

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

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STATION POSITIONS ~~AS~~

data report

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5306
(MLR 49)
3 June - 3 July 1953

SIO Reference 58-15
1 July 1958

ERRATA

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5305

SIO Reference 58-14
1 March 1958

Page 163: In second column heading of computed
data, delete sub T following delta.

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5306

(MLR 49)

3 June - 3 July 1953

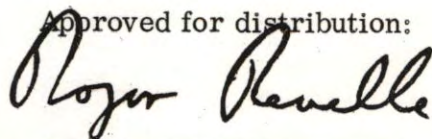
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Marine Research Committee

SIO Reference 58-15

1 July 1958

Approved for distribution:



Roger Revelle, Director

CONTENTS

List of Figures	ii
Introduction.	iii
Personnel	v
Tabulated Data at Standard Depths.	221
Distribution List	273

FIGURES

1. CCOFI Cruise 5306 (MLR 49), station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Surface currents measured by geomagnetic electrokinetograph (GEK)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of temperature at 200 meters
7. Horizontal distribution of salinity at 200 meters

INTRODUCTION

The data in this report were collected on the forty-ninth consecutive cruise of the California Cooperative Oceanic Fisheries Investigations program. The five ships participating were the R/V Yellowfin of the California Department of Fish and Game and 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.

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 5306 data is numbered 221.

PERSONNEL

SHIPS' CAPTAINS

Davis, Laurence E., R/V Crest
Newbegin, Robert C., R/V E. W. Scripps
Ferris, Noel L., R/V Horizon
Newbegin, Robert C., R/V Paolina-T
Mitchell, Richard B., R/V Yellowfin

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Crest

Smith, Alan C., Senior Marine Technician
Hinds, James W., Marine Technician
King, Robert D., Marine Technician
Kircher, Robert J., Marine Technician
Person, David A., Marine Technician
Thraillkill, James R., Fisheries Research Biologist, U. S. Fish and Wildlife
Service

R/V E. W. Scripps

Greenbaum, Richard H., Marine Technician
King, Robert D., Marine Technician
Kivlen, John C., Marine Technician
Stover, Allan J., Jr., Marine Technician

R/V Horizon

Worrall, Charles G., Senior Marine Technician
Casey, Harold D., Marine Biologist, U. S. Fish and Wildlife Service
Greenbaum, Richard H., Marine Technician
Smith, James B., Marine Technician
Stover, Allan J., Jr., Marine Technician

R/V Paolina-T

Payne, Miles M., Jr., Senior Marine Technician
Howell, Robert W., Marine Technician
Livingstone, Robert, Jr., Marine Biologist, U. S. Fish and Wildlife Service
Schwartzlose, Richard A., Laboratory Technician

R/V Yellowfin

Coolidge, Richard N., Senior Marine Technician
Bevington, Clarence L., Jr., Marine Biologist, California Department of
Fish and Game
Lance, James R., Marine Technician
Riber, Donald N., Marine Technician

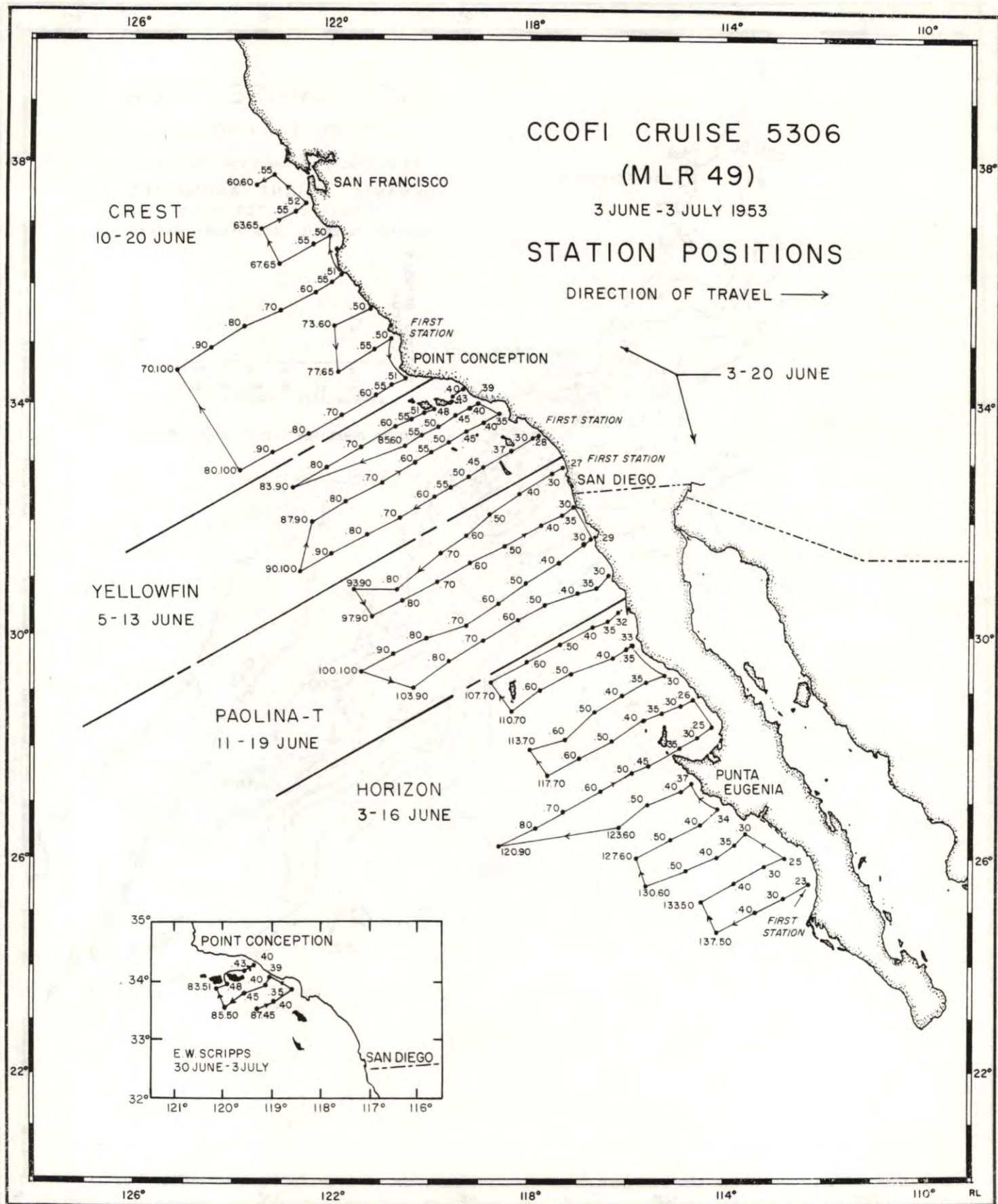


FIGURE 1

FROM H.O. CHART 0527

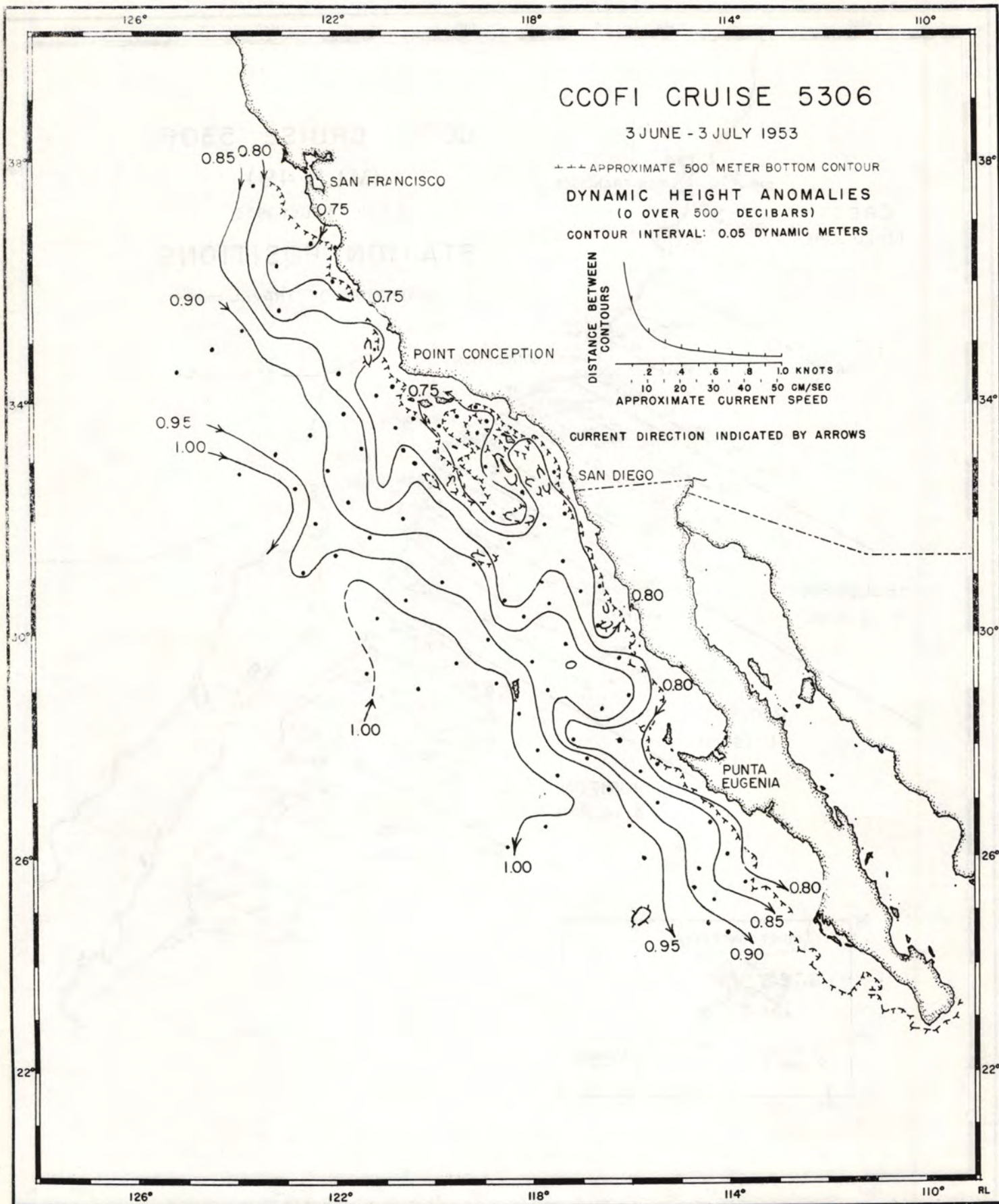


FIGURE 2

FROM H.O. CHART 0527

120°

CCOFI CRUISE 5306

3 JUNE-3 JULY 1953

SURFACE CURRENTS

MEASURED BY GEOMAGNETIC ELECTROKINETOGRAPH

CORRECTED FOR DROOP FACTOR

35°

35°

5 CM/SEC
10 CM/SEC

POINT CONCEPTION

YELLOWFIN
5-13 JUNE

SAN DIEGO

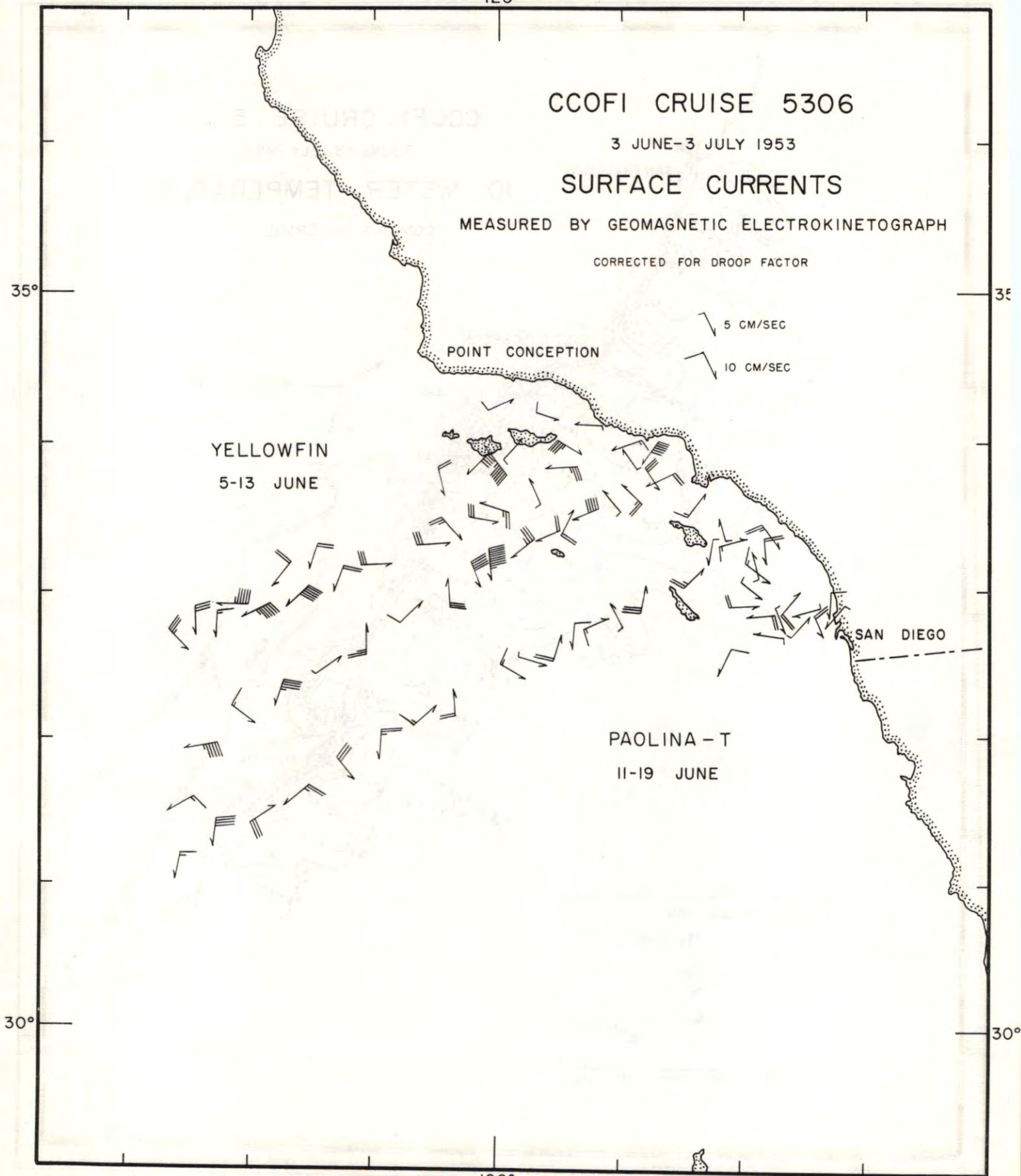
PAOLINA-T
11-19 JUNE

30°

30°

120°

FIGURE 3



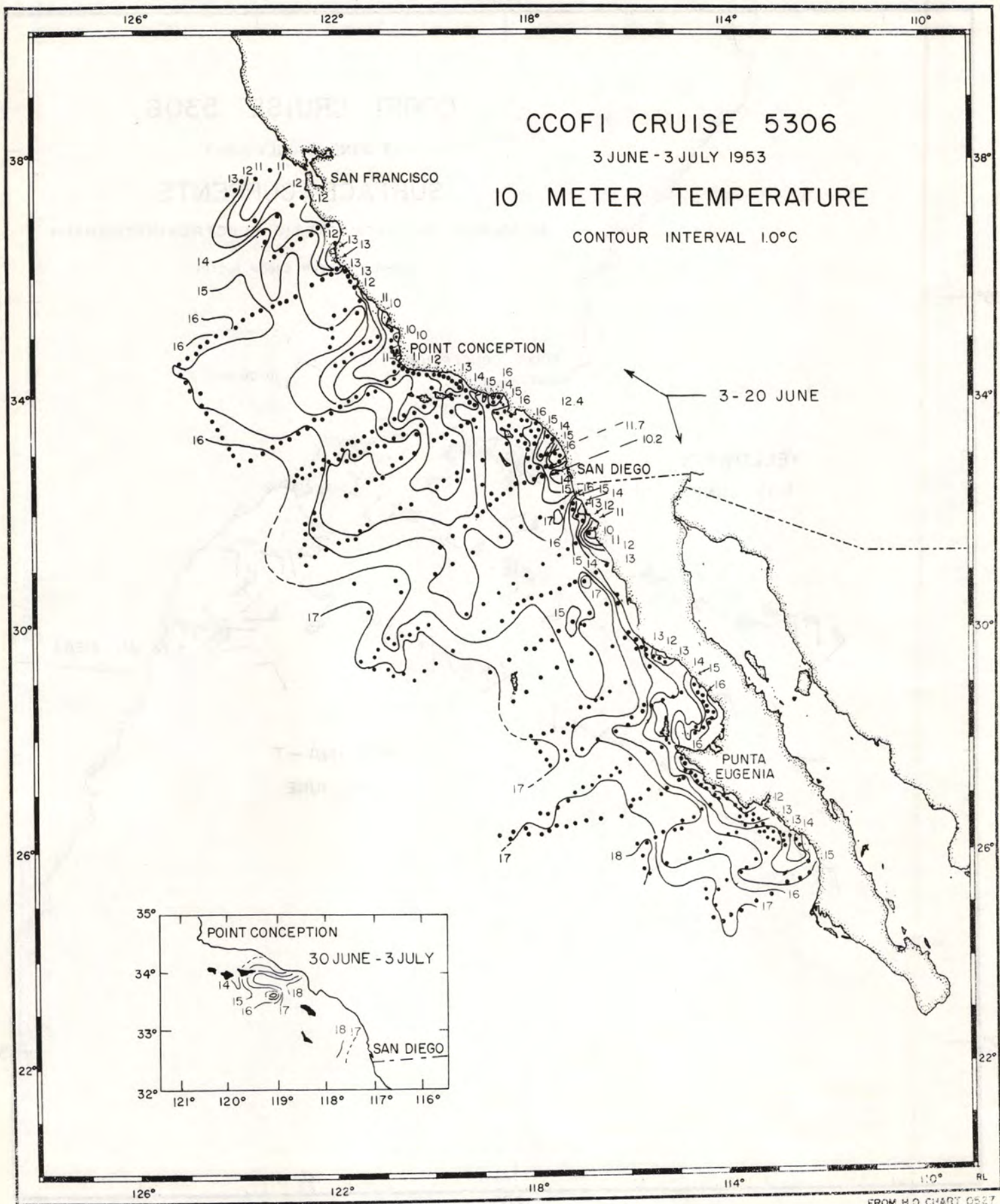


FIGURE 4

FROM H.O. CHART 0527

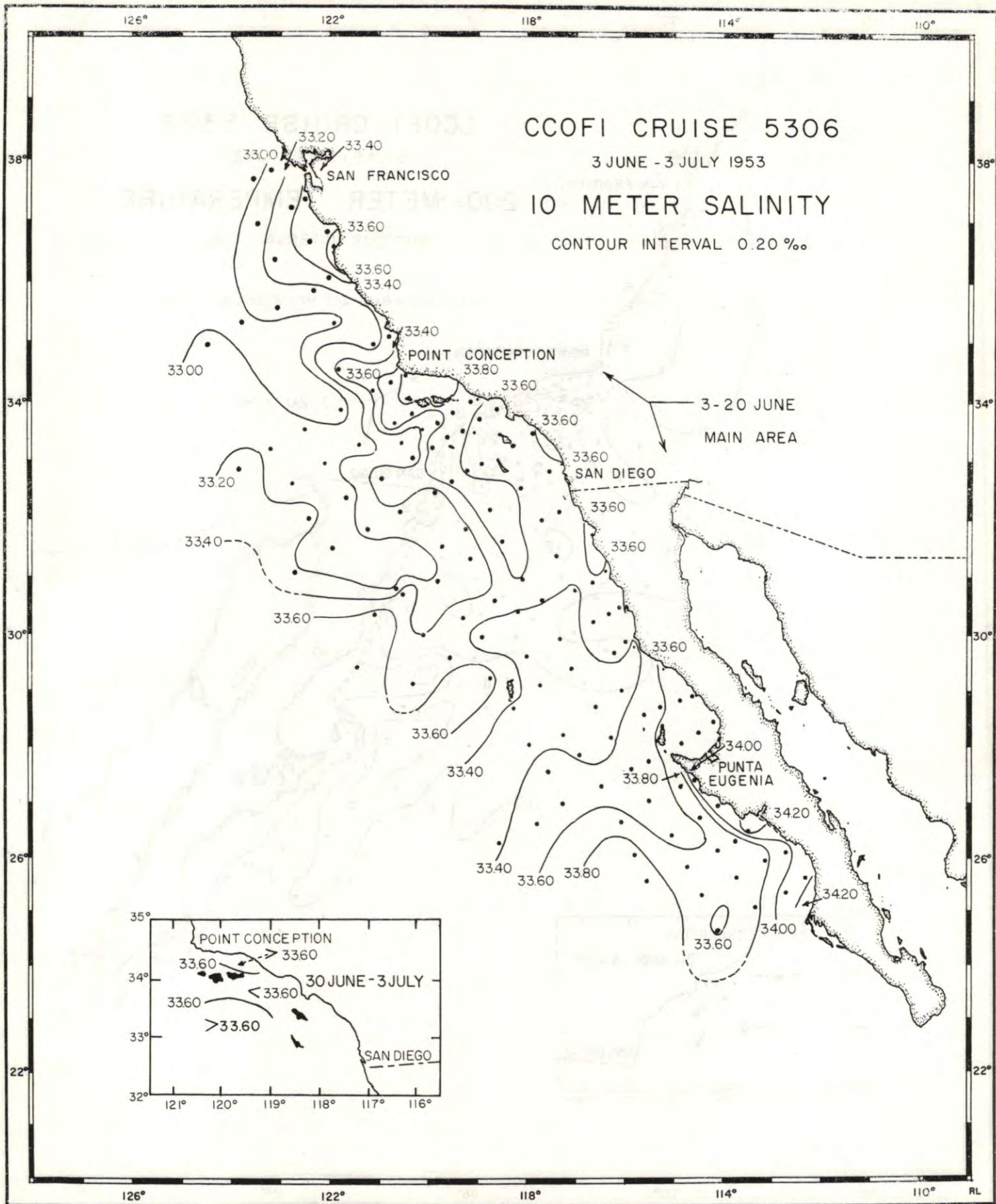


FIGURE 5

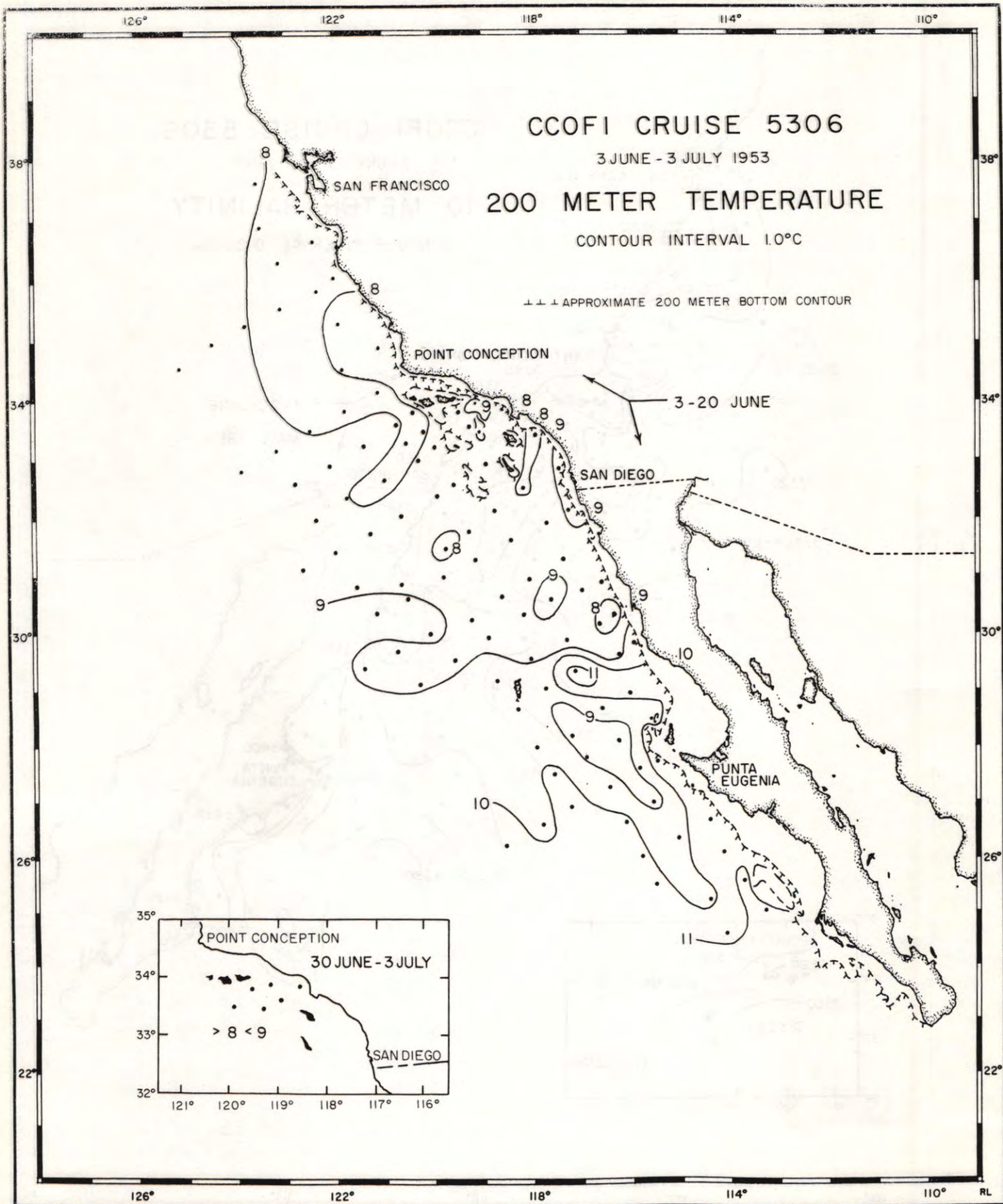


FIGURE 6

FROM H.O. CHART 0527

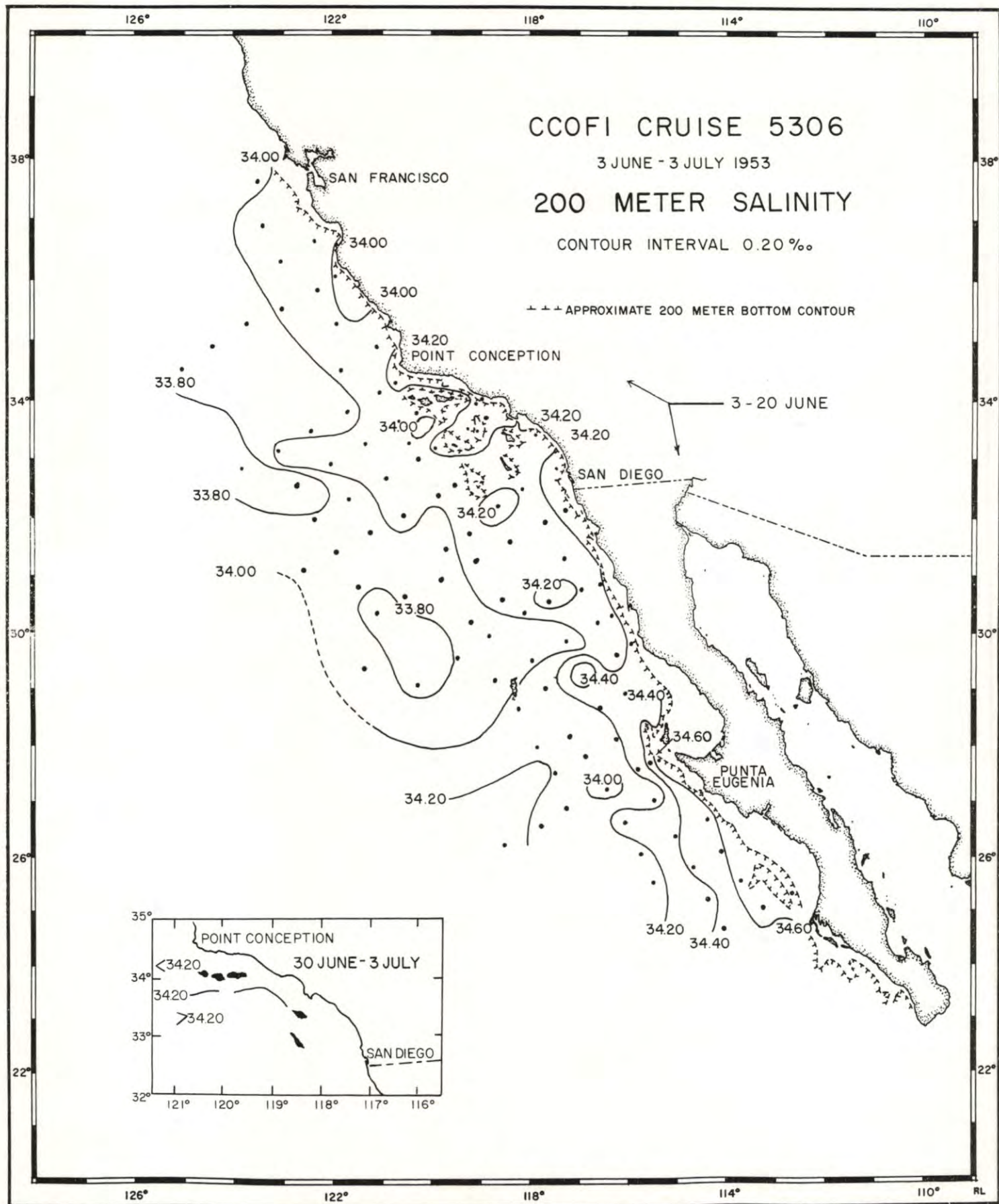


FIGURE 7

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

S10
CCOFI
5306

CREST; June 15, 1953; 1836 GCT; 37°47.5'N, 123°15'W; sounding, 72 fm; wind, 310°, force 6;
weather, cloudy; sea, high; wire angle, 25°.

60.55

0	11.22	33.19		0	11.22	33.19		25.35	263	0.00
8	11.16	33.13		10	11.17	33.13		25.31	267	0.03
18	11.16	33.19		20	11.14	33.19		25.36	262	0.05
26	11.07	33.19		30	11.00	33.19		25.39	260	0.08
45	9.37	33.22		50	9.15	33.28		25.77	223	0.13
69	8.50	33.60								

S10
CCOFI
5306

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

60.60

CREST; June 17, 1953; 2033 GCT; 37°37'N, 123°37'W; sounding, 1770 fm; wind, 330°, force 4; weather, partly cloudy; sea, high; wire angle, 42°.

0	12.51	32.90	6.55	0	12.51	32.90	6.55	24.88	308	0.00
8	12.19	-	6.56	10	12.03	(32.93)	6.57	(25.00)	(297)	(0.03)
20	11.54	-	6.62	20	11.54	(32.97)	6.62	(25.12)	(285)	(0.06)
41	10.86	-	6.55	30	11.28	(33.00)	6.61	(25.19)	(279)	(0.09)
60	9.74	-	6.12	50	10.25	(33.07)	6.37	(25.43)	(256)	(0.14)
82	9.28	33.22	5.49	75	9.38	33.19	5.71	25.66	234	(0.20)
121	8.94	33.68	3.90	100	9.11	33.51	4.80	25.96	205	(0.26)
158	8.44	33.80	2.70	150	8.54	33.79	2.86	26.26	177	(0.36)
194	8.16	33.86	2.26	200	8.13	33.89	2.18	26.40	164	(0.44)
227	8.01	34.14	1.86	250	7.88	34.21	1.67	26.69	136	(0.52)
297	7.49	34.28	1.43	300	7.45	34.28	1.42	26.81	125	(0.58)
366	6.78	-	1.20	400	6.63	34.29	0.95	26.93	113	(0.71)
438	6.45	34.30	0.76	500	6.01	(34.31)	0.62	(27.03)	(104)	(0.82)
584	5.35	-	0.52	600	5.25	(34.35)	0.51	(27.15)	(92)	(0.93)
741	4.54	-	0.41	700	4.72	(34.37)	0.43	(27.23)	(85)	(1.02)
916	3.99	34.42	0.55	800	4.35	(34.39)	0.43	(27.29)	(79)	(1.12)
				1000	(3.77)	(34.43)		(27.38)	(71)	(1.28)

63.52

CREST; June 14, 1953; 2021 GCT; 37°19'N, 122°36.5'W; sounding, 48 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	13.70	33.30		0	13.70	33.30		24.96	300	0.00
10	12.28	33.47		10	12.28	33.47		25.37	262	0.03
20	9.92	33.84		20	9.92	33.84		26.08	194	0.05
30	9.14	33.83		30	9.14	33.83		26.20	183	0.07
50	8.58	33.91		50	8.58	33.91		26.35	168	0.10

63.55

CREST; June 14, 1953; 1844 GCT; 37°12'N, 122°48'W; sounding, 140 fm; wind, 310°, force 4; weather, overcast; sea, moderate; wire angle, 10°.

0	13.71	-		0	13.71	(33.37)		(25.01)	(296)	(0.00)
10	13.46	33.38		10	13.46	33.38		25.07	290	0.03
24	10.30	33.41		20	11.20	33.40		25.52	247	0.06
49	9.04	33.66		30	9.85	33.45		25.79	222	0.08
73	9.08	33.96		50	9.04	33.70		26.12	190	0.12
97	8.71	34.03		75	9.07	33.96		26.31	172	0.17
149	8.05	34.09		100	8.66	34.03		26.43	161	0.21
196	7.80	34.14		150	8.04	34.09		26.57	148	0.29
				200	(7.78)	(34.14)		(26.65)	(140)	(0.36)

63.65

CREST; June 14, 1953; 1354 GCT; 36°53'N, 123°31.5'W; sounding, 1990 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 38°.

0	12.74	-		0	12.74	(33.07)		(24.97)	(300)	(0.00)
8	12.69	33.08		10	12.65	33.16		25.06	291	0.03
16	11.20	33.18		20	10.45	33.17		25.47	252	0.06
27	9.96	33.17		30	9.91	33.17		25.56	243	0.08
38	9.86	33.48		50	9.65	33.52		25.88	213	0.13
51	9.63	33.53		75	8.98	33.67		26.10	192	0.18
60	9.44	33.62		100	8.56	33.85		26.31	172	0.22
74	8.99	33.66		150	8.24	34.08		26.54	150	0.31
91	8.68	33.76		200	7.96	34.19		26.66	139	0.38
107	8.49	33.90		250	7.66	34.25		26.76	129	0.45
133	8.36	34.03		300	7.07	34.22		26.82	124	0.52
159	8.20	-		400	6.00	34.18		26.93	133	0.64
188	8.02	-								
257	7.61	34.25								
332	6.68	34.20								
422	5.78	34.18								

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

SIO
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5306

CREST; June 14, 1953; 0227 GCT; 36°48'N, 122°06'W; sounding, 120 fm; wind, 290°, force 7;
weather, partly cloudy; sea, rough; wire angle, 27°.

67.50

0	11.41	33.63		0	11.41	33.63		25.66	234	0.00
8	11.38	33.55		10	11.36	33.55		25.60	240	0.02
23	10.97	33.66		20	11.11	33.60		25.69	231	0.05
44	9.12	33.85		30	10.50	33.75		25.91	210	0.07
66	9.03	33.91		50	9.11	33.87		26.24	179	0.11
89	8.52	33.94		75	8.81	33.92		26.32	171	0.15
138	8.34	34.13		100	8.47	33.99		26.43	161	0.19
184	8.01	34.15		150	8.27	34.14		26.58	146	0.27

CREST; June 14, 1953; 0449 GCT; 36°38.5'N, 122°27'W; sounding, 1100 fm; wind, 330°, force 5;
weather, cloudy; sea, rough; wire angle, 25°.

67.55

0	13.12	33.41		0	13.12	33.41		25.16	281	0.00
9	13.09	33.44		10	13.08	33.44		25.19	279	0.03
18	13.09	33.41		20	13.08	33.41		25.17	280	0.06
31	11.35	33.45		30	11.70	33.43		25.45	254	0.08
49	9.64	33.62		50	9.63	33.62		25.96	205	0.13
63	9.45	-		75	8.95	33.74		26.16	186	0.18
76	8.90	33.74		100	8.27	33.84		26.34	169	0.22
98	8.32	33.83		150	8.19	33.96		26.45	159	0.31
117	8.08	33.88		200	7.65	34.10		26.64	141	0.38
143	8.21	33.94		250	7.29	34.18		26.75	130	0.45
187	7.78	34.08		300	6.97	34.23		26.84	122	0.52
237	7.38	34.15		400	6.14	34.23		26.95	111	0.64
279	7.16	34.23		500	5.68	34.29		27.05	110	0.75
378	6.28	34.22		600	(5.30)	(34.41)		(27.19)	(89)	(0.85)
478	5.76	34.27								
583	5.36	34.39								

CREST; June 14, 1953; 0932 GCT; 36°19'N, 123°09'W; sounding, 1770 fm; wind, 320°, force 4;
weather, clear; sea, rough; wire angle, 10°.

67.65

0	14.46	33.33		0	14.46	33.33		24.82	314	0.00
9	14.40	33.29		10	14.35	33.29		24.81	315	0.03
19	12.95	33.33		20	12.70	33.33		25.18	280	0.06
34	11.30	33.56		30	11.65	33.52		25.53	246	0.09
53	9.98	33.63		50	10.25	33.61		25.85	216	0.13
68	9.11	33.68		75	9.03	33.75		26.16	186	0.18
82	9.00	33.83		100	8.88	33.96		26.34	169	0.23
105	8.79	33.98		150	8.03	34.01		26.51	153	0.31
129	8.17	34.01		200	7.47	34.11		26.67	138	0.38
156	7.99	34.01		250	7.08	34.16		26.77	128	0.45
208	7.40	34.12		300	6.83	34.23		26.86	120	0.52
264	7.00	34.18		400	6.12	34.32		27.02	105	0.64
309	6.78	34.24		500	5.66	34.38		27.13	94	0.74
416	6.03	34.33		600	5.13	34.45		27.25	83	0.83
520	5.57	34.39								
628	4.96	34.47								

CREST; June 13, 1953; 2046 GCT; 36°10.5'N, 121°48'W; sounding, 200 fm; wind, 290°, force 7;
weather, partly cloudy; sea, rough; wire angle, 40°.

70.51

0	10.82	33.63		0	10.82	33.63		25.76	224	0.00
8	10.68	-		10	10.50	33.63		25.82	219	0.02
20	9.45	33.63		20	9.45	33.63		25.99	202	0.04
39	8.69	33.69		30	8.91	33.66		26.10	192	0.06
58	8.49	33.78		50	8.51	33.74		26.23	180	0.10
78	8.43	33.89		75	8.43	33.87		26.34	169	0.14
119	8.10	34.07		100	8.27	34.00		26.47	157	0.18
158	7.93	34.14		150	7.96	34.13		26.62	143	0.26

S10
CCOFI
5306

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

7055

CREST; June 13, 1953; 1813 GCT; 36°03'N, 122°02'W; sounding, 750 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 20°.

0	13.56	33.22	6.34	0	13.56	33.22	6.34	24.92	304	0.00
9	13.50	33.25	6.30	10	13.50	33.26	6.31	24.97	300	0.03
23	13.50	33.28	6.36	20	13.50	33.27	6.36	24.97	300	0.06
46	9.48	33.65	4.30	30	12.90	33.46	6.31	25.24	274	0.09
69	8.74	33.62	3.59	50	9.30	33.65	4.13	26.03	199	0.14
92	8.33	-	3.10	75	8.64	33.63	3.43	26.12	190	0.18
141	7.68	33.94	2.75	100	8.22	33.76	3.03	26.29	174	0.23
186	7.34	34.00	2.51	150	7.61	33.96	2.69	26.54	150	0.31
231	6.66	33.96	2.55	200	7.15	33.99	2.52	26.62	143	0.39
275	6.20	34.08	1.93	250	6.42	34.00	2.32	26.73	132	0.46
371	5.90	34.19	1.01	300	6.08	34.13	1.68	26.88	118	0.52
464	5.42	34.25	0.56	400	5.73	34.20	0.81	26.98	109	0.64
561	5.33	34.41	0.42	500	5.39	34.33	0.48	27.12	95	0.75
753	4.54	34.45	0.45	600	5.18	34.42	0.42	27.22	86	0.85
944	3.89	34.58	0.53	700	4.75	34.43	0.43	27.27	81	0.94
1142	3.40	34.61	0.79	800	4.37	34.49	0.46	27.36	73	1.02
				1000	3.73	34.59	0.60	27.51	58	1.17

7060

CREST; June 13, 1953; 1453 GCT; 35°50'N, 122°23.5'W; sounding, 1769 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 15°.

0	13.65	33.22		0	13.65	33.22		24.91	305	0.00
10	13.60	33.18		10	13.60	33.18		24.88	308	0.03
19	13.54	33.17		20	13.53	33.17		24.89	307	0.06
33	12.10	33.19		30	12.31	33.18		25.14	283	0.09
52	11.54	33.21		50	11.63	33.21		25.29	269	0.15
66	10.35	33.32		75	9.92	33.65		25.93	208	0.21
79	9.86	33.71		100	9.62	33.79		26.09	193	0.26
102	9.60	33.80		150	8.81	33.90		26.31	172	0.35
124	9.36	33.89		200	7.82	34.06		26.58	146	0.43
151	8.80	33.90		250	6.92	34.06		26.71	134	0.50
200	7.82	34.06		300	6.16	34.11		26.85	121	0.57
254	6.84	34.06		400	5.56	34.20		27.00	107	0.69
300	6.16	34.11		500	5.07	34.23		27.08	99	0.80
407	5.52	34.20		600	4.70	34.27		27.15	92	0.90
509	5.03	34.23								
615	4.66	34.28								

7070

CREST; June 13, 1953; 0851 GCT; 35°32'N, 123°05'W; sounding, 2000 fm; wind, 330°, force 5; weather, clear; sea, moderate; wire angle, 28°.

0	14.57	33.04	6.55	0	14.57	33.04	6.55	24.58	337	0.00
8	14.55	33.06	6.63	10	14.52	33.09	6.68	24.62	333	0.03
22	13.67	33.18	7.02	20	14.15	33.17	7.01	24.76	320	0.07
48	10.01	33.22	5.50	30	12.10	33.19	6.99	25.19	279	0.10
70	9.28	33.38	4.59	50	9.92	33.23	5.41	25.61	239	0.15
96	8.73	33.64	3.65	75	9.16	33.45	4.20	25.90	211	0.20
144	8.18	33.84	3.15	100	8.67	33.66	3.60	26.14	188	0.26
191	7.90	34.00	2.20	150	8.14	33.86	3.04	26.38	166	0.34
241	6.95	34.04	2.27	200	7.72	34.01	2.20	26.56	148	0.42
282	7.05	34.19	1.25	250	6.94	34.08	2.17	26.72	133	0.49
376	6.02	34.18	0.85	300	6.87	34.19	1.16	26.82	124	0.56
468	5.91	34.41	0.48	400	6.00	34.24	0.72	26.97	110	0.68
560	5.34	34.38	0.46	500	5.72	34.40	0.47	27.14	93	0.79
744	4.52	34.42	0.42	600	5.14	34.39	0.45	27.20	88	0.88
936	3.94	34.45	0.56	700	4.69	34.41	0.44	27.26	82	0.98
1129	3.35	34.41	0.72	800	4.34	34.43	0.47	27.32	76	1.06
				1000	3.74	34.47	0.61	27.41	68	1.22

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

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CREST; June 13, 1953; 0348 GCT; 35°17'N, 123°50'W; sounding, 2000+ fm; wind, 330°, force 4; weather, clear; sea, moderate; wire angle, 21°.

7080

0	15.41	32.98		0	15.41	32.98		24.35	359	0.00
9	15.34	32.98		10	15.31	32.98		24.37	357	0.04
18	14.68	32.99		20	14.61	32.99		24.53	341	0.07
32	14.35	32.97		30	14.42	32.97		24.55	340	0.10
46	13.65	33.04		50	13.45	33.10		24.85	311	0.17
59	13.04	33.16		75	11.77	33.13		25.20	278	0.24
72	12.01	33.13		100	10.13	33.29		25.62	238	0.31
88	10.56	33.18		150	9.15	33.71		26.11	191	0.42
109	9.94	33.37		200	8.05	33.93		26.45	159	0.51
132	9.63	33.56		250	7.44	34.03		26.61	144	0.58
173	8.57	33.84		300	6.88	34.07		26.72	133	0.66
215	7.83	33.96		400	6.37	34.20		26.89	117	0.78
258	7.38	34.04		500	5.85	34.28		27.02	105	0.90
348	6.48	34.12								
439	6.26	34.24								
538	5.56	34.30								

CREST; June 12, 1953; 2258 GCT; 34°53'N, 124°30'W; sounding, 2300 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.

7090

0	15.97	32.94	5.85	0	15.97	32.94	5.85	24.19	374	0.00
10	14.87	33.09	5.91	10	14.87	33.09	5.91	24.55	340	0.04
25	14.54	32.98	6.01	20	14.64	33.00	5.98	24.53	341	0.07
50	12.81	33.19	6.19	30	14.34	32.98	6.06	24.58	337	0.10
74	11.44	32.93	6.31	50	12.81	33.19	6.19	25.05	292	0.17
98	10.64	33.04	5.61	75	11.42	32.93	6.31	25.11	286	0.24
149	8.96	33.62	3.61	100	10.53	33.07	5.55	25.38	260	0.31
196	8.89	33.94	2.41	150	8.94	33.63	3.60	26.08	194	0.42
242	8.00	34.10	2.20	200	8.83	33.97	2.39	26.36	167	0.52
287	7.38	34.06	1.97	250	7.87	34.09	2.16	26.60	145	0.60
385	6.14	34.06	1.62	300	7.19	34.06	1.93	26.67	138	0.67
479	5.76	34.12	0.71	400	6.06	34.07	1.51	26.83	123	0.80
576	5.16	34.22	-	500	5.63	34.14	0.64	26.94	112	0.93
769	4.43	34.42	0.39	600	5.03	34.25	0.53	27.10	97	1.04
961	3.92	34.44	0.38	700	4.67	34.37	0.43	27.24	84	1.14
1161	3.44	34.48	0.77	800	4.34	34.43	0.38	27.32	76	1.22
				1000	3.83	34.45	0.42	27.39	70	1.39

CREST; June 12, 1953; 1804 GCT; 34°31.5'N, 125°11'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

70100

0	15.23	32.93		0	15.23	32.93		24.35	359	0.00
10	15.06	32.99		10	15.06	32.99		24.43	351	0.04
20	14.55	32.92		20	14.55	32.92		24.49	345	0.07
35	14.24	32.98		30	14.32	32.94		24.55	340	0.10
55	13.84	33.13		50	13.97	33.12		24.76	320	0.17
69	12.75	33.14		75	12.15	33.13		25.13	284	0.25
83	11.51	33.11		100	10.96	33.22		25.42	257	0.32
107	10.67	33.26		150	9.25	33.64		26.04	198	0.43
129	9.09	33.25		200	8.18	33.87		26.38	166	0.52
157	9.28	33.69		250	7.64	34.02		26.58	146	0.60
208	8.07	33.90		300	7.03	34.03		26.67	138	0.68
264	7.50	34.03		400	6.17	34.21		26.93	113	0.81
312	6.90	34.03		500	5.58	34.21		27.00	107	0.92
422	6.02	34.23		600	5.17	34.27		27.10	97	1.03
529	5.46	34.23								
638	5.02	34.31								

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

7350

CREST; June 10, 1953; 0345 GCT; 35°36'N, 121°16'W; sounding, 58 fm; wind, 300°, force 3;
weather, clear; sea, moderate; wire angle, 10°.

0	14.34	33.12		0	14.34	33.12		24.69	326	0.00
9	13.34	33.18		10	13.10	33.20		25.00	297	0.03
19	10.95	33.45		20	10.92	33.45		25.60	240	0.06
29	10.56	33.44		30	10.53	33.44		25.67	233	0.08
49	8.88	33.58		50	(8.80)	(33.59)		(26.07)	(195)	(0.12)

7360

CREST; June 10, 1953; 0921 GCT; 35°18'N, 121°58.5'W; sounding, 1300 fm; wind, 280°, force 2;
weather, clear; sea, moderate; wire angle, 00°.

0	13.90	33.01		0	13.90	33.01		24.69	326	0.00
10	13.61	32.94		10	13.61	32.94		24.70	325	0.03
20	13.41	32.78		20	13.41	32.78		24.61	334	0.07
35	12.01	-		30	12.58	32.82		24.81	316	0.10
49	11.25	33.00		50	11.22	33.00		25.20	278	0.16
64	10.64	33.05		75	9.91	33.08		25.49	250	0.22
79	9.75	33.09		100	9.30	33.37		25.82	219	0.28
98	9.34	33.35		150	8.73	33.87		26.30	173	0.38
122	8.85	33.55		200	8.07	34.03		26.52	152	0.46
129p	8.80	33.58		250	7.41	34.06		26.64	191	0.54
149	8.76	33.86		300	(6.37)	(34.05)		(26.78)	(128)	(0.61)
197	8.11	34.03								
243	7.54	34.06								
292p	6.54	34.05								

7750

CREST; June 10, 1953; 2241 GCT; 35°04.5'N, 120°52'W; sounding, 70 fm; wind, 280°, force 2;
weather, partly cloudy; sea, moderate; wire angle, 10°.

0	11.58	33.30		0	11.58	33.30		25.37	262	0.00
10	10.96	33.33		10	10.96	33.33		25.50	249	0.03
19	10.95	33.43		20	10.93	33.44		25.59	241	0.05
29	10.70	33.56		30	10.65	33.57		25.75	225	0.07
49	9.42	33.71		50	9.40	33.72		26.07	195	0.12
73	8.88	33.89		75	8.88	33.89		26.29	174	0.16
98	8.66	33.97		100	(8.63)	(33.97)		(26.39)	(164)	(0.20)

7755

CREST; June 10, 1953; 2000 GCT; 34°55'N, 121°12'W; sounding, 320 fm; wind, 240°, force 1;
weather, partly cloudy; sea, slight; wire angle, 10°.

0	13.78	33.10		0	13.78	33.10		24.79	317	0.00
10	12.70	33.14		10	12.70	33.14		25.03	295	0.03
24	12.20	33.16		20	12.32	33.15		25.11	286	0.06
49	11.70	33.33		30	12.10	33.18		25.18	280	0.09
73	10.35	33.58		50	11.65	33.35		25.39	260	0.14
97	9.82	33.68		75	10.32	33.59		25.82	219	0.20
148	9.08	33.99		100	9.77	33.70		26.00	202	0.26
193	8.90	34.09		150	9.07	33.99		26.34	169	0.35
238	8.51	34.22		200	8.84	34.11		26.47	157	0.43
284	7.93	34.34		250	8.38	34.26		26.66	139	0.51
335	6.94	34.21		300	7.57	34.32		26.82	124	0.58
382	7.14	34.28		400	6.89	34.26		26.87	119	0.70
428	6.45	34.22		500	(5.87)	(34.25)		(27.00)	(107)	(0.82)
475	6.04	34.23								

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	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; June 10, 1953; 1435 GCT; 34°30'N, 121°54.5'W; sounding, 2170 fm; wind, 230°, force 1;
weather, partly cloudy; sea, slight; wire angle, 05°.

7765

0	13.16	33.41		0	13.16	33.41		25.15	282	0.00
10	11.94	33.43		10	11.94	33.43		25.40	259	0.03
20	11.75	33.44		20	11.75	33.44		25.45	254	0.05
35	11.53	33.48		30	11.61	33.46		25.49	250	0.08
50	11.10	33.50		50	11.10	33.50		25.61	239	0.13
64	10.84	33.57		75	10.77	33.62		25.76	224	0.18
78	10.74	33.62		100	9.43	33.61		25.98	204	0.24
97	9.44	33.61		150	8.90	33.88		26.28	175	0.34
120	9.51	33.82		200	8.02	34.02		26.52	152	0.42
148	8.92	33.87		250	7.38	33.99		26.59	146	0.49
195	8.08	34.02		300	6.92	34.05		26.70	135	0.57
241	7.45	33.99		400	6.12	34.14		26.88	118	0.70
289	7.02	34.04		500	5.55	34.19		26.99	108	0.82
388	6.20	34.14		600	(5.08)	(34.28)		(27.12)	(95)	(0.92)
485	5.62	34.18								
589	5.14	34.27								

CREST; June 11, 1953; 0303 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 300°, force 3;
weather, partly cloudy; sea, moderate; wire angle, 05°.

8051

0	12.50	33.94		0	12.50	33.94		25.69	231	0.00
10	11.86	33.85		10	11.86	33.85		25.74	226	0.02
20	10.89	33.92		20	10.89	33.92		25.97	204	0.04
30	10.44	33.91		30	10.44	33.91		26.05	197	0.06
50	10.24	33.94		50	10.24	33.94		26.10	192	0.10
75	9.82	34.00		75	9.82	34.00		26.22	181	0.15

CREST; June 11, 1953; 0511 GCT; 34°19.5'N, 120°48'W; sounding, 410 fm; wind, 330°, force 3;
weather, clear; sea, slight; wire angle, 10°.

8055

0	12.61	33.70		0	12.61	33.70		25.48	251	0.00
10	11.34	33.68		10	11.34	33.68		25.71	229	0.02
20	11.24	33.73		20	11.24	33.73		25.76	224	0.05
35	10.86	33.74		30	10.95	33.74		25.82	219	0.07
50	10.78	33.79		50	10.78	33.79		25.89	212	0.11
64	10.39	33.72		75	9.53	33.63		25.98	204	0.16
78	9.47	33.63		100	9.03	33.86		26.24	179	0.21
97	9.10	33.80		150	8.97	34.09		26.43	161	0.30
121	8.71	34.02		200	8.89	34.25		26.57	148	0.38
148	8.97	34.08		250	8.15	34.18		26.63	142	0.45
194	8.95	34.26		300	7.90	34.27		26.74	131	0.52
239	8.20	34.17		400	7.10	34.26		26.84	122	0.65
286	8.00	34.27		500	6.37	34.38		27.04	103	0.77
384	7.22	34.25		600	(5.72)	(34.33)		(27.08)	(99)	(0.88)
478	6.52	34.38								
580	5.84	34.33								

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

80.60

CREST; June 11, 1953; 0833 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 10°.

0	13.78	33.38	5.97	0	13.78	33.38	5.97	25.00	297	0.00
10	13.38	33.40	6.07	10	13.38	33.40	6.07	25.10	287	0.03
25	13.04	33.46	6.15	20	13.12	33.44	6.14	25.18	280	0.06
49	9.66	35.14r	5.13	30	12.97	33.47	6.12	25.23	275	0.08
73	9.35	33.62	4.07	50	9.63	33.54	5.11	25.90	211	0.13
97	8.71	33.71	3.14	75	9.32	33.63	3.98	26.02	200	0.19
148	8.14	33.94	2.62	100	8.66	33.72	3.09	26.19	184	0.23
193	7.74	34.06	1.93	150	8.12	33.94	2.59	26.45	159	0.32
239	7.01	34.09	1.83	200	7.64	34.07	1.92	26.62	143	0.40
284	6.79	34.11	1.32	250	6.94	34.09	1.76	26.73	132	0.47
381	6.27	34.20	0.79	300	6.70	34.12	1.20	26.79	127	0.54
474	6.00	34.32	0.51	400	6.23	34.23	0.72	26.94	112	0.66
570	5.00	34.34	0.33	500	5.76	34.33	0.44	27.08	99	0.77
762	4.48	34.45	0.42	600	4.87	34.36	0.33	27.20	88	0.87
951	4.02	34.46	0.50	700	4.63	34.43	0.39	27.29	79	0.96
1150	3.51	34.50	0.71	800	4.38	34.45	0.43	27.33	75	1.05
				1000	3.91	34.47	0.53	27.40	59	1.21

80.70

CREST; June 11, 1953; 1359 GCT; 33°49.5'N, 121°50'W; sounding, 1900 fm; wind, 330°, force 2; weather, cloudy; sea, moderate; wire angle, 13°.

0	14.48	32.92		0	14.48	32.92		24.50	344	0.00
10	13.92	32.93		10	13.92	32.93		24.63	332	0.03
20	13.79	32.91		20	13.79	32.91		24.64	331	0.07
34	13.48	32.94		30	13.60	32.93		24.69	326	0.10
49	12.14	32.89		50	12.10	32.89		24.95	301	0.16
63	11.33	32.96		75	10.72	33.07		25.34	264	0.23
77	10.65	33.07		100	9.78	33.18		25.59	241	0.30
96	9.95	33.16		150	8.47	33.77		26.26	177	0.40
119	9.09	33.39		200	7.80	33.94		26.49	155	0.49
145	8.53	33.73		250	7.14	33.99		26.63	142	0.56
189	7.93	33.92		300	6.84	34.09		26.75	130	0.63
233	7.34	33.97		400	6.44	34.25		26.93	113	0.76
276	6.92	34.04		500	5.79	34.31		27.06	101	0.88
371	6.64	34.22								
464	6.00	34.30								
566	5.44	34.31								

80.80

CREST; June 11, 1953; 1835 GCT; 33°29'N, 122°30'W; sounding, 2200 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 05°.

0	15.38	33.19	5.90	0	15.38	33.19	5.90	24.52	342	0.00
10	15.32	33.18	5.90	10	15.32	33.18	5.90	24.52	342	0.03
25	15.01	33.17	5.78	20	15.13	33.17	5.79	24.55	340	0.07
49	14.57	33.14	6.37	30	14.92	33.17	5.78	24.60	335	0.10
74	12.14	33.17	6.30	50	14.40	33.14	6.37	24.69	326	0.17
98	11.08	33.24	5.59	75	12.08	33.17	6.29	25.17	280	0.24
151	8.73	33.61	3.86	100	10.98	33.25	5.48	25.44	255	0.31
198	8.07	33.93	3.05	150	8.78	33.60	3.90	26.08	194	0.42
244	7.32	34.00	2.65	200	8.00	33.93	3.02	26.46	158	0.52
291	6.87	34.04	2.23	250	7.25	34.01	2.59	26.63	142	0.59
388	5.96	34.08	1.45	300	6.78	34.04	2.18	26.71	134	0.66
480	5.72	34.26	0.65	400	5.91	34.10	1.31	26.87	119	0.79
579	5.27	34.34	0.50	500	5.64	34.28	0.59	27.05	102	0.91
772	4.36	34.42	0.39	600	5.13	34.35	0.48	27.17	91	1.01
963	3.86	34.55	0.62	700	4.62	34.38	0.39	27.25	83	1.11
1164	3.36	34.53	0.91	800	4.27	34.44	0.40	27.33	75	1.19
				1000	3.77	34.55	0.69	27.47	62	1.35

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

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CREST; June 11, 1953; 2321, 2339 GCT; 33°09'N, 123°13'W; sounding, 2200 fm; wind, 300°, force 2; weather, partly cloudy; sea, slight; wire angle, 19°, 32°

8090

0	16.21	33.15		0	16.21	33.15		24.30	363	0.00
9	15.38	33.14		10	15.28	33.14		24.50	344	0.04
19	15.10	33.14		20	15.08	33.14		24.54	340	0.07
33	15.02	33.18		30	15.03	33.16		24.57	338	0.10
46	14.82	33.23		50	14.62	33.23		24.71	324	0.17
60	14.07	33.22		75	12.85	33.12		24.99	298	0.25
73	12.92	33.12		100	10.82	33.22		25.44	255	0.32
90	11.36	33.20		150	9.06	33.64		26.07	195	0.43
110	10.40	33.24		200	8.13	34.03		26.51	153	0.52
134	9.52	33.53		250	7.57	34.05		26.61	144	0.60
171	8.53	33.79		300	7.07	34.08		26.71	134	0.67
209	8.02	34.04		400	5.86	34.12		26.90	116	0.80
				500	5.20	34.15		27.00	107	0.92
236	7.70	34.04								
323	6.81	34.09								
408	5.80	34.12								
500	5.20	34.15								

CREST; June 12, 1953; 0445 GCT; 32°49'N, 123°54'W; sounding, 2350 fm; wind, 090°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

80100

0	16.76	33.30	5.77	0	16.76	33.30	5.77	24.29	364	0.00
9	16.16	33.30	5.78	10	16.14	33.30	5.78	24.43	351	0.04
23	16.08	33.24	5.79	20	16.10	33.26	5.78	24.41	353	0.07
49	15.19	33.18	6.13	30	15.88	33.21	5.83	24.42	352	0.11
72	14.47	33.19	6.03	50	15.14	33.18	6.13	24.56	339	0.18
98	13.34	33.13	6.10	75	14.39	33.19	6.03	24.73	322	0.26
144	11.24	33.26	5.32	100	13.27	33.13	6.09	24.91	305	0.34
189	9.08	33.46	4.36	150	10.95	33.28	5.20	25.47	252	0.48
237	8.37	33.91	3.86	200	8.86	33.67	4.22	26.12	190	0.59
277	7.59	33.97	2.57	250	8.03	33.93	3.30	26.45	159	0.68
371	6.44	34.06	2.02	300	7.27	33.99	2.42	26.61	144	0.76
461	5.69	34.14	1.14	400	6.18	34.09	1.72	26.83	122	0.90
553	5.12	34.24	0.60	500	5.41	34.19	0.87	27.01	106	1.02
736	4.46	34.33	0.45	600	4.92	34.27	0.52	27.13	94	1.12
928	3.94	34.45	0.61	700	4.57	34.31	0.46	27.20	88	1.22
1120	3.48	-	1.00	800	4.27	34.37	0.46	27.28	80	1.31
				1000	3.77	(34.47)	0.75	(27.41)	(68)	(1.48)

YELLOWFIN; June 13, 1953; 0550 GCT; 34°14'N, 119°22'W; sounding, 12 fm; wind, 270°, force 2; weather, clear; sea, rough; wire angle, 03°.

8340

0	14.62	33.92		0	14.62	33.92		25.24	274	0.00
5	12.09r	33.79		10	12.65	33.79		25.55	244	0.03
15	11.60	33.82								

E. W. SCRIPPS; July 3, 1953; 0504 GCT; 34°13'N, 119°21.5'W; sounding, 12 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

8340

0	14.85	33.64		0	14.85	33.64		24.98	299	0.00
10	13.37	33.66		10	13.37	33.66		25.30	268	0.03
20	11.13	33.60		20	11.13	33.60		25.68	232	0.05

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

8343 YELLOWFIN; June 13, 1953; 0346 GCT; 34°08'N, 119°34'W; sounding, 125 fm; wind, 360°, force 6; weather, clear; sea, rough; wire angle, 20°.

0	13.00	33.81		0	13.00	33.81		25.49	345	0.00
9	12.97	33.84		10	12.96	33.85		25.53	246	0.02
23	11.30	33.95		20	11.50	33.94		25.88	213	0.05
47	10.89	33.96		30	11.19	33.96		25.95	206	0.07
70	9.87	33.82		50	10.80	33.96		26.02	200	0.11
94	9.44	33.91		75	9.75	33.82		26.09	193	0.16
118	9.20	33.92		100	9.37	33.92		26.23	180	0.21
145	9.00	34.26		150	(8.97)	(34.28)		(26.58)	(146)	(0.29)

8343 E. W. SCRIPPS; July 3, 1953; 0320 GCT; 34°08'N, 119°34'W; sounding, 135 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 24°.

0	13.49	33.75		0	13.49	33.75		25.35	263	0.00
9	13.52	33.78		10	13.52	33.78		25.36	262	0.03
23	13.50	33.78		20	13.51	33.78		25.37	262	0.05
45	12.54	33.85		30	13.37	33.78		25.39	260	0.08
68	9.97	33.86		50	11.90	33.86		25.74	226	0.13
90	9.27	34.08		75	9.59	33.87		26.16	186	0.18
140	8.87	34.18		100	9.16	34.11		26.42	162	0.22
183	8.70	34.26		150	8.82	34.20		26.54	150	0.30

8348 YELLOWFIN; June 12, 1953; 2104 GCT; 33°58'N, 119°55'W; sounding, 130 fm; wind, 310°, force 5; weather, clear; sea, very rough; wire angle, 17°.

0	11.82	33.83		0	11.82	33.83		25.73	227	0.00
9	10.35	33.86		10	10.33	33.87		26.03	199	0.02
19	10.02	33.96		20	10.01	33.96		26.16	186	0.04
29	9.93	33.95		30	9.93	33.95		26.16	186	0.06
48	9.58	34.04								

8348 E. W. SCRIPPS; July 2, 1953; 2256 GCT; 33°58.5'N, 119°55'W; sounding, 100 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	14.90	33.59		0	14.90	33.59		24.93	303	0.00
10	14.03	-		10	14.03	33.59		25.11	286	0.03
20	13.16	33.59		20	13.16	33.59		25.29	269	0.06
30	11.27	33.59		30	11.27	33.59		25.65	235	0.08
50	9.64	33.82		50	9.64	33.82		26.11	191	0.12
75	9.24	33.99		75	9.24	33.99		26.31	172	0.17

8351 YELLOWFIN; June 12, 1953; 1826 GCT; 33°52'N, 120°08'W; sounding, 70 fm; wind, 290°, force 4; weather, clear; sea, very rough; wire angle, 23°.

0	10.85	33.76		0	10.85	33.76		25.86	215	0.00
9	10.78	33.76		10	10.78	33.76		25.87	214	0.02
18	10.70	33.76		20	10.68	33.76		25.89	212	0.04
27	10.54	33.78		30	10.42	33.80		25.96	205	0.06
45	9.56	33.92		50	9.41	33.98		26.27	176	0.10
69	9.08	34.14		75	9.03	34.16		26.48	156	0.14
92	8.98	34.20		100	(8.96)	(34.21)		(26.53)	(151)	(0.18)

8351 E. W. SCRIPPS; July 2, 1953; 2035 GCT; 33°52'N, 120°05.5'W; sounding, 47 fm; wind, 210°, force 5; weather, partly cloudy; sea, very rough; wire angle, 02°.

0	14.52	33.58		0	14.52	33.58		25.00	297	0.00
10	14.50	33.58		10	14.50	33.58		25.01	296	0.03
20	13.06	33.64		20	13.06	33.64		25.35	263	0.06
30	11.18	33.73		30	11.18	33.73		25.78	222	0.08
50	9.44	33.80		50	9.44	33.80		26.13	189	0.12

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

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YELLOWFIN; June 12, 1953; 1512 GCT; 33°⁴⁴34'N, 120°24'W; sounding, 500 fm; wind, 310°, force 5;
weather, clear; sea, rough; wire angle, 37°.

8355

0	12.00	33.77		0	12.00	33.77		25.65	235	0.00
8	12.13	33.78		10	12.13	33.78		25.64	236	0.02
16	12.06	33.76		20	11.91	33.76		25.66	234	0.05
28	11.18	33.81		30	11.13	33.82		25.85	216	0.07
40	11.02	33.83		50	11.04	33.85		25.89	212	0.11
52	11.04	-		75	10.65	33.89		25.99	202	0.16
63	10.95	33.88		100	9.64	33.81		26.10	192	0.21
77	10.63	33.89		150	8.04	33.99		26.50	154	0.30
93	9.93	33.80		200	7.70	34.04		26.59	146	0.38
111	9.17	33.84		250	7.58	34.19		26.72	133	0.45
144	8.10	33.99		300	7.38	34.25		26.80	126	0.52
177	7.83	33.97		400	6.72	34.31		26.93	113	0.64
213	7.65	34.10		500	(6.16)	(34.39)		(27.07)	(100)	(0.76)
292	7.42	34.25								
372	6.89	34.29								
465	6.34	34.36								

YELLOWFIN; June 12, 1953; 1109 GCT; 33°34'N, 120°45'W; sounding, 800 fm; wind, 310°, force 5;
weather, clear; sea, rough; wire angle, 08°.

8360

0	12.40	33.78		0	12.40	33.78		25.59	240	0.00
10	12.44	33.77		10	12.44	33.77		25.57	242	0.02
20	11.98	33.76		20	11.98	33.76		25.65	235	0.05
35	10.48	33.82		30	11.00	33.79		25.85	216	0.07
49	10.08	33.90		50	10.07	33.90		26.10	192	0.11
80	9.57	33.90		75	9.65	33.90		26.17	185	0.16
99	9.26	33.92		100	9.25	33.92		26.25	178	0.20
123	8.84	33.92		150	8.49	33.95		26.40	164	0.29
153	8.45	33.96		200	8.24	34.13		26.58	146	0.37
202	8.22	34.14		250	7.80	34.15		26.66	139	0.44
250	7.80	34.15		300	7.46	34.22		26.76	128	0.51
298	7.48	34.22		400	6.70	34.29		26.92	114	0.64
400	6.70	34.29		500	5.99	34.33		27.05	102	0.76
497	6.01	34.33		600	5.44	34.38		27.15	92	0.86
600	5.44	34.38								

YELLOWFIN; June 12, 1953; 0434 GCT; 33°14'N, 121°26'W; sounding, 1000+ fm; wind, 310°, force 4;
weather, clear; sea, rough; wire angle, 29°.

8370

0	14.43	33.14		0	14.43	33.14		24.68	327	0.00
8	14.38	33.13		10	14.35	33.12		24.68	327	0.03
17	13.48	33.03		20	13.29	33.03		24.83	313	0.06
30	12.80	33.03		30	12.80	33.03		24.93	303	0.10
44	12.20	32.97		50	11.77	32.96		25.07	290	0.16
57	11.18	32.95		75	10.61	33.17		25.44	256	0.22
70	10.69	33.06		100	9.72	33.39		25.76	224	0.28
87	10.42	33.31		150	8.93	33.86		26.26	177	0.38
110	9.32	33.46		200	8.72	34.07		26.46	158	0.47
134	8.98	33.75		250	7.98	34.19		26.66	139	0.55
173	8.90	33.96		300	7.34	34.16		26.73	132	0.62
212	8.59	34.11		400	6.88	34.22		26.84	122	0.75
252	7.94	34.19		500	6.29	34.31		26.99	108	0.87
339	7.00	34.13								
427	6.77	34.27								
523	6.10	34.32								

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

83.80 YELLOWFIN; June 11, 1953; 2242 GCT; 32°53.5'N, 122°07'W; sounding, 1000+ fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 00°.

0	15.25	33.20		0	15.25	33.20		24.55	340	0.00
10	15.06	33.17		10	15.06	33.17		24.57	338	0.03
20	14.55	33.14		20	14.55	33.14		24.66	329	0.07
35	14.26	33.18		30	14.35	33.18		24.73	322	0.10
50	13.84	33.15		50	13.84	33.15		24.81	315	0.16
65	12.53	33.11		75	11.79	33.14		25.21	277	0.24
80	11.57	33.22		100	10.73	33.38		25.58	242	0.30
100	10.73	33.38		150	9.13	33.85		26.22	181	0.41
125	9.81	33.61		200	8.66	34.09		26.48	156	0.50
154	9.07	33.88		250	8.01	34.13		26.61	144	0.57
203	8.63	34.10		300	7.89	34.22		26.70	135	0.64
252	7.99	34.13		400	6.64	34.22		26.87	119	0.78
300	7.89	34.22		500	5.86	34.22		26.98	109	0.90
404	6.60	34.22		600	5.59	34.35		27.11	96	1.01
502	5.84	34.22								
606	5.58	34.36								

83.90 YELLOWFIN; June 11, 1953; 1641 GCT; 32°34'N, 122°48'W; sounding, 1000+ fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

0	15.62	33.05		0	15.62	33.05		24.36	358	0.00
10	15.46	33.07		10	15.46	33.07		24.41	353	0.04
20	15.32	33.11		20	15.32	33.11		24.47	347	0.07
35	14.96	33.05		30	15.01	33.06		24.50	344	0.10
49	15.30	33.18		50	15.30	33.18		24.53	341	0.17
64	14.46	33.20		75	14.12	33.20		24.79	317	0.26
78	14.06	33.20		100	13.90	33.33		24.94	302	0.34
98	13.94	33.33		150	9.94	33.27		25.63	237	0.47
122	11.42	33.14		200	8.56	33.68		26.17	185	0.58
150	9.94	33.27		250	7.89	33.98		26.51	153	0.66
197	8.62	33.66		300	7.03	34.04		26.68	137	0.74
244	8.00	33.96		400	6.06	34.06		26.82	124	0.87
291	7.12	34.08		500	5.47	34.20		27.01	106	0.99
391	6.14	34.05		600	(5.23)	(34.31)		(27.12)	(95)	(1.10)
487	5.52	34.18								
590	5.24	34.30								

85.39 YELLOWFIN; June 10, 1953; 0652 GCT; 34°00'N, 119°04'W; sounding, 240 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 10°.

0	14.45	33.63		0	14.45	33.63		25.05	292	0.00
10	14.43	33.64		10	14.43	33.64		25.07	290	0.03
25	12.53	33.81		20	13.85	33.76		25.28	271	0.06
49	9.68	33.91		30	11.65	33.84		25.77	223	0.08
74	9.62	34.02		50	9.67	33.92		26.18	184	0.12
98	9.32	34.22		75	9.61	34.03		26.28	176	0.17
152	9.14	34.31		100	9.31	34.23		26.49	155	0.21
202	8.84	34.33		150	9.16	34.31		26.57	148	0.29
251	8.64	34.34		200	8.85	34.33		26.64	141	0.36
300	7.91	34.34		250	8.66	34.34		26.68	137	0.43
354	7.46	34.32		300	7.91	34.34		26.79	127	0.50

85.39 E. W. SCRIPPS; July 2, 1953; 0610 GCT; 34°00'N, 119°04'W; sounding, 230 fm; wind, 270°, force 4; weather, clear; sea, rough; wire angle, 03°.

0	14.38	33.53		0	14.38	33.53		24.99	298	0.00
10	13.92	33.53		10	13.92	33.53		25.09	288	0.03
20	12.73	-		20	12.73	33.53		25.33	265	0.06
30	10.83	33.53		30	10.83	33.53		25.68	232	0.08
50	9.66	33.72		50	9.66	33.72		26.03	199	0.12

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

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YELLOWFIN; June 10, 1953; 0845 GCT; 33°57'N, 119°10.5'W; sounding, 400 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 05°.

8540

0	13.94	33.60		0	13.94	33.60		25.14	283	0.00
10	13.80	33.67		10	13.80	33.67		25.22	276	0.03
20	11.13	34.04r		20	11.13	33.71		25.77	223	0.05
25	10.24	33.73		30	10.07	33.78		26.01	201	0.07
35	9.96	33.80		50	9.87	33.82		26.07	195	0.11
50	9.87	33.82		75	9.53	33.94		26.22	181	0.16
75	9.53	33.94		100	9.34	34.03		26.32	171	0.20
99	9.34	34.03		150	9.20	34.16		26.45	159	0.29
124	9.34	34.12		200	9.09	34.30		26.58	146	0.37
149	9.20	34.16		250	8.73	34.33		26.66	139	0.44
198	9.10	34.30		300	8.26	34.34		26.74	131	0.51
295	8.31	34.34		400	7.22	34.32		26.87	119	0.64
392	7.30	34.32		500	6.37	34.35		27.01	106	0.76
491	6.42	34.34		600	5.81	34.41		27.13	94	0.87
589	5.86	34.41								
605	5.77	34.41								

E. W. SCRIPPS; July 2, 1953; 0810 GCT; 33°57'N, 119°10.5'W; sounding, 450 fm; wind, 300°, force 4; weather, clear; sea, moderate; wire angle, 13°.

8540

0	17.28	33.55		0	17.28	33.55		24.36	358	0.00
9	17.23	33.55		10	17.22	33.55		24.37	357	0.04
24	12.41	33.33		20	14.00	33.55		25.09	288	0.07
48	10.02	33.57		30	11.58	33.56		25.57	242	0.10
73	9.15	33.70		50	9.87	33.58		25.89	212	0.14
97	8.92	33.93		75	9.11	33.71		26.11	191	0.19
149	8.90	34.11		100	8.91	33.95		26.33	170	0.24
196	8.44	34.13		150	8.89	34.11		26.46	158	0.32
263p	8.42	34.28		200	8.43	34.14		26.55	149	0.40
379p	7.10	34.30		250	8.43	34.26		26.65	140	0.47
481p	6.56	34.36		300	8.02	34.30		26.74	131	0.54
591p	5.82	34.36		400	6.99	34.31		26.90	116	0.67
				500	6.44	34.36		27.01	106	0.79
				600	(5.76)	(34.36)		(27.10)	(97)	(0.90)

YELLOWFIN; June 10, 1953; 1410 GCT; 33°47'N, 119°31'W; sounding, 1000 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 00°.

8545

0	13.74	33.66		0	13.74	33.66		25.23	275	0.00
10	13.67	33.66		10	13.67	33.66		25.24	274	0.03
20	10.33	33.86		20	10.33	33.86		26.03	199	0.05
25	9.82	33.89		30	9.47	33.93		26.23	180	0.07
35	9.44	33.97		50	9.45	34.01		26.29	174	0.11
50	9.45	34.01		75	9.20	34.06		26.37	166	0.15
75	9.20	34.06		100	9.02	34.13		26.45	159	0.19
100	9.02	34.13		150	8.73	34.22		26.57	148	0.27
125	8.86	34.19		200	8.34	34.20		26.62	143	0.34
149	8.74	34.22		250	7.99	34.26		26.72	133	0.41
198	8.37	34.20		300	7.62	34.31		26.81	125	0.48
297	7.64	34.31		400	6.89	34.32		26.92	114	0.60
395	6.92	34.32		500	6.29	34.34		27.02	105	0.72
493	6.34	34.34		600	5.74	34.38		27.12	95	0.83
592	5.78	34.35r								
607	5.73	34.38								

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

85.45 E. W. SCRIPPS; July 2, 1953; 1200 GCT; 33°47'N, 119°31'W; sounding, 1000 fm; wind, 300°, force 1; weather, clear; sea, moderate; wire angle, 00°.

0	16.87	33.48		0	16.87	33.48		24.40	354	0.00
10	14.00	33.48		10	14.00	33.48		25.03	294	0.03
25	10.64	33.48		20	11.60	33.48		25.50	249	0.06
50	9.64	33.64		30	10.34	33.48		25.73	227	0.08
75	9.18	33.83		50	9.64	33.64		25.97	204	0.13
99	8.93	33.93		75	9.18	33.83		26.19	184	0.18
153	8.58	34.14		100	8.92	33.93		26.31	172	0.22
202	8.44	34.19		150	8.60	34.13		26.52	152	0.30
299	7.68	34.23		200	8.46	34.19		26.59	146	0.38
402	6.92	34.23		250	8.06	34.21		26.67	138	0.45
501	6.24	34.34		300	7.67	34.23		26.74	131	0.52
603	5.73	34.31		400	6.94	34.23		26.84	122	0.65
				500	6.25	34.34		27.02	105	0.77
				600	5.75	34.32		27.07	100	0.88

85.50 YELLOWFIN; June 10, 1953; 1808 GCT; 33°37'N, 119°52'W; sounding, 100 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 13°.

0	13.70	33.58		0	13.70	33.58		25.17	280	0.00
9	12.94	33.57		10	12.90	33.57		25.33	265	0.03
19	10.01	33.78		20	10.01	33.78		26.02	200	0.05
29	9.90	33.78		30	9.89	33.78		26.04	198	0.07
48	9.64	33.86		50	9.63	33.87		26.15	185	0.11
73	9.35	33.98		75	9.32	33.99		26.30	173	0.16
97	9.02	34.21		100	9.00	34.22		26.53	151	0.20
122	8.96	34.24								

85.50 E. W. SCRIPPS; July 2, 1953; 1645, 1702 GCT; 33°31'N, 119°56.5'W; sounding, 400 fm; wind, 310°, force 6; weather, overcast; sea, very high; wire angle, 05°, 10°.

0	12.83	33.59		0	12.83	33.59		25.36	262	0.00
10	12.81	33.62		10	12.81	33.62		25.38	260	0.03
				20	12.67	33.66		25.44	255	0.05
29	12.24	-		30	12.15	33.71		25.58	242	0.08
59	9.20	33.90		50	9.54	33.84		26.14	188	0.12
89	8.74	34.03		75	8.93	33.98		26.35	168	0.16
118	8.45	34.11		100	8.61	34.06		26.46	158	0.21
175	8.12	34.21		150	8.24	34.17		26.61	144	0.28
233	7.98	34.27		200	8.04	34.24		26.69	136	0.35

85.55 YELLOWFIN; June 10, 1953; 2119 GCT; 33°27'N, 120°12'W; sounding, 650 fm; wind, 270°, force 2; weather, clear; sea, moderate; wire angle, 24°.

0	13.19	33.28		0	13.19	33.28		25.04	293	0.00
9	12.80	33.38		10	12.80	33.39		25.21	277	0.03
18	12.37	33.56		20	12.29	33.56		25.44	255	0.06
23	12.20	33.56		30	11.83	33.58		25.54	245	0.08
32	11.72	33.65		50	11.39	33.74		25.74	226	0.13
45	11.46	33.74		75	10.95	33.71		25.80	221	0.18
68	11.13	33.72		100	9.34	33.70		26.07	195	0.24
91	10.00	33.70		150	8.32	33.92		26.40	164	0.33
112	8.73	33.74		200	7.80	33.99		26.53	151	0.41
133	8.50	33.86		250	7.36	34.03		26.63	142	0.48
174	8.06	33.96		300	7.21	34.10		26.70	136	0.55
259	7.30	34.04		400	6.72	34.25		26.89	117	0.68
347	7.13	34.19		500	6.04	34.32		27.03	104	0.80
439	6.42	34.28								
535	5.84	34.35r								
550	5.77	34.34								

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

S10
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5306

YELLOWFIN; June 11, 1953; 0141 GCT; 33°16.5'N, 120°33'W; sounding, 580 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 30°.

8560

0	14.03	33.30		0	14.03	33.30		24.89	307	0.00
8	13.40	33.30		10	13.28	33.30		25.04	293	0.03
17	12.93	33.33		20	12.87	33.34		25.15	282	0.06
30	12.65	33.36		30	12.65	33.36		25.21	277	0.09
43	11.76	33.41		50	10.93	33.35		25.52	247	0.14
56	10.25	33.30		75	9.53	33.32		25.74	226	0.20
68	10.07	33.31		100	9.67	33.82		26.11	191	0.25
84	9.28	33.34		150	8.57	33.92		26.36	167	0.34
102	9.68	33.82		200	7.88	34.06		26.57	148	0.42
122	8.84	33.81		250	7.50	34.18		26.72	133	0.49
157	8.50	33.94		300	7.42	34.26		26.80	126	0.56
193	7.97	34.04		400	6.72	34.34		26.96	110	0.68
230	7.58	34.14		500	(5.98)	(34.35)		(27.06)	(101)	(0.80)
313	7.35	34.28								
397	6.74	34.34								
492	6.02	34.35								

YELLOWFIN; June 10, 1953; 0239 GCT; 33°50'N, 118°37.5'W; sounding, 240 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, missing.

8735

0	16.06	33.59		0	16.06	33.59		24.67	328	0.00
10	15.71	33.57		10	15.71	33.57		24.73	322	0.03
25	11.57	33.48		20	13.10	33.49		25.22	276	0.06
49	9.92	33.68		30	11.10	33.48		25.60	240	0.09
74	9.30	33.82		50	9.91	33.69		25.97	204	0.13
98	8.99	33.93		75	9.29	33.82		26.17	185	0.18
152	9.30	34.22		100	9.00	33.94		26.31	172	0.22
201	8.96	34.34		150	9.30	34.20		26.46	158	0.31
249	8.79	34.35		200	8.98	34.34		26.63	142	0.39
297	8.50	34.32		250	8.79	34.35		26.66	139	0.46
350	7.64	-		300	8.46	(34.32)		(26.69)	(136)	(0.53)

E. W. SCRIPPS; July 2, 1953; 0201 GCT; 33°50'N, 118°37.5'W; sounding, 240 fm; wind, 270°, force 3; weather, clear; sea, moderate; wire angle, 10°.

8735

0	18.43	33.48		0	18.43	33.48		24.02	390	0.00
10	18.06	33.51		10	18.06	33.51		24.14	379	0.04
25	12.02	33.57		20	13.50	33.55		25.19	279	0.07
49	9.44	33.73		30	11.20	33.59		25.66	234	0.10
73	9.17	33.84		50	9.42	33.73		26.08	194	0.14
97	9.02	33.94		75	9.14	33.85		26.22	181	0.19
150	9.02	34.06		100	9.02	33.95		26.31	172	0.23
198	8.87	34.15		150	9.02	34.06		26.40	164	0.32
246	8.58	34.23		200	8.84	34.16		26.51	153	0.40
295	8.26	34.22		250	8.54	34.23		26.61	144	0.47
350	8.02	34.29		300	8.23	34.22		26.65	140	0.55
399	7.56	34.27		400	(7.54)	(34.27)		(26.79)	(127)	(0.69)

S10

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5306

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

8740

YELLOWFIN; June 9, 1953; 2315 GCT; 33°40'N, 118°58.5'W; sounding, 510 fm; wind, 280°, force 2; weather, clear; sea, moderate; wire angle, 06°.

0	16.05	33.57		0	16.05	33.57		24.66	329	0.00
10	11.34	33.55		10	11.34	33.55		25.61	239	0.03
20	10.18	33.62		20	10.18	33.62		25.87	214	0.05
35	9.88	33.71		30	9.90	33.68		25.96	205	0.07
50	9.86	33.84		50	9.86	33.84		26.09	193	0.11
65	9.56	33.86		75	9.33	33.92		26.24	179	0.16
79	9.30	33.94		100	9.27	34.02		26.33	170	0.20
99	9.28	34.02		150	9.20	34.20		26.48	156	0.29
124	9.25	34.14		200	9.04	34.32		26.60	145	0.36
154	9.20	34.21		250	8.52	34.33		26.69	136	0.44
203	9.02	34.33		300	8.06	34.34		26.77	128	0.50
253	8.48	34.33		400	6.97	34.35		26.93	113	0.63
303	8.02	34.34		500	6.22	34.37		27.05	102	0.74
404	6.92	34.35		600	5.63	34.39		27.14	93	0.85
501	6.20	34.37								
605	5.60	34.39								

8740

E. W. SCRIPPS; July 1, 1953; 2238 GCT; 33°40'N, 118°58.5'W; sounding, 450 fm; wind, 250°, force 3; weather, clear; sea, moderate; wire angle, 15°.

0	17.68	33.51		0	17.68	33.51		24.23	370	0.00
9	17.04	33.48		10	17.03	33.48		24.36	358	0.04
24	13.50	33.50		20	15.10	33.49		24.81	315	0.07
48	10.19	33.54		30	12.05	33.51		25.44	255	0.10
73	9.30	33.70		50	10.06	33.55		25.83	218	0.15
96	8.86	33.88		75	9.25	33.72		26.10	192	0.20
146	8.32	34.06		100	8.77	33.90		26.31	172	0.24
193	8.14	34.20		150	8.31	34.07		26.52	152	0.33
288	7.72	34.22		200	8.13	34.21		26.66	139	0.40
388	7.08	34.25		250	7.92	34.22		26.69	136	0.47
				300	7.66	34.22		26.73	132	0.54
				400	(6.99)	(34.25)		(26.85)	(121)	(0.67)

8745

YELLOWFIN; June 9, 1953; 1930 GCT; 33°30'N, 119°19'W; sounding, 900 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 02°.

0	14.63	33.61		0	14.63	33.61		25.00	297	0.00
10	14.28	33.64		10	14.28	33.64		25.10	287	0.03
20	14.20	33.63		20	14.20	33.63		25.11	286	0.06
35	9.68	33.91		30	11.20	33.87		25.88	213	0.08
50	9.40	33.96		50	9.40	33.96		26.26	177	0.12
65	9.33	33.98		75	9.15	34.05		26.37	166	0.16
80	9.09	34.06		100	8.96	34.05		26.40	164	0.21
100	8.96	34.05		150	8.74	34.19		26.55	149	0.29
125	8.83	34.18		200	8.44	34.24		26.63	142	0.36
155	8.72	34.19		250	8.22	34.35		26.75	130	0.43
204	8.42	34.25		300	7.59	34.30		26.81	125	0.50
254	8.18	34.36		400	6.82	34.34		26.94	112	0.62
303	7.54	34.30		500	6.20	34.38		27.06	101	0.73
405	6.78	34.34		600	5.59	34.37		27.13	94	0.84
502	6.18	34.38								
606	5.55	34.37								

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

S10
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5306

E. W. SCRIPPS; July 1, 1953; 1930 GCT; 33°30'N, 119°19'W; sounding, 900 fm; wind, 270°, force 3; weather, clear; sea, very rough; wire angle, 05°.

8745

0	15.83	33.42		0	15.83	33.42		24.59	336	0.00
10	13.82	33.62		10	13.82	33.62		25.18	280	0.03
25	9.64	33.94		20	10.10	33.84		26.05	197	0.06
55	9.05	34.12		30	9.45	33.99		26.28	175	0.07
109	8.93	34.15		50	9.08	34.10		26.42	162	0.11
162	8.66	34.18		75	8.97	34.14		26.47	157	0.15
215	8.15	34.27		100	8.95	34.15		26.48	156	0.19
321	7.32	34.31		150	8.74	34.17		26.53	151	0.26
435	6.58	34.29		200	8.30	34.24		26.65	140	0.34
543	6.05	34.34		250	7.84	34.30		26.77	128	0.41
652	5.62	34.34		300	7.47	34.31		26.83	123	0.47
				400	6.78	34.29		26.91	115	0.60
				500	6.24	34.32		27.01	106	0.71
				600	5.82	34.34		27.08	99	0.82

YELLOWFIN; June 9, 1953; 1613 GCT; 33°20'N, 119°39.5'W; sounding, 40 fm; wind, 310°, force 4; weather, clear; sea, very rough; wire angle, 05°.

8750

0	12.74	33.71		0	12.74	33.71		25.47	252	0.00
10	12.02	33.73		10	12.02	33.73		25.62	238	0.02
20	9.81	33.86		20	9.81	33.86		26.11	191	0.05
30	9.58	33.96		30	9.58	33.96		26.23	180	0.06
50	9.30	34.03		50	9.30	34.03		26.33	170	0.10

YELLOWFIN; June 9, 1953; 1227 GCT; 33°10'N, 120°00.5'W; sounding, 610 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 35°.

8755

0	12.78	33.76		0	12.78	33.76		25.50	249	0.00
8	12.80	33.73		10	12.81	33.73		25.47	252	0.02
17	12.81	33.74		20	12.80	33.74		25.48	251	0.05
29	12.74	33.74		30	12.73	33.74		25.49	250	0.08
45	11.87	33.84		50	11.86	33.83		25.73	227	0.12
57	11.84	33.79		75	11.05	33.92		25.95	206	0.18
70	11.33	33.89		100	9.10	33.93		26.29	174	0.23
90	10.40	33.94		150	8.77	34.14		26.50	154	0.31
109	8.99	33.89		200	8.07	34.24		26.69	136	0.38
130	9.02	34.09		250	7.89	34.25		26.71	134	0.45
164	8.36	34.17		300	7.57	34.30		26.81	125	0.52
203	8.06	34.24		400	7.03	34.28		26.87	119	0.65
237	7.96	34.24		500	6.22	34.32		27.01	106	0.77
321	7.45	34.31								
409	6.97	34.28								
502	6.20	34.32								

S10

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5306

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

8760

YELLOWFIN; June 9, 1953; 0800 GCT; 33°00.5'N, 120°21'W; sounding, 400 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 27°.

0	13.94	33.28		0	13.94	33.28		24.89	307	0.00
9	13.96	33.29		10	13.96	33.29		24.90	306	0.03
18	13.97	33.29		20	13.97	33.29		24.89	307	0.06
31	13.95	33.29		30	13.96	33.29		24.90	306	0.09
49	13.38	33.27		50	13.36	33.27		25.01	296	0.15
62	12.98	33.31		75	11.99	33.48		25.43	256	0.22
75	11.99	33.48		100	9.79	33.39		25.75	225	0.28
96	10.00	33.38		150	8.47	33.88		26.35	168	0.38
116	9.24	33.61		200	8.04	34.10		26.58	146	0.46
142	8.57	33.83		250	7.84	34.18		26.67	138	0.53
188	8.10	34.06		300	7.19	34.22		26.80	126	0.60
239	7.94	34.17		400	6.77	34.32		26.94	112	0.72
283	7.30	34.22		500	6.17	34.34		27.03	104	0.83
386	6.85	34.31		600	(5.53)	(34.39)		(27.15)	(92)	(0.93)
486	6.26	34.34								
592	5.58	34.39								

8770

YELLOWFIN; June 9, 1953; 0059 GCT; 32°40'N, 121°01.5'W; sounding, 1000+ fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°.

0	13.90	33.41		0	13.90	33.41		25.00	297	0.00
10	13.92	33.46		10	13.92	33.46		25.03	294	0.03
20	13.71	33.42		20	13.71	33.42		25.05	292	0.06
34	12.00	33.42		30	12.62	33.42		25.26	272	0.09
53	10.05	33.50		50	10.13	33.47		25.76	224	0.14
68	9.79	33.68		75	9.64	33.71		26.03	199	0.19
83	9.50	33.74		100	9.13	33.81		26.19	184	0.24
112	8.84	33.86		150	8.19	33.94		26.43	161	0.33
132	8.40	33.88		200	7.71	34.07		26.61	144	0.40
161	8.08	34.00		250	7.21	34.08		26.69	136	0.48
215	7.57	34.08		300	6.55	34.08		26.78	128	0.54
272	6.94	34.08		400	5.90	34.19		26.95	111	0.67
319	6.32	34.08		500	5.46	34.23		27.03	104	0.78
429	5.76	34.22		600	5.12	34.28		27.11	96	0.89
536	5.32	34.24								
643	4.99	34.31								

8780

YELLOWFIN; June 8, 1953; 1843 GCT; 32°20.5'N, 121°44'W; sounding, 1000+ fm; wind, 310°, force 4; weather, cloudy; sea, very rough; wire angle, 31°.

0	13.47	33.03		0	13.47	33.03		24.80	316	0.00
8	13.48	33.05		10	13.47	33.05		24.81	315	0.03
17	13.25	33.04		20	13.05	33.04		24.89	307	0.06
30	12.62	33.04		30	12.62	33.04		24.97	300	0.09
47	12.53	33.13		50	12.54	33.13		25.06	291	0.15
60	12.72	33.12		75	11.88	33.13		25.18	280	0.22
72	12.01	33.13		100	10.54	33.31		25.56	243	0.29
91	11.15	33.27		150	8.65	33.72		26.19	184	0.40
110	9.75	33.35		200	8.00	33.97		26.49	155	0.48
132	8.90	33.56		250	7.56	34.08		26.64	141	0.56
174	8.36	33.87		300	7.09	34.12		26.73	132	0.63
220	7.76	34.02		400	6.53	34.21		26.88	118	0.76
259	7.50	34.09		500	6.18	34.37		27.05	102	0.88
357	6.60	34.14								
450	6.46	34.32								
553	5.81	34.40								

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

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YELLOWFIN; June 8, 1953; 1227 GCT; ^{32° 00'}31° 60' N, 122° 24.5' W; sounding, 1000+ fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 12°.

8790

0	15.20	33.35		0	15.20	33.35		24.68	327	0.00
10	15.22	33.34		10	15.22	33.34		24.67	328	0.03
19	15.21	33.33		20	15.21	33.33		24.66	329	0.07
34	14.95	34.22r		30	15.02	33.33		24.70	325	0.10
53	14.82	33.33		50	14.86	33.33		24.74	321	0.16
68	13.68	33.29		75	13.30	33.32		25.05	292	0.24
83	12.94	33.38		100	12.28	33.39		25.31	267	0.31
107	12.01	33.39		150	10.10	33.49		25.78	222	0.44
131	11.06	33.42		200	8.75	33.85		26.28	175	0.54
160	9.76	33.54		250	8.16	34.07		26.54	150	0.62
213	8.54	33.94		300	7.60	34.15		26.69	136	0.69
270	7.96	34.11		400	6.54	34.25		26.91	115	0.82
319	7.36	34.17		500	5.92	34.35		27.07	100	0.94
432	6.28	34.28		600	5.31	34.43		27.21	87	1.04
539	5.70	34.39								
649	5.00	34.45								

YELLOWFIN; June 6, 1953; 0235 GCT; 33° 28.5' N, 117° 46.5' W; sounding, 140 fm; wind, 190°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

9028

0	16.20	33.58		0	16.20	33.58		24.63	332	0.00
10	15.06	33.62		10	15.06	33.62		24.92	304	0.03
20	13.05	33.61		20	13.05	33.61		25.33	265	0.06
30	10.32	33.60		30	10.32	33.60		25.83	218	0.08
50	9.80	33.75		50	9.80	33.75		26.03	199	0.13
75	9.45	33.87		75	9.45	33.87		26.18	184	0.18
100	9.10	33.93		100	9.10	33.93		26.29	174	0.22

YELLOWFIN; June 6, 1953; 0431, 0455 GCT; 33° 24.5' N, 117° 55' W; sounding, 300 fm; wind, 180°, force 1; weather, partly cloudy; sea, slight; wire angle, missing.

9030

0	15.94	33.58	6.21	0	15.94	33.58	6.21	24.69	326	0.00
10	15.58	33.52	6.30	10	15.58	33.52	6.30	24.72	323	0.03
25	11.50	33.40	4.16	20	12.20	33.41	4.90	25.34	264	0.06
50	11.14	33.55	3.05	30	11.41	33.40	3.73	25.48	251	0.09
75	9.47	33.82	3.08	50	11.14	33.55	3.05	25.64	236	0.14
100	9.04	33.86	2.84	75	9.47	33.82	3.08	26.14	188	0.19
155	8.40	34.01	2.45	100	9.04	33.86	2.84	26.24	179	0.24
203	7.90	34.11	1.86	150	8.47	34.00	2.51	26.44	160	0.32
252	7.48	34.17	1.66	200	7.93	34.10	1.90	26.60	145	0.40
				250	7.49	34.17	1.67	26.72	133	0.47
300	7.26	34.15	1.68	300	7.26	34.15	1.68	26.73	132	0.54
354	7.47	34.37	0.60	400	7.16	34.34	0.53	26.90	116	0.67
402	7.14	34.34	0.52	500	(6.59)	(34.28)		(26.93)	(113)	(0.79)
451	6.85	34.30	0.44							

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

9037 YELLOWFIN; June 6, 1953; 0917 GCT; 33°11'N, 118°23.5'W; sounding, 580 fm; wind, 200°, force 1; weather, partly cloudy; sea, slight; wire angle, 06°.

0	15.58	33.51	6.20	0	15.58	33.51	6.20	24.72	323	0.00
10	15.60	33.53	6.19	10	15.60	33.53	6.19	24.73	322	0.03
20	15.57	33.51	6.22	20	15.57	33.51	6.22	24.72	323	0.06
35	11.25	33.49	5.15	30	12.70	33.50	5.70	25.31	267	0.09
50	9.92	33.50	4.24	50	9.92	33.50	4.24	25.82	219	0.14
64	9.57	33.68	3.76	75	9.37	33.69	3.54	26.05	197	0.20
79	9.32	33.70	3.45	100	9.22	33.85	2.82	26.20	183	0.24
98	9.23	-	2.92	150	8.73	34.07	2.54	26.45	159	0.32
123	9.19	34.04	2.48	200	8.29	34.13	1.87	26.57	148	0.41
152	8.70	34.07	2.53	250	7.94	(34.16)	1.14	(26.64)	(141)	(0.48)
201	8.28	34.13	1.83	300	7.60	(34.19)	0.90	(26.72)	(133)	(0.55)
250	7.94	-	1.14	400	6.81	34.25	0.53	26.88	118	(0.68)
299	7.60	-	0.91	500	6.02	34.32	0.42	27.03	104	(0.80)
402	6.79	34.25	0.52	600	5.47	-	0.30	-	-	-
500	6.02	34.32	0.42	-	-	-	-	-	-	-
605	5.45	-	0.29	-	-	-	-	-	-	-

9045 YELLOWFIN; June 6, 1953; 1455, missing GCT; 32°54.5'N, 118°57'W; sounding, 900 fm; wind, 290°, force 4; weather, overcast; sea, rough; wire angle, 08°, missing.

0	14.68	33.48	6.23	0	14.68	33.48	6.23	24.89	307	0.00
10	14.70	33.48	6.30	10	14.70	33.48	6.30	24.89	307	0.03
25	14.12	33.52	6.43	20	14.42	33.50	6.42	24.96	300	0.06
50	9.54	33.63	3.30	30	13.45	33.54	6.41	25.19	279	0.09
74	9.18	-	2.48	50	9.54	33.63	3.30	25.98	204	0.14
99	9.20	-	2.28	75	9.18	(33.75)	2.46	(26.13)	(189)	(0.19)
152	8.65	34.10	1.77	100	9.20	(33.86)	2.27	(26.21)	(182)	(0.24)
200	8.26	34.14	1.40	150	8.68	34.10	1.78	26.48	156	(0.32)
248	7.85	34.19	1.06	200	8.26	34.14	1.40	26.58	146	(0.40)
-	-	-	-	250	7.83	34.19	1.04	26.68	137	(0.47)
287	7.55	34.23	0.88	300	7.44	34.24	0.83	26.78	128	(0.54)
386	6.72	-	0.60	400	6.62	(34.30)	0.54	(26.94)	(112)	(0.66)
482	6.12	34.33	0.33	500	6.02	34.33	0.38	27.04	103	(0.78)
581	5.62	34.34	0.59	600	5.53	(34.34)	0.59	(27.11)	(96)	(0.88)
779	4.69	-	0.40	700	5.06	(34.36)	0.44	(27.18)	(90)	(0.98)
971	4.08	34.42	0.47	800	4.61	(34.38)	0.41	(27.25)	(83)	(1.08)
1173	3.83	-	0.55	1000	4.03	(34.43)	0.49	(27.35)	(74)	(1.25)

9050 YELLOWFIN; June 6, 1953; 1907 GCT; 32°44.5'N, 119°16.5'W; sounding, 270 fm; wind, 280°, force 4; weather, fog; sea, moderate; wire angle, 30°.

0	13.76	33.51	6.07	0	13.76	33.51	6.07	25.11	286	0.00
8	13.76	33.57	6.40	10	13.75	33.58	6.39	25.16	281	0.03
22	11.82	-	4.98	20	12.20	33.61	5.15	25.49	250	0.06
43	10.33	33.67	4.19	30	11.18	33.63	4.65	25.70	230	0.08
64	9.16	33.80	2.77	50	9.93	33.70	3.78	25.97	204	0.12
82	8.88	33.82	2.30	75	8.92	33.81	2.42	26.22	181	0.17
125	8.78	33.89	1.86	100	8.85	33.84	2.06	26.25	178	0.22
165	8.54	34.03	1.73	150	8.64	33.97	1.81	26.39	164	0.30
206	8.22	34.14	1.25	200	8.28	34.13	1.30	26.57	148	0.38
249	7.83	34.22	1.13	250	7.83	34.22	1.13	26.71	135	0.46
297	7.45	34.25	1.09	300	7.43	34.25	1.07	26.79	127	0.52
343	7.08	34.23	0.65	-	-	-	-	-	-	-
389	6.74	34.28	0.57	-	-	-	-	-	-	-

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

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YELLOWFIN; June 6, 1953; 2258 GCT; 32°35'N, 119°37'W; sounding, 240 fm; wind, 270°, force 4; weather, dense fog; sea, rough; wire angle, 19°.

9055

0	12.41	33.47	6.30	0	12.41	33.47	6.30	25.34	264	0.00
9	12.40	33.59	6.35	10	12.40	33.59	6.35	25.44	255	0.03
23	12.13	33.53	6.10	20	12.19	33.53	6.13	25.43	256	0.05
47	11.91	33.58	5.83	30	12.08	33.54	6.02	25.46	253	0.08
70	10.42	33.48	4.80	50	11.87	33.58	5.78	25.53	246	0.13
94	9.56	33.53	4.14	75	10.19	33.48	4.60	25.75	225	0.19
143	8.63	33.95	2.80	100	9.40	33.56	3.97	25.95	206	0.24
188	8.33	34.06	1.97	150	8.58	33.98	2.66	26.41	163	0.33
234	7.92	34.04	1.43	200	8.23	34.06	1.76	26.52	152	0.41
280	7.74	34.14	1.28	250	7.84	34.06	1.40	26.58	146	0.49
332	7.32	34.20	0.87	300	7.62	34.17	1.16	26.70	135	0.56
379	6.84	34.26	0.56							

YELLOWFIN; June 7, 1953; 0331 GCT; 32°25'N, 119°57'W; sounding, 720 fm; wind, 290°, force 3; weather, dense fog; sea, moderate; wire angle, 38°.

9060

0	13.08	33.28	6.38	0	13.08	33.28	6.37	25.07	290	0.00
8	13.05	33.29	6.27	10	13.04	33.30	6.28	25.09	288	0.03
16	12.93	33.31	6.32	20	12.88	33.31	6.41	25.13	284	0.06
28	12.73	33.31	6.46	30	12.70	33.31	6.45	25.16	281	0.09
39	12.40	33.33	5.93	50	12.33	33.35	6.25	25.27	271	0.14
51	12.33	33.35	6.26	75	10.89	33.22	5.30	25.43	256	0.21
63	11.87	33.27	5.94	100	9.73	33.52	4.32	25.86	215	0.27
78	10.68	33.22	5.15	150	8.59	33.84	2.82	26.30	173	0.36
96	9.88	34.47	4.46	200	8.27	34.04	2.31	26.50	154	0.45
113	9.26	33.62	3.83	250	7.86	34.13	1.72	26.63	142	0.52
142	8.66	33.80	3.05	300	7.52	34.18	1.27	26.72	133	0.60
172	8.40	33.94	2.46	400	6.91	34.25	0.64	26.86	120	0.73
202	8.24	34.05	2.30							
275	7.66	-	1.44							
351	7.24	34.22	0.95							
439	6.61	34.27	0.46							

YELLOWFIN; June 7, 1953; 0942 GCT; 32°04'N, 120°39'W; sounding, 1000+ fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 19°.

9070

0	13.64	33.39	6.27	0	13.64	33.39	6.27	25.04	293	0.00
9	13.63	33.38	6.15	10	13.63	33.38	6.15	25.03	294	0.03
23	13.34	33.34	6.24	20	13.43	33.34	6.24	25.04	293	0.06
52	12.88	33.41	5.87	30	13.21	33.34	6.19	25.09	288	0.09
75	12.36	33.58	5.88	50	12.92	33.40	5.88	25.19	279	0.14
104	11.07	33.50	4.68	75	12.36	33.58	5.88	25.44	255	0.21
156	9.45	33.74	3.34	100	11.21	33.50	4.84	25.59	240	0.27
208	8.22	34.18	2.27	150	9.62	33.70	3.48	26.02	238	0.38
264	7.80	34.12	1.81	200	8.32	34.17	2.38	26.60	145	0.47
310	7.54	-	1.21	250	7.89	34.14	1.93	26.64	141	0.55
417	6.38	34.14	0.70	300	7.60	34.12	1.30	26.66	139	0.62
519	5.84	34.37	0.40	400	6.51	34.13	0.74	26.82	124	0.76
622	5.36	34.36	0.31	500	5.92	34.34	0.44	27.06	101	0.87
824	4.52	34.39	0.40	600	5.46	34.36	0.32	27.14	93	0.98
1030	3.78	34.48	0.64	700	5.01	34.36	0.30	27.19	89	1.08
1231	3.30	34.47	0.85	800	4.62	34.38	0.37	27.25	83	1.17
				1000	3.88	34.47	0.61	27.40	69	1.34

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

9080

YELLOWFIN; June 7, 1953; 1610 GCT; 31°45'N, 121°19'W; sounding, 1000+ fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 13°.

0	13.67	33.16	6.33	0	13.67	33.16	6.33	24.85	311	0.00
9	13.65	33.22	6.32	10	13.65	33.22	6.32	24.91	305	0.03
19	13.59	33.12	5.93	20	13.59	33.12	5.93	24.84	312	0.06
34	13.46	33.04	6.39	30	13.52	33.04	6.34	24.79	317	0.09
48	13.31	33.14	6.36	50	13.25	33.14	6.36	24.92	304	0.16
63	12.57	33.10	6.38	75	11.40	33.08	5.90	25.23	275	0.23
78	11.27	33.08	5.79	100	10.46	33.24	5.11	25.52	247	0.29
97	10.56	33.22	5.21	150	8.89	33.71	3.06	26.15	187	0.40
121	9.35	33.32	4.54	200	8.21	33.87	3.40	26.38	166	0.49
149	8.90	33.70	3.07	250	7.61	33.97	2.51	26.54	150	0.57
198	8.24	33.87	3.39	300	7.23	34.03	1.69	26.64	141	0.65
290	7.32	33.96	2.67	400	6.36	34.13	0.95	26.84	122	0.78
243	7.66	34.02	1.80	500	5.98	34.26	0.48	26.99	108	0.91
391	6.40	34.12	1.01	600	(5.53)	(34.27)		(27.06)	(101)	(1.02)
487	6.02	34.25	0.53							
589	5.58	34.27	0.35							

9090

YELLOWFIN; June 7, 1953; 2209 GCT; 31°25'N, 121°59'W; sounding, 1000+ fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 11°.

0	15.72	33.09		0	15.72	33.09		24.36	358	0.00
10	15.64	33.11		10	15.64	33.11		24.40	354	0.04
24	15.45	-		20	15.53	33.11		24.42	352	0.07
49	14.24	33.05		30	15.30	33.09		24.46	348	0.11
73	12.68	33.07		50	14.23	33.05		24.65	330	0.17
98	11.20	33.03		75	12.59	33.07		25.00	297	0.25
152	9.05	33.59		100	11.11	33.03		25.24	274	0.32
201	8.38	33.84		150	9.10	33.57		26.00	202	0.44
250	7.83	-		200	8.40	33.84		26.32	171	0.54
299	7.20	-		250	7.83	(33.93)		(26.48)	(156)	(0.62)
402	6.12	34.06		300	7.19	(33.98)		(26.61)	(144)	(0.70)
498	5.48	34.13		400	6.14	34.06		26.81	125	(0.84)
601	4.96	34.25		500	5.47	34.13		26.95	111	(0.96)
800	4.32	34.34		600	4.97	34.25		27.11	96	(1.07)
996	3.82	34.43		700	4.59	34.31		27.20	88	(1.17)
1199	3.32	34.47		800	4.32	34.34		27.25	83	(1.26)
				1000	3.81	34.43		27.37	72	(1.43)

90100

YELLOWFIN; June 8, 1953; 0420 GCT; 31°04'N, 122°40'W; sounding, 1000+ fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 21°.

0	15.93	33.18	5.73	0	15.93	33.18	5.73	24.39	355	0.00
9	15.96	33.20	5.87	10	15.97	33.20	5.87	24.39	355	0.04
19	15.95	33.18	5.81	20	15.96	33.18	5.81	24.38	356	0.07
33	15.94	33.21	5.95	30	15.95	33.19	5.92	24.39	355	0.11
47	15.25	33.34	6.12	50	14.94	33.34	6.19	24.73	322	0.18
60	13.93	33.32	6.35	75	12.80	33.30	6.34	25.14	283	0.25
74	12.81	33.30	6.35	100	11.54	33.37	5.63	25.43	256	0.32
92	11.95	33.37	5.87	150	8.85	33.73	3.90	26.17	185	0.43
114	10.71	33.35	5.11	200	8.27	33.97	3.07	26.45	159	0.52
141	9.02	33.65	4.11	250	7.79	34.08	2.42	26.60	145	0.60
186	8.41	33.92	3.28	300	7.16	34.13	1.99	26.73	132	0.67
276	7.51	34.11	2.14	400	6.04	34.20	1.32	26.94	112	0.79
375	6.19	34.17	1.53	500	5.56	34.30	0.53	27.08	99	0.91
469	5.72	34.28	0.67							
572	5.14	34.33	0.42							

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

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PAOLINA-T; June 11, 1953; 0519 GCT; 32°55.5'N, 117°20.5'W; sounding, 200 fm; wind, 340°, force 2; weather, clear; sea, slight; wire angle, 04°.

93.27

0	16.92	33.58		0	16.92	33.58		24.46	348	0.00
10	15.29	33.58		10	15.29	33.58		24.83	313	0.03
20	12.24	33.56		20	12.24	33.56		25.45	254	0.06
30	11.16	33.60		30	11.16	33.60		25.68	232	0.09
50	9.47	33.79		50	9.47	33.79		26.12	190	0.13
75	9.23	33.89		75	9.23	33.89		26.23	180	0.18

PAOLINA-T; June 11, 1953; 0812, 0827 GCT; 32°49'N, 117°32.5'W; sounding, 530 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 02°, 03°.

93.30

0	16.59	33.48		0	16.59	33.48		24.46	348	0.00
10	16.56	33.48		10	16.56	33.48		24.47	347	0.04
				20	10.50	33.44		25.67	328	0.06
20	10.50	33.44		30	9.74	33.52		25.86	310	0.09
35	9.56	33.57		50	9.29	33.65		26.04	280	0.13
50	9.29	33.65		75	9.03	33.83		26.22	181	0.18
65	9.08	33.78		100	8.92	33.95		26.33	170	0.22
80	9.02	33.85		150	9.12	34.12		26.43	161	0.30
100	8.92	33.95		200	9.10	34.21		26.50	154	0.38
124	8.93	34.04		250	7.71	34.09		26.62	143	0.46
153	9.14	34.13		300	7.19	34.16		26.75	130	0.53
201	9.10	34.21		400	7.00	34.26		26.86	120	0.66
249	7.74	34.09		500	6.48	34.32		26.97	110	0.78
297	7.20	34.16		600	5.78	34.33		27.07	100	0.89
400	7.00	34.26								
497	6.51	34.32								
600	5.78	34.33								

PAOLINA-T; June 11, 1953; 1603 GCT; 32°28'N, 118°12.5'W; sounding, 1190 fm; wind, 310°, force 3; force 3; weather, clear; sea, moderate; wire angle, 06°.

93.40

0	16.25	33.58		0	16.25	33.58		24.62	333	0.00
10	16.08	33.59		10	16.08	33.59		24.67	328	0.03
20	15.42	33.58		20	15.42	33.58		24.81	315	0.06
50	10.42	33.55		30	13.59	33.56		25.18	280	0.10
65	9.76	33.66		50	10.42	33.55		25.77	223	0.15
79	9.40	33.82		75	9.48	33.80		26.12	190	0.20
99	8.98	33.91		100	8.93	33.92		26.30	173	0.24
124	8.61	34.05		150	8.44	34.08		26.51	153	0.33
154	8.40	34.09		200	7.84	34.19		26.68	137	0.40
204	7.80	34.20		250	7.52	34.25		26.78	128	0.47
252	7.51	34.25		300	7.34	34.33		26.86	120	0.53
300	7.34	34.33		400	6.74	34.43		27.03	104	0.65
402	6.72	34.43		500	6.12	34.43		27.11	96	0.76
500	6.12	34.43		600	5.49	34.47		27.22	86	0.86
602	5.48	34.47								

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

93.50

PAOLINA-T; June 11, 1953; 2221, 2252 GCT; 32°07'N, 118°47.5'W; sounding, 1000 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 40°, 47°.

0	15.06	33.73		0	15.06	33.73		25.00	297	0.00
8	15.07	33.71		10	15.06	33.71		24.99	298	0.03
15	14.85	33.71		20	14.60	33.72		25.09	288	0.06
42	11.23	33.78		30	12.55	33.75		25.53	246	0.09
53	10.48	33.78		50	10.63	33.78		25.91	210	0.13
65	10.09	33.86		75	9.62	33.92		26.19	184	0.18
82	9.42	33.95		100	9.12	34.05		26.38	166	0.22
100	9.12	34.05		150	8.79	34.21		26.55	149	0.30
119	8.94	34.11		200	8.45	34.30		26.68	137	0.38
153	8.77	34.22		250	8.03	34.35		26.78	128	0.45
				300	7.50	34.36		26.87	119	0.51
183	8.55	34.27		400	6.70	34.35		26.97	110	0.63
216	8.34	34.33		500	(6.09)	(34.44)		(27.12)	(95)	(0.74)
294	7.56	34.36								
376	6.88	34.33								
466	6.29	34.43								

93.60

PAOLINA-T; June 12, 1953; 0455, 0524 GCT; 31°46'N, 119°18'W; sounding, 550 fm; wind, 310°, force 4; weather, clear; sea, moderate; wire angle, 22°, 30°.

0	14.92	33.24		0	14.92	33.24		24.65	330	0.00
9	14.92	33.35		10	14.92	33.35		24.74	321	0.03
19	14.26	33.33		20	14.13	33.33		24.89	307	0.06
51	13.24	33.34		30	13.82	33.34		24.96	300	0.09
64	11.96	33.31		50	13.25	33.34		25.08	289	0.15
79	10.44	33.30		75	10.75	33.30		25.52	248	0.22
99	9.76	33.49		100	9.71	33.40		25.77	223	0.28
123	9.30	33.72		150	8.95	33.86		26.25	178	0.38
150	8.95	33.86		200	8.21	34.10		26.56	148	0.46
199	8.24	34.10		250	7.64	34.10		26.64	141	0.54
				300	7.40	34.25		26.79	127	0.61
244	7.68	34.09		400	6.73	34.28		26.91	115	0.73
288	7.46	34.24		500	6.01	34.33		27.04	103	0.85
389	6.84	34.28		600	(5.38)	(34.39)		(27.17)	(91)	(0.95)
490	6.08	34.33								
584	5.48	34.38								

93.70

PAOLINA-T; June 12, 1953; 1152, 1225 GCT; 31°26'N, 119°47'W; sounding, 1000+ fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 35°, missing.

0	15.03	33.27		0	15.03	33.27		24.65	330	0.00
9	14.96	33.32		10	14.94	33.32		24.71	324	0.03
18	14.29	33.32		20	14.15	33.32		24.88	308	0.06
49	13.28	33.41		30	13.88	33.35		24.96	300	0.10
64	12.16	33.36		50	13.15	33.41		25.15	285	0.15
77	11.51	33.36		75	11.59	33.36		25.41	258	0.22
98	10.24	33.35		100	10.13	33.35		25.66	234	0.28
120	9.44	33.52		150	8.79	33.68		26.14	188	0.39
146	8.88	33.66		200	7.91	33.97		26.50	154	0.48
193	8.00	33.96		250	7.32	34.01		26.62	143	0.55
				300	6.83	34.05		26.72	133	0.62
				400	6.00	34.14		26.90	116	0.75
298p	6.88	34.05								
404p	5.98	34.14								

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

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PAOLINA-T; June 12, 1953; 2037 GCT; 30°48'N, 120°41.5'W; sounding, 1000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°.

9380

0	16.31	33.18		0	16.31	33.18		24.30	363	0.00
9	16.30	33.19		10	16.29	33.19		24.31	362	0.04
19	16.17	33.18		20	16.14	33.18		24.34	360	0.07
52	15.42	33.19		30	15.99	33.18		24.37	357	0.11
66	14.42	-		50	15.50	33.19		24.49	345	0.18
80	13.87	33.08		75	14.02	33.08		24.72	323	0.26
104	13.03	33.18		100	13.22	33.16		24.95	301	0.34
127	10.79	33.21		150	9.80	33.37		25.73	227	0.48
155	9.64	33.41		200	8.75					
205	8.65	-		250	7.98					
260	7.86	-		300	7.39					
305	7.33	-		400	6.37					
413	6.27	-		500	5.81					
518	5.74	34.22		600	5.28					
626	5.14	-								

PAOLINA-T; June 13, 1953; 0345 GCT; 30°47.5'N, 121°33.5'W; sounding, 1000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 07°.

9390

0	16.41	-		0	16.41	33.22				0.00
10	16.42	-		10	16.42	33.22				0.04
19	16.30	33.22		20	16.26	33.22		24.34	360	0.08
54	14.05	33.09		30	15.12	33.20		24.58	337	0.11
68	14.04	33.20		50	14.07	33.09		24.72	323	0.18
84	13.44	33.21		75	14.01	33.21		24.82	314	0.26
109	11.46	33.18		100	12.11	33.19		25.18	280	0.33
134	9.99	33.26		150	9.32	33.41		25.84	217	0.45
163	8.99	33.57		200	8.55	33.84		26.30	173	0.55
217	8.31	-		250	7.78	34.01		26.55	149	0.63
274	7.42	34.05		300	7.12	34.06		26.68	137	0.70
321	6.94	34.07		400	6.38	34.12		26.83	123	0.83
431	6.18	34.16		500	5.76	34.20		26.97	110	0.95
538	5.54	34.23		600	5.19	34.29		27.11	96	1.06
647	4.92	34.34								

PAOLINA-T; June 15, 1953; 0652 GCT; 32°14.5'N, 117°08'W; sounding, 36 fm; wind, 310°, force 1; weather, partly cloudy; sea, slight; wire angle, 01°.

9730

0	17.20	33.56		0	17.20	33.56		24.38	356	0.00
10	15.12	33.48		10	15.12	33.48		24.80	316	0.03
20	11.79	33.51		20	11.79	33.51		25.49	250	0.06
30	11.42	33.44		30	11.42	33.44		25.51	248	0.09
50	9.61	33.65		50	9.61	33.65		25.98	204	0.13

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

97.35

PAOLINA-T; June 15, 1953; 0430 GCT; 32°08.5'N, 117°20'W; sounding, 850 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 17°.

0	16.84	33.57		0	16.84	33.57		24.48	346	0.00
10	16.72	33.56		10	16.72	33.56		24.50	344	0.04
19	15.79	33.54		20	15.60	33.54		24.74	321	0.07
48	10.82	-		30	13.80	(33.52)		(25.11)	(286)	(0.10)
62	10.08	-		50	10.68	(33.51)		(25.69)	(231)	(0.15)
76	9.70	33.53		75	9.72	33.53		25.87	214	(0.21)
95	9.34	33.74		100	9.26	33.78		26.14	188	(0.26)
119	9.00	33.86		150	8.65	33.99		26.40	164	(0.35)
148	8.66	33.97		200	9.00	34.31		26.60	145	(0.42)
196	9.04	34.31		250	7.59	34.10		26.65	140	(0.50)
242	7.68	34.10		300	7.17	34.15		26.75	130	(0.57)
289	7.26	34.14		400	6.46	34.22		26.90	116	(0.70)
389	6.50	34.21		500	6.13	34.35		27.04	103	(0.81)
485	6.20	34.35		600	(5.61)	(34.35)		(27.11)	(96)	(0.92)
585	5.70	34.35								

97.40

PAOLINA-T; June 15, 1953; 0016 GCT; 31°57'N, 117°46'W; sounding, 1000+ fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 16°.

0	16.36	33.39		0	16.36	33.39		24.45	349	0.00
10	16.38	33.54		10	16.38	33.54		24.56	339	0.03
19	16.32	33.54		20	16.31	33.54		24.58	337	0.07
53	11.25	-		30	14.95	33.54		24.88	308	0.10
67	10.44	33.58		50	11.88	33.55		25.51	248	0.16
81	9.39	33.68		75	9.75	33.62		25.94	207	0.21
105	8.98	33.86		100	9.02	33.83		26.22	181	0.26
129	8.85	33.94		150	8.55	34.00		26.43	161	0.35
156	8.47	34.01		200	8.20	34.13		26.58	146	0.43
212	8.13	34.15		250	7.58	34.19		26.72	133	0.50
267	7.37	34.20		300	7.07	34.18		26.78	128	0.57
313	6.97	34.18		400	6.39	34.26		26.94	112	0.69
419	6.28	34.28		500	5.78	34.30		27.05	102	0.80
524	5.65	34.30		600	5.29	34.35		27.15	93	0.91
630	5.18	34.37								

97.50

PAOLINA-T; June 14, 1953; 1632 GCT; 31°35.5'N, 118°31'W; sounding, 1000+ fm; wind, 330°, force 6; weather, overcast; sea, high; wire angle, 20°.

0	14.63	33.64		0	14.63	33.64		25.02	295	0.00
10	14.63	33.63		10	14.63	33.63		25.02	295	0.03
19	14.63	33.64		20	14.62	33.64		25.03	294	0.06
52	11.42	33.52		30	14.61	33.62		25.01	296	0.09
66	10.90	33.54		50	11.70	33.52		25.52	247	0.14
79	9.76	33.60		75	9.86	33.59		25.90	211	0.20
103	9.48	33.85		100	9.51	33.83		26.14	188	0.25
127	9.28	33.93		150	9.01	34.09		26.42	162	0.34
156	8.95	34.10		200	8.52	34.11		26.52	152	0.42
207	8.46	34.12		250	8.08	34.19		26.65	140	0.50
266	7.94	-		300	7.65	34.28		26.78	128	0.56
314	7.52	34.30		400	6.97	34.31		26.90	116	0.69
424	6.82	34.31		500	6.31	34.31		26.99	108	0.81
532	6.06	34.32		600	5.52	34.35		27.12	95	0.92
641	5.20	34.37								

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

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5306

PAOLINA-T; June 14, 1953; 0646 GCT; 31°16'N, 119°11.5'W; sounding, 1000+ fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 25°.

9760

0	15.28	33.30		0	15.28	33.30		24.62	333	0.00
9	15.31	33.34		10	15.30	33.34		24.65	330	0.03
18	15.31	33.30		20	15.30	33.30		24.62	333	0.07
49	14.58	33.34		30	15.20	33.32		24.65	330	0.10
62	12.86	33.21		50	14.49	33.34		24.82	314	0.16
75	12.51	33.29		75	12.51	33.29		25.19	279	0.24
94	11.09	33.40		100	10.70	33.40		25.60	240	0.30
115	10.03	33.30		150	9.42	33.85		26.17	185	0.41
140	9.54	33.61		200	8.65	34.08		26.47	157	0.50
186	8.94	34.09		250	7.78	34.03		26.57	148	0.58
237	7.90	34.03		300	7.33	34.08		26.67	138	0.65
281	7.49	-		400	6.57	34.20		26.87	119	0.78
384	6.66	34.18		500	6.04	34.32		27.03	104	0.90
484	6.12	34.31		600	(5.59)	(34.35)		(27.11)	(96)	(1.01)
589	5.62	34.35								

PAOLINA-T; June 14, 1953; 0139 GCT; 30°56.5'N, 119°52.5'W; sounding, 1000+ fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 25°.

9770

0	15.11	33.22		0	15.11	33.22		24.60	335	0.00
9	15.12	33.21		10	15.11	33.21		24.59	336	0.03
18	15.12	33.18		20	15.10	33.18		24.57	338	0.07
49	14.76	33.20		30	15.04	33.18		24.58	337	0.10
64	14.16	33.16		50	14.73	33.20		24.66	329	0.17
77	13.20	33.12		75	13.38	33.12		24.88	302	0.25
99	11.74	33.16		100	11.61	33.16		25.25	273	0.32
121	10.06	33.14		150	9.32	33.57		25.97	204	0.44
147	9.41	33.53		200	8.29	33.95		26.43	161	0.53
194	8.38	33.93		250	7.59	34.01		26.58	146	0.61
246	7.64	34.01		300	7.04	34.04		26.68	137	0.69
291	7.13	34.04		400	6.23	34.13		26.86	120	0.82
392	6.30	34.13		500	5.59	(34.17)		(26.97)	(110)	(0.94)
492	5.62	34.17		600	(5.23)					
593	5.24	-								

PAOLINA-T; June 13, 1953; 1655 GCT; 30°37'N, 120°33.5'W; sounding, 1000+ fm; wind, 310°, force 5; weather, clear; sea, very rough; wire angle, 26°.

9780

0	16.50	33.46		0	16.50	33.46		24.47	347	0.00
9	16.50	33.47		10	16.50	33.47		24.48	346	0.04
18	16.51	33.42		20	16.51	33.42		24.44	350	0.07
49	15.49	33.42		30	16.48	33.42		24.44	350	0.10
63	14.34	33.18		50	15.40	33.42		24.69	326	0.17
76	13.83	33.16		75	13.85	33.16		24.82	314	0.25
99	12.90	33.24		100	12.78	33.24		25.09	288	0.33
121	11.56	33.28		150	10.43	33.50		25.73	227	0.46
148	10.52	33.47		200	9.03	33.85		26.23	180	0.56
199	9.06	33.85		250	8.16	33.93		26.43	161	0.65
253	8.10	33.94		300	7.61	34.06		26.61	144	0.73
297	7.65	34.06		400	6.41	34.13		26.83	123	0.86
404	6.38	34.14		500	5.77	34.27		27.03	104	0.98
506	5.74	34.28		600	5.40	34.35		27.13	94	1.09
609	5.38	34.35								

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

97.90

PAOLINA-T; June 13, 1953; 0920 GCT; 30°18.5'N, 121°11'W; sounding, 1000+ fm; wind, 340°, force 5; weather, clear; sea, rough; wire angle, 16°.

0	17.02	33.67		0	17.02	33.67		24.51	343	0.00
10	17.04	33.68		10	17.04	33.68		24.51	343	0.03
19	17.01	33.71		20	17.01	33.71		24.54	340	0.07
48	16.77	33.68		30	16.91	33.70		24.56	339	0.10
62	16.70	33.72		50	16.74	33.68		24.58	337	0.17
75	16.63	33.71		75	16.63	33.71		24.63	332	0.25
93	15.89	33.60		100	15.20	33.50		24.79	317	0.34
114	13.88	33.36		150	11.17	33.48		25.58	242	0.48
140	11.83	33.43		200	9.36	33.76		26.11	191	0.59
184	9.75	33.67		250	8.49	34.02		26.45	159	0.68
226	8.86	33.89		300	7.86	34.11		26.62	143	0.75
271	8.20	34.09		400	6.78	34.17		26.82	124	0.89
364	7.16	34.13		500	6.04	34.29		27.01	106	1.01
455	6.30	34.25								
553	5.82	34.32								

100.29

PAOLINA-T; June 15, 1953; 1350 GCT; 31°42'N, 116°43.5'W; sounding, 60 fm; wind, 310°, force 1; weather, overcast; sea, slight; wire angle, 02°.

0	10.68	33.64		0	10.68	33.64		25.79	222	0.00
10	10.08	33.68		10	10.08	33.68		25.93	208	0.02
20	9.64	33.78		20	9.64	33.78		26.08	194	0.04
30	9.42	33.85		30	9.42	33.85		26.17	185	0.06
50	9.19	33.84		50	9.19	33.84		26.20	183	0.10
75	9.11	34.02		75	9.11	34.02		26.35	168	0.14

100.30

PAOLINA-T; June 15, 1953; 1517 GCT; 31°40.5'N, 116°46.5'W; sounding, 240 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 04°.

0	11.55	33.48		0	11.55	33.48		25.51	248	0.00
10	9.88	33.61		10	9.88	33.61		25.91	210	0.02
25	9.42	33.68		20	9.51	33.66		26.01	201	0.04
50	9.20	33.86		30	9.35	33.71		26.07	195	0.06
75	9.18	34.03		50	9.20	33.86		26.21	182	0.10
100	9.21	34.17		75	9.18	34.03		26.35	168	0.14
154	9.26	34.28		100	9.21	34.17		26.46	158	0.19
203	8.83	34.29		150	9.26	34.28		26.53	151	0.26
252	8.58	34.30		200	8.85	34.29		26.61	144	0.34
302	8.46	34.39		250	8.59	34.30		26.66	139	0.41
				300	8.46	34.38		26.74	131	0.48

100.40

PAOLINA-T; June 15, 1953; 2220 GCT; 31°17'N, 117°24.5'W; sounding, 1000+ fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 18°.

0	15.85	33.52	5.41	0	15.85	33.52	5.41	24.66	329	0.00
10	15.84	33.46	5.91	10	15.84	33.46	5.91	24.62	333	0.03
20	15.83	-	6.03	20	15.83	33.43	6.03	24.60	335	0.07
34	15.80	33.40	5.81	30	15.81	33.41	5.83	24.59	336	0.10
48	13.52	-	5.80	50	13.32	33.34	5.79	25.06	291	0.16
62	12.62	33.30	5.37	75	11.19	33.48	5.29	25.58	242	0.23
76	11.14	33.48	5.29	100	9.80	33.45	5.18	25.80	221	0.29
95	10.01	33.45	5.21	150	8.69	33.85	3.40	26.29	174	0.39
145	8.75	33.82	3.49	200	8.24	34.08	2.56	26.54	150	0.47
189	8.35	34.04	2.75	250	7.67	34.15	1.91	26.68	137	0.54
235	7.87	34.14	2.05	300	7.10	34.18	1.51	26.78	128	0.61
280	7.26	34.16	1.67	400	6.50	34.33	0.82	26.98	109	0.74
377	6.62	34.32	1.00	500	5.95	34.38	0.29	27.09	98	0.85
471	6.12	34.36	0.37							
572	5.50	34.42	0.15							

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

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PAOLINA-T; June 16, 1953; 0507 GCT; 30°54.5'N, 118°02.5'W; sounding, 1000+ fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 22°.

10050

0	15.52	-		0	15.52					
10	15.53	33.59		10	15.53					
19	15.50	33.56		20	15.49					
33	15.30	33.61		30	15.37					
47	13.77	-		50	13.55					
74	11.58	-		75	11.60					
91	10.62	-		100	10.20					
140	8.95	-		150	8.86					
183	8.54	-		200	8.28					
226	7.86	-		250	7.72					
271	7.60	-		300	7.31					
365	6.74	34.28		400	6.55					
458	6.23	-		500	6.01					
559	5.73	34.35								

PAOLINA-T; June 16, 1953; 1213 GCT; 30°32'N, 118°37.5'W; sounding, 1000+ fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 12°.

10060

0	15.48	33.38	5.76	0	15.48	33.38	5.76	24.64	331	0.00
10	15.51	-	5.76	10	15.51	33.42	5.76	24.66	329	0.03
20	15.52	33.44	5.77	20	15.52	33.44	5.77	24.68	327	0.07
35	15.50	33.44	5.80	30	15.51	33.44	5.79	24.68	327	0.10
49	13.44	33.43	5.91	50	13.20	33.43	5.91	25.16	281	0.16
63	11.29	33.40	4.98	75	10.72	33.40	4.45	25.60	240	0.22
77	10.67	33.40	4.45	100	9.82	33.57	3.88	25.89	212	0.28
96	9.95	-	3.96	150	9.09	33.98	2.72	26.33	170	0.38
147	9.13	33.97	2.74	200	8.42	34.06	2.42	26.49	155	0.46
192	8.50	34.04	2.49	250	7.95	34.19	1.97	26.67	138	0.54
238	8.10	34.16	2.07	300	7.42	34.26	1.53	26.80	126	0.61
284	7.55	-	1.68	400	6.70	34.33	0.79	26.95	111	0.73
382	6.84	34.33	0.90	500	5.85	(34.27)	0.45	(27.02)	(105)	(0.84)
477	6.00	34.28	0.49	600	(5.31)					
580	5.40	-	0.39							

PAOLINA-T; June 16, 1953; 1903 GCT; 30°10'N, 119°15'W; sounding, 1000+ fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 25°.

10070

0	15.20	33.43		0	15.20	33.43		24.74	321	0.00
9	15.18	33.49		10	15.19	33.49		24.79	317	0.03
18	15.19	33.48		20	15.18	33.48		24.78	318	0.06
32	15.15	33.46		30	15.16	33.46		24.77	319	0.10
45	14.61	33.37		50	14.15	33.34		24.89	307	0.16
58	13.43	33.30		75	12.40	33.27		25.19	279	0.23
71	12.64	33.27		100	11.10	33.34		25.49	250	0.30
86	11.83	33.30		150	9.13	33.60		26.02	200	0.41
130	9.77	33.40		200	8.24	33.86		26.36	167	0.50
171	8.65	33.78		250	7.69	34.00		26.56	148	0.59
213	8.06	-		300	7.60	34.18		26.71	134	0.66
253	7.67	34.01		400	6.89					
342	7.56	34.34		500	6.15					
428	6.58	-								
521	6.05	-								

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

100.80

PAOLINA-T; June 17, 1953; 0205 GCT; 29°58.5'N, 120°05.5'W; sounding, 1000+ fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 21°.

0	16.49	33.40	5.74	0	16.49	33.40	5.74	24.43	351	0.00
9	16.50	33.41	5.70	10	16.50	33.41	5.70	24.43	351	0.04
19	16.50	33.50	5.75	20	16.50	33.50	5.74	24.50	344	0.07
33	16.49	33.47	5.71	30	16.50	33.47	5.73	24.48	346	0.10
47	16.48	33.48	5.74	50	16.49		5.75			
60	16.74	-	5.74	75	15.35		5.83			
74	15.44	-	5.84	100	13.45		5.89			
94	14.10	-	5.91	150	10.19		4.59			
145	10.31	-	4.71	200	9.16		3.38			
191	9.30	33.87	3.48	250	8.38		2.82			
238	8.56	-	2.95	300	7.69		2.33			
285	7.83	-	2.50	400	6.65		1.37			
384	6.80	34.13	1.50	500	5.83		0.74			
479	5.98	-	0.81	600	(5.27)					
582	5.36	-	0.59							

100.90

PAOLINA-T; June 17, 1953; 0829 GCT; 29°39'N, 120°46.5'W; sounding, 1000+ fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 11°.

0	16.99	33.48		0	16.99					
10	17.00	-		10	17.00					
20	16.98	-		20	16.98					
34	17.00	33.47		30	16.99					
49	16.16	33.57		50	16.00					
64	14.61	-		75	13.50					
78	13.26	-		100	11.93					
99	12.05	33.34		150	9.62					
152	9.56	-		200	8.54					
199	8.58	-		250	7.89					
246	7.92	-		300	7.42					
294	7.48	-		400	6.41					
396	6.44	-		500	5.76					
493	5.78	-		600	(5.45)					
595	5.46	34.38								

100.100

PAOLINA-T; June 17, 1953; 1438 GCT; 29°20'N, 121°24.5'W; sounding, 1000+ fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	17.09	33.59	5.65	0	17.09	33.59	5.65	24.43	351	0.00
10	17.11	33.64	5.63	10	17.11	33.64	5.63	24.47	347	0.04
19	17.12	-	5.64	20	17.12	33.64	5.63	24.46	398	0.07
33	16.99	33.55	5.68	30	17.07	33.60	5.65	24.44	350	0.10
48	16.28	33.44	5.72	50	16.23	33.44	5.71	24.52	342	0.17
63	16.17	-	5.77	75	16.09	33.51	5.80	24.60	335	0.26
77	16.09	-	5.80	100	15.39	33.59	5.97	24.82	314	0.34
96	15.69	33.59	5.97	150	10.70	33.58	4.10	25.74	226	0.48
149	10.79	33.58	4.13	200	8.92	33.89	3.36	26.28	175	0.58
196	9.03	33.86	3.39	250	8.05	34.01	2.94	26.51	153	0.66
242	8.18	34.00	3.03	300	7.36	34.09	2.32	26.67	138	0.74
290	7.54	34.08	2.48	400	6.58	34.17	1.24	26.84	122	0.87
388	6.67	-	1.31	500	5.79	34.26	0.74	27.02	105	0.99
484	5.88	34.24	0.80	600	(5.39)	(34.37)		(27.15)	(92)	(1.00)
586	5.42	34.36	0.45							

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

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PAOLINA-T; June 19, 1953; 1419 GCT; 31°04.5'N, 116°25'W; sounding, 40 fm; wind, calm; weather, overcast; sea, slight; wire angle, 00°.

10330

0	14.63	33.51		0	14.63	33.51		24.92	304	0.00
10	12.62	33.55		10	12.62	33.55		25.37	261	0.03
20	9.82	33.52		20	9.82	33.52		25.85	216	0.05
30	9.47	33.63		30	9.47	33.63		25.99	202	0.07

PAOLINA-T; June 19, 1953; 1127 GCT; 30°53'N, 116°39.5'W; sounding, 1000+ fm; wind, 310°, force 1; weather, overcast; sea, moderate; wire angle, 01°.

10335

0	14.98	33.65		0	14.98	33.65		24.96	300	0.00
10	14.58	33.58		10	14.58	33.58		24.99	298	0.03
20	13.30	33.50		20	13.30	33.50		25.19	279	0.06
35	10.60	33.39		30	11.10	33.40		25.53	346	0.08
50	9.80	33.57		50	9.80	33.57		25.89	212	0.13
65	9.36	33.73		75	9.21	33.80		26.17	185	0.18
80	9.16	-		100	8.87	33.93		26.32	171	0.23
100	8.87	33.93		150	9.74	34.35		26.51	153	0.31
155	9.76	34.36		200	8.41	34.19		26.60	145	0.38
203	8.40	34.18		250	9.06	34.33		26.60	145	0.46
250	9.06	-		300	8.89	34.49		26.76	129	0.53
298	8.91	34.49		400	7.75	34.44		26.89	117	0.66
399	7.77	34.44		500	6.66	34.41		27.02	105	0.78
496	6.70	34.41		600	(5.95)	(34.37)		(27.08)	(99)	(0.89)
599	5.95	34.37								

PAOLINA-T; June 19, 1953; 0801 GCT; 30°44'N, 117°02.5'W; sounding, 1000+ fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 23°.

10340

0	16.28	33.32		0	16.28	33.32		24.41	353	0.00
9	16.28	33.39		10	16.27	33.39		24.47	347	0.04
18	15.99	33.39		20	15.92	33.39		24.55	340	0.07
32	15.78	33.36		30	15.80	33.37		24.56	339	0.10
46	13.26	33.25		50	12.80	33.23		25.08	289	0.17
59	11.92	-		75	10.60	33.23		25.49	250	0.23
72	10.73	33.22		100	9.45	33.56		25.94	207	0.29
90	9.84	33.47		150	8.66	33.96		26.38	166	0.39
136	8.71	33.83		200	8.57	34.18		26.56	148	0.47
179	8.64	34.12		250	8.13	34.27		26.70	135	0.54
223	8.42	34.23		300	7.72	34.32		26.80	126	0.61
267	7.96	34.29		400	7.00	34.39		26.96	110	0.73
361	7.26	34.37		500	6.32	34.42		27.07	100	0.84
454	6.64	34.42								
554	5.95	34.41								

PAOLINA-T; June 19, 1953; 0135 GCT; 30°30'N, 117°41.5'W; sounding, 1000+ fm; wind, missing; weather, overcast; sea, moderate; wire angle, 16°.

10350

0	16.30	33.46		0	16.30	33.46		24.52	342	0.00
10	16.00	33.40		10	16.00	33.40		24.54	340	0.03
20	15.92	33.41		20	15.92	33.41		24.56	339	0.07
34	15.86	33.40		30	15.89	33.41		24.57	338	0.10
48	14.46	33.34		50	14.01	33.32		24.91	305	0.17
63	12.67	33.23		75	10.80	33.30		25.51	248	0.24
77	10.51	-		100	9.60	33.79		26.10	192	0.29
96	9.61	33.71		150	9.74	34.18		26.38	166	0.38
149	9.74	34.17		200	9.67	34.33		26.50	154	0.46
194	9.70	34.32		250	9.41	34.39		26.59	146	0.54
239	9.48	34.38		300	9.11	34.42		26.67	138	0.62
285	9.21	34.41		400	8.16	34.43		26.82	124	0.75
382	8.39	34.43		500	6.82	(34.40)		(26.99)	(108)	(0.88)
476	7.03	34.41								
576	6.24	-								

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

10360

PAOLINA-T; June 18, 1953; 1957 GCT; 30°19.5'N, 118°12'W; sounding, 1000+ fm; wind, 300°, force 1; weather, overcast; sea, rough; wire angle, 01°.

0	16.18	33.44		0	16.18	33.44		24.53	341	0.00
10	15.94	33.40		10	15.94	33.40		24.55	340	0.03
20	15.77	33.40		20	15.77	33.40		24.59	336	0.07
35	15.74	33.41		30	15.74	33.41		24.60	335	0.10
50	14.77	33.35		50	14.77	33.35		24.77	319	0.17
65	12.97	33.24		75	11.90	33.33		25.33	265	0.24
79	11.46	33.37		100	10.25	33.43		25.71	229	0.30
98	10.37	33.42		150	8.89	33.81		26.23	180	0.41
151	8.88	33.83		200	8.24	34.01		26.48	156	0.49
199	8.24	34.01		250	7.60	34.09		26.64	141	0.57
246	7.66	34.09		300	7.13	34.17		26.77	128	0.64
295	7.18	34.16		400	6.47	34.27		26.94	112	0.76
396	6.50	34.26		500	5.85	34.35		27.08	99	0.88
493	5.90	34.34		600	(5.30)	(34.41)		(27.19)	(89)	(0.98)
597	5.31	34.41								

10370

PAOLINA-T; June 18, 1953; 1258 GCT; 29°54'N, 118°55.5'W; sounding, 1000+ fm; wind, 310°, force 1; weather, overcast; sea, slight; wire angle, 10°.

0	15.82	33.26		0	15.82	33.26		24.47	347	0.00
10	15.80	33.27		10	15.80	33.27		24.48	346	0.04
20	15.63	33.20		20	15.63	33.20		24.47	347	0.07
35	15.14	-		30	15.30	33.19		24.53	341	0.10
49	14.72	33.20		50	14.68	33.21		24.68	327	0.17
64	14.12	33.30		75	13.90	33.22		24.85	311	0.25
79	13.84	33.18		100	11.09	33.13		25.33	265	0.32
98	11.21	33.13		150	9.51	33.47		25.86	215	0.44
151	9.48	-		200	8.44	33.87		26.34	169	0.54
197	8.48	33.84		250	8.37	34.08		26.52	152	0.62
244	8.39	-		300	7.89	34.18		26.67	138	0.70
290	8.00	34.17		400	6.94	34.22		26.83	123	0.84
388	7.02	-		500	6.23	34.27		26.97	110	0.96
483	6.35	34.26		600	(5.59)	(34.35)		(27.11)	(96)	(1.07)
586	5.68	34.34								

10380

PAOLINA-T; June 18, 1953; 0522 GCT; 29°30'N, 119°39'W; sounding, 1000+ fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 11°.

0	17.26	33.58		0	17.26	33.58		24.38	356	0.00
10	17.24	33.58		10	17.24	33.58		24.39	355	0.04
20	17.18	-		20	17.18	33.59		24.41	353	0.07
34	17.17	33.60		30	17.16	33.59		24.42	352	0.11
49	17.14	33.52		50	17.13	33.48		24.34	360	0.18
63	16.04	33.39		75	15.15	33.43		24.75	320	0.26
78	15.16	-		100	15.26	33.58		24.84	312	0.34
98	15.28	33.58		150	10.42	33.48		25.72	228	0.48
150	10.42	33.48		200	8.78	33.79		26.23	180	0.58
197	8.80	33.76		250	8.69	34.11		26.49	155	0.67
244	8.72	34.10		300	8.06	34.17		26.63	142	0.75
291	8.14	34.16		400	7.21	34.28		26.84	122	0.88
391	7.30	34.28		500	6.35	34.31		26.98	109	1.00
487	6.46	34.30		600	(5.68)	(34.43)		(27.16)	(92)	(1.11)
591	5.72	34.42								

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

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5306

PAOLINA-T; June 17, 1953; 2233 GCT; 29°05'N, 120°21'W; sounding, 1000+ fm; wind, 300°, force 2; weather, partly cloudy; sea, rough; wire angle, 11°.

103.90

0	17.43	-		0	17.43	(33.52)		(24.30)	(363)	(0.00)
10	17.26	-		10	17.26	(33.52)		(24.34)	(360)	(0.04)
20	17.25	33.53		20	17.25	33.53		24.35	359	(0.07)
35	17.04	33.60		30	17.14	33.60		24.43	351	(0.11)
49	16.82	33.58		50	16.80	33.55		24.47	347	(0.18)
64	15.51	33.44		75	14.95	33.42		24.79	317	(0.26)
78	14.83	-		100	13.86	33.41		25.01	296	(0.34)
98	14.00			150	10.51	33.46		25.68	232	(0.47)
150	10.51	33.46		200	8.99	33.75		26.16	186	(0.58)
197	9.06	33.72		250	8.40	34.04		26.48	156	(0.66)
244	8.46	34.03		300	7.76	34.07		26.60	145	(0.74)
291	7.84	34.06		400	6.87	34.22		26.84	122	(0.88)
392	6.91	34.21		500	6.29	34.32		27.00	107	(1.00)
487	6.36	34.31		600	(5.83)	(34.42)		(27.14)	(93)	(1.11)
590	5.87	34.41								

HORIZON; June 16, 1953; 2025 GCT; 30°25.5'N, 116°10.5'W; sounding, 160 fm; wind, 310°, force 1; weather, overcast; sea, moderate; wire angle, 08°.

107.32

0	14.65	33.49		0	14.65	33.49		24.90	306	0.00
10	13.02	33.41		10	13.02	33.41		25.18	280	0.03
22	10.94	33.40		20	11.30	33.40		25.50	249	0.06
52	9.46	33.60		30	10.42	33.41		25.66	234	0.08
77	9.16	33.94		50	9.53	33.57		25.94	207	0.12
103	9.19	33.98		75	9.17	33.93		26.27	176	0.17
128	9.72	34.22		100	9.18	33.97		26.30	173	0.22
157	9.85	34.33		150	9.85	34.32		26.47	157	0.30

HORIZON; June 16, 1953; 1831 GCT; 30°19.5'N, 116°22'W; sounding, 1010 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 07°.

107.35

0	15.36	33.48		0	15.36	33.48		24.74	321	0.00
11	15.34	33.49		10	15.34	33.49		24.75	320	0.03
20	12.92	33.36		20	12.92	33.36		25.16	281	0.06
37	10.68	33.39		30	11.40	33.37		25.46	253	0.09
57	9.86	33.55		50	10.11	33.49		25.78	222	0.14
73	9.32	33.64		75	9.25	33.65		26.04	198	0.19
88	8.99	33.74		100	8.93	33.88		26.27	176	0.24
112	8.88	33.93		150	8.48	34.11		26.52	153	0.32
137	8.53	33.98		200	7.79	34.11		26.63	142	0.40
167	8.36	34.16		250	7.72	34.20		26.71	134	0.47
221	7.60	34.09		300	7.71	34.33		26.81	125	0.53
259p	7.78	34.26		400	6.92	34.28		26.88	118	0.66
280	7.84	34.34								
330	7.43	34.31								
445	6.67	34.26								

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

107.40

HORIZON; June 16, 1953; 1536 GCT; 30°09.5'N, 116°42'W; sounding, 1625 fm; wind, 310°, force 3;
weather, overcast; sea, rough; wire angle, 13°.

0	15.67	33.51		0	15.67	33.51		24.70	325	0.00
11	15.64	33.48		10	15.65	33.48		24.68	327	0.03
20	15.65	33.54		20	15.65	33.54		24.72	323	0.06
36	12.10	33.55		30	15.66	33.55		24.73	322	0.10
55	9.78	33.68		50	9.88	33.65		25.94	207	0.15
71	9.61	33.75		75	9.54	33.79		26.10	192	0.20
86	9.25	33.86		100	8.96	33.90		26.28	175	0.25
111	8.82	33.94		150	8.56	34.11		26.51	153	0.33
136	8.66	34.06		200	7.91	34.11		26.61	144	0.41
166	8.43	34.13		250	7.48	34.09		26.66	139	0.48
221	7.67	34.10		300	7.02	34.13		26.75	130	0.55
279	7.24	34.09		400	6.37	34.25		26.93	113	0.68
326	6.75	34.18		500	5.90	34.35		27.07	100	0.79
437	6.20	34.28		600	5.39	34.38		27.16	92	0.89
543	5.68	34.38								
653	5.10	34.38								

107.50

HORIZON; June 16, 1953; 0919 GCT; 29°50'N, 117°22'W; sounding, 1250 fm; wind, 310°, force 4;
weather, cloudy; sea, rough; wire angle, 35°.

0	16.01	33.33		0	16.01	33.33		24.48	346	0.00
8	16.02	33.34		10	16.02	33.34		24.49	345	0.04
17	16.00	33.35		20	16.00	33.36		24.51	343	0.07
30	16.00	33.37		30	16.00	33.37		24.52	342	0.10
47	15.62	33.49		50	15.41	33.49		24.74	321	0.17
59	14.93	33.42		75	13.45	33.19		24.92	304	0.25
71	13.72	33.20		100	11.32	33.19		25.33	265	0.32
92	11.92	33.18		150	9.30	33.57		25.97	204	0.44
111	10.51	33.21		200	8.50	33.87		26.33	170	0.53
132	9.64	33.40		250	7.91	34.04		26.55	149	0.62
173	8.90	33.74		300	7.55	34.07		26.63	142	0.69
216	8.28	33.94		400	6.80	34.21		26.85	121	0.83
254	7.89	34.05		500	6.12	34.31		27.01	106	0.95
341	7.24	34.10								
433	6.56	34.25								
533	5.91	34.33								

107.50

HORIZON; June 16, 1953; 1009 GCT; 29°50'N, 117°22'W; sounding, 1250 fm; wind, 310°, force 4;
weather, cloudy; sea, rough; wire angle, 36°.

0	16.01			0	16.01					
22	16.01			10	16.02					
42	15.16			20	16.02					
82	13.52			30	15.45					
121	10.17			50	15.00					
160	9.30			75	14.05					
240	7.97			100	11.45					
318	7.42			150	9.50					
398	6.39			200	8.50					
559	5.71			250	7.91					
807	4.65			300	7.58					
1258	3.34			400	6.39					
				500	5.98					
				600	5.53					
				700	5.10					
				800	4.70					
				1000	4.04					

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

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HORIZON; June 16, 1953; 0405 GCT; 29°31'N, 118°02'W; sounding, 1950 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 30°.

107.60

0	16.30	33.41		0	16.30	33.41		24.48	346	0.00
9	16.30	33.37		10	16.30	33.37		24.45	349	0.04
18	16.29	33.39		20	16.29	33.40		24.47	347	0.07
32	16.26	33.40		30	16.28	33.40		24.47	347	0.10
48	15.28	33.32		50	15.20	33.31		24.65	330	0.17
61	14.68	33.30		75	13.62	33.30		24.97	300	0.25
75	13.62	33.30		100	12.20	33.31		25.26	272	0.32
95	12.54	33.30		150	9.72	33.66		25.97	204	0.44
114	11.03	33.46		200	8.88	33.94		26.33	170	0.54
138	10.04	33.56		250	8.25	34.08		26.54	150	0.62
184	9.10	33.88		300	7.70	34.15		26.67	138	0.70
233	8.42	34.04		400	6.79	34.23		26.86	120	0.83
275	7.96	34.13		500	6.12	34.33		27.03	104	0.95
374	6.96	34.20								
473	6.28	34.31								
577	5.62	34.36								

HORIZON; June 15, 1953; 2051 GCT; 29°09'N, 118°45'W; sounding, 2500 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 36°.

107.70

0	17.31	33.63		0	17.31	33.63		24.41	353	0.00
8	17.29	33.62		10	17.29	33.62		24.41	353	0.04
21	17.27	33.65		20	17.28	33.65		24.43	351	0.07
34	17.26	33.59		30	17.27	33.60		24.40	354	0.11
50	17.21	33.61		50	17.21	33.61		24.42	352	0.18
63	16.15	33.60		75	15.58	33.52		24.72	323	0.26
79	15.53	33.52		100	15.45	33.60		24.81	315	0.34
98	15.48	33.60		150	11.70	33.46		25.47	252	0.48
121	14.32	33.58		200	9.56	33.88		26.17	185	0.60
143	12.20	33.46		250	8.79	33.98		26.37	166	0.69
185	9.80	33.75		300	8.10	34.03		26.52	152	0.77
226	9.19	33.97		400	6.97	34.17		26.79	127	0.91
268	8.50	33.99		500	6.20	34.27		26.97	110	1.04
356	7.42	34.10								
455	6.47	34.24								
566	5.84	34.29								

HORIZON; June 15, 1953; 2210 GCT; 29°09'N, 118°45'W; sounding, 2500 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 37°.

107.70

0	17.33			0	17.33					
21	17.32			10	17.34					
42	17.27			20	17.33					
81	15.82			30	17.32					
120	15.14			50	17.20					
155	11.25			75	16.05					
217	9.41			100	15.47					
284	8.20			150	11.52					
490	6.34			200	9.86					
717	5.24			250	8.74					
1188	3.64			300	8.00					
				400	7.00					
				500	6.29					
				600	5.78					
				700	5.32					
				800	4.88					
				1000	4.20					

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

11033 HORIZON; June 14, 1953; 1317 GCT; 29°50.5'N, 115°52.5'W; sounding, 50 fm; wind, 310°, force 7; weather, fog; sea, rough; wire angle, 16°.

0	13.64	33.39		0	13.64	33.39		25.04	293	0.00
10	13.62	33.35		10	13.62	33.35		25.01	296	0.03
20	12.28	33.30		20	12.28	33.30		25.24	274	0.06
30	10.80	33.40		30	10.80	33.40		25.59	240	0.08
50	9.30	33.61		50	9.30	33.61		26.00	202	0.13
75	9.32	33.86		75	9.32	33.86		26.20	183	0.18

11035 HORIZON; June 14, 1953; 1506 GCT; 29°47.5'N, 116°00'W; sounding, 600 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 41°.

0	15.49	33.48		0	15.49	33.48		24.71	324	0.00
8	15.46	33.48		10	15.44	33.48		24.72	323	0.03
20	14.87	33.44		20	14.87	33.44		24.82	314	0.06
32	12.28	33.26		30	12.61	33.26		25.14	283	0.09
47	10.51	33.32		50	10.33	33.33		25.61	239	0.15
59	10.10	33.38		75	9.56	33.57		25.93	208	0.20
74	9.61	33.56		100	8.99	33.76		26.17	185	0.25
94	8.96	33.70		150	8.48	33.99		26.43	161	0.34
117	9.09	33.89		200	9.39	34.34		26.56	148	0.42
141	8.40	33.94		250	8.78	34.32		26.64	141	0.49
188	9.44	34.27		300	8.12	34.29		26.72	133	0.56
213	9.20	34.35		400	7.03	34.29		26.88	118	0.70
277	8.42	34.30		500	6.37	34.32		26.99	108	0.82
369	7.28	34.29								
470	6.56	34.31								
575	5.90	34.34								

11040 HORIZON; June 14, 1953; 1852 GCT; 29°37.5'N, 116°15'W; sounding, 1450 fm; wind, 310°, force 6; weather, overcast; sea, very rough; wire angle, 51°.

0	16.19	33.40		0	16.19	33.40		24.50	344	0.00
8	16.18	33.43		10	16.18	33.43		24.52	342	0.03
17	16.15	33.41		20	16.14	33.41		24.51	343	0.07
27	15.88	33.41		30	15.75	33.41		24.60	335	0.10
40	14.84	33.33		50	13.66	33.22		24.90	306	0.17
51	13.36	33.22		75	11.22	33.21		25.36	262	0.24
65	11.91	33.21		100	10.10	33.41		25.72	228	0.30
82	10.90	33.22		150	9.20	34.00		26.32	171	0.40
103	9.90	33.45		200	8.25	34.04		26.50	154	0.48
121	9.12	33.63		250	7.70	34.12		26.65	140	0.56
158	9.21	34.02		300	7.43	34.21		26.76	129	0.63
195	8.34	34.04		400	6.84	34.35		26.95	111	0.76
229	7.82	34.09		500	(6.34)	(34.37)		(27.03)	(104)	(0.87)
301	7.42	34.21								
386	6.91	34.34								
486	6.41	34.37								

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

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HORIZON; June 15, 1953; 0202 GCT; 29°19'N, 117°10'W; sounding, 3100 fm; wind, 310°, force 7; weather, cloudy; sea, high; wire angle, 43°.

11050

0	16.14	33.34		0	16.14	33.34		24.46	348	0.00
8	16.15	33.30		10	16.14	33.30		24.43	351	0.04
20	16.12	33.30		20	16.12	33.30		24.43	351	0.07
31	16.10	33.33		30	16.11	33.33		24.46	348	0.10
46	15.58	33.23		50	15.40	33.24		24.55	340	0.17
58	14.97	33.30		75	14.05	33.20		24.81	315	0.26
73	14.08	33.20		100	12.89	33.21		25.05	292	0.33
92	13.41	33.21		150	9.31	33.46		25.88	213	0.46
114	11.49	33.21		200	11.08	34.45		26.35	168	0.56
135	10.04	33.35		250	9.96	34.42		26.53	151	0.64
172	9.10	33.66		300	8.85	34.33		26.64	141	0.72
209	11.10	34.46		400	7.73	34.35		26.82	124	0.85
249	9.97	34.42		500	6.75					
327	8.46	34.31								
416	7.59	34.36								
522	6.52	-								

HORIZON; June 15, 1953; 0255 GCT; 29°19'N, 117°10'W; sounding, 3100 fm; wind, 310°, force 7; weather, cloudy; sea, high; wire angle, 45°.

11050

0	16.09			0	16.09					
19	16.10			10	16.10					
36	15.95			20	16.09					
74	13.98			30	16.01					
111	11.60			50	15.55					
144	9.62			75	13.94					
208	11.16			100	12.72					
272	9.60			150	9.65					
339	8.30			200	11.15					
483	7.00			250	10.40					
715	5.29			300	8.93					
1163	3.66			400	7.72					
				500	6.87					
				600	6.06					
				700	5.38					
				800	4.93					
				1000	4.21					

HORIZON; June 15, 1953; 0758 GCT; 29°01'N, 117°46'W; sounding, 2050 fm; wind, 310°, force 6; weather, cloudy; sea, very rough; wire angle, 42°.

11060

0	15.94	33.29		0	15.94	33.29		24.47	347	0.00
8	15.94	33.30		10	15.94	33.30		24.48	346	0.04
20	15.94	33.30		20	15.94	33.30		24.48	346	0.07
31	15.92	33.32		30	15.93	33.32		24.49	345	0.10
46	14.42	33.25		50	14.21	33.23		24.80	316	0.17
58	13.86	33.22		75	12.85	33.30		25.13	284	0.25
73	12.88	33.26		100	11.70	33.49		25.49	250	0.31
93	12.32	33.50		150	9.81	33.83		26.09	193	0.42
117	10.46	33.42		200	9.23	34.10		26.40	164	0.52
139	10.00	33.71		250	8.88	34.23		26.56	148	0.60
186	9.30	34.05		300	8.36	34.30		26.69	136	0.67
232	9.04	34.19		400	7.20	34.33		26.88	118	0.80
280	8.57	34.28		500	6.25	34.29		26.98	109	0.92
373	7.54	34.35		600	(5.74)	(34.41)		(27.14)	(93)	(1.03)
473	6.42	34.28								
581	5.82	34.40								

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

110.70

HORIZON; June 15, 1953; 1301, 1331 GCT; 28°38'N, 118°20'W; sounding, 2050 fm; wind, 310°, force 6; weather, cloudy; sea, rough; wire angle, 43°, 54°.

0	16.13	33.29		0	16.13	33.29		24.42	352	0.00
8	16.12	33.35		10	16.12	33.35		24.47	347	0.04
19	16.13	33.29		20	16.12	33.29		24.43	351	0.07
30	16.08	33.31		30	16.08	33.31		24.45	349	0.10
46	16.05	33.25		50	16.00	33.26		24.43	351	0.18
56	15.89	33.30		75	15.20	33.30		24.64	331	0.26
72	15.38	33.31		100	13.36	33.17		24.93	303	0.34
91	13.63	33.17		150	10.50	33.60		25.79	222	0.47
				200	9.30	34.04		26.34	169	0.57
111	13.02	33.22		250	8.81	34.15		26.50	154	0.66
151	10.44	33.60		300	8.03	34.15		26.62	143	0.73
191	9.39	33.98		400	7.07	34.26		26.85	121	0.87
232	9.02	34.14		500	6.50	34.39		27.03	104	0.99
314	7.84	34.16								
406	7.02	34.26								
504	6.46	34.39								

110.70

HORIZON; June 15, 1953; 1453 GCT; 28°38'N, 118°20'W; sounding, 2050 fm; wind, 310°, force 6; weather, cloudy; sea, rough; wire angle, 49°.

0	16.14			0	16.14					
17	16.15			10	16.14					
33	16.14			20	16.14					
67	15.72			30	16.14					
102	13.51			50	16.02					
136	11.28			75	15.40					
197	9.65			100	13.70					
257	8.97			150	10.70					
317	8.16			200	9.60					
445	6.80			250	9.03					
655	5.56			300	8.39					
1043	3.93			400	7.20					
				500	6.50					
				600	5.85					
				700	(5.36)					
				800	(4.92)					
				1000	(4.10)					

113.30

HORIZON; June 14, 1953; 0601 GCT; 29°20.5'N, 115°14.5'W; sounding, 40 fm; wind, 340°, force 6; weather, clear; sea, rough; wire angle, 26°.

0	12.95	33.74		0	12.95	33.74		25.45	254	0.00
9	12.94	33.71		10	12.91	33.71		25.43	256	0.02
18	11.95	33.71		20	11.50	33.72		25.71	229	0.05
27	10.68	33.86		30	10.67	33.90		26.00	202	0.07
47	10.66	34.02								

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	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; June 13, 1953; 2332 GCT; 28°57'N, 116°03'W; sounding, 410 fm; wind, 310°, force 5;
weather, partly cloudy; sea, very rough; wire angle, 35°.

11340

0	16.16	33.42		0	16.16	33.42		24.52	342	0.00
8	16.14	33.38		10	16.11	33.36		24.48	346	0.03
18	15.97	33.34		20	15.95	33.34		24.50	344	0.03
31	15.82	33.34		30	15.85	33.34		24.53	341	0.10
48	14.42	33.22		50	14.11	33.21		24.80	316	0.17
60	13.32	33.20		75	12.65	33.31		25.17	280	0.24
74	12.65	33.30		100	11.32	33.47		25.55	244	0.31
94	11.60	33.44		150	10.48	34.01		26.12	190	0.42
115	10.79	33.57		200	10.13	34.29		26.40	164	0.51
140	10.52	33.95		250	9.45	34.41		26.60	145	0.59
187	10.24	34.21		300	8.92	34.41		26.69	136	0.66
237	9.66	34.41		400	7.99	34.40		26.83	123	0.80
277	9.06	34.41		500	6.69	34.33		26.95	111	0.92
374	8.40	34.41								
470	6.81	34.34								
570	6.50	34.33								

HORIZON; June 13, 1953; 1820 GCT; 28°39'N, 116°40'W; sounding, 2000 fm; wind, 340°, force 5;
weather, clear; sea, rough; wire angle, 23°.

11350

0	15.98	33.35		0	15.98	33.35		24.50	344	0.00
9	15.94	33.34		10	15.94	33.34		24.51	343	0.03
19	15.88	33.32		20	15.88	33.32		24.50	344	0.07
33	15.83	33.32		30	15.85	33.32		24.51	343	0.10
52	14.49	33.26		50	14.71	33.27		24.72	323	0.17
67	13.68	33.22		75	13.25	33.23		24.99	298	0.25
80	12.81	33.24		100	10.99	33.28		25.46	253	0.32
105	10.78	33.30		150	9.36	33.68		26.05	197	0.43
129	10.12	33.55		200	9.82	34.20		26.38	166	0.52
156	9.32	33.73		250	10.38	34.51		26.52	152	0.60
207	9.93	34.27		300	9.45	34.38		26.58	147	0.68
262	10.40	34.51		400	7.83	34.33		26.79	127	0.82
309	9.24	34.36		500	7.00	34.34		26.92	114	0.95
417	7.66	34.33		600	6.30	34.39		27.05	102	1.07
522	6.82	34.34								
630	6.10	34.42								

HORIZON; June 13, 1953; 1252 GCT; 28°10.5'N, 117°15'W; sounding, 2150 fm; wind, 310°, force 5;
weather, partly cloudy; sea, rough; wire angle, 38°.

11360

0	15.41	33.40		0	15.41	33.40		24.67	328	0.00
8	15.42	33.42		10	15.43	33.42		24.68	327	0.03
17	15.34	33.42		20	15.29	33.42		24.71	324	0.06
29	14.80	33.40		30	14.50	33.40		24.87	310	0.10
45	11.78	33.49		50	11.45	33.53		25.57	242	0.15
57	10.92	33.55		75	10.11	33.47		25.76	224	0.21
69	10.29	33.47		100	9.96	33.84		26.07	195	0.26
90	9.96	33.69		150	9.02	34.03		26.38	166	0.36
110	9.98	33.87		200	8.60	34.12		26.51	153	0.44
134	8.96	33.89		250	8.02	34.19		26.66	139	0.51
172	9.16	34.14		300	7.69	34.28		26.78	128	0.58
207	8.49	34.12		400	7.03	34.36		26.93	113	0.71
242	8.08	34.18		500	6.20	34.37		27.05	102	0.82
326	7.52	34.31								
416	6.90	34.36								
517	6.06	34.37								

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

113.70

HORIZON; June 13, 1953; 0741 GCT; 27°58'N, 117°55'W; sounding, 1900 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 29°.

0	16.34	33.30		0	16.34	33.30		24.38	356	0.00
9	16.34	33.29		10	16.35	33.29		24.37	357	0.04
18	16.34	33.24		20	16.33	33.24		24.34	360	0.07
32	16.27	33.28		30	16.30	33.28		24.38	356	0.11
49	16.07	33.30		50	16.07	33.30		24.45	349	0.18
64	15.98	33.53		75	15.40	33.50		24.75	320	0.26
77	15.05	33.38		100	12.85	33.22		25.07	290	0.34
101	12.54	33.22		150	10.73	33.71		25.84	217	0.47
123	11.08	33.41		200	9.55	34.04		26.30	173	0.57
148	10.78	33.69		250	8.53	34.09		26.50	154	0.65
196	9.66	34.03		300	8.01	34.17		26.64	141	0.73
248	8.56	34.09		400	7.03	34.26		26.85	121	0.86
289	8.12	34.15		500	6.17	34.33		27.02	105	0.98
389	7.14	34.25		600	(5.63)	(34.37)		(27.12)	(95)	(1.09)
486	6.26	34.32								
587	5.69	34.37								

117.26

HORIZON; June 12, 1953; 1227 GCT; 28°54.5'N, 114°38.5'W; sounding, 50 fm; wind, 290°, force 1; weather, clear; sea, moderate; wire angle, 09°.

0	15.51	33.69		0	15.51	33.69		24.87	309	0.00
10	15.47	33.71		10	15.47	33.71		24.89	307	0.03
20	12.73	33.75		20	12.73	33.75		25.50	249	0.06
25	11.62	33.91		30	11.20	33.96		25.95	206	0.08
31	10.88	33.96		50	10.59	34.19		26.24	179	0.12
41	10.50	34.10								
51	10.63	34.19								

117.30

HORIZON; June 12, 1953; 0635 GCT; 28°48'N, 114°56.5'W; sounding, 55 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 14°.

0	13.47	33.58		0	13.47	33.58		25.22	276	0.00
10	13.10	33.68		10	13.10	33.68		25.37	262	0.03
20	12.13	33.70		20	12.13	33.70		25.58	242	0.05
25	11.84	33.70		30	11.72	33.64		25.61	239	0.08
30	11.72	33.64		50	9.31	33.63		26.02	200	0.12
40	10.56	33.68								
50	9.31	33.63								

117.35

HORIZON; June 12, 1953; 0857 GCT; 28°39'N, 115°17'W; sounding, 155 fm; wind, 270°, force 4; weather, partly cloudy; sea, moderate; wire angle, 13°.

0	13.75	33.58		0	13.75	33.58		25.16	281	0.00
10	12.24	33.58		10	12.24	33.58		25.46	253	0.03
25	10.68	33.49		20	11.36	33.54		25.60	240	0.05
40	9.48	33.46		30	10.00	33.47		25.78	222	0.08
50	9.30	33.54		50	9.30	33.54		25.95	206	0.12
75	9.22	33.76		75	9.22	33.76		26.13	189	0.17
100	9.14	33.95		100	9.14	33.95		26.29	174	0.21
126	9.72	34.33		150	9.72	34.48		26.61	144	0.29
156	9.72	34.51								

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

117.70

HORIZON; June 13, 1953; 0256 GCT; 27°30'N, 117°33'W; sounding, 2100 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°.

0	17.37	33.54		0	17.37	33.54		24.33	360	0.00
9	17.36	33.50		10	17.37	33.50		24.30	363	0.04
19	17.35	33.50		20	17.33	33.50		24.31	362	0.07
33	17.25	33.49		30	17.29	33.49		24.31	362	0.11
52	17.08	33.48		50	17.09	33.48		24.35	359	0.18
67	15.72	33.42		75	15.12	33.34		24.69	326	0.27
81	14.70	33.32		100	12.82	33.30		25.13	284	0.34
105	12.26	33.30		150	10.89	33.76		25.85	216	0.47
130	11.13	33.46		200	10.28	34.22		26.32	171	0.57
158	10.78	33.87		250	9.53	34.30		26.50	154	0.65
209	10.14	34.25		300	9.12	34.40		26.65	140	0.73
265	9.36	34.32		400	8.01	34.43		26.85	121	0.87
311	9.02	34.42		500	6.90	34.42		27.00	107	0.99
418	7.80	34.43		600	6.07	34.38		27.08	99	1.10
522	6.68	34.41								
632	5.81	34.36								

120.25

HORIZON; June 12, 1953; 0010 GCT; 28°25'N, 114°16'W; sounding, 30 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

0	15.75	33.75	5.99	0	15.75	33.75	5.99	24.86	310	0.00
10	15.38	33.75	6.12	10	15.38	33.75	6.12	24.95	301	0.03
20	13.56	33.74	6.75	20	13.56	33.74	6.75	25.32	266	0.06
25	13.20	33.74	6.58	30	12.10	33.69	4.80	25.57	242	0.08
30	12.10	33.69	4.80	50	10.93	34.05	0.27	26.07	195	0.13
40	11.16	33.74	2.56							
50	10.93	34.05	0.27							

120.30

HORIZON; June 11, 1953; 2132 GCT; 28°13'N, 114°34.5'W; sounding, 55 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 11°.

0	14.79	33.74	6.10	0	14.79	33.74	6.10	25.07	290	0.00
10	14.72	33.74	6.23	10	14.72	33.74	6.23	25.08	289	0.03
20	14.37	33.70	6.20	20	14.37	33.70	6.20	25.13	284	0.06
25	13.10	33.72	4.37r	30	12.14	33.72	5.02	25.59	240	0.08
30	12.14	33.72	5.02	50	10.79	33.86	2.25	25.95	206	0.13
41	11.28	33.64	-	75	10.39	34.22	0.50	26.30	173	0.18
51	10.73	33.87	2.13							
76	10.38	34.22	0.50							

120.35

HORIZON; June 11, 1953; 1856 GCT; 28°03'N, 114°54'W; sounding, 38 fm; wind, 020°, force 5; weather, partly cloudy; sea, slight; wire angle, 15°.

0	15.47	33.68		0	15.47	33.68		24.87	309	0.00
10	15.37	33.70		10	15.37	33.70		24.91	305	0.03
20	14.64	33.65		20	14.64	33.65		25.03	294	0.06
25	14.28	33.57		30	13.86	33.55		25.12	285	0.09
30	13.86	33.55		50	12.64	33.60		25.40	259	0.14
40	13.58	33.57								
50	12.64	33.60								

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	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; June 10, 1953; 1905 GCT; 27° 41.5'N, 115° 33.5'W; sounding, 1500 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 36°.

12045

0	14.95	33.58		0	14.95	33.58		24.91	305	0.00
8	14.92	33.58		10	14.92	33.58		24.92	304	0.03
17	15.03	33.68		20	15.03	33.68		24.97	300	0.06
30	14.76	33.68		30	14.76	33.68		25.03	294	0.09
42	14.16	33.73		50	12.25	33.59		25.47	252	0.14
55	11.39	33.59		75	10.80	34.13		26.15	187	0.20
68	10.75	33.94		100	11.22	34.40		26.29	174	0.25
84	11.23	34.25		150	11.05	34.65		26.51	153	0.33
104	11.20	34.42		200	10.39	34.60		26.59	146	0.41
121	11.18	34.50		250	9.71	34.62		26.72	133	0.48
159	10.95	34.66		300	9.16	34.57		26.78	128	0.55
196	10.42	34.60		400	8.00	34.50		26.90	116	0.67
233	9.90	34.63		500	7.12	34.47		27.01	106	0.79
319	8.96	34.55								
404	7.96	34.50								
501	7.10	34.47								

HORIZON; June 10, 1953; 1434 GCT; 27° 35'N, 115° 51'W; sounding, 2180 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 17°.

12050

0	15.87	33.48	5.84	0	15.87	33.48	5.84	24.63	332	0.00
10	15.88	33.51	5.62	10	15.88	33.51	5.62	24.65	330	0.03
25	14.85	33.51	5.69	20	15.29	33.51	5.68	24.78	318	0.07
54	12.18	33.68	4.00	30	14.50	33.51	5.68	24.95	301	0.10
79	9.95	33.53	3.87	50	12.65	33.68	4.05	25.46	253	0.15
108	9.82	33.89	2.57	75	10.00	33.53	3.90	25.83	218	0.21
164	9.66	34.20	1.80	100	9.85	33.76	2.75	26.03	199	0.26
218	8.84	34.27	1.42	150	9.73	34.16	1.96	26.36	167	0.36
276	8.13	34.28	1.19	200	9.10	34.26	1.51	26.54	150	0.44
326	7.96	34.39	0.59	250	8.40	34.28	1.32	26.67	138	0.51
442	6.85	34.37	0.38	300	8.06	34.35	0.88	26.78	128	0.58
552	5.85	34.40	0.33	400	7.25	34.38	0.42	26.92	114	0.71
660	5.28	34.41	0.31	500	6.27	34.39	0.35	27.06	101	0.82
877	4.45	34.48	0.41	600	5.57	34.40	0.32	27.15	92	0.93
1094	3.74	34.56	0.69	700	5.11	34.42	0.30	27.22	86	1.02
1307	3.28	-	0.89	800	4.73	34.46	0.35	27.30	78	1.11
				1000	4.00	34.52	0.57	27.43	66	1.28

HORIZON; June 10, 1953; 1611 GCT; 27° 35'N, 115° 51'W; sounding, 2180 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 11°.

12050

0	15.86			0	15.86					
25	15.33			10	15.70					
51	12.42			20	15.50					
103	9.84			30	15.00					
153	9.47			50	12.79					
204	9.25			75	10.60					
304	7.83			100	9.90					
404	7.20			150	9.49					
503	6.28			200	9.29					
706	5.04			250	8.52					
1010	4.05			300	7.89					
1526	2.84			400	7.23					
				500	6.32					
				600	5.55					
				700	5.09					
				800	4.72					
				1000	4.07					
				1200	3.49					
				1500	2.88					

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

12060

HORIZON; June 10, 1953; 0851 GCT; 27°14.5'N, 116°31'W; sounding, 2125 fm; wind, 330°, force 2;
weather, overcast; sea, moderate; wire angle, 24°.

0	17.10	33.51	5.65	0	17.10	33.51	5.65	24.37	357	0.00
9	17.11	-	5.60	10	17.12	33.53	5.59	24.38	356	0.04
18	17.11	33.53	5.57	20	17.12	33.53	5.57	24.38	356	0.07
32	17.11	33.53	5.59	30	17.12	33.53	5.58	24.38	356	0.11
51	16.83	33.48	5.62	50	16.94	33.48	5.62	24.38	356	0.18
66	16.11	33.48	5.77	75	15.82	33.52	5.78	24.67	328	0.26
80	15.61	33.53	5.75	100	13.30	33.43	5.20	25.14	283	0.34
103	12.84	33.42	5.06	150	10.31	33.64	3.99	25.86	214	0.47
127	11.27	33.46	4.47	200	9.28	33.96	3.29	26.28	175	0.57
155	10.18	33.68	3.87	250	8.51	34.08	2.64	26.50	154	0.65
205	9.14	33.98	3.21	300	8.78	34.27	1.36	26.60	145	0.73
258	8.50	34.10	2.51	400	7.53	34.33	0.59	26.84	122	0.87
303	8.78	34.28	1.30	500	6.52	34.38	0.35	27.02	105	0.98
409	7.41	34.33	0.55	600	5.70	34.39	0.28	27.13	94	1.10
509	6.44	34.38	0.33							
618	5.56	34.39	0.28							

12070

HORIZON; June 10, 1953; 0143 GCT; 26°51'N, 117°17'W; sounding, 2250 fm; wind, 340°, force 3;
weather, cloudy; sea, rough; wire angle, 20°.

0	17.01	33.49	5.57	0	17.01	33.49	5.57	24.37	357	0.00
10	16.93	33.48	5.62	10	16.93	33.48	5.62	24.39	355	0.04
24	16.84	33.44	5.59	20	16.89	33.44	5.61	24.36	358	0.07
53	16.54	33.47	5.67	30	16.81	33.44	5.60	24.38	356	0.11
78	15.48	33.40	5.83	50	16.61	33.47	5.65	24.45	349	0.18
107	12.93	33.24	5.41	75	15.72	33.41	5.85	24.61	334	0.26
158	10.49	33.79	3.10	100	13.50	33.25	5.64	24.96	301	0.34
210	10.14	34.16	1.79	150	10.59	33.70	3.40	25.86	215	0.47
264	9.35	34.31	1.38	200	10.23	34.11	1.92	26.24	179	0.57
311	8.76	34.32	1.15	250	9.56	34.29	1.45	26.49	155	0.66
419	8.20	34.46	0.26	300	8.89	34.32	1.23	26.62	143	0.74
523	6.58	34.41	0.33	400	8.33	34.45	0.34	26.81	125	0.88
629	5.77	34.42	0.23	500	6.91	34.42	0.35	27.00	107	1.00
836	4.65	34.46	0.36	600	5.95	34.42	0.25	27.12	95	1.11
1049	3.90	34.52	0.59	700	5.36	34.43	0.26	27.20	88	1.21
1256	3.42	34.55	0.86	800	4.83	34.45	0.32	27.28	80	1.30
				1000	4.05	34.51	0.52	27.41	68	1.47

12070

HORIZON; June 10, 1953; 0253 GCT; 26°51'N, 117°17'W; sounding, 2250 fm; wind, 340°, force 3;
weather, cloudy; sea, rough; wire angle, 22°.

0	16.95			0	16.95					
24	16.80			10	16.90					
47	16.41			20	16.85					
95	13.62			30	16.77					
141	10.60			50	16.35					
189	10.26			75	15.23					
282	9.23			100	13.15					
375	8.46			150	10.53					
470	6.98			200	10.14					
659	5.64			250	9.56					
950	4.15			300	9.10					
1455	2.99			400	8.09					
				500	6.73					
				600	6.02					
				700	5.37					
				800	4.83					
				1000	4.04					
				1200	3.53					
				1500	(2.90)					

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

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HORIZON; June 9, 1953; 2110 GCT; 26°33.5'N, 117°49'W; sounding, 2050 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 13°.

120.80

0	17.12	33.48		0	17.12	33.48		24.34	360	0.00
10	16.99	33.50		10	16.99	33.50		24.39	355	0.04
20	16.94	33.51		20	16.94	33.51		24.41	353	0.07
35	16.65	33.48		30	16.69	33.48		24.44	350	0.11
50	16.67	33.49		50	16.67	33.49		24.45	349	0.18
65	16.30	33.49		75	15.85	33.49		24.64	331	0.26
80	15.38	33.49		100	13.40	33.40		25.09	288	0.34
100	13.40	33.40		150	10.50	33.82		25.97	204	0.46
125	11.73	33.50		200	9.81	34.11		26.31	172	0.56
156	10.38	33.87		250	9.30	34.24		26.50	154	0.64
206	9.76	34.13		300	8.67	34.30		26.64	141	0.72
258	9.20	34.25		400	7.58	34.35		26.85	121	0.86
307	8.57	34.31		500	6.72	34.38		26.99	108	0.98
413	7.42	34.35		600	5.90	34.40		27.11	96	1.09
514	6.60	34.38								
620	5.74	34.40								

HORIZON; June 9, 1953; 1402 GCT; 26°13.5'N, 118°35.5'W; sounding, 2300 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

120.90

0	16.75	33.38	5.37	0	16.75	33.38	5.37	24.35	359	0.00
10	16.75	33.36	5.58	10	16.75	33.36	5.58	24.34	360	0.04
25	16.67	33.34	5.64	20	16.70	33.34	5.63	24.33	360	0.07
55	16.40	33.36	5.70	30	16.62	33.34	5.65	24.35	359	0.11
81	15.42	33.42	5.81	50	16.45	33.35	5.70	24.40	354	0.18
110	12.20	33.37	5.06	75	15.80	33.41	5.80	24.59	336	0.27
165	10.58	33.91	2.64	100	13.50	33.38	5.55	25.06	291	0.34
220	10.46	34.38	1.08	150	10.73	33.72	3.21	25.85	216	0.47
280	9.85	34.42	0.71	200	10.50	34.32	1.45	26.35	168	0.57
329	9.26	34.48	0.51	250	10.22	34.40	0.86	26.47	157	0.66
447	7.78	34.41	0.33	300	9.60	34.45	0.61	26.61	144	0.73
558	6.31	34.38	0.29	400	8.41	34.44	0.36	26.79	127	0.88
668	5.66	34.40	0.23	500	7.00	34.39	0.31	26.69	110	1.00
884	4.56	34.52	0.44	600	6.04	34.38	0.28	27.08	99	1.11
1103	3.76	34.52	0.65	700	5.48	34.42	0.24	27.18	90	1.22
1312	3.24	34.55	0.89	800	4.95	34.48	0.33	27.29	79	1.31
				1000	4.09	34.52	0.55	27.42	67	1.47

HORIZON; June 9, 1953; 1602 GCT; 26°13.5'N, 118°35.5'W; sounding, 2300 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 16°.

120.90

0	16.75			0	16.75					
25	16.62			10	16.70					
50	16.49			20	16.65					
99	13.29			30	16.60					
150	10.42			50	16.49					
201	10.50			75	15.40					
301	9.69			100	13.10					
402	8.18			150	10.42					
502	6.76			200	10.50					
701	5.46			250	10.23					
1000	4.10			300	9.71					
1504	2.84			400	8.22					
				500	6.81					
				600	6.05					
				700	5.49					
				800	4.96					
				1000	4.10					
				1500	2.85					

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

12337

HORIZON; June 8, 1953; 1315 GCT; 27°24.5'N, 114°40'W; sounding, 35 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 00°.

0	12.94	34.12		0	12.94	34.12		25.74	226	0.00
10	12.32	34.12		10	12.32	34.12		25.86	215	0.02
20	11.96	34.09		20	11.96	34.09		25.91	210	0.04
31	12.03	34.12		30	12.02	34.12		25.92	209	0.06

12340

HORIZON; June 8, 1953; 1510 GCT; 27°18'N, 114°52'W; sounding, 355 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 27°.

0	14.01	33.70		0	14.01	33.70		25.20	278	0.00
9	14.00	33.67		10	14.00	33.67		25.18	280	0.03
23	13.52	33.87		20	13.80	33.86		25.37	262	0.06
46	11.08	33.92		30	12.70	33.89		25.61	239	0.08
69	10.70	34.14		50	10.95	33.95		25.99	202	0.12
92	11.08	34.40		75	10.73	34.26		26.27	176	0.17
144	11.24	34.59		100	11.13	34.45		26.34	169	0.21
190	10.74	34.63		150	11.23	34.60		26.44	160	0.29
237	10.32	34.51		200	10.64	34.61		26.56	148	0.37
253	10.22	34.64r		250	10.26	34.51		26.54	150	0.45
338	8.92	34.55		300	9.49	34.55		26.71	134	0.52
385	8.34	34.52		400	8.19	34.52		26.89	117	0.65
436	7.88	34.51		500	7.44	34.46		26.95	111	0.77
483	7.53	34.46		600	(6.82)	(34.48)		(27.06)	(101)	(0.89)
589	6.90	34.48								

12350

HORIZON; June 8, 1953; 2034 GCT; 26°59.5'N, 115°33'W; sounding, 1975 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 21°.

0	16.12	33.48		0	16.12	33.48		24.57	338	0.00
10	16.05	33.48		10	16.05	33.48		24.59	336	0.03
19	16.00	33.48		20	15.99	33.48		24.60	335	0.07
34	14.84	33.42		30	15.32	33.45		24.73	322	0.10
53	13.52	33.33		50	13.77	33.33		24.97	300	0.16
68	12.82	33.39		75	12.45	33.46		25.33	265	0.23
82	12.06	33.52		100	10.70	33.56		25.73	227	0.30
107	10.27	33.58		150	9.57	33.98		26.25	178	0.40
130	9.81	33.82		200	8.83	34.10		26.46	158	0.48
158	9.46	34.01		250	8.70	34.29		26.63	142	0.56
209	8.76	34.12		300	8.32	34.34		26.73	132	0.63
265	8.66	34.32		400	7.22	34.34		26.89	117	0.76
312	8.18	34.34		500	6.40	34.38		27.03	104	0.88
420	7.02	34.34		600	5.89					
526	6.24	34.40								
634	5.77	-								

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

HORIZON; June 9, 1953; 0125 GCT; 26°36'N, 116°08.5'W; sounding, 2200 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 18°.

12360

0	17.42	33.71		0	17.42	33.71		24.45	349	0.00
10	17.46	33.70		10	17.46	33.70		24.43	351	0.04
20	17.72	33.83		20	17.72	33.83		24.46	348	0.07
35	17.86	33.88		30	17.83	33.86		24.46	348	0.10
54	17.85	33.92		50	17.86	33.92		24.50	344	0.17
69	16.84	33.79		75	16.15	33.67		24.71	324	0.26
84	14.94	33.66		100	12.90	33.68		25.41	258	0.33
109	12.12	33.71		150	10.53	33.91		26.03	199	0.45
134	10.69	33.78		200	10.35	34.31		26.37	166	0.54
163	10.45	34.05		250	9.73	34.41		26.56	148	0.62
216	10.27	34.37		300	9.12	34.42		26.67	138	0.70
275	9.40	34.42		400	7.83	34.41		26.86	120	0.83
325	8.85	-		500	7.20	34.49		27.01	106	0.95
438	7.49	34.41		600	6.31	34.50		27.14	93	1.06
548	6.88	34.53								
662	5.58	34.44								

HORIZON; June 8, 1953; 0900 GCT; 26°56.5'N, 114°07.5'W; sounding, 45 fm; wind, 310°, force 1; weather, partly cloudy; sea, moderate; wire angle, 05°.

12734

0	13.03	34.04		0	13.03	34.04		25.66	234	0.00
10	12.94	34.04		10	12.94	34.04		25.68	232	0.02
20	11.58	33.81		20	11.58	33.81		25.76	224	0.05
31	11.76	34.13		30	11.74	34.13		25.98	204	0.07
52	11.44	34.19		50	11.52	34.19		26.07	195	0.11

HORIZON; June 8, 1953; 0511 GCT; 26°41.5'N, 114°27.5'W; sounding, 2000 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 35°.

12740

0	15.47	33.59		0	15.47	33.59		24.80	316	0.00
8	15.47	33.62		10	15.47	33.62		24.83	313	0.03
22	15.48	33.63		20	15.47	33.63		24.83	313	0.06
34	15.08	33.63		30	15.43	33.63		24.84	312	0.09
51	13.61	33.64		50	13.75	33.64		25.21	277	0.15
64	13.00	33.75		75	12.00	33.74		25.63	237	0.22
81	11.60	33.73		100	10.96	33.89		25.94	207	0.27
103	10.84	33.91		150	10.88	34.30		26.27	176	0.37
129	10.51	34.07		200	10.65	34.57		26.52	152	0.46
155	10.92	34.35		250	9.91	34.53		26.62	143	0.53
208	10.58	34.58		300	9.19	34.48		26.70	135	0.60
261	9.72	34.52		400	8.23	34.44		26.82	124	0.74
314	9.02	34.47		500	6.96	34.47		27.03	104	0.86
419	8.01	34.44		600	6.08	34.46		27.14	93	0.97
531	6.64	34.48								
646	5.78	34.44								

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

127.50

HORIZON; June 7, 1953; 2349 GCT; 26°23.5'N, 115°05'W; sounding, 1950 fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 40°.

0	15.53	33.39		0	15.53	33.39		24.64	331	0.00
8	15.42	33.41		10	15.40	33.41		24.68	327	0.03
16	14.92	33.40		20	14.20	33.32		24.87	309	0.06
28	13.90	33.26		30	13.91	33.26		24.88	308	0.10
43	14.02	33.49		50	14.04	33.53		25.06	291	0.16
54	14.06	33.54		75	11.10	33.35		25.49	250	0.22
65	13.83	33.55		100	10.32	33.61		25.83	218	0.28
83	10.48	33.34		150	10.27	34.21		26.31	172	0.38
101	10.30	33.63		200	9.93	34.39		26.51	153	0.46
124	10.34	33.94		250	9.29	34.41		26.63	142	0.54
163	10.18	34.30		300	8.64	34.42		26.74	131	0.61
206	9.88	34.39								
270p	9.00	34.41								
379p	7.83	34.46								

127.60

HORIZON; June 7, 1953; 1805 GCT; 26°01'N, 115°46'W; sounding, 2150 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 28°.

0	17.84	33.94		0	17.84	33.94		24.52	342	0.00
9	17.76	33.89		10	17.75	33.89		24.50	344	0.03
28	17.73	33.92		20	17.74	33.90		24.51	343	0.07
55	17.73	33.88		30	17.73	33.92		24.53	341	0.10
83	15.06	33.62		50	17.73	33.89		24.51	343	0.17
110	12.64	33.55		75	17.40	33.71		24.45	349	0.26
166	10.47	33.99		100	13.48	33.56		25.20	278	0.34
219	9.84	34.15		150	10.86	33.90		25.96	205	0.46
272	9.09	34.27		200	10.09	34.11		26.26	177	0.56
327	8.68	34.43		250	9.35	34.22		26.47	157	0.64
431	7.84	34.46		300	8.86	34.38		26.68	137	0.72
542	6.79	34.47		400	8.11	34.44		26.84	122	0.86
648	6.06	34.46		500	7.17	34.47		27.00	107	0.98
866	4.70	34.45		600	6.39	34.46		27.10	97	1.09
1081	3.92	34.54		700	5.72	34.46		27.18	90	1.19
1289	3.43	34.57		800	5.08	34.45		27.25	83	1.28
				1000	4.16	34.51		27.40	69	1.45

130.30

HORIZON; June 6, 1953; 2057 GCT; 26°31.5'N, 113°33'W; sounding, 95 fm; wind, 310°, force 4; weather, partly cloudy; sea, slight; wire angle, 00°.

0	13.82	34.30		0	13.82	34.30		25.70	230	0.00
10	12.92	34.30		10	12.92	34.30		25.89	212	0.02
21	12.65	34.28		20	12.70	34.28		25.91	210	0.04
31	12.16	34.29		30	12.20	34.29		26.02	200	0.06
52	11.54	34.48		50	11.62	34.45		26.25	178	0.10

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

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HORIZON; June 6, 1953; 2230 GCT; 26°19.5'N, 113°47.5'W; sounding, 250 fm; wind, 300°, force 3; weather, clear; sea, rough; wire angle, 45°.

13035

0	14.19	33.65		0	14.19	33.65		25.12	285	0.00
8	14.10	33.62		10	14.09	33.62		25.12	285	0.03
19	13.74	33.66		20	13.70	33.66		25.23	275	0.06
37	13.40	33.70		30	13.51	33.68		25.29	269	0.08
55	12.86	33.84		50	13.08	33.82		25.48	251	0.14
73	11.80	33.88		75	11.79	33.89		25.79	222	0.20
112	11.74	34.52		100	11.77	34.34		26.14	188	0.25
149	11.46	34.64		150	11.42	34.64		26.44	160	0.34
189	11.05	34.64		200	10.96	34.64		26.52	152	0.42
229	10.70	34.64		250	10.51	34.64		26.60	145	0.49
277	10.28	34.64								

HORIZON; June 7, 1953; 0150 GCT; 26°06.5'N, 114°08'W; sounding, 1450 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 37°.

13040

0	15.27	33.58	5.67	0	15.27	33.58	5.67	24.84	312	0.00
9	14.95	33.60	5.64	10	14.85	33.62	5.63	24.96	300	0.03
23	13.70	33.68	5.36	20	13.80	33.68	5.45	25.23	275	0.06
48	13.58	33.68	5.21	30	13.64	33.68	5.29	25.26	272	0.09
69	13.26	33.77	5.29	50	13.58	33.68	5.21	25.27	271	0.14
94	11.54	33.78	3.08	75	13.00	33.77	5.27	25.46	253	0.21
140	11.00	34.35	1.30	100	11.45	33.80	2.75	25.78	222	0.27
185	10.90	34.59	0.55	150	10.98	34.44	0.99	26.36	167	0.37
235	10.52	34.61	0.42	200	10.80	34.60	0.51	26.52	152	0.45
280	10.01	34.64	0.21	250	10.38	34.62	0.34	26.61	144	0.52
379	8.23	34.51	0.27	300	9.69	34.63	0.22	26.74	131	0.60
473	7.30	34.46	0.16	400	8.00	34.49	0.24	26.89	117	0.73
568	6.44	34.47	0.21	500	7.05	34.46	0.17	27.01	106	0.85
755	5.20	34.48	0.26	600	6.21	34.47	0.22	27.13	94	0.95
949	4.34	34.53	0.42	700	5.55	34.48	0.23	27.22	86	1.05
1155	3.66	34.59	0.68	800	4.96	34.49	0.29	27.30	78	1.14
				1000	4.15	34.54	0.49	27.43	66	1.31

HORIZON; June 7, 1953; 0730 GCT; 25°48'N, 114°45'W; sounding, 2000+ fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 28°.

13050

0	15.85	33.62		0	15.85	33.62		24.74	321	0.00
10	15.86	33.66		10	15.86	33.66		24.77	319	0.03
18	15.83	33.63		20	15.82	33.62		24.75	320	0.06
32	15.34	33.58		30	15.62	33.58		24.76	320	0.10
51	13.41	33.49		50	13.50	33.49		25.14	283	0.16
64	12.34	33.54		75	11.35	33.63		25.67	233	0.22
78	11.22	33.66		100	11.06	34.00		26.01	200	0.28
101	11.06	34.01		150	10.81	34.30		26.28	175	0.37
123	11.05	34.22		200	10.09	34.43		26.51	153	0.46
150	10.81	34.30		250	9.62	34.43		26.59	146	0.53
198	10.10	34.43		300	8.95	34.45		26.72	133	0.60
253	9.59	34.43		400	8.03	34.48		26.88	118	0.74
297	8.99	34.45		500	6.94	34.49		27.05	102	0.85
401	8.01	34.48		600	5.99	34.41		27.11	96	0.96
501	6.93	34.49								
602	5.98	34.41								

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

130.60 HORIZON; June 7, 1953; 1320 GCT; 25°31.5'N, 115°33'W; sounding, 2250 fm; wind, 280°, force 3; weather, cloudy; sea, rough; wire angle, 35°.

0	17.73	33.93	6.41	0	17.73	33.93	6.41	24.54	340	0.00
8	17.73	33.92	5.90	10	17.73	33.92	5.90	24.53	341	0.03
21	17.74	33.93	5.97	20	17.73	33.93	5.97	24.54	340	0.07
47	17.73	33.90	5.88	30	17.74	33.92	5.96	24.53	341	0.10
68	17.76	33.92	5.59	50	17.76	33.90	5.82	24.51	343	0.17
93	15.42	33.38	6.38	75	17.76	33.70	5.68	24.36	358	0.26
139	11.72	33.61	4.31	100	14.01	33.39	6.34	24.96	300	0.34
185	10.82	34.09	2.83	150	11.48	33.78	3.91	25.76	224	0.48
232	10.14	-	1.96	200	10.59	-	2.49	26.18	184	0.58
272	10.08	-	1.66	250	10.10	-	1.83	-	-	-
361	8.82	-	0.59	300	9.70	-	1.26	-	-	-
448	7.92	-	0.65	400	8.41	-	0.60	-	-	-
536	7.08	-	0.75	500	7.42	-	0.77	-	-	-
716	5.60	-	0.35	600	6.49	-	0.56	-	-	-
903	4.63	34.50	0.59	700	5.72	-	0.36	-	-	-
1102	3.94	34.58	0.60	800	5.09	-	0.49	-	-	-
				1000	4.28	-	0.60	-	-	-

133.25 HORIZON; June 6, 1953; 1512 GCT; 26°05'N, 112°46.5'W; sounding, 45 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	14.08	33.94	-	0	14.08	33.94	-	25.37	262	0.00
10	14.03	33.93	-	10	14.03	33.93	-	25.37	262	0.03
21	13.45	34.00	-	20	13.82	34.00	-	25.47	252	0.05
31	12.68	33.99	-	30	12.79	33.99	-	25.67	233	0.08
52	11.94	34.22	-	50	12.00	34.18	-	25.97	204	0.12

133.30 HORIZON; June 6, 1953; 1225 GCT; 25°53'N, 113°10'W; sounding, 90 fm; wind, 310°, force 2; weather, clear; sea, moderate; wire angle, 12°.

0	14.05	33.71	-	0	14.05	33.71	-	25.20	278	0.00
10	14.06	33.73	-	10	14.06	33.73	-	25.21	277	0.03
20	14.05	33.72	-	20	14.05	33.72	-	25.21	277	0.06
31	13.76	33.86	-	30	13.93	33.86	-	25.34	264	0.08
51	12.18	33.96	-	50	12.19	33.95	-	25.76	224	0.13
76	12.21	34.37	-	75	12.21	34.36	-	26.07	195	0.18
102	11.85	34.57	-	100	11.90	34.55	-	26.28	175	0.23

133.40 HORIZON; June 6, 1953; 0652 GCT; 25°34.5'N, 113°45.5'W; sounding, 1600 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 39°.

0	14.48	33.67	-	0	14.48	33.67	-	25.08	289	0.00
8	14.49	33.68	-	10	14.49	33.68	-	25.08	289	0.03
21	14.50	33.72	-	20	14.50	33.72	-	25.11	286	0.06
33	14.50	33.70	-	30	14.50	33.70	-	25.10	287	0.09
49	13.48	33.77	-	50	13.31	33.77	-	25.40	259	0.14
61	12.79	33.81	-	75	12.24	34.00	-	25.79	222	0.20
77	12.24	34.01	-	100	12.16	34.29	-	26.03	199	0.26
97	12.16	34.25	-	150	11.75	34.62	-	26.36	167	0.35
120	12.14	34.52	-	200	11.04	34.64	-	26.51	153	0.43
141	11.86	34.62	-	250	10.14	34.57	-	26.61	144	0.51
184	11.28	34.66	-	300	9.40	34.57	-	26.74	131	0.58
228	10.58	34.60	-	400	8.26	34.56	-	26.91	115	0.71
272	9.76	34.56	-	500	7.19	34.50	-	27.02	105	0.83
361	8.70	34.59	-	-	-	-	-	-	-	-
459	7.60	34.50	-	-	-	-	-	-	-	-
564	6.56	34.50	-	-	-	-	-	-	-	-

OBSERVED				INTERPOLATED				COMPUTED		
Z	T	S	O ₂	Z	T	S	O ₂	σ_t	δ	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; June 5, 1953; 2357 GCT; 25°15.5'N, 114°26.5'W; sounding, 1900 fm; wind, 310°, force 5; weather, partly cloudy; sea, moderate; wire angle, 36°.

13350

0	16.64	33.65		0	16.64	33.65		24.58	337	0.00
8	16.62	33.67		10	16.59	33.67		24.61	334	0.03
21	16.41	33.65		20	16.44	33.65		24.63	332	0.07
34	15.92	33.67		30	16.18	33.66		24.70	325	0.10
50	14.54	33.45		50	14.54	33.45		24.90	306	0.16
63	13.91	33.61		75	13.10	33.62		25.32	266	0.24
80	12.46	33.62		100	10.99	33.75		25.82	219	0.30
101	10.99	33.76		150	10.94	34.30		26.26	177	0.40
126	11.15	34.13		200	9.73	34.32		26.49	155	0.48
150	10.94	34.30		250	9.58	34.51		26.66	139	0.56
199	9.72	34.32		300	8.82	34.44		26.73	132	0.63
250	9.58	34.51		400	7.57	34.42		26.90	116	0.76
301	8.78	34.44		500	6.84	34.47		27.04	103	0.87
398	7.60	34.42		600	6.06	34.46		27.14	93	0.98
507	6.79	34.47								
620	5.90	34.46								

HORIZON; June 5, 1953; 0301 GCT; 25°33.5'N, 112°15.5'W; sounding, 39 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 14°.

13723

0	15.48	34.16		0	15.48	34.16		25.24	274	0.00
10	15.47	34.19		10	15.47	34.19		25.26	272	0.03
20	14.94	34.15		20	14.94	34.15		25.35	263	0.05
30	13.10	34.38		30	13.10	34.38		25.91	210	0.08
50	12.78	34.45		50	12.78	34.45		26.03	199	0.12

HORIZON; June 5, 1953; 0646 GCT; 25°19.5'N, 112°45'W; sounding, 179 fm; wind, 270°, force 4; weather, clear; sea, rough; wire angle, 29°.

13730

0	15.08	34.02		0	15.08	34.02		25.22	276	0.00
9	15.10	34.04		10	15.10	34.04		25.23	275	0.03
23	15.07	34.04		20	15.10	34.04		25.23	275	0.06
47	13.18	34.13		30	14.79	34.04		25.30	268	0.08
72	12.42	34.39		50	13.04	34.16		25.75	225	0.13
96	12.18	34.43		75	12.38	34.40		26.07	195	0.18
150	11.28	34.64		100	12.11	34.44		26.15	187	0.23
199	10.92	34.64		150	11.28	34.64		26.46	158	0.32
250	10.70	34.63		200	10.91	34.64		26.53	151	0.40
				250	10.70	34.63		26.56	148	0.48

HORIZON; June 5, 1953; 1240, 1315 GCT; 25°00.5'N, 113°21'W; sounding, 1800 fm; wind, 300°, force 4; weather, overcast; sea, very rough; wire angle, 53°, 50°.

13740

0	15.62	33.71		0	15.62	33.71		24.86	310	0.00
7	15.62	33.69		10	15.61	33.71		24.86	310	0.03
13	15.62	33.73		20	15.60	33.73		24.88	308	0.06
22	15.60	33.73		30	15.58	33.72		24.88	308	0.09
35	14.79	33.72		50	13.40	33.84		25.43	256	0.15
44	13.50	33.80		75	13.06	34.16		25.75	225	0.21
54	13.36	33.87		100	12.35	34.48		26.14	188	0.26
85	12.84	34.29		150	11.71	34.59		26.34	169	0.35
				200	11.12	34.68		26.52	152	0.44
				250	10.52	34.68		26.63	142	0.51
73	13.09	34.13		300	9.93	34.61		26.68	137	0.58
102	12.29	34.49		400	8.69	34.59		26.87	119	0.72
140	11.82	34.57								
222	10.86	34.70								
312	9.78	34.60								
411	8.55	34.59								

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

13750

HORIZON; June 5, 1953; 1843 GCT; 24° 37', 114° 07' W; sounding, 2175 fm; wind, 270°, force 5;
weather, cloudy; sea, rough; wire angle, 25°.

0	16.66	33.58		0	16.66	33.58		24.53	341	0.00
10	16.63	33.59		10	16.63	33.59		24.54	340	0.03
24	16.60	33.62		20	16.61	33.62		24.57	338	0.07
38	16.02	33.54		30	16.45	33.61		24.60	335	0.10
58	15.70	33.54		50	15.81	33.54		24.69	326	0.17
72	15.12	33.66		75	14.70	33.66		25.02	295	0.25
90	12.34	33.57		100	11.98	33.60		25.53	246	0.31
112	11.26	33.75		150	10.50	34.31		26.35	168	0.42
139	10.34	33.97		200	10.95	34.47		26.39	164	0.50
167	11.11	34.40		250	10.31	34.54		26.56	148	0.59
220	10.73	34.50		300	9.69	34.58		26.70	135	0.66
275	9.98	34.56		400	8.28	34.50		26.86	120	0.79
330	9.33	34.58		500	7.19	34.49		27.01	106	0.91
435	7.85	34.48		600	6.33	34.48		27.12	95	1.02
546	6.79	34.49								
659	5.86	34.47								

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