

CORRECTIONS MADE :
STATION POSITIONS #18

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5304
(MLR 47)
31 March - 19 April 1958

SIO Reference 58-13
20 February 1958

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5304

(MLR 47)

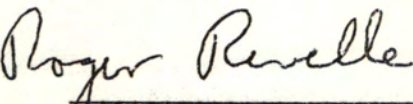
31 March - 19 April 1953

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Marine Research Committee

SIO Reference 58-13
20 February 1958

Approved for distribution


Roger Revelle, Director

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6. Horizontal distribution of temperature at 200 meters
7. Horizontal distribution of salinity at 200 meters

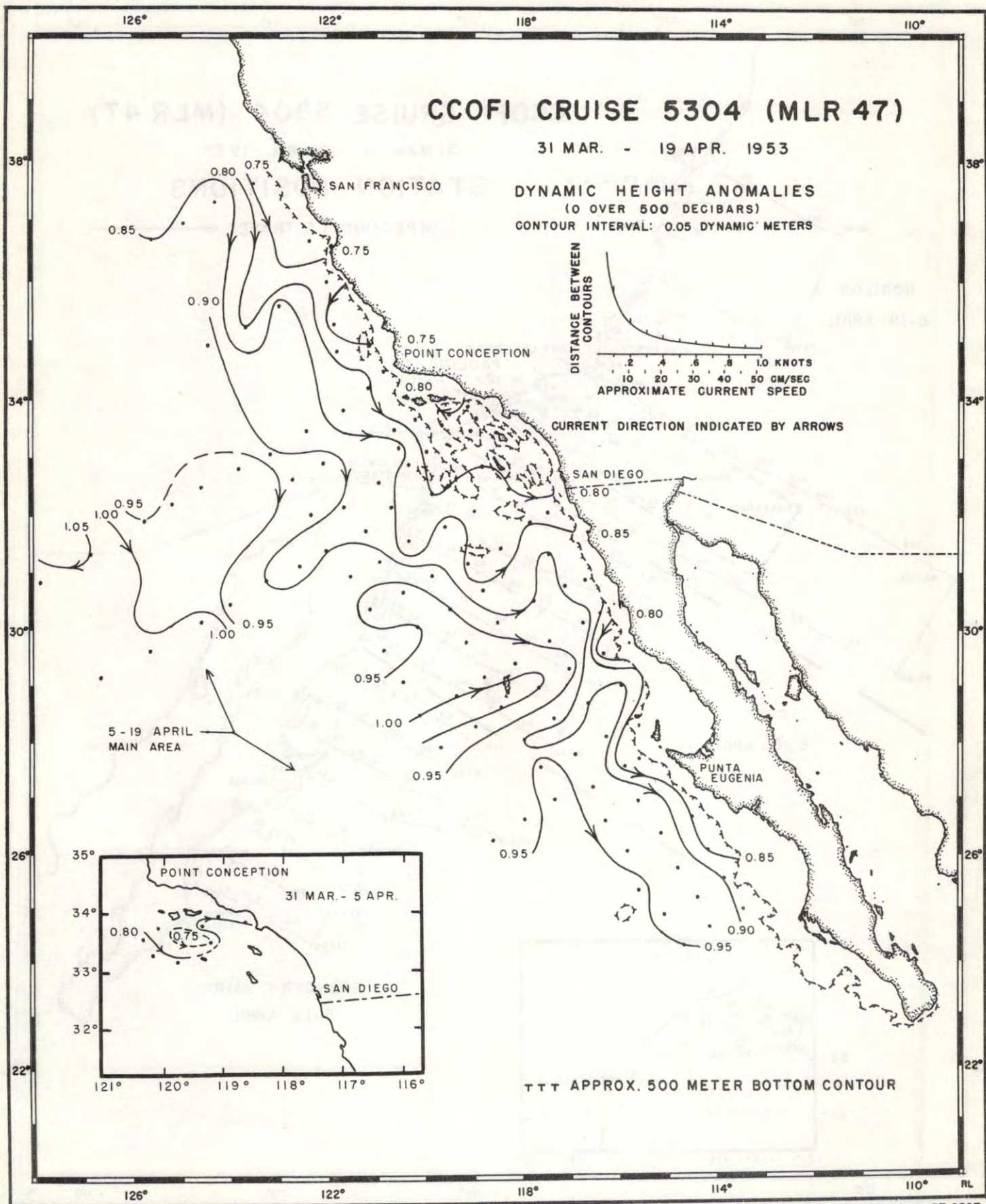


FIGURE 2

FROM H.O. CHART 0527

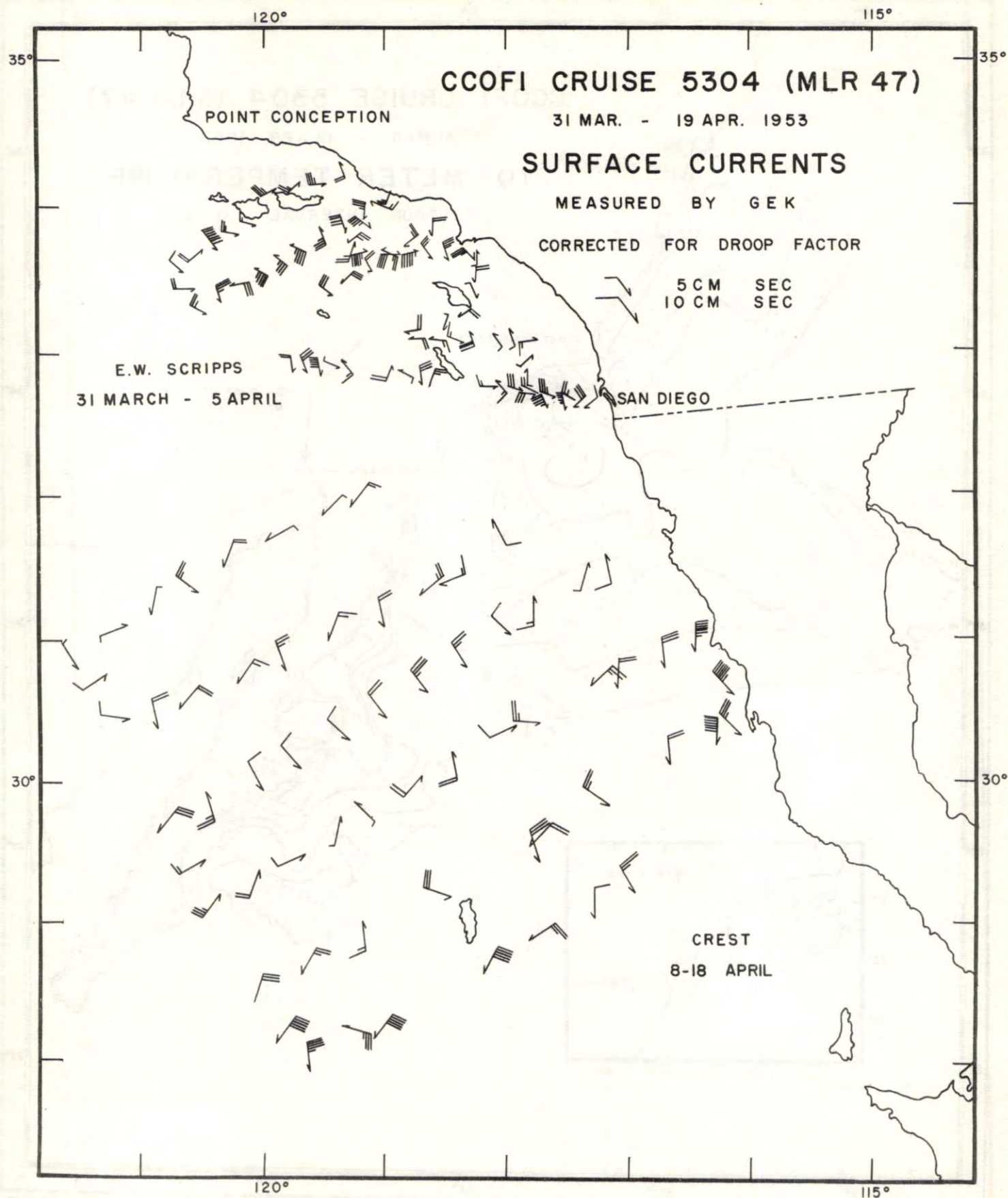


FIGURE 3

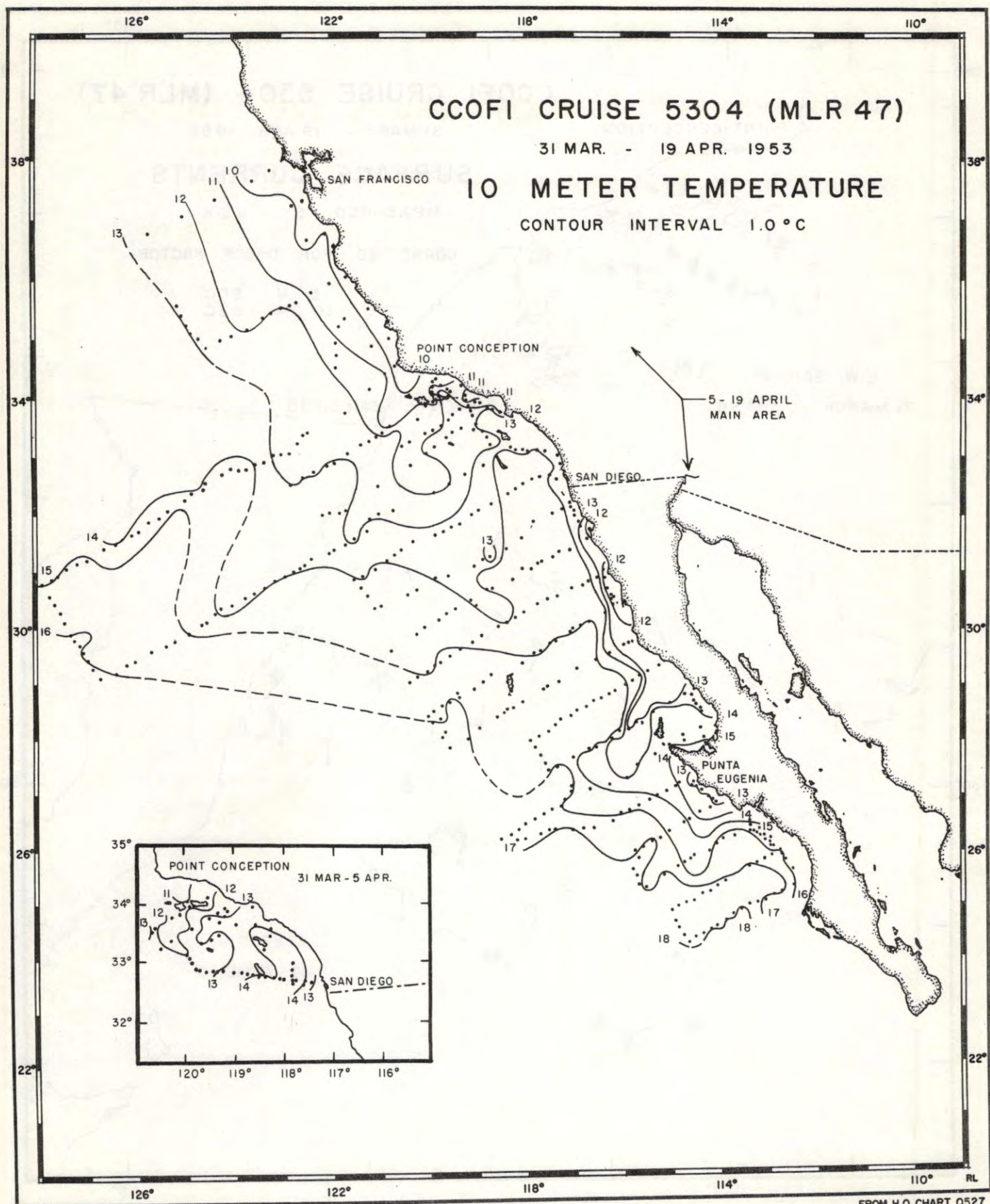


FIGURE 4

FROM H.O. CHART 0527

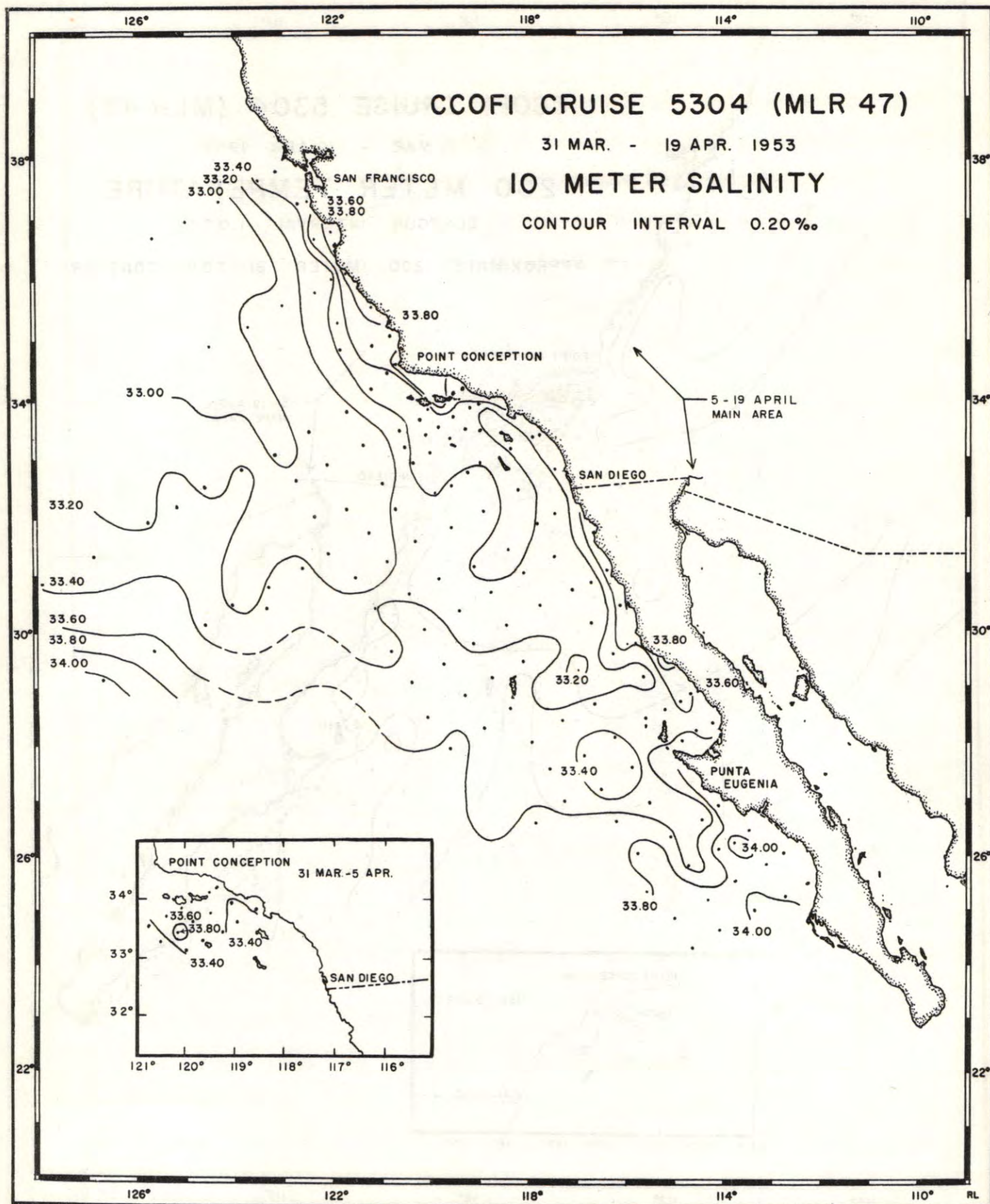


FIGURE 5

FROM H.O. CHART 0527

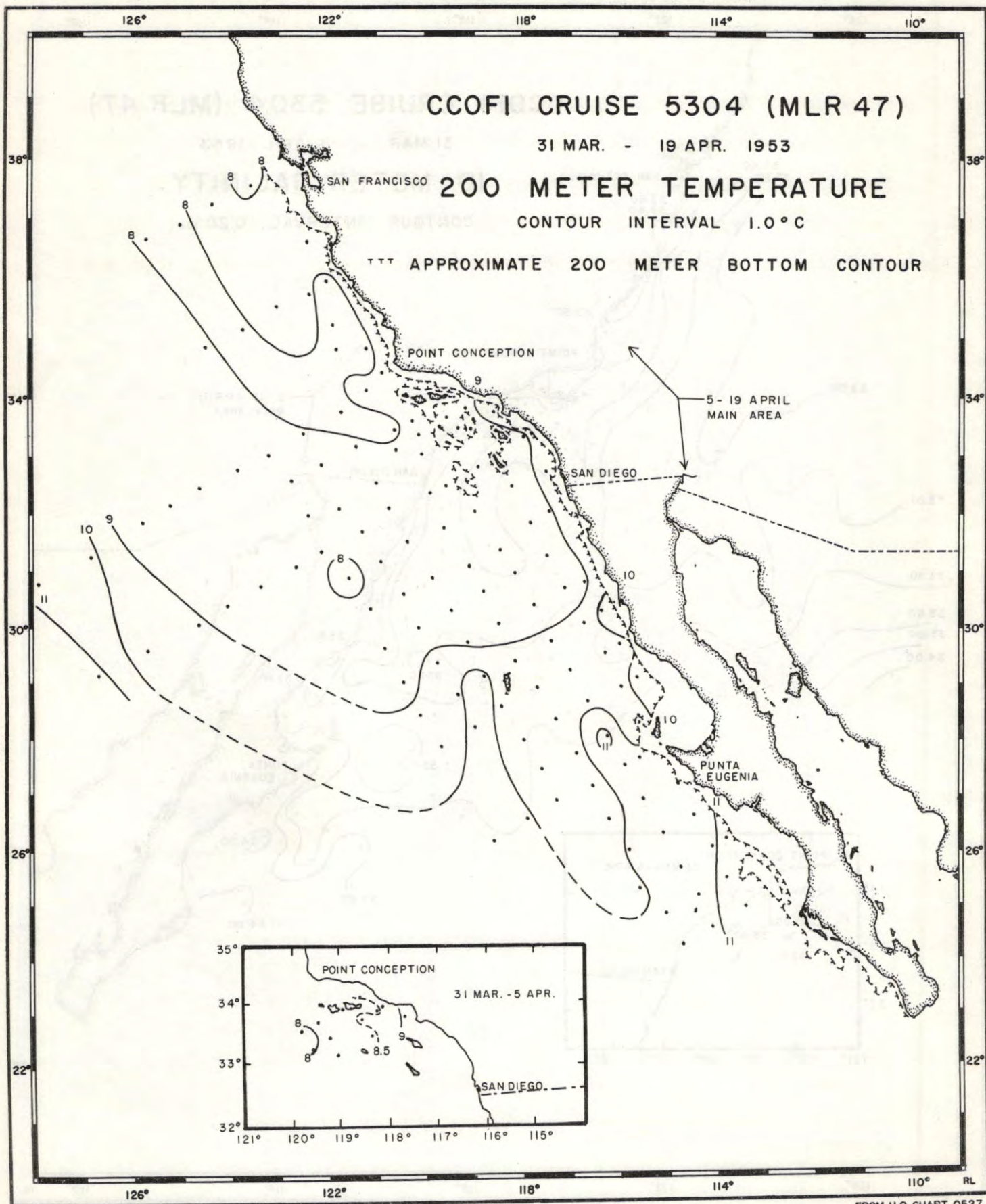


FIGURE 6

FROM H.O. CHART 0527

INTRODUCTION

The data in this report were collected on the forty-seventh consecutive cruise of the California Cooperative Oceanic Fisheries Investigations program. The five ships participating were the R/V Crest, the R/V E. W. Scripps, the R/V Horizon, the R/V Paolina-T and the R/V Spencer F. Baird of the Scripps Institution of Oceanography.

The data are tabulated at observed depths, and the interpolated and computed values are tabulated at standard depths accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication, and the interpretations herein may be subject to modification as the program continues.

STANDARD PROCEDURES

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers are recorded in hundredths of a degree. Extrapolated values and values interpolated between remote observations are entered within parentheses. A hyphen is used to indicate a missing observed value. The time is the time of messenger release. When more than one cast was made on a station, each messenger time and wire angle is given in the order of increasing depth of casts. A line is left blank between the observed data of each cast.

FOOTNOTES

In addition to standard footnotes, three special notations are used without footnotes because their meaning is always the same.

To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip.

Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

r: rejected value (value seems to be definitely wrong),

u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

FORMAT

Beginning with this report, these data will be typed in the format of the University of California Press publication, "Oceanic Observations of the Pacific." So that these pages can be used as copy for the 1953 volume, the first page of the Cruise 5304 data is numbered 111.

PERSONNEL

SHIPS' CAPTAINS

Davis, L. E., R/V Crest
Brandel, G., R/V E. W. Scripps
Ferris, Noel, R/V Horizon
Newbegin, R. C., R/V Paolina-T
Colbeth, C. W., R/V Spencer F. Baird

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V CREST

Cunningham, Leonard M., Jr., Senior Marine Technician
Greenbaum, Richard H., Marine Technician
Larimore, Wayne H., Marine Technician
Livingstone, Robert, Jr., Marine Biologist, U. S. Fish and Wildlife Service
Smith, James B., Student Chemist

R/V E. W. SCRIPPS

Cunningham, Leonard M., Jr., Senior Marine Technician
Payne, Miles M., Senior Marine Technician
Duiker, Wesley J., Marine Technician
Schwartzlose, Richard A., Laboratory Technician

R/V HORIZON

Gilkey, Robert W., Senior Marine Technician
Casey, Harold D., Fisheries Aid, U. S. Fish and Wildlife Service
Kircher, Robert J., Marine Technician
Person, David A., Marine Technician
Schwartzlose, Richard A., Laboratory Technician

R/V PAOLINA-T

Coolidge, Richard N., Senior Marine Technician
Payne, Miles M., Senior Marine Technician
Worrall, Charles G., Senior Marine Technician
Riber, Donald N., Marine Technician

R/V SPENCER F. BAIRD

Smith, Alan C., Senior Marine Technician
Counts, Robert C., Fisheries Research Biologist, U. W. Fish and Wildlife Service
Howell, Robert W., Marine Technician
King, Robert D., Marine Technician
Lance, James J., Marine Technician

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn.m

S10

CCOFI
5304

HORIZON; April 18, 1953; 1710 GCT; 37°47.5'N, 123°15'W; sounding, 50 fm; wind, 040°, force 1; weather, cloudy; sea, moderate; wire angle, 00°.

6055

0	9.76	33.36	6.14	0	9.76	33.36	6.14	25.73	227	0.00
10	9.36	33.45	6.03	10	9.36	33.45	6.03	25.87	214	0.02
20	8.69	33.65	5.10	20	8.69	33.65	5.10	26.13	189	0.04
30	8.35	33.68	4.17	30	8.35	33.68	4.17	26.21	182	0.06
50	8.40	33.90	3.42	50	8.40	33.90	3.42	26.37	167	0.10

HORIZON; April 18, 1953; 1343 GCT; 37°38'N, 123°36'W; sounding, 1900 fm; wind, 270°, force 1; weather, partly cloudy; sea, rough; wire angle, 09°.

6060

0	10.20	33.28	6.27	0	10.20	33.28	6.27	25.60	240	0.00
10	9.37	33.41	5.47	10	9.37	33.41	5.47	25.84	217	0.02
25	8.94	33.48	5.02	20	9.07	33.46	5.20	25.92	209	0.04
54	8.34	33.60	3.82	30	8.80	33.50	4.90	26.00	202	0.06
77	8.34	33.68	3.20	50	8.35	33.58	4.00	26.13	190	0.10
104	7.96	33.90	2.74	75	8.33	33.68	3.21	26.21	183	0.15
152	7.46	33.93	2.94	100	8.04	33.89	2.73	26.42	164	0.19
200	7.24	34.03	2.06	150	7.48	33.93	2.95	26.53	154	0.27
253	6.83	34.04	1.63	200	7.24	34.03	2.06	26.64	144	0.35
298	6.33	34.04	1.67	250	6.89	34.04	1.64	26.70	139	0.42
400	5.50	34.07	0.99	300	6.31	34.04	1.65	26.78	132	0.49
499	5.15	34.21	0.58	400	5.50	34.07	0.99	26.90	121	0.61
598	4.78	34.24	0.41	500	5.14	34.21	0.59	27.06	107	0.73
789	4.20	34.43	0.36	600	4.77	34.24	0.42	27.12	101	0.83
981	3.64	34.49	0.59	700	4.45	34.34	0.36	27.24	91	0.93
1172	3.24	34.50	0.79	800	4.17	34.43	0.38	27.34	82	1.01
				1000	3.60	34.49	0.60	27.44	73	1.17

HORIZON; April 18, 1953; 0847 GCT; 37°18'N, 124°21'W; sounding, 2000+ fm; wind, 330°, force 1; weather, cloudy; sea, rough; wire angle, 05°.

6070

0	11.52	32.94	6.61	0	11.52	32.94	6.61	25.10	287	0.00
10	11.38	32.88	6.56	10	11.38	32.88	6.56	25.08	289	0.03
20	10.94	32.97	6.72	20	10.94	32.97	6.72	25.23	275	0.06
35	10.63	-	6.45	30	10.70	32.96	6.58	25.26	272	0.08
54	10.42	32.89	6.42	50	10.47	32.89	6.42	25.25	274	0.14
68	10.31	33.04	6.38	75	10.20	33.07	6.32	25.43	257	0.20
82	10.04	33.10	6.25	100	9.62	33.20	6.00	25.63	238	0.27
104	9.52	33.23	5.87	150	8.69	33.66	4.10	26.14	191	0.38
125	9.06	33.41	4.92	200	8.70	33.96	2.22	26.37	170	0.46
152	8.67	33.68	4.04	250	8.27	34.05	1.92	26.51	158	0.55
198	8.70	33.95	2.25	300	7.74	34.16	1.68	26.67	143	0.62
251	8.24	34.05	1.92	400	6.80	34.22	1.07	26.85	126	0.76
295	7.78	34.15	1.69	500	5.91	34.22	0.68	26.97	116	0.88
400	6.80	34.22	1.07	600	5.19	34.25	0.60	27.08	106	0.99
502	5.88	34.22	0.68							
606	5.14	34.25	0.60							

SIO

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5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

60.80

HORIZON; April 18, 1953; 0355 GCT; 36°57'N, 125°04'W; sounding, 2000+ fm; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 15°.

0	12.33	32.82	6.45	0	12.33	32.82	6.45	24.86	310	0.00
9	12.14	32.87	6.46	10	12.10	32.87	6.45	24.94	303	0.03
24	11.64	32.87	6.51	20	11.75	32.87	6.50	25.00	297	0.06
52	11.31	32.83	6.50	30	11.57	32.87	6.51	25.04	294	0.09
75	11.18	32.78	6.37	50	11.34	32.84	6.51	25.06	292	0.15
100	8.79	32.95	5.69	75	11.18	32.78	6.37	25.04	295	0.22
150	8.33	33.62	3.62	100	8.79	32.95	5.69	25.57	244	0.29
198	7.90	34.04	2.61	150	8.33	33.62	3.62	26.16	189	0.40
252	7.16	34.06	2.22	200	7.88	34.04	2.60	26.56	152	0.48
296	6.83	34.09	1.76	250	7.17	34.06	2.25	26.68	141	0.56
397	6.00	34.14	1.12	300	6.80	34.09	1.73	26.75	135	0.62
495	5.32	34.15	0.62	400	5.97	34.14	1.10	26.90	121	0.75
591	4.92	34.34	0.42	500	5.30	34.15	0.60	26.99	114	0.87
781	4.29	34.42	0.30	600	4.90	34.35	0.40	27.19	95	0.96
970	3.64	34.52	0.45	700	4.54	34.39	0.32	27.27	89	1.07
1157	3.32	34.58	0.70	800	4.22	34.43	0.30	27.33	83	1.15
				1000	3.58	34.53	0.50	27.48	70	1.30

60.90

HORIZON; April 17, 1953; 2255 GCT; 36°41'N, 125°43'W; sounding, 2000+ fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 20°.

0	12.71	32.93	6.45	0	12.71	32.93	6.45	24.87	309	0.00
9	12.60	32.92	6.37	10	12.60	32.92	6.38	24.88	308	0.03
19	11.72	32.93	6.56	20	11.66	32.93	6.57	25.07	291	0.06
33	11.33	32.98	6.58	30	11.40	32.97	6.58	25.15	283	0.09
50	11.08	33.00	6.70	50	11.08	33.00	6.70	25.23	276	0.14
63	10.85	33.04	6.26	75	9.99	33.12	5.69	25.51	250	0.21
75	9.99	33.12	5.69	100	8.90	33.34	4.65	25.86	217	0.27
95	9.12	33.29	4.74	150	8.23	33.72	3.64	26.26	180	0.37
114	8.57	33.48	4.42	200	7.99	34.00	2.39	26.51	156	0.45
140	8.26	33.65	3.90	250	7.00	34.03	2.50	26.68	141	0.53
180	8.16	33.96	2.53	300	6.40	34.03	2.42	26.76	134	0.60
232	7.41	34.03	2.29	400	5.63	34.10	1.36	26.91	120	0.72
274	6.62	34.02	2.68	500	5.11	34.19	0.83	27.04	108	0.84
370	5.87	34.07	1.59							
466	5.24	34.16	0.98							
566	4.94	34.27	0.54							

63.52

HORIZON; April 18, 1953; 2305 GCT; 37°19'N, 122°35'W; sounding, 42 fm; wind, 270°, force 2; weather, partly cloudy; sea, slight; wire angle, 15°.

0	10.80	33.54	6.28	0	10.80	33.54	6.28	25.70	230	0.00
9	9.87	33.51	6.18	10	9.55	33.51	6.10	25.88	213	0.02
19	9.13	33.58	5.00	20	9.15	33.58	5.00	26.00	202	0.04
29	9.24	33.78	5.79	30	9.24	33.78	5.78	26.15	188	0.06
49	8.40	33.92	3.49							

63.55

HORIZON; April 18, 1953; 2105 GCT; 37°14.5'N, 122°48'W; sounding, 105 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

0	11.55	33.35	6.37	0	11.15	33.35	6.37	25.49	250	0.00
9	10.61	33.40	6.41	10	10.60	33.40	6.41	25.62	238	0.02
23	10.18	33.40	6.18	20	10.30	33.40	6.30	25.67	233	0.05
47	9.16	33.58	4.28	30	9.94	33.41	5.94	25.74	227	0.07
71	8.74	33.77	3.66	50	9.10	33.61	4.15	26.04	199	0.11
94	8.45	33.93	3.26	75	8.70	33.80	3.60	26.25	179	0.16
118	8.26	34.01	2.31	100	8.39	33.95	3.10	26.41	164	0.20
147	8.22	34.14	1.84	150	(8.21)	(34.15)	(1.80)	(26.60)	(148)	(0.28)

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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67.50

HORIZON; April 19, 1953; 0311 GCT; 36°48.5'N, 122°04'W; sounding, 85 fm; wind, 220°, force 1; weather, cloudy; sea, moderate; wire angle, 02°.

0	10.03	33.84	5.61	0	10.03	33.84	5.61	26.06	196	0.00
10	10.00	33.90	5.61	10	10.00	33.90	5.61	26.11	191	0.02
20	9.70	33.96	5.09	20	9.70	33.96	5.09	26.21	182	0.04
30	9.56	33.99	4.39	30	9.56	33.99	4.39	26.26	178	0.06
48	8.84	34.00	2.74	50	8.80	34.00	2.71	26.39	166	0.09
71	8.60	34.03	2.32	75	8.61	34.04	2.30	26.45	160	0.13
92	8.63	34.14	2.10	100	8.60	34.13	2.05	26.52	154	0.17
115	8.48	34.09	1.93							

67.55

HORIZON; April 19, 1953; 0551 GCT; 36°39'N, 122°26'W; sounding, 1300 fm; wind, 200°, force 2; weather, cloudy; sea, moderate; wire angle, 05°.

0	11.01	33.59	5.94	0	11.01	33.59	5.94	25.70	230	0.00
10	9.83	33.77	5.25	10	9.83	33.77	5.25	26.04	198	0.02
20	9.44	33.82	4.51	20	9.44	33.82	4.51	26.14	188	0.04
35	9.32	33.86	4.27	30	9.36	33.84	4.35	26.17	186	0.06
49	9.23	33.91	3.43	50	9.21	33.92	3.42	26.26	178	0.10
63	9.04	34.01	3.37	75	8.90	34.08	2.89	26.43	162	0.14
77	8.88	34.07	2.81	100	8.63	34.09	2.35	26.48	157	0.18
95	8.68	34.09	2.44	150	8.46	34.09	1.78	26.51	156	0.26
117	8.54	34.06	2.09	200	8.17	34.25	1.53	26.68	140	0.33
143	8.48	34.07	1.80	250	8.01	34.28	1.21	26.73	137	0.40
187	8.22	34.22	1.61	300	7.75	34.29	1.10	26.77	133	0.47
230	8.07	34.28	1.30	400	6.90	34.33	0.82	26.93	120	0.59
275	7.94	34.28	1.13	500	6.38	34.31	0.52	26.98	116	0.71
370	7.06	34.33	0.96							
462	6.61	34.28	0.59							
562	5.86	34.39	0.47							

70.51

HORIZON; April 16, 1953; 1305 GCT; 36°00'N, 121°45'W; sounding, 221 fm; wind, 300°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

0	9.51	33.87	4.48	0	9.51	33.87	4.48	26.17	185	0.00
10	9.50	33.90	4.38	10	9.50	33.90	4.38	26.20	183	0.02
25	8.91	33.91	2.94	20	9.20	33.91	3.38	26.25	178	0.04
49	8.74	33.96	2.66	30	8.83	33.92	2.85	26.32	172	0.05
73	8.72	33.97	2.37	50	8.73	33.96	2.64	26.37	168	0.09
96	8.62	34.01	2.14	75	8.71	33.97	2.36	26.38	167	0.13
146	8.54	34.07	2.02	100	8.60	34.02	2.12	26.43	162	0.17
193	8.45	34.16	1.76	150	8.52	34.08	2.00	26.49	157	0.25
				200	(8.44)	(34.17)	(1.70)	(26.58)	(150)	(0.33)

70.55

HORIZON; April 16, 1953; 1558 GCT; 36°03'N, 122°02'W; sounding, 800 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 25°.

0	10.32	33.35	6.29	0	10.32	33.35	6.29	25.63	237	0.00
8	10.30	33.35	6.29	10	10.30	33.36	6.28	25.64	236	0.02
23	10.24	33.40	6.33	20	10.26	33.39	6.32	25.67	233	0.05
49	9.25	33.48	4.84	30	10.19	33.42	6.18	25.71	230	0.07
71	9.13	33.60	4.07	50	9.23	33.48	4.80	25.91	211	0.11
96	8.62	33.84	3.10	75	9.10	33.64	3.98	26.06	197	0.16
140	8.42	34.01	2.38	100	8.60	33.88	3.00	26.33	172	0.21
182	7.80	34.00	2.81	150	8.30	34.01	2.42	26.47	159	0.29
229	7.82	34.11	1.59	200	7.80	34.03	2.40	26.56	151	0.37
269	7.44	34.16	1.42	250	7.65	34.14	1.49	26.67	142	0.45
362	6.80	34.23	0.82	300	7.21	34.19	1.20	26.77	133	0.51
450	6.26	34.27	0.65	400	6.57	34.24	0.75	26.90	122	0.64
539	5.72	34.33	0.42	500	5.95	34.31	0.50	27.04	110	0.76
714	4.80	34.38	0.38	600	5.38	34.36	0.39	27.15	100	0.86
890	4.11	34.48	0.50	700	4.87	34.38	0.38	27.22	93	0.96
1080	3.58	34.50	0.66	800	4.45	34.43	0.43	27.31	86	1.05
				1000	3.79	34.49	0.61	27.42	75	1.21

S10

CCOFI
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn.m

70.60

HORIZON; April 16, 1953; 1913 GCT; 35°49'N, 122°25'W; sounding, 1900 fm; wind, 310°, force 1; weather, cloudy; sea, slight; wire angle, 35°.

0	10.64	33.38	6.17	0	10.64	33.38	6.17	25.60	240	0.00
8	10.48	33.31	6.11	10	10.47	33.29	6.13	25.56	244	0.02
17	10.44	33.29	6.18	20	10.42	33.29	6.17	25.57	243	0.05
29	10.37	33.36	6.11	30	10.37	33.37	6.11	25.64	236	0.07
41	10.34	33.46	6.13	50	10.30	33.51	6.11	25.76	225	0.12
54	10.21	33.53	6.03	75	9.29	33.58	4.60	25.98	205	0.17
64	9.64	33.58	5.50	100	8.70	33.78	3.18	26.23	181	0.22
77	9.25	33.58	4.62	150	8.47	34.04	2.21	26.47	160	0.31
92	8.64	33.62	3.77	200	8.10	34.22	1.74	26.67	142	0.38
108	8.85	33.86	2.93	250	7.20	34.16	1.62	26.75	134	0.45
137	8.42	33.99	2.54	300	6.50	34.12	1.40	26.81	128	0.52
168	8.50	34.11	1.90	400	5.81	34.16	0.82	26.93	118	0.64
200	8.10	34.22	1.74							
273	6.82	34.13	1.54							
353	6.02	34.12	1.04							
444	5.66	34.22	0.64							

70.70

HORIZON; April 16, 1953; 2342 GCT; 35°34'N, 123°05'W; sounding, 2000+ fm; wind, 220°, force 4; weather, overcast; sea, slight; wire angle, 22°.

0	12.10	33.04	6.56	0	12.10	33.04	6.56	25.07	290	0.00
9	11.86	33.04	6.60	10	11.84	33.04	6.60	25.12	286	0.03
23	11.68	33.02	6.55	20	11.72	33.02	6.59	25.13	285	0.06
50	11.19	33.18	6.45	30	11.60	33.02	6.54	25.15	283	0.09
72	11.00	33.38	6.32	50	11.19	33.18	6.45	25.35	265	0.14
98	10.29	33.41	5.67	75	10.98	33.39	6.31	25.55	246	0.20
144	9.14	33.73	3.30	100	10.22	33.42	5.60	25.70	232	0.26
191	8.29	33.99	3.22	150	9.01	33.76	3.30	26.17	188	0.37
243	8.11	34.15	1.69	200	8.24	34.03	3.07	26.50	158	0.46
286	7.62	34.19	1.42	250	8.07	34.16	1.64	26.62	146	0.53
385	7.00	34.28	0.78	300	7.50	34.21	1.32	26.75	135	0.60
481	5.76	34.27	0.64	400	6.85	34.28	0.74	26.89	123	0.73
577	5.44	34.35	0.45	500	5.67	34.28	0.60	27.05	108	0.85
764	4.54	34.47	0.34	600	5.35	34.37	0.41	27.16	99	0.95
955	3.84	34.47	0.46	700	4.85	34.44	0.33	27.27	89	1.04
1144	3.36	34.52	0.71	800	4.38	34.47	0.33	27.35	82	1.13
				1000	3.71	34.48	0.51	27.42	75	1.29

70.80

HORIZON; April 17, 1953, 0529 GCT; 35°14'N, 123°48'W; sounding, 2000+ fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°.

0	12.02	33.12	6.42	0	12.02	33.12	6.42	25.15	283	0.00
10	11.94	33.09	5.95	10	11.94	33.09	5.95	25.14	284	0.03
20	11.22	33.16	6.05	20	11.22	33.16	6.05	25.33	266	0.06
35	10.93	33.25	5.97	30	10.94	33.22	6.00	25.42	257	0.08
54	10.98	33.35	5.95	50	10.98	33.33	5.98	25.50	250	0.13
68	10.40	33.48	5.31	75	10.15	33.50	4.88	25.78	224	0.19
83	9.96	33.52	4.14	100	9.39	33.70	2.80	26.06	198	0.24
104	9.23	33.75	2.75	150	8.35	33.95	2.40	26.42	164	0.34
125	8.64	33.90	2.56	200	7.95	34.05	1.90	26.56	152	0.41
151	8.34	33.95	2.36	250	7.76	34.17	1.41	26.68	141	0.49
199	7.97	34.04	1.94	300	7.13	34.15	1.23	26.75	135	0.56
250	7.76	34.17	1.41	400	6.31	34.19	0.78	26.89	122	0.68
294	7.20	34.15	1.26	500	5.53	34.22	0.60	27.02	111	0.80
397	6.34	34.19	0.79	600	4.98	34.29	0.41	27.14	100	0.91
497	5.56	34.22	0.60							
602	4.96	34.29	0.40							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁵ cm ³ /g	dyn. m

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HORIZON; April 17, 1953; 1009 GCT; 34°55'N, 124°33'W; sounding, 2000+ fm; wind, 230°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°.

7090

0	12.69	32.93	6.32	0	12.69	32.93	6.32	24.87	309	0.00
10	12.62	32.88	6.13	10	12.62	32.88	6.13	24.85	311	0.03
25	12.12	32.89	6.18	20	12.30	32.89	6.17	24.92	305	0.06
54	11.78	32.88	5.71	30	12.07	32.89	6.16	24.96	301	0.09
79	11.38	32.95	5.55	50	11.83	32.88	5.79	25.00	298	0.15
108	10.70	33.11	5.94	75	11.42	32.94	5.56	25.12	287	0.22
157	8.61	33.39	4.15	100	10.93	33.06	5.80	25.30	270	0.30
204	8.36	33.89	2.80	150	8.80	33.35	4.43	25.88	216	0.42
256	7.67	33.98	2.56	200	8.40	33.86	2.85	26.34	173	0.51
299	7.00	33.98	2.35	250	7.79	33.98	2.58	26.53	156	0.60
397	6.00	34.12	1.17	300	7.00	33.98	2.34	26.64	146	0.67
494	5.67	34.23	0.58	400	5.98	34.13	1.14	26.89	122	0.80
590	5.26	34.32	0.34	500	5.64	34.24	0.55	27.02	111	0.92
781	4.33	34.39	0.32	600	5.21	34.33	0.34	27.14	100	1.03
981	3.88	34.48	0.48	700	4.70	34.37	0.32	27.23	92	1.12
1177	3.35	34.54	0.70	800	4.30	34.40	0.32	27.30	86	1.21
				1000	3.83	34.49	0.50	27.42	75	1.37

HORIZON; April 16, 1953; 0832 GCT; 35°37'N, 121°17'W; sounding, 50 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°.

7350

0	9.38	33.87	3.88	0	9.38	33.87	3.88	26.19	183	0.00
10	9.35	33.91	3.88	10	9.35	33.91	3.88	26.23	180	0.02
19	9.09	33.93	2.77	20	9.02	33.94	2.73	26.31	173	0.04
29	8.91	33.98	2.50	30	8.91	33.98	2.48	26.35	168	0.05
48	8.90	-	2.42	50	8.90	33.97	2.42	26.35	169	0.09
74	8.90	33.95	2.74							

HORIZON; April 16, 1953; 0354 GCT; 35°18'N, 121°57'W; sounding, 1300 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 21°.

7360

0	10.55	33.58	6.26	0	10.55	33.58	6.26	25.77	223	0.00
9	10.53	33.59	6.32	10	10.54	33.59	6.33	25.78	223	0.02
18	10.52	33.58	6.33	20	10.51	33.58	6.34	25.79	222	0.04
33	10.27	33.58	6.24	30	10.40	33.58	6.30	25.80	222	0.07
50	9.52	33.75	4.80	50	9.52	33.75	4.80	26.08	195	0.11
64	9.43	33.78	4.59	75	9.36	33.86	4.31	26.19	185	0.16
76	9.35	33.86	4.30	100	9.05	33.87	3.30	26.25	180	0.20
96	9.12	33.86	3.50	150	8.38	34.01	2.42	26.46	160	0.29
114	8.79	33.95	2.59	200	7.48	34.04	2.55	26.62	146	0.36
138	8.57	33.99	2.42	250	6.65	34.03	2.33	26.72	136	0.43
181	7.78	34.04	2.50	300	6.27	34.06	1.79	26.80	130	0.50
229	6.96	34.04	2.56	400	5.69	34.17	1.03	26.96	116	0.62
270	6.46	34.03	2.06	500	5.22	34.24	0.54	27.07	106	0.73
368	5.85	34.14	1.24							
467	5.35	34.22	0.62							
570	5.02	34.26	0.47							

HORIZON; April 15, 1953; 1432 GCT; 35°04.5'N, 120°51.5'W; sounding, 79 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°.

7750

0	9.98	33.74	5.02	0	9.98	33.74	5.02	25.99	202	0.00
9	9.86	33.78	5.01	10	9.83	33.78	4.99	26.05	197	0.02
19	9.68	33.81	4.48	20	9.67	33.82	4.37	26.11	192	0.04
28	9.61	33.85	4.21	30	9.62	33.86	4.21	26.15	188	0.06
48	9.61	33.89	4.24	50	9.61	33.89	4.23	26.17	186	0.10
72	9.54	33.85	4.21	75	9.50	33.86	4.18	26.17	186	0.14
96	8.88	33.96	2.87	100	(9.76)	(34.00)	(2.67)	(26.39)	(166)	(0.19)

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

7755

HORIZON; April 15, 1953; 1750 GCT; 34°55'N, 121°13'W; sounding, 320 fm; wind, 310°, force 5; weather, overcast; sea, rough; wire angle, 10°.

0	10.58	33.69	5.52	0	10.58	33.69	5.52	25.85	216	0.00
10	10.56	33.69	5.47	10	10.56	33.69	5.47	25.85	216	0.02
25	10.56	33.63	5.56	20	10.58	33.64	5.54	25.81	220	0.04
49	10.48	33.69	5.39	30	10.56	33.63	5.55	25.81	221	0.06
72	10.25	33.66	5.98	50	10.48	33.69	5.39	25.87	215	0.11
95	9.66	33.71	4.34	75	10.21	33.66	5.97	25.89	213	0.16
142	8.39	34.04	2.47	100	9.50	33.74	4.10	26.07	197	0.21
186	8.06	34.11	1.98	150	8.32	34.06	2.36	26.51	156	0.30
230	7.65	34.30	1.04	200	7.95	34.18	1.74	26.66	142	0.38
275	7.39	34.34	0.94	250	7.51	34.33	0.99	26.84	126	0.44
323	7.14	34.31	0.82	300	7.27	34.33	0.87	26.87	123	0.51
368	6.86	34.33	0.73	400	6.60	34.35	0.65	26.98	114	0.62
413	6.49	34.35	0.62	500	(6.10)	(34.33)		(27.03)	(110)	(0.74)
459	6.24	34.33	0.59							

7765

HORIZON; April 15, 1953; 2238 GCT; 34°52'N, 121°54'W; sounding, 2000+ fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	11.62	33.41	6.30	0	11.62	33.41	6.30	25.45	254	0.00
9	11.56	33.40	6.29	10	11.53	33.40	6.30	25.46	254	0.02
18	11.45	33.40	6.38	20	11.45	33.40	6.39	25.47	252	0.05
33	11.39	33.40	6.34	30	11.41	33.40	6.38	25.48	252	0.08
53	10.44	33.40	5.82	50	10.60	33.40	6.08	25.62	239	0.12
67	10.19	33.41	4.84	75	9.83	33.40	4.48	25.75	226	0.18
80	9.57	33.40	4.32	100	9.00	33.59	3.80	26.04	200	0.24
101	9.00	33.60	3.74	150	8.48	33.89	2.88	26.35	171	0.33
120	8.92	33.73	3.22	200	7.92	34.02	2.40	26.54	154	0.41
144	8.56	33.86	2.90	250	7.47	34.13	1.66	26.69	140	0.48
189	8.02	33.99	2.59	300	6.80	34.16	1.35	26.81	130	0.55
237	7.62	34.10	1.76	400	5.99	34.26	0.70	26.99	113	0.67
279	7.06	34.14	1.50	500	5.68	34.33	0.42	27.09	105	0.78
375	6.08	34.23	0.80							
473	5.73	34.32	0.45							
576	5.42	34.34	0.39							

80.51

HORIZON; April 15, 1953; 1047 GCT; 34°34.5'N, 120°45'W; sounding, 50 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 06°.

0	10.07	33.96	5.78	0	10.07	33.96	5.78	26.15	187	0.00
10	10.05	33.91	5.63	10	10.05	33.91	5.63	26.11	191	0.02
19	9.98	33.91	5.38	20	9.98	33.91	5.30	26.13	190	0.04
30	9.73	33.94	4.62	30	9.73	33.94	4.62	26.19	184	0.06
50	9.22	33.94	3.38	50	9.22	33.94	3.38	26.27	176	0.09
75	9.04	34.00	2.38	75	9.04	34.00	2.38	26.35	170	0.14

80.55

HORIZON; April 15, 1953; 0819 GCT; 34°28.5'N, 120°58'W; sounding, 450 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 38°.

0	11.30	33.50	6.21	0	11.30	33.50	6.21	25.57	242	0.00
8	11.28	33.50	6.04	10	11.28	33.51	6.05	25.59	241	0.02
15	11.26	33.52	6.26	20	11.26	33.52	6.27	25.60	240	0.05
27	11.25	33.49	6.29	30	11.23	33.49	6.27	25.58	242	0.07
43	10.96	33.53	5.78	50	10.61	33.54	5.42	25.73	228	0.12
55	10.43	33.54	4.97	75	9.60	33.65	3.80	25.99	204	0.17
67	10.04	33.60	4.54	100	9.12	33.78	3.21	26.17	188	0.22
86	9.25	33.69	3.34	150	8.40	33.97	2.67	26.43	164	0.31
106	9.10	33.82	3.15	200	8.08	34.04	2.28	26.53	154	0.39
131	8.68	33.94	2.76	250	7.75	34.15	1.80	26.66	143	0.46
172	8.19	33.99	2.56	300	7.43	34.20	1.42	26.75	135	0.53
221	7.98	-	2.05	400	6.80	34.26	0.85	26.88	124	0.66
261	7.67	34.17	1.68	500	5.95	34.36	0.52	27.07	106	0.78
355	7.18	34.22	1.05							
448	6.20	34.32	0.67							
547	5.79	34.39	0.40							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn.m

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8060

HORIZON; April 15, 1953; 0434 GCT; 34°12'N, 121°16'W; sounding, 1250 fm; wind, 310°, force 6; weather, cloudy; sea, very rough; wire angle, 40°.

0	11.56	33.58	6.17	0	11.56	33.58	6.17	25.59	241	0.00
8	11.56	33.59	6.19	10	11.55	33.59	6.20	25.60	240	0.02
22	11.55	33.56	6.22	20	11.55	33.57	6.21	25.58	242	0.05
46	11.55	33.55	6.19	30	11.55	33.55	6.21	25.57	243	0.07
68	11.34	33.57	5.94	50	11.52	33.55	6.18	25.57	243	0.12
88	10.40	33.64	4.42	75	11.02	33.59	5.48	25.70	232	0.18
126	9.27	33.88	2.80	100	9.91	33.73	3.83	26.00	204	0.24
166	8.96	34.03	2.27	150	9.09	34.00	2.38	26.34	172	0.33
206	8.16	34.04	2.31	200	8.24	34.04	2.33	26.51	157	0.41
252	7.78	34.10	1.76	250	7.79	34.09	1.80	26.61	148	0.49
328	7.29	34.21	1.02	300	7.50	34.19	1.23	26.73	137	0.56
415	6.44	34.23	0.72	400	6.56	34.23	0.78	26.89	122	0.69
500	5.96	34.30	0.49	500	5.96	34.30	0.49	27.03	111	0.80
680	5.08	34.39	0.30	600	5.46	34.36	0.33	27.14	101	0.91
866	4.34	34.45	0.43	700	4.98	34.40	0.30	27.22	93	1.01
1060	3.70	34.51	0.68	800	4.57	34.43	0.36	27.29	87	1.10
				1000	3.90	34.49	0.60	27.41	76	1.26

HORIZON; April 14, 1953; 2308, 2348 GCT; 33°49'N, 121°44'W; sounding, 2000+ fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 36°, 35°.

8070

0	12.50	33.18	6.17	0	12.50	33.18	6.17	25.10	286	0.00
8	12.46	33.18	6.26	10	12.44	33.18	6.26	25.11	286	0.03
22	12.34	33.22	6.32	20	12.38	33.21	6.31	25.15	283	0.06
33	12.04	33.29	6.23	30	12.20	33.29	6.30	25.24	274	0.08
49	11.66	33.24	6.04	50	11.61	33.23	6.00	25.31	268	0.14
60	10.86	33.14	5.70	75	10.37	33.20	5.45	25.51	250	0.20
77	10.30	33.22	5.44	100	9.18	33.62	3.55	26.03	200	0.26
98	9.19	33.60	3.58	150	8.55	33.91	2.71	26.36	170	0.35
				200	7.89	34.02	2.42	26.54	153	0.43
118	9.15	33.70	3.18	250	7.42	34.08	1.91	26.66	143	0.51
141	8.69	33.87	2.76	300	6.78	34.09	1.59	26.75	134	0.58
189	8.00	33.99	2.52	400	6.01	34.14	1.10	26.89	122	0.71
235	7.57	34.07	-	500	5.70	34.24	0.58	27.01	112	0.82
282	7.00	34.09	1.65	600	(5.10)	(34.34)		(27.16)	(98)	(0.93)
378	6.09	34.12	1.24							
483	5.78	34.22	0.62							
582	5.21	34.33	0.46							

HORIZON; April 14, 1953; 1656 GCT; 33°29.5'N, 122°31'W; sounding, 2000+ fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 34°.

8080

0	12.93	33.17	6.43	0	12.93	33.17	6.43	25.01	296	0.00
8	12.90	33.18	6.29	10	12.90	33.18	6.28	25.02	294	0.03
24	12.90	33.18	6.19	20	12.90	33.18	6.20	25.02	295	0.06
50	12.40	33.19	6.13	30	12.88	33.18	6.18	25.03	295	0.09
74	11.73	33.27	5.89	50	12.40	33.19	6.13	25.13	286	0.15
97	9.92	33.19	5.09	75	11.72	33.27	5.89	25.32	268	0.22
142	8.73	33.71	3.38	100	9.80	33.19	4.96	25.59	242	0.28
187	8.17	33.99	2.62	150	8.60	33.78	3.26	26.25	181	0.38
233	7.69	34.04	2.19	200	8.03	34.01	2.48	26.51	156	0.47
277	6.96	34.04	2.08	250	7.46	34.04	2.14	26.62	147	0.54
365	6.01	34.11	1.30	300	6.64	34.05	1.92	26.74	136	0.62
458	5.62	34.18	0.86	400	5.86	34.14	1.11	26.91	120	0.74
548	5.01	34.26	0.75	500	5.34	34.22	0.80	27.04	109	0.86
738	4.44	34.39	0.34	600	4.80	34.30	0.61	27.17	97	0.96
932	3.94	34.52	0.55	700	4.53	34.37	0.39	27.25	90	1.06
1129	3.41	34.49	0.95	800	4.27	34.44	0.37	27.33	83	1.14
				1000	3.75	34.51	0.69	27.44	73	1.30

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

80.90

HORIZON; April 14, 1953; 1105 GCT; 33°04'N, 123°12'W; sounding, 2000+ fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 35°.

0	12.80	32.99	5.68 ^{a)}	0	12.80	32.99		24.90	306	0.00
8	12.80	32.98	4.98	10	12.80	32.98		24.89	307	0.03
16	12.78	32.98	5.53	20	12.78	32.98		24.89	307	0.06
28	12.72	32.92	5.22	30	12.71	32.92		24.86	311	0.09
42	12.50	32.94	6.16	50	12.50	32.94		24.92	306	0.15
53	12.50	32.94	6.04	75	11.95	33.09		25.14	285	0.23
63	12.23	33.05	5.41	100	11.02	33.19		25.38	262	0.30
78	11.85	33.09	5.30	150	8.89	33.56		26.03	201	0.41
94	11.36	33.19	5.23	200	8.13	33.92		26.43	164	0.50
114	9.74	33.15	4.56	250	7.58	34.00		26.57	151	0.58
149	8.90	33.54	3.67	300	7.28	34.14		26.72	138	0.66
188	8.34	33.92	2.88	400	6.27	34.13		26.85	126	0.79
221	7.80	33.91	3.36	500	(5.75)	(34.28)		(27.04)	(110)	(0.90)
296	7.31	34.14	1.55							
377	6.43	34.12	1.45							
471	5.88	34.25	0.75							

80.100

HORIZON; April 14, 1953; 0552 GCT; 32°50'N, 123°53'W; sounding, 2000+ fm; wind, 090°, force 4; weather, cloudy; sea, moderate; wire angle, 25°.

0	14.25	33.22	5.98	0	14.25	33.22	5.98	24.78	318	0.00
8	14.24	33.21	5.87	10	14.24	33.21	5.90	24.78	318	0.03
23	14.04	33.25	6.08	20	14.10	33.24	6.06	24.83	314	0.06
49	13.92	33.18	5.98	30	14.00	33.25	6.05	24.86	311	0.10
72	13.88	33.22	6.10	50	13.91	33.18	5.99	24.82	315	0.16
98	13.87	33.23	6.10	75	13.87	33.22	6.10	24.86	312	0.24
144	10.27	33.22	5.22	100	13.65	33.23	6.01	24.91	308	0.31
187	8.76	33.67	4.00	150	9.94	33.22	5.09	25.59	243	0.45
234	8.17	33.96	3.18	200	8.56	33.78	3.77	26.25	181	0.56
276	7.74	34.04	2.64	250	8.00	34.00	2.97	26.51	157	0.64
369	6.94	34.13	1.60	300	7.51	34.07	2.35	26.64	146	0.72
457	6.28	34.19	0.86	400	6.70	34.16	1.30	26.82	130	0.86
548	5.58	34.27	0.59	500	5.94	34.22	0.72	26.97	116	0.98
728	4.73	34.37	0.34	600	5.28	34.31	0.50	27.12	102	1.09
914	4.14	34.46	0.46	700	4.83	34.36	0.37	27.21	94	1.19
1102	3.68	34.52	0.70	800	4.49	34.40	0.37	27.28	88	1.28
				1000	3.92	34.49	0.56	27.41	76	1.44

80.110

HORIZON; April 14, 1953; 0042 GCT; 32°30'N, 124°40'W; sounding, 2000+ fm; wind, 360°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.

0	14.39	33.15	-	0	14.39	33.15	(6.00)	24.70	325	0.00
10	13.84	33.15	6.00	10	13.84	33.15	6.00	24.81	315	0.03
19	13.68	33.18	6.04	20	13.67	33.18	6.04	24.87	310	0.06
34	13.63	33.18	6.03	30	13.63	33.18	6.05	24.88	309	0.09
48	13.54	33.12	6.01	50	13.53	33.12	6.01	24.85	312	0.16
62	13.51	33.13	6.00	75	13.50	33.13	5.98	24.87	311	0.23
75	13.50	33.13	5.98	100	13.50	33.13	5.97	24.87	312	0.31
93	13.51	33.12	5.96	150	10.16	33.16	5.03	25.51	251	0.45
115	13.42	33.18	5.95	200	8.98	33.71	3.90	26.13	193	0.56
139	10.58	33.14	5.23	250	8.31	33.98	2.42	26.45	163	0.65
183	9.32	33.51	4.43	300	7.81	34.06	2.28	26.59	151	0.73
224	8.55	33.91	2.82	400	6.81	34.18	1.69	26.82	130	0.87
268	8.17	34.02	2.29	500	6.09	34.31		27.02	112	0.99
361	7.14	34.13	2.29							
449	6.44	34.25	0.85							
550	5.74	34.34	0.04 ^r							

a) Oxygen values appear erratic; no interpolations made.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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HORIZON; April 13, 1953; 2001 GCT; 32°11'N, 125°15'W; sounding, 2000+ fm; wind, 030°, force 2; weather, partly cloudy; sea, moderate; wire angle, 02°.

80.120

0	14.92	33.29	5.82	0	14.92	33.29	5.82	24.69	326	0.00
10	14.92	33.39	5.82	10	14.92	33.39	5.82	24.77	319	0.03
25	15.14	33.46	5.79	20	15.08	33.44	5.80	24.77	319	0.06
49	15.17	33.55	5.74	30	15.15	33.49	5.78	24.80	317	0.10
73	15.14	33.54	5.71	50	15.17	33.55	5.74	24.84	313	0.16
96	15.11	33.53	5.70	75	15.14	33.54	5.72	24.84	314	0.24
145	10.16	33.18	5.14	100	15.10	33.52	5.67	24.83	316	0.32
188	8.96	33.71	5.10	150	9.94	33.18	5.12	25.56	246	0.46
232	8.17	33.92	3.66	200	8.70	33.80	4.79	26.25	182	0.56
276	7.40	33.99	3.19	250	7.87	33.95	3.49	26.49	159	0.65
368	6.22	34.10	1.94	300	7.05	34.02	2.83	26.66	143	0.72
457	5.52	34.10	1.15	400	5.92	34.10	1.63	26.87	124	0.86
551	5.00	34.28	0.60	500	5.27	34.16	0.86	27.00	112	0.98
737	4.32	34.43	0.36	600	4.79	34.34	0.51	27.20	94	1.08
922	3.90	34.44	0.46	700	4.42	34.42	0.38	27.30	85	1.17
1119	3.45	34.50	0.82	800	4.16	34.43	0.38	27.34	82	1.25
				1000	3.72	34.46	0.60	27.41	76	1.41

HORIZON; April 13, 1953; 1552 GCT; 31°54'N, 125°48'W; sounding, 2000+ fm; wind, 090°, force 2; weather, cloudy; sea, slight; wire angle, 04°.

80.130

0	14.21	33.18	5.91	0	14.21	33.18	5.91	24.76	320	0.00
10	14.18	33.18	5.87	10	14.18	33.18	5.87	24.77	319	0.03
20	14.10	33.18	5.90	20	14.10	33.18	5.90	24.78	318	0.06
35	13.99	33.11	5.94	30	14.01	33.13	5.93	24.76	320	0.10
49	13.86	33.16	5.94	50	13.85	33.17	5.94	24.83	314	0.16
63	13.78	33.21	5.97	75	13.78	33.19	5.93	24.86	312	0.24
77	13.78	33.18	5.92	100	12.30	33.11	5.86	25.09	291	0.31
94	12.88	33.12	5.87	150	9.50	33.40	4.50	25.81	223	0.44
116	11.11	33.09	5.78	200	8.34	33.82	3.37	26.32	175	0.54
141	9.84	33.32	4.61	250	7.80	33.96	3.12	26.51	157	0.62
185	8.46	33.71	3.75	300	6.90	33.99	2.92	26.66	143	0.70
228	8.19	33.94	2.92	400	5.90	34.09	1.51	26.87	124	0.83
273	7.28	33.97	3.29	500	5.31	34.16	0.94	27.00	113	0.95
367	6.14	34.07	1.80							
461	5.52	34.12	1.08							
561	5.02	34.23	0.75							

HORIZON; April 13, 1953; 0745 GCT; 31°19'N, 126°57'W; sounding, 2000+ fm; wind, 060°, force 3; weather, cloudy; sea, slight; wire angle, 09°.

80.145

0	14.88	33.35	5.77	0	14.88	33.35	5.77	24.75	321	0.00
10	14.84	33.34	5.57	10	14.84	33.34	5.57	24.75	321	0.03
25	14.88	33.37	5.29	20	14.86	33.35	5.36	24.75	321	0.06
50	15.17	33.54	5.74	30	14.90	33.40	5.30	24.78	318	0.10
73	15.46	33.69	5.53	50	15.17	33.54	5.74	24.83	314	0.16
97	15.47	33.71	5.63	75	15.46	33.70	5.53	24.89	309	0.24
145	13.84	33.79	5.10	100	15.46	33.71	5.62	24.90	309	0.31
189	10.56	33.54	4.74	150	13.40	33.79	5.08	25.40	263	0.46
233	9.09	33.80	4.04	200	10.09	33.55	4.58	25.83	222	0.58
277	8.07	33.95	3.75	250	8.66	33.88	3.94	26.32	176	0.68
368	6.83	34.00	2.76	300	7.69	33.97	3.50	26.53	156	0.76
456	5.86	34.05	1.60	400	6.43	34.01	2.31	26.74	137	0.91
548	5.28	34.18	0.86	500	5.55	34.11	1.22	26.93	120	1.04
730	4.41	34.30	0.36	600	5.00	34.22	0.65	27.08	106	1.15
912	3.85	34.48	0.51	700	4.55	34.27	0.39	27.17	96	1.25
1109	3.48	34.54	0.88	800	4.15	34.38	0.38	27.30	86	1.34
				1000	3.68	34.52	0.68	27.46	72	1.50

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

80.160

HORIZON; April 12, 1953; 2350 GCT; 30°48'N, 127°58'W; sounding, 2000+ fm; wind, 110°, force 4; weather, cloudy; sea, moderate; wire angle, 20°.

0	14.88	33.36	5.90	0	14.88	33.36	5.90	24.76	320	0.00
8	14.87	33.38	5.97	10	14.87	33.39	5.90	24.78	318	0.03
18	14.86	33.40	5.99	20	14.85	33.40	5.98	24.79	317	0.06
31	14.83	33.36	5.85	30	14.83	33.36	5.88	24.77	320	0.10
51	14.97	33.46	5.81	50	14.94	33.45	5.81	24.81	316	0.16
62	15.12	33.55	5.90	75	15.35	33.67	5.85	24.89	309	0.24
75	15.35	33.67	5.85	100	15.80	33.88	5.73	24.95	304	0.31
96	15.76	33.85	5.74	150	13.35	33.58	5.71	25.24	277	0.46
114	15.87	33.93	5.70	200	10.75	33.66	4.94	25.80	225	0.59
140	13.90	33.58	5.75	250	8.70	33.82	4.20	26.26	181	0.69
186	11.56	33.63	5.18	300	7.80	33.96	3.60	26.51	158	0.77
236	9.09	33.76	4.33	400	6.48	34.07	2.20	26.78	133	0.92
279	8.18	33.94	3.91	500	5.63	34.16	1.30	26.96	117	1.04
381	6.66	34.05	2.39	600	(5.01)	(34.22)		(27.08)	(106)	1.15
482	5.74	34.15	1.44							
587	5.08	34.21	0.75							

83.40

E. W. SCRIPPS; April 1, 1953; 1753 GCT; 34°14'N, 119°22'W; sounding, 14 fm; wind, calm; weather, thick fog; sea, slight; wire angle, 00°.

0	12.38	33.57		0	12.38	33.57		25.43	256	0.00
10	11.10	33.56		10	11.10	33.56		25.66	234	0.02
20	10.29	33.66		20	10.29	33.66		25.88	214	0.05

83.40

PAOLINA-T; April 18, 1953; 0040 GCT; 34°14'N, 119°22'W; sounding, 30 fm; wind, 240°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°.

0	11.98	33.66		0	11.98	33.66		25.57	242	0.00
10	11.79	33.66		10	11.79	33.66		25.61	239	0.02
20	10.83	33.76		20	10.83	33.76		25.86	215	0.05

83.43

E. W. SCRIPPS; April 1, 1953; 1943 GCT; 34°08'N, 119°34'W; sounding, 130 fm; wind, 220°, force 1; weather, thick fog; sea, slight; wire angle, 12°.

0	12.05	33.52		0	12.05	33.52		25.45	254	0.00
10	11.58	33.57		10	11.58	33.57		25.58	242	0.02
26	11.24	33.63		20	11.32	33.61		25.66	235	0.05
49	10.70	33.68		30	11.16	33.64		25.71	230	0.07
73	10.05	33.74		50	10.62	33.68		25.84	218	0.12
98	9.46	33.90		75	9.99	33.75		26.00	203	0.17
152	8.80	33.14		100	9.40	33.92		26.23	182	0.23
200	8.49	34.21		150	8.82	34.13		26.49	158	0.30
				200	8.49	34.21		26.60	148	0.38

83.43

PAOLINA-T; April 17, 1953; 2243 GCT; 34°08'N, 119°34'W; sounding, 150 fm; wind, 310°, force 6; weather, clear; sea, very rough; wire angle, 18°.

0	10.74r	33.65		0	(11.35)	33.65		(25.68)	(232)	(0.00)
9	11.31	33.63		10	11.30	33.63		25.68	233	0.02
19	10.98	33.70		20	10.96	33.74		25.82	219	0.05
28	10.71	33.83		30	10.61	33.83		25.95	206	0.07
47	9.79	33.86		50	9.68	33.86		26.14	190	0.11
71	9.42	33.93		75	9.40	33.93		26.24	180	0.15
95	9.33	33.94		100	(9.33)	(33.94)		(26.26)	(179)	(0.20)

83.48

E. W. SCRIPPS; April 2, 1953; 1503 GCT; 33°58'N, 119°55'W; sounding, 130 fm; wind, 140°, force 1; weather, overcast; sea, slight; wire angle, 03°.

0	12.08	33.45		0	12.08	33.45		25.39	259	0.00
10	12.10	33.44		10	12.10	33.44		25.38	261	0.03
25	11.86	33.43		20	12.01	33.43		25.39	260	0.05
50	10.30	33.58		30	11.38	33.44		25.51	248	0.08
75	9.88	33.66		50	10.30	33.58		25.81	220	0.12
100	9.64	33.78		75	9.88	33.66		25.95	208	0.18
155	8.90	34.10		100	9.64	33.78		26.08	196	0.23
204	8.40	34.15		150	8.98	34.08		26.42	164	0.32
				200	8.42	34.15		26.56	152	0.40

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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PAOLINA-T; April 17, 1953; 1534 GCT; 33°59'N, 119°55'W; sounding, 75 fm; wind, 320°, force 7; weather, partly cloudy; sea, rough; wire angle, 16°.

83.48

0	10.75	33.75		0	10.75	33.75		25.87	214	0.00
9	10.73	33.92		10	10.73	33.92		26.00	201	0.02
19	10.66	33.74		20	10.65	33.74		25.88	214	0.04
29	10.60	33.81		30	10.60	33.81		25.94	208	0.06
48	10.51	33.73		50	10.51	33.73		25.89	213	0.10
72	10.30	33.75		75	(10.26)	(33.75)		(25.95)	(208)	(0.16)

E. W. SCRIPPS; April 2, 1953; 1705 GCT; 33°52'N, 120°08'W; sounding, 137 fm; wind, calm; weather, fog; sea, moderate; wire angle, 00°.

83.51

0	11.49	33.48		0	11.49	33.48		25.52	247	0.00
10	11.37	33.52		10	11.37	33.52		25.58	242	0.02
25	10.91	33.56		20	11.11	33.54		25.64	236	0.05
50	9.11	34.02		30	10.60	33.59		25.77	224	0.07
75	8.82	34.06		50	9.11	34.02		26.35	169	0.11
100	8.63	34.12		75	8.82	34.06		26.43	162	0.15
125	8.56	34.18		100	8.63	34.12		26.51	155	0.19
155	8.28	34.21		150	8.35	34.21		26.62	145	0.27

PAOLINA-T; April 17, 1953; 1255, 1310 GCT; 33°52'N, 120°07'W; sounding, 73 fm; wind, 320°, force 8; weather, partly cloudy; sea, rough; wire angle, 12°, 12°.

83.51

0	12.07	33.46		0	12.07	33.46		25.40	258	0.00
9	12.09	33.50		10	12.08	33.50		25.43	256	0.03
				20	12.03	33.46		25.41	258	0.05
19	12.03	33.46		30	11.06	33.67		25.75	226	0.08
29	11.19	33.62		50	9.66	33.87		26.15	188	0.12
48	9.72	33.86		75	(9.13)	(33.94)		(26.29)	(176)	(0.16)
73	9.16	33.94								

E. W. SCRIPPS; April 2, 1953; 1940 GCT; 33°44'N, 120°24.5'W; sounding, 570 fm; wind, 270°, force 1; weather, fog; sea, moderate; wire angle, 16°.

83.55

0	12.10	-		0	12.10	(33.59)		(25.50)	(249)	(0.00)
10	12.06	33.50		10	12.06	33.50		25.43	256	0.02
24	11.90	33.41		20	11.95	33.42		25.39	260	0.05
48	10.83	-		30	11.75	33.41		25.42	257	0.08
72	10.00	33.51		50	10.66	33.43		25.63	237	0.13
96	9.62	33.83		75	9.93	33.53		25.84	218	0.18
149	8.74	39.10		100	9.56	33.88		26.17	187	0.23
197	8.26	34.19		150	8.71	34.11		26.49	158	0.32
292	7.39	34.29		200	8.20	34.19		26.63	145	0.40
392	6.84	34.29		250	7.73	34.26		26.75	134	0.47
489	6.22	34.31		300	7.33	34.29		26.83	127	0.53
591	5.91	34.30		400	6.78	34.29		26.91	121	0.66
				500	6.16	34.31		27.01	113	0.77
				600	(5.89)	(34.30)		(27.04)	(111)	(0.88)

PAOLINA-T; April 17, 1953; 0947 GCT; 33°40'N, 120°14.5'W; sounding, 600 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 17°.

83.55

0	11.44	33.47		0	11.44	33.47		25.53	247	0.00
9	11.46	33.46		10	11.46	33.46		25.51	248	0.02
23	11.13	33.55		20	11.29	33.54		25.61	239	0.05
48	10.59	33.65		30	11.03	33.61		25.71	230	0.07
73	9.09	33.53		50	10.49	33.65		25.84	218	0.12
96	8.68	33.85		75	9.04	33.54		25.99	204	0.17
149	8.16	33.98		100	8.58	33.86		26.31	174	0.22
195	8.22	34.23		150	8.17	33.99		26.48	159	0.30
289	7.52	34.25		200	8.22	34.24		26.67	142	0.38
389	6.90	34.32		250	7.84	34.24		26.72	137	0.45
484	6.54	34.30		300	7.44	34.26		26.80	131	0.51
586	5.90	34.35		400	6.86	34.32		26.92	120	0.64
				500	6.47	34.30		26.96	118	0.76
				600	(5.73)	(34.36)		(27.10)	(104)	(0.87)

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

83.60

E. W. SCRIPPS; April 2, 1953; 2255 GCT; 33°33'N, 120°44.5'W; sounding, 1000 fm; wind, 270°, force 1; weather, fog; sea, slight; wire angle, 07°.

0	12.57	-		0	12.57	(33.36)		(25.23)	(275)	(0.00)
10	12.32	33.36		10	12.32	33.36		25.28	271	0.03
24	12.25	33.39		20	12.27	33.38		25.30	268	0.05
54	11.58	33.38		30	12.20	33.39		25.32	267	0.08
79	10.33	33.39		50	11.76	33.38		25.37	262	0.13
109	8.98	-		75	10.52	33.38		25.62	239	0.20
164	8.26	33.91		100	9.14	33.43		25.89	214	0.25
218	7.79	34.02		150	8.39	33.82		26.31	175	0.35
325	6.92	34.15		200	7.93	33.99		26.51	156	0.43
437	6.38	34.26		250	7.48	34.06		26.63	146	0.51
544	5.76	34.32		300	7.10	34.12		26.73	136	0.58
653	5.32	34.40		400	6.55	34.23		26.89	122	0.71
				500	6.01	34.30		27.02	111	0.82
				600	5.50	34.36		27.13	102	0.93

83.60

PAOLINA-T; April 17, 1953; 0543 GCT; 33°30'N, 120°39'W; sounding, 750 fm; wind, 310°, force 4; weather, drizzle; sea, rough; wire angle, 00°.

0	12.08	33.28		0	12.08	33.28		25.26	272	0.00
10	12.10	33.26		10	12.10	33.26		25.24	274	0.03
25	12.10	33.28		20	12.10	33.27		25.25	274	0.06
56	10.63	33.39		30	12.05	33.29		25.27	271	0.08
80	9.10	33.49		50	11.29	33.37		25.48	252	0.13
110	8.71	33.74		75	9.20	33.47		25.91	212	0.19
164	7.98	33.96		100	8.85	33.63		26.09	195	0.24
219	7.60	34.07		150	8.11	33.92		26.43	163	0.33
323	7.01	34.14		200	7.72	34.04		26.58	150	0.41
435	6.32	34.23		250	7.41	34.09		26.67	142	0.48
543	5.70	34.33		300	7.13	34.12		26.73	137	0.55
650	5.38	34.36		400	6.54	34.20		26.87	124	0.68
				500	5.93	34.29		27.02	111	0.80
				600	5.50	34.35		27.12	102	0.91

83.70

PAOLINA-T; April 16, 1953; 2253 GCT; 33°12.5'N, 121°25.5'W; sounding, 2340 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 33°.

0	13.14	33.10		0	13.14	33.10		24.92	305	0.00
8	13.14	33.09		10	13.14	33.09		24.91	306	0.03
21	13.02	33.15		20	13.03	33.15		24.98	299	0.06
46	12.84	33.09		30	12.94	33.13		24.98	299	0.09
66	11.95	33.16		50	12.76	33.09		24.98	300	0.15
88	11.18	33.19		75	11.56	33.18		25.28	272	0.22
119p	9.52	33.29		100	10.62	33.21		25.47	254	0.29
128	9.33	33.42		150	8.83	33.74		26.18	187	0.40
167	8.47	33.85		200	8.11	33.92		26.43	164	0.49
196p	8.14	33.91		250	7.68	33.97		26.53	155	0.57
274p	7.49	34.00								

83.80

PAOLINA-T; April 16, 1953; 1553 GCT; 32°53.5'N, 122°07'W; sounding, 2400 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 25°.

0	13.06	33.05		0	13.06	33.05		24.89	307	0.00
9	13.08	33.05		10	13.09	33.05		24.89	308	0.03
23	13.08	33.05		20	13.09	33.05		24.89	308	0.06
49	12.60	32.99		30	13.03	33.03		24.88	308	0.09
72	12.14	33.05		50	12.57	32.99		24.94	303	0.15
99	11.74	33.20		75	12.10	33.07		25.09	289	0.23
147	9.24	33.46		100	11.68	33.21		25.28	272	0.30
194	8.52	33.82		150	9.18	33.48		25.92	212	0.42
292	7.09	34.03		200	8.44	33.84		26.32	175	0.52
395	6.20	34.06		250	7.64	33.97		26.54	154	0.60
498	5.30	34.13		300	7.00	34.04		26.68	141	0.67
604	4.89	34.20		400	6.15	34.06		26.81	130	0.81
				500	5.28	34.14		26.98	114	0.93
				600	4.91	34.20		27.07	106	1.04

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁵ cm ³ /g	dyn. m

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PAOLINA-T; April 16, 1953; 0905 GCT; 32°34.5'N, 122°48'W; sounding, 2590 fm; wind, 310, force 3; weather, clear; sea, rough; wire angle, 13°.

83.90

0	13.29	33.04		0	13.29	33.04		24.84	312	0.00
10	13.30	33.05		10	13.30	33.05		24.84	312	0.03
25	12.80	33.10		20	13.04	33.09		24.93	304	0.06
54	12.12	33.09		30	12.68	33.10		25.01	297	0.09
78	11.76	-		50	12.20	33.09		25.09	289	0.15
107	10.22	33.12		75	11.82	33.09		25.16	283	0.22
159	8.70	33.54		100	10.60	33.11		25.40	261	0.29
212	8.22	33.92		150	8.82	33.42		25.93	211	0.41
317	7.00	34.04		200	8.32	33.87		26.36	171	0.50
438	5.87	34.08		250	7.88	33.99		26.52	156	0.58
535	5.28	34.18		300	7.20	34.03		26.65	145	0.66
644	4.77	34.25		400	6.15	34.06		26.81	130	0.80
				500	5.48	34.15		26.97	116	0.92
				600	4.93	34.23		27.10	104	1.03

E. W. SCHIPPS; April 3, 1953; 1914 GCT; 34°00'N, 119°04'W; sounding, 300 fm; wind, 270°, force 2; weather, fog; sea, slight; wire angle, 00°.

85.39

0	12.89	33.40		0	12.89	33.40		25.20	278	0.00
10	12.68	33.38		10	12.68	33.38		25.22	276	0.03
25	11.95	33.43		20	12.24	33.40		25.32	266	0.06
50	10.31	33.49		30	11.76	33.44		25.44	255	0.08
75	9.60	33.82		50	10.31	33.49		25.74	227	0.13
100	9.36	-		75	9.60	33.82		26.12	192	0.18
155	8.98	-		100	9.36					
206	8.66	-		150	9.00					
				200	8.69					

PAOLINA-T; April 13, 1953; 1422 GCT; 33°59.5'N, 119°02.5'W; sounding, 55 fm; wind, 110°, force 2; weather, overcast; sea, slight; wire angle, 00°.

85.39

0	11.38	33.57		0	11.38	33.57		25.61	238	0.00
10	11.13	33.58		10	11.13	33.58		25.67	233	0.02
20	10.74	33.66		20	10.74	33.66		25.80	221	0.05
30	10.58	33.59		30	10.58	33.59		25.77	224	0.07
50	10.22	33.64		50	10.22	33.64		25.87	214	0.11
75	9.80	34.69r		75	9.80					

E. W. SCHIPPS; April 3, 1953; 1650, 1709 GCT; 33°57'N, 119°10.5'W; sounding, 420 fm; wind, calm; weather, fog; sea, smooth; wire angle, 00°, 00°.

85.40

0	12.77	33.38		0	12.77	33.38		25.20	277	0.00
10	12.61	33.40		10	12.61	33.40		25.25	273	0.03
25	10.85	33.48		20	11.30	33.44		25.53	247	0.05
50	9.66	33.72		30	10.41	33.52		25.75	226	0.08
75	9.40	33.79		50	9.66	33.72		26.03	200	0.12
100	9.31	33.90		75	9.40	33.79		26.13	191	0.17
154	8.92	34.07		100	9.31	33.90		26.23	182	0.22
204	8.46	34.07		150	8.96	34.07		26.42	165	0.30
				200	8.49	34.07		26.49	158	0.38
301	7.82	34.25		250	8.13	34.18		26.63	146	0.46
402	7.11	34.29		300	7.82	34.25		26.73	131	0.53
500	6.42	34.32		400	7.13	34.29		26.86	126	0.66
605	5.88	34.38		500	6.42	34.32		26.98	115	0.78
				600	5.89	34.37		27.09	106	0.89

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

85.40

PAOLINA-T; April 13, 1953; 1110 GCT; 33°56'N, 119°10'W; sounding, 460 fm; wind, 340°, force 1; weather, partly cloudy; sea, slight; wire angle, 15°.

0	11.59	33.52		0	11.59	33.52		25.54	246	0.00
9	11.58	33.52		10	11.58	33.52		25.54	246	0.02
24	11.10	33.54		20	11.28	33.53		25.60	240	0.05
48	10.66	33.54		30	10.97	33.54		25.67	234	0.07
72	10.01	33.77		50	10.60	33.54		25.73	228	0.12
97	9.58	33.85		75	9.94	33.78		26.03	200	0.17
149	9.06	34.01		100	9.53	33.86		26.16	188	0.22
198	8.69	34.13		150	9.05	34.01		26.36	171	0.31
293	7.98	34.28		200	8.66	34.13		26.51	157	0.39
393	7.21	34.27		250	8.30	34.23		26.65	145	0.47
490	6.65	34.32		300	7.91	34.28		26.74	136	0.54
591	6.19	34.44		400	7.16	34.27		26.84	128	0.67
				500	6.60	34.33		26.97	117	0.79
				600	(6.15)	(34.45)		(27.12)	(103)	(0.90)

85.45

E. W. SCRIPPS; April 3, 1953; 1252 GCT; 33°47'N, 119°31'W; sounding, 800 fm; wind, calm; weather, missing; sea, slight; wire angle, 00°.

0	13.60	33.38		0	13.60	33.38		25.04	293	0.00
10	12.86	33.44		10	12.86	33.44		25.23	275	0.03
25	11.77	33.47		20	12.00	33.46		25.41	258	0.06
50	11.22	33.56		30	11.59	33.48		25.51	249	0.08
75	10.90	33.65		50	11.22	33.56		25.64	237	0.13
100	9.52	33.86		75	10.90	33.65		25.76	226	0.19
155	9.02	34.20		100	9.52	33.86		26.16	188	0.24
204	8.54	34.15		150	9.06	34.20		26.50	157	0.32
302	7.38	34.25		200	8.57	34.15		26.54	154	0.40
404	7.06	34.25		250	7.89	34.21		26.69	140	0.48
501	6.47	34.30		300	7.39	34.25		26.79	131	0.54
604	5.88	34.34		400	7.09	34.25		26.84	128	0.67
				500	6.48	34.30		26.96	118	0.80
				600	5.90	34.34		27.07	108	0.91

85.45

PAOLINA-T; April 13, 1953; 0551, 0628 GCT; 33°46'N, 119°33'W; sounding, 1100 fm; wind, 310°, force 2; weather, overcast; sea, slight; wire angle, 05°, missing.

0	12.85	33.38		0	12.85	33.38		25.19	279	0.00
15	12.78	33.42		10	12.80	33.40		25.21	276	0.03
40	11.36	33.54		20	12.77	33.44		25.25	273	0.06
64	10.71	33.52		30	11.90	33.52		25.48	252	0.08
89	9.63	33.69		50	11.00	33.54		25.66	235	0.13
144	8.89	34.02		75	10.20	33.58		25.83	219	0.19
193	8.48	34.12		100	9.36	33.78		26.13	191	0.24
				150	8.85	34.04		26.41	165	0.33
288	7.90	34.27		200	8.42	34.13		26.55	153	0.41
389	7.12	34.32		250	8.11	34.21		26.66	143	0.48
486	6.26	34.35		300	7.81	34.28		26.76	135	0.55
589	5.66	34.37		400	7.03	34.32		26.90	122	0.68
				500	6.16	34.35		27.04	110	0.80
				600	(5.61)	(34.37)		(27.13)	(102)	(0.90)

85.50

E. W. SCRIPPS; April 3, 1953; 0855 GCT; 33°37'N, 119°52'W; sounding, 132 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 05°.

0	12.88	33.46		0	12.88	33.46		25.24	273	0.00
10	11.84	33.52		10	11.84	33.52		25.49	250	0.02
25	11.62	33.52		20	11.70	33.52		25.52	248	0.05
50	9.95	33.70		30	11.43	33.53		25.57	243	0.08
75	9.31	33.92		50	9.95	33.70		25.97	206	0.12
100	8.84	34.47r		75	9.31	33.92		26.24	180	0.17
124	8.79	34.12		100	8.84	34.05		26.43	164	0.21
154	8.62	34.17		150	8.65	34.16		26.54	153	0.29

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

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PAOLINA-T; April 13, 1953; 0057, 0139 GCT; 33°35'N, 119°45'W; sounding, 360 fm; wind, 310°, force 2; weather, partly cloudy; sea, slight; wire angle, 21°, 20°.

85.50

0	12.51	33.45		0	12.51	33.45		25.31	267	0.00
9	11.80	33.42		10	11.62	33.42		25.45	254	0.03
23	11.34	33.50		20	11.38	33.48		25.54	245	0.05
47	11.24	33.56		30	11.31	33.52		25.59	241	0.08
70	9.62	33.76		50	11.12	33.59		25.68	233	0.12
94	9.22	33.89		75	9.47	33.81		26.13	190	0.18
144	8.70	34.05		100	9.12	33.91		26.27	178	0.22
189	8.34	34.17		150	8.64	34.07		26.47	160	0.31
252	7.97	34.21		200	8.26	34.18		26.61	147	0.38
				250	7.97	34.21		26.68	141	0.46
349	7.28	34.25		300	7.62	34.23		26.75	136	0.52
440	6.98	34.28		400	7.13	34.26		26.84	128	0.66
541	5.72	34.34		500	6.33	34.31		26.99	115	0.78

E. W. SCRIPPS; April 3, 1953; 0501 GCT; 33°27'N, 120°12.5'W; sounding, 650 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 00°.

85.55

0	11.88	33.53		0	11.88	33.53		25.49	250	0.00
10	11.88	33.80		10	11.88	33.80		25.70	230	0.02
25	11.38	33.62		20	11.65	33.63		25.61	239	0.05
50	9.86	33.69		30	11.00	33.63		25.73	228	0.07
75	9.11	33.82		50	9.86	33.69		25.97	205	0.11
100	8.64	33.86		75	9.11	33.82		26.20	184	0.16
128p	8.45	33.95		100	8.64	33.86		26.30	174	0.21
159	8.42	34.15		150	8.44	34.12		26.54	153	0.29
207	8.24	34.20		200	8.26	34.20		26.63	146	0.36
297p	7.48	34.22		250	7.91	34.21		26.69	140	0.44
				300	(7.41)	(34.22)		(26.77)	(133)	(0.50)

PAOLINA-T; April 12, 1953; 1942 GCT; 33°26'N, 120°10'W; sounding, 700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 43°.

85.55

0	11.21	33.46		0	11.21	33.46		25.56	243	0.00
8	11.14	33.48		10	11.11	33.48		25.59	240	0.02
20	11.04	33.46		20	11.04	33.46		25.59	241	0.05
39	11.04	33.45		30	11.04	33.45		25.59	242	0.07
58	11.01	33.53		50	11.03	33.50		25.62	239	0.12
78	10.32	33.44		75	10.40	33.45		25.70	232	0.18
111	8.91	33.70		100	9.03	33.58		26.02	201	0.23
143	8.87	34.04		150	8.86	34.07		26.43	163	0.32
197	8.66	34.15		200	8.62	34.15		26.53	155	0.40
258	8.12	34.20		250	8.18	34.19		26.63	146	0.48
338	7.60	34.27		300	7.83	34.24		26.72	138	0.55
432	6.94	34.29		400	7.18	34.29		26.86	127	0.68

E. W. SCRIPPS; April 3, 1953; 0135, 0152 GCT; 33°16.5'N, 120°33'W; sounding, 720 fm; wind, 310°, force 1; weather, overcast; sea, rough; wire angle, 10°, 12°.

85.60

0	12.38	33.33		0	12.38	33.33		25.24	274	0.00
10	12.26	33.33		10	12.26	33.33		25.26	272	0.03
25	12.20	33.37		20	12.21	33.36		25.30	269	0.05
49	12.17	33.39		30	12.20	33.37		25.31	268	0.08
73	11.17	33.42		50	12.14	33.39		25.33	266	0.14
98	9.41	33.66		75	10.92	33.42		25.58	243	0.20
153	8.41	33.95		100	9.32	33.69		26.06	198	0.25
202	8.00	34.02		150	8.44	33.94		26.40	166	0.34
				200	8.00	34.02		26.53	155	0.42
297	7.51	34.16		250	7.83	34.07		26.59	150	0.50
398	6.68	34.36u		300	7.48	34.17		26.72	138	0.57
495	6.20	34.27		400	6.66	34.25		26.90	121	0.70
601	5.64	34.34		500	6.18	34.27		26.97	116	0.81
				600	5.65	34.34		27.10	105	0.92

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn.m

85.60

PAOLINA-T; April 12, 1953; 1620 GCT; 33°12'N, 120°34'W; sounding, 970 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 31°.

0	11.83	33.35		0	11.83	33.35		25.36	262	0.00
9	11.88	33.28		10	11.86	33.28		25.30	268	0.03
23	11.87	33.37		20	11.85	33.35		25.36	263	0.05
51	11.62	33.41		30	11.83	33.39		25.39	260	0.08
74	11.24	33.34		50	11.64	33.41		25.44	256	0.13
103	10.90	33.49		75	11.21	33.34		25.47	254	0.20
154	8.88	33.80		100	10.94	33.46		25.61	240	0.26
204	8.13	34.01		150	8.95	33.78		26.19	186	0.36
253	7.56	34.06		200	8.19	34.00		26.48	159	0.45
406	6.41	34.19		250	7.61	34.06		26.61	147	0.53
506	6.08	34.34		300	7.11	34.09		26.71	139	0.60
606	5.64	34.39		400	6.45	34.18		26.87	125	0.73
				500	6.08	34.33		27.03	110	0.85
				600	5.66	34.39		27.13	101	0.95

87.35

E. W. SCRIPPS; April 1, 1953; 1138 GCT; 33°50'N, 118°37.5'W, sounding, 300 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 05°.

0	13.50	33.35		0	13.50	33.35		25.04	293	0.00
10	13.22	33.49		10	13.22	33.49		25.20	278	0.03
25	11.58	33.38		20	12.10	33.40		25.35	264	0.06
50	10.14	33.56		30	10.96	33.39		25.47	252	0.08
99	9.39	33.94		50	10.14	33.56		25.83	220	0.13
154	9.21	34.11		75	9.61	33.80		26.10	193	0.18
204	9.00	34.21		100	9.38	33.95		26.26	179	0.23
254	8.82	34.29		150	9.22	34.11		26.41	166	0.31
302	8.04	34.24		200	9.02	34.20		26.51	157	0.39
356	7.48	34.25		250	8.85	34.29		26.61	149	0.47
405	7.19	34.27		300	8.08	34.24		26.69	142	0.54
455	6.82	34.29		400	7.20	34.27		26.84	128	0.68
				500	(6.53)	(34.30)		(26.95)	(118)	(0.80)

87.35

PAOLINA-T; April 13, 1953; 1806 GCT; 33°49'N, 118°36'W; sounding, 220 fm; wind, 140°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

0	12.02	33.47		0	12.02	33.47		25.42	257	0.00
10	11.42	33.46		10	11.42	33.46		25.52	247	0.02
25	10.92	33.54		20	11.03	33.52		25.64	236	0.05
50	10.26	33.58		30	10.80	33.55		25.70	230	0.07
75	9.75	33.76		50	10.26	33.58		25.82	220	0.12
99	9.62	33.90		75	9.75	33.76		26.05	199	0.17
153	9.25	34.14		100	9.62	33.91		26.19	186	0.22
203	9.08	34.20		150	9.27	34.13		26.41	165	0.31
253	8.72	34.25		200	9.11	34.20		26.49	158	0.39
303	8.04	34.22		250	8.73	34.25		26.59	150	0.46
				300	8.12	34.23		26.67	143	0.54

87.40

E. W. SCRIPPS; April 1, 1953; 0810 GCT; 33°40'N, 118°58.5'W; sounding, 450 fm; wind, 120°, force 1; weather, clear; sea, slight; wire angle, 00°.

0	13.64	33.37		0	13.64	33.37		25.02	294	0.00
10	13.66	33.36		10	13.66	33.36		25.01	296	0.03
25	13.38	33.35		20	13.55	33.35		25.03	295	0.06
50	11.59	33.38		30	13.12	33.35		25.11	287	0.09
75	9.93	33.64		50	11.59	33.38		25.43	257	0.14
100	9.59	33.80		75	9.93	33.64		25.92	210	0.20
				100	9.59	33.80		26.10	194	0.25

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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PAOLINA-T; April 14, 1953; 1409 GCT; 33°41'N, 119°02'W; sounding, 360 fm; wind, 090°, force 1; weather, clear; sea, moderate; wire angle, 05°.

87.40

0	13.47	33.39		0	13.47	33.39		25.07	290	0.00
10	13.23	33.38		10	13.23	33.38		25.11	286	0.03
25	12.22	33.41		20	12.50	33.39		25.26	272	0.06
50	10.63	33.49		30	11.94	33.42		25.39	260	0.08
75	9.64	33.79		50	10.63	33.49		25.69	232	0.13
100	9.60	33.96		75	9.64	33.79		26.09	195	0.19
154	9.18	34.23		100	9.60	33.96		26.23	182	0.23
203	8.54	34.16		150	9.22	34.23		26.50	157	0.32
271	7.94	34.25		200	8.57	34.16		26.55	153	0.40
401	6.72	34.26		250	8.15	34.22		26.66	143	0.47
498	6.18	34.32		300	7.60	34.26		26.77	133	0.54
601	5.73	34.32		400	6.74	34.26		26.89	123	0.67
				500	6.16	34.32		27.02	112	0.78
				600	5.74	34.32		27.07	108	0.89

E. W. SCRIPPS; April 1, 1953; 0440 GCT; 33°30'N, 119°19'W; sounding, 850 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 05°.

87.45

0	13.09	33.46		0	13.09	33.46		25.20	277	0.00
10	12.76	33.41		10	12.76	33.41		25.23	275	0.03
25	10.92	33.84		20	11.23	33.83		25.84	217	0.05
56	9.28	33.79		30	10.49	33.84		25.98	204	0.07
81	8.98	33.94		50	9.38	33.80		26.14	189	0.11
110	8.86	33.98		75	9.00	33.91		26.29	176	0.16
165	8.54	34.09		100	8.91	33.97		26.35	170	0.20
219	8.24	34.17		150	8.61	34.06		26.46	160	0.28
325	7.37	34.25		200	8.36	34.15		26.57	151	0.36
438	6.76	34.30		250	7.96	34.20		26.67	142	0.44
546	6.02	34.41		300	7.54	34.23		26.76	134	0.50
653	5.57	34.36		400	6.98	34.28		26.88	124	0.63
				500	6.33	34.37		27.03	110	0.75
				600	5.78	34.39		27.12	103	0.86

PAOLINA-T; April 14, 1953; 1740 GCT; 33°32'N, 119°20'W; sounding, 1010 fm; wind, calm; weather, clear; sea, moderate; wire angle, 03°.

87.45

0	13.04	33.43		0	13.04	33.43		25.19	279	0.00
11	12.86	33.46		10	12.87	33.46		25.25	273	0.03
25	12.72	33.42		20	12.75	33.43		25.25	274	0.06
50	9.80	33.67		30	12.66	33.43		25.26	272	0.08
75	9.24	33.86		50	9.80	33.67		25.97	206	0.13
92p	9.20	33.90		75	9.24	33.86		26.21	183	0.18
99	9.10	33.94		100	9.08	33.94		26.30	175	0.22
153	8.69	34.09		150	8.72	34.09		26.47	160	0.31
171p	8.52	34.09		200	8.45	34.12		26.54	154	0.39
203	8.43	34.13		250	8.01	34.17		26.64	145	0.46
247p	8.05	34.17		300	7.53	34.20		26.74	137	0.53
331p	7.36	34.22								

E. W. SCRIPPS; April 1, 1953; 0129 GCT; 33°20.5'N, 119°39'W; sounding, 45 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 20°.

87.50

0	13.02	33.50		0	13.02	33.50		25.25	273	0.00
9	12.86	33.41		10	12.80	33.41		25.22	276	0.03
18	12.68	33.46		20	12.60	33.50		25.33	266	0.06
38	12.38	33.56		30	12.25	33.56		25.44	255	0.08
47	11.13	33.51		50	10.49	33.52		25.73	228	0.13
70	9.22	33.84								

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

87.50

PAOLINA-T; April 14, 1953; 2126 GCT; 33°21'N, 119°39.5'W; sounding, 53 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 00°.

0	13.10	33.48		0	13.10	33.48		25.22	276	0.00
10	12.46	33.46		10	12.46	33.46		25.33	266	0.03
20	11.38	33.53		20	11.38	33.53		25.58	242	0.05
30	10.81	33.56		30	10.81	33.56		25.71	230	0.08
50	9.85	33.70		50	9.85	33.70		25.98	204	0.12

87.55

E. W. SCRIPPS; March 31, 1953; 2235 GCT; 33°10.5'N, 120°01'W; sounding, 620 fm; wind, 300°, force 3; weather, partly cloudy; sea, rough; wire angle, 23°.

0	12.17	33.39		0	12.17	33.39		25.33	265	0.00
9	12.14	33.41		10	12.14	33.41		25.35	264	0.03
23	11.88	33.40		20	11.97	33.41		25.38	261	0.05
51	11.68	33.47		30	11.80	33.40		25.41	259	0.08
74	10.03	33.45		50	11.70	33.47		25.48	252	0.13
101	9.22	33.63		75	9.97	33.45		25.77	225	0.19
152	8.60	33.95		100	9.26	33.62		26.02	202	0.24
202	8.32	34.15		150	8.62	33.94		26.37	169	0.34
304	7.56	34.28		200	8.33	34.14		26.57	151	0.42
410	6.88	34.31		250	7.98	34.23		26.69	140	0.49
514	6.06	34.33		300	7.58	34.28		26.79	131	0.56
620	5.66	34.37		400	6.94	34.31		26.90	122	0.68
				500	6.16	34.33		27.02	111	0.80
				600	5.71	34.36		27.11	104	0.91

87.55

PAOLINA-T; April 15, 1953; 0053 GCT; 33°07.5'N, 120°03'W; sounding, 710 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 18°.

0	12.12	33.50		0	12.12	33.50		25.42	256	0.00
9	12.11	33.51		10	12.10	33.51		25.43	256	0.03
23	11.71	33.51		20	11.90	33.51		25.47	252	0.05
52	10.14	33.59		30	11.20	33.52		25.61	240	0.08
75	9.50	33.62		50	10.20	33.58		25.83	219	0.12
104	9.20	33.86		75	9.50	33.62		25.98	205	0.17
156	8.82	34.04		100	9.23	33.80		26.16	188	0.22
207	8.46	34.12		150	8.88	34.03		26.40	166	0.31
309	7.52	34.20		200	8.51	34.11		26.52	156	0.39
414	6.44	34.27		250	8.08	34.16		26.62	147	0.47
517	6.06	34.31		300	7.61	34.19		26.72	138	0.54
624	5.48	34.32		400	6.55	34.26		26.92	120	0.67
				500	6.12	34.31		27.01	112	0.79
				600	5.67	34.32		27.08	107	0.88

87.60

PAOLINA-T; April 15, 1953; 0512, 0547 GCT; 32°55.5'N, 120°24'W; sounding, 420 fm; wind, 310°, force 5; weather, clear; sea, very rough; wire angle, 34°, 28°.

0	11.59	33.46		0	11.59	33.46		25.49	250	0.00
8	11.58	33.47		10	11.55	33.49		25.52	247	0.02
21	11.46	33.52		20	11.47	33.52		25.56	244	0.05
45	11.24	33.48		30	11.40	33.51		25.56	244	0.07
66	10.95	33.48		50	11.20	33.48		25.58	243	0.12
91	9.98	33.50		75	10.72	33.48		25.66	235	0.18
133	8.59	33.92		100	9.27	33.55		25.96	207	0.24
175	8.40	34.05		150	8.52	33.96		26.40	166	0.33
				200						
138 ^{a)}	8.55	33.93		250						
512	6.26	34.30		300						
614	5.68	34.33		400						
				500	(6.33)	(34.30)		(26.98)	(116)	(0.82)
				600	5.77	34.33		27.07	107	(0.94)

a) It was assumed that cast 2 started with this depth.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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PAOLINA-T; April 15, 1953; 1220 GCT; 32°32'N, 121°04'W; sounding, 2350 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 30°.

87.70

0	12.66	33.11		0	12.66	33.11		25.02	295	0.00
8	12.66	33.13		10	12.65	33.13		25.03	294	0.03
22	12.58	33.14		20	12.59	33.14		25.05	292	0.06
48	12.43	33.15		30	12.53	33.15		25.07	290	0.09
70	11.02	33.11		50	12.43	33.15		25.09	289	0.15
96	9.78	33.25		75	10.55	33.11		25.41	260	0.21
143	8.78	33.69		100	9.65	33.29		25.70	232	0.28
190	8.24	33.91		150	8.70	33.74		26.20	185	0.38
283	7.54	34.06		200	8.16	33.94		26.44	163	0.47
384	6.80	34.20		250	7.77	34.01		26.55	153	0.55
479	6.24	34.29		300	7.42	34.08		26.66	144	0.62
578	5.60	34.32		400	6.72	34.22		26.86	125	0.76
				500	6.10	34.31		27.02	112	0.87

PAOLINA-T; April 15, 1953; 2020 GCT; 32°09.5'N, 121°44'W; sounding, 2120 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

87.80

0	13.44	33.12		0	13.44	33.12		24.87	309	0.00
9	13.40	33.11		10	13.38	33.11		24.88	309	0.03
24	13.29	33.10		20	13.32	33.10		24.88	309	0.06
53	12.86	33.15		30	13.21	33.10		24.90	307	0.09
77	12.43	34.40r		50	12.92	33.15		25.00	298	0.15
106	11.06	33.13		75	12.45	33.15		25.09	290	0.23
159	8.86	33.92		100	11.40	33.13		25.27	273	0.30
213	8.06	34.07		150	9.05	33.88		26.25	180	0.41
318	7.31	34.13		200	8.21	34.05		26.51	157	0.49
428	6.59	34.26		250	7.78	34.10		26.62	147	0.57
533	5.94	34.32		300	7.42	34.12		26.69	141	0.64
640	5.28	34.32		400	6.76	34.23		26.87	125	0.78
				500	6.15	34.31		27.01	112	0.89
				600	5.52	34.33		27.10	104	1.00

PAOLINA-T; April 16, 1953; 0201 GCT; 32°00'N, 122°24'W; sounding, 2450 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.

87.90

0	13.52	33.09		0	13.52	33.09		24.83	313	0.00
9	13.53	33.06		10	13.54	33.06		24.80	316	0.03
23	13.08	33.04		20	13.30	33.04		24.84	313	0.06
52	12.50	33.02		30	12.87	33.03		24.91	306	0.09
74	12.40	33.09		50	12.54	33.02		24.97	301	0.15
103	11.70	33.12		75	12.40	33.09		25.05	293	0.23
154	8.93	-		100	12.30	33.11		25.09	291	0.30
210	8.28	33.94		150	9.05	33.67		26.09	196	0.42
304	7.11	34.05		200	8.38	33.91		26.38	169	0.51
410	6.14	34.24		250	7.85	34.00		26.53	155	0.60
512	5.24	34.12		300	7.18	34.04		26.66	144	0.67
616	5.04	34.28		400	6.23	34.23		26.94	118	0.80
				500	5.32	34.13		26.97	115	0.92
				600	5.04	34.25		27.10	104	1.03

HORIZON; April 8, 1953; 0544 GCT; 33°29'N, 117°48'W; sounding, 310 fm; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 17°.

90.28

0	13.30	33.44	6.22	0	13.30	33.44	6.22	25.15	283	0.00
9	13.26	33.42	6.44	10	13.22	33.42	6.43	25.15	283	0.03
24	11.92	33.49	6.17	20	12.85	33.46	6.33	25.25	273	0.06
48	10.33	33.59	3.47	30	11.40	33.53	5.62	25.58	242	0.08
71	10.05	33.78	3.12	50	10.31	33.60	3.45	25.83	219	0.13
94	9.64	33.92	2.80	75	10.00	33.81	3.07	26.04	199	0.18
141	9.48	34.14	1.98	100	9.60	33.96	2.71	26.23	182	0.23
185	9.43	34.26	2.22r	150	9.47	34.17	1.90	26.41	165	0.32
231	9.20	34.35	1.25	200	9.38	34.29	1.48	26.52	156	0.40

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

90.30

HORIZON; April 8, 1953; 0755 GCT; 33°25'N, 117°55'W; sounding, 340 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 23°.

0	13.51	33.56	7.74a)	0	13.51	33.56	7.74	25.20	278	0.00
8	13.52	33.55	8.47a)	10	13.51	33.55	8.45	25.19	279	0.03
23	11.24	33.56	4.97	20	12.12	33.55	6.15	25.46	253	0.05
46	9.92	33.71	2.98	30	10.65	33.58	4.00	25.75	226	0.08
69	9.82	33.86	2.71	50	9.90	33.74	2.93	26.01	202	0.12
90	9.63	33.97	2.40	75	9.79	33.90	2.62	26.15	189	0.17
134	9.34	34.13	2.12	100	9.54	34.01	2.33	26.28	177	0.22
173	9.17	34.25	1.80	150	9.29	34.20	2.00	26.47	160	0.30
214	8.68	34.26	1.62	200	8.83	34.26	1.70	26.59	150	0.38
256	8.54	34.21	1.23	250	8.57	34.30	1.30	26.66	144	0.45
303	8.13	-	0.88	300	8.17	34.36	0.91	26.77	134	0.52
346	7.98	34.39	0.67	400	(7.15)	(34.34)	(0.66)	(26.90)	(122)	(0.65)
390	7.32	34.34	0.66							

90.37

HORIZON; April 8, 1953; 1226 GCT; 33°11'N, 118°24'W; sounding, 700 fm; wind, 310°, force 4; weather, clear; sea, very rough; wire angle, 25°.

0	14.03	33.40	6.16	0	14.03	33.40	6.16	24.97	300	0.00
10	14.01	33.39	5.67	10	14.01	33.39	5.67	24.96	300	0.03
18	14.02	33.38	6.22	20	14.02	33.38	6.22	24.95	302	0.06
31	12.78	33.41	5.38	30	13.00	33.41	5.60	25.18	280	0.09
49	10.88	33.48	4.15	50	10.85	33.48	4.15	25.64	237	0.14
63	10.40	33.55	3.79	75	9.99	33.72	3.30	25.98	205	0.20
76	9.99	33.72	3.29	100	9.71	33.84	2.90	26.12	192	0.25
93	9.82	33.81	2.77	150	9.22	34.02	2.39	26.34	172	0.34
109	9.61	33.88	2.53	200	8.70	34.14	1.94	26.51	157	0.42
132	9.41	33.95	2.16	250	8.33	34.18	1.58	26.60	149	0.50
172	8.96	34.10	1.81	300	7.90	34.21	1.20	26.69	141	0.58
216	8.56	34.16	1.52							
255	8.28	34.18	0.78							
349	7.40	34.25	1.70r							

90.45

HORIZON; April 8, 1953; 1747 GCT; 32°54'N, 118°57'W; sounding, 970 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 21°.

0	13.36	33.38	5.76	0	13.36	33.38	5.76	25.09	289	0.00
9	13.34	33.40	5.86	10	13.34	33.40	5.85	25.11	287	0.03
23	13.33	33.36	5.78	20	13.34	33.37	5.83	25.08	289	0.06
51	10.77	33.48	4.38	30	13.34	33.36	5.60	25.08	290	0.09
74	9.88	33.59	3.63	50	10.80	33.48	4.49	25.65	236	0.14
101	9.68	33.78	2.86	75	9.87	33.59	3.60	25.89	213	0.20
147	9.01	33.98	2.50	100	9.71	33.77	2.90	26.06	198	0.25
193	8.63	34.13	1.99	150	8.99	33.99	2.47	26.35	171	0.34
243	8.07	34.21	1.35	200	8.58	34.14	1.92	26.53	155	0.42
285	7.74	34.27	1.00	250	8.01	34.22	1.30	26.68	141	0.49
381	6.94	34.31	0.56	300	7.62	34.28	0.92	26.79	132	0.56
476	6.40	34.34	0.47	400	6.80	34.32	0.52	26.93	119	0.69
568	5.86	34.37	0.32	500	6.27	34.35	0.42	27.03	111	0.80
755	4.84	34.41	0.43	600	5.67	34.38	0.34	27.13	102	0.91
947	4.11	34.46	0.47	700	5.12	34.40	0.40	27.21	95	1.01
1137	3.84	34.52	0.59	800	4.64	34.42	0.43	27.28	89	1.10
				1000	4.00	34.48	0.49	27.39	78	1.27

a) No apparent reason for high oxygen values; same value obtained from each sample on second titration.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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HORIZON; April 8, 1953; 2213 GCT; 32°45'N, 119°17'W; sounding, 270 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 33°.

90.50

0	12.37	33.42	6.11	0	12.37	33.42	6.11	25.31	267	0.00
8	12.34	33.39	6.10	10	12.32	33.39	6.10	25.30	268	0.03
17	12.30	33.38	6.14	20	12.29	33.38	6.12	25.30	269	0.05
29	12.24	33.41	6.02	30	12.22	33.41	6.03	25.33	266	0.08
45	12.14	33.41	5.98	50	11.40	33.41	5.92	25.49	251	0.13
57	10.57	33.43	4.52	75	9.50	33.59	3.72	25.96	207	0.19
69	9.66	33.55	3.83	100	9.11	33.76	3.08	26.15	189	0.24
84	9.34	33.64	3.56	150	8.81	34.02	2.32	26.40	166	0.33
100	9.11	33.76	3.08	200	8.40	34.19	1.59	26.60	148	0.41
119	8.89	33.92	2.67	250	8.03	34.26	1.20	26.71	138	0.48
153	8.80	34.04	2.23	300	7.48	34.29	0.83	26.81	129	0.54
190	8.46	34.17	1.66							
221	8.30	34.22	1.42							
292	7.55	34.29	0.88							
362	7.04	34.28	0.55							

HORIZON; April 9, 1953; 0215 GCT; 32°33'N, 119°38'W; sounding, 550 fm; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 35°.

90.55

0	12.14	33.31	6.14	0	12.14	33.31	6.14	25.27	271	0.00
8	12.13	33.33	6.17	10	12.14	33.34	6.18	25.29	269	0.03
16	12.14	33.36	6.22	20	12.13	33.36	6.21	25.31	267	0.05
28	12.12	33.33	6.19	30	12.12	33.33	6.18	25.29	270	0.08
44	12.06	33.38	6.09	50	11.99	33.37	5.92	25.35	265	0.13
55	11.50	33.36	5.50	75	10.20	33.44	4.55	25.72	230	0.20
66	10.66	-	3.45r	100	9.43	33.67	3.43	26.03	200	0.25
82	9.94	33.49	4.25	150	8.57	33.94	1.88	26.38	168	0.34
97	9.51	33.65	3.69	200	8.39	34.19	1.81	26.60	148	0.42
118	9.18	33.75	2.56	250	7.89	34.27	1.10	26.74	136	0.49
155	8.51	33.97	1.85	300	7.58	34.29	0.78	26.80	131	0.56
194	8.44	34.17	1.86	400	6.88	34.32	0.71	26.92	120	0.69
227	8.08	34.25	1.33	500	(6.31)	(34.34)	(0.34)	(27.01)	(112)	(0.80)
306	7.53	34.29	0.76							
393	6.91	34.32	0.72							
490	6.37	34.34	0.38							

HORIZON; April 9, 1953; 0525 GCT; 32°24.5'N, 119°55'W; sounding, 925 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 26°.

90.60

0	12.31	-	6.13	0	12.31	(33.40)	6.13	(25.31)	(267)	(0.00)
9	12.34	33.40	6.13	10	12.34	33.40	6.13	25.30	268	0.03
18	12.34	33.36	6.08	20	12.33	33.36	6.08	25.27	271	0.05
31	12.32	33.40	6.10	30	12.32	33.40	6.10	25.31	268	0.08
49	12.34	33.39	5.97	50	12.33	33.39	5.97	25.30	270	0.13
63	12.29	33.38	5.93	75	10.70	33.31	4.65	25.85	218	0.20
76	10.68	33.31	4.59	100	9.56	33.60	3.80	25.95	208	0.25
96	9.78	33.55	3.91	150	8.62	33.94	2.80	26.37	169	0.34
116	8.96	33.74	3.37	200	8.40	34.19	1.74	26.60	148	0.42
140	8.68	33.86	2.98	250	7.90	34.27	1.29	26.74	136	0.49
185	8.51	34.18	1.98	300	7.55	34.35	1.01	26.85	126	0.56
233	8.02	34.22	1.35	400	6.71	34.39	0.46	27.00	113	0.68
274	7.75	34.32	1.19	500	6.22	34.41	0.31	27.08	106	0.79
370	6.92	34.38	0.52							
465	6.36	34.41	0.35							
566	6.01	34.39	0.30							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

90.70

HORIZON; April 9, 1953; 1054 GCT; 32°09'N, 120°46'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	12.93	33.21	6.21	0	12.93	33.21	6.21	25.04	293	0.00
9	12.92	33.22	5.98	10	12.92	33.23	5.99	25.06	291	0.03
23	12.94	33.24	6.14	20	12.93	33.24	6.10	25.07	291	0.06
51	12.92	33.19	6.02	30	12.93	33.24	6.15	25.07	291	0.09
73	11.95	33.24	5.68	50	12.92	33.19	6.05	25.03	295	0.15
97	10.01	33.26	5.05	75	11.80	33.25	5.66	25.29	271	0.22
144	8.79	33.87	3.21	100	9.81	33.26	4.95	25.65	237	0.28
189	8.27	34.00	2.71	150	8.71	33.89	3.15	26.32	174	0.38
239	7.81	34.17	2.09	200	8.15	34.04	2.57	26.52	156	0.47
281	7.75	34.24	1.62	250	7.79	34.19	1.98	26.69	140	0.54
377	7.08	34.32	0.75	300	7.67	34.26	1.45	26.76	134	0.61
468	6.31	34.40	0.43	400	6.87	34.34	0.61	26.94	118	0.74
560	5.76	34.40	0.32	500	6.11	34.40	0.39	27.09	105	0.85
739	4.75	34.47	0.34	600	5.51	34.41	0.32	27.17	98	0.95
921	4.18	34.50	0.45	700	4.92	34.46	0.32	27.28	88	1.04
1114	3.70	-	0.75	800	4.53	34.48	0.38	27.34	83	1.13
				1000	3.99	(34.51)	0.51	(27.42)	(76)	(1.29)

90.80

HORIZON; April 9, 1953; 1605 GCT; 31°45'N, 121°18.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

0	12.97	33.22	5.97	0	12.97	33.22	5.97	25.04	293	0.00
10	12.98	33.17	6.04	10	12.98	33.17	6.04	25.00	297	0.03
20	12.95	33.20	6.18	20	12.95	33.20	6.18	25.03	294	0.06
34	12.92	33.28	5.96	30	12.94	33.27	6.03	25.09	289	0.09
53	12.90	33.28	6.00	50	12.91	33.28	6.00	25.10	288	0.15
67	12.71r	33.26	6.03	75	11.90	33.25	5.70	25.27	273	0.22
80	11.49	33.24	5.29	100	10.23	33.42	4.10	25.70	232	0.28
103	9.84	33.45	3.97	150	8.89	33.89	2.86	26.29	177	0.38
124	9.23	33.64	3.56	200	8.29	33.98	2.53	26.45	162	0.47
152	8.86	33.90	2.83	250	7.88	34.12	1.95	26.62	147	0.54
199	8.30	33.98	2.53	300	7.34	34.17	1.42	26.74	136	0.61
253	7.84	34.13	1.89	400	6.77	34.28	0.80	26.90	122	0.74
298	7.36	34.17	1.43	500	5.98	34.30	0.28	27.02	111	0.86
402	6.76	34.28	0.79	600	5.57	34.37	0.42	27.13	102	0.97
504	5.74	34.30	0.29							
609	5.54	34.38	0.43							

90.90

HORIZON; April 9, 1953; 2108 GCT; 31°22'N, 122°05'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 28°.

0	13.62	33.13	5.81	0	13.62	33.13	5.81	24.84	312	0.00
8	13.22	33.18	5.98	10	13.14	33.18	6.00	24.98	299	0.03
22	12.92	33.13	6.06	20	12.95	33.13	6.05	24.98	299	0.06
49	12.85	33.14	6.03	30	12.89	33.13	6.05	24.99	298	0.09
70	12.88	33.20	6.13	50	12.85	33.14	6.05	25.00	298	0.15
92	12.12	33.18	5.81	75	12.89	33.20	6.13	25.04	294	0.22
133	9.67	33.33	4.64	100	11.58	33.18	5.60	25.28	273	0.30
172	8.73	33.73	3.89	150	9.19	33.52	4.29	25.95	209	0.42
216	8.04	33.95	3.39	200	8.26	33.90	3.58	26.39	168	0.51
253	7.48	33.98	2.78	250	7.55	33.98	2.89	26.56	152	0.59
339	6.20	34.07	1.51	300	6.79	34.03	2.06	26.71	139	0.66
421	5.58	34.17	0.88	400	5.70	34.15	1.03	26.94	117	0.79
505	5.31	34.23	0.46	500	5.33	34.23	0.48	27.05	108	0.90
667	4.84	34.37	0.42	600	5.03	34.32	0.43	27.15	99	1.01
843	4.35	34.47	0.38	700	4.74	34.39	0.40	27.24	91	1.10
1030	3.80	34.51	0.63	800	4.48	34.45	0.38	27.32	84	1.19
				1000	3.89	34.51	0.59	27.43	75	1.35

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

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HORIZON; April 10, 1953; 0133 GCT; 31°06'N, 122°39'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 12°.

90.100

0	13.63	33.18	5.89	0	13.63	33.18	5.89	24.88	308	0.00
10	13.61	33.21	5.88	10	13.61	33.21	5.88	24.91	306	0.03
19	13.35	33.20	5.95	20	13.34	33.20	5.95	24.95	302	0.06
34	13.32	33.17	5.94	30	13.31	33.18	5.97	24.94	303	0.09
53	13.24	33.15	5.87	50	13.27	33.15	5.88	24.93	305	0.15
67	13.09	33.17	5.93	75	11.89	33.18	5.59	25.22	278	0.22
80	11.47	33.18	5.37	100	10.30	33.22	4.90	25.53	248	0.29
102	10.12	33.22	4.82	150	8.84	33.74	3.74	26.18	187	0.40
123	9.28	33.49	4.27	200	8.31	33.97	2.70	26.44	163	0.49
148	8.89	33.72	3.78	250	7.39	34.06	2.34	26.65	144	0.56
195	8.36	33.95	2.73	300	6.58	34.02	2.07	26.73	137	0.63
247	7.44	34.06	2.36	400	5.75	34.15	1.04	26.93	118	0.76
290	6.69	34.02	2.15	500	5.34	34.28	0.48	27.09	104	0.87
390	5.81	34.14	1.11	600	(5.05)	(34.36)	(0.27)	(27.18)	(96)	(0.97)
491	5.38	34.27	0.50							
595	5.06	34.35	0.28							

HORIZON; April 10, 1953; 0709 GCT; 30°45.5'N, 123°20.5'W; sounding, 2000+ fm; wind, 290°, force 2; weather, clear; sea, slight; wire angle, 08°.

90.110

0	13.95	33.18	6.02	0	13.95	33.18	6.02	24.81	314	0.00
10	13.94	33.22	6.21	10	13.94	33.22	6.21	24.85	312	0.03
25	13.75	33.22	6.05	20	13.83	33.22	6.11	24.87	310	0.06
49	13.65	33.14	6.10	30	13.72	33.22	6.05	24.89	308	0.09
72	13.46	33.18	6.08	50	13.63	33.14	6.10	24.85	312	0.16
95	11.51	33.18	5.62	75	13.44	33.18	6.07	24.92	306	0.23
144	9.30	33.52	4.30	100	11.13	33.18	5.46	25.36	265	0.30
187	8.44	33.89	3.76	150	9.19	33.57	4.25	25.99	205	0.42
230	7.87	34.04	2.65	200	8.22	33.96	3.42	26.45	163	0.51
276	7.44	34.09	1.92	250	7.66	34.07	2.30	26.61	147	0.59
370	6.49	34.20	1.03	300	7.20	34.11	1.69	26.71	139	0.66
458	5.91	34.29	0.62	400	6.27	34.24	0.89	26.94	118	0.79
553	5.32	34.32	0.43	500	5.64	34.31	0.53	27.07	106	0.90
737	4.60	34.49	0.35	600	5.10	34.36	0.40	27.18	97	1.00
921	4.00	34.50	0.53	700	4.72	34.48	0.34	27.32	84	1.09
1112	3.56	34.54	0.71	800	4.39	34.50	0.40	27.37	80	1.18
				1000	3.80	34.52	0.60	27.45	73	1.33

HORIZON; April 10, 1953; 1253 GCT; 30°26'N, 124°05'W; sounding, 2000+ fm; wind, 290°, force 2; weather, clear; sea, slight; wire angle, 03°.

90.120

0	13.66	33.14		0	13.66	33.14		24.84	312	0.00
10	13.66	33.16		10	13.66	33.16		24.86	310	0.03
20	13.66	33.16		20	13.66	33.16		24.86	311	0.06
35	13.54	33.18		30	13.60	33.17		24.88	309	0.09
49	13.50	33.16		50	13.50	33.16		24.89	308	0.16
63	13.01	33.14		75	12.44	33.09		25.04	294	0.23
78	12.37	33.09		100	11.78	33.16		25.22	278	0.30
95	11.91	33.15		150	9.53	33.34		25.76	228	0.43
117	10.81	33.18		200	8.61	33.84		26.29	177	0.53
141	9.72	33.26		250	7.80	33.98		26.52	156	0.61
185	8.86	33.76		300	7.25	34.03		26.64	145	0.69
230	8.04	33.94		400	6.14	34.13		26.87	124	0.82
274	7.54	34.01		500	5.56	34.24		27.03	110	0.94
367	6.46	34.09								
459	5.76	34.20								
559	5.38	34.29								

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

90.130

HORIZON; April 10, 1953; 1755 GCT; 30°04'N, 124°39'W; sounding, 2000+ fm; wind, 330°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°.

0	14.76	33.38	5.92	0	14.76	33.38	5.92	24.80	316	0.00
10	14.69	33.37	5.92	10	14.69	33.37	5.92	24.80	316	0.03
25	14.67	33.38	5.92	20	14.67	33.38	5.93	24.82	315	0.06
49	14.71	33.38	5.66	30	14.67	33.38	5.90	24.82	315	0.10
73	15.30	33.58	5.69	50	14.73	33.38	5.67	24.80	317	0.16
96	15.38	33.65	5.59	75	15.32	33.60	5.68	24.84	314	0.24
144	12.36	33.55	5.33	100	15.40	33.65	5.57	24.86	312	0.32
188	9.61	33.55	4.27	150	11.91	33.55	5.29	25.50	252	0.46
232	8.53	33.86	3.38	200	9.20	33.57	4.02	25.99	206	0.57
276	7.97	34.02	2.53	250	8.30	33.94	3.02	26.42	166	0.66
369	6.88	34.10	1.53	300	7.65	34.05	2.26	26.60	149	0.74
457	6.17	34.16	0.89	400	6.57	34.12	1.30	26.81	131	0.88
550	5.64	34.31	0.51	500	5.92	34.22	0.70	26.97	116	1.01
734	4.68	34.44	0.34	600	5.36	34.36	0.44	27.15	100	1.11
917	4.13	34.53	0.56	700	4.83	34.42	0.34	27.26	90	1.21
1109	3.61	34.55	0.75	800	4.46	34.48	0.41	27.35	82	1.30
				1000	3.91	34.54	0.63	27.45	73	1.45

90.145

HORIZON; April 11, 1953; 0135 GCT; 29°36'N, 125°40.5'W; sounding, 2000+ fm; wind, 020°, force 3; weather, cloudy; sea, moderate; wire angle, 08°.

0	16.06	33.68	5.69	0	16.06	33.68	5.69	24.74	321	0.00
10	15.95	33.70	5.63	10	15.95	33.70	5.63	24.78	318	0.03
20	15.72	33.70	5.70	20	15.72	33.70	5.70	24.83	313	0.06
34	15.65	33.69	5.80	30	15.66	33.69	5.79	24.84	313	0.10
48	15.66	33.72	5.71	50	15.64	33.72	5.71	24.86	311	0.16
63	15.66	33.73	5.68	75	15.72	33.73	5.63	24.85	313	0.24
75	15.72	33.73	5.63	100	15.90	33.85	5.68	24.91	308	0.31
92	15.91	33.84	5.68	150	12.86	33.67	5.30	25.41	261	0.46
115	15.62	33.85	5.61	200	9.38	33.48	4.12	25.89	216	0.58
141	13.64	33.75	5.39	250	8.40	33.91	3.20	26.38	170	0.67
184	9.90	33.46	4.56	300	7.68	34.00	2.60	26.56	154	0.75
227	8.81	33.80	3.52	400	6.56	34.15	1.48	26.83	128	0.89
271	8.08	33.96	2.92	500	5.84	34.25	0.78	27.00	113	1.01
363	6.92	34.08	1.88							
454	6.12	34.22	0.95							
554	5.56	34.27	0.63							

90.160

HORIZON; April 11, 1953; 0853 GCT; 29°07'N, 126°42'W; sounding, 2000+ fm; wind, 045°, force 2; weather, partly cloudy; sea, moderate; wire angle, 12°.

0	16.88	34.14	5.49	0	16.88	34.14	5.49	24.90	306	0.00
10	16.85	34.16	5.49	10	16.85	34.16	5.49	24.92	304	0.03
24	16.76	34.13	5.31	20	16.79	34.13	5.38	24.92	305	0.06
53	16.77	34.16	5.44	30	16.75	34.13	5.32	24.93	305	0.09
77	16.79	34.14	5.47	50	16.76	34.16	5.41	24.95	303	0.15
104	16.78	34.14	5.44	75	16.79	34.14	5.47	24.92	306	0.23
152	15.28	34.11	5.15	100	16.80	34.14	5.45	24.92	307	0.30
199	11.34	33.88	4.72	150	15.42	34.12	5.16	25.22	280	0.45
251	9.72	33.96	4.52	200	11.30	33.88	4.71	25.87	218	0.58
296	8.26	33.99	3.85	250	9.80	33.96	4.54	26.19	188	0.68
396	6.86	34.05	2.05	300	8.18	33.99	3.75	26.48	162	0.77
493	5.77	34.13	2.02	400	6.80	34.05	2.05	26.72	139	0.92
591	5.16	34.26	0.53	500	5.72	34.14	1.97	26.93	120	1.04
780	4.40	34.42	0.36	600	5.11	34.27	0.52	27.11	103	1.16
972	3.87	34.54	0.69	700	4.69	34.36	0.40	27.23	93	1.26
1164	3.39	34.54	0.90	800	4.33	34.44	0.40	27.33	83	1.34
				1000	3.80	34.54	0.72	27.46	71	1.50

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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CREST; April 8, 1953; 0032 GCT; 32°56'N, 117°19'W; sounding, 165 fm; wind, 250°, force 4; weather, cloudy; sea, moderate; wire angle, 05°.

93.27

0	14.53	33.45	6.27	0	14.53	33.45	6.27	24.90	306	0.00
10	13.52	33.60	6.44	10	13.52	33.60	6.44	25.22	276	0.03
25	11.26	33.59	4.17	20	11.90	33.59	5.50	25.53	247	0.06
50	9.95	-	2.70	30	10.81	-	3.70	-	-	-
74	9.72	-	2.42	50	9.95	-	2.70	-	-	-
98	9.60	-	2.64	75	9.71	-	2.44	-	-	-
150	9.40	-	1.73	100	9.58	-	2.64	-	-	-
198	9.40	34.36	1.12	150	9.40	-	1.73	-	-	-
245	9.13	-	1.08	200	9.38	-	1.12	-	-	-
				250	(9.09)	-	(1.07)	-	-	-

CREST; April 8, 1953; 0239 GCT; 32°50'N, 117°31.5'W; sounding, 500 fm; wind, 270°, force 5; weather, partly cloudy; sea, moderate; wire angle, 18°.

93.30

0	14.25	33.43	6.16	0	14.25	33.43	6.16	24.94	302	0.00
10	13.96	33.41	6.21	10	13.96	33.41	6.21	24.99	298	0.03
19	12.90	33.47	5.97	20	12.89	33.47	5.89	25.25	273	0.06
33	11.87	33.45	5.35	30	12.11	33.46	5.49	25.40	260	0.09
47	10.70	33.44	3.71	50	10.51	33.44	3.55	25.67	234	0.13
62	10.12	-	3.37	75	9.75	33.64	3.29	25.96	208	0.19
75	9.75	-	3.29	100	9.69	33.89	2.47	26.16	189	0.24
94	9.67	33.84	2.59	150	9.39	34.14	1.87	26.40	167	0.33
118	9.75	34.01	2.31	200	9.21	(34.21)	1.66	(26.50)	(160)	(0.41)
146	9.42	34.13	1.92	250	8.96	-	1.25	-	-	-
192	-	34.20	1.70	300	8.60	-	0.89	-	-	-
239	9.03	-	1.39	400	7.79	-	0.72	-	-	-
285	8.70	34.45	0.93	500	6.76	-	0.52	-	-	-
383	7.96	34.34	0.74	-	-	-	-	-	-	-
477	6.98	-	0.55	-	-	-	-	-	-	-
578	6.10	-	0.40	-	-	-	-	-	-	-

CREST; April 8, 1953; 0823 GCT; 32°30'N, 118°12.5'W; sounding, 1000 fm; wind, 300°, force 5; weather, clear; sea, very rough; wire angle, 29°.

93.40

0	15.65r	-	5.67	0	(14.62)	(33.46)	5.67	(24.89)	(307)	(0.00)
8	14.61	33.46	5.75	10	14.61	33.47	5.74	24.90	307	0.03
17	14.60	33.51	5.70	20	14.59	33.51	5.71	24.93	303	0.06
30	14.57	33.46	5.73	30	14.57	33.46	5.73	24.90	307	0.09
48	12.24	33.36	4.99	50	11.15	33.36	4.81	25.49	251	0.15
61	10.49	33.45	4.15	75	10.06	33.56	3.65	25.84	218	0.21
74	10.08	33.56	3.69	100	9.65	33.86	3.12	26.14	190	0.26
96	9.68	33.83	3.27	150	9.20	34.13	2.25	26.43	164	0.35
118	9.58	33.96	2.70	200	8.61	34.26	1.99	26.62	146	0.42
144	9.28	34.10	2.30	250	8.06	34.29	1.48	26.73	137	0.49
193	8.70	34.26	2.03	300	7.64	34.35	1.00	26.84	127	0.56
242	8.12	34.28	1.54	400	6.89	34.40	0.52	26.98	114	0.68
285	7.76	34.34	1.13	500	6.22	34.48	0.34	27.14	101	0.79
385	6.98	34.39	0.56	600	(5.60)	(34.49)	(0.33)	(27.22)	(93)	(0.89)
486	6.30	34.48	0.37	-	-	-	-	-	-	-
596	5.62	34.49	0.32	-	-	-	-	-	-	-

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn, m

93.50

CREST; April 8, 1953; 1447 GCT; 32°07.5'N, 118°59'W; sounding, 800 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 14°.

0	13.05	33.37	6.09	0	13.05	33.37	6.09	25.14	283	0.00
10	13.08	33.35	5.93	10	13.08	33.35	5.93	25.12	285	0.03
19	13.07	33.31	5.48	20	13.07	33.31	5.47	25.09	288	0.06
34	13.07	33.32	5.82	30	13.07	33.32	5.79	25.10	288	0.09
53	12.02	33.32	5.58	50	12.18	33.32	5.61	25.27	272	0.14
67	11.34	33.32	5.37	75	10.80	33.31	4.84	25.52	249	0.21
82	10.30	33.31	4.63	100	9.63	33.46	4.28	25.83	219	0.27
107	9.46	33.53	4.26	150	8.74	33.83	3.45	26.26	179	0.36
130	9.06	33.71	5.09	200	8.24	34.17	2.22	26.61	147	0.45
158	8.65	33.89	3.00	250	8.11	34.23	1.69	26.67	142	0.52
207	8.21	34.19	2.14	300	7.79	34.34	1.02	26.81	130	0.59
262	8.08	34.24	1.54	400	6.91	34.34	0.82	26.93	119	0.71
309	7.69	34.36	0.96	500	6.21	34.42	0.45	27.09	105	0.82
415	6.80	34.34	0.79	600	5.64	34.46	0.38	27.19	96	0.92
518	6.10	34.43	0.40							
623	5.52	34.46	0.38							

93.60

CREST; April 8, 1953; 2006 GCT; 31°50'N, 119°34'W; sounding, 1400 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

0	13.50	33.30	5.87	0	13.50	33.30	5.87	25.00	297	0.00
10	13.46	33.22	5.98	10	13.46	33.22	5.98	24.94	302	0.03
20	13.40	33.27	6.16	20	13.40	33.27	6.16	24.99	298	0.06
34	13.40	33.28	5.78	30	13.40	33.28	5.83	25.00	297	0.09
53	12.84	33.25	5.78	50	13.32	33.25	5.79	25.00	298	0.15
67	11.98	33.27	5.53	75	11.78	33.27	5.58	25.31	269	0.22
82	11.60	33.28	5.62	100	10.50	33.31	5.11	25.57	244	0.28
105	9.97	33.33	4.61	150	8.75	33.76	3.48	26.21	184	0.39
128	9.09	33.61	3.76	200	8.09	34.00	2.70	26.50	158	0.48
156	8.68	33.80	3.41	250	7.54	34.12	1.98	26.67	142	0.55
206	9.83r	34.02	2.59	300	7.29	34.22	1.49	26.79	132	0.62
260	7.48	34.14	1.86	400	6.62	34.30	0.69	26.94	118	0.75
306	7.26	34.23	1.44	500	6.03	34.37	0.40	27.07	106	0.86
412	6.54	34.31	0.63	600	5.55	34.40	0.28	27.16	99	0.96
516	5.95	34.38	0.38							
623	5.44	34.41	0.27							

93.70

CREST; April 9, 1953; 0200 GCT; 31°33'N, 120°21'W; sounding, 1850 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 17°.

0	13.38	33.32	5.98	0	13.38	33.32	5.98	25.04	293	0.00
9	13.37	33.32	5.76	10	13.36	33.22	5.74	25.04	293	0.03
19	13.32	33.29	5.73	20	13.31	33.29	5.77	25.03	294	0.06
33	13.20	33.36	6.00	30	13.21	33.35	5.96	25.09	288	0.09
52	13.24	33.37	6.04	50	13.23	33.37	6.06	25.11	288	0.14
67	11.57	33.27	5.62	75	11.30	33.32	5.54	25.44	257	0.21
81	11.14	33.35	5.48	100	9.98	33.41	4.10	25.74	229	0.27
105	9.76	33.44	4.01	150	9.10	33.91	2.96	26.27	179	0.38
128	9.37	33.60	4.27	200	8.28	34.00	2.68	26.47	160	0.46
155	9.04	33.93	2.87	250	7.64	34.09	2.10	26.63	146	0.54
205	8.20	34.01	2.65	300	7.17	34.21	1.48	26.79	131	0.61
260	7.55	34.11	1.94	400	6.54	34.31	0.67	26.96	116	0.73
306	7.11	34.22	1.41	500	6.08	34.35	0.45	27.05	109	0.84
411	6.49	34.32	0.61	600	5.53	34.40	0.38	27.16	99	0.95
516	6.01	34.36	0.44							
621	5.40	34.41	0.35							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn.m

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CREST; April 9, 1953; 0654, 0717 GCT; 31°13'N, 120°56'W; sounding, 2000+ fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 10°, 14°.

93.80

0	13.87	33.15	5.75	0	13.87	33.15	5.75	24.81	315	0.00
10	13.85	33.14	5.78	10	13.85	33.14	5.78	24.80	316	0.03
19	13.84	33.12	5.76	20	13.83	33.12	5.75	24.79	317	0.06
34	13.83	33.12	5.84	30	13.83	33.12	5.82	24.79	317	0.10
54	13.84	33.12	5.78	50	13.84	33.12	5.80	24.79	318	0.16
68	13.78	33.12	5.74	75	13.73	33.07	5.69	24.77	320	0.24
83	12.47	33.06	5.65	100	11.24	33.10	5.40	25.28	273	0.31
107	10.88	33.12	5.24	150	8.97	33.56	4.12	26.02	203	0.43
132	9.63	33.19	4.68	200	8.35	33.96	3.27	26.43	165	0.52
160	8.78	33.73	3.87	250	7.44	33.99	2.87	26.58	150	0.60
				300	6.75	34.03	2.12	26.71	138	0.67
208	8.26	33.97	3.20	400	6.12	34.19	0.84	26.92	120	0.80
263	7.23	34.00	2.72	500	5.55	34.28	0.47	27.06	107	0.92
310	6.66	34.05	1.86	600	5.04	34.39	0.37	27.21	94	1.02
416	6.04	34.21	0.77							
520	5.44	34.29	0.44							
625	4.96	34.42	0.36							

CREST; April 9, 1953; 1218 GCT; 30°55.5'N, 121°32.5'W; sounding, 2000+ fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°.

93.90

0	13.88	33.19	5.78	0	13.88	33.19	5.78	24.83	312	0.00
10	13.88	33.16	5.81	10	13.88	33.16	5.81	24.81	315	0.03
20	13.86	33.19	5.86	20	13.86	33.19	5.86	24.84	312	0.06
35	13.86	33.39r	5.79	30	13.85	33.19	5.80	24.84	312	0.09
54	13.90	33.16	5.78	50	13.90	33.17	5.75	24.82	316	0.16
68	13.87	33.15	5.82	75	13.84	33.17	5.84	24.83	315	0.24
83	13.78	33.19	5.80	100	11.40	33.14	5.28	25.28	272	0.31
108	10.66	33.13	5.05	150	9.18	33.60	4.16	26.02	203	0.43
132	9.77	33.38	4.70	200	7.93	33.94	3.20	26.47	160	0.52
160	8.85	33.69	3.84	250	7.74	34.08	2.31	26.61	148	0.60
214	7.84	34.00	3.01	300	7.12	34.04	2.20	26.67	143	0.67
270	7.59	34.09	2.12	400	5.95	34.12	1.07	26.89	123	0.80
316	6.80	34.01	2.24	500	5.34	34.25	0.56	27.06	106	0.92
424	5.78	34.16	0.91	600	4.94	34.36	0.37	27.20	95	1.02
530	5.20	34.29	0.49							
636	4.82	34.39	0.37							

CREST; April 9, 1953; 1338, 1421 GCT; 30°55.5'N, 121°32.5'W; sounding, 2000+ fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle 10°, 11°.

93.90

0	13.89			0	13.89		
10	13.85			10	13.85		
24	13.90			20	13.90		
49	13.89			30	13.90		
98	11.57			50	13.89		
152	8.99			75	13.80		
201	8.22			100	11.32		
300	7.03			150	9.03		
394	6.04			200	8.23		
				250	7.77		
486	5.38			300	7.03		
582	5.09			400	5.98		
768	4.46			500	5.32		
952	3.92			600	5.05		
1145	3.44			700	4.72		
1462	2.79			800	4.35		
				1000	3.79		
				1200	3.29		

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

97.30

CREST; April 11, 1953; 0440 GCT; 32°16'N, 117°09'W; sounding, 33 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 10°.

0	13.67	33.36	6.34	0	13.67	33.36	6.34	25.01	296	0.00
10	13.70	33.43	6.56	10	13.70	33.43	6.56	25.06	292	0.03
20	12.81	33.38	5.70	20	12.81	33.38	5.70	25.20	278	0.06
30	11.37	33.36	4.58	30	11.37	33.36	4.58	25.45	254	0.08
49	10.40	33.60	3.57	50	(10.39)	(33.61)	(3.50)	(25.82)	(220)	(0.13)

97.35

CREST; April 11, 1953; 0135 GCT; 32°05.5'N, 117°29'W; sounding, 550 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 35°.

0	14.55	-	6.22	0	14.55	(33.37)	6.22	(24.83)	(313)	(0.00)
8	14.56	33.37	6.22	10	14.57	33.37	6.22	24.83	313	0.03
15	14.56	33.37	5.92	20	14.55	33.37	5.85	24.83	313	0.06
28	14.49	33.37	5.81	30	14.47	33.37	5.82	24.85	312	0.09
44	13.80	33.34	5.84	50	12.72	33.26	5.80	25.12	286	0.15
56	11.90	33.22	5.32	75	10.62	33.37	4.38	25.59	242	0.22
69	10.92	33.29	4.67	100	9.54	33.57	3.87	25.93	210	0.28
88	10.15	33.53	4.11	150	9.00	33.98	2.85	26.34	172	0.37
106	9.38	33.59	3.77	200	8.47	34.09	2.00	26.51	157	0.45
125	9.13	33.81	3.15	250	8.06	34.29	1.55	26.73	137	0.53
163	8.91	34.02	2.70	300	7.67	34.32	1.22	26.81	130	0.59
203	8.43	34.10	2.06	400	7.00	34.31	0.66	26.90	123	0.72
237	8.18	34.26	1.67	500	(6.34)	(34.40)	(0.40)	(27.06)	(108)	(0.84)
317	7.54	34.32	1.11							
404	6.96	34.31	0.66							
498	6.34	34.40	0.40							

97.40

CREST; April 10, 1953; 2232 GCT; 31°55'N, 117°50'W; sounding, 780 fm; wind, 310°, force 6; weather, partly cloudy; sea, rough; wire angle, 25°.

0	14.47	33.42	5.81	0	14.47	33.42	5.81	24.89	307	0.00
8	14.48	33.40	6.18	10	14.48	33.40	6.17	24.87	309	0.03
17	14.48	33.40	6.04	20	14.47	33.41	6.04	24.88	308	0.06
31	14.44	33.42	6.09	30	14.45	33.42	6.08	24.89	308	0.09
49	13.94	33.37	5.77	50	13.72	33.37	5.73	25.01	297	0.15
63	12.06	33.27	5.49	75	10.66	33.35	4.74	25.57	244	0.22
75	10.79	33.35	4.81	100	9.98	33.49	4.25	25.80	223	0.28
97	10.07	33.47	4.36	150	8.86	33.88	3.67	26.28	177	0.38
118	9.39	33.62	3.88	200	8.84	34.12	2.30	26.48	160	0.46
143	8.88	33.82	3.77	250	8.04	34.21	1.77	26.67	142	0.54
187	8.95	34.08	2.53	300	7.82	34.27	1.32	26.75	136	0.60
235	8.13	34.19	1.92	400	6.98	34.30	0.70	26.89	123	0.74
276	7.93	34.25	1.52	500	6.13	34.36	0.43	27.05	108	0.85
373	7.26	34.29	0.85							
471	6.32	34.34	0.46							
573	5.70	34.40	0.35							

97.50

CREST; April 10, 1953; 1645 GCT; 31°27'N, 118°26'W; sounding, 1480 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	14.17	33.49	5.81	0	14.17	33.49	5.81	25.01	296	0.00
9	14.20	33.45	5.75	10	14.21	33.45	5.75	24.97	300	0.03
19	14.20	33.45	5.78	20	14.21	33.45	5.78	24.97	300	0.06
33	13.76	33.44	5.67	30	14.14	33.45	5.69	24.98	299	0.09
52	11.14	33.36	4.67	50	11.30	33.36	4.71	25.47	253	0.14
66	10.50	33.44	4.19	75	10.14	33.53	3.90	25.80	222	0.20
79	10.04	33.55	3.82	100	9.75	33.80	3.16	26.08	196	0.26
102	9.72	33.81	3.12	150	9.16	34.00	2.69	26.33	173	0.35
125	9.37	33.93	2.79	200	8.65	34.19	2.05	26.56	152	0.43
152	9.15	34.01	2.69	250	8.24	34.23	1.60	26.65	144	0.50
203	8.61	34.19	2.00	300	7.78	34.27	1.25	26.75	135	0.57
258	8.18	34.24	1.55	400	6.87	34.31	0.67	26.91	121	0.70
304	7.74	34.27	1.23	500	6.18	34.38	0.42	27.06	108	0.82
408	6.80	34.31	0.65	600	5.58	34.46	0.33	27.20	95	0.92
510	6.12	34.39	0.41							
613	5.52	34.47	0.32							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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CREST; April 10, 1953; 1045 GCT; 31°09'N, 119°07'W; sounding, 2000+ fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 22°.

97.60

0	13.51	33.45	5.75	0	13.51	33.45	5.75	25.11	286	0.00
9	13.50	33.48	5.74	10	13.50	33.49	5.74	25.14	283	0.03
18	13.50	33.55	5.72	20	13.50	33.55	5.73	25.19	279	0.06
32	13.50	33.45	5.76	30	13.50	33.49	5.76	25.14	284	0.08
49	13.54	33.33	5.70	50	13.54	33.33	5.66	25.01	297	0.14
62	12.60	33.33	5.12	75	10.61	33.50	3.70	25.70	232	0.21
76	10.60	33.51	3.71	100	9.94	33.66	3.13	25.94	210	0.26
96	10.04	33.63	3.23	150	9.34	34.03	2.44	26.32	174	0.36
118	9.66	33.86	2.83	200	8.52	34.17	2.08	26.56	152	0.44
144	9.42	34.00	2.48	250	8.22	34.21	1.68	26.64	145	0.52
191	8.61	34.16	2.14	300	7.83	34.25	1.30	26.73	137	0.59
243	8.24	34.21	1.74	400	6.83	34.36	0.56	26.96	116	0.71
288	7.94	34.24	1.39	500	6.11	34.35	0.37	27.05	109	0.83
392	6.89	34.36	0.59	600	(5.45)	(34.39)	(0.28)	(27.16)	(99)	(0.93)
494	6.14	34.35	0.38							
599	5.45	34.39	0.29							

CREST; April 10, 1953; 0513 GCT; 30°55'N, 119°51'W; sounding, 2000+ fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 25°.

97.70

0	13.84	33.28	5.19r	0	13.84	33.28	(6.23)	24.91	305	0.00
8	13.80	33.29	6.23	10	13.79	33.29	6.20	24.93	303	0.03
17	13.78	33.19	6.01	20	13.77	33.19	6.05	24.86	311	0.06
31	13.74	33.27	6.35	30	13.76	33.27	6.33	24.92	305	0.09
44	13.56	33.27	6.52	50	13.48	33.27	6.36	24.98	300	0.15
57	13.43	33.33	6.01	75	13.39	33.23	5.87	24.97	302	0.23
69	13.40	33.82r	6.99r	100	11.80	33.21	5.66	25.26	274	0.30
85	12.58	33.19	5.81	150	9.00	33.57	4.60	26.02	202	0.42
105	11.62	33.22	5.61	200	8.41	33.94	2.94	26.40	167	0.51
128	10.18	33.36	5.20	250	7.88	34.06	2.53	26.57	151	0.59
166	8.65	33.72	3.99	300	7.40	34.07	1.82	26.65	144	0.66
205	8.37	33.97	2.87	400	6.65	34.22	0.94	26.87	124	0.80
245	7.94	34.06	2.58	500	6.04	34.37	0.45	27.07	107	0.92
332	7.15	34.07	1.39							
418	6.54	34.26	0.85							
513	5.98	34.38	0.38							

CREST; April 10, 1953; 0003 GCT; 30°37'N, 120°28'W; sounding, 2000+ fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle 17°.

97.80

0	14.30	33.32	6.23	0	14.30	33.32	6.23	24.85	311	0.00
9	14.28	33.30	6.07	10	14.27	33.30	6.07	24.84	312	0.03
18	14.17	33.29	6.10	20	14.16	33.29	6.14	24.85	311	0.06
32	14.13	33.31	6.19	30	14.13	33.31	6.18	24.88	309	0.09
45	14.14	33.33	5.79	50	14.13	33.33	5.85	24.89	308	0.16
58	14.11	33.32	6.52	75	14.09	33.26	5.99	24.85	313	0.23
70	14.10	33.25	5.98	100	13.50	33.27	6.33	24.97	302	0.31
85	14.06	33.27	6.07	150	9.73	33.35	5.50	25.73	230	0.44
104	13.29	33.27	6.34	200	8.77	33.79	3.92	26.23	183	0.55
124	11.83	33.27	6.17	250	7.98	34.00	2.51	26.51	157	0.63
157	9.52	33.42	5.31	300	7.51	34.13	2.00	26.68	142	0.71
193	8.90	33.74	4.16	400	6.51	34.21	1.12	26.88	123	0.84
229	8.20	33.93	2.89	500	(5.82)	(34.25)	(0.51)	(27.00)	(113)	(0.96)
309	7.43	34.14	1.92							
390	6.60	34.20	1.18							
480	5.95	34.24	0.60							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

97.90

CREST; April 9, 1953; 1923 GCT; 30°22'N, 121°08.5'W; sounding, 2000+ fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°.

0	14.54	33.37	6.46	0	14.54	33.37	6.46	24.84	312	0.00
10	14.56	33.41	6.16	10	14.56	33.41	6.16	24.86	310	0.03
20	14.55	33.40	5.86	20	14.55	33.40	5.86	24.86	311	0.06
34	14.54	34.03r	5.70	30	14.54	33.39	5.71	24.85	312	0.09
49	14.56	33.37	5.82	50	14.55	33.37	5.83	24.83	314	0.16
63	14.53	33.37	6.32	75	14.54	33.39	6.23	24.85	313	0.23
77	14.54	33.39	6.23	100	14.52	33.39	6.36	24.86	313	0.31
97	14.52	33.39	6.37	150	11.00	33.44	5.62	25.58	244	0.45
120	13.33	33.37	5.92	200	8.70	33.74	4.71	26.20	186	0.56
148	11.20	33.43	5.65	250	8.15	33.97	3.15	26.46	162	0.65
194	8.85	33.70	4.89	300	7.49	34.09	2.63	26.65	144	0.72
241	8.28	33.94	3.27	400	6.43	34.17	1.31	26.86	125	0.86
289	7.62	34.08	2.76	500	5.67	34.29	0.64	27.05	108	0.97
388	6.53	34.16	1.42	600	(5.10)	(34.32)		(27.15)	(100)	(1.08)
484	5.77	34.28	0.71							
587	5.16	34.32	0.43							

100.29

CREST; April 11, 1953; 0854 GCT; 31°42'N, 116°43.5'W; sounding, 60 fm; wind, 070°, force 3; weather, clear; sea, moderate; wire angle, 07°.

0	12.07	33.68	4.99	0	12.07	33.68	4.99	25.57	242	0.00
10	10.35	33.79	2.84	10	10.35	33.79	2.84	25.97	205	0.02
20	9.89	33.91	2.51	20	9.89	33.91	2.51	26.14	189	0.04
30	9.87	33.96	2.27	30	9.87	33.96	2.27	26.18	185	0.06
50	9.84	34.09	1.93	50	9.84	34.09	1.93	26.29	175	0.10
74	9.74	34.22	1.70	75	(9.73)	(34.22)	(1.69)	(26.41)	(164)	(0.14)

100.30

CREST; April 11, 1953; 0950 GCT; 31°40.5'N, 116°47'W; sounding, 210 fm; wind, 070°, force 2; weather, clear; sea, moderate; wire angle, 15°.

0	12.39	33.55	5.85	0	12.39	33.55	5.85	25.41	258	0.00
9	12.12	33.59	4.81	10	12.10	33.60	4.66	25.50	249	0.02
24	9.97	33.82	2.63	20	10.01	33.75	2.97	26.00	202	0.05
48	9.91	33.98	2.14	30	9.92	33.87	2.41	26.10	192	0.07
71	9.80	34.08	2.05	50	9.90	33.99	2.12	26.20	184	0.10
94	9.85	34.17	1.71	75	9.80	34.10	2.00	26.30	174	0.15
144	9.66	34.29	1.22	100	9.85	34.19	1.64	26.37	169	0.19
191	9.22	34.34	1.17	150	9.63	34.30	1.22	26.49	158	0.28
238	8.92	34.36	0.89	200	9.17	34.35	1.12	26.60	148	0.35
285	8.56	34.41	0.67	250	8.84	34.37	0.82	26.67	143	0.42

100.40

CREST; April 11, 1953; 1600 GCT; 31°20'N, 117°29'W; sounding, 1030 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.

0	14.26	33.28	5.21	0	14.26	33.28	5.21	24.83	313	0.00
9	14.30	33.32	5.23	10	14.30	33.32	5.25	24.85	311	0.03
23	14.28	33.29	5.53	20	14.28	33.30	5.53	24.84	313	0.06
51	14.28	33.24	5.35	30	14.27	33.28	5.53	24.82	314	0.09
74	12.70	33.16	5.45	50	14.27	33.24	5.35	24.79	318	0.16
103	11.22	33.29	4.93	75	12.60	33.16	5.44	25.07	292	0.23
153	9.07	33.75	2.95	100	11.40	33.26	5.03	25.37	264	0.30
203	8.19	-	2.67	150	9.14	33.73	2.97	26.12	193	0.42
256	8.07	34.14	1.74	200	8.22	34.00	2.70	26.48	160	0.50
300	7.38	34.13	1.47	250	8.08	34.13	1.80	26.60	149	0.58
400	6.97	34.29	0.52	300	7.38	34.13	1.47	26.70	140	0.65
495	6.15	34.31	0.36	400	6.97	34.29	0.52	26.89	124	0.79
591	5.57	34.35	0.31	500	6.10	34.31	0.34	27.02	112	0.90
782	4.74	34.48	0.34	600	5.53	34.35	0.32	27.12	103	1.01
974	4.04	34.57	0.54	700	5.07	34.43	0.33	27.24	92	1.11
1163	3.50	34.60	0.67	800	4.66	34.49	0.37	27.33	84	1.20
				1000	3.96	34.58	0.58	27.48	70	1.35

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn.m

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CREST; April 11, 1953; 2144 GCT; 31°02'N, 118°07'W; sounding, 950 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 22°.

100.50

0	14.06	33.32	5.49	0	14.06	33.32	5.49	24.90	306	0.00
9	14.06	-	5.35	10	14.06	33.35	5.35	24.92	304	0.03
18	13.90	33.37	5.55	20	13.89	33.37	5.78	24.97	300	0.06
32	13.83	33.37	5.82	30	13.83	33.37	5.83	24.98	299	0.09
51	13.06	33.28	5.10	50	13.28	33.28	5.18	25.03	295	0.15
65	11.15	33.30	4.38	75	10.30	33.34	3.88	25.63	238	0.22
78	10.20	-	3.86	100	9.62	33.45	3.71	25.83	220	0.27
100	9.62	33.45	3.71	150	8.92	33.56	2.70	26.03	202	0.38
123	9.22	33.38	3.68	200	8.35	34.00	2.63	26.46	162	0.47
149	8.92	-	2.70	250	7.98	34.19	1.59	26.66	143	0.55
198	8.37	33.99	2.63	300	(7.85)	(34.26)	(1.22)	(26.74)	(137)	(0.62)
251	7.98	34.19	1.58							
296	7.86	34.26	1.24							

CREST; April 12, 1953; 0342 GCT; 30°42.5'N, 118°48'W; sounding, 1550 fm; wind, 340°, force 5; weather, clear; sea, rough; wire angle, 40°.

100.60

0	13.59	33.32	5.36	0	13.59	33.32	5.36	24.99	297	0.00
7	13.62	-	5.76	10	13.62	33.29	5.73	24.97	300	0.03
19	13.60	33.29	5.58	20	13.60	33.29	5.57	24.97	300	0.06
41	13.56	33.33	5.97	30	13.58	33.31	5.77	24.99	298	0.09
60	12.04	33.13	5.55	50	13.50	33.25	5.87	24.96	302	0.15
84	10.91	33.28	4.81	75	11.36	33.20	5.05	25.33	267	0.22
125	9.33	33.51	3.76	100	10.10	33.37	4.34	25.68	234	0.28
168	8.90	33.84	3.04	150	9.05	33.70	3.33	26.11	194	0.39
214	8.50	34.05	2.22	200	8.63	34.01	2.48	26.42	165	0.48
252	8.04	34.09	1.63	250	8.08	34.09	1.66	26.57	152	0.56
336	6.91	-	0.96	300	7.34	34.16	1.25	26.73	137	0.63
415	6.47	34.31	0.56	400	6.55	34.30	0.60	26.95	117	0.76
494	5.82	34.33	0.39	500	5.78	34.33	0.38	27.07	106	0.87
656	5.09	34.36	0.30	600	5.33	34.35	0.30	27.14	100	0.97
831	4.44	34.46	0.43	700	4.93	34.38	0.32	27.21	94	1.07
1012	3.86	34.49	0.62	800	4.55	34.44	0.40	27.30	86	1.16
				1000	3.90	34.49	0.61	27.41	76	1.32

CREST; April 12, 1953; 0921 GCT; 30°22'N, 119°28'W; sounding, 2000+ fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 11°.

100.70

0	14.53	33.38	6.81 ^{a)}	0	14.53	33.38		24.85	311	0.00
9	14.57	33.36	6.23	10	14.57	33.36		24.82	314	0.03
19	14.54	33.33	7.37	20	14.54	33.33		24.80	316	0.06
34	14.53	33.30	6.19	30	14.54	33.31		24.79	318	0.09
53	14.22	33.35	6.17	50	14.30	33.34		24.86	311	0.16
68	13.97	33.25	4.84	75	13.35	33.23		24.97	301	0.23
83	12.60	33.22	6.36	100	11.82	33.23		25.27	273	0.31
125p	10.71	33.28	6.06	150	9.70	33.40		25.77	226	0.43
165p	9.33	33.51	3.49	200	8.78	33.88		26.30	177	0.53
199p	8.80	33.87	3.44	250	8.22	34.07		26.53	155	0.61
283p	7.98	34.16	1.75	300	7.86	34.19		26.68	142	0.69
367p	7.30	34.28	0.88	400	6.94	34.28		26.88	124	0.82
453p	6.36	34.28	0.53	500	(5.85)	(34.28)		(27.02)	(111)	(0.94)

a) Oxygen values appear erratic; no interpolations made.

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

100.80

CREST; April 12, 1953; 1442 GCT; 30°^{02'}N, 120°08'W; sounding, 2000+ fm; wind, 350°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

0	14.88	33.45	5.32	0	14.88	33.45	5.32	24.82	313	0.00
9	14.90	33.49	5.14	10	14.90	33.49	5.15	24.85	311	0.03
23	14.90	33.48	5.31	20	14.90	33.48	5.28	24.84	312	0.06
53	14.91	33.48	5.28	30	14.91	33.48	5.32	24.84	313	0.09
77	14.58	33.41	5.39	50	14.92	33.48	5.28	24.84	313	0.16
105	12.37	33.32	5.11	75	14.60	33.42	5.39	24.86	312	0.23
158	9.42	33.57	3.64	100	13.50	33.33	5.19	25.02	297	0.31
210	8.51	33.91	2.81	150	9.59	33.50	3.80	25.87	217	0.44
267	7.78	34.08	2.30	200	8.69	33.86	2.93	26.30	177	0.54
313	7.08	34.19	1.94	250	7.97	34.02	2.43	26.53	155	0.62
419	5.98	34.17	1.03	300	7.27	34.17	2.04	26.75	135	0.69
519	5.80	34.30	0.53	400	6.12	34.17	1.15	26.90	121	0.82
621	5.34	34.37	0.30	500	5.87	34.27	0.60	27.01	112	0.94
820	4.52	34.53	0.40	600	5.46	34.36	0.32	27.14	101	1.04
1023	3.83	34.56	0.69	700	5.00	34.43	0.32	27.25	91	1.14
1222	3.36	34.61	0.85	800	4.62	34.52	0.38	27.36	81	1.23
				1000	3.93	34.56	0.66	27.47	72	1.38

100.90

CREST; April 12, 1953; 2027 GCT; 29°39'N, 120°49'W; sounding, 2100 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

0	14.86	33.28	5.41	0	14.86	33.28	5.41	24.70	325	0.00
10	14.54	33.34	5.36	10	14.54	33.34	5.36	24.81	315	0.03
20	14.52	33.28	5.34	20	14.52	33.28	5.34	24.77	319	0.06
35	14.49	33.32	5.24	30	14.52	33.31	5.26	24.79	317	0.10
50	14.28	33.26	5.26	50	14.28	33.26	5.26	24.81	316	0.16
64	13.85	33.25	5.28	75	12.85	33.20	5.41	25.05	294	0.24
79	12.68	33.18	5.43	100	11.47	33.17	4.81	25.29	271	0.31
98	11.64	33.16	4.90	150	9.23	33.53	3.84	25.95	209	0.43
122	10.29	33.31	4.41	200	8.55	33.91	2.77	26.36	171	0.52
150	9.23	33.53	3.84	250	7.93	34.03	2.49	26.54	154	0.60
197	8.59	33.90	2.82	300	7.24	34.07	1.95	26.67	142	0.68
244	8.01	34.02	2.54	400	6.29	34.17	1.00	26.88	123	0.81
292	7.32	34.07	2.02	500	5.62	34.25	0.51	27.03	110	0.93
390	6.38	34.16	1.14	600	(5.14)	(34.35)	(0.42)	(27.17)	(98)	(1.03)
487	5.70	34.24	0.54							
589	5.18	34.34	0.43							

100.90

CREST; April 12, 1953; 2133, 2230 GCT; 29°39'N, 120°49'W; sounding, 2100 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 05°, 10°.

0	15.04			0	15.04		
10	14.55			10	14.55		
25	14.51			20	14.52		
50	13.99			30	14.48		
75	13.42			50	13.99		
100	11.58			75	13.42		
154	9.30			100	11.58		
204	8.46			150	9.41		
304	7.15			200	8.51		
409	6.23			250	7.82		
				300	7.20		
495	5.82			400	6.30		
591	5.38			500	5.79		
775	4.58			600	5.33		
958	4.12			700	4.87		
1145	3.51			800	4.50		
1441	2.86			1000	4.00		
1926	2.17			1200	3.39		
2416	1.82			1500	2.74		
2970	1.67			2000	2.10		
				2500	1.79		

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn.m

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CREST; April 14, 1953; 1142 GCT; 31°05.5'N, 116°24.5'W; sounding, 40 fm; wind, 350°, force 2;
weather, clear; sea, slight; wire angle, 08°.

103.30

0	11.73	33.82	5.02	0	11.73	33.82	5.02	25.74	226	0.00
10	11.05	33.75	3.68	10	11.05	33.75	3.68	25.81	219	0.02
20	10.06	33.83	2.65	20	10.06	33.83	2.65	26.05	197	0.04
30	9.88	33.93	2.23	30	9.88	33.93	2.23	26.16	187	0.06
49	9.88	34.03	1.98							

CREST; April 14, 1953; 0839 GCT; 30°52'N, 116°43'W; sounding, 950 fm; wind, 330°, force 4;
weather, clear; sea, rough; wire angle, 28°.

103.35

0	14.71	33.32	5.31	0	14.71	33.32	5.31	24.76	319	0.00
9	14.74	33.31	4.92	10	14.74	33.31	4.92	24.75	321	0.03
18	14.72	33.41	5.21	20	14.72	33.41	5.22	24.83	314	0.06
31	14.68	33.32	5.24	30	14.68	33.32	5.25	24.77	320	0.10
44	14.63	33.37	5.24	50	14.61	33.35	5.28	24.81	316	0.16
58	14.06	33.31	5.29	75	11.60	33.31	4.67	25.37	263	0.23
70	12.13	33.32	4.83	100	10.05	33.36	3.90	25.68	234	0.29
87	10.84	33.23	4.37	150	8.96	33.82	3.09	26.22	183	0.40
107	9.81	33.49	3.72	200	8.50	34.10	2.60	26.51	156	0.48
130	9.25	33.64	3.20	250	8.40	34.31	1.50	26.69	140	0.56
170	8.80	34.00	3.01	300	7.89	34.30	1.13	26.76	134	0.63
209	8.46	34.14	2.35	400	7.01	34.33	0.62	26.91	121	0.75
251	8.40	34.31	1.49	500	6.27	34.44	0.35	27.10	104	0.87
337	7.46	34.29	0.97							
422	6.86	34.35	0.52							
513	6.16	34.45	0.35							

CREST; April 14, 1953; 0518 GCT; 30°44.5'N, 117°04'W; sounding, 900 fm; wind, 310°, force 5;
weather, clear; sea, rough; wire angle, 12°.

103.40

0	14.58	33.27	5.39	0	14.58	33.27	5.39	24.75	320	0.00
10	14.63	33.30	5.30	10	14.63	33.30	5.30	24.76	320	0.03
20	14.48	33.27	5.47	20	14.48	33.27	5.47	24.77	319	0.06
34	14.22	33.30	5.51	30	14.27	33.29	5.52	24.83	314	0.10
48	14.22	33.25	5.34	50	14.23	33.25	5.36	24.81	316	0.16
63	13.21	33.22	5.66	75	12.34	33.15	4.97	25.11	288	0.23
77	12.28	33.15	4.96	100	10.90	33.28	4.70	25.48	254	0.30
96	11.12	33.27	4.77	150	8.82	33.70	3.35	26.15	190	0.41
119	9.89	33.33	4.11	200	8.22	33.99	2.60	26.47	160	0.50
146	8.96	33.66	3.43	250	7.95	34.20	1.85	26.67	142	0.58
191	8.29	33.95	2.75	300	7.56	34.28	1.22	26.79	131	0.64
236	8.04	34.15	2.06	400	6.81	34.30	0.65	26.91	121	0.77
282	7.71	34.27	1.43	500	6.06	34.39	0.48	27.08	105	0.88
380	6.99	34.28	0.69							
473	6.22	34.38	0.50							
574	5.69	34.39	0.37							

CREST; April 14, 1953; 0001 GCT; 30°27'N, 117°46'W; sounding, 1470 fm; wind, 320°, force 4;
weather, clear; sea, moderate; wire angle, 23°.

103.50

0	14.23	33.27	5.45	0	14.23	33.27	5.45	24.82	313	0.00
9	14.06	33.25	5.46	10	14.01	33.25	5.65	24.85	311	0.03
18	13.92	33.25	5.34	20	13.90	33.25	5.35	24.88	309	0.06
32	13.86	33.23	5.53	30	13.85	33.23	5.53	24.87	310	0.09
46	13.86	33.12	5.38	50	13.83	33.12	5.40	24.79	318	0.16
59	13.76	-	5.49	75	13.48	33.19	5.53	24.92	306	0.23
72	13.50	33.19	5.55	100	10.64	33.14	4.52	25.41	259	0.30
89	11.25	33.13	4.74	150	9.22	33.67	3.20	26.06	198	0.42
110	10.24	33.17	4.33	200	8.69	34.09	2.52	26.48	160	0.51
133	9.40	33.47	3.58	250	7.99	34.10	2.34	26.59	150	0.59
174	9.02	33.91	2.90	300	7.41	34.15	1.97	26.71	139	0.66
213	8.49	34.11	2.39	400	6.45	34.19	0.98	26.88	124	0.79
254	7.94	34.10	2.31	500	5.84	34.33	0.51	27.07	107	0.90
341	7.07	34.19	1.42							
428	6.20	34.20	0.82							
523	5.75	34.36	0.43							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

103.60

CREST; April 13, 1953; 1917 GCT; 30°09'N, 118°27'W; sounding, 1500 fm; wind, 300°, force 3;
weather, clear; sea, slight; wire angle, 07°.

0	14.21	33.28	5.39	0	14.21	33.28	5.39	24.84	312	0.00
10	13.94	33.27	5.28	10	13.94	33.27	5.28	24.88	308	0.03
20	13.84	33.27	5.63	20	13.84	33.27	5.63	24.90	306	0.06
35	13.67	33.25	5.47	30	13.69	33.25	5.55	24.92	305	0.09
50	13.70	33.27	5.30	50	13.70	33.27	5.30	24.93	304	0.15
64	13.67	33.28	5.32	75	13.45	33.29	5.35	25.00	298	0.23
78	13.12	33.29	5.36	100	11.81	33.26	5.42	25.30	271	0.30
97	12.10	33.26	5.43	150	9.21	33.59	3.86	26.00	204	0.42
120	10.15	33.33	4.77	200	8.70	33.99	2.57	26.40	168	0.51
148	9.24	33.57	3.92	250	7.84	34.10	2.30	26.61	148	0.59
194	8.78	33.96	2.65	300	7.49	34.15	1.75	26.70	140	0.66
239	7.99	34.09	2.38	400	6.75	34.24	0.75	26.88	124	0.79
286	7.58	34.14	1.90	500	6.04	34.33	0.38	27.04	110	0.91
383	6.89	-	0.90	600	(5.48)	(34.40)		(27.16)	(98)	(1.02)
477	6.21	34.31	0.41							
580	5.58	34.39	0.31							

103.70

CREST; April 13, 1953; 1420 GCT; 29°48'N, 119°07'W; sounding, 1900 fm; wind, 330°, force 3;
weather, partly cloudy; sea, rough; wire angle, 05°.

0	14.74	33.27	5.28	0	14.74	33.27	5.28	24.72	324	0.00
10	14.76	33.29	5.18	10	14.76	33.29	5.18	24.73	323	0.03
20	14.68	33.27	5.38	20	14.68	33.27	5.38	24.73	323	0.06
35	14.66	33.29	5.42	30	14.65	33.29	5.42	24.75	321	0.10
50	14.68	-	5.34	50	14.68	33.28	5.34	24.74	323	0.16
65	14.64	33.27	5.50	75	14.58	33.37	5.40	24.83	315	0.24
79	14.56	33.38	5.36	100	13.10	33.30	5.30	25.08	292	0.32
99	13.29	33.30	5.31	150	9.99	33.41	4.33	25.73	230	0.45
122	11.40	-	4.82	200	8.85	33.71	3.45	26.15	191	0.55
151	9.94	33.41	4.33	250	8.18	34.04	2.86	26.51	157	0.64
198	8.90	33.69	3.48	300	7.82	34.18	1.70	26.68	142	0.71
244	8.26	34.01	2.95	400	7.04	34.33	0.75	26.91	122	0.85
291	7.89	34.16	1.91	500	6.03	34.36	0.48	27.06	107	0.96
392	7.13	34.33	0.78	600	(5.64)	(34.39)	(0.30)	(27.14)	(101)	(1.06)
489	6.10	34.36	0.51							
595	5.66	34.39	0.31							

103.80

CREST; April 13, 1953; 0852 GCT; 29°27'N, 119°45.5'W; sounding, 2100 fm; wind, 300°, force 4;
weather, clear; sea, moderate; wire angle, 10°.

0	15.39	33.51	5.12	0	15.39	33.51	5.12	24.76	320	0.00
10	15.41	33.54	5.58	10	15.41	33.54	5.58	24.78	318	0.03
19	15.30	33.52	5.35	20	15.29	33.52	5.21	24.79	317	0.06
32p	15.28	33.50r	5.57r	30	15.28	33.49	5.09	24.77	320	0.10
34	15.27	33.49	5.08	50	15.24	33.52	5.42	24.80	317	0.16
49	15.28	33.52	5.43	75	14.75	33.36	6.02	24.78	319	0.24
51p	15.21	33.52r	5.56r	100	14.20	33.23	5.58	24.80	318	0.32
63	15.00	33.45	5.07	150	10.51	33.48	4.92	25.70	233	0.46
73p	14.80	33.42r	5.24r	200	9.10	33.60	3.40	26.03	203	0.56
78	14.70	-	6.03	250	8.65	34.05	2.59	26.45	163	0.66
111p	13.87	33.23	5.37	300	8.18	34.20	1.80	26.64	146	0.73
149p	10.75	33.48	4.94	400	7.00	34.27	0.75	26.87	126	0.87
187p	9.30	33.53	3.75							
267p	8.52	34.13	2.33							
344p	7.60	34.24	1.18							
426p	6.76	34.27	0.67							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

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CREST; April 13, 1953; 0336 GCT; 29°04'N, 120°25'W; sounding, 2000+ fm; wind, 020°, force 2; weather, clear; sea, slight; wire angle, 03°.

103.90

0	15.40	33.53	5.46	0	15.40	33.53	5.46	24.77	318	0.00
10	15.36	33.51	5.47	10	15.36	33.51	5.47	24.77	319	0.03
20	15.10	33.53	5.27	20	15.10	33.53	5.27	24.84	313	0.06
35	14.99	33.45	5.24	30	14.99	33.48	5.26	24.82	314	0.10
50	15.02	33.45	5.17	50	15.02	33.45	5.17	24.79	318	0.16
65	14.78	33.53	5.38	75	14.83	33.58	5.31	24.93	305	0.24
80	14.86	33.59	5.28	100	12.95	33.15	5.45	24.99	300	0.31
100	12.95	33.15	5.45	150	10.08	33.25	4.53	25.59	243	0.45
124	11.63	-	4.88	200	8.75	33.77	3.18	26.22	185	0.55
153	9.91	33.27	4.50	250	8.09	34.01	2.93	26.50	158	0.64
201	8.75	33.78	3.16	300	7.29	34.09	2.57	26.68	141	0.72
248	8.12	34.01	2.95	400	6.30	34.19	1.19	26.90	122	0.85
295	7.36	34.09	2.63	500	5.63	34.29	0.59	27.06	107	0.96
395	6.37	34.19	1.26	600	(5.20)	(34.37)	(0.39)	(27.17)	(97)	(1.06)
492	5.66	34.29	0.62							
593	5.22	34.37	0.41							

CREST; April 14, 1953; 1612 GCT; 30°26'N, 116°10.5'W; sounding, 105 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 15°.

107.32

0	11.63	33.70	5.91	0	11.63	33.70	5.91	25.67	233	0.00
9	11.27	33.65	4.73	10	11.21	33.65	4.69	25.71	230	0.02
24	11.04	33.63	4.41	20	11.09	33.63	4.50	25.71	229	0.05
48	9.99	33.77	2.95	30	10.84	33.63	4.20	25.76	225	0.07
72	10.08	34.11	1.91	50	9.98	33.80	2.90	26.04	199	0.11
96	10.25	34.42	1.05	75	10.10	34.17	1.76	26.31	174	0.16
120	10.20	34.44	0.90	100	10.24	34.43	1.00	26.49	158	0.20
149	10.12	34.50	0.69	150	(10.12)	(34.50)	(0.69)	(26.56)	(152)	(0.28)

CREST; April 14, 1953; 1817 GCT; 30°20'N, 116°23'W; sounding, 970 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 19°.

107.35

0	14.39	33.33	5.37	0	14.39	33.33	5.37	24.84	312	0.00
9	14.36	33.40	5.58	10	14.35	33.40	5.58	24.90	306	0.03
19	14.21	33.36	5.43	20	14.20	33.35	5.41	24.89	308	0.06
33	13.28	33.30	5.37	30	13.79	33.31	5.39	24.95	302	0.09
47	11.06	33.19	4.92	50	10.90	33.19	4.66	25.41	259	0.15
60	10.48	33.32	4.30	75	9.84	33.43	3.88	25.77	224	0.21
74	9.82	33.43	3.92	100	9.26	33.65	3.60	26.04	200	0.26
92	9.40	33.59	3.67	150	10.15	34.30	1.49	26.40	167	0.35
114	9.19	33.74	3.42	200	10.06	34.45	0.95	26.53	155	0.43
140	10.12	34.18	1.72	250	9.73	34.53	0.68	26.65	145	0.51
183	10.16	34.46	1.06	300	9.41	34.55	0.58	26.72	139	0.58
225	9.84	34.49	0.81	400	7.93	34.50	0.48	26.91	122	0.71
267	9.64	34.55	0.64	500	6.73	34.45	0.43	27.04	110	0.83
361	8.60	34.52	0.50							
450	7.23	34.47	0.45							
546	6.36	34.43	0.35							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn.m

107.40

CREST; April 14, 1953; 2119 GCT; 30°10.5'N, 116°43.5'W; sounding, 1550 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 22°.

0	14.92	33.38	6.64	0	14.92	33.38	6.64	24.76	319	0.00
9	14.92	33.37	7.07	10	14.92	33.37	7.08	24.75	320	0.03
18	14.84	33.35	6.18	20	14.82	33.35	6.19	24.76	320	0.06
32	14.73	33.37	6.29	30	14.75	33.37	6.29	24.79	317	0.10
50	14.54	33.38	5.94	50	14.54	33.38	5.94	24.84	313	0.16
64	13.58	33.19	6.07	75	12.53	33.19	5.89	25.10	288	0.23
78	12.42	33.20	5.76	100	10.95	33.31	4.85	25.49	252	0.30
101	10.88	33.31	4.84	150	9.62	33.82	3.30	26.12	194	0.41
123	9.98	33.40	4.72	200	9.92	34.23	1.85	26.38	169	0.50
149	9.61	33.81	3.46	250	9.03	34.31	1.89	26.59	150	0.58
196	9.96	34.21	1.87	300	8.62	34.32	1.16	26.67	144	0.66
246	9.07	34.31	1.91	400	7.38	34.35	0.82	26.87	125	0.79
289	8.74	34.32	1.28	500	6.46	34.36	0.44	27.01	113	0.91
388	7.51	34.35	0.85	600	(5.73)	(34.38)	(0.36)	(27.12)	(103)	(1.02)
489	6.58	34.36	0.47							
590	5.79	34.38	0.36							

107.50

CREST; April 15, 1953; 0259 GCT; 29°50.5'N, 117°23.5'W; sounding, 1150 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

0	15.18	33.47	6.23	0	15.18	33.47	6.23	24.77	318	0.00
9	15.20	33.40	5.90	10	15.20	33.40	5.91	24.72	324	0.03
19	15.18	33.47	6.66	20	15.18	33.47	6.65	24.77	319	0.06
33	15.17	33.45	5.98	30	15.16	33.45	6.00	24.76	320	0.10
52	15.10	33.50	6.08	50	15.12	33.50	6.09	24.81	316	0.16
66	15.02	33.45	5.97	75	13.30	33.26	5.88	25.01	298	0.24
79	12.74	33.25	5.83	100	11.41	33.26	5.16	25.37	264	0.31
101	11.36	33.27	5.15	150	9.52	33.68	3.98	26.02	202	0.42
122	10.54	33.41	4.86	200	9.32	34.01	3.06	26.31	176	0.52
148	9.56	33.65	4.00	250	8.69	34.17	2.21	26.54	155	0.60
194	9.33	33.99	3.17	300	8.35	34.27	1.39	26.67	143	0.68
244	8.72	34.16	2.32	400	7.35	34.36	0.74	26.89	124	0.81
287	8.46	-	1.54	500	6.52	34.40	0.46	27.03	111	0.93
387	7.48	34.35	0.80	600	(5.69)	(34.41)		(27.15)	(100)	(1.03)
486	6.62	34.40	0.47							
586	5.81	34.41	0.32							

107.60

CREST; April 15, 1953; 0845 GCT; 29°27.5'N, 118°05.5'W; sounding, 1850 fm; wind, 340°, force 5; weather, clear; sea, rough; wire angle, 22°.

0	15.46	33.55	5.78	0	15.46	33.55	5.78	24.77	318	0.00
9	15.50	33.55	5.85	10	15.50	33.55	5.85	24.77	319	0.03
18	15.49	33.57	5.78	20	15.48	33.57	5.78	24.79	318	0.06
32	15.47	33.57	5.81	30	15.47	33.57	5.81	24.79	318	0.10
51	15.42	33.56	5.79	50	15.42	33.56	5.80	24.79	318	0.16
64	15.47	33.62	5.79	75	15.46	33.60	5.80	24.81	317	0.24
78	15.47	33.59	5.80	100	14.60	33.53	5.81	24.95	304	0.32
100	14.60	33.53	5.81	150	11.19	33.73	3.62	25.77	226	0.45
121	12.83	33.52	5.03	200	9.48	33.96	3.07	26.25	182	0.55
147	11.34	33.71	3.67	250	9.16	34.19	2.28	26.48	161	0.64
193	9.56	33.92	3.19	300	8.16	34.19	2.20	26.63	146	0.71
245	9.22	34.19	2.29	400	7.48	34.39	0.76	26.89	123	0.85
289	8.34	34.18	2.24	500	6.70	34.41	0.45	27.02	112	0.97
390	7.52	34.37	0.81	600	6.08	34.41	0.32	27.10	106	1.08
486	6.80	34.41	0.48							
600	6.08	34.41	0.32							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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CREST; April 16, 1953; 0554 GCT; 29°11'N, 118°43'W; sounding, 1650 fm; wind, 010°, force 4; weather, clear; sea, rough; wire angle, 18°.

107.70

0	15.64	33.55	6.02	0	15.64	33.55	6.02	24.73	322	0.00
9	15.65	33.60u	6.35	10	15.65	33.55	6.34	24.73	323	0.03
19	15.64	33.55	6.19	20	15.63	33.55	6.21	24.74	322	0.06
33	15.60	33.70u	6.35	30	15.60	33.56	6.33	24.75	322	0.10
52	15.64	33.58	5.98	50	15.63	33.58	6.03	24.76	321	0.16
65	15.58	33.64	5.91	75	15.56	33.63	5.83	24.81	316	0.24
79	15.56	33.63	5.81	100	14.25	33.38	5.92	24.90	308	0.32
101	14.02	33.37	5.93	150	11.16	33.57	4.34	25.65	238	0.45
124	12.41	33.31	5.78	200	10.26	34.28	2.60	26.37	171	0.56
150	11.16	33.57	4.34	250	10.41	34.44	1.22	26.46	163	0.64
197	10.26	-	2.76	300	9.60	34.41	1.06	26.58	153	0.72
251	10.41	34.44	1.22	400	7.60	34.32	0.85	26.82	130	0.86
295	9.75	34.42	1.04	500	6.69	34.33	0.55	26.95	118	0.98
397	7.62	34.32	0.87	600	(5.99)	(34.36)	(0.40)	(27.07)	(108)	(1.10)
495	6.74	34.33	0.58							
597	6.00	34.36	0.39							

CREST; April 16, 1953; 1035 GCT; 28°53'N, 119°18.5'W; sounding, 1950 fm; wind, 330°, force 5; weather, missing; sea, rough; wire angle, 20°.

107.80

0	15.48	33.54	5.83	0	15.48	33.54	5.83	24.76	319	0.00
9	15.47	33.52	5.75	10	15.46	33.52	5.77	24.75	321	0.03
18	15.47	33.52	5.95	20	15.50	33.53	5.94	24.75	321	0.06
33	15.62	33.59	5.81	30	15.62	33.58	5.83	24.76	320	0.10
52	15.54	33.65	5.83	50	15.55	33.65	5.84	24.83	314	0.16
65	15.47	33.55	5.82	75	15.41	33.61	5.84	24.83	315	0.24
79	15.40	33.61	5.83	100	14.20	33.32	5.94	24.87	312	0.32
103	13.94	33.32	5.94	150	11.25	33.41	4.51	25.51	251	0.46
128	12.47	33.41	5.28	200	9.46	33.77	4.00	26.10	196	0.57
155	11.05	33.42	4.43	250	8.61	34.01	3.35	26.43	166	0.66
204	9.37	33.80	3.94	300	7.98	34.12	2.79	26.61	149	0.74
257	8.51	34.03	3.25	400	6.92	34.19	1.25	26.81	130	0.88
301	7.96	34.12	2.75	500	6.10	34.33	0.63	27.03	110	1.00
404	6.89	34.19	1.22	600	5.51	34.41	0.47	27.17	98	1.10
505	6.06	34.33	0.61							
613	5.44	34.42	0.45							

CREST; April 16, 1953; 1138, 1302 GCT; 28°53'N, 119°18.5'W; sounding, 1950 fm; wind, 330°, force 5; weather, missing; sea, rough; wire angle, 12°, 18°.

107.80

0	15.59			0	15.59		
10	15.62			10	15.62		
24	15.56			20	15.58		
53	15.64			30	15.58		
107	14.31			50	15.64		
161	10.51			75	15.64		
215	9.24			100	15.50		
322	7.86			150	10.86		
391	7.12			200	9.53		
				250	8.69		
416	7.00			300	8.14		
534	5.95			400	7.08		
664	5.26			500	6.24		
794	4.72			600	5.58		
1031	3.93			700	5.10		
				800	4.70		
				1000	4.03		

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

107.90

CREST; April 16, 1953; 1829 GCT 28°28'N, 120°05'W; sounding, 2000+ fm; wind, 350°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

0	15.43	33.45	5.81	0	15.43	33.45	5.81	24.70	325	0.00
9	15.44	33.45	5.81	10	15.44	33.45	5.82	24.70	325	0.03
19	15.42	33.47	5.83	20	15.42	33.47	5.85	24.72	324	0.06
33	15.40	33.53	5.93	30	15.41	33.52	5.91	24.76	320	0.10
53	15.44	33.55	5.91	50	15.43	33.55	5.94	24.78	319	0.16
67	15.17	33.44	5.80	75	15.15	33.45	5.78	24.77	321	0.24
81	15.17	33.45	5.78	100	15.15	33.47	5.95	24.78	320	0.32
104	15.02	33.47	5.97	150	10.95	33.45	5.06	25.60	243	0.46
127	12.96	33.46	5.66	200	9.13	33.80	4.14	26.18	188	0.57
154	10.74	33.45	4.94	250	8.23	34.00	3.82	26.48	161	0.66
202	9.08	33.82	4.11	300	7.50	34.04	2.79	26.61	148	0.73
256	8.13	34.01	3.74	400	6.32	34.19	1.44	26.89	122	0.87
301	7.49	34.04	2.76	500	5.71	34.25	0.61	27.02	111	0.99
407	6.28	34.20	1.38	600	5.22	34.32	0.38	27.13	101	1.09
510	5.65	34.26	0.58							
615	5.16	34.33	0.35							

110.33

CREST; April 18, 1953; 0753 GCT; 29°49.5'N, 115°53.5'W; sounding, 85 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 10°.

0	12.16	33.59	6.87	0	12.16	33.59	6.87	25.48	250	0.00
10	12.08	33.61	6.56	10	12.08	33.61	6.56	25.52	248	0.02
20	11.21	33.66	4.84	20	11.21	33.66	4.84	25.72	229	0.05
30	11.15	33.75	5.89	30	11.15	33.75	5.89	25.80	222	0.07
49	9.88	33.66	3.44	50	9.81	33.66	3.42	25.96	206	0.11
74	9.59	33.93	2.85	75	9.59	33.96	2.75	26.23	181	0.16
98	10.35	34.29	1.35	100	(10.50)	(34.32)	(1.21)	(26.35)	(170)	(0.21)

110.35

CREST; April 18, 1953; 0632 GCT; 29°46'N, 116°00'W; sounding, 850 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 40°.

0	12.47	33.67	6.41	0	12.47	33.67	6.41	25.49	250	0.00
8	12.29	33.69	6.35	10	12.20	33.69	6.33	25.55	244	0.02
15	11.8	33.62	6.08	20	11.37	33.60	5.36	25.64	236	0.05
27	10.97	33.59	4.57	30	10.80	33.59	4.25	25.73	227	0.07
42	10.42	33.68	3.72	50	10.22	33.63	3.54	25.87	215	0.12
54	10.14	33.63	3.46	75	9.65	33.80	3.28	26.09	194	0.17
65	9.86	33.75	3.29	100	9.28	33.94	3.10	26.26	178	0.21
84	9.54	33.84	3.30	150	9.40	34.25	1.80	26.49	158	0.30
101	9.28	33.95	3.04	200	9.60	(34.46)	0.77	(26.62)	(147)	(0.38)
122	9.12	34.05	2.64	250	9.28		0.46			
159	9.46	34.31	1.55	300	8.68		0.45			
199	9.59	34.45	0.79	400	7.74		0.35			
234	9.44	34.57 ^{a)}	0.49	500	6.78		0.34			
321	8.45	34.44	0.43							
412	7.62	34.57	0.35							
509	6.67	34.39	0.33							

a) Last four salinity values erratic; no interpolations made.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn.m

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CREST; April 18, 1953; 0310 GCT; 29°36.5'N, 116°19.5'W; sounding, 1150 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°.

110.40

0	12.89	33.55	7.21	0	12.89	33.55	7.21	25.31	267	0.00
9	12.90	33.52	7.27	10	12.91	33.52	7.29	25.29	270	0.03
18	12.90	33.54	7.67	20	12.90	33.54	7.68	25.30	268	0.05
31	12.29	33.55	5.78	30	12.40	33.55	5.90	25.41	258	0.08
48	10.60	33.58	3.73	50	10.55	33.59	3.68	25.78	224	0.13
62	10.33	33.67	3.34	75	10.27	33.78	2.94	25.97	206	0.18
75	10.27	33.78	2.94	100	10.11	33.93	2.44	26.12	192	0.23
96	10.12	33.91	2.45	150	9.45	34.12	2.30	26.38	169	0.32
117	10.05	33.99	2.39	200	9.43	34.30	1.29	26.52	156	0.40
141	9.53	34.09	2.35	250	8.98	34.35	1.10	26.63	146	0.48
185	9.42	34.25	1.66	300	8.10	34.31	1.24	26.74	137	0.55
232	9.36	34.37	0.94	400	7.26	34.37	0.58	26.91	122	0.68
270	8.31	34.31	1.29	500	6.34	34.41	0.44	27.06	108	0.79
365	7.66	34.35	0.66							
461	6.62	34.41	0.49							
560	5.98	34.38	0.38							

CREST; April 17, 1953; 2221 GCT; 29°18'N, 117°00'W; sounding, 1750 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°.

110.50

0	15.03	33.18	6.33	0	15.03	33.18	6.33	24.58	336	0.00
9	15.06	33.17	6.10	10	15.05	33.17	6.10	24.57	338	0.03
23	14.96	33.17	6.20	20	14.98	33.17	6.19	24.59	336	0.07
44	14.86	33.19	5.95	30	14.92	33.18	6.14	24.61	335	0.10
65	14.40	33.15	5.96	50	14.77	33.19	5.95	24.65	332	0.17
86	12.22	33.03	5.66	75	13.70	33.05	5.87	24.76	321	0.25
132	10.06	33.32	4.42	100	11.30	33.04	5.20	25.22	278	0.32
173	9.54	33.79	3.50	150	9.72	33.54	3.96	25.88	216	0.45
214	9.24	34.03	2.77	200	9.35	33.97	3.02	26.28	179	0.55
257	8.69	34.17	2.06	250	8.78	34.15	2.15	26.51	158	0.63
344	7.93	34.26	1.06	300	8.28	34.23	1.54	26.65	145	0.71
429	7.14	34.31	0.54	400	7.40	34.29	0.66	26.82	130	0.84
519	6.35	34.30	0.37	500	6.50	34.31	0.40	26.96	117	0.97
695	5.14	34.36	0.43	600	5.67	34.32	0.39	27.08	107	1.08
874	4.49	34.46	0.48	700	5.12	34.37	0.43	27.18	97	1.18
1064	3.83	34.50	0.83	800	4.73	34.43	0.42	27.28	89	1.28
				1000	4.07	34.49	0.70	27.40	78	1.44

CREST; April 17, 1953; 1705 GCT; 28°58'N, 117°40'W; sounding, 2000+ fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

110.60

0	15.29	33.41	5.94	0	15.29	33.41	5.94	24.70	325	0.00
10	15.30	33.33	6.39	10	15.30	33.33	6.39	24.64	331	0.03
20	15.28	33.34	6.44	20	15.28	33.34	6.44	24.65	330	0.07
35	15.25	33.34	6.24	30	15.26	33.34	6.36	24.66	330	0.10
55	14.70	33.27	6.00	50	15.06	33.28	6.02	24.65	331	0.17
70	13.97	33.27	6.48	75	13.74	33.27	6.44	24.93	306	0.24
84	13.32	33.27	5.40	100	12.15	33.32	4.50	25.28	272	0.32
109	11.55	33.45	4.14	150	10.55	33.70	3.17	25.86	218	0.44
133	10.85	33.56	3.69	200	9.85	33.99	2.34	26.21	186	0.54
161	10.40	33.81	2.84	250	9.39	34.19	1.48	26.44	164	0.63
212	9.73	34.04	2.14	300	8.88	34.20	1.10	26.53	157	0.71
268	9.21	34.21	1.29	400	7.45	34.17	0.75	26.72	139	0.86
315	8.66	34.19	1.04	500	6.49	34.20	0.48	26.88	125	0.99
423	7.19	34.17	0.69	600	5.73	34.21	0.30	26.98	116	1.11
527	6.26	34.21	0.40							
631	5.58	34.21	0.33							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

110.70

CREST; April 17, 1953; 1114 GCT; 28°36'N, 118°24'W; sounding, 1950 fm; wind, 330°, force 5;
weather, clear; sea, rough; wire angle, 25°.

0	15.41	33.52	5.82	0	15.41	33.52	5.82	24.76	319	0.00
9	15.45	33.53	5.81	10	15.47	33.53	5.81	24.76	320	0.03
23	15.45	33.49	5.81	20	15.45	33.50	5.81	24.74	322	0.06
50	15.41	33.50	5.86	30	15.45	33.48	5.83	24.72	324	0.10
73	15.40	33.57	5.79	50	15.41	33.50	5.86	24.75	322	0.16
100	14.58	33.45	5.82	75	15.39	33.57	5.78	24.81	317	0.24
112	14.48	33.58	5.81	100	14.58	33.45	5.82	24.89	310	0.32
142	11.57	33.39	4.98	150	11.20	33.40	4.37	25.52	251	0.46
176	10.10	33.69	3.57	200	9.58	33.89	3.08	26.18	189	0.57
204	9.53	33.91	3.01	250	9.23	34.12	1.95	26.41	167	0.66
268	9.01	34.17	1.77	300	8.46	34.19	1.62	26.59	151	0.74
330	8.04	34.21	1.45	400	7.62	34.32	0.79	26.82	131	0.88
390	7.69	34.31	0.86	500	6.50	34.33	0.38	26.98	116	1.00
510	6.40	34.33	0.37	600	5.79	34.41	0.29	27.13	102	1.11
631	5.62	34.42	0.28	700	5.33	34.42	0.27	27.20	96	1.21
764	5.08	34.42	0.32							

110.80

CREST; April 17, 1953; 0614 GCT; 28°17'N, 118°59'W; sounding, 2000+ fm; wind, 330°, force 5;
weather, clear; sea, rough; wire angle 24°.

0	15.52	33.49	5.85	0	15.52	33.49	5.85	24.71	324	0.00
9	15.56	33.51	6.04	10	15.55	33.51	6.04	24.73	323	0.03
18	15.54	33.50	5.86	20	15.54	33.50	5.88	24.72	324	0.06
32	15.54	33.52	6.10	30	15.55	33.51	6.09	24.72	324	0.10
50	15.54	33.55	5.85	50	15.54	33.55	5.85	24.76	321	0.16
64	15.53	33.56	5.83	75	15.51	33.61	6.00	24.81	317	0.24
78	15.50	33.62	6.00	100	13.81	33.45	5.50	25.05	294	0.32
100	13.81	33.45	5.50	150	10.90	33.60	3.92	25.72	231	0.45
123	12.36	33.53	5.00	200	10.14	34.10	2.50	26.25	182	0.55
149	10.92	33.60	4.00	250	9.42	34.24	1.69	26.48	161	0.64
197	10.18	34.09	2.56	300	8.77	34.39	1.19	26.70	141	0.71
248	9.48	34.24	1.73	400	7.67	34.39	0.81	26.86	126	0.85
291	8.86	34.38	1.24	500	6.55	34.35	0.52	26.99	114	0.97
390	7.79	34.39	0.85	600	(5.86)	(34.39)		(27.11)	(104)	(1.08)
486	6.69	34.35	0.54							
585	5.92	34.38	0.37							

110.90

CREST; April 16, 1953; 2317 GCT; 27°56.5'N, 119°37'W; sounding, 1950 fm; wind, 340°, force 5;
weather, partly cloudy; sea, rough; wire angle, 25°.

0	16.20	33.67	5.75	0	16.20	33.67	5.75	24.70	325	0.00
8	16.20	33.65	5.77	10	16.19	33.65	5.77	24.69	327	0.03
22	16.10	33.64	5.81	20	16.12	33.64	5.82	24.70	326	0.06
44	16.08	33.71	5.93	30	16.09	33.66	5.90	24.72	324	0.10
68	15.98	33.66	5.83	50	16.06	33.71	5.92	24.76	321	0.16
89	15.66	33.69	5.79	75	15.90	33.67	5.82	24.77	321	0.24
134	12.33	33.60	4.99	100	14.85	33.68	5.72	25.01	299	0.32
173	10.39	33.70	4.20	150	11.30	33.61	4.67	25.66	237	0.45
212	9.25	34.01	3.44	200	9.50	33.92	3.68	26.21	185	0.56
251	8.48	34.14	2.49	250	8.52	34.14	2.51	26.54	155	0.64
335	7.70	34.21	1.65	300	7.48	34.19	1.98	26.66	144	0.72
414	6.98	34.21	0.92	400	7.04	34.21	1.00	26.81	130	0.86
500	6.36	34.35	0.52	500	6.36	34.35	0.52	27.01	112	0.98
670	5.32	34.40	0.34	600	5.73	34.38	0.34	27.12	103	1.09
843	4.47	34.45	0.50	700	5.15	34.41	0.38	27.21	95	1.18
1028	3.95	34.50	0.68	800	4.62	34.44	0.47	27.30	87	1.28
				1000	4.03	34.49	0.64	27.40	78	1.44

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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CREST; April 17, 1953; 0017, 0053 GCT; 27°56.5'N, 119°37'W; sounding, 1950 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°, 22°.

110.90

0	16.17			0	16.17					
9	16.20			10	16.19					
23	16.08			20	16.09					
47	16.06			30	16.07					
70	16.04			50	16.06					
94	15.78			75	16.03					
146	11.58			100	15.58					
193	9.66			150	11.36					
288	8.07			200	9.51					
377	7.14			250	8.52					
				300	7.93					
437	6.72			400	6.97					
528	6.17			500	6.36					
706	5.02			600	5.67					
883	4.45			700	5.08					
1067	3.89			800	4.69					
1367	3.14			1000	4.09					
				1200	3.58					

SPENCER F. BAIRD; April 15, 1953; 0557 GCT; 29°21.5'N, 115°18'W; sounding, 38 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 00°.

113.30

0	12.43	33.87	5.36	0	12.43	33.87	5.36	25.65	235	0.00
10	12.44	33.82	5.29	10	12.44	33.82	5.29	25.61	239	0.02
20	12.44	33.84	5.47	20	12.44	33.84	5.47	25.62	238	0.05
30	12.40	33.81	5.06	30	12.40	33.81	5.06	25.61	239	0.07

SPENCER F. BAIRD; April 15, 1953; 1121, 1018, 1041 GCT; 29°12'N, 115°40'W; sounding, 775 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 19°, 53°, 57°.

113.35

0	14.58	33.32	5.93	0	14.58	33.32	5.93	24.79	317	0.00
9	14.60	33.31	5.86	10	14.60	33.31	5.88	24.78	318	0.03
18	14.59	33.34	6.25	20	14.58	33.34	6.24	24.80	316	0.06
33	14.58	33.30	6.12	30	14.58	33.30	6.17	24.77	319	0.10
52	14.56	33.36	5.98	50	14.57	33.36	5.98	24.82	315	0.16
65	13.27	33.22	6.02	75	12.20	33.22	5.75	25.19	280	0.23
84	11.22	33.26	5.27	100	9.99	33.51	4.41	25.81	221	0.30
103	9.88	33.55	4.27	150	9.50	34.16	2.17	26.40	166	0.39
				200	10.14	34.50	0.85	26.56	153	0.47
81	11.49	33.24	5.41	250	9.99	34.55	0.52	26.63	148	0.54
				300	9.50	34.51	0.52	26.67	144	0.62
142	9.44	34.05	2.74							
166	10.15	34.31	1.49							
229	10.12	34.56	0.53							
301	9.48	34.51	0.52							
380	8.21	34.44	0.38							

SPENCER F. BAIRD; April 15, 1953; 0712 GCT; 29°02'N, 115°59'W; sounding, 1075 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 25°.

113.40

0	14.98	33.40	5.83	0	14.98	33.40	5.83	24.76	319	0.00
8	15.00	33.41	5.83	10	15.00	33.41	5.84	24.77	319	0.03
18	14.99	33.38	5.83	20	14.98	33.38	5.83	24.75	321	0.06
32	14.97	33.44	5.81	30	14.97	33.44	5.82	24.80	317	0.10
44	14.94	33.45	5.81	50	14.94	33.46	5.82	24.82	315	0.16
58	14.91	33.47	5.82	75	13.20	33.29	5.61	25.05	294	0.24
70	13.98	33.34	5.71	100	10.95	33.30	4.60	25.48	253	0.30
88	11.66	33.26	5.18	150	10.09	33.90	3.08	26.10	195	0.42
108	10.74	33.38	4.34	200	9.53	34.20	2.21	26.43	165	0.51
133	10.27	33.70	3.55	250	8.83	34.29	1.63	26.61	148	0.58
173	9.84	34.07	2.52	300	8.32	34.35	1.17	26.74	137	0.66
215	9.37	34.25	2.04	400	7.54	34.44	0.63	26.92	121	0.78
258	8.74	34.30	1.56	500	6.71	34.43	0.43	27.03	111	0.90
349	7.94	34.42	0.82							
441	7.21	34.44	0.51							
542	6.35	34.43	0.38							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

113.50

SPENCER F. BAIRD; April 15, 1953; 0215 GCT; 28°44'N, 116°39'W; sounding, 1900 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 12°.

0	15.48	33.47	5.72	0	15.48	33.47	5.72	24.71	324	0.00
10	15.50	33.44	-	10	15.50	33.44	5.74	24.68	327	0.03
19	15.47	33.51	5.74	20	15.47	33.51	5.76	24.74	322	0.06
34	15.34	33.44	5.75	30	15.40	33.45	5.76	24.71	325	0.10
48	15.09	33.48	5.78	50	14.97	33.48	5.77	24.83	314	0.16
63	13.63	33.43	5.72	75	12.89	33.53	5.10	25.30	270	0.23
77	12.88	33.54	4.85	100	11.61	33.63	3.86	25.62	240	0.30
95	11.88	33.61	3.84	150	10.10	33.90	3.00	26.10	195	0.41
118	10.71	33.72	3.94	200	9.67	34.22	1.92	26.42	166	0.50
145	10.16	33.87	3.11	250	9.02	34.35	1.45	26.63	147	0.58
191	9.78	34.18	2.05	300	8.40	34.37	1.30	26.74	137	0.65
238	9.19	34.33	1.51	400	7.37	34.30	0.79	26.84	128	0.78
285	8.60	34.38	1.36	500	6.73	34.42	0.44	27.02	112	0.90
384	7.49	34.29	0.89	600	(6.03)	(34.43)		(27.12)	(103)	(1.01)
479	6.87	34.41	0.49							
581	6.16	34.43	0.35							

113.60

SPENCER F. BAIRD; April 14, 1953; 2129 GCT; 28°25'N, 117°19'W; sounding, 2000 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 04°.

0	15.42	33.44	6.13	0	15.42	33.44	6.13	24.70	325	0.00
10	15.38	33.46	5.77	10	15.38	33.46	5.77	24.72	323	0.03
20	15.29	33.43	5.83	20	15.29	33.43	5.83	24.72	324	0.06
35	15.24	33.46	5.71	30	15.25	33.45	5.75	24.74	322	0.10
55	15.64	33.44	5.69	50	15.61	33.45	5.69	24.66	330	0.16
69	15.33	33.47	5.75	75	14.92	33.45	5.66	24.82	316	0.24
83	14.20	33.38	5.25	100	12.26	33.48	4.00	25.38	263	0.32
106	11.80	33.55	3.70	150	10.40	34.11	2.22	26.21	185	0.43
130	10.88	33.77	3.00	200	9.63	34.27	1.96	26.46	161	0.51
143	10.54	34.06	2.28	250	9.29	34.39	1.29	26.61	148	0.59
207	9.58	34.29	1.90	300	8.60	34.35	1.00	26.69	141	0.66
268	9.15	34.41	1.16	400	7.21	34.32	0.72	26.88	125	0.80
323	8.20	34.31	0.93	500	6.30	34.35	0.48	27.02	112	0.92
437	6.88	34.33	0.63	600	5.69	34.44	0.33	27.17	98	1.02
546	6.00	34.38	0.38							
657	5.41	34.50	0.30							

113.70

SPENCER F. BAIRD; April 14, 1953; 1703 GCT; 28°02'N, 117°55'W; sounding, 1800 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 14°.

0	15.49	33.45	5.84	0	15.49	33.45	5.84	24.69	326	0.00
9	15.49	33.44	5.74	10	15.48	33.44	5.74	24.69	327	0.03
19	15.46	33.44	5.70	20	15.45	33.44	5.70	24.69	326	0.06
33	15.31	33.41	5.83	30	15.39	33.42	5.78	24.69	327	0.10
53	14.60	33.36	6.02	50	14.80	33.37	6.03	24.78	319	0.16
67	12.94	33.34	4.91	75	12.10	33.35	4.48	25.31	269	0.24
82	11.67	33.39	4.10	100	11.04	33.51	3.51	25.63	239	0.30
107	10.88	33.58	3.38	150	10.18	33.94	2.54	26.11	194	0.41
131	10.30	33.81	2.93	200	9.51	34.14	1.90	26.38	169	0.50
160	10.08	33.99	2.36	250	8.93	34.24	1.49	26.59	150	0.58
213	9.34	34.18	1.77	300	8.34	34.29	1.14	26.69	142	0.65
270	8.70	34.27	1.33	400	7.48	34.37	0.59	26.88	125	0.78
318	8.13	34.30	1.01	500	6.47	34.37	0.31	27.02	112	0.90
428	7.22	34.38	0.49	600	5.71	34.37	0.28	27.11	104	1.01
536	6.16	34.37	0.29							
643	5.47	34.37	0.28							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

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SPENCER F. BAIRD; April 13, 1953; 1603, 1617 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 290°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°, 00°.

117.26

0	13.42	33.60	5.22	0	13.42	33.60	5.22	25.25	273	0.00
10	13.35	33.60	5.24	10	13.35	33.60	5.24	25.26	272	0.03
				20	13.23	33.60	4.83	25.28	270	0.05
20	13.23	33.60	4.83	30	11.95	33.69	2.79	25.60	240	0.08
25	12.82	33.64	4.25	50	11.52	33.82	1.49	25.78	223	0.13
30	11.95	33.69	2.79							
40	11.64	33.76	1.83							
50	11.52	33.82	1.49							

SPENCER F. BAIRD; April 13, 1953; 1811 GCT; 28°48'N, 114°56'W; sounding, 57 fm; wind, 310°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

117.30

0	13.33	33.71	5.90	0	13.33	33.71	5.90	25.35	264	0.00
10	13.17	33.73	5.84	10	13.17	33.73	5.84	25.40	259	0.03
20	12.58	33.71	5.34	20	12.58	33.71	5.34	25.50	250	0.05
30	11.79	33.85	2.78	30	11.79	33.85	2.78	25.76	225	0.08
35	11.38	-	-	50	10.89	34.00	1.09	26.04	199	0.12
50	10.89	34.00	1.09	75	10.92	34.34	1.19	26.30	175	0.16
65	10.70	-	-							
75	10.92	34.34	1.19							

SPENCER F. BAIRD; April 13, 1953; 2035 GCT; 28°38'N, 115°16'W; sounding, 120 fm; wind, 310°, force 2; weather, partly cloudy; sea, slight; wire angle, 04°.

117.35

0	13.29	33.52	5.88	0	13.29	33.52	5.88	25.21	277	0.00
10	12.92	33.57	5.77	10	12.92	33.57	5.77	25.32	266	0.03
25	12.77	33.50	5.60	20	12.80	33.52	5.61	25.31	268	0.05
50	12.75	33.58	5.71	30	12.75	33.50	5.60	25.30	269	0.08
75	12.14	33.58	5.08	50	12.75	33.58	5.71	25.36	263	0.13
100	10.56	33.93	2.39	75	12.14	33.58	5.08	25.48	253	0.20
125	10.28	34.11	2.09	100	10.56	33.93	2.39	26.04	200	0.26
155	9.98	34.37	1.33	150	10.02	34.32	1.50	26.44	163	0.35

SPENCER F. BAIRD; April 13, 1953; 2253 GCT; 28°28'N, 115°36'W; sounding, 515 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

117.40

0	14.51	33.48	6.04	0	14.51	33.48	6.04	24.93	304	0.00
10	13.12	33.44	6.15	10	13.12	33.44	6.15	25.18	280	0.03
20	13.01	33.54	6.15	20	13.01	33.54	6.15	25.28	270	0.06
35	11.45	33.29	5.24	30	12.50	33.30	5.89	25.20	279	0.08
50	10.48	33.34	4.55	50	10.48	33.34	4.55	25.60	241	0.14
65	10.28	33.61	3.50	75	10.17	33.59	3.36	25.84	218	0.19
79	10.16	33.59	3.28	100	10.31	33.73	2.37	25.93	210	0.25
98	10.30	33.70	2.47	150	9.64	34.19	1.92	26.40	166	0.34
123	10.35	33.96	1.83	200	9.08	34.18	1.69	26.48	159	0.42
152	9.59	34.19	1.93	250	9.56	34.27	0.54	26.48	161	0.50
201	9.08	34.18	1.67	300	8.75	34.55	0.48	26.83	129	0.58
250	9.56	34.27	0.54	400	7.72	34.48	0.35	26.93	120	0.70
299	8.78	34.55	0.47	500	7.03	34.41	0.30	26.97	117	0.82
404	7.69	34.48	0.35	600	6.00	34.41	0.27	27.11	104	0.93
503	7.00	34.41	0.30							
608	5.91	34.41	0.27							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

117.50

SPENCER F. BAIRD; April 14, 1953; 0330 GCT; 28°07'N, 116°17'W; sounding, 2275 fm; wind, 310°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.

0	15.11	33.35	5.72	0	15.11	33.35	5.72	24.70	325	0.00
10	15.12	33.37	5.80	10	15.12	33.37	5.80	24.71	324	0.03
20	14.93	33.39	5.81	20	14.93	33.39	5.81	24.77	319	0.06
35	14.80	33.44	5.78	30	14.83	33.43	5.71	24.82	315	0.10
49	14.80	33.45	5.73	50	14.80	33.45	5.73	24.84	313	0.16
64	13.10	33.34	5.57	75	12.49	33.35	4.92	25.24	276	0.23
78	12.37	33.36	4.74	100	11.14	33.73	3.26	25.78	224	0.30
97	11.13	33.62	3.58	150	11.23	34.36	1.16	26.26	181	0.40
121	11.29	34.20	1.77	200	11.04	34.44	0.80	26.35	173	0.49
149	11.23	34.36	1.17	250	10.70	34.60	0.55	26.54	156	0.57
196	11.08	34.43	0.85	300	10.08	34.52	0.58	26.58	153	0.64
244	10.76	34.60	0.56	400	9.06	34.56	0.38	26.78	135	0.79
291	10.18	34.52	0.59	500	7.86	34.50	0.26	26.92	123	0.92
392	9.12	34.56	0.39	600	(6.66)	(34.48)	(0.23)	(27.08)	(108)	(1.03)
490	7.99	34.50	0.26							
594	6.72	34.48	0.22							

117.60

SPENCER F. BAIRD; April 14, 1953; 0820 GCT; 27°48'N, 116°54'W; sounding, 2000 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 11°.

0	15.06	33.36	5.80	0	15.06	33.36	5.80	24.72	324	0.00
10	15.08	33.38	5.87	10	15.08	33.38	5.87	24.73	323	0.03
19	14.95	33.40	5.86	20	14.93	33.40	5.85	24.77	319	0.06
34	14.83	33.39	5.84	30	14.87	33.40	5.85	24.79	318	0.10
49	14.87	33.38	5.83	50	14.87	33.38	5.83	24.77	320	0.16
63	14.63	33.40	5.74	75	13.68	33.36	5.91	25.01	298	0.24
78	13.57	33.35	5.91	100	12.94	33.37	5.35	25.16	284	0.31
97	13.08	33.36	5.49	150	10.60	33.88	2.99	26.00	205	0.43
120	11.69	33.52	4.11	200	9.55	34.15	2.39	26.38	169	0.53
148	10.67	33.86	3.02	250	8.98	34.28	1.74	26.58	151	0.61
194	9.61	34.13	2.46	300	8.47	34.32	1.22	26.69	142	0.68
241	9.07	34.27	1.86	400	7.21	34.39	0.61	26.93	120	0.81
287	8.61	34.31	1.34	500	6.39	34.46	0.40	27.10	105	0.92
384	7.37	34.38	0.67							
476	6.58	34.45	0.41							
576	5.88	34.48	0.36							

117.70

SPENCER F. BAIRD; April 14, 1953; 1238 GCT; 27°30'N, 117°33.5'W; sounding, 2100 fm; wind, 330°, force 2; weather, partly cloudy; sea, slight; wire angle, 01°.

0	15.74	33.47	5.78	0	15.74	33.47	5.78	24.65	330	0.00
10	15.76	33.47	5.84	10	15.76	33.47	5.84	24.65	331	0.03
20	15.72	33.44	5.99	20	15.72	33.44	5.99	24.63	332	0.07
35	15.65	33.46	5.99	30	15.67	33.45	5.99	24.65	331	0.10
50	15.65	33.48	5.76	50	15.65	33.48	5.76	24.68	329	0.17
65	15.68	33.47	5.75	75	15.69	33.50	5.83	24.68	329	0.25
80	15.26	33.51	5.87	100	12.78	33.39	5.55	25.21	279	0.32
99	12.82	33.39	5.59	150	10.31	33.68	3.88	25.89	215	0.45
123	11.29	33.44	5.07	200	9.08	34.05	3.30	26.38	169	0.54
153	10.20	33.71	3.79	250	8.32	34.07	2.91	26.52	157	0.62
202	9.02	34.05	3.29	300	7.84	34.11	2.36	26.62	148	0.70
250	8.32	34.07	2.91	400	7.23	34.27	0.69	26.83	129	0.84
300	7.84	34.11	2.36	500	6.39	34.26	0.39	26.94	119	0.96
404	7.20	34.27	0.63	600	(5.70)	(34.34)	(0.30)	(27.09)	(106)	(1.08)
503	6.36	34.26	0.38							
593	5.73	34.33	0.30							

120.25

SPENCER F. BAIRD; April 13, 1953; 1253 GCT; 28°23'N, 114°15.5'W; sounding, 30 fm; wind, 340°, force 1; weather, clear; sea, smooth; wire angle, 04°.

0	14.32	33.55	6.14	0	14.32	33.55	6.14	25.02	295	0.00
10	14.32	33.56	6.15	10	14.32	33.56	6.15	25.03	294	0.03
20	14.20	33.58	6.07	20	14.20	33.58	6.07	25.07	291	0.06
34	12.32	33.54	4.15	30	12.80	33.55	5.10	25.33	266	0.09
46	11.62	33.83	1.70							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁵ cm ³ /g	dyn.m

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SPENCER F. BAIRD; April 13, 1953; 0924 GCT; 28°15'N, 114°35.5'W; sounding, 50 fm; wind, 350°, force 2; weather, clear; sea, smooth; wire angle, 01°.

120.30

0	13.78	33.55	5.69	0	13.78	33.55	5.69	25.13	284	0.00
10	13.74	33.57	5.65	10	13.74	33.57	5.65	25.16	282	0.03
20	13.75	33.54	5.67	20	13.75	33.54	5.67	25.13	285	0.06
25	13.78	-	-	30	13.78	33.53	5.63	25.12	286	0.08
30	13.78	33.53	5.63	50	10.91	33.64	2.88	25.75	226	0.14
40	12.72	-	-							
50	10.91	33.64	2.88							

SPENCER F. BAIRD; April 13, 1953; 0649 GCT; 28°03'N, 114°54'W; sounding, 40 fm; wind, 340°, force 1; weather, clear; sea, smooth; wire angle, 00°.

120.35

0	13.98	33.65	5.74	0	13.98	33.65	5.74	25.17	281	0.00
10	13.94	33.72	5.54	10	13.94	33.72	5.54	25.23	275	0.03
20	13.84	33.54	5.35	20	13.84	33.54	5.35	25.11	286	0.06
25	13.84	-	-	30	13.86	33.62	5.49	25.17	281	0.08
30	13.86	33.62	5.49	50	11.67	33.67	3.18	25.64	237	0.14
40	13.56	-	-							
50	11.67	33.67	3.18							

SPENCER F. BAIRD; April 13, 1953; 0158 GCT; 27°43'N, 115°33'W; sounding, 1300 fm; wind, 310°, force 3; weather, cloudy; sea, slight; wire angle, 25°.

120.45

0	13.97	33.53	5.72	0	13.97	33.53	5.72	25.08	289	0.00
9	14.07	33.60	5.80	10	14.07	33.60	5.84	25.11	286	0.03
18	13.65	33.51	5.94	20	13.50	33.51	5.94	25.16	282	0.06
32	12.62	33.52	5.41	30	12.86	33.52	5.56	25.30	269	0.09
45	11.38	33.54	4.49	50	11.14	33.54	4.20	25.63	237	0.14
59	10.91	33.51	3.90	75	10.73	33.93	2.60	26.01	202	0.19
72	10.72	33.86	2.84	100	10.97	34.23	1.43	26.20	185	0.24
89	10.93	34.13	1.77	150	11.09	34.55	0.62	26.43	164	0.33
111	10.99	34.33	1.21	200	10.69	34.64	0.39	26.57	152	0.40
137	11.12	34.48	0.79	250	9.95	34.57	0.44	26.64	146	0.48
180	10.90	34.66	0.41	300	9.41	34.55	0.43	26.72	139	0.55
224	10.34	34.59	0.39	400	8.47	34.51	0.30	26.84	129	0.68
267	9.76	34.56	0.49	500	7.25	34.49	0.29	27.00	114	0.81
361	8.82	34.52	0.30							
455	7.84	34.50	0.30							
558	6.40	34.48	0.26							

SPENCER F. BAIRD; April 12, 1953; 2235 GCT; 27°34'N, 115°52.5'W; sounding, 2200 fm; wind, 350°, force 2; weather, partly cloudy; sea, slight; wire angle, 07°.

120.50

0	15.80	33.32	5.76	0	15.80	33.32	5.76	24.52	342	0.00
10	14.73	33.26	5.80	10	14.73	33.26	5.80	24.71	324	0.03
25	14.21	33.30	5.90	20	14.41	33.28	5.88	24.79	317	0.06
49	12.88	33.35	5.35	30	14.00	33.31	5.88	24.90	307	0.10
73	11.30	33.52	3.62	50	12.73	33.36	5.30	25.20	279	0.16
96	11.32	34.05	1.95	75	11.30	33.55	3.46	25.61	240	0.22
148	10.86	34.39	1.20	100	11.31	34.12	1.82	26.05	199	0.28
196	10.10	34.38	1.10	150	10.82	34.39	1.20	26.35	171	0.37
243	9.75	34.53	0.46	200	10.07	34.38	1.09	26.48	161	0.45
291	9.02	34.51	0.40	250	9.69	34.53	0.44	26.66	144	0.53
391	7.52	34.39	0.35	300	8.87	34.50	0.40	26.77	134	0.60
488	6.84	34.44	0.30	400	7.46	34.39	0.35	26.89	123	0.72
589	5.92	34.44	0.28	500	6.74	34.44	0.30	27.03	111	0.84
788	4.78	34.50	0.42	600	5.85	34.44	0.29	27.15	100	0.95
983	4.05	34.56	0.57	700	5.21	34.47	0.36	27.25	91	1.04
1185	3.54	34.60	0.73	800	4.72	34.50	0.43	27.33	84	1.13
				1000	3.99	34.56	0.59	27.46	72	1.29

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

120.60

SPENCER F. BAIRD; April 12, 1953; 1724 GCT; 27°12'N, 116°29.5'W; sounding, 2050 fm; wind, 360°, force 2; weather, clear; sea, slight; wire angle, 14°.

0	14.62	33.44	6.02	0	14.62	33.44	6.02	24.87	309	0.00
10	14.68	33.32	5.92	10	14.68	33.32	5.92	24.81	315	0.03
20	14.54	33.39	5.72	20	14.54	33.39	5.72	24.85	311	0.06
34	14.40	33.30	5.93	30	14.44	33.33	5.89	24.83	314	0.09
48	14.30	33.35	5.79	50	14.29	33.35	5.76	24.87	310	0.16
62	14.14	33.32	5.70	75	13.80	33.33	6.30	24.96	302	0.23
76	13.75	33.33	6.30	100	11.75	33.33	4.43	25.36	265	0.30
94	12.08	33.32	4.87	150	10.10	33.91	2.74	26.10	195	0.42
116	11.13	33.57	3.68	200	9.52	34.20	1.92	26.43	165	0.51
143	10.18	33.85	2.91	250	8.87	34.26	1.43	26.58	151	0.59
187	9.70	34.17	2.03	300	8.55	34.33	0.90	26.68	142	0.66
233	8.97	34.24	1.66	400	7.38	34.39	0.48	26.91	122	0.79
278	8.72	34.30	1.06	500	6.60	34.41	0.31	27.03	111	0.91
375	7.66	34.39	0.54							
469	6.75	34.39	0.35							
570	6.32	34.49	0.26							

120.70

SPENCER F. BAIRD; April 12, 1953; 1223 GCT; 26°59'N, 117°17'W; sounding, 2150 fm; wind, 360°, force 3; weather, clear; sea, moderate; wire angle, 18°.

0	15.92	33.55	5.57	0	15.92	33.55	5.57	24.67	328	0.00
10	15.96	33.55	5.49	10	15.96	33.55	5.49	24.66	330	0.03
24	15.93	33.59	5.72	20	15.93	33.58	5.70	24.69	326	0.07
48	15.96	33.59	5.56	30	15.93	33.59	5.71	24.70	326	0.10
71	15.98	33.63	5.47	50	15.97	33.59	5.55	24.69	328	0.16
94	13.84	33.55	4.79	75	15.99	33.63	5.44	24.72	326	0.24
143	10.51	33.82	3.50	100	13.18	33.55	4.56	25.25	275	0.32
187	9.92	33.96	2.59	150	10.39	33.85	3.37	26.01	204	0.44
231	9.38	34.23	2.04	200	9.77	34.02	2.40	26.25	182	0.54
274	8.73	34.30	1.62	250	9.10	34.27	1.86	26.55	154	0.62
367	7.59	34.30	0.87	300	8.35	34.30	1.41	26.69	141	0.70
457	6.86	34.34	0.46	400	7.30	34.31	0.68	26.85	127	0.83
550	6.03	34.38	0.32	500	6.47	34.36	0.38	27.01	113	0.95
736	4.98	34.51	0.47	600	5.67	34.41	0.38	27.15	100	1.06
921	4.33	34.56	0.47	700	5.11	34.49	0.43	27.28	88	1.15
1117	3.78	34.56	0.68	800	4.73	34.54	0.48	27.36	81	1.23
				1000	4.10	34.56	0.55	27.45	74	1.39

120.80

SPENCER F. BAIRD; April 12, 1953; 0715 GCT; 26°37'N, 117°51'W; sounding, 2000 fm; wind, 310°, force 2; weather, clear; sea, slight; wire angle, 11°.

0	16.22	33.62	5.56	0	16.22	33.62	5.56	24.66	329	0.00
10	16.25	33.64	5.51	10	16.25	33.64	5.51	24.67	329	0.03
20	16.22	33.64	5.46	20	16.22	33.64	5.46	24.67	328	0.07
34	16.24	33.66	5.34	30	16.23	33.66	5.36	24.69	328	0.10
53	16.20	33.66	5.65	50	16.21	33.66	5.62	24.69	328	0.16
67	16.19	33.66	5.62	75	16.18	33.61	5.59	24.66	331	0.25
82	15.21	33.56	5.53	100	12.95	33.60	4.32	25.34	267	0.32
104	12.64	33.61	4.02	150	10.94	34.06	2.31	26.07	198	0.44
127	11.57	33.85	3.02	200	10.27	34.30	1.61	26.38	170	0.53
155	10.84	34.09	2.21	250	9.59	34.43	0.91	26.60	150	0.61
205	10.20	34.31	1.54	300	8.93	34.45	0.69	26.72	139	0.68
260	9.45	34.44	0.85	400	7.90	34.45	0.36	26.88	125	0.81
307	8.86	34.45	0.66	500	6.89	34.45	0.28	27.02	112	0.93
416	7.75	34.45	0.32	600	5.95	34.47	0.31	27.16	99	1.04
523	6.64	34.45	0.28							
632	5.66	34.48	0.33							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

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120.90

SPENCER F. BAIRD; April 12, 1953; 0203 GCT; 26°16'N, 118°31'W; sounding, 2280 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 31°.

0	16.20	33.63	5.78	0	16.20	33.63	5.78	24.67	328	0.00
8	16.22	33.60	5.54	10	16.22	33.60	5.51	24.64	331	0.03
21	16.14	33.57	5.47	20	16.15	33.57	5.48	24.63	332	0.07
47	16.12	33.64	5.59	30	16.13	33.59	5.50	24.65	330	0.10
69	15.92	33.61	5.48	50	16.12	33.64	5.58	24.70	327	0.16
94	13.00	33.47	4.73	75	15.86	33.60	5.38	24.72	325	0.25
140	10.98	33.84	3.10	100	12.32	33.47	4.55	25.36	265	0.32
186	10.49	34.20	1.90	150	10.85	33.94	2.75	26.00	205	0.44
233	9.75	34.33	1.25	200	10.29	34.25	1.70	26.34	174	0.53
273	9.48	34.45	0.75	250	9.61	34.38	0.97	26.55	154	0.61
365	8.40	34.45	0.40	300	9.21	34.45	0.61	26.67	144	0.69
456	7.44	34.43	0.27	400	8.02	34.44	0.32	26.85	128	0.82
544	6.22	34.41	0.29	500	6.84	34.42	0.29	27.01	114	0.94
726	5.08	34.48	0.33	600	5.79	34.43	0.31	27.15	100	1.05
914	4.40	34.62r	0.42	700	5.19	34.47	0.33	27.25	91	1.15
1104	3.80	34.56	0.65	800	4.78	34.51	0.38	27.33	84	1.24
				1000	4.14	34.55	0.52	27.44	75	1.39

SPENCER F. BAIRD; April 11, 1953; 0113 GCT; 27°24'N, 114°40'W; sounding, 34 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 13°.

123.37

0	12.28	34.03	3.34	0	12.28	34.03	3.34	25.80	220	0.00
10	12.24	34.05	3.25	10	12.24	34.05	3.25	25.83	218	0.02
19	12.14	34.06	2.80	20	12.09	34.06	2.57	25.86	215	0.04
29	11.73	34.08	2.10	30	11.74	34.08	2.02	25.94	208	0.06
48	11.78	34.16	1.51							

SPENCER F. BAIRD; April 11, 1953; 0310 GCT; 27°18'N, 114°51'W; sounding, 240 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 48°.

123.40

0	13.62	33.70	6.01	0	13.62	33.70	6.01	25.28	270	0.00
7	13.61	33.67	5.89	10	13.62	33.67	5.84	25.26	272	0.03
17	13.62	33.69	5.77	20	12.63	33.69	5.68	25.27	271	0.05
34	12.18	33.62	3.93	30	13.25	33.63	4.36	25.30	269	0.08
51	11.23	33.91	2.54	50	11.25	33.87	2.64	25.87	215	0.13
67	11.34	34.16	1.77	75	11.43	34.28	1.28	26.16	188	0.18
101	11.58	34.53	0.48	100	11.57	34.52	0.48	26.32	174	0.22
134	11.42	34.60	0.50	150	11.24	34.60	0.48	26.44	163	0.31
168	10.94	34.60	0.42	200	10.43	34.56	0.52	26.55	153	0.39
207	10.35	34.56	0.51	250	9.98	34.59	0.36	26.66	145	0.46
254	9.94	34.59	0.34	300	9.60	34.54	0.33	26.68	143	0.54
300	9.60	34.54	0.33							

SPENCER F. BAIRD; April 11, 1953; 0820 GCT; 26°58'N, 115°30.5'W; sounding, 1750 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 30°.

123.50

0	15.69	33.54	5.18	0	15.69	33.54	5.18	24.72	324	0.00
8	15.74	33.57	5.53	10	15.74	33.57	5.53	24.73	323	0.03
17	15.71	33.56	5.53	20	15.71	33.56	5.51	24.73	323	0.06
30	15.74	33.63	5.42	30	15.74	33.63	5.42	24.77	319	0.10
48	15.74	33.57	5.48	50	15.74	33.57	5.50	24.73	324	0.16
60	15.53	33.55	5.55	75	14.87	33.55	5.32	24.90	308	0.24
74	15.00	33.55	5.34	100	12.61	33.44	4.05	25.28	272	0.31
95	12.90	33.44	4.36	150	11.01	34.12	2.10	26.11	195	0.43
117	12.01	33.78	3.17	200	10.19	34.35	1.46	26.43	165	0.52
143	11.20	34.07	2.20	250	9.87	34.46	0.78	26.57	152	0.60
190	10.24	34.32	1.60	300	9.33	34.52	0.48	26.71	140	0.67
242	9.92	34.44	0.83	400	8.19	34.48	0.34	26.86	127	0.80
284	9.53	34.52	0.53	500	6.95	34.43	0.33	27.00	114	0.93
383	8.40	34.49	0.33	600	(5.91)	(34.38)		(27.10)	(105)	(1.04)
482	7.12	34.44	0.33							
589	6.02	34.39	0.26							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

123.60

SPENCER F. BAIRD; April 11, 1953; 1410 GCT; 26°37'N, 116°13'W; sounding, 2100 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 34°.

0	16.16	33.66	5.47	0	16.16	33.66	5.47	24.70	325	0.00
8	16.20	33.72	5.43	10	16.20	33.72	5.44	24.74	322	0.03
20	16.18	33.74	5.51	20	16.18	33.74	5.51	24.76	320	0.06
33	16.19	33.83	5.80	30	16.19	33.83	5.79	24.82	314	0.10
50	16.20	33.74	5.42	50	16.20	33.74	5.42	24.75	322	0.16
62	16.19	33.72	5.47	75	16.19	33.67	5.07	24.70	327	0.24
79	15.04	33.66	4.87	100	12.11	33.59	3.79	25.49	252	0.31
99	12.18	33.59	3.87	150	10.44	34.01	2.73	26.12	193	0.42
124	11.22	33.81	3.16	200	9.74	34.29	1.91	26.46	162	0.51
150	10.44	34.01	2.73	250	9.48	34.43	1.03	26.61	148	0.59
200	9.74	34.29	1.91	300	9.00	34.43	0.64	26.69	142	0.66
250	9.48	34.43	1.03	400	7.62	34.44	0.52	26.91	122	0.80
300	9.00	34.43	0.64	500	6.72	34.44	0.34	27.04	110	0.91
398	7.68	34.44	0.51	600	6.03	34.44	0.33	27.13	103	1.02
505	6.69	-	0.33							
615	5.94	34.44	0.33							

127.34

SPENCER F. BAIRD; April 10, 1953; 2034 GCT; 26°55'N, 114°06'W; sounding, 45 fm; wind, 330°, force 3; weather, clear; sea, moderate; wire angle, 04°.

0	13.24	33.92	5.33	0	13.24	33.92	5.33	25.53	246	0.00
10	12.81	33.89	4.48	10	12.81	33.89	4.48	25.59	241	0.02
20	12.73	33.93	3.80	20	12.73	33.93	3.80	25.64	236	0.05
30	12.52	34.00	2.91	30	12.52	34.00	2.91	25.73	228	0.07
50	12.02	34.30	1.04	50	12.02	34.30	1.04	26.06	197	0.11

127.40

SPENCER F. BAIRD; April 10, 1953; 1733 GCT; 26°43'N, 114°28'W; sounding, 1800 fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 20°.

0	14.42	33.42	5.81	0	14.42	33.42	5.81	24.90	306	0.00
9	14.44	33.44	5.79	10	14.44	33.44	5.78	24.91	305	0.03
18	14.39	33.41	5.76	20	14.36	33.41	5.76	24.90	306	0.06
32	14.23	33.42	5.67	30	14.28	33.42	5.68	24.93	304	0.09
41	13.66	33.43	5.65	50	13.03	33.46	5.52	25.22	277	0.15
53	12.85	33.54	5.16	75	11.00	33.64	3.65	25.74	228	0.21
65	11.74	33.58	4.27	100	10.99	33.88	2.50	25.93	211	0.27
84	10.80	33.71	3.19	150	10.74	34.39	1.40	26.37	170	0.36
104	11.00	33.93	2.46	200	10.48	34.52	0.71	26.51	157	0.44
127	10.64	34.07	2.30	250	9.92	34.59	0.49	26.67	144	0.52
170	10.80	34.50	0.88	300	9.31	34.59	0.33	26.77	135	0.59
217	10.28	34.53	0.63	400	8.16	34.52	0.26	26.89	124	0.72
255	9.86	34.60	0.47	500	7.04	34.47	0.26	27.02	113	0.84
347	8.74	34.56	0.27							
438	7.77	34.50	0.26							
536	6.62	34.46	0.24							

127.50

SPENCER F. BAIRD; April 10, 1953; 1216 GCT; 26°24'N, 115°07'W; sounding, 2100 fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 25°.

0	15.66	33.56	5.57	0	15.66	33.56	5.57	24.74	322	0.00
9	15.67	33.61	5.54	10	15.66	33.61	5.55	24.78	318	0.03
18	15.65	33.58	5.55	20	15.65	33.57	5.55	24.75	321	0.06
32	15.66	33.56	5.55	30	15.66	33.56	5.55	24.74	322	0.10
49	15.70	33.57	5.53	50	15.70	33.57	5.54	24.74	323	0.16
63	15.67	33.59	5.55	75	14.80	33.66	5.00	25.00	298	0.24
76	14.58	33.66	5.00	100	11.99	33.58	3.71	25.51	250	0.31
97	12.18	33.58	3.85	150	10.83	34.07	2.19	26.10	195	0.42
118	11.40	33.72	3.19	200	10.52	34.41	1.09	26.42	166	0.51
144	10.88	34.01	2.31	250	10.21	34.51	0.54	26.55	154	0.59
192	10.54	34.38	1.24	300	9.55	34.53	0.53	26.68	143	0.66
244	10.26	34.51	0.54	400	8.23	34.49	0.26	26.86	127	0.80
288	9.72	34.53	0.53	500	7.21	34.49	0.21	27.01	114	0.92
390	8.35	34.49	0.27	600	(6.29)	(34.48)	(0.18)	(27.13)	(103)	(1.03)
490	7.30	34.49	0.21							
594	6.34	34.48	0.18							

158

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

S10

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SPENCER F. BAIRD; April 10, 1953; 0654 GCT; 26°04'N, 115°47'W; sounding, 2050 fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 23°.

127.60

0	16.80	33.90	5.53	0	16.80	33.90	5.53	24.74	322	0.00
9	16.81	33.90	5.51	10	16.81	33.90	5.52	24.74	322	0.03
18	16.76	33.95	5.59	20	16.76	33.95	5.57	24.79	318	0.06
32	16.79	33.92	5.48	30	16.78	33.92	5.49	24.76	321	0.10
48	16.82	33.91	5.45	50	16.85	33.91	5.46	24.73	324	0.16
60	15.76	33.74	5.50	75	14.71	33.61	5.45	24.98	300	0.24
71	15.08	33.63	5.48	100	11.92	33.60	3.83	25.54	248	0.31
90	12.84	33.56	4.41	150	10.38	34.00	2.63	26.13	193	0.42
107	11.62	33.68	3.39	200	10.06	34.33	1.50	26.44	164	0.51
128	10.94	33.90	2.85	250	9.72	34.46	0.81	26.60	150	0.58
169	10.10	34.10	2.45	300	9.20	34.44	0.49	26.67	144	0.66
213	10.02	34.38	1.21	400	7.92	34.46	0.37	26.88	125	0.79
252	9.68	34.46	0.79	500	6.72	34.42	0.34	27.02	112	0.91
343	8.68	34.44	0.39							
436	7.46	34.47	0.38							
533	6.34	34.39	0.31							

SPENCER F. BAIRD; April 9, 1953; 0841 GCT; 26°30.5'N, 113°29.5'W; sounding, 40 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 13°.

130.30

0	15.40	33.89	5.62	0	15.40	33.89	5.62	25.05	292	0.00
10	15.42	33.85	5.73	10	15.42	33.85	5.73	25.01	296	0.03
20	15.29	33.87	5.50	20	15.29	33.87	5.50	25.06	292	0.06
30	14.57	33.81	4.97	30	14.57	33.81	4.97	25.17	282	0.09
49	12.31	33.99	2.51							

SPENCER F. BAIRD; April 9, 1953; 1103 GCT; 26°19'N, 113°48.5'W; sounding, 150 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 17°.

130.35

0	16.76	33.93	5.39	0	16.76	33.93	5.39	24.77	318	0.00
10	16.80	34.07	5.39	10	16.80	34.07	5.39	24.87	310	0.03
24	16.75	33.96	5.36	20	16.78	34.02	5.37	24.83	313	0.06
48	14.33	33.74	4.42	30	16.67	33.86	5.30	24.74	322	0.09
72	12.46	34.12	2.33	50	13.98	33.74	4.21	25.24	275	0.15
95	11.76	34.34	1.62	75	12.34	34.16	2.24	25.89	214	0.22
147	11.56	34.60	0.64	100	11.71	34.38	1.50	26.18	187	0.26
194	11.10	34.72	0.28	150	11.53	34.61	0.61	26.39	168	0.35
				200	(11.03)	(34.73)	(0.27)	(26.58)	(151)	(0.43)

SPENCER F. BAIRD; April 9, 1953; 1340 GCT; 26°10'N, 114°06'W; sounding, 1200 fm; wind, 310°, force 3; weather, cloudy; sea, very rough; wire angle, 25°.

130.40

0	16.46	33.90	5.57	0	16.46	33.90	5.57	24.82	314	0.00
9	16.48	33.90	5.51	10	16.48	33.90	5.52	24.81	315	0.03
23	16.45	33.89	5.54	20	16.46	33.90	5.53	24.82	315	0.06
50	14.02	33.67	4.83	30	16.31	33.84	5.52	24.81	316	0.09
73	12.34	34.00	2.54	50	14.02	33.67	4.83	25.18	281	0.15
100	12.37	34.38	1.22	75	12.34	34.04	2.30	25.80	222	0.22
150	11.44	34.53	1.03	100	12.37	34.38	1.22	26.06	199	0.27
198	11.01	34.66	0.48	150	11.44	34.53	1.03	26.35	172	0.36
252	10.25	34.61	0.44	200	10.99	34.66	0.46	26.53	156	0.44
297	9.66	34.64	0.30	250	10.27	34.61	0.44	26.62	148	0.52
399	8.38	34.54	0.34	300	9.61	34.64	0.30	26.76	136	0.59
498	7.22	34.50	0.37	400	8.37	34.54	0.34	26.88	126	0.72
598	6.23	34.46	0.28	500	7.20	34.50	0.37	27.02	113	0.84
796	5.13	34.46	0.45	600	6.22	34.46	0.28	27.12	104	0.95
1017	4.12	34.52	0.51	700	5.60	34.46	0.34	27.20	97	1.05
1219	3.51	34.57	0.80	800	5.10	34.46	0.46	27.26	91	1.14
				1000	4.16	34.52	0.51	27.41	77	1.31

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

13050

SPENCER F. BAIRD; April 9, 1953; 1928 GCT; 25°49'N, 114°46'W; sounding, 1980 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 34°.

0	15.79	33.54	5.80	0	15.79	33.54	5.80	24.69	326	0.00
8	15.76	33.52	5.86	10	15.76	33.52	5.83	24.68	327	0.03
17	15.72	33.52	5.60	20	15.71	33.52	5.60	24.70	326	0.06
29	15.62	33.55	5.66	30	15.62	33.57	5.65	24.75	321	0.10
46	15.28	33.65	5.35	50	14.99	33.65	5.38	24.95	302	0.16
58	14.64	33.55	5.43	75	14.51	33.61	5.13	25.03	296	0.24
70	14.59	33.62	5.30	100	12.13	33.70	3.74	25.58	244	0.30
86	13.33	33.55	4.50	150	11.39	34.28	1.28	26.16	190	0.41
103	11.89	33.74	3.59	200	10.89	34.51	0.71	26.43	165	0.50
122	11.14	33.91	2.76	250	10.21	34.52	0.50	26.56	154	0.58
157	11.42	34.34	1.12	300	9.64	34.51	0.37	26.65	146	0.65
197	10.93	34.51	0.72	400	8.21	34.48	0.42	26.85	128	0.79
231	10.45	34.52	0.59	500	(7.05)	(34.46)	(0.22)	(27.01)	(114)	(0.91)
315	9.44	34.51	0.35							
402	8.18	34.48	0.41							
498	7.08	34.46	0.21							

13060

SPENCER F. BAIRD; April 10, 1953; 0106 GCT; 25°22'N, 115°34'W; sounding, 2100 fm; wind, 350°, force 4; weather, partly cloudy; sea, rough; wire angle, 29°.

0	16.95	33.75	5.72	0	16.95	33.75	5.72	24.59	336	0.00
8	16.96	33.74	5.74	10	16.97	33.74	5.73	24.58	337	0.03
22	16.91	33.77	5.51	20	16.92	33.76	5.53	24.60	335	0.07
48	16.90	33.81	5.60	30	16.90	33.78	5.54	24.62	334	0.10
68	16.80	33.76	5.65	50	16.90	33.81	5.62	24.65	332	0.17
92	15.21	33.61	4.84	75	16.73	33.71	5.57	24.61	336	0.25
136	11.04	33.64	3.71	100	14.40	33.61	4.63	25.05	295	0.33
180	10.04	34.10	2.32	150	10.60	33.76	3.27	25.90	214	0.46
228	9.82	34.35	1.19	200	9.94	34.24	1.78	26.39	169	0.55
269	9.52	-	0.66	250	9.67	34.39	0.83	26.55	154	0.63
364	8.42	34.44	0.47	300	9.17	34.41	0.58	26.65	146	0.71
455	7.52	34.46	0.26	400	8.04	34.45	0.37	26.86	127	0.84
548	6.82	34.48	0.18	500	7.15	34.47	0.21	27.00	114	0.97
734	5.23	34.45	0.30	600	6.39	34.47	0.18	27.10	105	1.08
929	4.48	34.50	0.39	700	5.47	34.45	0.28	27.21	96	1.18
1123	3.90	34.59	0.57	800	4.91	34.46	0.24	27.28	89	1.27
				1000	4.26	34.53	0.44	27.41	78	1.44

13325

SPENCER F. BAIRD; April 9, 1953; 0403 GCT; 26°05'N, 112°49'W; sounding, 45 fm; wind, 290°, force 4; weather, clear; sea, moderate; wire angle, 07°.

0	15.76	33.83	5.69	0	15.76	33.83	5.69	24.92	304	0.00
10	15.81	33.87	5.69	10	15.81	33.87	5.69	24.94	302	0.03
20	15.77	33.90	5.65	20	15.77	33.90	5.65	24.97	300	0.06
30	15.57	33.90	5.51	30	15.57	33.90	5.51	25.02	296	0.09
50	12.84	34.07	2.31	50	12.84	34.07	2.31	25.72	229	0.14

13330

SPENCER F. BAIRD; April 9, 1953; 0143 GCT; 25°54.5'N, 113°07.5'W; sounding, 95 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 12°.

0	16.40	33.81	5.75	0	16.40	33.81	5.75	24.76	319	0.00
10	16.41	33.82	5.47	10	16.41	33.82	5.47	24.77	319	0.03
20	16.15	33.87	5.60	20	16.15	33.87	5.60	24.86	310	0.06
30	16.08	33.82	5.63	30	16.08	33.82	5.63	24.84	312	0.10
49	14.44	33.67	5.03	50	14.39	33.67	4.94	25.10	289	0.16
73	12.75	34.05	1.80	75	12.71	34.07	1.60	25.75	227	0.22
98	12.20	34.33	0.74	100	12.16	34.35	0.73	26.07	197	0.27
122	11.80	34.49	0.63							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

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SPENCER F. BAIRD; April 8, 1953; 2041 GCT; 25°35'N, 113°47'W; sounding, 1740 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

13340

0	16.73	33.87	5.47	0	16.73	33.87	5.47	24.73	322	0.00
10	16.69	33.81	5.44	10	16.69	33.81	5.44	24.69	326	0.03
20	16.63	33.90	5.33	20	16.63	33.90	5.33	24.78	318	0.06
35	15.76	33.75	5.53	30	16.23	33.84	5.49	24.82	314	0.10
55	14.04	33.65	4.70	50	14.50	33.66	4.99	25.07	292	0.16
69	13.09	33.67	3.87	75	12.62	33.70	3.64	25.48	253	0.22
84	12.50	33.75	3.37	100	12.29	33.95	2.49	25.74	229	0.28
108	12.22	34.12	2.02	150	11.91	34.47	0.87	26.21	185	0.39
132	12.10	34.45	0.99	200	11.20	34.59	0.54	26.44	164	0.48
162	11.73	34.49	0.81	250	10.29	34.58	0.48	26.59	151	0.56
215	10.96	34.62	0.46	300	9.52	34.55	0.37	26.70	141	0.63
273	9.88	34.56	0.48	400	8.40	34.50	0.27	26.84	129	0.76
322	9.26	34.54	0.29	500	7.26	34.45	0.27	26.97	117	0.89
434	8.04	34.48	0.26	600	6.30	34.46	0.26	27.11	105	1.00
542	6.78	34.44	0.27							
650	5.90	34.48	0.26							

SPENCER F. BAIRD; April 8, 1953; 1548 GCT; 25°15'N, 114°20'W; sounding, 2000+ fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 20°.

13350

0	17.60	34.00	5.28	0	17.60	34.00	5.28	24.62	332	0.00
10	17.59	33.96	5.25	10	17.59	33.96	5.25	24.60	335	0.03
20	17.57	34.00	5.21	20	17.57	34.00	5.21	24.63	332	0.07
34	17.58	33.96	5.22	30	17.58	33.98	5.22	24.61	334	0.10
48	17.33	33.94	5.33	50	17.28	33.94	5.33	24.65	331	0.17
62	16.87	33.90	5.32	75	14.30	33.59	4.80	25.06	293	0.24
77	13.94	33.59	4.59	100	11.82	33.72	3.14	25.65	237	0.31
96	12.02	33.65	3.41	150	10.55	34.13	1.83	26.20	186	0.42
119	11.32	34.00	2.34	200	10.66	34.44	0.80	26.42	166	0.50
148	10.55	34.12	1.90	250	9.94	34.46	0.54	26.56	154	0.58
195	10.66	34.43	0.84	300	9.33	34.55	0.30	26.73	138	0.66
242	10.05	34.45	0.59	400	8.26	34.47	0.27	26.84	129	0.79
290	9.44	34.55	0.30	500	7.20	34.48	0.24	27.00	114	0.91
391	8.36	34.47	0.28	600	(6.38)	(34.47)	(0.20)	(27.11)	(105)	(1.02)
488	7.32	34.48	0.25							
592	6.43	34.47	0.20							

SPENCER F. BAIRD; April 8, 1953; 1043 GCT; 24°55'N, 115°01'W; sounding, 2150 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 13°.

13360

0	17.36	33.96	5.31	0	17.36	33.96	5.31	24.65	330	0.00
10	17.36	33.94	5.26	10	17.36	33.94	5.26	24.64	332	0.03
20	17.23	33.90	5.41	20	17.23	33.90	5.41	24.64	332	0.07
34	16.43	33.74	5.74	30	16.57	33.75	5.72	24.68	328	0.10
48	16.31	33.82	5.17	50	16.26	33.82	5.17	24.80	317	0.16
63	15.02	33.58	5.53	75	14.77	33.65	4.10	25.00	298	0.24
77	14.72	33.65	3.88	100	11.95	33.60	2.59	25.53	248	0.31
95	12.28	33.60	2.79	150	10.90	34.11	1.19	26.12	193	0.42
119	11.36	33.87	2.01	200	10.52	34.34	0.55	26.37	171	0.51
146	10.94	34.09	1.27	250	10.40	34.52	0.55	26.53	157	0.59
191	10.54	34.30	0.57	300	9.41	34.46	0.30	26.65	146	0.67
236	10.52	34.54	0.59	400	8.25	34.44	0.18	26.82	131	0.81
281	9.70	34.47	0.37	500	7.26	(34.50)	0.19	(27.01)	(114)	(0.93)
377	8.48	34.43	0.15							
472	7.58	34.50	0.20							
574	6.30	34.34r	0.15							

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

137.23

SPENCER F. BAIRD; April 7, 1953; 1228 GCT; 25°33'N, 112°18'W; sounding, 40 fm; wind, 290°, force 2; weather, overcast; sea, smooth; wire angle, 05°.

0	15.95	33.92	5.65	0	15.95	33.92	5.65	24.95	302	0.00
10	15.96	33.90	5.65	10	15.96	33.90	5.65	24.93	304	0.03
20	15.44	33.89	5.02	20	15.44	33.89	5.02	25.04	293	0.06
30	15.16	34.04	3.93	30	15.16	34.04	3.93	25.22	277	0.09
50	13.45	34.19	1.04	50	13.45	34.19	1.04	25.69	232	0.14

137.30

SPENCER F. BAIRD; April 7, 1953; 1530 GCT; 25°20'N, 112°46'W; sounding, 155 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

0	17.18	34.00	5.36	0	17.18	34.00	5.36	24.72	323	0.00
10	17.20	33.95	5.36	10	17.20	33.95	5.36	24.68	327	0.03
25	17.13	33.97	5.32	20	17.17	33.96	5.34	24.70	326	0.06
49	15.41	33.94	3.89	30	17.07	33.97	5.26	24.73	324	0.10
74	13.68	34.17	2.15	50	15.30	33.94	3.77	25.11	288	0.16
98	13.11	34.40	1.04	75	13.63	34.17	2.00	25.64	238	0.22
153	11.81	34.61	0.36	100	13.05	34.41	0.99	25.95	209	0.28
202	11.00	34.66	0.16	150	11.88	34.60	0.38	26.32	175	0.38
				200	11.01	34.66	0.16	26.53	156	0.46

137.40

SPENCER F. BAIRD; April 7, 1953; 2023 GCT; 25°03'N, 113°23'W; sounding, 1600 fm; wind, 310°, force 2; weather, cloudy; sea, moderate; wire angle, 13°.

0	17.78	34.07	5.10	0	17.78	34.07	5.10	24.63	332	0.00
10	17.64	34.06	5.16	10	17.64	34.06	5.16	24.66	329	0.03
20	17.55	34.05	5.31	20	17.55	34.05	5.31	24.67	328	0.07
34	17.51	34.05	5.25	30	17.52	34.05	5.27	24.68	328	0.10
48	17.07	33.95	5.40	50	17.01	33.95	5.39	24.73	324	0.16
63	16.67	34.05	4.67	75	14.35	34.09	2.57	25.43	258	0.24
77	14.14	34.10	2.46	100	13.03	34.33	1.39	25.89	215	0.30
96	13.14	34.30	1.52	150	11.95	34.64	0.63	26.34	173	0.39
119	12.59	34.42	0.95	200	11.38	34.74	0.28	26.52	157	0.48
148	11.98	34.63	0.66	250	10.66	34.68	0.28	26.61	150	0.55
195	11.44	34.74	0.29	300	9.92	34.60	0.17	26.67	144	0.62
242	10.80	34.69	0.29	400	8.70	34.56	0.16	26.84	129	0.76
290	10.04	34.61	0.18	500	7.19	34.48	0.23	27.00	114	0.88
391	8.84	34.57	0.15	600	(6.26)	(34.46)	(0.20)	(27.12)	(104)	(0.99)
488	7.32	34.48	0.23							
591	6.34	34.46	0.20							

137.50

SPENCER F. BAIRD; April 8, 1953; 0113 GCT; 24°39.5'N, 114°03'W; sounding, 2050 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	17.53	33.92	5.24	0	17.53	33.92	5.24	24.58	337	0.00
10	17.54	33.92	5.32	10	17.54	33.92	5.32	24.58	337	0.03
19	17.40	33.91	5.19	20	17.40	33.91	5.19	24.60	335	0.07
33	17.46	33.91	5.33	30	17.46	33.91	5.30	24.59	337	0.10
48	17.43	33.91	5.47	50	17.41	33.91	5.46	24.60	336	0.17
62	17.22	33.89	5.46	75	14.14	33.54	4.80	25.05	294	0.25
77	13.82	33.54	4.74	100	11.65	33.69	3.60	25.66	236	0.31
95	12.05	33.65	3.73	150	11.05	34.22	1.50	26.18	188	0.42
119	10.62	33.80	3.23	200	10.49	34.41	0.90	26.43	165	0.51
148	11.05	34.20	1.59	250	9.90	34.48	0.50	26.58	152	0.59
195	10.54	34.40	0.97	300	9.24	34.45	0.36	26.67	144	0.66
242	10.00	34.48	0.54	400	8.30	34.48	0.27	26.84	129	0.80
290	9.34	34.45	0.39	500	7.16	34.45	0.20	26.98	116	0.92
392	8.42	34.48	0.26	600	(6.38)	(34.49)	(0.35)	(27.12)	(104)	(1.03)
489	7.25	34.45	0.20							
593	6.42	34.49	0.34							

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn.m

SIO

CCOFI
5304
5305

137.60

SPENCER F. BAIRD; April 8, 1953; 0603 GCT; 24°20'N, 114°39.5'W; sounding, 2100 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 13°.

0	17.47	33.94	5.23	0	17.47	33.94	5.23	24.61	334	0.00
10	17.48	33.96	5.40	10	17.48	33.96	5.40	24.62	333	0.03
20	17.41	33.93	5.57	20	17.41	33.93	5.57	24.62	334	0.07
34	17.40	33.98	5.45	30	17.40	33.96	5.50	24.64	332	0.10
49	17.39	33.94	5.41	50	17.39	33.94	5.41	24.63	334	0.17
63	16.80	33.86	5.21	75	15.02	33.51	5.22	24.84	314	0.25
78	14.38	33.51	5.22	100	12.50	33.50	4.20	25.35	266	0.32
97	12.70	33.50	4.51	150	10.76	33.90	3.03	25.98	206	0.44
120	11.60	33.79	3.36	200	10.31	34.31	1.35	26.38	170	0.53
149	10.78	33.89	3.06	250	10.39	34.53	0.50	26.54	156	0.61
196	10.31	34.29	1.48	300	9.52	34.46	0.41	26.63	148	0.69
243	10.42	34.53	0.51	400	8.25	34.46	0.28	26.83	130	0.83
290	9.68	34.46	0.42	500	7.08	34.47	0.25	27.01	113	0.95
389	8.38	34.46	0.28	600	(6.29)	(34.47)		(27.12)	(104)	(1.06)
484	7.24	34.47	0.25							
587	6.36	34.47	0.22							

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