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UNIVERSITY OF CALIFORNIA  
SCRIPPS INSTITUTION OF OCEANOGRAPHY

Physical and Chemical Data  
Cruise 21  
Marine Life Research Program  
9-29 January 1951

Prepared by  
Marine Life Research Program Division of Oceanography

Sponsored by  
Marine Research Committee

SIO Reference 51-55  
15 December 1951

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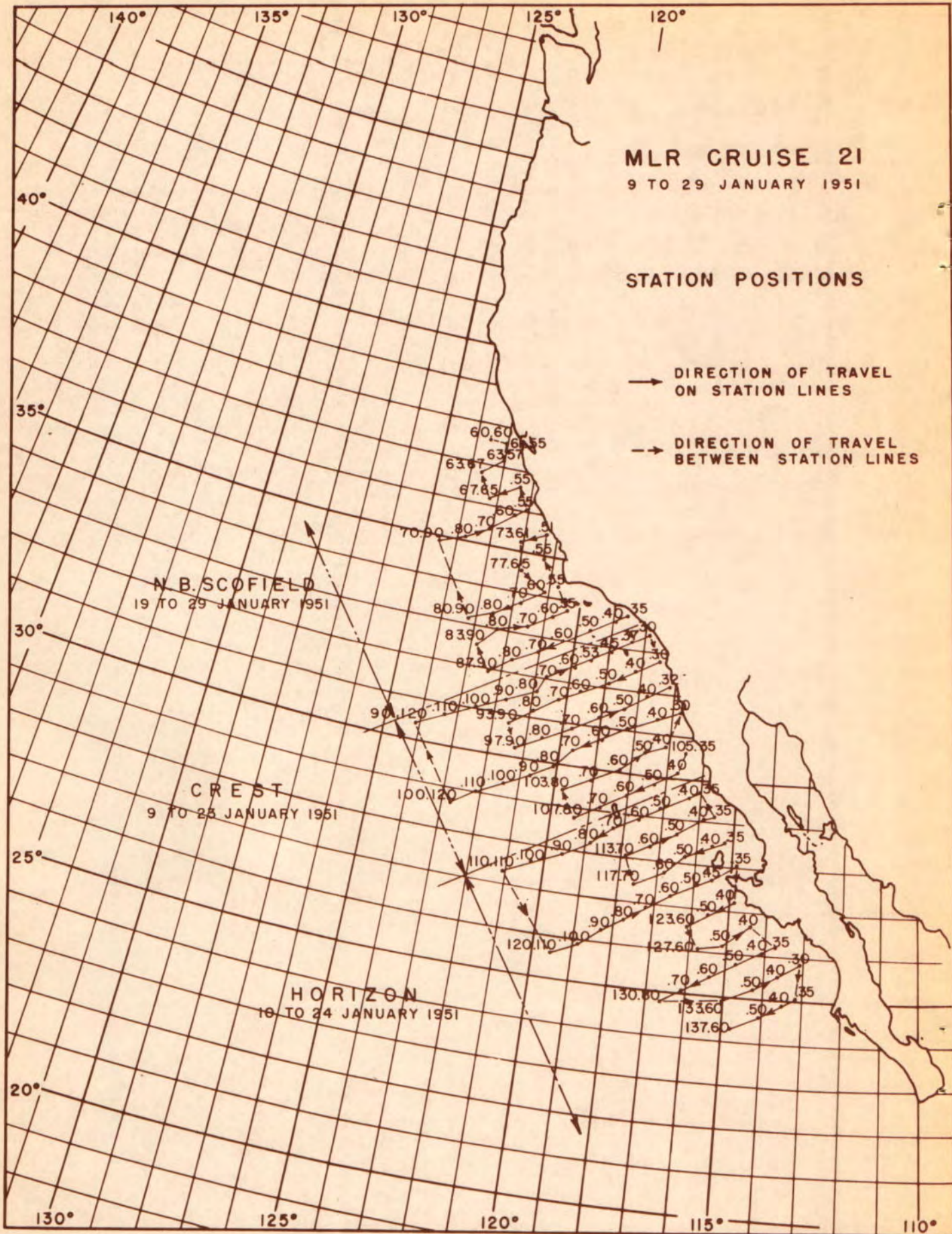
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## INTRODUCTION

The data presented in this report were collected on the twenty-first full-scale cruise conducted in the Marine Life Research Program. The three ships participating were the MV HORIZON and the MV CREST of the Scripps Institution of Oceanography, the MV N. B. SCOFIELD of the California Department of Fish and Game.

Data are presented in the form of tabulated values at standard 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.

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 pretripping on stations 73.61, 97.60, 103.60, 103.80, 105.35, 107.50, 110.40, 110.90, 110.100, 113.35, 127.50, 127.60 and 137.60, 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 pretripping wherever 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.

## PERSONNEL

Roger R. Revelle, Director of the Scripps Institution  
of Oceanography

Oceanographers

Horrer, Paul L., Assistant Oceanographer  
Reid, Robert O., Assistant Oceanographer  
Lewis, George J., Jr., Associate in Oceanography  
Reid, Joseph L., Jr., Associate in Oceanography  
Wooster, Warren S., Assistant Oceanographer

Marine Superintendent

Stose, Clemens W.

Ships' Captains

Brandal, G., MV CREST  
Kuselj, I., MV N. B. SCOFIELD  
Miller, F., MV HORIZON

## PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

MV CREST

Counts, Robert C., Marine Biologist, U.S. Fish & Wildlife Service  
Haddow, Robert W., Marine Technician  
Sibley, Slade W., Marine Technician  
Wallengren, Delbert E., Marine Technician  
Herreshoff, Karl F., Marine Technician, Chemical

MV HORIZON

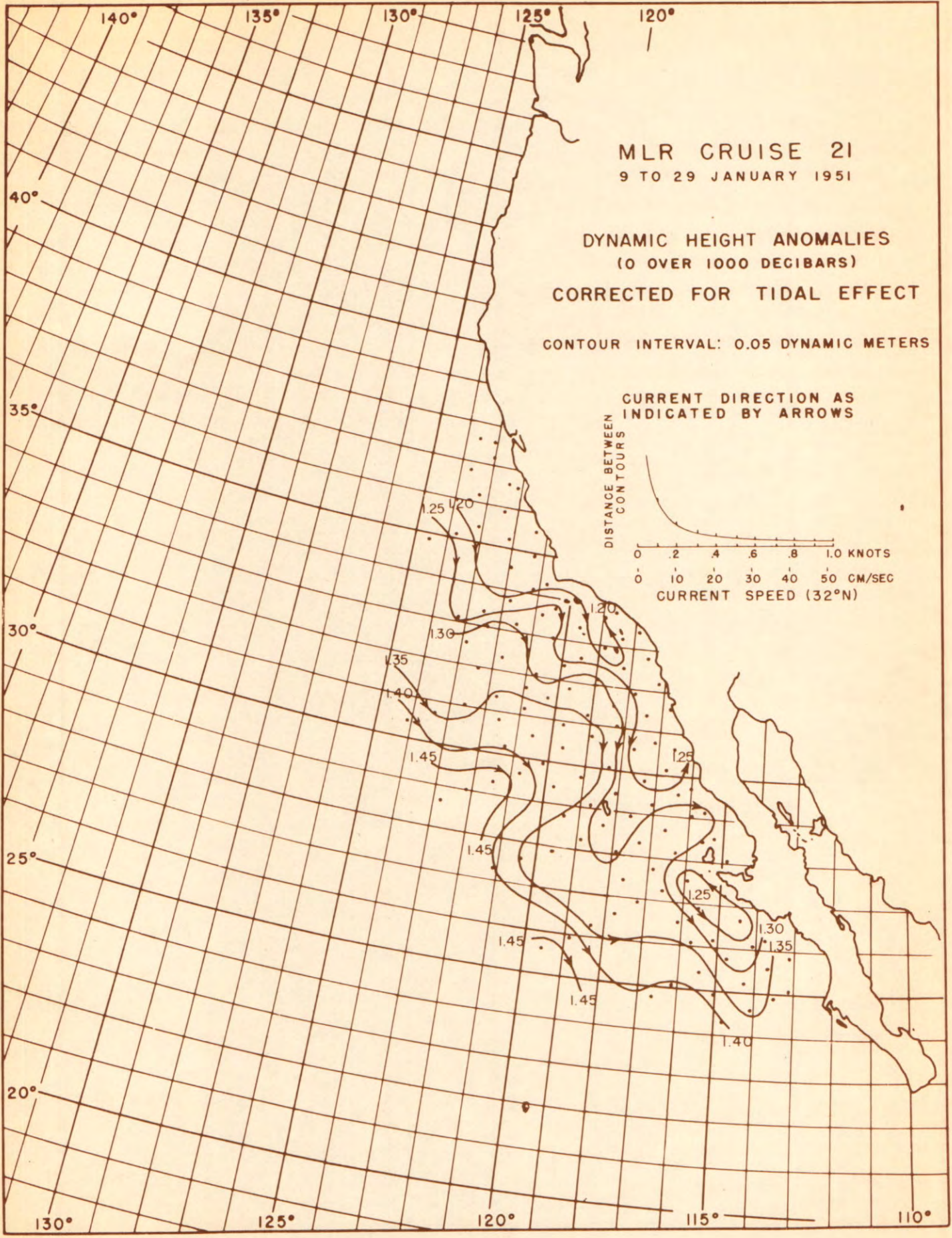
Carlson, Deane R., Marine Technician  
Cunningham, Leonard M., Jr., Marine Technician  
Imm, Henry L., Jr., Marine Technician  
Rockman, John N., Marine Technician, Chemical  
Thraillkill, James R., Marine Biologist, U.S. Fish Wildlife & Service

MV N. B. SCOFIELD

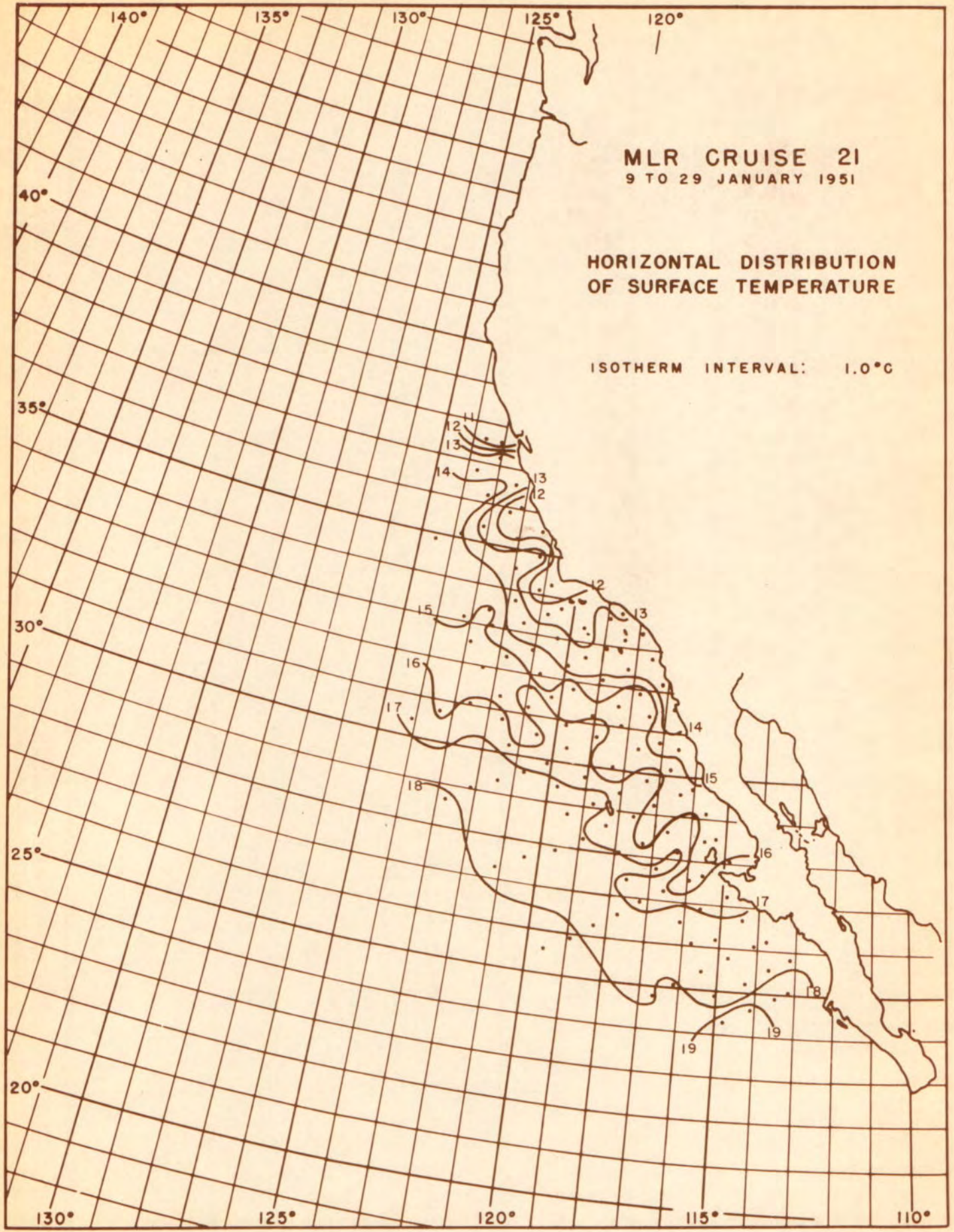
Beckwith, Warren W., Jr., Senior Marine Technician  
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Gossett, David A., Marine Technician  
Greenwood, Edward C., Junior Aquatic Biologist, California  
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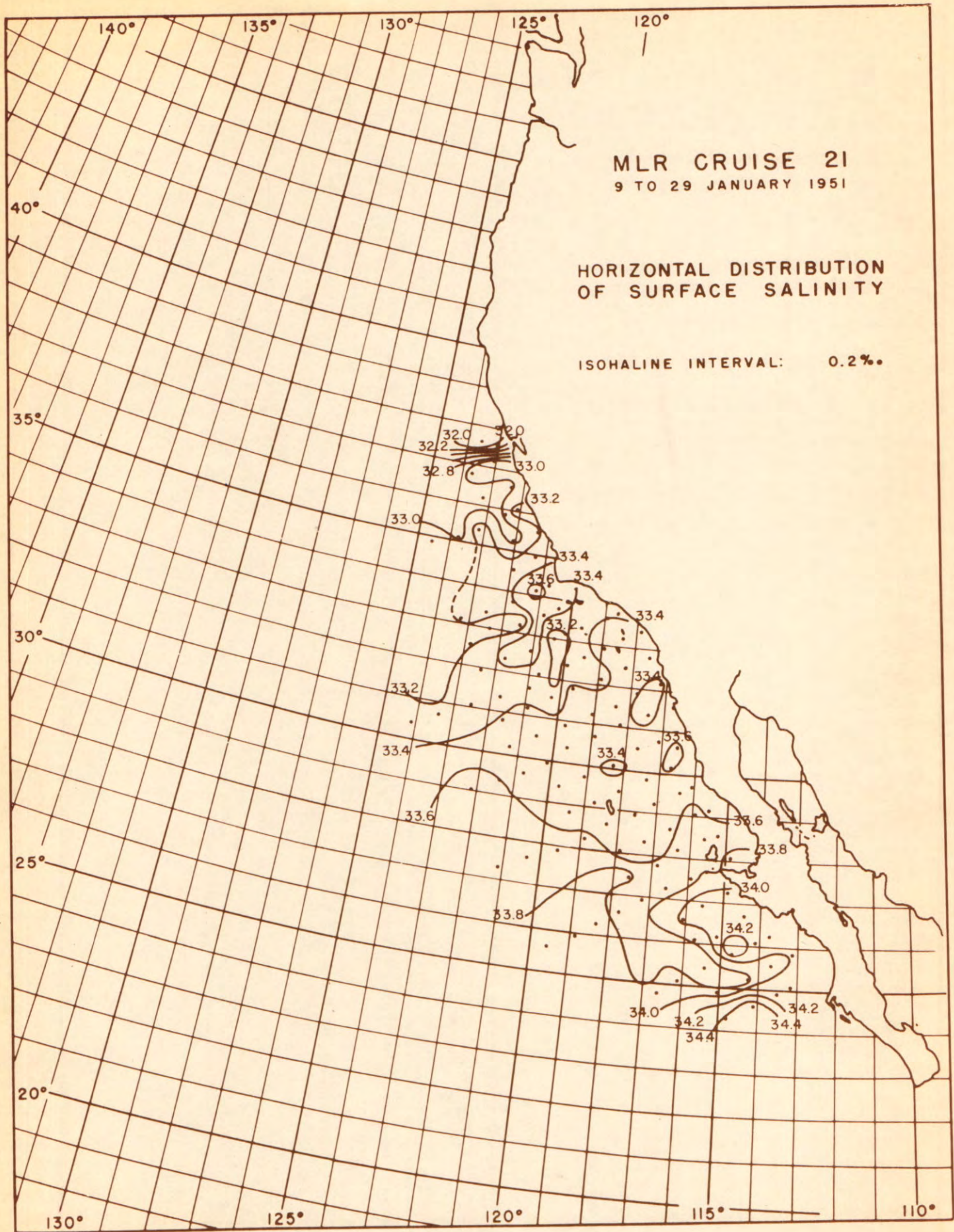
## PERSONNEL PARTICIPATING IN PREPARATION OF DATA

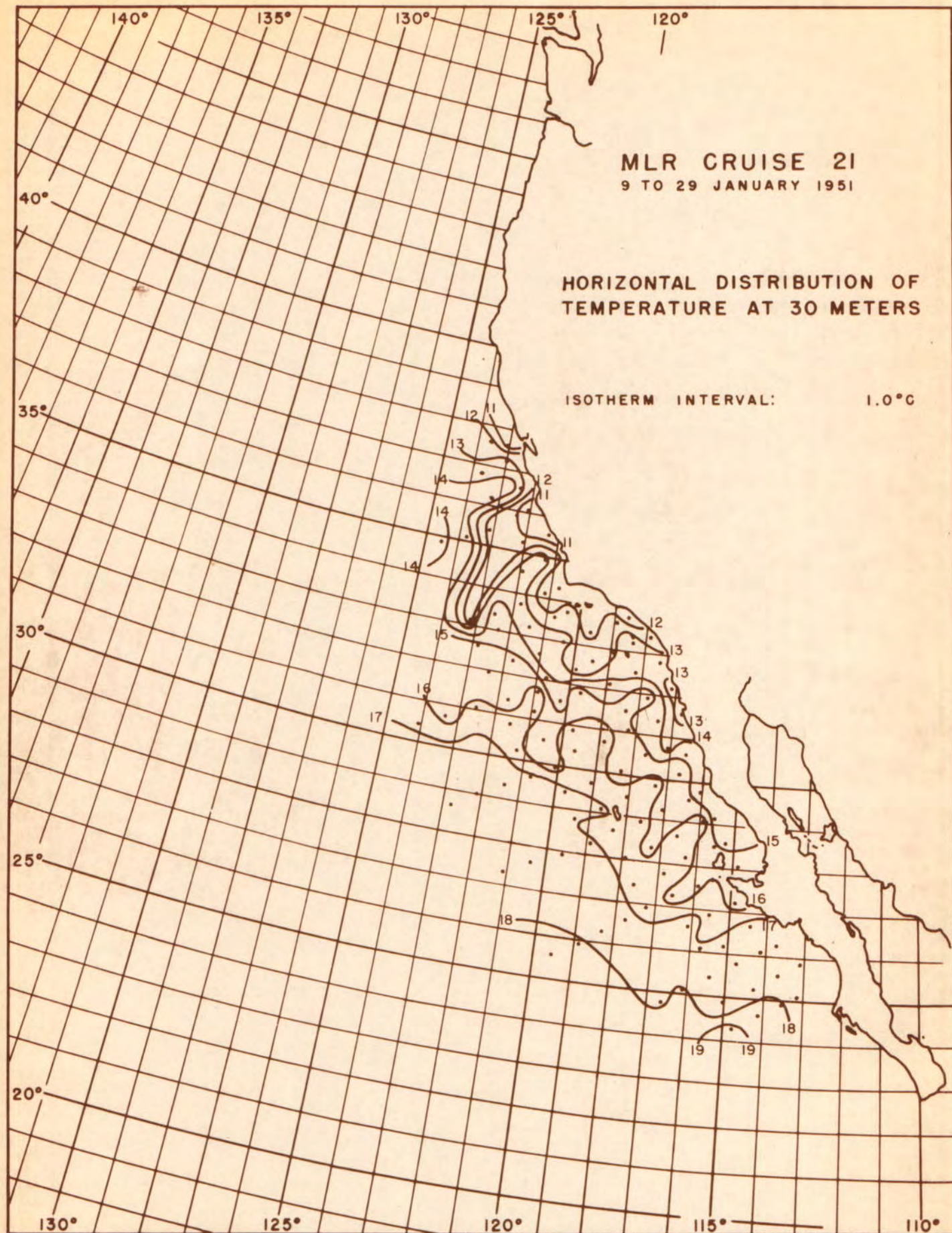
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Berkey, Max L., Jr., Marine Technician  
Brown, Gurthie F., Engineering Aid  
Browne, Geneva S., Engineering Aid  
Cunningham, Leonard M., Jr., Marine Technician  
Cassady, Rose Marie, Engineering Aid  
Eby, Lorraine L., Engineering Aid  
Gilkey, Robert W., Marine Technician  
Gossett, David A., Senior Marine Technician  
Haddow, Robert W., Marine Technician  
Haulman, Doris V., Engineering Aid  
Herreshoff, Karl F., Marine Technician, Chemical  
Hutchins, Dorsey M., Typist-Clerk  
Jellison, Donald L., Engineering Aid  
Kartrude, Robert C., Senior Engineering Aid  
Kaatz, E. James, Marine Technician, Chemical  
Kirk, Robert W., Laboratory Technician  
Klein, Hans T., Principal Laboratory Technician  
Love, Cuthbert M., Research Assistant  
Mao, Han-Lee, Research Assistant  
Matheny, Gladys K., Engineering Aid  
Mead, Richard V., Principal Marine Technician  
Messner, Gordon P., Marine Technician  
Metzger, June C., Typist-Clerk  
Miller, Bernadette L., Engineering Aid  
Payne, Miles M., Marine Technician  
Propsner, Ruth O., Engineering Aid  
Ratty, Donald K., Marine Technician  
Ridgely, Johanna W., Laboratory Technician  
Smith, Alan C., Senior Marine Technician  
Trent, Luz F., Laboratory Technician  
Whitney, Alice D., Engineering Aid  
Wilburn, Virginia A., Statistician  
Wilkes, Frances C., Engineering Aid  
Winchell, Perrin, Marine Technician, Chemical  
Worrall, Charles G., Senior Marine Technician











## STATION 60.60 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 37°37'N 123°37'W January 29, 1951 1810, 1845 GCT Wire angle: 20°, 20° Sounding: 1,738 fms. Depth of observation: 93 m., 1,069 m. Weather: overcast Sea: rough Wind: 340°, force 5

Depth (m)	T (°C)	S (%)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	10.80	31.92	24.43	350.3	.0000	6.40	-
10	10.90	32.01	24.49	345.5	.0349	6.32	-
20	12.52	32.77	24.78	318.1	.0682	4.20	-
30	12.47	33.09	25.04	294.1	.0990	4.23	-
50	10.65	33.33	25.56	244.9	.1531	5.35	-
75	9.62	33.55	25.90	212.4	.2106	4.43	-
100	9.45	33.85	26.17	187.9	.2610	3.62	-
150	8.60	34.00	26.42	164.6	.350	2.84	-
200	7.97	34.13	26.62	146.5	.428	2.22	-
250	7.43	34.22	26.76	133.1	.498	1.85	-
300	7.09	34.33	26.90	121.1	.562	1.43	-
400	6.35	34.30	26.97	114.8	.681	.91	-
500	5.52	34.31	27.09	104.9	.792	.68	-
600	5.02	34.42	27.24	91.5	.891	.43	-
700	4.73	34.47	27.31	85.1	.980	.38	-
800	4.45	34.49	27.35	81.3	1.064	.38	-
1000	3.68	(34.63)	27.55	63.8	1.211	.60	-

## STATION 61.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 37°37'N 123°07.5'W January 29, 1951 1222 GCT Wire angle: 17° Sounding: 450 fms. Depth of observation: 771 m. Weather: overcast Sea: rough Wind: 310°, force 4

0	10.91	32.02	24.50	344.7	.0000	6.01	-
10	12.32	32.70	24.76	319.8	.0334	5.99	-
20	12.33	32.89	24.91	305.9	.0648	5.98	-
30	10.80	33.04	25.31	268.4	.0936	5.88	-
50	9.43	33.38	25.80	221.6	.1429	4.77	-
75	9.21	33.47	25.91	212.1	.1974	4.26	-
100	8.56	33.70	26.19	185.4	.2474	3.81	-
150	8.32	34.00	26.46	160.6	.334	2.66	-
200	8.12	34.19	26.64	144.3	.411	2.01	-
250	7.83	34.26	26.74	135.8	.482	1.68	-
300	7.37	34.28	26.82	128.5	.548	1.48	-
400	6.58	34.32	26.96	116.2	.672	1.12	-
500	5.96	34.26	27.00	114.0	.788	.68	-
600	5.36	34.38	27.16	98.7	.895	.43	-
700	4.85	34.44	27.27	88.8	.990	.35	-

## STATION 63.57 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 37°12'N 123°00'W January 29, 1951 0715 GCT Wire angle: 0°  
 Sounding: 260 fms. Depth of observation: 397 m. Weather: intermittent light  
 drizzle Sea: indistinguishable Wind: 330°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	10 <sup>5</sup> $\delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.42	32.99	24.77	318.3	.0000	6.02	-
10	13.40	32.93	24.73	322.8	.0322	6.00	-
20	13.41	32.92	24.72	324.0	.0647	6.00	-
30	13.43	32.93	24.72	323.8	.0972	5.96	-
50	11.70	33.01	25.12	286.5	.1585	5.70	-
75	9.10	33.33	25.82	220.5	.2222	5.00	-
100	8.70	33.69	26.16	188.3	.2737	3.88	-
150	8.34	34.02	26.47	159.3	.361	3.82	-
200	7.60	34.02	26.58	149.4	.439	2.50	-
250	7.02	34.13	26.75	134.2	.510	2.40	-
300	7.10	34.26	26.84	126.3	.576	1.38	-
400	(6.40)	(34.29)	26.96	116.2	.698	(.97)	-

## STATION 63.67 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 36°49'N 123°41'W January 29, 1951 0046 GCT Wire angle: 5°  
 Sounding: 1,900 fms. Depth of observation: 1,186 m. Weather: overcast  
 Sea: rough Wind: 330°, force 4

0	13.40	33.08	24.85	311.5	.0000	5.82	-
10	13.42	33.03	24.81	315.7	.0315	5.47	-
20	13.40	33.01	24.79	317.1	.0633	5.68	-
30	13.38	33.02	24.81	316.3	.0951	5.72	-
50	12.20	33.15	25.14	284.9	.1555	5.30	-
75	9.65	33.43	25.81	221.6	.2192	4.47	-
100	8.93	33.70	26.13	191.2	.2711	3.98	-
150	8.05	33.98	26.49	158.1	.359	2.99	-
200	7.62	34.20	26.72	136.4	.433	1.85	-
250	7.06	34.18	26.79	131.0	.500	1.75	-
300	6.50	34.18	26.86	124.1	.565	1.63	-
400	5.90	34.31	27.04	108.2	.682	.82	-
500	5.50	34.33	27.11	102.8	.788	.52	-
600	5.09	34.38	27.20	95.2	.888	.35	-
700	4.74	34.46	27.30	86.1	.980	.35	-
800	4.38	34.55	27.41	76.2	1.062	.35	-
1000	3.70	34.63	27.54	64.1	1.204	.47	-

## STATION 67.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 36°39'N 122°26'W January 28, 1951 1057 GCT Wire angle: 16°  
 Sounding: 1,260 fms. Depth of observation: 1,143 m. Weather: cloudy  
 Sea: moderate Wind: 330°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.93	32.99	24.67	328.3	.0000	5.77	-
10	13.91	33.02	24.70	326.0	.0329	5.61	-
20	13.93	33.03	24.70	326.0	.0656	5.65	-
30	13.95	33.03	24.70	326.6	.0983	5.73	-
50	12.25	33.01	25.02	296.4	.1610	5.64	-
75	9.65	33.18	25.61	240.1	.2284	5.25	-
100	9.73	33.70	26.00	203.4	.2842	4.73	-
150	8.98	34.01	26.37	169.7	.378	2.75	-
200	8.43	34.13	26.55	153.2	.459	2.43	-
250	8.02	34.14	26.62	147.4	.535	1.98	-
300	7.65	34.15	26.68	142.2	.608	1.48	-
400	6.74	34.34	26.96	117.0	.739	.99	-
500	6.08	34.38	27.08	106.5	.851	.64	-
600	5.52	34.49	27.23	92.6	.952	.42	-
700	5.04	34.51	27.30	86.1	1.042	.40	-
800	4.63	34.53	27.37	80.6	1.126	.45	-
1000	3.86	34.58	27.49	69.6	1.278	.53	-

## STATION 67.65 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 36°15'N 123°14'W January 28, 1951 1744 GCT Wire angle: 3°  
 Sounding: 1,812 fms. Depth of observation: 1,172 m. Weather: overcast  
 Sea: rough Wind: 310°, force 1

0	14.22	32.94	24.57	337.8	.0000	5.30	-
10	14.18	33.03	24.66	329.9	.0335	5.48	-
20	14.20	33.00	24.62	333.4	.0668	5.60	-
30	14.20	32.98	24.61	335.3	.1004	5.62	-
50	14.19	32.97	24.60	336.2	.1679	5.53	-
75	12.50	33.03	24.99	299.9	.2478	5.40	-
100	9.88	33.10	25.51	250.2	.3170	5.44	-
150	8.87	33.76	26.19	186.5	.427	3.86	-
200	8.20	34.03	26.50	157.3	.514	3.38	-
250	7.59	34.10	26.65	144.2	.589	3.02	-
300	7.00	34.14	26.76	133.9	.660	2.68	-
400	6.03	34.20	26.94	117.8	.786	1.30	-
500	5.70	34.37	27.11	102.5	.898	.58	-
600	5.20	34.50	27.28	87.7	.994	.37	-
700	4.83	34.50	27.32	84.1	1.080	.43	-
800	4.50	34.52	27.37	79.7	1.163	.50	-
1000	3.83	34.59	27.50	68.5	1.313	.53	-

## STATION 70.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 36°03'N 122°02'W January 28, 1951 0407 GCT Wire angle: 15°  
 Sounding 800 fms. Depth of observation: 1,156 m. Weather: overcast  
 Sea: rough Wind: 320°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	11.63	33.24	25.31	267.3	.0000	6.27	-
10	11.30	33.25	25.38	260.9	.0265	6.17	-
20	11.30	33.27	25.40	259.7	.0527	5.85	-
30	10.30	33.35	25.64	237.2	.0776	5.36	-
50	9.65	33.62	25.95	207.3	.1223	3.92	-
75	9.34	33.75	26.11	193.1	.1726	3.27	-
100	8.84	33.84	26.26	179.3	.2194	3.25	-
150	8.53	34.09	26.50	157.1	.304	2.65	-
200	8.15	34.21	26.65	143.2	.380	2.02	-
250	7.70	34.23	26.74	136.2	.450	1.76	-
300	7.23	34.23	26.80	130.3	.517	1.48	-
400	6.46	34.27	26.94	118.4	.643	.88	-
500	5.92	34.38	27.10	104.5	.755	.63	-
600	5.33	34.40	27.18	96.8	.857	.49	-
700	4.84	34.49	27.31	85.0	.948	.45	-
800	4.46	34.59	27.43	74.0	1.029	.47	-
1000	3.83	34.69	27.58	61.2	1.165	.65	-

## STATION 70.60 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 35°53'N 122°23'W January 27, 1951 2332 GCT Wire angle: 9°  
 Sounding: 1,664 fms. Depth of observation: 1,254 m. Weather: continuous  
 moderate rain Sea: rough Wind: 290°, force 1

0	11.45	33.17 *	25.29	269.3	.0000	6.17	-
10	11.24	33.15 *	25.31	267.2	.0269	6.10	-
20	11.18	33.18 *	25.35	264.3	.0536	6.08	-
30	11.12	33.25 *	25.41	258.4	.0799	6.07	-
50	10.20	33.45 *	25.73	228.5	.1288	5.50	-
75	9.65	33.75 *	26.06	198.1	.1824	3.50	-
100	9.25	33.92 *	26.25	179.6	.2299	2.94	-
150	8.64	34.12 *	26.51	156.5	.315	2.44	-
200	8.15	34.19 *	26.64	144.8	.390	2.03	-
250	7.73	34.22 *	26.72	137.4	.462	1.67	-
300	7.32	34.24 *	26.80	130.9	.529	1.33	-
400	6.22	34.31 *	27.00	112.2	.652	.93	-
500	5.62	34.40 *	27.15	99.2	.758	.62	-
600	5.23	34.41 *	27.20	94.8	.856	.36	-
700	4.76	34.43 *	27.27	88.4	.949	.35	-
800	4.39	34.49 *	27.36	80.7	1.034	.36	-
1000	3.85	34.59 *	27.50	68.9	1.185	.51	-

\*Sequence of salinity bottles uncertain

## STATION 70.70 (Interpolated Values at Standard Depths)

N.B SCOFIELD: 35°28'N 123°07'W January 27, 1951 1550 GCT Wire angle: 15°  
Sounding: 2,080 fms. Depth of observation: 1,156 m. Weather: overcast  
Sea: rough Wind: 320°, force 2

Depth (m)	T (°C)	S (%)	$\bar{\sigma}_t$ (mg/cm <sup>3</sup> )	$10^5 \sigma$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	12.75	33.28	25.13	284.4	.0000	5.63	-
10	12.75	33.29	25.14	283.9	.0285	6.25	-
20	12.75	33.25	25.11	287.1	.0572	6.02	-
30	11.65	33.24	25.31	268.2	.0851	5.93	-
50	11.40	33.47	25.53	247.4	.1369	5.74	-
75	10.40	33.70	25.89	214.0	.1949	4.05	-
100	9.38	33.82	26.15	189.0	.2456	3.23	-
150	8.50	34.02	26.45	161.7	.334	2.68	-
200	8.15	34.24	26.68	141.1	.410	2.29	-
250	7.73	34.30	26.78	131.4	.479	1.76	-
300	7.27	34.34	26.88	122.7	.543	1.28	-
400	6.60	34.40	27.02	110.6	.660	.94	-
500	5.87	34.45	27.16	98.6	.766	.71	-
600	5.34	34.46	27.23	92.4	.862	.41	-
700	4.89	34.53	27.34	82.5	.951	.40	-
800	4.45	34.56	27.41	76.1	1.031	.40	-
1000	3.81	34.59	27.50	68.6	1.177	.52	-

## STATION 70.80 (Interpolated Values at Standard Depth)

N.B. SCOFIELD: 35°10'N 123°49'W January 27, 1951 0812 GCT Wire angle: 38°  
Sounding: 2,200 fms. Depth of observation: 862 m. Weather: light fog  
Sea: missing Wind: 320°, force 4

0	14.05	32.99	24.65	330.7	.0000	5.73	-
10	14.05	32.98	24.64	331.8	.0333	5.56	-
20	14.10	33.03	24.67	329.2	.0664	5.78	-
30	14.10	32.97	24.62	333.9	.0997	5.77	-
50	11.07	32.96	25.20	279.0	.1613	5.44	-
75	9.52	33.01	25.50	251.0	.2280	5.62	-
100	8.78	33.40	25.92	211.0	.2861	4.75	-
150	7.95	33.96	26.49	158.1	.379	3.98	-
200	7.67	34.12	26.65	143.0	.455	3.01	-
250	7.32	34.21	26.77	132.4	.524	2.27	-
300	6.63	34.21	26.87	123.6	.589	1.98	-
400	5.57	34.16	26.96	115.2	.709	1.42	-
500	4.81	34.25	27.13	100.5	.818	.92	-
600	4.44	34.40	27.29	85.9	.912	.64	-
700	4.25	34.51	27.39	76.5	.994	.46	-
800	4.08	34.56	27.45	71.9	1.069	.35	-
1000	(3.77)	(34.54)	(27.46)	(71.4)	(1.214)	-	-



## STATION 70.90 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 34°53'N 124°30'W January 27, 1951 0127 GCT Wire angle: 20°  
 Sounding: 2,260 fms. Depth of observation: 1,142 m. Weather: overcast  
 Sea: indistinguishable Wind: 310°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	14.66	33.13	24.63	332.5	.0000	5.52	-
10	15.00	33.00	24.45	349.3	.0342	5.65	-
20	14.00	32.82	24.53	342.7	.0690	5.75	-
30	13.54	32.77	24.58	337.7	.1031	5.77	-
50	13.28	32.74	24.61	335.2	.1708	5.68	-
75	12.77	32.80	24.76	322.0	.2534	5.75	-
100	9.80	33.05	25.49	252.6	.3257	5.25	-
150	8.53	33.64	26.15	190.3	.437	3.98	-
200	7.82	34.00	26.54	154.0	.524	3.39	-
250	7.22	34.15	26.74	135.3	.597	2.86	-
300	6.68	34.21	26.86	124.3	.662	2.34	-
400	5.95	34.24	26.98	114.2	.782	1.14	-
500	5.46	34.32	27.11	103.0	.892	.55	-
600	4.95	34.44	27.26	89.0	.989	.43	-
700	4.68	34.52	27.35	80.8	1.074	.40	-
800	4.41	34.59	27.44	73.6	1.152	.41	-
1000	3.78	34.66	27.56	62.6	1.290	.54	-

## STATION 73.51 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 35°35.5'N 121°20'W January 24, 1951 1306 GCT Wire angle: 4°  
 Sounding: 160 fms. Depth of observation: 250 m. Weather: clear.  
 Sea: rough Wind: 240°, force 1

0	11.34	33.19	25.33	265.7	.0000	6.17	-
10	10.96	33.35	25.52	247.7	.0258	5.78	-
20	10.80	33.44	25.62	238.5	.0502	5.20	-
30	10.60	33.52	25.71	229.6	.0737	4.55	-
50	10.16	33.69	25.92	210.1	.1179	4.05	-
75	9.68	33.87	26.14	189.6	.1681	3.17	-
100	9.30	33.93	26.25	179.6	.2146	2.97	-
150	8.72	34.08	26.46	160.7	.300	2.35	-
200	8.21	34.22	26.65	143.4	.377	1.88	-
250	8.02	34.22	26.68	141.5	.449	1.69	-

## STATION 73.61 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 35°18'N 122°05'W January 24, 1951 1910 GCT Wire angle: 3°  
 Sounding: 1,500 fms. Depth of observation: 1,184 m. Weather: clear  
 Sea: rough Wind: 270°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	12.00	32.94	25.01	296.0	.0000	6.63	-
10	11.95	32.94	25.02	295.2	.0297	6.35	-
20	11.70	32.99	25.11	287.3	.0589	5.98	-
30	11.37	33.08	25.24	275.2	.0872	5.60	-
50	9.96	33.29	25.65	236.3	.1386	5.32	-
75	8.91	33.48	25.96	206.7	.1943	4.70	-
100	8.89	33.70	26.14	190.5	.2442	3.75	-
150	8.71	34.09	26.47	159.7	.332	2.40	-
200	8.17	34.17	26.62	146.6	.410	2.11	-
250	7.68	34.23	26.74	135.7	.481	1.85	-
300	7.32	34.29	26.84	127.1	.547	1.45	-
400	6.50	34.34	26.99	113.7	.668	.96	-
500	5.79	34.36	27.09	104.4	.778	.76	-
600	5.26	34.44	27.22	92.9	.878	.41	-
700	4.71	34.49	27.33	83.5	.967	.38	-
800	4.40	34.52	27.38	78.5	1.049	.39	-
1000	3.89	34.56	27.47	71.4	1.200	.62	-

## STATION 77.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 34°57'N 121°20'W January 24, 1951 0615 GCT Wire angle: 5°  
 Sounding: 240 fms. Depth of observation 397 m. Weather: clear  
 Sea: very rough Wind: 360°, force 3

0	13.18	33.30	25.06	291.0	.0000	5.96	-
10	13.17	33.24	25.02	295.7	.0295	5.59	-
20	13.18	33.32	25.08	290.2	.0589	5.85	-
30	13.13	33.33	25.09	288.8	.0879	5.89	-
50	12.56	33.33	25.21	278.4	.1449	5.79	-
75	10.65	33.55	25.73	229.2	.2087	4.53	-
100	9.76	33.69	25.99	204.7	.2633	4.02	-
150	8.96	34.04	26.39	167.2	.357	2.79	-
200	8.47	34.05	26.48	159.9	.439	2.18	-
250	7.96	34.29	26.74	135.5	.514	1.78	-
300	7.74	34.29	26.78	133.1	.581	1.52	-
400	(6.83)	(34.40)	26.99	114.0	.706	(.82)	-

## STATION 77.65 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 34°34'N 121°55'W January 25, 1951 0137 GCT Wire  
 angle: 8° Sounding: 2,080 fms. Depth of observation: 1,181 m. Weather:  
 clear Sea: very rough Wind: 310°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg.cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.78	33.27	24.92	304.8	.0000	5.90	-
10	13.58	33.21	24.91	305.6	.0306	5.72	-
20	13.59	33.22	24.92	305.2	.0613	5.38	-
30	13.59	33.26	24.95	302.6	.0918	5.21	-
50	11.50	33.37	25.44	256.4	.1480	5.13	-
75	9.58	33.49	25.86	216.2	.2074	3.96	-
100	8.97	33.73	26.15	189.3	.2584	3.43	-
150	8.18	34.15	26.60	147.2	.343	2.97	-
200	7.67	34.18	26.70	138.6	.415	1.73	-
250	7.07	34.20	26.80	129.6	.483	1.67	-
300	6.54	34.23	26.90	121.0	.546	1.62	-
400	5.79	34.31	27.06	106.7	.661	.61	-
500	5.30	34.28	27.09	104.0	.767	.39	-
600	5.02	34.48	27.28	87.1	.863	.30	-
700	4.73	34.50	27.33	83.0	.949	.34	-
800	4.39	34.52	27.38	78.4	1.031	.42	-
1000	3.79	34.63	27.54	65.1	1.176	.55	-

## STATION 80.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 34°19'N 120°48'W January 23, 1951 2151 GCT Wire  
 angle: 8°, Sounding: 400 fms. Depth of observation 692 m. Weather:  
 partly cloudy Sea: high Wind: 320°, force 6

0	11.20	33.57	25.65	235.4	.0000	5.35	-
10	11.19	33.58	25.66	234.7	.0236	5.47	-
20	11.15	33.70	25.76	225.4	.0467	5.10	-
30	11.09	33.74	25.80	221.7	.0691	4.65	-
50	10.25	33.77	25.97	205.6	.1121	3.67	-
75	9.52	33.88	26.18	186.5	.1614	3.22	-
100	9.04	34.05	26.39	166.9	.2058	2.80	-
150	8.67	34.22	26.58	149.4	.285	2.27	-
200	8.34	34.27	26.67	141.7	.359	1.53	-
250	7.87	34.28	26.75	135.1	.428	1.33	-
300	7.58	34.32	26.82	128.7	.495	1.33	-
400	6.75	34.34	26.95	117.2	.619	.79	-
500	6.34	34.47	27.11	103.5	.730	.52	-
600	5.80	34.51	27.21	94.7	.830	.48	-
700	(5.17)	(34.49)	27.27	89.1	.923	(.41)	-

## STATION 80.60 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 34°09'N 121°09'W January 25, 1951 0811 GCT Wire  
 angle: 8°, Sounding: 1,186 fms. Depth of observation: 984 m. Weather:  
 clear Sea: rough Wind: 270°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	11.84	33.64	25.58	241.5	.0000	5.85	-
10	11.74	33.57	25.55	244.9	.0244	5.74	-
20	11.66	33.61	25.59	240.9	.0488	4.52	-
30	11.60	33.67	25.65	235.7	.0727	4.23	-
50	10.60	33.71	25.86	215.8	.1181	3.85	-
75	9.75	33.82	26.09	194.5	.1697	3.33	-
100	9.13	33.89	26.25	180.1	.2168	2.93	-
150	8.62	34.18	26.56	151.7	.300	2.12	-
200	7.82	34.22	26.71	137.8	.373	1.78	-
250	7.32	34.27	26.82	127.9	.440	1.51	-
300	6.88	34.29	26.90	121.1	.503	1.24	-
400	6.18	34.27	26.97	114.8	.622	.79	-
500	5.69	34.38	27.12	101.7	.731	.45	-
600	5.24	34.40	27.19	95.8	.831	.44	-
700	4.91	34.42	27.25	91.1	.925	.45	-
800	4.57	34.46	27.32	84.9	1.014	.46	-
1000	(3.91)	(34.60)	27.50	68.7	1.169	(.62)	-

## STATION 80.70 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°47.5'N 121°49'W January 25, 1951 1504 GCT Wire  
 angle: 5°, Sounding: 2,000 fms. Depth of observation: 981 m. Weather:  
 overcast Sea: very rough Wind: 310°, force 1

0	13.65	33.40	25.04	292.7	.0000	6.10	-
10	13.73	33.31	24.96	301.3	.0298	6.41	-
20	13.73	33.33	24.97	300.0	.0600	6.37	-
30	13.68	33.35	25.00	297.8	.0900	6.10	-
50	13.35	33.37	25.08	290.4	.1491	5.53	-
75	10.41	33.04	25.37	263.1	.2187	5.20	-
100	9.65	33.47	25.84	219.3	.2794	4.43	-
150	8.70	33.85	26.29	177.2	.379	3.38	-
200	8.08	34.07	26.55	152.7	.462	2.25	-
250	7.47	34.17	26.72	137.5	.535	1.83	-
300	6.78	34.20	26.84	126.5	.602	1.43	-
400	5.84	34.22	26.98	114.2	.723	.88	-
500	5.53	34.32	27.09	104.1	.833	.51	-
600	5.05	34.43	27.24	91.1	.932	.41	-
700	4.64	34.49	27.33	82.6	1.019	.40	-
800	4.32	34.55	27.42	75.5	1.099	.41	-
1000	(3.79)	(34.60)	27.51	67.3	1.244	(.66)	-

## STATION 80.80 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°25'N 122°30'W January 25, 1951 2119 GCT Wire  
 angle: 1°, Sounding: 2,400 fms. Depth of observations: 1,190 m.  
 Weather: cloudy Sea: rough Wind: 270°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	15.10	33.26	24.63	332.2	.0000	5.62	-
10	14.96	33.19	24.61	334.7	.0335	5.80	-
20	14.87	33.19	24.63	332.9	.0670	5.80	-
30	14.81	33.19	24.64	332.0	.1004	5.70	-
50	14.32	33.19	24.74	322.6	.1662	5.45	-
75	12.50	33.15	25.08	291.2	.2433	5.42	-
100	10.38	33.10	25.43	258.3	.3124	5.14	-
150	9.75	33.40	25.77	227.0	.435	4.57	-
200	8.25	34.04	26.50	157.3	.531	3.20	-
250	7.52	34.06	26.63	146.1	.608	2.28	-
300	6.88	34.08	26.73	136.8	.679	1.73	-
400	5.86	34.30	27.04	108.5	.803	1.00	-
500	5.57	34.39	27.15	99.3	.908	.53	-
600	4.93	34.42	27.25	90.4	1.003	.36	-
700	4.41	34.50	27.37	79.2	1.089	.35	-
800	4.15	34.59	27.46	70.5	1.164	.35	-
1000	3.77	34.63	27.54	65.0	1.301	.67	-

## STATION 80.90 (Interpolated values at Standard Depths)

N.B. SCOFIELD: 33°09'N 123°13'W January 26, 1951 0508 GCT Wire  
 angle: 16°, Sounding: 2,400 fms. Depth of observation: 1,175 m.  
 Weather: overcast Sea: missing Wind: 320°, force 3

0	14.54	33.21	24.71	324.5	.0000	5.88	-
10	14.54	33.17	24.68	327.8	.0328	5.54	-
20	14.30	33.20	24.76	320.8	.0653	6.01	-
30	11.75	33.28	25.32	267.0	.0948	5.98	-
50	11.65	33.40	25.43	256.8	.1475	5.35	-
75	9.80	33.40	25.76	226.4	.2082	4.40	-
100	8.82	33.63	26.10	194.5	.2599	3.58	-
150	8.25	33.99	26.46	160.4	.349	2.69	-
200	7.58	34.23	26.75	133.7	.423	2.32	-
250	6.96	34.23	26.84	126.0	.489	2.03	-
300	6.57	34.22	26.89	122.0	.551	1.76	-
400	5.83	34.27	27.02	110.4	.668	1.11	-
500	5.37	34.39	27.17	96.7	.773	.61	-
600	5.00	34.30	27.14	100.6	.872	.38	-
700	4.56	34.47	27.33	83.0	.965	.38	-
800	4.23	34.57	27.44	72.8	1.044	.45	-
1000	3.67	34.59	27.51	66.6	1.184	.59	-

## STATION 83.55 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°44'N 120°24.5'W January 22, 1951 1259 GCT  
 Wire angle: 35° Sounding: 380 fms. Depth of observation: 653 m.  
 Weather: cloudy Sea: very rough Wind: 300°, force 6

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	12.26	33.46	25.37	262.2	.0000	5.65	-
10	12.27	33.35	25.28	270.7	.0268	5.40	-
20	12.25	33.43	25.34	264.8	.0536	4.96	-
30	12.21	33.46	25.38	262.0	.0801	5.08	-
50	12.06	33.51	25.44	256.1	.1322	5.32	-
75	10.45	33.52	25.74	228.7	.1931	4.87	-
100	9.57	33.57	25.93	210.6	.2484	3.69	-
150	8.97	34.01	26.37	169.5	.344	2.93	-
200	8.34	34.21	26.62	146.1	.424	2.32	-
250	7.63	34.24	26.75	134.5	.494	1.86	-
300	7.17	34.30	26.86	124.4	.559	1.50	-
400	6.65	34.40	27.02	111.3	.678	.62	-
500	6.10	34.48	27.15	99.5	.785	.46	-
600	5.59	34.50	27.23	92.6	.881	.40	-

## STATION 83.60 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°34'N 120°45'W January 22, 1951 0725 GCT  
 Wire angle: 10° Sounding: 1,000 fms. Depth of observation: 1,245 m.  
 Weather: partly cloudy Sea: rough Wind: 350°, force 4

0	12.60	33.42	25.27	271.4	.0000	5.48	-
10	12.05	33.50	25.44	255.7	.0265	5.38	-
20	12.06	33.42	25.37	262.0	.0525	5.28	-
30	12.05	33.42	25.37	262.1	.0788	5.15	-
50	11.35	33.57	25.62	239.1	.1291	4.87	-
75	9.85	33.48	25.81	221.1	.1870	4.46	-
100	9.13	33.65	26.06	197.8	.2397	3.50	-
150	8.39	33.99	26.45	162.2	.330	2.88	-
200	7.99	34.24	26.70	138.7	.406	2.43	-
250	7.52	34.26	26.78	131.5	.474	1.91	-
300	6.97	34.23	26.84	126.7	.539	1.41	-
400	6.36	34.36	27.02	110.5	.659	.58	-
500	5.92	34.44	27.14	100.0	.765	.38	-
600	5.40	34.50	27.25	90.3	.861	.37	-
700	4.98	34.54	27.33	83.1	.948	.40	-
800	4.55	34.57	27.41	76.6	1.029	.45	-
1000	3.87	34.62	27.52	66.9	1.174	.56	-

## STATION 83.70 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°14'N 121°27'W January 21, 1951 0019 GCT Wire angle: 24°  
 Sounding: 1,700 fms. Depth of observation: 1,088 m. Weather: partly cloudy  
 Sea: rough Wind: 330°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^2\delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	13.76	33.03	24.74	322.0	.0000	5.65	-
10	13.75	33.24	24.90	306.8	.0316	5.38	-
20	13.68	33.24	24.91	305.7	.0623	5.37	-
30	13.65	33.24	24.92	305.3	.0930	5.33	-
50	13.60	33.31	24.98	299.6	.1538	5.06	-
75	10.27	32.97	25.34	265.7	.2248	4.93	-
100	9.58	33.45	25.83	219.6	.2859	4.04	-
150	8.55	33.84	26.30	176.8	.386	3.12	-
200	7.98	33.86	26.40	166.7	.472	2.59	-
250	7.57	34.02	26.59	150.0	.552	2.02	-
300	6.63	34.17	26.84	126.8	.622	1.59	-
400	6.15	34.36	27.05	107.8	.740	.85	-
500	5.82	34.49	27.19	95.2	.842	.40	-
600	5.22	34.50	27.28	87.9	.935	.34	-
700	4.75	34.47	27.31	85.4	1.022	.28	-
800	4.37	34.56	27.42	75.3	1.103	.38	-
1000	3.83	34.67	27.56	62.6	1.243	.51	-

## STATION 83.80 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°00'N 122°20'W January 21, 1951 1637 GCT Wire  
 angle: 12° Sounding: 2,200 fms. Depth of observation: 1,161 m.  
 Weather: cloudy Sea: very rough Wind: 020°, force 3

0	14.78	33.15	24.62	333.5	.0000	5.23	-
10	14.75	32.99	24.50	345.0	.0340	5.35	-
20	14.61	32.99	24.53	342.4	.0686	5.15	-
30	14.57	33.12	24.63	333.0	.1025	5.10	-
50	14.57	33.25	24.74	323.2	.1684	5.27	-
75	13.80	33.23	24.88	310.1	.2480	5.26	-
100	10.97	32.99	25.24	276.2	.3218	4.93	-
150	9.35	33.56	25.96	208.7	.444	3.80	-
200	8.61	33.86	26.31	176.0	.541	2.98	-
250	7.96	34.03	26.54	154.7	.624	2.58	-
300	7.39	34.16	26.73	137.7	.698	2.28	-
400	6.53	34.32	26.97	115.7	.826	1.92	-
500	5.92	34.39	27.10	103.8	.936	.79	-
600	5.34	34.43	27.20	94.7	1.036	.42	-
700	4.84	34.43	27.26	89.5	1.129	.48	-
800	4.41	34.42	27.30	86.2	1.218	.54	-
1000	3.72	34.44	27.39	78.4	1.384	.65	-

## STATION 83.90 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 32°34.5'N 122°48'W January 21, 1951 0923 GCT Wire  
 angle: 5° Sounding: 2,100 fms. Depth of observation: 1,186 m.  
 Weather: cloudy Sea: high Wind: 280°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \sigma$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.56	33.18	24.47	347.4	.0000	-	--
10	15.56	33.24	24.52	343.4	.0347	-	-
20	15.25	33.20	24.55	340.3	.0690	-	-
30	15.04	33.10	24.52	343.5	.1033	5.55	-
50	14.78	33.12	24.59	337.0	.1717	5.60	-
75	11.43	33.05	25.20	279.3	.2492	5.39	-
100	9.62	32.95	25.44	257.3	.3167	5.22	-
150	8.88	33.60	26.06	198.6	.431	3.98	-
200	8.22	33.89	26.39	168.1	.524	3.63	-
250	7.65	33.99	26.55	153.2	.605	2.90	-
300	7.09	34.05	26.68	141.7	.679	2.00	-
400	5.86	34.11	26.89	122.5	.812	1.30	-
500	5.27	34.22	27.05	108.1	.928	.98	-
600	4.75	34.31	27.18	96.4	1.032	.49	-
700	4.58	34.38	27.25	89.9	1.126	.54	-
800	4.40	34.43	27.31	85.3	1.214	.61	-
1000	3.79	34.49	27.42	75.4	1.377	.89	-

## STATION 87.35 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°50.0'N 118°37.5'W January 19, 1951 0506 GCT Wire  
 angle: 5° Sounding: 200 fms. Depth of observation: 295 m.  
 Weather: overcast Sea: moderate Wind: 200°, force 1

0	12.96	33.33	25.13	284.6	.0000	5.52	-
10	12.96	33.33	25.13	284.9	.0286	5.59	-
20	12.94	33.35	25.15	283.5	.0571	5.52	-
30	11.78	33.44	25.44	255.9	.0842	4.98	-
50	10.62	33.57	25.75	226.7	.1327	3.87	-
75	10.05	33.68	25.93	209.7	.1876	3.43	-
100	9.67	33.79	26.08	195.8	.2386	3.22	-
150	8.94	34.08	26.43	163.9	.329	2.25	-
200	8.51	34.27	26.64	144.3	.407	1.85	-
250	8.30	34.22	26.64	145.7	.480	1.49	-
300	(7.70)	(34.35)	(26.83)	(127.9)	(.549)	(1.12)	-



## STATION 87.40 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°40.0'N 118°58.5'W January 19, 1951 1149 GCT Wire  
 angle: 7° Sounding: 437 fms. Depth of observation: 697 m. Weather:  
 light intermittent drizzle Sea: rough Wind: 220°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	13.44	33.40	25.09	288.7	.0000	(5.73)	-
10	13.44	33.40	25.09	289.0	.0290	5.73	-
20	13.37	33.40	25.10	287.9	.0580	5.47	-
30	12.80	33.40	25.22	277.2	.0863	5.23	-
50	10.60	33.52	25.71	230.0	.1373	4.95	-
75	10.05	33.66	25.92	211.2	.1928	4.64	-
100	9.67	33.80	26.09	195.1	.2439	3.64	-
150	8.99	34.03	26.38	168.2	.335	3.23	-
200	8.72	34.16	26.53	155.6	.417	2.63	-
250	8.28	34.25	26.66	143.2	.492	2.05	-
300	7.71	34.20	26.71	139.4	.563	2.23	-
400	7.04	34.33	26.91	122.0	.695	1.00	-
500	6.23	34.36	27.04	110.1	.812	1.26	-
600	5.62	34.44	27.18	97.4	.917	1.09	-
700	(3.27)	(34.49)	(27.26)	(90.5)	(1.011)	(.96)	-

## STATION 87.50 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°20.0'N 119°39.5'W January 19, 1951 1839 GCT Wire  
 angle: 5° Sounding: 40 fms. Depth of observation: 50 m. Weather:  
 partly cloudy Sea: very rough Wind: 270°, force 4

0	12.10	33.37	25.33	266.0	.0000	-	-
10	12.07	33.37	25.33	265.9	.0267	-	-
20	11.98	33.33	25.32	267.3	.0535	-	-
30	11.82	33.34	25.36	263.9	.0801	-	-
50	10.62	33.58	25.76	225.9	.1294	-	-

## STATION 87.60 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 33°00.0'N 120°21.5'W January 20, 1951 0155 GCT Wire angle: 14° Sounding: 670 fms. Depth of observation: 859 m. Weather: cloudy Sea: high Wind: 300°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	13.85	33.15	24.81	315.0	.0000	5.68	-
10	13.86	33.15	24.81	315.4	.0317	5.72	-
20	13.83	33.13	24.80	316.5	.0634	5.48	-
30	13.78	32.91	24.64	332.0	.0959	5.20	-
50	13.25	32.89	24.73	323.7	.1618	4.95	-
75	10.41	32.95	25.31	269.4	.2364	4.65	-
100	9.74	33.27	25.67	235.4	.2999	3.00	-
150	8.98	33.79	26.20	186.0	.406	2.41	-
200	8.08	33.90	26.42	165.3	.494	2.33	-
250	7.57	34.03	26.60	149.1	.574	1.96	-
300	7.22	34.13	26.72	137.6	.646	1.40	-
400	6.51	34.24	26.91	121.2	.776	.68	-
500	5.88	34.29	27.03	110.7	.893	.48	-
600	5.39	34.32	27.11	103.5	1.001	.39	-
700	5.09	34.35	27.17	98.5	1.103	.37	-
800	4.90	34.38	27.22	95.0	1.201	.37	-
1000	(4.59)	(34.45)	(27.31)	(87.9)	(1.386)	-	-

## STATION 87.70 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 32°37.0'N 121°02.0'W January 20, 1951 1057, 1143 GCT Wire angles: 10°, 5° Sounding: 2,000 fms. Depths of observation: 208, 1,261 m. Weather: cloudy Sea: high Wind: 290°, force 5

0	14.02	33.49	25.04	293.5	.0000	6.02	-
10	14.04	33.37	24.94	303.0	.0299	6.02	-
20	13.98	33.20	24.82	314.6	.0609	5.80	-
30	13.84	33.11	24.78	318.6	.0927	5.64	-
50	12.97	33.08	24.94	304.2	.1553	5.39	-
75	10.25	33.01	25.38	262.5	.2266	5.25	-
100	9.52	33.21	25.66	236.3	.2893	4.88	-
150	8.74	33.71	26.17	188.3	.396	3.54	-
200	8.18	34.00	26.48	159.4	.484	2.35	-
250	7.57	34.06	26.62	146.9	.561	1.97	-
300	6.92	34.08	26.73	137.2	.633	1.77	-
400	6.52	34.20	26.88	124.3	.764	.91	-
500	5.93	34.27	27.01	112.9	.884	.38	-
600	5.46	34.34	27.12	102.9	.993	.31	-
700	5.07	34.38	27.20	96.1	1.093	.28	-
800	4.63	34.41	27.27	89.5	1.187	.32	-
1000	3.92	34.47	27.39	78.4	1.357	.45	-

## STATION 87.80 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 32°22.0'N 121°45.0'W January 20, 1951 1914 GCT  
 Wire angle: 11° Sounding: 2,200 fms. Depth of observation: 1,166 m.  
 Weather: cloudy Sea: very rough Wind: 280°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	15.12	33.44	24.76	319.4	.0000	5.28	-
10	15.12	33.42	24.75	321.1	.0322	4.90	-
20	15.12	33.43	24.76	320.5	.0644	5.08	-
30	15.12	33.44	24.77	320.1	.0965	5.12	-
50	15.10	33.40	24.74	323.2	.1612	5.08	-
75	14.83	33.40	24.80	318.5	.2418	4.94	-
100	10.45	33.21	25.50	251.4	.3135	4.75	-
150	8.58	33.70	26.19	186.6	.424	3.85	-
200	8.29	34.05	26.51	157.2	.510	3.17	-
250	7.52	34.09	26.65	143.8	.586	2.52	-
300	6.82	34.12	26.77	133.0	.656	1.95	-
400	5.97	34.24	26.98	114.3	.780	.99	-
500	5.60	34.35	27.11	102.7	.890	.49	-
600	5.32	34.44	27.22	93.7	.989	.33	-
700	4.88	34.50	27.32	84.7	1.079	.37	-
800	4.52	34.56	27.40	77.1	1.161	.38	-
1000	3.98	(34.63)	(27.52)	(67.2)	(1.307)	(.51)	-

## STATION 87.90 (Interpolated Values at Standard Depths)

N.B. SCOFIELD: 31°59'N 122°24'W January 21, 1951 0228 GCT  
 Wire angle: 10° Sounding: 2,300 fms. Depth of observation: 1,047 m.  
 Weather: cloudy Sea: very rough Wind: 250°, force 2

0	15.47	33.33	24.61	334.5	.0000	5.77	-
10	15.49	33.33	24.60	335.3	.0336	5.22	-
20	15.47	33.20	24.51	344.6	.0678	5.02	-
30	15.45	33.19	24.50	345.3	.1024	4.97	-
50	15.25	33.21	24.56	340.4	.1713	4.96	-
75	11.45	33.28	25.38	262.8	.2471	4.65	-
100	9.92	33.47	25.79	223.4	.3083	4.30	-
150	8.80	33.89	26.30	175.9	.409	3.64	-
200	8.18	34.12	26.58	150.4	.491	2.43	-
250	7.68	34.16	26.68	141.0	.564	1.98	-
300	7.06	34.17	26.98	132.5	.633	1.82	-
400	5.87	34.23	27.08	113.8	.757	1.03	-
500	5.22	34.33	27.14	99.5	.865	.52	-
600	4.79	34.45	27.29	86.3	.959	.36	-
700	4.48	34.51	27.37	79.1	1.042	.40	-
800	4.22	34.55	27.43	74.2	1.120	.49	-
1000	3.75	34.61	27.52	66.1	1.261	.68	-

## STATION 90.30 (Interpolated Values at Standard Depths)

CREST: 33°23.5'N 117°52.5'W January 19, 1951 1841 GCT Wire angle: 17°  
 Sounding: 330 fms. Depth of observation 475 m. Weather: partly cloudy  
 Sea: rough Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^2\delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	13.80	33.42	25.03	294.4	.0000	5.75	-
10	13.80	33.46	25.06	291.7	.0294	5.68	-
20	13.35	33.37	25.08	289.8	.0586	5.49	-
30	12.73	33.38	25.21	277.5	.0871	5.12	-
50	11.04	33.51	25.63	238.2	.1389	4.48	-
75	10.25	33.79	25.99	204.7	.1946	3.88	-
100	9.68	33.88	26.15	189.2	.2441	3.36	-
150	8.57	34.07	26.48	159.1	.332	3.39	-
200	8.33	34.20	26.62	146.9	.409	2.27	-
250	8.29	34.30	26.70	139.7	.481	1.57	-
300	7.78	34.34	26.81	129.9	.549	1.19	-
400	6.77	34.42	27.02	111.4	.671	.81	-
500	(6.25)	(34.46)	(27.12)	(102.8)	(.779)	-	-

## STATION 90.37 (Interpolated Values at Standard Depths)

CREST: 33°11'N 118°23.5'W January 18, 1951 1717 GCT Wire angle: 15°  
 Sounding: 650 fms. Depth of observation: 949 m. Weather: cloudy  
 Sea: rough Wind: 160°, force 3

0	13.46	33.46	25.13	284.8	.0000	5.67	-
10	13.44	33.48	25.15	283.3	.0285	5.68	-
20	13.40	33.47	25.15	283.5	.0570	5.59	-
30	13.37	33.46	25.15	283.8	.0855	5.49	-
50	12.72	33.46	25.28	272.0	.1413	5.38	-
75	10.43	33.53	25.75	227.1	.2041	3.97	-
100	9.70	33.75	26.05	199.1	.2577	3.43	-
150	8.87	34.01	26.38	168.1	.350	2.93	-
200	8.62	34.20	26.57	151.1	.430	1.97	-
250	8.23	34.33	26.73	136.6	.503	1.54	-
300	7.75	34.34	26.81	129.6	.570	1.23	-
400	6.85	34.36	26.96	117.0	.694	.71	-
500	6.27	34.44	27.10	104.5	.806	.44	-
600	5.67	34.46	27.19	96.8	.908	.37	-
700	5.17	34.48	27.27	89.8	1.002	.35	-
800	4.69	34.51	27.34	82.7	1.089	.39	-
1000	(4.12)	(34.51)	(27.41)	(77.7)	(1.251)	(.54)	-

## STATION 90.45 (Interpolated Values at Standard Depths)

CREST: 32°57'N 118°56'W January 18, 1951 1247 GCT Wire angle: 13°  
 Sounding: 950 fms. Depth of observation: 1,136 m. Weather: moderate  
 drizzle Sea: moderate Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	13.04	33.43	25.19	279.0	.0000	5.62	-
10	13.03	33.45	25.21	277.5	.0279	5.58	-
20	12.98	33.42	25.20	278.9	.0559	5.46	-
30	12.95	33.42	25.20	278.6	.0839	5.23	-
50	10.38	33.59	25.81	221.3	.1341	4.13	-
75	9.78	33.81	26.08	195.9	.1865	3.46	-
100	9.30	33.87	26.21	184.1	.2343	3.11	-
150	8.60	34.02	26.44	163.2	.322	2.52	-
200	8.18	34.16	26.61	147.5	.400	2.04	-
250	7.88	34.27	26.74	135.9	.471	1.53	-
300	7.58	34.36	26.85	125.7	.537	1.12	-
400	6.82	34.42	27.01	112.3	.657	.74	-
500	6.23	34.43	27.10	104.9	.767	.41	-
600	5.59	34.46	27.20	95.5	.868	.39	-
700	5.07	34.50	27.29	87.2	.960	.41	-
800	4.62	34.54	27.38	79.7	1.044	.45	-
1000	4.02	34.59	27.48	70.8	1.197	.54	-

## STATION 90.53 (Interpolated Values at Standard Depths)

CREST: 32°38.5'N 119°29'W January 18, 1951 0754 GCT Wire angle: 3°  
 Sounding: 750 fms. Depth of observation: 1,191 m. Weather: drizzle  
 Sea: moderate Wind: 320°, force 1

0	13.30	33.38	25.10	287.5	.0000	5.42	-
10	13.16	33.40	25.14	283.7	.0287	5.40	-
20	12.99	33.32	25.12	286.5	.0573	5.60	-
30	12.77	33.31	25.15	283.4	.0859	5.62	-
50	11.78	33.40	25.41	259.0	.1404	5.19	-
75	10.04	33.64	25.90	212.7	.1997	4.02	-
100	9.39	33.84	26.18	187.0	.2500	3.25	-
150	8.94	34.10	26.44	162.6	.338	2.62	-
200	8.17	34.09	26.56	152.6	.417	2.49	-
250	7.28	34.12	26.71	138.3	.491	2.09	-
300	6.96	34.18	26.80	130.4	.558	1.54	-
400	6.64	34.31	26.95	117.9	.683	.87	-
500	5.83	34.40	27.12	102.0	.794	.52	-
600	5.65	34.45	27.18	97.2	.895	.42	-
700	5.19	34.48	27.26	90.1	.989	.43	-
800	4.68	34.49	27.33	84.2	1.077	.48	-
1000	4.03	34.60	27.48	70.1	1.233	.65	-

## STATION 90.60 (Interpolated Values at Standard Depths)

CREST: 32°23.5'N 119°53.5'W January 18, 1951 0321 GCT Wire angle: 10°  
 Sounding: 480 fms. Depth of observation: 780 m. Weather: partly cloudy  
 Sea: moderate Wind: 320°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (ng/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.82	33.25	24.89	307.0	.0000	5.56	-
10	13.74	33.24	24.90	306.7	.0308	5.61	-
20	13.74	33.25	24.91	306.1	.0616	5.58	-
30	12.30	33.27	25.21	277.7	.0909	5.33	-
50	11.02	33.31	25.48	252.5	.1442	4.88	-
75	10.00	33.40	25.72	229.6	.2048	4.43	-
100	9.36	33.78	26.14	191.9	.2578	3.56	-
150	8.81	33.94	26.34	172.3	.349	3.17	-
200	8.42	34.07	26.50	157.8	.433	2.53	-
250	7.75	34.14	26.66	143.6	.508	2.02	-
300	6.89	34.19	26.82	128.6	.577	1.72	-
400	6.02	34.27	27.00	112.6	.699	1.10	-
500	5.83	34.40	27.12	102.0	.807	.44	-
600	5.44	34.39	27.16	98.9	.908	.35	-
700	5.02	34.42	27.24	92.4	1.005	.36	-
800	(4.53)	(34.47)	27.32	85.0	1.094	-	-

## STATION 90.70 (Interpolated Values at Standard Depths)

CREST: 32°11'N 120°42.5'W January 17, 1951 2005, 2131 GCT Wire angle: 4°,  
 9° Sounding: 2,000 fms. Depth of observation: 1,184 m., 2,758 m.  
 Weather: partly cloudy Sea: very rough Wind: 320°, force 2

0	14.49	33.35	24.83	313.2	.0000	5.56	-
10	14.36	33.36	24.87	310.1	.0313	5.64	-
20	14.36	33.32	24.84	313.1	.0626	5.63	-
30	14.16	33.29	24.85	311.8	.0939	5.64	-
50	13.62	33.25	24.93	304.4	.1559	5.63	-
75	11.36	33.25	25.37	263.5	.2273	5.25	-
100	10.44	33.36	25.62	240.3	.2906	4.71	-
150	9.04	33.94	26.30	175.8	.395	3.29	-
200	8.54	34.12	26.52	156.0	.479	2.58	-
250	7.96	34.20	26.67	142.1	.554	2.02	-
300	7.29	34.26	26.82	128.9	.622	1.47	-
400	6.71	34.34	26.96	116.6	.746	.74	-
500	5.88	34.42	27.13	101.0	.856	.50	-
600	5.43	34.44	27.20	95.2	.955	.35	-
700	5.01	34.48	27.27	89.1	1.048	.38	-
800	4.64	34.53	27.37	80.6	1.133	.50	-
1000	4.04	34.60	27.49	70.1	1.286	.66	-
1200	3.53	34.61	27.55	64.8	1.422	-	-
1500	2.82	34.73	27.71	49.7	1.596	-	-
2000	2.09	34.68	27.73	47.4	1.843	-	-
2500	1.79	34.77	27.81	39.0	2.062	-	-

## STATION 90.80 (Interpolated Values at Standard Depths)

CREST: 31°40'N 120°55'W January 17, 1951 1554 GCT Wire angle: 25°  
 Sounding: 2,050 fms. Depth of observation: 1,036 m. Weather: cloudy  
 Sea: very rough Wind: 320°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.26	33.31	24.41	353.0	.0000	4.47	-
10	16.25	33.33	24.43	351.7	.0354	5.00	-
20	16.22	33.30	24.41	353.6	.0708	5.17	-
30	16.31	33.30	24.41	353.7	.1063	5.20	-
50	15.95	33.30	24.47	348.5	.1769	5.15	-
75	14.25	33.31	24.85	313.3	.2601	5.04	-
100	11.38	33.20	25.33	267.9	.3332	5.20	-
150	9.57	33.64	25.98	206.3	.453	4.17	-
200	8.32	34.04	26.49	158.4	.544	3.18	-
250	7.81	34.13	26.64	145.2	.621	2.70	-
300	7.10	34.15	26.76	134.5	.691	2.01	-
400	5.89	34.22	26.98	114.5	.817	1.21	-
500	5.51	34.32	27.10	104.0	.927	.67	-
600	5.09	34.39	27.20	94.6	1.027	.39	-
700	4.67	34.45	27.30	86.0	1.118	.31	-
800	4.37	34.52	27.39	78.2	1.201	.40	-
1000	3.87	34.61	27.51	67.5	1.349	.74	-

## STATION 90.90 (Interpolated Values at Standard Depths)

CREST: 31°21'N 121°43'W January 17, 1951 1024 GCT Wire angle: 12°  
 Sounding: 2,200 fms. Depth of observation: 1,234 m. Weather: partly  
 cloudy Sea: very rough Wind: 320°, force 3

0	15.55	33.23	24.51	343.7	.0000	5.34	-
10	15.56	33.28	24.55	340.1	.0343	5.40	-
20	15.57	33.30	24.56	339.6	.0685	5.40	-
30	15.57	33.31	24.57	339.0	.1025	5.42	-
50	15.58	33.31	24.56	339.8	.1707	5.51	-
75	15.57	33.22	24.50	347.1	.2571	5.62	-
100	11.29	33.26	25.39	261.7	.3337	5.33	-
150	9.43	33.61	25.98	206.6	.452	4.41	-
200	8.54	33.98	26.40	166.1	.545	3.93	-
250	7.84	34.08	26.60	149.3	.625	3.39	-
300	7.05	34.14	26.76	134.6	.696	2.74	-
400	6.06	34.22	26.95	116.8	.823	1.32	-
500	5.42	34.30	27.09	104.4	.935	.68	-
600	4.83	34.40	27.24	90.8	1.033	.44	-
700	4.41	34.44	27.32	83.7	1.121	.40	-
800	4.16	34.46	27.36	80.1	1.204	.50	-
1000	3.71	34.61	27.53	65.6	1.351	.77	-

## STATION 90.100 (Interpolated Values at Standard Depths)

CREST: 31°03'N 122°31.5'W January 17, 1951 0451 GCT Wire angle: 7°  
 Sounding: 2,250 fms. Depth of observation: 1,245 m. Weather: partly cloudy  
 Sea: very rough Wind: calm

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.12	33.33	24.46	348.6	.0000	4.83	-
10	16.16	33.28	24.41	353.5	.0353	4.84	-
20	16.15	33.31	24.44	351.4	.0706	4.86	-
30	16.13	33.30	24.43	351.9	.1060	4.93	-
50	15.73	33.13	24.39	356.2	.1771	5.18	-
75	13.50	33.22	24.94	305.0	.2602	5.47	-
100	10.79	33.03	25.30	270.2	.3326	5.35	-
150	9.38	33.53	25.93	211.5	.454	4.68	-
200	8.69	34.04	26.44	163.9	.548	4.11	-
250	8.08	34.05	26.54	155.0	.629	3.57	-
300	7.17	34.05	26.67	142.8	.704	3.03	-
400	5.74	34.15	26.93	118.2	.835	1.72	-
500	5.01	34.26	27.11	102.0	.946	.91	-
600	4.95	34.46	27.27	87.6	1.042	.50	-
700	4.76	34.54	27.36	80.4	1.127	.50	-
800	4.28	34.57	27.44	73.4	1.204	.60	-
1000	3.71	34.61	27.53	65.6	1.345	.75	-

## STATION 90.110 (Interpolated Values at Standard Depths)

CREST: 30°44'N 123°20'W January 16, 1951 2316 GCT Wire angle: 20°  
 Sounding: 1,700 fms. Depth of observation: 1,185 Weather: partly cloudy  
 Sea: high Wind: 320°, force 4

0	15.78	33.21	24.44	350.0	.0000	5.52	-
10	15.76	33.15	24.40	354.0	.0353	5.41	-
20	15.76	33.15	24.40	354.0	.0709	5.39	-
30	15.72	33.14	24.40	354.6	.1065	5.44	-
50	15.49	33.10	24.42	353.2	.1776	5.57	-
75	14.40	33.13	24.68	329.3	.2634	5.57	-
100	10.64	32.97	25.28	272.3	.3391	5.47	-
150	9.06	33.58	26.02	202.8	.459	4.10	-
200	8.45	33.98	26.43	164.8	.551	3.67	-
250	7.88	34.10	26.61	148.3	.630	3.36	-
300	7.21	34.16	26.75	135.3	.701	2.86	-
400	6.05	34.25	26.98	114.6	.827	1.58	-
500	5.12	34.23	27.07	105.8	.938	.83	-
600	4.57	34.42	27.29	85.9	1.035	.48	-
700	4.37	34.45	27.33	82.3	1.120	.47	-
800	4.24	34.48	27.37	79.7	1.202	.46	-
1000	3.69	34.65	27.56	62.5	1.346	.74	-



## STATION 90.120 (Interpolated Values at Standard Depths)

CREST: 30°26'N 124°04.5'W January 16, 1951 1739 GCT Wire angle: 45°  
 Sounding: 2,350 fms. Depth of observation: 1,069 m. Weather: cloudy  
 Sea: high Wind: 320°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.90	33.33	24.28	365.8	.0000	5.40	-
10	16.91	33.39	24.32	361.9	.0365	5.42	-
20	16.92	33.39	24.32	362.4	.0729	5.38	-
30	16.91	33.39	24.32	362.6	.1093	5.37	-
50	16.90	33.39	24.32	362.9	.1822	5.45	-
75	14.45	33.38	24.86	312.1	.2671	5.68	-
100	12.25	33.20	25.17	283.4	.3420	5.68	-
150	9.62	33.40	25.79	225.0	.470	4.60	-
200	8.68	33.77	26.23	183.5	.573	3.87	-
250	8.05	34.03	26.53	156.1	.658	3.50	-
300	7.46	34.20	26.75	135.6	.732	3.12	-
400	6.19	34.15	26.88	123.6	.862	2.10	-
500	5.23	34.15	27.00	113.0	.982	1.09	-
600	4.92	34.32	27.17	97.6	1.088	.60	-
700	4.74	34.45	27.29	86.8	1.181	.35	-
800	4.40	34.50	27.37	80.2	1.265	.45	-
1000	3.77	34.58	27.50	68.4	1.416	.68	-

## STATION 93.30 (Interpolated Values at Standard Depths)

CREST: 32°49.5'N 117°32.5'W January 19, 1951 2326 GCT Wire angle: 13°  
 Sounding: 650 m. Depth of observation: 677 m. Weather: partly cloudy  
 Sea: rough Wind: 320°, force 4

0	13.65	33.44	25.08	289.8	.0000	5.89	-
10	13.62	33.44	25.08	289.5	.0291	5.84	-
20	13.49	33.46	25.12	285.7	.0580	5.79	-
30	13.44	33.46	25.13	285.2	.0866	5.60	-
50	10.91	33.46	25.61	239.6	.1394	4.67	-
75	10.02	33.70	25.95	207.8	.1956	4.12	-
100	9.58	33.79	26.10	194.5	.2462	3.87	-
150	9.03	34.14	26.46	160.9	.336	2.54	-
200	8.37	34.16	26.58	150.2	.414	2.57	-
250	8.59	34.28	26.64	145.7	.489	1.22	-
300	8.23	34.33	26.73	137.5	.560	.97	-
400	7.29	34.34	26.88	124.4	.692	.68	-
500	6.32	34.37	27.04	110.5	.810	.49	-
600	5.72	34.44	27.17	98.8	.916	.37	-
700	(5.34)	(34.48)	(27.24)	(92.2)	(1.012)	-	-

## STATION 93.40 (Interpolated Values at Standard Depths)

CREST: 32°30'N 118°11.5'W January 20, 1951 0449 GCT Wire angle: 20°  
 Sounding: 950 fms. Depth of observation: 1,173 m. Weather: partly cloudy  
 Sea: very rough Wind: 320°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.12	33.48	25.21	276.8	.0000	5.57	-
10	13.12	33.48	25.21	277.1	.0278	5.51	-
20	13.13	33.51	25.23	275.3	.0555	5.52	-
30	13.14	33.60	25.30	269.1	.0829	5.54	-
50	11.00	33.67	25.76	225.7	.1326	4.40	-
75	9.76	33.93	26.18	186.6	.1844	3.67	-
100	9.32	33.91	26.24	181.4	.2307	3.22	-
150	8.64	34.15	26.53	154.4	.315	2.56	-
200	8.22	34.23	26.66	143.1	.390	2.17	-
250	7.85	34.30	26.77	133.2	.460	1.65	-
300	7.48	34.39	26.89	121.8	.524	1.03	-
400	6.60	34.42	27.04	109.2	.640	.60	-
500	6.09	34.35	27.05	108.9	.750	.44	-
600	5.59	34.52	27.25	91.2	.851	.35	-
700	5.09	34.59	27.36	80.8	.938	.35	-
800	4.65	34.63	27.44	73.5	1.016	.38	-
1000	4.02	34.61	27.50	69.3	1.160	.59	-

## STATION 93.50 (Interpolated Values at Standard Depths)

CREST: 32°09'N 118°57'W January 20, 1951 1059 GCT Wire angle: 25°  
 Sounding: 900 fms. Depth of observation: 1,139 m. Weather: partly cloudy  
 Sea: very rough Wind: 320°, force 5

0	14.28	33.35	24.87	309.0	.0000	5.66	-
10	14.28	33.40	24.91	305.4	.0308	5.47	-
20	14.31	33.35	24.87	310.0	.0617	5.49	-
30	14.30	33.36	24.88	309.4	.0928	5.52	-
50	14.26	33.39	24.91	306.9	.1548	5.54	-
75	11.80	33.28	25.31	268.8	.2271	5.32	-
100	10.16	33.49	25.77	226.0	.2894	4.66	-
150	9.02	33.92	26.29	176.9	.391	3.37	-
200	8.03	34.10	26.58	149.7	.473	3.39	-
250	7.78	34.25	26.74	135.9	.545	2.29	-
300	7.44	34.31	26.83	127.5	.611	1.42	-
400	6.44	34.32	26.98	114.5	.733	.91	-
500	6.23	34.42	27.09	105.7	.844	.47	-
600	5.47	34.43	27.19	96.4	.946	.37	-
700	4.99	34.52	27.32	84.5	1.038	.36	-
800	4.65	34.58	27.40	77.1	1.119	.41	-
1000	(4.11)	(34.60)	(27.48)	(72.1)	(1.270)	-	-

## STATION 93.60 (Interpolated Values at Standard Depths)

CREST: 31°50'N 119°40.5'W January 20, 1951 1739 GCT Wire angle: 35°  
 Sounding: 1,800 fms. Depth of observation: 1,176 m. Weather: partly cloudy  
 Sea: high Wind: 270°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.15	33.41	24.73	322.2	.0000	5.47	-
10	15.17	33.40	24.72	323.7	.0324	5.41	-
20	15.16	33.41	24.73	322.7	.0649	5.40	-
30	15.14	33.41	24.74	322.8	.0973	5.34	-
50	15.07	33.42	24.76	321.1	.1620	4.67	-
75	10.29	33.44	25.71	231.2	.2314	4.44	-
100	9.49	33.76	26.09	195.1	.2850	3.15	-
150	8.46	33.99	26.43	163.4	.375	2.45	-
200	7.47	34.04	26.62	146.2	.453	2.57	-
250	7.17	34.08	26.69	139.8	.525	1.95	-
300	6.94	34.13	26.76	133.9	.594	1.15	-
400	6.36	34.20	26.90	122.2	.723	.70	-
500	5.46	34.20	27.01	111.9	.841	.57	-
600	5.40	34.35	27.14	101.4	.949	.35	-
700	4.95	34.41	27.24	92.2	1.047	.37	-
800	4.52	34.46	27.32	84.4	1.136	.44	-
1000	3.92	34.52	27.33	74.7	1.297	.65	-

## STATION 93.70 (Interpolated Values at Standard Depths)

CREST: 31°33'N 120°15'W January 20, 1951 2257 GCT Wire angle: 35°  
 Sounding: 2,180 fms. Depth of observation: 1,114 m. Weather: partly cloudy  
 Sea: very rough Wind: 270°, force 5

0	15.10	33.22	24.60	335.1	.0000	5.54	-
10	14.95	33.31	24.70	325.7	.0332	5.54	-
20	14.47	33.30	24.80	316.9	.0654	5.62	-
30	14.12	33.29	24.86	311.0	.0970	5.65	-
50	13.72	33.28	24.94	304.2	.1588	5.49	-
75	12.80	33.30	25.14	285.7	.2329	5.38	-
100	10.90	33.21	25.42	258.9	.3014	4.87	-
150	9.24	33.79	26.15	190.2	.414	3.45	-
200	8.64	34.06	26.46	161.8	.503	2.75	-
250	7.91	34.11	26.61	148.1	.581	2.47	-
300	7.30	34.15	26.73	137.2	.653	2.21	-
400	6.52	34.20	26.88	124.3	.785	.88	-
500	5.83	34.22	26.99	114.7	.905	.53	-
600	5.17	34.27	27.10	104.3	1.016	.45	-
700	4.89	34.36	27.20	95.1	1.116	.39	-
800	4.63	34.42	27.28	88.8	1.209	.43	-
1000	3.93	34.48	27.40	77.8	1.378	.67	-

## STATION 93.80 (Interpolated Values at Standard Depth)

CREST: 31°12'N 120°15'W January 21, 1951 0448, 0505 GCT Wire angle: 12°  
 Sounding: 2,150 fms. Depth of observation: 10 m., 1,197 m. Weather:  
 Partly cloudy Sea: very rough Wind: 270°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	16.52	33.42	24.43	350.8	.0000	5.40	-
10	16.55	33.42	24.43	351.6	.0353	5.37	-
20	16.56	33.43	24.43	351.4	.0706	5.32	-
30	16.56	33.43	24.43	351.9	.1059	5.30	-
50	16.56	33.41	24.42	353.8	.1768	5.30	-
75	16.56	33.35	24.37	359.1	.2664	5.61	-
100	12.99	33.25	25.07	292.8	.3484	5.54	-
150	10.06	33.47	25.77	226.9	.479	4.57	-
200	8.82	33.94	26.34	173.2	.580	3.35	-
250	8.24	34.11	26.56	153.1	.662	2.53	-
300	7.82	34.22	26.71	139.5	.736	1.90	-
400	6.83	34.32	26.93	119.6	.866	.94	-
500	6.38	34.45	27.09	105.2	.980	.47	-
600	5.64	34.43	27.17	98.4	1.083	.37	-
700	5.09	34.43	27.23	92.7	1.179	.37	-
800	4.75	34.43	27.27	89.4	1.271	.42	-
1000	4.03	34.61	27.49	69.3	1.432	.62	-

## STATION 93.90 (Interpolated Values at Standard Depths)

CREST: 30°50'N 121°35'W January 21, 1951 1047 GCT Wire Angle: 20°  
 Sounding: 2,280 fms. Depth of observation: 1,205 m. Weather: partly cloudy  
 Sea: very rough Wind: 320°, force 4

0	16.79	33.43	24.38	356.0	.0000	5.18	-
10	16.80	33.41	24.36	357.7	.0358	5.03	-
20	16.81	33.40	24.35	359.2	.0718	5.32	-
30	16.81	33.39	24.34	360.3	.1079	5.36	-
50	16.81	33.31	24.28	366.6	.1810	5.30	-
75	16.80	33.40	24.36	360.6	.2724	5.34	-
100	13.30	33.17	24.94	305.3	.3562	5.52	-
150	10.51	33.46	25.68	235.0	.492	4.96	-
200	9.03	33.84	26.23	184.0	.598	4.28	-
250	8.08	34.00	26.50	158.7	.684	3.68	-
300	7.34	34.09	26.68	142.3	.760	2.99	-
400	6.36	34.14	26.85	126.2	.895	1.58	-
500	5.64	34.22	27.00	112.8	1.016	.83	-
600	4.92	34.30	27.15	99.2	1.123	.57	-
700	4.49	34.39	27.27	88.1	1.217	.46	-
800	4.29	34.48	27.36	80.2	1.302	.42	-
1000	3.78	34.57	27.49	69.4	1.453	.68	-

## STATION 97.32 (Interpolated Values at Standard Depths)

CREST: 32°11'N 117°11'W January 23, 1951 0232 GCT Wire angle: missing  
 Sounding: 750 fms. Depth of observation: 985 m. Weather: cloudy  
 Sea: moderate Wind: calm

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	13.43	33.39	25.08	289.4	.0000	5.58	-
10	13.22	33.35	25.09	288.5	.0290	5.77	-
20	12.92	33.38	25.17	280.7	.0576	5.63	-
30	12.92	33.46	25.24	275.1	.0855	5.33	-
50	10.51	33.57	25.77	224.8	.1357	4.21	-
75	9.89	33.82	26.07	196.6	.1887	3.36	-
100	9.79	34.04	26.26	179.4	.2360	2.49	-
150	9.63	34.22	26.43	164.5	.323	1.84	-
200	9.17	34.31	26.57	151.3	.402	1.49	-
250	8.66	34.33	26.67	142.9	.476	1.32	-
300	8.27	34.34	26.74	137.4	.547	1.18	-
400	7.37	34.40	26.92	121.1	.677	.76	-
500	6.42	34.36	27.02	112.7	.795	.57	-
600	5.66	34.40	27.14	100.8	.903	.38	-
700	5.18	34.48	27.26	89.9	.999	.35	-
800	4.84	34.54	27.35	82.5	1.086	.36	-
1000	(4.18)	(34.54)	(27.42)	(76.2)	(1.247)	(.56)	-

## STATION 97.40 (Interpolated Values at Standard Depths)

CREST: 31°56'N 117°50'W January 22, 1951 2203 GCT Wire angle: 22°  
 Sounding: 350 fms. Depth of observation: 547 m. Weather: cloudy  
 Sea: very rough Wind: 360°, force 4

0	15.77	33.41	24.60	335.2	.0000	5.20	-
10	15.72	33.44	24.63	332.1	.0335	5.34	-
20	15.52	33.43	24.67	329.0	.0667	5.37	-
30	15.42	33.41	24.68	328.8	.0997	5.41	-
50	15.38	33.39	24.67	329.9	.1659	5.52	-
75	14.80	33.35	24.77	321.3	.2478	5.45	-
100	11.75	33.45	25.45	256.1	.3204	5.46	-
150	9.20	33.53	25.96	208.7	.437	4.32	-
200	8.52	33.45	26.00	205.4	.542	2.79	-
250	7.84	34.23	26.71	138.3	.628	2.13	-
300	7.58	34.29	26.80	130.8	.696	1.45	-
400	6.65	34.32	26.95	117.3	.821	.92	-
500	6.14	34.37	27.06	108.2	.935	.48	-

## STATION 97.50 (Interpolated Values at Standard Depths)

CREST: 31°31'N 118°21'W January 22, 1951 1631 GCT Wire angle: 15°  
 Sounding: 1,000 fms. Depth of observation: 1,226 m. Weather: partly cloudy  
 Sea: very rough Wind: 360°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.31	33.53	24.79	316.8	.0000	5.35	-
10	15.32	33.46	24.73	322.5	.0321	5.48	-
20	15.31	33.45	24.73	323.1	.0645	5.47	-
30	15.29	33.45	24.73	323.0	.0969	5.47	-
50	14.70	33.42	24.84	313.5	.1609	5.51	-
75	13.87	33.37	24.98	301.2	.2382	5.47	-
100	12.20	33.38	25.32	269.2	.3099	4.77	-
150	9.95	33.92	26.14	191.8	.426	3.16	-
200	9.36	34.20	26.45	162.6	.515	2.55	-
250	8.82	34.30	26.62	147.7	.593	1.98	-
300	8.23	34.33	26.73	137.4	.665	1.46	-
400	7.49	34.43	26.92	120.6	.795	.71	-
500	6.55	34.36	27.00	114.2	.913	.46	-
600	5.69	34.52	27.24	92.3	1.018	.40	-
700	5.29	34.56	27.32	85.4	1.107	.42	-
800	4.82	34.59	27.39	78.4	1.190	.48	-
1000	4.04	34.65	27.53	66.6	1.337	.62	-

## STATION 97.60 (Interpolated Values at Standard Depths)

CREST: 31°12'N 119°04.5'W January 22, 1951 1056 GCT Wire angle: 25°  
 Sounding: 1,950 fms. Depth of observation: 1,177 m. Weather: partly cloudy  
 Sea: very rough Wind: 360°, force 5

0	15.99	33.49	24.61	334.2	.0000	5.31	-
10	15.98	33.57	24.67	328.4	.0333	5.42	-
20	16.02	33.57	24.66	329.6	.0663	5.46	-
30	16.01	33.57	24.66	329.9	.0994	5.46	-
50	15.86	33.58	24.71	326.2	.1653	5.47	-
75	13.98	33.39	24.97	302.0	.2443	5.42	-
100	11.60	33.40	25.44	257.1	.3146	5.18	-
150	9.11	33.72	26.12	193.0	.428	3.95	-
200	9.07	34.19	26.49	158.6	.516	2.57	-
250	8.87	34.33	26.64	146.2	.593	1.84	-
300	8.12	34.34	26.76	135.1	.664	1.44	-
400	6.84	34.34	26.94	118.3	.792	.83	-
500	6.08	34.42	27.11	103.7	.904	.44	-
600	5.51	34.48	27.22	93.3	1.003	.33	-
700	5.02	34.51	27.31	85.8	1.094	.37	-
800	4.62	34.54	27.38	79.8	1.177	.44	-
1000	3.94	34.60	27.50	69.3	1.328	.66	-

## STATION 97.70 (Interpolated Values at Standard Depths)

CREST: 30°53.5'N 119°48'W January 22, 1951 0518 GCT Wire angle: 18°  
 Sounding: 1,950 fms. Depth of observation: 1,287 m. Weather: partly cloudy  
 Sea: very rough Wind: 360°, force 6

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (m./L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.10	33.44	24.54	340.2	.0000	5.31	-
10	16.12	33.49	24.58	337.3	.0340	5.31	-
20	16.12	33.53	24.61	334.8	.0678	5.29	-
30	16.11	33.55	24.63	333.5	.1013	5.29	-
50	16.02	33.58	24.67	329.8	.1680	5.52	-
75	14.12	33.32	24.89	309.8	.2484	5.51	-
100	11.64	33.34	25.39	262.3	.3203	5.21	-
150	9.78	33.69	25.99	206.1	.438	4.48	-
200	8.60	33.97	26.40	167.8	.532	3.69	-
250	7.82	34.08	26.60	149.1	.612	2.95	-
300	7.06	34.12	26.74	136.1	.684	2.34	-
400	6.79	34.38	26.98	114.6	.810	.93	-
500	6.43	34.48	27.11	103.9	.921	.43	-
600	5.67	34.51	27.23	92.8	1.020	.38	-
700	5.17	34.56	27.33	84.0	1.109	.37	-
800	4.75	34.60	27.41	76.9	1.190	.45	-
1000	4.04	34.66	27.53	65.8	1.335	.66	-

## STATION 97.80 (Interpolated Values at Standard Depths)

CREST: 30°34'N 120°34.5'W January 21, 1951 2231, 2308 GCT Wire angle:  
 21°, 34° Sounding: 2,200 fms. Depth of observation: 627 m., 1,247 m.  
 Weather: partly cloudy Sea: very rough Wind: 360°, force 5

0	15.80	33.53	24.68	327.2	.0000	5.22	-
10	15.79	33.55	24.70	325.6	.0328	5.41	-
20	15.71	33.57	24.73	322.7	.0653	5.38	-
30	15.68	33.57	24.74	322.5	.0977	5.33	-
50	15.67	33.54	24.72	325.0	.1628	5.43	-
75	13.10	33.45	25.19	280.5	.2389	5.18	-
100	11.43	33.54	25.58	244.0	.3049	4.38	-
150	9.83	34.05	26.26	180.2	.412	2.78	-
200	8.58	34.07	26.48	160.0	.497	3.13	-
250	7.62	34.12	26.66	143.2	.574	2.87	-
300	7.13	34.23	26.81	129.1	.642	1.88	-
400	6.88	34.42	27.00	112.9	.764	.60	-
500	6.29	34.40	27.06	107.7	.875	.42	-
600	5.42	34.44	27.20	95.0	.978	.30	-
700	5.14	34.46	27.25	91.0	1.072	.34	-
800	4.63	34.47	27.32	85.0	1.161	.39	-
1000	4.00	34.56	27.46	72.8	1.320	.54	-

## STATION 97.90 (Interpolated Values at Standard Depths)

CREST: 30°12'N 121°17'W January 21, 1951 1601 GCT Wire angle: 35°  
 Sounding: 2,100 fms. Depth of observation: 990 m. Weather: partly cloudy  
 Sea: very rough Wind: 320°, force 5

Depth (m)	T (°C)	S (%)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.05	33.55	24.64	331.2	.0000	5.48	-
10	16.06	33.37	24.50	344.7	.0339	5.17	-
20	16.07	33.46	24.57	338.8	.0682	5.47	-
30	16.12	33.46	24.56	340.1	.1023	5.43	-
50	16.20	33.44	24.52	343.6	.1710	5.30	-
75	15.10	33.35	24.70	327.6	.2554	5.51	-
100	11.72	33.37	25.40	261.6	.3295	5.43	-
150	9.95	33.71	25.97	207.3	.448	4.24	-
200	8.84	34.04	26.41	166.3	.542	3.71	-
250	7.86	34.18	26.67	142.1	.619	3.27	-
300	7.12	34.21	26.80	130.4	.688	2.59	-
400	6.19	34.32	27.01	110.9	.810	1.07	-
500	4.93	34.40	27.23	90.6	.911	.57	-
600	4.92	34.45	27.27	88.0	1.001	.38	-
700	4.78	34.51	27.34	82.7	1.087	.37	-
800	4.41	34.56	27.41	75.9	1.168	.47	-
1000	(3.74)	(34.61)	27.52	66.0	1.311	(.66)	-

## STATION 100.30 (Interpolated Values at Standard Depths)

CREST: 31°40.5'N 116°46.5'W January 12, 1951 1733 GCT Wire angle: 3°  
 Sounding: 250 fms. Depth of observation: 398 m. Weather: partly cloudy  
 Sea: rough Wind: 90°, force 1

0	13.36	33.45	25.14	283.9	.0000	5.69	-
10	13.32	33.48	25.17	280.9	.0284	5.70	-
20	13.09	33.48	25.22	276.7	.0563	5.62	-
30	12.70	33.48	25.30	269.6	.0838	5.42	-
50	10.56	33.49	25.70	231.5	.1341	4.66	-
75	10.05	33.69	25.94	208.9	.1895	3.90	-
100	10.46	34.04	26.14	190.4	.2397	2.55	-
150	9.14	34.14	26.44	162.7	.329	2.08	-
200	8.49	34.34	26.70	138.7	.405	1.61	-
250	8.06	33.34	26.77	133.2	.473	1.33	-
300	7.64	34.34	26.83	128.0	.539	1.00	-
400	(6.77)	(34.35)	26.96	116.6	.662	(.68)	-



## STATION 100.40 (Interpolated Values at Standard Depths)

CREST: 31°21.5'N 117°29'W January 13, 1951 2328 GCT Wire angle: 28°  
 Sounding: 1,070 fms. Depth of observation: 1,025 m. Weather: partly cloudy  
 Sea: high Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	15.60	33.33	24.58	337.6	.0000	5.36	-
10	15.28	33.33	24.62	331.1	.0336	5.30	-
20	14.65	33.37	24.81	315.5	.0660	5.74	-
30	14.36	33.32	24.84	312.6	.0976	5.71	-
50	12.55	33.28	25.17	282.1	.1573	5.50	-
75	11.45	33.35	25.43	257.7	.2252	5.09	-
100	11.18	33.60	25.67	235.3	.2872	4.17	-
150	10.57	34.15	26.21	185.1	.393	2.14	-
200	8.97	34.24	26.55	153.5	.478	1.81	-
250	8.19	34.30	26.72	138.1	.552	1.45	-
300	8.21	34.35	26.75	135.6	.621	1.07	-
400	6.89	34.36	26.95	117.5	.748	.78	-
500	6.52	34.41	27.04	110.1	.863	.42	-
600	5.87	34.45	27.16	100.1	.969	.32	-
700	5.22	34.49	27.27	89.8	1.065	.32	-
800	4.76	34.51	27.34	83.6	1.153	.38	-
1000	4.06	34.57	27.46	72.6	1.310	.57	-

## STATION 100.50 (Interpolated Values at Standard Depths)

CREST: 31°02.5'N 118°13'W January 14, 1951 0530 GCT Wire angle: 10°  
 Sounding: 1,000 fms. Depth of observation: 1,261 m. Weather: partly cloudy  
 Sea: very rough Wind: 320°, force 3

0	15.11	33.44	24.77	319.2	.0000	5.55	-
10	15.13	33.48	24.79	317.0	.0319	5.57	-
20	15.08	33.48	24.82	314.9	.0637	5.54	-
30	15.05	33.48	24.81	315.8	.0953	5.42	-
50	12.68	33.48	25.30	269.8	.1542	4.99	-
75	11.41	33.50	25.55	245.9	.2190	4.51	-
100	10.45	33.63	25.82	220.6	.2777	4.03	-
150	9.48	33.90	26.20	185.6	.380	2.98	-
200	8.84	34.11	26.47	161.1	.467	2.60	-
250	8.25	34.16	26.60	149.5	.545	2.37	-
300	7.59	34.17	26.70	139.8	.618	2.00	-
400	6.54	34.26	26.92	120.3	.749	.96	-
500	5.89	34.32	27.05	108.5	.865	.47	-
600	5.42	34.40	27.17	98.0	.969	.34	-
700	5.05	34.47	27.27	89.1	1.063	.35	-
800	4.64	34.49	27.33	83.8	1.151	.44	-
1000	3.99	34.54	27.44	74.1	1.310	.58	-

## STATION 100.60 (Interpolated Values at Standard Depths)

CREST: 30°43.5'N 118°56'W January 14, 1951 1115, 1313 GCT Wire angle: 12°,  
10° Sounding: 1,550 fms. Depth of observation: 635 m. 1,180 m. Weather;  
partly cloudy Sea: very rough Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	16.30	33.46	24.52	343.0	.0000	5.28	-
10	16.32	33.51	24.55	340.1	.0343	5.54	-
20	16.33	33.43	24.48	346.6	.0688	5.51	-
30	16.32	33.44	24.50	345.9	.1035	5.45	-
50	16.34	33.50	24.54	342.3	.1727	5.50	-
75	14.85	33.44	24.82	315.8	.2554	5.53	-
100	12.11	33.29	25.26	274.5	.3297	5.45	-
150	9.70	33.60	25.93	211.3	.452	3.86	-
200	8.90	34.06	26.42	165.7	.547	3.33	-
250	8.64	34.22	26.59	150.9	.627	2.41	-
300	8.57	34.31	26.67	144.0	.701	1.16	-
400	7.28	34.34	26.88	124.3	.836	.77	-
500	6.23	34.38	27.05	108.6	.954	.55	-
600	5.67	34.48	27.21	95.2	1.056	.43	-
700	5.11	34.51	27.29	87.0	1.148	.43	-
800	4.61	34.50	27.35	82.6	1.234	.52	-
1000	4.02	34.58	27.47	71.5	1.390	.60	-

## STATION 100.70 (Interpolated Values at Standard Depths)

CREST: 30°24'N 119°40'W January 14, 1951 1824 GCT Wire angle: 3°  
Sounding: 2,070 fms. Depth of observation: 1,189 m. Weather: partly cloudy  
Sea: rough Wind: 320°, force 2

0	16.70	33.50	24.46	348.8	.0000	5.28	-
10	16.68	33.46	24.43	351.7	.0352	5.34	-
20	16.68	33.49	24.45	349.8	.0704	5.42	-
30	16.68	33.49	24.45	349.9	.1055	5.47	-
50	16.09	33.47	24.57	339.2	.1748	5.51	-
75	13.05	33.26	25.06	293.4	.2543	5.40	-
100	10.93	33.36	25.53	248.6	.3225	4.95	-
150	9.76	33.95	26.19	186.4	.432	3.12	-
200	9.37	34.11	26.38	169.5	.522	2.32	-
250	8.92	34.19	26.52	157.4	.604	1.83	-
300	8.29	34.25	26.66	144.2	.680	1.53	-
400	7.10	34.39	26.95	118.2	.812	.73	-
500	6.21	34.32	27.01	112.9	.929	.54	-
600	5.90	34.51	27.20	96.0	1.034	.36	-
700	5.37	34.50	27.26	91.0	1.128	.36	-
800	4.72	34.48	27.32	85.4	1.217	.41	-
1000	4.08	34.59	27.47	71.4	1.376	.55	-

## STATION 100.80 (Interpolated values at Standard Depths)

CREST: 29°59'N 120°09'W January 14, 1951 2312 GCT Wire angle: 0°  
 Sounding: 2,100 fms. Depth of observation: 1,186 m. Weather: partly cloudy  
 Sea: rough Wind: 320°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg.cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	16.26	33.51	24.56	338.6	.0000	5.41	-
10	15.92	33.53	24.66	329.9	.0336	5.43	-
20	15.84	33.53	24.67	328.6	.0666	5.44	-
30	15.80	33.53	24.68	328.1	.0996	5.46	-
50	15.77	33.53	24.69	328.0	.1655	5.47	-
75	12.92	33.37	25.17	282.9	.2423	5.32	-
100	11.38	33.60	25.64	238.5	.3079	4.27	-
150	9.88	33.95	26.17	188.2	.415	2.65	-
200	9.03	34.22	26.52	155.9	.502	2.55	-
250	8.06	34.24	26.69	140.6	.577	2.20	-
300	7.29	34.24	26.80	130.4	.645	1.68	-
400	6.57	34.31	26.96	116.8	.770	.94	-
500	5.56	34.34	27.11	102.8	.880	.62	-
600	5.00	34.41	27.23	91.9	.978	.47	-
700	4.74	34.49	27.32	83.8	1.067	.45	-
800	4.44	34.57	27.42	75.5	1.148	.46	-
1000	3.84	34.60	27.51	68.0	1.293	.66	-

## STATION 100.90 (Interpolated Values at Standard Depths)

CREST: 29°40.5'N 120°47'W January 15, 1951 0506 GCT Wire angle: 0°  
 Sounding: 2,200 fms. Depth of observation: 1,127 m. Weather: partly cloudy  
 Sea: moderate Wind: calm

0	17.16	33.48	24.33	360.8	.0000	5.33	-
10	17.16	33.48	24.33	360.8	.0362	5.25	-
20	17.12	33.47	24.33	360.8	.0724	5.24	-
30	17.08	33.45	24.33	361.9	.1087	5.28	-
50	17.06	33.43	24.32	363.6	.1816	5.40	-
75	15.30	33.61	24.85	312.9	.2667	5.55	-
100	13.80	33.59	25.16	284.4	.3418	5.54	-
150	10.36	33.55	25.78	225.8	.470	4.67	-
200	8.96	34.05	26.40	167.2	.569	4.19	-
250	8.11	34.11	26.58	151.1	.649	3.29	-
300	7.38	34.14	26.71	139.1	.722	2.44	-
400	6.24	34.17	26.89	123.0	.855	1.38	-
500	5.58	34.28	27.06	107.5	.971	.66	-
600	5.15	34.41	27.21	93.7	1.072	.34	-
700	4.75	34.46	27.30	86.1	1.163	.35	-
800	4.35	34.50	27.37	79.4	1.247	.42	-
1000	3.84	34.59	27.50	68.5	1.396	.66	-

## STATION 100.100 (Interpolated Values at Standard Depths)

CREST: 29°20.5'N 121°27'W January 15, 1951 1036 GCT Wire angle: 7°  
 Sounding: 2,200 fms. Depth of observation: 1,186 m. Weather: clear  
 Sea: moderate Wind: calm

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	17.66	33.64	24.33	360.6	.0000	5.32	-
10	17.66	33.64	24.33	360.9	.0362	5.36	-
20	17.65	33.56	24.27	366.6	.0727	5.32	-
30	17.64	33.55	24.27	367.4	.1096	5.32	-
50	17.61	33.64	24.35	360.8	.1828	5.41	-
75	17.62	33.51	24.25	371.1	.2748	5.26	-
100	15.55	33.69	24.86	312.8	.3608	5.54	-
150	11.82	33.68	25.62	241.4	.500	4.90	-
200	9.74	33.82	26.09	196.8	.611	4.23	-
250	8.72	34.13	26.50	158.7	.700	3.54	-
300	7.96	34.22	26.70	140.7	.776	2.88	-
400	6.80	34.25	26.88	124.4	.909	1.39	-
500	5.91	34.35	27.07	106.6	1.026	.84	-
600	5.28	34.37	27.17	98.3	1.129	.50	-
700	4.82	34.46	27.29	87.0	1.223	.42	-
800	4.48	34.57	27.37	80.7	1.307	.41	-
1000	3.82	34.69	27.58	61.0	1.451	.66	-

## STATION 100.110 (Interpolated Values at Standard Depths)

CREST: 29°00.5'N 122°06'W January 15, 1951 1608 GCT Wire angle: 12°  
 Sounding: 2,300 fms. Depth of observation: 1,165 m. Weather: cloudy  
 Sea: rough Wind: 320°, force 3

0	17.85	33.75	24.37	356.8	.0000	5.39	-
10	17.85	33.69	24.33	361.5	.0361	5.34	-
20	17.85	33.66	24.30	364.0	.0725	5.31	-
30	17.85	33.67	24.31	363.4	.1090	5.32	-
50	17.85	33.69	24.33	362.6	.1820	5.42	-
75	17.86	33.71	24.36	359.9	.2728	5.33	-
100	15.07	33.57	24.88	311.5	.3572	5.67	-
150	12.30	33.76	25.59	244.3	.497	4.93	-
200	10.09	33.95	26.14	192.7	.607	4.23	-
250	8.89	34.06	26.42	166.5	.698	3.71	-
300	8.02	34.10	26.59	151.2	.778	3.18	-
400	6.63	34.14	26.81	130.5	.920	1.62	-
500	5.81	34.31	27.05	108.4	1.040	.75	-
600	5.33	34.40	27.18	96.8	1.144	.50	-
700	4.93	34.45	27.27	89.2	1.237	.51	-
800	4.57	34.51	27.36	81.3	1.324	.50	-
1000	4.01	34.60	27.49	70.0	1.477	.68	-

## STATION 100.120 (Interpolated Values at Standard Depths)

CREST: 28°40.5'N 122°46'W January 15, 1951 2331 GCT Wire angle: 5°  
 Sounding: 2,350 fms. Depth of observation: 1,179 m. Weather: cloudy  
 Sea: high Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	18.04	33.69	24.28	365.6	.0000	4.85	-
10	17.90	33.71	24.33	361.3	.0365	5.14	-
20	17.87	33.68	24.31	363.0	.0729	5.17	-
30	17.86	33.68	24.32	363.0	.1093	5.13	-
50	17.85	33.71	24.34	361.2	.1821	5.02	-
75	17.85	33.66	24.30	365.7	.2735	5.13	-
100	15.85	33.68	24.79	320.0	.3597	5.29	-
150	13.28	34.14	25.69	235.0	.499	4.84	-
200	10.33	33.71	25.91	214.6	.613	4.34	-
250	8.77	33.98	26.38	170.5	.710	3.76	-
300	7.78	34.12	26.64	146.2	.789	3.00	-
400	6.48	34.23	26.91	121.5	.924	1.54	-
500	5.81	34.30	27.04	109.2	1.041	.83	-
600	5.44	34.39	27.16	99.0	1.146	.45	-
700	4.99	34.47	27.28	88.3	1.240	.40	-
800	4.49	34.53	27.38	78.7	1.325	.41	-
1000	3.94	34.59	27.49	69.8	1.475	.62	-

## STATION 103.40 (Interpolated Values at Standard Depths)

CREST: 30°44.5'N 117°07.5'W January 12, 1951 0421 GCT Wire angle: 10°  
 Sounding: 750 fms. Depth of observation: 1,180 m. Weather: cloudy  
 Sea: very rough Wind: 270°, force 5

0	14.50	33.47	24.92	304.6	.0000	5.37	-
10	14.30	33.48	24.97	300.1	.0304	5.69	-
20	14.08	33.48	25.02	295.9	.0603	5.67	-
30	13.99	33.48	25.03	294.5	.0899	5.52	-
50	12.15	33.52	25.43	257.0	.1454	4.85	-
75	11.09	33.73	25.79	223.4	.2057	3.72	-
100	10.39	33.85	26.01	203.0	.2594	3.42	-
150	9.48	34.12	26.37	169.3	.353	2.52	-
200	8.93	34.28	26.59	149.8	.433	1.83	-
250	8.67	34.43	26.75	135.6	.505	1.03	-
300	8.47	34.49	26.82	129.1	.572	.82	-
400	6.91	34.40	26.98	114.9	.695	.79	-
500	6.16	34.46	27.13	101.7	.804	.45	-
600	5.61	34.48	27.21	94.5	.903	.37	-
700	5.17	34.51	27.29	87.6	.995	.37	-
800	4.78	34.54	27.36	81.6	1.081	.42	-
1000	3.86	34.53	27.45	73.3	1.237	.64	-

## STATION 103.50 (Interpolated Values at Standard Depths)

CREST: 30°32'N 117°40'W January 11, 1951 2254 GCT Wire angle: 24°  
 Sounding: 1,200 fms. Depth of observation: 1,073 m. Weather: cloudy  
 Sea: high Wind: 270°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.41	33.51	24.75	320.4	.0000	5.30	-
10	15.42	33.40	24.67	328.9	.0326	5.39	-
20	15.33	33.41	24.70	326.5	.0655	5.39	-
30	15.31	33.43	24.71	325.0	.0982	5.27	-
50	11.70	33.46	25.47	253.5	.1563	4.79	-
75	10.32	33.43	25.69	232.5	.2174	4.47	-
100	9.83	33.80	26.06	197.8	.2716	3.54	-
150	9.06	34.03	26.37	169.4	.364	2.69	-
200	8.52	34.17	26.56	152.0	.445	2.14	-
250	7.79	34.26	26.74	135.2	.517	1.77	-
300	7.56	34.31	26.82	129.1	.584	1.22	-
400	6.84	34.38	26.97	115.4	.707	.56	-
500	6.06	34.43	27.12	102.7	.817	.33	-
600	5.54	34.45	27.20	95.9	.917	.32	-
700	4.95	34.47	27.28	87.9	1.010	.33	-
800	4.51	34.51	27.37	80.7	1.095	.44	-
1000	3.95	34.54	27.45	73.6	1.251	.62	-

## STATION 103.60 (Interpolated Values at Standard Depths)

CREST: 30°04'N 118°19.5'W January 11, 1951 1652 GCT Wire angle: 17°  
 Sounding: 1,950 m. Depth of observation: 1,086 m. Weather: rain showers  
 Sea: rough Wind: 270°, force 3

0	15.31	33.39	24.68	327.0	.0000	5.07	-
10	15.32	33.39	24.68	327.5	.0329	5.42	-
20	15.32	33.38	24.67	328.5	.0658	5.51	-
30	15.30	33.33	24.64	332.0	.0990	5.56	-
50	12.74	33.17	25.05	293.6	.1618	5.56	-
75	11.21	33.42	25.53	248.3	.2299	4.82	-
100	10.47	33.58	25.78	224.5	.2894	4.38	-
150	9.09	34.01	26.35	171.2	.389	3.24	-
200	8.83	34.20	26.54	154.5	.471	1.82	-
250	8.62	34.27	26.63	146.9	.547	1.26	-
300	8.33	34.32	26.71	139.8	.619	.92	-
400	7.11	34.36	26.92	120.6	.750	.67	-
500	6.32	34.40	27.06	108.3	.866	.56	-
600	5.64	34.43	27.17	98.3	.970	.40	-
700	5.07	34.48	27.28	88.6	1.064	.41	-
800	4.62	34.56	27.39	78.3	1.149	.46	-
1000	3.98	34.60	27.49	69.6	1.298	.61	-

## STATION 103.70 (Interpolated Values at Standard Depths)

CREST: 29°45'N 119°03'W January 11, 1951 1049 GCT Wire angle: 20°  
 Sounding: 1,650 fms. Depth of observation: 1,217 m. Weather: partly cloudy  
 Sea: very rough Wind: 270°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (mL/L)	PO <sub>4</sub> -P (µg at/L)
0	16.63	33.57	24.52	342.2	.0000	5.41	-
10	16.63	33.58	24.53	341.9	.0343	5.31	-
20	16.65	33.56	24.51	344.0	.0688	5.39	-
30	16.64	33.50	24.47	348.5	.1035	5.43	-
50	16.63	33.42	24.41	354.7	.1742	5.46	-
75	13.32	33.31	25.04	294.8	.2558	5.52	-
100	11.58	33.37	25.42	259.0	.3255	5.19	-
150	10.59	33.77	25.91	213.3	.444	3.37	-
200	9.72	34.07	26.29	178.1	.543	2.32	-
250	8.87	34.18	26.52	157.2	.627	2.06	-
300	8.12	34.26	26.70	141.0	.703	1.87	-
400	6.90	34.27	26.88	124.3	.836	1.07	-
500	6.37	34.41	27.06	108.3	.954	.54	-
600	5.62	34.44	27.18	97.6	1.057	.39	-
700	4.93	34.48	27.30	86.8	1.151	.39	-
800	4.56	34.55	27.39	78.2	1.234	.44	-
1000	3.94	34.60	27.50	69.0	1.383	.62	-

## STATION 103.80 (Interpolated Values at Standard Depths)

CREST: 29°27'N 119°45.5'W January 11, 1951 0451 GCT Wire angle: 25°  
 Sounding: 2,050 fms. Depth of observation: 979 m. Weather: partly cloudy  
 Sea: very rough Wind: 270°, force 4

0	17.44	33.55	24.32	361.9	.0000	5.06	-
10	17.47	33.55	24.31	362.1	.0363	5.16	-
20	17.46	33.58	24.33	361.0	.0726	5.22	-
30	17.45	33.58	24.34	361.0	.1089	5.25	-
50	17.46	33.53	24.30	365.5	.1819	5.21	-
75	14.48	33.34	24.82	315.8	.2675	5.65	-
100	12.95	33.33	25.13	287.1	.3434	5.38	-
150	10.52	33.46	25.68	235.2	.475	4.06	-
200	9.32	34.02	26.32	175.3	.578	3.83	-
250	8.43	34.21	26.61	148.4	.660	2.84	-
300	7.73	34.22	26.72	138.0	.732	2.08	-
400	6.61	34.24	26.90	122.6	.863	1.17	-
500	6.20	34.45	27.12	102.9	.977	.56	-
600	6.03	34.49	27.17	99.3	1.079	.36	-
700	5.13	34.55	27.32	84.3	1.172	.34	-
800	4.58	34.59	27.42	75.5	1.252	.39	-
1000	(4.02)	(34.61)	27.50	69.3	1.399	(.58)	-

## STATION 105.35 (Interpolated Values at Standard Depths)

CREST: 30°37'N 116°35'W January 9, 1951 1720 GCT Wire angle: 3°  
 Sounding: 720 fms. Depth of observation: 1,138 m. Weather: partly cloudy  
 Sea: very rough Wind: 040°, force 1

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g at/L}$ )
0	14.95	33.62	24.94	302.8	.0000	5.62	-
10	14.92	33.58	24.92	305.3	.0305	5.64	-
20	14.85	33.60	24.94	302.7	.0611	5.68	-
30	14.49	33.60	25.02	295.8	.0911	5.45	-
50	12.10	33.61	25.51	249.5	.1459	4.68	-
75	10.71	33.77	25.89	214.0	.2042	3.87	-
100	10.11	33.97	26.15	189.6	.2549	2.89	-
150	8.98	34.29	26.59	149.0	.340	1.98	-
200	8.56	34.34	26.69	139.8	.413	1.67	-
250	8.31	34.38	26.76	134.1	.482	1.41	-
300	8.03	34.44	26.85	126.4	.547	1.17	-
400	7.34	34.46	26.97	116.6	.670	.62	-
500	6.12	34.37	27.06	107.9	.783	.49	-
600	5.71	34.53	27.24	92.2	.884	.30	-
700	5.23	34.56	27.32	84.7	.973	.34	-
800	4.71	34.55	27.37	80.1	1.057	.41	-
1000	4.05	(34.48)	(27.39)	(79.3)	(1.218)	-	-

## STATION 107.40 (Interpolated Values at Standard Depths)

CREST: 30°10.5'N 116°43.5'W January 9, 1951 2222 GCT Wire angle: 15°  
 Sounding: 1,450 fms. Depth of observation: 1,022 m. Weather: cloudy  
 Sea: rough Wind: 320°, force 4-5

0	15.52	33.62	24.82	314.6	.0000	5.62	-
10	15.49	33.53	24.75	320.7	.0319	5.71	-
20	15.44	33.58	24.80	316.4	.0639	5.72	-
30	15.44	33.63	24.84	313.0	.0955	5.66	-
50	11.33	33.66	25.69	232.1	.1503	4.27	-
75	10.32	33.75	25.94	208.7	.2057	3.68	-
100	9.82	34.03	26.24	180.7	.2547	2.73	-
150	9.34	34.25	26.50	157.8	.340	2.14	-
200	9.03	34.37	26.64	145.9	.416	1.55	-
250	8.53	34.38	26.73	137.5	.488	1.21	-
300	7.94	34.36	26.80	131.0	.555	.94	-
400	6.93	34.42	26.99	113.6	.679	.54	-
500	6.19	34.62	27.25	90.2	.781	.34	-
600	5.62	34.52	27.24	91.6	.873	.32	-
700	5.18	34.51	27.29	87.7	.964	.34	-
800	4.83	34.54	27.35	82.3	1.050	.36	-
1000	4.18	34.62	27.49	70.4	1.204	.55	-





## STATION 107.70 (Interpolated Values at Standard Depths)

CREST: 29°09.5'N 118°43.5'W January 10, 1951 1723 GCT Wire angle: 5°  
 Sounding: 1,650 fms. Depth of observation: 1,198 m. Weather: cloudy  
 Sea: rough Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu\text{g}$ at/L)
0	17.30	33.44	24.27	366.7	.0000	5.41	-
10	17.30	33.49	24.31	363.3	.0367	5.31	-
20	17.25	33.46	24.29	364.8	.0732	5.30	-
30	17.17	33.42	24.28	366.1	.1099	5.43	-
50	15.37	33.35	24.64	332.8	.1801	5.77	-
75	13.69	33.30	24.96	302.8	.2600	5.59	-
100	11.60	33.29	25.36	265.2	.3315	5.12	-
150	9.28	33.60	26.00	204.6	.450	3.97	-
200	8.44	33.93	26.39	168.4	.544	3.84	-
250	7.84	34.04	26.57	152.4	.624	2.73	-
300	7.35	34.13	26.71	139.3	.698	1.64	-
400	6.97	34.34	26.92	120.1	.829	.86	-
500	6.11	34.39	27.08	106.3	.943	.51	-
600	5.76	34.40	27.13	102.2	1.048	.33	-
700	5.32	34.45	27.22	94.1	1.147	.34	-
800	4.75	34.48	27.31	85.7	1.238	.42	-
1000	4.02	34.50	27.41	77.5	1.403	.72	-

## STATION 107.80 (Interpolated Values at Standard Depths)

CREST: 28°50'N 119°22.5'W January 10, 1951 2239 GCT Wire angle: 4°  
 Sounding: 2,020 fms. Depth of observation: 1,196 m. Weather: cloudy  
 Sea: rough Wind: 270°, force 2

0	17.28	33.44	24.27	366.2	.0000	5.22	-
10	17.24	33.55	24.37	357.7	.0363	5.12	-
20	17.18	33.52	24.36	358.8	.0723	5.19	-
30	17.08	33.47	24.34	360.5	.1084	5.25	-
50	16.60	33.42	24.42	353.9	.1802	5.14	-
75	13.25	33.31	25.05	293.6	.2616	5.47	-
100	12.12	33.45	25.38	262.9	.3316	4.92	-
150	11.88	34.30	26.09	196.9	.447	1.41	-
200	11.14	34.30	26.22	185.1	.544	1.41	-
250	9.92	34.35	26.48	161.5	.631	1.32	-
300	9.05	34.43	26.68	142.6	.707	1.09	-
400	7.87	34.41	26.85	127.8	.844	.60	-
500	6.46	34.48	27.10	104.2	.961	.33	-
600	6.02	34.46	27.15	101.3	1.064	.33	-
700	5.59	34.46	27.20	96.7	1.164	.34	-
800	5.02	34.46	27.27	90.7	1.259	.35	-
1000	4.08	34.48	27.39	79.4	1.431	.62	-

## STATION 110.35 (Interpolated Values at Standard Depths)

HORIZON 29°47.5'N 116°02.0'W January 12, 1951 2122 GCT Wire Angle 44°  
 Sounding: 825 fms. Depth of observation 854 m. Weather: cloudy  
 Sea: very high Wind: 320°, force 8

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.47	33.55	24.77	318.8	.0000	3.75	-
10	15.50	33.55	24.77	319.5	.0320	3.90	-
20	15.47	33.51	24.74	322.1	.0642	3.40	-
30	15.43	33.53	24.77	320.0	.0965	3.87	-
50	14.00	33.40	24.97	301.0	.1589	3.58	-
75	11.26	33.56	25.63	238.9	.2268	2.85	-
100	10.80	33.78	25.88	215.1	.2839	2.18	-
150	10.21	34.21	26.32	174.7	.382	1.29	-
200	9.63	34.31	26.49	158.8	.466	.82	-
250	8.72	34.33	26.66	144.1	.542	.68	-
300	8.33	34.33	26.72	139.1	.614	.64	-
400	7.44	34.40	26.91	122.2	.745	.31	-
500	6.36	34.40	27.06	108.7	.862	.30	-
600	5.80	34.41	27.13	102.1	.968	.28	-
700	5.42	34.43	27.20	96.9	1.068	.29	-
800	4.97	34.44	27.26	91.4	1.164	.35	-
1000	(4.10)	(34.48)	(27.38)	(79.8)	(1.337)		

## STATION 110.35 (Interpolated Values at Standard Depths)

HORIZON 29°47'N 116°01'W January 14, 1951 1702 GCT Wire angle: 5°  
 Sounding: 350 fms. Depth of observation: 495 m. Weather: partly cloudy  
 Sea: very rough Wind: 040°, force 2

0	15.07	33.49	24.81	314.8	.0000	3.68	-
10	15.10	33.60	24.89	307.5	.0312	4.10	-
20	14.72	33.64	25.00	297.0	.0616	3.77	-
30	14.10	33.64	25.14	284.8	.0908	3.48	-
50	11.55	33.57	25.58	242.8	.1438	3.22	-
75	10.69	33.68	25.82	220.4	.2020	2.57	-
100	10.12	33.90	26.10	194.9	.2543	2.17	-
150	9.92	34.29	26.43	163.9	.345	1.34	-
200	9.67	34.40	26.56	152.7	.424	.84	-
250	9.01	34.52	26.76	134.6	.497	.75	-
300	8.86	34.61	26.86	126.1	.562	.35	-
400	7.67	34.52	26.97	116.7	.685	.35	-
500	(6.50)	(34.38)	(27.02)	(112.1)	(.800)	(.30)	-

## STATION 110.40 (Interpolated Values at Standard Depths)

HORIZON 29°38.5'N 116°21'W January 14, 1951 2050 GCT Wire angle: 4°  
 Sounding: 1,390 fms. Depth of observation: 1,200 m. Weather: clear  
 Sea: rough Wind: 320°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.72	33.48	24.66	329.0	.0000	3.88	-
10	15.50	33.64	24.84	312.9	.0322	3.75	-
20	15.48	33.62	24.82	314.3	.0637	3.38	-
30	15.44	33.59	24.81	316.0	.0954	3.28	-
50	13.25	33.57	25.26	273.8	.1546	3.24	-
75	10.87	33.64	25.76	226.4	.2175	2.80	-
100	10.19	33.77	25.98	206.3	.2719	2.38	-
150	9.55	34.06	26.32	174.9	.368	1.69	-
200	9.48	34.37	26.57	151.8	.450	1.12	-
250	9.09	34.48	26.72	138.4	.523	.69	-
300	8.64	34.55	26.84	127.5	.590	.51	-
400	7.67	34.48	26.94	119.7	.715	.33	-
500	6.81	34.44	27.02	112.0	.832	.25	-
600	6.00	34.51	27.19	97.3	.937	.25	-
700	5.36	34.50	27.26	90.9	1.032	.24	-
800	4.87	34.49	27.31	86.5	1.122	.22	-
1000	4.12	34.63	27.50	69.0	1.279	.49	-

## STATION 110.50 (Interpolated Values at Standard Depths)

HORIZON 29°19'N 117°04'W January 15, 1951 0354 GCT Wire angle: 15°  
 Sounding: 1,750 fms. Depth of observation: 1,129 m. Weather: clear  
 Sea: very rough Wind: 040°, force 3

0	15.36	33.49	24.75	320.6	.0000	3.66	-
10	15.30	33.49	24.76	319.8	.0322	3.48	-
20	15.20	33.49	24.79	317.9	.0642	3.46	-
30	15.19	33.49	24.79	318.0	.0961	3.52	-
50	14.71	33.44	24.85	312.2	.1594	3.96	-
75	12.50	33.35	25.23	276.5	.2334	3.67	-
100	11.06	33.59	25.69	233.7	.2976	2.96	-
150	9.80	33.92	26.16	189.5	.404	2.43	-
200	8.71	34.14	26.51	156.9	.491	2.35	-
250	7.98	34.25	26.71	138.7	.566	1.68	-
300	7.61	34.34	26.83	127.7	.633	1.04	-
400	7.18	34.43	26.97	116.2	.756	.44	-
500	6.24	34.44	27.10	104.3	.867	.32	-
600	5.52	34.49	27.23	92.5	.966	.30	-
700	5.14	34.60	27.36	80.7	1.054	.24	-
800	4.84	34.61	27.41	77.4	1.134	.19	-
1000	4.10	34.62	27.50	69.4	1.282	.29	-

## STATION 110.60 (Interpolated Values at Standard Depths)

HORIZON 28°56'N 117°39'W January 15, 1951 0942, 1137 GCT Wire angle: 2°  
 Sounding: 3,000, 3,400 fms. Depth of observation: 1,199, 3,089 m.  
 Weather: clear Sea: rough Wind: 320°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^3\sigma$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	16.76	33.58	24.50	344.3	.0000	3.47	-
10	16.77	33.58	24.50	344.9	.0346	3.54	-
20	16.76	33.61	24.52	342.8	.0691	3.25	-
30	16.76	33.62	24.53	342.3	.1035	3.24	-
50	16.76	33.48	24.42	353.2	.1734	3.36	-
75	15.23	33.49	24.78	320.1	.2580	3.56	-
100	12.21	33.42	25.34	266.6	.3319	3.34	-
150	10.27	33.90	26.07	198.5	.449	1.95	-
200	9.58	34.23	26.44	163.8	.540	1.58	-
250	9.18	34.35	26.60	149.5	.619	1.17	-
300	8.86	34.44	26.72	138.7	.691	.65	-
400	8.10	34.60	26.96	117.4	.820	.25	-
500	7.18	34.57	27.08	107.4	.934	.17	-
600	6.44	34.60	27.20	96.7	1.037	.16	-
700	5.64	34.60	27.30	87.1	1.130	.21	-
800	4.75	34.58	27.39	78.4	1.214	.30	-
1000	4.14	34.60	27.48	71.4	1.365	.40	-
1200	3.68	34.68	27.59	61.6	1.500	.50	-
1500	2.87	34.76	27.73	48.1	1.666	.85	-
2000	2.14	34.71	27.75	45.4	1.904	.44	-
2500	1.82	34.70	27.77	44.5	2.132	.31	-
3000	1.65	34.75	27.82	38.9	2.345	.66	-

## STATION 110.70 (Interpolated Values at Standard Depths)

HORIZON 28°41'N 118°20'W January 15, 1951 1735 GCT Wire angle: 28°  
 Sounding: 1,350 fms. Depth of observation: 1,123 m. Weather: clear  
 Sea: rough Wind: 330°, force 3

0	16.26	33.49	24.55	340.0	.0000	3.95	-
10	16.29	33.57	24.60	334.9	.0339	3.38	-
20	16.24	33.57	24.61	334.4	.0675	3.60	-
30	16.22	33.57	24.62	334.1	.1010	3.70	-
50	16.20	33.55	24.61	335.8	.1684	3.79	-
75	13.55	33.52	25.16	283.9	.2463	3.99	-
100	12.15	33.71	25.58	244.1	.3127	2.94	-
150	9.55	33.86	26.16	189.8	.422	2.27	-
200	8.71	34.15	26.52	156.0	.509	1.94	-
250	8.39	34.25	26.65	144.8	.585	1.50	-
300	7.94	34.31	26.76	134.5	.655	1.05	-
400	7.01	34.42	26.98	114.9	.781	.50	-
500	6.24	34.48	27.13	101.3	.890	.40	-
600	5.60	34.50	27.23	92.8	.988	.35	-
700	5.11	34.53	27.31	85.5	1.078	.35	-
800	4.78	34.57	27.38	79.3	1.161	.34	-
1000	4.08	34.60	27.48	70.6	1.312	.39	-

## STATION 110.80 (Interpolated Values at Standard Depths)

HORIZON 28°17.5'N 118°56.5'W January 15, 1951 2317 GCT Wire angle: 10°  
 Sounding: 2,150 fms. Depth of observation: 1,192 m. Weather: cloudy  
 Sea: rough Wind: 360°, force 2

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.26	33.71	24.48	346.0	.0000	3.28	-
10	17.25	33.58	24.39	355.7	.0352	3.64	-
20	17.16	33.73	24.52	343.0	.0703	3.60	-
30	17.15	33.72	24.52	343.9	.1048	3.55	-
50	17.19	33.63	24.44	351.9	.1747	3.46	-
75	13.40	33.44	25.12	287.1	.2550	4.01	-
100	12.02	33.65	25.56	246.2	.3221	3.42	-
150	9.72	34.04	26.27	179.1	.429	2.20	-
200	9.05	34.25	26.55	153.8	.513	1.54	-
250	8.44	34.29	26.67	142.5	.588	1.17	-
300	8.01	34.30	26.74	136.3	.658	.87	-
400	7.41	34.49	26.98	115.2	.785	.45	-
500	6.37	34.48	27.12	103.0	.895	.39	-
600	5.64	34.53	27.25	91.2	.993	.27	-
700	5.06	34.62	27.39	78.1	1.078	.29	-
800	4.61	34.69	27.50	68.6	1.152	.32	-
1000	4.01	34.65	27.53	66.2	1.288	.33	-

## STATION 110.90 (Interpolated Values at Standard Depths)

HORIZON 27°56.5'N 119°38'W January 16, 1951 0509 GCT Wire angle: 7°  
 Sounding: 1,120 fms. Depth of observation: 989 m. Weather: cloudy  
 Sea: rough Wind: 310°, force 2

0	17.22	33.66	24.45	349.2	.0000	3.64	-
10	17.23	33.73	24.51	344.4	.0348	3.64	-
20	17.20	33.72	24.51	344.7	.0694	3.65	-
30	17.16	33.71	24.51	344.9	.1040	3.70	-
50	17.14	33.73	24.53	343.6	.1732	3.84	-
75	11.67	33.68	25.65	237.2	.2462	3.25	-
100	10.51	33.69	25.86	217.1	.3034	2.60	-
150	9.79	34.07	26.28	178.2	.403	2.47	-
200	8.88	34.24	26.56	151.9	.486	1.54	-
250	7.97	34.24	26.70	139.2	.559	1.12	-
300	7.33	34.25	26.80	130.2	.627	.82	-
400	6.77	34.40	27.00	113.0	.750	.35	-
500	6.20	34.47	27.13	101.5	.858	.20	-
600	5.60	34.56	27.28	88.2	.954	.25	-
700	5.04	34.54	27.33	83.8	1.040	.27	-
800	4.64	34.59	27.41	76.3	1.121	.27	-
1000	(3.95)	(34.63)	(27.52)	(67.0)	(1.266)	(.44)	-

## STATION 110.100 (Interpolated Values at Standard Depths)

HORIZON 27°38.5'N 120°22'W January 16, 1951 1138 GCT Wire angle: 10°  
 Sounding: 2,200 fms. Depth of observation 923 m. Weather: cloudy  
 Sea: rough Wind: 310°, force 3

Depth	T	S	$\sigma_t$	$10^6 \delta$	$\Delta D$	O <sub>2</sub>	PO <sub>4</sub> -P
(m)	(°C)	(‰)	(mg/cm <sup>3</sup> )		(dyn.m.)	(ml/L)	( $\mu$ g at/L)
0	17.13	33.69	24.50	344.7	.0000	3.41	-
10	17.15	33.82	24.59	335.8	.0342	3.16	-
20	17.14	33.82	24.60	336.2	.0679	3.17	-
30	17.14	33.82	24.60	336.5	.1017	3.29	-
50	17.14	33.77	24.55	340.9	.1697	3.53	-
75	11.68	33.62	25.60	241.9	.2430	2.78	-
100	10.45	33.85	26.00	204.3	.2991	2.58	-
150	9.43	34.09	26.36	170.8	.394	1.68	-
200	8.88	34.31	26.62	146.9	.474	1.35	-
250	8.23	34.37	26.77	133.7	.544	1.17	-
300	7.74	34.36	26.83	128.0	.610	.95	-
400	6.64	34.38	27.00	112.6	.731	.45	-
500	5.95	34.48	27.17	97.3	.837	.35	-
600	5.43	34.55	27.29	87.0	.930	.28	-
700	4.85	34.50	27.32	84.3	1.017	.40	-
800	4.48	34.56	27.41	76.1	1.098	.62	-
1000	(3.93)	(34.75)	(27.62)	(57.8)	(1.233)	-	-

See introduction

## STATION 113.35 (Interpolated Values at Standard Depths)

HORIZON 29°12'N 115°39'W January 12, 1951 1058 GCT Wire angle: 48°  
 Sounding: 540 fms. Depth of observation: 483 m. Weather: squalls  
 Sea: high Wind: 320°, force 7

0	15.02	33.57	24.89	307.7	.0000	3.08	-
10	15.02	33.52	24.85	311.9	.0311	3.91	-
20	14.99	33.50	24.84	312.9	.0625	3.65	-
30	14.98	33.49	24.83	313.8	.0939	3.44	-
50	14.05	33.40	24.96	302.0	.1558	3.99	-
75	11.45	33.40	25.47	254.0	.2257	2.91	-
100	10.30	33.62	25.84	218.6	.2852	2.15	-
150	9.42	34.15	26.40	166.4	.382	1.46	-
200	9.45	34.40	26.60	149.1	.461	.85	-
250	9.18	34.42	26.66	144.3	.535	.56	-
300	8.68	34.41	26.73	138.3	.607	.48	-
400	7.73	34.43	26.89	124.2	.739	.31	-
500	(7.00)	(34.47)	(27.02)	(112.4)	(.858)	-	-

## STATION 113.40 (Interpolated Values at Standard Depths)

HORIZON 29°02'N 115°58.5'W January 12, 1951 0643 GCT Wire angle: 25°  
 Sounding: 1,050 fms. Depth of observation: 1,100 m. Weather: clear  
 Sea: very rough Wind: 310°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	16.65	33.71	24.63	332.3	.0000	3.75	-
10	16.66	33.71	24.63	332.9	.0334	3.19	-
20	16.64	33.71	24.63	333.0	.0668	3.20	-
30	16.63	33.71	24.63	333.1	.1003	3.65	-
50	16.64	33.71	24.63	333.6	.1673	3.86	-
75	12.84	33.73	25.46	253.0	.2410	3.55	-
100	11.18	33.78	25.81	221.9	.3007	2.73	-
150	10.65	34.15	26.19	186.8	.404	2.15	-
200	10.87	34.48	26.41	167.0	.493	1.00	-
250	10.58	34.60	26.56	154.2	.574	.77	-
300	10.00	34.54	26.61	150.0	.650	.68	-
400	7.99	34.54	26.94	120.0	.786	.42	-
500	7.00	34.55	27.09	106.6	.901	.32	-
600	6.19	34.54	27.19	97.3	1.004	.37	-
700	5.54	34.54	27.27	90.3	1.098	.37	-
800	5.05	34.55	27.34	84.3	1.186	.38	-
1000	4.23	34.61	27.47	71.8	1.344	.52	-

## STATION 113.50 (Interpolated Values at Standard Depths)

HORIZON 28°42'N 116°37.5'W January 12, 1951 0006 GCT Wire angle: 5°  
 Sounding: 1,700 fms. Depth of observation: 1,204 m. Weather: partly cloudy  
 Sea: very rough Wind: 310°, force 4

0	16.17	33.53	24.60	335.2	.0000	4.00	-
10	16.20	33.57	24.61	333.2	.0336	4.26	-
20	16.18	33.56	24.62	333.8	.0670	3.83	-
30	16.15	33.49	24.57	338.6	.1008	3.81	-
50	13.90	33.39	24.99	299.7	.1649	4.00	-
75	11.74	33.39	25.41	259.9	.2353	3.43	-
100	10.86	33.76	25.86	217.6	.2953	2.34	-
150	9.47	33.99	26.27	178.8	.395	2.55	-
200	9.51	34.33	26.53	155.3	.479	1.40	-
250	9.17	34.36	26.61	148.4	.556	.92	-
300	8.73	34.38	26.70	141.1	.629	.70	-
400	7.68	34.45	26.91	122.0	.761	.38	-
500	6.85	34.47	27.04	110.3	.878	.23	-
600	5.98	34.49	27.18	98.4	.984	.24	-
700	5.32	34.47	27.24	92.5	1.080	.25	-
800	4.92	34.45	27.27	90.0	1.172	.30	-
1000	4.18	34.53	27.42	77.0	1.341	.39	-



## STATION 113.60 (Interpolated Values at Standard Depths)

HORIZON 28°22'N 117°16.5'W January 11, 1951 1735 GCT Wire angle: 29°  
 Sounding: 1,800 fms. Depth of observation: 1,122 m. Weather: partly cloudy  
 Sea: very rough Wind: 340°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.72	33.44	24.63	332.0	.0000	3.36	-
10	15.75	33.47	24.65	330.9	.0333	3.79	-
20	15.74	33.51	24.68	327.9	.0664	3.74	-
30	15.73	33.51	24.68	327.9	.0993	3.59	-
50	15.72	33.46	24.63	334.0	.1658	3.38	-
75	14.55	33.47	24.91	307.6	.2464	3.97	-
100	11.20	33.56	25.64	238.4	.3151	2.93	-
150	10.17	33.98	26.15	190.8	.423	2.48	-
200	9.94	34.30	26.44	164.4	.513	1.30	-
250	9.32	34.40	26.62	148.3	.591	1.08	-
300	8.58	34.39	26.73	138.3	.663	.86	-
400	7.78	34.42	26.87	125.8	.797	.40	-
500	7.10	34.56	27.08	107.2	.914	.26	-
600	6.25	34.57	27.20	96.2	1.017	.25	-
700	5.51	34.51	27.25	92.2	1.112	.23	-
800	4.85	34.52	27.34	84.0	1.201	.25	-
1000	4.04	34.60	27.49	70.3	1.357	.45	-

## STATION 113.70 (Interpolated Values at Standard Depths)

HORIZON 28°02'N 117°55.5'W January 11, 1951 1124 GCT Wire angle: 39°  
 Sounding: 1,800 fms. Depth of observation: 990 m. Weather: clear  
 Sea: very rough Wind: 290°, force 4

0	17.00	33.58	24.44	349.8	.0000	3.47	-
10	17.02	33.58	24.44	350.6	.0352	3.18	-
20	16.98	33.65	24.50	344.8	.0701	4.50	-
30	16.77	33.62	24.53	342.7	.1046	4.76	-
50	16.64	33.52	24.48	347.5	.1740	4.74	-
75	13.33	33.51	25.19	280.5	.2529	3.23	-
100	11.74	33.58	25.56	246.4	.3192	2.68	-
150	10.56	34.07	26.15	190.6	.429	2.28	-
200	9.69	34.29	26.47	161.1	.518	1.98	-
250	9.01	34.39	26.66	144.0	.595	1.47	-
300	8.58	34.47	26.79	132.3	.664	.88	-
400	7.65	34.59	27.02	111.4	.787	.46	-
500	6.68	34.60	27.17	98.2	.893	.37	-
600	5.88	34.60	27.28	88.9	.987	.29	-
700	5.29	34.61	27.35	81.8	1.073	.29	-
800	4.87	34.63	27.42	76.3	1.153	.35	-
1000	(4.25)	(34.70)	(27.54)	(65.5)	(1.297)	(.35)	-

## STATION 117.35 (Interpolated Values at Standard Depths)

HORIZON 28°39'N 115°17'W January 10, 1951 0535 GCT Wire angle: 15°  
 Sounding: 125 fms. Depth of observation 202 m. Weather: clear  
 Sea: rough Wind: 320°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.19	33.66	24.92	304.6	.0000	4.02	-
10	15.20	33.69	24.94	302.9	.0305	4.30	-
20	15.04	33.60	24.91	306.5	.0611	4.25	-
30	14.25	33.61	25.08	290.1	.0910	4.02	-
50	11.64	33.71	25.67	233.7	.1437	3.12	-
75	11.27	33.96	25.94	209.6	.1994	2.01	-
100	10.30	34.00	26.14	190.3	.2497	1.93	-
150	9.90	34.43	26.55	153.2	.336	1.18	-
200	9.43	34.49	26.67	142.3	.411	.77	-

## STATION 117.40 (Interpolated Values at Standard Depths)

HORIZON 28°32.5'N 115°38.5'W January 10, 1951 1002 GCT Wire angle: 12°  
 Sounding: 230 fms. Depth of observation 199 m. Weather: clear  
 Sea: rough Wind: 270°, force 3-4

0	15.40	33.70	24.90	306.2	.0000	4.97	-
10	15.42	33.68	24.88	308.3	.0309	4.89	-
20	15.42	33.67	24.88	309.3	.0619	4.96	-
30	15.30	33.65	24.88	308.8	.0929	4.99	-
50	14.30	33.58	25.05	293.9	.1535	4.90	-
75	11.95	33.65	25.57	244.3	.2211	2.62	-
100	11.17	33.93	25.93	210.6	.2783	2.33	-
150	10.03	34.39	26.49	158.3	.3712	1.60	-
						1.67	-

## STATION 117.50 (Interpolated Values at Standard Depths)

HORIZON 28°15'N 116°21'W January 10, 1951 1633 GCT Wire angle: 5°  
 Sounding: 1,970 fms. Depth of observation: 1,255 m. Weather: cloudy  
 Sea: rough Wind: 350°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^2\delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.02	33.66	24.50	344.3	.0000	3.99	-
10	17.02	33.58	24.44	350.5	.0349	4.20	-
20	16.97	33.62	24.48	347.0	.0699	4.00	-
30	16.70	33.64	24.56	339.6	.1044	3.89	-
50	15.78	33.59	24.73	323.8	.1710	3.86	-
75	13.50	33.48	25.14	286.0	.2477	4.07	-
100	11.68	33.62	25.60	242.4	.3142	3.54	-
150	9.93	33.91	26.13	192.2	.424	2.58	-
200	9.86	34.32	26.47	161.6	.513	1.43	-
250	9.79	34.57	26.67	143.2	.589	.76	-
300	9.26	34.67	26.84	128.1	.658	.54	-
400	8.10	34.58	26.95	118.8	.782	.40	-
500	6.77	34.53	27.10	104.7	.895	.26	-
600	5.97	34.50	27.18	97.6	.997	.21	-
700	5.39	34.50	27.26	91.2	1.092	.23	-
800	4.95	34.56	27.36	82.3	1.180	.33	-
1000	4.17	34.63	27.50	69.6	1.333	.46	-

## STATION 117.60 (Interpolated Values at Standard Depths)

HORIZON 27°48'N 116°54.5'W January 10, 1951 2238 GCT Wire angle: 12°  
 Sounding: 1,720 fms. Depth of observation: 1,192 m. Weather: overcast  
 Sea: very rough Wind: 300°, force 5

0	17.04	33.69	24.52	342.7	.0000	3.95	-
10	17.06	33.71	24.53	341.8	.0344	3.84	-
20	16.98	33.68	24.52	342.9	.0687	4.15	-
30	16.96	33.68	24.53	342.5	.1031	4.15	-
50	16.88	33.68	24.55	341.2	.1719	3.77	-
75	13.95	33.53	25.08	291.1	.2513	4.30	-
100	12.40	33.74	25.55	246.6	.3190	3.71	-
150	11.47	34.25	26.13	193.2	.430	1.48	-
200	11.06	34.60	26.47	161.4	.519	.86	-
250	10.77	34.76	26.65	145.6	.596	.52	-
300	10.35	34.77	26.73	138.7	.668	.35	-
400	8.58	34.58	26.88	125.9	.801	.26	-
500	7.24	34.59	27.08	106.9	.919	.25	-
600	5.87	34.43	27.14	101.4	1.024	.33	-
700	5.52	34.51	27.25	92.3	1.122	.31	-
800	5.05	34.58	27.36	82.1	1.210	.24	-
1000	4.15	(34.58)	(27.46)	(73.0)	(1.366)	(.40)	-

## STATION 117.70 (Interpolated Values at Standard Depths)

HORIZON: 27°28'N 117°38'W January 11, 1951 0444 GCT Wire angle: 2°  
 Sounding: 1,850 fms. Depth of observation: 1,195 m. Weather: clear  
 Sea: high Wind: 290°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	16.80	33.82	24.68	327.7	.0000	4.46	-
10	16.82	33.78	24.64	331.1	.0331	4.65	-
20	16.81	33.73	24.61	334.8	.0665	4.53	-
30	16.77	33.74	24.62	333.9	.1001	4.37	-
50	16.63	33.77	24.68	328.9	.1667	3.90	-
75	14.36	33.82	25.22	277.9	.2430	3.04	-
100	11.75	33.75	25.69	233.9	.3073	3.35	-
150	10.01	34.05	26.23	183.1	.412	2.55	-
200	9.55	34.32	26.52	156.7	.498	1.59	-
250	9.24	34.54	26.74	136.5	.572	.80	-
300	8.95	34.61	26.84	127.7	.638	.48	-
400	7.76	34.54	26.97	116.6	.761	.40	-
500	6.60	34.56	27.15	100.2	.871	.22	-
600	5.74	34.61	27.30	86.6	.965	.25	-
700	5.06	34.63	27.40	77.3	1.048	.30	-
800	4.57	34.63	27.45	72.3	1.123	.36	-
1000	3.98	34.72	27.59	60.6	1.258	.55	-

## STATION 120.35 (Interpolated Values at Standard Depths)

HORIZON: 28°03'N 114°54'W January 19, 1951 1010 GCT Wire angle: 15°  
 Sounding: 45 fms. Depth of observation: 72 m. Weather: cloudy  
 Sea: rough Wind: 340°, force 3

0	16.12	33.84	24.85	311.4	.0000	5.55	-
10	16.14	33.64	24.69	326.9	.0320	5.49	-
20	16.05	33.79	24.83	314.0	.0642	5.45	-
30	15.81	33.80	24.89	308.6	.0955	5.45	-
50	15.30	33.77	24.98	300.4	.1567	5.40	-
75	(11.99)	(33.64)	(25.56)	(245.7)	(.2253)	(4.81)	-

## STATION 120.45 (Interpolated Values at Standard Depths)

HORIZON: 27°43.5'N 115°34.5'W January 19, 1951 0426 GCT Wire angle: 15°  
 Sounding: 1,590 fms. Depth of observation: 1,253 m. Weather: cloudy  
 Sea: very rough Wind: 320°, force 6

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	15.99	33.73	24.79	316.8	.0000	5.56	-
10	16.01	33.75	24.80	316.0	.0318	5.54	-
20	16.00	33.83	24.87	310.2	.0632	5.55	-
30	16.00	33.83	24.87	310.5	.0944	5.57	-
50	15.95	33.80	24.86	312.0	.1569	5.59	-
75	12.60	33.93	25.66	235.8	.2258	4.05	-
100	12.03	34.22	26.00	204.5	.2812	2.08	-
150	10.97	34.41	26.34	172.9	.376	1.14	-
200	10.36	34.60	26.60	149.4	.457	.79	-
250	9.76	34.61	26.71	139.8	.530	.61	-
300	9.04	34.57	26.80	132.2	.599	.53	-
400	7.60	34.45	26.92	120.9	.726	.53	-
500	6.53	34.50	27.11	103.7	.840	.42	-
600	6.07	34.57	27.23	93.6	.939	.29	-
700	5.68	34.59	27.29	88.3	1.031	.27	-
800	5.05	34.60	27.38	80.6	1.116	.35	-
1000	4.22	34.68	27.53	66.5	1.265	.52	-

## STATION 120.50 (Interpolated Values at Standard Depths)

HORIZON: 27°35'N 115°57.5'W January 18, 1951 2339 GCT Wire angle: 18°  
 Sounding: 2,100 fms. Depth of observation: 1,283 m. Weather: cloudy  
 Sea: very rough Wind: 360°, force 5

0	15.84	33.80	24.88	308.4	.0000	5.56	-
10	15.87	33.70	24.80	316.7	.0314	5.62	-
20	15.75	33.76	24.87	309.8	.0628	5.63	-
30	15.60	33.78	24.92	305.5	.0937	5.60	-
50	15.48	33.66	24.85	312.2	.1558	5.19	-
75	11.84	33.71	25.64	237.8	.2249	4.16	-
100	10.29	33.86	26.04	200.6	.2801	3.49	-
150	10.21	34.38	26.45	162.1	.371	1.85	-
200	10.03	34.45	26.54	154.5	.451	1.20	-
250	9.42	34.48	26.66	143.9	.526	.94	-
300	8.78	34.69	26.93	119.0	.592	.70	-
400	7.44	34.56	27.03	110.5	.708	.37	-
500	6.51	34.58	27.18	97.6	.813	.30	-
600	5.86	34.60	27.28	88.7	.907	.25	-
700	5.30	34.60	27.34	82.7	.993	.29	-
800	4.77	34.63	27.43	75.0	1.073	.39	-
1000	4.03	34.68	27.55	64.4	1.214	.59	-

## STATION 120.60 (Interpolated Values at Standard Depths)

HORIZON: 27°19'N 116°38.5'W January 18, 1951 1729 GCT Wire angle: 45°  
 Sounding: 2,250 fms. Depth of observation: 1,022 m. Weather: squalls  
 Sea: very rough Wind: 360°, force 6

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P (µg at/L)
0	16.10	33.68	24.73	322.8	.0000	4.06	-
10	16.09	33.65	24.71	325.1	.0325	4.07	-
20	15.99	33.58	24.68	328.4	.0653	4.09	-
30	15.97	33.60	24.69	326.9	.0982	4.06	-
50	15.96	33.63	24.72	324.8	.1637	3.86	-
75	13.70	33.52	25.13	286.9	.2406	3.96	-
100	12.87	33.70	25.43	258.2	.3092	3.65	-
150	11.15	34.00	25.99	206.3	.426	2.15	-
200	10.25	34.28	26.37	171.2	.521	1.36	-
250	9.54	34.46	26.63	147.3	.601	.90	-
300	8.89	34.54	26.80	131.9	.672	.67	-
400	7.20	34.48	27.00	112.9	.795	.54	-
500	6.47	34.60	27.20	95.4	.900	.32	-
600	6.06	34.62	27.27	89.8	.993	.24	-
700	5.42	34.63	27.35	82.2	1.080	.20	-
800	4.85	34.62	27.41	76.7	1.161	.24	-
1000	4.12	34.60	27.48	71.4	1.310	.38	-

## STATION 120.70 (Interpolated Values at Standard Depths)

HORIZON: 26°59'N 117°11.5'W January 18, 1951 1055 GCT Wire angle: 20°  
 Sounding: 1,800 fms. Depth of observation: 1,157 m. Weather: partly cloudy  
 Sea: very rough Wind: 360°, force 4

0	16.54	33.77	24.70	325.7	.0000	5.50	-
10	16.56	33.76	24.69	326.9	.0328	5.55	-
20	16.55	33.82	24.74	322.8	.0654	5.55	-
30	16.55	33.82	24.74	323.1	.0978	5.56	-
50	16.57	33.60	24.56	340.1	.1644	5.56	-
75	13.89	33.51	25.08	291.3	.2438	5.14	-
100	12.68	33.97	25.68	234.9	.3100	3.59	-
150	10.63	34.20	26.24	182.4	.415	2.61	-
200	9.99	34.38	26.49	159.3	.501	1.27	-
250	9.60	34.61	26.74	137.1	.576	.62	-
300	9.00	34.64	26.86	126.4	.642	.42	-
400	7.50	34.52	26.99	114.3	.763	.40	-
500	6.43	34.44	27.08	106.9	.875	.39	-
600	5.74	34.52	27.23	93.2	.976	.34	-
700	5.21	34.55	27.32	85.2	1.066	.31	-
800	4.81	34.57	27.38	80.0	1.149	.32	-
1000	4.07	34.62	27.50	69.0	1.300	.56	-

## STATION 120.80 (Interpolated Values at Standard Depths)

HORIZON: 26°39'N 117°45'W January 18, 1951 0500 GCT Wire angle: 15°  
 Sounding: 2,200 fms. Depth of observation: 1,160 m. Weather: cloudy  
 Sea: very rough Wind: 360°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.78	33.71	24.36	358.0	.0000	3.59	-
10	17.80	33.77	24.40	354.3	.0358	3.67	-
20	17.76	33.74	24.39	356.0	.0714	3.87	-
30	17.55	33.73	24.43	352.2	.1070	3.88	-
50	16.61	33.75	24.67	330.1	.1755	3.70	-
75	13.67	33.48	25.10	289.3	.2534	3.70	-
100	12.40	33.54	25.40	261.4	.3227	3.70	-
150	9.88	33.85	26.10	195.9	.438	2.80	-
200	8.75	34.13	26.50	158.1	.527	2.07	-
250	7.99	34.22	26.69	141.0	.602	1.56	-
300	7.38	34.26	26.81	130.1	.670	1.15	-
400	6.62	34.34	26.97	115.5	.794	.51	-
500	6.12	34.43	27.11	103.5	.905	.30	-
600	5.58	34.63	27.34	82.9	.999	.30	-
700	5.09	34.53	27.32	85.1	1.083	.31	-
800	4.62	34.49	27.33	83.5	1.169	.36	-
1000	3.94	34.53	27.44	74.3	1.328	.49	-

## STATION 120.90 (Interpolated Values at Standard Depths)

HORIZON: 26°19'N 118°20'W January 17, 1951 2257 GCT Wire angle: 6°  
 Sounding: 2,200 fms. Depth of observation: 1,155 m. Weather: cloudy  
 Sea: high Wind: 020°, force 4

0	17.22	33.63	24.43	351.2	.0000	3.60	-
10	17.23	33.78	24.54	340.7	.0347	3.64	-
20	17.18	33.81	24.58	337.6	.0688	3.63	-
30	17.14	33.81	24.59	337.3	.1027	3.60	-
50	15.62	33.49	24.69	327.6	.1695	3.99	-
75	14.39	33.75	25.16	283.8	.2463	4.18	-
100	13.55	33.68	25.28	272.8	.3164	4.32	-
150	11.18	33.92	25.92	212.7	.439	3.28	-
200	9.18	34.02	26.34	172.9	.536	2.44	-
250	8.53	34.19	26.58	151.5	.617	1.87	-
300	8.04	34.26	26.71	139.7	.691	1.42	-
400	6.70	34.29	26.92	120.0	.822	.70	-
500	6.07	34.43	27.12	102.7	.934	.37	-
600	5.48	34.69	27.40	77.1	1.025	.28	-
700	4.96	34.63	27.41	76.1	1.102	.30	-
800	4.67	34.60	27.42	75.8	1.179	.32	-
1000	4.04	34.65	27.52	66.7	1.323	.42	-

## STATION 120.100 (Interpolated Values at Standard Depths)

HORIZON: 25°56.5'N 118°54.5'W January 17, 1951 1549 GCT Wire angle: 18°  
 Sounding: 2,200 fms. Depth of observation: 1,233 m. Weather: light fog  
 Sea: high Wind: 360°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^3\delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	18.27	33.91	24.39	354.8	.0000	3.56	-
10	18.27	33.93	24.41	353.8	.0356	3.55	-
20	18.23	33.84	24.35	359.4	.0714	3.47	-
30	18.25	33.85	24.35	359.7	.1075	3.47	-
50	18.29	33.91	24.39	356.8	.1795	3.83	-
75	18.25	33.91	24.40	357.8	.2693	3.60	-
100	14.52	33.73	25.12	288.6	.3506	3.82	-
150	11.08	33.85	25.88	216.2	.478	2.52	-
200	10.43	34.25	26.31	176.6	.577	1.29	-
250	10.03	34.37	26.48	161.8	.662	.82	-
300	9.52	34.42	26.60	150.9	.741	.65	-
400	8.38	34.57	26.90	123.6	.879	.31	-
500	7.15	34.55	27.07	108.6	.996	.28	-
600	6.20	34.52	27.17	99.1	1.101	.27	-
700	5.56	34.52	27.25	91.9	1.197	.28	-
800	5.02	34.51	27.31	87.0	1.288	.30	-
1000	4.30	34.70	27.54	66.0	1.442	.38	-

## STATION 120.110 (Interpolated Values at Standard Depths)

HORIZON: 25°38'N 119°35'W January 17, 1951 0930 GCT Wire angle: 10°  
 Sounding: 2,230 fms. Depth of observation: 1,271 m. Weather: partly cloudy  
 Sea: high Wind: 100°, force 5

0	18.57	33.91	24.32	362.1	.0000	5.34	-
10	18.58	33.95	24.35	359.9	.0362	5.28	-
20	18.54	33.96	24.36	358.4	.0723	5.26	-
30	18.52	33.96	24.37	358.1	.1083	5.26	-
50	18.57	33.82	24.25	370.1	.1815	5.26	-
75	16.35	33.78	24.75	322.9	.2686	5.68	-
100	13.52	33.67	25.28	273.0	.3435	5.17	-
150	10.81	34.06	26.10	195.8	.462	2.25	-
200	10.93	34.44	26.37	171.0	.554	.77	-
250	10.99	34.61	26.49	160.6	.637	.50	-
300	10.60	34.67	26.61	150.6	.716	.45	-
400	9.30	34.53	26.72	141.1	.863	.45	-
500	7.88	34.51	26.93	122.2	.996	.38	-
600	6.82	34.55	27.11	105.6	1.111	.25	-
700	5.88	34.55	27.24	93.8	1.211	.23	-
800	5.19	34.51	27.29	89.1	1.304	.27	-
1000	4.34	34.57	27.43	76.0	1.471	.45	-



## STATION 123.40 (Interpolated Values at Standard Depths)

HORIZON: 27°16.5'N 114°55'W January 19, 1951 1748 GCT Wire angle: 2°  
 Sounding: 145 fms. Depth of observation: 597 m. Weather: squalls  
 Sea: rough Wind: 330°, force 4

Depth (m)	T (°C)	S (%)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	16.28	34.09	25.00	296.5	.0000	5.39	-
10	16.26	34.07	25.00	297.5	.0298	5.35	-
20	15.93	33.96	24.99	299.0	.0598	5.20	-
30	15.87	33.96	25.00	297.9	.0897	4.83	-
50	12.40	33.96	25.72	229.5	.1427	3.35	-
75	11.53	34.06	25.97	206.5	.1975	2.56	-
100	10.84	34.05	26.08	196.2	.2482	2.24	-
150	11.34	34.51	26.35	172.1	.341	1.26	-
200	10.67	34.72	26.64	145.6	.421	.62	-
250	9.88	34.61	26.69	141.7	.493	.45	-
300	9.32	34.49	26.69	142.4	.565	.40	-
400	8.00	34.47	26.88	125.3	.700	.37	-
500	7.18	34.66	27.15	100.8	.814	.25	-
600	(6.50)	(34.50)	(27.12)	(104.8)	(.917)	(.25)	-

## STATION 123.50 (Interpolated Values at Standard Depths)

HORIZON: 26°55.5'N 115°34'W January 19, 1951 2333 GCT Wire angle: 26°  
 Sounding 1,800 fms. Depth of observation: 1,120 m. Weather: cloudy  
 Sea: very rough Wind: 340°, force 4-5

0	16.98	34.06	24.81	314.2	.0000	5.39	-
10	16.99	34.06	24.81	314.7	.0316	5.45	-
20	16.95	34.13	24.88	309.1	.0629	5.44	-
30	16.92	34.13	24.89	308.7	.0939	5.39	-
50	14.25	33.80	25.23	276.6	.1527	4.85	-
75	11.71	33.67	25.63	238.7	.2175	4.63	-
100	10.58	33.85	25.98	206.3	.2735	3.59	-
150	9.35	34.19	26.45	162.2	.366	2.63	-
200	9.26	34.36	26.60	149.2	.445	1.49	-
250	9.51	34.63	26.77	134.2	.516	.42	-
300	9.26	34.64	26.82	130.3	.583	.27	-
400	8.00	34.59	26.97	116.4	.707	.24	-
500	7.04	34.59	27.11	104.2	.818	.21	-
600	6.17	34.55	27.20	96.3	.919	.22	-
700	5.52	34.49	27.23	93.6	1.015	.25	-
800	4.97	34.47	27.28	89.1	1.108	.35	-
1000	4.02	34.58	27.47	71.5	1.270	.59	-



## STATION 127.50 (Interpolated Values at Standard Depths)

HORIZON: 26°14'N 115°09'W January 20, 1951 1711 GCT Wire angle: 25°  
 Sounding: 1,775 fms. Depth of observation: 1,179 m. Weather: cloudy  
 Sea: very rough Wind: 340°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta \rho$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.40	34.13	24.77	318.8	.0000	5.34	-
10	17.41	34.20	24.82	314.2	.0318	5.27	-
20	17.37	34.15	24.80	317.0	.0635	5.27	-
30	17.10	34.02	24.76	320.9	.0955	5.25	-
50	13.05	33.82	25.49	251.7	.1530	3.77	-
75	11.76	34.07	25.93	209.9	.2111	2.60	-
100	11.91	34.40	26.16	189.0	.2612	1.16	-
150	11.76	34.65	26.38	169.1	.351	.66	-
200	11.52	34.80	26.55	154.7	.433	.35	-
250	11.12	34.80	26.62	148.9	.509	.25	-
300	10.25	34.70	26.69	142.6	.583	.27	-
400	8.50	34.69	26.97	116.7	.713	.28	-
500	7.17	34.66	27.15	100.5	.823	.24	-
600	6.37	34.60	27.21	95.5	.922	.22	-
700	5.74	34.57	27.27	90.6	1.016	.23	-
800	5.14	34.56	27.33	84.8	1.104	.30	-
1000	4.18	34.70	27.55	64.7	1.255	.45	-

## STATION 127.60 (Interpolated Values at Standard Depths)

HORIZON: 26°04'N 115°47'W January 20, 1951 1105 GCT Wire angle: 30°  
 Sounding: 2,020 fms. Depth of observation: 1,158 m. Weather: cloudy  
 Sea: rough Wind: 320°, force 4

0	17.08	33.82	24.61	334.1	.0000	5.50	-
10	17.08	33.78	24.58	337.3	.0337	5.45	-
20	17.06	33.77	24.58	337.6	.0676	5.45	-
30	17.03	33.77	24.58	337.5	.1015	5.46	-
50	16.95	33.79	24.62	334.9	.1691	5.50	-
75	13.20	33.52	25.23	277.2	.2460	5.66	-
100	11.68	33.51	25.51	250.5	.3123	4.95	-
150	10.43	33.91	26.05	200.3	.426	3.81	-
200	9.45	34.21	26.45	163.2	.517	2.92	-
250	8.53	34.35	26.70	139.6	.594	2.00	-
300	8.13	34.42	26.82	129.4	.661	1.01	-
400	7.57	34.43	26.91	121.9	.788	.45	-
500	6.78	34.42	27.02	112.9	.906	.26	-
600	5.85	34.46	27.17	99.0	1.013	.20	-
700	5.33	34.54	27.29	87.6	1.108	.27	-
800	4.94	34.59	27.38	80.0	1.192	.38	-
1000	4.16	34.63	27.50	69.4	1.343	.51	-

## STATION 130.35 (Interpolated Values at Standard Depths)

HORIZON: 26°19'N 113°48.5'W January 21, 1951 0546 GCT Wire angle: 35°  
 Sounding: 200 fms. Depth of observation: 205 m. Weather: partly cloudy  
 Sea: rough Wind: 340°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.69	34.13	24.70	325.3	.0000	5.37	-
10	17.70	34.05	24.64	331.7	.0330	5.35	-
20	17.67	34.14	24.72	324.6	.0659	5.40	-
30	17.69	34.14	24.71	325.8	.0986	5.42	-
50	17.68	33.84	24.48	347.8	.1663	5.41	-
75	12.88	33.66	25.40	260.8	.2428	5.00	-
100	11.42	34.02	25.96	308.0	.3018	3.48	-
150	10.76	34.39	26.36	171.6	.397	1.41	-
200	10.67	34.61	26.55	153.9	.479	.77	-

## STATION 130.40 (Interpolated Values at Standard Depths)

HORIZON: 26°09'N 114°08'W January 22, 1951 0931 GCT Wire angle: 22°  
 Sounding: 1,250 fms. Depth of observation: 1,232 m. Weather: partly cloudy  
 Sea: rough Wind: 330°, force 4

0	17.66	34.18	24.75	321.0	.0000	5.41	-
10	17.69	34.14	24.71	324.9	.0324	5.35	-
20	17.66	34.18	24.75	321.6	.0649	5.35	-
30	17.64	34.18	24.75	321.7	.0972	5.34	-
50	17.25	34.18	24.85	313.2	.1610	5.30	-
75	12.56	33.87	25.60	239.0	.2304	3.41	-
100	11.36	34.00	25.95	208.5	.2867	2.60	-
150	10.31	34.25	26.33	173.3	.383	2.15	-
200	10.21	34.51	26.55	153.2	.465	1.60	-
250	9.91	34.63	26.70	140.8	.539	.82	-
300	9.36	34.67	26.82	129.9	.607	.39	-
400	7.98	34.58	26.97	116.9	.732	.33	-
500	6.95	34.63	27.16	100.0	.841	.25	-
600	6.00	34.61	27.27	89.9	.937	.29	-
700	5.38	34.59	27.33	84.4	1.025	.36	-
800	4.94	34.60	27.39	79.4	1.107	.45	-
1000	4.20	34.66	27.52	67.8	1.256	.55	-

## STATION 130.50 (Interpolated Values at Standard Depths)

HORIZON: 25°49.5'N 114°49.5'W January 21, 1951 1530 GCT Wire angle: 15°  
 Sounding: 2,050 fms. Depth of observation: 1,165 m. Weather: partly cloudy  
 Sea: very rough Wind: 340°, force 4

Depth	T	S	$\sigma_t$	$10^5 \delta$	$\Delta D$	O <sub>2</sub>	PO <sub>4</sub> -P
(m)	(°C)	(‰)	(mg/cm <sup>3</sup> )		(dyn.m.)	(ml/L)	( $\mu$ g at/L)
0	17.76	34.25	24.78	318.2	.0000	5.31	-
10	17.76	34.33	24.84	312.9	.0317	5.30	-
20	17.74	34.33	24.84	312.8	.0631	5.33	-
30	17.73	34.33	24.84	313.1	.0945	5.34	-
50	17.74	34.27	24.79	318.0	.1579	5.30	-
75	13.15	33.94	25.56	245.4	.2288	3.05	-
100	11.48	34.06	25.98	206.4	.2856	2.59	-
150	10.15	34.26	26.37	170.1	.380	1.83	-
200	9.95	34.56	26.64	145.4	.460	.92	-
250	9.70	34.68	26.77	133.6	.530	.69	-
300	9.31	34.69	26.85	127.6	.596	.51	-
400	7.96	34.63	27.01	112.8	.717	.25	-
500	6.87	34.59	27.14	101.6	.825	.26	-
600	6.10	34.61	27.25	91.2	.923	.34	-
700	5.47	34.56	27.29	87.8	1.013	.34	-
800	4.94	34.52	27.32	85.1	1.100	.35	-
1000	4.13	(34.56)	(27.44)	(74.3)	(1.261)	(.52)	-

## STATION 130.60 (Interpolated Values at Standard Depths)

HORIZON: 25°30'N 115°28.5'W January 21, 1951 2121 GCT Wire angle: 18°  
 Sounding: 2,100 fms. Depth of observation: 1,027 m. Weather: cloudy  
 Sea: high Wind: 340°, force 4

0	17.30	33.63	24.41	352.8	.0000	5.17	-
10	17.29	33.78	24.53	341.9	.0349	5.05	-
20	17.25	33.77	24.53	342.1	.0692	5.07	-
30	17.21	33.76	24.53	342.2	.1036	5.12	-
50	17.20	33.71	24.50	346.3	.1728	5.35	-
75	17.21	33.64	24.44	352.2	.2606	5.10	-
100	15.90	33.76	24.84	315.2	.3445	5.36	-
150	10.49	33.81	25.96	208.9	.476	3.73	-
200	10.22	34.42	26.48	160.4	.569	1.75	-
250	10.08	34.51	26.58	152.3	.648	.83	-
300	9.58	34.51	26.66	145.1	.723	.46	-
400	8.10	34.52	26.90	123.4	.858	.38	-
500	7.13	34.58	27.09	106.2	.974	.27	-
600	6.17	34.54	27.19	97.2	1.077	.27	-
700	5.38	34.56	27.30	86.7	1.170	.26	-
800	4.94	34.69	27.46	72.5	1.250	.31	-
1000	4.21	34.69	27.54	65.7	1.390	.51	-

## STATION 130.70 (Interpolated Values at Standard Depths)

HORIZON: 25°08'N 116°09'W January 22, 1951 0309 GCT Wire angle: 32°  
 Sounding: 2,030 fms. Depth of observation: 664 m. Weather: partly cloudy  
 Sea: high Wind: 350°, force 5

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	18.04	33.89	24.43	351.2	.0000	5.37	-
10	18.04	33.78	24.35	359.5	.0357	5.48	-
20	18.01	33.89	24.44	351.0	.0714	5.18	-
30	18.02	33.89	24.44	351.3	.1066	5.24	-
50	18.04	33.89	24.43	352.8	.1774	5.34	-
75	17.92	33.81	24.40	356.1	.2665	5.38	-
100	14.05	33.61	25.12	288.0	.3475	5.45	-
150	11.26	33.90	25.89	215.3	.474	3.70	-
200	10.28	34.18	26.29	178.9	.574	1.82	-
250	9.64	34.48	26.63	147.3	.656	1.14	-
300	9.07	34.53	26.76	135.6	.727	.88	-
400	8.03	34.64	27.01	113.4	.852	.48	-
500	7.08	34.63	27.14	101.6	.961	.25	-
600	6.25	34.58	27.21	95.4	1.060	.23	-

## STATION 130.80 (Interpolated Values at Standard Depths)

HORIZON: 24°47.5'N 116°40'W January 22, 1951 0830 GCT Wire angle: 25°  
 Sounding: 2,150 fms. Depth of observation: 1,159 m. Weather: partly cloudy  
 Sea: very rough Wind: 360°, force 5

0	17.98	33.82	24.39	354.7	.0000	5.34	-
10	17.99	33.87	24.43	351.6	.0355	5.36	-
20	17.96	33.82	24.40	354.6	.0709	5.35	-
30	17.95	33.82	24.40	354.9	.1065	5.36	-
50	17.98	33.82	24.39	356.5	.1780	5.39	-
75	17.96	33.79	24.38	358.7	.2679	5.40	-
100	14.57	33.71	25.09	291.1	.3497	5.68	-
150	11.43	33.89	25.86	219.0	.478	4.15	-
200	10.31	34.24	26.33	175.0	.577	2.95	-
250	9.58	34.42	26.59	150.8	.659	1.81	-
300	9.03	34.55	26.78	133.6	.731	.87	-
400	8.11	34.60	26.96	117.5	.857	.35	-
500	7.15	34.61	27.11	104.1	.969	.33	-
600	6.30	34.60	27.22	94.7	1.070	.31	-
700	5.62	34.57	27.28	88.9	1.162	.38	-
800	5.01	34.54	27.33	84.7	1.250	.48	-
1000	4.18	34.63	27.50	69.8	1.406	.51	-

## STATION 133.30 (Interpolated Values at Standard Depths)

HORIZON 25°53'N 113°08'W January 22, 1951 1310 GCT Wire angle: 10°  
 Sounding: 105 fms. Depth of observation 152 m. Weather: partly cloudy  
 Sea: rough Wind: 320°, force 4

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.cm.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.98	34.05	24.57	338.1	.0000	5.38	-
10	18.00	34.00	24.53	342.4	.0342	5.40	-
20	17.97	33.97	24.51	344.4	.0686	5.34	-
30	17.95	33.97	24.52	343.9	.1032	5.35	-
50	16.15	33.80	24.81	316.4	.1696	5.60	-
75	13.35	33.64	25.29	271.3	.2434	5.11	-
100	11.97	33.80	25.68	234.2	.3070	3.35	-
150	11.77	34.66	26.39	168.8	.408	.60	-

## STATION 133.40 (Interpolated Values at Standard Depths)

HORIZON 25°36'N 113°43'W January 23, 1951 0802 GCT Wire angle: 10°  
 Sounding: 1,600 fms. Depth of observation: 1,189 m. Weather: partly cloudy  
 Sea: rough Wind: 310°, force 4

0	17.89	33.91	24.48	346.2	.0000	5.24	-
10	17.90	33.87	24.45	349.5	.0349	5.40	-
20	17.91	33.98	24.53	342.0	.0696	5.33	-
30	17.88	33.98	24.54	341.5	.1039	5.30	-
50	17.35	33.93	24.63	333.6	.1718	5.41	-
75	13.65	33.86	25.40	260.9	.2465	4.60	-
100	12.55	34.05	25.77	226.5	.3078	2.70	-
150	12.21	34.67	26.31	176.9	.409	.95	-
200	11.80	34.75	26.45	163.8	.495	.51	-
250	10.86	34.78	26.65	145.8	.573	.32	-
300	9.85	34.74	26.80	132.5	.643	.25	-
400	8.47	34.54	26.86	127.2	.774	.24	-
500	7.35	34.59	27.07	108.6	.893	.20	-
600	6.42	34.47	27.10	106.0	1.001	.24	-
700	5.76	34.51	27.22	95.3	1.103	.27	-
800	5.13	34.57	27.34	84.0	1.194	.30	-
1000	4.27	34.65	27.50	69.3	1.349	.44	-

## STATION 133.50 (Interpolated Values at Standard Depths)

HORIZON 25°17.5'N 114°15.5'W January 22, 1951 0107 GCT Wire angle: 25°  
 Sounding: 1,870 fms. Depth of observation: 1,200 m. Weather: cloudy  
 Sea: rough Wind: 330°, force 5

Depth (m)	T (°C)	S (%)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \sigma_s$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	17.31	33.78	24.53	342.2	.0000	5.39	-
10	17.29	33.68	24.45	349.1	.0347	5.43	-
20	17.26	33.78	24.54	341.4	.0694	5.45	-
30	17.21	33.95	24.68	328.4	.1030	5.45	-
50	17.08	34.09	24.82	316.0	.1677	5.41	-
75	12.80	33.60	25.37	263.6	.2406	4.49	-
100	12.19	33.85	25.68	234.4	.3033	3.53	-
150	12.04	34.68	26.35	172.3	.406	.83	-
200	11.45	34.67	26.46	163.1	.490	.36	-
250	10.65	34.62	26.56	154.0	.570	.32	-
300	9.88	34.60	26.68	143.4	.645	.31	-
400	8.41	34.61	26.93	121.2	.778	.24	-
500	7.18	34.56	27.07	108.3	.894	.25	-
600	6.34	34.63	27.24	93.0	.996	.21	-
700	5.70	34.62	27.31	86.4	1.086	.22	-
800	5.18	34.60	27.36	82.2	1.171	.26	-
1000	4.32	34.56	27.43	78.7	1.334	.46	-

## STATION 133.60 (Interpolated Values at Standard Depths)

HORIZON 24°55'N 155°02'W January 22, 1951 1923 GCT Wire angle: 30°  
 Sounding: 2,150 fms. Depth of observation 951 m. Weather: partly cloudy  
 Sea: rough Wind: 350°, force 3

0	17.36	33.81	24.54	341.0	.0000	5.36	-
10	17.35	33.77	24.51	344.1	.0344	5.40	-
20	17.30	33.81	24.55	340.3	.0688	5.08	-
30	17.29	33.81	24.55	340.6	.1029	5.15	-
50	17.33	33.80	24.54	342.5	.1716	5.36	-
75	17.34	33.95	24.65	332.8	.2565	5.42	-
100	12.18	33.83	25.67	235.7	.3280	5.26	-
150	11.51	34.15	26.04	201.3	.438	1.83	-
200	11.00	34.69	26.55	153.8	.527	.53	-
250	10.50	34.75	26.69	141.3	.602	.42	-
300	9.85	34.76	26.81	131.2	.670	.24	-
400	8.48	34.60	26.91	123.0	.798	.17	-
500	7.26	34.61	27.10	105.7	.914	.19	-
600	6.32	34.47	27.11	104.7	1.020	.20	-
700	5.58	34.52	27.25	92.2	1.119	.25	-
800	4.93	34.57	27.36	81.4	1.207	.31	-
1000	(4.25)	(34.51)	(27.39)	(79.5)	(1.370)	(.50)	-



## STATION 137.35 (Interpolated Values at Standard Depths)

HORIZON 25°06.5'N 113°06.8'W January 23, 1951 1939 GCT Wire angle: 2°  
 Sounding: 310 fms. Depth of observation: 410 m. Weather: cloudy  
 Sea: rough Wind: 310°, force 2-3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (Mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	18.16	34.12	24.58	337.2	.0000	-	-
10	18.05	34.13	24.61	334.3	.0337	-	-
20	17.65	34.12	24.70	326.0	.0669	-	-
30	17.61	34.04	24.65	331.1	.0999	-	-
50	16.87	34.02	24.81	316.1	.1649	5.19	-
75	13.85	33.63	25.18	281.8	.2401	5.08	-
100	12.90	34.16	25.78	225.1	.3038	2.63	-
150	11.95	34.52	26.25	182.2	.406	1.13	-
200	10.98	34.66	26.54	155.5	.491	.68	-
250	10.26	34.61	26.62	147.9	.568	.54	-
300	9.58	34.56	26.70	141.4	.641	.35	-
400	8.21	34.59	26.94	119.8	.772	.34	-

## STATION 137.40 (Interpolated Values at Standard Depths)

HORIZON 24°55.5'N 113°33.5'W January 23, 1951 2357 GCT Wire angle: 16°  
 Sounding: 160 fms. Depth of observation: 965 m. Weather: cloudy  
 Sea: moderate Wind: 320°, force 2-3

0	18.46	34.11	24.50	344.8	.0000	5.20	-
10	18.31	34.11	24.53	341.6	.0345	5.40	-
20	18.23	34.13	24.57	338.6	.0686	5.39	-
30	18.18	34.13	24.58	337.7	.1026	5.38	-
50	18.15	33.97	24.47	349.3	.1716	5.42	-
75	13.43	33.73	25.34	266.5	.2490	4.58	-
100	12.85	34.06	25.71	231.4	.3117	2.80	-
150	12.15	34.56	26.24	183.0	.416	.84	-
200	11.59	34.72	26.47	161.9	.503	.34	-
250	10.45	34.58	26.57	153.5	.582	.28	-
300	9.71	34.55	26.67	144.4	.657	.27	-
400	8.67	34.63	26.90	123.9	.792	.26	-
500	7.33	34.54	27.03	111.9	.911	.25	-
600	6.42	34.53	27.15	101.5	1.019	.24	-
700	5.65	34.51	27.23	93.8	1.118	.23	-
800	5.13	34.58	27.35	83.3	1.207	.33	-
1000	(4.32)	(34.72)	(27.55)	(64.6)	(1.357)	(.39)	-

## STATION 137.50 (Interpolated Values at Standard Depths)

HORIZON 24°39'N 114°07'W January 24, 1951 0404 GCT Wire angle: 13°  
 Sounding: 1,900 fms. Depth of observation 1,174 m. Weather: partly cloudy  
 Sea: rough Wind: 330°, force 3

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	PO <sub>4</sub> -P ( $\mu$ g at/L)
0	19.78	34.43	24.40	353.8	.0000	5.10	-
10	19.80	34.43	24.40	354.5	.0356	5.12	-
20	19.49	34.39	24.45	350.1	.0709	5.14	-
30	18.38	34.10	24.51	334.8	.1053	5.20	-
50	17.59	34.01	24.63	333.3	.1725	5.47	-
75	13.60	33.75	25.33	267.9	.2480	5.52	-
100	12.82	34.20	25.83	220.4	.3095	2.37	-
150	11.56	34.47	26.28	178.9	.410	1.25	-
200	10.84	34.63	26.54	155.5	.494	.65	-
250	10.34	34.71	26.69	142.0	.569	.32	-
300	9.88	34.71	26.77	135.1	.639	.25	-
400	8.20	34.59	26.94	119.6	.767	.30	-
500	7.19	34.56	27.07	108.3	.882	.22	-
600	6.37	34.56	27.18	98.6	.987	.24	-
700	5.70	34.52	27.23	93.8	1.084	.25	-
800	5.12	34.52	27.30	87.5	1.175	.31	-
1000	4.20	34.63	27.49	70.0	1.334	.50	-

## STATION 137.60 (Interpolated Values at Standard Depths)

HORIZON 24°19.5'N 114°46.5'W January 24, 1951 1111 GCT Wire angle: 15°  
 Sounding: 2,050 fms. Depth of observation: 1,174 m. Weather: partly cloudy  
 Sea: rough Wind: 320°, force 3

0	19.82	34.40	24.37	356.7	.0000	5.15	-
10	19.82	34.38	24.36	358.6	.0359	5.17	-
20	19.74	34.38	24.37	357.1	.0718	5.15	-
30	19.73	34.38	24.38	357.4	.1077	5.16	-
50	19.78	34.36	24.35	360.6	.1799	5.22	-
75	13.80	33.93	25.42	258.8	.2577	4.39	-
100	12.65	34.21	25.87	216.9	.3176	2.45	-
150	11.48	34.41	26.25	181.7	.418	1.35	-
200	10.95	34.54	26.45	163.9	.505	.71	-
250	10.37	34.64	26.63	147.7	.583	.38	-
300	9.79	34.69	26.77	135.4	.655	.30	-
400	8.62	34.74	27.00	114.6	.781	.25	-
500	7.28	34.68	27.15	100.9	.889	.25	-
600	6.47	34.63	27.22	94.7	.988	.27	-
700	5.73	34.64	27.32	85.4	1.079	.29	-
800	5.02	34.65	27.42	76.6	1.161	.31	-
1000	4.27	34.59	27.45	73.7	1.313	.46	-



MLR-2

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