

CORRECTIONS MADE :

STATION POSITIONS ~~to~~

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5408
(MLR 63)
18 August - 10 September 1954

SIO Reference 59-42
18 May 1959

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5408

(MLR 63)

18 August - 10 September 1954

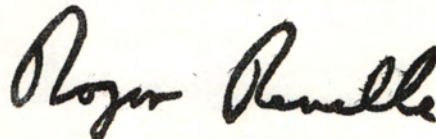
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Marine Research Committee

SIO Reference 59-42

18 May 1959

Approved for distribution:



Roger Revelle, Director

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FIGURES

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

INTRODUCTION

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

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

STANDARD PROCEDURES

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

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 such 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.

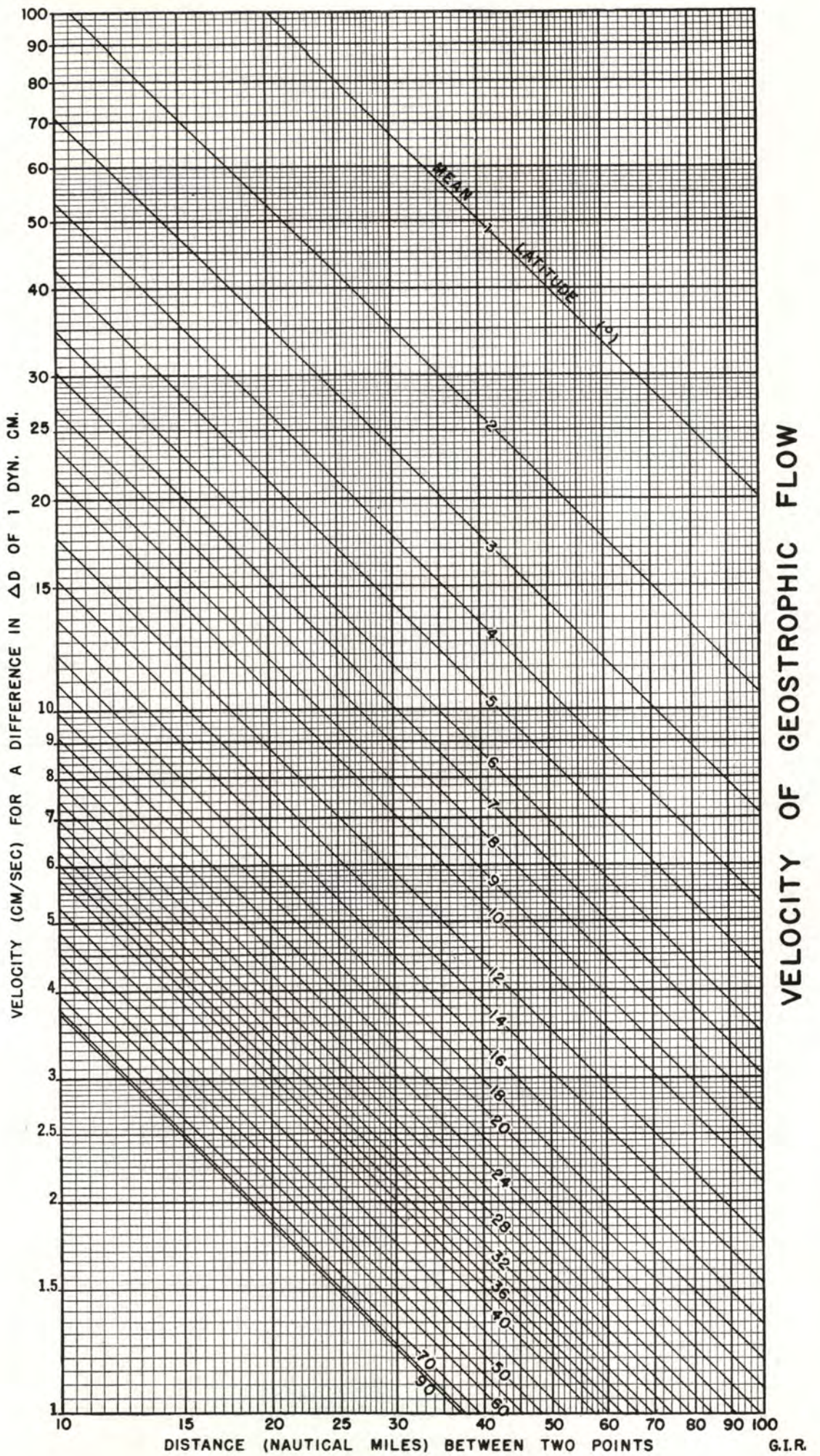
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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).

FORMAT

These data are typed in the format of the University of California Press publication, "Oceanic Observations of the Pacific." So that these pages can be used as copy for the 1954 volume, the first page of the Cruise 5408 data is numbered 226.



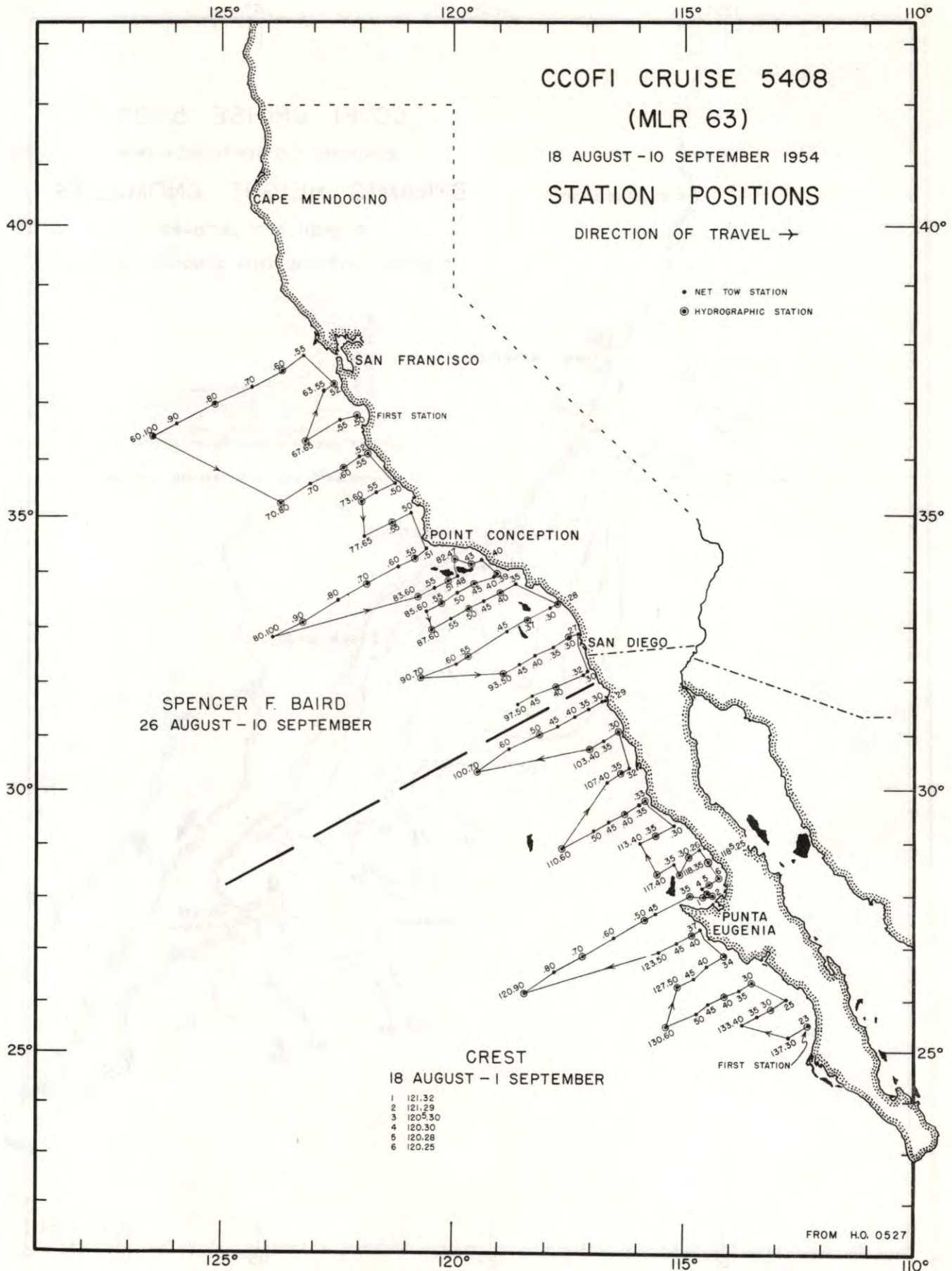


FIGURE 1

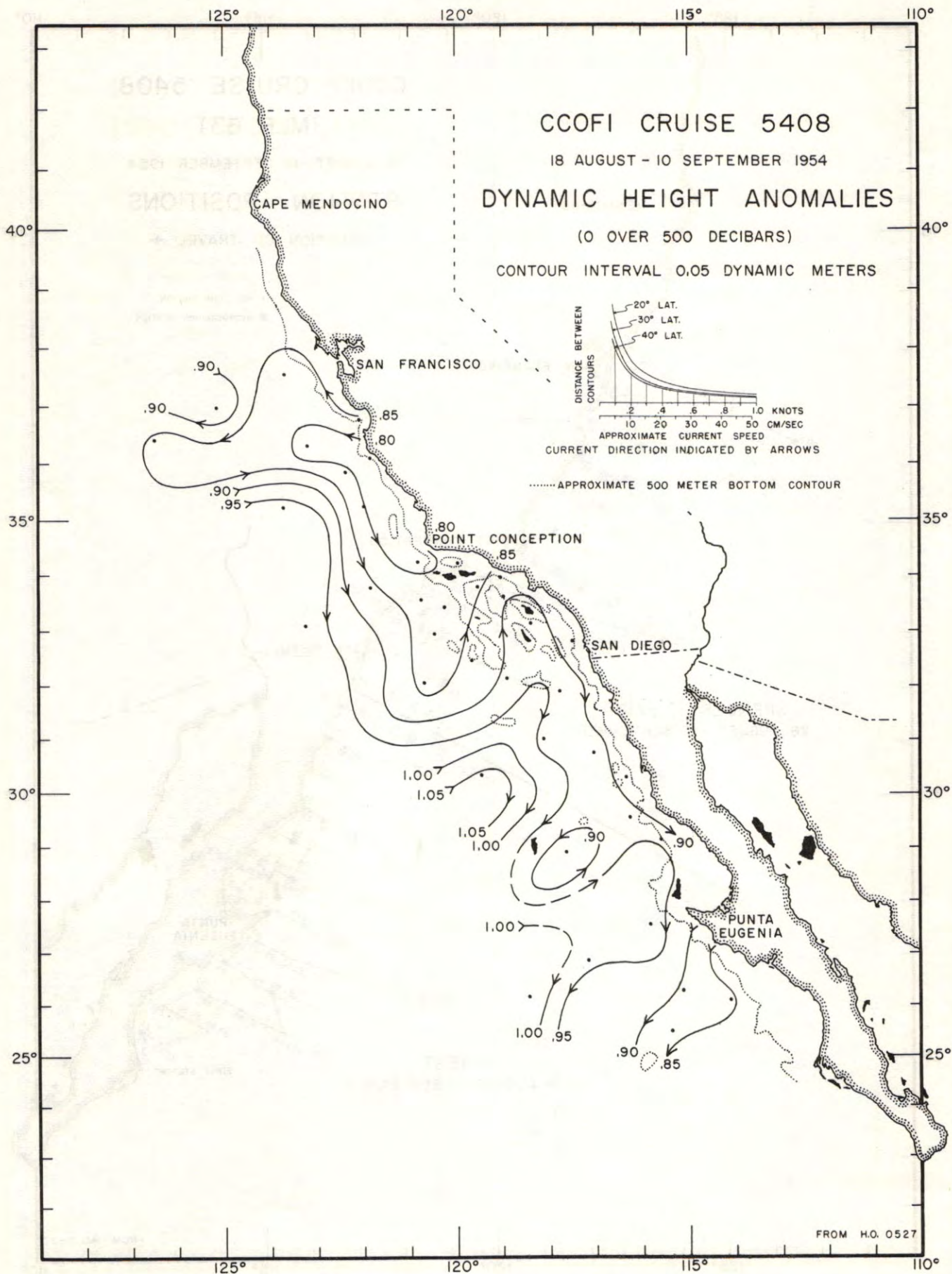


FIGURE 2

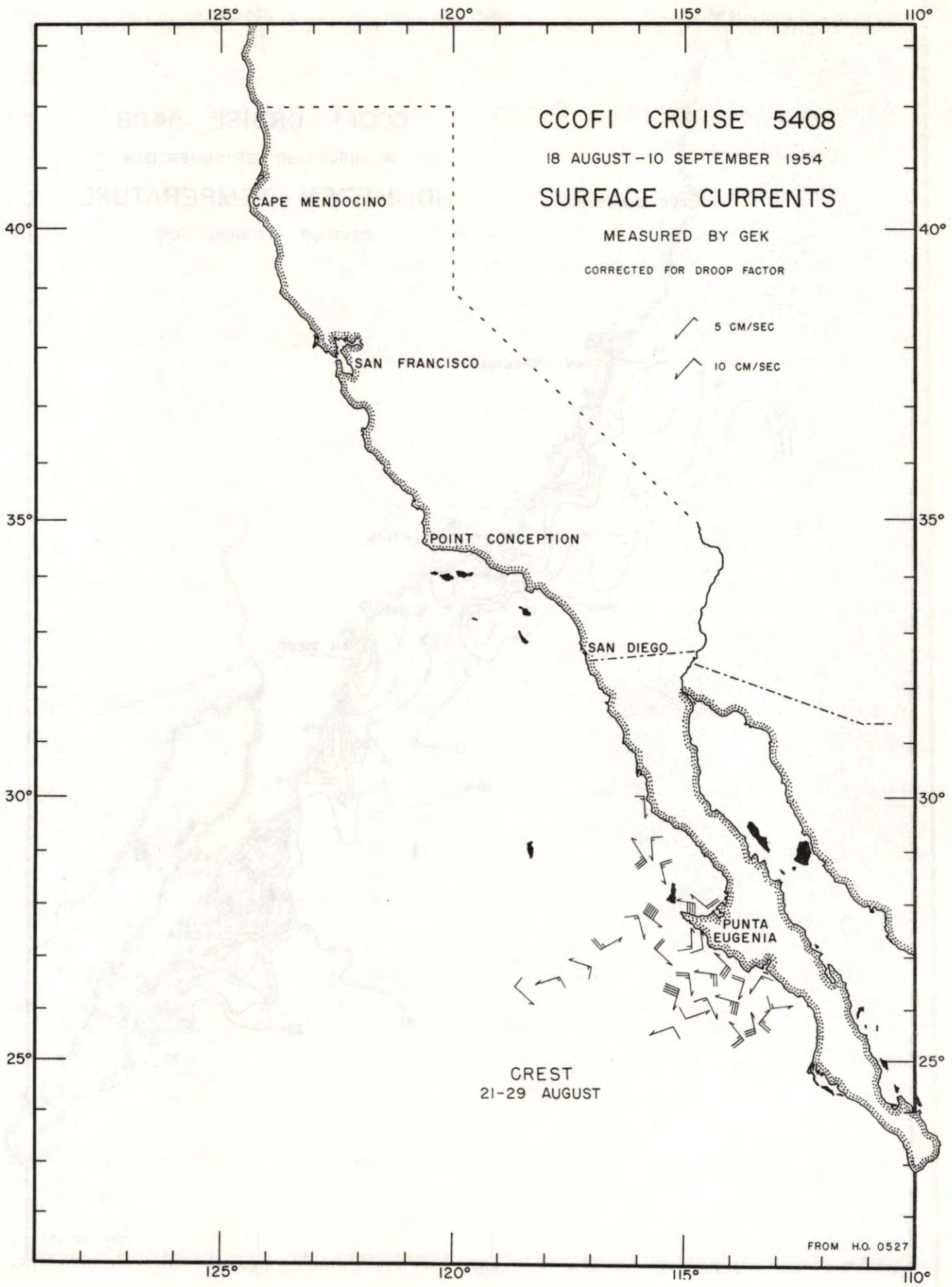


FIGURE 3

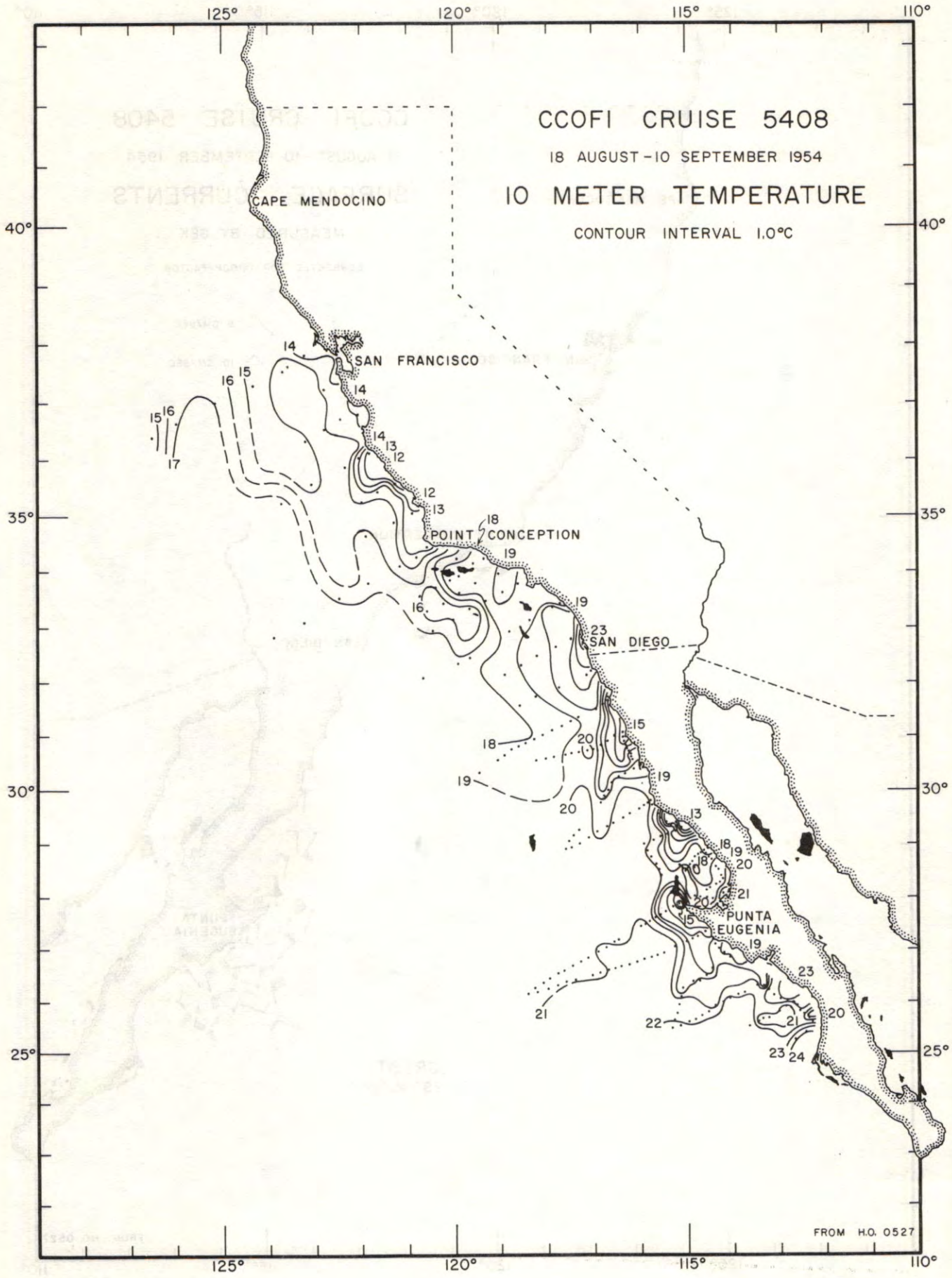


FIGURE 4

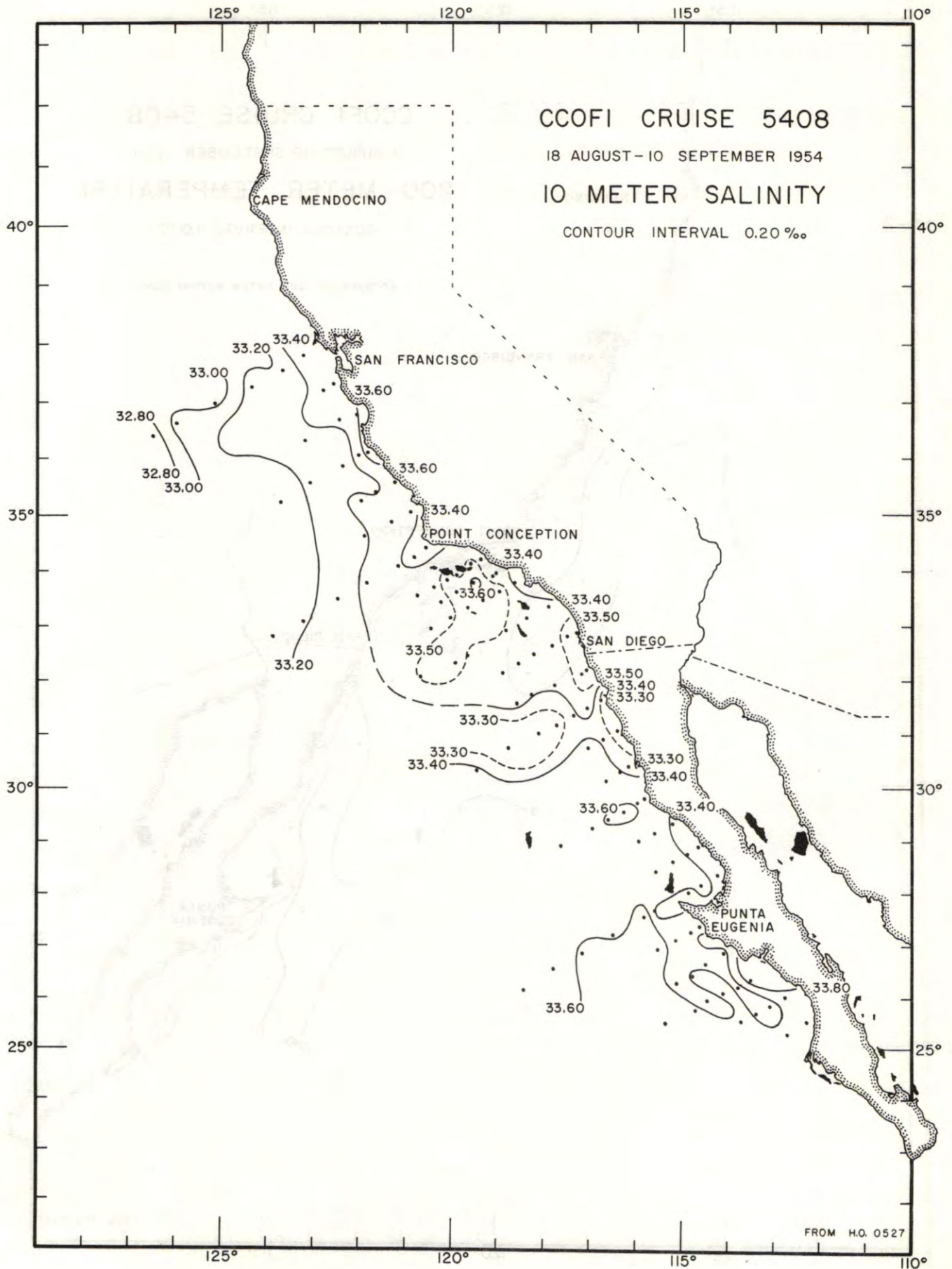


FIGURE 5

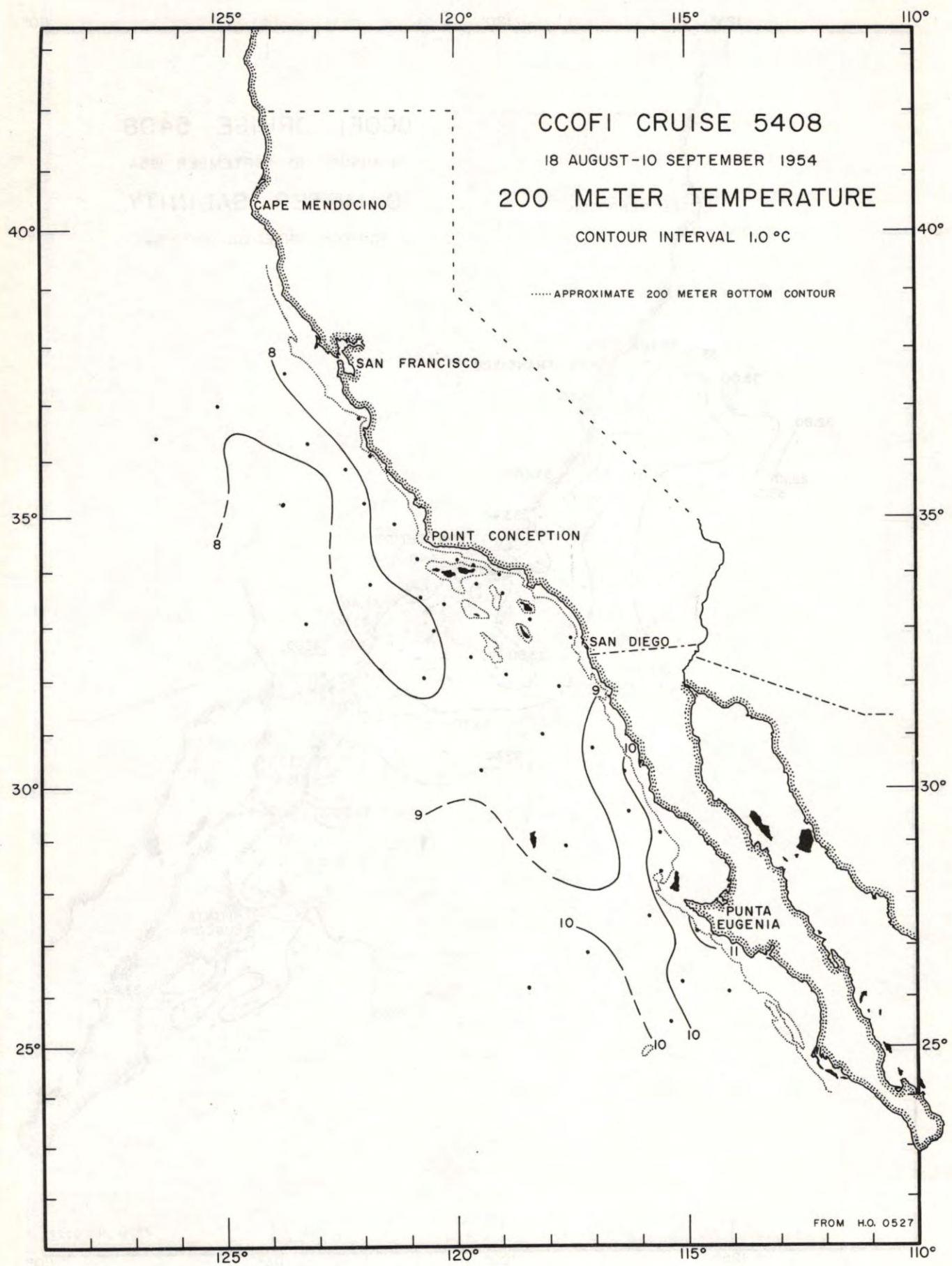


FIGURE 6

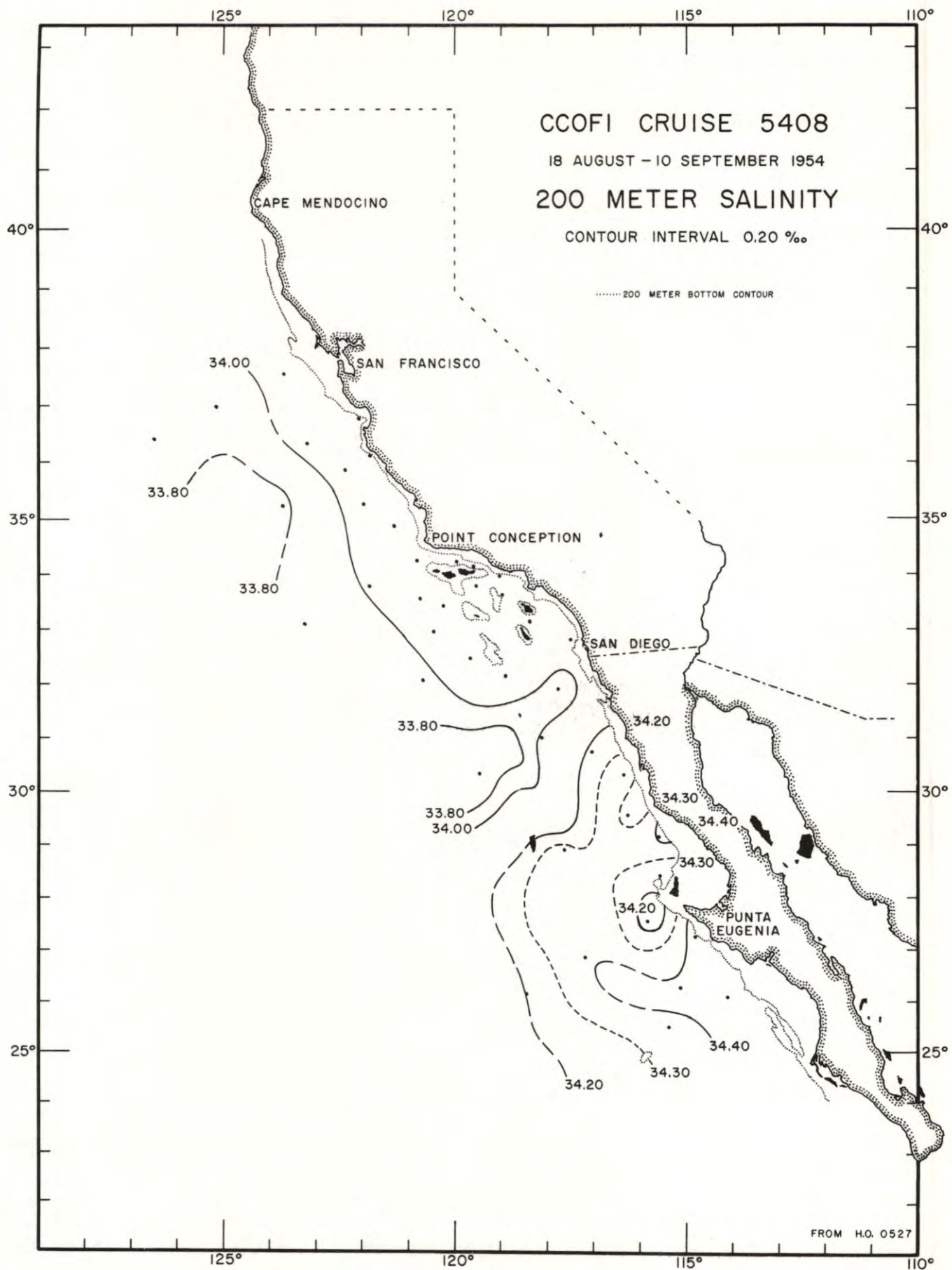


FIGURE 7

PERSONNEL

SHIPS' CAPTAINS

Davis, Laurence E. , R/V Crest
Wyatt, Vernon H. , R/V Spencer F. Baird

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Crest

Payne, Miles M. , Jr. , Senior Marine Technician
Greenbaum, Richard H. , Marine Technician
Isles, David F. , Marine Technician
Vrooman, Andrew M. , Fishery Research Biologist, U. S. Fish and Wildlife
Service
Willis, Robert S. , Marine Technician

R/V Spencer F. Baird

Schwartzlose, Richard A. , Senior Marine Technician
Linn, Robert J. , Marine Technician
Taft, Bruce A. , Fishery Aid, U. S. Fish and Wildlife Service

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

60.60

SPENCER F. BAIRD; August 31, 1954; 2351 GCT; 37°36'N, 123°38.5'W; sounding, 1760 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 22°.

0	15.4	33.35	0	15.4	33.35	24.62	333	0.00
10	15.48	33.33	10	15.48	33.33	24.60	335	0.03
29	11.27	33.30	20	15.50	33.31	24.58	337	0.07
52	9.77	33.35	30	11.11	33.30	25.45	254	0.10
67	9.58	33.38	50	9.81	33.35	25.72	228	0.14
76	9.45	33.46	75	9.47	33.45	25.85	216	0.20
90	9.39	33.59	100	9.19	33.67	26.07	195	0.25
112	8.95	33.75	150	8.65	33.97	26.39	164	0.34
153	8.64	33.98	200	8.06	34.10	26.58	146	0.42
208	7.98	34.11	250	7.77	34.14	26.65	140	0.50
297	7.60	34.18	300	7.57	34.18	26.71	134	0.57
399	6.91	34.25	400	6.90	34.25	26.86	120	0.70
540	5.60	34.22	500	5.94	34.22	26.97	110	0.82
731	4.70	34.36	600	5.24	34.26	27.08	99	0.93
963	3.81	34.46	700	4.81	34.34	27.20	88	1.03
1282	3.14	34.51	800	4.40	34.40	27.29	79	1.12
			1000	3.70	34.47	27.42	67	1.29

60.80

SPENCER F. BAIRD; September 1, 1954; 0918, 0948 GCT; 36°59'N, 125°09.5'W; sounding, 2400 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 28°, 36°.

0	16.9	32.92	0	16.9	32.92	23.96	396	0.00
9	17.03	32.90	10	17.04	32.90	23.92	400	0.04
27	17.04	32.99	20	17.04	32.96	23.96	396	0.08
49	14.32	32.84	30	17.04	32.98	23.98	394	0.12
61	12.61	32.85	50	14.12	32.84	24.52	342	0.19
69	11.36	32.84	75	10.71	32.88	25.20	278	0.27
82	10.28	32.96	100	9.77	33.29	25.68	232	0.34
101	9.74	33.30	150	8.49	33.69	26.19	184	0.44
138	8.67	33.58	200	7.85	33.94	26.49	155	0.53
			250	7.06	33.99	26.64	141	0.60
185	8.06	33.91	300	6.56	34.01	26.72	133	0.67
255	6.98	33.99	400	5.78	34.09	26.88	118	0.80
344	6.18	34.04	500	5.19	34.18	27.03	104	0.92
447	5.48	34.13	600	4.74	34.26	27.14	93	1.02
635	4.62	34.29	700	4.42	34.34	27.24	84	1.12
844	4.06	34.43	800	4.17	34.41	27.32	76	1.21
1147	3.44	34.52	1000	3.71	34.49	27.43	66	1.36

60.100

SPENCER F. BAIRD; September 1, 1954; 1806, 1855 GCT; 36°25.5'N, 126°28'W; sounding, 2550 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 17°, 12°.

0	16.4	32.67	0	16.4	32.67	23.89	403	0.00
10	14.90	32.72	10	14.90	32.72	24.26	367	0.04
30	12.15	32.87	20	12.86	32.81	24.75	320	0.07
55	11.09	33.12	30	12.15	32.87	24.93	303	0.10
69	10.38	33.17	50	10.87	33.08	25.33	265	0.16
79	9.96	33.27	75	10.13	33.22	25.56	243	0.22
94	9.09	33.38	100	8.95	33.44	25.93	208	0.28
119	8.62	33.65	150	8.16	33.86	26.38	166	0.38
162	7.99	33.91	200	7.52	33.97	26.56	148	0.46
230	7.23	34.00	250	7.04	34.02	26.66	139	0.53
316	6.48	34.07	300	6.61	34.06	26.75	130	0.60
425	5.62	34.12	400	5.80	34.11	26.90	116	0.73
574	4.80	34.24	500	5.17	34.17	27.02	105	0.84
778	4.09	34.38	600	4.70	34.25	27.14	93	0.95
			700	4.34	34.31	27.22	86	1.04
585	4.76	34.22	800	4.02	34.37	27.31	77	1.13
793	4.05	34.33	1000	3.49	34.45	27.42	67	1.29
1045	3.38	34.46						
1374	2.80	34.53						

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

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SPENCER F. BAIRD; August 28, 1954; 0007 GCT; 37°19.5'N, 122°33'W; sounding, 39 fm; wind, 150°, force 5; weather, cloudy; sea, rough; wire angle, 07°.

63.52

0	14.4	33.51	0	14.4	33.51	24.97	300	0.00
5	14.36	33.48	10	14.34	33.49	24.97	300	0.03
10	14.34	33.49	20	12.39	33.60	25.45	254	0.06
15	13.34	33.52	30	11.31	33.65	25.69	231	0.08
20	12.39	33.60						
30	11.31	33.65						
40	10.68	33.68						

SPENCER F. BAIRD; August 27, 1954; 0853 GCT; 36°46'N, 122°04'W; sounding, 400 fm; wind, 180°, force 4; weather, drizzle; sea, smooth; wire angle, 08°.

67.50

0	14.6	33.53	0	14.6	33.53	24.95	301	0.00
10	14.02	33.60	10	14.02	33.60	25.12	285	0.03
30	11.25	33.65	20	12.47	33.63	25.46	253	0.06
40	10.80	33.62	30	11.25	33.65	25.70	230	0.08
50	10.05	33.70	50	10.05	33.70	25.95	206	0.12
60	9.97	33.70	75	9.74	33.72	26.02	200	0.18
70	9.80	33.69	100	9.60	33.75	26.06	196	0.22
80	9.70	33.74	150	9.28	33.81	26.16	186	0.32
89	9.65	33.71	200	8.76	34.00	26.39	164	0.41
98	9.62	33.75	250	8.37	34.10	26.53	151	0.49
123	9.38	33.78	300	7.90	34.13	26.63	142	0.57
152	9.26	33.81	400	7.14	34.15	26.75	130	0.71
201	8.74	34.01	500	6.45	34.16	26.85	121	0.84
259	8.29	34.11	600	5.51	34.25	27.04	103	0.96
364	7.38	34.15						
482	6.60	34.16						
605	5.46	34.25						

SPENCER F. BAIRD, August 27, 1954; 1549, 1620 GCT; 36°20'N, 123°12.5'W; sounding, 1900 fm; wind, 150°, force 4; weather, cloudy; sea, moderate; wire angle, 08°, 02°.

67.65

0	15.1	33.39	0	15.1	33.39	24.73	322	0.00
5	15.12	33.34	10	14.73	33.37	24.79	317	0.03
16	14.33	33.39	20	13.89	33.41	25.00	297	0.06
35	12.46	33.49	30	12.89	33.47	25.25	273	0.09
50	11.28	33.51	50	11.28	33.51	25.59	240	0.14
70	9.31	33.64	75	9.22	33.66	26.06	196	0.20
81	9.16	33.69	100	8.90	33.82	26.23	180	0.24
91	9.07	33.76	150	8.48	34.02	26.45	159	0.33
105	8.86	33.84	200	7.90	34.04	26.56	148	0.41
			250	7.19	34.04	26.66	139	0.48
82	9.17	33.70	300	6.40	34.06	26.78	128	0.55
95	8.98	33.80	400	5.76	34.12	26.91	115	0.68
106	8.84	33.84	500	5.30	34.19	27.02	105	0.79
130	8.68	33.93	600	4.93	34.25	27.11	96	0.90
158	8.36	34.04						
212	7.76	34.04						
275	6.71	34.05						
385	5.84	34.11						
515	5.24	34.20						
648	4.76	34.27						

S10

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

70.52

SPENCER F. BAIRD; September 2, 1954; 2230 GCT; 36°07.5'N, 121°51'W; sounding, 480 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°.

0	11.1	33.60	0	11.1	33.60	25.69	231	0.00
10	11.04	33.67	10	11.04	33.67	25.75	225	0.02
28	10.84	33.64	20	10.96	33.65	25.75	225	0.04
36	10.46	33.65	30	10.78	33.64	25.78	222	0.07
45	9.92	33.64	50	9.80	33.64	25.94	207	0.11
53	9.73	33.64	75	9.38	33.77	26.12	190	0.16
61	9.53	33.71	100	9.26	33.79	26.15	187	0.21
70	9.43	33.70	150	8.90	33.97	26.35	168	0.30
74	9.38	33.77	200	8.55	34.05	26.47	157	0.38
101	9.26	33.79	250	8.21	34.15	26.60	145	0.46
128	9.10	33.89	300	7.81	34.22	26.71	134	0.53
166	8.75	34.01	400	6.96	34.20	26.82	124	0.67
215	8.46	34.07	500	6.29	34.27	26.96	110	0.79
302	7.80	34.22						
407	6.90	34.20						
523	6.15	34.29						

70.60

SPENCER F. BAIRD; September 2, 1954; 1812 GCT; 35°53'N, 122°22'W; sounding, 1780 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 25°.

0	15.3	33.18	0	15.3	33.18	24.53	341	0.00
10	15.39	33.19	10	15.39	33.19	24.51	343	0.03
29	13.96	33.18	20	15.40	33.18	24.50	344	0.07
52	10.83	33.20	30	13.65	33.18	24.87	309	0.10
65	10.01	33.39	50	10.99	33.19	25.39	260	0.16
74	9.31	33.48	75	9.26	33.48	25.91	210	0.22
88	8.78	33.51	100	8.60	33.61	26.11	191	0.27
109	8.48	33.68	150	8.06	33.89	26.41	163	0.36
148	8.06	33.88	200	7.86	34.04	26.56	148	0.44
206	7.82	34.04	250	7.25	34.04	26.65	140	0.51
282	6.72	34.04	300	6.61	34.05	26.75	130	0.58
378	6.43	34.15	400	6.37	34.18	26.88	118	0.71
509	5.92	34.29	500	5.97	34.28	27.01	106	0.83
687	4.90	34.36	600	5.34	34.33	27.13	94	0.93
904	4.10	34.38	700	4.84	34.36	27.21	87	1.03
1216	3.26	34.50	800	4.44	34.37	27.26	82	1.12
			1000	3.81	34.41	27.36	73	1.30

70.80

SPENCER F. BAIRD; September 2, 1954; 0849 GCT; 35°14'N, 123°44.5'W; sounding, 2310 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 25°.

0	17.3	33.05	0	17.3	33.05	23.97	395	0.00
10	17.40	33.04	10	17.40	33.04	23.94	398	0.04
24	17.39	33.08	20	17.40	33.07	23.96	396	0.08
50	15.53	33.02	30	17.37	33.07	23.97	395	0.12
59	14.55	33.08	50	15.53	33.02	24.35	359	0.20
67	13.42	33.02	75	13.07	33.10	24.93	303	0.28
79	12.95	33.12	100	12.04	33.07	25.10	287	0.35
96	12.32	33.07	150	9.12	33.38	25.85	216	0.48
123	10.13	33.09	200	8.23	33.79	26.31	172	0.58
178	8.54	33.65	250	7.60	33.95	26.53	151	0.66
245	7.66	33.94	300	6.73	33.98	26.67	138	0.73
335	6.38	34.00	400	5.96	34.06	26.84	122	0.87
454	5.64	34.11	500	5.39	34.14	26.97	110	0.99
618	4.78	34.22	600	4.87	34.21	27.09	98	1.10
830	4.09	34.40	700	4.50	34.30	27.20	88	1.20
1122	3.39	34.46	800	4.19	34.38	27.30	78	1.29
			1000	3.66	34.44	27.40	69	1.45

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

S10
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SPENCER F. BAIRD; September 3, 1954; 0430 GCT; 35°16.5'N, 121°58.5'W; sounding, 1450 fm; wind, 330°, force 6; weather, partly cloudy; sea, very rough; wire angle, 38°.

73.60

0	14.8	33.42	0	14.8	33.42	24.82	314	0.00
9	14.77	33.44	10	14.76	33.44	24.84	312	0.03
24	14.75	33.45	20	14.75	33.45	24.85	311	0.06
37	13.91	33.42	30	14.75	33.44	24.84	312	0.09
49	12.04	33.43	50	11.99	33.43	25.39	260	0.15
56	11.56	33.41	75	9.94	33.58	25.87	214	0.21
63	10.61	33.46	100	9.16	33.80	26.17	185	0.26
75	9.94	33.58	150	8.33	33.94	26.41	163	0.35
84	9.52	33.68	200	7.93	34.04	26.55	149	0.43
109	8.99	33.84	250	7.50	34.12	26.68	137	0.50
133	8.50	33.91	300	7.16	34.17	26.76	129	0.57
174	8.17	33.98	400	6.60	34.29	26.94	112	0.70
221	7.74	34.08	500	5.97	34.29	27.02	105	0.81
305	7.12	34.18						
413	6.52	34.30						
537	5.72	34.29						

SPENCER F. BAIRD; September 3, 1954; 1615, 1635, 1650 GCT; 34°53.5'N, 121°20.5'W; sounding, 266 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°, 12°, 20°.

77.55

0	15.2	33.48	0	15.2	33.48	24.78	318	0.00
10	15.18	33.46	10	15.18	33.46	24.77	319	0.03
15	15.20	33.48	20	15.18	33.48	24.78	318	0.06
20	15.18	33.48	30	13.59	33.46	25.10	287	0.09
25	15.07	33.48	50	9.86	33.62	25.92	209	0.14
30	13.59	33.46	75	9.30	33.75	26.11	191	0.19
40	11.84	33.60	100	9.09	33.87	26.24	179	0.24
50	9.86	33.62	150	8.71	34.03	26.43	161	0.33
65	9.35	33.72	200	8.51	34.16	26.56	148	0.41
			250	8.25	34.21	26.64	141	0.48
77	9.28	33.76	300	7.77	34.22	26.72	133	0.55
119	8.88	33.94	400	(7.04)	(34.27)	(26.86)	(120)	(0.68)
153	8.70	34.04						
196	8.53	34.15						
245	8.30	34.21						
318	7.62	34.22						
398	7.05	34.27						

SPENCER F. BAIRD; September 5, 1954; 0759 GCT; 34°16.5'N, 120°50.5'W; sounding, 450 fm; wind, 330°, force 6; weather, cloudy; sea, very rough; wire angle, 15°.

80.55

0	14.4	33.44	0	14.4	33.44	24.92	304	0.00
10	14.29	33.40	10	14.29	33.40	24.91	305	0.03
30	11.32	33.45	20	13.00	33.42	25.19	279	0.06
44	9.80	33.60	30	11.32	33.45	25.53	246	0.09
54	9.52	33.70	50	9.61	33.66	25.99	202	0.13
63	9.30	33.77	75	9.08	33.85	26.23	180	0.18
73	9.10	33.84	100	8.96	33.91	26.29	174	0.22
82	9.03	33.87	150	8.86	33.97	26.35	168	0.31
96	8.97	33.90	200	8.52	34.11	26.52	152	0.39
124	8.90	33.94	250	8.37	34.20	26.61	144	0.47
157	8.83	33.98	300	7.69	34.22	26.73	132	0.54
207	8.58	34.13	400	6.62	34.22	26.88	118	0.67
265	8.25	34.21	500	6.19	34.21	26.93	113	0.79
371	6.77	34.22	600	5.58	34.36	27.12	95	0.90
486	6.27	34.21						
624	5.40	34.41						

S10

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

80.70

SPENCER F. BAIRD; September 5, 1954; 0024 GCT; 33°48'N, 121°51'W; sounding,
2050 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 13°.

0	16.1	33.43	0	16.1	33.43	24.54	340	0.00
10	16.18	33.45	10	16.18	33.45	24.54	340	0.03
30	16.19	33.42	20	16.19	33.44	24.53	341	0.07
54	12.81	33.13	30	16.19	33.42	24.51	343	0.10
69	11.14	33.17	50	13.93	33.14	24.79	317	0.17
79	10.38	33.23	75	10.63	33.20	25.46	253	0.24
93	9.56	33.39	100	9.30	33.48	25.90	211	0.30
117	8.82	33.66	150	8.24	33.88	26.38	166	0.39
160	8.12	33.93	200	7.69	34.01	26.56	148	0.47
224	7.44	34.04	250	7.18	34.06	26.68	137	0.55
308	6.62	34.09	300	6.69	34.08	26.76	129	0.62
416	5.81	34.19	400	5.90	34.17	26.93	113	0.74
562	5.09	34.32	500	5.35	34.27	27.08	99	0.85
764	4.47	34.39	600	4.96	34.34	27.18	90	0.96
1007	3.83	34.48	700	4.65	34.37	27.24	84	1.05
1335	3.04	34.51	800	4.39	34.40	27.29	79	1.14
			1000	3.85	34.48	27.41	68	1.30

80.90

SPENCER F. BAIRD; September 4, 1954; 1449 GCT; 33°05'N, 123°15'W; sounding,
2400 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 22°.

0	17.4	33.14	0	17.4	33.14	24.02	391	0.00
10	17.49	33.14	10	17.49	33.14	23.99	393	0.04
29	17.51	33.14	20	17.51	33.14	23.99	393	0.08
52	15.57	33.09	30	17.51	33.14	23.99	393	0.12
66	14.31	33.05	50	15.76	33.09	24.35	359	0.19
75	13.81	33.06	75	13.81	33.06	24.75	320	0.28
89	12.63	33.02	100	11.67	33.03	25.14	283	0.35
111	10.85	33.07	150	8.88	33.46	25.95	206	0.48
152	8.84	33.48	200	8.50	33.95	26.40	164	0.57
214	8.41	34.01	250	8.00	34.00	26.51	153	0.65
294	7.40	34.00	300	7.31	34.00	26.61	144	0.73
398	6.31	34.08	400	6.30	34.08	26.81	125	0.87
539	5.56	34.22	500	5.75	34.19	26.97	110	0.99
735	4.66	34.35	600	5.25	34.27	27.09	98	1.10
971	3.90	34.45	700	4.80	34.33	27.19	89	1.20
1295	3.14	34.52	800	4.43	34.38	27.27	81	1.30
			1000	3.83	34.46	27.40	69	1.46

82.47

SPENCER F. BAIRD; September 5, 1954; 1421 GCT; 34°15'N, 119°59'W; sounding,
328 fm; wind, 280°, force 2; weather, clear; sea, moderate; wire angle, 10°.

0	17.1	33.51	0	17.1	33.51	24.37	357	0.00
10	17.19	33.49	10	17.19	33.49	24.33	360	0.04
30	11.85	33.37	20	14.08	33.42	24.97	300	0.07
40	11.44	33.40	30	11.85	33.37	25.37	262	0.10
50	10.92	33.43	50	10.92	33.43	25.59	240	0.15
60	10.40	33.50	75	9.65	33.66	25.99	202	0.20
70	9.77	33.62	100	9.03	33.90	26.27	176	0.25
79	9.58	33.68	150	8.69	34.12	26.50	154	0.34
89	9.25	33.81	200	8.60	34.14	26.53	151	0.41
98	9.06	33.89	250	8.18	34.20	26.64	141	0.49
117	8.90	33.96	300	7.73	34.23	26.73	132	0.56
142	8.70	34.11	400	7.04	34.24	26.84	122	0.69
200	8.60	34.14	500	6.49	34.27	26.93	113	0.82
278	7.92	34.22						
381	7.16	34.24						
500	6.49	34.27						

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

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SPENCER F. BAIRD; September 5, 1954; 1723 GCT; 34°08'N, 119°35.5'W; sounding, 140 fm; wind, 280°, force 2; weather, clear; sea, rough; wire angle, 02°.

83.43

0	18.7	33.52	0	18.7	33.52	23.99	393	0.00
10	18.41	33.51	10	18.41	33.51	24.05	387	0.04
15	18.08	33.57	20	17.67	33.44	24.18	375	0.08
20	17.67	33.44	30	16.51	33.45	24.46	348	0.11
25	17.19	33.44	50	11.98	33.39	25.36	262	0.18
30	16.51	33.45	75	9.99	33.56	25.85	216	0.24
35	15.05	33.41	100	9.22	33.76	26.13	189	0.29
45	12.48	33.40	150	8.72	34.00	26.40	164	0.38
55	11.70	33.39	200	8.56	34.08	26.49	155	0.46
65	11.29	33.40						
75	9.99	33.56						
95	9.30	33.72						
110	9.11	33.86						
140	8.80	33.98						
170	8.62	34.04						
205	8.56	34.08						

SPENCER F. BAIRD; September 6, 1954; 0015 GCT; 33°51.5'N, 120°08'W; sounding, 100 fm; wind, 290°, force 4; weather, clear; sea, moderate; wire angle, 06°.

83.51

0	18.4	33.50	0	18.4	33.50	24.05	387	0.00
10	18.40	33.53	10	18.40	33.53	24.07	385	0.04
15	17.70	33.50	20	16.91	33.48	24.39	355	0.08
20	16.91	33.48	30	13.81	33.42	25.03	294	0.11
25	16.46	33.45	50	10.27	33.48	25.74	226	0.16
30	13.81	33.42	75	9.70	33.57	25.91	210	0.22
35	11.71	33.35	100	9.33	33.79	26.14	188	0.27
45	10.32	33.47	150	9.06	33.84	26.22	181	0.36
55	10.27	33.48						
65	10.09	33.50						
80	9.56	33.61						
101	9.32	33.79						
121	9.14	33.79						
156	9.05	33.86						

SPENCER F. BAIRD; September 6, 1954; 0506, 0533 GCT; 33°34.5'N, 120°46.5'W; sounding, 930 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 30°, 10°.

83.60

0	16.3	33.51	0	16.3	33.51	24.55	340	0.00
9	16.42	33.49	10	16.41	33.49	24.51	343	0.03
26	16.43	33.48	20	16.43	33.48	24.50	344	0.07
41	15.61	33.40	30	16.42	33.47	24.50	344	0.10
52	11.72	33.31	50	12.13	33.31	25.27	271	0.16
61	11.30	33.36	75	10.23	33.50	25.76	224	0.23
70	10.59	33.48	100	9.30	33.65	26.03	199	0.28
83	9.86	33.53	150	8.45	33.91	26.37	166	0.37
97	9.34	-	200	8.00	34.05	26.55	149	0.45
			250	7.53	34.11	26.66	139	0.53
109	9.20	33.70	300	6.95	34.17	26.79	127	0.60
142	8.56	33.87	400	6.29	34.24	26.94	112	0.72
177	8.20	34.01	500	5.91	34.31	27.04	103	0.83
236	7.70	34.09	600	5.56	34.35	27.12	95	0.94
305	6.90	34.17	700	(5.20)	(34.35)	(27.16)	(92)	(1.04)
429	6.16	34.26						
559	5.72	34.34						
698	5.21	34.35						

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

85.39

SPENCER F. BAIRD; September 6, 1954; 2025 GCT; 33°59'N, 119°04.5'W; sounding, 408 fm; wind, 260°, force 2; weather, clear; sea, calm; wire angle, 14°.

0	19.5	33.55	0	19.5	33.55	23.81	411	0.00
10	18.96	33.52	10	18.96	33.52	23.92	400	0.04
30	13.06	33.33	20	15.67	33.38	24.60	335	0.08
40	11.80	33.37	30	13.06	33.33	25.11	286	0.11
49	10.54	33.44	50	10.52	33.45	25.67	233	0.16
59	10.47	33.49	75	9.87	33.54	25.86	215	0.22
69	10.22	33.48	100	9.57	33.60	25.95	206	0.27
78	9.76	33.57	150	9.28	33.77	26.13	189	0.37
93	9.63	33.58	200	8.92	33.92	26.31	172	0.46
117	9.41	33.71	250	8.45	34.08	26.50	154	0.54
150	9.28	33.77	300	8.14	34.21	26.65	140	0.62
198	8.94	33.91	400	7.49	34.28	26.80	126	0.76
256	8.41	34.10	500	6.61	34.28	26.93	113	0.89
359	7.79	34.29	600	5.82	34.34	27.08	99	1.00
477	6.82	34.27						
600	5.82	34.34						

85.45

SPENCER F. BAIRD; September 6, 1954; 1634 GCT; 33°49'N, 119°32.5'W; sounding, 900 fm; wind, 100°, force 1; weather, cloudy; sea, slight; wire angle, 14°.

0	19.3	33.57	0	19.3	33.57	23.87	404	0.00
10	18.39	33.61	10	18.39	33.61	24.13	380	0.04
31	14.31	33.44	20	16.30	33.51	24.55	340	0.08
46	12.67	33.46	30	14.44	33.44	24.91	305	0.11
54	10.78	33.42	50	11.53	33.43	25.48	251	0.16
63	10.58	33.46	75	10.44	33.51	25.74	226	0.22
73	10.48	33.50	100	9.68	33.67	25.99	202	0.28
82	10.20	33.55	150	8.83	33.93	26.33	170	0.37
97	9.77	33.64	200	8.51	34.11	26.52	152	0.45
125	9.06	33.84	250	8.29	34.21	26.63	142	0.53
158	8.79	33.96	300	8.04	34.26	26.71	134	0.60
210	8.45	34.14	400	7.25	34.32	26.87	119	0.73
273	8.20	34.24	500	6.60	34.49	27.09	98	0.85
383	7.38	34.30	600	5.93	34.37	27.09	98	0.96
509	6.54	34.49						
642	5.66	34.36						

85.55

SPENCER F. BAIRD; September 6, 1954; 1045 GCT; 33°27'N, 120°16'W; sounding, 675 fm; wind, 320°, force 6; weather, missing; sea, rough; wire angle, 14°.

0	15.6	33.48	0	15.6	33.48	24.69	326	0.00
10	15.70	33.48	10	15.70	33.48	24.67	328	0.03
30	13.57	33.40	20	15.70	33.44	24.64	331	0.07
45	10.31	33.47	30	13.57	33.40	25.06	291	0.10
59	9.92	33.55	50	10.12	33.50	25.78	222	0.15
69	9.60	33.63	75	9.54	33.69	26.03	199	0.20
78	9.52	33.72	100	9.01	33.83	26.22	181	0.25
93	9.10	33.80	150	8.59	34.06	26.47	157	0.34
108	8.92	33.88	200	8.29	34.15	26.58	146	0.41
141	8.64	34.04	250	8.00	34.21	26.67	138	0.48
174	8.44	34.11	300	7.68	34.22	26.73	132	0.56
230	8.12	34.20	400	7.03	34.25	26.85	121	0.69
297	7.70	34.22	500	6.28	34.31	26.99	108	0.81
411	6.95	34.26	600	5.68	34.34	27.09	98	0.92
545	6.00	34.33	700	(5.20)	(34.36)	(27.17)	(91)	(1.02)
683	5.26	34.36						

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

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SPENCER F. BAIRD; September 7, 1954; 0141 GCT; 33°39.5'N, 118°59.5'W; sounding, 325 fm; wind, 280°, force 4; weather, clear; sea, moderate; wire angle, 19°.

8740

0	19.1	-	0	(19.67)	(33.55)	(23.76)	(415)	(0.00)
5	19.66	33.55	10	19.64	33.54	23.76	415	0.04
25	19.09	33.50	20	19.31	33.51	23.83	409	0.08
34	16.98	33.48	30	18.32	33.49	24.06	386	0.12
44	13.72	33.31	50	13.01	33.35	25.13	284	0.19
53	12.81	33.37	75	10.66	33.44	25.64	236	0.26
63	12.00	33.37	100	9.89	33.55	25.86	215	0.31
72	11.00	33.40	150	8.93	33.87	26.27	176	0.41
81	10.32	33.52	200	8.49	34.04	26.47	157	0.50
91	10.16	33.53	250	8.21	34.17	26.61	144	0.57
110	9.52	33.59	300	7.86	34.25	26.73	132	0.64
138	9.07	33.83	400	7.13	34.30	26.87	119	0.78
185	8.60	33.99	500	(6.55)	(34.27)	(26.93)	(113)	(0.90)
266	8.11	34.20						
366	7.36	34.31						
484	6.63	34.27						

SPENCER F. BAIRD; September 7, 1954; 0653 GCT; 33°20.5'N, 119°40'W; sounding, 40 fm; wind, 300°, force 6; weather, clear; sea, rough; wire angle, 00°.

8750

0	15.3	33.54	0	15.3	33.54	24.80	316	0.00
5	15.38	33.55	10	15.27	33.53	24.80	316	0.03
10	15.27	33.53	20	13.72	33.52	25.12	285	0.06
15	15.47	33.49	30	11.25				
20	13.72	33.52						
25	12.58	33.58						
35	10.66	-						
45	9.87	-						

SPENCER F. BAIRD; September 7, 1954; 1225 GCT; 32°58.5'N, 120°28.5'W; sounding, 810 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 21°.

8760

0	16.6	33.49	0	16.6	33.49	24.47	347	0.00
10	16.72	33.49	10	16.72	33.49	24.44	350	0.04
29	16.57	33.48	20	16.63	33.48	24.46	348	0.07
42	12.08	33.33	30	16.57	33.48	24.47	347	0.10
56	10.78	33.35	50	11.21	33.34	25.47	252	0.16
65	10.21	33.38	75	9.80	33.47	25.81	220	0.22
73	9.90	33.44	100	9.00	33.73	26.15	187	0.28
86	9.26	33.62	150	8.33	33.92	26.40	164	0.36
99	9.02	33.73	200	7.88	34.03	26.55	149	0.44
130	8.49	33.84	250	7.36	34.10	26.68	137	0.52
161	8.26	33.96	300	6.89	34.15	26.79	127	0.59
215	7.70	34.05	400	6.30	34.23	26.93	113	0.71
277	7.09	34.13	500	6.03	34.32	27.03	104	0.83
383	6.36	34.22	600	5.59	34.37	27.13	94	0.93
511	5.98	34.33						
642	5.40	34.38						

SPENCER F. BAIRD; September 8, 1954; 1730 GCT; 33°28.5'N, 117°45'W; sounding, 25 fm; wind, 150°, force 1; weather, cloudy; sea, slight; wire angle, 05°.

9028

0	20.6	33.48	0	20.6	33.48	23.47	443	0.00
5	20.38	33.48	10	18.54	33.40	23.94	398	0.04
10	18.54	33.40	20	13.94	33.38	24.97	300	0.08
15	16.64	33.41	30	12.38	33.33	25.24	274	0.11
20	13.94	33.38						
25	12.98	33.35						
30	12.38	33.33						
35	12.12	33.30						

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

90.37

SPENCER F. BAIRD; September 8, 1954; 1249 GCT; 33°10.5'N, 118°23'W; sounding, 650 fm; wind, 270°, force 1, weather, fog; sea, slight; wire angle, 07°.

0	18.9	33.40	0	18.9	33.40	23.85	407	0.00
10	18.87	33.43	10	18.87	33.43	23.88	404	0.04
30	16.19	33.28	20	18.13	33.36	24.01	391	0.08
45	12.92	33.17	30	16.19	33.28	24.40	354	0.12
55	12.29	33.28	50	12.63	33.21	25.10	287	0.18
65	10.88	33.27	75	10.52	33.36	25.60	240	0.25
75	10.52	33.36	100	9.68	33.54	25.89	212	0.30
85	9.94	33.45	150	9.00	33.89	26.27	176	0.40
99	9.69	33.53	200	8.59	34.10	26.50	154	0.49
128	9.50	33.80	250	8.49	34.15	26.55	149	0.56
162	8.74	33.94	300	8.14	34.17	26.62	143	0.64
215	8.56	34.13	400	7.23	34.22	26.79	127	0.78
278	8.36	34.16	500	6.63	34.28	26.92	114	0.91
391	7.30	34.22	600	6.02	34.34	27.05	102	1.02
519	6.53	34.29						
653	5.71	34.38						

90.55

SPENCER F. BAIRD; September 8, 1954; 0420 GCT; 32°28.5'N, 119°39'W; sounding, 700 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 15°.

0	17.1	33.47	0	17.1	33.47	24.34	360	0.00
10	17.20	33.48	10	17.20	33.48	24.32	361	0.04
30	17.18	33.49	20	17.22	33.49	24.32	361	0.07
44	16.06	33.45	30	17.18	33.49	24.33	360	0.11
58	12.01	33.31	50	14.21	33.36	24.90	306	0.18
67	10.48	33.49	75	10.40	33.45	25.70	230	0.24
76	10.38	33.45	100	9.33	33.61	26.00	202	0.30
90	9.97	33.52	150	8.86	33.91	26.31	172	0.39
104	9.20	33.65	200	8.31	34.04	26.49	155	0.48
138	8.94	33.89	250	7.84	34.16	26.66	139	0.55
171	8.64	33.96	300	7.46	34.21	26.75	130	0.62
227	8.04	34.10	400	6.83	34.24	26.86	120	0.75
293	7.50	34.21	500	6.44	34.27	26.94	112	0.87
408	6.79	34.24	600	5.90	34.35	27.07	100	0.99
544	6.23	34.29	700	(5.30)	(34.41)	(27.19)	(89)	(1.09)
682	5.38	34.41						

90.70

SPENCER F. BAIRD; September 7, 1954; 1827 GCT; 32°05'N, 120°42'W; sounding, 2150 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 15°.

0	17.5	33.57	0	17.5	33.57	24.32	361	0.00
10	17.52	33.57	10	17.52	33.57	24.31	362	0.04
31	17.18	33.52	20	17.36	33.55	24.34	360	0.07
54	11.93	33.30	30	17.19	33.52	24.35	359	0.11
68	10.67	33.30	50	12.53	33.32	25.20	278	0.17
78	10.14	33.39	75	10.27	33.36	25.65	235	0.24
92	9.72	33.46	100	9.51	33.57	25.94	207	0.29
116	9.10	33.75	150	8.54	33.93	26.37	166	0.39
159	8.40	33.95	200	7.83	33.99	26.53	151	0.47
227	7.54	34.02	250	7.35	34.06	26.65	140	0.54
313	6.90	34.21	300	7.00	34.19	26.80	126	0.61
423	6.16	34.29	400	6.30	34.28	26.97	110	0.73
572	5.43	34.35	500	5.75	34.32	27.07	100	0.84
774	4.60	34.43	600	5.30	34.36	27.15	92	0.95
1018	3.90	34.46	700	4.89	34.40	27.23	85	1.04
1344	3.21	34.54	800	4.51	34.44	27.31	77	1.13
			1000	3.95	34.46	27.38	71	1.30

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

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SPENCER F. BAIRD; September 8, 1954; 2317 GCT; 32°50'N, 117°30.5'W; sounding, 456 fm; wind, 230°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.

93.30

0	21.6	33.58	0	21.6	33.58	23.27	462	0.00
10	20.27	33.55	10	20.27	33.55	23.61	430	0.04
30	14.36	33.37	20	17.06	33.45	24.33	360	0.08
40	13.42	33.33	30	14.36	33.37	24.87	309	0.12
50	12.03	33.30	50	12.03	33.30	25.28	270	0.18
60	11.09	33.40	75	10.30	33.43	25.70	230	0.24
70	10.64	33.40	100	9.53	33.64	25.99	202	0.29
80	9.95	33.53	150	9.10	33.97	26.32	171	0.39
94	9.60	33.60	200	8.77	34.13	26.49	155	0.47
118	9.39	33.77	250	8.29	34.35	26.74	131	0.54
152	9.08	33.98	300	7.95	34.33	26.78	128	0.61
200	8.77	34.13	400	7.26	34.30	26.85	121	0.74
258	8.22	34.35	500	6.48	34.35	27.00	107	0.86
361	7.60	34.30	600	5.91	34.40	27.11	96	0.97
478	6.66	34.34						
602	5.91	34.40						

SPENCER F. BAIRD; September 9, 1954; 0916 GCT; 32°09.5'N, 118°55.5'W; sounding, 840 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.

93.50

0	18.7	33.46	0	18.7	33.46	23.94	398	0.00
10	18.78	33.46	10	18.78	33.46	23.92	400	0.04
30	15.82	33.24	20	18.78	33.35	23.84	408	0.08
45	14.59	33.28	30	15.82	33.24	24.46	348	0.12
54	13.61	33.21	50	14.09	33.24	24.83	313	0.18
64	12.13	33.22	75	11.32	33.31	25.42	257	0.26
73	11.50	33.30	100	9.76	33.58	25.90	211	0.32
83	10.38	33.33	150	9.45	33.98	26.27	176	0.41
97	9.84	33.55	200	8.92	34.18	26.51	153	0.50
126	9.31	33.80	250	8.37	34.19	26.60	145	0.57
160	9.45	34.04	300	7.94	34.20	26.68	137	0.65
213	8.75	34.20	400	7.09	34.27	26.85	121	0.78
277	8.12	34.19	500	6.55	34.31	26.96	110	0.90
387	7.17	34.27	600	5.73	34.35	27.09	98	1.02
516	6.44	34.31						
649	5.32	34.38						

SPENCER F. BAIRD; September 9, 1954; 1919 GCT; 31°54.5'N, 117°46.5'W; sounding, 680 fm; wind, 300°, force 1; weather, cloudy; sea, moderate; wire angle, 12°.

97.40

0	19.9	33.40	0	19.9	33.40	23.59	431	0.00
10	19.96	33.42	10	19.96	33.42	23.59	431	0.04
30	17.42	33.26	20	19.16	33.35	23.74	417	0.09
45	14.82	33.10	30	17.42	33.26	24.10	382	0.13
55	13.68	33.08	50	14.27	33.09	24.68	327	0.20
64	12.74	33.01	75	12.10	33.12	25.13	284	0.27
74	12.18	33.11	100	10.30	33.29	25.59	240	0.34
83	11.42	33.18	150	8.96	33.75	26.17	185	0.45
99	10.33	33.28	200	8.37	33.98	26.44	160	0.54
128	9.30	33.46	250	7.70	34.01	26.56	148	0.61
162	8.80	33.85	300	7.03	34.06	26.70	135	0.69
214	8.20	34.00	400	6.31	34.18	26.89	117	0.82
276	7.36	34.02	500	6.15	34.18	26.91	115	0.94
387	6.34	34.18	600	5.69	34.31	27.07	100	1.06
514	6.11	34.18						
647	5.42	34.38						

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

100.50

CREST; September 1, 1954; 0910 GCT; 31°01'N, 118°06'W; sounding, 850 fm; wind, 320°, force 2; weather, missing; sea, smooth; wire angle, 05°.

0	18.5	33.33	0	18.5	33.33	23.89	403	0.00
10	18.19	33.26	10	18.19	33.26	23.92	400	0.04
40	17.58	33.44	20	17.91	33.33	24.04	388	0.08
45	17.44	33.42	30	17.73	33.42	24.15	378	0.12
50	15.67	33.19	50	15.67	33.19	24.45	349	0.19
55	14.52	33.04	75	12.64	32.97	24.91	305	0.27
60	14.02	33.03	100	10.44	33.22	25.51	248	0.34
70	12.90	32.94	150	8.99	33.69	26.12	190	0.45
90	10.91	33.10	200	8.46	34.04	26.47	157	0.54
95	10.56	33.24	250	7.99	34.13	26.61	144	0.62
100	10.44	33.22	300	7.44	34.15	26.71	134	0.69
149	9.00	33.68	400	6.39	34.18	26.88	118	0.82
248	8.00	34.13	500	5.71	34.28	27.04	103	0.94
396	6.42	34.18	600	(5.27)	(34.38)	(27.17)	(91)	(1.04)
596	5.28	34.37	700	(4.90)	(34.44)	(27.26)	(82)	(1.14)
895	4.36	34.51	800	(4.62)	(34.48)	(27.33)	(75)	(1.22)
1197	3.56	34.55	1000	4.08	34.53	27.43	66	(1.38)

100.70

CREST; August 31, 1954; 2316 GCT; 30°20.5'N 119°28'W; sounding, 2000 fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°.

0	19.0	33.39	0	19.0	33.39	23.81	410	0.00
9	18.94	33.41	10	18.93	33.41	23.85	407	0.04
18	18.89	33.40	20	18.90	33.40	23.85	407	0.08
23	18.92	33.39	30	18.89	33.41	23.86	406	0.12
27	18.92	33.39	50	17.10	33.26	24.18	375	0.20
31	18.89	33.41	75	14.87	33.14	24.59	336	0.29
35	18.78	33.39	100	13.57	33.13	24.85	311	0.37
40	18.37	33.29	150	10.28	33.41	25.68	232	0.51
44	17.84	33.28	200	8.89	33.68	26.12	190	0.62
65	15.67	33.21	250	8.30	33.91	26.39	164	0.71
85	14.08	33.07	300	7.83	34.06	26.58	146	0.79
167	9.46	33.50	400	7.12	34.21	26.80	126	0.93
291	7.90	34.04	500	6.33	34.28	26.96	110	1.05
417	7.01	34.22	600	5.66	34.32	27.08	99	1.16
635	5.44	34.34	700	5.12	34.37	27.18	90	1.26
861	4.49	34.44	800	4.71	34.42	27.27	81	1.36
1099	3.70	34.52	1000	4.00	34.49	27.40	69	1.53

103.30

CREST; August 31, 1954; 0335 GCT; 31°05'N, 116°25.5'W; sounding, 37 fm; wind, 200°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	16.26	33.28	0	16.26	33.28	24.39	355	0.00
5	15.42	33.23	10	14.71	33.28	24.73	322	0.03
10	14.71	33.28	20	12.68	33.21	25.09	288	0.06
16	13.16	33.19	30	11.80	33.24	25.28	270	0.09
21	12.57	33.22	50	11.19	33.47	25.57	242	0.14
26	12.06	33.25						
31	11.76	33.24						
36	11.50	33.27						
41	11.43	33.40						
46	11.26	33.40						
51	11.18	33.47						
56	11.12	33.44						

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

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CREST; August 31, 1954; 0847 GCT; 30°46'N, 117°04'W; sounding, 850 fm; wind, 310°, force 5; weather, clear; sea, moderate; wire angle, 15°.

103.40

0	20.1	33.47	0	20.1	33.47	23.59	431	0.00
10	20.02	33.44	10	20.02	33.44	23.59	432	0.04
20	19.51	33.43	20	19.51	33.43	23.71	420	0.09
30	16.78	33.23	30	16.78	33.23	24.23	370	0.12
39	14.94	33.12	50	13.86	33.08	24.75	320	0.19
49	13.91	33.08	75	11.92	33.10	25.15	282	0.27
58	13.30	33.03	100	9.83	33.44	25.78	222	0.33
68	12.36	33.05	150	9.81	33.97	26.20	183	0.44
78	11.75	33.13	200	9.47	34.23	26.46	158	0.52
83	10.79	33.25	250	9.10	34.35	26.61	144	0.60
92	10.24	33.33	300	8.68	34.36	26.69	136	0.67
137	9.86	33.91	400	7.44	34.38	26.89	117	0.81
156	9.78	34.00	500	6.59	34.38	27.01	106	0.92
228	9.28	34.33	600	6.00	34.40	27.10	97	1.03
322	8.44	34.37						
465	6.83	34.38						
624	5.88	34.40						

CREST; August 30, 1954; 2052 GCT; 30°20.5'N, 116°23.5'W; sounding, 900 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 16°.

107.35

0	18.2	33.36	0	18.2	33.36	23.99	393	0.00
10	18.18	33.40	10	18.18	33.40	24.02	390	0.04
15	18.06	33.35	20	15.64	33.30	24.54	340	0.08
20	15.64	33.30	30	12.74	33.31	25.16	281	0.11
25	13.84	33.22	50	10.51	33.48	25.70	230	0.16
35	11.97	33.39	75	10.37	33.75	25.93	208	0.21
49	10.60	33.48	100	10.21	33.87	26.05	197	0.26
59	10.08	33.51	150	10.38	34.15	26.24	179	0.36
69	10.39	33.73	200	10.19	34.36	26.44	160	0.45
88	10.28	33.78	250	9.71	34.38	26.54	150	0.53
117	10.18	34.00	300	9.21	34.40	26.63	142	0.60
146	10.39	34.13	400	8.10	34.45	26.85	121	0.74
194	10.24	34.36	500	6.85	34.37	26.96	110	0.86
292	9.28	34.40	600	(6.20)	(34.33)	(27.02)	(105)	(0.98)
390	8.24	34.45						
489	6.96	34.38						
589	6.26	34.33						

CREST; August 29, 1954; 1740 GCT; 29°50.5'N, 115°52'W; sounding, 46 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 14°.

110.33

0	20.20	33.62	0	20.20	33.62	23.68	423	0.00
5	20.16	33.60	10	20.11	33.61	23.69	422	0.04
10	20.11	33.61	20	20.04	33.58	23.69	422	0.08
12	20.09	33.59	30	16.79	33.39	24.35	359	0.12
14	20.10	33.58	50	11.50	33.23	25.33	265	0.19
16	20.10	33.57	75	10.77	33.43	25.62	238	0.25
18	20.08	33.62						
20	20.04	33.58						
25	19.2	33.44						
35	14.85	33.35						
40	13.52	33.28						
45	11.73	33.19						
50	11.50	33.23						
55	11.33	33.27						
65	11.0	33.30						
75	10.77	33.43						

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

110.40

CREST; August 29, 1954; 2146 GCT; 29°36.5'N, 116°17.5'W; sounding, 1325 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 30°.

0	20.5	33.60	0	20.5	33.60	23.58	432	0.00
10	20.48	33.61	10	20.48	33.61	23.60	431	0.04
19	19.90	33.58	20	19.78	33.56	23.74	417	0.09
32	17.89	33.33	30	18.28	33.37	23.98	394	0.13
36	16.88	33.25	50	14.79	33.22	24.67	328	0.20
40	16.32	33.24	75	12.60	33.23	25.12	285	0.28
45	15.88	33.26	100	10.56	33.43	25.65	235	0.34
52	14.56	33.22	150	9.63	33.98	26.24	179	0.45
68	13.46	33.22	200	(9.31)	(34.28)	(26.53)	(151)	(0.53)
91	11.02	33.30	250	(9.00)	(34.38)	(26.65)	(140)	(0.60)
119	9.84	33.69	300	(8.67)	(34.42)	(26.74)	(131)	(0.68)
157	9.58	34.04	400	7.83	34.36	26.82	124	(0.81)
306	8.62	34.42	500	6.90	34.34	26.93	113	(0.94)
460	7.29	34.34	600	6.02	34.36	27.07	100	(1.05)
697	5.46	34.38	700	5.45	34.38	27.15	92	(1.15)
945	4.50	34.46	800	5.03	34.41	27.23	85	(1.25)
1207	3.43	34.56	1000	4.29	34.48	27.36	73	(1.43)

110.60

CREST; August 30, 1954; 0813 GCT; 28°57'N, 117°38.5'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 12°.

0	20.5	33.58	0	20.5	33.58	23.57	433	0.00
10	20.48	33.58	10	20.48	33.58	23.57	433	0.04
35	20.45	33.58	20	20.46	33.58	23.58	432	0.09
50	16.10	33.26	30	20.44	33.58	23.58	432	0.13
54	15.46	33.24	50	16.10	33.26	24.41	353	0.21
59	14.90	33.25	75	11.93	33.36	25.35	263	0.29
64	14.20	33.23	100	10.48	33.55	25.76	224	0.35
73	12.20	33.35	150	9.84	34.11	26.30	173	0.45
89	10.76	33.41	200	8.34	34.34	26.73	132	0.53
108	10.28	33.68	250	7.74	34.35	26.82	124	0.59
146	9.83	34.08	300	7.31	34.36	26.89	117	0.65
194	8.46	34.34	400	6.70	34.39	27.00	107	0.77
293	7.37	34.36	500	(6.21)	(34.41)	(27.08)	(99)	(0.88)
490	6.26	34.41	600	(5.67)	(34.44)	(27.17)	(91)	(0.98)
787	4.78	34.47	700	(5.13)	(34.46)	(27.25)	(83)	(1.08)
1086	3.82	34.39	800	4.72	34.47	27.31	77	(1.16)
1385	3.13	34.43	1000	4.06	34.40	27.32	76	(1.34)

113.35

CREST; August 28, 1954; 0816, 0851 GCT; 29°10.5'N, 115°37.5'W; sounding, 700 fm; wind, 320°, force 5; weather, clear; sea, moderate; wire angle, 43°, 57°.

0	19.5	33.48	0	19.5	33.48	23.76	416	0.00
9	19.47	33.49	10	19.46	33.49	23.77	414	0.04
16	19.30	33.48	20	18.92	33.43	23.86	405	0.08
23	18.46	33.39	30	16.12	33.31	24.44	350	0.12
26	17.66	33.37	50	12.67	33.19	25.08	289	0.18
29	16.62	33.32	75	11.35	33.34	25.44	255	0.25
32	15.06	33.28	100	10.40	33.47	25.71	229	0.31
35	14.43	33.19	150	9.97	34.00	26.20	183	0.42
48	12.84	33.19	200	10.28	34.41	26.46	158	0.50
61	11.94	33.24	250	10.07	34.40	26.49	155	0.58
89	10.86	33.42	300	9.56	34.40	26.58	146	0.66
103	10.18	33.48						
114	9.62	33.58						
153	10.00	34.03						
210	10.29	34.42						
277	-	34.39						
353	9.02	34.47						

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

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CREST; August 27, 1954; 1705 GCT; 28°48'N, 114°56.5'W; sounding, 56 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 19°.

117.30

0	18.5	-	0	18.5	(33.38)	(23.93)	(399)	(0.00)
11	18.28	33.37	10	18.41	(33.37)	(23.95)	(397)	(0.04)
20	15.26	33.24	20	15.26	33.24	24.58	337	(0.08)
25	13.86	33.21	30	13.04	33.31	25.10	287	(0.11)
30	13.04	33.31	50	10.43	33.51	25.74	226	(0.16)
35	12.20	33.36	75	10.40	33.85	26.01	201	(0.21)
39	11.33	33.40	100	10.00	33.87	26.09	193	(0.26)
44	10.68	33.45						
49	10.44	33.48						
54	10.38	33.57						
59	10.26	33.61						
64	10.23	33.63						
69	10.22	33.71						
74	10.39	33.84						
83	10.29	33.88						
93	10.03	33.88						
102	10.00	33.87						

CREST; August 28, 1954; 0112 GCT; 28°27'N, 115°35'W; sounding, 550 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 14°.

117.40

0	20.3	33.51	0	20.3	33.51	23.57	433	0.00
10	20.10	33.48	10	20.10	33.48	23.60	431	0.04
20	18.77	33.44	20	18.77	33.44	23.91	401	0.08
30	18.20	33.51	30	18.20	33.51	24.10	382	0.12
40	16.69	33.30	50	15.85	33.30	24.50	344	0.20
49	15.92	33.30	75	12.09	33.42	25.37	262	0.27
59	14.99	33.28	100	10.82	33.90	25.97	204	0.33
68	13.54	33.28	150	11.18	34.19	26.13	189	0.43
78	11.74	33.48	200	10.51	34.24	26.29	174	0.52
88	11.22	33.58	250	10.06	34.35	26.45	159	0.61
97	10.80	33.86	300	9.50	34.38	26.57	148	0.69
116	11.30	34.04	400	8.22	34.38	26.77	128	0.83
144	11.24	34.18	500	7.02	34.38	26.95	111	0.96
193	10.58	34.23	600	(5.99)	(34.38)	(27.09)	(98)	(1.07)
288	9.66	34.38						
434	7.78	34.38						
582	6.14	34.38						

CREST; August 27, 1954; 2017 GCT; 28°26'N, 115°06'W; sounding, 80 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 13°.

118.35

0	20.09	33.53	0	20.09	33.53	23.64	427	0.00
5	20.10	33.53	10	19.99	33.55	23.68	423	0.04
10	19.99	33.55	20	19.22	33.48	23.83	409	0.08
15	19.51	33.48	30	18.58	33.46	23.97	395	0.12
20	19.22	33.48	50	14.19	33.34	24.89	307	0.20
25	18.88	33.48	75	11.51	33.45	25.50	249	0.26
30	18.58	33.46	100	10.88	33.74	25.84	217	0.32
45	15.12	33.35						
59	12.86	33.33						
74	11.53	33.44						
89	11.10	33.73						
104	10.78	33.74						
119	10.32	33.86						
129	10.54	34.00						
139	10.54	34.02						

S10
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OBSERVED			INTERPOLATED			COMPUTED		
Z	T	S	Z	T	S	σ_t	$\delta_{T_3}^{-5}$	ΔD
m	°C	‰	m	°C	‰	g/L	10 ⁻⁵ cm ³ /g	dyn. m

118⁵.25

CREST; August 27, 1954; 1150 GCT; 28°41'N, 114°28.5'W; sounding, 48 fm; wind, 310°, force 3; weather, clear; sea, slight; wire angle, 00°.

0	19.40	33.38	0	19.40	33.38	23.70	421	0.00
10	18.79	33.33	10	18.79	33.33	23.82	409	0.04
15	15.51	33.27	20	15.17	33.25	24.61	334	0.08
20	15.17	33.25	30	14.24	33.26	24.81	315	0.11
25	14.72	33.25	50	11.84	33.34	25.35	263	0.17
30	14.24	33.26	75	10.47	33.63	25.82	219	0.23
35	13.79	33.26						
41	13.04	33.30						
46	12.24	33.34						
51	11.78	33.34						
56	11.54	33.31						
61	11.04	33.40						
66	10.87	33.45						
71	10.58	33.50						
76	10.45	33.64						
82	10.41	33.67						

120.25

CREST; August 27, 1954; 0907 GCT; 28°23.5'N, 114°15.5'W; sounding, 30 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 03°.

0	19.8	-	0	19.8	(33.30)	(23.54)	(436)	(0.00)
4	19.90	33.31	10	19.90	33.35	23.55	435	0.04
9	19.90	33.35	20	19.56	33.34	23.63	427	0.09
14	19.90	33.35	30	16.06	33.27	24.43	351	0.12
19	19.82	33.35	50	13.67	33.24	24.92	304	0.19
24	16.62	33.27						
29	16.17	33.27						
34	15.51	33.27						
39	14.62	33.26						
44	14.12	33.26						
49	13.68	33.24						
54	13.63	33.27						

120.28

CREST; August 27, 1954; 0700 GCT; 28°18'N, 114°27'W; sounding, 50 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 05°.

0	19.2	-	0	19.2	(33.38)	(23.75)	(416)	(0.00)
3	19.20	33.37	10	19.16	33.36	23.75	416	0.04
8	19.18	33.33	20	17.91	33.38	24.08	384	0.08
13	19.00	33.37	30	15.87	33.38	24.55	340	0.12
18	18.39	33.38	50	12.62	33.26	25.14	283	0.18
23	17.22	33.37	75	10.58	33.68	25.84	217	0.24
28	16.28	33.39						
33	15.30	33.35						
38	14.62	33.28						
43	13.97	33.22						
48	12.95	33.24						
53	12.19	33.30						
58	11.53	33.39						
64	10.90	33.49						
69	10.50	33.67						
74	10.57	33.68						
84	10.54	33.80						

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

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CREST; August 26, 1954; 0530 GCT; 28°02.5'N, 114°54'W; sounding, 45 fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 14°.

12035

0	20.4	-	0	20.4	(33.40)	(23.46)	(444)	(0.00)
2	20.42	33.40	10	20.42	33.38	23.44	446	0.04
12	20.41	33.38	20	20.33	33.39	23.47	443	0.09
26	20.20	33.40	30	19.90	33.40	23.59	431	0.13
36	19.72	33.39	50	16.62	33.30	24.32	361	0.21
41	19.13	33.23	75	11.33	33.57	25.62	238	0.29
46	18.17	33.33						
49	17.02	33.30						
52	15.70	33.30						
55	14.84	33.29						
58	13.68	33.32						
61	12.46	33.38						
64	11.83	33.47						
67	11.44	33.58						
70	11.32	33.57						
74	11.35	33.57						
77	11.30	33.53						

CREST; August 25, 1954; 2043 GCT; 27°33'N, 115°52'W; sounding, 1975 fm; wind, 350°, force 5; weather, cloudy; sea, rough; wire angle, 25°.

12050

0	20.9	33.63	0	20.9	33.63	23.50	440	0.00
10	20.89	33.62	10	20.89	33.62	23.50	440	0.04
28	20.80	33.61	20	20.83	33.62	23.51	439	0.09
32	19.25	33.43	30	20.42	33.57	23.58	432	0.13
36	18.19	33.32	50	16.02	33.21	24.39	355	0.21
41	17.43	33.26	75	12.97	33.01	24.88	308	0.29
45	16.79	33.27	100	11.48	33.27	25.36	262	0.37
50	16.02	33.21	150	10.28	33.91	26.07	195	0.48
55	15.49	33.19	200	9.52	34.10	26.35	168	0.57
67	13.80	33.10	250	8.98	34.22	26.53	151	0.66
89	11.94	33.06	300	8.55	34.31	26.67	138	0.73
132	10.62	33.78	400	7.80	34.40	26.85	121	0.87
219	9.30	34.15	500	6.75	34.38	26.99	108	0.99
394	7.86	34.40	600	5.95	34.35	27.07	100	1.10
616	5.84	34.35	700	5.36	34.38	27.16	92	1.20
844	4.76	34.45	800	4.93	34.43	27.25	83	1.30
1084	3.82	34.52	1000	4.44	34.50	27.36	73	1.47

CREST; August 25, 1954; 1031 GCT; 26°52.5'N, 117°10'W; sounding, 2100 fm; wind, 350°, force 3; weather, overcast; sea, moderate; wire angle, 08°.

12070

0	21.0	33.69	0	21.0	33.69	23.52	438	0.00
10	20.87	33.64	10	20.87	33.64	23.52	438	0.04
25	20.78	33.62	20	20.85	33.63	23.51	439	0.09
27	20.14	33.55	30	18.82	33.37	23.84	407	0.13
30	18.82	33.37	50	16.08	33.36	24.49	345	0.20
40	17.18	33.31	75	13.09	33.23	25.03	294	0.29
50	16.08	33.36	100	11.20	33.42	25.53	246	0.35
59	15.15	33.33	150	10.04	34.10	26.26	177	0.46
74	13.18	33.23	200	10.20	34.38	26.45	159	0.55
89	11.84	33.35	250	9.81	34.47	26.59	146	0.62
109	10.80	33.46	300	9.28	34.49	26.69	136	0.70
159	10.18	34.14	400	8.07	34.46	26.86	120	0.83
173	10.20	34.20	500	(7.12)	(34.42)	(26.97)	(110)	(0.96)
296	9.34	34.49	600	(6.30)	(34.40)	(27.06)	(101)	(1.07)
492	7.17	34.42	700	(5.62)	(34.40)	(27.15)	(92)	(1.17)
789	5.10	34.41	800	5.04	34.41	27.22	86	(1.27)
1187	3.69	34.54	1000	4.23	34.47	27.36	73	(1.45)

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120.90

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

CREST; August 25, 1954; 0025 GCT; 26°12.5'N, 118°27'W; sounding, 2175 fm; wind, 350°, force 2; weather, overcast; sea, moderate; wire angle, 14°.

0	20.2	33.53	0	20.2	33.53	23.61	429	0.00
10	20.12	33.55	10	20.12	33.55	23.65	426	0.04
25	20.07	33.58	20	20.10	33.58	23.67	423	0.08
30	19.54	33.55	30	19.54	33.55	23.80	412	0.13
32	18.10	33.35	50	16.61	33.33	24.35	359	0.20
34	17.85	33.40	75	15.50	33.31	24.58	337	0.29
36	17.47	33.35	100	13.84	33.30	24.93	303	0.37
40	17.24	33.32	150	10.91	33.57	25.70	230	0.51
46	16.86	33.33	200	10.20	34.21	26.32	171	0.61
75	15.50	33.31	250	9.59	34.33	26.52	152	0.69
100	13.84	33.30	300	8.99	34.37	26.65	140	0.77
124	11.58	33.30	400	7.95	34.40	26.83	123	0.90
148	10.96	33.52	500	(6.98)	(34.41)	(26.98)	(109)	(1.03)
243	9.68	34.32	600	(6.05)	(34.42)	(27.11)	(96)	(1.14)
481	7.14	34.41	700	(5.32)	(34.44)	(27.22)	(86)	(1.24)
768	4.93	34.45	800	4.77	34.46	27.30	78	(1.33)
1160	3.60	34.57	1000	4.02	34.52	27.42	67	(1.49)

1205.30

CREST; August 27, 1954; 0407 GCT; 28°07.5'N, 114°29'W; sounding, 47 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 08°.

0	19.8	-	0	19.8	(33.36)	(23.59)	(432)	(0.00)
1	19.8	33.36	10	19.76	33.41	23.63	427	0.04
11	19.74	33.42	20	19.54	33.43	23.71	420	0.08
16	19.72	33.44	30	16.40	33.35	24.41	353	0.12
21	19.41	33.43	50	12.81	33.31	25.14	283	0.19
26	16.82	33.39	75	10.63	33.64	25.80	221	0.25
31	16.26	33.34						
36	14.92	33.32						
42	14.66	33.51						
47	13.12	33.31						
52	12.64	33.32						
57	12.08	33.38						
62	11.12	33.46						
67	9.92r	33.39						
72	10.74	33.55						
78	10.54	33.67						

121.29

CREST; August 27, 1954; 0231 GCT; 28°04.5'N, 114°21'W; sounding, 18 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 05°.

0	21.30	33.51	0	21.30	33.51	23.30	459	0.00
2	21.32	33.56	10	21.33	33.56	23.33	456	0.05
4	21.30	33.56	20	20.0	33.39	23.56	434	0.09
6	21.34	33.55						
8	21.3	33.55						
10	21.33	33.56						
12	21.31	33.57						
14	21.3	33.49						
16	21.3	33.52						
18	21.2	33.31						
20	20.0	33.39						
22	19.7	33.39						
24	19.5	33.40						
26	19.4	33.36						
28	18.5	33.33						

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

121.32

CREST; August 26, 1954; 0808 GCT; 28°01.5'N, 114°35'W; sounding, 39 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 06°.

0	19.25	33.41	0	19.25	33.41	23.76	415	0.00
5	19.22	33.44	10	19.24	33.44	23.79	412	0.04
10	19.24	33.44	20	17.94	33.40	24.08	384	0.08
15	18.68	33.48	30	16.75	33.40	24.37	357	0.12
20	17.94	33.40	50	13.31	33.28	25.02	295	0.18
25	17.52	33.40						
30	16.75	33.40						
35	15.95	33.33						
40	14.38	33.32						
45	13.90	33.33						
50	13.31	33.28						
55	12.07	33.40						
60	11.30	33.44						
65	11.24	33.47						

123.40

CREST; August 24, 1954; 0140 GCT; 27°18'N, 114°52'W; sounding, 295 fm; wind, 280°, force 5; weather, clear; sea, moderate; wire angle, 35°.

0	18.6	33.58	0	18.6	33.58	24.06	386	0.00
5	18.50	33.60	10	18.33	33.58	24.13	380	0.04
9	18.39	33.58	20	15.30	33.45	24.73	322	0.07
13	18.20	33.57	30	14.32	33.60	25.06	291	0.10
17	16.52	33.53	50	12.52	33.85	25.62	238	0.16
21	15.02	33.41	75	12.48	33.82	25.60	240	0.22
24	14.51	33.47	100	12.11	33.91	25.74	226	0.28
28	14.32	33.56	150	12.44	34.54	26.17	185	0.38
32	14.30	33.62	200	11.20	34.51	26.38	166	0.47
37	13.88	33.61	250	10.41	34.50	26.51	153	0.55
40	13.15	33.86	300	10.10	34.52	26.58	146	0.63
77	12.42	33.82	400	9.26	34.50	26.70	135	0.78
113	12.06	34.09						
143p	12.48	34.54						
240p	10.49	34.50						
328p	9.91	34.52						
442p	8.80	34.49						

127.34

CREST; August 23, 1954; 1843 GCT; 26°56'N, 114°07.5'W; sounding, 51 fm; wind, 280°, force 4; weather, partly cloudy; sea, slight; wire angle, 10°.

0	19.50	33.59	0	19.50	33.59	23.84	408	0.00
5	19.37	33.62	10	19.14	33.58	23.92	400	0.04
10	19.14	33.58	20	17.90	33.49	24.16	377	0.08
15	18.76	33.53	30	14.86	33.40	24.79	317	0.11
20	17.90	33.49	50	13.07	33.65	25.35	263	0.17
26	15.94	33.40	75	13.06	33.90	25.55	244	0.24
30	14.86	33.40						
35	14.08	33.46						
41	13.17	33.58						
45	13.13	33.62						
51	13.07	33.66						
56	13.09	33.76						
60	13.12	33.82						
65	13.10	33.87						
71	13.13	33.91						
81	12.74	33.86						

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OBSERVED			INTERPOLATED			COMPUTED		
Z	T	S	Z	T	S	σ_t	$\delta_{T_3}^{-5}$	ΔD
m	°C	%	m	°C	%	g/L	10 cm/g	dyn. m

127.50

CREST; August 23, 1954; 0907 GCT; 26°21'N, 115°10.5'W; sounding, 1800 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 28°.

0	19.5	33.49	0	19.5	33.49	23.76	415	0.00
10	19.44	33.48	10	19.44	33.48	23.77	414	0.04
19	19.11	33.45	20	19.06	33.45	23.84	407	0.08
28	17.73	33.44	30	17.31	33.42	24.25	368	0.12
32	16.89	33.39	50	12.44	33.42	25.30	268	0.18
36	16.04	33.39	75	11.58	33.67	25.66	234	0.25
40	14.90	33.37	100	11.57	34.05	25.95	206	0.30
44	13.74	33.41	150	11.29	34.37	26.25	178	0.40
48	12.93	33.44	200	(10.38)	(34.43)	(26.46)	(158)	(0.49)
52	12.14	33.41	250	(9.62)	(34.42)	(26.58)	(146)	(0.56)
56	11.92	33.44	300	(8.99)	(34.41)	(26.68)	(137)	(0.64)
60	11.60	33.48	400	7.90	34.41	26.85	121	(0.78)
83	11.58	33.79	500	7.03	34.42	26.98	109	(0.90)
119	11.44	34.25						
194	10.44	34.43						
311	8.84	34.41						
526	6.82	34.42						

130.30

CREST; August 22, 1954; 1038 GCT; 26°26'N, 113°32'W; sounding, 48 fm; wind, 350°, force 3; weather, clear; sea, moderate; wire angle, 20°.

0	21.66	33.89	0	21.66	33.89	23.49	441	0.00
5	21.63	33.90	10	21.34	33.93	23.61	430	0.04
10	21.34	33.93	20	16.02	33.58	24.67	328	0.08
15	20.22	33.79	30	14.33	33.60	25.06	291	0.11
20	16.02	33.58	50	13.07	33.74	25.42	257	0.17
25	14.98	33.58	75	(12.86)	(33.97)	(25.64)	(236)	(0.23)
34	13.92	33.61						
44	13.30	33.63						
53	12.96	33.78						
63	12.74	34.03						
73	12.82	33.98						

130.40

CREST; August 22, 1954; 1600 GCT; 26°09'N, 114°07.5'W; sounding, 1300 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 06°.

0	22.0	33.77	0	22.0	33.77	23.31	458	0.00
10	22.06	33.73	10	22.06	33.73	23.26	463	0.05
15	21.97	33.75	20	20.72	33.71	23.61	430	0.09
20	20.72	33.71	30	14.33	33.68	25.12	285	0.13
22	19.41	33.68	50	(11.88)	(33.88)	(25.76)	(224)	(0.18)
24	16.13	33.69	75	(11.56)	(34.11)	(26.00)	(202)	(0.23)
26	15.39	33.69	100	(11.37)	(34.29)	(26.18)	(184)	(0.28)
28	14.86	33.69	150	10.99	34.46	26.38	166	(0.37)
30	14.33	33.68	200	10.36	34.54	26.55	149	(0.45)
35	13.18	33.75	250	9.99	34.57	26.64	141	(0.52)
40	12.65	33.78	300	9.62	34.59	26.72	133	(0.60)
101	11.32	34.29	400	8.64	34.57	26.86	120	(0.73)
201	10.34	34.54	500	7.34	34.50	27.00	107	(0.85)
349	9.28	34.60	600	6.37	34.45	27.09	98	(0.96)
599	6.37	34.45	700	5.66	34.47	27.20	88	(1.06)
897	4.62	34.50	800	5.09	34.48	27.27	81	(1.16)
1199	3.39	34.58	1000	4.16	34.52	27.41	68	(1.32)

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

S10
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CREST; August 23, 1954; 0206 GCT; 25°31.5'N, 115°24'W; sounding, 2080 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°.

130.60

0	22.9	33.68	0	22.9	33.68	22.98	489	0.00
10	22.88	33.68	10	22.88	33.68	22.99	489	0.05
20	22.82	33.65	20	22.82	33.65	22.98	489	0.10
25	19.90	33.55	30	16.70	33.48	24.44	350	0.14
27	17.93	33.46	50	11.80	33.56	25.53	246	0.20
29	17.15	33.47	75	11.36	33.92	25.89	212	0.26
31	16.30	-	100	11.00	34.17	26.15	187	0.31
33	15.67	33.49	150	10.23	34.28	26.37	166	0.40
35	15.02	33.46	200	9.51	34.35	26.55	149	0.48
40	13.76	33.46	250	8.89	34.38	26.67	138	0.55
44	12.68	33.57	300	8.36	34.40	26.77	128	0.62
50	11.80	33.56	400	7.42	34.42	26.92	114	0.75
98	11.02	34.16	500	(6.67)	(34.43)	(27.04)	(103)	(0.86)
243	8.98	34.38	600	(5.99)	(34.44)	(27.13)	(94)	(0.97)
483	6.78	34.43	700	(5.42)	(34.45)	(27.21)	(87)	(1.07)
774	5.06	34.46	800	4.96	34.47	27.28	80	(1.16)
1170	3.72	34.60	1000	4.21	34.54	27.42	67	(1.33)

CREST; August 22, 1954; 0159 GCT; 25°54.5'N, 113°07'W; sounding, 109 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 13°.

133.30

0	21.92	33.52	0	21.92	33.52	23.14	474	0.00
10	21.21	33.55	10	21.21	33.55	23.35	454	0.05
20	16.96	33.48	20	16.96	33.48	24.38	356	0.09
30	16.05	33.48	30	16.05	33.48	24.59	336	0.12
40	14.80	33.40	50	13.65	33.40	25.04	293	0.18
51	13.57	33.40	75	13.31	33.98	25.56	243	0.25
61	13.22	33.58	100	12.86	34.14	25.77	223	0.31
71	13.24	33.85	150	(11.95)	(34.38)	(26.14)	(188)	(0.42)
80	13.34	34.10						
90	13.12	34.11						
100	12.86	34.14						
111	12.59	34.24						
120	12.32	34.22						
131	12.13	34.34						
140	12.00	34.38						
149	11.95	34.38						

CREST; August 21, 1954; 1103 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

137.23

0	23.66	33.72	0	23.66	33.72	22.80	507	0.00
10	23.5	33.73	10	23.5	33.73	22.85	502	0.05
20	20.0	34.13	20	20.0	34.13	24.12	380	0.10
30	18.2	34.04	30	18.2	34.04	24.51	343	0.13
41	17.1	34.13	50	16.9	34.25	24.98	298	0.19
51	16.9	34.26						
61	16.2	34.42						

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
60.55-F	VIII-31	2030	37°47.5'	123°14.5'	65	330°	5	cloudy	moderate	13.63	33.52
60.70-F	IX-1	0410	37°17.0'	124°20.0'	2260	330°	5	partly cloudy	moderate	14.84	33.36
60.90-F	1	1415	36°36.0'	125°58.0'	2500	330°	5	partly cloudy	moderate	16.86	33.07
63.55-F	VIII-27	2145	37°13.0'	122°49.0'	150	160°	5	cloudy	rough	14.72	33.43
67.55-F	27	1137	36°41.0'	122°28.0'	1020	170°	4	cloudy	smooth	14.27	33.41
70.55-F	IX-2	2045	36°03.0'	122°01.0'	800	310°	5	partly cloudy	moderate	12.66	33.51
70.70-F	2	1320	35°33.0'	123°05.5'	2150	330°	4	cloudy	moderate	14.70	33.30
73.50-F	3	0935	35°37.0'	121°17.5'	60	330°	2	clear	slight	12.04	33.46
73.55-F	3	0705	35°27.0'	121°39.0'	670	320°	6	clear	moderate	14.36	33.37
77.50-F	3	1340	35°04.0'	120°56.0'	125	330°	3	cloudy	moderate	13.33	33.45
77.65-F	3	2020	34°38.5'	121°54.5'	2200	320°	4	clear	moderate	16.10	33.40
80.51-F	5	1020	34°25.5'	120°33.5'	70	320°	6	cloudy	moderate	13.36	33.28
80.60-F	5	0500	34°06.0'	121°12.0'	1370	330°	6	cloudy	moderate	15.18	33.40
80.80-F	4	2010	33°30.5'	122°30.0'	2250	330°	5	partly cloudy	moderate	16.88	33.33
80.100-F	4	0920	32°49.5'	123°54.0'	2450	330°	4	clear	moderate	17.99	33.13
83.40-F	5	1900	34°14.0'	119°22.5'	15	200°	1	cloudy	calm	18.62	33.46
83.48-F	5	2230	33°57.5'	119°55.0'	55	310°	2	clear	smooth	18.78	33.46
83.55-F	6	0215	33°43.5'	120°25.0'	660	330°	4	cloudy	moderate	16.12	33.46
85.40-F	6	1920	33°58.0'	119°09.0'	405	calm		calm	calm	18.89	33.41

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
85.50-F	IX-6	1320	33°36.5'	119°55.0'	175	310°	3	cloudy	moderate	18.43	33.52
85.60-F	6	0750	33°19.0'	120°35.5'	860	320°	6	missing	moderate	15.73	-
87.35-F	6	2307	33°49.0'	118°37.5'	475	250°	2	clear	smooth	18.64	33.32
87.45-F	7	0410	33°29.5'	119°20.0'	950	280°	4	clear	slight	18.46	33.56
87.55-F	7	1030	33°10.0'	120°02.5'	660	310°	6	clear	rough	15.95	33.49
90.30-F	8	1550	33°23.5'	117°54.0'	335	180°	2	cloudy	smooth	20.22	33.46
90.45-F	8	0925	32°57.0'	118°50.5'	810	330°	3	clear	moderate	18.20	33.48
90.60-F	8	0135	32°20.5'	119°56.0'	620	310°	4	clear	moderate	17.50	33.50
93.27-F	8	2120	32°55.0'	117°17.5'	45	220°	2	clear	calm	23.03a)	33.51
93.35-F	9	0140	32°40.0'	117°51.0'	340	250°	2	cloudy	smooth	20.22	33.46
93.40-F	9	0350	32°30.0'	118°11.5'	850	310°	1	cloudy	smooth	19.71	33.43
93.45-F	9	0630	32°20.0'	118°33.0'	950	310°	2	cloudy	smooth	19.18	33.42
97.30-F	10	0035	32°14.0'	117°07.0'	40	310°	2	clear	smooth	21.21	33.52
97.32-F	9	2320	32°08.5'	117°11.0'	770	290°	2	clear	smooth	21.69	33.55
97.45-F	9	1540	31°45.5'	118°16.0'	1450	310°	2	cloudy	smooth	18.89	33.40
97.50-F	9	1310	31°35.5'	118°34.0'	840	300°	3	cloudy	slight	18.78	33.41

a) Alternate value, 22.84°C.

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

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Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
100.29-C	IX-1	1930	31°42.0'	116°43.0'	53	270°	2	partly cloudy	moderate	16.68	-
100.30-C	1	1844	31°40.5'	116°46.5'	275	050°	1	partly cloudy	moderate	15.30	33.29
100.35-C	1	1635	31°29.0'	117°05.0'	650	310°	2	partly cloudy	moderate	19.92	33.44
100.40-C	1	1445	31°22.5'	117°23.5'	900	200°	3	partly cloudy	moderate	19.56	33.39
100.45-C	1	1214	31°11.5'	117°44.5'	900	330°	1	missing	slight	18.28	33.26
100.60-C	1	0415	30°40.5'	118°47.0'	1100	330°	2	missing	moderate	18.36	33.24
103.35-C	VIII-31	0605	30°55.0'	116°45.5'	1000	340°	2	clear	moderate	16.38	-
107.32-C	30	2247	30°25.5'	116°11.0'	315	310°	3	partly cloudy	moderate	18.42	33.35
107.40-C	30	1818	30°11.0'	116°42.0'	1400	320°	4	partly cloudy	moderate	18.70	33.44
110.35-C	29	1855	29°46.0'	115°59.5'	630	320°	4	partly cloudy	moderate	20.31	33.56
110.45-C	30	0053	29°26.0'	116°39.0'	213	330°	5	cloudy	moderate	20.10	33.61
110.50-C	30	0327	29°16.5'	116°58.5'	1620	330°	4	partly cloudy	moderate	19.70	33.51
113.30-C	29	1215	29°22.0'	115°17.0'	32	330°	3	partly cloudy	moderate	13.34	33.30
113.40-C	29	0445	29°02.0'	115°58.5'	1050	320°	4	clear	moderate	20.30	33.46
117.26-C	27	1455	28°56.0'	114°41.0'	41	310°	1	partly cloudy	moderate	17.94	33.32
117.35-C	27	2224	28°38.0'	115°16.0'	110	310°	4	partly cloudy	slight	18.70	33.46
120.30-C	27	0520	28°11.0'	114°38.0'	51	320°	4	clear	moderate	19.55	33.43
120.45-C	25	2345	27°41.0'	115°37.0'	1700	330°	4	partly cloudy	moderate	17.68	33.39
120.60-C	25	1545	27°13.0'	116°30.0'	2050	350°	4	overcast	moderate	20.17	33.57

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
120.80-C	VIII-25	0525	26°33.0'	117°48.0'	2100	330°	2	overcast	slight	20.49	33.52
123.37-C	23	2320	27°24.0'	114°39.5'	39	300°	5	clear	moderate	17.19	33.54
123.45-C	24	0335	27°07.5'	115°12.0'	2300	330°	4	clear	slight	20.10	33.45
123.50-C	24	0715	26°58.0'	115°31.0'	1850	320°	4	clear	slight	21.66	33.69
127.40-C	23	1520	26°43.0'	114°30.0'	1900	calm		cloudy	slight	18.42	33.57
127.45-C	23	1212	26°28.0'	114°49.0'	1750	330°	4	clear	moderate	20.53	33.64
130.35-C	22	1255	26°17.0'	113°49.5'	380	330°	2	partly cloudy	slight	21.75	33.58
130.45-C	22	1855	25°59.5'	114°29.0'	1900	330°	3	partly cloudy	slight	20.48	33.46
130.50-C	22	2120	25°50.5'	114°46.5'	1900	330°	3	partly cloudy	slight	21.76	33.66
133.25-C	22	0443	26°04.5'	112°48.0'	43	280°	3	clear	moderate	22.62	33.71
133.35-C	21	2250	25°44.5'	113°26.0'	450	300°	3	clear	slight	20.56	33.49
133.40-C	21	2010	25°34.0'	113°45.5'	1600	330°	3	cloudy	moderate	22.24	33.68
137.30-C	21	1424	25°20.0'	112°45.5'	210	310°	3	cloudy	slight	23.75	33.73

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