

CORRECTIONS MADE :

STATION POSITIONS #8

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5307

(MLR 50)

8-27 July 1953

and

CCOFI Cruise 5308

(MLR 51)

5-30 August 1953

SIO Reference 58-23

1 August 1958

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5307
(MLR 50)
8-27 July 1953

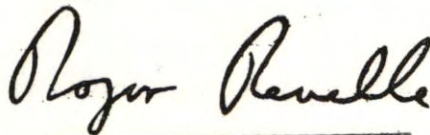
and

CCOFI CRUISE 5308
(MLR 51)
5-30 August 1953

Sponsored by
Marine Research Committee

SIO Reference 58-23
1 August 1958

Approved for distribution:



Roger Revelle, Director

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DISTRIBUTION LIST 345

INTRODUCTION

The data in this report were collected on the fiftieth and fifty-first consecutive cruises of the California Cooperative Oceanic Fisheries Investigations program. The R/V Crest, the R/V E. W. Scripps, the R/V Horizon and the R/V Paolina-T of the Scripps Institution of Oceanography participated in the fiftieth cruise while the R/V Crest, the R/V Horizon and the R/V Paolina-T participated in the fifty-first 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, each messenger time and wire angle is given in the order of increasing depth of casts. A line is left blank between the observed data of each cast.

FOOTNOTES

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

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

p: pretrip or posttrip.

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

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

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

FORMAT

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 1953 volume, the first page of the Cruise 5307 data is numbered 272, and the first page of the Cruise 5308 data is numbered 311.

FIGURES

1. CCOFI Cruise 5307 (MLR 50), station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Surface currents measured by geomagnetic electrokinetograph (GEK), R/V Crest
4. Surface currents measured by geomagnetic electrokinetograph (GEK), R/V Horizon
5. Horizontal distribution of temperature at 10 meters
6. Horizontal distribution of salinity at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters

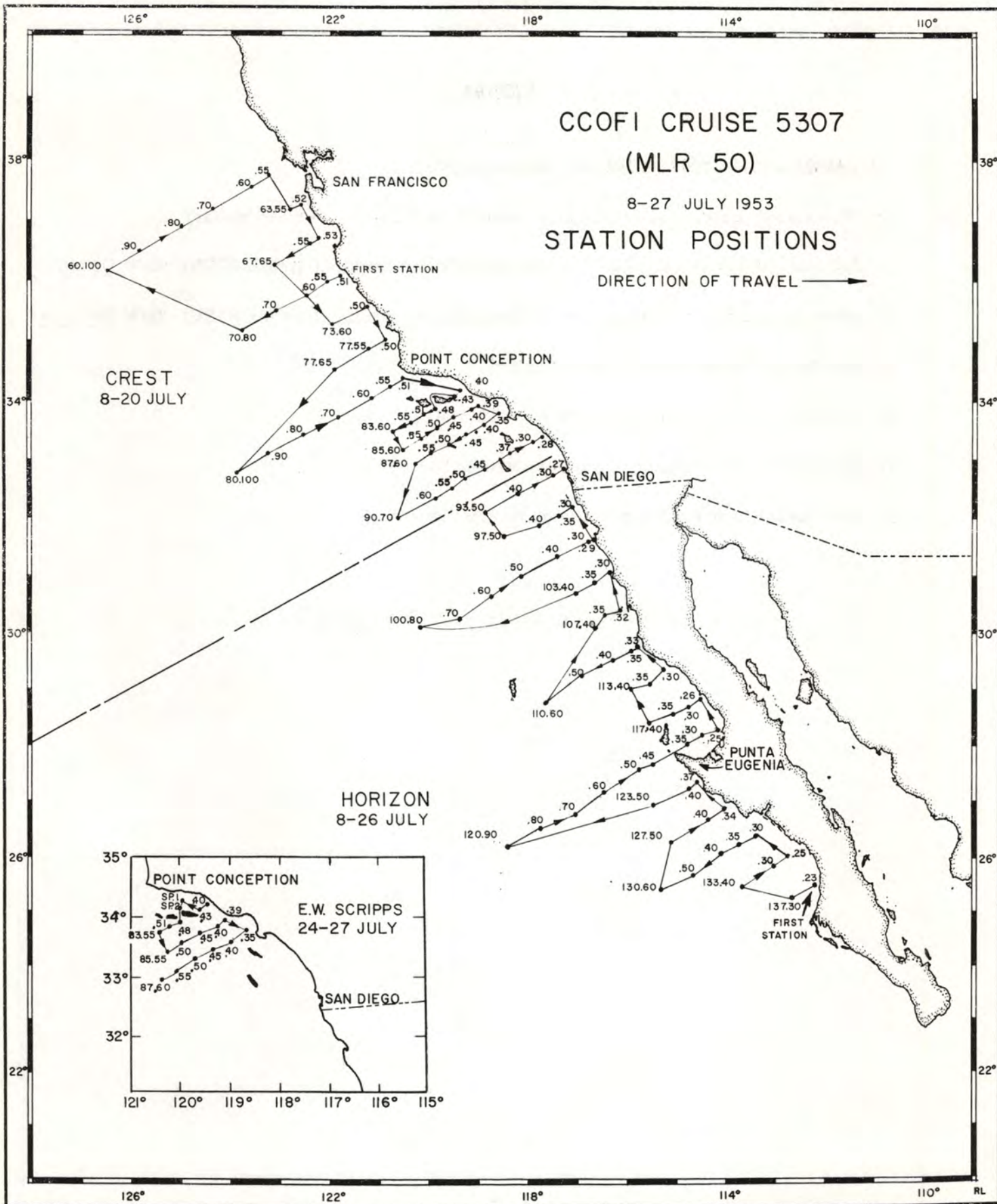


FIGURE 1

FROM H.O. CHART 0527

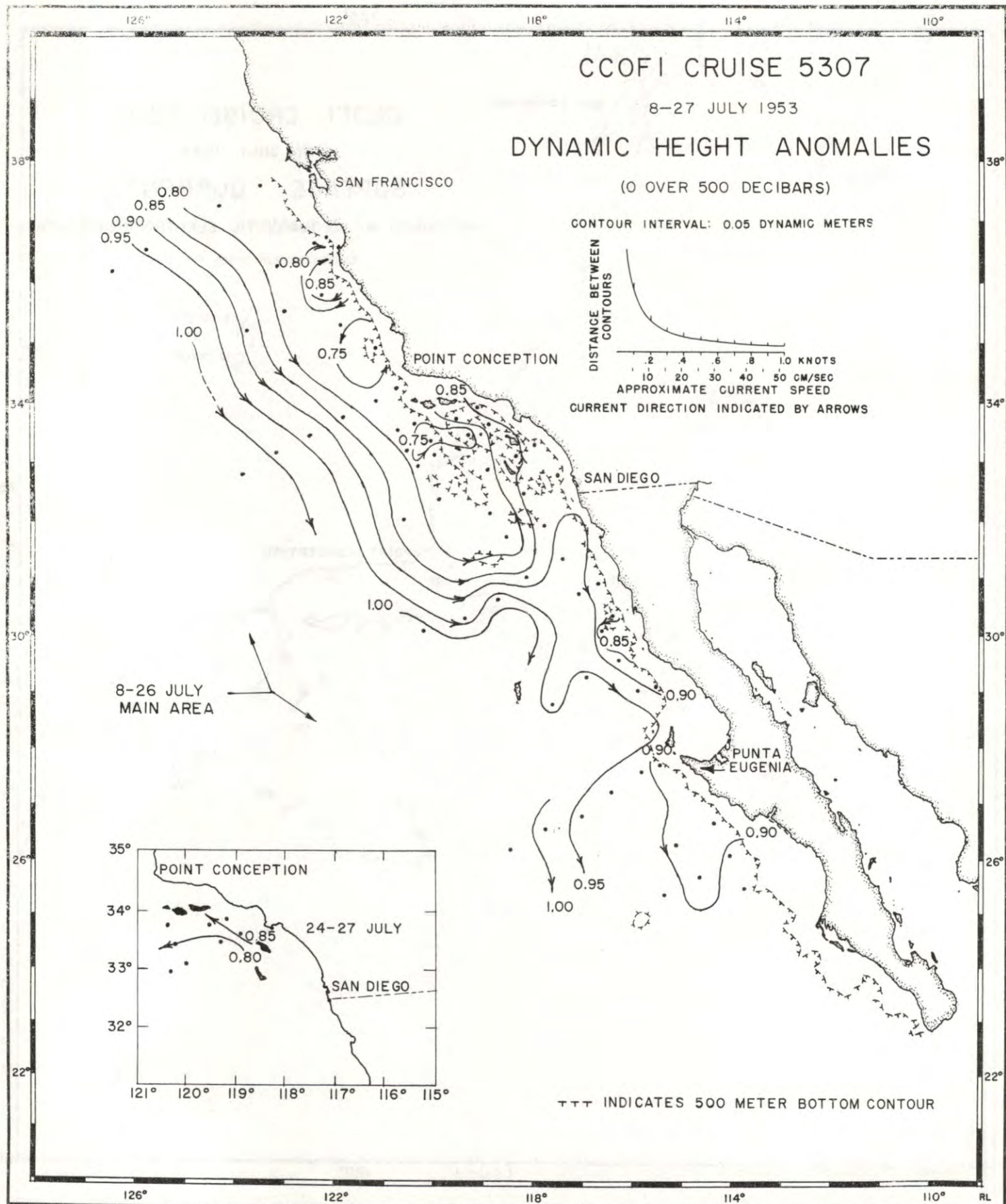
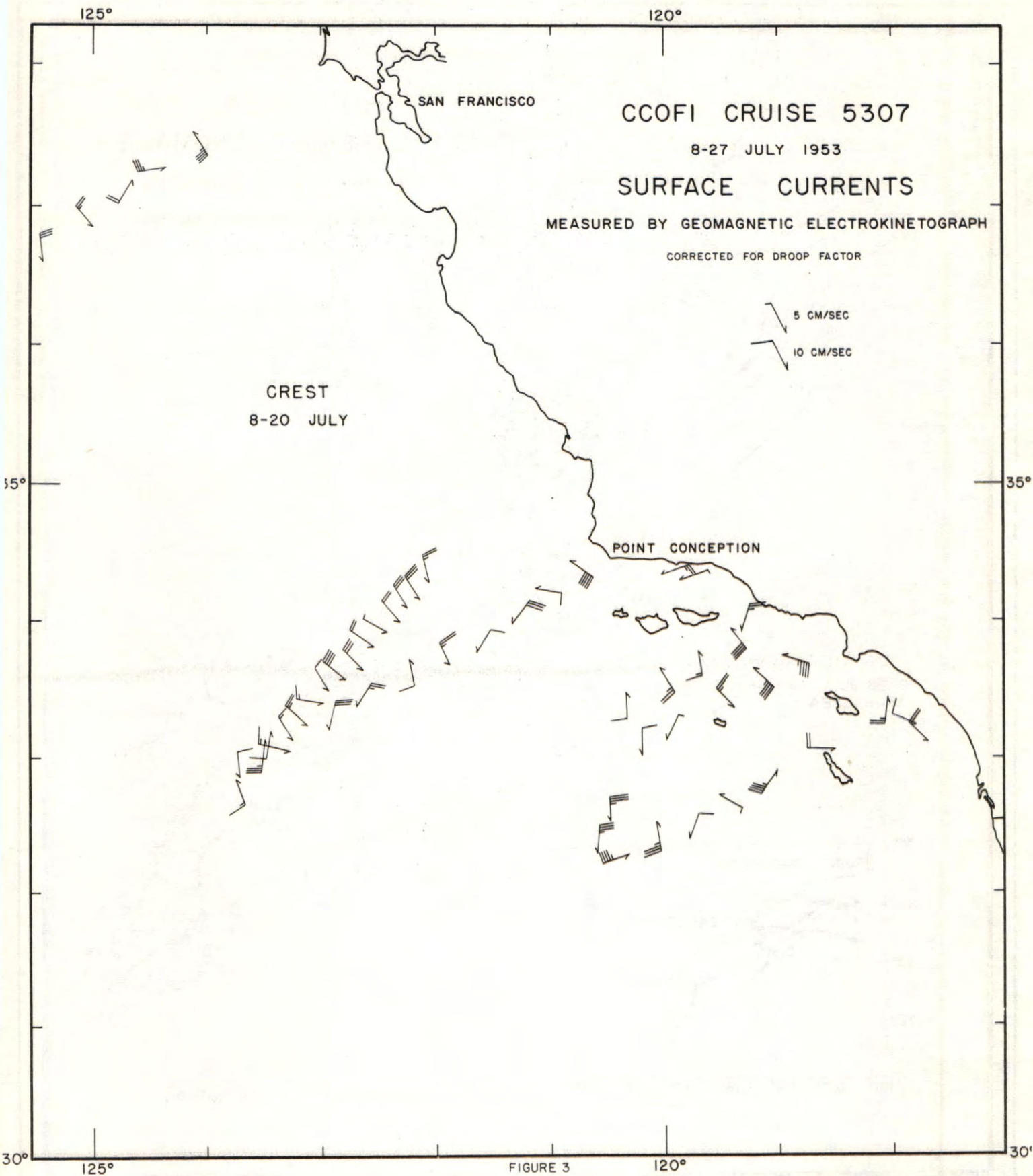


FIGURE 2



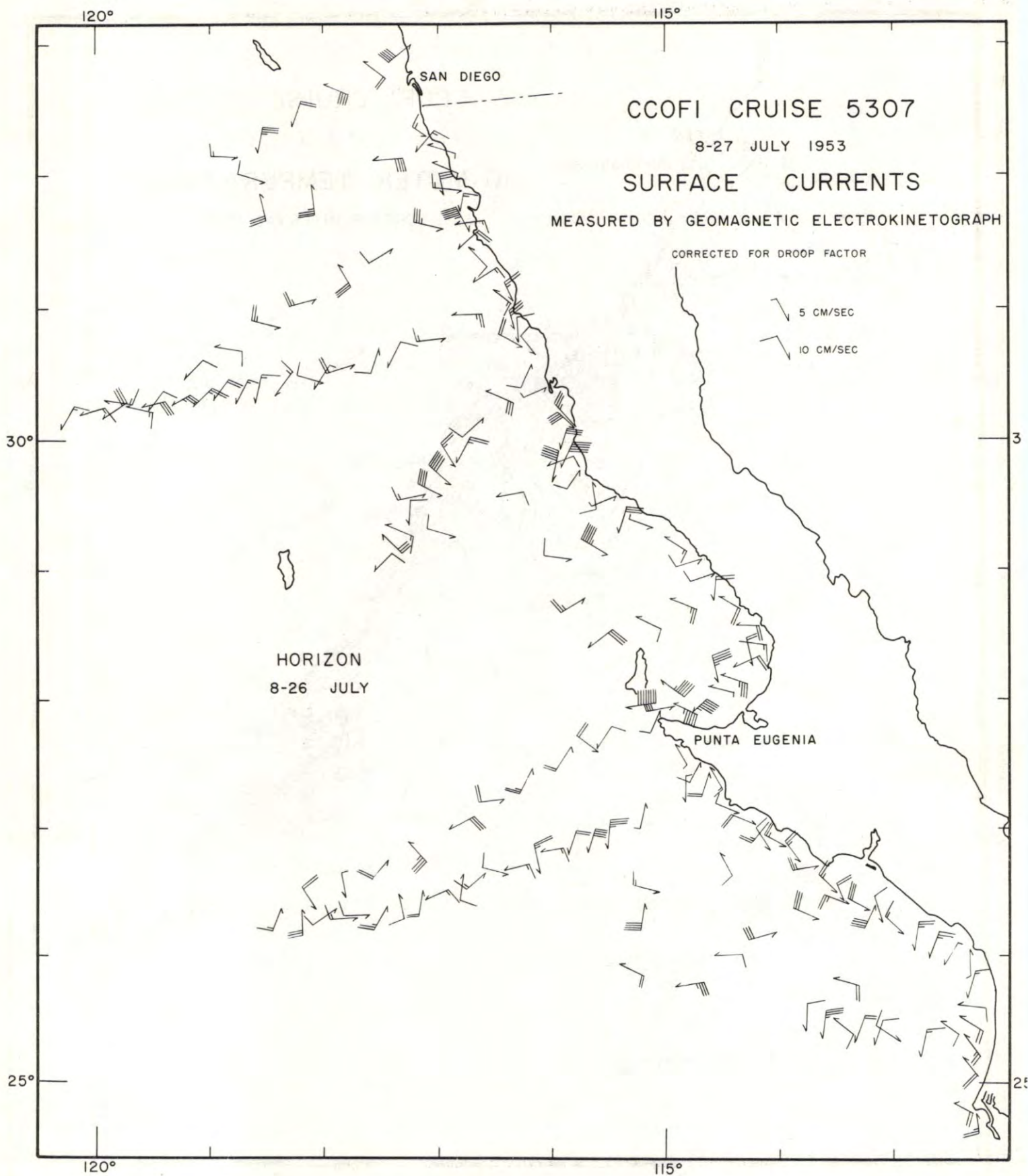


FIGURE 4

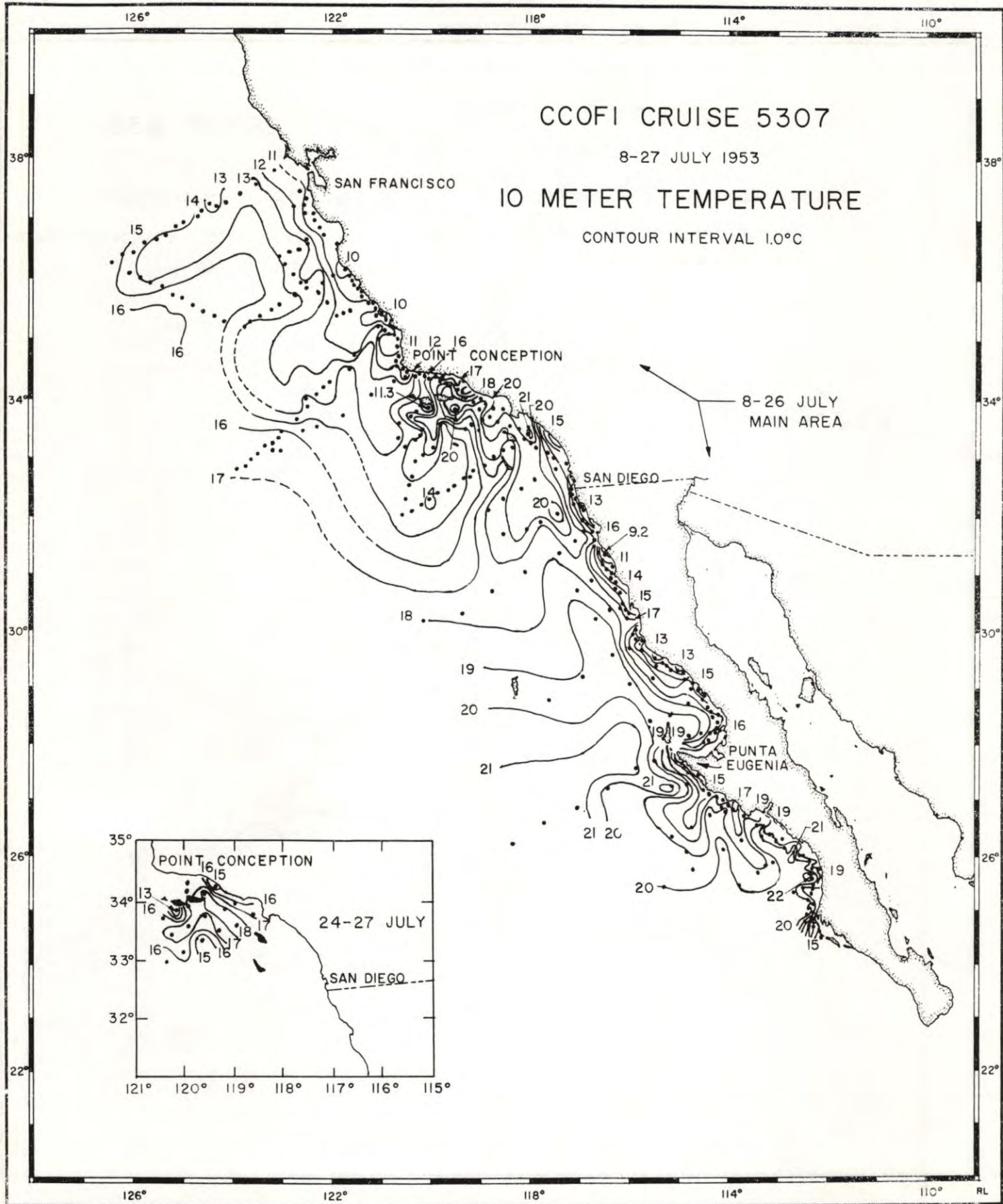


FIGURE 5

FROM H.O. CHART 0527

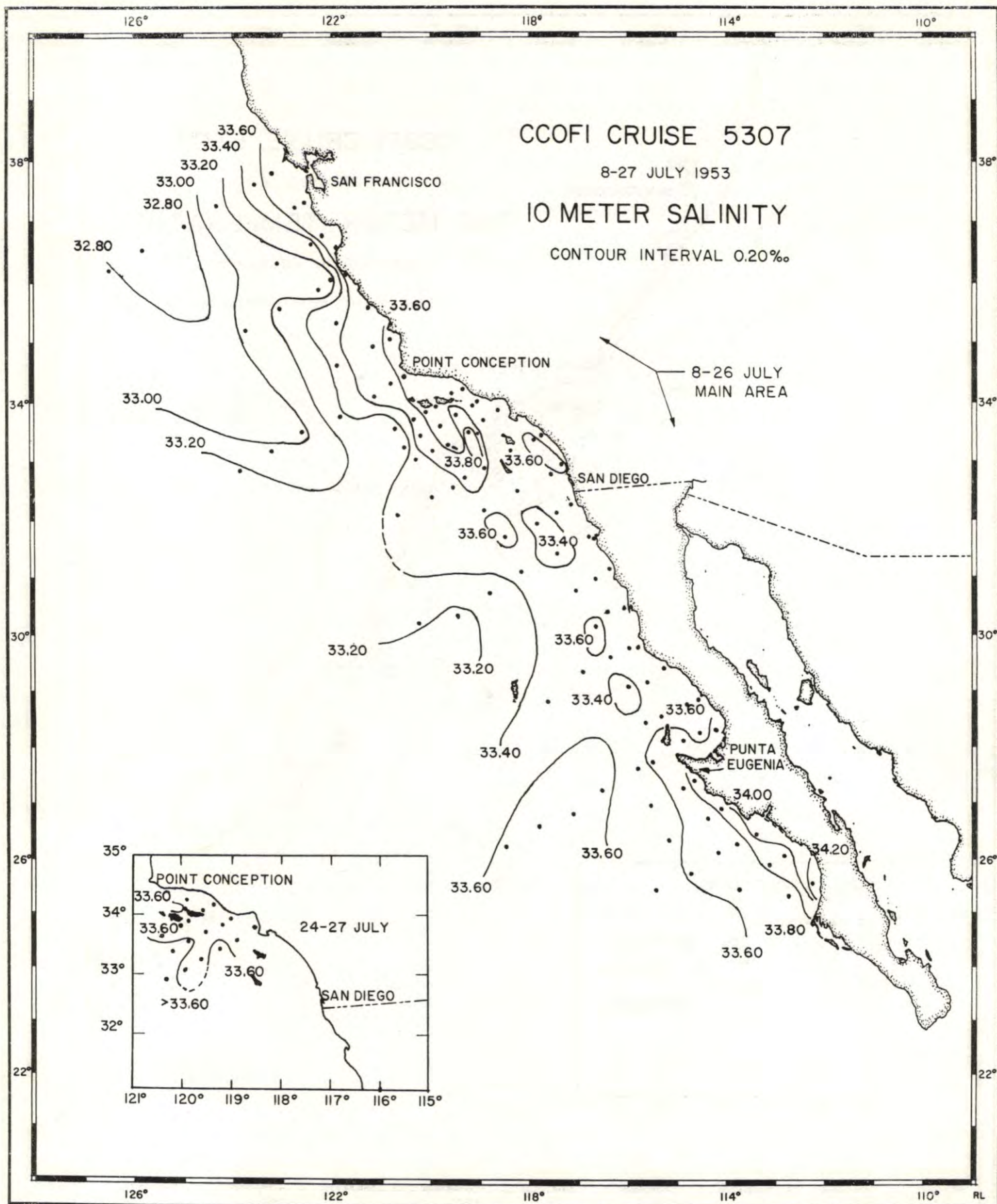


FIGURE 6

126° 122° 118° 114° 110°

CCOFI CRUISE 5307

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200 METER TEMPERATURE

CONTOUR INTERVAL 1.0°C

--- INDICATES 200 METER BOTTOM CONTOUR

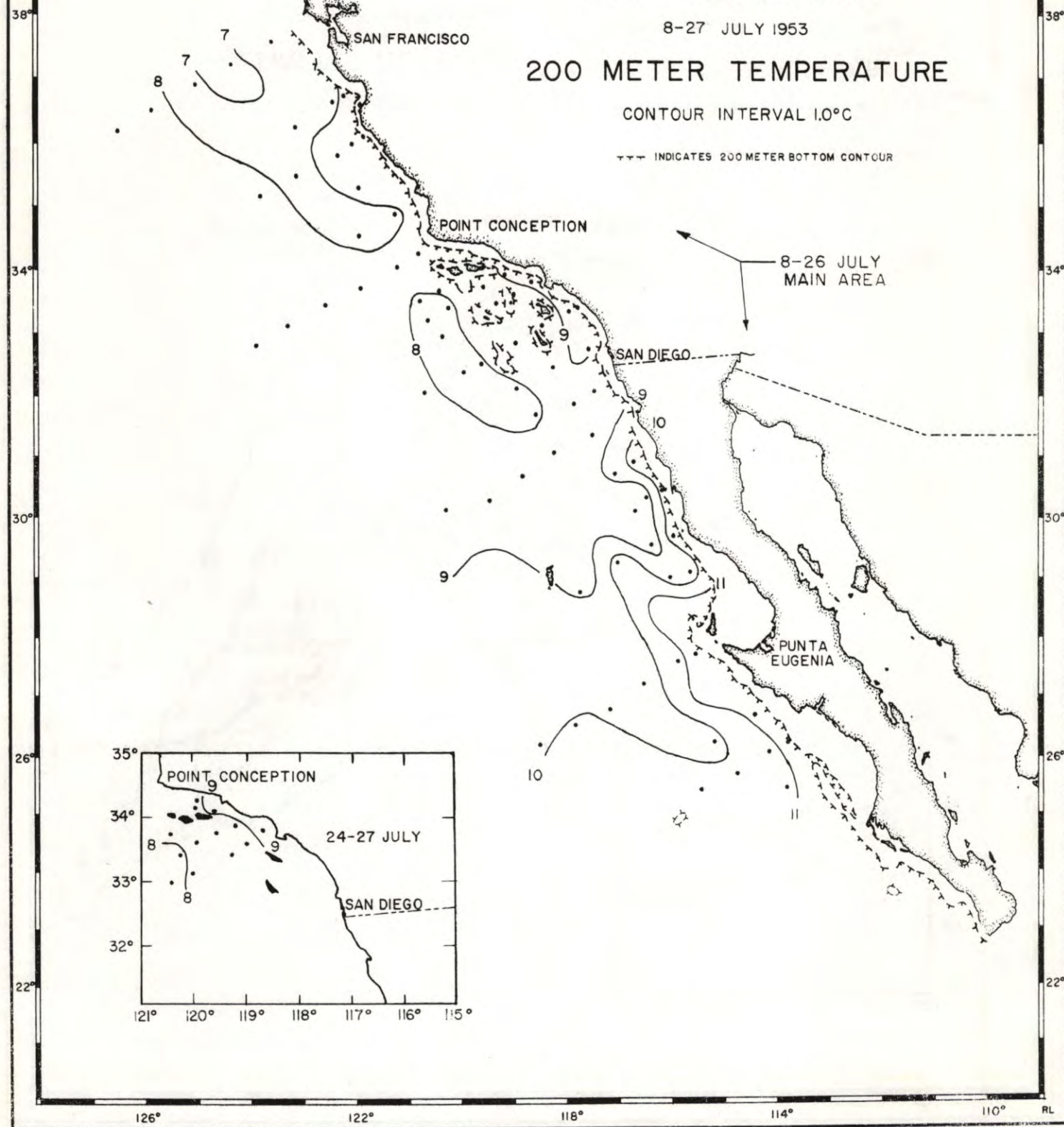


FIGURE 7

FROM H.O. CHART 0527

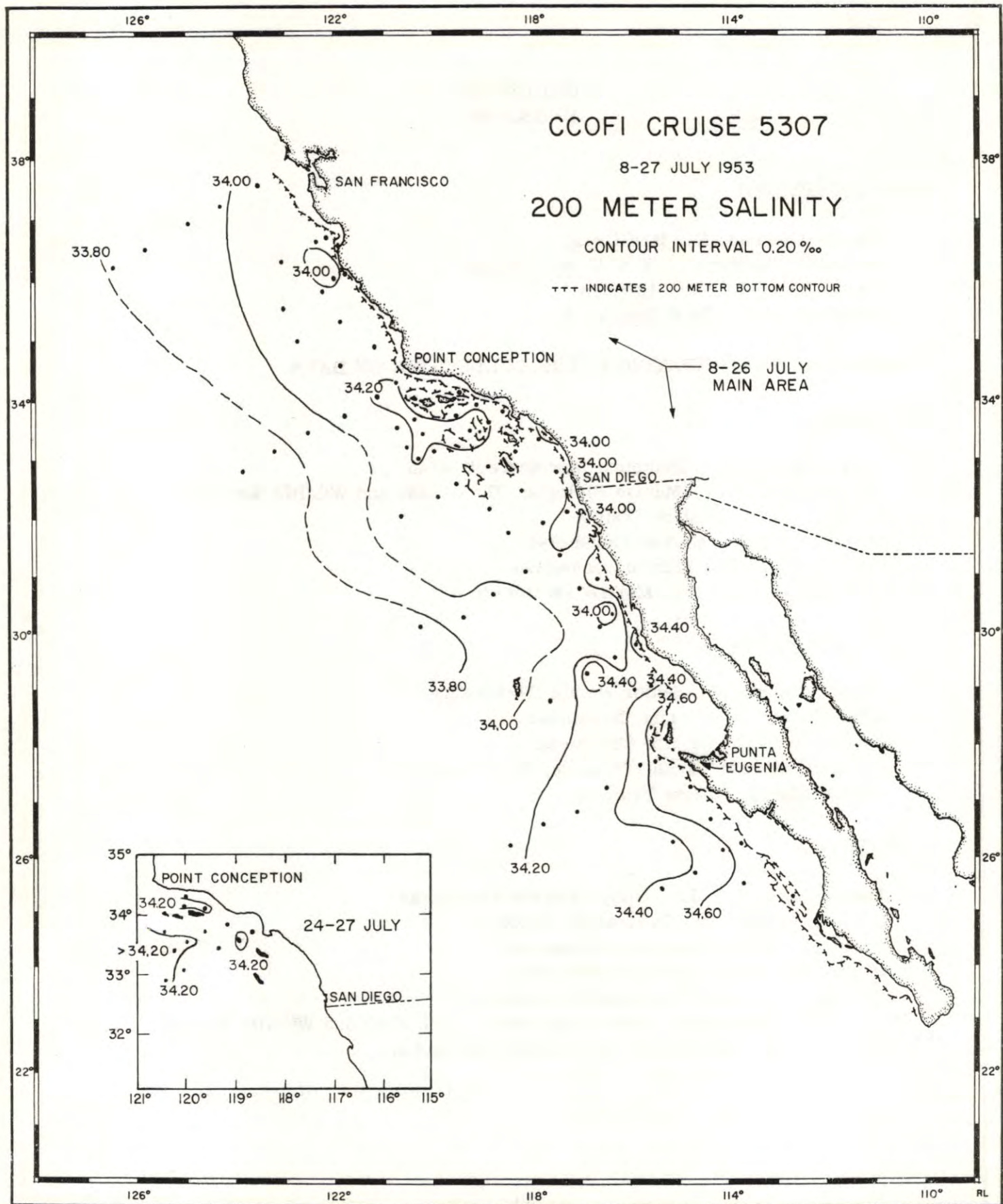


FIGURE 8

CRUISE 5307
PERSONNEL

SHIPS' CAPTAINS

Davis, Laurence E., R/V Crest
Newbegin, Robert C., R/V E. W. Scripps
Ferris, Noel L., R/V Horizon
Greenway, Glen, R/V Paolina-T

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Crest

Mead, Richard V., Principal Marine Technician
Counts, Robert C., Marine Biologist, U. S. Fish and Wildlife Service
Harvey, J. H., Student Trainee
Kivlen, John C., Marine Technician
Lance, James R., Marine Technician
Stover, Allan J., Jr., Marine Technician

R/V E. W. Scripps

Gilkey, Robert W., Senior Marine Technician
King, Robert D., Marine Technician
Kivlen, John C., Marine Technician
Plunkett, Robert, Student Trainee, U. S. Navy
Schink, David, Student Trainee

R/V Horizon

Payne, Miles M., Jr., Senior Marine Technician
Carter, William D., Laboratory Assistant
Freeman, David, Laboratory Assistant
Hinds, James W., Marine Technician
Jennings, Feenan D., Research Assistant
Livingstone, Robert L., Marine Biologist, U. S. Fish and Wildlife Service
Schwartzlose, Richard A., Laboratory Technician

R/V Paolina-T

Arthur, David K., Marine Biologist
Berner, Leo D., Jr., Graduate Research Biologist
Greenbaum, Richard H., Marine Technician
Hill, Donald, Honeywell Regulator Company, Minneapolis, Minnesota
Kelly, Arthur I., Research Assistant
Schaefer, Dr. Milner B., Director, Inter-American Tropical Tuna Commission

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

60.55

CREST; July 11, 1953; 1613 GCT; 37°49'N, 123°16.5'W; sounding, 62 fm; wind, 300°, force 6; weather, fog; sea, rough; wire angle, 10°.

0	11.05	33.61		0	11.05	33.61		25.71	229	0.00
10	11.02	33.64		10	11.02	33.64		25.73	227	0.02
19	10.13	33.69		20	10.10	33.70		25.94	207	0.04
29	8.74	33.72		30	8.72	33.75		26.20	183	0.06
49	8.47	33.90		50	8.46	33.90		26.36	167	0.10
74	8.40	33.84		75	(8.40)	(33.84)		(26.32)	(171)	(0.14)

60.60

CREST; July 11, 1953; 1316 GCT; 37°37'N, 123°37'W; sounding, 1750 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 30°.

0	13.03	33.50		0	13.03	33.50		25.25	273	0.00
9	12.96	33.57		10	12.93	33.57		25.32	266	0.03
17	12.15	33.57		20	11.92	33.57		25.51	248	0.05
30	11.42	33.62		30	11.42	33.62		25.65	235	0.07
43	10.82	33.64		50	10.34	33.66		25.87	214	0.12
56	10.00	33.67		75	9.51	33.79		26.11	191	0.17
68	9.70	33.68		100	9.02	33.81		26.20	183	0.22
83	9.35	33.81		150	8.11	33.93		26.44	160	0.31
101	8.99	33.81		200	7.59	34.03		26.59	146	0.38
123	8.54	33.90		250	7.02	34.02		26.67	138	0.46
159	8.00	33.94		300	6.61	34.06		26.75	130	0.53
198	7.62	34.03		400	6.30	34.28		26.97	110	0.65
236	7.15	34.02		500	(5.78)	(34.28)		(27.03)	(104)	(0.76)
319	6.51	34.09								
403	6.28	34.29								
498	5.80	34.28								

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

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CREST; July 11, 1953; 0305 GCT; 37°15'N, 124°21'W; sounding, 2000+ fm; wind, 330°, force 4; weather, fog; sea, slight; wire angle, 19°.

6070

0	12.81	33.12		0	12.81	33.12		25.00	297	0.00
10	12.82	33.12		10	12.82	33.12		24.99	298	0.03
19	11.28	33.12		20	11.20	33.12		25.30	268	0.06
33	9.94	33.13		30	10.18	33.12		25.48	251	0.08
47	9.10	33.27		50	9.09	33.32		25.81	220	0.13
61	9.06	33.44		75	8.48	33.53		26.07	195	0.18
74	8.51	33.53		100	8.16	33.63		26.20	183	0.23
92	8.30	33.61		150	7.53	33.89		26.49	155	0.32
114	7.93	33.68		200	6.81	33.96		26.65	140	0.39
139	7.74	33.86		250	6.38	34.00		26.74	131	0.49
181	6.97	33.94		300	6.04	34.05		26.82	124	0.53
225	6.64	33.99		400	5.68	34.17		26.96	110	0.65
269	6.21	34.01		500	5.16	34.23		27.07	100	0.76
364	5.85	34.13								
457	5.40	34.21								
557	4.85	34.24								

CREST; July 11, 1953; 0208 GCT; 36°57'N, 125°01'W; sounding, 2130 fm; wind, 320°, force 4; weather, fog; sea, slight; wire angle, 16°.

6080

0	14.54	32.76	6.37	0	14.54	32.76	6.37	24.37	357	0.00
10	14.08	32.79	6.42	10	14.08	32.79	6.42	24.49	345	0.04
24	13.57	32.81	6.64	20	13.76	32.80	6.63	24.56	339	0.07
53	10.33	32.96	5.79	30	13.10	32.83	6.62	24.71	324	0.10
76	9.12	33.16	4.99	50	10.80	32.93	5.95	25.22	276	0.16
104	8.42	33.54	3.83	75	9.15	33.16	5.00	25.68	232	0.23
153	7.66	33.89	2.87	100	8.51	33.48	3.99	26.03	199	0.28
203	7.02	33.99	2.81	150	7.69	33.88	2.87	26.46	158	0.37
257	6.40	34.02	2.32	200	7.07	33.98	2.81	26.63	142	0.45
302	5.94	34.04	1.66	250	6.48	34.02	2.41	26.74	131	0.52
407	5.62	34.19	0.75	300	5.96	34.04	1.69	26.82	124	0.58
508	5.10	34.20	0.47	400	5.64	34.19	0.78	26.98	109	0.70
610	4.66	34.29	0.16	500	5.13	34.20	0.51	27.05	102	0.81
808	4.15	34.39	0.16	600	4.68	34.28	0.18	27.16	92	0.92
1012	3.62	34.46	0.55	700	4.43	34.35	0.14	27.25	83	1.01
1209	3.20	34.52	0.74	800	4.17	34.39	0.16	27.31	77	1.10
				1000	3.65	34.46	0.52	27.41	68	1.26

CREST; July 10, 1953; 2044 GCT; 36°32'N, 125°51'W; sounding, 2400 fm; wind, 300°, force 2; weather, cloudy; sea, slight; wire angle, 15°.

6090

0	14.77	-		0	14.77	(32.60)		(24.19)	(374)	(0.00)
10	14.04	-		10	14.04	(32.63)		(24.37)	(357)	(0.04)
19	14.06	32.69		20	14.04	32.70		24.42	352	(0.07)
33	14.02	32.80		30	14.03	32.79		24.50	344	(0.11)
47	13.96	32.82		50	13.93	32.83		24.55	340	(0.18)
61	13.68	32.84		75	11.37	32.86		25.07	290	(0.26)
74	11.43	32.86		100	10.55	32.83		25.19	279	(0.33)
92	10.80	32.82		150	8.54	33.31		25.89	212	(0.45)
112	10.02	32.89		200	8.19	33.88		26.39	164	(0.55)
137	8.70	33.15		250	7.51	33.98		26.57	148	(0.63)
180	8.29	33.72		300	7.08	34.02		26.66	139	(0.70)
224	8.05	33.99		400	6.21	34.17		26.89	117	(0.83)
268	7.29	33.97		500	5.28	34.17		27.01	106	(0.95)
362	6.62	34.16								
453	5.60	34.13								
552	5.00	34.20								

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

60.100

CREST; July 10, 1953; 1626 GCT; 36°14'N, 126°30.5'W; sounding, 2000+ fm; wind, 310°, force 2; weather, cloudy; sea, slight; wire angle, 02°.

0	15.30	32.83	5.93	0	15.30	32.83	5.93	24.26	367	0.00
10	15.08	32.83	6.43	10	15.08	32.83	6.43	24.30	363	0.04
25	14.89	32.87	6.15	20	14.92	32.85	6.37	24.35	359	0.07
55	14.86	32.95	5.84	30	14.88	32.89	6.06	24.39	355	0.11
79	12.68	32.92	6.29	50	14.87	32.95	5.86	24.44	350	0.18
108	10.37	32.94	5.69	75	13.00	32.92	6.28	24.80	316	0.26
160	8.96	33.41	4.48	100	10.96	32.92	5.91	25.19	279	0.34
211	8.44	33.91	2.57	150	9.12	33.31	4.79	25.80	221	0.46
266	7.74	34.03	2.37	200	8.57	33.84	2.72	26.30	173	0.56
313	7.18	34.05	2.09	250	7.95	34.01	2.42	26.53	151	0.65
421	6.37	34.15	1.13	300	7.32	34.05	2.19	26.65	140	0.72
525	5.48	34.17	0.72	400	6.53	34.13	1.27	26.82	124	0.86
629	5.02	34.27	0.45	500	5.69	34.17	0.81	26.96	110	0.98
833	4.17	34.39	0.34	600	5.15	34.24	0.50	27.08	99	1.09
1041	3.68	34.52	0.52	700	4.71	34.32	0.40	27.19	89	1.20
1240	3.16	34.54	0.73	800	4.28	34.37	0.36	27.28	80	1.29
				1000	3.78	34.50	0.49	27.43	66	1.45

63.52

CREST; July 13, 1953; 0152 GCT; 37°19'N, 122°36'W; sounding, 48 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 00°.

0	12.31	33.60		0	12.31	33.60		25.46	253	0.00
10	10.71	33.74		10	10.71	33.74		25.87	214	0.02
20	9.69	33.85		20	9.69	33.85		26.13	189	0.04
30	8.90	33.83		30	8.90	33.83		26.24	179	0.06
50	8.52	33.86		50	8.52	33.86		26.32	171	0.10

63.55

CREST; July 12, 1953; 2320 GCT; 37°14'N, 122°49'W; sounding, 180 fm; wind, 310°, force 4; weather, cloudy; sea, very rough; wire angle, 35°.

0	12.15	33.52		0	12.15	33.52		25.43	256	0.00
8	12.14	33.66		10	12.12	33.67		25.55	244	0.02
20	11.24	33.68		20	11.24	33.68		25.73	227	0.05
41	10.00	33.66		30	10.55	33.67		25.84	217	0.07
60	8.74	33.73		50	9.30	33.68		26.06	196	0.11
80	8.50	33.83		75	8.55	33.81		26.28	175	0.16
122	7.94	33.94		100	8.13	33.89		26.40	164	0.20
161	7.95	34.12		150	7.96	34.06		26.56	148	0.28
201	7.48	34.20		200	7.50	34.20		26.74	131	0.35
243	-	34.13								

67.53

CREST; July 13, 1953; 0645 GCT; 36°45'N, 122°14.5'W; sounding, 440 fm; wind, 310°, force 3; weather, fog; sea, very rough; wire angle, 25°.

0	10.59	33.74		0	10.59	33.74		25.89	212	0.00
8	10.61	33.72		10	10.62	33.72		25.87	214	0.02
18	10.60	33.73		20	10.59	33.73		25.88	213	0.04
32	10.21	33.68		30	10.28	33.69		25.90	211	0.06
49	10.12	33.72		50	10.11	33.73		25.96	205	0.11
63	10.11	33.75		75	9.61	33.73		26.05	197	0.16
77	9.51	33.73		100	8.88	33.82		26.23	180	0.20
100	8.88	33.82		150	8.52	34.04		26.46	158	0.29
121	8.74	33.93		200	8.23	34.04		26.51	153	0.37
146	8.56	34.04		250	7.94	34.10		26.60	145	0.44
191	8.28	34.04		300	7.58	34.14		26.68	137	0.52
239	8.04	34.09		400	6.93	34.18		26.80	126	0.65
279	7.68	34.12		500	6.00	34.20		26.94	112	0.78
376	7.20	34.18								
473	6.20	34.19								
575	5.51	34.26								

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

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CREST; July 13, 1953; 1017 GCT; 36°39'N, 122°36'W; sounding, 1100 fm; wind, 310°, force 3;
weather, cloudy; sea, very rough; wire angle, 33°.

67.55

0	12.96	33.30		0	12.96	33.30		25.11	286	0.00
8	12.96	33.25		10	12.96	33.25		25.07	290	0.03
17	12.95	33.25		20	12.93	33.26		25.08	289	0.06
29	11.92	33.28		30	11.70	33.28		25.33	265	0.09
46	10.53	33.27		50	10.39	33.30		25.58	242	0.14
58	10.17	33.52		75	9.80	33.57		25.89	212	0.19
70	9.82	33.54		100	9.53	33.86		26.16	186	0.24
88	9.78	33.73		150	8.72	34.05		26.44	160	0.33
106	9.38	33.91		200	7.58	34.02		26.59	146	0.41
128	8.98	33.99		250	7.72	34.15		26.67	138	0.48
166	8.50	34.07		300	7.60	34.27		26.78	128	0.55
208	7.56	34.01		400	6.74	34.29		26.92	114	0.68
244	7.72	34.14		500	5.99	34.23		26.97	110	0.80
330	7.42	34.30								
418	6.60	34.28								
514	5.88	34.22								

CREST; July 13, 1953; 1455 GCT; 36°19'N, 123°09'W; sounding, 1750 fm; wind, 310°, force 5;
weather, cloudy; sea, very rough; wire angle, 30°.

67.65

0	13.93	33.14		0	13.93	33.14		24.79	317	0.00
8	13.94	33.18		10	13.94	33.18		24.81	315	0.03
21	13.86	33.15		20	13.88	33.15		24.80	316	0.06
34	12.19	33.22		30	12.80	33.18		25.04	293	0.09
52	10.61	33.30		50	10.69	33.29		25.52	247	0.15
64	10.36	33.39		75	9.22	33.53		25.95	206	0.20
80	9.03	33.58		100	8.66	33.71		26.18	184	0.25
100	8.66	33.71		150	7.99	33.97		26.49	155	0.34
122	8.34	33.84		200	7.56	34.05		26.61	144	0.42
145	8.06	33.96		250	7.19	34.09		26.70	135	0.49
191	7.63	34.05		300	6.80	34.13		26.78	128	0.56
238	7.28	34.07		400	5.48	34.07		26.90	116	0.68
286	6.93	34.14		500	5.01	34.16		27.03	104	0.80
381	5.65	34.07		600	(4.98)	(34.28)		(27.13)	(94)	(0.90)
486	5.02	34.14								
592	4.98	34.27								

CREST; July 9, 1953; 0902 GCT; 36°10'N, 121°46'W; sounding, 205 fm; wind, 310°, force 2;
weather, clear; sea, moderate; wire angle, 03°.

70.51

0	10.98	33.61		0	10.98	33.61		25.72	228	0.00
10	9.03	33.73		10	9.03	33.73		26.14	188	0.02
48	9.01	33.79		20	9.02	33.75		26.16	186	0.04
72	9.16	33.96		30	9.01	33.76		26.17	185	0.06
97	9.03	34.02		50	9.02	33.80		26.20	183	0.10
144	8.93	34.10		75	9.16	33.97		26.31	172	0.14
196	8.86	34.17		100	9.02	34.03		26.38	166	0.18
242	8.76	34.21		150	8.93	34.11		26.45	159	0.26
288	8.57	34.24		200	8.85	34.17		26.51	153	0.34
295	8.44	34.25		250	8.74	34.21		26.56	148	0.42
				300	(8.37)	(34.25)		(26.65)	(140)	(0.50)

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OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ_{T3}	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

7055

CREST; July 9, 1953; 1217, 1255 GCT; 36°03'N, 122°02'W; sounding, 650 fm; wind, 120°, force 5; weather, partly cloudy; sea, rough; wire angle, 30°, 35°

0	13.39	33.12		0	13.39	33.12		24.88	308	0.00
8	13.38	33.07		10	13.38	33.07		24.84	312	0.03
21	13.36	33.10		20	13.37	33.10		24.87	309	0.06
43	12.28	33.13		30	13.27	33.12		24.90	306	0.09
64	10.77	33.25		50	11.37	33.16		25.30	268	0.15
84	10.45	33.34		75	10.58	33.30		25.55	244	0.22
129	9.64	33.54		100	10.17	33.40		25.70	230	0.28
168	9.09	33.81		150	9.36	33.68		26.05	197	0.38
206	8.14	33.94		200	8.31	33.92		26.40	164	0.47
244	7.58	34.06		250	7.52	34.06		26.63	142	0.55
326	6.99	34.09		300	7.14	34.08		26.70	135	0.62
409	6.31	34.17		400	6.41	34.16		26.86	120	0.76
				500	5.39	34.20		27.02	105	0.88
504	5.38	34.20		600	5.19	34.29		27.11	96	0.98
591	5.22	34.28		700	4.78	34.36		27.22	86	1.08
680	4.86	34.35		800	4.50	34.40		27.28	80	1.17
862	4.34	34.42		1000	(4.06)	(34.45)		(27.36)	(73)	(1.34)

7060

CREST; July 9, 1953; 1539 GCT; 35°55.5'N, 122°17.5'W; sounding, 1200 fm; wind, 310°, force 2; weather, cloudy; sea, moderate; wire angle, 03°

0	13.22	33.10	5.96	0	13.22	33.10	5.96	24.90	306	0.00
10	13.19	33.14	6.09	10	13.19	33.14	6.09	24.94	302	0.03
25	12.89	33.11	6.01	20	13.00	33.12	6.06	24.96	300	0.06
55	11.74	33.11	5.75	30	12.78	33.11	5.98	24.99	298	0.09
78	10.14	33.26	5.15	50	12.04	33.11	5.81	25.14	283	0.15
106	9.72	33.56	4.52	75	10.20	33.23	5.21	25.56	243	0.22
158	8.89	33.90	2.99	100	9.82	33.50	4.66	25.83	218	0.27
210	8.51	34.06	2.04	150	8.98	33.86	3.21	26.25	178	0.37
267	8.16	34.18	1.81	200	8.57	34.03	2.14	26.45	159	0.46
314	7.35	34.14	1.57	250	8.29	34.16	1.87	26.59	146	0.54
422	6.87	34.29	0.70	300	7.50	34.15	1.64	26.70	135	0.61
526	5.25	34.18	0.77	400	7.05	34.28	0.79	26.87	119	0.74
632	5.06	34.32	0.45	500	5.51	34.20	0.78	27.00	107	0.86
837	4.28	34.44	0.39	600	5.14	34.28	0.53	27.11	96	0.97
1045	3.65	34.54	0.69	700	4.81	34.37	0.42	27.22	86	1.07
1247	3.32	34.58	0.84	800	4.41	34.42	0.40	27.30	78	1.16
				1000	3.75	34.53	0.63	27.46	63	1.31

7070

CREST; July 9, 1953; 2120 GCT; 35°34.5'N, 123°07'W; sounding, 2000+ fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°

0	14.68	33.23		0	14.68	33.23		24.70	325	0.00
9	14.40	33.27		10	14.39	33.27		24.79	317	0.03
19	14.28	33.21		20	14.27	33.21		24.77	319	0.06
25	13.21	33.28		30	12.84	33.37		25.18	280	0.09
39	12.23	33.42		50	11.50	33.40		25.46	253	0.15
52	11.34	33.40		75	9.45	33.55		25.93	208	0.20
65	10.32	33.46		100	8.78	33.67		26.13	189	0.26
82	9.14	33.60		150	7.96	33.94		26.47	157	0.34
101	8.74	33.68		200	7.44	34.06		26.64	141	0.42
123	8.45	33.83		250	7.32	34.16		26.73	132	0.49
153	7.91	33.95		300	7.11	34.23		26.82	124	0.56
187	7.50	34.04		400	6.50	34.28		26.94	112	0.68
224	7.39	34.11		500	(5.81)	(34.28)		(27.03)	(104)	(0.79)
309	7.06	34.24								
395	6.54	34.28								
491	5.88	34.28								

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δT_{30}	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm}^3/\text{g}$	dyn. m

CREST; July 10, 1953; 0226 GCT; 35°13'N, 123°48'W; sounding, 2200 fm; wind, 330°, force 4;
weather, fog; sea, moderate; wire angle, 47°.

7080

0	13.58	33.03	6.18	0	13.58	33.03	6.18	24.77	319	0.00
7	13.58	33.05	6.20	10	13.54	33.04	6.21	24.79	317	0.03
17	13.18	33.01	6.22	20	13.11	33.01	6.25	24.85	311	0.06
34	12.86	33.07	6.30	30	12.94	33.03	6.27	24.90	306	0.09
51	12.57	33.15	6.44	50	12.58	33.14	6.44	25.06	291	0.15
68	12.23	33.34	6.07	75	12.02	33.36	5.94	25.33	265	0.22
101	10.66	33.40	5.37	100	10.74	33.40	5.39	25.60	240	0.29
128	9.26	33.59	4.20	150	8.82	33.74	3.26	26.18	184	0.40
153	8.75	33.76	3.14	200	8.30	34.00	2.31	26.46	158	0.48
175	8.42	33.90	2.77	250	7.40	34.05	1.99	26.64	141	0.56
221	8.10	34.04	2.04	300	7.06	34.09	1.71	26.72	133	0.63
265	7.22	34.05	1.97	400	6.22	34.13	1.13	26.86	120	0.76
315	6.98	34.10	1.59	500	5.63	34.19	0.68	26.98	109	0.88
420	6.08	34.14	1.03	600	5.19	34.27	0.34	27.10	97	0.99
534	5.48	34.22	0.53	700	(4.77)	(34.35)		(27.21)	(87)	(1.09)
685	4.82	34.34	0.16							

CREST; July 14, 1953; 0419 GCT; 35°37'N, 121°17.5'W; sounding, 55 fm; wind, 300°, force 2;
weather, cloudy; sea, rough; wire angle, 07°.

7350

0	9.98	33.78		0	9.98	33.78		26.02	200	0.00
10	9.99	33.79		10	9.99	33.79		26.03	199	0.02
20	9.92	33.84		20	9.92	33.84		26.08	194	0.04
30	9.63	-		30	9.63	33.88		26.16	186	0.06
50	9.42	33.94		50	9.42	33.94		26.24	179	0.10
74	9.23	34.01		75	(9.22)	(34.01)		(26.33)	(170)	(0.14)

CREST; July 13, 1953; 2325 GCT; 35°21'N, 121°54.5'W; sounding, 1220 fm; wind, 310°, force 5;
weather, partly cloudy; sea, very rough; wire angle, 27°.

7360

0	11.58	33.40		0	11.58	33.40		25.45	254	0.00
8	11.56	33.43		10	11.54	33.44		25.48	251	0.02
22	11.40	33.49		20	11.45	33.49		25.54	245	0.05
35	9.47	33.64		30	10.00	33.63		25.90	211	0.07
53	9.02	33.62		50	9.11	33.63		26.05	197	0.11
65	8.81	33.67		75	8.62	33.74		26.21	182	0.16
82	8.52	33.78		100	8.44	33.89		26.36	167	0.20
103	8.44	33.92		150	8.84	34.14		26.49	155	0.29
127	8.84	34.13		200	8.32	34.14		26.57	148	0.36
150	8.84	34.14		250	7.64	34.12		26.66	139	0.44
198	8.38	34.14		300	7.42	34.23		26.77	128	0.51
247	7.67	34.12		400	6.96	34.28		26.88	118	0.64
295	7.45	34.22		500	6.33	34.32		26.99	108	0.76
391	7.00	34.27		600	(5.54)	(34.30)		(27.08)	(99)	(0.86)
493	6.38	34.32								
597	5.58	34.30								

CREST; July 14, 1953; 0822 GCT; 35°05'N, 120°54'W; sounding, 97 fm; wind, 320°, force 2;
weather, partly cloudy; sea, very rough; wire angle, 00°.

7750

0	10.83	33.52		0	10.83	33.52		25.67	233	0.00
10	10.18	33.58		10	10.18	33.58		25.83	218	0.02
20	9.76	33.57		20	9.76	33.57		25.90	211	0.04
30	9.55	33.59		30	9.55	33.59		25.95	206	0.06
50	9.20	33.63		50	9.20	33.63		26.04	198	0.11
74	8.83	33.71		75	8.83	33.71		26.16	186	0.15
98	8.94	33.84		100	8.95	33.85		26.25	178	0.20
121	8.96	33.96								

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

77.55

CREST; July 14, 1953; 1121 GCT; 34°56'N, 121°14'W; sounding, 310 fm; wind, 320°, force 4;
weather, fog; sea, rough; wire angle, 15°.

0	13.15	33.77		0	13.15	33.77		25.43	256	0.00
9	13.11	33.78		10	13.10	33.78		25.45	254	0.02
24	11.31	33.74		20	12.00	33.75		25.64	236	0.05
48	9.29	33.73		30	10.75	33.74		25.86	215	0.07
72	8.84	33.82		50	9.24	33.74		26.11	191	0.11
95	8.55	33.94		75	8.78	33.84		26.27	176	0.16
147	8.16	34.07		100	8.51	33.96		26.40	164	0.20
193	7.84	34.10		150	8.13	34.07		26.55	149	0.28
238	7.64	34.20		200	7.82	34.11		26.62	143	0.36
284	7.55	34.22		250	7.63	34.21		26.73	132	0.43
334	7.47	34.34		300	7.53	34.27		26.79	127	0.49
380	7.13	34.30		400	7.04	34.30		26.88	118	0.62
427	6.91	34.31		500	(6.61)	(34.36)		(26.99)	(108)	(0.74)
474	6.70	34.34								

77.65

CREST; July 14, 1953; 1645 GCT; 34°33'N, 121°45'W; sounding, 2050 fm; wind, 310°, force 4;
weather, cloudy; sea, rough; wire angle, 22°.

0	14.29	33.43		0	14.29	33.43		24.93	303	0.00
9	14.28	33.42		10	14.27	33.42		24.93	303	0.03
18	13.63	33.55		20	13.40	33.59		25.24	274	0.06
32	11.56	33.72		30	11.70	33.70		25.66	234	0.08
50	10.09	33.81		50	10.09	33.81		26.03	199	0.13
64	9.58	33.82		75	9.20	33.80		26.17	185	0.18
76	9.19	33.80		100	8.74	33.89		26.31	172	0.22
97	8.81	33.89		150	7.97	34.00		26.51	153	0.30
117	8.43	33.91		200	7.48	34.08		26.65	140	0.38
143	8.05	33.99		250	7.06	34.14		26.75	130	0.45
194	7.54	34.07		300	6.71	34.12		26.79	127	0.51
242	7.12	34.14		400	6.01	34.20		26.94	112	0.64
284	6.80	34.11		500	5.35	34.26		27.07	100	0.75
387	6.12	34.19		600	5.08	34.33		27.16	92	0.85
486	5.40	34.25								
610	5.06	34.34								

80.51

CREST; July 16, 1953; 1648 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 310°, force 5;
weather, partly cloudy; sea, rough; wire angle, 00°.

0	13.47	33.61		0	13.47	33.61		25.24	274	0.00
10	11.41	33.56		10	11.41	33.56		25.60	240	0.03
20	10.19	33.60		20	10.19	33.60		25.85	216	0.05
30	9.87	33.65		30	9.87	33.65		25.94	207	0.07
50	9.64	33.70		50	9.64	33.70		26.02	200	0.11

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

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CREST; July 16, 1953; 1412 GCT; 34°19'N, 120°48'W; sounding, 414 fm; wind, 010°, force 4; weather, cloudy; sea, rough; wire angle, 05°.

8055

0	13.73	33.61		0	13.73	33.61		25.19	279	0.00
10	13.73	33.60		10	13.73	33.60		25.18	280	0.03
20	13.55	33.63		20	13.55	33.63		25.24	274	0.06
35	10.88	33.65		30	12.35	33.64		25.49	250	0.08
55	9.34	33.76		50	9.54	33.73		26.06	196	0.13
69	9.13	33.85		75	9.05	33.90		26.27	176	0.17
84	8.96	33.96		100	8.87	34.05		26.42	162	0.22
107	8.82	34.09		150	8.64	34.14		26.52	152	0.30
131	8.70	34.16		200	8.47	34.20		26.60	145	0.37
159	8.60	34.14		250	8.28	34.25		26.66	139	0.44
210	8.44	34.21		300	8.09	34.25		26.69	136	0.52
266	8.21	34.25		400	7.63	34.27		26.78	128	0.65
312	8.04	34.25		500	6.65	34.32		26.95	111	0.78
420	7.48	34.28		600	5.92	34.34		27.06	101	0.89
525	6.44	34.33								
631	5.72	34.34								

CREST; July 16, 1953; 1008 GCT; 34°07.5'N, 121°11'W; sounding, 1230 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 20°.

8060

0	13.54	33.73	6.48	0	13.54	33.73	6.48	25.32	266	0.00
9	13.53	33.71	6.37	10	13.53	33.71	6.36	25.31	267	0.03
23	12.67	33.72	5.94	20	12.87	33.72	6.07	25.45	254	0.05
51	11.19	33.71	5.22	30	12.32	33.72	5.75	25.55	244	0.08
74	9.64	33.71	3.72	50	11.28	33.71	5.26	25.74	226	0.12
101	8.94	33.92	2.84	75	9.63	33.72	3.60	26.04	198	0.18
150	8.58	34.14	2.15	100	8.96	33.91	2.88	26.29	174	0.22
198	8.26	34.21	1.30	150	8.58	34.14	2.15	26.53	151	0.31
250	7.81	34.27	0.94	200	8.23	34.21	1.25	26.64	141	0.38
296	7.50	34.29	0.71	250	7.81	34.27	0.94	26.75	130	0.45
398	6.70	34.29	0.50	300	7.47	34.29	0.70	26.81	125	0.52
498	6.04	34.32	0.35	400	6.69	34.29	0.50	26.92	114	0.64
598	5.43	34.37	0.30	500	6.02	34.32	0.34	27.03	104	0.76
796	4.60	34.40	0.42	600	5.43	34.37	0.30	27.15	92	0.86
998	4.04	34.44	0.55	700	4.95	34.38	0.35	27.21	87	0.96
1191	3.46	34.48	0.72	800	4.58	34.40	0.42	27.27	81	1.05
				1000	4.03	34.44	0.55	27.36	73	1.22

CREST; July 16, 1953; 0350 GCT; 33°47'N, 121°50'W; sounding, 2000 fm; wind, 310°, force 5; weather, cloudy; sea, very rough; wire angle, 30°.

8070

0	14.76	33.43		0	14.76	33.43		24.83	313	0.00
8	14.74	33.40		10	14.70	33.40		24.82	314	0.03
18	14.53	33.40		20	14.39	33.40		24.89	307	0.06
30	13.70	33.41		30	13.70	33.41		25.04	293	0.09
46	12.82	33.35		50	11.90	33.16		25.20	278	0.15
58	10.82	33.12		75	9.92	33.18		25.57	242	0.22
70	10.14	33.16		100	9.42	33.68		26.04	198	0.27
88	9.64	33.26		150	8.89	34.06		26.42	162	0.36
105	9.33	33.72		200	8.44	34.12		26.54	150	0.44
125	8.96	33.81		250	7.76	34.12		26.64	141	0.52
163	8.84	34.09		300	6.91	34.06		26.71	134	0.59
204	8.39	34.12		400	5.89	34.15		26.92	114	0.72
239	7.94	34.12		500	5.58	34.25		27.03	104	0.83
323	6.60	34.05								
412	5.82	34.17								
509	5.57	34.26								

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

8080 CREST; July 15, 1953; 2207 GCT; 33°29'N, 122°32'W; sounding, 2200 fm; wind, 360°, force 5; weather, cloudy; sea, rough; wire angle, 35°.

0	15.48	32.98	5.79	0	15.48	32.98	5.79	24.33	360	0.00
8	15.42	32.99	5.85	10	15.40	32.99	5.87	24.36	358	0.04
20	15.22	33.02	5.90	20	15.22	33.02	5.90	24.42	352	0.07
46	14.91	33.03	5.90	30	15.10	33.03	5.90	24.45	349	0.11
65	13.40	33.01	6.26	50	14.76	33.03	5.93	24.53	341	0.18
88	11.42	33.00	6.12	75	12.26	33.00	6.24	25.01	296	0.26
129	9.57	33.37	5.17	100	10.78	33.03	5.94	25.30	268	0.33
170	8.82	33.78	2.91	150	9.13	33.62	3.48	26.04	198	0.44
216	8.20	33.99	2.43	200	8.38	33.94	2.54	26.41	163	0.54
255	7.94	34.07	2.28	250	7.98	34.06	2.31	26.56	148	0.62
345	6.83	34.14	1.42	300	7.34	34.11	1.87	26.69	136	0.69
432	6.13	34.20	0.71	400	6.43	34.19	0.91	26.88	118	0.82
521	5.37	34.21	0.64	500	5.50	34.21	0.67	27.01	106	0.94
698	4.68	34.34	0.37	600	5.02	34.27	0.45	27.12	95	1.05
884	4.10	34.44	0.58	700	4.66	34.34	0.37	27.21	87	1.14
1068	3.60	34.54	0.78	800	4.34	34.40	0.47	27.30	78	1.23
				1000	3.78	34.50	0.71	27.43	66	1.40

8090 CREST; July 15, 1953; 1631 GCT; 33°09'N, 123°15.5'W; sounding, 2250 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 26°.

0	16.35	33.09		0	16.35	33.09		24.22	371	0.00
9	16.36	33.10		10	16.36	33.10		24.23	370	0.04
18	16.37	33.10		20	16.37	33.10		24.22	371	0.07
32	16.36	33.12		30	16.36	33.12		24.24	369	0.11
49	15.91	33.12		50	15.85	33.12		24.36	358	0.18
62	14.33	33.03		75	13.19	32.97		24.81	315	0.27
75	13.19	32.97		100	12.00	33.00		25.06	291	0.34
96	12.30	33.00		150	9.59	33.35		25.75	225	0.48
116	11.05	32.98		200	8.66	33.76		26.22	181	0.58
142	9.84	33.29		250	7.86	33.99		26.52	152	0.66
188	8.82	33.63		300	7.11	34.00		26.64	141	0.74
239	8.10	33.98		400	6.18	34.05		26.80	126	0.88
282	7.30	34.00		500	5.35	34.15		26.98	109	1.00
382	6.36	34.03		600	(4.87)	(34.23)		(27.10)	(97)	(1.11)
480	5.48	34.13								
584	4.94	34.22								

80100 CREST; July 15, 1953; 1034 GCT; 32°49'N, 123°54'W; sounding, 2300 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 12°.

0	17.10	33.31	5.39	0	17.10	33.31	5.39	24.22	371	0.00
10	17.16	33.29	5.68	10	17.16	33.29	5.68	24.19	374	0.04
29	17.03	33.28	5.74	20	17.13	33.28	5.72	24.19	374	0.08
59	16.02	33.39	5.94	30	17.02	33.28	5.75	24.21	372	0.11
87	14.97	33.58	6.04	50	16.35	33.32	5.88	24.40	354	0.18
116	13.64	33.47	5.93	75	15.42	33.56	6.01	24.79	317	0.27
173	9.66	33.39	5.37	100	14.40	33.56	6.02	25.01	296	0.35
228	8.44	33.83	3.36	150	11.35	33.41	5.69	25.50	249	0.48
283	7.61	34.03	2.76	200	8.94	33.57	4.18	26.03	199	0.60
337	7.00	34.08	1.98	250	8.07	33.94	3.11	26.45	159	0.69
442	5.89	34.13	1.31	300	7.43	34.05	2.42	26.63	142	0.77
553	5.16	34.24	0.67	400	6.30	34.11	1.56	26.83	123	0.90
661	4.84	34.34	0.37	500	5.47	34.18	0.96	26.99	108	1.02
882	4.12	34.46	0.56	600	5.01	34.29	0.48	27.13	94	1.13
1096	3.65	34.52	0.75	700	4.70	34.37	0.38	27.23	85	1.23
1304	3.18	34.57	1.00	800	4.37	34.43	0.50	27.32	76	1.32
				1000	3.85	34.49	0.66	27.42	67	1.48

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

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E. W. SCRIPPS; July 24, 1953; 2221 GCT; 34°18'N, 119°58'W; sounding, 270 fm; wind, 270°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°.

81846

0	17.48	-		0	17.48	(33.59)		(24.34)	(360)	(0.00)
10	16.35	33.59		10	16.35	33.59		24.60	335	0.04
24	13.14	33.64		20	13.68	33.61		25.20	278	0.06
49	11.30	33.59		30	12.66	33.64		25.43	256	0.09
73	9.58	33.58		50	11.19	33.59		25.66	234	0.14
97	9.32	33.75		75	9.54	33.58		25.94	207	0.20
150	9.06	33.83		100	9.29	33.76		26.12	190	0.25
197	8.96	34.00		150	9.06	33.83		26.21	182	0.34
244	8.78	34.09		200	8.95	34.01		26.37	166	0.43
292	8.54	34.16		250	8.76	34.10		26.47	157	0.51
393	7.36	34.25		300	8.47	34.17		26.57	148	0.59
442	7.02	34.39		400	7.30	34.26		26.82	124	0.73

E. W. SCRIPPS; July 25, 1953; 0004 GCT; 34°10'N, 119°59.5'W; sounding, 270 fm; wind, 240°, force 4; weather, clear; sea, very rough; wire angle, 20°.

82347

0	16.68	33.62		0	16.68	33.62		24.55	340	0.00
9	16.68	33.60		10	16.67	33.60		24.54	341	0.03
23	13.48	33.55		20	15.00	33.55		24.88	308	0.07
47	11.48	33.68		30	12.65	33.56		25.37	262	0.10
71	10.08	33.78		50	11.26	33.69		25.73	227	0.14
94	9.32	33.92		75	9.90	33.80		26.05	197	0.20
145	9.06	34.11		100	9.28	33.95		26.27	176	0.24
193	8.86	34.24		150	9.03	34.13		26.45	159	0.33
239	8.61	34.18		200	8.82	34.23		26.56	148	0.41
288	8.20	34.22		250	8.53	34.19		26.58	147	0.48
389	7.28	34.25		300	8.09	34.23		26.68	137	0.56
437	6.96	34.24		400	7.19	34.25		26.82	124	0.69

CREST; July 16, 1953; 2239 GCT; 34°14'N, 119°22'W; sounding, 12 fm; wind, 270°, force 4; weather, cloudy; sea, moderate; wire angle, 00°.

8340

0	19.22	33.61		0	19.22	33.61		23.92	400	0.00
5	19.20	33.59		10	18.64	33.56		24.03	389	0.04
10	18.64	33.56								
15	16.03	33.56								

E. W. SCRIPPS; July 24, 1953; 1648 GCT; 34°14'N, 119°22'W; sounding, 16 fm; wind, calm; weather, light fog; sea, slight; wire angle, 00°.

8340

0	17.12	33.53		0	17.12	33.53		24.38	356	0.00
10	14.08	33.53		10	14.08	33.53		25.06	291	0.03
20	11.44	33.54		20	11.44	33.54		25.58	242	0.06

CREST; July 17, 1953; 0041 GCT; 34°08'N, 119°34'W; sounding, 134 fm; wind, 260°, force 5; weather, cloudy; sea, rough; wire angle, 18°.

8343

0	18.32	33.58		0	18.32	33.58		24.13	380	0.00
9	17.71	33.59		10	17.50	33.59		24.33	361	0.04
23	14.11	33.55		20	15.00	33.55		24.88	308	0.07
47	10.45	33.63		30	12.75	33.56		25.35	263	0.10
70	9.52	33.72		50	10.16	33.64		25.88	213	0.15
93	9.35	33.88		75	9.47	33.77		26.10	192	0.20
144	9.07	34.06		100	9.32	33.92		26.24	179	0.24
190	8.87	34.16		150	9.04	34.07		26.40	164	0.33
				200	(8.82)	(34.18)		(26.53)	(151)	(0.41)

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

83.43 E. W. SCRIPPS; July 24, 1953; 1826 GCT; 34°08'N, 119°34'W; sounding, 125 fm; wind, 270°, force 1; weather, fog in patches; sea, slight; wire angle, 00°.

0	18.54	33.59		0	18.54	33.59		24.08	384	0.00
10	18.50	33.58		10	18.50	33.58		24.08	384	0.04
25	13.89	33.56		20	17.50	33.57		24.32	361	0.08
50	10.98	33.50		30	13.20	33.55		25.25	273	0.11
75	9.68	33.58		50	10.98	33.50		25.63	237	0.16
99	9.36	33.73		75	9.68	33.58		25.92	209	0.22
153	9.11	33.96		100	9.36	33.74		26.10	192	0.27
201	9.04	34.20		150	9.12	33.95		26.30	173	0.36
				200	9.04	34.20		26.51	153	0.44

83.48 CREST; July 17, 1953; 0357 GCT; 33°58.5'N, 119°55'W; sounding, 100 fm; wind, 350°, force 3; weather, clear; sea, rough; wire angle, 10°.

0	17.74	33.61		0	17.74	33.61		24.29	364	0.00
10	17.73	33.57		10	17.73	33.57		24.26	367	0.04
25	13.71	33.63		20	16.40	33.60		24.60	335	0.07
49	10.14	33.71		30	12.90	33.65		25.39	260	0.10
73	9.50	33.90		50	10.05	33.72		25.97	204	0.15
97	9.26	33.93		75	9.48	33.90		26.20	183	0.20
120	9.08	33.99		100	9.22	33.94		26.27	176	0.24
148	8.96	34.03		150	(8.95)	(34.03)		(26.39)	(164)	(0.33)

83.48 E. W. SCRIPPS; July 25, 1953; 0215 GCT; 33°58.5'N, 119°55'W; sounding, 100 fm; wind, 270°, force 6; weather, partly cloudy; sea, rough; wire angle, 07°.

0	17.24	33.59		0	17.24	33.59		24.40	354	0.00
10	17.04	33.55		10	17.04	33.55		24.41	353	0.04
20	15.90	33.58		20	15.90	33.58		24.70	325	0.07
30	14.50	33.47		30	14.50	33.47		24.92	304	0.10
50	11.13	33.48		50	11.13	33.48		25.59	241	0.16
75	9.71	33.73		75	9.71	33.73		26.03	199	0.21

83.51 CREST; July 17, 1953; 0557 GCT; 33°52'N, 120°08'W; sounding, 75 fm; wind, 350°, force 4; weather, clear; sea, rough; wire angle, 09°.

0	15.68	33.61		0	15.68	33.61		24.77	319	0.00
10	11.43	33.58		10	11.43	33.58		25.61	239	0.03
20	10.80	33.59		20	10.80	33.59		25.73	227	0.05
30	10.03	34.00r		30	10.03	33.66		25.92	209	0.07
49	9.51	33.78		50	9.50	33.79		26.11	191	0.11
74	9.18	33.90		75	(9.17)	(33.90)		(26.25)	(178)	(0.16)

83.51 E. W. SCRIPPS; July 25, 1953; 1520 GCT; 33°52'N, 120°08.5'W; sounding, 65 fm; wind, 250°, force 3; weather, overcast; sea, moderate; wire angle, 10°.

0	13.73	33.51		0	13.73	33.51		25.11	287	0.00
10	13.00	33.53		10	13.00	33.53		25.28	270	0.03
20	10.26	33.51		20	10.26	33.51		25.77	223	0.05
30	9.54	33.68		30	9.54	33.68		26.02	200	0.07
49	9.34	33.74		50	9.33	33.75		26.11	191	0.11
73	9.12	33.88		75	9.11	33.88		26.24	179	0.16
98	9.08	34.02		100	(9.07)	(34.03)		(26.37)	(166)	(0.20)

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

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CREST; July 17, 1953; 0826 GCT; 33°43'N, 120°25'W; sounding, 650 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 11°.

8355

0	17.51	33.55		0	17.51	33.55		24.30	363	0.00
10	17.42	33.60		10	17.42	33.60		24.36	358	0.04
19	15.47	33.64		20	15.20	33.64		24.90	306	0.07
34	11.31	33.66		30	12.30	33.65		25.50	249	0.10
54	9.03	33.91		50	9.15	33.87		26.23	180	0.14
68	8.86	33.95		75	8.87	34.04		26.41	163	0.18
83	8.92	34.05		100	8.73	34.05		26.44	160	0.22
107	8.68	34.05		150	8.61	34.18		26.56	148	0.30
130	8.73	34.17		200	8.28	34.26		26.67	138	0.38
159	8.54	34.19		250	7.92	34.25		26.72	133	0.44
210	8.21	34.26		300	7.69	34.29		26.78	128	0.51
266	7.83	34.25		400	7.12	34.31		26.88	118	0.64
313	7.62	34.31		500	6.88	34.32		26.92	114	0.76
421	7.04	34.31		600	6.38	34.35		27.01	106	0.88
525	6.79	34.33								
632	6.16	34.37								

E. W. SCRIPPS; July 25, 1953; 1806 GCT; 33°43.5'N, 120°25'W; sounding, 640 fm; wind, 330°, force 5; weather, overcast; sea, high; wire angle, 20°.

8355

0	16.20	33.54		0	16.20	33.54		24.60	335	0.00
9	16.21	33.57		10	16.21	33.57		24.62	333	0.03
28	14.91	33.58		20	15.87	33.58		24.71	324	0.07
56	9.88	33.57		30	14.45	33.58		25.02	295	0.10
84	9.32	33.76		50	10.07	33.57		25.85	216	0.15
113	8.94	33.91		75	9.46	33.68		26.03	199	0.20
169	8.50	34.14		100	9.11	33.84		26.21	182	0.25
226	8.48	34.22		150	8.59	34.09		26.49	155	0.33
339	7.76	34.30		200	8.49	34.19		26.58	147	0.41
450	7.22	34.29		250	8.32	34.25		26.66	139	0.48
567	6.42	34.29		300	7.97	34.29		26.74	131	0.55
				400	7.47	34.29		26.81	125	0.69
				500	6.91	34.29		26.89	117	0.82

CREST; July 17, 1953; 1132 GCT; 33°34'N, 120°45'W; sounding, 850 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

8360

0	14.10	33.26		0	14.10	33.26		24.84	312	0.00
10	14.10	33.30		10	14.10	33.30		24.87	309	0.03
20	13.16	33.23		20	13.16	33.23		25.01	296	0.06
35	10.21	33.17		30	11.00	33.17		25.37	262	0.09
54	9.76	33.32		50	9.91	33.26		25.63	237	0.14
68	9.29	33.47		75	9.27	33.57		25.98	204	0.19
82	9.26	33.65		100	8.96	33.78		26.19	184	0.24
105	8.82	33.81		150	8.12	34.00		26.49	155	0.33
129	8.38	33.93		200	7.96	34.14		26.63	142	0.40
156	8.08	34.02		250	7.58	34.16		26.70	135	0.48
206	7.94	34.15		300	7.21	34.22		26.80	126	0.54
261	7.49	34.17		400	6.33	34.26		26.95	111	0.67
306	7.17	34.22		500	5.96	34.35		27.07	100	0.78
413	6.25	34.27		600	5.48	34.39		27.16	92	0.88
517	5.90	34.36								
621	5.35	34.40								

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

8539 CREST; July 18, 1953; 0511 GCT; 34°00'N, 119°04'W; sounding, 200 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°.

0	19.47	33.63		0	19.47	33.63		23.88	403	0.00
9	19.22	33.55		10	19.18	33.55		23.89	402	0.04
18	14.73	33.56		20	13.90	33.56		25.12	285	0.08
28	11.83	33.47		30	11.67	33.47		25.48	251	0.10
47	10.57	33.58		50	10.45	33.60		25.80	221	0.15
70	9.71	33.67								

8539 E. W. SCRIPPS; July 26, 1953; 0933 GCT; ^{34°00}33°60'N, 119°03.5'W; sounding, 115 fm; wind, variable, force 1; weather, cloudy; sea, moderate; wire angle, 00°.

0	17.44	33.56		0	17.44	33.56		24.33	361	0.00
10	15.66	33.52		10	15.66	33.52		24.71	324	0.03
20	13.61	33.52		20	13.61	33.52		25.14	283	0.06
30	12.22	33.47		30	12.22	33.47		25.38	261	0.09
50	10.77	33.41		50	10.77	33.41		25.60	240	0.14
65	10.24	33.52		75	10.00	33.51		25.81	220	0.20
75	10.00	33.51								

8540 CREST; July 18, 1953; 0344 GCT; 33°57'N, 119°10.5'W; sounding, 400 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°.

0	20.03	33.59		0	20.03	33.59		23.70	421	0.00
9	19.30	33.58		10	19.00	33.58		23.96	396	0.04
19	14.29	33.57		20	14.17	33.57		25.07	290	0.08
33	12.41	33.44		30	12.70	33.44		25.26	272	0.10
48	10.67	33.47		50	10.60	33.48		25.68	232	0.15
62	9.79	33.57		75	9.41	33.66		26.02	200	0.21
76	9.38	33.66		100	9.25	33.81		26.17	185	0.26
94	9.26	33.79		150	9.04	33.96		26.32	171	0.35
117	9.20	33.86		200	9.02	34.12		26.45	159	0.43
145	9.04	33.94		250	8.94	34.21		26.53	151	0.51
191	9.06	34.10		300	8.92	34.33		26.63	142	0.59
237	8.88	34.18		400	7.86	34.25		26.73	132	0.73
283	9.08	34.33		500	7.22	34.30		26.86	120	0.86
381	8.00	34.25								
477	7.36	34.29								
579	6.66	34.32								

8540 E. W. SCRIPPS; July 26, 1953; 0727 GCT; 33°55.5'N, 119°10'W; sounding, 440 fm; wind, variable, force 1; weather, clear; sea, slight; wire angle, 02°.

0	18.26	33.51		0	18.26	33.51		24.09	383	0.00
10	18.27	33.51		10	18.27	33.51		24.09	383	0.04
25	14.45	33.48		20	15.70	33.49		24.67	328	0.07
50	12.20	33.46		30	13.90	33.47		25.05	292	0.10
75	10.61	33.50		50	12.20	33.46		25.38	261	0.16
100	9.57	33.58		75	10.61	33.50		25.70	230	0.22
153	8.80	33.96		100	9.57	33.58		25.94	207	0.28
202	8.36	34.08		150	8.82	33.94		26.34	169	0.37
299	8.30	34.24		200	8.38	34.07		26.51	153	0.46
401	7.52	34.27		250	8.33	34.17		26.59	146	0.53
498	6.90	34.31		300	8.29	34.24		26.65	140	0.60
603	6.15	34.42		400	7.53	34.27		26.79	127	0.74
				500	6.87	34.31		26.91	115	0.87
				600	6.17	34.41		27.09	98	0.99

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

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CREST; July 18, 1953; 0037 GCT; 33°47'N, 119°32'W; sounding, 1000 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°.

8545

0	20.49	33.60		0	20.49	33.60		23.59	431	0.00
10	20.27	33.62		10	20.27	33.62		23.66	424	0.04
19	15.80	33.55		20	15.75	33.53		24.69	326	0.08
34	13.10	33.47		30	14.20	33.47		24.98	299	0.11
48	11.02	33.53		50	10.91	33.53		25.67	233	0.16
62	10.34	33.52		75	9.72	33.63		25.95	206	0.22
76	9.66	33.65		100	9.12	33.87		26.24	179	0.27
94	9.18	33.86		150	8.68	33.99		26.40	164	0.36
117	9.01	33.89		200	8.39	34.12		26.55	149	0.44
143	8.72	33.96		250	8.24	34.22		26.65	140	0.51
188	8.50	34.11		300	8.55	34.37		26.72	133	0.58
233	8.11	34.15		400	7.53	34.29		26.81	125	0.72
278	8.76	34.35		500	6.72	34.30		26.93	113	0.84
375	7.74	34.30								
470	6.96	34.29								
571	6.13	34.34								

E. W. SCRIPPS; July 26, 1953; 0356 GCT; 33°45.5'N, 119°31.5'W; sounding, 1000 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

8545

0	18.30	33.47		0	18.30	33.47		24.05	387	0.00
10	16.06	33.43		10	16.06	33.43		24.55	340	0.04
25	13.34	33.47		20	14.30	33.46		24.96	301	0.07
55	9.86	33.43		30	12.19	33.47		25.39	260	0.10
80	9.35	33.68		50	10.01	33.43		25.75	225	0.14
110	9.14	33.82		75	9.43	33.65		26.01	201	0.20
164	9.17	34.14		100	9.16	33.77		26.15	187	0.25
218	8.45	34.09		150	9.17	34.12		26.42	162	0.34
323	7.88	34.23		200	8.69	34.10		26.48	156	0.42
433	7.20	34.32		250	8.22	34.12		26.57	148	0.50
541	6.49	34.36		300	7.99	34.20		26.67	138	0.57
649	5.72	34.44		400	7.42	34.31		26.84	122	0.70
				500	6.77	34.34		26.95	114	0.83
				600	6.08	34.40		27.09	98	0.94

CREST; July 17, 1953; 2124, 2131 GCT; 33°37'N, 119°52'W; sounding, 130 fm; wind, 310°, force 2; weather, cloudy; sea, moderate; wire angle, 07°, missing.

8550

0	18.29	33.61		0	18.29	33.61		24.16	377	0.00
10	14.62	33.47		10	14.62	33.47		24.90	306	0.03
25	13.82	33.48		20	14.11	33.48		25.01	296	0.06
50	10.24	33.53		30	13.00	33.49		25.24	274	0.09
				50	10.24	33.53		25.79	222	0.14
71	9.36	33.78		75	9.27	33.80		26.16	186	0.19
94	9.10	33.86		100	9.07	33.88		26.25	178	0.24
144	8.91	33.98		150	8.87	34.00		26.38	166	0.33
189	8.63	34.21								

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

8550

E. W. SCRIPPS; July 26, 1953; 0004 GCT; 33°37'N, 119°26.5'W; sounding, 225 fm; wind, 310°, force 4; weather, partly cloudy; sea, very rough; wire angle, 35°.

0	18.56	33.58		0	18.56	33.58		24.07	385	0.00
8	18.57	33.67		10	18.56	33.67		24.14	379	0.04
20	13.67	33.51		20	13.67	33.51		25.12	285	0.07
40	11.04	33.54		30	12.50	33.52		25.37	262	0.10
61	9.62	33.62		50	10.06	33.57		25.85	216	0.15
82	9.27	33.72		75	9.38	33.68		26.05	197	0.20
128	8.88	34.07		100	9.07	33.84		26.22	181	0.25
171	8.76	34.32		150	8.79	34.27 ¹⁶		26.60	145	0.33
217	8.76	34.24		200	8.77	34.27 ²⁴		26.60	145	0.40
263	8.55	34.24		250	8.61	34.24		26.61	144	0.48
317	8.42	34.34		300	8.45	34.30		26.68	137	0.55

8555

CREST; July 17, 1953; 1822 GCT; 33°27'N, 120°12.5'W; sounding, 650 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 08°.

0	17.57	33.67		0	17.57	33.67		24.38	356	0.00
10	14.63	33.68		10	14.63	33.68		25.05	292	0.03
20	13.99	33.68		20	13.99	33.68		25.19	279	0.06
35	11.47	33.81		30	12.20	33.75		25.60	240	0.09
50	10.19	33.88		50	10.19	33.88		26.07	195	0.13
65	9.83	33.89		75	9.20	33.90		26.25	178	0.18
79	9.16	33.90		100	9.00	33.97		26.33	170	0.22
98	9.04	33.96		150	8.41	34.17		26.58	147	0.30
122	8.62	34.03		200	7.73	34.23		26.73	132	0.37
149	8.42	34.17		250	7.57	34.36		26.86	120	0.44
195	7.75	34.22		300	7.17	34.37		26.92	114	0.50
240	7.66	34.35		400	6.90	34.36		26.95	114	0.62
286	7.24	34.37		500	6.47	34.35		27.00	107	0.73
384	6.96	34.36								
477	6.59	34.34								
578	6.06	34.46								

8555

E. W. SCRIPPS; July 25, 1953; 2157 GCT; 33°27'N, 120°12.5'W; sounding, 650 fm; wind, 330°, force 5; weather, cloudy; sea, high; wire angle, 20°.

0	17.20	33.60		0	17.20	33.60		24.41	353	0.00
9	17.23	33.68		10	17.23	33.68		24.47	347	0.04
28	16.16	33.63		20	17.25	33.65		24.44	350	0.07
56	10.91	33.70		30	15.60	33.63		24.80	316	0.10
84	9.48	33.91		50	11.56	33.66		25.65	235	0.16
113	8.78	33.96		75	9.85	33.88		26.12	190	0.21
169	8.26	34.18		100	9.00	33.93		26.30	173	0.26
226	7.76	34.20		150	8.42	34.13		26.55	149	0.34
337	7.32	34.27		200	7.97	34.20		26.67	138	0.41
445	7.06	34.30		250	7.60	34.21		26.73	132	0.48
561	6.50	34.32		300	7.41	34.25		26.79	127	0.55
675	5.65	34.34		400	7.19	34.29		26.85	121	0.68
				500	6.84	34.31		26.92	114	0.80
				600	6.23	34.33		27.02	105	0.92

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

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CREST; July 17, 1953; 1457 GCT; 33°14.5'N, 120°34'W; sounding, 850 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.

8560

0	14.11	33.25		0	14.11	33.25		24.83	313	0.00
10	14.10	33.30		10	14.10	33.30		24.87	309	0.03
19	13.49	33.32		20	13.40	33.32		25.03	294	0.06
34	12.00	33.20		30	12.45	33.22		25.14	283	0.09
48	10.64	33.22		50	10.40	33.22		25.52	247	0.14
62	9.76	33.22		75	9.54	33.54		25.91	210	0.20
75	9.54	33.54		100	9.24	33.60		26.01	201	0.25
93	9.27	33.57		150	8.42	33.96		26.42	162	0.34
115	9.19	33.74		200	7.99	34.07		26.57	148	0.42
140	8.52	33.94		250	7.74	34.22		26.72	133	0.50
184	8.11	34.01		300	7.41	34.28		26.82	124	0.56
228	7.82	34.18		400	6.66	34.32		27.01	111	0.69
272	7.62	34.25		500	6.04	34.37		27.07	100	0.80
366	6.90	34.31								
458	6.30	34.34								
558	5.70	34.42								

CREST; July 18, 1953; 0818 GCT; 33°50.5'N, 118°37.5'W; sounding, 250 fm; wind, 270°, force 2; weather, smog; sea, moderate; wire angle, 00°.

8735

0	21.03	33.61		0	21.03	33.61		23.45	444	0.00
10	18.09	33.54		10	18.09	33.54		24.15	378	0.04
25	12.78	33.48		20	14.50	33.49		24.94	302	0.08
50	10.23	33.58		30	11.80	33.48		25.47	252	0.10
75	9.96	33.70		50	10.23	33.58		25.83	218	0.15
98	9.37	33.80		75	9.96	33.70		25.96	205	0.20
150	9.06	33.98		100	9.34	33.81		26.15	187	0.25
197	9.11	34.19		150	9.06	33.98		26.33	170	0.34
243	9.14	34.25		200	9.12	34.19		26.49	155	0.43
290	9.06	34.32		250	9.14	34.26		26.54	150	0.50
342	8.46	34.27		300	8.97	34.32		26.61	144	0.58
389	8.04	34.30								

E. W. SCRIPPS; July 26, 1953; 1300 GCT; 33°50'N, 118°37.5'W; sounding, 290 fm; wind, 260°, force 1; weather, fog; sea, slight; wire angle, 00°.

8735

0	16.86	33.51		0	16.86	33.51		24.43	352	0.00
10	16.74	33.54		10	16.74	33.54		24.48	346	0.04
25	13.07	33.44		20	14.90	33.45		24.82	314	0.07
50	10.30	33.50		30	12.00	33.44		25.40	259	0.10
75	9.48	33.59		50	10.30	33.50		25.75	225	0.14
100	9.19	33.77		75	9.48	33.59		25.96	205	0.20
153	9.09	34.05		100	9.19	33.77		26.15	187	0.25
201	9.02	34.15		150	9.10	34.04		26.37	166	0.34
249	9.16	34.30		200	9.02	34.15		26.47	157	0.42
				250	(9.16)	(34.30)		(26.56)	(148)	(0.50)

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

8740

CREST; July 18, 1953; 1149 GCT; 33°40'N, 118°58.5'W; sounding, 480 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 00°.

0	22.93	33.63		0	22.93	33.63		22.94	493	0.00
10	18.68	33.54		10	18.68	33.54		24.01	391	0.04
20	16.49	33.59		20	16.49	33.59		24.57	338	0.08
35	13.68	33.52		30	14.85	33.54		24.90	306	0.11
49	11.43	33.51		50	11.41	33.51		25.56	243	0.17
64	10.56	33.64		75	9.84	33.70		25.99	203	0.22
78	9.72	33.71		100	9.20	33.84		26.20	183	0.27
98	9.24	33.82		150	8.90	34.14		26.48	156	0.36
120	8.79	33.97		200	8.24	34.20		26.63	142	0.44
150	8.90	34.14		250	8.17	34.32		26.74	131	0.50
197	8.24	34.19		300	8.03	34.35		26.78	128	0.57
244	8.18	34.31		400	7.27	34.42		26.95	111	0.70
289	8.08	34.34		500	6.32	34.35		27.02	105	0.81
388	7.41	34.43		600	(5.98)	(34.45)		(27.14)	((93))	(0.92)
485	6.39	34.35								
587	6.01	34.44								

8740

E. W. SCRIPPS; July 26, 1953; 1550 GCT; 33°39'N, 118°56.5'W; sounding, 400 fm; wind, 150°, force 1; weather, overcast; sea, moderate; wire angle, 15°.

0	19.07	33.57		0	19.07	33.57		23.93	399	0.00
9	18.65	33.55		10	18.50	33.54		24.05	487	0.04
24	14.26	33.41		20	15.60	33.42		24.64	331	0.08
48	11.90	33.47		30	13.57	33.41		25.07	290	0.11
72	10.48	33.54		50	11.82	33.48		25.46	253	0.16
95	9.58	33.66		75	10.31	33.55		25.79	222	0.22
145	9.02	33.91		100	9.48	33.69		26.04	198	0.27
190	8.94	34.19		150	9.02	33.95		26.31	172	0.37
282	8.69	34.23		200	8.93	34.20		26.52	152	0.45
380	7.85	34.30		250	8.83	34.21		26.55	149	0.53
476	6.82	34.30		300	8.57	34.25		26.62	143	0.60
578	6.02	34.35		400	7.63	34.30		26.80	126	0.74
				500	6.63	34.30		26.94	112	0.87

8745

CREST; July 18, 1953; 1500 GCT; 33°30'N, 119°19'W; sounding, 910 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, missing.

0	15.88	33.79		0	15.88	33.79		24.86	310	0.00
10	15.88	33.80		10	15.88	33.80		24.87	309	0.03
20	13.36	33.79		20	13.36	33.79		25.40	259	0.06
35	10.07	33.96		30	19.90	33.92		25.97	204	0.08
49	9.26	34.00		50	9.24	34.00		26.32	171	0.12
63	8.97	34.05		75	8.95	34.14		26.47	157	0.16
78	8.94	34.15		100	8.74	34.19		26.55	149	0.20
97	8.76	34.19		150	8.46	34.14		26.55	149	0.28
121	8.54	34.09		200	8.29	34.23		26.65	140	0.35
149	8.46	34.14		250	7.92	34.28		26.74	131	0.42
196	8.31	34.23		300	7.59	34.30		26.81	125	0.49
242	7.98	34.27		400	7.09	34.35		26.92	114	0.61
289	7.64	34.29		500	6.49	34.38		27.02	105	0.73
388	7.16	34.34		600	(5.91)	(34.36)		(27.08)	(99)	(0.84)
484	6.58	34.38								
588	5.98	34.36								

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

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E. W. SCRIPPS; July 26, 1953; 1903 GCT; 33°29.5'N, 119°18.5'W; sounding, 900 fm; wind, 240°, force 1; weather, overcast; sea, rough; wire angle, 00°.

8745

0	17.56	33.86		0	17.56	33.86		24.53	341	0.00
10	17.38	33.78		10	17.38	33.78		24.51	343	0.03
25	13.12	33.88		20	15.25	33.83		25.04	293	0.07
55	9.34	33.98		30	12.02	33.90		25.75	225	0.09
80	9.13	34.05		50	9.44	33.96		26.25	178	0.13
109	8.85	34.12		75	9.18	34.04		26.36	167	0.18
162	8.60	34.01 [?]		100	8.92	34.11		26.45	159	0.22
215	8.49	34.21		150	8.64	34.01 ¹⁴		26.42	162	0.30
322	7.61	34.27		200	8.53	34.17 ¹⁹		26.56	148	0.38
434	7.08	34.32		250	8.19	34.24		26.67	138	0.45
541	6.20	34.35		300	7.76	34.26		26.75	130	0.52
650	5.74	34.40		400	7.30	34.31		26.85	121	0.65
				500	6.46	34.34		26.99	108	0.77
				600	5.92	34.37		27.09	98	0.88

CREST; July 18, 1953; 1740 GCT; 33°20'N, 119°38.5'W; sounding, 40 fm; wind, 280°, force 2; weather, cloudy; sea, moderate; wire angle, 00°.

8750

0	17.87	33.67		0	17.87	33.67		24.31	362	0.00
10	14.58	33.56		10	14.58	33.56		24.97	300	0.03
20	10.90	33.58		20	10.90	33.58		25.71	229	0.06
30	9.72	33.63		30	9.72	33.63		26.95	206	0.08
50	9.18	33.85		50	9.18	33.85		26.21	182	0.12

E. W. SCRIPPS; July 26, 1953; 2153 GCT; 33°19.5'N, 119°39'W; sounding, 38 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 00°.

8750

0	18.00	33.58		0	18.00	33.58		24.21	372	0.00
10	14.70	33.54		10	14.70	33.54		24.93	303	0.03
20	12.52	33.50		20	12.52	33.50		25.35	263	0.06
30	10.48	33.54		30	10.48	33.54		25.75	226	0.09
50	9.34	33.77		50	9.34	33.77		26.12	190	0.13

CREST; July 18, 1953; 2017 GCT; 33°10'N, 120°00.5'W; sounding, 650 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 12°.

8755

0	17.76	33.68		0	17.76	33.68		24.34	260	0.00
9	16.19	33.75		10	16.05	33.75		24.80	316	0.03
19	13.87	33.77		20	13.80	33.77		25.30	268	0.06
34	11.09	33.71		30	11.70	33.75		25.70	230	0.09
48	9.86	33.68		50	9.74	33.68		25.99	203	0.13
62	9.21	33.66		75	9.03	33.90		26.27	176	0.18
76	9.02	33.90		100	8.93	33.94		26.32	171	0.22
94	8.96	33.92		150	8.49	34.06		26.48	156	0.31
117	8.77	34.04		200	8.04	34.13		26.61	144	0.38
144	8.56	34.06		250	7.87	34.23		26.71	134	0.45
189	8.08	34.09		300	7.51	34.26		26.79	127	0.52
234	7.95	34.22		400	6.78	34.35		26.96	111	0.65
279	7.66	34.23		500	6.27	34.36		27.03	104	0.76
377	6.92	34.34								
471	6.40	34.35								
573	5.98	34.38								

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

87.55

E. W. SCRIPPS; July 27, 1953; 0049 GCT; 33°09.5'N, 120°00'W; sounding, 650 fm; wind, 270°, force 2; weather, overcast; sea, rough; wire angle, 20°.

0	17.02	33.65		0	17.02	33.65		24.49	345	0.00
9	16.73	33.60		10	16.73	33.59		24.52	342	0.03
23	12.76	33.48		20	13.35	33.50		25.18	280	0.07
51	10.46	33.43		30	12.10	33.46		25.40	259	0.09
74	9.22	33.73		50	10.62	33.43		25.64	236	0.14
102	8.98	33.89		75	9.21	33.73		26.11	191	0.20
152	8.54	34.04		100	9.00	33.88		26.26	177	0.24
202	8.10	34.18		150	8.57	34.03		26.45	159	0.33
303	7.42	34.30		200	8.13	34.17		26.62	143	0.40
410	6.78	34.32		250	7.78	34.25		26.74	131	0.48
514	6.32	34.34		300	7.45	34.30		26.83	123	0.54
621	5.60	34.38		400	6.82	34.32		26.93	113	0.66
				500	6.40	34.33		26.99	108	0.78
				600	5.76	34.37		27.11	96	0.89

87.60

CREST; July 18, 1953; 2338 GCT; 33°00'N, 120°21.5'W; sounding, 520 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 06°.

0	16.80	33.73		0	16.80	33.73		24.61	334	0.00
10	15.47	33.68		10	15.47	33.68		24.87	309	0.03
20	15.01	33.74		20	15.01	33.74		25.02	295	0.06
35	13.47	33.73		30	14.00	33.74		25.23	275	0.09
50	12.05	33.77		50	12.05	33.77		25.64	236	0.14
65	10.40	33.83		75	10.01	33.89		26.10	192	0.20
79	9.82	33.90		100	9.06	33.95		26.31	172	0.24
98	9.12	33.94		150	8.27	34.14		26.58	147	0.32
122	8.63	34.05		200	7.84	34.21		26.70	135	0.40
149	8.28	34.14		250	7.37	34.22		26.77	129	0.46
195	7.89	34.21		300	7.06	34.32		26.90	116	0.53
240	7.44	34.21		400	6.39	34.34		27.00	107	0.64
286	7.14	34.31		500	5.85	34.37		27.10	97	0.75
385	6.48	34.34		600	(5.39)	(34.41)		(27.18)	(90)	(0.85)
481	5.94	34.36								
583	5.46	34.40								

87.60

E. W. SCRIPPS; July 27, 1953; 0401 GCT; 32°59'N, 120°21'W; sounding, 440 fm; wind, 300°, force 3; weather, clear; sea, rough; wire angle, 25°.

0	15.78	33.68		0	15.78	33.68		24.80	316	0.00
9	15.40	33.69		10	15.30	33.69		24.92	304	0.03
23	14.04	33.68		20	14.39	33.69		25.11	286	0.06
50	11.64	33.67		30	13.19	33.67		25.35	263	0.09
72	10.47	33.75		50	11.64	33.67		25.64	236	0.14
99	9.06	33.86		75	10.20	33.77		25.98	204	0.19
144	8.24	33.94		100	9.01	33.86		26.25	178	0.24
188	7.81	34.05		150	8.18	33.96		26.45	159	0.33
281	6.89	34.20		200	7.66	34.07		26.61	144	0.40
382	6.62	34.31		250	7.10	34.15		26.76	129	0.47
483	6.05	34.33		300	6.82	34.22		26.85	121	0.54
589	5.57	34.37		400	6.53	34.32		26.97	110	0.66
				500	5.97	34.33		27.05	102	0.77
				600	(5.51)	(34.38)		(27.15)	(93)	(0.88)

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

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CREST; July 20, 1953; 0917 GCT; 33°28.5'N, 117°46.5'W; sounding, 450 fm; wind, 230°, force 2;
weather, overcast; sea, slight; wire angle, missing.

90.28

0	18.91	33.60	6.37	0	18.91	33.60	6.37	24.00	392	0.00
10	13.64	33.49	6.95	10	13.64	33.49	6.95	25.12	285	0.03
25	11.61	33.53	5.80	20	12.25	33.52	6.50	25.41	258	0.06
50	10.16	33.50	3.83	30	11.15	33.53	5.20	25.63	237	0.09
74	9.61	33.65	3.39	50	10.16	33.50	3.83	25.78	223	0.13
98	9.31	33.78	3.07	75	9.58	33.65	3.38	25.99	203	0.19
151	9.11	33.94	2.78	100	9.30	33.79	3.04	26.14	188	0.24
198	9.05	33.99	2.41	150	9.12	33.94	2.79	26.29	174	0.33
243	9.13	34.17	1.80	200	9.05	33.99	2.38	26.34	169	0.41
289	9.12	34.37	1.30	250	9.14	34.20	1.71	26.49	155	0.50
341	8.60	34.32	1.03	300	9.06	34.37	1.22	26.64	141	0.57
388	8.30	34.33	0.96							

CREST; July 20, 1953; 0647 GCT; 33°24.5'N, 117°55'W; sounding, 300 fm; wind, 300°, force 2;
weather, clear; sea, slight; wire angle, 00°.

90.30

0	21.29	33.65	5.80	0	21.29	33.65	5.80	23.41	448	0.00
10	20.80	33.67	5.91	10	20.80	33.67	5.91	23.56	434	0.04
25	12.37	33.50	5.84	20	14.75	33.51	5.89	24.90	306	0.08
50	10.47	33.52	4.27	30	11.82	33.50	5.67	25.48	251	0.11
74	9.30	33.71	3.36	50	10.47	33.52	4.27	25.74	226	0.16
98	9.17	33.94	2.66	75	9.29	33.72	3.35	26.09	193	0.21
150	9.24	34.07	1.91	100	9.17	33.94	2.61	26.28	175	0.26
197	9.29	34.19	1.71	150	9.24	34.07	1.91	26.37	166	0.34
244	9.32	34.28	-	200	9.29	34.19	1.70	26.46	158	0.42
290	9.45	34.35	1.69	250	9.34	34.29	1.70	26.53	151	0.50
341	9.38	34.35	0.88r	300	9.46	34.35	1.58	26.56	148	0.58
388	8.96	34.35	1.32	400	8.86	34.35	1.25	26.65	140	0.73
434	8.54	34.36	0.93	500	(7.66)	(34.30)	(1.00)	(26.80)	(126)	(0.88)

CREST; July 20, 1953; 0156 GCT; 33°11'N, 118°23.5'W; sounding, 650 fm; wind, 290°, force 4;
weather, partly cloudy; sea, moderate; wire angle, 22°.

90.37

0	18.04	33.52	5.94	0	18.04	33.52	5.94	24.15	378	0.00
9	17.92	33.52	6.02	10	17.91	33.52	6.06	24.18	375	0.04
18	15.05	33.42	6.57	20	14.90	33.42	6.55	24.80	316	0.07
32	14.28	33.55	6.19	30	14.40	33.54	6.24	25.00	297	0.10
51	12.56	33.42	5.96	50	12.61	33.43	5.97	25.27	271	0.16
64	11.34	33.40	5.28	75	10.75	33.40	4.84	25.60	240	0.22
78	10.60	33.40	4.78	100	9.57	33.57	3.97	25.93	208	0.28
100	9.57	33.57	3.97	150	8.71	33.94	3.21	26.36	167	0.38
123	9.15	33.79	3.10	200	8.24	34.10	2.28	26.55	149	0.46
149	8.72	33.93	3.21	250	7.83	34.17	1.65	26.67	138	0.53
196	8.28	34.09	2.35	300	7.43	34.30	1.44	26.83	123	0.60
250	7.83	34.17	1.65	400	7.28	34.30	0.91	26.85	121	0.72
295	7.44	34.30	1.47	500	6.48	34.30	0.53	26.96	111	0.85
402	7.27	34.30	0.89	600	6.00	34.34	0.40	27.05	102	0.96
508	6.42	34.30	0.51							
616	5.94	34.35	0.38							

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

90.45 CREST; July 19, 1953; 2137 GCT; 32°54.5'N, 118°56'W; sounding, 900 fm; wind, 300°, force 3; weather, cloudy; sea, slight; wire angle, 16°.

0	18.65	33.68	5.88	0	18.65	33.68	5.88	24.12	281	0.00
9	17.59	33.65	6.17	10	17.25	33.64	6.19	24.43	351	0.04
23	13.04	33.52	6.40	20	13.35	33.52	6.39	25.20	278	0.07
47	11.44	33.63	5.25	30	12.60	33.53	6.30	25.35	263	0.10
71	9.64	33.65	4.18	50	11.06	33.63	5.11	25.72	228	0.14
95	9.40	33.86	3.09	75	9.58	33.65	3.95	25.99	203	0.20
146	8.61	34.07	2.27	100	9.32	33.89	2.97	26.22	181	0.25
191	8.23	34.16	2.17	150	8.56	34.08	2.26	26.49	155	0.33
236	7.86	34.22	1.83	200	8.17	34.17	2.12	26.62	143	0.41
280	7.52	34.22	1.25	250	7.73	34.22	1.62	26.72	133	0.48
374	7.19	34.30	0.76	300	7.44	34.23	1.12	26.77	129	0.55
463	6.59	34.32	0.63	400	7.03	34.31	0.72	26.89	117	0.68
558	5.94	34.36	0.42	500	6.31	34.33	0.54	27.01	106	0.79
746	5.07	34.47	0.41	600	5.74	34.39	0.42	27.13	94	0.90
933	4.28	34.52	0.44	700	5.30	34.45	0.42	27.23	85	1.00
1126	3.92	34.55	0.73	800	4.78	34.49	0.43	27.32	76	1.09
				1000	4.14	34.53	0.50	27.42	67	1.25

90.50 CREST; July 19, 1953; 1826 GCT; 32°44.5'N, 119°17'W; sounding, 165 fm; wind, 300°, force 3; weather, cloudy; sea, slight; wire angle, 10°.

0	18.65	33.71	5.75	0	18.65	33.71	5.75	24.14	379	0.00
10	15.45	33.74	6.24	10	15.45	33.74	6.24	24.92	304	0.03
24	13.22	33.72	5.96	20	13.81	33.73	6.15	25.27	271	0.06
48	11.68	33.70	5.10	30	12.85	33.71	5.74	25.44	255	0.09
72	9.62	33.65	3.90	50	11.25	33.70	4.99	25.74	226	0.14
95	9.42	33.89	2.94	75	9.57	33.65	3.81	25.99	203	0.19
144	8.72	34.08	2.06	100	9.34	33.92	2.78	26.24	179	0.24
190	8.46	34.15	1.81	150	8.68	34.09	2.02	26.48	156	0.32
				200	(8.42)	(34.16)	(1.78)	(26.57)	(148)	(0.40)

90.55 CREST; July 19, 1953; 1542 GCT; 32°34.5'N, 119°32'W; sounding, 280 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 06°.

0	14.71	33.55		0	14.71	33.55		24.94	302	0.00
10	14.69	33.55		10	14.69	33.55		24.94	302	0.03
25	11.68	33.28		20	12.30	33.29		25.23	275	0.06
50	11.35	33.52		30	11.60	33.28		25.53	263	0.09
74	10.11	33.60		50	11.35	33.52		25.58	242	0.14
98	9.76	33.73		75	10.08	33.61		25.87	214	0.19
151	8.40	33.94		100	9.73	33.74		26.03	199	0.27
197	7.85	34.06		150	8.43	33.93		26.39	165	0.34
244	7.22	34.09		200	7.80	34.06		26.59	146	0.42
289	6.85	34.15		250	7.16	34.09		26.70	135	0.49
298p	6.74r	34.17r		300	6.78	34.17		26.82	124	0.56
339	6.62	34.22								
385	6.64	34.32								

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

CREST; July 19, 1953; 1251 GCT; 32°24'N, 119°55'W; sounding, 716 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 05°.

9060

0	14.76	33.44	6.01	0	14.76	33.44	6.01	24.84	312	0.00
9	14.24	33.46	6.19	10	14.22	33.47	6.19	24.98	299	0.03
19	13.40	33.54	6.18	20	13.30	33.54	6.19	25.21	277	0.06
34	11.29	33.38	5.56	30	11.72	33.39	5.75	25.41	258	0.09
50	10.88	33.44	5.24	50	10.88	33.44	5.24	25.60	240	0.14
65	9.93	33.42	4.81	75	9.84	33.53	4.26	25.85	216	0.19
79	9.80	33.60	4.06	100	9.43	33.81	3.40	26.14	188	0.24
98	9.46	33.79	3.47	150	8.30	33.94	3.07	26.42	162	0.33
122	9.05	33.94	2.93	200	7.82	34.03	2.85	26.56	148	0.41
150	8.30	33.94	3.07	250	7.21	34.13	2.17	26.73	132	0.48
197	7.84	34.02	2.89	300	6.77	34.17	1.24	26.82	124	0.55
242	7.28	34.12	2.35	400	6.05	34.26	0.74	26.98	109	0.67
288	6.88	34.16	1.35	500	5.68	34.41	0.40	27.15	93	0.78
386	6.12	34.24	0.80	600	(5.42)	(34.43)		(27.20)	(88)	(0.88)
480	5.74	34.39	0.43							
582	5.46	34.43	0.31							

CREST; July 19, 1953; 0630 GCT; 32°04.5'N, 120°39'W; sounding, 2040 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 25°.

9070

0	15.34	33.67	5.91	0	15.34	33.67	5.91	24.89	307	0.00
9	14.94	33.58	5.94	10	14.87	33.57	5.95	24.92	304	0.03
23	13.74	33.41	6.05	20	13.95	33.44	6.03	25.01	296	0.06
45	12.81	33.35	5.97	30	13.46	33.37	6.04	25.06	291	0.09
67	10.90	33.46	5.17	50	12.10	33.35	5.84	25.31	267	0.15
89	10.45	33.64	4.88	75	10.73	33.54	5.05	25.71	229	0.21
133	8.99	33.91	3.14	100	10.05	33.72	4.36	25.97	204	0.26
174	8.31	33.98	2.48	150	8.67	33.94	2.88	26.36	167	0.36
214	7.99	34.14	1.69	200	8.08	34.09	2.00	26.57	148	0.44
255	7.78	34.18	1.19	250	7.81	34.18	1.24	26.68	137	0.51
341	7.00	34.24	0.81	300	7.40	34.21	0.95	26.76	129	0.58
423	6.41	34.36	0.60	400	6.55	34.34	0.66	26.98	109	0.70
513	5.92	34.37	0.36	500	6.01	34.37	0.38	27.08	99	0.81
689	4.87	34.42	0.33	600	5.29	34.39	0.34	27.18	90	0.92
868	4.34	34.47	0.44	700	4.83	34.42	0.33	27.26	82	1.01
1060	3.73	34.52	0.67	800	4.54	34.45	0.38	27.31	77	1.10
				1000	3.92	34.50	0.60	27.42	67	1.26

HORIZON; July 26, 1953; 1210 GCT; 32°56'N, 117°18'W; sounding, 31 fm; wind, 130°, force 2; weather, cloudy; sea, slight; wire angle, 02°.

9327

0	21.42	33.66		0	21.42	33.66		23.38	451	0.00
10	16.60	33.60		10	16.60	33.60		24.55	340	0.04
20	13.28	33.53		20	13.28	33.53		25.22	276	0.07
30	11.87	33.42		30	11.87	33.42		25.41	258	0.10

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

93.30

HORIZON; July 26, 1953; 0954 GCT; 32°49'N, 117°32.5'W; sounding, 450 fm; wind, 220°, force 1; weather, cloudy; sea, slight; wire angle, 01°.

0	21.72	33.66		0	21.72	33.66		23.30	459	0.00
10	16.32	33.58		10	16.32	33.58		24.60	335	0.04
20	13.42	33.53		20	13.42	33.53		25.19	279	0.07
35	10.96	33.31		30	11.43	33.32		25.41	258	0.10
50	10.43	33.48		50	10.43	33.48		25.71	229	0.15
64	10.10	33.57		75	9.78	33.58		25.90	211	0.20
79	9.66	33.58		100	9.33	33.80 ⁷⁶		26.15	187	0.25
96	9.39	33.71		150	9.12	33.86 ⁹⁸		26.23	180	0.34
117	9.12	33.86		200	9.16	34.08		26.39	165	0.43
143	9.11	33.85		250	9.13	34.19		26.48	156	0.51
185	9.16	34.04		300	9.03	34.29		26.58	147	0.59
227	9.13	34.14		400	8.22	34.36		26.76	129	0.74
271	9.11	34.23		500	7.04	34.28		26.87	119	0.87
365	8.60	34.39								
456	7.56	34.30								
557	6.34	34.26								

93.40

HORIZON; July 26, 1953; 0355 GCT; 32°29.5'N, 118°13'W; sounding, 860 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 09°.

0	19.39	33.46		0	19.39	33.46		23.77	414	0.00
9	19.12	33.48		10	18.88	33.48		23.91	401	0.04
19	16.50	33.40		20	16.30	33.40		24.47	347	0.08
33	14.72	33.44		30	15.00	33.43		24.78	318	0.11
47	13.67	33.35		50	13.21	33.30		25.06	291	0.17
60	12.34	33.27		75	11.10	33.37		25.51	248	0.24
74	11.12	33.36		100	9.51	33.51		25.89	212	0.30
93	9.78	33.46		150	9.11	33.88		26.24	179	0.40
114	9.30	33.63		200	8.58	34.11		26.51	153	0.48
140	9.20	33.82		250	8.18	34.19		26.63	142	0.56
183	8.70	34.04		300	7.72	34.24		26.74	131	0.63
225	8.40	34.18		400	6.92	34.27		26.88	118	0.76
269	8.00	34.20		500	6.29	34.30		26.98	109	0.88
350	7.27	34.28								
449	6.58	34.27								
550	6.04	34.35								

93.50

HORIZON; July 25, 1953; 2225 GCT; 32°09'N, 118°53'W; sounding, 900 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 25°.

0	18.02	33.61		0	18.02	33.61		24.22	371	0.00
9	17.84	33.58		10	17.80	33.58		24.25	368	0.04
18	15.69	33.54		20	15.40	33.54		24.78	318	0.07
31	13.24	33.57		30	13.58	33.56		25.18	280	0.10
43	10.96	33.64		50	10.29	33.64		25.86	215	0.15
56	9.87	33.64		75	9.18	33.79		26.16	186	0.20
68	9.48	33.75		100	8.69	33.93		26.35	168	0.25
83	8.90	33.82		150	8.21	34.06		26.53	151	0.33
104	8.66	33.95		200	7.89	34.13		26.63	142	0.40
127	8.49	34.03		250	7.30	34.19		26.76	129	0.47
167	8.04	34.08		300	6.92	34.21		26.83	123	0.54
204	7.84	34.13		400	6.33	34.26		26.95	111	0.66
244	7.34	34.18		500	6.02	34.30		27.02	105	0.77
329	6.75	34.22								
426	6.22	34.27								
512	6.00	34.31								

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

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HORIZON; July 25, 1953; 0627 GCT; 32°15'N, 117°09'W; sounding, 22 fm; wind, 290°, force 1; weather, missing; sea, moderate; wire angle, 03°.

97.30

0	18.79	33.61		0	18.79	33.61		24.03	389	0.00
10	14.99	33.53		10	14.99	33.53		24.86	310	0.04
20	12.99	33.52		20	12.99	33.52		25.27	271	0.06
30	10.74	33.44		30	10.74	33.44		25.63	237	0.09

HORIZON; July 25, 1953; 0856 GCT; 32°07'N, 117°26.5'W; sounding, 800 fm; wind, 290°, force 2; weather, missing; sea, moderate; wire angle, 12°.

97.35

0	20.24	33.59		0	20.24	33.59		23.63	425	0.00
10	19.40	33.49		10	19.40	33.49		23.79	412	0.04
20	16.06	33.30		20	16.06	33.30		24.45	349	0.08
34	14.70	33.27		30	15.10	33.28		24.65	330	0.11
48	13.21	33.26		50	13.00	33.26		25.07	290	0.18
61	12.09	33.24		75	11.29	33.25		25.38	260	0.25
75	11.29	33.25		100	10.37	33.42		25.68	232	0.31
92	10.58	33.35		150	9.02	33.81		26.20	183	0.41
116	9.85	33.54		200	8.32	34.00		26.46	158	0.50
139	9.21	33.75		250	7.68	34.06		26.60	145	0.58
181	8.56	33.94		300	7.43	34.13		26.69	136	0.65
223	8.07	34.04		400	6.93	34.26		26.87	119	0.78
265	7.52	34.07		500	6.19	34.32		27.01	106	0.90
358	7.26	34.23								
448	6.58	34.29								
546	5.88	34.34								

HORIZON; July 25, 1953; 1142 GCT; 31°57.5'N, 117°48'W; sounding, 900 fm; wind, 270°, force 4; weather, missing; sea, rough; wire angle, 08°.

97.40

0	17.31	33.29		0	17.31	33.29		24.15	378	0.00
10	17.32	-		10	17.32	33.28		24.14	379	0.04
20	16.16	33.27		20	16.16	33.27		24.40	354	0.07
35	14.78	33.22		30	15.30	33.25		24.58	337	0.11
49	13.02	33.14		50	13.00	33.14		24.97	300	0.17
63	12.79	33.32		75	12.17	33.40		25.34	264	0.24
76	12.09	33.40		100	10.33	33.28		25.58	242	0.31
93	10.40	33.27		150	8.98	33.85		26.24	179	0.41
115	10.24	33.55		200	8.53	34.02		26.45	159	0.50
139	9.10	-		250	7.62	34.10		26.64	141	0.58
182	8.70	33.98		300	7.16	34.14		26.74	131	0.65
224	8.27	-		400	6.58	34.22		26.88	118	0.78
268	7.36	34.11		500	6.08	34.32		27.03	104	0.89
360	6.82	34.18								
453	6.28	34.28								
552	5.89	34.37								

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

97.50

HORIZON; July 25, 1953; 1758 GCT; 31°44'N, 118°32'W; sounding, 1000 fm; wind, 290°, force 4;
weather, overcast; sea, very rough; wire angle, 01°.

0	18.16	33.78		0	18.16	33.78		24.32	361	0.00
10	18.16	33.69		10	18.16	33.69		24.25	368	0.04
20	17.95	33.73		20	17.95	33.73		24.33	360	0.07
34	10.74	33.76		30	11.62	33.75		25.71	229	0.10
53	9.90	33.80		50	10.03	33.79		26.02	200	0.15
67	9.52	33.86		75	9.23	33.89		26.23	180	0.19
80	9.16	33.91		100	8.98	34.00		26.36	167	0.24
102	8.94	34.02		150	8.49	34.14		26.55	149	0.32
124	8.71	34.10		200	7.96	34.19		26.66	139	0.39
149	8.50	34.14		250	7.68	34.25		26.75	130	0.46
195	7.98	34.18		300	7.27	34.27		26.83	123	0.53
247	7.72	34.25		400	6.47	34.31		26.97	110	0.65
289	7.39	34.26		500	5.98	34.34		27.06	101	0.76
372	6.62	34.30		600	(5.34)	(34.39)		(27.17)	(91)	(0.86)
483	6.07	34.33								
589	5.42	34.38								

100.29

HORIZON; July 25, 1953; 0116 GCT; 31°42'N, 116°44'W; sounding, 55 fm; wind, 310°, force 3;
weather, partly cloudy; sea, moderate; wire angle, 03°.

0	17.79	33.54		0	17.79	33.54		24.23	370	0.00
10	15.18	33.52		10	15.18	33.52		24.81	315	0.03
20	11.77	33.49		20	11.77	33.49		25.48	251	0.06
30	11.03	33.45		30	11.03	33.45		25.58	242	0.09
49	9.99	33.62		50	9.93	33.62		25.91	210	0.13
72	9.53	33.68		75	(9.51)	(33.69)		(26.03)	(199)	(0.18)

100.30

HORIZON; July 24, 1953; 2331, 2348 GCT; 31°40'N, 116°48'W; sounding, 300 fm; wind, 310°, force 3;
weather, partly cloudy; sea, moderate; wire angle, 41°, 46°.

0	19.56	33.52		0	19.56	33.52		23.77	414	0.00
6	19.00	33.56		10	18.50	33.56		24.07	385	0.04
19	15.96	33.35		20	15.83	33.35		24.54	340	0.08
38	13.92	33.30		30	14.88	33.32		24.72	323	0.11
56	10.98	33.28		50	12.00	33.28		25.28	270	0.17
72	9.75	33.52		75	9.73	33.55		25.89	212	0.23
				100	9.48	33.70		26.04	198	0.28
104	9.43	33.73		150	9.42	33.96		26.26	177	0.38
131	9.33	33.88		200	9.31	34.16		26.43	161	0.46
161	9.47	34.00		250	9.23	34.34		26.58	146	0.54
195	9.32	34.14		300	9.01	34.38		26.65	140	0.62
236	9.24	34.28								
275	9.22	34.38								
317	8.80	34.38								

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

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HORIZON; July 24, 1953; 1748 GCT; 31°24.5'N, 117°28.5'W; sounding, 810 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 11°.

10040

0	17.43	33.27	5.73	0	17.43	33.27	5.73	24.11	382	0.00
10	17.47	33.28	5.65	10	17.47	33.28	5.65	24.10	382	0.04
25	16.55	33.27	6.17	20	17.47	33.28	5.80	24.10	382	0.08
48	14.83	33.18	7.84	30	16.21	33.24	6.80	24.37	357	0.11
71	12.34	33.18	6.08	50	14.40	33.18	7.82	24.72	323	0.18
94	11.55	33.34	5.78	75	12.20	33.19	6.01	25.17	280	0.26
141	9.47	33.51	3.98	100	11.37	33.36	5.50	25.45	254	0.33
183	8.66	33.94	3.18	150	9.27	33.64	3.77	26.03	199	0.44
224	8.27	34.09	2.48	200	8.47	34.01	2.91	26.45	159	0.53
264	8.12	34.20	1.69	250	8.19	34.18	1.84	26.62	143	0.61
350	6.87	34.17	1.47	300	7.59	34.19	1.60	26.72	133	0.68
432	6.24	34.22	0.83	400	6.42	34.19	1.07	26.88	118	0.81
518	5.91	34.35	0.41	500	5.99	34.33	0.47	27.05	102	0.93
692	5.12	34.45	0.32	600	5.52	34.40	0.33	27.16	92	1.03
867	4.50	34.48	0.45	700	5.09	34.45	0.32	27.25	83	1.12
1055	3.92	34.55	0.63	800	4.72	34.47	0.39	27.31	77	1.21
				1000	4.09	34.53	0.57	27.43	66	1.38

HORIZON; July 24, 1953; 1127 GCT; 31°03.5'N, 118°09.5'W; sounding, 1050 fm; wind, 310°, force 4; weather, missing; sea, moderate; wire angle, 14°.

10050

0	17.18	33.47		0	17.18	33.47		24.32	361	0.00
10	17.18	33.47		10	17.18	33.47		24.32	361	0.04
20	16.16	33.35		20	16.16	33.35		24.46	348	0.07
34	14.77	33.22		30	15.18	33.24		24.60	335	0.11
52	13.11	33.20		50	13.40	33.20		24.94	302	0.17
66	11.63	33.27		75	10.98	33.29		25.47	252	0.24
79	10.70	33.30		100	9.54	33.41		25.81	220	0.30
100	9.54	33.41		150	8.42	33.88		26.35	168	0.40
122	8.90	33.63		200	8.10	34.06		26.54	150	0.48
146	8.44	33.86		250	7.60	34.15		26.69	136	0.55
191	8.17	34.04		300	7.24	34.22		26.79	127	0.62
241	7.65	34.14		400	6.63	34.34		26.97	110	0.74
283	7.33	34.19		500	5.95	34.36		27.07	100	0.85
383	6.76	34.33		600	(5.40)	(34.40)		(27.17)	(91)	(0.96)
483	6.05	34.35								
585	5.48	34.39								

HORIZON; July 24, 1953; 0543 GCT; 30°41'N, 118°48'W; sounding, 1200 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 17°.

10060

0	17.33	33.22	5.92	0	17.33	33.22	5.92	24.09	383	0.00
9	17.32	33.24	5.72	10	17.31	33.24	5.72	24.11	382	0.04
23	17.21	33.18	5.72	20	17.28	33.19	5.72	24.08	384	0.08
51	14.94	33.26	6.15	30	16.86	33.19	5.80	24.18	375	0.12
73	13.57	33.18	6.15	50	15.03	33.26	6.12	24.65	330	0.18
101	11.60	33.22	5.79	75	13.50	33.18	6.15	24.90	306	0.26
149	9.30	33.49	4.26	100	11.78	33.21	5.82	25.26	272	0.34
196	8.42	33.90	3.37	150	9.30	33.50	4.23	25.92	209	0.46
245	7.62	33.95	2.89	200	8.36	33.91	3.32	26.39	164	0.56
286	7.22	34.05	2.08	250	7.58	33.96	2.80	26.54	150	0.64
381	6.68	34.13	0.92	300	7.12	34.06	1.87	26.68	137	0.71
472	6.25	34.35	0.45	400	6.60	34.18	0.79	26.85	121	0.84
563	5.75	34.32	0.32	500	6.10	34.34	0.38	27.04	103	0.96
742	4.76	34.44	0.34	600	5.53	34.33	0.31	27.10	97	1.07
927	4.16	34.49	0.52	700	4.98	34.42	0.32	27.24	84	1.17
1116	3.66	34.57	0.80	800	4.54	34.46	0.38	27.32	76	1.25
				1000	3.96	34.52	0.62	27.43	66	1.41

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

100.70

HORIZON; July 23, 1953; 2352 GCT; 30°18'N, 119°27'W; sounding, 2025 fm; wind, 310°, force 5;
weather, cloudy; sea, rough; wire angle, 30°.

0	17.24	33.18		0	17.24	33.18		24.08	384	0.00
8	17.22	33.18		10	17.20	33.18		24.09	383	0.04
17	17.04	33.18		20	16.95	33.18		24.15	378	0.08
30	16.07	33.08		30	16.07	33.08		24.28	365	0.11
47	14.82	33.08		50	14.57	33.08		24.61	334	0.18
61	13.92	33.11		75	12.93	33.15		25.00	297	0.26
70	13.27	33.13		100	10.71	33.18		25.43	256	0.33
88	12.15	33.17		150	9.12	33.72		26.12	190	0.44
105	10.20	33.18		200	8.85	33.99		26.37	166	0.54
128	9.26	33.40		250	8.48	34.12		26.53	151	0.62
168	9.04	33.85		300	7.95	34.15		26.63	142	0.69
251	8.44	34.12		400	6.77	34.23		26.87	119	0.83
343	7.43	34.17		500	6.08	34.31		27.02	105	0.95
438	6.39	34.26								
537	5.94	34.34								

100.80

HORIZON; July 23, 1953; 1801 GCT; 30°10'N, 120°14'W; sounding, 1850 fm; wind, 310°, force 3;
weather, cloudy; sea, moderate; wire angle, 24°.

0	17.82	33.29	5.66	0	17.82	33.29	5.66	24.03	389	0.00
9	17.84	33.28	5.71	10	17.83	33.28	5.70	24.02	390	0.04
23	17.71	33.32	5.61	20	17.76	33.31	5.62	24.06	386	0.08
50	15.69	33.28	5.99	30	17.30	33.32	5.63	24.18	375	0.12
72	15.24	33.39	5.96	50	15.69	33.28	5.99	24.52	342	0.19
96	13.35	33.30	5.98	75	15.09	33.39	5.96	24.73	322	0.27
140	10.18	33.25	5.08	100	13.04	33.29	5.96	25.08	289	0.35
183	8.74	33.62	3.75	150	9.81	33.27	4.74	25.65	235	0.48
229	8.07	33.94	2.91	200	8.38	33.74	3.40	26.25	178	0.58
266	7.90	34.06	2.40	250	7.99	34.04	2.58	26.54	150	0.67
355	6.78	34.06	1.89	300	7.48	34.06	2.23	26.63	142	0.74
440	6.04	34.14	0.79	400	6.35	34.12	1.20	26.83	123	0.88
525	5.58	34.11	0.44	500	5.71	34.12	0.51	26.92	114	1.01
695	4.82	34.38	0.33	600	5.22	34.24	0.37	27.07	100	1.12
873	4.28	34.42	0.50	700	4.80	34.38	0.32	27.23	85	1.22
1059	3.72	34.46	0.69	800	4.49	34.41	0.41	27.29	79	1.31
				1000	3.91	34.45	0.63	27.38	71	1.48

103.30

HORIZON; July 22, 1953; 1654 GCT; 31°05'N, 116°25'W; sounding, 35 fm; wind, 310°, force 1;
weather, fog; sea, slight; wire angle, 02°.

0	16.42	33.46		0	16.42	33.46		24.49	345	0.00
10	13.68	33.40		10	13.68	33.40		25.04	293	0.03
20	11.75	33.39		20	11.75	33.39		25.41	258	0.06
30	10.69	33.41		30	10.69	33.41		25.61	239	0.08
49	9.74	33.56								

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

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HORIZON; July 22, 1953; 1935 GCT; 30°53'N, 116°45.5'W; sounding, 1100 fm; wind, 300°, force 3;
weather, overcast; sea, rough; wire angle, 16°.

103.35

0	17.42	33.50		0	17.42	33.50		24.28	365	0.00
9	16.98	33.52		10	16.97	33.52		24.41	353	0.04
20	16.69	33.50		20	16.69	33.50		24.46	348	0.07
32	13.30	33.32		30	14.02	33.38		24.95	301	0.10
47	11.91	33.25		50	11.80	33.25		25.29	269	0.16
60	11.08	33.30		75	10.18	33.41		25.70	230	0.22
74	10.20	33.41		100	9.97	33.70		25.96	205	0.28
90	9.97	33.57		150	10.60	34.29		26.31	172	0.37
112	9.98	33.87		200	10.15	34.36		26.45	159	0.46
137	10.60	34.25		250	9.63	34.41		26.57	148	0.54
177	10.58	34.34		300	9.06	34.37		26.64	141	0.61
220	9.82	34.38		400	7.83	34.32		26.79	127	0.75
263	9.54	34.41		500	7.04	34.31		26.89	117	0.88
353	8.36	34.33								
443	7.46	34.31								
543	6.76	34.31								

HORIZON; July 22, 1953; 2234 GCT; 30°44'N, 117°04'W; sounding, 1000 fm; wind, 310°, force 3;
weather, cloudy; sea, moderate; wire angle, 30°.

103.40

0	18.43	33.52		0	18.43	33.52		24.05	387	0.00
9	18.08	33.47		10	18.00	33.47		24.12	380	0.04
17	17.30	33.50		20	16.80	33.50		24.43	351	0.08
30	14.94	33.35		30	14.94	33.35		24.73	322	0.11
41	14.05	33.34		50	13.41	33.37		25.07	290	0.17
54	13.10	33.38		75	11.50	33.30		25.38	260	0.24
66	12.30	33.32		100	9.95	33.42		25.75	225	0.30
82	10.88	33.30		150	9.13	33.80		26.18	184	0.40
100	9.95	33.42		200	9.13	34.13		26.44	160	0.49
119	9.47	33.69		250	8.45	34.12		26.54	150	0.57
164	9.08	33.86		300	7.96	34.12		26.61	144	0.65
187	9.30	34.14		400	6.95	34.22		26.83	123	0.79
226	8.70	34.12		500	(6.65)	(34.34)		(26.97)	(110)	(0.91)
307	7.88	34.12								
390	7.00	34.21								
484	6.68	34.32								

HORIZON; July 22, 1953; 1135, 1206 GCT; 30°27'N, 116°13'W; sounding, 700 fm; wind, 310°, force 4;
weather, missing; sea, rough; wire angle, 35°, missing.

107.32

0	17.49	33.49		0	17.49	33.49		24.26	367	0.00
9	17.47	33.50		10	17.46	33.50		24.28	365	0.04
16	15.75	33.53		20	15.20	33.53		24.82	314	0.07
29	14.15	33.32		30	13.98	33.31		24.91	305	0.10
40	12.70	33.28		50	11.02	33.33		25.49	250	0.16
49	11.05	33.33		75	10.14	33.65		25.90	211	0.22
61	10.62	33.40		100	9.73	33.84		26.11	191	0.27
72	10.26	33.62		150	10.28	34.12		26.24	179	0.36
88	10.13r	34.04r		200	10.28	34.33		26.40	164	0.45
106	9.69	33.88		250	9.90	34.42		26.54	150	0.53
136	10.81r	34.29r		300	9.38	34.40		26.61	144	0.60
168	10.36	34.20		400	8.32	34.40		26.78	128	0.75
176	10.36	34.24								
253	9.86	34.42								
333	9.01	34.39								
425	8.07	34.41								

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

10735

HORIZON; July 22, 1953; 0834 GCT; 30°21'N, 116°27'W; sounding, 1300 fm; wind, 300°, force 3; weather, missing; sea, moderate; wire angle, 18°.

0	18.09	33.41		0	18.09	33.41		24.05	387	0.00
10	18.03	33.42		10	18.03	33.42		24.08	384	0.04
19	17.58	33.42		20	17.42	33.42		24.22	371	0.08
33	15.84	33.31		30	16.37	33.37		24.43	351	0.11
47	13.88	33.19		50	13.50	33.19		24.91	305	0.18
61	12.60	33.26		75	11.78	33.29		25.32	266	0.25
74	11.80	33.29		100	10.12	33.43		25.73	227	0.31
91	10.58	33.36		150	8.97	33.80		26.20	183	0.42
112	9.73	33.52		200	8.37	33.98		26.44	160	0.50
137	9.16	33.67		250	7.97	34.10		26.59	146	0.58
177	8.62	33.97		300	7.81	34.23		26.72	133	0.65
219	8.18	33.99		400	7.18	34.36		26.91	115	0.78
234	8.04	34.04		500	6.43	34.38		27.03	104	0.90
351	7.55	34.32								
439	6.88	34.37								
538	6.18	34.38								

10740

HORIZON; July 21, 1953; 0512 GCT; 30°09'N, 116°40'W; sounding, 1550 fm; wind, 290°, force 3; weather, missing; sea, moderate; wire angle, 10°.

0	19.38	33.57		0	19.38	33.57		23.85	406	0.00
10	19.16	33.64		10	19.16	33.64		23.96	396	0.04
20	16.34	33.48		20	16.34	33.48		24.52	342	0.08
35	12.80	33.62		30	14.20	33.61		25.09	288	0.11
48	11.30	33.49		50	11.17	33.49		25.59	240	0.16
62	10.32	33.60		75	9.74	33.70		26.00	202	0.22
76	9.66	33.70		100	9.13	33.81		26.19	184	0.27
93	9.22	33.78		150	8.60	34.03		26.44	160	0.35
116	8.94	33.90		200	8.10	34.08		26.56	148	0.43
141	8.70	34.02		250	7.53	34.13		26.68	137	0.50
183	8.23	34.04		300	7.20	34.18		26.77	128	0.57
226	7.86	34.12		400	6.84	34.35		26.95	111	0.70
269	7.34	34.14		500	6.18	34.39		27.07	100	0.81
362	7.02	34.29								
454	6.50	34.40								
553	5.76	34.35								

11033

HORIZON; July 19, 1953; 1132 GCT; 29°49'N, 115°54'W; sounding, 100 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 10°.

0	13.57	33.51		0	13.57	33.51		25.15	282	0.00
10	13.55	33.49		10	13.55	33.49		25.13	284	0.03
20	11.72	33.63		20	11.72	33.63		25.60	240	0.06
30	10.20	33.54		30	10.20	33.54		25.80	221	0.08
49	10.50	33.89		50	10.50	33.89		26.02	200	0.12
72	10.20	33.86		75	10.18	33.86		26.05	197	0.17
95	10.09	33.93		100	(10.10)	(33.96)		(26.14)	(188)	(0.22)

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

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HORIZON; July 19, 1953; 1342 GCT; 29°44'N, 116°00'W; sounding; 750 fm; wind, 310°, force 4;
weather, overcast; sea, rough; wire angle, 30°.

110.35

0	15.08	33.51		0	15.08	33.51		24.83	313	0.00
8	15.08	33.48		10	15.08	33.48		24.80	316	0.03
17	13.19	33.53		20	12.10	33.54		25.46	253	0.06
29	11.37	33.58		30	11.35	33.58		25.63	237	0.08
47	10.74	33.80		50	10.52	33.83		25.97	204	0.13
58	10.42	33.88		75	10.55	34.01		26.10	192	0.18
71	10.56	33.99		100	10.27	34.14		26.25	178	0.22
89	10.26	34.07		150	10.61	34.39		26.39	164	0.31
107	10.29	34.20		200	10.36	34.46		26.49	155	0.39
129	10.80	34.39		250	9.93	34.47		26.57	148	0.47
169	10.44	34.38		300	9.40	34.44		26.64	141	0.55
214	10.30	34.47		400	8.61	34.40		26.73	132	0.69
252	9.90	34.47		500	7.52	34.40		26.89	117	0.82
348	9.00	34.42								
444	8.21	34.40								
545	6.89	34.41								

HORIZON; July 19, 1953; 1655 GCT; 29°35'N, 116°22'W; sounding, 1200 fm; wind, 310°, force 4;
weather, cloudy; sea, rough; wire angle, 20°.

110.40

0	18.94	33.51		0	18.94	33.51		23.92	400	0.00
9	18.88	33.54		10	18.87	33.54		23.96	396	0.04
19	16.80	33.49		20	16.59	33.49		24.47	347	0.08
33	15.41	33.38		30	15.60	33.39		24.62	333	0.11
51	14.50	33.45		50	14.60	33.45		24.88	308	0.18
64	13.33	33.40		75	12.28	33.30		25.24	274	0.25
77	12.04	33.30		100	10.28	33.43		25.70	230	0.31
99	10.32	33.42		150	8.98	33.89		26.27	176	0.42
127	9.64	33.61		200	8.34	34.05		26.50	154	0.50
144	9.09	33.85		250	7.89	34.13		26.63	142	0.58
185	8.52	34.01		300	7.61	34.19		26.72	133	0.65
233	7.99	34.11		400	7.02	34.30		26.89	117	0.78
272	7.76	34.16		500	6.38	34.38		27.04	103	0.89
367	7.22	34.25								
464	6.60	34.38								
566	5.94	34.38								

HORIZON; July 19, 1953; 2202 GCT; 29°18'N, 116°59'W; sounding, 2000+ fm; wind, 310°, force 3;
weather, cloudy; sea, rough; wire angle, 22°.

110.50

0	18.68	33.40	5.64	0	18.68	33.40	5.64	23.90	402	0.00
9	18.62	33.45	5.56	10	18.62	33.45	5.57	23.95	397	0.04
23	17.34	33.41	5.78	20	17.57	33.42	5.70	24.19	374	0.08
51	14.88	33.36	6.13	30	16.67	33.40	5.90	24.39	355	0.12
73	13.59	33.30	6.21	50	15.03	33.36	6.12	24.72	323	0.18
99	11.91	33.29	5.52	75	13.44	33.30	6.19	25.01	296	0.26
146	10.40	33.86	4.53	100	11.81	33.29	5.51	25.32	266	0.33
190	10.63	34.40	1.18	150	10.40	33.93	4.25	26.07	195	0.45
233	10.64	34.52	0.65	200	10.65	34.44	1.00	26.42	162	0.54
277	10.04	34.55	0.48	250	10.43	34.53	0.57	26.53	151	0.62
364	9.12	34.57	0.35	300	9.83	34.56	0.42	26.66	139	0.70
448	7.21	34.39	0.52	400	8.11	34.50	0.44	26.89	117	0.83
531	6.36	34.31	0.44	500	6.63	34.33	0.48	26.96	110	0.95
697	5.32	34.43	0.34	600	5.89	34.36	0.38	27.08	99	1.06
868	4.62	34.48	0.40	700	5.29	34.43	0.32	27.21	87	1.16
1042	4.04	34.51	0.56	800	4.85	34.47	0.37	27.29	79	1.26
				1000	4.18	34.50	0.51	27.39	70	1.42

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

11060

HORIZON; July 21, 1953; 1711 GCT; 28°48.5'N, 117°40.5'W; sounding, 2100 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 00°.

0	19.66	33.49		0	19.66	33.49		23.72	419	0.00
10	19.54	33.46		10	19.54	33.46		23.73	418	0.04
20	17.53	33.52		20	17.53	33.52		24.27	366	0.08
35	16.11	33.38		30	16.53	33.38		24.40	354	0.12
49	15.45	33.50		50	15.44	33.50		24.74	321	0.18
63	15.08	33.36		75	13.82	33.23		24.88	308	0.26
75	13.82	33.23		100	11.88	33.36		25.36	262	0.34
94	12.22	33.26		150	9.44	33.81		26.14	188	0.45
113	10.93	33.54		200	8.88	34.11		26.46	158	0.54
140	9.73	33.75		250	8.53	34.22		26.60	145	0.62
183	8.94	34.01		300	7.96	34.29		26.74	131	0.69
226	8.83	34.19		400	7.20	34.36		26.91	115	0.82
270	8.26	34.24		500	6.48	34.36		27.01	106	0.93
364	7.42	34.36								
455	6.84	34.36								
554	5.95	34.37								

11330

HORIZON; July 19, 1953; 0622 GCT; 29°24'N, 115°21.5'W; sounding, 39 fm; wind, 310°, force 5; weather, missing; sea, rough; wire angle, 10°.

0	14.16	33.57		0	14.16	33.57		25.07	290	0.00
10	14.14	33.55		10	14.14	33.55		25.06	291	0.03
20	13.96	33.60		20	13.96	33.60		25.13	284	0.06
30	11.77	33.58		30	11.77	33.58		25.55	244	0.08
48	10.28	33.74								

11335

HORIZON; July 19, 1953; 0303 GCT; 29°10'N, 115°37.5'W; sounding, 640 fm; wind, 310°, force 5; weather, clear; sea, moderate; wire angle, 18°.

0	17.85	33.41		0	17.85	33.41		24.11	382	0.00
9	17.80	33.44		10	17.79	33.44		24.15	378	0.04
19	16.65	33.39		20	16.53	33.39		24.41	353	0.08
33	15.29	33.35		30	15.64	33.36		24.59	336	0.11
52	13.64	33.26		50	13.86	33.26		24.89	307	0.17
66	11.69	33.41		75	10.72	33.45		25.64	236	0.24
80	10.28	33.47		100	9.76	33.72		26.01	201	0.30
102	9.69	33.77		150	9.40	34.08		26.35	168	0.39
124	9.42	33.96		200	9.51	34.35		26.55	149	0.47
149	9.41	34.07		250	9.49	34.42		26.60	145	0.55
184	9.48	34.28		300	9.16	34.41		26.65	140	0.62
234p	9.54	34.42		400	8.23	34.41		26.80	126	0.76
239	9.54	34.42		500	(7.31)	(34.42)		(26.94)	(112)	(0.89)
347p	8.76	34.40								
453p	7.68	34.42								

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

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HORIZON; July 18, 1953; 2340 GCT; 29°04'N, 115°59.5'W; sounding, 1150 fm; wind, 310°, force 4; weather, cloudy; sea, slight; wire angle, 22°.

113.40

0	19.45	33.44		0	19.45	33.44		23.74	417	0.00
9	19.38	33.37		10	19.37	33.37		23.70	421	0.04
19	17.39	33.40		20	17.38	33.40		24.22	371	0.08
33	17.02	33.42		30	17.11	33.42		24.30	363	0.12
51	16.08	33.42		50	16.19	33.42		24.51	343	0.19
64	14.54	33.32		75	13.60	33.41		25.06	291	0.27
76	13.42	33.41		100	11.08	33.30		25.46	253	0.34
97	11.70	33.30		150	10.70	34.07		26.13	189	0.45
118	10.51	33.43		200	9.72	34.27		26.45	159	0.54
141	10.73	33.94		250	8.83	34.26		26.59	146	0.62
182	10.28	34.28		300	8.30	34.29		26.69	136	0.69
227	9.14	34.26		400	7.29	34.35		26.89	117	0.82
266	8.66	34.26		500	6.47	34.35		27.00	107	0.94
357	7.32	34.35								
451	6.82	34.35								
551	6.17	34.36								

HORIZON; July 18, 1953; 0716 GCT; 28°54'N, 114°36.5'W; sounding, 40 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°.

117.26

0	16.93	33.67		0	16.93	33.67		24.53	341	0.00
10	14.10	33.51		10	14.10	33.51		25.04	293	0.03
20	12.58	33.55		20	12.58	33.55		25.37	262	0.06
30	11.35	33.64		30	11.35	33.64		25.67	233	0.08
49	10.45	33.78								

HORIZON; July 18, 1953; 1132 GCT; 28°46'N, 114°51.5'W; sounding, 52 fm; wind, 110°, force 5; weather, missing; sea, smooth; wire angle, 05°.

117.30

0	19.16	33.70		0	19.16	33.70		24.01	391	0.00
10	15.54	33.56		10	15.54	33.56		24.76	320	0.04
20	12.22	33.49		20	12.22	33.49		25.40	259	0.06
30	10.96	33.48		30	10.96	33.48		25.62	238	0.09
49	9.85	33.68		50	9.85	33.70		25.98	204	0.13
73	10.32	34.14		75	(10.33)	(34.16)		(26.26)	(177)	(0.18)

HORIZON; July 18, 1953; 1426 GCT; 28°36'N, 115°11'W; sounding, 94 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 09°.

117.35

0	18.64	33.48		0	18.64	33.48		23.97	395	0.00
10	18.60	33.47		10	18.60	33.47		23.97	395	0.04
25	17.16	33.47		20	18.00	33.47		24.12	380	0.08
48	12.12	33.47		30	16.30	33.47		24.52	342	0.11
71	9.98	33.48		50	11.58	33.47		25.50	249	0.17
93	10.10	33.78		75	9.98	33.49		25.80	221	0.23
113	11.49	34.43		100	10.80	34.31		26.29	174	0.28
138	11.26	34.49								

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

117.40 HORIZON; July 18, 1953; 1755 GCT; 28°28'N, 115°36'W; sounding, 540 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 22°.

0	19.64	33.44		0	19.64	33.44		23.69	422	0.00
9	19.52	33.43		10	19.45	33.43		23.73	418	0.04
19	18.08	33.41		20	17.96	33.41		24.09	383	0.08
33	16.59	33.37		30	16.84	33.38		24.33	360	0.12
46	15.19	33.29		50	14.76	33.28		24.72	323	0.19
59	13.98	33.26		75	12.82	33.25		25.09	288	0.26
72	13.08	33.25		100	10.58	33.41		25.63	237	0.33
88	11.15	33.30		150	11.63	34.37		26.19	184	0.44
108	10.53	33.53		200	11.43	34.60		26.40	164	0.53
131	11.16	34.13		250	10.69	34.60		26.54	150	0.61
167	11.75	34.51		300	10.34	34.57		26.58	146	0.68
205	11.36	34.60		400	8.90	34.44		26.72	133	0.83
243	10.73	34.60		500	7.57	34.42		26.90	116	0.96
328	10.07	34.54								
413	8.65	34.43								
511	7.42	34.42								

120.25 HORIZON; July 18, 1953; 0212 GCT; 28°20'N, 114°14.5'W; sounding, 16 fm; wind, 330°, force 4; weather, clear; sea, moderate; wire angle, 02°.

0	20.99	33.78	5.92	0	20.99	33.78	5.92	23.59	431	0.00
7	20.98	33.78	5.96	10	18.40	33.78	6.25	24.26	367	0.04
17	15.00	33.58	7.03	20	13.90	33.58	7.01	25.13	284	0.07
27	11.86	33.67	4.22							

120.30 HORIZON; July 17, 1953; 2316 GCT; 28°15'N, 114°34.5'W; sounding, 53 fm; wind, 300°, force 2; weather, clear; sea, smooth; wire angle, 08°.

0	19.53	33.51	6.03	0	19.53	33.51	6.03	23.77	414	0.00
10	18.66	33.52	6.35	10	18.66	33.52	6.35	24.00	392	0.04
20	15.76	33.65	6.87	20	15.76	33.65	6.87	24.78	318	0.08
29	14.24	33.62	6.85	30	13.78	33.62	6.84	25.19	279	0.11
48	10.90	33.45	4.62	50	10.70	33.45	4.40	25.64	236	0.16
70	10.01	33.87	2.46	75	(9.90)	(33.99)	(2.27)	(26.20)	(183)	(0.21)

120.35 HORIZON; July 17, 1953; 1204 GCT; 28°05.5'N, 114°53'W; sounding, 50 fm; wind, 310°, force 2; weather, missing; sea, calm; wire angle, 00°.

0	19.09	33.62	6.07	0	19.09	33.62	6.07	23.97	395	0.00
10	19.10	33.64	6.03	10	19.10	33.64	6.03	23.98	394	0.04
20	19.10	33.61	4.53r	20	19.10	33.61	5.92	23.96	393	0.08
30	18.80	33.64	5.85	30	18.80	33.64	5.85	24.05	387	0.12
50	13.86	33.55	5.80	50	13.86	33.55	5.80	25.12	285	0.19

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

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HORIZON; July 17, 1953; 0614, 0649 GCT; 27°43.5'N, 115°31.5'W; sounding, 1000+ fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°, 12°.

12045

0	18.77	33.64	6.16	0	18.77	33.64	6.16	24.06	386	0.00
20	15.44	33.61	6.29	10	17.15	33.62	6.25	24.44	350	0.04
49	12.94	33.86	3.90	20	15.44	33.61	6.29	24.82	314	0.07
78	11.90	34.04	2.10	30	14.56	33.63	6.10	25.03	294	0.10
105	12.12	34.41	0.95	50	12.91	33.87	3.88	25.56	243	0.15
158	11.71	34.58	0.52	75	11.91	34.02	2.29	25.87	214	0.21
210	11.28	34.64	0.23	100	12.09	34.37	1.06	26.10	192	0.26
238	11.04	34.64	0.29	150	11.79	34.56	0.58	26.31	172	0.36
261	10.72	34.64	0.29	200	11.37	34.63	0.24	26.44	160	0.44
				250	10.88	34.64	0.29	26.54	150	0.52
310	10.12	34.61	0.25	300	10.22	34.61	0.25	26.63	142	0.60
408	9.02	34.57	0.25	400	9.12	34.57	0.24	26.78	128	0.74
511	7.77	34.48	0.23	500	7.92	34.49	0.22	26.91	115	0.87
611	6.64	34.39	0.23	600	6.76	34.39	0.22	26.99	108	0.99
812	5.14	34.47	0.30	700	5.93	34.42	0.25	27.12	95	1.10
1016	4.01	34.52	0.63	800	5.23	34.47	0.30	27.25	83	1.20
1218	3.43	34.53	0.92	1000	4.08	34.52	0.61	27.42	67	1.37

HORIZON; July 16, 1953; 2354 GCT; 27°35.5'N, 115°52'W; sounding, 2000+ fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 17°.

12050

0	20.84	33.43	5.52	0	20.84	33.43	5.52	23.36	453	0.00
9	20.44	33.50	5.73	10	20.43	33.50	5.74	23.53	437	0.04
19	19.95	33.50	5.77	20	19.75	33.50	5.76	23.71	420	0.09
33	16.90	33.42	5.51	30	17.50	33.44	5.52	24.22	371	0.13
41	15.62	33.40	6.55	50	15.08	33.38	6.50	24.73	322	0.20
63	14.19	33.36	-	75	13.28	33.34	5.78	25.07	290	0.27
77	13.14	33.34	5.72	100	11.49	33.50	4.30	25.54	245	0.34
97	11.65	33.47	4.53	150	10.31	34.07	2.48	26.19	184	0.45
118	10.87	33.70	3.37	200	10.31	34.45	0.89	26.49	155	0.54
142	10.30	33.95	2.80	250	9.80	34.49	0.57	26.61	144	0.61
187	10.36	34.42	1.10	300	9.23	34.49	0.47	26.70	135	0.69
237	9.94	34.48	0.61	400	8.17	34.46	0.30	26.85	121	0.82
279	9.46	34.49	0.51	500	7.08	34.43	0.20	26.98	109	0.94
377	8.41	34.47	0.33							
474	7.34	34.43	0.21							
574	6.34	34.46	0.18							

HORIZON; July 16, 1953; 1808 GCT; 27°14'N, 116°30'W; sounding, 2000+ fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 22°.

12060

0	20.63	33.61	5.59	0	20.63	33.61	5.59	23.56	434	0.00
9	19.36	33.65	5.64	10	19.21	33.65	5.65	23.96	396	0.04
23	18.40	33.61	5.78	20	18.63	33.63	5.73	24.09	383	0.08
46	16.97	33.53	6.00	30	18.07	33.58	5.86	24.19	374	0.12
68	15.44	33.49	5.97	50	16.80	33.52	6.00	24.45	349	0.19
90	13.16	33.38	5.20	75	14.70	33.46	5.88	24.87	309	0.27
135	10.70	33.74	3.38	100	12.54	33.40	4.68	25.26	272	0.35
175	9.82	34.06	2.79	150	10.17	33.88	3.17	26.07	195	0.46
214	9.74	34.34	1.51	200	9.78	34.25	1.94	26.42	162	0.56
252	9.20	34.42	1.02	250	9.24	34.42	1.02	26.65	140	0.63
346	8.06	34.41	0.69	300	8.60	34.41	0.85	26.74	131	0.70
415	7.34	34.46	0.37	400	7.48	34.46	0.42	26.95	111	0.83
499	6.71	34.42	0.24	500	6.69	34.42	0.24	27.03	104	0.95
669	5.60	34.43	0.29	600	6.02	34.42	0.25	27.11	96	1.05
841	4.68	34.45	0.42	700	5.42	34.44	0.30	27.20	88	1.15
1025	4.00	34.47	0.62	800	4.88	34.45	0.39	27.27	81	1.25
				1000	4.10	34.47	0.59	27.38	71	1.42

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

12070

HORIZON; July 16, 1953; 1300 GCT; 26°50'N, 117°06.5'W; sounding, 2000+ fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°.

0	21.47	33.74	5.33	0	21.47	33.74	5.33	23.43	446	0.00
9	21.38	33.76	4.43r	10	21.35	33.76	5.49	23.48	442	0.04
20	18.64	33.66	5.73	20	18.64	33.66	5.73	24.11	382	0.09
34	18.56	33.74	6.19	30	18.59	33.70	6.13	24.15	378	0.12
49	17.82	33.69	6.07	50	17.70	33.68	6.05	24.36	358	0.20
63	14.99	33.52	3.69r	75	13.60	33.41	5.77	25.06	291	0.28
77	13.44	33.41	5.76	100	11.84	33.54	4.36	25.51	248	0.35
95	12.19	33.48	4.85	150	10.08	33.97	2.81	26.15	187	0.46
114	10.99	33.70	3.60	200	9.72	34.33	1.77	26.50	154	0.54
144	10.12	33.92	3.00	250	8.99	34.37	1.31	26.65	140	0.62
185	9.88	34.29	1.98	300	8.20	34.36	1.02	26.76	129	0.69
229	9.34	34.37	1.45	400	7.01	34.36	0.55	26.93	113	0.82
272	8.58	34.37	1.18	500	6.37	34.46	0.31	27.10	97	0.93
365	7.40	34.33	0.70							
456	6.54	34.42	0.38							
558	6.20	34.49	0.26							

12080

HORIZON; July 16, 1953; 0726 GCT; 26°33'N, 117°47'W; sounding, 2000+ fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 19°.

0	21.17	33.69	5.47	0	21.17	33.69	5.47	23.47	442	0.00
9	20.70	33.68	5.46	10	20.59	33.68	5.46	23.62	428	0.04
23	18.80	33.72	5.67	20	19.10	33.71	5.64	24.03	389	0.08
46	18.33	33.75	5.74	30	18.69	33.73	5.71	24.15	378	0.12
69	15.45	33.49	6.13	50	17.99	33.75	5.80	24.34	360	0.20
91	13.13	33.41	5.65	75	14.70	33.44	6.12	24.86	310	0.28
139	10.56	33.77	3.45	100	12.40	33.41	5.17	25.30	268	0.35
179	10.14	34.13	2.23	150	10.40	33.86	3.08	26.01	201	0.47
217	10.05	34.40	1.45	200	10.10	34.34	1.78	26.44	160	0.56
257	8.77	34.23	-	250	8.93	34.24	0.90	26.55	149	0.64
339	7.98	34.34	0.71	300	8.26	34.28	0.78	26.69	136	0.72
419	7.48	34.42	0.31	400	7.65	34.41	0.38	26.88	118	0.85
502	6.42	34.36	0.29	500	6.44	34.36	0.30	27.01	106	0.97
669	5.50	34.45	0.22	600	5.85	34.41	0.24	27.13	94	1.08
840	4.70	34.55	0.32	700	5.34	34.47	0.22	27.24	84	1.17
1003	4.02	34.60	0.56	800	4.87	34.53	0.29	27.34	74	1.26
				1000	4.03	34.60	0.53	27.49	60	1.42

12090

HORIZON; July 16, 1953; 0209 GCT; 26°17'N, 118°27'W; sounding, 2000+ fm; wind, 310°, force 2; weather, partly cloudy; sea, rough; wire angle, 08°.

0	21.95	33.63	6.02	0	21.95	33.63	6.02	23.21	467	0.00
10	20.42	33.61	5.65	10	20.42	33.61	5.65	23.61	429	0.04
20	18.89	33.61	5.22	20	18.89	33.61	5.22	24.01	391	0.09
35	18.63	33.61	5.57	30	18.70	33.61	5.47	24.06	386	0.12
49	18.14	33.59	5.44	50	18.00	33.59	5.43	24.21	372	0.20
63	16.56	33.54	5.40	75	15.88	33.53	5.87	24.67	328	0.29
76	15.80	33.53	5.88	100	14.19	33.41	5.97	24.94	302	0.37
94	14.64	33.41	5.99	150	10.98	33.71	3.38	25.80	221	0.50
116	12.94	33.41	5.37	200	9.97	34.14	2.28	26.31	172	0.60
141	11.13	33.60	3.92	250	9.37	34.33	1.64	26.55	149	0.68
181	10.57	34.05	2.38	300	9.02	34.39	0.92	26.66	139	0.76
222	9.55	34.21	2.18	400	7.59	34.38	0.50	26.87	119	0.89
238	9.46	34.30	1.86	500	6.58	34.37	0.39	27.00	107	1.01
354	8.50	34.42	0.51							
445	6.98	34.34	0.48							
548	6.41	34.42	0.25							

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

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HORIZON; July 14, 1953; 2259 GCT; 27°24'N, 114°39'W; sounding, 41 fm; wind, 300°, force 2; weather, partly cloudy; sea, rough; wire angle, 10°.

12337

0	18.39	33.87		0	18.39	33.87		24.33	360	0.00
10	15.88	33.87		10	15.88	33.87		24.93	303	0.03
20	12.65	33.65		20	12.65	33.65		25.44	255	0.06
29	13.07	33.97		30	13.07	33.98		25.61	239	0.09
48	12.52	34.13		50	12.45	34.13		25.85	216	0.13
72	12.13	34.17		75	(12.11)	(34.17)		(25.94)	(207)	(0.18)

HORIZON; July 15, 1953; 0123 GCT; 27°18'N, 114°51.5'W; sounding, 230 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 18°.

12340

0	20.17	33.73		0	20.17	33.73		23.77	414	0.00
9	17.57	33.78		10	17.56	33.80		24.48	346	0.04
24	15.54	33.89		20	16.12	33.86		24.86	310	0.07
47	13.33	34.10		30	14.70	33.94		25.24	274	0.10
69	12.44	34.21		50	13.19	34.11		25.69	231	0.15
91	12.10	34.42		75	12.30	34.28		25.99	202	0.20
135	12.03	34.54		100	12.07	34.45		26.17	185	0.25
174	11.60	34.64		150	11.90	34.60		26.32	171	0.34
217	11.29	34.64		200	11.39	34.64		26.44	160	0.43
259	11.00	34.63		250	11.07	34.63		26.49	155	0.51
307	10.44	34.64		300	10.52	34.64		26.60	145	0.59
353	9.70	34.52								

HORIZON; July 15, 1953; 0722, 0745 GCT; 26°59'N, 115°31'W; sounding, 2000 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 31°, 39°.

12350

0	20.97	33.47		0	20.97	33.47		23.36	453	0.00
7	18.33	33.44		10	17.70	33.45		24.18	375	0.04
17	17.03	33.46		20	16.92	33.46		24.37	357	0.08
30	16.68	33.44		30	16.68	33.44		24.41	353	0.11
43	15.98	33.42		50	15.34	33.41		24.69	326	0.18
56	14.70	33.39		75	12.50	33.38		25.26	272	0.26
67	13.50	33.37		100	10.40	33.62		25.83	218	0.32
80	12.05	33.43		150	10.90	34.21		26.20	183	0.42
95	11.01	33.60		200	11.00	34.60		26.48	156	0.50
114	9.98	33.68		250	10.32	34.60		26.60	145	0.58
149	10.84	34.18		300	9.69	34.57		26.69	136	0.66
186	11.37	34.55		400	8.32	34.49		26.85	121	0.79
				500	(7.23)	(34.46)		(26.98)	(109)	(0.92)
211	10.74	34.60								
289	9.86	34.58								
366	8.72	34.51								
457	7.70	34.47								

HORIZON; July 14, 1953; 1701 GCT; 26°55'N, 114°07'W; sounding, 40 fm; wind, calm; weather, clear; sea, slight; wire angle, 12°.

12734

0	19.17	33.94		0	19.17	33.94		24.19	374	0.00
10	18.53	33.96		10	18.53	33.96		24.37	357	0.04
20	18.34	33.94		20	18.34	33.94		24.40	354	0.07
30	14.94	33.79		30	14.94	33.79		25.07	290	0.10
48	12.76	33.99								

S10

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

HORIZON; July 20, 1953; 2331 GCT; 27°28.5'N, 114°39.5'W; sounding, 30 fm; wind, 270°, force 5; weather, clear; sea, rough; wire angle, 10°.

0	17.22	33.88	5.14	0	17.22	33.88	5.14	24.62	333	0.00
5	17.18	33.91	5.18	10	15.11	33.92	3.99	25.14	283	0.03
10	15.11	33.92	3.99	20	12.97	33.94	2.80	25.60	240	0.06
15	13.68	33.94	2.84	30	12.83	34.02	1.10	25.69	231	0.08
19	13.55r	33.94	2.81							
24	12.91	33.96	1.94							
29	12.71r	34.01	1.25							
34	12.73	34.08	0.53							
39	12.45	34.14	0.14							
44	12.41	34.17	0.13							

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306

12740

HORIZON; July 14, 1953; 1338 GCT; 26°44.5'N, 114°26'W; sounding, 1640 fm; wind, 290°, force 1; weather, cloudy; sea, moderate; wire angle, 02°.

0	20.35	33.68		0	20.35	33.68		23.68	422	0.00
10	19.34	33.65		10	19.34	33.65		23.92	400	0.04
20	15.61	33.58		20	15.61	33.58		24.76	320	0.08
35	14.68	33.88		30	15.00	33.86		25.11	286	0.11
49	13.74	33.84		50	13.73	33.81		25.34	264	0.16
63	11.42	33.57		75	10.68	33.70		25.84	217	0.22
78	10.66	33.73		100	10.69	34.07		26.13	189	0.27
96	10.68	33.93		150	11.60	34.54		26.33	170	0.37
118	11.69	34.35		200	11.09	34.70		26.54	150	0.45
143	11.64	34.51		250	10.68	34.67		26.60	145	0.52
184	11.26	34.68		300	10.24	34.62		26.63	142	0.60
223	10.87	34.71		400	9.01	34.55		26.78	128	0.74
264	10.56	34.64		500	7.73	34.49		26.93	113	0.87
349	9.70	34.60								
438	8.50	34.51								
535	7.30	34.49								

12750

HORIZON; July 14, 1953; 0712 GCT; 26°21'N, 115°10.5'W; sounding, 2200 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 03°.

0	21.06	33.63		0	21.06	33.63		23.46	444	0.00
10	18.46	33.53		10	18.46	33.53		24.05	387	0.04
20	16.07	33.55		20	16.07	33.55		24.64	331	0.08
35	15.12	33.51		30	15.46	33.52		24.75	320	0.11
49	14.27	33.65		50	14.31	33.65		25.10	287	0.17
63	13.49	33.63		75	11.90	33.52		25.48	251	0.24
76	11.66	33.52		100	10.62	33.72		25.87	214	0.30
94	10.61	33.62		150	10.49	34.31		26.35	168	0.39
115	10.77	34.05		200	9.75	34.38		26.53	151	0.48
140	10.66	34.29		250	9.32	34.46		26.66	139	0.55
181	9.88	34.36		300	8.57	34.45		26.78	128	0.62
224	9.61	34.42		400	7.60	34.43		26.91	115	0.75
265	9.11	34.48		500	6.89	34.48		27.05	102	0.86
356	7.92	34.42								
449	7.30	34.45								
546	6.47	34.51								

13030

HORIZON; July 13, 1953; 0358 GCT; 26°30'N, 113°28'W; sounding, 43 fm; wind, 290°, force 2; weather, clear; sea, moderate; wire angle, 10°.

0	21.06	34.15		0	21.06	34.15		23.85	406	0.00
10	20.56	34.16		10	20.56	34.16		23.99	393	0.04
20	15.35	34.08		20	15.35	34.08		25.21	277	0.07
30	12.81	34.05		30	12.81	34.05		25.71	229	0.10
49	12.20	34.18								

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

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HORIZON; July 13, 1953; 0717 GCT; 26°20'N, 113°48'W; sounding, 265 fm; wind, 220°, force 2; weather, clear; sea, slight; wire angle, 18°.

13035

0	19.20	33.87		0	19.20	33.87		24.13	380	0.00
9	17.74	33.79		10	17.55	33.79		24.48	346	0.04
24	15.73	33.53		20	16.50	33.53		24.52	342	0.07
47	13.67	33.73		30	14.70	33.53		24.92	304	0.10
70	12.99	34.14		50	13.54	33.78		25.36	262	0.16
92	12.19	34.24		75	12.71	34.17		25.83	218	0.22
139	12.08	34.60		100	12.18	34.28		26.02	200	0.27
180	11.64	34.64		150	11.99	34.62		26.32	171	0.37
221	11.38	34.69		200	11.51	34.66		26.44	160	0.45
263	11.03	34.67		250	11.13	34.68		26.52	152	0.53
311	10.74	34.66		300	10.82	34.66		26.56	148	0.61
354	10.31	34.68								

HORIZON; July 13, 1953; 1055, 1127 GCT; 26°10'N, 114°08'W; sounding, 1300 fm; wind, 270°, force 2; weather, missing; sea, slight; wire angle, 28°, 37°.

13040

0	20.17	33.65	4.45	0	20.17	33.65	4.45	23.71	420	0.00
8	19.64	33.62	5.90	10	19.29	33.62	5.95	23.91	400	0.04
21	17.75	33.68	6.07	20	18.00	33.68	6.06	24.28	365	0.08
44	15.67	33.54	5.89	30	16.94	33.66	6.02	24.52	342	0.12
66	13.92	33.50	5.72	50	15.22	33.52	5.85	24.80	316	0.18
88	12.39	33.53	4.68	75	13.27	33.51	5.30	25.21	277	0.26
129	10.58	33.94	3.14	100	11.78	33.60	4.21	25.56	243	0.32
161	10.08	34.25	1.97	150	10.10	34.15	2.40	26.29	174	0.43
188	10.76	34.52	0.78	200	10.72	34.53	0.73	26.48	156	0.51
213	10.59	34.53	0.70	250	9.97	34.58	0.41	26.65	140	0.59
				300	9.33	34.60	0.30	26.77	128	0.66
217	10.02r	34.61r	0.33r	400	8.23	34.56	0.21	26.91	115	0.78
273	9.62	34.60	0.30	500	7.08	34.51	0.19	27.04	103	0.90
332	8.99	34.60	0.28	600	6.13	34.49	0.20	27.15	92	1.01
445	7.72	34.53	0.18	700	(5.56)	(34.49)	(0.30)	(27.23)	(85)	(1.10)
559	6.48	34.49	0.19							
695	5.59	34.49	0.29							

HORIZON; July 13, 1953; 1748, 1831 GCT; 25°46'N, 114°47'W; sounding, 2400 fm; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 08°, 06°.

13050

0	20.87	33.59		0	20.87	33.59		23.48	442	0.00
9	18.98	33.64		10	18.80	33.64		24.05	387	0.04
20	17.57	33.63		20	17.57	33.63		24.35	359	0.08
35	15.41	33.59		30	16.30	33.61		24.63	332	0.11
54	13.28	33.40		50	13.53	33.41		25.08	289	0.18
68	12.53	33.65		75	12.00	33.65		25.56	243	0.24
82	11.26	33.55		100	10.18	33.64		25.88	213	0.30
105	10.16	33.72		150	10.07	34.05		26.22	181	0.40
				200	10.06	34.40		26.49	155	0.49
125	10.51	33.97		250	9.43	34.45		26.64	141	0.56
152	10.06	34.06		300	8.82	34.43		26.72	133	0.63
198	10.08	34.40		400	7.58	34.42		26.90	116	0.76
251	9.42	34.45		500	6.62	34.42		27.04	103	0.88
294	8.89	34.43		600	5.90	34.42		27.13	94	0.99
397	7.61	34.42								
496	6.65	34.42								
600	5.90	34.42								

OBSERVED		INTERPOLATED				COMPUTED				
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ_T	ΔD
m	°C	‰	ml/L	m	°C	‰	ml/L	g/L	$10^{-5} \frac{cm^3}{g}$	dyn. m
13060 HORIZON; July 13, 1953; 2354 GCT; 25°28'N, 115°26'W; sounding, 2000+ fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 18°.										
0	19.52	33.45	5.53	0	19.52	33.45	5.53	23.73	418	0.00
10	18.38	33.46	5.43	10	18.38	33.46	5.43	24.02	390	0.04
25	17.50	33.45	5.85	20	17.83	33.46	5.60	24.16	377	0.08
52	14.82	33.37	6.34	30	17.00	33.43	6.04	24.33	360	0.12
75	13.30	33.41	6.00	50	15.03	33.37	6.32	24.73	322	0.18
101	11.81	33.62	4.17	75	13.30	33.41	6.00	25.12	285	0.26
146	10.30	34.08	2.99	100	11.97	33.60	4.22	25.53	246	0.33
192	10.54	34.40	1.12	150	10.31	34.12	2.80	26.23	180	0.44
241	9.72	34.46	1.11	200	10.49	34.41	1.11	26.43	161	0.52
282	9.29	34.49	0.64	250	9.62	34.47	1.08	26.62	143	0.60
376	8.22	34.52	0.28	300	9.11	34.50	0.54	26.73	132	0.67
469	6.96	34.47	0.20	400	7.83	34.52	0.25	26.94	112	0.80
561	6.24	34.48	0.28	500	6.69	34.47	0.20	27.06	101	0.91
743	5.08	34.54	0.44	600	5.99	34.50	0.31	27.18	90	1.02
930	4.32	34.55	0.55	700	5.33	34.54	0.40	27.29	79	1.11
1115	3.82	34.60	0.18r	800	4.82	34.54	0.49	27.35	74	1.19
				1000	4.12	34.56		27.45	64	1.35
13325 HORIZON; July 12, 1953; 2340 GCT; 26°05'N, 112°50'W; sounding, 44 fm; wind, 290°, force 2; weather, partly cloudy; sea, slight; wire angle, 05°.										
0	22.44	34.14		0	22.44	34.14		23.46	444	0.00
10	18.58	33.96		10	18.58	33.96		24.35	359	0.04
20	14.30	33.97		20	14.30	33.97		25.35	263	0.07
30	13.51	34.12		30	13.51	34.12		25.63	237	0.10
50	12.86	34.35		50	12.86	34.35		25.94	207	0.14
73	12.63	34.52		75	(12.61)	(34.53)		(26.13)	(189)	(0.19)
13330 HORIZON; July 12, 1953; 2055 GCT; 25°57'N, 113°07.5'W; sounding, 100 fm; wind, 200°, force 3; weather, cloudy; sea, calm; wire angle, 00°.										
0	20.28	33.98		0	20.28	33.98		23.93	399	0.00
10	18.26	33.87		10	18.26	33.87		24.36	358	0.04
20	15.39	33.70		20	15.39	33.70		24.90	306	0.07
30	14.39	33.76		30	14.39	33.76		25.17	280	0.10
49	13.18	33.96		50	13.12	33.97		25.59	240	0.15
73	12.42	34.15		75	12.40	34.16		25.88	213	0.21
96	12.13	34.36		100	(12.12)	(34.39)		(26.11)	(191)	(0.26)
13340 HORIZON; July 12, 1953; 1452 GCT; 25°31'N, 113°47'W; sounding, 2000+ fm; wind, 290°, force 3; weather, cloudy; sea, slight; wire angle, 12°.										
0	20.18	33.63		0	20.18	33.63		23.69	422	0.00
10	19.36	33.62		10	19.36	33.62		23.90	402	0.04
20	17.80	33.62		20	17.80	33.62		24.29	364	0.08
33	15.86	33.48		30	16.40	33.51		24.53	341	0.12
48	14.78	33.44		50	14.64	33.44		24.87	309	0.18
61	13.39	33.41		75	12.52	33.40		25.27	271	0.25
74	12.53	33.40		100	10.95	33.62		25.73	227	0.32
92	11.62	33.52		150	11.31	34.42		26.29	174	0.42
114	10.80	33.87		200	10.98	34.63		26.51	153	0.50
137	11.22	34.26		250	10.64	34.61		26.56	148	0.58
178	11.33	34.59		300	9.89	34.56		26.65	140	0.66
220	10.72	34.64		400	8.49	34.53		26.85	121	0.79
262	10.57	34.60		500	7.42	34.51		26.99	108	0.91
351	9.01	34.53								
443	8.04	34.53								
542	6.93	34.49								

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

S10
CCOFI
5307

HORIZON; July 12, 1953; 0310 GCT; 25°36'N, 112°18'W; sounding, 40 fm; wind, 340°, force 3;
weather, clear; sea, moderate; wire angle, 00°.

13723

0	22.99	34.25		0	22.99	34.25		23.39	450	0.00
10	21.94	34.22		10	21.94	34.22		23.66	424	0.04
20	16.95	34.03		20	16.95	34.03		24.80	316	0.08
30	14.61	34.06		30	14.61	34.06		25.35	263	0.11
49	13.40	34.22								

HORIZON; July 12, 1953; 0705 GCT; 25°20'N, 112°45'W; sounding, 175 fm; wind, 270°, force 3;
weather, clear; sea, slight; wire angle, 14°.

13730

0	20.94	33.79		0	20.94	33.79		23.61	429	0.00
10	20.25	33.75		10	20.25	33.75		23.76	415	0.04
23	16.94	33.63		20	17.95	33.65		24.27	366	0.08
48	13.69	33.56		30	15.80	33.60		24.74	321	0.12
71	12.77	33.94		50	13.48	33.56		25.20	278	0.18
105	12.48	34.20		75	12.72	33.99		25.69	231	0.24
141	12.08	34.57		100	12.53	34.16		25.85	216	0.30
184	11.55	34.70		150	11.98	34.63		26.32	171	0.39
225	10.99	34.64		200	11.32	34.69		26.50	154	0.48

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