

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)

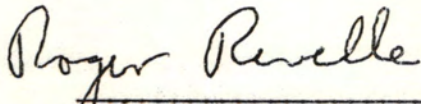
31 March - 19 April 1953

Sponsored by

Marine Research Committee

SIO Reference 58-13  
20 February 1958

Approved for distribution

  
Roger Revelle, Director

## CONTENTS

List of Figures . . . . .	ii
Introduction . . . . .	iii
Personnel . . . . .	v
Tabulated Data . . . . .	111
Distribution List . . . . .	164

## FIGURES

1. CCOFI Cruise 5304 (MLR 47), station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Surface currents measured by geomagnetic electrokinetograph (GEK)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of temperature at 200 meters
7. Horizontal distribution of salinity at 200 meters

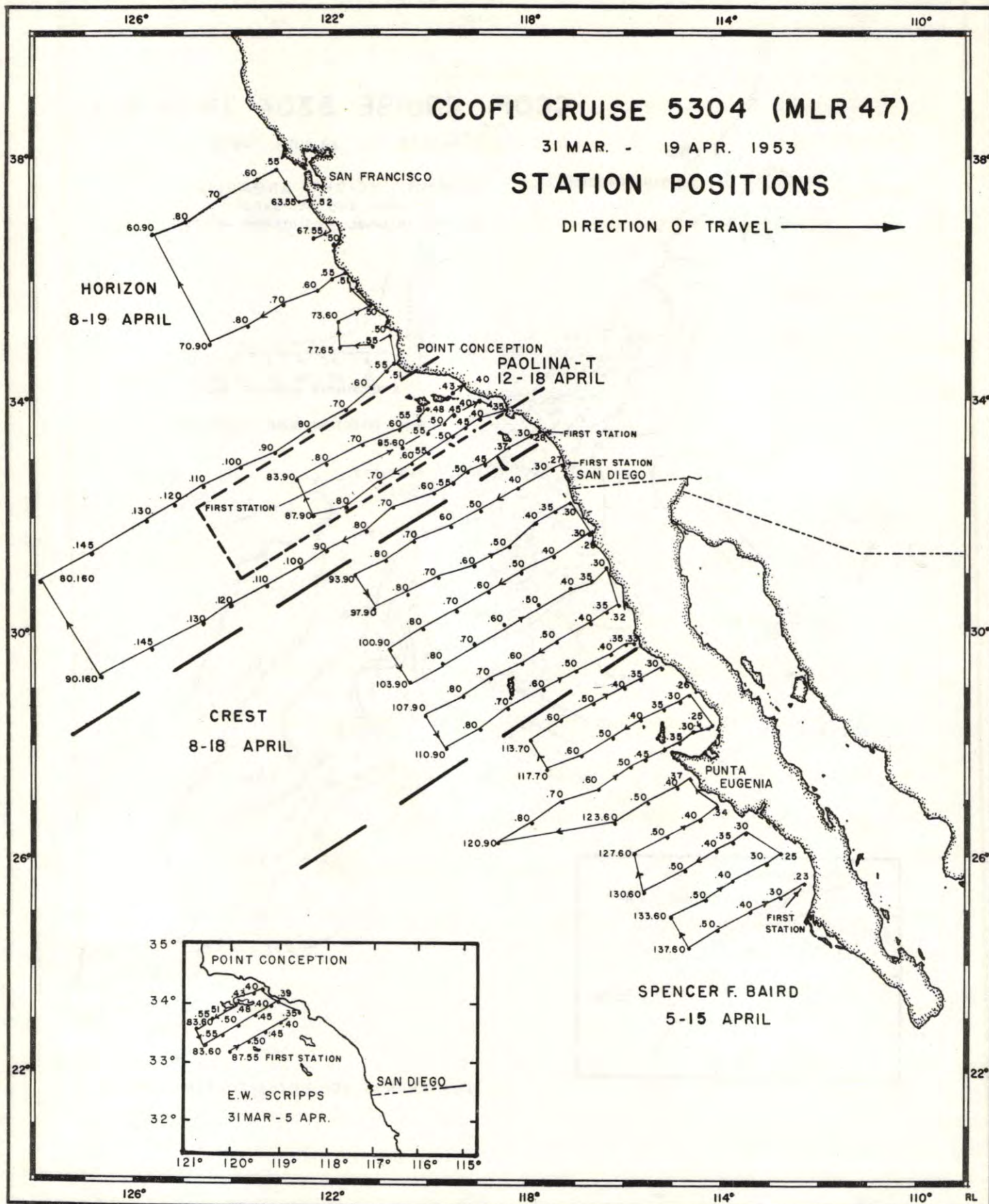


FIGURE 1

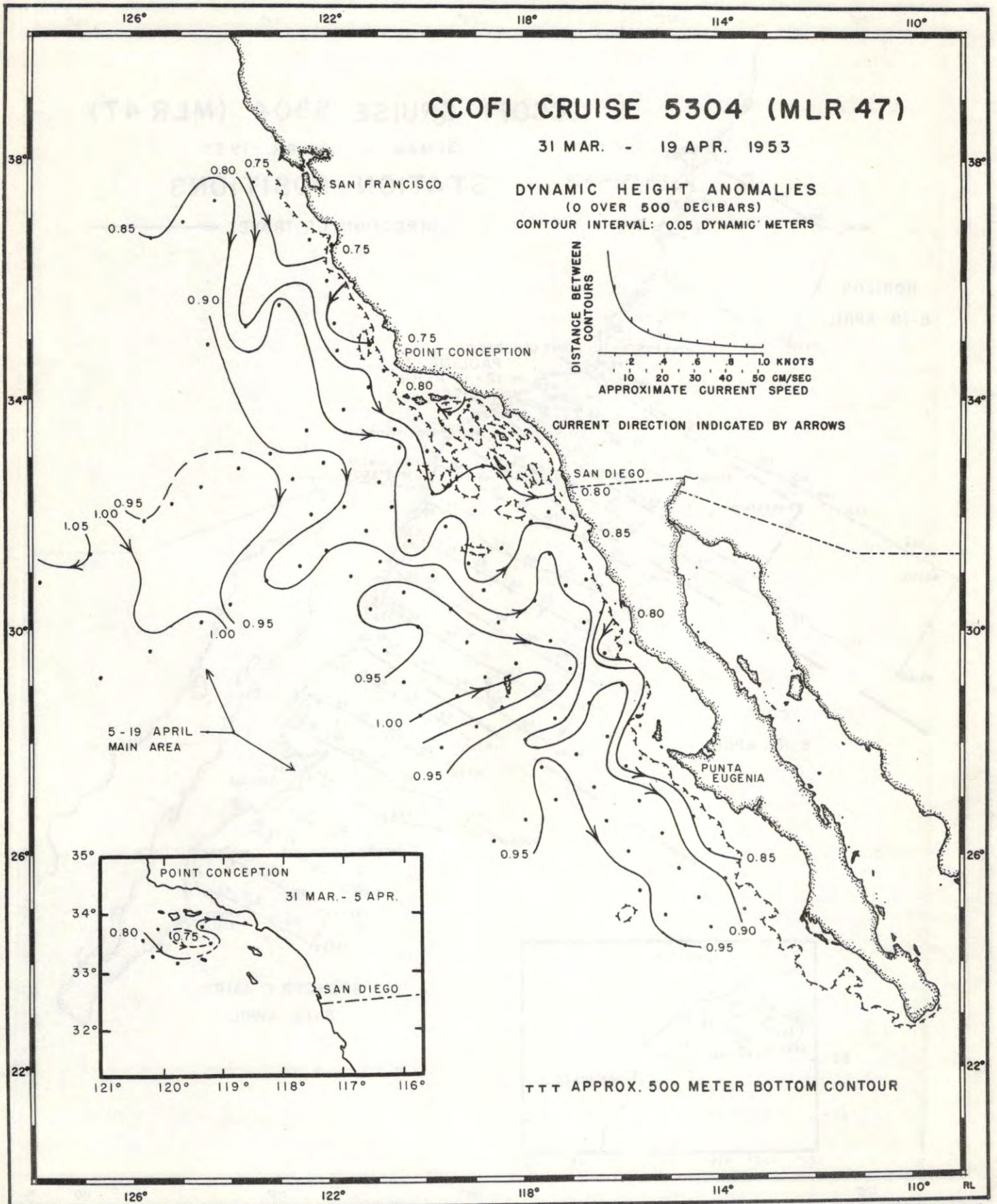


FIGURE 2

FROM H.O. CHART 0527

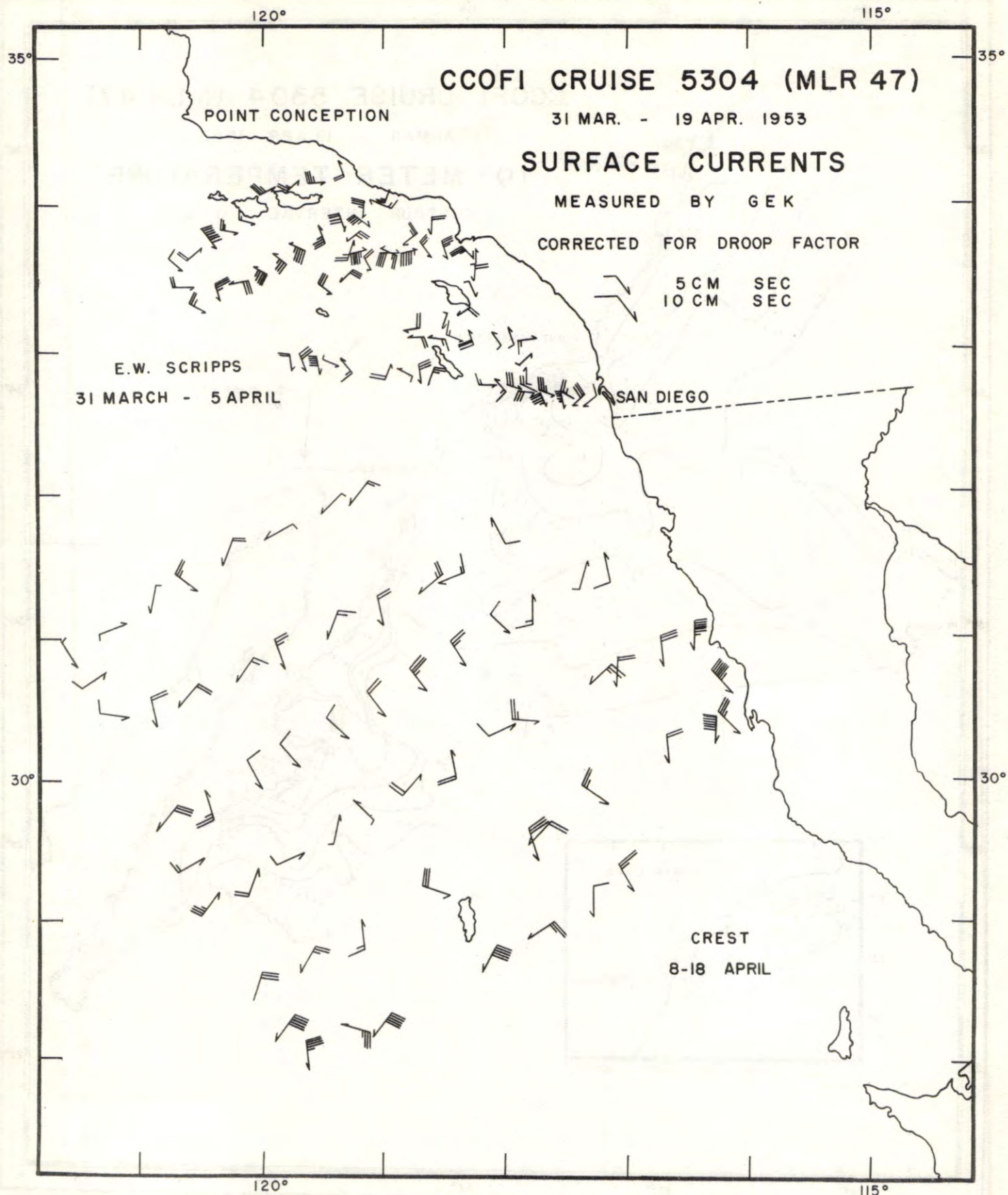


FIGURE 3

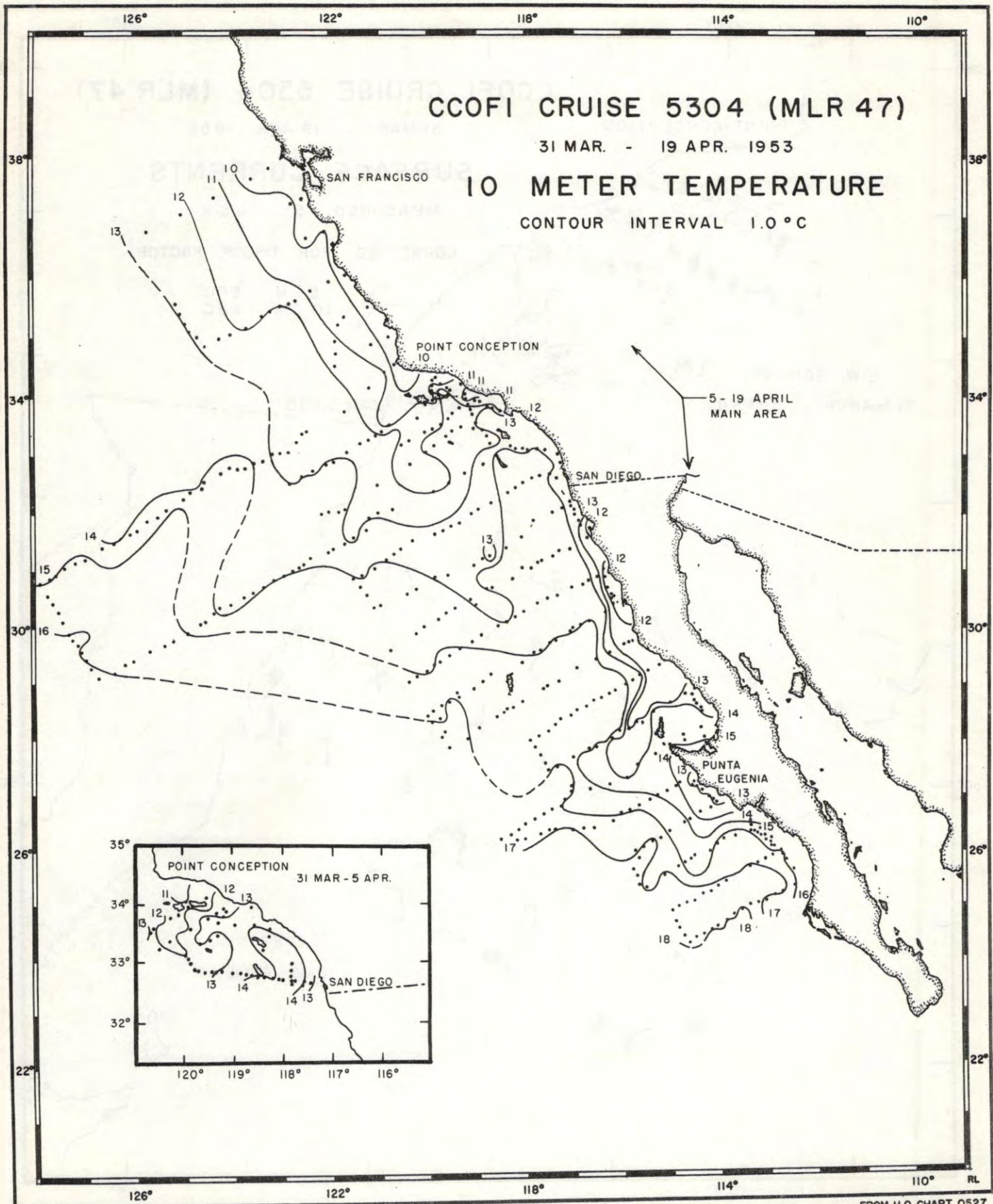


FIGURE 4

FROM H.O. CHART 0527

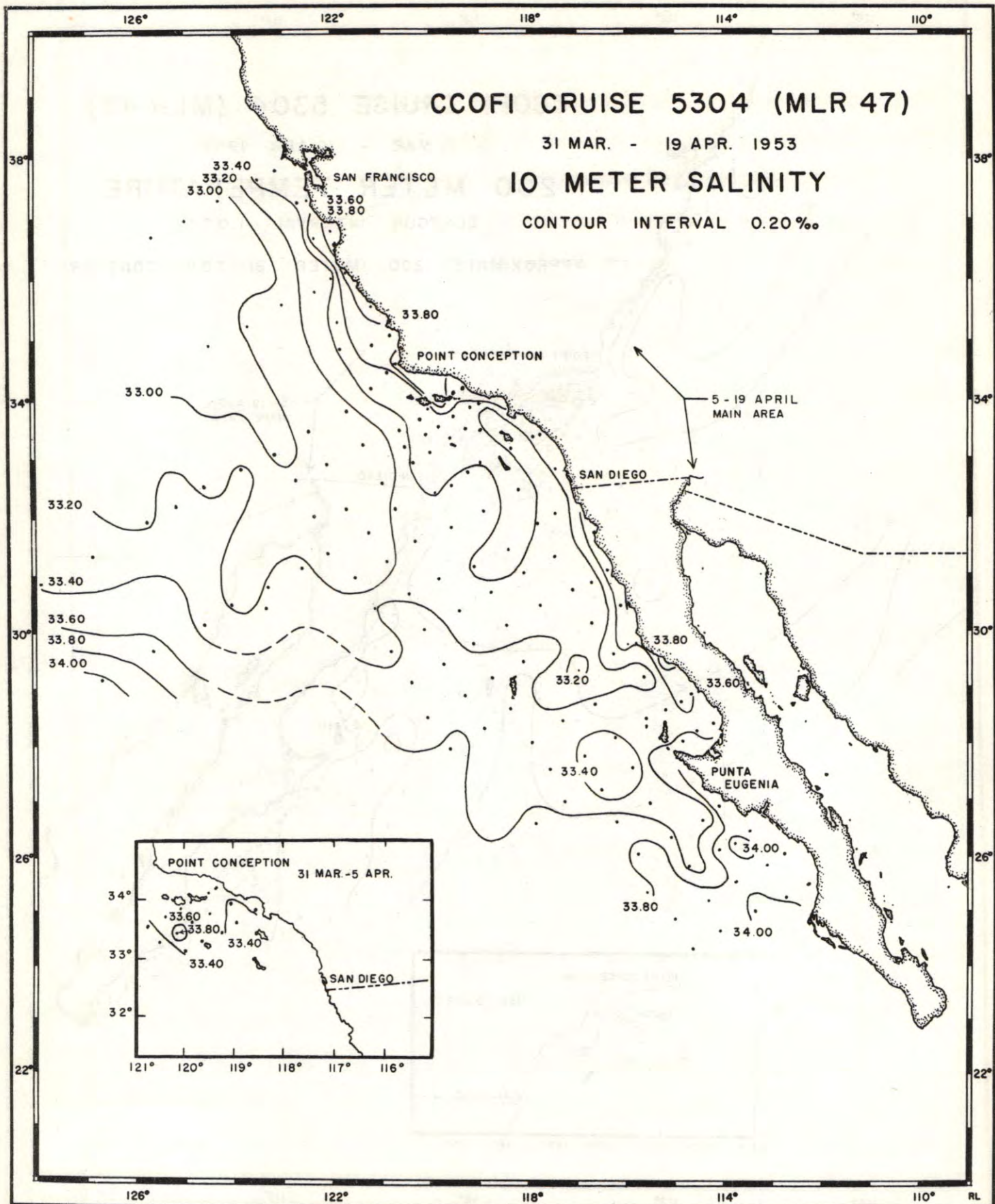


FIGURE 5



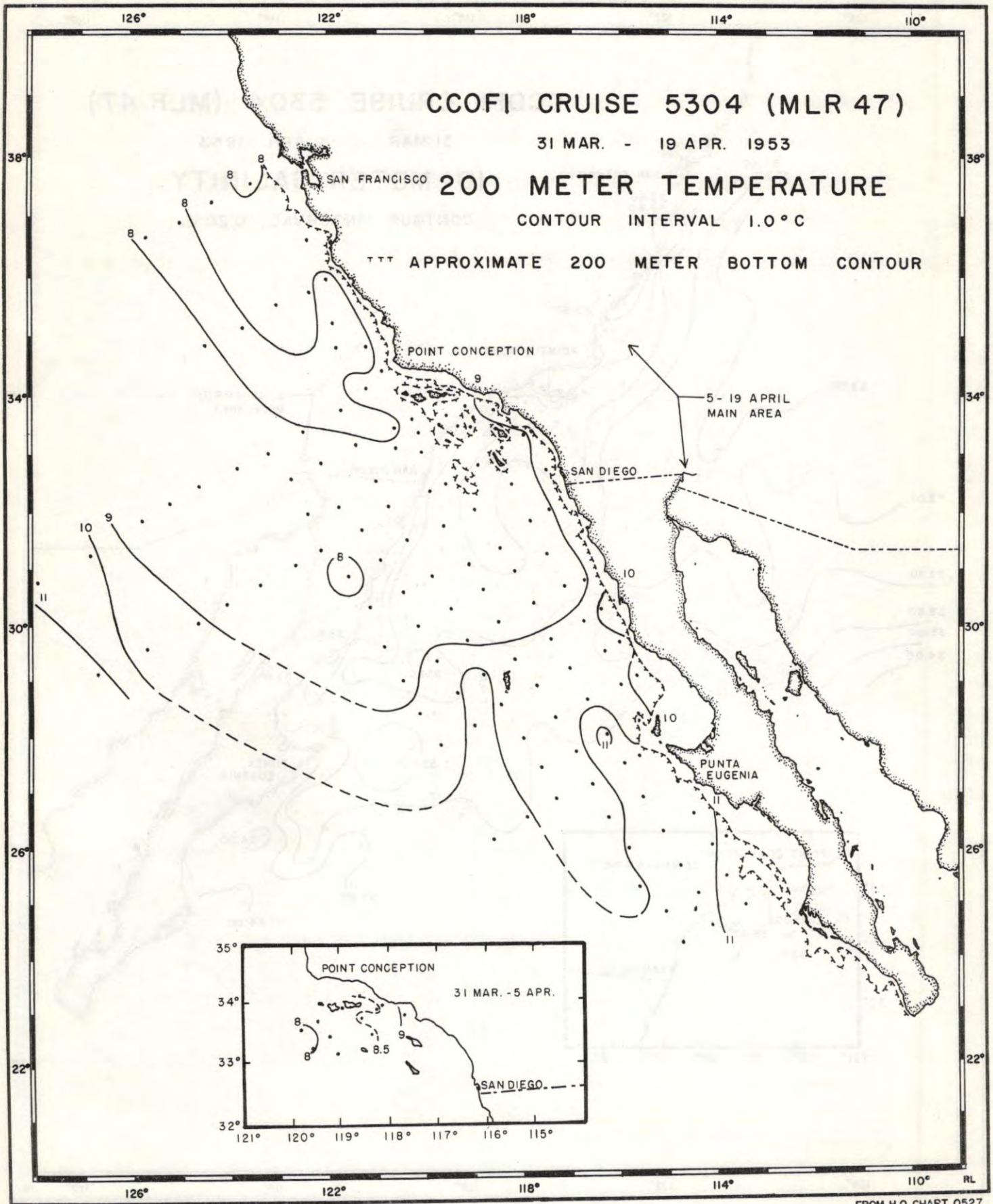


FIGURE 6

FROM H.O. CHART 0527

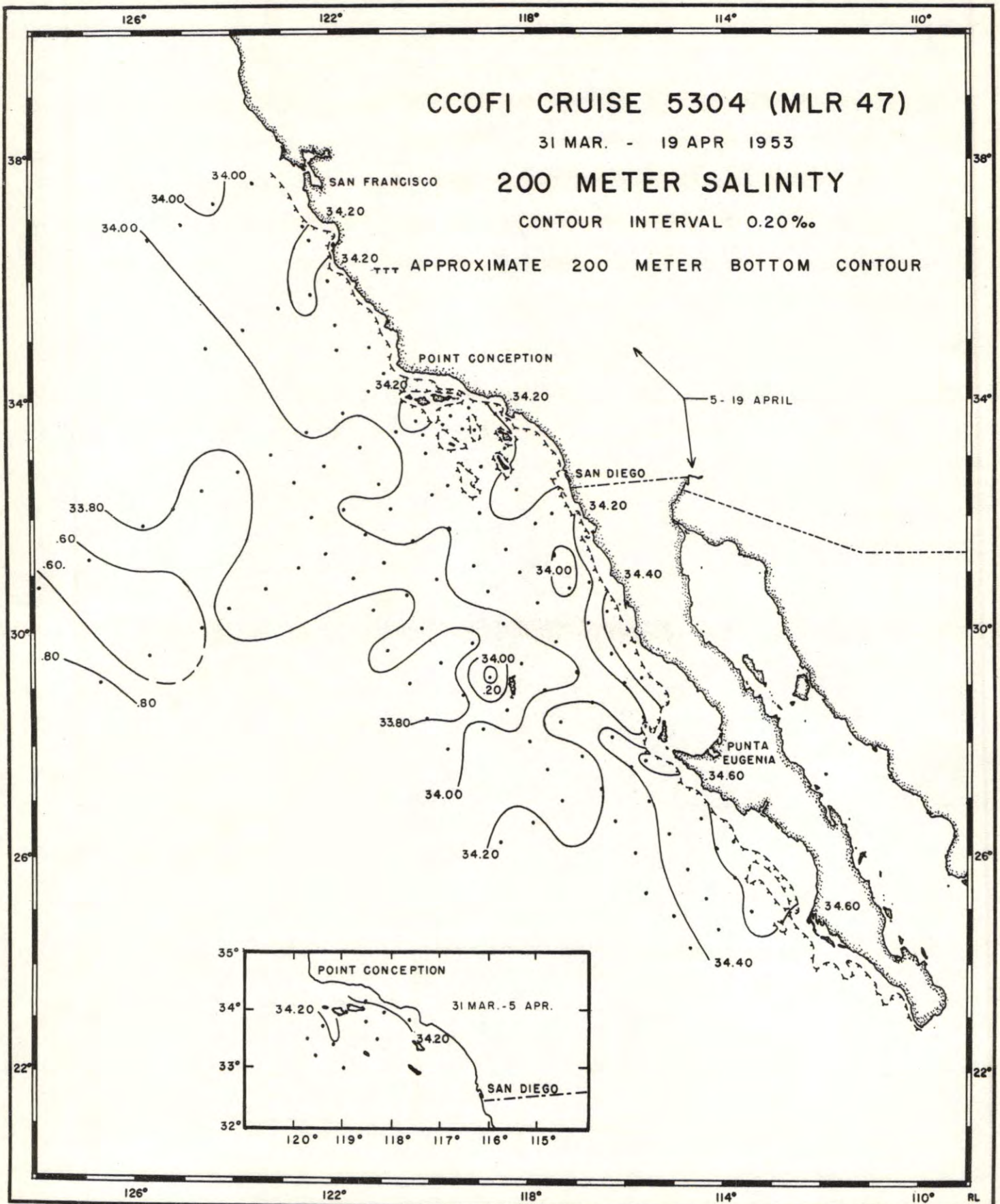


FIGURE 7

## 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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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							

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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°.

67.50

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							

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°.

67.55

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							

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°.

70.51

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)

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°.

70.55

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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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							



SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn.m

S10  
CCOFI  
5304

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°.

8060

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

SIO  
CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{cm^3}{g}$	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 <sup>a)</sup>	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 <sup>r</sup>							

a) Oxygen values appear erratic; no interpolations made.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	dyn.m

S10  
CCOFI  
5304

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

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	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	33.94		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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	dyn. m

S10

CCOF1  
5304

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)

121

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	dyn. m

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. SCRIPPS; 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. SCRIPPS; 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

S10

CCOF1  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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

SIO  
CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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



S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sup>a)</sup>	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn.m

S10  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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								

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{ cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn.m

S10  
CCOFI  
5304

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	-	-	-	-	-	-	-

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{cm}^3/\text{g}$	dyn.m

S10  
CCOFI  
5304

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					

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

S10  
CCOFI  
5304

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							

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn.m

S10  
CCOFI  
5304

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 <sup>a)</sup>	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.

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

100.80

CREST; April 12, 1953; 1442 GCT; 30°<sup>02'</sup>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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

S10

CCOFI  
5304

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							

143

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

SIO  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	dyn.m

S10  
CCOFI  
5304

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					

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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 <sup>a)</sup>	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^5 \text{cm}^3/\text{g}$	dyn.m

S10  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn.m

11350

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							

11360

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							

11370

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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

S10  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
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							

154

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

12060

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							

12070

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

12080

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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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°.

120.90

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							

S10

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	σ <sub>t</sub>	δ	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

S10  
CCOFI  
5304

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°.

12760

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°.

13030

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°.

13035

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°.

13040

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

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	dyn. m

S10  
CCOFI  
5304

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							

SIO

CCOFI  
5304

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	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 <sub>2</sub>	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta$	$\Delta D$
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

S10  
CCOFI  
5304  
5305

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°.

13760

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							

	DISTRIBUTION LIST		
--	-------------------	--	--

Dr. E. H. Ahlstrom  
U. S. Fish and Wildlife Service  
c/o Scripps Institution of Oceanography  
La Jolla, California

British Joint Services  
(Navy Staff)  
1910 K Street N. W.  
Washington, D. C.

Mr. J. G. Burnette, Chairman  
Marine Research Committee  
P. O. Box 807  
Los Altos, California

Mr. Ray Cannon  
Ocean Fish Protective Association  
645 N. Serrano Street  
Los Angeles 4, California

Mr. R. S. Croker, Director  
California Department of Fish and Game  
Marine Fisheries Laboratory Branch  
722 Capitol Avenue  
Sacramento 14, California

Director of Research  
Fish Commission of Oregon  
Route 1, Box 31A  
Clackamas, Oregon

Hancock Library of Biology and  
Oceanography  
Allan Hancock Foundation  
University of Southern California  
Los Angeles 7, California

Dr. Robert W. Hiatt  
University of Hawaii  
Honolulu, T. H.

Mr. William Anderson  
U. S. Fish and Wildlife Service  
Brunswick, Georgia

Dr. Wayne V. Burt  
Assoc. Prof. of Oceanography  
School of Science  
Oregon State College  
Corvallis, Oregon

Librarian (4)  
Department of Fish and Game  
California State Fisheries Laboratory  
Terminal Island, California

Chief, Division of Fisheries  
Commonwealth Scientific and Industrial  
Research Organization  
P. O. Box 21  
Crunulla, N. S. W., AUSTRALIA

Herrn Professor Dr. A. Defant  
Sternwartestrasse 38  
Innsbruck  
AUSTRIA

Mr. Seth Gordon, Director  
California Department of Fish and Game  
926 J Street  
Sacramento 14, California

Mr. John Hawk  
c/o Seafarers' International Union  
of North America  
450 Harrison Street  
San Francisco 5, California

Director  
Hopkins Marine Station  
Pacific Grove, California

Mr. John D. Isaacs  
Director, Marine Life Research  
University of California  
Scripps Institution of Oceanography  
La Jolla, California

Dr. H. Kitamura  
Oceanographic Section  
Kobe Marine Observatory  
Kobe, JAPAN

Mr. Joseph Mardesich  
Franco-Italian Packing Company  
Fish Harbor Wharf  
Terminal Island, California

Dr. J. L. McHugh  
Virginia Fisheries Laboratory  
Gloucester Point, Virginia

Mr. Arthur H. Mendonca  
c/o R. E. Booth Company, Inc.  
280 Battery Street  
San Francisco 11, California

Mr. John V. Morris  
French Sardine Company  
582 Tuna Street  
Terminal Island, California

Director  
Norwegian Polar Institute  
Observatoriegat 1  
Oslo, NORWAY

Office of Naval Research  
Geophysics Branch  
Washington 25, D. C.

Dr. E. L. Pickard  
Institute of Oceanography  
University of British Columbia  
Vancouver, B. C.  
CANADA

Mr. Milton C. James  
Pacific Marine Fishery Commission  
340 State Office Building  
1400 S. W. Fifth Avenue  
Portland 1, Oregon

Dr. E. C. La Fond  
Code 2235  
U. S. Navy Electronics Laboratory  
San Diego 52, California

Mr. J. C. Marr  
U. S. Fish and Wildlife Service  
c/o Scripps Institution of Oceanography  
La Jolla, California

Dr. H. J. McLellan  
Atlantic Oceanographic Group  
St. Andrews, New Brunswick  
CANADA

Dr. R. C. Miller, Director  
California Academy of Science  
Golden Gate Park  
San Francisco 18, California

Dr. A. W. H. Needler, Director  
Pacific Biological Station  
Nanaimo, B. C.  
CANADA

Dr. Yngve H. Olsen  
Journal of Marine Research  
Yale University  
New Haven, Connecticut

Librarian  
Pacific Oceanic Fishery Investigations  
P. O. Box 3830  
Honolulu, T. H.

Mr. Don Powell  
U. S. Fish and Wildlife Service  
2725 Montlake Boulevard  
Seattle 2, Washington

Dr. D. W. Pritchard, Director  
Chesapeake Bay Institute  
The Johns Hopkins University  
121 Maryland Hall  
Baltimore 18, Maryland

Dr. Roger Revelle  
University of California  
Scripps Institution of Oceanography  
La Jolla, California

Mrs. Margaret K. Robinson  
University of California  
Scripps Institution of Oceanography  
La Jolla, California

Dr. M. B. Schaefer  
Inter-American Tropical Tuna Commission  
c/o Scripps Institution of Oceanography  
La Jolla, California

Mr. O. E. Sette, Chief  
Ocean Research  
U. S. Fish and Wildlife Service  
450-B Jordan Hall  
Stanford, California

Mr. W. E. Stewart  
c/o California State Chamber of  
Commerce  
350 Bush Street  
San Francisco 4, California

Dr. Albert L. Tester, Chief  
Division of Biological Research  
Bureau of Commercial Fisheries  
U. S. Fish and Wildlife Service  
Washington 25, D. C.

Dr. John P. Tully  
Pacific Oceanographic Group  
P. O. Drawer 6  
Nanaimo, B. C.  
CANADA

Mr. John Radovich  
California Department of Fish and Game  
California State Fisheries Laboratory  
Terminal Island, California

Dr. Gordon A. Riley  
Bingham Oceanographic Foundation  
Yale University  
New Haven, Connecticut

Mr. Don T. Saxby  
California Division  
California Packing Corporation  
2600 Seventh Street  
Berkeley 10, California

Library (4)  
University of California  
Scripps Institution of Oceanography  
La Jolla, California

President Robert G. Sproul  
University of California  
Berkeley 4, California

Miss Margaret Storey, Librarian  
Natural History Museum  
Stanford, California

Department of Oceanography  
Texas A. and M. College  
College Station, Texas

U. S. Hydrographic Office  
Navy Department  
Washington 25, D. C.  
Attn: Mr. John Lyman

Library (2)  
U. S. Navy Electronics Laboratory  
San Diego 52, California

University of California (2)  
General Library  
Berkeley 4, California  
Attn: Gifts and Exchange Department

Librarian  
University of Washington  
Oceanographic Laboratories  
Friday Harbor, Washington

Director  
University of Washington  
School of Fisheries  
Seattle 4, Washington

Dr. Lionel A. Walford, Chief  
Atlantic Fishery Oceanographic  
Research Center  
U. S. Fish and Wildlife Service  
734 Jackson Place, N. W.  
Washington 25, D. C.

Director  
Woods Hole Oceanographic Institution  
Woods Hole, Massachusetts

University of California  
Department of Zoology  
Berkeley 4, California

Director  
University of Miami  
Marine Laboratory  
Coral Gables, Florida

Librarian (2)  
University of Washington  
Oceanographic Laboratories  
Seattle 5, Washington

Mr. Gilbert C. Van Camp, Sr.  
772 Tuna Street  
Terminal Island, California

Dr. Boyd W. Walker  
University of California  
Department of Zoology  
Los Angeles 24, California