

CORRECTIONS MADE :
STATION POSITIONS 1/5

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5407

(MLR 62)

7-23 July 1954

SIO Reference 59-35
26 January 1959

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5407

(MLR 62)

7-23 July 1954

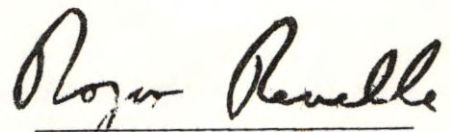
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Marine Research Committee

SIO Reference 59-35

26 January 1959

Approved for distribution:


Roger Revelle, Director

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FIGURES

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6. Horizontal distribution of salinity at 200 meters

INTRODUCTION

The data presented in this report were collected on the sixty-second cruise of the California Cooperative Oceanic Fisheries Investigations program. The R/V Crest and the R/V Horizon 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 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

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

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

p: pretrip or posttrip.

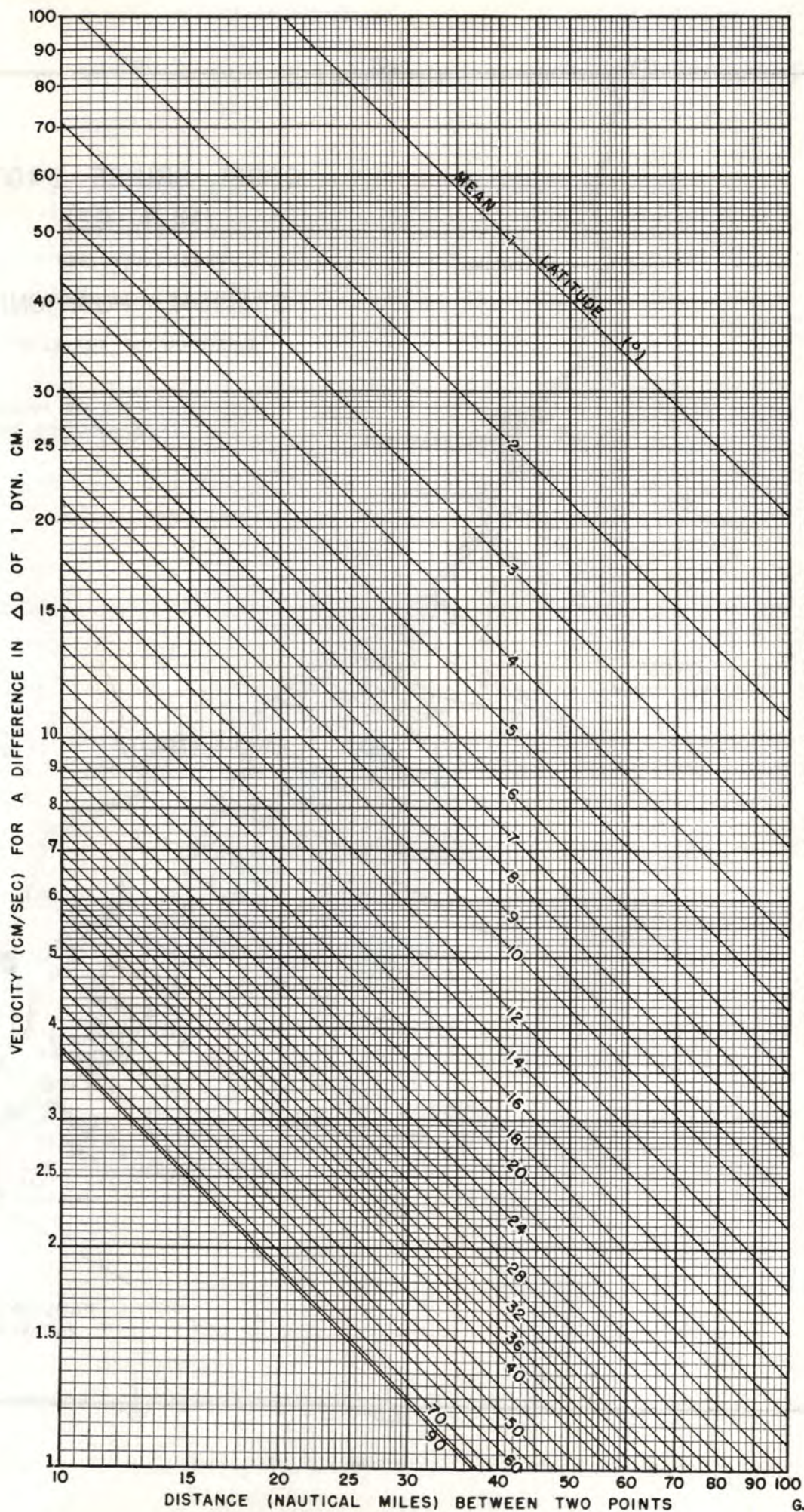
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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

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

FORMAT

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 5407 data is numbered 204.



VELOCITY OF GEOSTROPHIC FLOW

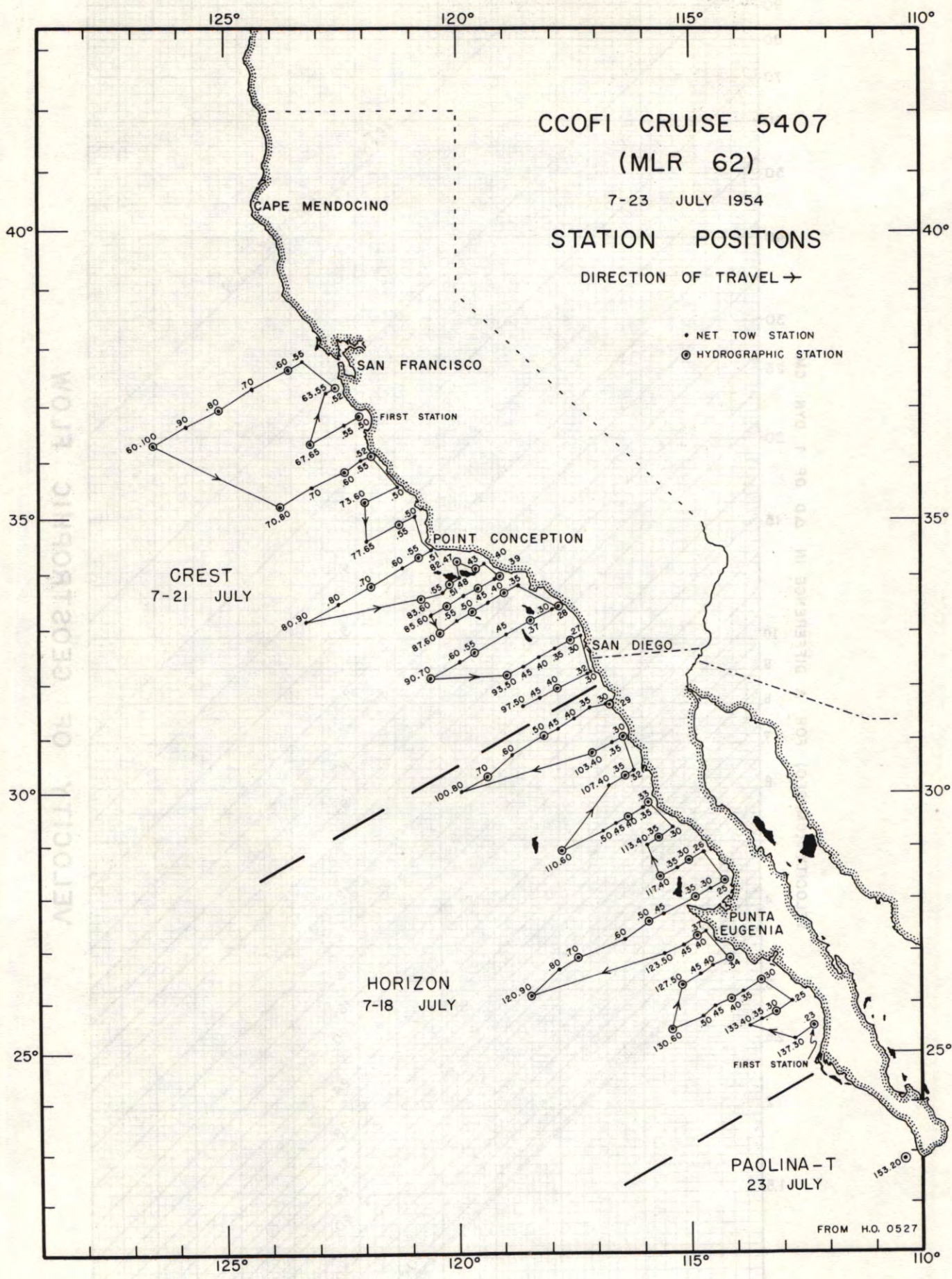


FIGURE 1

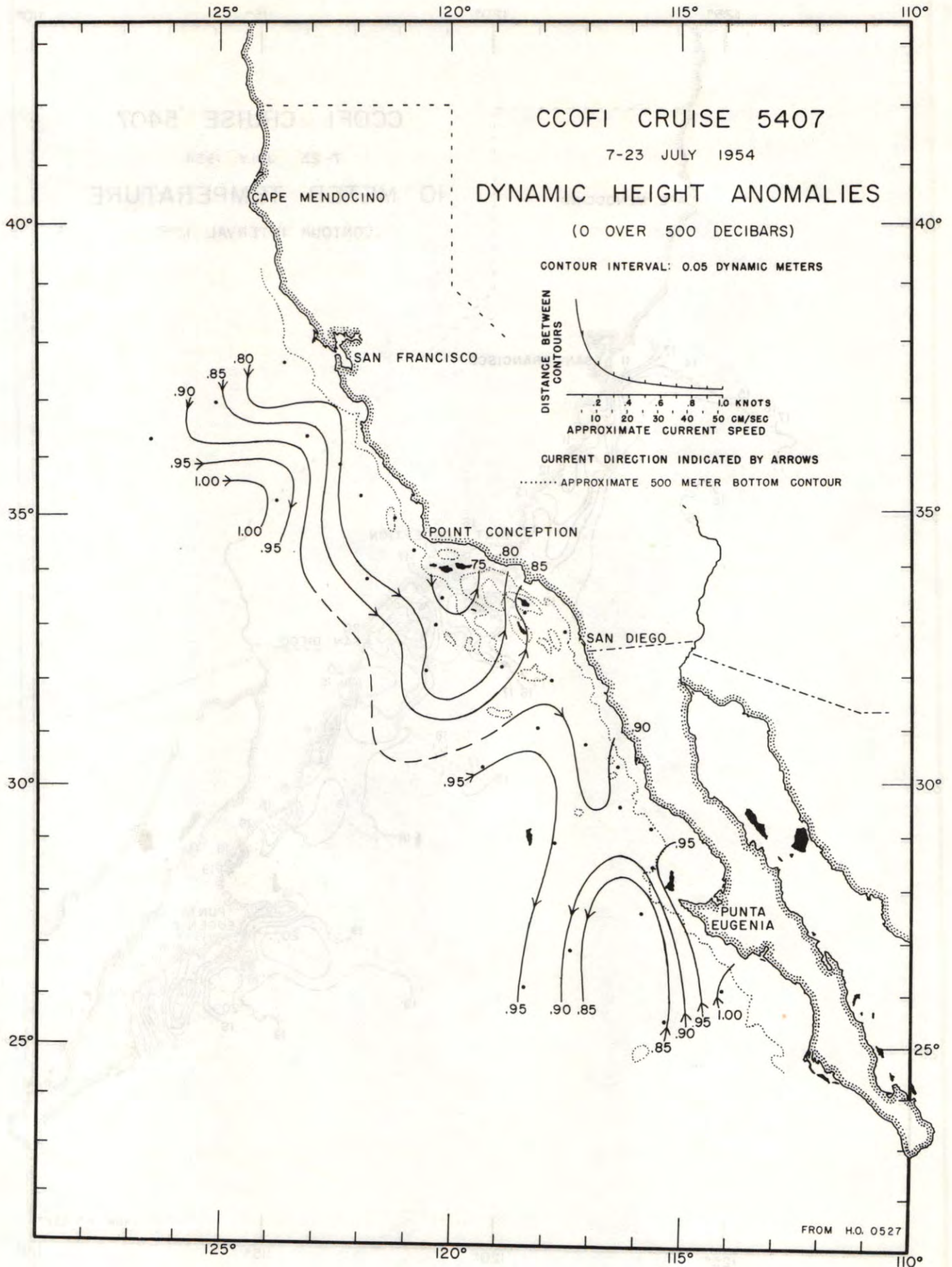


FIGURE 2

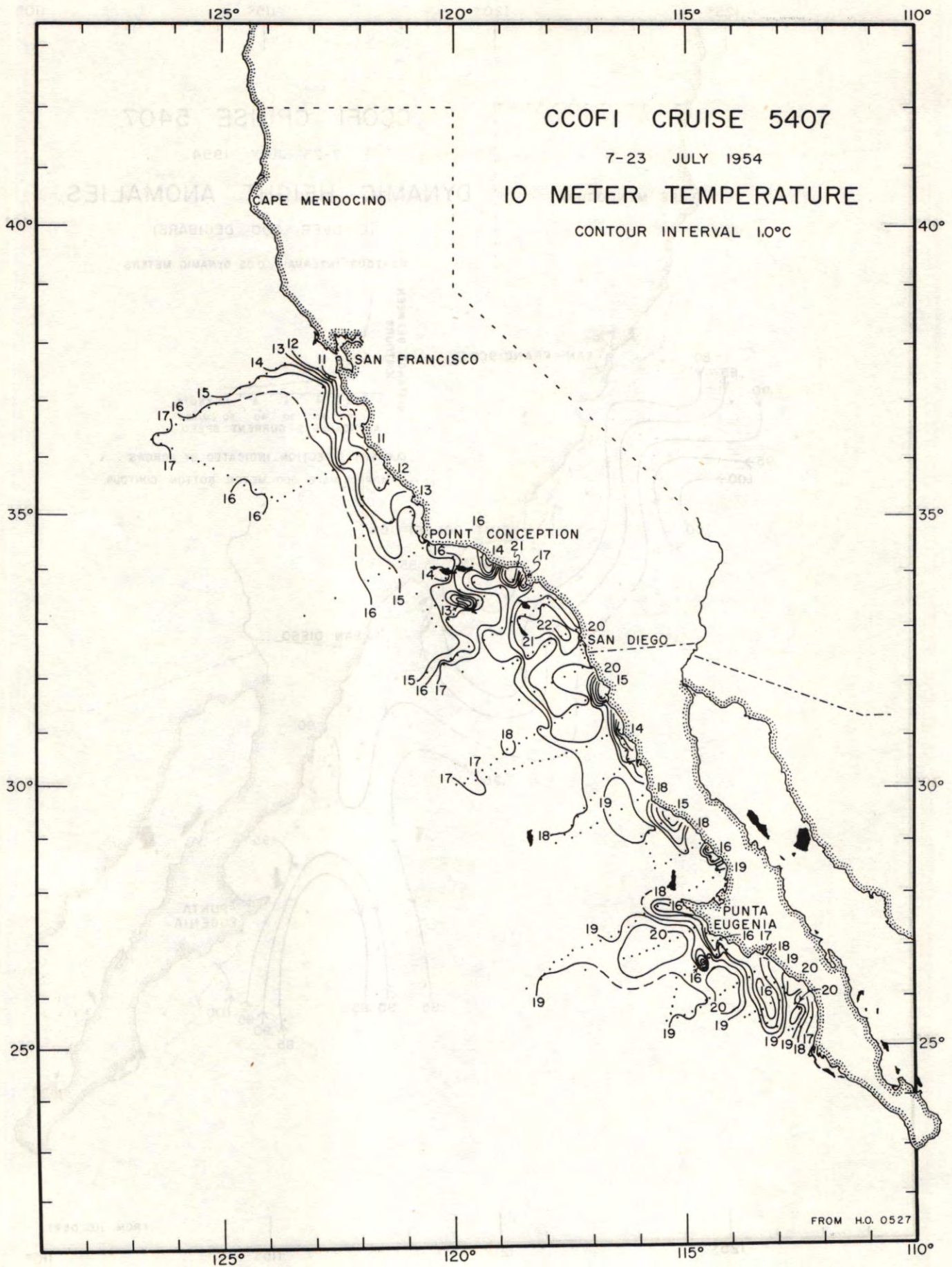


FIGURE 3

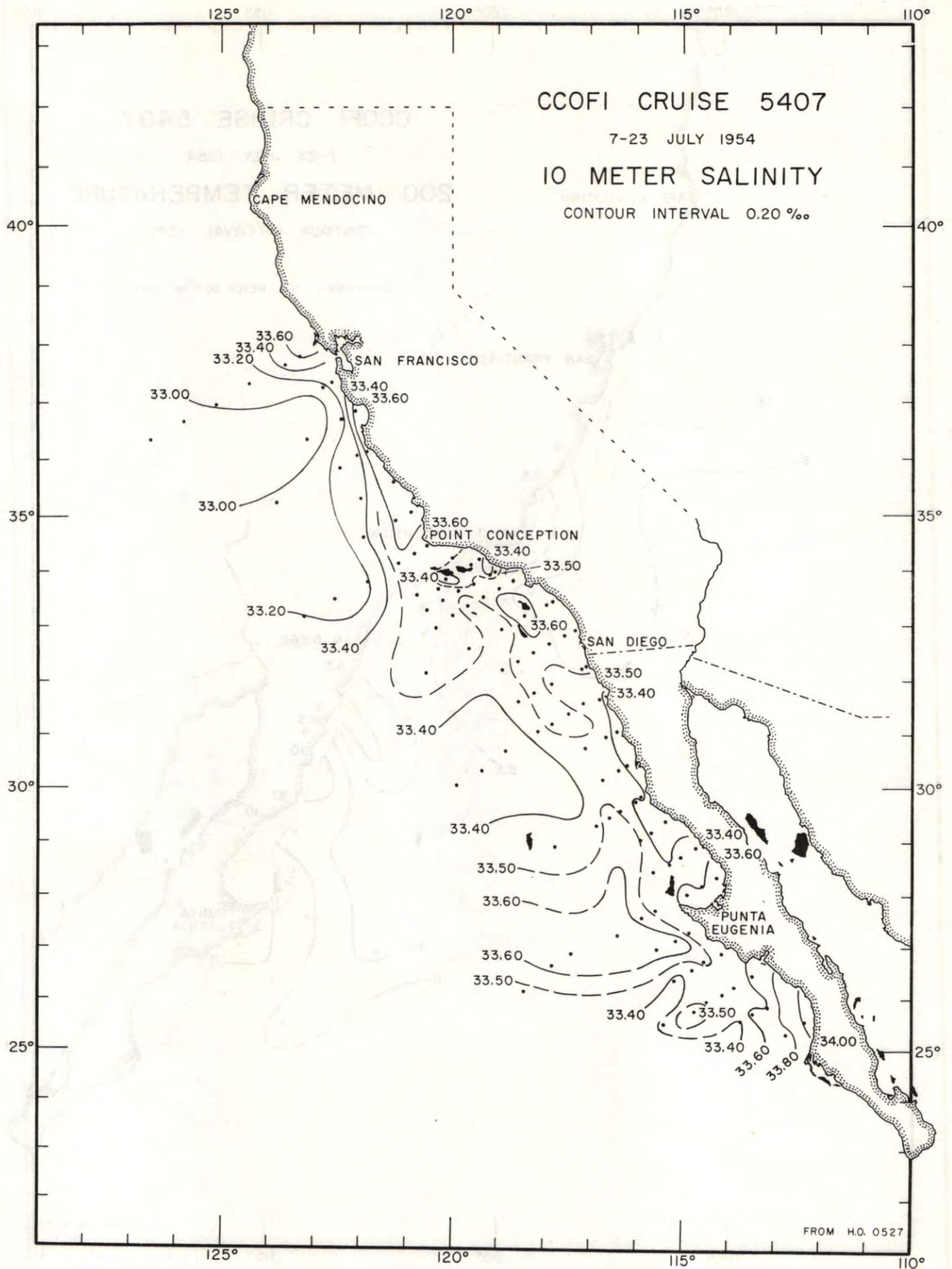


FIGURE 4

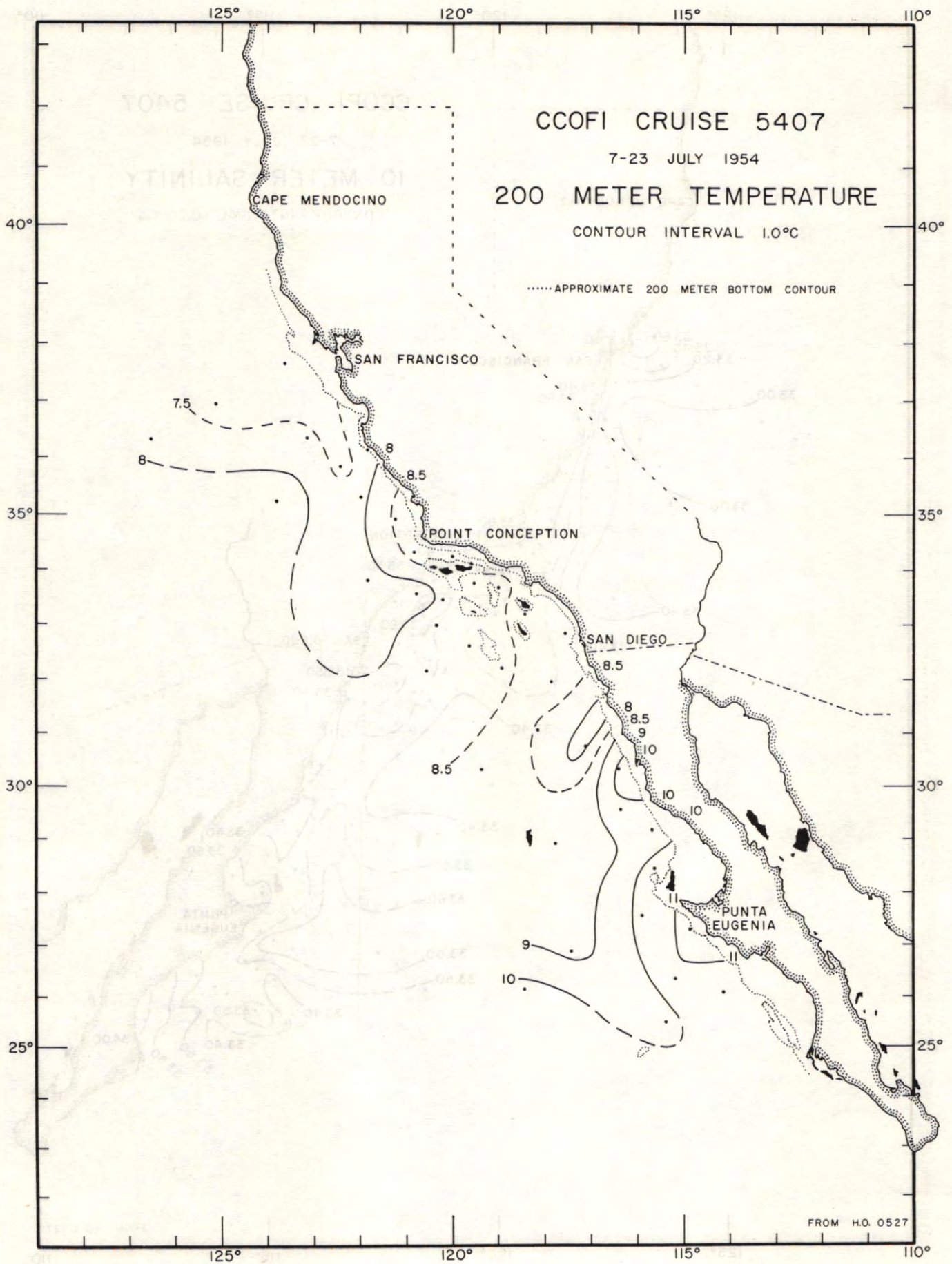


FIGURE 5

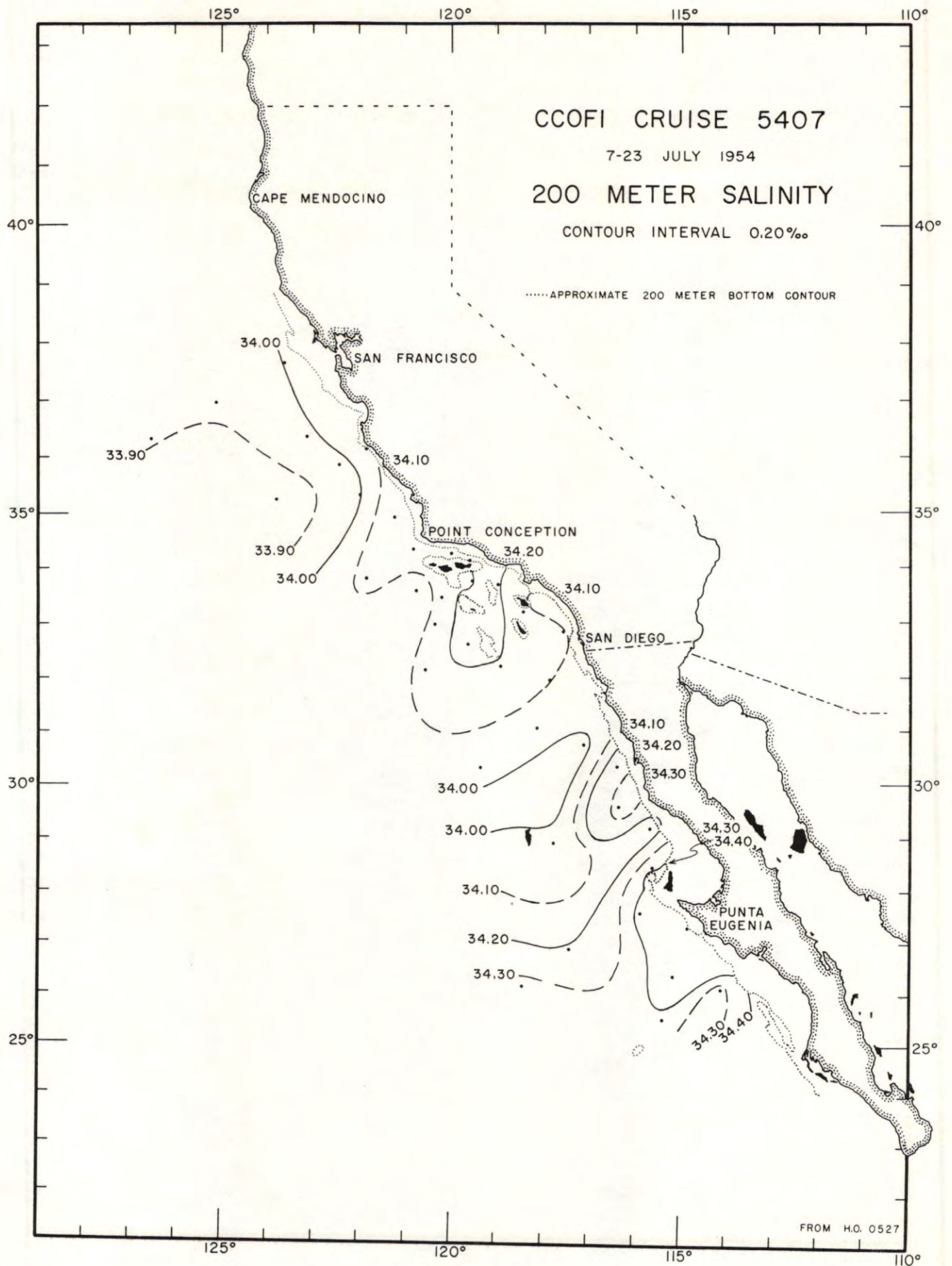


FIGURE 6

DATE		TIME		LATITUDE		LONGITUDE	
DAY	MONTH	HOUR	MINUTE	DEG.	MIN.	DEG.	MIN.

PERSONNEL

SHIPS' CAPTAINS

- Davis, Laurence E. , M/V Crest
- Ferris, Noel L. , M/V Horizon

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

M/V Crest

- Worrall, Charles G. Senior Marine Technician
- *Beck, Lt. William, U. S. Navy, student trainee
- Brennan, Robert E. , Marine Technician
- Hapgood, William F. , Fishery Aid, U. S. Fish and Wildlife Service
- Isles, David, student trainee

M/V Horizon

- Coolidge, Richard N. , Senior Marine Technician
- Bundy, George C. , III, Research Assistant, University of California at Los Angeles
- Ford, Richard F. , Laboratory Helper
- Kivlen, John C. , Marine Technician
- Morse, David H. , Laboratory Helper
- Thraikill, James R. , Fishery Research Biologist, U. S. Fish and Wildlife Service
- Vrooman, Andrew M. , Fishery Research Biologist, U. S. Fish and Wildlife Service

*Participated in part of cruise only.

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5407

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

60.60

CREST; July 11, 1954; 0502 GCT; 37°37'N, 123°37'W; sounding, 1750 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 25°.

0	14.5	33.40	0	14.5	33.40	24.87	309	0.00
10	14.04	33.41	10	14.04	33.41	24.97	300	0.03
24	11.52	33.55	20	12.14	33.51	25.43	256	0.06
52	10.28	33.66	30	11.14	33.58	25.67	233	0.08
60	9.95	33.78	50	10.34	33.65	25.86	215	0.13
69	9.30	33.74	75	9.29	33.76	26.12	190	0.18
82	9.22	33.80	100	8.67	33.84	26.28	175	0.22
93p	8.50	33.82	150	8.11	34.00	26.49	155	0.30
101	8.68	33.84	200	7.34	34.01	26.61	144	0.38
121	8.42	33.98	250	6.76	34.03	26.71	134	0.46
146	8.17	34.00	300	6.47	34.06	26.77	128	0.52
191	7.44	34.01	400	(5.99)	(34.15)	(26.90)	(116)	(0.65)
260p	6.68	34.03	500	(5.60)	(34.23)	(27.02)	(105)	(0.77)
387p	6.04	34.14	600	(5.26)	(34.30)	(27.11)	(96)	(0.87)
604p	5.24	34.30						

60.80

CREST; July 11, 1954; 1724 GCT; 36°56'N, 125°04'W; sounding, 2350 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 25°.

0	16.4	32.98	0	16.4	32.98	24.13	380	0.00
10	16.36	33.01	10	16.36	33.01	24.16	377	0.04
24	15.94	32.94	20	16.16	32.96	24.17	376	0.08
47	12.36	32.86	30	15.11	32.91	24.36	358	0.11
56	11.46	32.92	50	12.06	32.87	24.95	301	0.18
66	10.93	33.09	75	9.78	33.30	25.68	232	0.24
75	9.78	33.30	100	8.87	33.46	25.95	206	0.30
93	9.18	33.42	150	8.13	33.84	26.37	166	0.40
114	8.41	33.58	200	7.36	33.94	26.56	148	0.48
139	8.26	33.81	250	6.95	34.01	26.67	138	0.55
181	7.60	33.91	300	6.74	34.07	26.74	131	0.62
236	7.02	33.99	400	5.57	34.12	26.93	113	0.74
321	6.64	34.09	500	5.10	34.17	27.03	104	0.86
428	5.37	34.12	600	4.80	34.28	27.15	92	0.96
585	4.84	34.27	700	4.50	34.35	27.24	84	1.06
781	4.26	34.39	800	4.20	34.39	27.30	78	1.15
1061	3.50	34.46	1000	3.62	34.45	27.41	68	1.31

60.100

CREST; July 12, 1954; 0317, 0401 GCT; 36°17'N, 126°30'W; sounding, 2360 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 28°, 35°.

0	17.0	33.02	0	17.0	33.02	24.02	390	0.00
10	16.97	32.90	10	16.97	32.90	23.93	399	0.04
23	16.19	32.89	20	16.67	32.89	23.99	393	0.08
46	15.05	32.95	30	15.83	32.90	24.19	374	0.12
55	14.22	32.99	50	14.66	32.97	24.50	344	0.19
64	13.48	32.94	75	11.70	32.93	25.06	291	0.27
73	11.94	32.93	100	9.72	33.25	25.65	235	0.34
89	10.46	33.15	150	8.48	33.68	26.19	184	0.44
111	9.22	33.36	200	7.88	33.91	26.46	158	0.53
135	8.68	33.56	250	7.24	34.02	26.64	141	0.60
174	8.18	33.84	300	6.65	34.08	26.76	129	0.67
			400	5.73	34.07	26.87	119	0.80
215	7.69	33.95	500	5.15	34.15	27.01	106	0.92
296	6.72	34.08	600	4.79				
400	5.73	34.07	700	4.50				
554	4.93	34.22	800	4.18				
750	4.34	-	1000	3.56				
1036	3.48	-						

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; July 10, 1954; 2250 GCT; 37°18'N, 122°36'W; sounding, 47 fm; wind, 280°, force 4; weather, overcast; sea, moderate; wire angle, 03°.

63.52

0	13.66	33.04	0	13.66	33.04	24.76	320	0.00
10	12.53	33.36	10	12.53	33.36	25.24	274	0.03
15	12.08	33.79	20	11.61	33.80	25.75	225	0.06
20	11.61	33.80	30	9.46	33.87	26.18	184	0.08
25	10.69	33.86						
30	9.46	33.87						
35	9.04	33.93						
39	8.64	33.94						
49	8.42	33.98						

CREST; July 10, 1954; 0615 GCT; 36°49'N, 122°05'W; sounding, 61 fm; wind, 320°, force 3; weather, fog; sea, slight; wire angle, 00°.

67.50

0	10.87	33.70	0	10.87	33.70	25.81	220	0.00
16	10.79	33.68	10	10.87	33.70	25.81	220	0.02
26	10.18	33.63	20	10.53	33.66	25.84	217	0.04
36	9.42	33.58	30	9.87	33.61	25.91	210	0.06

CREST; July 10, 1954; 1418 GCT; 36°19'N, 123°09'W; sounding, 1800 fm; wind, 340°, force 4; weather, overcast; sea, moderate; wire angle, 10°.

67.65

0	16.0	32.98	0	16.0	32.98	24.22	371	0.00
11	16.06	32.95	10	16.03	32.95	24.19	374	0.04
30	15.98	32.94	20	16.00	32.94	24.19	374	0.08
46	13.88	33.13	30	15.98	32.94	24.19	374	0.11
55	13.48	33.14	50	13.65	33.14	24.84	312	0.18
64	11.93	33.05	75	10.65	33.13	25.40	259	0.25
75	10.65	33.13	100	9.25	33.37	25.82	219	0.31
85	9.72	33.21	150	8.39	33.90	26.37	166	0.41
98	9.33	-	200	7.73	33.99	26.54	150	0.49
109	9.02	33.46	250	6.83	34.03	26.70	135	0.56
133	8.60	33.77	300	6.23	34.06	26.80	126	0.63
160	8.28	33.95	400	5.51	34.13	26.95	111	0.75
215	7.51	34.00	500	5.02	34.20	27.06	101	0.86
277	6.44	-	600	4.67	34.30	27.18	90	0.97
391	5.58	34.12						
519	4.94	34.22						
655	4.50	34.35						

CREST; July 13, 1954; 1141 GCT; 36°08'N, 121°49'W; sounding, 380 fm; wind, 300°, force 3; weather, fog; sea, slight; wire angle, 02°.

70.52

0	12.2	33.58	0	12.2	33.58	25.47	252	0.00
11	11.66	33.68	10	11.70	33.68	25.64	236	0.02
32	10.14	33.69	20	10.77	33.69	25.82	219	0.05
42	9.78	33.86	30	10.23	33.69	25.91	210	0.07
52	9.61	33.77	50	9.64	33.78	26.08	194	0.11
63	9.30	33.77	75	9.03	33.84	26.23	180	0.16
72	9.11	33.84	100	8.57	33.85	26.31	172	0.20
83	8.76	34.11r	150	8.12	33.97	26.47	157	0.28
93	8.64	33.77	200	7.81	34.08	26.60	145	0.36
102	8.54	33.86	250	7.47	34.11	26.67	138	0.43
122	8.28	33.89	300	7.21	34.15	26.74	131	0.50
196p	7.84	34.07	400	6.84	34.22	26.85	121	0.63
290p	7.24	34.14						
407p	6.82	34.22						

S10

CCOFI
5407

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

7060

CREST; July 13, 1954; 0540 GCT; 35° 52'N, 122° 23'W; sounding, 1920 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 22°.

0	13.7	33.38	0	13.7	33.38	25.02	295	0.00
10	13.02	33.32	10	13.02	33.32	25.11	286	0.03
24	12.21	33.36	20	12.46	33.34	25.23	275	0.06
53	11.19	33.52	30	12.04	33.40	25.36	262	0.08
63	10.46	33.55	50	11.41	33.51	25.56	243	0.14
72	9.77	33.60	75	9.61	33.61	25.95	206	0.19
86	9.22	33.65	100	8.77	33.67	26.13	189	0.24
105	8.64	33.68	150	8.10	33.92	26.43	161	0.33
130	8.33	33.86	200	7.41	33.96	26.56	148	0.41
157	8.02	33.93	250	6.90	34.03	26.69	136	0.48
208	7.33	33.97	300	6.61	34.08	26.77	128	0.55
279	6.70	34.06	400	6.17	34.16	26.89	117	0.68
378	6.32	34.14	500	5.50	34.22	27.02	105	0.79
508	5.46	34.22	600	5.11	34.29	27.12	95	0.90
686	4.80	34.35	700	4.74	34.36	27.22	86	0.10
910	4.04	34.42	800	4.39	34.39	27.28	80	1.09
1208	3.32	34.51	1000	3.80	34.45	27.39	70	1.25

7080

CREST; July 12, 1954; 1941 GCT; 35° 11.5'N, 123° 47.5'W; sounding, 2200 fm; wind, 330°, force 5; weather, overcast; sea, moderate; wire angle, 25°.

0	16.7	33.04	0	16.7	33.04	24.10	382	0.00
10	16.58	33.03	10	16.58	33.03	24.12	380	0.04
24	16.55	33.02	20	16.56	33.02	24.12	380	0.08
51	16.06	33.03	30	16.32	33.02	24.17	376	0.11
61	15.62	33.04	50	16.07	33.03	24.24	369	0.19
71	13.99	33.02	75	13.86	33.02	24.71	324	0.28
85	13.60	33.04	100	12.17	33.05	25.06	291	0.35
103	11.86	33.05	150	9.20	33.37	25.83	218	0.48
126	10.03	33.17	200	8.30	33.82	26.32	171	0.58
150	9.20	33.37	250	7.51	33.93	26.53	151	0.66
199	8.30	33.82	300	6.88	33.98	26.65	140	0.74
268	7.28	33.95	400	6.07	34.07	26.83	123	0.87
363	6.28	34.04	500	5.52	34.17	26.98	109	1.00
491	5.58	34.16	600	5.03	34.24	27.09	98	1.10
664	4.76	34.29	700	4.64	34.31	27.19	89	1.20
884	4.12	34.45	800	4.35	34.40	27.29	79	1.30
1179	3.34	34.51	1000	3.81	34.48	27.41	68	1.46

7360

CREST; July 13, 1954; 2142 GCT; 35° 19.5'N, 121° 58.5'W; sounding, 1300 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 22°.

0	13.5	33.37	0	13.5	33.37	25.05	292	0.00
9	12.87	33.32	10	12.87	33.32	25.14	283	0.03
29	11.65	33.64	20	12.18	33.53	25.43	256	0.06
38	11.28	33.65	30	11.61	33.64	25.63	237	0.08
47	11.16	33.69	50	10.97	33.71	25.80	221	0.13
56	10.05	33.74	75	9.36	33.86	26.19	184	0.18
65	9.66	33.78	100	9.20	34.09	26.39	164	0.22
74	9.36	33.85	150	8.72	34.00	26.40	164	0.30
83	9.39	33.99	200	7.90	34.00	26.52	152	0.38
91	9.27	34.05	250	7.50	34.16	26.71	134	0.46
112	9.10	34.11	300	7.09	34.19	26.79	127	0.52
139	8.94	34.04	400	6.40	34.27	26.95	111	0.65
182	8.02	33.93a)	500	5.88	34.32	27.05	102	0.76
235	7.65	34.14						
329	6.88	34.21						
438	6.17	34.29						
557	5.65	34.34						

a) Alternate value, 34.09‰, not used in interpolation.

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

CREST; July 14, 1954; 0804 GCT; 34°54.5'N, 121°13'W; sounding, 310 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 20°.

77.55

0	14.0	33.59	0	14.0	33.59	25.12	285	0.00
10	13.97	33.60	10	13.97	33.60	25.13	284	0.03
29	12.31	33.62	20	13.19	33.61	25.30	268	0.06
39	10.76	33.66	30	12.22	33.62	25.50	249	0.08
48	10.24	33.69	50	10.17	33.71	25.94	207	0.13
58	9.91	33.78	75	9.67	33.84	26.12	190	0.18
67	9.79	33.78	100	9.17	34.00	26.33	170	0.22
77	9.65	33.87	150	8.90	34.09	26.44	160	0.31
85	9.50	33.94	200	8.64	34.19	26.56	148	0.39
94	9.24	33.98	250	8.30	34.21	26.63	142	0.46
113	9.08	34.03	300	7.98	34.26	26.72	133	0.53
137	8.96	34.07	400	7.38	34.34	26.87	119	0.66
154	8.88	34.09	500	(6.63)	(34.32)	(26.95)	(111)	(0.79)
192	8.70	34.18						
267	8.18	34.22						
366	7.63	34.34						
483	6.73	34.32						

CREST; July 14, 1954; 1817 GCT; 34°19.5'N, 120°48.5'W; sounding, 430 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

80.55

0	14.7	-	0	14.7	(33.50)	(24.90)	(306)	(0.00)
4	-	33.50	10	14.53	33.57	24.99	298	0.03
8	14.56	33.57	20	11.58	33.60	25.60	240	0.06
28	11.76r	33.65	30	10.56	33.63	25.81	220	0.08
43	9.95	33.68	50	9.78	33.76	26.04	198	0.12
53	9.72	33.78	75	9.55	33.87	26.17	185	0.17
63	9.61	33.82	100	9.30	33.94	26.26	177	0.22
72	9.62	34.19r	150	8.96	34.08	26.43	161	0.30
82	9.40	34.04r	200	8.65	34.16	26.54	150	0.38
97	9.33	33.93	250	8.30	34.23	26.65	140	0.46
106	9.23	33.98	300	7.97	34.24	26.70	135	0.53
124p	9.04	34.00	400	7.20	34.27	26.84	122	0.66
144	8.98	34.07	500	(6.51)	(34.30)	(26.96)	(110)	(0.78)
173	8.85	34.11						
229	8.45	34.22						
264	8.14	34.24						
363	7.47	34.26						
475	6.68	34.29						

CREST; July 15, 1954; 0206 GCT; 33°49'N, 121°50'W; sounding, 2000 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 24°.

80.70

0	16.0	33.19	0	16.0	33.19	24.38	356	0.00
10	15.82	33.19	10	15.82	33.19	24.42	352	0.04
24	14.81	33.08	20	15.54 ^r	33.11	24.42	352	0.07
53	12.20	33.44	30	13.62	33.11	24.83	313	0.10
61	11.25	33.30	50	12.40	33.43	25.32	266	0.16
71	10.16	33.29	75	10.03	33.33	25.66	234	0.22
84	9.90	33.60	100	9.50	33.64	25.99	202	0.28
104	9.37	33.65	150	8.33	33.92	26.40	164	0.37
126	8.67	33.84	200	7.81	34.14	26.65	140	0.45
153	8.30	33.93	250	7.08	34.12	26.74	131	0.52
202	7.78	34.14	300	6.53	34.13	26.82	124	0.59
284p	6.67	34.12	400	5.87	34.23	26.98	109	0.71
456p	5.61	34.27	500	(5.47)	(34.30)	(27.09)	(98)	(0.82)
740p	4.91	34.39	600	(5.20)	(34.34)	(27.15)	(92)	(0.92)
			700	(4.99)	(34.38)	(27.21)	(87)	(1.01)

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

82.47

CREST; July 16, 1954; 1514 GCT; 34°15'N, 119°58'W; sounding, 300 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

0	18.0	33.46	0	18.0	33.46	24.11	382	0.00
10	15.96	33.50	10	15.96	33.50	24.62	333	0.04
30	12.79	33.36	20	14.40	33.42	24.90	306	0.07
40	11.62	33.38	30	12.79	33.36	25.19	279	0.10
50	10.32	33.61	50	10.32	33.61	25.83	218	0.15
61	10.11	33.68	75	9.58	33.79	26.10	192	0.20
70	9.79	33.72	100	9.05	33.98	26.33	170	0.24
81	9.32	33.89	150	8.81	34.09	26.46	158	0.33
91	9.11	33.96	200	8.60	34.17	26.55	149	0.41
100	9.05	33.98	250	8.27	34.15	26.59	146	0.48
120	8.97	34.02						
143	8.83	34.06						
164	8.75	34.14						
203	8.58	34.17						
284	8.00	34.14						

83.43

CREST; July 16, 1954; 1836 GCT; 34°08'N, 119°34'W; sounding, 157 fm; wind, 280°, force 1; weather, clear; sea, slight; wire angle, 04°.

0	18.05	33.46	0	18.05	33.46	24.10	382	0.00
10	17.56	33.49	10	17.56	33.49	24.24	369	0.04
15	17.42	33.42	20	17.10	33.45	24.32	361	0.07
20	-	33.45	30	13.60	33.51	25.14	283	0.11
25	15.68	33.44	50	11.62	33.41	25.45	254	0.16
30	13.60	33.51	75	10.32	33.56	25.79	222	0.22
35	12.32	33.43	100	9.26	33.96	26.28	175	0.27
45	12.00	33.42	150	8.88	34.12	26.47	157	0.35
55	11.23	33.40	200	8.74	34.22	26.57	148	0.43
66	10.56	33.49						
76	10.29	33.57						
95	9.33	33.87						
109	9.14	34.03						
139	8.90	34.09						
167	-	34.16						
202	8.74	34.22						

83.51

CREST; July 16, 1954; 0909 GCT; 33°52'N, 120°08.5'W; sounding, 88 fm; wind, 300°, force 5; weather, overcast; sea, rough; wire angle, 08°.

0	16.02	33.40	0	16.02	33.40	24.53	341	0.00
10	13.66	33.30	10	13.66	33.30	24.96	300	0.03
15	11.60	33.30	20	11.50	33.36	25.43	256	0.06
20	11.50	33.36	30	10.80	33.42	25.60	240	0.09
25	11.48	33.40	50	9.95	33.53	25.83	218	0.13
30	10.80	33.42	75	9.43	33.69	26.04	198	0.18
35	10.56	33.40	100	9.16	33.85	26.21	182	0.23
45	10.18	33.49						
55	9.74	-						
65	9.59	33.63						
81	9.34	33.73						
101	9.14	33.86						

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; July 16, 1954; 0212 GCT; 33°34'N, 120°45'W; sounding, 900 fm; wind, 030°, force 6; weather, cloudy; sea, rough; wire angle, 46°.

83.60

71	10.35	33.30	75	10.13	33.34	25.66	234	
85	9.66	33.43	100	9.15	33.55	25.98	204	
92	9.46	33.48	150	8.31	33.86	26.35	168	
105	8.99	-	200	7.88	(34.02)	(26.54)	(150)	
127	8.61	33.73	250	7.50	(34.11)	(26.67)	(138)	
168	8.12	33.94	300	7.05	(34.18)	(26.79)	(127)	
233	7.64	-						
320	6.90	34.20						

CREST; July 16, 1954; 2339 GCT; 34°00'N, 119°04'W; sounding, 250 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 12°.

85.39

0	21.04	33.53	0	21.04	33.53	23.39	450	0.00
15	18.65	33.47	10	19.52	33.49	23.76	415	0.04
25	12.76	33.35	20	16.21	33.40	24.49	345	0.08
35	11.49	33.46	30	11.95	33.41	25.39	260	0.11
40	11.11	33.47	50	10.63	33.53	25.72	228	0.16
45	10.96	33.58	75	(10.02)				
50	10.63	33.53						
55	10.39	33.57						
60	10.28	33.74						
70	10.08	33.66						

CREST; July 17, 1954; 0336 GCT; 33°47'N, 119°31'W; sounding, 1000 fm; wind, 220°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°.

85.45

0	20.5	33.49	0	20.5	33.49	23.50	440	0.00
11	16.81	33.51	10	18.09	33.51	24.13	380	0.04
31	11.81	33.37	20	13.68	33.45	25.08	289	0.07
41	11.44	33.39	30	11.90	33.37	25.36	262	0.10
46p	11.35	33.35	50	10.68	33.44	25.64	236	0.15
51	10.59	33.46	75	9.68	33.64	25.96	205	0.21
61	9.87	33.61	100	9.24	33.80	26.16	186	0.26
72	9.72	33.62	150	8.64	34.05	26.45	159	0.34
79p	9.54	33.67	200	8.31	34.20	26.62	143	0.42
81	9.50	33.71	250	7.99	34.21	26.68	137	0.49
92	9.43	33.74	300	7.62	34.22	26.74	131	0.56
100	9.24	33.80	400	(6.88)	(34.26)	(26.87)	(119)	(0.69)
119p	8.86	33.90						
126	8.82	33.94						
196p	8.33	34.20						
289p	7.70	34.22						
398p	6.88	34.26						

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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

85.55

CREST; July 17, 1954; 0931, 0959 GCT; 33°27'N, 112°12.5'W; sounding, 650 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 28°, 28°.

0	15.4	33.55	0	15.4	33.55	24.79	317	0.00
10	15.38	33.56	10	15.38	33.56	24.80	316	0.03
28	10.84	33.64	20	12.06	33.60	25.51	248	0.06
42	10.00	33.68	30	10.68	33.65	25.80	221	0.08
50	9.84	33.73	50	9.84	33.73	26.01	201	0.13
59	9.42	33.83	75	8.86	33.85	26.26	177	0.17
66	9.04	33.84	100	8.66	33.92	26.35	168	0.22
75	8.86	-	150	8.54	34.10	26.51	153	0.30
86	8.68	33.86	200	8.06	34.15	26.62	143	0.37
94	8.66	33.87	250	7.54	34.21	26.74	131	0.44
112	8.68	34.01	300	7.33	34.32	26.86	120	0.51
135	8.59	34.07	400	6.72	34.40	27.01	106	0.63
178	8.43	34.13	500	6.10	34.39	27.08	99	0.74
			600	(5.62)	(34.33)	(27.09)	(98)	(0.84)
233	7.62	34.18						
334	7.19	34.38						
455	6.36	34.41						
587	5.70	34.34						

87.40

CREST; July 18, 1954; 0229, 0243 GCT; 33°40.5'N, 118°59'W; sounding, 500 fm; wind, 240°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°, missing.

0	21.1	33.55	0	21.1	33.55	23.39	450	0.00
10	18.03	33.50	10	18.03	33.50	24.14	379	0.04
15	16.64	33.47	20	15.44	33.47	24.72	323	0.08
20	15.44	33.47	30	13.06	33.40	25.16	281	0.11
			50	10.64	33.50	25.69	231	0.16
25	13.78	33.44	75	9.72	33.69	26.00	202	0.21
30	13.06	33.40	100	9.28	33.80	26.16	186	0.26
41	11.29	33.46	150	8.68	34.07	26.46	158	0.35
51	10.60	33.51	200	8.40	34.20	26.61	144	0.43
66	10.06	33.58	250	8.09	34.28	26.72	133	0.50
81	9.52	33.73	300	7.79				
101	9.26	33.81	400	7.04				
125	8.89	33.93						
166	8.57	34.14						
206	8.37	34.21						
256	8.03	34.29						
330	7.60	-						
412	6.92	-						

87.50

CREST; July 17, 1954; 2129 GCT; 33°20'N, 119°39.5'W; sounding, 40 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

0	16.12	33.48	0	16.12	33.48	24.57	338	0.00
10	12.29	33.46	10	12.29	33.46	25.36	262	0.03
15	11.32	33.48	20	10.70	33.55	25.72	228	0.06
21	10.65	33.55	30	10.65	33.51	25.70	230	0.08
26	10.67	33.52	50	9.52				
31	10.64	33.51						
36	9.62	-						
41	9.59	-						
51	9.50	-						

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

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CREST; July 17, 1954; 1542 GCT; 32°56.5'N, 120°21'W; sounding, 500 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 10°.

87.60

0	14.6	33.55	0	14.6	33.55	24.96	300	0.00
10	14.46	33.53	10	14.46	33.53	24.98	299	0.03
30	14.44	33.56	20	14.44	33.55	25.00	297	0.06
46	11.80	33.57	30	14.44	33.56	25.00	297	0.09
56	11.40	33.57	50	11.63	33.57	25.57	242	0.14
65	10.83	33.57	75	10.58	33.60	25.78	222	0.20
75	10.58	33.60	100	9.31	33.67	26.05	197	0.26
84	10.20	33.57	150	8.77	33.99	26.38	166	0.35
98	9.36	33.60	200	8.37	34.14	26.56	148	0.43
107	9.14	33.80	250	7.73	34.23	26.73	132	0.50
131	8.83	34.02	300	7.24	34.27	26.83	123	0.56
160	8.73	33.98	400	6.49	34.32	26.98	109	0.68
211	8.24	34.17	500	6.02	34.45	27.14	93	0.79
273	7.46	34.25	600	5.54	34.42	27.17	91	0.89
383	6.59	34.31						
509	5.99	34.45						
641	5.30	34.40						

CREST; July 18, 1954; 1047, 1102 GCT; 33°28.5'N, 117°47'W; sounding, 100 fm; wind, calm; weather, overcast; sea, slight; wire angle, 00°, 00°.

90.28

0	21.09	33.48	0	21.09	33.48	23.34	455	0.00
11	20.0	-	10	20.00	33.45	23.60	430	0.04
16	15.69	33.42	20	14.70	33.40	24.82	314	0.08
21	14.49	33.39	30	12.58	33.38	25.24	274	0.11
26	13.00	33.34	50	10.73	33.49	25.67	233	0.16
31	12.45	-	75	9.88	33.61	25.91	210	0.22
36	11.76	33.44	100	9.42	33.78	26.12	190	0.27
46	10.86	33.49						
57	10.56	33.50						
64	10.08	33.57						
79	9.81	33.63						
98	9.46	33.77						
123	9.15	33.89						

CREST; July 18, 1954; 1703 GCT; 33°11'N, 118°22'W; sounding, 650 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

90.37

0	21.6	33.52	0	21.6	33.52	23.23	465	0.00
11	20.36	33.71	10	20.50	33.71	23.67	423	0.04
31	14.74	-	20	18.06	33.61	24.21	372	0.08
41	12.71	33.40	30	15.00	33.48	24.82	314	0.12
51	11.26	33.50	50	11.44	33.50	25.55	244	0.18
61	10.38	33.50	75	9.95	33.60	25.89	212	0.23
72	10.11	33.56	100	9.45	33.77	26.10	192	0.28
82	9.70	33.66	150	8.76	33.99	26.39	164	0.37
92	9.57	33.73	200	8.66	34.12	26.50	154	0.46
101	9.42	33.78	250	8.28	34.23	26.65	140	0.53
125	8.91	33.89	300	7.83	34.26	26.74	131	0.60
154	8.74	34.00	400	7.05	34.30	26.88	118	0.73
203	8.64	34.13	500	6.40	34.33	26.99	108	0.85
262	8.18	34.24	600	5.81	34.34	27.08	99	0.96
365	7.29	34.29						
485	6.49	34.33						
612	5.76	34.34						

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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

90.55

CREST; July 20, 1954; 0138 GCT; 32°35'N, 119°37'W; sounding, 500 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 40°.

0	15.7	33.55	0	15.7	33.55	24.72	323	0.00
8	15.42	33.55	10	15.41	33.55	24.79	317	0.03
24	14.28	33.52	20	14.98	33.52	24.86	310	0.06
31	13.02	33.51	30	13.05	33.51	25.25	273	0.09
40	12.96	33.48	50	11.20	33.50	25.59	240	0.14
47	11.61	33.48	75	9.88	33.65	25.94	207	0.20
53	11.04	33.53	100	9.05	33.82	26.21	182	0.25
60	10.99	33.54	150	8.55	34.05	26.47	157	0.34
65	10.80	33.55	200	8.12	34.28	26.71	134	0.41
72	10.07	33.60	250	7.60	34.43	26.91	115	0.47
88	9.26	33.77	300	7.25	34.34	26.89	117	0.54
107	8.96	33.84	400	6.52	34.35	26.99	108	0.65
139	8.65	33.99						
177	8.34	34.19						
249	7.60	34.43a)						
334	7.03	34.29						
439	6.24	34.39						

90.70

CREST; July 20, 1954; 0954 GCT; 32°07'N, 120°34'W; sounding, 2100 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 06°.

2	15.4	33.60	0	(15.41)	(33.60)	(24.82)	(314)	(0.00)
12	15.10	33.58	10	15.12	33.58	24.87	309	0.03
27	14.90	33.57	20	15.03	33.57	24.88	308	0.06
58	11.60	33.60	30	14.79	33.57	24.94	302	0.09
68	10.48	33.68	50	13.30	33.59	25.26	272	0.15
78	10.02	33.64	75	10.15	33.65	25.89	212	0.21
94	9.53	33.69	100	9.38	33.72	26.08	194	0.26
114	9.08	33.80	150	8.58	34.01	26.43	161	0.35
138	8.73	33.96	200	8.18	34.13	26.58	146	0.43
167	8.39	34.06	250	7.50	34.13	26.68	137	0.50
220	8.04	34.16	300	6.93	34.18	26.80	126	0.57
265p	7.22	34.11	400	6.24	34.37	27.05	102	0.69
407p	6.20	34.37	500	5.69	34.38	27.12	95	0.79
575p	5.33	34.39	600	5.21	34.39	27.19	89	0.89
805p	4.42	34.42	700	4.80	34.41	27.25	83	0.99
			800	4.43	34.42	27.30	78	1.07

93.30

CREST; July 21, 1954; 0638 GCT; 32°50'N, 117°31.5'W; sounding, 470 fm; wind, 150°, force 1; weather, overcast; sea, slight; wire angle, 03°.

0	21.8	33.49	0	21.8	33.49	23.15	473	0.00
10	21.95	33.51	10	21.95	33.51	23.12	476	0.05
30	13.30	33.33	20	17.00	33.44	24.34	360	0.09
40	12.12	33.39	30	13.30	33.33	25.06	291	0.12
50	11.33	33.45	50	11.33	33.45	25.53	246	0.18
61	10.52	33.46	75	10.11	33.57	25.84	217	0.23
71	10.24	33.53	100	9.57	33.68	26.01	201	0.29
81	9.98	33.63	150	9.02	33.94	26.31	172	0.38
91	9.80	33.65	200	8.87	34.12	26.47	157	0.47
101	9.55	33.69	250	8.70	34.19	26.55	149	0.54
125	9.23	33.77	300	8.28	34.22	26.64	141	0.62
154	9.00	33.97	400	7.47	34.27	26.80	126	0.76
203	8.85	34.13	500	6.98	34.34	26.92	114	0.88
262	8.66	34.20	600	6.00	34.38	27.08	99	1.00
366	7.63	34.24						
486	7.06	34.34						
611	5.88	34.38						

a) Alternate value, 34.27‰, not used in interpolation.

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

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CREST; July 20, 1954; 1941 GCT; 32°11'N, 118°53.5'W; sounding, 800 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.

93.50

0	17.6	33.49	0	17.6	33.49	24.23	370	0.00
10	17.13	33.49	10	17.13	33.49	24.35	359	0.04
29	15.02	33.55	20	16.13	33.53	24.61	334	0.07
38	13.80	33.46	30	14.90	33.55	24.90	306	0.10
48	13.04	33.45	50	12.85	33.45	25.24	274	0.16
57	12.05	33.47	75	10.66	33.48	25.67	233	0.22
66	11.42	33.48	100	9.59	33.64	25.98	204	0.28
75	10.66	33.48	150	8.82	34.07	26.44	160	0.37
84	10.13	33.49	200	8.27	34.17	26.60	145	0.45
93	9.78	33.57	250	7.75	34.19	26.70	135	0.52
113	9.30	33.80	300	7.13	34.19	26.78	128	0.59
139	8.96	34.02	400	6.43	34.22	26.90	116	0.72
182	8.42	34.16	500	5.97	34.33	27.05	102	0.83
232	7.96	34.19						
324	6.88	34.19						
433	6.26	34.25						
555	5.72	34.41						

CREST; July 21, 1954; 1838 GCT; 31°57'N, 117°50.5'W; sounding, 720 fm; wind, 240°, force 1; weather, overcast; sea, moderate; wire angle, 15°.

97.40

0	20.4	33.50	0	20.4	33.50	23.53	437	0.00
10	20.03	33.45	10	20.03	33.45	23.59	431	0.04
30	14.74	33.21	20	16.98	33.31	24.24	369	0.08
40	13.62	33.24	30	14.74	33.21	24.67	328	0.12
49	12.02	33.19	50	11.96	33.19	25.21	277	0.18
60	11.35	33.20	75	10.59	33.32	25.56	243	0.24
69	10.85	33.26	100	9.41	33.64	26.01	201	0.30
79	10.40	33.35	150	9.22	34.03	26.34	169	0.39
88	9.96	33.41	200	8.87	34.10	26.45	159	0.48
97	9.42	33.59	250	8.99	34.28	26.58	146	0.56
121	9.32	33.86	300	8.10	34.25	26.69	136	0.63
148	9.22	34.02	400	7.17	34.26	26.83	123	0.76
196	8.86	34.09	500	6.61	34.32	26.96	110	0.89
252	8.99	34.28	600	(5.90)	(34.34)	(27.07)	(100)	(1.00)
353	7.37	34.21						
469	6.80	34.31						
595	5.94	34.34						

HORIZON; July 18, 1954; 1625, 1644 GCT; 31°42'N, 116°43.5'W; sounding, 100 fm; wind, 320°, force 4; weather, overcast; sea, slight; wire angle, missing, missing.

100.29

0	17.38	33.46	0	17.38	33.46	24.26	367	0.00
10	14.57	33.39	10	14.57	33.39	24.84	312	0.03
15	12.74	33.46	20	11.88	33.25	25.27	271	0.06
20	11.88	33.25	30	11.22	33.26	25.40	259	0.09
25	11.30	33.22	50	10.80	33.41	25.59	240	0.14
30	11.22	33.26	75	10.01	33.55	25.84	217	0.20
35	11.18	33.39	100	9.67	33.67	25.99	202	0.25
46	10.96	33.40						
56	10.53	33.43						
65	10.27	33.50						
80	9.92	33.57						
93	9.76	33.63						
117	9.48	33.73						

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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

100.50

HORIZON; July 18, 1954; 0451 GCT; 31°02.5'N, 118°08.5'W; sounding, 920 fm;
wind, 290°, force 3; weather, cloudy; sea, rough; wire angle, 21°.

0	18.3	-	0	18.3	(33.45)	(24.03)	(389)	(0.00)
10	18.20	33.45	10	18.20	33.45	24.06	386	0.04
25	17.36	33.33	20	17.71	33.37	24.12	380	0.08
49	15.60	33.26	30	16.93	33.31	24.26	367	0.12
58	15.02	33.26	50	15.57	33.26	24.53	341	0.19
68	14.18	33.23	75	13.30	33.24	24.99	298	0.27
77	13.02	33.24	100	10.87	33.22	25.43	256	0.34
96	11.06	33.22	150	9.11	33.77	26.16	186	0.45
119	10.07	33.47	200	8.48	34.06	26.48	156	0.54
146	9.18	33.72	250	7.50	34.11	26.67	138	0.61
190	8.66	34.05	300	7.06	34.14	26.75	130	0.68
252	7.48	34.11	400	6.16	34.22	26.94	112	0.80
347	6.63	34.18	500	5.71	34.32	27.07	100	0.92
465	5.82	34.28	600	5.43	34.41	27.18	90	1.02
634	5.32	34.43	700	5.05	34.45	27.26	82	1.11
845	4.46	34.49	800	4.62	34.48	27.33	75	1.20
1144	3.59	34.59	1000	3.96	34.54	27.45	64	1.36

100.70

HORIZON; July 17, 1954; 1858 GCT; 30°18.5'N, 119°21.5'W; sounding, 1920 fm;
wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

0	17.6	-	0	17.6	(33.28)	(24.07)	(385)	(0.00)
10	17.31	33.28	10	17.31	33.28	24.14	379	0.04
25	15.83	33.21	20	16.31	33.23	24.34	360	0.08
56	14.70	33.20	30	15.65	33.21	24.47	347	0.11
66	13.96	33.15	50	14.92	33.21	24.63	332	0.18
76	13.64	33.16	75	13.68	33.16	24.85	311	0.26
91	13.16	33.26	100	12.27	33.25	25.20	278	0.33
111	10.98	33.24	150	9.17	33.61	26.02	200	0.45
135	9.52	33.48	200	8.75	34.04	26.43	161	0.55
164	8.95	33.71	250	8.10	34.08	26.56	148	0.62
218	8.65	34.08	300	7.20	34.07	26.68	137	0.70
296	7.26	34.07	400	6.39	34.18	26.88	118	0.83
403	6.35	34.19	500	6.01	34.30	27.02	105	0.95
546	5.84	34.34	600	5.51	34.38	27.15	92	1.06
737	4.82	34.46	700	4.99	34.44	27.25	83	1.15
974	4.05	34.51	800	4.60	34.48	27.33	75	1.24
1286	3.22	34.57	1000	3.99	34.52	27.43	66	1.40

103.30

HORIZON; July 16, 1954; 1811 GCT; 31°06'N, 116°25'W; sounding, 40 fm; wind,
180°, force 2; weather, overcast; sea, rough; wire angle, 00°.

0	18.65	33.38	0	18.65	33.38	23.89	402	0.00
10	13.85	33.34	10	13.85	33.34	24.96	300	0.04
15	12.20	33.24	20	11.74	33.30	25.34	264	0.06
20	11.74	33.30	30	11.44	33.33	25.42	257	0.09
25	11.70	33.33	50	10.87	33.37	25.55	244	0.14
30	11.44	33.33						
35	11.34	33.37						
40	11.22	33.35						
50	10.87	33.37						
60	10.38	33.45						

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

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HORIZON; July 16, 1954; 2330 GCT; 30°45'N, 117°07'W; sounding, 950 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 21°.

103.40

0	19.5	-	0	19.5	(33.47)	(23.75)	(416)	(0.00)
10	18.66	33.46	10	18.66	33.46	23.95	397	0.04
29	16.87	33.46	20	17.17	33.46	24.31	362	0.08
43	15.85	33.42	30	16.86	33.46	24.39	355	0.12
52	14.62	33.38	50	14.92	33.39	24.77	319	0.18
60	13.56	33.31	75	11.50	33.28	25.37	262	0.26
70	12.25	33.29	100	10.20	33.45	25.73	227	0.32
79	11.10	33.27	150	8.89	33.80	26.22	181	0.42
93	10.52	33.33	200	8.00	33.98	26.49	155	0.50
102	10.18	33.46	250	7.49	34.08	26.65	140	0.58
125	9.81	33.68	300	7.20	34.17	26.76	129	0.65
153	8.80	33.81	400	6.70	34.26	26.90	116	0.78
202	7.96	33.99	500	6.03	34.29	27.01	106	0.90
262	7.39	34.10	600	5.47	34.33	27.11	96	1.00
370	6.86	34.25						
496	6.06	34.29						
630	5.31	34.34						

HORIZON; July 16, 1954; 1202 GCT; 30°21'N, 116°23.5'W; sounding, 950 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 07°.

107.35

0	18.5	-	0	18.5	(33.48)	(24.01)	(391)	(0.00)
10	18.4	-	10	18.4	(33.48)	(24.03)	(389)	(0.04)
20	18.30	33.48	20	18.30	33.48	24.06	386	(0.08)
30	16.56	33.37	30	16.56	33.37	24.39	355	(0.12)
40	15.56	33.28	50	14.08	33.21	24.81	315	(0.18)
51	13.92	33.20	75	11.05	33.12	25.32	266	(0.26)
61	12.70	33.17	100	9.98	33.41	25.74	226	(0.32)
70	11.35	33.10	150	9.98	34.17	26.33	170	(0.42)
80	10.70	33.18	200	10.18	34.24	26.35	168	(0.50)
90	10.03	33.38	250	9.40	34.32	26.54	150	(0.59)
101	9.97	33.41	300	8.90	34.35	26.65	140	(0.66)
126	9.64	33.81	400	8.02	34.36	26.79	127	(0.80)
155	10.04	34.19	500	7.02	34.36	26.93	113	(0.93)
202	10.17	34.24	600	6.10	34.34	27.04	103	(1.04)
260	9.25	34.34						
362	8.40	34.36						
480	7.22	34.36						
607	6.04	34.34						

HORIZON; July 15, 1954; 0946 GCT; 29°52'N, 115°54.5'W; sounding, 95 fm; wind, 020°, force 4; weather, sky obscured; sea, rough; wire angle, 30°.

110.33

0	18.74	33.40	0	18.74	33.40	23.89	402	0.00
10	18.68	33.41	10	18.68	33.41	23.91	400	0.04
14	18.16	33.43	20	16.27	33.28	24.39	355	0.08
19	16.56	33.33	30	13.23	33.16	24.94	302	0.11
23	15.36	33.22	50	11.25	33.22	25.37	262	0.17
27	13.91	33.18	75	9.99	33.57	25.86	215	0.23
31	13.16	33.16	100	9.70	33.77	26.06	196	0.28
40	12.59	33.22						
48	11.39	33.22						
56	10.98	33.23						
69	10.20	33.48						
84	9.80	33.67						
101	9.70	33.77						
126	9.62	33.85						

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

110.40

HORIZON; July 15, 1954; 1350 GCT; 29°36.5'N, 116°16'W; sounding, 1250 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 21°.

0	19.1	-	0	19.1	(33.47)	(23.85)	(406)	(0.00)
10	19.18	33.47	10	19.18	33.47	23.83	408	0.04
29	18.39	33.58	20	19.14	33.52	23.88	403	0.08
52	15.81	33.34	30	18.24	33.58	24.15	378	0.12
67	14.71	33.33	50	15.96	33.35	24.51	343	0.19
76	13.58	33.30	75	13.71	33.30	24.95	301	0.27
90	11.82	33.33	100	11.11	33.39	25.52	247	0.34
113	10.42	33.58	150	9.65	33.94	26.20	183	0.45
145	9.62	33.89	200	9.86	34.35	26.49	155	0.54
168	9.94	34.18	250	9.48	34.42	26.61	144	0.62
225	9.70	34.40	300	8.87	34.42	26.71	134	0.69
301	8.82	34.42	400	7.53	34.40	26.89	117	0.82
409	7.45	34.40	500	6.66	34.41	27.02	105	0.94
554	6.26	34.42	600	5.92	34.43	27.13	94	1.04
751	5.00	34.66r	700	5.28	34.44	27.22	86	1.14
991	4.14	34.47	800	4.80	34.45	27.28	80	1.23
1320	3.28	34.56	1000	4.14	34.47	27.37	72	1.40

110.60

HORIZON; July 16, 1954; 0000 GCT; 28°56'N, 117°45'W; sounding, 2150 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 17°.

0	18.5	-	0	18.5	(33.46)	(23.99)	(393)	(0.00)
10	18.38	33.46	10	18.38	33.46	24.02	390	0.04
30	17.30	33.37	20	18.31	33.42	24.01	391	0.08
55	15.27	33.27	30	17.30	33.37	24.21	372	0.12
68	13.98	33.13	50	15.60	33.29	24.54	340	0.19
78	12.68	33.04	75	13.07	33.05	24.89	307	0.27
92	11.76	33.18	100	11.19	33.23	25.39	260	0.34
115	10.29	33.30	150	9.13	33.63	26.05	197	0.46
147	9.13	33.58	200	8.70	34.03	26.43	161	0.55
170	9.02	33.86	250	8.30	34.16	26.59	146	0.63
225	8.44	34.11	300	7.96	34.23	26.70	135	0.70
304	7.92	34.23	400	7.00	34.32	26.90	116	0.83
413	6.87	34.33	500	6.20	34.39	27.07	100	0.94
558	5.84	34.42	600	5.60	34.44	27.18	90	1.05
760	4.88	34.49	700	5.13	34.48	27.27	81	1.14
1002	4.00	34.52	800	4.73	34.50	27.33	75	1.23
1332	3.22	34.60	1000	4.01	34.52	27.43	66	1.39

113.35

HORIZON; July 15, 1954; 0049, 0126 GCT; 29°10.5'N, 115°41.5'W; sounding, 1010 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 34°, 37°.

0	19.0	-	0	19.0	(33.36)	(23.79)	(412)	(0.00)
9	18.96	33.36	10	18.96	33.36	23.80	411	0.04
26	17.91	33.40	20	18.46	33.38	23.94	398	0.08
39	16.31	33.31	30	17.46	33.39	24.19	374	0.12
47	15.00	33.26	50	14.52	33.25	24.75	320	0.19
55	13.90	33.24	75	11.91	33.24	25.26	272	0.26
63	13.16	33.20	100	10.60	33.48	25.68	232	0.33
71	12.27	33.22	150	9.06	33.94	26.30	173	0.43
83	11.36	33.27	200	9.29	34.14	26.42	162	0.52
91	10.97	33.39	250	9.14	34.29	26.56	148	0.60
111	10.14	33.54	300	9.00	34.37	26.65	140	0.67
132	9.32	33.73	400	7.76	34.35	26.82	124	0.81
135	9.30	33.76	500	6.76	34.32	26.94	112	0.93
174	9.43	34.06						
225	9.19	34.20						
320	8.91	34.38						
434	7.35	34.34						
561	6.31	34.32						

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

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HORIZON; July 14, 1954; 1242 GCT; 28°46'N, 115°01'W; sounding, 70 fm; wind, 300°, force 3; weather, sky obscured; sea, slight; wire angle, 17°.

117.30

0	17.68	33.36	0	17.68	33.36	24.12	380	0.00
10	17.26	33.41	10	17.26	33.41	24.25	368	0.04
15	16.39	33.30	20	15.72	33.25	24.49	345	0.07
20	15.72	33.25	30	13.82	33.18	24.84	312	0.11
25	14.68	33.21	50	11.49	33.36	25.43	256	0.16
30	13.82	33.18	75	10.05	33.80	26.03	199	0.22
34	13.19	33.16	100	(10.20)	(34.03)	(26.18)	(184)	(0.27)
44	12.29	33.28						
54	10.74	33.42						
64	10.00	33.63						
79	10.08	33.84						
98	10.19	34.02						

HORIZON; July 14, 1954; 1704, 1722 GCT; 28°27'N, 115°37'W; sounding, 560 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°, 27°.

117.40

0	18.97	33.47	0	18.97	33.47	23.88	403	0.00
10	18.72	33.43	10	18.72	33.43	23.91	400	0.04
30	17.66	33.42	20	18.21	33.43	24.04	388	0.08
44	16.28	33.33	30	17.66	33.42	24.17	376	0.12
53	15.46	33.28	50	15.75	33.29	24.51	343	0.19
62	13.99	33.20	75	12.80	33.24	25.09	288	0.27
71	13.10	33.23	100	10.62	33.52	25.71	229	0.34
80	12.35	33.26	150	10.40	34.17	26.26	177	0.44
			200	10.30	34.38	26.44	160	0.52
89	11.51	33.30	250	10.28	34.51	26.54	150	0.60
98	10.67	33.45	300	10.01	34.53	26.60	145	0.68
146	10.41	34.15	400	8.70	34.53	26.82	124	0.82
195	10.30	34.36	500	7.52	34.40	26.89	117	0.95
252	10.28	34.51	600	6.52	34.40	27.03	104	1.07
359	9.26	34.54						
484	7.67	34.41						
618	6.40	34.40						

HORIZON; July 14, 1954; 0620 GCT; 28°23'N, 114°14.5'W; sounding, 45 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 07°.

120.25

0	19.54	33.43	0	19.54	33.43	23.71	420	0.00
10	18.52	33.38	10	18.52	33.38	23.93	399	0.04
15	14.17	33.31	20	13.08	33.18	24.99	298	0.08
20	13.08	33.18	30	12.07	33.26	25.25	273	0.10
26	12.60	33.27	50	10.77	33.47	25.65	235	0.16
30	12.07	33.26						
36	11.55	33.22						
41	11.36	33.30						
52	10.65	33.49						
62	10.26	33.57						

HORIZON; July 14, 1954; 0152 GCT; 28°03'N, 114°53'W; sounding, 45 fm; wind, 320°, force 4; weather, partly cloudy; sea, slight; wire angle, 07°.

120.35

0	18.60	33.30	0	18.60	33.30	23.84	407	0.00
10	18.43	33.28	10	18.43	33.28	23.87	404	0.04
15	18.43	33.29	20	18.22	33.29	23.93	399	0.08
20	18.22	33.29	30	17.43	33.30	24.13	380	0.12
25	18.06	33.30	50	16.04	33.30	24.45	349	0.19
30	17.43	33.30						
34	17.08	33.37						
39	16.74	33.30						
48	16.31	33.30						
58	13.67	33.30						

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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

120.50

HORIZON; July 13, 1954; 1036, 1117 GCT; $27^{\circ}35.5'N$, $115^{\circ}37'W$; sounding, 2200 fm; wind, 320° , force 3; weather, cloudy; sea, slight; wire angle, 15° , 26° .

0	18.4	-	0	18.4	(33.57)	(24.10)	(382)	(0.00)
10	18.07	33.57	10	18.07	33.57	24.18	375	0.04
25	14.36	33.47	20	16.31	33.48	24.53	341	0.07
55	12.06	33.90	30	13.89	33.49	25.06	291	0.10
65	11.16	34.00	50	12.39	33.74	25.56	243	0.16
74	11.02	34.04	75	11.01	34.05	26.05	197	0.21
88	10.95	34.16	100	10.75	34.23	26.24	179	0.26
108	10.70	34.27	150	9.92	34.25	26.40	164	0.35
132	10.82	34.38	200	10.18	34.41	26.48	156	0.43
160	9.72	34.24	250	9.27	34.46	26.67	138	0.51
211	9.96	34.44	300	8.63	34.47	26.78	128	0.58
287	8.78	34.47	400	7.82	34.47	26.91	115	0.70
392	7.90	34.47	500	6.89	34.31	26.91	115	0.82
532	6.65	34.29	600	6.17	34.30	27.00	107	0.94
727	5.22	34.34	700	5.40	34.33	27.12	95	1.05
			800	4.87	34.37	27.21	87	1.15
930	4.37	34.44	1000	4.20	34.46	27.36	73	1.33
1235	3.49	34.49						

120.70

HORIZON; July 12, 1954; 2338 GCT; $26^{\circ}55'N$, $117^{\circ}24'W$; sounding, 2250 fm; wind, 320° , force 3; weather, overcast; sea, moderate; wire angle, 06° .

0	20.3	-	0	20.3	(33.64)	(23.67)	(423)	(0.00)
10	19.78	33.64	10	19.78	33.64	23.80	411	0.04
25	18.85	33.60	20	19.11	33.62	23.96	396	0.08
56	12.32	33.48	30	18.26	33.57	24.13	380	0.12
66	11.06	33.56	50	13.39	33.48	25.16	281	0.19
76	10.82	33.62	75	10.84	33.62	25.75	225	0.25
91	10.25	33.83	100	10.11	33.90	26.10	192	0.30
112	10.05	34.00	150	9.58	34.17	26.39	164	0.39
136	10.03	34.15	200	8.84	34.21	26.55	149	0.47
164	9.17	34.18	250	8.55	34.32	26.68	137	0.55
219	8.72	34.23	300	8.18	34.38	26.78	128	0.62
295	8.21	34.38	400	7.30	34.40	26.93	113	0.74
405	7.26	34.40	500	6.38	34.41	27.06	101	0.86
547	6.00	34.42	600	5.68	34.43	27.16	92	0.96
742	4.97	34.47	700	5.16	34.46	27.25	83	1.06

120.90

HORIZON; July 12, 1954; 1519 GCT; $26^{\circ}12'N$, $118^{\circ}24'W$; sounding, 2250 fm; wind, 320° , force 4; weather, overcast; sea, rough; wire angle, 21° .

0	19.5	-	0	19.5	(33.48)	(23.75)	(416)	(0.00)
10	19.40	33.48	10	19.40	33.48	23.78	413	0.04
25	18.34	33.49	20	18.71	33.49	23.96	396	0.08
53	15.69	33.32	30	17.80	33.48	24.18	375	0.12
62	14.90	33.25	50	15.97	33.35	24.51	343	0.19
72	13.90	33.30	75	13.52	33.35	25.03	294	0.27
85	12.50	33.46	100	11.26	33.42	25.52	247	0.34
104	11.02	33.42	150	10.03	33.97	26.16	186	0.45
127	10.15	33.62	200	10.10	34.33	26.43	161	0.54
155	10.01	34.02	250	9.10	34.34	26.61	144	0.62
205	10.10	34.34	300	8.46	34.34	26.71	134	0.69
277	8.69	34.34	400	7.52	34.38	26.88	118	0.82
380	7.73	34.38	500	6.65	34.38	27.00	107	0.94
514	6.54	34.38	600	5.99	34.40	27.10	97	1.05
698	5.36	34.43	700	5.36	34.43	27.20	88	1.15
925	4.33	34.52	800	4.88	34.47	27.29	79	1.24
1227	3.42	34.68	1000	4.08	34.55	27.44	65	1.40

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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HORIZON; July 11, 1954; 0947 GCT; 27°18'N, 114°51.5'W; sounding, 585 fm; wind, 300°, force 5; weather, clear; sea, moderate; wire angle, 37°.

123.40

0	19.0	-	0	19.0	(33.48)	(23.88)	(403)	(0.00)
9	18.90	33.48	10	18.89	33.48	23.91	400	0.04
25	16.73	33.40	20	17.07	33.42	24.31	362	0.08
33	16.20	33.37	30	16.45	33.38	24.42	352	0.11
41	14.43	33.34	50	14.14	33.38	24.93	303	0.18
48	14.14	33.35	75	11.30	33.56	25.62	238	0.25
56	14.21	33.51	100	10.81	34.04	26.08	194	0.30
63	12.45	-	150	11.45	34.35	26.21	182	0.40
70	11.82	33.58	200	11.40	34.47	26.31	172	0.49
77	11.17	33.56	250	10.97	34.56	26.46	158	0.57
93	10.68	33.74	300	10.26	34.55	26.58	146	0.65
112	11.17	34.18	400	8.32	34.43	26.80	126	0.80
145	11.43	34.34						
184	11.44	34.41						
254	10.91	34.56						
337	9.56	34.53						
461	7.36	34.31						

HORIZON; July 11, 1954; 0318 GCT; 26°55.5'N, 114°06'W; sounding, 44 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°.

127.34

0	17.58	33.51	0	17.58	33.51	24.25	368	0.00
10	16.40	33.40	10	16.40	33.40	24.45	349	0.04
15	14.89	33.22	20	13.86	33.19	24.84	312	0.07
20	13.86	33.19	30	13.33	33.37	25.09	288	0.10
25	13.33	33.18	50	12.02	33.81	25.68	232	0.15
30	13.33	33.37						
35	12.32	33.33						
40	11.88	33.36						
50	12.02	33.81						
60	11.63	33.90						

HORIZON; July 10, 1954; 1839 GCT; 26°24.5'N, 115°12'W; sounding, 2070 fm; wind, 280°, force 3; weather, cloudy; sea, rough; wire angle, 23°.

127.50

0	19.2	-	0	19.2	(33.40)	(23.77)	(414)	(0.00)
10	18.88	33.38	10	18.88	33.38	23.84	407	0.04
29	15.85	33.28	20	16.97	33.32	24.25	368	0.08
38	16.07	33.42	30	15.85	33.28	24.48	346	0.12
47	15.04	33.38	50	14.52	33.36	24.83	313	0.18
56	13.69	33.33	75	12.10	33.34	25.30	268	0.26
65	12.90	33.30	100	10.56	33.67	25.84	217	0.32
74	12.20	33.33	150	11.30	34.41	26.28	175	0.42
82	11.37	33.39	200	10.80	34.51	26.45	159	0.50
90	10.89	33.52	250	10.27	34.53	26.56	148	0.58
111	10.40	33.80	300	9.70	34.53	26.66	139	0.66
135	11.40	34.33	400	8.46	34.49	26.82	124	0.79
177	11.04	34.49						
228	10.52	34.52						
317	9.51	34.53						
421	8.16	34.48						

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

130.30

HORIZON; July 9, 1954; 2001 GCT; 26°30'N, 113°29'W; sounding, 43 fm; wind, 280°, force 4; weather, fog; sea, smooth; wire angle, 16°.

0	18.61	33.58	0	18.61	33.58	24.06	386	0.00
10	16.46	33.68	10	16.46	33.68	24.65	330	0.04
15	15.62	33.78	20	13.74	33.73	25.28	270	0.07
20	13.74	33.73	30	12.56	33.89	25.64	236	0.09
25	13.20	33.82	50	11.54	33.97	25.90	211	0.14
30	12.56	33.89						
35	12.00	33.90						
40	11.84	33.94						
50	11.54	33.97						
60	11.52	33.96						

130.40

HORIZON; July 10, 1954; 0058, 0138 GCT; 26°08'N, 114°07'W; sounding, 1200 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 15°, 23°.

0	20.6	-	0	20.6	(33.49)	(23.47)	(442)	(0.00)
10	20.74	33.49	10	20.74	33.49	23.44	445	0.04
24	19.35	33.45	20	19.87	33.45	23.64	426	0.09
48	17.25	33.51	30	18.65	33.45	23.95	397	0.13
58	17.18	33.67	50	17.24	33.54	24.36	358	0.20
67	16.36	33.62	75	15.43	33.55	24.78	318	0.29
76	15.34	33.54	100	12.24	33.30	25.25	273	0.36
95	12.42	33.28	150	11.38	34.00	25.95	206	0.49
118	11.83	33.60	200	10.58	34.29	26.32	171	0.58
146	11.41	33.96	250	10.10	34.37	26.46	158	0.67
193	10.64	34.27	300	9.44	34.41	26.61	144	0.74
257	10.01	34.38	400	8.20	34.41	26.80	126	0.89
357	8.73	34.42	500	7.01	34.36	26.93	113	1.01
482	7.19	34.36	600	6.21	34.37	27.05	102	1.13
668	5.80	34.38	700	5.60	34.39	27.14	93	1.24
			800	5.11	34.42	27.22	86	1.33
873	4.77	34.44	1000	4.31	34.46	27.35	74	1.51
1175	3.76	34.48						

130.60

HORIZON; July 10, 1954; 1115, 1143, 1214 GCT; 25°29'N, 115°24'W; sounding, 2100 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 09°, 10°, 09°.

0	20.1	-	0	20.1	(33.44)	(23.57)	(433)	(0.00)
10	18.94	33.41	10	18.94	33.41	23.84	407	0.04
25	15.81	33.40	20	17.17	33.40	24.27	366	0.08
56	11.11	33.52	30	14.55	33.41	24.86	310	0.12
66	10.92	33.71	50	11.51	33.48	25.52	247	0.17
76	10.98	33.82	75	10.98	33.82	25.88	213	0.23
91	11.04	33.99	100	10.93	34.08	26.09	193	0.28
111	10.82	34.16	150	10.61	34.36	26.37	166	0.37
138	10.68	34.30	200	9.90	34.35	26.48	156	0.45
			250	9.31	34.38	26.60	145	0.53
165	10.51	34.40	300	8.91	34.48	26.75	130	0.60
218	9.58	34.34	400	7.80	34.45	26.89	117	0.73
295	8.98	34.48	500	6.67	34.42	27.03	104	0.85
402	7.75	34.45	600	5.85	34.43	27.14	93	0.96
543	6.24	34.42	700	5.31	34.46	27.23	85	1.05
737	5.18	34.47	800	4.91	34.48	27.30	78	1.14
			1000	4.21	34.50	27.39	70	1.31
973	4.30	34.50						
1284	3.46	34.57						

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

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HORIZON; July 9, 1954, 1238 GCT; 25°53.5'N, 113°09'W; sounding, 120 fm; wind, 240°, force 2; weather, fog; sea, smooth; wire angle, 00°.

133.30

0	19.66	33.73	0	19.66	33.73	23.90	402	0.00
10	15.59	33.60	10	15.59	33.60	24.78	318	0.04
15	13.96	33.61	20	13.61	33.56	25.18	280	0.07
20	13.61	33.56	30	12.64	33.51	25.33	265	0.09
25	13.16	33.49	50	11.68	33.69	25.65	235	0.14
31	12.55	33.51	75	11.92	34.06	25.89	212	0.20
36	12.03	33.48	100	11.93	34.44	26.19	184	0.25
46	11.66	33.60	150	11.49	34.60	26.39	164	0.34
56	11.78	33.81						
67	11.88	33.93						
82	11.95	34.24						
102	11.92	34.45						
123	11.70	34.52						
159	11.43	34.64						

HORIZON; July 8, 1954; 2243 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 280°, force 3; weather, partly cloudy; sea, moderate; wire angle, 07°.

137.23

0	22.82	34.16	0	22.82	34.16	23.37	452	0.00
10	17.02	34.00	10	17.02	34.00	24.76	320	0.04
15	14.02	33.96	20	13.08	34.00	25.62	238	0.07
20	13.08	34.00	30	12.72	34.03	25.72	228	0.09
25	12.92	33.99	50	12.50	34.33	25.99	202	0.13
30	12.72	34.03						
35	12.62	34.16						
40	12.65	34.25						
51	12.50	34.34						
61	12.52	34.42						

PAOLINA-T; July 23, 1954; 1716, 1748 GCT; 22°53'N, 110°22'W; sounding, 320 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°, 32°.

153.20

0	23.68	34.65	0	23.68	34.65	23.49	441	0.00
9	23.54	34.69	10	23.53	34.69	23.57	434	0.04
23	22.83	34.70	20	23.01	34.70	23.73	418	0.09
38	21.04	34.72	30	22.30	34.71	23.93	398	0.13
52	18.05	34.74	50	18.47	34.74	24.98	299	0.20
65	15.61	34.78	75	15.21	34.85	25.83	218	0.26
78	15.10	34.88	100	14.17	34.96	26.04	188	0.32
92	14.43	34.96	150	13.29	34.95	26.32	172	0.41
114	13.88	34.96						
140	13.51	34.96						
175	12.70	34.88						

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
60.55-C	VII-11	0350	37°46.5'	123°17.0'	250	280°	4	fog	slight	11.46	33.66
60.70-C	11	1220	37°16.0'	124°22.0'	2150	240°	4	partly cloudy	slight	15.16	33.07
60.90-C	11	2158	36°35.5'	125°47.0'	2450	310°	4	cloudy	moderate	16.15	32.86
63.55-C	10	2036	37°14.0'	122°50.0'	115	320°	4	cloudy	slight	15.39	33.08
67.55-C	10	0900	36°38.5'	122°25.5'	1150	320°	3	cloudy	slight	12.41	33.19
70.55-C	14	0830	36°02.0'	122°01.5'	750	280°	4	overcast	slight	13.18	33.37
70.70-C	13	0016	35°33.0'	123°06.0'	2050	330°	5	overcast	moderate	16.59	-
73.50-C	13	1630	35°37.5'	121°16.5'	52	010°	2	cloudy	slight	12.20	33.82
77.50-C	14	1140	35°04.0'	120°52.0'	75	320°	4	cloudy	slight	14.12	33.65
77.65-C	14	0240	34°34.0'	121°55.0'	2000	340°	5	overcast	slight	15.34	33.39
80.51-C	14	1530	34°27.5'	120°30.5'	25	290°	2	cloudy	slight	15.15	33.54
80.60-C	14	2045	34°09.0'	121°08.5'	1240	030°	5	cloudy	moderate	14.13	33.57
80.80-C	15	0700	33°29.0'	122°32.0'	2000	050°	6	cloudy	moderate	16.76	33.12
80.90-C	15	1210	33°09.0'	123°13.0'	2000	340°	6	cloudy	rough	16.5a)	33.20
83.40-C	16	2030	34°15.0'	119°23.0'	12	calm		clear	smooth	16.09	33.44
83.48-C	16	1125	33°58.5'	119°55.0'	46	360°	3	clear	slight	16.24	33.47
83.55-C	16	0530	33°40.0'	120°18.5'	370	050°	6	partly cloudy	rough	15.18	33.53

a) Bucket temperature.

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
85.40-C	VII-17	0040	33°57.0'	119°10.5'	430	250°	2	partly cloudy	smooth	15.48	33.40
85.50-C	17	0610	33°37.0'	119°52.0'	160	200°	1	clear	smooth	16.74	33.51
85.60-C	17	1220	33°56.5' 33°15.5'	120°21.0' 120°32'	650	330°	4	missing	slight	14.19	33.56
87.35-C	18	0505	33°50.0'	118°37.5'	300	260°	1	partly cloudy	smooth	19.34	33.44
87.45-C	17	2330	33°30.0'	119°19.0'	900	260°	2	partly cloudy	smooth	16.18	33.58
87.55-C	17	1820	33°10.0'	120°00.5'	605	150°	2	overcast	smooth	15.38	33.54
90.30-C	18	1200	33°24.0'	117°55.5'	300	calm		cloudy	calm	20.18	33.48
90.45-C	19	2040	32°54.5'	118°56.5'	900	280°	2	partly cloudy	slight	17.38	33.44
90.60-C	20	0425	32°25.0'	119°57.5'	500	300°	5	clear	slight	16.16	-
93.27-C	21	0830	32°56.0'	117°19.0'	137	150°	3	cloudy	smooth	19.95	33.52
93.35-C	21	0320	32°40.0'	117°52.0'	340	250°	1	cloudy	smooth	19.74	33.55
93.40-C	21	0100	32°30.0'	118°12.5'	1000	290°	4	cloudy	smooth	19.80	33.55
93.45-C	20	2230	32°20.0'	118°33.0'	850	310°	3	cloudy	smooth	17.41	33.53
97.30-C	21	1310	32°14.5'	117°09.5'	35	220°	3	cloudy	smooth	20.33	33.60
97.32-C	21	1415	32°10.5'	117°17.0'	800	220°	3	cloudy	smooth	19.62	33.51
97.45-C	21	2110	31°47.0'	118°11.0'	900	270°	3	cloudy	smooth	19.86	33.54
97.50-C	21	2340	31°37.0'	118°31.5'	1300	300°	4	cloudy	smooth	17.59	33.46
100.30-C	18	1453	31°41.5'	116°47.0'	243	310°	5	cloudy	smooth	18.47	33.42
100.35-C	18	1220	31°35.0'	117°09.5'	395	310°	3	cloudy	smooth	20.17	33.46

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
100.40-H	VII-18	0951	31°23.5'	117°29.0'	900	290°	3	cloudy	slight	19.68	33.51
100.45-H	18	0738	31°13.5'	117°49.0'	1070	290°	3	cloudy	slight	19.70	33.56
100.60-H	17	2346	30°42.0'	118°49.5'	1500	290°	4	partly cloudy	slight	18.10	33.27
100.80-H	17	1507	30°02.0'	119°54.0'	2250	310°	3	cloudy	smooth	17.09	33.28
103.35-H	16	2042	30°56.0'	116°45.5'	1025	220°	2	cloudy	smooth	18.78	33.49
107.32-H	16	1410	30°27.5'	116°11.0'	450	calm		cloudy	calm	17.47	33.35
107.40-H	16	0923	30°10.5'	116°43.5'	1600	290°	3	cloudy	slight	18.72	33.44
110.35-H	15	1210	29°46.5'	116°00.0'	680	310°	4	fog	slight	18.80	33.39
110.45-H	15	1633	29°27.5'	116°34.0'	1650	310°	4	cloudy	moderate	19.59	33.57
110.50-H	15	1831	29°18.0'	116°52.5'	1570	310°	4	cloudy	moderate	18.77	33.43
113.30-H	15	0433	29°23.0'	115°18.5'	35	310°	6	cloudy	slight	14.46	33.33
113.40-H	14	2288	29°02.0'	115°58.0'	700	290°	5	partly cloudy	slight	19.45	33.50
117.26-H	14	1039	28°55.5'	114°41.5'	45	310°	4	overcast	slight	18.69	33.42
117.35-H	14	1445	28°37.0'	115°18.0'	120	310°	3	overcast	slight	-	33.40
120.30-H	14	0402	28°14.0'	114°33.5'	50	320°	4	partly cloudy	slight	18.12	33.40
120.45-H	13	1321	27°43.0'	115°33.0'	755	310°	4	cloudy	smooth	15.54	33.47
120.60-H	13	0538	27°15.0'	116°25.0'	2050	320°	4	cloudy	slight	20.4a)	33.65

a) Bucket temperature.

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
120. 80-H	VII-12	2006	26°40. 0'	117°49. 5'	2100	330°	3	cloudy	slight	19. 86	33. 65
123. 37-H	11	0749	27°24. 0'	114°39. 5'	35	300°	3	partly cloudy	slight	17. 17	33. 40
123. 45-H	11	1231	27°08. 0'	115°11. 0'	2300	300°	4	partly cloudy	slight	20. 26	33. 69
123. 50-H	11	2310	26°58. 0'	115°30. 5'	1900	320°	4	partly cloudy	slight	20. 88	33. 66
127. 40-H	11	0026	26°46. 0'	114°32. 5'	1850	280°	3	partly cloudy	moderate	19. 84	33. 51
127. 45-H	10	2206	26°34. 0'	114°48. 5'	1900	330°	4	partly cloudy	moderate	19. 06	33. 45
130. 35-H	9	2229	26°16. 5'	113°53. 0'	670	280°	3	clear	smooth	19. 98	33. 45
130. 45-H	10	0414	25°59. 0'	114°27. 0'	2000	270°	4	clear	smooth	19. 76	33. 48
130. 50-H	10	0636	25°49. 0'	114°46. 0'	1950	270°	4	clear	smooth	19. 28	33. 51
133. 25-H	9	1525	26°04. 5'	112°48. 0'	44	220°	2	fog	smooth	20. 09	33. 94
133. 35-H	9	0953	25°43. 5'	113°28. 0'	545	270°	3	fog	smooth	18. 67	33. 64
133. 40-H	9	0731	25°35. 5'	113°44. 0'	1350	270°	2	missing	smooth	18. 46	33. 40
137. 30-H	9	0158	25°20. 0'	112°45. 5'	110	280°	3	partly cloudy	smooth	19. 56	33. 75

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

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