT; wire angle: 15°, 20°; sounding: 950 fms; depth of observation: 1,133; 5 5.50 weather: cloudy; sea: moderate; wind: 270°, force 2

	00	13.90	3322	24.853	310.58	. 000	6.05
	10	1 3.98	3 3.2 4	24.852	310.95	.0312	6.01
	20	14.00	3 3.2 4	24.848	311.60	.0625	6.01
	30	13.80	3 3.2 3	24.882	308.67	.0936	6.00
	50	13.40	3 3.1 8	24.925	305.07	1553	5.8 7
	75	11.30	3 3.1 1	25.272	272.41	2279	5.44
	100	10.10	33.26	25.598	241.74	2936	4.90
	150	09.10	33.66	26.074	197.31	4031	3.65
	200	08.30	34.02	26.480	159.50	4929	2.75
	250	07.98	34.24	26.701	139.38	.5682	2.07
	300	07.60	34.27	26.780	132.50	.6367	1.42
	400	06.83	34.22	26.849	126.98	.7675	0.59
	500	06.12	34.22	26.942	118.83	.8915-	0.45
	600	05.55	34.25	27.037	110.47	1.0072	0.48
	700	05.06	34.35	27.180	98.10	1.1120	0.37
	800	04.66	34.41	27.270	89.70	1.2070	0.40
1	000	04.00	34.48	27.400	7850	1.3770	0.50

HORIZON: 33°00'N 119°00'W; February 17, 1952; 1735 GCT; wire angle: 20°; sounding: 950 fms; depth of observation; 1,526 m; weather: partly cloudy; sea: rough; wind: 100°, force 3

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	⁹ 2
800	0 4.6 6	3 4.3 8	27.244	9189		0.3 4
1000	0 4.0 0	3 4.4 2	27.346	82.77		0.5 6
1200	0 3.8 2	3 4.4 5	27.389	80.06		0.5 7
1500	0 3.7 6	3 4.4 5	27.395	81.71		0.6 1

STATION 90.53 (Interpolated Values at Standard Depths)

HORIZON: 32°39.5'N 119°29'W; February 17, 1952; 2316 GCT; wire angle: 30°; sounding: 700fms; depth of observation: 866 m; weather: cloudy; sea: moderate; wind: 290°, force 5

	00	14.00	33.15	24.779	317.68	.0000	6.1 5
	10	1.4.00	33.19	24.810	315.01	.0318	6.10
	20	14.00	33.15	24.779	318.21	.0636	6.1.2
	30	14.00	3 3.1 5	24.779	318.47	.0956	6.1. 7
	50	13.70	3 3.1 4	24.833	313.83	.1591	6.1.2
	75	12.50	3 3.1 2	25.055	293.14	.2354	5.85
	100	10.30	3 3.1 4	25.471	253.86	.3042	5.00
	150	08.92	33.68	26.118	1 9 3.0 8	4167	3.92
	200	08.30	33.86	26.355	171.34	.5085	3.27
	250	07.89	3 3.9 6	26.494	158.80	5916	2.78
	300	07.50	34.04	26.614	1 4 8.1 2	.6689	2.33
	400	0 6.8 0	3 4.1 3	26.783	1 3 3.2 3	8107	1.51
	500	06.20	34.22	26.932	119.89	9383-	0.69
	600	05.60	34.27	27.047	109.63	1.0541	0.40
	700	05.06	34.32	27.151	100.24	11600	0.35
	800	0 4.7 2	34.37	27.229	93.38	12578	0.39
1	0 0 0	A STATE OF THE PARTY OF THE PAR			(83.98)	(14371)	0.55
	() () ()	(04.16)	(34.43)	(27338)	(0).901	4 2 1 11	

HORIZON: 32°25'N 119°56'W; February 18, 1952; 0329 GCT; wire angle: 38°; sounding: 650 fms; depth of observation: 841 m; weather: clear; sea: rough; wind: 300°, force 5

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	AD (dyn.m.)	(ml/L)
00 10 20 30 50 75 10 20 250 250 300 400 500 600 700 800 100	13.50 13.50 13.50 13.50 13.50 10.60 09.60 08.61 08.08 07.48 06.90 06.10 05.69 05.22 04.70 04.43 (04.10)	33.29 33.19 33.22 33.22 33.32 33.33 33.57 34.05 34.05 34.12 34.33 34.43 34.43 34.44 34.45)	24915 24915 24915 24935 24935 24935 25866 25845 26524 26713 267285 27285 27285 (2736)	30353 30526 30524 30357 30407 24060 21600 18098 15701 14630 13832 12170 113.26 101.12 92.83 87.60 (81.77)	.0006 .00612 .00	6.1 0 6.1 0 6.1 2 5.9 8 4.4 7 4.2 0 3.6 2 2.1 2 1.6 7 0.3 5 0.4 0

STATION 90.70 (Interpolated Values at Standard Depths)

HORIZON: 32°04.5'N 120°39'W; February 18, 1952; 0929, 0950 GCT; wire angle: 40°, 45°; sounding 2100 fms; depth of observation: 19, 915 m; weather: clear; sea: moderate; wind: 340°, force 5

	0.0	1410	3315	24758	31965	0000	6.01	
	10	14.10	3 3.1 0	24.720	323.58	0323	6.06	
	50	14.10	33.07	24.697	326.04	0649	6.06	
	30	14,20	3 3.1 0	24.699	326.10	0976	6.05	
	50	14.30	3 3.1 2	24.693	327.16	1633	6.10	
	75	13.00	3 3.1 7	24.997	298.80	2420	5.95	
	100	10.20	3 3.1 1	25,464	254.44	3116	5.49	
	150	09.11	3 3.5 8	26.010	203.39	.4268	4.01	
	200	08.10	33.88	26.401	166.93	.5200	3.07	
	250	07.51	33.99	26.573	151.16	.6001	2.32	
	300	07.03	34.04	26.680	141.56	.6738	1.76	
	400	06.04	34.10	26.858	125.39	.8083	1.06	
	500	05.73	34.20	26.976	115.26	.9297-	0.60	
	600	05.31	34.28	27.090	105.21	1.0409	0.36	
	700	04.87	34.34	27.188	96.39	1.1 487	0.37	
	800	0 4.5 1	34.38	27.260	90.06	1.2369	0.44	-
1	000	(04.10)	(34.45)	(27.360)	(81.77)	(1.4106)		

HORIZON: 31°45'N 121°17'W; February 18, 1952; 1630 GCT; wire angle: 29°; sounding: 2,150 fms; depth of observation: 1,144 m; weather: partly cloudy; sea: rough; wind: 300°, force 5

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 700 600 700 800	1 4.6 0 1 4.6 1 1 4.6 0 1 4.6 0 1 4.5 0 1 3.5 0 1 0.0 7 0 8.6 2 0 7.1 3 0 6.2 8 0 7.1 3 0 6.2 8 0 5.3 8 0 4.5 7 0 3.9 5	3 3.1 7 3 3.2 4 3 3.2 1 3 3.2 1 3 3.2 1 3 3.2 1 3 3.2 0 3 3.1 7 3 3.2 3 3 3.2 1 3 3 3.2 1 3 3 3.2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2468 24729 24699 24699 24699 24699 24699 24699 255194 255194 26661 26699 2771 2772 2772 2773	3 2 3 5 5 5 3 2 3 5 5 5 3 2 5 6 6 8 2 7 3 2 6 6 6 2 7 3 2 6 6 8 8 8 2 1 6 8 8 2 1 6 8 8 2 1 6 8 8 2 1 6 8 6 3 7 2 1 4 8 6 0 1 0 4 6 0 0 9 6 7 9 8 2 1 7	0000 6.00 0327 6.10 0653 6.03 0981 6.02 1638 6.02 2457 6.07 3252 6.02 4651 5.10 5748 4.09 6631 3.31 7417 2.48 8807 1.13 10030 0.62 11137 0.40 12154 0.35 13101 0.39 14850 0.59

STATION 90.90 (Interpolated Values at Standard Depths)

HORIZON: 31°25'N 121°58.5'W; February 18, 1952; 2222 GCT; wire angle: 30°; sounding: 2,000 fms; depth of observation: 1,120 m; weather: partly cloudy; sea: very rough; wind: 280°, force 4

	00	1 4.8 0	33.19	24.541	330.80	.0000	5.97
	10	1 4.7 0	3 3.1 5	24.632	331.97	0333	6.00
	20	1 4.7 0	33.22	24.685	3 2 7.1 2	.0664	6.00
	30	1 4.7 0	33.22	24.685	327.40	0993	5.95
	50	1 4.7 0	3 3.1 9	24.662	330.12	1654	5.96
	75	1 4.7 0	33.21	24.678	329.33	2483	5.98
			22.07	The state of the s		.0400	
	100	1 4.6 0	3 3.1 9	24.684	329.44	.3312	5.9 4
	150	10.29	3 3.2 5	25.558	246.59	4762	4.90
	200	08.77	33.70	26.157	190.21	5862	3.92
	250	08.13	3 3.9 1	26.420	166.00	6759	3.37
	300	07.54	3 3.9 8	26.561	153.13	7563	2.68
	400	06.32	34.06	26.791	131.98	9000	1.29
	500	05.63	34.20	26.988	113.99	10240-	0.62
	600	05.19	34.26	27.088	105.19	11346	0.40
	700	0 4.8 0	34.32	27.181	97.08	1.2367	0.36
	800	0 4.4 8	34.38	27.264	89.69	1.3310	0.40
1	000	0392	34.44	27371	8034	1.5029	0.60

HORIZON: 32°56'N 117°19'W; February 11, 1952; 2110 GCT; wire angle: 0°; sounding: 50 fms; depth of observation: 50 m; weather: partly cloudy; sea: slight; wind: 260°, force 3

Depth (m)	T (°C)	S (%)	σ _t (mg/cm ³)	10 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00	14.75	3 3.2 1 3 3.2 4	24.667	3 2 8.3 2 3 2 0.9 3	.0000	5.9 8 6.0 4
2 0 3 0 5 0	1 4 3 2 1 4 1 8 1 3 7 2	33.21 33.24 33.23	2 4.7 5 8 2 4.8 1 1 2 4.8 9 8	3 2 0 1 7 3 1 5 4 4 3 0 7 6 2	.0648 .0967 .1593	6.0 0 6.0 8 5.9 9

STATION 93.30 (Interpolated Values at Standard Depths)

HORIZON: 32°52.5'N 117°34.5'W; February 11, 1952; 1900 GCT; wire angle: 10°; sounding: 485 fms; depth of observation: 673 m; weather: partly cloudy; sea: slight; wind: 280°, force 2

00 1440 10 1434 20 1420	3328 3322 3325	24.795 24.762 24.814	31 6.1 1 31 9.5 7 31 4.8 5	.0319	5.9 5 5.9 5 5.9 5	
30 14.20	33.25	24.814	315.11		5.91	
50 12.50	33.22	25.133	285.18	•	5.4 5 ,7413	
75 10.80	33.37	25.563	244.69		4.55	
100 10.50	33.56	25.763	226.17		3.8 2	
150 09.78	33.89	26.143	191.03		2.78	
200 09.32	34.14	26.414	166.88	.4764	2.06	
250 08.76	34.22	26.566	152.54		1.63	
300 08.23	34.24	26.663	1 4 3.9 4	.6314	1.28	
400 07.17	34.23	26.810	130.96	.7699	0.69	
500 06.44	34.25	26.934	120.89	.8969-	0.48	
600 05.85	34.28	27.024	112.13	1.0145	0.33	
700 (05.39)	(3435)	(27.136)	(10221)((11227)		
					1	

.1270

HORIZON: 32°30'N 118°12'W; February 11, 1952; 1432 GCT; wire angle: 5°; sounding: 1,050 fms; depth of observation: 1,159 m; weather: over cast; sea: slight; wind: 320°, force 1

Depth (m)	T (°C)	S (%)	σ _t (mg/cm ³)	10 ⁵ 8	△D (dyn,m.)	O ₂ (ml/L)	
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800 1000	14.30 14.20 14.20 13.50 11.90 10.30 09.42 08.80 07.80 06.85 06.17 05.58 05.05 04.62 03.95	33.19 33.21 33.23 33.20 33.32 33.32 33.33 33.33 33.34 4.17 34.24 34.43 34.44 34.44 34.44 34.44	24.763 24.763 24.789 24.799 24.799 25.756 26.426 26.557 26.426 26.557 27.228 27.227 27.23 27.23 27.23	320.70 319.51 317.78 316.57 298.21 274.88 227.29 186.77 164.79 152.98 142.79 125.78 112.83 102.71 93.46 88.43 80.70	0000 0321 0641 09577 297 2977 2977 2977 2977 2977 2977 2	6.0 6 6.0 8 6.0 5 5.9 8 5.7 8 5.4 8 5.0 5 2.3 7 0.6 0 0.3 5 0.3 7 0.6 0	17321

STATION 93.50 (Interpolated Values at Standard Depths)

HORIZON: 32°10'N 118°53'W; February 11, 1952; 0911 GCT; wire angle: 11°; sounding 850 fms; depth of observation: 1,146;m; weather: cloudy; sea: missing; wind: 100°, force 2

1

HORIZON: 31°48.5'N 119°35'W; February 11, 1952; 0332 GCT; wire angle: 12°; sounding: 1,200 fms; depth of observation: 1,144 m; weather: partly cloudy; sea: moderate; wind: 210°, force 3

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800 100	1 4.7 0 1 4.6 5 1 4.2 0 1 4.1 0 1 3.9 0 1 3.4 0 1 1.3 0 0 9.5 0 0 8.4 8 0 8.0 0 0 7.4 9 0 6.5 1 0 6.0 0 0 5.3 6 0 4.8 7 0 4.5 0 0 3.9 5	33.22 33.22 33.20 33.20 33.20 33.20 33.21	24.678 24.696 24.787 24.837 24.837 24.836 25.9323 26.5337 26.5337 26.6844 26.8888 27.288 27.2893 27.38	327.30 325.83 317.78 316.78 314.08 303.51 273.69 213.90 174.02 155.21 145.01 127.09 114.29 103.61 94.17 86.97 79.22	0000 5.89 0328 5.90 0651 6.00 0970 6.08 1604 6.08 2380 5.91 3106 5.56 4333 4.41 5310 3.39 6139 2.64 6895 2.09 8266 1.02 9483 0.52 1.0582 0.35 1.1580 0.35 1.2495 0.40 1.4175 0.60

STATION 93.70 (Interpolated Values at Standard Depths)

HORIZON: 31°28'N 120°15'W; February 10, 1952; 2218 GCT; wire angle: 12°; sounding: 2,150 fms; depth of observation: 1,141 m; weather: partly cloudy; sea: moderate; wind: 290°, force 4

	00	1 4.5 0	3 3.1 2	2 4.6 5 1	329.84	.0000	5.95
	10	14.22	3 3.1 9	24.764	319.37	.0326	5.98
	20	14.20	3 3.1 9	24.768	319.24	.0647	6.02
	30	13.70	3 3.1 9	24.871	309.65	.0963	6.01
	50	13.40	3 3.2 1	24.948	302.87	.1579	5.92
	75	12.70	3 3.0 9	24.994	299.05	.2336	5.71
	100	11.00	3 3.0 6	25.287	271.47	.3054	5.23
	150	0 9.1 3	3 3.4 6	25.913	212.57	.4272	4.19
	200	08.49	33.86	26.386	174.16	.5246	3.20
	250	08.26	34.07	26.525	156.08	.6078	2.10
	300	07.96	34.17	26.649	1 4 5.1 1	.6837	1.43
	400	06.72	34.20	26.848	126.96	.8208	0.87
	500	05.87	34.22	26.974	115.57	.9 4 3 1-	0.53
	600	05.38	34.32	27.113.	103.13	1.0534	0.38
	700	05.00	34.40	27.221	93.57	1.1 5 2 7	0.34
	800	0 4.6 3	34.42	27.279	88.56	1.2447	0.38
L	000	04.02	3444	27360	8 1.5 4	1.4167	0.57

1

HORIZON: 32°15'N 117°08.5'W; February 9, 1952; 1713 GCT; wire angle: 0°; sounding: 30fms; depth of observation: 30 m; weather: cloudy; sea: moderate; wind: 90°, force 3

Depth (m)	T (°C)	S (%)	(mg/cm ³)	1058	ΔD (dyn.m.)	0 ₂ (ml/L)
0 0	13.99	3 3.2 4	2 4.8 5 0	310.88	. 000	6.0 0
1 0	13.98	3 3.2 2	2 4.8 3 7	312.41	.0313	6.0 0
2 0	13.98	3 3.2 2	2 4.8 3 7	312.68	.0627	5.9 4
3 0	13.48	3 3.2 8	2 4.9 8 6	298.77	.0934	5.6 8

STATION 97.32 (Interpolated Values at Standard Depths)

HORIZON: 32°11.5'N 117°18'W; February 9, 1952; 1908 GCT; wire angle: 25°; sounding: 800 fms; depth of observation: 1,146 m; weather: moderate intermittent rain; sea: moderate; wind: 160°, force 4

0.0	1 1 7 0	33.28	24.816	314.10	. 000	5.99
00	1 4.3 0			313.97	0315	5.96
10	14.28	33.28	24.821		0630	5.93
50	14.20	33.26	24.822	3 1 4.1 1		
30	1 4.2 0	33,25	24.814	3 1 5.1 1	.0946	5.89
50	1 3.5 0	3324	24.951	302.60	1567	5.80
75	11.80	3339	25.397	260,59	2275	4.75
		33,40	25.673	234.67	3898	4.35
100	10.30			187.30	3960	3.28
150	09.17	33.81	26.180			2.1 2
200	08.70	34.04	26.434	164.01	4845	
250	08.61	34.21	26,581	150.99	.5638	1.50
300	08.55	34.23	26,606	1 4 9.5 1	.6395	1.1.8
	07.09	34.24	26.829	129.09	7799	0.73
400		34.28	26,959	117.59	.9043-	0.43
500	06.36			108.35	1.0183	0.33
600	0 5.7 3	34.31	27.063		11230	0.32
700	05.20	34.36	27.166	99.05		
800	0 4.7 0	34.40	27.255	90.90	1.2189	0.35
1000	0 3.9 7	34.45	27373	80.20	1.3919	0.59
1000						

HORIZON: 31°58'N 117°50.5'W; February 10, 1952; 0034 GCT; wire angle: 5°; sounding: 755 fms; depth of observation: 1,159 m; weather: partly cloudy; sea: indistinguishable; wind: 340°, force 1

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800	1 4.6 0 1 4.2 1 1 4.1 0 1 4.0 0 1 3.4 0 1 1.8 0 1 0.1 0 0 9.2 5 0 7.9 3 0 7.4 5 0 6.9 7 0 6.9 7 0 6.9 6 0 5.6 7 0 5.1 2 0 4.6 5 0 3.8 3	33.21 33.19 33.19 33.17 33.16 33.15 33.57 34.09 34.23 34.23 34.42 34.42 34.42 34.42	24699 24789 24789 24817 25964 255964 25596556 266556 26689 2727 2727 2738	325.27 319.18 317.25 315.53 305.81 284.86 247.65 207.76 168.42 153.46 143.70 128.91 119.95 102.39 88.81 79.26	0000 0324 09643 09685 23994 4190 5900 5900 5649 8927 8927 111331 1231 140	5.9 5.9 5.9 5.9 5.9 5.9 5.5 6.9 6.7 6.8 6.4 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3

STATION 97.50 (Interpolated Values at Standard Depths)

HORIZON: 31°35'N 118°30.5'W; February 10, 1952; 0632 GCT; wire angle: 0°; sounding: 1400 fms; depth of observation: 1,165 m; weather: clear; sea: slight; wind: 360°, force 1

00	1470	33,21	24.678	327.30	0000	5.92
10	14.62	33.22	24.703	3 2 5.2 2	0328	5.91
50	1 4.5 0	3 3.2 1	24.720	323.80	.0654	5.91
30	1 4.5 0	3 3.2 1	24.720	324.07	.0979	5.92
		3 3.2 1	24.763	320.56	1627	5.90
50	1 4.3 0					5.67
75	1 3.6 0	3 3.2 1	24.907	307.39	,2416	The second secon
100	11.80	3 3.3 1	25.335	267.04	.3139	4.99
150	09.33	3 3.5 7	25.967	207.54	4334	3.92
500	08.61	3 3.9 7	26.393	167.82	5279	2.8 3
				153.46	.6088	2.38
250	07.93	3 4.0 4	26.551			
. 300	07.46	34.10	26.667	1 4 3.1 0	.6835	1.79
400	06.90	34.22	26.839	127.94	.8201	0.73
500	06.23	34.30	26.991	114.37	.9423-	0.44
		34.31	27.073	107.31	1.0541	0.33
600	0 5.6 5					0.33
700	05.05	34.36	27.184	97.08	1.1573	
800	04.53	34.41	27.282	8 8 .0 8	1.2508	0.37
1000		34.46	27.389	7862	14194	0.59
1000	0 0.5 0	27.40	2 1.202	,	-	

HORIZON: 31°15'N 119°08'W; February 10, 1952; 1233 GCT; wire angle: 11°; sounding: 2050 fms; depth of observation: 1,148 m; weather: clear; sea: slight; wind: 110°, force 2

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800 100	1 4.9 0 1 4.8 8 1 4.8 0 1 4.7 0 1 3.0 0 1 1.1 0 0 9.8 5 0 9.0 3 0 8.7 2 0 8.2 0 0 7.0 3 0 6.1 9 0 5.5 2 0 5.0 0 0 4.6 0 0 4.0 2	33.42 33.45 33.45 33.45 33.45 33.35 33.59 34.25 34.25 34.25 34.35 34.43 34.43 34.45	2 4.7 9 6 2 4.7 7 8 2 4.8 4 1 2 4.8 4 9 2 4.8 4 7 2 5.1 3 6 2 5.6 1 8 2 6.4 2 1 2 6.5 8 0 2 6.6 7 5 2 6.8 5 3 2 7.2 1 3 2 7.2 1 3 2 7.3 6 8	31 6.0 8 31 8.0 9 31 2.3 8 31 1.8 8 31 2.5 8 28 5.5 9 24 0.0 2 18 6.2 6 16 5.3 7 15 1.1 9 14 2.7 5 12 6.7 8 11 3.1 0 9 4.3 0 8 8.9 3 8 0.7 9	0000 5.92 0318 5.95 0634 5.97 0947 5.98 1575 5.91 2327 5.10 2988 4.36 4061 3.41 4946 2.22 5743 1.57 6483 1.22 7841 0.73 9051 0.45 1.0140 0.40 1.1134 0.38 1.2059 0.36 1.3775 0.55

STATION 97.70 (Interpolated Values at Standard Depths)

HORIZON: 30°56'N 119°50.5'W; February 10, 1952; 1730 GCT; wire angle: 0°; sounding: 2020 fms; depth of observation: 1,168 m; weather: partly cloudy; sea: slight; wind: 280°, force 1

	00	1 4.5 0	3 3.1 9	24.705	324.72	.0000	5.9 5	
	10	1 4.4 5	3 3.1 5	24.685	326.98	.0327	5.96	
	50	14.40	33.20	24.734	322.52	.0653	5.98	
	30	14.30	3 3.2 2	24.770	319.31	.0975	6.09	
	50	1 3.9 0	3 3.2 5	24.877	309.69	.1607	6.26	
	75	1 3.5 0	3 3.1 9	24.912	306.90	.2382	5.95	
	100	11.20	3 3.1 2	25.298	270.49	.3108	5.50	
	1.50	08.96	3 3.6 1	26.057	198.87	.4289	4.20	
	200	08.30	33.90	26.386	168.38	.5214	3.3 1.	
	250	07.88	34.01	26.535	154.95	.6028	2.50	
	300	07.36	. 34.09	26.673	142.44	.6777	1.80	
	400	06.27	34.21	26.915	120.20	.8101	0.80	
	500	05.87	34.28	27.021	111.12	.9268	0.43	
	600	05.30	34.32	27.123	102.11	1.0344	0.33	
	700	0 4.8 3	34.38	27.225	92.95	1.1329	0.33	
	800	0 4.4 4	34.43	27.308	85.51	1.2230	0.38	
1	000	0383	3 4 4 5	27.388	7852	13889	062	

HORIZON: 31°42'N 116°44'W; February 9, 1952; 1339 GCT; wire angle: 7° sounding: 45 fms; depth of observation: 50 m; weather: overcast; sea: missing; wind: 090°, force 5.

Depth T (m) (°C)	S (%)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	O ₂ (ml/L)
0 0 1 3.7 1 0 1 3.8 2 0 1 3.6 3 0 1 3.5 5 0 1 3.1	4 3 3.3 5 0 3 3.3 3 5 3 3.3 7	24.928 24.966 25.000 25.041 25.138	303.44 300.12 297.17 293.53 284.72	.0000 .0303 .0603 .0900 .1481	6.0 0 6.0 3 5.9 3 5.9 1 5.5 9

STATION 100.30 (Interpolated Values at Standard Depths)

HORIZON: 31°41'N 116°46'W; February 9, 1952; 1226 GCT; wire angle: 27° sounding: 150 fms; depth of observation: 171 m; weather: continuous rain; sea: slight; wind: 110°, force 5-6.

10 14.05 33.33 24.907 305.74 .0310 6.08 20 13.80 33.37 24.990 298.14 .0613 6.08 30 13.45 33.38 25.069 290.85 .0909 6.08 50 12.94 33.39 25.178 280.90 .1484 5.38 75 12.20 33.42 25.345 265.58 .2171 4.68 100 11.64 33.49 25.504 250.95 .2821 4.28	10 6.08 13 6.09 09 6.03 84 5.39 71 4.65 81 4.28 70 2.94	0310 0613 0909 1484 2171 2821 3970	305.74 298.1.4 290.85 280.90 265.58 250.95	2 4.9 9 0 2 5.0 6 9 2 5.1 7 8 2 5.3 4 5 2 5.5 0 4	3 3.3 3 3 3.3 7 3 3.3 8 3 3.3 9 3 3.4 2 3 3.4 9	1 4.0 5 1 3.8 0 1 3.4 5 1 2.9 4 1 2.2 0 1 1.6 4	10 20 30 50 75 100
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STATION 100.40 (Interpolated Values at Standard Depths)

HORIZON: 31°20.5'N 117°24'W; February 9, 1952; 0704 GCT; wire angle: 22° sounding: 1,000 fms; depth of observation: 1,107; weather: moderate intermittent rain; sea: indistinguishable; wind: 090°, force 4.

00	14.40	33.10	24.657	329.30	.0000	6.00
1 (1 4 3 4	33.26	24.793	316.64	.0324	6.03
- 3(1430	33.22	24.770	319.04	.0643	6.02
3 (33.21	24.783	318.04	.0963	6.01
5 (33.24	24.889	308.45	.1593	6.03
75		3 3.3 3	25.275	273.20	.2323	4.8 2
100	11,40	3 3.5 0	25.556	245.98	.2975	4.00
150	10.12	3 3.8 5	26.054	199.58	.4096	2.87
200	0 0 9 . 2 6	34.09	26.384	168.96	.5024	2.27
250	0 9.07	34.26	26.548	154.40	.5838	1.34
300	08.53	34.26	26.633	146.99	.6597	1.12
400	0 07.21	34.25	26.820	130.04	.7993	0.79
500	0 6.37	34.32	26.989	114.76	9888	0.43
600	0 0 5.6 7	34.36	27.109	103.87	1.0331-	0.33
700	05.12	34.37	27.183	07.29	1.1346	0.33
800	0 4.68	34.40	27.257	90.66	1.2395	0.38
1000	0 3.98	34.45	27372	80.32	1.4034	0.62
					-	

HORIZON: 30°56'N 118°04'W; February 9, 1952; 0128 GCT; wire angle: 14°; sounding: 850 fms; depth of observation 1,219 m; weather: overcast;

sea:	indistinguishable;	wind:	170°,	force 3
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Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800	1 4.7 0 1 4.6 1 1 4.5 0 1 4.4 0 1 4.3 0 1 2.6 0 1 1.2 0 1 0.3 0 0 9.7 2 0 9.1 4 0 8.3 0 0 6.9 8 0 6.9 8 0 6.3 9 0 5.8 1 0 4.7 4 0 4.0 1	3 3.2 4 3 3.2 6 3 3.2 2 3 3.2 2 3 3.1 2 3 3.3 7 3 3.9 2 3 4.1 5 3 4.2 0 3 4.2 0 3 4.3 0 3 4.3 7 3 4.4 2 3 4.4 2 3 4.4 5	24.701 24.735 24.736 24.749 24.770 25.036 25.498 26.355 26.482 26.355 26.482 26.828 26.828 26.828 27.173 27.269	3 2 5.1 1 3 2 2.0 9 3 2 2.3 3 3 2 1.3 1 3 1 9.8 4 2 9 4.9 9 2 5 3.0 7 1 9 7.3 4 1 7 1.8 9 1 6 0.6 7 1 4 7.9 4 1 2 9.0 4 1 1 6.5 1 1 0 7.0 4 9 8.4 3 8 9.9 2 8 0.6 8	0000 5.92 0325 5.95 0648 5.98 0971 6.00 1615 5.97 2388 5.67 3076 4.67 4207: 267 5137 1.93 5974 1.69 6751 1.58 8147 0.95 9385 0.45 1.0513 0.31 1.1550 0.32 1.2501 0.38 1.4226 0.61

STATION 100.60 (Interpolated Values At Standard Depths)

HORIZON: 30°45'N 118°49'W; February 8, 1952; 2000 GCT; wire angle: 22°; sounding: 1,800 fms; depth of observation: 1,131 m; weather: intermittent light rain; sea: moderate; wind: 90°, force 4

	0.0	1510	33.34	24691	326.00	.0000	5.85
	10	1512	33.37	24.710	324.51	0327	5.81
	20	1500	3 3.3 5	24.721	323.77	0652	5.83
	30	1500	33.35	24721	324.04	0977	5.88
	50	1490	33.33	24.727	323.99	1628	5.86
	75	14.30	3 3.3 5	24.870	310.99	2426	5.82
	100	11.87	33.21	25.245	275,65	31.64	5.40
	150	09.59	3 3.6 3	25,971	207.19	4379	3.82
	200	09.02	3 3.9 5	26.313	1.75.56	5343	2.90
	250	08.45	34.09	26.512	157.44	6181	2.20
	300	08.01	34.22	26.680	142.16	6936	1.46
	400	07.20	3 4.3 3	26.884	123.99	8277	0.63
	*		34.31	26.972	116.44	9489-	
	500	06.44	34.35	27.094	105.39	1.0608	0.27
	600	05.73			96.78	11629	0.30
	700	05.08	34.37	27.188		1.2575	0.37
	800	04.61	34.39	27.257	90.54	1.2376	0.60
1.	000	03.95	3448	27.399	7774	1.4 2 10	0.00

HORTZON: 30°12'N 119°13'W; February 8, 1952; 1437 GCT; wire angle: 28°; sounding: 2,100 fms; depth of observation: 1,022 m; weather: partly cloudy; sea: slight; wind: 170°, force 4

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	AD O ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800 1000	15.00 15.03 15.00 14.80 14.50 14.50 11.40 09.28 08.82 07.55 06.16 05.68 04.60 04.00	3 3.3 5 3 3.3 3 3 3.3 1 3 3.3 1 3 3.3 1 3 3.3 1 3 3.3 1 3 3.6 3 3 3.6 3 3 4.0 0 3 4.1 6 3 4.3 5 3 4.3 7 3 4.4 7	24.7 29 24.7 99 24.6 93 24.7 97 24.7 97 24.7 97 24.7 97 26.3 29 26.3 21 26.6 80 26.6 80 27.1 88 27.2 78 27.3 86	3 2 3.2 0 3 2 5.5 7 3 2 6.6 9 3 2 2.8 5 3 1 7.2 8 3 2 0.1 5 2 7 0.2 8 2 0 0.8 4 1 7 3.9 6 1 5 7.4 1 1 4 4.3 8 1 3 1.1 5 1 1 1.9 5 1 0 3.8 4 9 6.7 8 8 8.9 3 7 9 0	0000 5.81 0326 5.79 0653 5.87 0979 5.91 1622 5.65 3166 5.18 4352 3.70 5296 2.72 6130 2.22 6130 2.22 6890 1.81 8279 0.85 .9505 0.41 1.0594 0.28 1.1607 0.31 1.2545 0.40 1.4244 0.65

STATION 100.80 (Interpolated Values at Standard Depths)

HORIZON: 29°51.5N 119°53'W; February 8, 1952; 0907, 0925 GCT; wire angle: 0°, 0°; sounding: 2,100 fms; depth of observation: 150, 1,164 m; weather: partly cloudy; sea: slight; wind: 180°, force 3

0 0 1 4.6 0 1 0 1 4.6 2 2 0 1 4.5 0 3 0 1 4.2 0 5 0 1 4.1 0 7 5 1 3.1 0 1 0 0 1 0.9 0 1 5 0 0 9.7 2	3 3.2 4 3 3.3 1 3 3.2 6 3 3.2 4 3 3.2 8 3 3.1 5 3 3.2 3 3 3.7 8	2 4.7 2 2 2 4.7 7 2 2 4.7 5 9 2 4.8 0 7 2 4.8 5 8 2 4.9 6 1 2 5.4 3 6 2 6.0 6 7	3 2 3,0 8 3 1 8.6 3 3 2 0.1 3 3 1 5.8 4 3 1 1.4 4 3 0 2.1 6 2 5 7.2 4 1 9 8.1 9	0000 0322 0643 0962 1592 2363 3067 4213	5.97 5.95 5.99 5.99 5.65 5.03 3.34
200 08.8 2	3 3.9 7	26.361	171.01	.5143	1.9 1
250 08.1 8	3 4.0 9	26.553	153.41	.5960	1.8 0
300 07.6 5	3 4.1 3	26.663	143.58	.6708	1.5 5
400 06.5 8	3 4.1 6	26.835	128.07	.8077	0.8 0
500 05.6 8	3 4.1 5	26.942	118.33	.9320-	- 0.4 8
600 05.2 8	3 4.2 9	27.101	104.09	10442	0.3 6
700 04.9 0	3 4.3 7	27.209	94.54	1.1445	0.3 7
800 04.5 2	3 4.3 9	27.267	89.43	1.2374	0.4 2
1000 03.8 5	3 4.4 4	27.378	7950	1.4082	0.6 2

STATION 100.90 (Interpolated Values at Standard Depths)

HORIZON: 29°30'N 120°33'W; February 8, 1952; 0330, 0357 GCT; wire angle: 8°, 9°; sounding: 2,200 fms; depth of observation: 195, 1,153m; weather: partly cloudy; sea: indistinguishable; wind: 210°, force 2

Depth T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.n.) (ml/L)
00 15.10 10 14.99 20 14.90 30 14.70 50 14.50 75 14.00 100 11.70 150 10.00 200 08.89 250 08.35 300 07.83 400 06.75 500 06.00 600 05.44 700 05.01 800 04.66 000 04.01	33,20 33,21 33,20 33,19 33,19 33,19 33,49 34,05 34,13 34,26 34,26 34,26 34,38 34,38 34,44	24.584 24.615 24.627 24.662 24.663 24.810 25.137 25.794 26.287 26.287 26.496 26.636 26.958 27.157 27.244 27.361	336.24 333.53 332.68 329.59 326.07 316.71 285.86 224.13 178.00 158.90 146.18 128.11 116.52 108.33 99.61 91.89 81.42	.0000 5.87 .0336 5.89 .0670 5.90 .1002 5.90 .1661 5.89 .2469 5.87 .3227 5.67 .4511 4.42 .5524 3.49 .6372 2.75 .7140 1.89 .8522 0.90 .9756 0.57 1.0890 0.40 1.1940 0.36 1.2907 0.39 1.4659 0.60

STATION 105.32 (Interpolated Values at Standard Depths)

HORIZON: 30°43.5'N 116°20'W; February 6, 1952; 1321 GCT; wire angle: 0°; sounding: 60 fms; depth of observation: 50 m; weather: clear; sea: slight; wind: 200°, force 1

0.0	1 4.3 1	3 3.4 1	24914	304.78	.0000	6.01
	1 4.1 3	33.42	24.960	300.78	.0304	5.95
	1 3.9 9	3 3.4 4	25.004	296.75	.0604	5.92
30	1 3.8 5	33.42	25.018	295.72	.0901	5.95
50	12.29	3337	25.289	270.31	1470	4.8 3

HORIZON: 30°38'N 116°33'W; February 6, 1952; 1611 GCT; wire angle 0°; sounding: 820 fms; depth of observation: 1,165 m; weather: partly cloudy; sea: slight; wind: 90°, force 1

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00 10 20 30 50 70 150 250 400 500 400 600 700 800 100	1 5.0 0 1 4.9 0 1 4.8 0 1 4.8 0 1 4.7 0 1 2.3 0 1 0.4 0 0 9.5 7 0 8.7 3 0 8.1 3 0 7.7 4 0 6.8 8 0 6.0 1 0 5.5 6 0 5.0 9 0 4.6 6 0 3.9 8	33.42 33.44 33.44 33.42 33.43 33.53 34.06 34.28 34.43 34.43 34.43 34.43 34.43 34.43 34.43 34.43 34.43 34.43 34.43	24.775 24.812 24.833 24.833 24.839 25.280 25.734 26.430 26.437 26.6337 26.688 27.098 27.272 27.272 27.272 27.272	318.08 314.84 313.06 313.34 313.30 271.82 228.94 192.10 164.46 154.90 142.67 123.22 104.68 96.93 88.94 76.63	.0000 .0318 .0633 .0947 .1577 .2312 .2942 .4900 .5704 .6454 .7794 .8999 1.1011 1.1950 1.3624	5.8 1 5.8 5 5.8 5 5.7 5 4.1 0 9 5 2.4 6 3 2.4 6 3 0.4 0 0.3 3 4 0.6 0 0.6 0

STATION 105.40 (Interpolated Values at Standard Depths)

HORIZON; 30°30'N 116°54'W; February 6, 1952; 2010 GCT; wire angle: 10°; sounding: 750 fms; depth of observation: 1,156 m; weather: partly cloudy; sea: moderate; wind: 170°, force 2

00 10 20 30 50 75 100 250 250 300 400 500 600 700	15.60 15.01 14.90 14.70 11.70 10.60 09.30 08.62 08.43 08.14 06.94 06.22 05.52 05.01	3 3 4 6 3 3 4 7 3 3 4 7 3 3 4 5 3 3 3 7 3 3 5 7 3 3 5 8 3 4 1 5 3 4 2 6 3 4 2 8 3 4 3 6 3 4 3 8	24.674 24.819 24.835 24.819 24.847 25.400 25.753 26.223 26.423 26.553 26.653 26.653 26.6977 27.128 27.204	327.71 314.18 312.92 314.66 312.58 260.27 227.10 185.02 152.70 144.82 125.53 115.72 101.94 9517	000 000 000 000 000 000 000 000 000 00	5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8
600	0 5.5 2	3 4.3 6	27.128	101.94	1,0052	
700	0 5.0 1	3 4.3 8	27.204	95.17	1,1047	
800	0 4.6 1	3 4.3 9	27.257	90.54	1,1985	
1000	0 3.9 9	3 4.4 6	27.379	7970	1,3706	

HORIZON: 30°06.5'N 117°32'W; February 7, 1952; 0157 GCT; wire angle: 10°; sounding: 850 fms; depth of observation: 1,143 m; weather: partly cloudy; sea: indistinguishable; wind: 290°, force 2

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
10 1 20 1 30 1 50 1 75 1 100 1 150 1 200 0 250 0 300 0 400 0 500 0 600 0 700 0 800 0	15.90 15.60 15.50 15.50 15.50 16.5.50 16.5.50 16.5.7 16.37 1	33.44 33.51 33.46 33.45 33.35 33.35 33.35 33.35 33.40 4.14 34.29 4.34 34.34 34.34 34.34 34.34 34.34	24.591 24.696 24.706 24.698 24.742 25.155 25.849 26.556 26.652 26.816 26.863 27.161 27.236 27.356	335.56 325.83 325.23 326.981 326.81 323.22 284.32 218.95 179.53 157.85 144.71 130.37 117.26 106.13 99.55 92.89 82.02	.0000 .0332 .0659 .0986 .1643 .2460 .3224 .4491 .5494 .6344 .7106 .8492 .9741 1.0868 1.1906 1.2878 1.4647	5.76 5.76 5.76 5.79 5.79 5.78 5.15 4.30 8.61 1.68 8.63 9.63 1.68 0.33 0.40 0.60

STATION 105.60 (Interpolated Values at Standard Depths)

HORIZON: 29°48'N 118°14.5'W; February 7, 1952; 0740 GCT; wire angle: 8°; sounding: 1,900 fms; depth of observation: 1,158 m; weather: cloudy; sea: slight; wind: 260°, force 1

00 10 20 30 50 75 100 250 250 300 400 500 600 700	16.10 15.70 15.60 15.60 15.60 15.60 10.69	33.46 34.46 34.46	24.546 24.651 24.674 24.674 24.674 24.674 25.837 26.404 25.823 26.404 26.561 26.561 27.060 27.171	339.86 330.12 328.29 328.57 329.14 329.86 294.09 220.30 184.82 168.41 155.42 136.34 128.64 108.89 98.70	.0000 .0336 .0667 .0997 .1658 .2486 .3271 .4566 .5586 .6475 .7291 .8761 1.0067 1.1235 1.2283	5.75 5.75 5.77 5.77 5.77 5.77 5.77 1.0.6.3.8 9.20 0.43 1.0.6.43 0.33
			27.171			
800	0 4.7 8	3 4 . 4 1	27.254	91.16	1.3242	0.3.8
1000	0 4.0 1	34.46	27377	7994	1.4972	0.60

HORIZON: 29°26.5'N 119°07'W; February 7, 1952; 1336 GCT; wire angle: 0°; sounding: 1,950 fms; depth of observation: 1,164 m; weather: clear;

sea: slight; wind: 200°, force 1

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800 100	1 5.8 0 1 5.6 6 1 5.6 0 1 5.4 0 1 5.3 0 1 5.1 0 1 2.9 0 0 9.6 8 0 9.0 7 0 8.1 9 0 7.6 3 0 6.9 9 0 6.3 2 0 5.7 0 0 5.1 2 0 4.6 3 0 3.9 7	3 3.4 4 3 3.4 6 3 3.4 1 3 3.3 7 3 3.3 7 3 3.3 9 3 3.5 0 3 3.8 7 3 3.9 7 3 4.0 3 3 4.3 5 3 4.3 5 3 4.3 5 3 4.4 1 3 4.4 6	2 4.6 1 4 2 4.6 6 0 2 4.6 5 8 2 4.6 8 0 2 4.6 7 1 2 4.7 3 0 2 5.8 5 5 2 6.2 4 3 2 6.4 5 8 2 6.4 5 8 2 6.5 9 5 2 6.9 9 8 2 7.0 9 1 2 7.2 7 1 2 7.3 8 1	333.42 329.27 329.74 327.99 329.39 329.44 294.58 218.25 162.45 149.97 126.45 115.56 105.50 96.55 89.30 79.46	.0000 568 .0333 559 .0664 559 .0994 562 .1655 567 .2477 569 .3256 550 .4547 409 .5555 345 .6423 290 .7210 217 .8613 0.73 .9844 0.39 1.0957 0.27 1.1974 0.31 1.2913 0.41 1.4619 0.62

STATION 105.80 (Interpolated Values at Standard Depths)

HORIZON: 29°05'N 119°37'W; February 7, 1952; 1934 GCT; wire angle: 7°; sounding: 2,200 fms; depth of observation: 1,162 m; weather: cloudy; sea: slight; wind: 270°, force 2

	00 16.60	33.60	24.554	339.11	.0000	5.62
	10 16.27	3 3.6 0	24.630	332.17	.0337	5.5 4
	20 (16.20)	3 3.6 1	(24.653)	(330.22)	(.0670)	(5.55)
	30 (16.10)	\$ 3.6 1	(24.676)	(328.34)	(.1001)	(5.56:
	50 (15.70)	(3 3.5 2	(24.697)	(326.89)	(.1660)	
	75 (15.70)	(33.48.	(24.667)	(330.53)	(.2486)	15.63.
	100 13.60	33.28	24.961	302.89	.3283	5.5 7
	150 09.67	3 3.5 3	25.880	215.86	.4589	4.1 1
	200 08.82	33.89	26.298	176.98	.5578	3.35
	250 08.30	34.06	26.511	157.41	.6420	2.19
	300 07.84	3 4.1 4	26.643	1 4 5.5 8	.7183	1.50
	400 06.94	34.19	26.810	130.71	.8576	0.73
	500 06.23	34.31	26.999	113.68	.9808	0.22
	600 05.69	34.36	27.107	104.13	1.0907	0.27
	700 05.08	34.36	27.180	97.53	1.1925	0.30
	800 04.62	34.37	27.240	9 2.1 3	1.2883	0.35
1	000 03.98	34.44	27364	81.06	1.4634	0.5 7

STATION 110.33 (Interpolated Values at Standard Depths) -25-

CREST: 29°51'N 115°53'W; February 6, 1952; 2018 GCT; wire angle: 5°; sounding: 60 fms; depth of observation: 75 m; weather: partly cloudy; sea: rough; wind: 150°, force 2

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	△D (dyn.m.)	⁰ 2 (ml/L)
10 1 20 1 30 1 50 1	5.25 4.80 4.71 4.46 4.18 1.264	3 3.3 9 3 3.4 2 3 3.4 2 3 3.4 2 3 3.4 2 3 3.3 9	2 4.6 9 7 2 4.8 1 8 2 4.8 8 3 2 4.8 9 0 2 4.9 4 9 2 5.2 3 7	32546 31425 30829 30787 30279 27589	.0000 .0321 .0634 .0943 .1557 .2284	5.7 7 5.8 2 5.8 4 5.8 0 5.6 6 5.0 7

STATION 110.35 (Interpolated Values at Standard Depths)

CREST: 29°48'N 115°59W; February 6, 1952; 2132 GCT; wire angle: 13°; sounding: 650 fms; depth of observation: 945 m; weather: partly cloudy; sea: rough; wind: 150°, force 2.

iDepth (m)	.T ((3C)	S (‰)	(mg/cm ³)	10 ⁵ 8	(dyn.m.) ((ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800 100	1570 1512 1500 1500 1500 1410 1200 1070 0970 0951 09.51 09.660 05.82 05.83 04.82 03.95)	33.42 33.39 33.46 33.46 33.46 33.45 34.35 34.36 34.36 34.36 34.36 34.43 34.36 34.43	2 4.6 21 2 4.7 26 2 4.8 0 5 2 4.8 0 5 2 4.9 5 1 2 5.3 5 5 2 6.1 4 4 2 6.5 9 8 2 6.6 9 8 2 6.6 9 8 2 7.2 5 2 7.2 5 2 7.2 5 3 (2 7.4 2 3)	3325 3275 3275 315006 2315006 231500	0000 5.79 0329 5.86 0650 5.86 0967 5.85 1589 5.74 2305 5.25 2939 4.39 4015 3.28 4913 2.08 5710 1.28 .6445 0.85 .7788 0.49 .9002 0.29 1.0119 0.26 1.1133 0.27 1.2076 0.37 (1.3766)

STATION 110.40 (Interpolated Values at Standard Depths)

CREST: 29°36.5 N 116°20'W: February 7, 1952; Oll4 GCT; wire angle: 4°; sounding: 1,400 fms; depth of observation: 1,163 m; weather: partly cloudy; sea: moderate; wind: 340°, force 2.

00 1630 10 1565 20 1560 30 1550 50 1540 75 1520 100 1224 150 0990 250 08.85 300 08.50 400 07.28 500 06.30 600 05.68 700 05.22	33.48 33.50 33.51 33.46 33.46 33.46 33.56 34.26 34.27 34.29 34.29 34.29	2 4.5 3 1 2 4.6 7 8 2 4.7 0 4 2 4.7 4 4 2 4.7 3 3 2 4.7 6 4 2 5.2 4 5 2 5.8 6 5 7 2 6.5 8 4 1 2 6.9 7 4 2 7.0 9 3 2 7.2 0 3	3 4 1 2 8 3 2 7 5 9 3 2 5 3 7 3 2 1 8 7 3 2 3 4 5 3 2 1 4 1 2 7 5 7 2 2 1 7 3 4 1 7 1 4 7 1 5 0 9 8 1 4 2 8 4 1 2 8 0 8 1 1 6 0 4 1 0 5 4 7 9 5 6 0	0000 0336 0664 0989 16389 16449 32449 32441 5420 6232 895686 11701	5.8 8 6.0 5 5.8 0 5.7 5 5.7 8 5.2 8 3.2 0 1.8 0 0.7 5 0.4 0 0.5 0
700 05.22 800 04.80 1000 03.96			95.60 87.71 75.65	1.1701 1.2627 1.4279	0.5 0 0.5 3 0.5 5

CREST: 29°16'N 116°59'W; February 7, 1952; 0645 GCT; wire angle: 7°; sounding: 1,800 fms; depth of observation: 1,165 m; weather: partly cloudy; sea: very rough; wind: 340°, force 2

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800	16.10 15.91 15.80 15.70 15.70 15.60 10.60 09.70 08.80 07.60 08.30 07.60 06.52 05.63 04.73 04.00	3 3 5 1 3 3 5 5 1 3 3 5 5 1 3 3 3 5 5 3 3 3 3 5 5 3 3 3 3 5 5 3 3 4 4 2 2 2 3 3 4 4 3 3 4 4 3 3 3 4 4 5 9 3 4 4 5 9	24.600 24.643 24.667 24.690 24.705 24.704 25.948 25.948 26.497 26.819 26.819 26.819 27.270 27.270 27.347 27.340	33476 33095 32889 32705 32615 32694 29288 20973 17893 15906 14646 130.45 116.05 101.87 89.15 82.40 77.61	0000 5.60 0334 5.62 0665 5.65 0994 5.65 1650 5.65 2471 5.50 3251 4.98 4516 3.20 5495 2.30 6346 1.90 7116 1.48 8512 0.58 9755 0.32 1.0854 0.32 1.1818 0.32 1.2684 0.32 1.4302 0.59

STATION 110.60 (Interpolated Values at Standard Depths)

CREST: 28°55.5'N 117°40'W; February 7, 1952; 1202, 1220 GCT; wire angle: 7°, 8°; sounding: 2,050 fms; depth of observation: 25, 1,166 m; weather: cloudy; sea: rough; wind: 020°, force 2

00	16.30 16.12 16.10	3 3.6 0 3 3.5 7 3 3.5 9	24.623 24.641 24.661	332.53 331.11 329.50	0000	5.63 5.52 5.63
30 50 75 100 150 200 250 300 400 500 600 700	16.10 16.00 16.00 16.10 15.20 11.61 10.10 08.72 07.92 07.18 06.34 05.40 05.12	3.5 9 3.6 2 3.6 2 3.7 1 3.7 1 3.7 9 3.4.0 9 3.4.1 6 3.4.2 6 3.4.3 8 3.4.4 9 3.4.4 6	24.661 24.707 24.722 24.684 24.954 25.680 26.167 26.470 26.647 26.647 27.245 27.255	3 2 5.4 5 3 2 4.5 7 3 2 8.9 3 3 0 3.8 7 2 3 5.3 8 1 8 9.9 0 1 6 1.5 3 1 4 5.2 7 1 2 8.8 8 1 0 9.9 2 9 0.7 8 9 0.6 3	0994 1647 2468 364 4621 5692 6577 73336 10949 11865	5.65 5.65 5.78 5.50 3.55 2.48 2.31 2.00 0.83 0.41 0.40 0.40
800	0 4.6 9 0 3.9 0	3 4. 4 3 3 4. 5 1	27.280 27.428	8 8.5 6 7 4.9 2	1.2770	0.40

GREST: 28°36.5'N 118°18'W; February 7, 1952; 1731 G&T; wire angle: 0°; sounding: 1,850 fms; depth of observation: 1,176 m; weather: cloudy; sea: rough; wind: calm,

Depth (m)	T (°C)	S (%)	σ _t (mg/cm ³)	10 ⁵ 8	AD (dyn.m.)	O ₂ (ml/L)
0 0 1 0 2 0 3 0 5 0 7 5 1 0 0 2 5 0 3 0 0 4 0 0 5 0 6 0 0 7 0 0 8 0 0 1 0 0	16.9 0 16.1 1 16.0 0 16.0 0 15.8 0 15.5 0 13.5 0 10.2 9 09.3 0 08.4 0 07.7 0 06.8 0 06.1 2 04.9 8 04.5 8 04.5 8 03.9 5	3 3 5 7 3 3 5 5 8 3 3 5 5 8 3 3 5 5 2 3 3 5 5 5 6 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	24.461 24.628 24.676 24.676 24.677 24.752 25.768 26.441 26.837 26.441 26.835 27.228 27.228 27.228 27.235	3 4 7.9 6 3 3 2.3 5 3 2 8.0 7 3 2 8.3 6 3 2 9.7 6 3 2 2.4 2 2 9 2.1 5 2 2 6.6 7 1 8 5.1 2 1 6 4.0 9 1 4 8.0 6 1 1 7.3 5 1 0 3.4 3 9 3.3 2 8 7.9 5 8 2.1 7	0000 0342 0674 10655 2485 3564 56486 72657 9809 12918 1463	5.60 5.75 5.60 5.76 5.60 5.76 5.76 6.30

STATION 110.80 (Interpolated Values at Standard Depths)

CREST: 28°17'N 118°56'W; February 7, 1952; 2251 GCT; wire angle: 3°; sounding: 2,250 fms; depth of observation: 1,169 m; weather: cloudy; sea: rough; wind: 290°, force 2

	0 0 1 0 2 0 3 0 5 0	1690 1655 1640 1640 1630	3 3.6 6 3 3.6 2 3 3.6 2 3 3.6 2 3 3.6 9	2 4.5 3 0 2 4.5 9 6 2 4.6 1 5 2 4.6 1 5 2 4.6 9 8	3 4 1.4 0 3 3 5.3 9 3 3 3 8 5 3 3 4.1 5 3 2 7.4 5	.0000 .0340 .0676 .1011 .1676	5.6 0 5.5 9 5.5 5 5.5 5
	75	16'20	3 3.7 1	24.730	3 2 4.5 5	2496	5.5 2
	100	16.50	3 3.6 8	24.707	327,48	3316	5.6 0
	150	11.95	3 3.6 6	25.578	245.17	5853	3.50
	200	09.15	33,78	26.160	19015	6747	2.88
	250	08.35	33.97	26.433	150,64	7542	2.23
	300	07.78	34.06	26.589	13000	8956	1.1 5
	400	06.78	34.17	26.816		1.0197	0.50
	500	06.03	34.24	26.970	11618		0.38
	600	05.30	34.28	27.091	105.08	1.1 3 1 3	0.38
	700	0 4.9 0	34.36	27.201	05.29	1.2324	
	800	04.60	34,42	27.282	88.20	1.3251	0.40
1	000	0 3.9 8	34.48	27396	78.11	1.4933	0.64

CREST: 27°56.5'N 119°36'W; February 8, 1952; 0425 GCT; wire angle: 5°; sounding: 2,250 fms; depth of observation: 1,167m; weather: partly cloudy; sea: very rough; wind: 220°, force 3

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.) (0 ₂ (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 700 800 1000	16.8 0 16.5 2 16.4 0 16.3 0 16.1 0 16.3 0 16.0 0 12.0 0 10.7 8 0 9.6 8 0 8.6 0 0 7.1 6 0 6.4 5 0 5.7 0 0 5.1 8 0 4.7 8 0 4.0 2	33.6 8 33.5 8 33.6 0 33.5 7 33.8 6 33.8 6 34.2 2 34.2 2 34.2 2 34.2 2 34.2 2 34.3 6 34.3 8 34.4 8	24.5 2 3 24.5 5 7 24.5 5 7 24.6 0 3 24.6 2 3 24.6 2 4 24.7 9 2 24.8 9 1 25.7 2 6.4 1 7 26.4 1 7 26.4 1 7 26.5 9 5 26.9 3 1 27.0 7 4 27.1 6 8 27.2 3 9 2	3 4 2 0 8 3 3 9 1 1 3 3 5 3 1 3 3 3 4 3 3 3 1 8 5 3 1 8 7 2 3 1 0 0 0 2 3 1 3 9 1 9 1 0 8 1 6 7 0 9 1 5 1 0 1 1 3 2 3 1 1 2 0 2 8 1 0 7 2 2 9 8 7 8 9 2 6 3 7 8 5 9	0000 0342 0681 1017 1686 2595 4658 5722 6624 7425 1.0127 1.1275 1.2318 1.5013	5.561 5.61 5.61 5.65 5.60 2.90 1.80 1.45 0.57 0.33 0.64

STATION 113.30 (Interpolated Values at Standard Depths)

CREST: 29°22.5'N 115°17.5'W; February 9, 1952; 1526 GCT; wire angle: 0°; sounding: 30 fms; depth of observation: 30 m; weather: intermittent light drizzle; sea: rough; wind: 210°, force 4

00	15.66	3 3.6 6	24.814	314.36	.0000	5.76
10	15.68	3 3.6 8	24.825	313.62	.0315	5.75
20	15.70	3 3.6 6	24.805	315.80	.0631	5.76
30	15.63	3 3.6 8	24.836	313.14	.0947	5.71.

CREST: 29°12'N 115°39'W; February 9, 1952; 1125 GCT; wire angle: 0°; sounding: 900 fms; depth of observation: 1,180 m; weather: cloudy; sea: rough; wind: 150°, force 4

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800	15.80 15.45 15.50 15.20 14.70 12.00 11.49 10.33 09.48 09.09 08.72 07.70 06.68 05.98 05.32 04.87 04.13	3 3.4 2 3 3.4 0 3 3.4 0 3 3.4 0 3 3.4 8 3 3.7 0 3 3.9 6 3 4.2 2 3 4.4 0 3 4.3 7 3 4.4 0 3 4.4 8	24.598 24.6606 24.6616 24.6616 24.88995 25.60825 26.6688 26.6688 26.6888 26.6888 26.6888 26.6888 27.288 27.288 27.288	334.88 327.75 329.62 324.53 308.91 270.06 232.84 197.10 174.66 157.66 143.99 126.00 115.29 106.46 97.62 91.54 79.92	0000 00333 006991 103589 103589 103386 103386 11220 103386 11220	5.3 9 5.4 3 5.6 3 5.7 5.8 4 5.0 0 3.5 7 4 2.3 2 0.4 8 3 0.2 9 0.3 7 0.3 7 0.5 7

STATION 113.40 (Interpolated Values at Standard Depths)

CREST: 29°05'N 115°59.5'W; February 9, 1952; 0805 GCT; wire angle: 1°; sounding: 900 fms; depth of observation: 1,180 m; weather: cloudy; sea: rough; wind: 180°, force 4

00 1590 33.48 24.622 332.64 .0000 5.69 10 15.65 33.46 24.662 329.06 .0332 5.69 20 15.70 33.46 24.651 330.41 .0663 5.73 30 15.50 33.46 24.706 325.58 .0992 5.76 50 15.20 33.46 24.762 320.71 .1641 5.73 75 15.00 33.46 24.805 31.7.25 .2443 5.68 100 12.18 33.31 25.264 273.89 .3187 5.17 150 09.82 33.75 26.027 202.02 .4385 3.80 200 09.43 34.12 26.380 169.44 .5320 2.35 250 09.18 34.46 26.686 141.37 .6103 1.40 300 08.80 34.54 26.810 130.47 .6788 0.90 400 07.70 34.34 26.820 130.43 8103 0.58 700 05.82 34							
500 06.74 34.36 27.091 105.82 1.0473 0.28 700 05.20 34.38 27.182 97.56 1.1500 0.30 800 04.72 34.42 27.269 89.68 1.2446 0.40 800 06.5	10 20 30 50 75 100 200 250 250 30	15.65 15.70 15.50 15.20 15.00 12.18 09.82 09.43 09.18 08.80 07.70	3 3.4 6 3 3.4 6 3 3.4 6 3 3.4 6 3 3.3 1 3 3.7 5 3 4.1 2 3 4.4 6 3 4.5 4 3 4.3 4	24.662 24.651 24.706 24.762 24.805 25.264 26.386 26.686 26.810 26.820	329.06 330.41 325.52 320.71 317.25 273.89 202.02 169.44 141.37 130.47	.0332 .0663 .0992 .1641 .2443 .3187 .4385 .5320 .6103 .6788 .8103	5.6 9 5.7 3 5.7 6 5.7 3 5.6 8 5.1 7 3.8 3 5.3 4 0.9 0 0.5 8
	200 250 300 400 500 600 700 800	0 9.4 3 0 9.1 8 0 8.8 0 0 7.7 0 0 6.7 4 0 5.8 2 0 5.2 0 0 4.7 2	3 4.1 2 3 4.4 6 3 4.5 4 3 4.3 6 3 4.3 6 3 4.3 8 3 4.4 2	26.380 26.686 26.810 26.820 26.971 27.091 27.182 27.269	169.44 141.37 130.47 130.43 116.85 105.82 97.56 89.68	.5320 .6103 .6788 .8103 .9350 10473 11500 12446	2.3 5 1.4 0 0.9 0 0.5 8 0.3 7 0.2 8 0.3 0 0.4 0

CREST: 28°43'N 116°38'W; February 9, 1952; 0225, 0255 GCT; wire angle: 6°, 6°; sounding: 1,950 fms; depth of observation: 50, 1,173 m; weather: cloudy; sea: rough; wind: 170°, force 3

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800 1000	16.20 15.99 16.00 15.90 15.80 15.70 13.54 10.85 10.23 09.57 08.90 07.80 06.89 05.99 05.30 04.84 04.12	3 3 5 5 3 3 4 9 3 3 5 2 3 3 5 3 3 3 5 3 4 3 4 4 4 3 4 6 7 3 5 7 3 6 7 3 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4	24.607 24.609 24.630 24.663 24.683 24.705 25.904 26.261 26.451 26.451 26.451 26.606 27.076 27.085 27.186 27.271 27.493	334.01 334.14 332.45 329.87 328.30 326.88 297.33 213.99 181.02 163.83 149.74 131.90 107.12 106.59 97.35 89.69 69.46	0000 0335 0670 1002 1663 2487 3272 4559 55422 7212 8631 .9836 1.0914 1.1943 1.2888 1.4497	5.40 5.55 5.69 5.65 5.66 5.70 5.65 5.66 5.70 5.65 5.70 5.65 6.00 2.00 1.10 0.00 0.00 0.00 0.00 0.00 0

STATION 113.60 (Interpolated Values at Standard Depths)

CREST: 28°23'N 117°16.5'W; February 8, 1952; 2106 GCT; wire angle: 12°; sounding: 2,150 fms; depth of observation: 1,159 m; weather: cloudy; sea: rough; wind: 200°, force 3

00 10 20 30 50 75 100 150 200	1650 1620 1610 1600 1580 1300 1142 1026	3364 3362 3362 3362 3351 3346 3354 3354	2 4 6 0 8 2 4 6 4 6 2 4 6 8 4 2 4 7 0 7 2 4 6 6 7 2 4 7 6 2 2 5 1 7 4 2 5 5 8 4 2 6 3 0 3	33399 33065 32731 32545 32976 32141 28254 24450 17709	0000 0334 0664 0992 1650 2469 3229 4556 5618	568 570 568 563 561 538 410
300 400 500 600 700	0901 0779 0679 0602 0546	3434 3436 3436 3438	26487 26620 26823 26964 27081	16038 14851 13027 11754 10699	6 4 6 8 7 2 4 6 8 6 5 1 9 9 0 1 1 1 0 3 4	270 190 090 052 036
800	0493	3440 3445 3462	27167 27269 27495	9942 9008 6923	12076 13033 14644	030 030 056

STATION 113.70 (Interpolated Values at S andard Depth)

CREST: 28°06'N 117°51'W; February 8, 1952; 1622 GCT; wire angle: 0°; sounding: 2,000 fms; depth of observation: 1,179 m; weather: overcast; sea: rough; wind: 200°, force 3

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	ΔD´ (dyn.m.)	0 ₂ (ml/L)
00 10 20 30 50 75 100 200 200 300 400 500 600 700 800	16.30 1607 1600 1600 1600 1590 1148 0957 0865 0798 0715 0662 05.26 04.85 04.11	3 3.5 5 3 3.5 3 3 3.5 4 3 3.5 6 3 3.5 6 3 3.6 4 3 3.6 4 3 3.8 1 3 3.9 8 3 4.1 2 3 4.3 0 3 4.3 6 3 4.3 6 3 4.3 6 3 4.4 4 3 4.4 6	2 4 5 8 5 2 4 6 2 2 2 4 6 4 5 2 4 6 6 1 2 4 6 6 7 2 4 7 2 2 2 4 7 2 2 2 4 7 2 2 2 6 1 1 5 2 6 6 9 8 7 2 6 6 9 8 7 2 7 1 8 3 2 7 2 7 3 6 7	3 3 6.1 8 3 3 2.9 4 3 3 1.0 0 3 2 9.8 3 3 2 8.9 5 3 2 5.3 0 3 2 3.8 8 2 5 4.4 0 1 9 4.5 7 1 6 8.6 0 1 4 9.1 1 1 2 5.5 0 1 1 5.2 0 1 0 5.3 0 9 7.5 8 8 9.8 1 8 1.1 5	0000 0336 0669 1001 16685 2485 3308 4758 5803 76987 10313 123384 1.3284 1.5013	5.60 5.60 5.60 5.60 5.60 5.60 5.60 5.60

STATION 117.26 (Interpolated Values at Standard Depths)

CREST: 28°56'N 114°41'W; February 9, 1952; 2040 GCT; wire angle: 2°; sounding: 40 fms; depth of observation: 50 m; weather: intermittent light drizzle; sea: moderate; wind: 280°, force 3

	15.87	33.73	24.820	313,73 315,07	0000	
30	15.85	3 3.7 1 3 3.7 5	24.851	311.37	.0630	5.76
	1 4.7 7 1 4.7 8	33.82	25.132 25.007	284.92	.0929	

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CREST: 28°48'N 114°56.5W; February 9, 1952; 2232 GCT; wire angle: 0°; sounding: 111 fms; depth of observation: 50 m; weather: cloudy; sea: slight; wind: calm,

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00	15.31	33.44	24.722	323.06	.0000	5.86
1.0	15.44	3 3.5 3	24.763	319.50	.0323	5.8 5
20	15.62	33.71	24.861	310.44	.0639	5.8 3
30	15.47	3 3.6 4	24.841	312.66	.0952	5.80
50	1381	33.62	25.180	280.80	1548	3.8 9

STATION 117.35 (Interpolated Values at Standard Depths)

CREST: 28°38'N 115°16'W; February 10, 1952; 0225 GCT; wire angle: 0° sounding: 52 fms; depth of observation: 148 m; weather: partly cloudy; sea: slight; wind: 260°, force 3

00 15.77	3 3.5 1 3 3.7 3	24674	327.66 315.97	0000	5.77
20 15.70	3 3.8 4	24.943	302.65	0634	5.4 6
30 15.60 50 14.37	3 3.8 4 3 3.8 0	24965	300.81	0937	4.9 5
75 13.00	3 3.7 6 3 3.8 9	25.452 25.766	255.50	2191	3.5 8
100 11.90 150 (10.91)	(34.17)	(26165)	(189.26)	(3843	

CREST: 28°28'N 115°35.5'W; February 10, 1952; 0600 GCT; wire angle: 4°; sounding: 570 fms; depth of observation: 894 m; weather: clear; sea: moderate; wind: 250°, force 2

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	⁰ 2 (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800 1000	15.50 15.39 15.30 15.20 14.90 14.00 13.50 11.00 10.60 09.88 09.29 08.48 06.79 05.90 05.40 04.85 (04.27)	3346 3346 3346 3346 3346 3346 3440 3445 3445 3440 3442 (3440)	24.706 24.689 24.742 24.762 24.781 25.036 25.379 26.5.26 26.5.289 26.5.289 26.5.289 26.783 26.783 27.174 27.30 (27.30)	3 2 4.66 3 2 6.50 3 2 1.96 3 2 0.15 3 1 8.87 2 9 6.93 2 6 7.24 1 9 7.43 1 7 1.06 1 5 7.11 1 4 8.53 1 3 4.02 1 2 0.50 1 0 6.88 9 8.63 9 1.30 (8 7.55)	0000 003253 00975 16377 231071 31071 51095 60795 8956587 10687 12646 1445	5.6 9 5.6 9 5.7 0 5.7 8 5.8 3 5.6 3 4.1 0 2.3 0 1.1 6 0.7 2 0.4 3 0.3 7 0.3 8 0.3 8

STATION 117.50 (Interpolated Values at Standard Depths)

CREST: 28°08'N 116°15'W; February 10, 1952; 1136, 1348 GCT; wire angle: 2°, 8°; sounding: 2,400 fms; depth of observation: 197, 1,164 m; weather: partly cloudy; sea: rough; wind: 260°, force 1

	00 10 20 30 50 75 100 150	15·30 15·40 15·10 14·90 14·80 12·90 11·40 10·33	3 3·5 1 3 3·4 9 3 3·5 1 3 3·4 9 3 3·4 9 3 3·4 8 3 3·8 9	24.778 24.741 24.822 24.865 24.872 25.186 25.541 26.049	317.73 321.58 314.13 310.27 310.24 280.77 247.45 200.05	.0000 .0321 .0640 .0953 .1577 .2320 .2985 .4111	5.68 5.72 5.75 5.66 5.00 4.45 2.77
	200 250 300 400 500 700 800	0 9.4 0 0 9.0 0 0 8.5 8 0 7.2 7 0 6.5 0 0 5.8 0 0 5.2 0 0 4.7 7	3 4.0 8 3 4.2 1 3 4.2 8 3 4.3 3 3 4.3 1 3 4.3 6 3 4.4 3	26.354 26.520 26.641 26.843 26.980 27.054 27.166 27.271	171.92 157.00. 146.27 127.94 115.78 109.26 99.05 89,56	.5 0 4 8 .5 8 7 6 .6 6 4 0 .8 0 2 2 .9 2 5 1 1.0 3 8 6 1.1 4 3 8 1.2 3 9 1	2.29 1.74 1.23 0.60 0.35 0.30 0.32 0.38
1	000	04.08	34.48	27.386	79.38	1.4099	0.60

CREST: 27°46.5'N 116°56.5'W; February 10, 1952; 1906 GCT; wire angle: 6°; sounding: 1,950 fms; depth of observation: 1,164 m; weather: partly cloudy; sea: rough; wind: 180°, force 1

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (m1/L)
0 0 1 0 2 0 3 0 5 0 7 5 1 0 0 2 5 0 2 5 0 3 0 0 5 0 6 0 0 7 0 7 0 7 0 8 0 7	16.30 15.98 16.00 15.90 15.70 15.60 12.30 10.90 09.93 09.33 08.70 07.27 06.73 05.90 05.32 04.80 04.07	3 3.5 1 3 3.4 8 3 3.5 0 3 3.5 1 3 3.5 5 1 3 3.8 6 3 3.8 6 3 4.2 6 3 4.2 6 3 4.2 6 3 4.3 6 3 4.3 6 3 4.3 8 3 4.4 8	2 4 5 5 4 2 4 6 0 4 2 4 6 1 5 2 4 6 8 2 2 4 6 8 2 2 4 6 8 1 2 2 4 6 8 1 2 2 5 5 2 2 6 6 6 8 1 5 2 6 6 6 8 1 5 2 7 7 2 6 6 6 8 1 5 2 7 7 2 7 7 2 8 7 2 7 7 3 8 7	339.10 334.66 333.92 331.32 328.35 328.35 329.76 211.91 177.52 158.51 147.38 130.15 118.19 109.09 92.14 79.19	0000 0338 0674 1008 1671 2494 3256 4475 6321 7092 8491 9743 1087 10884 11884 14616	5.65 5.65 5.65 5.65 5.65 5.65 5.65 5.65

STATION 117.70 (Interpolated Values at Standard Depths)

CREST: 27°24'N 117°32'W; February 11, 1952; 0014 GCT; wire angle: 0°; sounding: 2,280 fms; depth of observation: 1,167 m; weather: partly cloudy; sea: rough; wind: 240°, force 2

00 10 20 30 50 75 10 20 20 20 30 40 40 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	17.90 16.78 16.90 17.00 16.90 10.27 09.31 08.93 07.60 06.60 05.90	33.80 33.86 34.86 36.86 36 36 36 36 36 36 36 36 36 36 36 36 36	24.6689 24.6689 24.6689 24.6689 24.6689 24.729 28.6689	35252 32883 32744 32999 328243 276268 17477 15060 14283 13010 11058	.0000 .0342 .0671 .1063 .2481 .3244 .4447 .5405 .6963 .89604 1.0768	5.5.5.3.3.7.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.9.7.7.0.3.3.0.3.3.0.3.9.7.7.0.3.3.0.3.0.3.9.7.7.0.3.3.0.3.0.3.9.7.7.0.3.3.0.3.0.3.0.3.9.7.7.0.3.3.0.3.0.3.0.3.0.3.0.3.0.3.0.3.0
700	05.40	34.35	27134	10233	1.1 8 4 3	0.30
800	05.00	34.38	27,205	96.14	1.2845	0.35
000	0 4.1 0	34.46	27368	81.03	1.4636	0.58

1

CREST: 28°23'N 114°14'W; February 13, 1952; 0443 GCT; wire angle: 5°; sounding: 30 fms; depth of observation: 30 m; weather: clear; sea: very rough; wind: 320°, force 6

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
0 0	15,87	3 3.7 1	2 4.8 0 5	315.20	.0 0 0 0	5.6 4
1 0	15,90	3 3.6 4	2 4.7 4 5	321.25	.0 3 1 9	5.7 2
2 0	15,86	3 3.7 7	2 4.8 5 3	311.19	.0 6 3 6	5.6 5
3 0	15,90	3 3.8 2	2 4.8 8 3	308.70	.0 9 4 7	5.2 4

STATION 120.30 (Interpolated Values at Standard Depths)

CREST: 28°13.5'N 114°34'W; February 13, 1952; 0127 GCT; wire angle: 15°; sounding: 54 fms; depth of observation: 72 m; weather: partly cloudy; sea: very rough; wind: 320°, force 5

00	15.59	33.62	24799	315.80	.0000	5.74
	15.62	33.58	24.761	319.65	.0319	5,75
20	15.60	3 3.5 5	24.743	321,71	.0641	5.76
30	15.58	33.52	24.801	316.46	.0961	5.77
50	1 4.6 0	33.56	24,968	301.01	1582	
75	1 2.4 0	(33.44)	(25,322)	(267.77)	(2297)	(4.69)

STATION 120.35 (Interpolated Values at Standard Depths)

CREST: 28°02.5'N 114°55'W; February 12, 1952; 2204 GCT; wire angle: 10°; sounding: 46 fms; depth of observation: 49 m; weather: partly cloudy; sea: very rough; wind: 340°, force 6

00	15.30	33.49	247.63	31920	0000	5.69
10	15.31	3 3.4 4	247,22	323.35	0323	5.72
20	15.30	3 3.5 1	247.78	318.30	0645	5.71
30	15.31	3 3.4 6	247.38	322.45	0967	
50	1580	(33.72)	(248,28)	(31443)	(1607)	5.45

CREST: 27°43'N 115°33'W; February 12, 1952; 1619 GCT; wire angle: 18°; sounding: 1,200 fms; depth of observation: 1,232 m; weather: cloudy; sea: high; wind: 360°, force 7

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD 0 ₂ (dyn.m.) (ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800 1000	1650 16.34 16.30 16.30 16.00 12.50 11.30 10.09 09.61 09.48 09.28 08.23 06.88 06.01 05.43 04.86 04.05	3 7 8 3 3 8 6 3 3 8 6 3 3 3 8 8 6 3 3 3 8 8 0 3 3 3 8 8 0 3 3 3 4 1 6 3 4 4 4 8 3 4 4 4 8 3 4 4 4 8 3 4 4 4 8 3 4 4 5 3 4 5	247822 247822 24822 24822 24822 24822 25582 265670 26689984 277227 26689984 27727 27727	3 2 3.7 8 3 1 7.6 5 3 1 4.1 6 3 1 4.4 6 3 0 8.5 2 2 4 1.7 1 2 2.1 4 1 9 2.3 8 1 6 9.3 7 1 5 2.8 0 1 4 3.9 5 1 3 0.9 4 1 1 4.3 7 1 0 5.3 7 1 0 5.3 7 1 0 5.5 0 9 5.1 1 7 4.5 2	0000 570 0322 573 0639 575 0955 570 158174482 2273 380 2857 325 3900 248 4811 170 5622 100 6370 060 7755 041 8992-033 10101 028 11140 031 12128 040 13843 0.57

120.50 (Interpolated Values at Standard Depths) STATION

CREST: 27°31'N 115°52.5'W; February 12, 1952; 1114 GCT; wire angle: 28°; sounding: 2,175 fms; depth of observation: 1,099 m; weather: overcast; sea: very rough; wind: 360°, force 5

10 1616 3362 24670 20 1620 3370 24722 30 1620 3370 24722 50 1610 3366 24715 75 1600 3362 24707 100 1190 3341 25394 150 1079 3404 26.085 200 1026 3433 26404 250 0988 3442 26.539 300 0940 3446 26.650 400 0802 3443 26.946 500 0698 3440 27.093 700 0530 3440 27.270 800 0478 3443 27.270 000 0405 3451 27.413	3 2 3 3 3 3 3 3 3 3 3 3 3 3 2 3 5 6 4 4 9 9 7 7 7 6 2 4 8 1 7 1 2 5 7 8 9 7 6 7 3 8 7 6 7 8 7 6 7 8 7 6 7 8 7 8 7 6 7 8 7 8	0330 .562 0657 .560 0982 .5558 1634 .5557 .3194 .468 .4347 .263 .5264 .121 .6078 .054 .8221 .036 .9472 .029 1.0609 .024 1.1635 .024 1.2580 .031 1.4263 .052
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1

CREST: 27°13'N 116°32'W; February 12, 1952; 0521 GCT; wire angle: 20°; sounding: 2,150 fms; depth of observation: 1,206 m; weather: cloudy; sea: very rough; wind: 020°, force 5

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	⁰ 2 (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800 1000	17.30 17.20 17.20 17.10 17.00 12.90 11.20 10.35 10.35 09.75 08.89 07.98 06.94 06.10 05.45 04.94 04.15	3 3.9 1 3 3.8 7 3 3.8 6 3 3.9 6 3 4.1 0 3 3.9 0 3 3.7 7 3 4.3 6 3 4.4 4 3 4.4 0 3 4.4 5 3 4.4 4 3 4.4 5 3 4.4 7 3 4.5 4	24.627 24.620 24.612 24.712 24.843 25.5802 25.802 26.365 26.489 26.576 26.6865 27.079 27.176 27.283 27.426	33219 33315 33420 32496 31313 24333 22261 17016 15946 15202 14221 12644 11373 10732 9855 8873 7574	000 0334 0669 10641 2340 23925 4745 5270 7624 8959 10935 1135 135	5.50 5.51 5.45 5.17 4.19 4.00 3.38 1.72 0.88 0.72 0.67 0.28 0.22 0.22 0.30 0.48

STATION 120.70 (Interpolated Values at Standard Depths)

CREST: 26°52'N 117°10'W; February 11, 1952; 2318 GCT; wire angle: 17°; sounding: 2,150 fms; depth of observation: 1,127 m; weather: cloudy; sea: very rough; wind: 020°, force 4

00 10 20 30 50 75 100 250 250 300 400 500 600	17.80 17.50 17.20 17.10 17.00 16.00 12.20 10.80 10.08 09.48 08.90 07.85 06.78 06.07	3 4.0 0 3 3.9 6 3 3.9 6 3 3.9 5 3 3.9 4 3 3.6 0 3 4.0 4 3 4.3 8 3 4.4 2 3 4.4 2 3 4.3 8 3 4.4 1	24.575 24.617 24.689 24.712 24.728 24.728 24.952 25.484 26.600 26.443 26.600 26.830 26.931 27.099	33710 33343 32691 32496 32405 30344 25294 19694 16377 14911 14089 12968 11593 10543	000 0337 0668 0995 1647 2436 3136 4268 5176 5965 8059 9298 10415	5.45 5.43 5.43 5.46 5.35 4.10 2.28 1.30 0.92 0.70 0.42 0.33 0.30
600	06.07	34.41	27.099	105.43		
700	05.43	34.42	27.186	97,55	1.1 4 4 0	0.31
800	0 4.8 6	3 4.4 4	27.269	89.94	1.2387	0.33
1000	0 4.0 8	34.48	27386	79.32	1,4098	0,52

CREST: 26°35'N 117°50'W; February 11, 1952; 1726 GCT; wire angle: 13°; sounding: 2, 250 fms; depth of observation: 1,147 m; weather: partly cloudy; sea: rough; wind: 020°, force 3

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00 10 20 30 50 75 100 150 250 300 400 500 600 700 800	17.70 17.45 17.40 17.30 17.00 16.70 12.20 10.87 10.05 09.70 09.33 07.88 06.70 06.02 05.35 04.90 04.16	3 4·0 2 3 3·9 8 3 3·9 9 3 3·9 0 3 4·4 3 3 4·5 3 3 4·6 3 3 5 3 4·6 3 3 5 3 5 3 5 3 5 3 5 3 5 3 6 3 6 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7	24.615 24.644 24.664 24.6690 24.730 25.562 26.118 26.577 26.554 26.8376 27.264 27.264 27.264 27.264	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	000 0333 06694 109653 24790 42962 31296 5075376 81376 81376 10152 11246 11416	5.4 4 5.4 5 5.4 5 5.4 6 5.4 6 5.4 6 5.4 8 1.9 7 0.5 0 0.4 1 0.7 5 0.4 1 0.7 5 0.4 1 0.7 5 0.4 1 0.7 5 0.4 1 0.7 5 0.7 5 0.

STATION 120.90 (Interpolated Values at Standard Depths)

CREST: 26°14'N 118°31'W; February 11, 1952; 1125 GCT; wire angle: 8°; sounding: 2,200 fms; depth of observation: 1,163 m; weather; over cast; sea: rough; wind: 360°, force 3

00 16.90 33.78 24.622 332.65 000 5.52 10 16.94 33.82 24.643 330.93 0333 5.50 20 16.80 33.80 24.660 329.57 0665 5.49 30 16.70 33.80 24.684 327.66 0995 5.48 50 16.70 33.78 24.668 329.72 .1656 5.45 75 15.60 33.71 24.865 311.61 .2462 4.60 100 12.40 33.76 25.570 244.86 .3162 3.70 150 10.60 33.88 25.994 205.31 .4295 2.90 200 09.93 34.14 26.312 176.05 .5255 2.10 250 09.25 34.23 26.495 159.45 6100 1.50 300 08.60 34.28 26.638 146.57 6871 1.04 400 07.35 34.31 26.847 127.60 8253 0.54 500 06.22 34.29 <th>10 16.94 33.82 24.643 330.93 0333 5.50 20 16.80 33.80 24.660 329.57 0665 5.49 30 16.70 33.80 24.684 327.66 0995 5.48 50 16.70 33.78 24.668 329.72 1656 5.45 75 15.60 33.71 24.865 311.61 2462 4.60 100 12.40 33.76 25.570 244.86 31.62 3.70 150 10.60 33.88 25.994 205.31 4295 2.90 200 09.93 34.14 26.312 176.05 5255 2.10 250 09.25 34.23 26.495 159.45 6100 1.50 300 08.60 34.28 26.638 146.57 6871 1.04 400 07.35 34.31 26.847 127.60 8253 0.54 500 06.22 34.29 26.985 114.97 9476 0.46 600 05.63 34.38</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	10 16.94 33.82 24.643 330.93 0333 5.50 20 16.80 33.80 24.660 329.57 0665 5.49 30 16.70 33.80 24.684 327.66 0995 5.48 50 16.70 33.78 24.668 329.72 1656 5.45 75 15.60 33.71 24.865 311.61 2462 4.60 100 12.40 33.76 25.570 244.86 31.62 3.70 150 10.60 33.88 25.994 205.31 4295 2.90 200 09.93 34.14 26.312 176.05 5255 2.10 250 09.25 34.23 26.495 159.45 6100 1.50 300 08.60 34.28 26.638 146.57 6871 1.04 400 07.35 34.31 26.847 127.60 8253 0.54 500 06.22 34.29 26.985 114.97 9476 0.46 600 05.63 34.38								
250 09.25 34.23 26.495 159.45 6100 1.50 300 08.60 34.28 26.638 146.57 6871 1.04 400 07.35 34.31 26.847 127.60 8253 0.54 500 06.22 34.29 26.985 114.97 9476 0.46 600 05.63 34.38 27.130 101.87 10570 0.36 700 05.14 34.44 27.236 92.36 1.1550 0.39	250 09.25 34.23 26.495 159.45 .6100 1.50 300 08.60 34.28 26.638 146.57 .6871 1.04 400 07.35 34.31 26.847 127.60 8253 0.54 500 06.22 34.29 26.985 114.97 9476 0.46 600 05.63 34.38 27.130 101.87 1.0570 0.36 700 05.14 34.44 27.236 92.36 1.1550 0.39 800 04.71 34.46 27.302 86.59 1.2454 0.45	10 20 30 50 75 100 150	16.94 16.80 16.70 16.70 15.60 12.40 10.60	3 3.8 2 3 3.8 0 3 3.8 0 3 3.7 8 3 3.7 1 3 3.7 6 3 3.8 8	2 4.6 4 3 2 4.6 6 0 2 4.6 8 4 2 4.6 6 8 2 4.8 6 5 2 5.5 7 0 2 5.9 9 4	330.93 329.57 327.66 329.72 311.61 244.86 205.31	0333 0665 0995 1656 2462 3162 4395	5·5 0 5·4 9 5·4 8 5·4 5 4·6 0 3·7 0 2·9 0	
	000 03.92 34.50 27.418 75.90 1.4097 0.63	150 200 250 300 400 500 600 700 800	1 0.6 0 0 9.9 3 0 9.2 5 0 8.6 0 0 7.3 5 0 6.2 2 0 5.6 3 0 5.1 4 0 4.7 1	3 3.8 8 3 4.1 4 3 4.2 3 3 4.2 8 3 4.3 1 3 4.2 9 3 4.3 8 3 4.4 4 3 4.4 6	25.994 26.312 26.495 26.638 26.847 26.985 27.130 27.236 27.302	20 5·31 176·05 159·45 146·57 127·60 114·97 101.87 92.36 86.59	4295 5255 6100 6871 8253 9476 10570 11550 12454	2.9 0 2.1 0 1.5 0 1.0 4 0.5 4 0.4 6 0.3 6 0.3 9 0.4 5	

STATION 123.37 (Interpolated Values at Standard Depths)

CREST: 27°23'N 114°41'W; February 14, 1952; 1608 GCT; wire angle: 3°; sounding: 40 fms; depth of observation: 50 m; weather: clear; sea: rough; wind: 020°, force 5

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	(ml/L)
0 0	17.33	3 4.0 5	24726	322.67	000	5 4 0
1 0	17.34	3 4.0 5	24724	323.22	0324	5 4 1
2 0	17.31	3 4.0 9	24762	319.94	0647	5 3 8
3 0	17.32	3 4.0 7	24744	321.94	0969	5 4 5
5 0	14.44	3 3.6 9	25102	288.25	1582	4.9 6

STATION 123.40 (Interpolated Values at Standard Depths)

CREST: 27°19'N 114°51'W; February 14, 1952; 1257 GCT; wire angle: 18°; sounding: 300 fms; depth of observation 472 m; weather: clear; sea: high; wind: 240°, force 5

00	1750	34.04	24.678	327.28	. 000	5.59
10	17.20	33.98	24.704	3 2 5 1 4	0328	5,53
20	17.20	34.05	24,757	320.35	0652	5.61
30	17.20	34.03	24.742	322.12	0975	5.59
50	1 4.2 0	33.72	25.176	281,21	1581	4.86
75	11.80	3 3.6 3	25.583	242.92	2240	3.85
100	11.60	33,99	25.899	213.44	2814	2.50
150	11.07	34.33	26,261	180.25	.3805	1.25
200	10.55	34.50	26.486	1.59.91	.4662	0,60
250	10.00	34.52	26.597	150.25	5 4 4 3	0.49
300	09.18	34.48	26.702	140.88	6176	0.45
400	07.82	34.40	26.850	127.76	7530	0.41
500	(06.52)	(34.43)	(27.056)	(108.65)	(8722)	

CREST: 27°01'N 115°32'W; February 14, 1952; 0607 GCT; wire angle: 30°; sounding: 1,790 fms; depth of observation: 1,000 m; weather: clear; sea: high; wind: 350°, force 6

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	O ₂
00 10 20 30 50 75 100 250 300 400 500 600 700 800 1000	17.10 17.11 17.10 17.10 17.10 16.10 12.90 110.55 10.55	33.86 33.88 33.88 33.88 33.88 33.88 33.88 33.88 33.88 33.88 33.88 34.44	24.636 24.651 24.651 24.653 24.653 24.655 26.455 26.455 26.655 26.655 26.6990 27.196 27.262 27.42	33131 33330 330,47 330,79 332,13 311,43 260,10 218,70 164,66 154,03 142,56 127,61 114,83 105,37 97,10 90,97 75,50	. 000 .0334 .0667 .0999 .1665 .2474 .3198 .5365 .6912 .8277 1.0630 1.2580 1.426	5.49 5.46 5.46 5.46 5.46 5.42 4.77 2.60 0.67 0.32 0.24 0.26 0.41 0.50

STATION 123.60 (Interpolated Values at Standard Depths)

CREST: 26°44'N 116°05'W; February 14, 1952; 0010 GCT; wire angle: 25°; sounding: 1,900 fms; depth of observation: 1,075 m; weather: partly cloudy; sea: high; wind: 330°, force 6

00 20 30 50 75 10 10 20 20 20 20 20 20 20 20 20 20 20 20 20	17.30 17.34 17.30 17.10 16.60 13.70 10.74 10.10 09.40 08.84 07.82 06.93 06.14	3 4.0 0 3 3.9 8 3 3.9 8 3 3.9 6 3 3.9 5 3 3.7 9 3 4.3 6 3 4.4 0 3 4.4 0 3 4.3 6 3 4.3 5 3 4.3 8	24.695 24.632 24.680 24.680 24.712 24.822 25.334 25.8334 25.8334 26.693 26.694 26.694 26.818 26.937 27.066	325.63 331.96 327.72 328.04 325.59 315.88 267.49 221.68 164.12 149.30 141.42 130.71 120.23 108.59	000 0330 0661 0990 1647 2453 3187 4418 5178 6910 88282 9547	5.46 5.45 5.49 5.44 5.31 2.21 0.87 0.30	
					.9547	0.32	
700	05.43	34.40	27.066	108.59	1,0701	0.30	
800	04.96	34.45	27,265	90.46	1.2706	0.34	
000	0 4.1 9	34.48	27374	80.66	14436	0.52	

1

STATION 127.60 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 26°00'N 115°48'W; February 23, 1952; 0304 GCT; wire angle: 18°; sounding: 2,050fms; depth of observation: 1,110 m; weather: partly cloudy; sea: rough; wind: 340°, force 5

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	1058	ΔD (dyn.m.)	⁰ 2 (ml/L)
0 10 20 30 50 75 100 250 250 300 400 500 600 700 800	1730 1730 1730 1730 1730 1730 1730 1736 1054 10.12 9.40 8.20 7.27 6.30 5.59 4.18	3 4:0 2 3 4:0 0 3 4:0 1 3 4:0 2 3 4:0 4 3 4:0 4 3 3:9 8 3 4:3 6 3 4:3 6 3 4:3 6 3 4:3 8 3 4:4 4 3 4:4 6 3 4:4 8 3 4:4 8 3 4:5 2	24.711 24.695 24.703 24.716 24.726 24.726 24.726 24.649 25.251 26.451 26.451 26.451 26.451 26.773 27.198 27.287 27.407	3 2 4.1 8 3 2 5.9 5 3 2 5.5 4 3 2 5.1 3 3 2 5.0 8 3 3 3.1 4 2 2 2.8 6 1 8 1.8 1 1 6 4.0 4 1 5 1.0 4 1 5 1.0 4 1 1 9.1 7 1 0 6.3 2 9 6.6 7 8 8.5 0 7 7.5 7	.000 .000 .000 .000 .000 .000 .000 .00	

STATION 130.30 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 26°29'N 113°29'W; February 21, 1952; 0651 GCT; wire angle: 0°; sounding: 45 fms; depth of observation: 75 m; weather: clear; sea: moderate; wind: 280°, force 1

10	17.26 17.26 17.27 17.12 15.60 13.16	3 4.2 5 3 4.2 9 3 4.2 5 3 4.0 5 3 3.9 6	24.898 24.959 24.924 24.929 25.126 25.575	3 0 6.3 3 3 0 0.8 3 3 0 4.4 7 3 0 4.3 0 28 6,0 7 2 4 3.8 9	0000 0305 0609 0915 .1508 .2174
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STATION 130.35 (Interpolated Values at Standard Depths) -43-

BLACK DOUGLAS: 26°18.5'N 113°49.5'W; February 21, 1952; 2232 GCT; wire angle: 0°; wounding: 150 fms; depth of observation: 198 m; weather: overcast; sea: moderate; wind: 300°, force 2

Depth (m)	T (°C)	S (‰)	ot (mg/cm ³)	10 ⁵ 8	△D (dyn.m.)	O ₂ (ml/L)
0	1776	3427	24791	316.53	.0000	
10	1774	3449	24964	300.39	.0310	
20	1773	3432	24836	312.85	.0618	
30	1772	3428	24808	315.84	.0934	
50	1773	3431	24829	314.53	.1568	
75	1414	3404	25.435	257.27	.287	
100	1294	3412	25.742	228.59	.2898	
150	1211	3454	26.230	183.49	.3935	
200	(1179)	(3461)	(26.345)	(173.70)	(.4834)	

STATION 130.40 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 26°09'N 114°07.5 W; February 22, 1952; 0215 GCT; wire angle: 9°; sounding: 1,100 fms; depth of observation: 1,136 m; weather: overcast; sea: rough; wind: 290°, force 3

0 10 20 30 50 75 100 250 300 400 500 700 800 100	1780 1778 1800 1770 1740 1350 1370 1204 11.52 1044 972 845 714 6553 499 413	34.21 34.20 34.21 34.23 34.02 34.06 4.34 34.53 34.53 34.53 34.53 34.49 34.49 34.49 34.57	24735 247337 246875 246875 246875 25611 25611 266575 266849 2666849 2669849 27293 27293 2745	3 2 1.81 3 2 2.41 3 2 7.1 2 3 1 9.0 2 3 2 8.0 3 2 7 3.9 2 2 4 1.8 7 1 9 3.9 5 1 6 7.3 6 1 5 8.5 2 1 4 3.7 2 1 2 8.4 0 1 1 5.8 2 1 0 1.0 0 9 3.6 7 8 7.8 8 7 3.2 8	0000 0323 0649 0973 1623 23029 4126 5841 65841 65847 79190 10284 11267 12184 1.3813

BLACK DOUGLAS: 25°49'N 114°46'W; February 22, 1952; 0845 GCT; wire angle: 17°; sounding: 1,980 fms; depth of observation: 1,103 m; weather: overcast; sea: rough; wind: 340°, force 4

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD: (dyn.m.)	O ₂ (ml/L)
0 10 20 30 50 75 100 150 250 300 400 500 600 700 800 100	17.20 17.20 17.00 17.00 17.00 12.50 11.40 10.29 9.79 9.07 8.568 6.01 5.28 4.80 4.13	3 4.1 4 3 4.1 3 3 4.1 4 3 4.1 3 3 4.1 4 3 4.1 3 3 4.3 1 3 4.3 1 3 4.4 2 3 4.4 2 3 4.4 2 3 4.4 2 3 4.4 2 3 4.4 3 3 4.4 3 3 4.4 4 3 4.4 3 3 4.4 4 3 4.4 5 3 5 4 5 4 5 5 5 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	24819 24819 24874 24867 24867 2551886 2551886 26687 26687 27288 271104 2728 2741 2741 2741	31317 31421 30929 30960 31096 257.86 250.52 1860.49 150.72 142.27 124.96 114.23 103.89 95.62 88.45 76.98	0000 0315 0628 0939 1563 2892 3943 4802 3943 4802 6340 78899 11900 11900 11900 1360	

STATION 130.60 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 25°29'N 115°24'W; February 22, 1952; 1516 GCT; wire angle: 16°; sounding: 2,050 fms; depth of observation: 1,089 m; weather: overcast; sea: rough; wind: 340°, force 4

10 1 20 1 30 1 50 1 75 1 100 1 150 1 250 1 250 1 300 400 500 600 700	6.7 0 6.7 0 6.7 0 6.7 0 6.5 0 3.5 1 4 0.0 0 9.6 2 7.2 3 5.6 2	33.93 33.86 33.84 33.89 33.70 33.99 34.33 34.43 34.45 34.45	24714 24.783 24.734 24.714 24.734 24.734 25.344 25.344 25.344 26.468 26.468 26.468 26.468 26.468 26.468 26.468 26.468 26.708 27.188	32385 31756 327598 32474 32536 324736 3266511 182778 15183 115183 115183 115183 115183 115183 115183 115183	0000 0322 0644 0969 1622 2439 3183 4390 5247 8475 9733 10865 11891 12856
700 800 1000	5.06	3 4.4 5 3 4.4 3 3 4.4 6	27.238 27.351		

STATION 133.25 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 26°04.5'N 112°48'W; February 21, 1952; 0118 GCT; wire angle: 0°; sounding: 46 fms; depth of observation: 75 m; weather: cloudy; sea: slight; wind: 280°, force 2

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	O ₂ (ml/L)
0	18.72	3 4.4 5	2 4.6 9 1	326,05	.0000	
10	18.75	3 4.5 1	2 4.7 2 9	322,75	.0326	
20	18.60	3 4.4 9	2 4.7 5 2	320,95	.0649	
30	18.39	3 4.4 9	2 4.8 0 4	316,28	.0969	
50	16.14	3 4.1 4	2 5.0 7 3	291,15	.1579	
75	14.11	3 4.1 6	2 5.5 3 4	247,89	.2257	

STATION 133.30 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 25°54.5'N 113°09'W; February 20, 1952; 2155 GCT; wire angle: 0°; sounding: 106 fms; depth of observation: 152 m; weather: cloudy; sea: moderate; wind: 320°, force 3

0	18.93	34.51	24.684	326.75	0000
10	18.92	3 4.5 1	24.686	326.85	.0328
50	18.80	34.50	24.709	325.02	0655
30	18.77	34.49	24.709	325.37	.0981
50	18.77	34.47	24.694	327.49	.1637
75	1 4.7 5	34.09	25.344	266.08	.2383
100	13.89	3 4.1 8	25.595	242.70	.3023
150	1 2.6 6	3 4.4 5	26.053	200.36	.4138

BLACK DOUGLAS: 25°34.5'N 113°45.5'W; February 20, 1952; 1625 GCT; wire angle: 5°; sounding: 1,000 fms; depth of observation: 1,149 m; weather: partly cloudy; sea: rough; wind: 360°, force 3

Depth T	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	O ₂ (ml/L)
0 19.00 10 18.97 20 19.00 30 19.00 50 19.00 75 14.60 100 13.80 150 11.58 200 10.83 250 10.23 300 9.61 400 8.06 500 7.05 600 6.17 700 5.50 800 4.93 1000 4.07	3 4·5 3 3 4·5 6 3 4·5 6 3 4·5 3 3 4·5 3 3 4·2 7 3 4·5 3 4·5 3 4·5 3 4·4 4 3 4·4 6 3 4·4 5 3 4·5 3 4·5 3 4·5 3	2 4.6 8 1 2 4.6 8 1 2 4.7 0 4 2 4.7 0 4 2 4.6 8 1 2 5.2 9 2 2 5.6 8 4 2 6.1 2 6 2 6.4 3 6 2 6.5 7 0 2 6.8 4 5 2 7.0 0 9 2 7.2 0 1 2 7.2 8 5 2 7.4 2 7	3 2 6.9 9 3 2 7.3 3 3 2 5.4 9 3 2 5.8 3 3 2 8.6 8 2 7 0.9 9 2 3 4.3 3 1 9 3.6 8 1 6 4.7 2 1 5 2.6 3 1 4 4.1 3 1 2 8.3 7 1 1 3.8 1 1 0 4.5 6 9 6.2 4 8 8.6 0 7 5.5 0	0000 0328 0656 0983 1641 2395 3031 4108 5010 5857 79153 1.1257 1.2261 1.386	

STATION 133.50 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 25°14.5'N 114°24'W; February 20, 1952; 0745 GCT; wire angle: 3°; sounding: 1,680 fms; depth of observation: 1,164 m; weather: clear; sea: rough; wind: 360°, force 4

	10 1 20(1 30(1 50(1	8.2 0 8.2 5 8.3 0) 8.3 0)	3 4.3 3 3 4.5 2 3 4.3 7 3 4.3 6 3 4.3 8 3 4.2 7	2 4 7 2 9 2 4 8 6 2 (2 4 7 3 5) (2 4 7 2 7) (2 4 7 4 2) (2 5 3 2 8)	322,42 310,13 (322,54) (323,59) (323,80) (267,68)	0 0 0 0 0 3 1 8 (0 6 3 6) (0 9 6 0) (1 6 1 0) (2 3 5 2)
		5.50)	3 3.9 3	25.421	259.22	3015
		1.62	34.33	26.159	189,98	4146
		10.77	34.49	26.439	164.42	5038
	250 1	0.06	34.52	26.586	151,86	5833
	300	9.31	3 4.5 1	26.704	1 4 0.7 5	6569
	400	7.91	3 4.4 5	26,876	125.40	.7910
!	500	6.96	3 4.4 5	27.012	113.27	.9114
	600	6.16	34.45	27.119	103.69	1.0209
	700	5.48	34.45	27.204	95,97	1.1217
	800	4.93	34.45	27.269	90,08	1,2157
1	000	4.17	34.52	27.408	77.46	1.3851

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BLACK DOUGLAS: 25°34'N 112°18.5'W; February 18, 1952; 2305 GCT; wire angle: 0°; sounding: 40 fms; depth of observation: 50 m; weather: clear; sea: rough; wind: 300°, force 6

Depth (m)	T (°C)	S (%)	(ng/cm ³)	10 ⁵ 8	AD (dyn.m.)	⁰ 2 (ml/L)
0 0	19.36	3 4 5 2	2 4.5 8 1	3 3 6.4 8	.0000	
1 0	19.35	3 4 5 4	2 4.5 9 9	3 3 5.1 4	.0337	
2 0	19.20	3 4 5 1	2 4.6 1 5	3 3 3.9 9	.0673	
3 0	19.13	3 4 5 6	2 4.6 7 1	3 2 8.9 9	.1006	
5 0	10.86	3 4 3 3	2 6.2 9 8	1 7 4.3 4	.1512	

STATION 137.30 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 25°20'N 112°45.5'W; February 19, 1952; 0315 GCT; wire angle: 5°; sounding: 100 fms; depth of observation: 148 m; weather: clear; sea: rough; wind: 300°, force 6

00	1966	34.51	24496	3 4 4 5 9	0000
10	1967	34.56	24,532	341,57	0344
20	19.70	34.53	24.501	3 4 4.8 3	0689
30	19.70	3 4.5 1	24.486	3 4 6.6 2	.1036
50	19.54	3 4.4 9	24.512	3 4 4.8 1	.1731
75	15.15	34.04	25.218	278.00	.2514
	1 3.3 0	34.29	25.800	223,30	3145
150	(12.39)	(34.60)	(26.222)	(184.29)	(4171)
					13/0

STATION 137.40 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 25°03.5'N 113°26'W; February 19, 1952; 1312 GCT; wire angle: 5°; sounding 1,200 fms; depth of observation: 10 m; weather: partly cloudy; sea: very rough; wind: 330°, force 6-7

00 19.48 34.51 10 19.46 34.56 BLACK DOUGLAS: 24°40'N 114°02'W; February 19, 1952; 2323 GCT; wire angle: 21°; sounding: 1,600 fms; depth of observation: 1,129 m; weather: clear; sea: rough; wind: 360°, force 6

Depth (m)	Ţ (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
0 0 1 0 2 0 3 0 5 0 7 5 1 0 0 2 5 0 3 0 0 4 0 0 5 0 6 0 0 7 0 0 8 0 0 1 0 0	20.00 19.50 19.00 18.80 18.80 16.10 12.40 11.44 10.46 09.98 09.49 08.31 07.16 06.33 05.54 05.01 04.18	3 4 3 6 3 4 5 8 3 4 3 5 3 4 3 5 3 3 5 3 3 6 9 3 3 4 1 3 3 4 4 5 1	24.293 24.5967 24.595 24.595 24.595 24.595 24.596 25.536 26.636 26.6798 26.6798 26.6968 26.7968 27.299 27.399	36392 33592 33592 33624 33691 30415 25002 20147 17089 15287 14365 13363 11759 10748 9110 7832	0000 0351 00351 00351 01029 1706 2512 3209 13438 4343 50945 8242 95644 1.1665 1.2655 1.4365	,516

STATION 140.30 (Interpolated Values at; Standard Depths)

BLACK DOUGLAS: 24°45.5'N 112°24'W; February 16, 1952; 1725 GCT; wire angle: 5°; sounding: 60 fms; depth of observation: 97 m; weather: partly cloudy; sea: rough; wind: 010°, force 2

00	19.92	34.47	24.398	353.96	.0.000
10	19.87	34.52	24.449	349.43	.0 3 5 3
20	1 9.8 2	34.49	24.439	350.71	.0704
30	19.60	34.45	24.466	3 4 8 . 4 9	.1055
50	16.60	34.16	24.983	299.81	.1707
	,13.55	34.18	25.666	235.32	.2380
100	(13.27)	(34.29)	(25808)	(222.48)	(.2956)

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STATION 140.35 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 24°36'N 112°43'W; February 16, 1952; 1353 GCT; wire angle: 0°; sounding: 100 fms; depth of observation: 150 m;

weather: partly cloudy; sea: rough; wind: 020°, force 2

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂
0 0	20.38	3 4.5 3	2 4,3 2 2	361,17	.0000	
1 0	20.38	3 4.5 4	2 4,3 3 0	360,80	.0362	
2 0	20.37	3 4.5 2	2 4.3 1 7	362,34	.0725	
3 0	20.34	3 4.5 1	2 4.3 1 8	362,67	.1089	
5 0	20.11	3 4.5 3	2 4.3 9 4	356,12	.1811	
7 5	15.50	3 4.0 4	2 5.1 5 1	284,47	.2616	
1 0 0	12.70	3 4.0 6	2 5.7 4 3	228,45	.3261	
1 5 0	11.98	3 4.4 9	2 6.2 1 6	184,77	.4301	

STATION 140.40 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 24°25.5'N 113°02'W; February 16, 1952; 1000 GCT; wire angle: 15°; sounding: 1,700 fms; depth of observation: 1,098 m; weather: partly cloudy; sea: rough; wind: 350°, force 3

0 0 1 0 2 0 3 0 5 0 7 5 1 0 0	19.80 19.80 19.80 19.80 18.60 14.70	34.58 34.56 34.57 34.57 34.27 33.89 34.10	24.513 24.498 24.506 24.506 24.584 25.801 25.833	3 4 2.9 9 3 4 4.7 9 3 4 4.4 1 3 4 4.7 6 3 3 7.9 3 2 7 9.6 1 2 1 9.9 1	0 0 0 0 0 3 4 5 0 6 9 1 1 0 3 7 1 7 2 3 2 4 9 9 3 1 2 7
150	11.09	34.24	26.187	187.23	4152
500	0 9.9 9	34.33	26.450	163.03	5034
250	0 9.6 3	34.41	26.573	152.28	5828
300	0 9.1 4	34.47	26.700	140.98	6567
400	0 8.1 7	34.49	26,868	126.34	7914
500	07.26	34.49	27.001	114.59	9129
600	06.27	34.49	27.136	102.23	10223
700	05.54	34.47	27,212	95,28	11220
800	05.00	34.47	27276	89.48	1.2 1 5 3
000	0 4.2 0	34,50	27390	79,50	1.3860

1

BLACK DOUGLAS: 24°05'N 113°39.5W; February 16, 1952; 0349 GCT; wire angle: 15°; sounding: 1,680 fms; depth of observation: 1,139 m; weather: partly cloudy; sea: rough; wind: 320°, force 3

Depth (m)	T (°C)	S (%)	σ _t (ng/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	(ml/L)
00 10 20 30 50 75 100 250 250 300 400 500 600 700 800 1000	1950 1950 1950 1950 1950 1930 1670 1390 1108 1112 1058 0972 0819 0629 0567 0513 0422	3 4.3 4 3 4.5 4 3 4.4 6 3 4.4 1 3 3.9 2 3 3.6 6 3 3.9 7 3 4.5 5 3 4.5 5 3 4.4 9 3 4.4 9 3 4.4 9 3 4.4 9 3 4.5 6	24.408 24.5600 24.5600 24.562 24.544 24.5793 25.979 26.5197 26.6657 27.213 27.213 27.235 27.435	352.97 338.81 344.96 348.93 341.81 320.29 280.97 206.92 167.58 157.85 144.46 127.38 113.58 102.49 95.50 88.19 75.12	0000 0347 0690 1038 1732 2564 3320 45491 6310 70746 12674 11746 12674 11435	

STATION 143.26 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 24°19'N 111°48'W; February 15, 1952; 1144 GCT; wire angle: 0°; sounding: 48 fms; depth of observation: 75 m; weather: clear; sea: noderate; wind: 010°, force 1

10 20 30 50	20.16 20.19 20.17 20.15 17.67 15.00	3 4.5 4 3 4.6 0 3 4.5 7 3 4.4 8 3 4.2 5 3 4.2 2	2 4.3 8 8 2 4.4 2 6 2 4.4 0 8 2 4.3 4 5 2 4.7 9 8 2 5.3 9 0	354.89 351.66 353.67 360.04 317.51 261.72	0000 0355 0709 1067 1748 2476
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STATION 143.30 (Interpolated Values at Standard Depths

BLACK DOUGLAS: 24°11'N 112°03'W; February 15, 1952; 1425 GCT; wire angle: 3°; sounding: 100 fms; depth of observation: 118 m; weather: partly cloudy; sea: rough; wind: 360°, force 3

Depth (m)	T (°C)	S (‰)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
00	19.92	34.42	2 4.3 6 0 2 4.3 7 8 2 4.3 4 2	3 5 7.5 8 3 5 6.2 5 3 5 9.9 7	0000	
20 30 50 75 100	1 9.9 3 1 9.9 2 1 9.9 0 1 7.5 0 1 3.5 6	3 4.4 0 3 4.3 8 3 4.4 1 3 4.2 7 3 4.1 5	2 4.3 3 0 2 4.3 5 8 2 4.8 5 4 2 5 6 4 0	361.52 359.55 312.94 238.38	.1080 .1805 .2650 .3344	

STATION 143.35 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 23°59'N 112°18.5'W; February 15, 1952; 1814 GCT; wire angle: 3°; sounding: 200 fms; depth of observation: 292 m; weather: partly cloudy; sea: rough; wind: 010°, force 3

20.86	34.56	24.217	371,24	.0000
20.88	34,52	24.181	375.02	.0375
	34.52	24.205	373.06	.0751
20.58	34,52	24.261	368.05	.1123
17.04	34.00	24.757	321.33	.1816
1 3.6 3	33.86	25.402	260,34	.2547
1 3.6 0	34.25	25.709	231.84	.3166
1 2.0 9	34.56	26.249	181.64	.4207
11.31	34.60	26.426		.5082
10.78	34.60	26.523		.5896
(10.20)	(34.64)	(26.656)	(145.86)	(.6661)
	2 0.7 9 2 0.5 8 1 7.0 4 1 3.6 3 1 3.6 0 1 2.0 9 1 1.3 1	20.88 34.52 20.79 34.52 20.58 34.52 17.04 34.00 13.63 33.86 13.60 34.25 12.09 34.56 11.31 34.60 10.78 34.60	20.88 34.52 24.181 20.79 34.52 24.205 20.58 34.52 24.261 17.04 34.00 24.757 13.63 33.86 25.402 13.60 34.25 25.709 12.09 34.56 26.249 11.31 34.60 26.426 10.78 34.60 26.523	20.88 34.52 24.181 375.02 20.79 34.52 24.205 373.06 20.58 34.52 24.261 368.05 17.04 34.00 24.757 321.32 13.63 33.86 25.402 260.34 13.60 34.25 25.709 231.84 12.09 34.56 26.249 181.64 11.31 34.60 26.426 165.80 10.78 34.60 26.523 157.64

BLACK DOUGLAS: 23°56'N 111°03.5'W; February 15, 1952; 0437 GCT; wire angle: 0°; sounding: 70 fms; depth of observation: 100 m;

weather: clear; sea: moderate; wind: 270°, force 1

00
76 52 29
37 97

STATION 147.25 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 23°47'N 111°23'W; February 14, 1952; 2345 GCT; wire angle: 0°; sounding: 48 fms; depth of observation 75 m; weather: clear; sea: moderate; wind: 270°, force 2

00	21.18	34.54	2 4.1 1 5	380.97	.0000
10	20.85	34.54	24.204	372.79	.0378
20	20.66	3 4.5 4	24.255	368.28	.0750
30	20.52	34.52	24.277	366.58	.1119
50	17.45	34.32	24.904	307.36	.1796
75	16.03	34.42	25.313	269.09	.2521

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BLACK DOUGLAS: 23°34'N 111°44'W; February 14, 1952; 1757 GCT; wire angle: 0°; sounding: 75 fms; depth of observation: 75 m; weather: clear; sea: moderate; wind: 330°, force 1

Depth (m)	T (°C)	S (%)	(mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	0 ₂ (ml/L)
0 0 1 0 2 0 3 0 5 0 7 5	21.92 21.90 21.86 21.85 21.75	3 4.6 0 3 4.6 0 3 4.5 8 3 4.5 7 3 4.6 1 3 4.4 3	2 3.9 5 6 2 3.9 6 2 2 3.9 5 8 2 3.9 5 3 2 4.0 1 1	3 9 6.0 6 3 9 5.9 1 3 9 6.6 6 3 9 7.4 9 3 9 2.6 8	0000 0398 0796 1195 1989	

STATION 150.19 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 23°25'N 110°40.5'W; Februsary 13, 1952; 1951 GCT; wire angle: 3°; sounding: 100 fms; depth of observation: 146 m; weather: cloudy; sea: moderate; wind: 030°, force 3

00	21.72	3460	24.012	390.77	.0000
10	21,51	3460	24.070	385.61	.0390
S 0	21.30	34,59	24.120	381.21	.0775
30	21.07	34.55	24.152	378.46	.1156
50	17.00	34.33	25.019	29639	.1834
75	1 4.6 9	34.50	25.672	234.84	.2502
	1 3.8 1	34.61	25.944	209.65	.3061
150	(12.70)	(34.67)	(26.215)	(184.99)	(.4054)

BLACK DOUGLAS: 23°11'N 111°03'W; February 13, 1952; 2327 GCT; wire angle: 5°; sounding: 600 fms; depth of observation: 954 m. weather: cloudy; sea: moderate; wind: 300°, force 3

Depth (m)	T (°C)	S (‰)	σ _t (mg/cm ³)	10 ⁵ 8	ΔD (dyn.m.)	(ml/L)
00 10 20 30 50 75 100 150 200 250 300 400 500 600 700 800 1000	21.40 21.19 21.10 21.00 20.40 16.80 12.30 12.68 12.01 11.30 10.65 08.91 07.59 06.43 05.64 05.14 (04.22)	3 4.6 0 3 4.6 0 3 4.6 0 3 4.6 0 3 4.6 0 3 4.4 0 3 4.3 1 3 4.6 5 3 4.6 7 3 4.6 5 3 4.6 7 3 4.6 5 3 4.6 5 3 4.4 4 3 4.4 1 3 4.4 8 (3 4.6 6)	24100 24158 24182 24209 24370 25120 26204 26204 26349 26483 265816 265816 265816 27515 27268 (27514)	38236 37725 37725 37527 37527 37527 28757 20263 18607 17334 16166 15282 131.90 120.13 108.10 101.01 90.54 (67.75)	0000 0381 0759 11878 11878 11868 118	

STATION 150.30 (Interpolated Values at Standard Depths)

BLACK DOUGLAS: 23°02'N 111°20'W; February 14, 1952; 0315 GCT; wire angle: 19°; sounding: 1,480 fms; depth of observation: 1,098 m; weather: cloudy; sea: moderate; wind: 320°, force 3

00	23.00	34.51	23583	431,72	0000
10	23.12	34.49	23.533	436.85	0436
50	23.10	34.50	23.546	435.94	0874
30	23.10	34.51	23.554	435.60	1312
50	22.40	34.51	23.754	41727	2169
75	16.90	34.20	24.943	30438	3076
100	1 4.0 0	34.44	25.773	22589	3743
150	1 2.3 8	34.49	26.139	19316	4795
200	11.69	34.62	26.371	17116	5710
250	11.02	34.64	26.510	15889	6541
300	10.31	34.64	26.637	14773	7313
400	08.76	34.56	26.832	13027	8714
500	07.49	34.51	26.984	116.45	9958
600	06.44	34.51	27.129	103.07	11065
700	0 5.6 7	34.51	27.228	94.04	1,2060
800	05.08	34.51	27.299	87.55	1,2977
000	0 4.25	34.52	27.400	78.45	1,4655

BLACK DOUGLAS: 22°42'N 111°57.5'W; February 14, 1952; 0923 GCT; wire angle: 14°; sounding: 1,900 fms; depth of observation: 1,102 m; weather: partly cloudy; sea: rough; wind: 320°, force 3

Depth T	S	σ_{+}	1058	△D	02
(m) (°C)	(%)	(ng/cm ³)		(dyn.m.)	(ml/L)
00 22.20 10 22.20 20 22.20 30 22.10 50 18.10 75 14.70 100 13.70 150 12.54 200 11.67 250 11.11 300 10.38 400 08.52 500 07.21 600 06.26 700 05.59 800 05.11 1000 04.31	3 4.5 4 3 4.5 3 3 4.4 2 3 3 4.2 8 3 4.2 8 3 4.6 9 3 4.6 9 3 4.6 9 3 4.5 9 3 4.5 9 3 4.5 3 4.5 3 4.5 3 3 4.5 3 3 4.5 3	23.833 23.833 23.833 23.825 23.815 24.654 25.462 25.635 26.216 26.429 26.533 26.648 26.900 27.087 27.121 27.230 27.121 27.230 27.311 27.409	407.87 408.25 409.34 410.64 331.17 254.77 238.93 184.91 165.66 156.81 146.71 123.58 106.48 103.56 93.71 86.46 77.72	.0000 .0410 .0820 .1232 .1978 .2715 .3336 .4403 .5286 .6865 .6865 .8225 .9385 1.0445 1.1441 1.2351 1.4011	

OBSERVED DEPTHS

HORIZON:	STATION	80.51	OBSERVED	HORIZON	STATIO	N 80.55	
Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°e)	(%)	(ml/L)
0 10 20 30 50 75	12.33 12.21 11.77 11.74 11.04 10.52	33.30 33.33 33.35 33.49 33.60	5.94 5.86 5.75 5.69 4.26 3.66	0 10 25 50 74 98 148 193 240 286 337 384 431 479 583	12.7 12.57 12.5 12.4 11.3 10.08 9.02 8.67 8.32 7.52 7.12 6.56 6.11 5.92 5.52	33.21 33.24 33.22 33.30 33.51 33.60 33.96 34.05 34.11 34.13 34.16 34.16 34.18 34.20 34.27	6.31 6.29 6.25 6.13 4.14 3.75 2.64 2.33 2.04 1.63 1.25 1.04 0.83 0.48
HORIZON:	STATION	80.60		HORIZON:	STATIO	N 80.70	
0 10 24 48 73 97 145g 148 192 228 353 475 694 905 1139	12.9 12.85 12.8 12.8 11.8 9.28 8.60a 8.68 8.34 7.87 6.52 5.88 4.12 3.58	33.24 33.24 33.24 33.22 33.13 33.69 33.80 33.98 34.04 34.11 34.29 34.36 34.40 34.47	6.36 6.39 6.38 6.42 5.96 5.22 3.39 3.23 2.80 2.59 1.09 0.54 0.32 0.49	0 8 21 41 61 80 118 153 223 296 366 439 589 754 943	12.5 12.47 12.4 12.3 12.2 10.92 9.13 8.67 8.28 7.74 7.28 6.30 5.18 4.54 4.02	32.95 32.94 32.99 32.95 32.95 32.92 33.31 33.77 34.20 34.18 34.27 34.36 34.45	6.29 6.29 6.27 6.30 6.25 5.81 4.67 3.40 1.57 1.14 1.02 0.85 0.40 0.34 0.53
HORIZON:	STATION	80.80		HORIZON:	STATIO	N 80.90	
0 10 25 49 73 97 150 185 216 g 252 383 491 730 934 1145	12.8 12.74 12.7 12.7 12.2 10.55 9.47 8.74 8.45 8.45 6.60 5.58 4.67 3.98 3.46	33.04 33.03 32.97 33.03 32.99 33.62 33.46 34.49 34.45 34.45 34.45	6.26 6.28 6.27 6.28 6.11 5.60 3.62 3.02 4.073 2.62 1.22 0.71 0.31 0.51 0.80	0 10 25 49 73 97 147 191 282 378 469 565 757 948 1151	13.1 13.09 13.1 13.1 13.1 11.14 8.93 8.29 7.14 6.10 5.84 5.40 4.53 3.91 3.48	33.17 33.17 33.17 33.15 33.24 33.57 33.91 33.96 34.09 34.20 34.29 34.36 34.43 34.48	6.27 6.25 6.25 6.29 6.21 5.55 3.97 3.47 2.66 1.27 0.61 0.38 0.35 0.51

OBSERVED DEPTHS

HORIZON:	STATION	80.100	<u>ODDERVI</u>	HORIZO	N: STATION	N 85.38	
Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(‰)	(ml/L)	(m)	(°°)	(‰)	(ml/L)
0 10 24 48 71 94 145 169 g 189 208 314 462 689 912	13.3 13.08 13.0 13.0 12.5 10.28 9.42 9.32 a 9.00 8.84 7.55 6.18 5.08 4.16	33.01 32.99 32.97 32.97 33.10 33.64 33.04 a 33.91 34.00 34.08 34.13 34.47	6.21 6.22 6.21 6.22 5.89 5.70 3.42 2.55 2.15 1.78 0.86 0.33 0.47	0 10 20 30 50 75	12.11 12.08 11.95 11.15 10.54 10.30	33.37 33.37 33.37 33.37 33.30 33.58	5.40 5.28 4.62 4.09 3.80
1133 HORIZON:	3.61 STATION	34.49	0.72	HORIZO	N: STATIO	N 85.50	
0 8 21 41 61 81 120 155 192 214 256 297 339 382 474	13.2 13.10 13.1 12.9 11.9 10.24 9.46 9.04 8.70 8.46 8.06 7.84 7.52 7.29 6.64	33.30 33.26 33.26 33.26 33.35 33.49 33.82 34.04 34.09 34.13 34.17 34.20 34.23 34.23 34.31	6.13 6.06 5.99 5.10 4.26 2.93 2.05a 2.48 1.94 1.52 1.32 1.02 0.85 0.50	0 9 23 29 e 47 69 92 143	13.17 13.16 13.15 11.04 a 11.90 10.20 9.92 8,96	33.28 33.26 33.28 33.73 a 33.30 33.49 33.75 33.84	6.23 6.28 6.27 3.32 ² 5.70 4.23 3.35 3.08
HORIZON:	STATION			HORIZO	N: STATION	85.70	
0 9 23 44 65 86 129 168 247 333 416 506 594 690 881	12.9 12.92 12.9 13.0 11.0 9.82 8.91 8.60 7.64 7.08 6.47 6.04 5.58 5.04 4.38	33.24 33.28 33.28 33.48 33.51 33.89 34.13 34.22 34.22 34.42 34.31 34.33	6.19 6.18 6.10 4.25 3.99 3.03 2.69 1.69 1.24 0.76 0.52 0.39 0.37 0.45	0 8 20 45 65 89 134 177 265 357 446 535 715 905 1098	12.9 12.89 12.8 12.8 10.07 9.12 8.56 7.35 6.86 6.14 5.54 4.72 4.20 3.67	33.28 33.26 33.30 33.27 33.29 33.48 33.77 33.98 34.07 34.18 34.40 34.40 34.47	6.19 6.19 6.17 5.99 5.89 4.00 3.28 2.68 1.94 1.00 0.61 0.47 0.34 0.44

HORIZON: STATION 90	90.28	HORIZON:	STATION	90.	30
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Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0 10 25 49 72 94 144 190 236 283 335 385	14.5 14.18 14.12 11.72 10.40 10.41 9.63 9.04 8.54 8.06 7.52 7.12	33.24 33.24 33.23 33.31 33.46 33.60 33.84 34.14 34.20 34.18 34.25 34.25	6.15 6.18 6.19 5.07 4.16 3.83 3.01 2.16 1.76 1.53 1.09 0.86	0 10 25 49 65 g 73 96 148 195 230 243 254	14.6 14.27 14.06 11.98 11.48a 10.76 10.02 9.33 9.02 8.80a 8.39 8.26a	33.24 33.24 33.26 33.30 33.58 33.58 33.58 33.95 34.12 33.95a 34.18 34.07a	6.11 6.15 6.19 5.66 4.00a 4.72 3.88 2.87 2.16 2.84a 1.62 2.23a
HORIZON	: STATIO	N 90.37		HORIZON	: STATIO	N 90.45	
0 10 25 49 73 97 146 190 235 279 374 463 560 653 752 948	14.2 14.11 12.9 10.8 10.2 9.38 8.67 8.32 7.84 7.00 6.50 5.94 5.99 4.92 4.29	33.26 33.22 33.35 33.28 33.44 33.58 33.93 34.07 34.16 34.13 34.22 34.27 34.31 34.36 34.38 34.49	6.05 6.09 6.10 5.50 4.49 3.94 2.68 2.53 1.72 1.40 0.93 0.35 0.35 0.30 0.44	0 10 24 48 72 95 145 189 276 370 459 554 742 931 1133	14.1 13.98 14.1 13.6 11.6 10.12 9.21 8.46 7.80 7.08 6.38 5.82 4.88 4.17 3.85	33.22 33.24 33.17 33.11 33.22 33.63 33.91 34.27 34.22 34.23 34.23 34.43 34.47 34.49	6.05 6.01 6.01 5.90 5.55 5.02 3.74 2.92 1.72 0.45 0.49 0.36 0.48 0.59
HORIZON:	STATION	90.45 DEE	P	HORIZON	: STATION	90.53	
746 841 941 1036 1129 1227 1327 1422 1526	4.86 4.51 4.16 3.94 3.88 3.80 3.76 3.74 3.76	34 · 38 34 · 42 34 · 42 34 · 45 34 · 45 34 · 45 34 · 45 34 · 45	0.34 0.36 0.46 0.60 0.56 0.58 0.54 0.63	0 8 22 45 65 86 132 148 _g 164 172 185 433 533 655 866	14.0 13.99 14.0 13.9 12.7 10.87 9.23 9.31a 8.74a 8.60 7.34a 6.58 6.02 5.26 4.53	33.15 33.15 33.15 33.15 33.12 33.55 33.12 33.78 34.05 34.14 34.25 34.29 34.40	6.16 6.11 6.12 6.16 6.02 5.60 4.22 5.79 a 3.60 a 3.59 2.03 a 1.20 0.52 0.35 0.45

HORIZON	N: STATIO	N 90.60		HORIZON	: STATIO	N 90.70	
Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0 8 20 40	13.6 13.51 13.4 13.4	33.21 33.19 33.22 33.22	6.12 6.11 6.12 6.09	0 8 19 39	14.0 14.05 14:1 14.1	33.15 33.12 33.07	6.01 6.05 6.05 6.04
60 78 118 155 229 309 389 475 560	12.2 10.50 9.13 8.55 7.74 6.81 6.18 5.76 5.47	33.40 33.57 33.80 34.04 34.07 34.16 34.20 34.29	5.60 4.45 4.05 3.49 2.34 1.59 0.90 0.53	57 78 112 147 151 _g 166 273 383 610	14.1 13.6 12.98 9.63 9.20 9.30a 8.65 7.28 6.12 5.26	33.13 33.12 33.17 33.08 33.51 32.99a 33.73 34.02 34.09 34.29	6.16 5.90 5.25 4.11 5.67 3.69 2.03 1.14 0.34
653 841	4.89	34.34	0.32	797 915	4.52	34.38 34.43	0.43
HORIZON	: STATION	90.80		HORIZON:			
0 9 23 49 70 75g 95 138 181 203 322 440 684 910 1144	14.6 14.6 14.5 14.5 9.88a 13.82 10.45 9.11 8.60 6.88 6.07 5.02 4.20 3.58	33.17 33.24 33.20 33.21 33.15 33.15 33.12 33.57 33.75 34.00 34.16 34.34 34.40 34.49	5.99 6.10 6.01 6.03 6.00 6.07 6.03 5.44 4.16 4.03 2.11 0.88 0.34 0.48 0.78	0 8 22 48 69 93 137 181 268 361 451 542 727 923 1120	14.8 14.69 14.6 14.5 14.66 11.43 9.10 7.95 6.88 5.44 4.72 4.12 3.61	33.19 33.15 33.22 33.19 33.21 33.53 33.95 34.02 34.16 34.22 34.34 34.49	5.96 6.00 5.99 5.98 5.98 5.90 4.17 3.18 1.74 0.36 0.36 0.76
HORIZON				HORIZON:	STATION	93.30	
0 10 20 30 50	14.75 14.48 14.32 14.18 13.72	33.21 33.24 33.21 33.24 33.23	5.98 6.04 6.00 6.09 5.9 9	0 10 25 49 73 97 147 192 237 283 333 379 474 575 673	14.6 14.34 14.3 12.8 11.1 10.61 9.82 9.39 8.96 8.38 7.90 7.37 6.61 5.99 5.51	33.28 33.22 33.25 33.53 33.53 34.10 34.22 34.23 34.27 34.22 34.27 34.27 34.27 34.33	5.95 5.95 5.95 5.50 4.64 3.94 2.85 2.14 1.72 1.40 1.05 0.80 0.53 0.35 0.31

HORIZON: STATION 93.40	HORIZON: STATION	93.50
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Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(‰)	(ml/L)
0 10 25 50 74 98 150 196 288 383 476 574 767 957 1159	14.3 14.30 14.3 13.8 11.9 10.41 9.43 8.88 7.96 7.00 6.32 5.74 4.76 4.06 3.65	33.19 33.21 33.22 33.30 33.22 33.48 33.87 34.04 34.16 34.23 34.30 34.35 34.42 34.51	6.07 6.09 6.01 5.78 4.31a 5.10 3.04 2.35 1.40 0.77 0.44 0.36 0.35 0.54 0.74	0 10 25 49 73 97 147 192 282 378 468 564 754 945 1146	14.3 14.28 14.1 13.9 12.4 11.06 9.71 9.18 7.86 6.84 6.22 5.68 4.76 4.18 3.59	33.22 33.28 33.24 33.22 33.26 33.78 33.78 34.16 34.25 34.40 34.33	6.00 6.02 6.01 6.06 5.51 4.83 3.29 2.61 1.46 0.80 0.48 0.37 0.35 0.49 0.75
HORIZON	: STATIO	N 93.60		HORIZON	: STATIO	N 93.70	
0 10 25 49 73 97 147 192 281 375 467 562 753 942 1144	14.7 14.65 14.2 13.9 13.6 11.62 9.61 8.55 7.72 6.69 6.22 5.58 4.66 4.09 3.64	33.21 33.22 33.19 33.10 33.48 33.82 34.07 34.13 34.23 34.29 34.40 34.45 34.51	5.89 5.90 6.03 6.08 5.92 5.60 4.50 3.49 2.28 1.26 0.63 0.36 0.35 0.56 0.75	0 10 25 49 73 96 146 191 280 373 465 559 750 941 1141	14.7 14.22 14.1 13.4 12.8 11.04 9.22 8.56 8.11 7.08 6.07 5.56 4.81 4.18 3.78	33.12 33.19 33.19 33.21 33.06 33.42 33.78 34.14 34.20 34.27 34.42 34.43 34.49	5.95 5.98 6.02 5.92 5.75 5.38 4.26 3.42 1.63 0.97 0.64 0.34 0.52 0.67
HORIZON	: STATIO	97.30		HORIZON	: STATIO	N 97.32	
0 10 20 25 30	13.99 13.98 13.94 13.48	33.24 33.22 33.21 33.28	6.01 6.00 5.94 5.96 5.69	9 23 50 72 98 144 188 280 376 469 564 752 948 1146	14.5 14.28 14.2 13.6 12.1 10.38 9.29 8.76 8.61 7.32 6.59 5.94 4.92 4.14 3.56	33.28 33.26 33.24 33.39 33.40 33.77 33.98 34.23 34.23 34.27 34.30 34.38 34.51	5.99 5.96 5.91 5.80 4.80 4.40 3.52 2.35 1.27 0.84 0.49 0.35 0.52 0.76

HORIZON: STATION 97.40 HORIZON: STATION 97.50

Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0 10 25 50 75 99 159 196 287 384 476 574 767 959 1159	14.9 14.21 14.2 13.5 11.9 10.10 9.15 8.72 7.54 7.10 6.40 5.82 4.69 3.98 3.46	33.19 33.19 33.17 33.06 33.17 33.64 33.96 34.07 34.22 34.22 34.36 34.42 34.43 34.51	5.92 5.94 5.92 5.90 5.52 4.94 3.78 2.76 2.07 0.45 0.35 0.36 0.56 0.87	0 10 25 50 74 98 150 196 289 386 479 577 771 964 1165	14.8 14.62 14.5 14.4 13.8 11.86 9.32 8.68 7.54 7.00 6.37 5.80 4.67 3.99 3.51	33.21 33.21 33.21 33.21 33.30 33.57 33.96 34.09 34.20 34.29 34.31 34.40 34.45 34.51	5.92 5.91 5.93 5.89 5.71 5.03 3.92 2.86 0.79 0.49 0.33 0.34 0.55 0.78
HORIZON	: STATION	97.60		HORIZON	: STATIO	N 97.70	
0 10 25 49 73 97 147 193 284 379 470 567 757 948 1148	14.9 14.88 14.7 13.3 11.12 9.95 9.10 8.44 7.22 6.44 5.72 4.76 4.16 3.65	33.42 33.39 33.46 33.44 33.35 34.25 34.25 34.25 34.25 34.25 34.29 34.40 34.44	5.92 5.95 5.97 5.92 5.23 4.41 3.54 2.32 1.29 0.85 0.48 0.41 0.36 0.47 0.87	0 10 25 50 75 99 150 196 288 386 480 578 773 966 1168	14.7 14.3 13.9 13.4 11.20 8.97 8.36 7.55 6.34 5.96 5.42 4.54 3.92 3.53	33.19 33.15 33.21 33.19 33.19 33.12 33.60 33.89 34.07 34.20 34.27 34.41 34.42 34.45 34.45	5.94 5.96 6.01 6.27 5.98 5.54 4.21 3.40 1.95 0.45 0.33 0.58 0.85
HORIZON:		100.29		HORIZON:	STATION	1 100.30	
0 10 20 30 50	13.76 13.84 13.60 13.55 13.18	33.28 33.35 33.33 33.37 33.40	5.99 6.03 5.94 5.91 5.59	0 9 22 43 63 82 126 171	13.93 14.05 13.68 13.12 12.53 12.04 11.06 9.71	33.22 33.33 33.37 33.39 33.40 33.46 33.58 34.07	5.99 6.07 6.09 5.63 4.94 4.51 3.80 1.93

HORIZON:	STATION	100.40	OBSERVED.	HORIZON	: STATIO	N 100.50	
Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)_	(%)	(ml/L)
0 9 23 47 69 92	14.4 14.34 14.2 13.9 12.6 11.70	33.10 33.26 33.21 33.24 33.30 33.44 33.80	5.99 6.02 6.02 6.05 4.94 4.41	0 10 24 53 77 106	14.7 14.61 14.4 14.1 12.4 11.12	33.24 33.26 33.22 33.22 33.12 33.46	5.92 5.95 5.99 5.96 5.62 4.10
140 183 269 359 446 539 723 909 1107	10.48 9.41 8.92 7.66 6.79 6.08 5.01 4.27 3.73	33.80 34.00 34.27 34.23 34.29 34.34 34.38 34.43	2.92 2.66 1.20 0.97 0.60 0.36 0.33 0.48 0.83	156 207 307 413 514 615 814 1018 1219	9.66 8.19 6.86 6.32 5.72 4.67 3.96 3.47	33.96 34.16 34.20 34.23 34.31 34.42 34.45 34.52	2.54 1.87 1.54 0.86 0.41 0.31 0.38 0.63 0.88
HORIZON:		100.60		HORIZON	: STATIO	N 100.70	
0 9 23 52 74 100 145 188 277 372 463 554 740 935 1131	15.3 15.12 15.0 14.8 14.4 11.87 9.64 9.18 8.20 7.44 6.70 6.06 4.87 4.14 3.59	33.34 33.37 33.35 33.35 33.35 33.58 33.58 34.16 34.33 34.33 34.33 34.33	5.86 5.85 5.86 5.85 5.41 3.97 3.07 1.78 0.78 0.37 0.27 0.33 0.53 0.76	0 9 22 44 66 87 130 169 244 327 404 487 652 827 1022	15.3 15.03 14.9 14.6 14.5 12.10 9.81 9.02 8.34 7.28 6.80 6.24 5.32 4.50 3.94	33.35 33.31 33.31 33.31 33.17 33.44 33.78 34.04 34.11 34.16 34.31 34.42 34.47	5.82 5.79 5.89 5.94 5.88 5.44 4.44 3.28 2.26 1.55 0.45 0.43 0.68
HORIZON:	STATION	100.80		HORIZON	STATIO	N 100.90	
0 10 25 50 75 99 150 196 290 387 479 578 771 963 1164	14.8 14.62 14.3 14.2 13.3 10.90 9.73 8.90 7.76 6.77 5.81 5.36 4.62 3.97 3.47	33.24 33.31 33.24 34.28 33.15 33.22 33.78 34.16 34.14 34.27 34.38 34.43 34.51	5.97 5.96 5.99 5.97 5.65 5.06 3.34 1.95 1.66 0.84 0.55 0.41 0.58 0.82	0 10 25 50 74 98 149 195 286 383 473 570 761 952 1153	15.1 14.99 14.6 14.4 14.1 11.72 10.01 8.94 8.00 6.92 6.16 5.60 4.78 4.14 3.59	33.20 33.19 33.19 33.19 33.03 33.48 33.87 34.11 34.18 34.22 34.25 34.36 34.42 34.52	5.87 5.89 5.89 5.87 5.73 4.43 3.55 0.63 0.36 0.54 0.80

HORIZON: STATION 105.32

HORIZON: STATION 105.35

Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(.m)	(°C)	(%)	(ml/L)
0 20 30 40 50	14.31 13.99 13.85 13.70 12.29	33.41 33.44 33.42 33.42 33.37	6.02 5.92 5.94 5.84 4.83	0 15 40 66 90 143 190 238 284 383 478 576 770 963 1165	15.3 14.89 14.8 13.4 11.2 9.69 8.90 8.24 7.88 7.06 6.12 5.67 4.77 4.09 3.63	33.42 33.44 33.44 33.35 33.44 34.05 34.05 34.14 34.25 34.40 34.41 34.49 34.52	5.84 5.83 5.83 5.27 4.33 3.24 2.45 2.62 0.71 0.49 0.56 0.74
HORIZON:	STATIO	N 105.40		HORIZON			
0 10 25 50 74 98 149 196 287 382 474 571 764 954 1156	16.1 15.01 14.8 14.6 11.8 10.74 9.32 8.65 8.27 7.08 6.41 5.70 4.76 4.10 3.69	33.46 33.46 33.43 33.37 33.55 33.89 34.20 34.25 34.27 34.38 34.45 34.51	5.86 5.85 5.83 5.65 4.67 4.12 2.94 2.70 1.22 0.65 0.42 0.34 0.51 0.70	0 10 25 50 74 98 148 193 284 377 468 563 754 942 1143	16.5 15.67 15.6 15.5 14.9 13.06 10.15 9.10 7.89 7.33 6.66 5.95 5.00 4.24 3.69	33.44 33.51 33.45 33.35 33.35 33.35 33.57 34.11 34.22 34.27 34.33 34.43 34.49	5.76 5.74 5.79 5.79 5.27 4.44 3.19 2.03 0.80 0.47 0.32 0.54 0.73
HORIZON:	STATIO	N 105.60		HORIZON	: SEATION	N 105.70	
0 10 25 50 73 97 149 194 285 382 473 570 762 954 1158	16.2 15.70 15.6 15.5 13.78 10.97 10.69 9.43 8.28 7.17 6.20 4.97 4.18 3.60	33.44 33.46 33.46 33.46 33.46 33.40 33.75 34.16 34.29 34.33 34.31 34.40 34.45 34.49	5.73 5.76 5.77 5.79 5.79 5.32 4.11 1.70 1.15 0.72 0.48 0.31 0.34 0.54 0.77	0 10 25 50 75 99 150 196 289 386 480 577 770 963 1164	15.8 15.66 15.5 15.3 15.1 13.18 9.68 9.12 7.72 7.10 6.44 5.84 4.76 4.08 3.52	33.44 33.46 33.42 33.37 33.39 33.21 33.50 33.86 34.02 34.21 34.29 34.34 34.40 34.45 34.51	5.67 5.59 5.60 5.66 5.69 5.55 4.07 3.49 2.36 0.81 0.43 0.27 0.38 0.58 0.81

HORIZON: STATION 105.80

Depth (m)	T	S	0 ₂
	(°C)	(%)	(ml/L)
0 10 25 50 74 98 151 197 288 386 478 576 768 960 1162	16.6 16.27 13.87 9.59 8.88 7.96 7.06 6.36 5.84 4.74 4.09 3.56	33.60 33.61 33.52 33.48 33.55 33.55 33.86 34.13 34.18 34.28 34.36 34.36 34.43	5.62 5.54 5.55 5.59 5.63 4.09 3.43 1.60 0.82 0.35 0.27 0.53 0.76

CREST: STATION 110.33

CREST: STATION 110.35

Depth (m)	T (°C)	S (%)	φ ₂ (m1/L)	Depth (m)	(°C)	S (%)	0 ₂ (ml/L)
0		33.39		7			
	15.25		5.77	0	15.9	33.42	5.79
10		33.42	5.82	10		33.39	
20	14.71	33.48	5.84	25	14.9	33.46	5.86
30	14.46	33.42	5.80	49	14-2	33.40	5.75
50	14.18	33.42	5.66	73	12-2	33.35	5.27
75	12.64	33.39	5.07	96	10.93	33.43	4.54
				146	9.75	33.84	3:34
				191	9.58	34.14	2.25
				281	8.39	34.36	0.97
				375	7.68	34.36	0.56
				465	6.88	34.36	0.34
				560	6.15	34.33	0.24
				653	5,44	33.45	0.23
				751	5.06	34.40	0.32
				945	4.15	34.49	0.50
CREST:	STATION	110.40		CREST:	STATION 1	.10.50	
0	16.3	33.48	5.88	0	16.1	33.51	5.60
10	15.65	33.48	6.06	10	15.91	33.51	5.63
25	15-6	33.51	5.74	25	15.9	33.51	5.65
50	15-4	33.48	5.78	49	15.8	33.53	5.64
75	15.0	33.46	5.59	73	15.7	33.51	5.52
100	12,24	33.30	5.29	97	13.54	33.39	5.18
154	9.77	33.60	4.11	148	10.62	33.80	3.23
201	9.08	34.02	2.88	195	9.80	34.04	2.37
294	8.56	34.31	1.34	289	8.37	34.20	1.59
391	7.40	34.29	0.80	387	7.72	34.31	0.64
484	6.44	34.29	0.44	480	6.78	34.33	0.33
581	5.78	34.33	0.36	578	5.78	34.36	0.33
772	4.90	34.45	0.53	772	4.84	34.52	0.32
963	4.10	34.50	0.54	963	4.13	34.49	0.53
1163	3.54	34.60	0.77	1165	3.64	34.51	0.73
CREST:	STATION	110.60		CREST:	STATION 1	1	
0	16.3	33.60	5.63	0	16.9	33.57	5.60
10	16.12	33.57	5.51	10	16.11	33.55	5.78
	16.1	33.60	5.65	25	16:0	33.58	5.61
25 51	16.1	33.64	5.65	49	15.7	33:51	5.64
74	16.1	33.62	5.78	73	15.6	33.52	
97	16.07	33.71	5.56	97	13.84	22 10	5.72
148	11.71	33.71	3.69	149	10.29	33.40	5.65
193	10.37	33.98	2.51	196	9.40	733 (51	4.32
286	8.10	34,14	2.15	293	7.80	33.87	3.15
384	7.28	34.25	0.97	394	6,86	34.07	2.33
478	6.60	34.34	0.43	489		34.20	0.99
577	5.51	34.49	0.39		6,20	34.23	0.61
773	4.82	34.43	0.40	589	5.60	34.33	0.37
967	4.00	34.51	0.58	737	4.62	34.42	0.35
1166	3+53	34.52		978	4.02	34.42	0.63
1100	2423	24.26	0.97	1176	3.50	34.51	0.86

CREST: STATION 110.80

CREST: STATION 110.90

				77.77			
epth	T	S	02	Depth	T	S	02
(m)	(°0)	(%)	(m1/L)	(m)	(oc)	(%)	(ml/L)
0	16.9	33.66	5.63	0	16.8	33.62	5.56
0	16.55	33.64	5.60	10	15.52	33.58	5,61
	16-4	33.62	5.59	25	16.3	33.60	5.61
	16.3	33.69	5.55	50	16.1	33.57	5.65
	16.3	33.71	5.52	73	16.2	33.64	5.61
	16.34	33.68	5.60	97	16.74	33.86	5.38
	11.86	33.66	4.27	149	12.04	33.86	2.94
	9.28	33.77	3.58	194	10.90	34.11	1.92
	7.90	34.05	2.37	287	8.85	34.23	1.50
	6.88	34.16	1.27	386	7.30	34.20	1.07
	6.16	34.23	0.56	480		34.25	
	5.38	34.27	0.39		6.59		0.56
	4.68	34.40		579	5.86	34.31	0.38
			0.38	775	4.86	34.38	0.32
	4.08	34.47	0.59	966	4.15	34.47	0.57
	3155	34.54	0.77	1167	3.60	34.54	0.78
		13.30		CREST:	STATION 1	13.35	
	15.66	33.66	5.76	0	15.8	33.42	5.39
	15.68	33.68	5.75	10	15.45	33.42	3.01a
	15.70	33.66	5.76	25	15-3	33.40	5.73
	15.63	33.68	5.71	50	14.5	33.48	5.85
				75	12.0	33.31	4.94
				100	11.49	33.70	3.48
				155	10.21	33.95	2.69
				203	9.42	34.07	2,30
				298	8.75	34.33	0.92
				397	7.75	34.40	0.48
				491	6.76	34.37	0.33
				590	6.04	34.38	0.27
				784	4.92	34.42	0.33
				977	4.22	34.47	0.52
				1180	3.56	34.58	0.78
S	PATION 1	.13.40		CREST:	STATION 1	13.50	
	15.9	33.48	5.68	0	16.2	33.55	5.41
	15.65	33.46	5.68	10	15.99	33.49	3.97a
	15-6	33.46	5.76	25	16.0	33.53	5.68
	15-3	33.46	5.73	50	16.0 15.8	33.53	5.68 5.69 5.63
	15-1	33.46	5.67	50 74	15.7	33·53 33·53	5.63
	12.18	33.31	5.14	100	13.54	33.34	5.36
	9.77	33.75	3.73	153	10.78	33.86	3.56
	9.44	34.11	2.35	200	10.23	34.14	2.00
	8.88	34.54	0.93	294	8.99	34.29	1.13
	7.76	34.34	0.59	393	7.88	34.34	1.13
	6.85	34.36	0.38	486	7.02	34.52	0.69
	5.92	34.36	0.28	584	6.11	34:52	0.41
	4.79	34.42	0.38	704	4.93	34.38	0.32
	4.02	34.51	0.62	777 969	4.23	34.42 34.63 34.52	0.34
	3.52	34.51	0.77	1173	3.62	34.52	0.50

CREST:	STATION	113.60	CREST: STATION 113		13.60 CREST: STATION 113.70			STATION 113.70	
Depth	T	S	02	Depth	T	S	02		
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)		
0 10 24 49 73 98 150 197 289 385 477 574 766 957 1159	16.5 16.20 16.1 15.7 15.3 13.12 9.91 c 10.30 9.16 7.96 7.96 7.00 6.20 5.11 4.26 3.69	33.64 33.60 33.62 33.51 33.47 33.55 34.36 34.36 34.36 34.36 34.36 34.36 34.36 34.36	5.67 5.69 5.69 5.61 5.62 5.38 4.04 0.59 9.38 .20 .50 .69	0 10 25 50 74 98 152 198 294 395 490 588 787 980 1179	16.3 16.07 15.8 15.7 15.7 16.00 11.32 9.61 8.02 7.19 6.72 5.88 4.91 4.19 3.60	33.55 33.55 33.55 33.58 33.64 33.42 33.80 34.10 34.29 34.36 34.43 34.43 34.43	5.66 5.59 5.63 5.59 5.59 5.58 4.73 3.48 2.00 0.75 .32 .32 .52		
GREST:	STATION	117.26		CREST:	STATION	117.30			
0 10 20 30 50	15.87 15.85 15.80 15.77 14.78	33.73 33.71 33.75 33.82 33.66	5.79 5.68 5.76 5.67 5.04	0 10 20 30 50 59a/75a	15.31 15.44 15.62 15.47 13.81 12.94 STATION	33.44 33.53 33.71 33.64 33.62 33.78	5.86 4.56 a 5.83 5.80 3.89 2.50		
			E 77	CREST:					
0 10 25 50 74 98 120 148	15.77 15.96 15.63 14.37 13.08 11.95 11.38 10.94	33.51 33.84 33.80 33.51 a 33.87 33.98 34.16	5.77 5.74 5.18 4.23 3.59 2.90 2.53 1.72	0 10 25 51 75 101 155 202 297 400 496 597 693 797 894	15.5 15.39 15.1 14.7 13.9 13.51 10.90 10.56 9.32 8.48 6.85 5.94 5.44 4.88 4.55	33.46 33.46 33.46 33.46 33.75 34.11 34.36 34.49 34.45 34.39 34.43 34.38	5.74 5.84 5.63 3.94 2.13 1.12 .75 .44 .38 .30 .37 .48		

CREST:	STATION	117.50		CREST	: STATION 1	17.60	
Depth	T	S	02	Depth	T	S	02:
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0 10 25 50 74 98 150 197 292 389 484 582 774 964 1164	16.0 15.40 14.9 14.9 12.9 11.82 10.32 9.44 8.66 7.38 6.61 5.89 4.87 4.18 3.66	33.51 33.49 33.51 33.49 33.39 33.46 33.89 34.07 34.27 34.29 34.33 34.42 34.47 34.49	5.68 5.68 5.74 5.68 5.02 4.53 2.77 2.32 1.29 .63 .38 .30 .35 .55 .74	0 10 25 50 75 99 150 197 290 387 481 579 771 962 1164	16.3 15.98 15.9 15.7 15.6 12.54 10.91 9.99 8.88 7.35 6.84 6.08 4.96 4.16 3.68	33.51 33.48 33.51 33.50 33.51 33.26 33.86 34.11 34.29 34.25 34.33 34.36 34.40 34.47 34.51	5.63 5.64 5.66 5.68 5.64 5.36 2.91 2.05 1;14 .83 .35 .52
CREST:	STATION	117.70		CREST	STATION 1	20.25	
0 10 25 50 75 99 151 199 293 392 486 586 780 968 1167	17.9 16.78 16.8 16.8 16.6 12.98 10.21 9.30 8.99 7.69 6.72 5.96 5.10 4.18 3.68	33.82 33.86 33.86 33.86 33.86 33.80 34.02 34.40 34.33 34.29 34.31 34.38 34.45 34.51	5.58 5.55 5.53 5.52 5.49 4.56 3.12 2.00 .82 .49 .38 .31 .33 .53	0 10 20 30	15.87 15.90 15.86 15.90	33.71 33.64 33.77 33.82	5.64 5.72 5.65 5.24
CREST:	STATION :	120.30		CREST:	STATION 1	20.35	
0 10 20 29 48 72	15.59 15.62 15.60 15.58 14.60	33.62 33.58 33.55 33.62 33.57 33.44	5.74 5.75 5.76 5.77 5.45 4.73	0 10 20 30 49	15.30 15.31 15.30 15.31 15.81	33.49 33.44 33.51 33.46 33.71	5.69 5.72 5.71 5.74 5.47

CREST:	STATION	120.45		CREST:	STATION :		
Depth	T	S	02	Depth	T	S	02
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0 9 24 52 76 104 156 207 310 417 520 622 827 1032 1232	16.5 16.34 16.3 15.9 12.4 11.42 9.97 9.60 9.24 8.00 6.66 5.89 4.70 3.40	33.78 33.82 33.86 33.86 33.80 33.97 34.18 34.47 34.43 34.42 34.40 34.37 34.54	5.70 5.73 5.74 4.69 3.36a 3.16 2.36 1.60 .56 .40 .31 .27 .42 .60 .92	0 9 23 49 69 94 139 182 271 365 453 543 721 909 1099	16.3 16.16 16.2 16.2 16.2 12.33 10.99 10.41 9.72 8.47 7.42 6.54 5.18 4.36 3.78	33.66 33.62 33.71 33.66 33.63 33.41 33.82 34.27 34.44 34.47 34.47 34.40 34.40 34.49 34.51	5.56 5.62 5.60 5.56 5.52 4.91 3.05 1.53 .40 .34 .24 .24 .48
CREST:	STATION	120.60		CREST:	STATION :	120.70	
0 9 23 51 73 100 149 199 299 403 503 603 803 1007 1206	17.3 17.18 17.2 17.1 13.4 11.20 10.37 10.38 8.91 7.92 6.90 6.08 4.92 4.12 3.52	33.91 33.87 33.87 34.02 33.69a 33.77 34.22 34.47 34.40 34.45 34.45 34.45 34.45 34.54 34.56	5.50 5.51 5.43 4.18 4.02 3.34 1.76 .89 .67 .33 .27 .22 .30 .48 .75	0 9 24 48 70 93 144 188 277 371 462 557 745 933 1127	17.8 17.47 17.3 17.1 17.1 12.96 10.91 10.22 9.15 8.19 7.12 6.36 5.14 4.30 3.69	34.00 33.96 33.95 33.95 33.60 33.98 34.29 34.43 34.40 34.43 34.47 34.54	5.47 5.47 5.42 5.48 5.48 5.46 1.47 .81 .48 .37 .30 .31 .48 .70
CREST:	STATION	120.80		CREST:	STATION	120.90	
0 10 24 48 72 95 144 190 283 381 473 569 758 947 1147	17.7 17.45 17.4 17.0 16.8 12.86 11.04 10.16 9.48 8.12 6.94 6.25 5.06 4.32 3.76	34.02 33.98 33.99 33.87 33.69 34.07 34.45 34.45 34.38 34.53 34.53	5.45 5.45 5.45 5.42 5.42 5.42 5.42 5.22 8.44 65	0 10 25 50 74 99 152 199 291 390 483 581 772 962 1163	17.1 16.94 16.8 16.7 15.6 12.34 10.55 9.95 8.70 7.55 6.33 5.74 4.82 4.05 3.63	33.78 33.82 33.80 33.78 33.71 33.75 33.89 34.14 34.27 34.31 34.29 34.36 34.46 34.49 34.51	5.52 5.50 5.49 5.47 4.68 3.72 2.88 2.12 1.11 .57 .47 .36 .43 .61

CREST:	STATION :	123.37		CREST:	STATION		
Depth	T	S	02	Depth	T	S	05
(m)	(°C)	(%)	(ml/L)	(m)	(°C)	(%)	(ml/L)
0- 10 20 30 50	17.33 17.34 17.31 17.32 14.44	34.05 34.05 34.09 34.07 33.69	5.40 5.41 5.38 5.45 4.96	0 9 23 47 71 94 144 190 236 281 331 378 424	17.5 17.15 17.2 15.6 11.8 11.78 11.15 10.63 10.22 9.46 8.80 8.08 7.52 6.86	34.04 33.98 34.05 33.77 33.63 33.95 34.29 34.49 34.45 34.40 34.40 34.40	5.58 5.53 5.62 4.98 4.12 2.74 1.39 .64 .51 .46 .45 .42 .37
CREST:	STATION	123.50		CREST:	STATION	123.60	
0 8 22 47 67 88 127 164 242 321 398 473 635 811 1000	17.1 17.1 17.1 17.1 14.77 11.60 10.90 10.16 8.76 7.94 6.88 5.90 4.95 4.14	33.86 33.89 33.87 33.87 33.68 33.73 34.09 34.42 34.42 34.42 34.43 34.45 34.54	5.49 5.47 5.46 5.46 5.18 3.59 2.16 .64 .68 .37 .42 .50 .33 .23	0 9 22 46 67 89 131 172 255 344 431 521 698 882 1075	17.6 17.34 17.2 17.1 16.8 15.80 11.09 10.48 9.33 8.42 7.52 6.74 5.44 4.65 3.92	34.00 33.93 33.96 33.96 33.86 33.64 33.64 34.40 34.40 34.40 34.40 34.47	5.47 5.45 5.49 5.46 5.43 5.30 4.21 2.96 1.23 .57 .41 .30 .31 .40 .62

BLACK	DOUGLAS:	STATION	127.60
Depth		T	S

BLACK	DOUGLAS:	STATION	130.30
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DIMOIT DO					
Depth	(⁸ c)	S	Depth	(°C)	(%)
(m)	(00)	(%)	(m)	(-0)	(%)
				30.00	01: 05
0	17.3	34.02	0	17.27	34.25
9	17.30	34.00	10	17.27	34.33
24	17-3	34.02	20	17.28	34.29
48	17.3	34.04	30	17.13	34.25
72	17-3	34.04	50	15.60	34.05
95	17.26	33.96	75	13.17	33.96
145	11,54	33.82			
188	10.63	34.09			
274	9.86	34.38			
367	8.48	34.36			
458	7.69	34.43			
549	6.72	34.43			
729	5.40	34.47			
912	4.45				
1110	3.90	34.54			
BLACK DO	OUGLAS: STATIO	N 130.35	BLACK DO	UGLAS: STATIC	N 130.40
0	17.77	34.27	0	17.9	34.21
11	17.75	34.49	10	17.78	34.20
26	17.72	34.28	25	17.7	34.23
49	17.74	34.31	50	17.2	34.02
73	14.33	34.04	74	13.6	33.64
97	13.04	34.10	98	13.74	34.13
150	12.12	34.54	149	12.05	34.38
198	11.82	34.61	195	11.59	34.63
-/-	11100	,,,,,	285	9.90	34.56
			379	8.14	34.54
			469	7.51	34.45
			564	6.45	34.47
			751	5.22	34.49
			938	4.36	34.54
			1136	3.74	34.60
DIAGU IV	OUGLAS: STATIO	N 130 FO			
DIMON IX	OGIAS: STATIO	1 10.00	PIAOK DO	UGLAS: STATIC	130.00
0	17.2	34.14	0	16.8	33.87
9	17.18	34.13	12	16.68	33.93
25	17.2	34.14	26	16.7	33.84
49	17.1	34.13	50	16.7	33.84
72	12.8	33.60	. 74	16.7	33.80
95	11.75	33.68	98	15.89	33.75
144	10.34	34.02	148	11.55	33.89
187	10.01	34.31	190	10.12	34.05
273	8,82	34.31	276	9.86	34.43
364	7.98	34.40	364	8.66	34.42
451	7.27	34.42	449	7.73	34.44
543	6.51	34.42	538	6,86	34.45
724	5.14	34.42	716	5.51	34.45
908	4.43	34.52	896	4.62	34.42
1103	3.82	34.52	1089	3.98	34.48

BLACK DO	UGLAS: STATIO	N 133.25	BLACK DOT	JGLAS: STATIO	N 133.30
Depth	T	S	Depth	T	S
(m)	(°c)	(%)	(m)	(°c)	(%)
0	18.72	34.45	0	18.94	34.51
10	18.75	34.51	10	18.93	34.51
20	18.60	34.49	25	18.78	34.49
30	18.39	34.49	51	18.72	34.47
50	16.14	34.14	74	14.80	34.09
75	14.11	34.16	99	13.97	34.15
			123	12.99	34.43
			152	12.64	34.45
BLACK DO	UGLAS: STATIC	N 133.40	BLACK DO	UGLAS: STATIC	N 133.50
0	19.0	34:53 :	0	18.2	34.33
10	18.97	34.52	10	18.25	34.52
26	18.9	34.56	25		34:36
51	18.9	34.52	50		34:38
75	14.8	33.98	75	-	34.27
99	13.76	34.27	99	13.84	33.93
150	11.58	34.27	151	11.60	34.34
196	10.89	34.49	198	10.79	34.49
287	9.79	34.54	290	9.48	34.51
382	8.24	34.45	388	8.07	34.45
474	7.31	34.46	481	7.14	34.45
571	6.39	34.45	579	6.31	34.45
760	5.14	34.46	772	5.08	34.45
949	4.26	34.52	963	4.29	34.52
1149	3.65	34.53	1164	3.65	34.56
BLACK DO	UGLAS: STATIC	N 137.23	BLACK DO	UGLAS: STATIC	DN 137.30
0	19.37	34.52	0	19.66	34.51
10	19.35	34.54	10	19.69	34.56
21	19.20	34.51	25	19.71	34.52
31	19.12	34.56	50	19.53	34.49
50	10.87	34.33	50 73 96	15.35	34.04
			96	13.44	34.25
			120	12.86	34.43
			148	12.41	34.58

Depth	T	S	Depth	T	S
(m)	(°c)	(%)	(m)	(°c)	(%)
0	19.48	34.51	0	20.0	34.3
10	19.47	34.56	9	18.96	34.5
			24	18.9	34.3
			52	18.9	34.3
			74	17:8	33.9
			100	12.40	33.6
			147	11.57	34.
			192	10.55	34.
			283	9,66	34.
			378	8.64	34.1
			470	7.43	34.
			561	6.64	34.4
			743	5.37	34.
			936	4.40	34.
			1129	3.78	34.
BLACK DO	UGLAS: STATIO	N 140.30	BLACK DO	UGLAS: STATIC	ON 140.3
0	19.92	34.47	0	20.38	34.
10	19.87	34.52	10	20.38	34.
20	19.82	34.49	25	20.38	34.
30	19.60	34.45	50	20.11	34.
49	16.65	34.16	73	15.60	34.
73	13.59	34.18	97	12.83	34.
97	13.31	34.27	121	12.19	34.
			150	11.98	34.
BLACK DO	UGLAS: STATIC	N 140.40	BLACK DO	UGLAS: STATIC	ON 140.5
0	19.85	34.58	0	19.5	34.
9	19.76	34.56	9	19.55	34.
24	19.8	34.58	24	19.6	34.
48	18.6	34.34	48	19.4	34.
72	15.4	33.89	72	17.6	34.
96	12.49	34.07	96	14.19	33.
147	11.22	34.23	147	11.07	33.9
190	10.07	34.31	192	11.16	34.
276	9.40	34.45	282	10.04	34.
365	8.48	34.49	376	8.46	34.
451	7.72	34.49	468	7.52	34.4
541 720	6.84 5.42	34.49 34.47	563	6.56	34.1
902	4.54	34.47	750	5.39	~34.1
1098	3.87	34.54	938 1139	3.81	34.

h	T	S	Depth	
	(^o o)	(%)	(m)	
	00.1/	34.54	0	
0	20.16	34.60	11	
10	20.19		21	
25	20.15	34.54 34.25	30	
50	17.67		49	
75	15.00	34.22	72	
			95	
	1		118	
CK DO	UGLAS: STATIO	N 143.35	BLACK DO	UG:
0	20.86	34.56	0	
10	20.88	34.52	10	
	20.65	34.52	20	
25	17.04	34.00	30	
50	13.62	33.86	50	
73	13.61	34.18	75	
97		34.56	100	
148	12,14	34.60	100	
196	11.34	34.60		
244	10.83	34.63		
292	10.28			
AOK DO	UGLAS: STATIC	N 147.25	BLACK DO	OUG
0	21.18	34.54	0	
10	20.85	34.23	10	
20	20.66	34.54	21.	
30	20.52	34.52	30	
50	17.45	34.32	50	
75	16.03	34.42	75	
CK DO	OUGLAS: STATIC	N 150.19	BLACK DO	UGLAS
0	21.72	34.60	0	
10	23.47	34.60	10	1
25	21.19	34.58	25	2
48	17.45	34.33	50	2
71	14.84	34.45	74	1'
94	13.92	34.60	99	1.4
117	13.57	34.63	151	12
146	12.81	34.67	195	13
			286	1
			377	
			478	
	A STATE OF THE STA		549	
			660	
			759	4
			954	

BLACK DOUGLAS: ST	PATION	150.30
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BLACK DOUGLAS: STATION 150.40

Depth	T T	S	Depth	T	S
(m)	(°c)	(%)	(m)	(00)	(%)
0	23.0	34.51	0 9	22.2	34.54
10	23.12	34.49		22.18	34.54
25	23.2	34.51	24	22.3	34.52
48	22.4	34.51	48	18.6	34.20
72	18.3	34.20	72	15.5	34.23
95	15.39	34.43	97	13.85	34.18
145	12.47	34.48	148	12.60	34.63
189	11.84	34.61	192	11.76	34.69
273	10.67	34.64	279	10.70	34.69
364	9.31	34.60	369	9.08	34.58
450	8.09	34.52	455	7.71	34.65
540	7.05	34.51	544	6.76	34.47
720	5.52	34.51	723	5.47	~34.51
901	4.60	34.51	907	4.67	34.54
1098	3.93	34.54	1102	3.96	34.56

EXPLANATORY NOTES

- a Value rejected in drawing curves and reading off values at standard depths.
- b Temperature reading off scale, above listed value.
- c Thermometer failure.
- d Observations disagreed, mean value taken.
- e This bottle tripped before being lowered to its full depth (pre-tripped) and possibly before thermometers reached equilibrium.
- f This bottle may have pre-tripped.
- g This bottle pre-tripped and released its messenger so that all bottles below it pre-tripped also.

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