

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5501
(MLR 68)
13-29 January 1955

and

CCOFI Cruise 5502
(MLR 69)
9-23 February 1955

SIO Reference 59-36
1 October 1958

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5501
(MLR 68)
13-29 January 1955

and

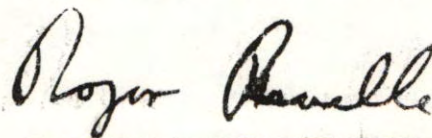
CCOFI CRUISE 5502
(MLR 69)
9-23 February 1955

Sponsored by

Marine Research Committee

SIO Reference 59-36
15 October 1958

Approved for distribution:



Roger Revelle, Director

UNIVERSITY OF CALIFORNIA
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Approved for distribution
Robert B. Wallace
Robert B. Wallace, Director

INTRODUCTION

The data presented in this report were collected on the sixty-eighth and sixty-ninth consecutive cruises of the California Cooperative Oceanic Fisheries Investigations program. The R/V Paolina-T and the R/V Crest of the Scripps Institution participated in the sixty-eighth cruise and the R/V Crest, the R/V Paolina-T and the R/V Spencer F. Baird participated in the sixty-ninth cruise.

The data are tabulated at observed depths; 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; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.^{1/} Certain approximations have been introduced for the determination of the integrated pressure terms which may result in errors whose maximum values are less than 0.5 dynamic centimeter at 0 over 200 decibars, 1.0 dynamic centimeter at 0 over 500 decibars, and 2.0 dynamic centimeters at 0 over 1000 decibars.

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, messenger times and wire angles are given in the order of increasing depth. A line is left blank between the observed data of each cast.

^{1/}

Klein, Hans T. A new technique for processing physical oceanographic data. MS.

FOOTNOTES

Footnotes which appear frequently are "loose bottle cap" and "possible evaporation." To avoid any confusion as to their meaning the following explanation is included.

Laboratory personnel, before titrating the salinity samples, note any possible imperfections in the sealing of the bottles as follows:

Loose bottle cap: The cap is definitely loose so that it could be moved with very little applied pressure. The salinity values obtained from these samples may be usable depending on time and/or conditions of storage.

Possible evaporation: Either the cap was sealed with less than usual pressure, the bottle edge chipped, the rubber washer cracked, or the bale broke on opening, etc.

Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve," depending upon whether the property curve was drawn through the value or not.

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

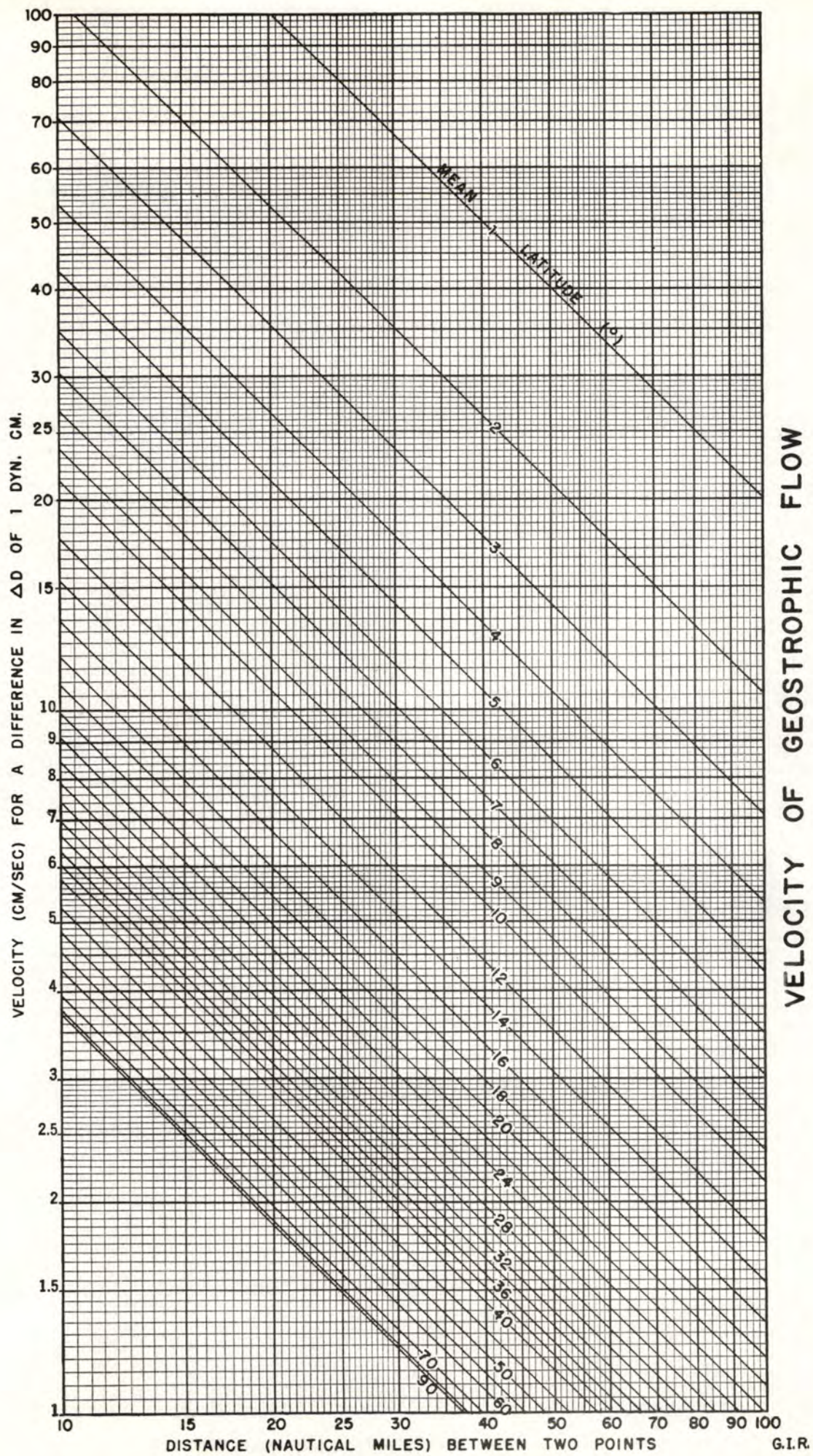
To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

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.

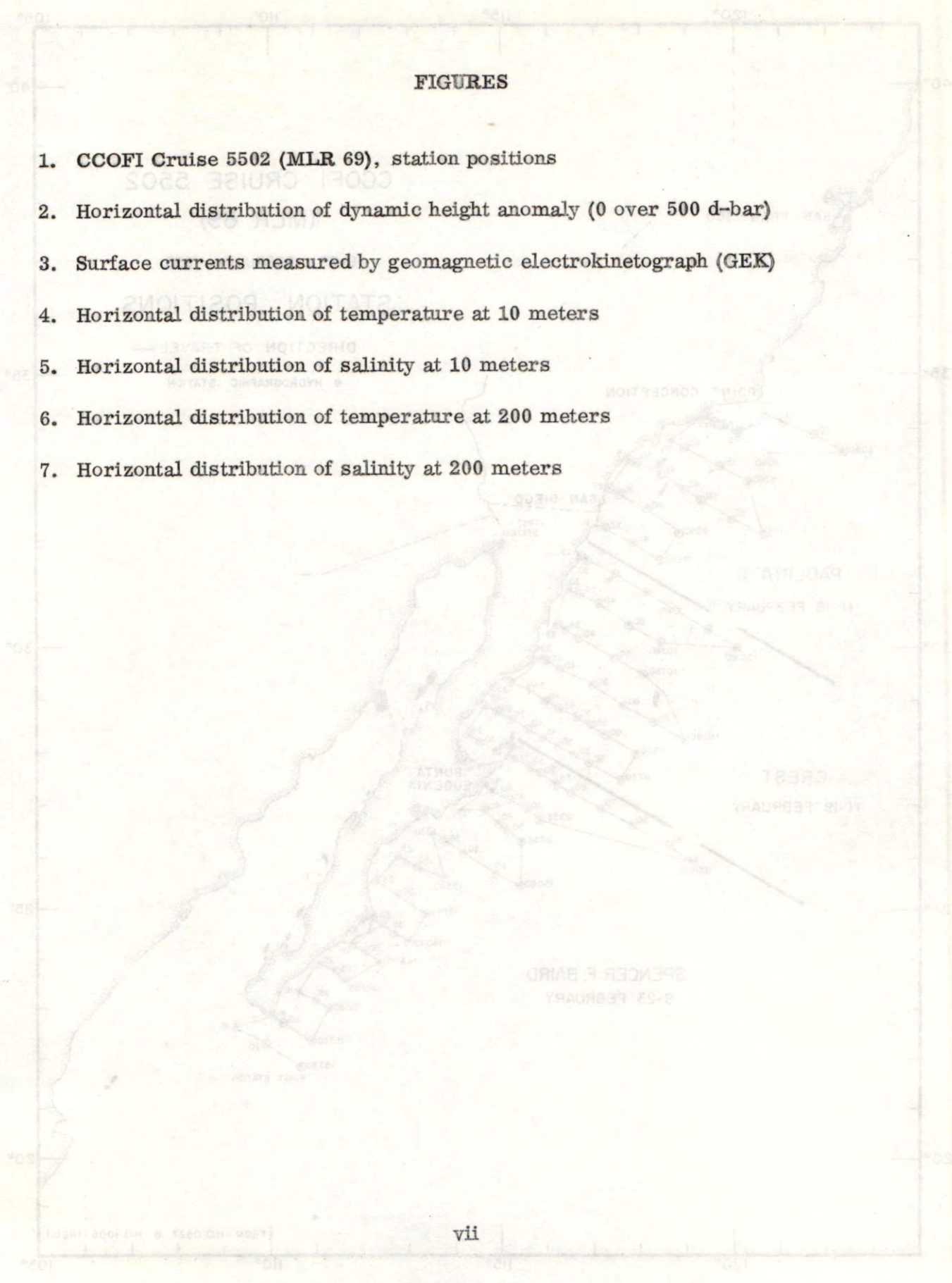
r: rejected value (value seems to be definitely wrong),

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



FIGURES

1. CCOFI Cruise 5502 (MLR 69), 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



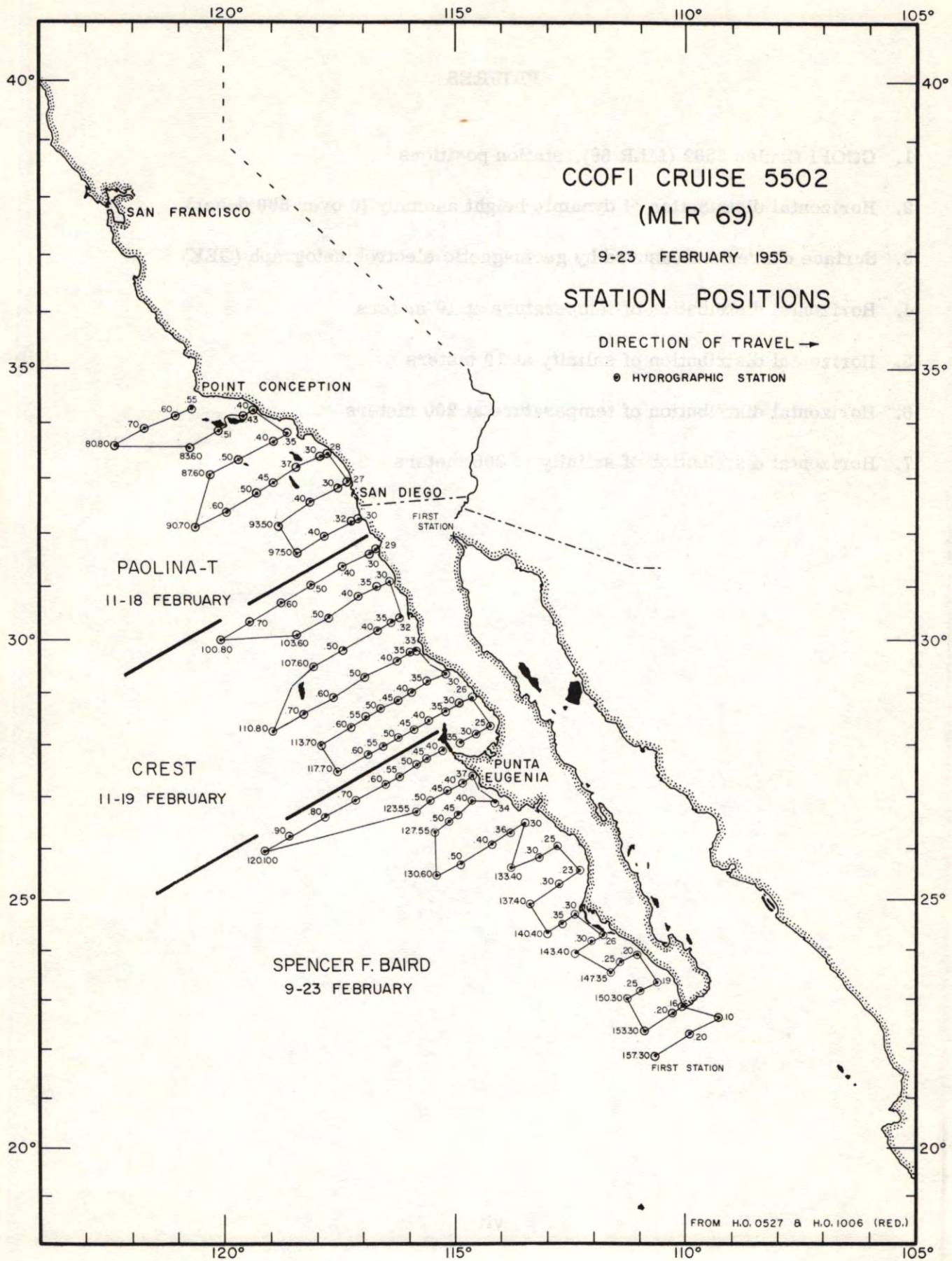


FIGURE 1

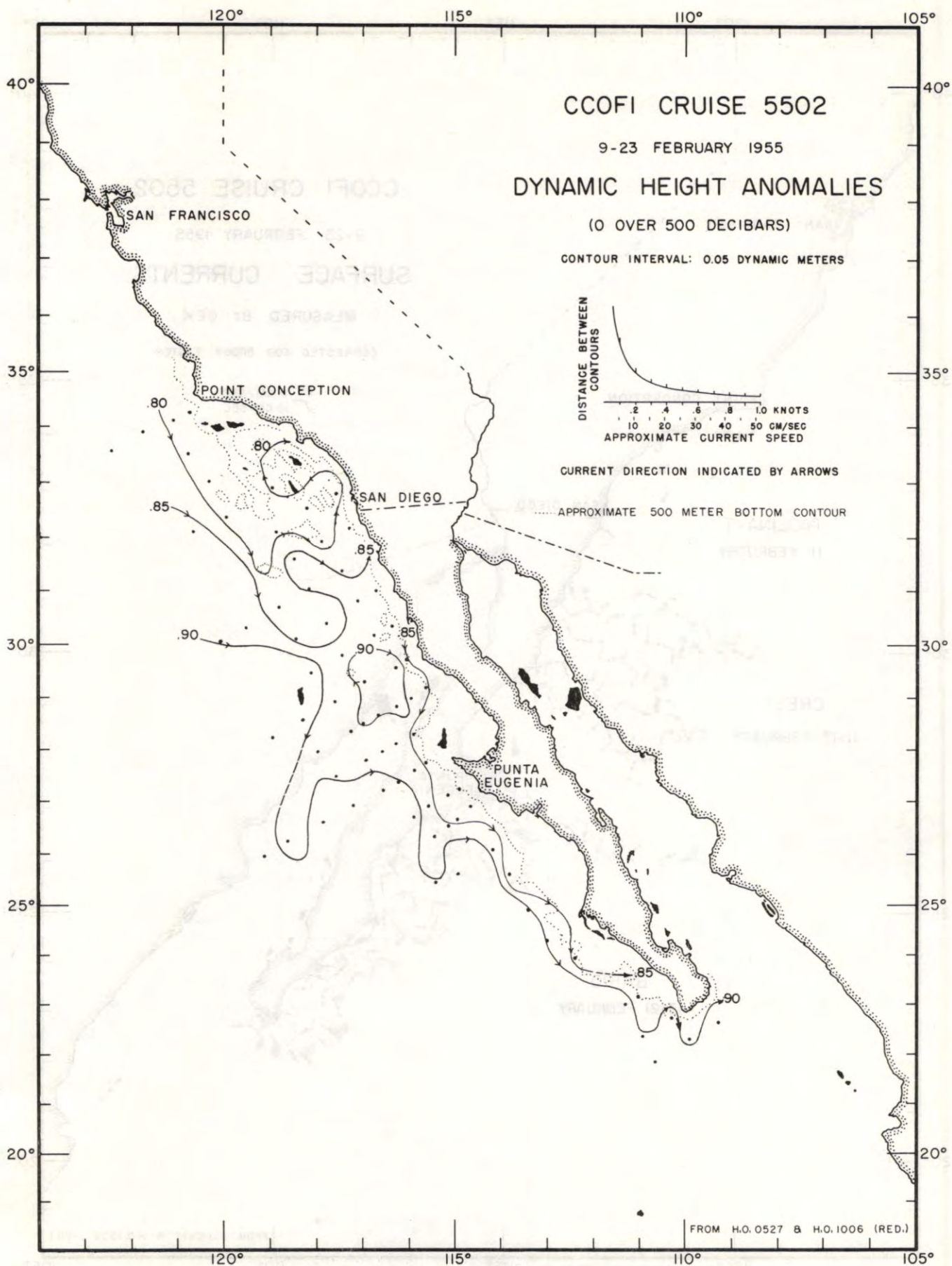


FIGURE 2

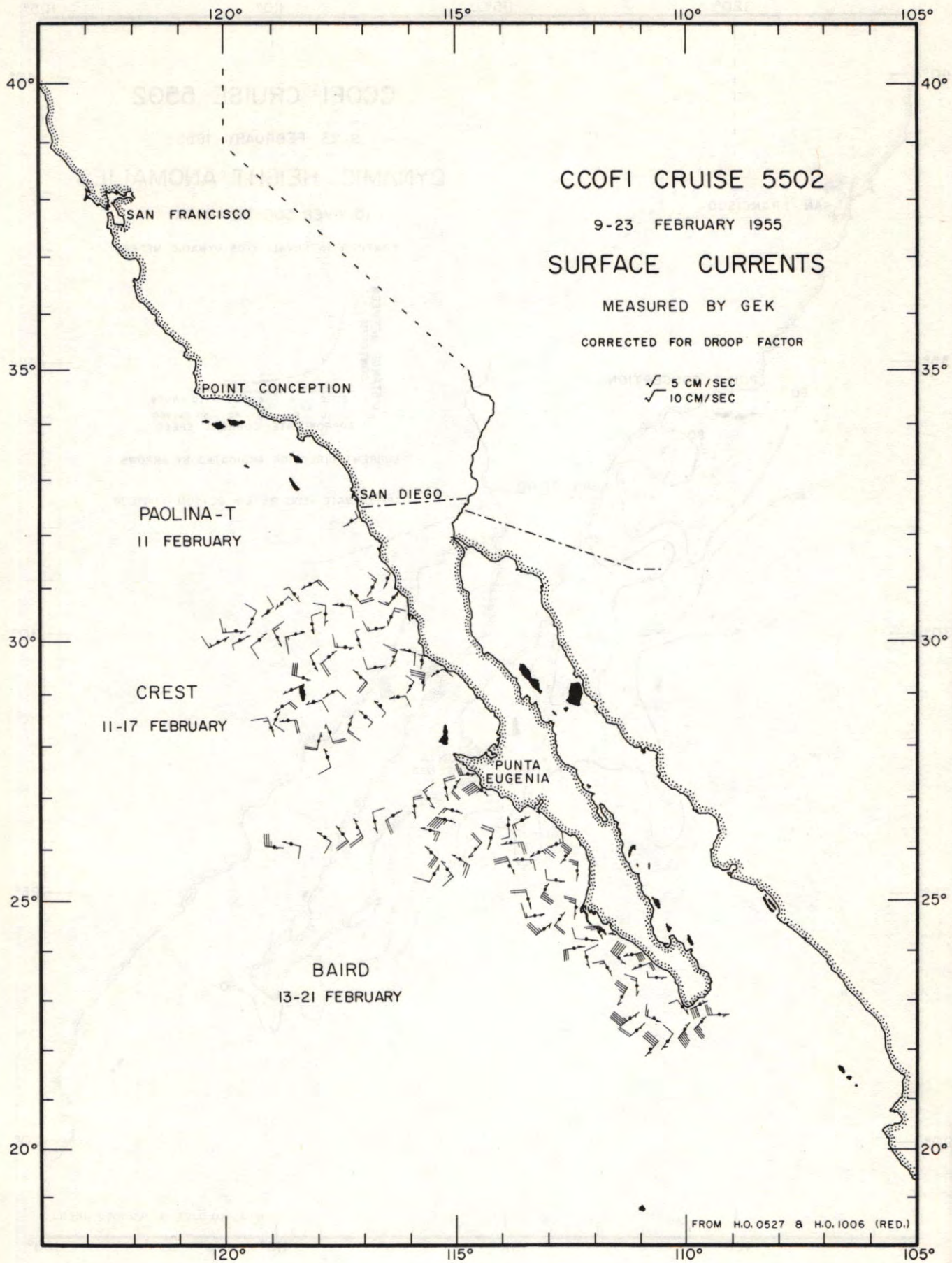


FIGURE 3

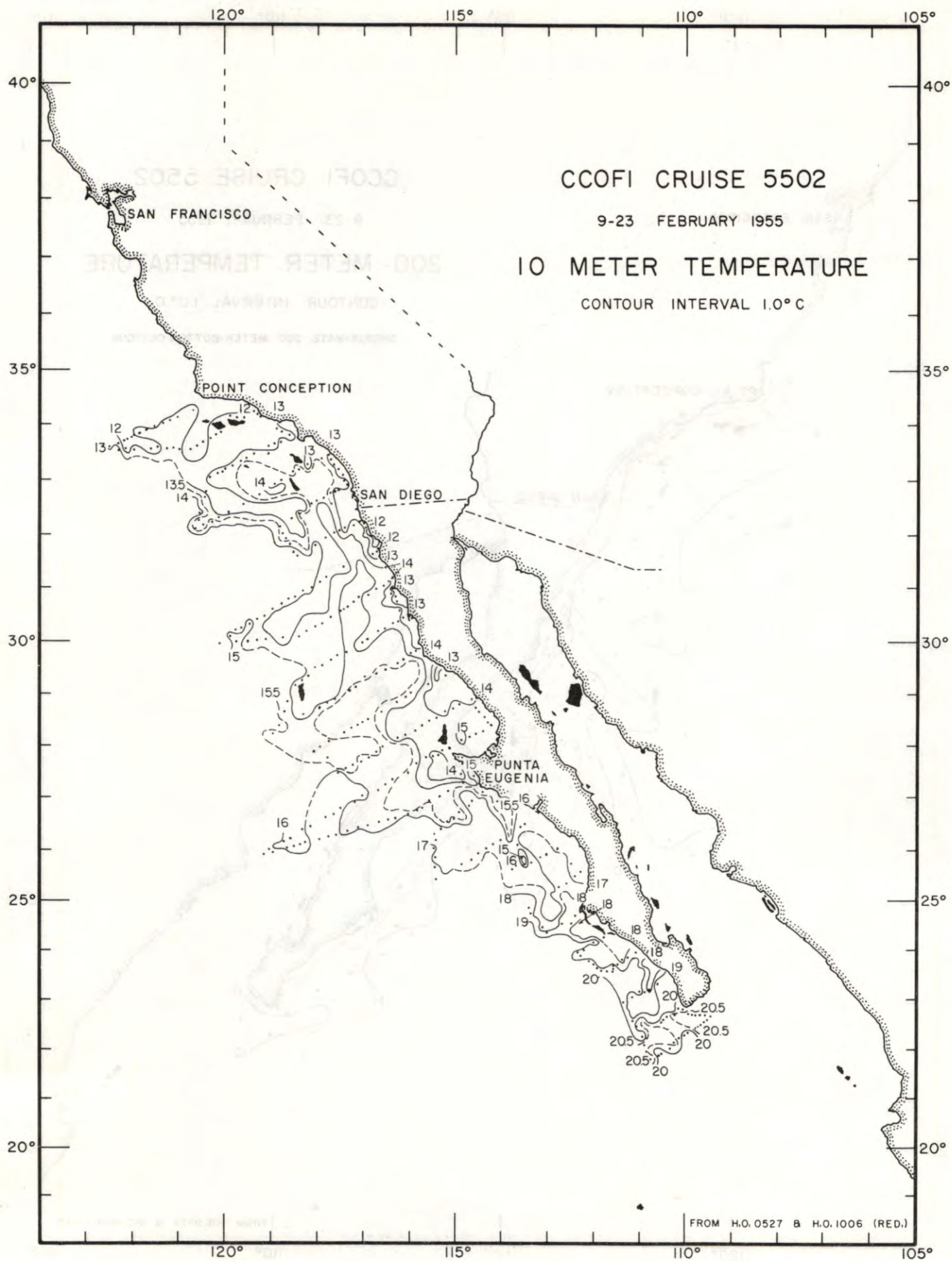


FIGURE 4

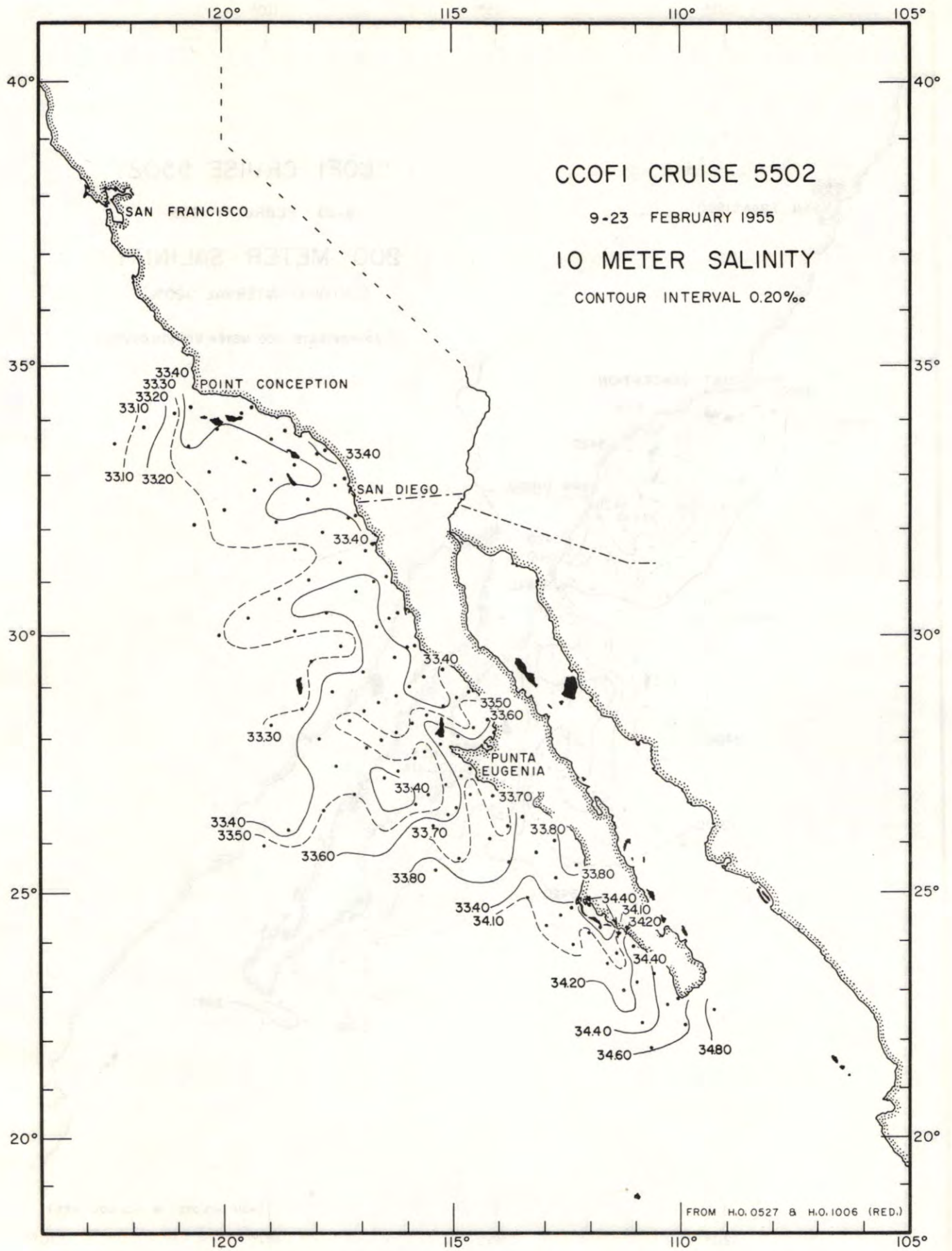


FIGURE 6

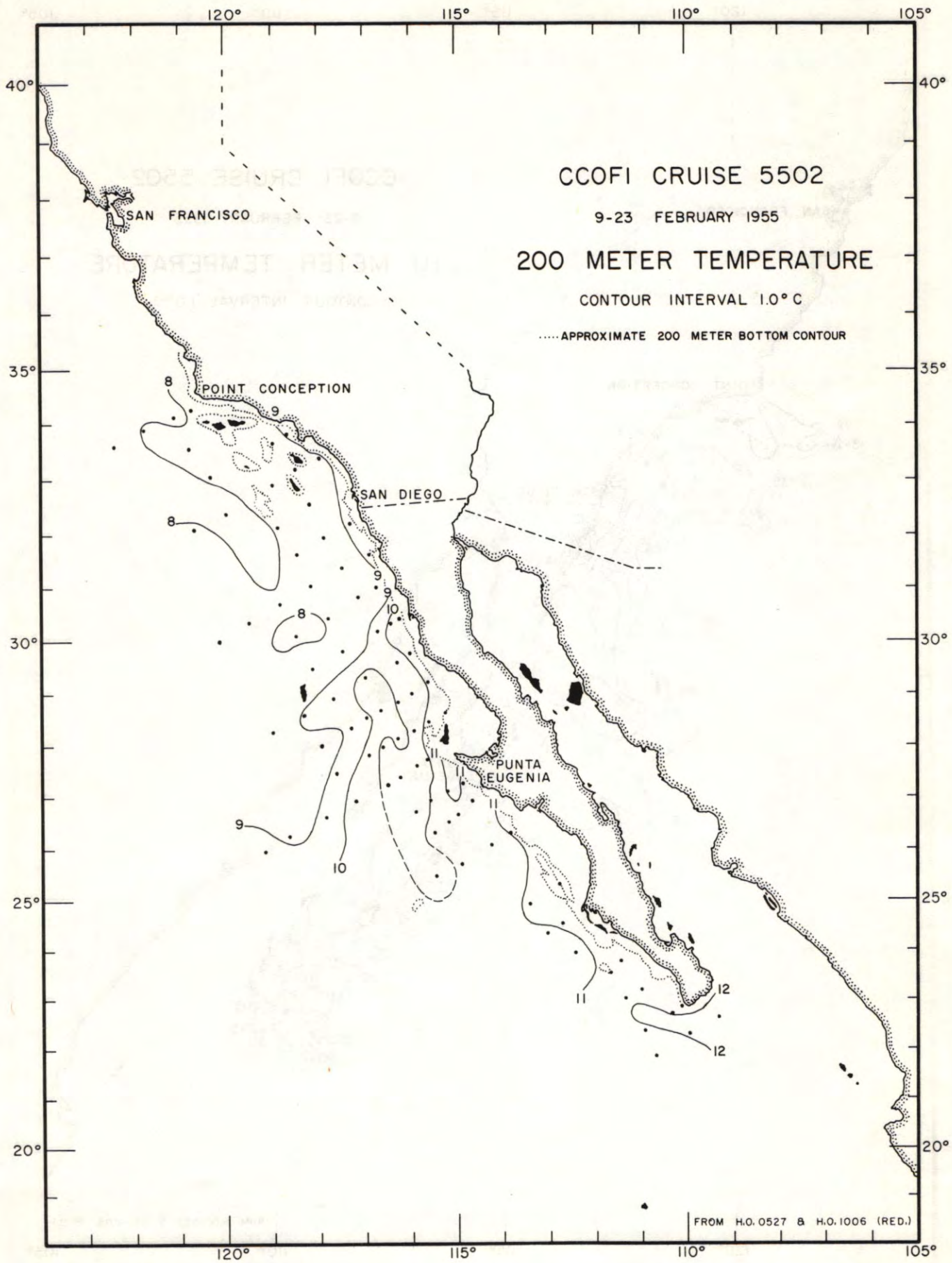


FIGURE 5

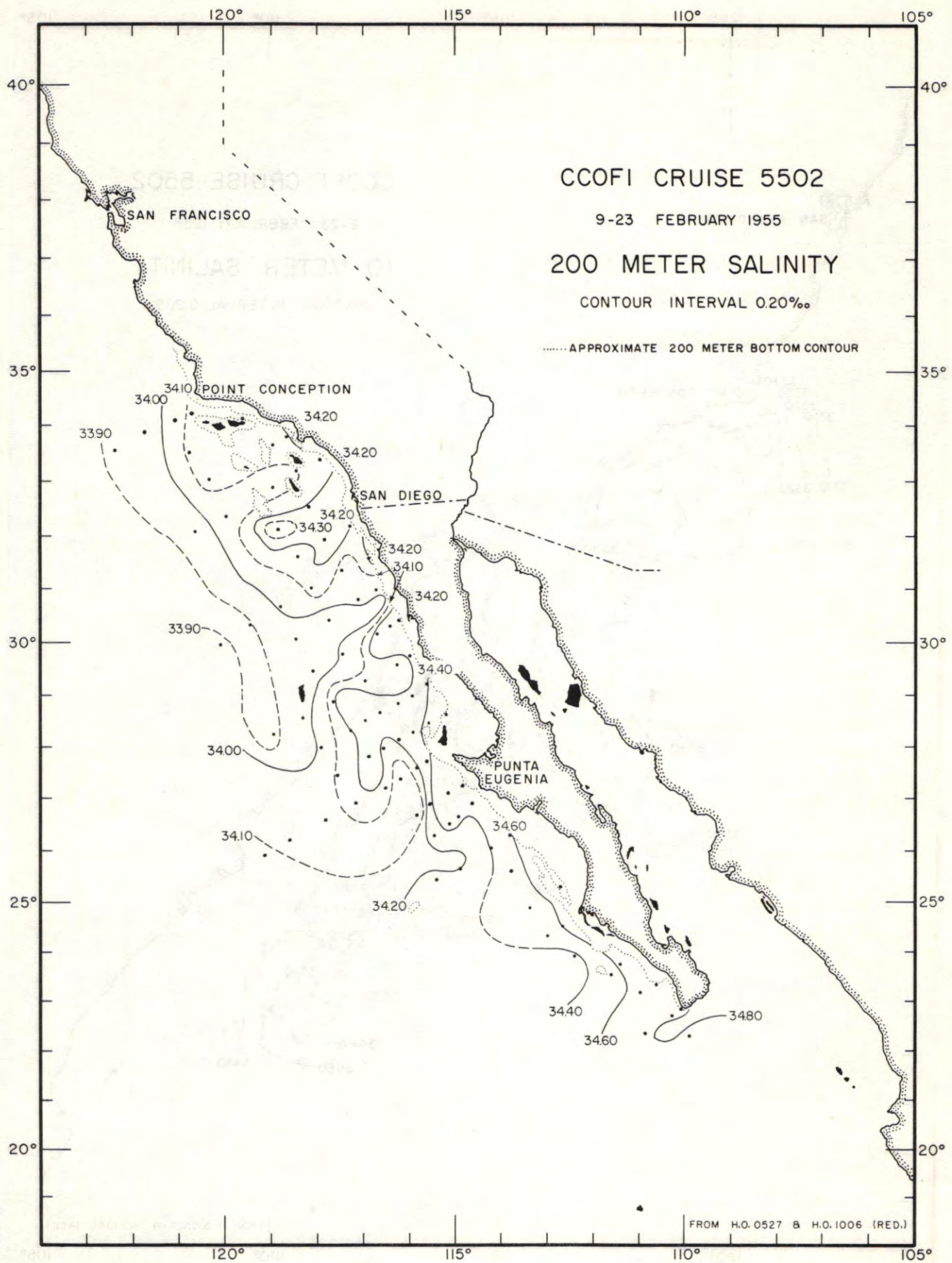


FIGURE 7

PERSONNEL	
Cruise 5502	

SHIPS' CAPTAINS

- Ashton, Robert D., R/V Crest
- Haines, Robert B., R/V Paolina-T
- Wyatt, Vernon H., R/V Spencer F. Baird

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Crest

- Coolidge, Richard N., Senior Marine Technician
- Brennan, Robert E., Marine Technician
- Brown, Daniel M., Marine Technician
- O'Connell, Charles P., Marine Research Biologist, U. S. Fish and Wildlife Service
- Dodimela, A. J., Assistant Scientist, Pacific Oceanographic Group, Nanaimo, British Columbia

R/V Paolina-T

- Kivlen, John C., Senior Marine Technician
- Fletcher, Kenneth H., Marine Technician
- Hapgood, William F., Fishery Aid, U. S. Fish and Wildlife Service
- Linn, Robert J., Marine Technician

R/V Spencer F. Baird

- Schwartzlose, Richard A., Senior Marine Technician
- Bryer, Bruce A., Marine Technician
- Reith, A. Dougall, Marine Technician
- Vrooman, Andrew M., Fishery Research Biologist, U. S. Fish and Wildlife Service

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OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	10^{-5} cm/g	m	°C	‰	ml/L	g/L	10^{-5} cm/g	dyn. m	

80.55 PAOLINA-T; February 18, 1955; 0650 GCT; 34°14'N, 120°43'W; sounding, 410 fm; wind, 310°, force 5; weather, missing; sea, very rough; wire angle, 25°.

0	12.3	33.47		262	0	12.3	33.47		25.36	262	0.00
10	12.16	33.50		257	10	12.16	33.50		25.42	257	0.03
30	11.67	33.49		249	20	11.97	33.50		25.45	254	0.05
40	10.83	33.56		230	30	11.67	33.49		25.50	249	0.08
50	10.36	33.65		215	50	10.36	33.65		25.86	215	0.12
59	9.87	33.74		200	75	9.68	33.84		26.12	190	0.17
69	9.74	33.80a)		194	100	9.35	33.88		26.21	182	0.22
78	9.63	33.86		188	150	8.80	34.06		26.44	160	0.31
87	9.56	33.88		185	200	8.50	34.12		26.53	152	0.39
96	9.40	33.86		184	250	8.24	34.15		26.59	146	0.46
120	9.10	34.00		169	300	7.94	34.19		26.67	138	0.54
147	8.86	34.06		161	400	7.22	34.23		26.80	126	0.67
195	8.53	34.11		152	500	6.39	34.24		26.92	114	0.80
252	8.22	34.15		146	600	(5.70)	(34.30)		(27.06)	(101)	(0.91)
351	7.61	34.22		132							
468	6.61	34.23		118							
591	5.79	34.30		102							

80.60 PAOLINA-T; February 18, 1955; 0249 GCT; 34°08'N, 121°01'W; sounding, 900 fm; wind, 320°, force 5; weather, missing; sea, moderate; wire angle, 40°.

0	12.5	33.29		279	0	12.5	33.29		25.19	279	0.00
9	12.32	33.24		279	10	12.32	33.24		25.18	279	0.03
25	12.06	33.21		277	20	12.15	33.22		25.20	278	0.06
37	11.57	33.29		262	30	11.85	33.24		25.27	271	0.08
48	11.46	33.42		251	50	11.40	33.44		25.51	248	0.14
55	11.23	33.48		242	75	10.58	33.55		25.74	227	0.20
63	11.22	33.53		238	100	9.40	33.68		26.04	198	0.25
73	10.76	33.54		230	150	8.52	33.94		26.38	165	0.34
80	10.16	33.57		218	200	7.97	34.03		26.54	151	0.42
89	9.86	33.60		211	250	7.53	34.09		26.65	140	0.49
106	9.20	33.75		190	300	7.23	34.16		26.75	130	0.56
122	9.02	33.84b)		180	400	6.75	34.24		26.87	119	0.69
152	8.50	33.94		165	500	(6.06)	(34.28)		(26.99)	(107)	(0.81)
191	8.05	34.02		152							
266	7.40	34.10		138							
369	6.93	34.22		122							
488	6.14	34.27		108							

80.70 PAOLINA-T; February 17, 1955; 2129 GCT; 33°54.5'N, 121°42.5'W; sounding, 1940 fm; wind, 290°, force 3; weather, fog; sea, rough; wire angle, 13°.

0	12.6	33.17		289	0	12.6	33.17		25.08	289	0.00
11	12.12	33.12		284	10	12.12	33.12		25.13	284	0.03
26	12.17	33.32		270	20	12.14	33.24		25.23	275	0.06
56	12.12	33.39		264	30	12.17	33.34		25.29	269	0.08
65	12.04	33.36		266	50	12.14	33.38		25.33	266	0.14
75	10.92	33.19		258	75	10.92	33.19		25.40	258	0.20
90	10.25	33.37		234	100	10.03	33.44		25.75	226	0.26
111	9.38	33.48		210	150	8.79	33.80		26.24	179	0.37
134	9.05	33.68		192	200	8.14	33.98		26.48	156	0.45
163	8.58	33.87		171	250	7.41	34.03		26.62	143	0.53
215	7.96	34.01		152	300	6.66	34.05		26.73	133	0.60
291	6.77	34.04		134	400	6.32	34.21		26.91	116	0.73
397	6.36	34.21		116	500	5.74	34.29		27.05	102	0.84
535	5.56	34.31		98	600	5.22	34.34		27.15	93	0.94
722	4.76	34.38		85	700	4.82	34.37		27.21	86	1.04
956	3.99	34.48		69	800	4.48	34.42		27.29	79	1.13
1267	3.26	34.55		57	1000	3.82	34.50		27.42	66	1.29

a) Mean value of 33.78 and 33.82‰.

b) Loose bottle cap: value falls on property curve.

OBSERVED				INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δ_{T_3}	Z	T	S	O ₂	σ_t	δ_{T_3}	ΔD
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m

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PAOLINA-T; February 17, 1955; 1443 GCT; 33°35'N, 122°23'W; sounding, 2130 fm; wind, 260°, force 4; weather, cloudy; sea, rough; wire angle, 12°.

80.80

0	12.7	33.05		300	0	12.7	33.05		24.96	300	0.00
10	12.68	33.03		301	10	12.68	33.03		24.95	301	0.03
26	12.22	33.05		291	20	12.44	33.04		25.00	297	0.06
56	11.58	33.10		276	30	12.12	33.06		25.08	289	0.09
65	11.54	33.19		269	50	11.68	33.09		25.19	279	0.15
75	10.78	33.19		256	75	10.78	33.19		25.43	256	0.21
89	10.02	33.37a)		230	100	9.59	33.42		25.80	220	0.27
107	9.35	33.44		215	150	8.55	33.80		26.27	176	0.37
131	8.85	33.78		181	200	7.80	33.90		26.46	158	0.46
159	8.39	33.81		173	250	7.23	33.98		26.60	144	0.54
282	6.96	34.04		136	300	6.82	34.08		26.73	132	0.61
382	6.44	34.20		118	400	6.36	34.22		26.91	115	0.74
516	5.61	34.34		97	500	5.70	34.33		27.08	99	0.85
696	4.74	34.42		82	600	5.17	34.38		27.19	89	0.95
922	4.05	34.48		70	700	4.72	34.42		27.26	82	1.04
1226	3.37	34.53		60	800	4.40	34.45		27.32	76	1.12
					1000	3.82	34.49		27.42	67	1.28

PAOLINA-T; February 16, 1955; 1024 GCT; 34°13'N, 119°22.5'W; sounding, 18 fm; wind, 120°, force 1; weather, overcast; sea, slight; wire angle, 00°.

8340

1	12.81	33.43		274	0	(12.81)	(33.43)		(25.23)	(274)	(0.00)
6	12.85	33.43		275	10	12.86	33.45		25.24	274	0.03
11	12.84	33.45		274	20	12.23	33.46		25.36	262	0.05
16	12.51	33.41		270							
21	12.22	33.46		262							
26	12.24	33.47		261							

PAOLINA-T; February 16, 1955; 1224 GCT; 34°08'N, 119°34'W; sounding, 135 fm; wind, 090°, force 1; weather, overcast; sea, smooth; wire angle, 00°.

8343

0	12.80	33.44		273	0	12.80	33.44		25.25	273	0.00
10	12.50	33.46		266	10	12.50	33.46		25.32	266	0.03
15	12.42	33.45		266	20	12.35	33.45		25.34	264	0.05
20	12.35	33.45		264	30	12.03	33.43		25.38	260	0.08
25	12.23	33.49		260	50	11.48	33.52		25.55	244	0.13
30	12.03	33.43		260	75	10.30	33.66		25.88	213	0.19
35	11.90	33.48		254	100	9.69	33.83		26.11	191	0.24
45	11.64	33.49		249	150	9.00	34.07		26.42	162	0.33
55	11.23	33.55		237	200	8.48	34.14		26.55	150	0.41
65	10.60	33.55		226							
74	10.30	33.66		214							
94	9.79	33.78		197							
108	9.58	33.88		186							
139	9.17	34.01		169							
168	8.74	34.15		152							
203	8.46	34.14		149							

a) Loose bottle cap; value falls on property curve.

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

8351 PAOLINA-T; February 16, 1955; 1958 GCT; 33°51.5'N, 120°08'W; sounding, 115 fm; wind, 200°, force 1; weather, rain; sea, smooth; wire angle, 00°.

0	12.62	33.40		273	0	12.62	33.40		25.25	273	0.00
10	12.55	33.40		272	10	12.55	33.40		25.26	272	0.03
15	12.54	33.40		272	20	11.92	33.41		25.39	260	0.05
20	11.92	33.41		260	30	11.19	33.44		25.55	245	0.08
25	11.38	33.45		247	50	10.00	33.65		25.92	209	0.12
30	11.19	33.44		245	75	9.56	33.85		26.15	188	0.17
35	10.66	33.50		231	100	9.30	33.94		26.26	177	0.22
45	10.33	33.57		221	150	9.12	34.04		26.37	166	0.31
55	9.70	33.73		199							
65	9.61	33.80		192							
81	9.49	33.87a)		185							
99	9.31	33.94		177							
118	9.24	34.00		172							
154	9.09	34.04		166							

8360 PAOLINA-T; February 17, 1955; 0134 GCT; 33°34'N, 120°45'W; sounding, 650 fm; wind, 180, force 5; weather, overcast; sea, moderate; wire angle, 15°.

0	12.1	33.39		264	0	12.1	33.39		25.34	264	0.00
10	11.70	33.41		256	10	11.70	33.41		25.43	256	0.03
30	11.38	33.48		245	20	11.52	33.45		25.49	250	0.05
39	11.30	33.49		243	30	11.38	33.48		25.55	245	0.08
49	11.13	33.48		240	50	11.11	33.48		25.59	240	0.12
59	10.65	33.51		230	75	9.95	33.56		25.86	215	0.18
68	10.20	33.53		222	100	9.24	33.80		26.15	187	0.23
78	9.80	33.58		212	150	9.81	34.04		26.41	163	0.32
87	9.55	33.68		200	200	8.42	34.14		26.56	149	0.40
97	9.32	33.76		191	250	7.95	34.18		26.66	139	0.47
121	9.10	33.93		174	300	7.58	34.22		26.74	131	0.54
148	8.86	34.03		163	400	6.87	34.28		26.88	118	0.67
194	8.48	34.13		150	500	6.24	34.31		26.99	107	0.79
250	7.95	34.18b)		139	600	(6.67)	(34.33)		(27.09)	(98)	(0.90)
350	7.20	34.25		124							
466	6.42	34.30		110							
591	5.74	34.33		99							

8735 PAOLINA-T; February 16, 1955; 0346 GCT; 33°49.5'N, 118°38'W; sounding, 340 fm; wind, 240°, force 5; weather, overcast; sea, moderate; wire angle, 08°.

0	13.2	33.39		285	0	13.2	33.39		25.13	285	0.00
10	12.79	33.45		272	10	12.79	33.45		25.26	272	0.03
15	12.72	33.41		274	20	12.65	33.41		25.25	273	0.06
20	12.65	33.41		273	30	12.42	33.38		25.27	271	0.08
25	12.56	33.42		270	50	10.73	33.44		25.63	237	0.13
30	12.42	33.38		271	75	9.97	33.64		25.91	210	0.19
40	11.52	33.41		252	100	9.74	33.77		26.06	196	0.24
50	10.73	33.44		237	150	9.40	34.03		26.33	170	0.33
64	10.17	33.55		219	200	9.22	34.21		26.48	156	0.42
78	9.90	33.67		206	250	8.85	34.24		26.57	147	0.49
98	9.76	33.77		196	300	8.28	34.24		26.67	138	0.57
121	9.62	33.88		186	400	7.39	34.29		26.83	123	0.70
159	9.34	34.07		168							
199	9.22	34.21		156							
248	8.86	34.24		148							
321	8.02	34.24		136							
402	7.38	34.29		123							

- a) Alternate value, 33.92‰, not used in interpolation.
b) Alternate value, 34.14‰, not used in interpolation.

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ _t	δ _T	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$\frac{\delta T}{10 \text{ cm/g}}$	dyn. m

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PAOLINA-T; February 16, 1955; 0037 GCT; 33°39.5'N, 118°58.5'W; sounding, 500 fm; wind, 260°, force 2; weather, overcast; sea, slight; wire angle, 05°.

8740

0	13.3	33.42	284	0	13.3	33.42		25.13	284	0.00
10	12.54	33.42	270	10	12.54	33.42		25.28	270	0.03
15	12.45	33.44	267	20	12.24	33.45		25.36	262	0.05
20	12.24	33.45	262	30	12.13	33.43		25.37	262	0.08
25	12.14	33.44	261	50	11.37	33.51		25.57	242	0.13
30	12.13	33.43	262	75	10.38	33.58		25.80	221	0.19
40	11.93	33.62u	-	100	9.92	33.74		26.00	202	0.24
50	11.37	33.51	242	150	9.49	33.91		26.21	182	0.34
65	10.71	33.53	230	200	8.84	34.14		26.49	155	0.42
79	10.24	33.61	216	250	8.72	34.26		26.61	144	0.50
99	9.94	33.74	202	300	7.91	34.28		26.74	132	0.57
123	9.78	33.80	195	400	6.95	34.34		26.92	114	0.70
162	9.36	33.96	176							
200	8.84	34.14	155							
251	8.72	34.26	144							
325	7.52	34.28	126							
406	6.92	34.34	113							

PAOLINA-T; February 15, 1955; 1855 GCT; 33°20'N, 119°40'W; sounding, 40 fm; wind, 240°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

8750

0	13.61	33.37	294	0	13.61	33.37		25.03	294	0.00
10	13.43	33.30	296	10	13.43	33.30		25.01	296	0.03
15	13.42	33.35	292	20	13.38	33.40		25.10	287	0.06
20	13.38	33.40	287	30	13.20	33.36		25.10	287	0.09
25	13.30	33.37	288	50	11.98	33.29		25.29	269	0.14
30	13.20	33.36	287							
35	12.59	33.33	278							
40	12.46	33.35	274							
50	11.98	33.29	269							
60	10.66	33.35	242							

PAOLINA-T; February 15, 1955; 1333 GCT; 33°03.5'N, 120°20'W; sounding, 336 fm; wind, 360°, force 3; weather, clear; sea, slight; wire angle, 06°.

8760

0	13.4	33.44	285	0	13.4	33.44		25.12	285	0.00
10	13.27	33.35	289	10	13.27	33.35		25.08	289	0.03
30	12.44	33.42	268	20	12.96	33.37		25.16	282	0.06
40	11.88	33.40	260	30	12.44	33.42		25.30	268	0.08
50	10.94	33.73r	-	50	10.94	33.45		25.60	240	0.14
60	10.35	33.50	226	75	9.80	33.62		25.93	208	0.19
70	9.93	33.68u	-	100	9.14	33.80		26.18	185	0.24
80	9.68	33.59u	-	150	8.26	34.01		26.48	156	0.33
90	9.34	33.72	194	200	8.03	34.14		26.61	144	0.40
100	9.14	33.80	185	250	7.72	34.19		26.70	136	0.48
119	8.91	33.87	176	300	7.31	34.24		26.80	126	0.54
144	8.36	34.00	158	400	6.39	34.32		26.99	108	0.66
163	8.15	34.02	154	500	6.03	34.33		27.04	103	0.77
202	8.02	34.14	143							
278	7.48	34.22	130							
381	6.49	34.32	110							
502	6.02	34.33	103							

PAOLINA-T; February 14, 1955; 0053 GCT; 33°28.5'N, 117°45.5'W; sounding, 35 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°.

9028

0	13.65	33.39	293	0	13.65	33.39		25.04	293	0.00
10	13.04	33.38	282	10	13.04	33.38		25.15	282	0.03
16	12.96	33.35	283	20	12.88	33.36		25.17	281	0.06
20	12.88	33.36	281	30	12.47	33.36		25.25	273	0.08
26	12.75	33.37	278							
30	12.47	33.36	273							

S10

CCOFI
5502

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

90.30

PAOLINA-T; February 14, 1955; 0244 GCT; 33°24'N, 117°54.5'W; sounding, 310 fm; wind, 190°, force 2;
weather, partly cloudy; sea, slight; wire angle, 00°.

0	14.11	33.38		302	0	14.11	33.38		24.94	302	0.00
10	13.36	33.40		287	10	13.36	33.40		25.10	287	0.03
15	13.32	33.37		288	20	13.04	33.41		25.17	280	0.06
20	13.04	33.41		280	30	12.90	33.41		25.21	277	0.09
25	12.97	33.38		281	50	11.74	33.36		25.38	260	0.14
30	12.90	33.41		277	75	10.73	33.62		25.77	223	0.20
40	13.61r	33.38		-	100	10.12	33.71		25.95	207	0.25
50	11.74	33.36		260	150	9.17	34.14		26.44	160	0.35
65	10.79	33.51		232	200	9.00	34.15		26.48	156	0.43
80	10.72	33.69		218	250	8.43	34.21		26.61	144	0.50
101	10.09	33.71		206	300	8.22	34.30		26.71	134	0.58
125	9.55	33.80		192	400	7.13	34.37		26.93	114	0.70
164	9.06	34.15		157							
203	8.99	34.15		156							
252	8.41	34.21		144							
325	8.06	34.35		128							
405	7.02	34.37		113							

90.37

PAOLINA-T; February 14, 1955; 0720 GCT; 33°12'N, 118°24.5'W; sounding, 600 fm; wind, 230°, force 3;
weather, fog; sea, slight; wire angle, 05°.

0	13.83	33.38		297	0	13.83	33.38		25.00	297	0.00
10	13.82	33.31		302	10	13.82	33.31		24.94	302	0.03
30	13.38	33.35		291	20	13.60	33.32		24.99	298	0.06
40	13.10	33.40		282	30	13.38	33.35		25.06	291	0.09
50	12.52	33.37		274	50	12.52	33.37		25.24	274	0.15
60	11.05	33.38		247	75	10.53	33.53		25.73	227	0.21
70	10.58	33.58u		-	100	10.05	33.59		25.86	215	0.26
80	10.53	33.49u		-	150	9.22	33.88		26.23	180	0.36
90	10.21	33.54		221	200	8.64	34.10		26.50	154	0.45
100	10.05	33.59		215	250	8.39	34.23		26.63	142	0.52
125	9.94	33.86		193	300	8.03	34.28		26.72	133	0.60
155	9.13	33.89		178	400	7.19	34.32		26.88	118	0.72
202	8.62	34.11		154	500	6.26	34.32		27.00	106	0.84
260	8.36	34.24		140	600	5.69	34.41		27.14	93	0.95
362	7.56	34.32		124							
480	6.40	34.32		108							
606	5.68	34.41		93							

90.45

PAOLINA-T; February 14, 1955; 1247 GCT; 32°54'N, 118°58.5'W; sounding, 900 fm; wind, 330°, force 1;
weather, clear; sea, slight; wire angle, 04°.

0	13.88	33.40		297	0	13.88	33.40		25.00	297	0.00
10	13.89	33.39		298	10	13.89	33.39		24.99	298	0.03
30	13.37	33.38		288	20	13.74	33.38		25.02	295	0.06
40	13.09	33.33		287	30	13.37	33.38		25.09	288	0.09
50	12.73	33.34		280	50	12.73	33.34		25.18	280	0.15
60	11.91	33.30		268	75	10.68	33.36		25.57	242	0.21
70	10.91	33.35		246	100	9.88	33.58		25.88	213	0.27
81	10.54	33.37		239	150	9.62	34.10		26.34	170	0.36
91	10.13	33.50		223	200	8.42	34.08		26.51	153	0.45
101	9.86	33.59		212	250	7.94	34.10		26.60	145	0.52
126	9.88	33.92		187	300	7.56	34.15		26.69	136	0.60
155	9.49	34.10		168	400	7.19	34.25		26.87	119	0.73
203	8.38	34.08		152	500	6.88	34.32		27.00	107	0.85
261	7.84	34.11		143	600	5.81	34.36		27.09	98	0.95
363	7.08	34.22		124							
482	6.38	34.29a)		113							
607	5.80	34.36		98							

a) Loose bottle cap; value falls on property curve.

OBSERVED				INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δ_{T_3}	Z	T	S	O ₂	σ_t	δ_{T_3}	ΔD
m	°C	‰	ml/L	10^{-5} cm/g	m	°C	‰	ml/L	g/L	10^{-5} cm/g	dyn. m

SIO
CCOF1
5502

PAOLINA-T; February 14, 1955; 1644 GCT; 32°44'N, 119°16'W; sounding, 155 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

90.50

0	13.76	33.40		295	0	13.76	33.40		25.02	295	0.00
10	13.61	33.39		292	10	13.61	33.39		25.04	292	0.03
15	13.42	33.36		291	20	13.14	33.35		25.11	286	0.06
20	13.14	33.35		286	30	12.72	33.32		25.17	281	0.09
25	12.96	33.33		284	50	10.88	33.41		25.58	241	0.14
30	12.72	33.32		281							
35	11.53	33.37		255							
40	11.22	33.40		248							
50	10.88	33.41		241							
60	10.45	33.45		232							

PAOLINA-T; February 14, 1955; 2251 GCT; 32°22'N, 119°58'W; sounding, 460 fm; wind, 010°, force 4; weather, cloudy; sea, rough; wire angle, 05°.

90.60

0	13.3	33.37		289	0	13.3	33.37		25.08	289	0.00
10	13.00	33.38		282	10	13.00	33.38		25.16	282	0.03
30	12.85	33.36		280	20	12.89	33.38		25.17	280	0.06
40	12.82	33.37		279	30	12.85	33.36		25.17	280	0.08
50	12.52	33.39		272	50	12.52	33.39		25.26	272	0.14
61	10.72	33.45		236	75	9.69	33.61		25.93	208	0.20
71	9.99	33.54		217	100	9.19	33.83		26.20	183	0.25
81	9.48	33.67		200	150	8.79	34.02		26.41	163	0.34
91	9.28	33.75		190	200	7.99	34.08		26.58	147	0.42
101	9.18	33.84		182	250	7.65	34.18		26.69	136	0.49
126	8.98	33.89		175	300	7.33	34.23		26.79	126	0.56
156	8.71	34.04		160	400	6.63	34.30		26.93	113	0.68
205	7.92	34.09		146	500	6.11	34.34		27.04	103	0.79
263	7.60	34.19		134	600	5.58	34.39		27.14	93	0.90
365	6.84	34.28		117							
483	6.20	34.33		105							
608	5.49	34.39		92							

PAOLINA-T; February 15, 1955; 0445 GCT; 32°04'N, 120°38'W; sounding, 2100 fm; wind, 270°, force 2; weather, missing; sea, moderate; wire angle, 00°.

90.70

0	13.6	33.32		298	0	13.6	33.32		24.99	298	0.00
10	13.48	33.28		298	10	13.48	33.28		24.98	298	0.03
25	13.46	33.46u		-	20	13.47	33.28		24.99	298	0.06
50	13.25	33.31		291	30	13.43	33.31		25.02	295	0.09
60	13.33	33.30		292	50	13.25	33.31		25.06	291	0.15
70	13.34	33.33		291	75	13.24	33.30		25.04	293	0.22
80	13.11	33.22		297	100	12.91	33.29		25.11	286	0.29
100	12.91	33.29		286	150	9.57	33.54		25.91	210	0.42
124	10.84	33.27		251	200	8.17	33.95		26.45	159	0.51
154	9.40	33.58		206	250	7.52	34.06		26.63	142	0.59
203	8.16	33.96		158	300	7.09	34.12		26.74	132	0.66
271	7.31	34.09		137	400	6.36	34.19		26.89	118	0.79
374	6.50	34.18		120	500	5.70	34.24		27.02	105	0.91
503	5.64	34.25		104	600	5.20	34.39		27.19	89	1.01
684	4.97	34.43		84	700	4.92	34.43		27.26	82	1.10
906	4.19	34.47		72	800	4.65	34.44		27.30	79	1.19
1212	3.42	34.54		60	1000	4.08	34.48		27.39	70	1.35

S10

CCOFI
5502

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

93.27

PAOLINA-T; February 13, 1955; 1916 GCT; 32°56'N, 117°19'W; sounding, 46 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

0	13.40	33.42		286	0	13.40	33.42		25.11	286	0.00
10	13.04	33.42		280	10	13.04	33.42		25.18	280	0.03
15	12.82	33.37		279	20	12.79	33.38		25.20	278	0.06
20	12.79	33.38		278	30	12.51	33.30		25.20	278	0.08
25	12.64	33.33		279	50	11.57	33.40		25.45	254	0.14
30	12.51	33.30		278							
35	-	33.39		-							698 838
40	12.00	33.38		263							
50	11.57	33.40		254							
61	10.41	33.48		228							

93.30

PAOLINA-T; February 13, 1955; 1606 GCT; 32°50.5'N, 117°31.5'W; sounding, 455 fm; wind, 360°, force 1; weather, clear; sea, slight; wire angle, 00°.

0	13.08	33.41		281	0	13.08	33.41		25.17	281	0.00
10	12.98	33.40		280	10	12.98	33.40		25.18	280	0.03
30	10.83	33.35		245	20	12.20	33.38		25.32	267	0.06
40	10.48	33.40		235	30	10.83	33.35		25.54	245	0.08
51	10.39	33.49		227	50	10.40	33.49		25.73	227	0.13
61	9.70	33.51		215	75	9.35	33.60		25.99	202	0.18
71	-	33.57		-	100	9.20	33.75		26.13	189	0.23
80	9.30	33.62		200	150	9.38	34.09		26.37	167	0.32
90	9.19	33.68a)		194	200	9.16	34.23		26.52	152	0.40
100	9.20	33.75		189	250	8.99	34.32		26.61	144	0.48
126	9.46	33.96		178	300	8.75	34.34		26.67	138	0.55
155	9.36	34.11		164	400	7.82	34.33		26.80	126	0.69
203	9.14	34.24		152	500	6.67	34.31		26.94	112	0.81
262	8.96	34.33		142	600	5.84	34.41		27.14	94	0.92
364	8.20	34.34		131							
483	6.83	34.31		114							
610	5.79	34.42		93							

93.40

PAOLINA-T; February 13, 1955; 0911, 1022 GCT; 32°33.5'N, 118°08.5'W; sounding, 950 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°, 03°.

0	13.23r	33.49		-	0	13.9	33.49		25.06	291	0.00
10	13.74	33.48		288	10	13.74	33.48		25.09	288	0.03
31	12.85	33.52		268	20	13.28	33.49		25.19	279	0.06
41	12.84	33.54		267	30	12.86	33.52		25.29	269	0.08
51	11.66	33.57		243	50	11.80	33.57		25.54	246	0.14
61	10.82	33.48		236	75	10.02	33.60		25.87	214	0.19
71	10.20	33.56		220	100	9.46	33.73		26.07	195	0.24
81	9.82	33.64		208	150	8.54	33.96		26.40	164	0.34
91	9.63	33.68b)		201	200	8.78	34.20		26.55	149	0.42
101	9.46	33.74		194	250	8.68	34.35		26.69	136	0.49
126	9.02	33.94		172	300	8.34	34.38		26.76	130	0.56
155	8.49	33.97		162	400	7.40	34.36		26.88	118	0.68
202	8.77c)	34.20		149	500	6.36	34.32		26.99	108	0.80
					600	5.59	34.38		27.14	94	0.91
200	8.80c)	34.21		149							
265	8.60	34.37		134							
367	7.74	34.38		122							
485	6.46	34.32		109							
610	5.49	34.39		92							

a) Alternate value, 33.71‰, not used in interpolation.

b) Alternate value, 33.72‰, not used in interpolation.

c) Curve drawn between the points.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m	

PAOLINA-T; February 13, 1955; 0238 GCT; 32°09.5'N, 118°50.5'W; sounding, 630 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°.

9350

0	13.47	33.38		290	0	13.47	33.38		25.06	290	0.00
10	13.46	33.40		289	10	13.46	33.40		25.08	289	0.03
30	13.24	33.37		287	20	13.34	33.39		25.10	288	0.06
40	13.22	33.34		288	30	13.24	33.37		25.10	287	0.09
50	13.09	33.37		284	50	13.09	33.37		25.13	284	0.14
59	11.34	33.39		251	75	10.10	33.45		25.75	226	0.21
69	10.29	33.42		231	100	9.32	33.75		26.11	191	0.26
79	10.00	33.48		222	150	8.65	33.96		26.38	165	0.35
89	9.74	33.64		206	200	8.00	34.12		26.61	144	0.43
97	9.38	33.73		194	250	7.52	34.16		26.71	134	0.50
121	9.10	33.80		184	300	7.13	34.19		26.78	127	0.57
149	8.67	33.95		167	400	6.43	34.26		26.93	113	0.69
195	8.06	34.12		145	500	5.98	34.33		27.05	102	0.80
250	7.52	34.16		134	600	(5.41)	(34.37)		(27.15)	(92)	(0.91)
350	6.74	34.23		119							
467	6.12	34.32		104							
590	5.52	34.37		94							

PAOLINA-T; February 12, 1955; 0148 GCT; 32°15'N, 117°08.5'W; sounding, 28 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°.

9730

0	13.36	33.39		288	0	13.36	33.39		25.10	288	0.00
10	13.05	33.44		278	10	13.05	33.44		25.20	278	0.03
15	13.00	33.37		282	20	12.75	33.37		25.20	278	0.06
20	12.75	33.37		278	30	12.05	33.42		25.38	261	0.08
26	12.27	33.37		269							
31	12.01	33.42		260							

PAOLINA-T; February 12, 1955; 0414 GCT; 32°11.5'N, 117°17'W; sounding, 750 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 05°.

9732

0	13.75	33.36		297	0	13.75	33.36		24.99	297	0.00
10	13.34	33.36		290	10	13.34	33.36		25.07	290	0.03
21	13.10	33.36		286	20	13.12	33.36		25.12	286	0.06
41	11.85	33.34		264	30	12.53	33.35		25.23	275	0.09
61	10.64	33.49		232	50	11.22	33.41		25.52	247	0.14
80	10.15	33.56		218	75	10.26	33.54		25.79	222	0.20
100	10.16	33.84		198	100	10.16	33.84		26.04	198	0.25
120	9.86	33.95		185	150	9.45	34.00		26.28	175	0.34
140	9.69	33.97		181	200	9.23	34.20		26.48	156	0.43
159	9.25	34.04		169	250	(8.33)	(34.18)		(26.60)	(144)	(0.50)
178	9.14	34.08		164							
197	9.24	34.18		158							
216	9.16	34.23		153							
225	9.01	34.24		150							
235	8.92	34.22		150							
245	8.50	34.19		146							

S10

CCOFI
5502

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

97.32

PAOLINA-T; February 12, 1955; 0647 GCT; 32°11.5'N, 117°17'W; sounding, 750 fm; wind, 340°, force 4; weather, partly cloudy; sea, slight; wire angle, 04°.

0	13.54	33.37		292	0	13.54	33.37		25.04	292	0.00
11	13.26	33.36		288	10	13.29	33.36		25.09	289	0.03
31	12.78	33.33		281	20	13.03	33.35		25.12	285	0.06
41	12.12	33.36		267	30	12.81	33.33		25.16	282	0.09
50	10.80	33.41		240	50	10.80	33.41		25.60	240	0.14
60	10.42	33.46		230	75	10.23	33.73		25.93	208	0.19
70	10.29	33.63		216	100	10.06	33.93		26.13	190	0.24
80	10.20	33.80		202	150	9.26	34.02		26.33	170	0.34
91	10.12	33.82		199	200	9.16	34.20		26.49	155	0.42
101	10.00	33.94		189	250	9.00	34.27		26.57	147	0.50
126	9.76	33.99		180	300	8.62	34.33		26.68	137	0.57
155	9.18	34.03		168	400	7.74	34.39		26.85	121	0.70
204	9.16	34.21		154	500	6.82	34.38		26.97	109	0.82
262	8.92	34.30		144	600	5.83	34.38		27.11	97	0.93
365	8.04	34.39		125							
483	7.00	34.38		111							
608	5.78	34.38		96							

97.40

PAOLINA-T; February 12, 1955; 1241 GCT; 31°56'N, 117°51'W; sounding, 650 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 00°.

0	13.52	33.41		289	0	13.52	33.41		25.08	289	0.00
10	13.49	33.37		291	10	13.49	33.37		25.06	291	0.03
30	12.84	33.39		278	20	13.18	33.38		25.12	285	0.06
40	12.74	33.35		279	30	12.84	33.39		25.20	278	0.09
50	12.57	33.35		276	50	12.57	33.35		25.22	276	0.14
60	12.49	33.39		272	75	10.84	33.36		25.55	245	0.21
70	11.41	33.37		254	100	9.50	33.58		25.95	207	0.26
80	10.34	33.36		236	150	8.85	33.96		26.36	167	0.36
90	9.96	33.62		211	200	8.70	34.24		26.59	145	0.44
100	9.50	33.58		207	250	8.21	34.29		26.70	135	0.51
126	9.12	33.86		180	300	7.70	34.30		26.79	126	0.58
154	8.72	33.97		166	400	6.96	34.35		26.94	113	0.70
203	8.68	34.25		144	500	6.38	34.44		27.08	100	0.81
262	8.10	34.29		133	600	5.69	34.42		27.16	92	0.91
364	7.08	34.32		117							
484	6.47	34.44		100							
608	5.60	34.42		91							

97.50

PAOLINA-T; February 12, 1955; 1859, 1943 GCT; 31°34'N, 118°25'W; sounding, 875 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 05°, 05°.

0	14.30	33.36		308	0	14.30	33.36		24.88	308	0.00
10	14.22	33.29		312	10	14.22	33.29		24.84	312	0.03
30	14.14	33.30		309	20	14.18	33.30		24.86	310	0.06
40	14.14	33.27		311	30	14.14	33.30		24.87	309	0.09
51	14.10	33.29		309	50	14.12	33.29		24.87	309	0.16
61	13.64	33.26		302	75	12.40	33.22		25.15	282	0.23
71	12.63	33.22a)		286	100	10.78	33.33		25.54	246	0.30
81	12.14	33.23		277	150	9.00	33.77		26.18	185	0.40
91	11.25	33.30		256	200	8.59	34.12		26.51	153	0.49
100	10.78	33.33		246	250	8.20	34.24		26.66	138	0.57
124	9.43	33.55		208	300	7.75	34.28		26.76	130	0.64
153	8.99	33.78		184	400	6.92	34.33		26.92	114	0.76
202	8.58	34.18		148	500	6.26	34.38		27.05	102	0.87
					600	5.62	34.42		27.16	91	0.98
197	8.64	34.09		156							
261	8.14	34.25		136							
365	7.16	34.31		119							
483	6.38	34.38b)		104							
608	5.59	34.42		91							

a) Alternate value, 33.27‰, not used in interpolation.

b) Alternate value, 34.45‰, not used in interpolation.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	$\delta_{T_3}^{-5}$	Z	T	S	O ₂	σ_t	$\delta_{T_3}^{-5}$	ΔD	
m	°C	‰	ml/L	10 ⁻⁵ cm ³ /g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m	

CREST; February 11, 1955; 0635, 0650 GCT; 31°42'N, 116°43.5'W; sounding, 100 fm; wind, 060°, force 3; weather, clear; sea, slight; wire angle, 04°, 03°.

100.29

0	12.77	33.40	6.86	276	0	12.77	33.40	6.86	25.22	276	0.00
10	12.64	33.33	7.02	279	10	12.64	33.33	7.02	25.19	279	0.03
15	12.46	33.33	6.64	275	20	12.26	33.27	5.62	25.22	276	0.06
20	12.26	33.27	5.62	276	30	12.08	33.30	5.25	25.27	271	0.08
25	12.14	33.28	5.34	273	50	11.27	33.34	4.04	25.45	254	0.14
30	12.08	33.30	5.25	271	75	10.36	33.66	3.40	25.86	214	0.19
35	11.96	33.31	5.11	267	100	10.05	33.78	2.86	26.01	200	0.25
45	11.55	33.31	4.36	260							
55	11.00	33.40	3.82	240							
65	10.66	33.55	3.54	228							
80	10.20	33.71	3.33	208							
101	10.04	33.78	2.85	200							
124	9.88	33.86	2.61	92							

CREST; February 11, 1955; 0816, 0830 GCT; 31°40.5'N, 116°47'W; sounding, 245 fm; wind, 060°, force 1; weather, clear; sea, moderate; wire angle, 02°, 03°.

100.30

0	12.8	33.33	6.90	282	0	12.8	33.33	6.90	25.16	282	0.00
10	12.90	33.32	6.72	284	10	12.90	33.32	6.72	25.13	284	0.03
15	12.84	33.30	6.57	285	20	12.82	33.32	6.80	25.15	282	0.06
					30	12.77	33.36	6.62	25.19	279	0.08
20	12.82	33.32	6.80	282	50	11.40	33.34	4.60	25.43	256	0.14
25	12.80	33.36	6.54	279	75	10.25	33.66	3.26	25.88	213	0.20
31	12.76	33.36	6.62	278	100	9.98	33.86	2.72	26.09	194	0.25
41	12.13	33.39	5.30	265	150	9.60	34.03	2.25	26.29	174	0.34
51	11.35	33.34	4.54	255	200	9.50	34.20	1.76	26.43	160	0.43
66	10.44	33.56	3.46	224	250	9.18	34.27	0.96	26.53	151	0.51
81	10.15	33.72a)	3.03	207	300	8.68	34.30		26.64	141	0.58
101	9.98	33.86a)	2.71	194	400	7.82	34.33		27.79	127	0.72
126	9.81	33.94	2.46	185							
166	9.46	34.10	2.14	168							
205	9.49	34.21	1.69	160							
253	9.15	34.27	0.94	150							
326	8.41	34.31	1.43u	136							
406	7.78	34.33	0.82	126							

CREST; February 11, 1955; 1336 GCT; 31°21'N, 117°27'W; sounding, 1070 fm; wind, 300°, force 1; weather, clear; sea, slight; wire angle, 04°.

100.40

0	13.8	33.36	6.31	298	0	13.8	33.36	6.31	24.99	298	0.00
10	13.61	33.35	6.52	295	10	13.61	33.35	6.52	25.02	295	0.03
25	13.43	33.34	6.07	293	20	13.48	33.34	6.26	25.03	294	0.06
51	12.21	33.31	4.96	272	30	13.38	33.34	5.83	25.05	292	0.09
61	11.44	33.35	4.90	256	50	12.25	33.31	4.96	25.25	273	0.14
71	10.88	33.40	4.00	242	75	10.78	33.43	3.98	25.62	238	0.21
82	10.66	33.51	3.93	230	100	9.93	33.59	3.43	25.88	212	0.27
102	9.88	33.59	3.41	212	150	9.26	33.99	2.48	26.31	172	0.36
127	9.72	33.82	2.97	192	200	8.33	34.06	1.69	26.51	153	0.44
158	9.10	34.02	2.36	168	250	8.02	34.19	1.42	26.65	140	0.52
206	8.25	34.07	2.73r	152	300	7.62	34.24	1.21	26.76	130	0.59
276	7.90	34.22	1.34	135	400	6.79	34.30	0.78	26.92	114	0.72
338p	7.12	34.26	1.02	122	500	6.39	34.35	0.34	27.01	106	0.83
517p	6.36	34.35	0.33	105	600	(5.98)	(34.38)	(0.33)	(27.09)	(98)	(0.94)
812p	4.76	34.42	0.39	81	700	(5.43)	(34.40)	(0.36)	(27.18)	(90)	(1.04)
					800	(4.83)	(34.42)	(0.39)	(27.26)	(82)	(1.13)

a) Salinity samples at 81 and 101 meters appear to have been reversed; it is assumed they are in the order listed.

S10

CCOFI
5502

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

100.50

CREST; February 11, 1955; 1913 GCT; 31°00'N, 118°07'W; sounding, 950 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 01°.

0	14.7	33.32	6.19	319	0	14.7	33.32	6.19	24.77	319	0.00
10	14.22	33.36	6.29	307	10	14.22	33.36	6.29	24.89	307	0.03
25	13.97	33.32	6.24	304	20	14.04	33.33	6.26	24.91	305	0.06
50	13.12	33.30	5.87	290	30	13.83	33.31	6.18	24.94	302	0.09
60	12.80	33.38	5.84	278	50	13.12	33.30	5.87	25.07	290	0.15
71	12.17	33.28	5.19	273	75	11.80	33.29	5.08	25.32	267	0.22
81	11.50	33.31	5.01	260	100	10.62	33.39	4.49	25.61	239	0.28
101	10.60	33.39	4.47	238	150	9.41	33.97	2.65	26.26	177	0.39
126	9.34	33.74	3.28	192	200	8.80	34.12	2.21	26.48	156	0.48
155	9.42	34.00	2.54	174	250	8.64	34.23	1.45	26.60	145	0.55
204	8.76	34.13	2.17	154	300	8.32	34.31	1.02	26.71	134	0.62
274	8.58	34.32	1.06	138	400	6.96	34.27	0.78	26.87	119	0.76
378	7.17	34.27	0.86	122	500	6.19	34.30	0.41	26.99	107	0.87
509	6.14	34.30	0.40	107	600	5.61	34.37	0.32	27.12	95	0.98
690	5.14	34.43	0.27	85	700	5.12	34.43	0.27	27.24	84	1.08
913	4.31	34.55	0.51	68	800	4.68	34.48	0.37	27.32	76	1.16

100.60

CREST; February 12, 1955; 0030 GCT; 30.40'N, 118°47'W; sounding, 1650 fm; wind, 320°, force 2; weather, fog; sea, slight; wire angle, 02°.

0	14.7	33.40	6.05	313	0	14.7	33.40	6.05	24.83	313	0.00
10	14.20	33.39	6.18	304	10	14.20	33.39	6.18	24.92	304	0.03
25	13.88	33.36	6.16	300	20	13.97	33.36	6.17	24.95	301	0.06
51	13.56	33.37	6.06	293	30	13.82	33.36	6.14	24.98	298	0.09
61	13.18	33.39	5.83	284	50	13.57	33.37	6.07	25.04	293	0.15
71	12.02	33.28	5.08	271	75	11.60	33.29	4.84	25.35	263	0.22
82	11.16	33.33	4.56	252	100	10.40	33.48	3.99	25.72	228	0.28
102	10.36	33.49	3.96	227	150	8.94	33.85	3.20	26.25	178	0.38
127	9.62	33.71	3.47	199	200	8.33	34.03	2.66	26.48	156	0.47
157	8.78	33.88	3.13	173	250	7.74	34.08	2.04	26.61	144	0.55
208	8.24	34.04	2.60	153	300	7.12	34.13	1.45	26.73	132	0.62
277	7.40	34.11	1.68	137	400	6.46	34.22	0.91	26.89	117	0.75
379	6.57	34.19	1.00	120	500	6.10	34.44	0.33	27.12	96	0.86
509	6.02	34.45	0.29	94	600	5.60	34.45	0.29	27.19	89	0.96
691	5.10	34.45	0.39	83	700	5.05	34.45	0.40	27.25	83	1.05
914	4.20	34.50	0.51	70	800	4.60	34.47	0.46	27.32	76	1.13
1217	3.39	34.59	0.94	55	1000	3.96	34.53	0.63	27.44	65	1.29

100.70

CREST; February 12, 1955; 0616 GCT; 30°19'N, 119°26'W; sounding, 2100 fm; wind, 350°, force 2; weather, partly cloudy; sea, slight; wire angle, 08°.

0	15.2	33.39	6.03	324	0	15.2	33.39	6.03	24.71	324	0.00
10	15.06	33.40	5.61	321	10	15.06	33.40	5.61	24.75	321	0.03
25	15.04	33.40	5.60	320	20	15.05	33.40	5.60	24.75	321	0.06
50	14.79	33.35	5.95	319	30	15.02	33.39	5.61	24.76	320	0.10
61	14.23	33.27	5.83	317	50	14.79	33.35	5.95	24.77	319	0.16
71	13.16	33.15	5.69	301	75	13.14	33.24	5.60	25.03	294	0.24
81	13.12	33.29	5.50	290	100	10.76	33.21	5.04	25.45	254	0.31
100	10.76	33.21	5.04	254	150	8.96	33.59	3.74	26.05	197	0.42
124	9.46	33.47	4.34	214	200	8.17	33.89	2.91	26.40	164	0.51
153	8.91	33.61	3.70	195	250	7.40	33.96	2.20	26.57	148	0.59
202	8.16	33.89	2.90	164	300	7.08	34.06	1.50	26.68	137	0.67
271	7.08	33.99	1.87	142	400	6.98	34.27	0.61	26.87	119	0.80
373	7.18	34.27	0.70	122	500	6.10	34.27	0.44	26.99	108	0.92
500	6.10	34.27	0.44	108	600	5.54	34.33	0.36	27.11	97	1.03
681	5.15	34.40	0.32	88	700	5.06	34.41	0.32	27.22	86	1.12
901	4.28	34.52	0.50	70	800	4.64	34.48	0.41	27.32	76	1.21
1202	3.43	34.53	0.94	60	1000	3.98	34.53	0.65	27.43	66	1.37

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

CREST; February 12, 1955; 1156 GCT; 29°59'N, 120°05'W; sounding, 2200 fm; wind, 010°, force 2; weather, clear; sea, slight; wire angle, 05°.

100.80

0	14.3	33.30	7.55	312	0	14.3	33.30	7.55	24.84	312	0.00
10	14.22	33.27	6.03	313	10	14.22	33.27	6.03	24.83	313	0.03
25	13.99	33.23	6.00	311	20	14.04	33.24	6.01	24.84	312	0.06
50	13.74	33.24	5.88	306	30	13.95	33.23	5.98	24.85	311	0.09
61	13.49	33.26	5.92	300	50	13.74	33.24	5.88	24.90	306	0.16
72	12.53	33.19	5.77	287	75	12.34	33.19	5.72	25.13	284	0.23
82	12.12	33.18	5.66	280	100	10.81	33.17	5.17	25.41	258	0.30
101	10.78	33.17	5.17	257	150	9.27	33.47	4.14	25.90	211	0.42
125	10.22	33.22	4.87	244	200	8.46	33.94	2.91	26.39	164	0.51
155	9.11	33.55	3.99	203	250	7.97	34.00	2.87	26.52	153	0.59
202	8.44	33.94	2.90	164	300	7.53	34.09	2.30	26.65	140	0.67
269	7.78	34.02	2.85	149	400	6.81	34.26	0.76	26.88	118	0.80
371	7.02	34.24	0.90	122	500	6.08	34.34	0.39	27.04	103	0.92
496	6.11	34.34	0.40	103	600	5.52	34.42	0.33	27.18	90	1.02
675	5.18	34.45	0.33	84	700	5.07	34.46	0.33	27.26	82	1.11
902	4.36	34.51	0.47	71	800	4.68	34.49	0.38	27.32	76	1.20
1206	3.50	34.56	0.82	59	1000	4.06	34.53	0.58	27.43	66	1.36

CREST; February 13, 1955; 1619 GCT; 31°05'N, 116°25.5'W; sounding, 43 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

103.30

0	14.4	33.42	6.03	306	0	14.4	33.42	6.03	24.90	306	0.00
10	14.30	33.38	5.95	307	10	14.30	33.38	5.95	24.89	307	0.03
15	13.94	33.36	6.02	301	20	13.53	33.33	5.90	25.02	295	0.06
20	13.53	33.33	5.90	295	30	12.90	33.33	6.68	25.14	283	0.09
25	13.38	33.30	6.22	295	50	11.38	33.48	4.19	25.54	245	0.14
30	12.90	33.33	6.68	283							74
35	12.22	33.32	5.50	271							80
40	11.71	33.42	4.88	255							
50	11.38	33.48a)	4.19	245							
60	10.97	33.57	3.42	231							

CREST; February 13, 1955; 1307 GCT; 30°57'N, 116°45.5'W; sounding, 1000 fm; wind, 350°, force 2; weather, clear; sea, slight; wire angle, 09°.

103.35

0	14.9	33.46	5.95	313	0	14.9	33.46	5.95	24.83	313	0.00
10	14.75	33.43	5.99	312	10	14.75	33.43	5.99	24.84	312	0.03
31	14.69	33.45	6.03	310	20	14.73	33.44	6.01	24.85	311	0.06
41	14.36	33.42	6.01	305	30	14.72	33.45	6.03	24.86	310	0.09
51	14.28	33.39	6.03	305	50	14.29	33.39	6.03	24.91	305	0.16
61	14.08	33.36	5.93	304	75	12.26	33.31	5.17	25.24	273	0.23
71	12.87	33.30	5.47	285	100	10.95	33.48	4.00	25.62	238	0.29
81	11.49	33.34	4.76	257	150	8.96	33.81	3.38	26.22	181	0.40
90	11.38	33.48	4.25	245	200	8.47	34.02	2.55	26.46	158	0.48
99	11.01	33.48	4.02	239	250	8.21	34.16	1.63	26.60	145	0.56
124	9.62	33.62	3.77	206	300	7.87	34.22	1.23	26.70	135	0.64
152	8.92	33.82	3.37	180	400	7.12	34.29	0.75	26.86	120	0.77
199	8.49	34.02	2.62	158	500	6.39	34.34	0.45	27.00	107	0.89
256	8.19	34.17	1.59	143	600	(5.79)	(34.36)	(0.37)	(27.10)	(97)	(0.99)
356	7.46	34.26	0.93	126							
473	6.57	34.33	0.50	110							
595	5.81	34.36	0.37	97							

a) Loose bottle cap; value falls on property curve.

S10

CCOFI
5502

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

103.40

CREST; February 13, 1955; 0921 GCT; 30°47.5'N, 117°06'W; sounding, 930 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 06°.

0	15.2	33.42	5.88	322	0	15.2	33.42	5.88	24.73	322	0.00
10	15.12	33.43	6.03	320	10	15.12	33.43	6.03	24.76	320	0.03
30	14.97	33.46	6.82u	314	20	15.04	33.45		24.80	316	0.06
40	14.93	33.45	5.93	314	30	14.97	33.46		24.82	314	0.10
50	14.92	33.44	5.85	315	50	14.92	33.44	5.85	24.81	315	0.16
60	14.88	33.46	5.73	313	75	12.20	33.33	4.80	25.27	271	0.23
70	13.06	33.34	5.08	286	100	10.40	33.40	4.20	25.65	234	0.30
80	11.58	33.32	4.58	260	150	8.70	33.80	3.30	26.25	178	0.40
90	11.12	33.36	4.39	249	200	8.32	34.04	2.59	26.50	154	0.48
100	10.40	33.40	4.20	234	250	8.02	34.18	1.53	26.65	140	0.56
125	9.33	33.58	3.76	204	300	7.52	34.20	1.30	26.74	131	0.63
155	8.60	33.86	3.22	172	400	6.66	34.25	0.78	26.89	117	0.76
204	8.30	34.05	2.53	154	500	6.17	34.31	0.40	27.00	106	0.88
246	8.06	34.18	1.56	141	600	5.65	34.43	0.41	27.17	91	0.98
365	6.88	34.23	1.01	121							
483	6.22	34.30	0.40	108							
608	5.60	34.45	0.41	89							

103.50

CREST; February 13, 1955; 0340 GCT; 30°25.5'N, 117°45'W; sounding, 1550 fm; wind, 340°, force 3; weather, missing; sea, slight; wire angle, 08°.

0	14.7	33.38	5.98	315	0	14.7	33.38	5.98	24.81	315	0.00
10	14.52	33.40	6.03	310	10	14.52	33.40	6.03	24.86	310	0.03
30	14.05	33.37	5.96	302	20	14.27	33.39	6.02	24.90	306	0.06
40	13.98	33.39	5.90	300	30	14.05	33.37	5.96	24.94	302	0.09
51	13.96	33.38	5.77	300	50	13.98	33.38	5.81	24.97	300	0.15
61	11.29	33.24	4.65	261	75	10.70	33.25	4.45	25.49	250	0.22
71	10.79	33.19	4.62	256	100	10.08	33.48	3.92	25.77	224	0.28
81	10.58	33.33	4.26	243	150	8.64	33.83	3.10	26.28	175	0.38
92	10.20	33.47	4.04	226	200	8.06	33.94	2.69	26.45	159	0.47
102	10.05	33.48	3.88	223	250	7.50	33.98	2.15	26.56	148	0.54
125	9.24	33.75	3.37	190	300	7.22	34.09	1.82	26.69	136	0.62
155	8.54	33.84	3.03	173	400	6.67	34.27	0.62	26.90	116	0.75
203	8.03	33.94	2.64	158	500	5.95	34.32	0.33	27.05	102	0.86
262	7.38	34.00	2.03	145	600	5.24	34.35	0.32	27.15	92	0.97
366	6.95	34.24	0.75	121							
484	6.01	34.32	0.35	103							
608	5.18	34.35	0.31	91							

103.60

CREST; February 12, 1955; 2217 GCT; 30°06'N, 118°24'W; sounding, 1900 fm; wind, 350°, force 2; weather, partly cloudy; sea, moderate; wire angle, 09°.

0	14.8	33.43	6.03	313	0	14.8	33.43	6.03	24.83	313	0.00
10	14.34	33.38	6.00	308	10	14.34	33.38	6.00	24.89	308	0.03
30	14.04	33.34	6.00	305	20	14.18	33.36	6.00	24.90	306	0.06
40	13.93	33.34	5.81	302	30	14.04	33.34	6.00	24.92	305	0.09
50	13.94	33.35	5.84	302	50	13.94	33.35	5.84	24.95	302	0.15
59	13.69	33.31	5.67	300	75	11.00	33.31	4.42	25.49	250	0.22
69	11.32	33.26	4.62	260	100	9.50	33.54	3.68	25.91	210	0.28
79	10.86	33.35	4.33	246	150	8.62	33.86	2.90	26.31	172	0.38
89	10.50	33.41	4.17	235	200	7.92	33.98	2.76	26.50	154	0.46
99	9.55	33.53	3.70	211	250	7.60	34.03	2.38	26.59	146	0.54
122	8.96	33.70	3.24	189	300	7.20	34.10	1.73	26.70	135	0.61
150	8.62	33.86	2.90	172	400	6.26	34.19	0.70	26.90	116	0.74
198	7.94	33.98	2.78	154	500	5.61	34.25	0.59	27.03	104	0.86
254	7.57	34.04	2.36	144	600	(5.43)	(34.41)	(0.89)	(27.18)	(90)	(0.96)
353	6.70	34.17	0.98	124							
468	5.77	34.23	0.45	107							
589	5.46	34.38	0.85	92							

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5502

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	10 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m

CREST; February 13, 1955; 2115 GCT; 30°26'N, 116°11.5'W; sounding, 360 fm; wind, 350°, force 1; weather, fog; sea, slight; wire angle, 07°.

107.32

0	14.46	33.38	6.27	310	0	14.46	33.38	6.27	24.86	310	0.00
10	13.90	33.36	6.53	300	10	13.90	33.36	6.53	24.96	300	0.03
15	13.54	33.30	6.64	298	20	13.02	33.32	6.34	25.11	286	0.06
20	13.02	33.32	6.34	286	30	12.02	33.31	5.22	25.29	269	0.09
25	12.29	33.34	5.46	272	50	11.02	33.38	4.49	25.53	246	0.14
30	12.02	33.31	5.22	269	75	10.38	33.42	4.08	25.68	232	0.20
35	11.62	33.32	4.92	261	100	10.09	33.75	3.10	25.98	204	0.25
45	11.25	33.36	4.69	251	150	9.76	34.12	2.03	26.33	170	0.35
55	10.84	33.40	4.34	242	200	10.03	34.37	1.03	26.48	156	0.43
70	10.50	33.41	4.27	235	250	(9.69)	(34.44)	(0.77)	(26.59)	(146)	(0.51)
85	10.15	33.60	3.63	216							
105	10.06	33.77	3.02	202							
133	9.28	33.88	2.99	181							
166	10.20	34.32	1.16	163							
199	10.03	34.37	1.04	156							
249	9.70	34.44	0.77	146							

CREST; February 13, 1955; 2336 GCT; 30°20'N, 116°23'W; sounding, 1000 fm; wind, 360°, force 3; weather, missing; sea, moderate; wire angle, 06°.

107.35

0	15.4	33.58	5.81	315	0	15.4	33.58	5.81	24.81	315	0.00
10	14.93	33.34	5.89	322	10	14.93	33.34	5.89	24.73	322	0.03
30	14.80	33.32	5.87	322	20	14.86	33.32	5.88	24.73	322	0.06
40	14.54	33.33	6.11	315	30	14.80	33.32	5.87	24.74	322	0.10
50	14.01	33.33	6.25	305	50	14.01	33.33	6.25	24.91	305	0.16
60	13.26	33.30	6.23	302	75	13.00	33.30	6.15	25.09	288	0.23
70	13.28	33.26	6.17	296	100	10.40	33.40	4.20	25.65	234	0.30
81	12.63	33.38	6.11	275	150	10.48	34.00	2.15	26.11	191	0.41
91	11.38	33.30	4.65	258	200	10.20	34.27	1.51	26.37	167	0.50
101	10.39	33.40	4.19	234	250	9.45	34.33	0.95	26.54	150	0.58
126	10.19	33.68	2.04u	210	300	8.78	34.33	0.82	26.65	140	0.66
155	10.50	34.03	2.04	190	400	7.56	34.30	0.65	26.80	125	0.79
204	10.16	34.28	1.45	165	500	6.52	34.28	0.44	26.93	113	0.92
263	9.26	34.33	0.87	147	600	5.87	34.36	0.39	27.09	98	1.03
365	8.00	34.31	0.73	130							
483	6.67	34.28	0.48	115							
608	5.82	34.37	0.39	97							

CREST; February 14, 1955; 0245 GCT; 30°10'N, 116°43.5'W; sounding, 1540 fm; wind, 020°, force 2; weather, fog; sea, slight; wire angle, 04°.

107.40

0	14.9	33.38	6.30	319	0	14.9	33.38	6.30	24.77	319	0.00
10	14.89	33.38	5.92	318	10	14.89	33.38	5.92	24.78	318	0.03
30	14.43	33.32	5.97	314	20	14.65	33.35	5.96	24.80	316	0.06
40	14.32	33.32	5.96	311	30	14.43	33.32	5.97	24.82	314	0.10
51	14.24	33.34	5.93	309	50	14.24	33.34	5.93	24.87	309	0.16
61	14.14	33.30	5.89	309	75	13.12	33.36	5.49	25.12	286	0.23
71	13.69	33.40	5.65	293	100	10.58	33.24	4.54	25.50	249	0.30
81	12.03	33.22	5.17	276	150	9.10	33.72	3.48	26.12	190	0.41
91	11.26	33.18	4.90	265	200	9.97	34.25	1.17	26.39	165	0.50
102	10.44	33.26	4.44	246	250	9.06	34.31	1.09	26.59	146	0.58
126	9.48	33.56	3.62	208	300	8.54	34.39	0.62	26.74	132	0.65
155	9.07	33.75	3.46	187							
203	10.02	34.30	1.08	162							
261	8.87	34.31	1.10	143							
287p	8.67	34.40	0.63	133							
365	7.80	34.31	0.70	128							

SIO

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5502

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

107.50 CREST; February 14, 1955; 0807 GCT; 29°49'N, 117°24'W; sounding, 1410 fm; wind, 040°, force 1; weather, partly cloudy; sea, smooth; wire angle, 03°.

0	15.3	33.36	5.85	329	0	15.3	33.36	5.85	24.66	329	0.00
10	15.02	33.26	5.83	330	10	15.02	33.26	5.83	24.65	330	0.03
30	14.50	33.24	6.00	321	20	14.72	33.24	5.93	24.70	325	0.07
40	14.38	33.22	5.92	320	30	14.50	33.24	6.00	24.74	321	0.10
51	14.20	33.25	5.93	314	50	14.22	33.25	5.93	24.82	314	0.16
61	14.16	33.28	5.83	311	75	13.37	33.22	5.74	24.96	300	0.24
70	13.86	33.28	5.84	305	100	10.80	33.18	4.98	25.42	257	0.31
81	12.64	33.13	5.59	294	150	8.97	33.67	3.59	26.11	191	0.42
91	11.39	33.11	5.40	272	200	8.39	34.03	2.50	26.47	157	0.51
100	10.80	33.18	4.98	257	250	7.72	34.05	2.24	26.59	146	0.59
124	9.84	33.47	3.97	220	300	7.38	34.11	1.68	26.69	136	0.66
154	8.89	33.69	3.55	189	400	6.71	34.26	0.75	26.89	117	0.79
197	8.42	34.02	2.55	158	500	5.99	34.35	0.38	27.06	101	0.91
267	7.59	34.06	2.18	144	600	5.52	34.37	0.25	27.13	94	1.01
364	7.00	34.21	0.94	124							
482	6.10	34.34	0.41	103							
606	5.50	34.37	0.24	94							

107.60 CREST; February 14, 1955; 1312 GCT; 29°29'N, 118°03'W; sounding, 2050 fm; wind, 100°, force 2; weather, missing; sea, slight; wire angle, 00°.

0	14.8	33.30	6.03	323	0	14.8	33.30	6.03	24.72	323	0.00
10	14.71	33.30	5.88	321	10	14.71	33.30	5.88	24.74	321	0.03
30	14.43	33.22	5.97	321	20	14.59	33.26	5.93	24.74	321	0.06
40	14.34	33.23	5.96	318	30	14.43	33.22	5.97	24.74	321	0.10
50	14.28	33.26	5.88	315	50	14.28	33.26	5.88	24.81	315	0.16
61	14.22	33.23	5.71	316	75	14.32	33.30	5.84	24.83	313	0.24
71	14.36	33.30	5.86	313	100	10.80	33.20	5.04	25.43	256	0.31
81	13.64	33.22	5.74	306	150	9.31	33.70	3.61	26.07	195	0.42
91	11.80	33.14	5.46	277	200	8.80	33.96	2.54	26.36	167	0.52
101	10.69	33.21	4.99	253	250	8.39	34.15	1.90	26.57	147	0.60
126	9.54	33.44	4.18	218	300	7.98	34.20	1.47	26.66	138	0.67
157	9.24	33.73	3.46	192	400	7.14	34.25	0.81	26.83	123	0.81
205	8.74	33.98	2.45	165	500	6.28	34.31	0.45	26.99	108	0.93
264	8.28	34.17	1.76	145	600	5.47	34.33	0.34	27.11	96	1.04
366	7.42	34.23	0.96	128							
484	6.42	34.30	0.48	110							
610	5.40	34.33	0.33	95							

107.60 CREST; February 14, 1955; 1437 GCT; 29°29'N, 118°03'W; sounding, 2050 fm; wind, 100°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

0	14.7				0	14.7					
10	14.69				10	14.69					
30	14.44				20	14.59					
45	14.32				30	14.44					
60	14.24				50	14.29					
80	13.45				75	13.78					
101	11.12				100	11.24					
126	9.80				150	9.26					
141	9.26				200	8.82					
155	9.26				250	8.24					
170	9.24										
184	9.01										
199	8.82										
214	8.72										
228	8.35										
243	8.28										
252	8.23										

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

CREST; February 16, 1955; 0541 GCT; 29°50.5'N, 115°53'W; sounding, 50 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 09°.

110.33

0	14.5	33.33	6.07	314	0	14.5	33.33	6.07	24.82	314	0.00
10	14.13	33.38	6.14	303	10	14.13	33.38	6.14	24.93	303	0.03
15	13.73	33.30	6.34	301	20	13.64	33.30	6.10	24.97	300	0.06
20	13.64	33.30	6.10	300	30	13.28	33.37	5.87	25.09	288	0.09
25	13.48	33.36	6.07	292	50	11.80	33.32	4.65	25.34	264	0.15
30	13.28	33.37	5.87	288	75	(10.97)	(33.37)	(3.89)	(25.54)	(246)	(0.21)
35	13.04	33.37	5.69	283							
45	12.09	33.31	4.97	270							
55	11.60	33.35	4.46	255							
70	11.10	33.37	4.00	248							

CREST; February 16, 1955; 0357 GCT; 29°46'N, 116°00'W; sounding, 650 fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 09°.

110.35

0	15.1	33.41	5.70	321	0	15.1	33.41	5.70	24.74	321	0.00
10	14.94	33.40	5.75	318	10	14.94	33.40	5.75	24.77	318	0.03
30	12.62	33.26	5.37	284	20	13.81	33.31	5.67	24.95	302	0.06
40	11.50	33.31	4.47	260	30	12.62	33.26	5.37	25.14	284	0.09
51	10.87	33.45	3.81	238	50	10.91	33.44	3.86	25.60	240	0.14
61	10.69	33.54	3.38	229	75	10.56	33.71	3.02	25.87	214	0.20
71	10.58	33.68	3.10	216	100	10.59	33.84	2.42	25.96	205	0.26
81	10.55	33.74	2.95	212	150	10.49	34.16	1.53	26.23	180	0.35
91	10.55	33.76	2.79	210	200	10.22	34.34	0.96	26.42	162	0.44
102	10.60	33.85	2.37	204	250	9.75	34.43	0.75	26.57	148	0.52
125	10.56	34.01	2.00	192	300	9.47	34.43	0.60	26.62	143	0.59
155	10.48	34.18	1.42	178	400	8.37	34.43	0.45	26.80	126	0.73
202	10.21	34.34	0.95	162	500	6.86	34.44	0.29	27.02	105	0.85
259	9.68	34.43	0.71	146	600	6.24	34.41	0.22	27.07	100	0.96
361	9.05	34.42	0.52	137							
478	7.05	34.45	0.32	107							
602	6.23	34.41	0.22	100							

CREST; February 16, 1955; 0020 GCT; 29°36.5'N, 116°19.5'W; sounding, 1380 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 18°.

110.40

0	15.4	33.41	5.86	327	0	15.4	33.41	5.86	24.68	327	0.00
10	15.20	33.40	5.81	324	10	15.20	33.40	5.81	24.72	324	0.03
25	15.10	33.36	5.77	325	20	15.12	33.37	5.78	24.70	325	0.06
50	14.83	33.46	5.71	312	30	15.08	33.36	5.75	24.72	324	0.10
59	14.02	33.31	5.87	306	50	14.83	33.46	5.71	24.84	312	0.16
69	13.49	33.26	5.70	300	75	12.66	33.25	5.12	25.12	285	0.24
79	11.78	33.25	4.74	269	100	10.96	33.50	3.56	25.63	236	0.30
98	10.94	33.48	3.64	237	150	10.31	33.96	2.29	26.10	192	0.41
123	10.81	33.73	2.45	217	200	9.82	34.18	1.94	26.36	168	0.50
152	10.29	33.97	2.28	190	250	9.28	34.29	1.00	26.54	150	0.58
197	9.88	34.17	1.99	169	300	8.91	34.33	0.78	26.63	142	0.66
260	9.20	34.31	0.89	148	400	7.97	34.34	0.54	26.78	127	0.80
355	8.52	34.34	0.68	135	500	6.85	34.34	0.27	26.94	112	0.92
473	7.12	34.34	0.29	116	600	6.02	34.35	0.24	27.06	101	1.04
643	5.75	34.36	0.24	97	700	5.43	34.38	0.25	27.16	92	1.14
855	4.73	34.46	0.31	78	800	4.98	34.44	0.28	27.26	82	1.23
1153	3.72	34.54	0.64	62	1000	4.21	34.50	0.45	27.39	70	1.40

S10

CCOFI
5502

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

110.50

CREST; February 15, 1955; 1841 GCT; 29°18'N, 117°00'W; sounding, 1575 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 02°.

0	15.7	33.35	5.76	338	0	15.7	33.35	5.76	24.57	338	0.00
9	15.43	33.40	5.65	328	10	15.43	33.40	5.65	24.67	328	0.03
26	15.43	33.44	5.65	326	20	15.43	33.43	5.65	24.69	326	0.07
56	15.20	33.45	5.71	320	30	15.41	33.45	5.66	24.70	325	0.10
66	15.14	33.41	5.70	322	50	15.24	33.45	5.70	24.74	321	0.16
76	15.06	33.41	5.60	320	75	15.07	33.41	5.62	24.75	320	0.24
91	13.23	33.29	5.10	293	100	12.34	33.34	4.42	25.26	272	0.32
112	11.60	33.48	3.60	249	150	11.19	33.87	2.07	25.88	213	0.44
137	11.31	33.80	2.28	220	200	10.52	34.14	1.56	26.21	181	0.54
168	11.00	33.96	1.85	203	250	9.76	34.26	1.26	26.44	160	0.63
221	10.17	34.22	1.41	170	300	9.12	34.29	1.03	26.56	148	0.71
300	9.12	34.29	1.03	148	400	8.03	34.33	0.59	26.76	129	0.85
409	7.94	34.33	0.55	128	500	7.04	34.35	0.32	26.92	114	0.98
552	6.52	34.36	0.25	107	600	6.19	34.37	0.24	27.06	102	1.03
744	5.32	34.42	0.24	88	700	5.59	34.40	0.24	27.16	92	1.14
982	4.29	34.50	0.44	71	800	5.07	34.44	0.27	27.26	82	1.24
1290	3.42	34.56	0.87	58	1000	4.23	34.51	0.45	27.39	70	1.41

110.60

CREST; February 15, 1955; 1254 GCT; 28°56'N, 117°39'W; sounding, 1950 fm; wind, 360°, force 4; weather, missing; sea, rough; wire angle, 18°.

0	15.2	33.39	5.84	324	0	15.2	33.39	5.84	24.71	324	0.00
10	14.98	33.42	5.87	318	10	14.98	33.42	5.87	24.78	318	0.03
25	14.73	33.37	5.80	316	20	14.80	33.38	5.82	24.79	316	0.06
54	13.94	33.30	5.66	306	30	14.63	33.34	5.77	24.79	316	0.10
64	13.24	33.26	5.40	295	50	14.32	33.31	5.70	24.84	312	0.16
73	12.52	33.29	4.94	279	75	12.37	33.29	4.89	25.22	276	0.23
87	11.44	33.30	4.62	260	100	10.33	33.36	4.45	25.63	237	0.30
107	9.94	33.40	4.34	227	150	10.03	33.98	2.58	26.17	186	0.40
130	9.96	33.79	3.39	198	200	9.58	34.21	1.76	26.43	161	0.49
158	10.04	34.08	2.22	178	250	8.92	34.28	1.30	26.60	145	0.57
209	9.45	34.23	1.67	157	300	8.38	34.33	0.95	26.71	134	0.64
283	8.54	34.32	1.07	137	400	7.52	34.37	0.52	26.87	119	0.77
385	7.65	34.37	0.56	121	500	6.62	34.38	0.32	27.00	107	0.89
522	6.41	34.38	0.30	104	600	5.90	34.39	0.30	27.11	96	1.00
705	5.19	34.42	0.33	86	700	5.20	34.42	0.32	27.21	87	1.10
934	4.22	34.49	0.51	72	800	4.73	34.45	0.38	27.29	79	1.19
1235	3.44	34.53	0.88	60	1000	4.05	34.50	0.58	27.40	68	1.35

110.70

CREST; February 15, 1955; 0635 GCT; 28°36.5'N, 118°19'W; sounding, 1975 fm; wind, 290°, force 2; weather, clear; sea, slight; wire angle, 00°.

0	14.8	33.33	5.95	321	0	14.8	33.33	5.95	24.75	321	0.00
10	14.72	33.30	5.83	321	10	14.72	33.30	5.83	24.74	321	0.03
25	14.46	33.30	5.80	316	20	14.52	33.30	5.81	24.78	317	0.06
50	14.28	33.35	5.72	308	30	14.39	33.34	5.79	24.84	312	0.10
60	14.25	33.32	5.71	310	50	14.28	33.35	5.72	24.88	308	0.16
69	14.12	33.25	5.74	312	75	13.03	33.20	5.66	25.01	296	0.23
80	12.17	33.18	5.46	281	100	11.01	33.29	4.65	25.46	253	0.30
100	11.01	33.29	4.65	253	150	9.72	33.86	2.69	26.13	190	0.41
126	10.04	33.51	3.92	220	200	9.02	33.95	2.52	26.32	172	0.51
156	9.67	33.87	2.60	188	250	8.84	34.13	1.86	26.48	156	0.59
207	8.96	33.97	2.50	169	300	8.53	34.20	1.42	26.60	145	0.67
275	8.78	34.19	1.54	155	400	7.40	34.25	0.99	26.79	126	0.81
378	7.60	34.24	1.09	130	500	6.60	34.30	0.47	26.94	112	0.93
505	6.56	34.30	0.45	112	600	5.88	34.33	0.31	27.06	101	1.05
686	5.34	34.36	0.24	92	700	5.26	34.37	0.24	27.16	91	1.15
907	4.36	34.47	0.43	74	800	4.79	34.42	0.32	27.26	82	1.24
1208	3.54	34.52	0.74	62	1000	4.07	34.49	0.55	27.39	69	1.41

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

CREST; February 15, 1955; 0106 GCT; 28°16.5'N, 118°52.5'W; sounding, 2200 fm; wind, 060°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.

110.80

0	15.4	33.35a)	5.37	332	0	15.4	33.35	5.37	24.63	332	0.00
10	15.30	33.32	5.66	332	10	15.30	33.32	5.66	24.63	332	0.03
25	15.19	33.26	5.61	334	20	15.22	33.27	5.63	24.61	334	0.07
48	15.08	33.28	5.52	330	30	15.17	33.27	5.58	24.64	331	0.10
58	15.08	33.29	5.71	329	50	15.08	33.28	5.53	24.66	330	0.17
67	15.02	33.29	5.82	328	75	15.02	33.30	5.66	24.68	327	0.25
76	15.02	33.30	5.65	327	100	12.73	33.21	5.38	25.08	289	0.33
94	13.48	33.20a)	5.45	304	150	9.42	33.48	4.27	25.88	213	0.45
116	11.14	33.28	5.17	256	200	8.78	33.95	3.50	26.35	168	0.55
142	9.66	33.40	4.40	223	250	8.66	34.05	2.47	26.45	159	0.63
187	8.88	33.82	3.77	179	300	8.19	34.16	1.78	26.60	144	0.71
248	8.66	34.05	2.50	159	400	7.41	34.33	0.79	26.85	121	0.85
342	7.83	34.23	1.23	134	500	6.72	34.40	0.30	27.00	107	0.97
459	7.02	34.39	0.36	111	600	6.00	34.42	0.24	27.12	96	1.08
629	5.80	34.43	0.23	92	700	5.37	34.45	0.24	27.22	86	1.17
844	4.67	34.48	0.32	76	800	4.86	34.47	0.28	27.29	79	1.26
1145	3.70	34.53	0.70	63	1000	4.13	34.51	0.51	27.40	69	1.43

CREST; February 16, 1955; 1055 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 340°, force 4; weather, missing; sea, smooth; wire angle, 02°.

113.30

0	13.57	33.41	6.10	290	0	13.57	33.41	6.10	25.07	290	0.00
10	13.59	33.40	6.26	291	10	13.59	33.40	6.26	25.06	291	0.03
15	13.56	33.44	6.21	288	20	13.38	33.45	6.03	25.14	284	0.06
20	13.38	33.45	6.03	284	30	12.55	33.38	5.21	25.25	273	0.09
25	12.73	33.33	6.24	280							
30	12.55	33.38	5.21	273							
35	12.12	33.41	4.60	263							
43	12.03	33.57	2.96	250							

CREST; February 16, 1955; 1356 GCT; 29°12'N, 115°39'W; sounding, 780 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 22°.

113.35

0	14.7	33.38	6.02	315	0	14.7	33.38	6.02	24.81	315	0.00
10	14.56	33.34	6.07	315	10	14.56	33.34	6.07	24.81	315	0.03
29	14.48	33.35	5.83	312	20	14.49	33.34	5.95	24.83	313	0.06
38	13.93	33.30	6.08	305	30	14.47	33.35	5.82	24.84	312	0.09
48	12.99	33.30	5.48	287	50	12.93	33.31	5.43	25.12	286	0.15
57	12.79	33.33	5.04	281	75	11.25	33.43	4.02	25.53	247	0.22
67	12.05	33.40	4.56	262	100	10.55	33.71	3.13	25.87	214	0.28
76	11.22	33.43	3.99	246	150	10.57	34.19	1.56	26.23	180	0.38
85	11.05	33.48	3.57	239	200	10.16	34.41	1.22	26.48	156	0.46
94	10.50	33.58	3.38	223	250	9.72	34.47	0.64	26.60	144	0.54
116	10.82	34.04	1.91	194	300	9.03	34.42	0.67	26.68	137	0.61
142	10.66	34.14	1.64	184	400	7.91	34.40	0.46	26.83	122	0.75
186	10.24	34.32	1.32	164	500	6.97	34.40	0.33	26.97	110	0.87
228	10.00	34.48	0.64	148							
330	8.64	34.40	0.68	132							
441	7.52	34.40	0.38	117							
561	6.35	34.40	0.30	102							

a) Loose bottle cap; value falls on property curve.

S10

CCOFI
5502

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m	

113.40 CREST; February 16, 1955; 1730 GCT; 29°01.5'N, 115°59'W; sounding, 1000 fm; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 20°.

0	15.3	33.40	5.59	326	0	15.3	33.40	5.59	24.69	326	0.00
10	15.08	33.38	5.70	323	10	15.08	33.38	5.70	24.72	323	0.03
29	15.06	33.41	5.69	320	20	15.07	33.41	5.70	24.74	321	0.06
43	14.82	33.32	5.56	318	30	15.04	33.41	5.68	24.76	320	0.10
53	13.61	33.32	5.85	298	50	13.98	33.33	5.79	24.92	304	0.16
63	13.12	33.30	5.76	290	75	12.80	33.30	5.61	25.14	284	0.23
73	12.89	33.30	5.74	285	100	10.62	33.43	4.00	25.64	236	0.30
82	12.13	33.31	5.03	270	150	9.42	33.85	2.90	26.17	185	0.40
96	10.82	33.35	4.26	245	200	9.57	34.21	1.50	26.43	160	0.49
105	10.46	33.54	3.70	225	250	9.33	34.38	0.85	26.60	145	0.57
128	10.15	33.79	2.83	201	300	8.79	34.38	0.62	26.69	136	0.64
156	9.32	33.87	2.90	182	400	7.59	34.35	0.41	26.84	122	0.78
205	9.57	34.25	1.38	158	500	6.62	34.36	0.28	26.98	108	0.90
263	9.22	34.39	0.76	142	600	5.91	34.41	0.25	27.12	95	1.00
369	7.90	34.35	0.48	126							
492	6.71	34.36	0.30	109							
623	5.75	34.42	0.25	92							

113.45 CREST; February 16, 1955; 2048 GCT; 28°51'N, 116°17.5'W; sounding, 1480 fm; wind, 310°, force 5; weather, cloudy; sea, moderate; wire angle, 09°.

0	15.5	33.46	5.67	325	0	15.5	33.46	5.67	24.70	325	0.00
10	15.25	33.44	5.67	322	10	15.25	33.44	5.67	24.74	322	0.03
31	15.15	33.42	5.71	321	20	15.20	33.43	5.70	24.74	322	0.06
46	14.95	33.41	5.75	317	30	15.16	33.42	5.71	24.74	321	0.10
56	14.59	33.39	5.83	312	50	14.81	33.40	5.77	24.80	316	0.16
66	14.07	33.32	5.83	306	75	13.53	33.32	5.57	25.01	296	0.24
76	13.49	33.32	5.54	295	100	11.49	33.49	3.73	25.53	246	0.30
86	12.57	33.32	4.99	278	150	10.50	33.96	2.30	26.08	194	0.42
102	11.41	33.51	3.57	243	200	9.97	34.27	1.41	26.41	163	0.51
112	11.14	33.60	3.14	232	250	9.52	34.34	0.98	26.54	150	0.59
136	10.52	33.81	2.69	206	300	8.95	34.38	0.77	26.66	139	0.66
165	10.14	34.06	2.00	181	400	7.87	34.41	0.48	26.85	121	0.80
218	9.88	34.30	1.28	159	500	6.96	34.38	0.27	26.96	110	0.92
281	9.17	34.37	0.81	143	600	6.12	34.38	0.23	27.07	100	1.03
393	7.92	34.41	0.50	122							
520	6.79	34.38	0.26	109							
654	5.66	34.38	0.22	94							

113.50 CREST; February 17, 1955; 0007 GCT; 28°40'N, 116°38'W; sounding, 1950 fm; wind, 340°, force 5; weather, cloudy; sea, moderate; wire angle, 20°.

0	15.5	33.38	5.79	331	0	15.5	33.38	5.79	24.64	331	0.00
10	15.18	33.43	5.73	321	10	15.18	33.43	5.73	24.75	321	0.03
20	14.69	33.37	5.79	315	20	14.69	33.37	5.79	24.81	315	0.06
40	14.46	33.35	5.82	312	30	14.55	33.36	5.80	24.82	314	0.10
50	14.33	33.34	5.82	310	50	14.33	33.34	5.82	24.86	310	0.16
60	14.10	33.36	5.68	304	75	12.78	33.30	4.92	25.14	283	0.23
69	13.75	33.42a)	5.31	293	100	10.63	33.49	3.78	25.68	232	0.30
79	12.29	33.25	4.70	278	150	10.58	34.06	1.54	26.14	188	0.40
88	11.56	33.27	4.36	263	200	10.07	34.24	1.46	26.36	167	0.49
98	10.75	33.46	3.93	236	250	9.58	34.32	1.07	26.51	153	0.58
121	10.28	33.77	2.78	205	300	9.06	34.34	0.79	26.62	143	0.65
149	10.59	34.05	1.58	189	400	7.87	34.33	0.47	26.79	127	0.79
196	10.08	34.22	1.50	168	500	6.80	34.32	0.30	26.92	114	0.92
253	9.54	34.32	1.03	152	600	(5.88)	(34.34)	(0.24)	(27.07)	(100)	(1.03)
351	8.46	34.34	0.59	134							
465	7.14	34.31	0.33	118							
585	6.00	34.34	0.25	102							

a) Mean value of 33.39 and 33.44‰.

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m

CREST; February 17, 1955; 0324 GCT; 28°30'N, 116°57'W; sounding, 1970 fm; wind, 360°, force 5; weather, partly cloudy; sea, moderate; wire angle, 12°.

11355

0	15.9	33.53	5.68	329	0	15.9	33.53	5.68	24.66	329	0.00
10	15.68	33.48	5.75	328	10	15.68	33.48	5.75	24.67	328	0.03
30	15.54	33.49	5.85	324	20	15.61	33.48	5.82	24.69	326	0.07
45	15.39	33.48	5.85	322	30	15.54	33.49	5.85	24.71	324	0.10
56	15.36	33.45	5.80	323	50	15.38	33.47	5.83	24.73	322	0.16
66	15.12	33.46	5.64	317	75	14.48	33.41	5.63	24.88	308	0.24
76	14.35	33.40	5.60	306	100	11.71	33.40	3.82	25.42	256	0.31
86	12.58	33.30	4.62	280	150	10.46	33.97	2.01	26.09	193	0.43
101	11.64	33.42	3.75	254	200	9.99	34.23	1.29	26.37	166	0.52
110	11.39	33.59	3.08	237	250	9.58	34.40	0.81	26.58	147	0.60
134	10.78	33.86	2.20	206	300	9.02	34.44	0.58	26.70	135	0.67
163	10.25	34.04	1.92	185	400	7.83	34.45	0.37	26.88	118	0.80
215	9.90	34.30	1.12	160	500	6.80	34.41	0.27	27.00	106	0.92
277	9.28	34.43	0.64	140	600	6.03	34.43	0.27	27.12	95	1.03
387	7.99	34.45	0.41	120							
513	6.68	34.41	0.27	105							
645	5.72	34.46	0.27	89							

CREST; February 17, 1955; 0641, 0720 GCT; 28°21'N, 117°15'W; sounding, 2000 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 03°, 03°.

11360

0	15.7	33.66	5.59	315	0	15.7	33.66	5.59	24.81	315	0.00
10	15.63	33.53	5.56	323	10	15.63	33.53	5.56	24.72	323	0.03
30	15.60	33.51	5.58	324	20	15.62	33.52	5.57	24.72	324	0.06
40	15.40	33.50	5.56	320	30	15.60	33.51	5.58	24.72	324	0.10
51	15.25	33.52	5.61	316	50	15.27	33.52	5.61	24.79	316	0.16
61	14.87	33.47	5.47	312	75	12.46	33.41	4.26	25.29	269	0.23
71	12.94	33.38	4.59	280	100	10.35	33.56	3.65	25.78	222	0.30
81	11.81	33.47	3.92	254	150	9.76	34.02	2.33	26.25	178	0.40
					200	9.19	34.21	1.91	26.49	155	0.48
91	10.94	33.45	3.80	240	250	9.09	34.38	1.10	26.64	141	0.56
101	10.27	33.58	3.62	219	300	8.72	34.45	0.55	26.75	130	0.63
125	9.51	33.84	3.07	187	400	7.62	34.47	0.28	26.93	114	0.75
155	9.75	34.04	2.15	176	500	6.61	34.43	0.24	27.04	103	0.87
204	9.15	34.22	1.86	154	600	5.91	34.44	0.22	27.14	93	0.97
261	9.06	34.39	0.78	140							
364	8.02	34.48	0.30	118							
481	6.78	34.43	0.24	105							
607	5.88	34.44	0.21	92							

CREST; February 17, 1955; 1241 GCT; 28°00'N, 117°56'W; sounding, 2100 fm; wind, 010°, force 2; weather, fog; sea, moderate; wire angle, 03°.

11370

0	15.5	33.47	5.61	325	0	15.5	33.47	5.61	24.70	325	0.00
10	15.24	33.48a)	5.66	319	10	15.24	33.48	5.66	24.77	319	0.03
30	14.81	33.47	5.62	311	20	15.01	33.47	5.64	24.82	314	0.06
41	14.74	33.48	5.67	308	30	14.81	33.47	5.62	24.85	311	0.10
51	14.64	33.48	5.67	307	50	14.66	33.48	5.67	24.89	307	0.16
61	14.40	33.48	5.40	301	75	11.83	33.43	3.98	25.42	256	0.23
71	12.55	33.38	4.36	273	100	10.22	33.40	4.01	25.69	231	0.30
81	11.29	33.46	3.76	245	150	9.85	33.93	2.71	26.16	186	0.40
91	10.92	33.44	3.76	240	200	8.72	34.03	2.53	26.42	162	0.49
102	10.08	33.40	3.98	230	250	8.20	34.16	1.64	26.61	144	0.57
126	9.81	33.72	3.25	201	300	7.64	34.20	1.24	26.71	134	0.64
155	9.75	33.94	2.63	184	400	6.50	34.24	0.72	26.90	116	0.77
203	8.66	34.04	2.50	160	500	5.87	34.30	0.44	27.04	103	0.89
260	8.10	34.18	1.54	141	600	5.56	34.42	0.31	27.17	91	0.99
362	6.89	34.22	0.86	122							
480	5.96	34.28	0.49	105							
607	5.57	34.42	0.30	90							

a) Mean value of 33.44 and 33.52‰.

S10

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5502

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	10^{-5} cm/g	m	°C	‰	ml/L	g/L	10^{-5} cm/g	dyn. m

117.26

CREST; February 18, 1955; 1945 GCT; 28°56'N, 114°41'W; sounding, 41 fm; wind, 300°, force 5; weather, partly cloudy; sea, moderate; wire angle, 10°.

0	13.97	33.44	6.09	296	0	13.97	33.44	6.09	25.01	296	0.00
10	13.95	33.43	6.01	296	10	13.95	33.43	6.01	25.01	296	0.03
15	13.82	33.41	5.84	295	20	13.80	33.44	6.08	25.05	292	0.06
20	13.80	33.44	6.08	292	30	13.06	33.53	5.02	25.26	272	0.09
25	13.71	33.48	6.03	288	50	11.18	33.55	3.80	25.64	236	0.14
30	13.06	33.53	5.02	272							
35	12.79	33.52	4.73	267							
40	12.28	33.52	4.42	258							
50	11.18	33.55	3.80	236							

117.30

CREST; February 18, 1955; 1726 GCT; 28°48'N, 114°56.5'W; sounding, 58 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 06°.

0	14.7	33.48	5.97	308	0	14.7	33.48	5.97	24.89	308	0.00
10	14.50	33.48	6.01	303	10	14.50	33.48	6.01	24.93	303	0.03
15	14.55	33.47	5.99	305	20	14.57	33.49	5.92	24.92	304	0.06
20	14.57	33.49	5.92	304	30	14.74	33.55	5.88	24.93	304	0.09
25	14.64	33.51	5.89	304	50	14.12	33.56	5.28	25.08	290	0.15
30	14.74	33.55	5.88	304	75	11.79	33.67	2.90	25.62	238	0.22
35	14.63	33.57	5.67	299							
45	14.57	33.58	5.61	297							
55	13.60	33.54	4.57	282							
65	12.34	33.56	4.10	256							
80	11.58	33.78	2.12	226							

117.35

CREST; February 18, 1955; 1436 GCT; 28°38'N, 115°16'W; sounding, 135 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 05°.

0	13.92	33.41	6.14	297	0	13.92	33.41	6.14	25.00	297	0.00
10	13.92	33.36	6.13	301	10	13.92	33.36	6.13	24.96	301	0.03
15	13.82	33.40	6.22	296	20	13.55	33.39	6.14	25.06	291	0.06
20	13.55	33.39	6.14	291	30	13.05	33.31	5.62	25.10	288	0.09
25	13.10	33.34	5.66	286	50	12.59	33.48	4.60	25.32	266	0.14
30	13.05	33.31a)	5.62	287	75	11.20	33.52	3.50	25.61	239	0.21
35	12.95	33.43	5.23	277	100	10.68	33.85	2.40	25.96	206	0.26
45	12.56	33.36	5.14	275	150	10.47	34.25	1.50	26.31	172	0.36
55	12.59	33.58	4.13	259	200	10.38	34.42	0.86	26.45	159	0.44
66	12.32	33.68	3.51	247							
75	11.20	33.52	3.50	239							
94	10.68	33.78	2.61	211							
109	10.72	33.96	2.13	198							
138	10.48	34.17	1.68	179							
167	10.44	34.35	1.19	165							
202	10.36	34.42	0.84	158							

a) Mean value of 33.28 and 33.34‰.

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$\frac{1}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{1}{10} \text{ cm/g}$	dyn. m

CREST; February 18, 1955; 1133 GCT; 28°28'N, 115°35.5'W; sounding, 550 fm; wind, 320°, force 5; weather, drizzle; sea, moderate; wire angle, 17°.

11740

0	14.8	33.54	5.65	305	0	14.8	33.54	5.65	24.91	305	0.00
10	14.58	33.58	5.82	298	10	14.58	33.58	5.82	24.99	298	0.03
15	14.32	33.53	5.84	296	20	13.88	33.62	5.40	25.17	281	0.06
20	13.88	33.62	5.40	281	30	13.73	33.61	5.34	25.19	278	0.09
25	13.80	33.58	5.29	282	50	12.18	33.54	4.07	25.44	255	0.14
30	13.73	33.61	5.34	278	75	11.07	33.78	2.90	25.83	218	0.20
40	13.34	33.66	4.90	268	100	11.06	33.97	2.14	25.98	204	0.25
50	12.18	33.54	4.07	255	150	10.83	34.34	1.55	26.31	172	0.35
66	11.08	33.66	3.13	227	200	10.52	34.43	0.90	26.44	160	0.43
81	11.10	33.87	2.81	211	250	10.12	34.45	0.68	26.52	152	0.51
100	11.06	33.97	2.14	204	300	9.81	34.51	0.58	26.62	143	0.59
123	10.97	34.08	1.84	193	400	(8.16)	(34.46)	(0.33)	(26.84)	(122)	(0.72)
161	10.76	34.40	1.34	166							
199	10.54	34.43	0.92	160							
246	10.15	34.45	0.69	152							
320	9.66	34.51	0.52	140							
398	8.20	34.46	0.33	122							

CREST; February 18, 1955; 0819 GCT; 28°18.5'N, 115°55'W; sounding, 1850 fm; wind, 340°, force 4; weather, missing; sea, rough; wire angle, 12°.

11745

0	14.8	33.54	6.00	305	0	14.8	33.54	6.00	24.91	305	0.00
10	14.67	33.50	5.40	306	10	14.67	33.50	5.40	24.91	306	0.03
30	14.14	33.43	6.06	300	20	14.42	33.46	5.73	24.92	304	0.06
41	13.92	33.45	5.63	294	30	14.14	33.43	6.06	24.96	300	0.09
51	13.30	33.56	5.32	274	50	13.38	33.55	5.38	25.21	276	0.15
61	11.91	33.64	3.82	242	75	11.04	33.76	3.15	25.83	218	0.21
71	11.08	33.67	3.34	226	100	10.48	33.90	2.75	26.03	198	0.26
80	10.98	33.82	2.96	213	150	9.98	34.20	2.11	26.36	168	0.36
90	10.67	33.81	2.94	209	200	9.50	34.33	1.55	26.53	151	0.44
99	10.48	33.88	2.76	200	250	9.15	34.43	0.97	26.67	138	0.51
123	10.25	34.07	2.28	182	300	8.72	34.43	0.73	26.74	131	0.58
151	9.95	34.21	2.10	167	400	7.72	34.43	0.42	26.88	118	0.71
198	9.51	34.32	1.56	152	500	6.82	34.42	0.35	27.00	106	0.83
254	9.12	34.43	0.92	137	600	(6.01)	(34.43)	(0.59)	(27.12)	(95)	(0.93)
354	8.16	34.43	0.51	124							
469	7.10	34.42	0.33	110							
591	6.07	34.43	0.56	96							

CREST; February 18, 1955; 0513 GCT; 28°09'N, 116°15.5'W; sounding, 2000+ fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 25°.

11750

0	15.0	33.40	5.81	320	0	15.0	33.40	5.81	24.76	320	0.00
10	14.94	33.43	5.86	316	10	14.94	33.43	5.86	24.80	316	0.03
28	14.73	33.39	5.81	315	20	14.84	33.42	5.85	24.80	316	0.06
43	14.21	33.45	6.06	300	30	14.70	33.39	5.81	24.82	314	0.10
52	13.95	33.43	5.80	296	50	14.00	33.43	5.85	25.00	297	0.16
61	13.41	33.50	5.30	280	75	11.72	33.32	4.62	25.35	263	0.23
70	12.00	33.31	4.67	268	100	10.80	33.64	3.07	25.77	223	0.29
79	11.51	33.35	4.53	257	150	10.71	34.13	1.67	26.17	186	0.39
92	10.96	33.48	3.47	238	200	10.26	34.38	1.05	26.45	159	0.48
100	10.80	33.64	3.07	223	250	9.73	34.46	0.70	26.59	145	0.56
122	11.05	33.96	2.02	204	300	9.00	34.43	0.66	26.70	135	0.63
147	10.75	34.11	1.71	188	400	7.81	34.42	0.49	26.86	120	0.76
191	10.35	34.34	1.16	164	500	6.98	34.42	0.30	26.99	108	0.88
244	9.80	34.46	0.72	146	600	(6.02)	(34.41)	(0.36)	(27.10)	(97)	(0.99)
341	8.32	34.41	0.63	127							
456	7.38	34.42	0.30	113							
583	6.20	34.41	0.34	99							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$\frac{10^{-5}}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10} \text{ cm/g}$	dyn. m

117.55 CREST; February 18, 1955; 0156 GCT; 27°58'N, 116°36'W; sounding, 2000 fm; wind, 350°, force 4; weather, overcast; sea, moderate; wire angle, 23°.

0	15.9	33.57	5.79	326	0	15.9	33.57	5.79	24.69	326	0.00
10	15.72	33.56	5.95	323	10	15.72	33.56	5.95	24.72	323	0.03
29	15.59	33.57	5.73	319	20	15.64	33.56	5.80	24.75	320	0.06
43	15.34	33.58	5.76	313	30	15.57	33.57	5.72	24.77	318	0.10
52	15.13	33.56	5.70	310	50	15.18	33.57	5.70	24.86	310	0.16
61	15.06	33.53	5.78	311	75	14.90	33.50	5.76	24.86	310	0.24
71	14.93	33.50	5.25	310	100	12.26	33.34	4.07	25.26	272	0.31
81	14.84	33.51	5.74	308	150	10.32	33.91	2.69	26.07	195	0.43
94	12.87	33.30	4.62	285	200	9.20	34.15	2.09	26.44	160	0.52
103	12.06	33.38	3.90	264	250	9.00	34.27	1.40	26.58	147	0.60
126	11.38	33.73	3.10	226	300	8.65	34.41	0.95	26.74	132	0.67
152	10.26	33.92	2.66	194	400	7.68	34.45	0.35	26.91	116	0.80
200	9.20	34.15	2.09	160	500	6.62	34.43	0.27	27.04	103	0.91
257	8.98	34.30	1.33	145	600	5.94	34.46	0.28	27.16	92	1.02
360	8.14	34.46	0.50	121							
483	6.75	34.43	0.26	105							
615	5.85	34.47	0.29	90							

117.60 CREST; February 17, 1955; 2253 GCT; 27°47.5'N, 116°55'W; sounding, 2000+ fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 15°.

0	15.8	33.45	5.75	332	0	15.8	33.45	5.75	24.62	332	0.00
10	15.60	33.45	5.74	328	10	15.60	33.45	5.74	24.67	328	0.03
30	15.49	33.49	5.86	323	20	15.53	33.47	5.82	24.69	326	0.07
41	15.30	33.50	5.88	318	30	15.49	33.49	5.86	24.72	323	0.10
51	15.39	33.58	5.53	314	50	15.38	33.57	5.55	24.81	315	0.16
60	15.35	33.58	5.46	314	75	12.98	33.41	4.94	25.19	279	0.24
70	14.01	33.49	5.02	293	100	11.27	33.50	3.77	25.58	242	0.30
79	12.23	33.35	4.77	270	150	10.03	33.87	2.60	26.08	194	0.41
89	11.53	33.33	4.04	259	200	10.15	34.34	1.02	26.44	160	0.50
98	11.32	33.49	3.81	243	250	9.45	34.36	0.71	26.56	148	0.58
123	10.43	33.75	2.94	209	300	8.72	34.41	0.50	26.72	133	0.66
151	10.02	33.88	2.58	193	400	7.49	34.43	0.28	26.92	114	0.78
199	10.16	34.34	1.04	160	500	6.55	34.42	0.20	27.04	103	0.90
256	9.35	34.36	0.67	146	600	5.89	34.42	0.20	27.13	94	1.00
358	7.95	34.44	0.34	120							
476	6.75	34.42	0.20	105							
601	5.87	34.42	0.20	94							

117.70 CREST; February 17, 1955; 1752 GCT; 27°27.5'N, 117°33'W; sounding, 2050 fm; wind, 010°, force 4; weather, fog; sea, moderate; wire angle, 13°.

0	16.5	33.47	5.46	346	0	16.5	33.47	5.46	24.48	346	0.00
10	16.28	33.46	5.61	342	10	16.28	33.46	5.61	24.52	342	0.03
30	15.21	33.43	5.79	322	20	15.73	33.44	5.70	24.63	332	0.07
40	15.26	33.43	5.77	323	30	15.21	33.43	5.79	24.74	322	0.10
50	15.22	33.43	5.71	322	50	15.22	33.43	5.71	24.74	322	0.16
60	15.25	33.48	5.71	319	75	15.03	33.50	5.62	24.83	313	0.24
70	15.38	33.53	5.72	318	100	11.67	33.42	4.31	25.45	254	0.32
79	14.40	33.42	5.40	306	150	9.62	33.91	2.77	26.18	184	0.43
89	12.38	33.33	4.64	274	200	9.28	34.16	2.08	26.44	160	0.52
98	11.78	33.41	4.37	257	250	8.90	34.31	1.30	26.62	143	0.59
123	10.00	33.54	3.36	218	300	8.44	34.36	0.73	26.73	132	0.66
150	9.62	33.91	2.77	184	400	7.42	34.38	0.37	26.89	117	0.79
196	9.31	34.14	2.12	162	500	6.41	34.39	0.32	27.03	104	0.91
250	8.90	34.31	1.30	143	600	(5.59)	(34.40)	(0.28)	(27.15)	(92)	(1.01)
348	7.98	34.38	0.38	125							
462	6.75	34.39	0.33	108							
583	5.76	34.40	0.28	94							

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	10^{-5} cm/g	m	°C	‰	ml/L	g/L	10^{-5} cm/g	dyn. m	

CREST; February 19, 1955; 0008 GCT; 28°23'N, 114°15'W; sounding, 30 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 05°.

12025

0	14.74	33.55	6.16	303	0	14.74	33.55	6.16	24.93	303	0.00
10	14.61	33.59	6.16	298	10	14.61	33.59	6.16	24.99	298	0.03
15	14.44	33.66	6.05	289	20	14.15	33.62	5.98	25.11	286	0.06
20	14.15	33.62	5.98	286	30	13.36	33.47	4.79	25.16	282	0.09
25	13.93	33.63	5.66	281							
30	13.36	33.47	4.79	282							
35	13.10	33.41	4.34	281							
40	13.70	33.70	4.38	272							

CREST; February 19, 1955; 0311 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 14°.

12030

0	14.9	33.56	6.28	306	0	14.9	33.56	6.28	24.90	306	0.00
10	14.72	33.52	6.34	305	10	14.72	33.52	6.34	24.91	305	0.03
15	14.73	33.50	6.27	306	20	14.69	33.49	6.35	24.90	306	0.06
20	14.69	33.49	6.35	306	30	14.21	33.62	6.01	25.10	288	0.09
25	14.41	33.54	6.06	297	50	13.45	33.56	4.68	25.21	277	0.15
30	14.21	33.62	6.01	288	75	(11.12)	(33.63)	(2.93)	(25.71)	(229)	(0.21)
35	14.08	33.62	5.77	285							
45	13.82	33.58	5.24	282							
55	12.95	33.56	3.89	267							
70	11.50	33.61	3.06	238							

CREST; February 19, 1955; 0624 GCT; 28°03'N, 114°55'W; sounding, 47 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 11°.

12035

0	14.9	33.58	5.96	304	0	14.9	33.58	5.96	24.92	304	0.00
10	15.00	33.63	5.98	303	10	15.00	33.63	5.98	24.94	303	0.03
15	15.01	33.68	5.95	299	20	14.98	33.58	5.91	24.91	306	0.06
20	14.98	33.58	5.91	306	30	14.96	33.58	5.83	24.91	305	0.09
25	14.98	33.60	5.92	305	50	14.70	33.58	5.71	24.96	300	0.15
30	14.96	33.58	5.83	305							
35	14.88	33.58	5.83	304							
40	14.82	33.60	5.79	301							
50	14.70	33.58	5.71	300							
60	14.08	33.52	5.61	292							

SPENCER F. BAIRD; February 23, 1955; 2011 GCT; 27°54'N, 115°18'W; sounding, 50 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

12040

0	14.18	33.63	5.41	286	0	14.18	33.63	5.41	25.11	286	0.00
5	13.88	33.61	5.71	282	10	13.82	33.63	5.30	25.18	279	0.03
10	13.82	33.63	5.30	279	20	13.77	33.65	5.18	25.21	276	0.06
14	13.80	33.67	5.36	276	30	13.75	33.67	5.25	25.24	274	0.08
19	13.76	33.67	5.17	275	50	12.76	33.69	4.02	25.45	254	0.15
24	13.77	33.62	5.25	278							
28	13.77	33.67	5.27	275							
38	13.68	33.67	5.09	274							
47	13.05	33.68	4.37	260							
60	12.02	33.23	2.99	238							

S10

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5502

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

120.45

SPENCER F. BAIRD; February 23, 1955; 1535 GCT; 27°44.5'N, 115°27'W; sounding, 1425 fm; wind, 360°, force 5; weather, overcast; sea, rough; wire angle, 11°.

0	14.69	33.52	5.65	304	0	14.69	33.52	5.65	24.92	304	0.00
10	14.68	33.44	5.66	310	10	14.68	33.44	5.66	24.86	310	0.03
30	14.69	33.44	5.57	310	20	14.69	33.44	5.60	24.86	310	0.06
45	13.72	33.37	5.03	296	30	14.69	33.44	5.57	24.86	310	0.09
59	11.95	33.78	2.71	233	50	11.41	33.51	4.26	25.56	243	0.15-69
69	11.70	33.84	2.62	224	75	11.59	33.89	2.40	25.82	218	0.21
78	11.51	33.92	2.19	215	100	11.17	34.04	1.88	26.02	200	0.26
92	11.32	33.97	1.97	208	150	10.90	34.28	1.42	26.24	178	0.36
102	11.17	34.04	1.87	200	200	10.79	34.38	1.15	26.36	168	0.44
117	11.15	34.07	1.69	197	250	10.23	34.46	0.58	26.51	153	0.52
145	10.94	34.27	1.42	179	300	9.31	34.52	0.48	26.71	134	0.60
175	10.86	34.37	-	170	400	8.08	34.48	0.33	26.88	118	0.73
233	10.54	34.42	0.69	161	500	6.99	34.47	0.28	27.02	105	0.84
301	9.30	34.52	0.48	134	600	6.02	34.45	0.24	27.13	94	0.95
416	7.90	34.48	0.32	116	700	(5.40)	(34.43)	(0.35)	(27.20)	(88)	(1.05)
554	6.40	34.46	0.24	98							
694	5.41	34.43	0.34	88							

120.45

SPENCER F. BAIRD; February 23, 1955; 1700 GCT; 27°44.5'N, 115°37'W; sounding, 1450 fm; wind, 360°, force 5; weather, overcast; sea, rough; wire angle, 18°.

0	14.67	33.50		305	0	14.67	33.50		24.91	305	0.00
10	14.65	33.47		307	10	14.65	33.47		24.89	307	0.03
30	14.66	33.48		306	20	14.65	33.48		24.90	307	0.06
34	14.48	33.45		305	30	14.66	33.48		24.90	306	0.09
39	13.97	33.39		299	50	13.73	33.40		25.03	294	0.15
44	13.90	33.39		298	75	11.67	33.83		25.76	224	0.22
48	13.80	33.41		294	100	11.13	33.98		25.98	203	0.27
53	13.50	33.35		293	150	10.87	34.32		26.29	174	0.37
59	12.33	33.40		268	200	10.67	34.47		26.44	160	0.45
68	11.62	33.52		246	250	(10.25)	(34.52)		(26.56)	(149)	(0.53)
77	11.68	33.86		222							
87	11.44	33.97		210							
96	11.20	33.97		206							
142	10.90	34.27		178							
190	10.72	34.45		162							
234	10.45	34.52		152							
244	10.37	34.52		150							

120.50

SPENCER F. BAIRD; February 23, 1955; 1205 GCT; 27°34.5'N, 115°49'W; sounding, 2100 fm; wind, 010°, force 5; weather, cloudy; sea, rough; wire angle, 36°.

0	14.94	33.48	4.93	313	0	14.94	33.48	4.93	24.83	313	0.00
9	14.96	33.49	5.74	312	10	14.96	33.49	5.76	24.84	312	0.03
25	14.96	33.39u	6.10	-	20	14.96	33.49	6.00	24.84	312	0.06
38	14.94	33.51	5.75	310	30	14.96	33.50	5.95	24.85	311	0.09
50	14.68	33.51	5.70	305	50	14.68	33.51	5.70	24.91	305	0.16
58	14.49	33.40	5.75	309	75	13.90	33.41	5.19	25.00	296	0.23
66	14.30	33.40	5.70	305	100	11.12	33.49	3.97	25.60	240	0.30
78	13.68	33.42	5.01	291	150	9.22	33.96	2.32	26.29	174	0.40
85	12.29	33.47	4.10	262	200	9.04	34.21	1.92	26.51	153	0.49
96	11.25	33.48	4.00	243	250	8.92	34.35	1.43	26.64	140	0.56
117	9.90	33.74	3.42	201	300	8.84	34.46	0.73	26.74	131	0.63
138	9.44	33.90	-	182	400	7.88	34.45	0.29	26.88	118	0.76
180	9.09	34.14	2.04	158	500	6.87	34.43	0.45	27.01	106	0.88
231	8.93	34.30	1.40	144							
322	8.76	34.47	0.38	129							
437	7.46	34.44	0.29	113							
560	6.28	34.43	0.69	99							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m

SPENCER F. BAIRD; February 23, 1955; 0842 GCT; 27°24'N, 116°12'W; sounding, 2200 fm; wind, 360°, force 5; weather, cloudy; sea, rough; wire angle, 30°.

12055

0	15.40	33.53	5.55	318	0	15.40	33.53	5.55	24.77	318	0.00
9	15.40	33.48	5.74	322	10	15.40	33.48	5.74	24.74	322	0.03
26	15.41	33.51	5.66	320	20	15.40	33.50	5.70	24.75	321	0.06
48	15.40	33.48	5.65	322	30	15.40	33.50	5.66	24.75	321	0.10
61	14.86	33.41	5.57	316	50	15.38	33.48	5.64	24.74	322	0.16
70	14.47	33.47	5.71a)	303	75	13.83	33.43	5.52	25.03	293	0.24
82	12.34	33.31	4.95	274	100	11.19	33.39	4.53	25.51	248	0.31
101	11.18	33.39	4.52	248	150	10.10	33.87	2.73	26.08	194	0.42
129	10.46	33.76	3.13	209	200	9.44	34.06	2.15	26.33	170	0.51
147	10.12	33.87	2.74	195	250	8.76	34.21	1.52	26.56	148	0.59
199	9.45	34.06	2.16	170	300	8.30	34.28	1.14	26.68	137	0.67
251	8.74	34.21	-	148	400	7.43	34.35	0.56	26.87	119	0.80
336	8.00	34.32	0.89	129	500	6.59	34.38	0.30	27.00	106	0.92
455	6.97	34.37	0.36	111	600	5.91	34.40	0.24	27.11	97	1.03
620	5.80	34.40	0.24	94	700	5.34	34.42	0.24	27.20	88	1.12
830	4.77	34.44	0.31	80	800	4.88	34.43	0.37	27.26	82	1.22
1131	3.76	34.49	0.64	66	1000	4.11	34.47	0.50	27.38	71	1.38

SPENCER F. BAIRD; February 23, 1955; 0452 GCT; 27°15'N, 116°30.5'W; sounding, 2100 fm; wind, 360°, force 4; weather, missing; sea, rough; wire angle, 30°.

12060

0	15.81	33.44	5.78	333	0	15.81	33.44	5.78	24.62	333	0.00
9	15.79	33.35	5.65	340	10	15.79	33.35	5.64	24.55	339	0.03
22	15.74	33.38	5.40	336	20	15.77	33.38	5.44	24.58	336	0.07
48	15.05	33.30	5.85	328	30	15.59	33.38	5.55	24.62	333	0.10
57	15.09	33.30	5.74	329	50	15.04	33.30	5.83	24.67	328	0.17
66	15.35	33.46	5.69	322	75	14.64	33.42	5.60	24.86	310	0.25
78	14.20	33.39	5.53	304	100	11.68	33.38	4.48	25.41	258	0.32
94	12.02	33.37	4.56	264	150	9.59	33.67	3.55	26.00	202	0.44
116	10.66	33.41	4.37	238	200	9.56	34.12	2.30	26.36	167	0.53
138	10.10	33.59	3.89	216	250	9.01	34.24	1.90	26.55	150	0.61
176	9.69	33.95	2.53	182	300	8.20	34.26	1.28	26.69	136	0.68
232	9.25	34.22	-	155	400	7.40	34.25	0.49	26.79	127	0.82
309	8.07	34.26	1.20	135	500	6.54	34.36	0.35	26.99	107	0.94
414	7.36	34.25	0.46	126	600	5.87	34.43	0.32	27.15	93	1.05
561	6.05	34.42	0.32	96	700	5.32	34.46	0.30	27.23	85	1.15
754	5.08	34.47	0.30	82	800	4.89	34.48	0.32	27.30	78	1.24
1033	4.06	34.54	0.51	66	1000	4.19	34.53	0.48	27.41	68	1.40

SPENCER F. BAIRD; February 22, 1955; 2337 GCT; 26°55'N, 117°09'W; sounding, 2300 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

12070

0	15.90	33.55	5.59	327	0	15.90	33.55	5.59	24.68	327	0.00
10	15.89	33.50	5.42	331	10	15.89	33.50	5.42	24.64	331	0.03
25	15.87	33.53	5.40	328	20	15.88	33.52	5.40	24.66	329	0.07
54	15.66	33.58	5.44	320	30	15.86	33.54	5.40	24.67	328	0.10
64	15.85	33.61	5.56	322	50	15.69	33.56	5.44	24.73	322	0.16
73	15.62	33.58	5.47	319	75	15.49	33.55	5.43	24.77	319	0.24
88	14.36	33.35	5.06	310	100	13.00	33.37	4.39	25.15	283	0.32
107	12.20	33.42	3.94	264	150	11.01	33.93	2.16	25.95	206	0.44
131	11.38	33.76	2.73	224	200	10.29	34.18	1.79	26.28	174	0.54
160	11.12	34.09	1.83	196	250	9.00	34.36	1.39	26.64	141	0.62
212	9.89	34.22	1.80	166	300	8.59	34.38	1.18	26.72	133	0.70
288	8.70	34.38	-	135	400	7.33	34.36	0.59	26.88	118	0.82
384	7.46	34.36	0.65	119	500	6.70	34.38	0.35	26.99	108	0.94
534	6.51	34.39	0.30	105	600	6.09	34.40	0.28	27.09	98	1.05
723	5.30	34.43	0.28	87	700	5.48	34.42	0.28	27.19	89	1.15
960	4.25	34.47	0.49	73	800	4.93	34.44	0.32	27.26	82	1.25
1269	3.42	34.52	0.80	61	1000	4.11	34.48	0.54	27.37	71	1.41

a) Mean value of 5.61 and 5.81 ml/L.

S10

CCOFI
5502

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

12080

SPENCER F. BAIRD; February 22, 1955; 1817 GCT; 26°38.5'N, 117°48.5'W; sounding, 2150 fm; wind, 050°, force 4; weather, cloudy; sea, rough; wire angle, 14°.

0	16.16	33.50	5.45	337	0	16.16	33.50	5.45	24.58	337	0.00
10	16.16	33.50	5.49	337	10	16.16	33.50	5.49	24.58	337	0.03
25	16.17	33.56	5.47	332	20	16.17	33.54	5.47	24.61	334	0.07
54	15.42	33.40	5.42	328	30	16.17	33.56	5.44	24.63	332	0.10
64	15.36	33.40	5.47	326	50	15.60	33.45	5.42	24.65	330	0.17
73	15.32	33.37	5.38	328	75	15.30	33.36	5.36	24.67	328	0.15
88	14.15	33.25	5.33	313	100	12.35	33.20	4.90	25.13	284	0.33
107	11.61	33.20	4.68	270	150	10.18	33.56	3.66	25.82	219	0.45
130	10.52	33.46	4.11	232	200	9.40	34.04	2.42	26.32	171	0.55
160	9.88	33.59	3.48	212	250	8.95	34.21	1.95	26.53	151	0.64
212	9.28	34.12	2.28	163	300	8.42	34.28	1.48	26.66	139	0.71
288	8.59	34.27	-	141	400	7.23	34.36	0.53	26.90	116	0.84
392	7.33	34.35	0.57	118	500	6.50	34.40	0.33	27.03	104	0.96
530	6.30	34.42	0.28	100	600	5.91	34.45	0.27	27.15	92	1.06
716	5.25	34.49	0.26	82	700	5.35	34.48	0.26	27.25	83	1.16
948	4.27	34.52	0.46	69	800	4.87	34.50	0.31	27.31	77	1.24
1251	3.45	34.63	0.77	53	1000	4.13	34.53	0.51	27.42	67	1.40

12090

SPENCER F. BAIRD; February 22, 1955; 1246 GCT; 26°14'N, 118°32'W; sounding, 2250 fm; wind, 030°, force 4; weather, clear; sea, rough; wire angle, 25°.

0	15.36	33.41	5.76	326	0	15.36	33.41	5.76	24.69	326	0.00
10	15.36	33.39	5.68	327	10	15.36	33.39	5.68	24.68	327	0.03
24	15.37	33.45	5.69	323	20	15.36	33.43	5.69	24.71	324	0.06
51	15.02	33.36	5.72	323	30	15.32	33.42	5.70	24.72	323	0.10
60	14.82	33.36	5.71	319	50	15.06	33.37	5.71	24.72	323	0.16
69	14.67	33.37	5.71	315	75	14.38	33.36	5.68	24.85	311	0.24
83	13.17	33.19	5.41	298	100	11.39	33.18	4.85	25.31	267	0.32
101	11.25	33.18	4.79	265	150	9.73	33.97	2.58	26.22	181	0.43
122	10.10	33.40	4.06	230	200	8.88	34.07	2.48	26.44	160	0.52
149	9.75	33.94	2.64	184	250	8.59	34.23	1.90	26.61	144	0.59
196	8.93	34.06	2.52	162	300	8.42	34.38	1.30	26.74	131	0.66
264	8.52	34.30a)	-	138	400	7.64	34.45	0.39	26.91	116	0.79
361	8.12	34.46	0.44	121	500	6.30	(34.38)	0.42	(27.04)	(103)	(0.91)
487	6.41	34.38	0.43	104	600	5.71	(34.43)	0.30	(27.17)	(91)	(1.01)
663	5.35	34.66r	0.28	-	700	5.19	(34.50)	0.29	(27.28)	(81)	(1.10)
880	4.43	34.55	0.45	69	800	4.73	(34.53)	0.38	(27.35)	(73)	(1.18)
1172	3.58	34.57	0.76	59	1000	4.06	34.56	0.58	27.45	64	(1.34)

120100

SPENCER F. BAIRD; February 22, 1955; 0735 GCT; 25°57'N, 119°06'W; sounding, 2300 fm; wind, 050°, force 4; weather, partly cloudy; sea, rough; wire angle, 02°.

0	16.44	33.58	5.45	337	0	16.44	33.58	5.45	24.58	337	0.00
10	16.43	33.55	5.36	339	10	16.43	33.55	5.36	24.56	339	0.03
25	16.45	33.58	5.35	337	20	16.45	33.58	5.35	24.56	338	0.07
55	16.45	33.57	5.47	338	30	16.45	33.58	5.38	24.56	338	0.10
65	15.83	33.41	5.32	336	50	16.46	33.58	5.46	24.56	338	0.17
74	15.35	33.38	5.54	328	75	15.32	33.38	5.54	24.68	327	0.25
89	14.85	33.38	5.11	318	100	14.20	33.39	5.02	24.92	304	0.33
108	13.20	33.42	4.96	282	150	10.38	33.58	4.02	25.80	221	0.46
133	11.18	33.46b)	4.76	243	200	9.82	33.99	2.62	26.21	182	0.57
161	10.14	33.68	3.61	209	250	9.25	34.16	2.00	26.45	159	0.66
213	9.73	34.04	2.40	176	300	8.59	34.26	1.49	26.63	142	0.73
291	8.70	34.25	-	144	400	7.50	34.30	0.73	26.82	124	0.87
397	7.55	34.30	0.76	125	500	6.67	34.38	0.36	26.99	108	0.99
538	6.40	34.39	0.30	103	600	5.97	34.41	0.31	27.11	96	1.10
727	5.15	34.43	0.33	85	700	5.31	34.42	0.32	27.20	88	1.20
962	4.32	34.52	0.51	70	800	4.84	34.47	0.39	27.29	79	1.29
1268	3.44	34.52	0.80	61	1000	4.19	34.52	0.56	27.41	68	1.45

a) Mean value of 34.27 and 34.34‰.

b) Mean value of 33.43 and 33.48‰.

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

SPENCER F. BAIRD; February 21, 1955; 0040 GCT; 27°24.5'N, 114°40.5'W; sounding, 40 fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 01°.

123.37

0	15.44	33.67	5.47	309	0	15.44	33.67	5.47	24.87	309	0.00
10	15.44	33.67	5.49	309	10	15.44	33.67	5.49	24.87	309	0.03
15	15.40	33.68	5.57	308	20	15.05	33.63	5.51	24.93	304	0.06
20	15.05	33.63	5.51	304	30	13.72	33.53	4.95	25.13	284	0.09
25	14.85	33.61	5.45	301	50	12.26	33.70	3.30	25.54	245	0.16
30	13.72	33.53	4.95	284							
35	13.25	33.56	4.66	273							
40	12.96	33.59	4.05	265							
45	12.76	33.65	3.74	257							
50	12.26	33.70	3.30	245							

SPENCER F. BAIRD; February 21, 1955; 0303 GCT; 27°18.5'N, 114°52'W; sounding, 300 fm; wind, 360°, force 4; weather, clear; sea, rough; wire angle, 20°.

123.40

0	15.51	33.68	5.57	309	0	15.51	33.68	5.57	24.87	309	0.00
10	15.50	33.66	5.63	311	10	15.50	33.66	5.63	24.85	311	0.03
29	15.40	33.64	5.48	310	20	15.47	33.65	5.63	24.85	311	0.06
38	13.79	33.48	5.04	289	30	15.39	33.63	5.46	24.86	310	0.09
48	12.58	33.47	4.10	267	50	12.48	33.47	4.06	25.33	265	0.15
57	12.17	33.48	3.98	258	75	11.06	33.80	2.82	25.85	216	0.21
66	11.40	33.58	3.29	238	100	11.83	34.28	1.41	26.08	194	0.26
75	11.06	33.80	2.82	216	150	10.29	34.31	1.50	26.38	165	0.35
84	11.61	34.08	2.09	205	200	10.66	34.56	0.56	26.52	152	0.43
93	11.99	34.24	1.62	200	250	10.01	34.54	0.51	26.61	144	0.51
111	11.48	34.30	1.37	186	300	9.49	34.53	0.46	26.67	138	0.58
135	10.44	34.24	-	173	400	8.37	34.51	0.35	26.85	121	0.71
153	10.28	34.31	1.44	165	500	(6.88)	(34.45)		(27.02)	(105)	(0.83)
190	10.74	34.56	0.62	154							
265	9.82	34.53	0.50	142							
362	8.86	34.52	0.38	127							
477	7.22	34.46	0.26	109							

SPENCER F. BAIRD; February 21, 1955; 0623 GCT; 27°08'N, 115°14'W; sounding, 2350 fm; wind, 010°, force 5; weather, clear; sea, rough; wire angle, 10°.

123.45

0	15.17	33.57	5.63	310	0	15.17	33.57	5.63	24.86	310	0.00
10	15.16	33.52	5.51	313	10	15.16	33.52	5.51	24.83	313	0.03
30	15.15	33.54	6.32	312	20	15.16	33.53	5.93	24.83	313	0.06
45	15.00	33.55	5.39	308	30	15.15	33.54	6.32	24.84	312	0.09
59	13.34	33.39	4.77	288	50	14.76	33.54	5.19	24.92	305	0.16
69	11.71	33.30	4.70	264	75	11.12	33.34	4.39	25.48	251	0.22
78	11.48	33.51	3.85	245	100	11.60	33.94	2.27	25.86	215	0.28
93	11.62	33.85	2.54	222	150	11.10	34.43	1.03	26.33	170	0.38
103	11.57	33.99	2.15	210	200	10.52	34.49	0.90	26.48	156	0.46
118	11.33	34.17	1.84	193	250	9.99	34.50	0.85	26.58	146	0.54
147	11.14	34.42	1.08	171	300	9.49	34.57	0.41	26.72	133	0.61
175	10.81	34.49	-	160	400	7.84	34.46	0.32	26.89	117	0.74
232	10.13	34.48	0.89	150	500	6.73	34.45	0.27	27.04	103	0.86
300	9.49	34.57	0.41	133	600	5.99	34.46	0.25	27.16	92	0.96
426	7.47	34.45	0.32	113	700	(5.39)	(34.48)	(0.27)	(27.24)	(84)	(1.05)
552	6.30	34.46	0.24	97							
690	5.41	34.48	0.27	84							

S10

CCOFI
5502

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m	

123.50

SPENCER F. BAIRD; February 21, 1955; 0937 GCT; 26°55.5'N, 115°33.5'W; sounding, 1800 fm; wind, 040°, force 5; weather, clear; sea, rough; wire angle, 05°.

0	15.46	33.50	5.65	322	0	15.46	33.50	5.65	24.74	322	0.00
10	15.46	33.44	5.76	325	10	15.46	33.44	5.76	24.70	325	0.03
30	15.46	33.50	5.60	322	20	15.46	33.48	5.65	24.72	323	0.06
45	15.10	33.52	5.55	313	30	15.46	33.50	5.60	24.74	322	0.10
60	14.70	33.46	5.50	309	50	14.96	33.50	5.54	24.85	311	0.16
70	14.29	33.47	5.30	300	75	13.51	33.40	5.12	25.07	290	0.24
80	12.75	33.32	5.07	281	100	11.04	33.44	3.90	25.57	242	0.30
95	11.28	33.32	4.37	255	150	10.75	34.14	1.75	26.17	185	0.41
104	10.87	33.56	3.49	230	200	10.28	34.43	1.12	26.48	156	0.50
119	9.88	33.70	3.26	204	250	9.81	34.53	0.78	26.64	141	0.57
148	10.75	34.14	1.79	185	300	9.19	34.53	0.44	26.74	131	0.64
177	10.49	34.34	-	166	400	7.72	34.43	0.30	26.88	118	0.77
235	9.99	34.52	0.87	145	500	6.88	34.43	0.27	27.01	106	0.89
303	9.16	34.53	0.43	131	600	6.19	34.46	0.21	27.12	95	1.00
420	7.50	34.42	0.29	115	700	(5.45)	(34.48)	0.18	(27.23)	(85)	(1.09)
567	6.40	34.45	0.23	99							
697	5.46	34.48	0.18	85							

123.55

SPENCER F. BAIRD; February 21, 1955; 1248 GCT; 26°45'N, 115°51.5'W; sounding, 2100 fm; wind, 030°, force 5; weather, clear; sea, rough; wire angle, 31°.

0	15.51	33.39	5.82	331	0	15.51	33.39	5.82	24.64	331	0.00
10	15.54	33.40	6.19	330	10	15.54	33.40	6.19	24.65	330	0.03
27	15.52	33.41	5.68	330	20	15.52	33.40	5.90	24.65	330	0.07
40	15.53	33.43	5.80	328	30	15.52	33.41	5.75	24.66	329	0.10
52	15.54	33.44	5.51	328	50	15.53	33.44	5.55	24.68	328	0.16
61	15.64	33.57	5.41	321	75	15.70	33.65	5.25	24.80	316	0.24
69	15.74	33.65	5.25	317	100	13.42	33.30	5.35	25.01	296	0.32
81	15.65	33.65	5.27	314	150	10.18	33.61	3.51	25.86	215	0.45
89	15.39	33.62	5.31	312	200	9.51	34.04	2.32	26.42	162	0.55
100	13.42	33.30	5.35	296	250	8.81	34.24	1.51	26.58	147	0.63
120	10.79	33.37	4.59	242	300	8.32	34.33	1.08	26.72	133	0.71
138	10.28	33.47	-	228	400	7.74	34.41	0.40	26.86	120	0.84
176	9.91	33.87	2.91	191	500	7.03	34.46	0.19	27.00	106	0.96
222	9.18	34.15	1.90	159							
301	8.31	34.33	1.05	133							
403	7.74	34.41	0.40	119							
516	6.92	34.46	0.18	104							

127.34

SPENCER F. BAIRD; February 20, 1955; 1912 GCT; 26°55.5'N, 114°06.5'W; sounding, 45 fm; wind, 020°, force 3; weather, clear; sea, slight; wire angle, 04°.

0	15.23	33.68	5.47	304	0	15.23	33.68	5.47	24.92	304	0.00
10	15.17	33.64	5.41	305	10	15.17	33.64	5.41	24.91	305	0.03
20	15.03	33.58	5.35	307	20	15.03	33.58	5.35	24.89	307	0.06
25	14.84	33.57	5.38	304	30	14.20	33.49	5.19	25.00	297	0.09
30	14.20	33.49	5.19	297	50	12.03	33.37	4.37	25.34	265	0.15
35	13.80	33.43	5.18	293							
40	12.88	33.37	4.76	280							
45	12.48	33.33	4.59	276							
50	12.03	33.37	4.37	265							
60	11.65	33.53	3.77	246							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	10 ⁻⁵ cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. cm

SPENCER F. BAIRD; February 20, 1955; 1516 GCT; 26°56.5'N, 114°40.5'W; sounding, 1750 fm; wind, 360°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°.

12740

0	16.06	33.72	5.49	318	0	16.06	33.72	5.49	24.78	318	0.00
10	16.08	33.75	5.45	316	10	16.08	33.75	5.45	24.79	316	0.03
30	16.07	33.71	5.30	320	20	16.08	33.73	5.40	24.78	318	0.06
43	16.07	33.71	5.44	320	30	16.07	33.71	5.30	24.76	320	0.10
57	15.85	33.71	5.46	315	50	16.00	33.71	5.45	24.77	319	0.16
66	14.02	33.57	4.51	288	75	12.78	33.49	3.88	25.29	269	0.23
75	12.78	33.49	3.88	269	100	10.74	33.71	3.28	25.84	217	0.30
89	11.53	33.55	3.65	242	150	10.56	34.27	1.69	26.31	172	0.39
98	10.79	33.68	3.34	220	200	10.28	34.48	0.91	26.52	152	0.48
111	10.60	33.83	2.79	206	250	9.80	34.52	0.63	26.64	141	0.55
137	10.60	34.13	1.98	184	300	9.20	34.53	0.52	26.73	132	0.62
163	10.48	34.34	-	166	400	7.92	34.50	0.30	26.91	116	0.75
217	10.14	34.50	0.72	148	500	6.82	34.46	0.18	27.03	104	0.86
281	9.43	34.53	0.57	136	600	6.07	34.46	0.16	27.14	93	0.97
389	8.02	34.50	0.33	117							
519	6.64	34.46	0.16	102							
653	5.78	34.47	0.18	89							

SPENCER F. BAIRD; February 20, 1955; 1127 GCT; 26°42.5'N, 114°58'W; sounding, 2050 fm; wind, 020°, force 6; weather, clear; sea, very rough; wire angle, 20°.

12745

0	15.02	33.60	5.82	305	0	15.02	33.60	5.82	24.91	305	0.00
10	15.04	33.59	5.63	306	10	15.04	33.59	5.63	24.90	306	0.03
29	14.58	33.60	5.67	296	20	14.91	33.59	5.58	24.93	304	0.06
42	12.92	33.55	4.73	268	30	14.42	33.60	5.64	25.03	294	0.09
56	12.10	33.51	3.65	255	50	12.41	33.53	3.96	25.39	260	0.15
65	11.56	33.50	3.88	246	75	11.46	33.65	3.24	25.66	234	0.21
74	11.46	33.65	3.25	234	100	10.69	33.85	2.69	25.95	206	0.26
87	11.02	33.74	2.85	220	150	10.15	34.15	2.00	26.28	175	0.36
109	10.51	33.89	2.66	200	200	10.04	34.41	1.57	26.51	154	0.44
135	10.10	33.98	2.38	186							
162	10.18	34.27	-	166							
220	9.96	34.45	1.52	149							

SPENCER F. BAIRD; February 20, 1955; 0744 GCT; 26°32.5'N, 115°11.5'W; sounding, 2300 fm; wind, 020°, force 6; weather, clear; sea, rough; wire angle, 10°.

12750

0	15.49	33.58	5.51	317	0	15.49	33.58	5.51	24.79	317	0.00
10	15.50	33.56	5.47	318	10	15.50	33.56	5.47	24.77	318	0.03
30	15.52	33.57	5.35	318	20	15.51	33.56	5.40	24.78	318	0.06
45	13.91	33.58	5.52	284	30	15.52	33.57	5.35	24.78	318	0.10
60	12.50	33.58	3.93	258	50	13.36	33.58	4.68	25.24	274	0.15
70	11.85	33.59	3.65	245	75	11.54	33.60	3.44	25.60	239	0.22
80	11.33	33.62	3.09	234	100	10.94	33.77	2.59	25.84	216	0.28
96	11.01	33.84u	2.61	-	150	10.28	34.14	1.92	26.25	178	0.38
105	10.89	33.80	2.58	212	200	10.14	34.42	1.18	26.50	155	0.46
120	10.99	34.00	2.03	200	250	9.49	34.41	0.72	26.60	145	0.54
149	10.28	34.14	1.93	178	300	8.83	34.42	0.55	26.71	134	0.61
179	10.33	34.42	-	158	400	7.74	34.42	0.34	26.87	119	0.74
238	9.62	34.41	0.76	147	500	6.91	34.43	0.21	27.00	106	0.86
305	8.78	34.42	0.53	133	600	6.18	34.44	0.18	27.11	96	0.96
423	7.54	34.42	0.32	116	700	5.46	34.45	0.21	27.20	88	1.06
561	6.42	34.44	0.18	100							
703	5.44	34.45	0.22	87							

S10

CCOFI
5502

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

127.55

SPENCER F. BAIRD; February 20, 1955; 0410 GCT; 26°20'N, 115°28'W; sounding, 2000 fm; wind, 020°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°.

0	16.24	33.68	5.50	325	0	16.24	33.68	5.50	24.70	325	0.00
9	16.26	33.67	5.53	326	10	16.26	33.66	5.53	24.68	327	0.03
27	16.27	33.66	5.52	327	20	16.26	33.66	5.53	24.68	327	0.06
40	16.16	33.62	5.60	328	30	16.25	33.65	5.56	24.68	328	0.10
54	15.63	33.62	5.62	317	50	15.83	33.62	5.62	24.74	321	0.16
62	15.08	33.61	5.85	306	75	13.80	33.49	5.04	25.08	289	0.24
71	14.40	33.51	5.48	299	100	11.57	33.62	3.30	25.64	236	0.31
84	12.27	33.47	4.04	262	150	10.20	33.92	2.40	26.09	193	0.42
92	11.46	33.45	3.97	249	200	10.58	34.38	1.20	26.39	165	0.50
104	11.56	33.72	3.03	230	250	10.18	34.53	0.58	26.58	147	0.58
129	10.90	33.73	2.89	218	300	9.60	34.54	0.38	26.68	138	0.66
152	10.20	33.96	-	190	400	8.36	34.46	0.27	26.82	124	0.79
197	10.56	34.35	1.28	167	500	7.10	34.41	0.21	26.96	110	0.92
251	10.18	34.54	0.56	146	600	(6.10)	(34.43)	(0.24)	(27.12)	(96)	(1.03)
347	9.05	34.51	0.32	130							
465	7.44	34.41	0.21	115							
592	6.21	34.43	0.22	98							

130.30

SPENCER F. BAIRD; February 19, 1955; 0314 GCT; 26°29.5'N, 113°32'W; sounding, 45 fm; wind, 280°, force 5; weather, clear; sea, rough; wire angle, 13°.

0	16.77	33.87	5.36	323	0	16.77	33.87	5.36	24.73	323	0.00
10	16.76	33.86	4.76	323	10	16.76	33.86	4.76	24.72	323	0.03
20	16.79	33.86	5.21	324	20	16.79	33.86	5.21	24.71	324	0.06
25	16.76	33.84	5.23	325	30	16.54	33.86	5.21	24.77	319	0.10
30	16.54	33.86	5.21	319	50	14.09	33.71	3.91	25.20	278	0.16
35	15.85	33.80	4.84	308							
40	15.26	33.78	4.59	297							
45	14.65	33.72	4.19	289							
50	14.09	33.71	3.91	278							
59	12.78	33.79	2.97	247							

130.35

SPENCER F. BAIRD; February 19, 1955; 0605, 0621 GCT; 26°20'N, 113°50'W; sounding, 175 fm; wind, 350°, force 5; weather, missing; sea, rough; wire angle, 09°, 07°.

0	15.13	33.65	5.63	304	0	15.13	33.65	5.63	24.92	304	0.00
10	15.12	33.65	5.38	304	10	15.12	33.65	5.38	24.92	304	0.03
20	14.12	33.66	4.80	283	20	14.12	33.66	4.80	25.15	283	0.06
25	13.79	33.64	4.47	277	30	13.10	33.65	3.84	25.35	263	0.09
30	13.10	33.65	3.84	263	50	12.14	33.82	2.56	25.66	234	0.14
35	12.66	33.66	3.50	255	75	11.32	33.93	2.23	25.90	211	0.19
45	12.34	33.74	2.73	243	100	11.06	34.07	1.86	26.06	196	0.24
55	11.89	33.88	-	224	150	11.33	34.41	0.80	26.27	176	0.34
64	11.49	33.90	2.37	216	200	11.05	34.60	0.52	26.48	156	0.42
					250	10.40	34.59	0.40	26.59	146	0.50
99	11.05	34.07	1.88	196	300	(9.74)	(34.51)	(0.38)	(26.64)	(141)	(0.57)
123	11.45	34.34	1.20	183							
161	11.28	34.45	0.74	172							
199	11.05	34.60	0.52	156							
238	10.50	34.60	0.48	147							
243	10.50	34.60	0.43	147							
298	9.78	34.52	0.38	141							

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

SPENCER F. BAIRD; February 19, 1955; 0947, 1051 GCT; 26°07'N, 114°12'W; sounding, 1550 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 33°, 32°.

130.40

0	16.69	33.83	5.58	324	0	16.69	33.83	5.58	24.71	324	0.00
9	16.69	33.75	5.41	330	10	16.70	33.75	5.41	24.66	330	0.03
26	16.70	33.80	5.27	327	20	16.70	33.78	5.31	24.68	328	0.07
47	16.17	33.72	5.35	321	30	16.68	33.81	5.23	24.70	325	0.10
60	15.85	33.68	5.23	317	50	16.03	33.71	5.32	24.77	319	0.16
					75	15.25	33.68	4.84	24.92	304	0.24
66	15.57	33.68	4.95	311	100	12.14	33.72	3.01	25.58	241	0.31
78	15.10	33.68	4.85	301	150	11.52	34.29	1.19	26.15	188	0.42
97	12.45	33.69	3.45	249	200	10.91	34.44	0.99	26.38	166	0.51
125	11.47	34.10	1.68	201	250	10.48	34.52	0.86	26.51	153	0.59
143	11.54	34.24	1.21	192	300	9.63	34.52	0.53	26.66	139	0.67
190	10.98	34.42	1.02	168	400	8.11	34.48	0.30	26.87	119	0.80
255	10.41	34.52	-	152	500	7.02	34.44	0.22	26.99	108	0.92
345	8.85	34.51	0.37	128	600	6.20	34.42	0.22	27.08	99	1.03
467	7.38	34.45	0.26	111	700	5.58	34.42	0.23	27.17	90	1.13
636	5.98	34.41	0.22	96	800	5.10	34.46	0.26	27.26	82	1.22
849	4.87	34.48	0.27	79	1000	4.32	34.53	0.30	27.39	69	1.39
1151	3.89	34.58	0.34	61							

SPENCER F. BAIRD; February 19, 1955; 1638 GCT; 25°45'N, 114°53'W; sounding, 2150 fm; wind, 010°, force 4; weather, partly cloudy; sea, rough; wire angle, 19°.

130.50

0	16.58	33.71	5.70	331	0	16.58	33.71	5.70	24.64	331	0.00
10	16.56	33.69	5.70	331	10	16.56	33.69	5.70	24.64	331	0.03
29	16.59	33.59	5.65	339	20	16.55	33.64	5.68	24.59	335	0.07
53	16.52	33.66	5.28	333	30	16.59	33.59	5.65	24.56	339	0.10
67	16.40	33.63	6.10	332	50	16.53	33.66	5.30	24.62	333	0.17
76	16.34	33.68	6.09	328	75	16.34	33.68	6.09	24.67	328	0.25
90	12.48	33.35	4.77	275	100	11.27	33.34	4.64	25.46	253	0.32
112	11.03	33.34	4.55	250	150	10.31	33.87	3.05	26.04	198	0.44
143	10.33	33.80	3.06	204	200	10.14	34.21	1.02	26.34	170	0.53
166	10.28	34.00	0.73	188	250	9.75	34.46	1.11	26.59	145	0.61
220	9.98	34.33	1.18	158	300	9.30	34.52	0.90	26.72	134	0.68
296	9.36	34.52	-	134	400	8.22	34.52	0.41	26.88	118	0.82
400	8.22	34.52	0.41	118	500	7.20	34.52	0.28	27.02	105	0.93
542	6.85	34.51	0.24	100	600	6.40	34.52	0.24	27.14	94	1.04
737	5.40	34.54	0.24	80	700	5.67	34.54	0.24	27.25	83	1.13
972	4.35	34.53	0.39	69	800	5.04	34.54	0.27	27.32	76	1.22
1293	3.41	34.64	0.68	52	1000	4.21	34.55	0.47	27.44	64	1.37

SPENCER F. BAIRD; February 19, 1955; 2137 GCT; 25°27.5'N, 115°26'W; sounding, 2150 fm; wind, 070°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.

130.60

0	17.49	33.94	5.38	335	0	17.49	33.94	5.38	24.60	335	0.00
10	17.48	33.88	5.35	339	10	17.48	33.88	5.35	24.56	339	0.03
28	17.41	33.86	5.39	338	20	17.47	33.87	5.38	24.56	339	0.07
51	16.22	33.61	5.52	330	30	17.36	33.85	5.41	24.57	338	0.10
65	15.40	33.48	5.48	322	50	16.22	33.61	5.51	24.65	330	0.17
75	13.80	33.38	5.31	297	75	13.80	33.38	5.31	25.00	297	0.25
88	12.52	33.24	5.34	283	100	12.49	33.28	5.34	25.38	261	0.32
110	10.54	33.36	5.23	240	150	9.83	33.88	3.01	26.12	190	0.43
141	9.93	33.79	3.24	198	200	9.40	34.25	2.00	26.49	155	0.52
163	9.60	34.00	2.90	177	250	8.97	34.30	1.26	26.60	145	0.60
215	9.30	34.27	1.64	152	300	8.39	34.31	0.91	26.70	136	0.67
290	8.50	34.31	-	137	400	7.48	34.35	0.57	26.86	120	0.80
393	7.52	34.35	0.57	120	500	6.65	34.41	0.41	27.02	105	0.92
534	6.42	34.42	0.30	101	600	6.00	34.44	0.28	27.13	94	1.02
727	5.27	34.46	0.28	84	700	5.40	34.46	0.28	27.21	86	1.12
961	4.24	34.48	0.45	72	800	4.92	34.47	0.34	27.28	80	1.21
1285	3.38	34.62	0.74	53	1000	4.12	34.48	0.48	27.38	71	1.38

S10

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5502

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	$\frac{-5}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{-5}{10} \text{ cm/g}$	dyn. m	

133.25

SPENCER F. BAIRD; February 18, 1955; 1330 GCT; 26°03'N, 112°50.5'W; sounding, 55 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 03°.

0	16.93	33.84	5.45	329	0	16.93	33.84	5.45	24.66	329	0.00
10	16.92	33.84	5.51	328	10	16.92	33.84	5.51	24.67	328	0.03
15	16.94	33.86	5.56	327	20	16.92	33.92	5.45	24.72	323	0.06
20	16.92	33.92	5.45	323	30	16.75	33.86	5.27	24.72	323	0.10
25	16.86	33.86	5.27	326	50	14.94	33.68	4.42	24.98	298	0.16
30	16.75	33.86	5.27	323	75	13.09	33.85	2.93	25.50	249	0.23
35	16.37	33.83	5.01	317	100	(12.65)	(34.17)	(1.50)	(25.84)	(217)	(0.29)
45	15.38	33.64	4.99	310							
55	14.56	33.73	3.90	286							
64	13.36	33.76	3.22	260							
79	12.93	33.93	2.62	240							
98	12.65	34.15	1.55	219							

133.30

SPENCER F. BAIRD; February 18, 1955; 1620 GCT; 25°51'N, 113°14.5'W; sounding, 58 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

0	17.03	33.89	5.27	329	0	17.03	33.89	5.27	24.66	329	0.00
10	17.02	33.93	5.19	324	10	17.02	33.93	5.19	24.71	324	0.03
15	17.03	33.93	5.28	324	20	17.00	33.91	5.28	24.70	325	0.06
20	17.00	33.91	5.28	325	30	16.57	33.91	5.24	24.80	315	0.10
25	16.88	33.93	5.33	321	50	14.25	33.77	3.82	25.20	278	0.16
30	16.57	33.91	5.24	315							
35	16.29	33.88	4.96	312							
40	15.78	33.83	4.76	304							
45	14.98	33.82	4.28	288							
50	14.25	33.77	3.82	278							

133.40

SPENCER F. BAIRD; February 18, 1955; 2030 GCT; 25°38'N, 113°50'W; sounding, 1550 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 27°.

0	16.31	33.75	5.54	322	0	16.31	33.75	5.54	24.74	322	0.00
9	16.31	33.79	5.60	318	10	16.31	33.79	5.60	24.78	318	0.03
27	15.28	33.62	5.43	309	20	15.80	33.71	5.54	24.82	314	0.06
40	14.66	33.68	5.48a)	292	30	15.10	33.63	5.46	24.91	305	0.09
52	14.22	33.69	5.01	283	50	14.29	33.69	5.08	25.13	284	0.15
60	13.22	33.58	4.50	271	75	12.31	33.72	3.40	25.56	244	0.22
68	12.70	33.64	3.89	257	100	11.78	33.95	2.11	25.84	217	0.28
80	12.45	33.83	2.84	238	150	10.82	34.34	1.31	26.32	172	0.38
88	11.96	33.92	2.23	222	200	10.62	34.51	0.70	26.48	156	0.46
100	11.78	33.95	2.11	217	250	10.06	34.54	0.70	26.61	144	0.54
125	11.20	34.18	1.50	190	300	9.40	34.51	0.47	26.68	137	0.61
148	10.82	34.34	1.31	172	400	8.24	34.47	0.20	26.84	122	0.74
197	10.64	34.50	0.70	157	500	7.31	34.47	0.19	26.98	109	0.86
254	10.00	34.54	0.70	143	600	6.38	34.48	0.31	27.11	96	0.96
355	8.72	34.47	0.26	128							
476	7.51	34.47	0.16	112							
603	6.35	34.48	0.32	96							

137.23

SPENCER F. BAIRD; February 18, 1955; 0823 GCT; 25°34.5'N, 112°19'W; sounding, 43 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 11°.

0	16.35	33.78	5.48	320	0	16.35	33.78	5.48	24.75	320	0.00
5	16.35	33.71	5.04	326	10	16.35	33.75	5.35	24.73	323	0.03
10	16.35	33.75	5.35	323	20	16.12	33.78	5.17	24.80	315	0.06
15	16.20	33.77	5.19	318	30	15.22	33.80	4.34	25.02	295	0.09
20	16.12	33.78	5.17	315							
25	15.28	33.84	4.34	293							
30	15.22	33.80	4.34	295							
35	14.45	33.77	3.80	281							
39	14.39	33.86	3.42	274							
44	14.24	33.94	3.24	265							

a) Mean value of 5.31 and 5.66 ml/L.

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

SPENCER F. BAIRD; February 18, 1955; 0435 GCT; 25°19.5'N, 112°45'W; sounding, 190 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 21°.

137.30

0	17.33	33.92	5.35	332	0	17.33	33.92	5.35	24.63	332	0.00
10	17.23	33.86	5.66	334	10	17.23	33.86	5.66	24.60	334	0.03
15	16.73	33.93	5.15	318	20	16.49	33.90	5.23	24.81	315	0.07
19	16.50	33.90	5.23	315	30	16.00	33.88	4.57	24.91	306	0.10
24	16.43	33.93	5.24	311	50	15.03	33.94	3.79	25.17	281	0.16
28	16.16	33.88	5.27	308	75	14.04	33.94	3.04	25.38	261	0.22
33	15.78	33.89	4.06	300	100	13.28	34.00	2.50	25.58	242	0.29
42	15.40	33.89	-	292	150	12.16	34.46	0.57	26.16	186	0.40
51	15.00	33.94	3.77	280	200	11.38	34.63	0.27	26.44	160	0.48
60	14.73	33.90	3.61	277	250	10.84	34.61	0.16	26.52	152	0.56
74	14.08	33.94	3.06	261							
92	13.54	33.95	2.70	250							
115	12.86	34.11	2.04	226							
151	12.16	34.47	0.56a)	185							
187	11.54	34.63	0.49b)	163							
224	11.05	34.62	0.14	155							
281	10.67	34.61	0.16	150							

34
90

SPENCER F. BAIRD; February 17, 1955; 1634 GCT; 24°56.5'N, 113°24'W; sounding, 1800 fm; wind, 340°, force 2; weather, partly cloudy; sea, moderate; wire angle, 12°.

137.40

0	18.49	34.04	4.87	351	0	18.49	34.04	4.87	24.43	351	0.00
10	18.46	34.10	4.90	346	10	18.46	34.10	4.90	24.48	346	0.04
30	17.72	33.96	5.02	338	20	18.20	34.08	4.97	24.52	342	0.07
40	16.70	33.85	4.96	323	30	17.72	33.96	5.02	24.56	338	0.10
49	16.62	33.85	5.08	321	50	16.60	33.85	5.10	24.74	321	0.17
59	16.42	33.82	5.11	319	75	15.78	33.80	4.74	24.90	306	0.25
68	16.36	33.85	5.13	315	100	12.92	33.75	3.44	25.46	253	0.32
78	15.02	33.70	4.28	298	150	12.04	34.42	1.10	26.15	187	0.43
87	14.07	33.58	3.93	287	200	11.40	34.53	0.50	26.36	167	0.52
96	13.12	33.63	3.61	265	250	10.72	34.64	0.26	26.56	148	0.60
120	12.94	34.26	1.58	216	300	10.06	34.61	0.22	26.66	139	0.68
148	12.05	34.41	1.10	188	400	8.82	34.55	0.19	26.82	124	0.81
194	11.44	34.52	0.55	169	500	7.63	34.51	0.12	26.96	110	0.94
251	10.72	34.64	0.26	148	600	(6.37)	(34.44)		(27.08)	(100)	(1.05)
349	9.40	34.57	0.22	132							
464	8.06	34.53	0.10	115							
585	6.56	34.45	0.21	101							

SPENCER F. BAIRD; February 17, 1955; 0455 GCT; 24°45'N, 112°25'W; sounding, 60 fm; wind, 240°, force 1; weather, clear; sea, smooth; wire angle, 03°.

140.30

0	18.74	34.03	5.01	357	0	18.74	34.03	5.01	24.37	357	0.00
10	18.46	34.07	5.10	348	10	18.46	34.07	5.10	24.46	348	0.04
15	18.36	34.02	4.72	349	20	18.29	34.04	5.06	24.48	346	0.07
20	18.29	34.04	5.06	346	30	18.20	34.01	5.39	24.48	346	0.10
25	18.24	34.00	5.08	348	50	17.08	33.92	5.42	24.68	327	0.17
30	18.20	34.01	5.39	346	75	14.88	33.86	4.62	25.14	283	0.25
35	18.15	34.04	5.27	343	100	(13.17)	(34.16)	(1.50)	(25.73)	(227)	(0.31)
45	17.25	33.94	5.35	329							
54	16.96	33.89	5.45	326							
65	16.52	33.86	5.42	319							
79	13.13	33.86	3.73	249							
98	13.18	34.15	1.67	228							

a) Mean value of 0.38 and 0.73 ml/L.

b) Mean value of 0.26 and 0.72 ml/L.

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	$\frac{-5}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{-5}{10} \text{ cm/g}$	dyn. m

140.35

SPENCER F. BAIRD; February 17, 1955; 0750 GCT; 24°35'N, 112°44'W; sounding, 700 fm; wind, 240°, force 1; weather, clear; sea, slight; wire angle, 07°.

0	18.50	34.06	5.20	350	0	18.50	34.06	5.20	24.44	350	0.00
10	18.29	34.04	4.90	346	10	18.29	34.04	4.90	24.48	346	0.04
30	17.17	33.94	5.28	326	20	17.39	33.99	5.24	24.67	328	0.07
40	16.47	33.81	5.10	321	30	17.17	33.94	5.28	24.69	326	0.10
50	16.26	33.78	5.24	318	50	16.26	33.78	5.24	24.77	318	0.17
60	16.18	33.78	5.20	316	75	13.82	33.69	3.64	25.23	275	0.24
70	14.09	33.63	3.85	284	100	12.50	33.95	2.59	25.70	230	0.30
79	13.72	33.75	3.50	268	150	12.22	34.57	0.80	26.22	180	0.41
89	13.62	33.93	2.94	253	200	11.70	34.69	0.25	26.42	162	0.50
98	12.54	33.95	2.62	231	250	10.80	34.67	0.26	26.58	147	0.57
122	12.00	34.21	1.83	202	300	10.08	34.64	0.24	26.68	137	0.65
152	12.22	34.58	0.72	179	400	8.60	34.55	0.18	26.85	121	0.78
200	11.70	34.69	0.25	162	500	7.47	34.52	0.14	26.98	108	0.90
258	10.70	34.67	0.27	145	600	6.76	34.51	0.14	27.08	99	1.01
360	9.16	34.57	0.20	127							
478	7.62	34.52	0.14	110							
601	6.74	34.51	0.14	99							

140.40

SPENCER F. BAIRD; February 17, 1955; 1112 GCT; 24°23'N, 113°03'W; sounding, 1850 fm; wind, 340°, force 1; weather, fog; sea, slight; wire angle, 04°.

0	18.92	34.07	5.27	358	0	18.92	34.07	5.27	24.35	358	0.00
10	18.85	34.08	5.08	356	10	18.85	34.08	5.08	24.38	356	0.04
30	17.77	33.95	5.43	340	20	18.48	34.04	5.18	24.44	350	0.07
40	17.49	33.94	5.01	334	30	17.77	33.95	5.43	24.54	340	0.11
49	16.82	33.87	5.27	324	50	16.80	33.86	5.26	24.71	324	0.17
59	16.47	33.80	5.06	322	75	14.72	33.63	4.57	24.99	298	0.25
68	15.63	33.68	5.08	312	100	12.82	33.94	2.74	25.62	238	0.32
78	14.26	33.62	3.83	289	150	11.62	34.37	1.16	26.19	184	0.42
87	13.83	33.89	3.18	260	200	10.72	34.49	0.78	26.45	159	0.51
96	13.10	33.90	2.89	245	250	10.20	34.58	0.36	26.61	144	0.59
120	12.31	34.14	1.93	213	300	9.62	34.58	0.23	26.72	134	0.66
148	11.68	34.37	1.20	185	400	8.45	34.54	0.14	26.86	120	0.79
196	10.78	34.48	0.83	160	500	7.37	34.47	0.14	26.97	110	0.91
253	10.18	34.58	0.34	143	600	(6.41)	(34.48)	(0.16)	(27.10)	(97)	(1.02)
354	8.98	34.58	0.17	124							
472	7.62	34.47	0.13	114							
596	6.45	34.48	0.16	97							

143.26

SPENCER F. BAIRD; February 16, 1955; 0449 GCT; 24°19.5'N, 111°49.5'W; sounding, 40 fm; wind, 060°, force 2; weather, clear; sea, slight; wire angle, 02°.

0	17.52	33.95a)	5.24b)	334	0	17.52	33.95	5.24	24.61	334	0.00
10	17.55	33.94	5.29	336	10	17.55	33.94	5.29	24.59	336	0.03
15	17.46	33.91	5.30	336	20	17.15	33.89	5.16	24.64	331	0.07
20	17.18	33.89	5.16	331	30	16.75	33.86	5.23	24.72	323	0.10
25	16.86	33.92	5.19	322	50	16.02	33.94	4.67	24.95	302	0.18
30	16.75	33.86	5.23	323							
35	16.65	33.92	5.16	317							
40	16.41	33.92	4.90	311							
45	16.29	33.95	4.82	307							
50	16.02	33.94	4.67	302							

a) Mean value of 33.93 and 33.97‰.

b) Mean value of 5.13 and 5.36 ml/L.

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

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5502

SPENCER F. BAIRD; February 16, 1955; 0230 GCT; 24°12'N, 112°04.5'W; sounding, 110 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 05°.

14330

0	19.33	34.12	5.36	364	0	19.33	34.12	5.36	24.29	364	0.00
10	19.32	34.12	5.52	364	10	19.32	34.12	5.52	24.29	364	0.04
15	19.30	34.10	5.27	365	20	19.22	34.13	5.36	24.32	362	0.07
20	19.22	34.13	5.36	362	30	19.18	34.11	5.36	24.32	362	0.11
25	19.20	34.14	5.39	360	50	16.80	33.82	5.51	24.66	330	0.18
30	19.18	34.11	5.36	362	75	14.53	33.94	3.13	25.27	271	0.25
35	18.82	34.05	5.25	357	100	13.46	34.26	1.58	25.75	226	0.32
45	18.31	34.04	5.49	346	150	12.30	34.64	0.34	26.27	176	0.42
55	15.14	33.59	5.51	308							
64	14.32	33.62	4.53	290							
78	14.21	34.04	2.66	257							
97	13.52	34.23	1.69	229							
116	13.16	34.43	1.13	207							
150	12.30	34.64	0.34	176							

SPENCER F. BAIRD; February 15, 1955; 2305 GCT; 24°01'N, 112°23'W; sounding, 1200 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 24°.

14335

0	19.00	34.11	5.29	357	0	19.00	34.11	5.29	24.36	357	0.00
10	18.88	34.08	5.70	357	10	18.88	34.08	5.70	24.37	357	0.04
28	17.99	33.97	5.21	344	20	18.42	34.02	5.42	24.43	351	0.07
42	17.10	33.89	5.30	329	30	17.86	33.96	5.23	24.53	341	0.11
55	16.02	33.78	4.99	313	50	16.44	33.83	5.12	24.77	319	0.17
64	15.58	33.70	4.85	310	75	13.90	33.59	4.38	25.14	284	0.25
72	14.32	33.59	4.54	292	100	12.44	33.74	3.29	25.55	244	0.31
86	12.83	33.58	3.85	264	150	11.20	34.18	1.79	26.12	190	0.42
94	12.54	33.69	3.53	250	200	10.80	34.40	1.18	26.37	167	0.52
108	12.34	33.78	3.16	240	250	10.35	34.50	0.51	26.53	152	0.60
134	11.50	34.09	2.02	202	300	9.78	34.54	0.31	26.65	140	0.67
160	11.05	34.22	1.70	185	400	8.67	34.54	0.24	26.84	122	0.81
214	10.70	34.46	0.87	161	500	7.50	34.48	0.19	26.95	111	0.93
276	10.04	34.52	0.37	146	600	6.63	34.48	0.16	27.07	100	1.04
384	8.84	34.55	0.24	124							
513	7.37	34.47	0.18	109							
649	6.35	34.49	0.14	95							

SPENCER F. BAIRD; February 15, 1955; 1018, 1030 GCT; 24°00'N, 111°05.5'W; sounding, 110 fm; wind, 330°, force 3; weather, clear; sea, moderate; wire angle, 00°, 00°.

14720

0	18.80	34.35	5.16	335	0	18.80	34.35	5.16	24.60	335	0.00
10	18.84	34.34	5.08	337	10	18.84	34.34	5.08	24.58	337	0.03
15	18.60	34.37	5.06	329	20	18.25	34.50	4.81	24.84	312	0.07
20	18.25	34.50	4.81	312	30	18.05	34.62	4.67	24.98	298	0.10
25	18.23	34.53	4.67	310	50	17.13	34.49	4.52	25.11	286	0.16
					75	16.56	34.80	2.86	25.48	251	0.22
30	18.05	34.62	4.67	298	100	14.30	34.60	1.56	25.83	218	0.28
35	18.04	34.60	4.64	299	150	11.95	34.60	0.54	26.31	172	0.38
45	17.09	34.41	4.57	291							
54	17.25	34.58	4.43	282							
64	17.62	34.84	3.97	272							
78	16.22	34.78	2.66	244							
98	14.43	34.61	1.64	220							
117	13.45	34.54	1.12	205							
151	11.89	34.60	0.52	171							

SIO

CCOFI
5502

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD	
m	°C	‰	ml/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m	

147.25

SPENCER F. BAIRD; February 15, 1955; 1330 GCT; 23°46'N, 111°27.5'W; sounding, 245 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 16°.

0	18.74	34.07	5.16	354	0	18.74	34.07	5.16	24.40	354	0.00
10	18.75	34.05	5.13	356	10	18.75	34.05	5.13	24.38	356	0.04
15	18.75	34.11u	5.21	-	20	18.70	34.05	5.14	24.40	354	0.07
20	18.70	34.18u	5.14	-	30	18.39	34.04	5.19	24.46	348	0.11
25	18.63	34.05	5.12	353	50	17.07	33.95	5.50	24.72	324	0.17
30	18.39	34.04	5.19	348	75	14.11	33.91	3.27	25.34	264	0.25
39	17.44	33.94	5.14	333	100	13.21	34.24	1.86	25.78	222	0.31
48	17.08	33.95	5.50	324	150	12.48	34.66	0.41	26.25	177	0.41
62	15.17	33.80	4.36	294	200	11.68	34.69	0.28	26.43	161	0.50
76	14.05	33.92	3.23	262	250	10.99	34.67	0.23	26.54	150	0.58
94	13.26	34.12	2.10	232	300	10.20	34.64	0.21	26.66	139	0.65
117	13.05	34.49	0.90	201							
154	12.39	34.67	0.38	175							
190	11.80	34.69	0.29	163							
238	11.18	34.67	0.24	153							
308	10.09	34.64	0.20	137							
385	9.27	34.61	0.19	127							

147.30

SPENCER F. BAIRD; February 15, 1955; 1641 GCT; 23°33.5'N, 111°40.5'W; sounding, 260 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 18°.

0	19.38	34.13	4.79	365	0	19.38	34.13	4.79	24.28	365	0.00
10	19.38	34.12	4.97	366	10	19.38	34.12	4.97	24.27	366	0.04
15	19.39	34.13	5.09	365	20	19.37	34.14	5.12	24.29	364	0.07
20	19.37	34.14	5.12	364	30	19.11	34.10	4.85	24.32	361	0.11
25	19.32	34.14	5.00	363	50	18.88	34.01	4.98	24.31	362	0.18
29	19.13	34.11	4.84	361	75	15.80	33.49	5.50	25.66	329	0.27
39	19.04	34.04	4.86	363	100	12.52	34.01	3.78	25.74	226	0.34
48	18.93	34.02	4.97	362	150	11.46	34.28	1.50	26.15	187	0.44
61	18.75	33.56u	5.00	-	200	11.40	34.58	0.79	26.39	164	0.53
75	15.80	33.49	5.50	329	250	10.83	34.61	0.42	26.52	152	0.62
93	13.42	33.73	4.51	264	300	9.88	34.61	0.19	26.69	136	0.69
115	11.63	34.28	3.06	191							
151	11.44	34.28	1.43	187							
187	11.44	34.56	0.88	166							
231	11.15	34.60	0.53	158							
301	9.85	34.61	0.19	136							
377	9.02	34.57	0.15	126							

150.19

SPENCER F. BAIRD; February 15, 1955; 0510 GCT; 23°24'N, 110°39'W; sounding, 100 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 07°.

0	19.37	34.38	5.11	347	0	19.37	34.38	5.11	24.47	347	0.00
10	19.35	34.36	5.37	348	10	19.35	34.36	5.37	24.46	348	0.04
15	18.47	34.25	4.88	335	20	17.88	34.14	5.17	24.66	329	0.07
20	17.88	34.14	5.17	329	30	17.47	34.18	4.93	24.79	316	0.10
25	17.72	34.19	5.12	321	50	15.48	34.40	3.18	25.43	256	0.16
30	17.47	34.18	4.93	316	75	14.20	34.56	1.46	25.82	219	0.22
35	16.69	34.07	4.75	306	100	13.70	34.60	1.12	25.96	206	0.27
45	15.00	34.05	-	272	150	12.47	34.65	0.55	26.25	178	0.37
55	15.75	34.63	2.66	245							
64	14.93	34.49	2.13	238							
79	14.06	34.57	1.36	215							
98	13.76	34.60	1.16	206							
117	13.04	34.61	0.89	192							
150	12.47	34.65	0.55	178							

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

SPENCER F. BAIRD; February 15, 1955; 0112 GCT; 23°12'N, 111°01.5'W; sounding, 780 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 07°.

150.25

0	19.5	34.24	5.16	360	0	19.5	34.24	5.16	24.33	360	0.00
10	19.15	34.22	5.42	353	10	19.15	34.22	5.42	24.41	353	0.04
30	16.33	33.94	5.40	308	20	17.68	34.16	5.42	24.54	340	0.07
45	15.75	33.94	4.81	295	30	16.33	33.94	5.40	24.88	308	0.10
59	15.14	33.96	3.84	281	50	15.51	33.94	4.44	25.07	290	0.16
69	14.65	34.09	3.14	262	75	13.84	33.99	2.96	25.46	253	0.23
79	13.40	33.95	2.86	247	100	13.56	34.47	1.09	25.89	212	0.29
93	13.62	34.39	1.36	220	150	12.30	34.64	0.54	26.27	176	0.39
103	13.51	34.49	1.08	210	200	11.64	34.68	0.40	26.43	161	0.47
117	13.05	34.54	0.96	197	250	10.87	34.65	0.27	26.54	150	0.55
145	12.37	34.62	0.57	178	300	10.18	34.62	0.20	26.65	140	0.63
175	12.05	34.69	0.49	167	400	8.73	34.59	0.15	26.86	120	0.76
233	11.12	34.66	0.30	153	500	7.52	34.58	0.14	27.03	104	0.88
301	10.15	34.62	0.19	140							
418	8.54	34.59	0.14	117							
555	6.84	34.57	0.14	95							

SPENCER F. BAIRD; February 14, 1955; 2133 GCT; 23°02'N, 111°20.5'W; sounding, 1400 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 20°.

150.30

0	19.41	34.15	5.18	365	0	19.41	34.15	5.18	24.28	365	0.00
10	19.15	34.14	5.07	359	10	19.15	34.14	5.07	24.35	359	0.04
29	18.05	34.10	5.43	336	20	18.64	34.13	5.18	24.46	348	0.07
43	17.07	33.94	5.27	325	30	18.00	34.09	5.43	24.60	335	0.11
56	16.92	34.01	5.31	316	50	16.97	34.00	5.29	24.78	318	0.17
65	16.80	33.95	5.30	318	75	16.36	34.01	4.56	24.92	304	0.25
74	16.44	34.01	4.64	306	100	14.28	34.16	2.50	25.49	250	0.32
88	15.08	33.95	3.76	281	150	13.02	34.56	0.97	26.07	195	0.43
96	14.31	34.04	2.71	258	200	11.98	34.66	0.37	26.35	168	0.52
110	14.26	34.44	1.95	229	250	10.92	34.66	0.24	26.54	151	0.61
135	13.25	34.49	1.20	205	300	10.22	34.65	0.20	26.66	139	0.68
162	12.82	34.61	0.74	188	400	9.02	34.64	0.16	26.86	120	0.82
216	11.58	34.66	0.30	162	500	7.66	34.51	0.18	26.96	111	0.94
279	10.48	34.65	0.22	143	600	6.66	34.50	0.14	27.09	98	1.05
388	9.18	34.65	0.16	122							
518	7.45	34.50	0.18	108							
651	6.19	34.50	0.11	92							

SPENCER F. BAIRD; February 14, 1955; 0540 GCT; 22°55'N, 110°07'W; sounding, 175 fm; wind, 340°, force 1; weather, clear; sea, slight; wire angle, 00°.

153.16

0	20.60	34.51	5.04	368	0	20.60	34.51	5.04	24.25	368	0.00
3p	20.60	34.51	5.05	368	10	20.38	34.49	5.23	24.30	364	0.04
8p	20.40	34.48	5.19	365	20	20.07	34.42	5.17	24.32	361	0.07
10	20.38	34.49	5.23	364	30	19.77	34.34	5.30	24.34	359	0.11
15	20.32	34.49	5.19	362	50	17.72	34.34	4.46	24.83	313	0.18
20	20.07	34.42	5.17	361	75	16.92	35.06	3.48	25.59	240	0.24
24p	19.90	34.34	5.22	363	100	15.17	34.91	1.52	25.89	212	0.30
35p	19.69	34.34	5.32	358	150	13.26	34.80	0.50	26.20	182	0.40
51p	17.52	34.34	4.20	306	200	11.87	34.79	0.32	26.47	157	0.49
68p	17.09	35.06	3.67	244	250	10.97	34.68	0.22	26.55	150	0.57
89p	15.87	34.96	2.21	224							
121p	14.16	34.85	0.88	196							
167p	12.78	34.78	0.38	174							
199p	11.87	34.79	0.32	157							
256p	10.87	34.66	0.19	149							

S10

CCOFI
5502

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

153.20

SPENCER F. BAIRD; February 14, 1955; 0820 GCT; 22°47.5'N, 110°22'W; sounding, 535 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 05°.

0	20.64	34.54		367	0	20.64	34.54		24.26	367	0.00
10	20.62	34.43		375	10	20.62	34.43		24.18	375	0.04
25	19.88	34.41		357	20	19.98	34.41		24.34	360	0.07
35	20.46	34.64		355	30	20.40	34.59		24.38	356	0.11
45	20.05	34.61		347	50	18.05	34.15		24.63	332	0.18
50	18.05	34.15		332	75	14.71	34.19		25.43	256	0.25
55	17.87	34.18		326	100	13.68	34.53		25.91	210	0.31
60	16.66	34.12		302	150	12.76	34.80		26.30	173	0.41
65	16.29	34.11		295	200	11.93	34.78		26.44	160	0.49
70	15.66	34.09		283	250	(11.09)	(34.72)		(26.56)	(148)	(0.57)
80	14.23	34.28		240							
99	13.71	34.52		211							
123	13.47	34.77		189							
147	12.84	34.80		174							
195	12.00	34.78		160							
234	11.52	34.72		156							
243	11.28	34.72		152							

153.20

SPENCER F. BAIRD; February 14, 1955; 0924 GCT; 22°47.5'N, 110°22'W; sounding, 525 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 13°.

0	20.62	34.48	5.06	371	0	20.62	34.48	5.06	24.22	371	0.00
20	20.18	34.43	5.04	363	10	20.38	34.46	5.05	24.27	366	0.04
30	20.45	34.39	4.92	373	20	20.18	34.43	5.04	24.30	363	0.07
40	20.30	34.52	4.92	360	30	20.45	34.39	4.92	24.20	373	0.11
50	19.81	34.50	4.75	349	50	19.81	34.50	4.75	24.45	349	0.18
59	18.95	34.17	4.04	352	75	16.30	34.13	2.98	25.03	294	0.26
69	17.26a)	34.12	3.61	316	100	13.68	34.47	1.33	25.86	215	0.33
79	15.91	34.14	2.66	284	150	12.95	34.78	0.42	26.25	178	0.43
89	14.27	34.24	2.00	243	200	11.92	34.78	0.26	26.44	159	0.51
114	13.35	34.70	0.76	191	250	11.27	34.73	0.14	26.54	150	0.56
143	13.07	34.78	0.45	180	300	10.58	34.68	0.12	26.62	143	0.67
191	12.08	34.78	0.29	162	400	9.09	34.62	0.10	26.82	123	0.81
248	11.29	34.73	0.14	151	500	7.72	34.56	0.12	26.99	108	0.93
348	9.88	34.64	0.11	144	600	(6.82)	(34.52)		(27.08)	(99)	(1.04)
465	8.09	34.58	0.10	122							
588	6.95	34.52	0.22	100							

153.30

SPENCER F. BAIRD; February 14, 1955; 1520 GCT; 22°22'N, 110°59.5'W; sounding, 1800 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 32°.

0	19.72	34.36	5.10	357	0	19.72	34.36	5.10	24.37	357	0.00
9	19.78	34.36	4.98	358	10	19.78	34.36	4.98	24.36	358	0.04
26	19.01	34.28	4.95	345	20	19.46	34.33	4.97	24.41	352	0.07
39	18.52	34.18	4.94	341	30	18.83	34.25	4.94	24.51	344	0.11
48	18.31	34.12	5.63b)	341	50	18.26	34.12	5.26	24.55	339	0.17
56	18.16	34.13	4.80	336	75	17.72	34.16	4.52	24.71	324	0.26
65	18.12	34.11	5.16	336	100	15.36	34.39	1.66	25.44	254	0.33
73	17.93	34.16	4.59	328	150	12.88	34.76	0.10	26.25	178	0.44
85	16.87	34.11	4.28	308	200	11.94	34.79	0.07	26.45	158	0.52
93	16.12	34.26	2.58	280	250	11.17	34.75	0.07	26.57	147	0.60
111	14.61	34.52	0.84	229	300	10.37	34.72	0.07	26.69	136	0.68
130	13.52	34.70	0.22	195	400	8.76	34.72	0.14	26.96	110	0.81
164	12.58	34.78	0.08	170	500	7.40	34.54	0.13	27.01	106	0.92
208	11.80	34.79	0.07	156							
290	10.54c)	34.72	0.07	139							
393	8.85	34.72	0.14	111							
511	7.24	34.51	0.13	105							

a) Mean value of 17.08 and 17.44°C.

b) Mean value of 5.53 and 5.73 ml/L.

c) Mean value of 10.49 and 10.60°C.

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

SPENCER F. BAIRD; February 13, 1955; 2327 GCT; 22°39'N, 109°18'W; sounding, 1650 fm; wind, 040°, force 3; weather, clear; sea, moderate; wire angle, 18°.

157.10

0	20.87	34.94	5.07	344	0	20.87	34.94	5.07	24.51	344	0.00
10	20.88	34.86	5.04	349	10	20.88	34.86	5.04	24.45	349	0.04
30	20.83	34.83	5.06	351	20	20.85	34.84	5.05	24.44	350	0.07
44	20.75	34.80	5.06	351	30	20.83	34.83	5.06	24.43	351	0.10
53	20.76	34.86	4.96	347	50	20.76	34.83	5.00	24.46	348	0.17
62	20.76	34.87	4.80	346	75	20.49	34.78	4.67	24.49	345	0.26
71	20.68	34.78	4.76	351	100	18.38	34.80	3.20	25.04	293	0.34
80	20.03	34.80	4.45	332	150	13.76	34.70	0.48	26.02	199	0.47
94	18.65	34.74	3.34	304	200	12.52	34.80	0.11	26.35	168	0.56
103	18.25	34.81	3.13	289	250	11.32	34.79	0.53	26.57	147	0.64
126	14.90	34.64	0.93	227	300	10.54	34.76	0.45	26.69	136	0.72
153	13.65	34.71	0.42	197	400	9.29	34.72	0.17	26.87	119	0.85
204	12.43	34.80	0.09	166	500	8.05	34.67	0.14	27.02	104	0.97
265	11.00	34.78	0.59	142	600	6.92	34.60	0.12	27.13	94	1.07
372	9.66	-	0.21	-							
495	8.11	34.67	0.14	105							
627	6.61	34.58	0.12	92							

SPENCER F. BAIRD; February 13, 1955; 1757 GCT; 22°21'N, 109°56.5'W; sounding, 1750 fm; wind, 060°, force 2; weather, clear; sea, slight; wire angle, 10°.

157.20

0	20.01	34.42	4.64	360	0	20.01	34.42	4.64	24.34	360	0.00
10	19.61	34.56	5.04	340	10	19.61	34.56	5.04	24.55	340	0.04
30	18.99	34.43	5.47	334	20	19.31	34.51	5.23	24.58	336	0.07
45	17.52	34.36	4.64	304	30	18.99	34.43	5.47	24.61	334	0.10
54	16.04	34.12	3.35	289	50	16.50	34.18	3.90	25.02	295	0.16
64	16.86	34.58	4.26	273	75	15.46	34.34	3.09	25.37	262	0.24
73	15.82	34.40	3.18	264	100	13.87	34.43	1.13	25.79	221	0.30
84	14.05	34.07a)	2.69	251	150	12.48	34.63	0.62	26.22	180	0.40
97	13.94	34.41	1.16	224	200	12.04	34.75	0.26	26.41	163	0.48
106	13.60	34.46	1.09	214	250	11.40	34.66	0.34	26.46	158	0.57
129	12.98	34.57	0.71	194	300	10.66	34.61	0.36	26.56	149	0.65
158	12.34	34.65	0.60	176	400	9.09	34.61	0.19	26.82	124	0.79
209	11.98	34.75	0.21	161	500	7.74	34.59	0.29	27.01	106	0.91
272	11.08	34.62	0.43	156	600	6.81	34.57	0.28	27.12	95	1.01
381	9.38	34.61	0.17	128							
507	7.64	34.59	0.29	105							
641	6.45	34.56	0.26	91							

SPENCER F. BAIRD; February 13, 1955; 1126 GCT; 21°53'N, 110°41'W; sounding, 1800 fm; wind, 340°, force 2; weather, clear; sea, slight; wire angle, 25°.

157.30

0	20.70	34.59	4.81	365	0	20.70	34.59	4.81	24.28	365	0.00
10	20.71	34.60	4.64	364	10	20.71	34.60	4.64	24.29	364	0.04
28	20.43	34.52	4.42	363	20	20.57	34.53	4.42	24.29	364	0.07
37	20.23	34.50	4.63	360	30	20.38	34.52	4.48	24.31	362	0.11
46	19.89	34.42	4.76	356	50	19.50	34.34	4.75	24.41	353	0.18
55	18.85	34.24	4.74	345	75	16.68	34.00	4.16	24.84	312	0.26
63	17.92	34.16	4.71	328	100	14.08	33.96	3.08	25.39	260	0.34
71	17.12	34.06	4.22	317	150	12.54	34.58	0.76	26.17	185	0.45
80	16.01	33.91	4.09	303	200	11.45	34.67	0.34	26.45	159	0.54
88	14.60	33.79	3.38	283	250	10.69	34.65	0.22	26.58	147	0.62
107	13.85	34.25	2.87	234	300	10.06	34.64	0.18	26.68	137	0.69
129	13.28	34.50	0.88	205	400	8.92	34.63	0.15	26.86	120	0.82
165	12.15	34.61	0.66	175	500	7.76	34.56	0.10	26.98	109	0.94
210	11.30	34.67	0.29	155							
293	10.15	34.64	0.18	138							
392	9.02	34.63	0.15	121							
506	7.70	34.55	0.10	108							

a) Mean value of 34.04 and 34.10‰.

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