

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5804
30 March - 27 April 1958

SIO Reference 59-14
1 March 1959

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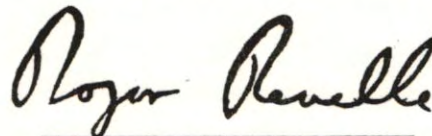
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Marine Research Committee

SIO Reference 59-14

1 March 1959

Approved for distribution:



Roger Revelle, Director

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INTRODUCTION

The data presented in this report were collected on the one hundred and seventh consecutive cruise of the California Cooperative Oceanic Fisheries Investigations program. The R/V Black Douglas of the U. S. Bureau of Commercial Fisheries, the R/V Paolina-T, the R/V Spencer F. Baird and the R/V Stranger of the Scripps Institution participated in this cruise.

The data are tabulated at observed depths, and the interpolated and computed values are tabulated at standard depths. They are accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.^{1/} Certain approximations have been introduced for the determination of the integrated pressure terms which may result in errors whose maximum values are less than 0.5 dynamic centimeter at 0 over 200 decibars, 1.0 dynamic centimeter at 0 over 500 decibars, and 2.0 dynamic centimeters at 0 over 1000 decibars. The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of ΔD . The interpolated values at 125 meters are not tabulated.

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. A line is left blank between the observed data of each cast.

^{1/}

Klein, Hans T. A new technique for processing physical oceanographic data. MS. Contribution from the Scripps Institution of Oceanography, New Series, No. 000.

FOOTNOTES

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

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

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

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

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

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

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

p: pretrip or posttrip.

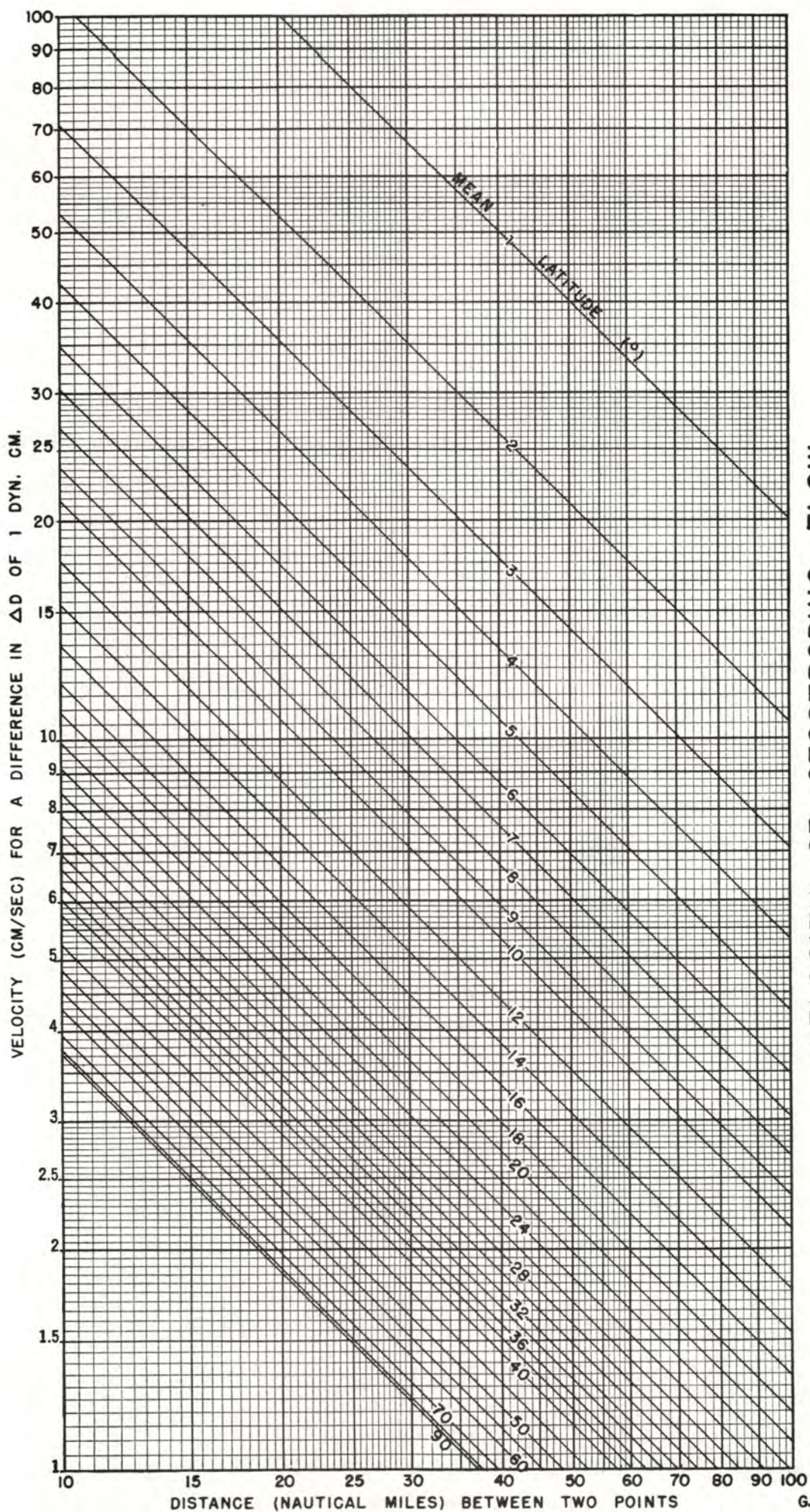
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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

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

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 1958 volume, the first page of the Cruise 5804 data is numbered 81.



VELOCITY OF GEOSTROPHIC FLOW

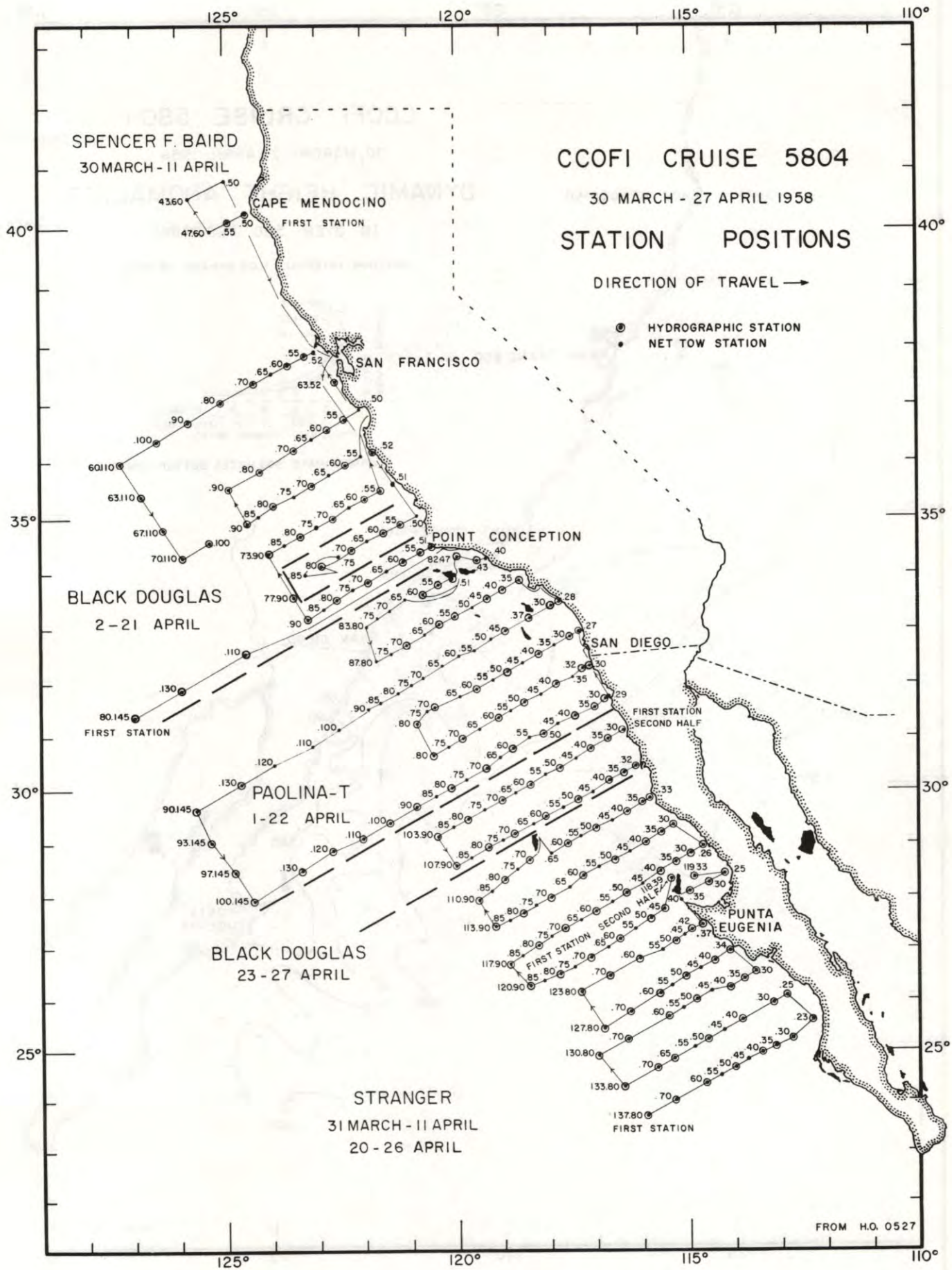


FIGURE 1

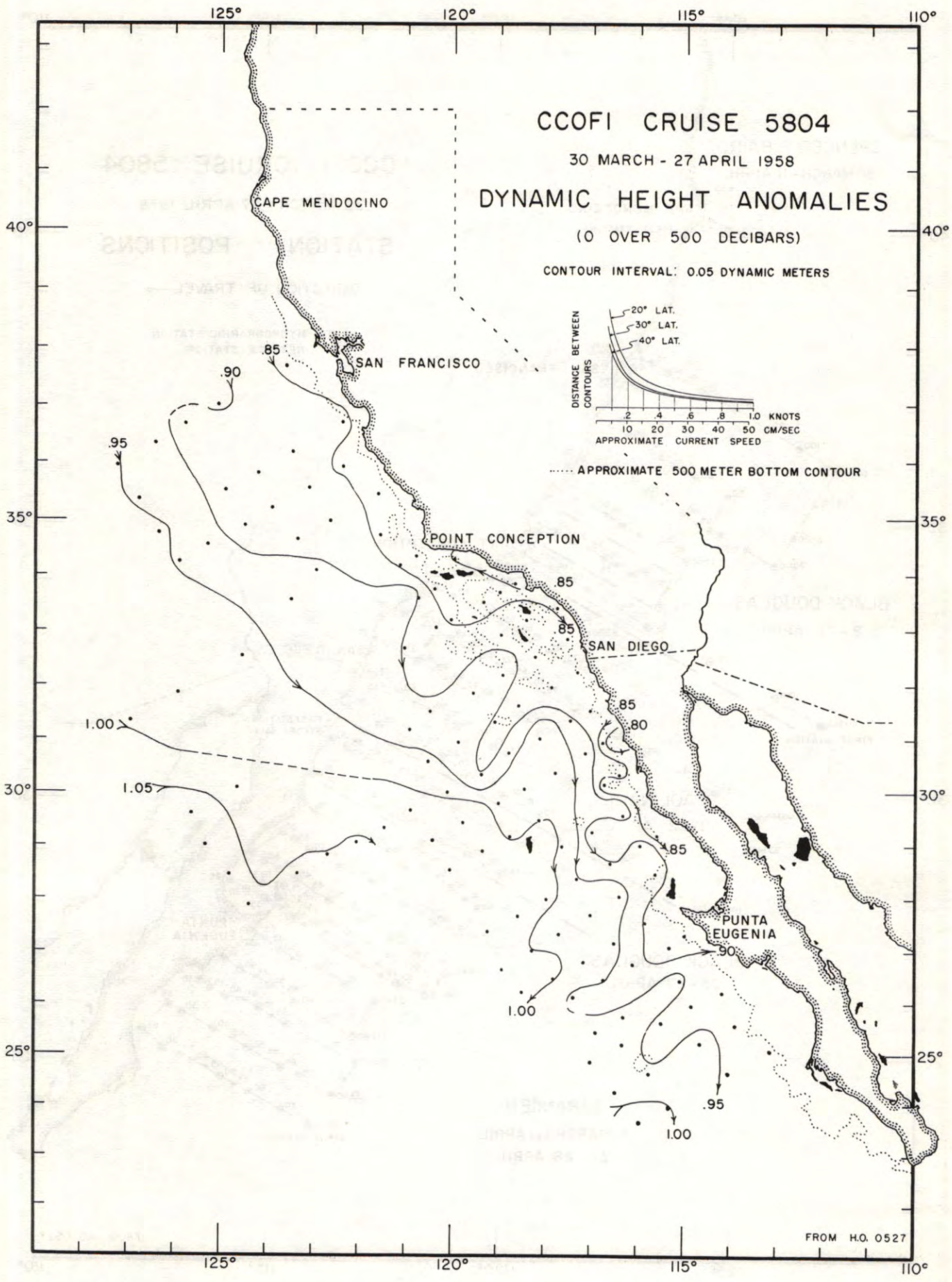


FIGURE 2

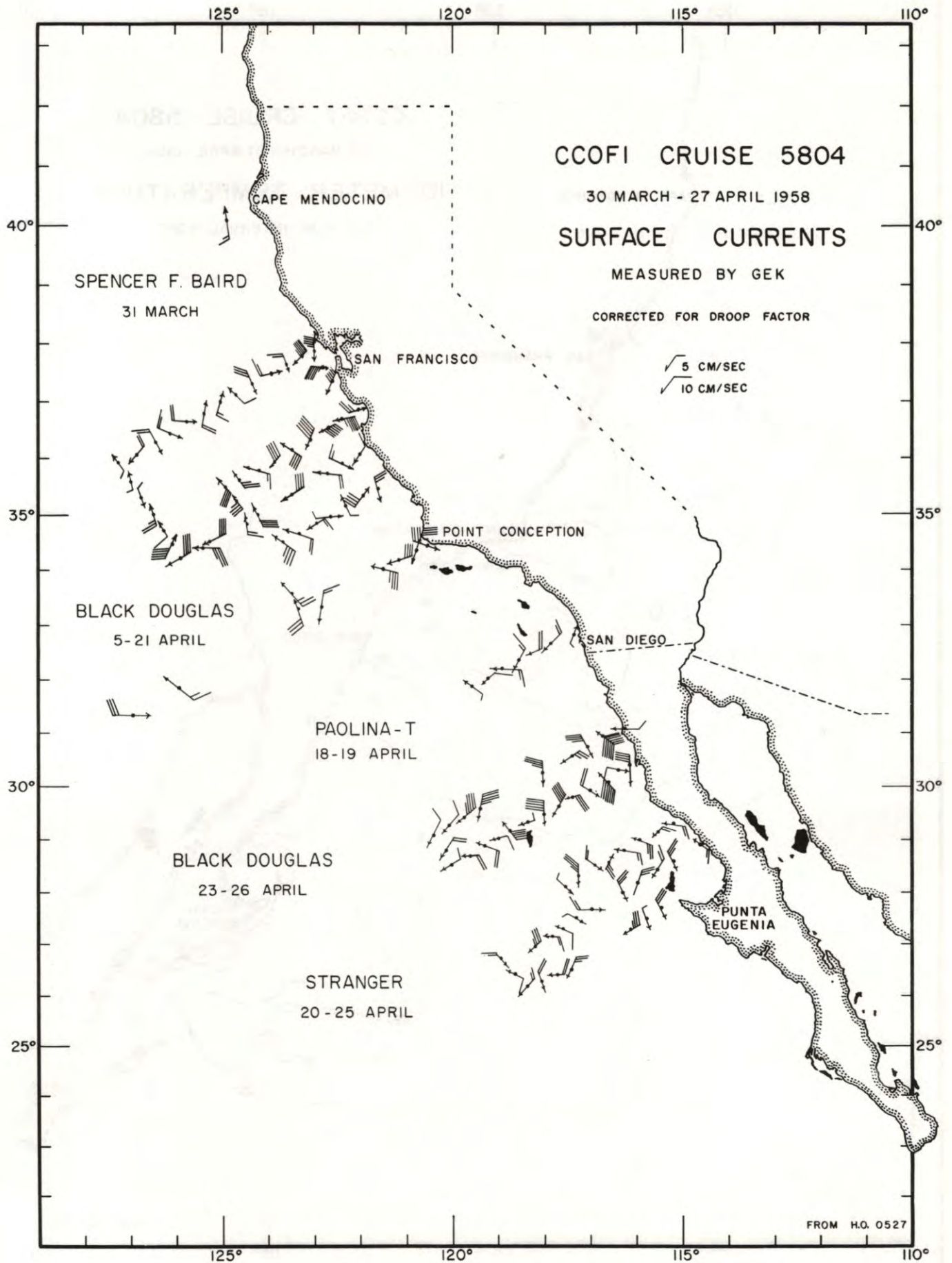


FIGURE 3

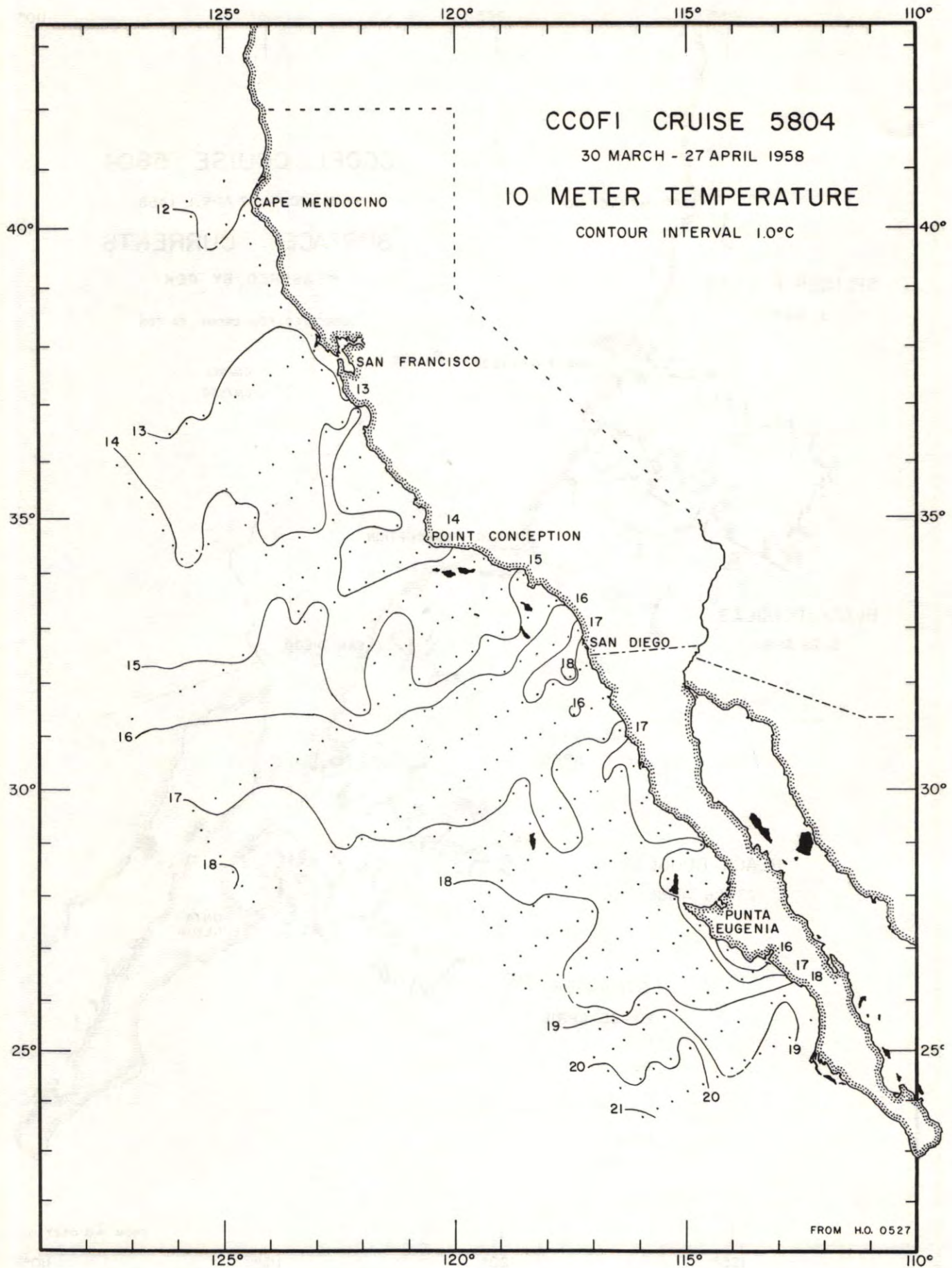


FIGURE 4

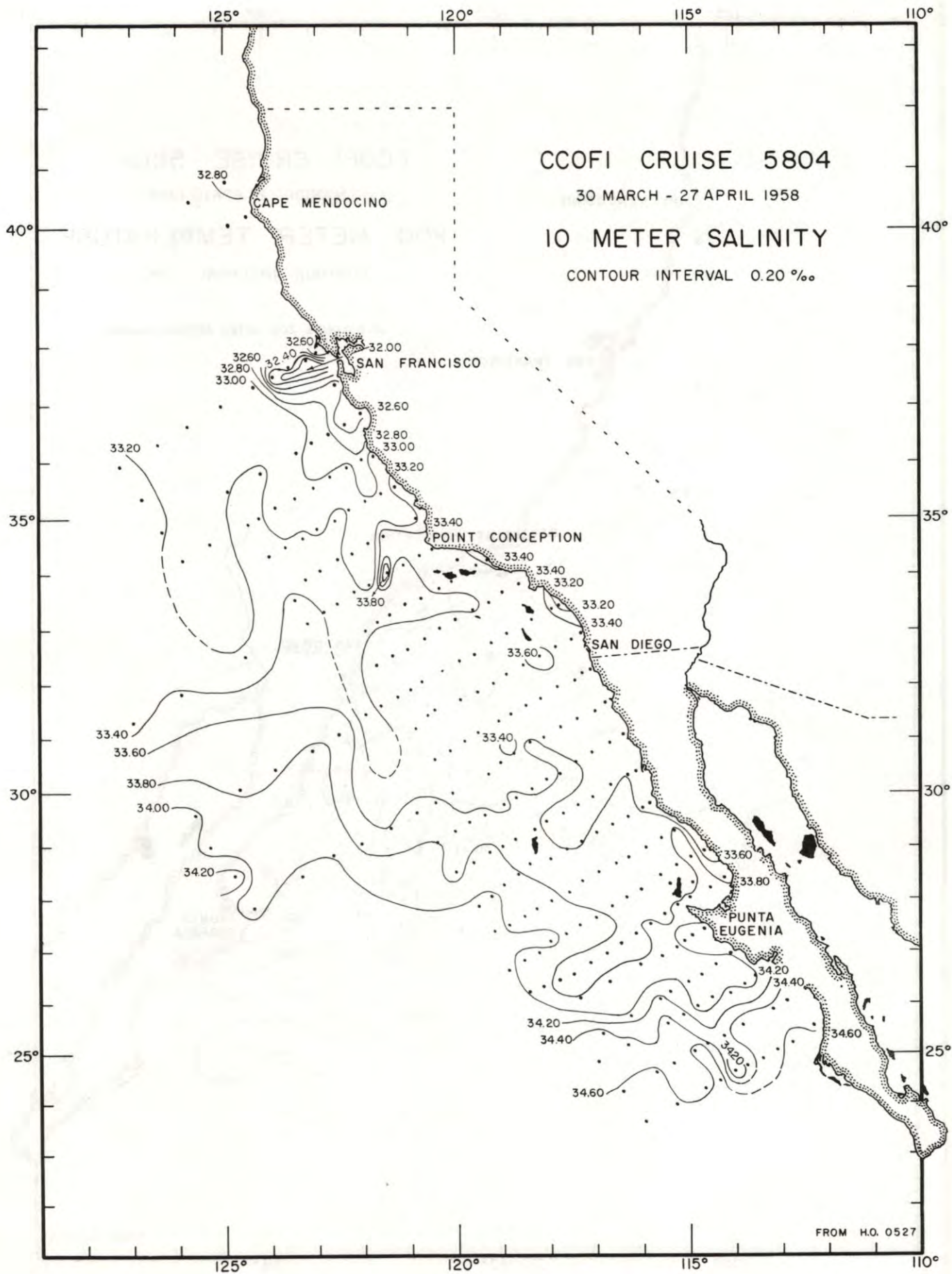


FIGURE 5

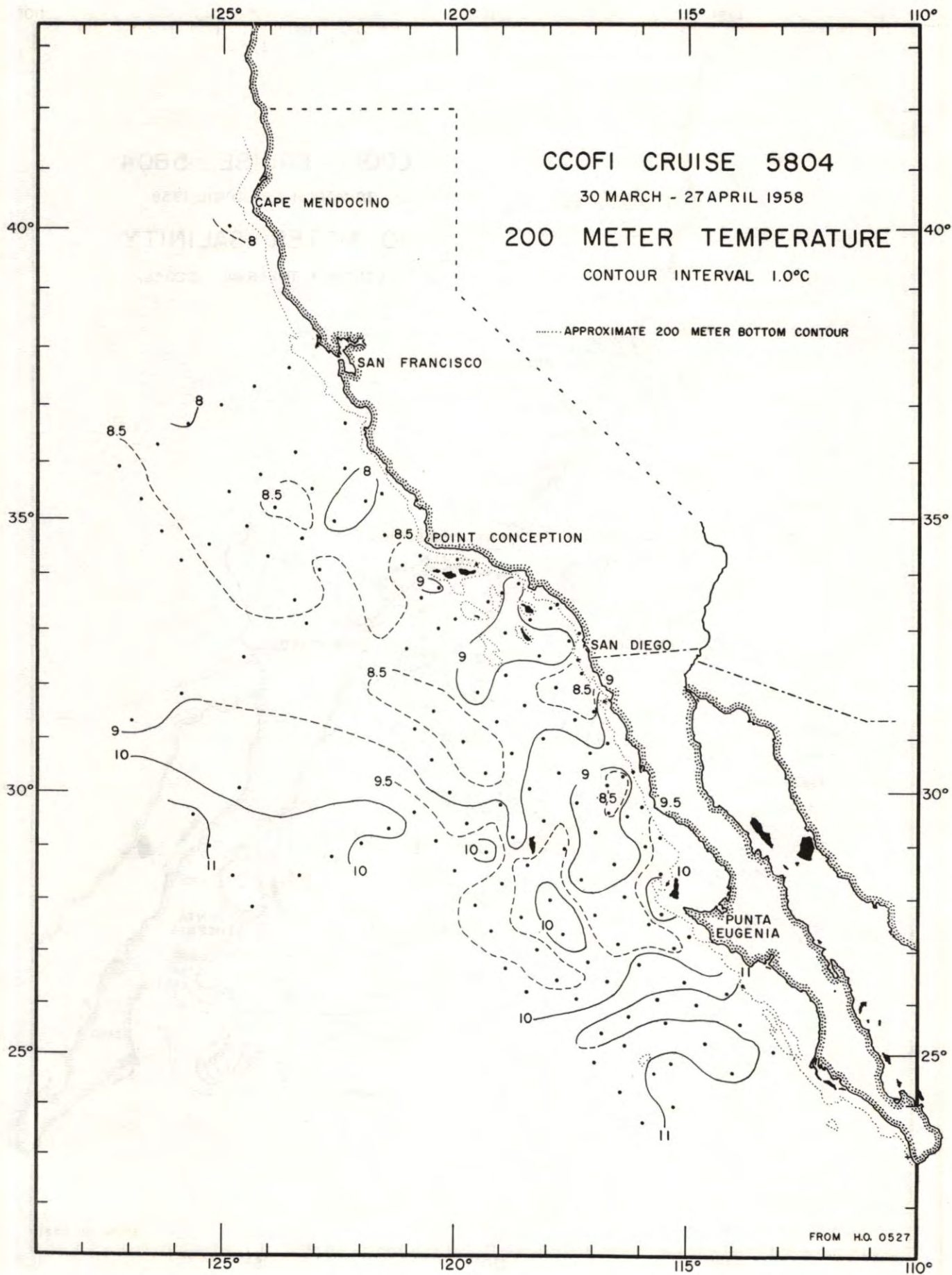


FIGURE 6

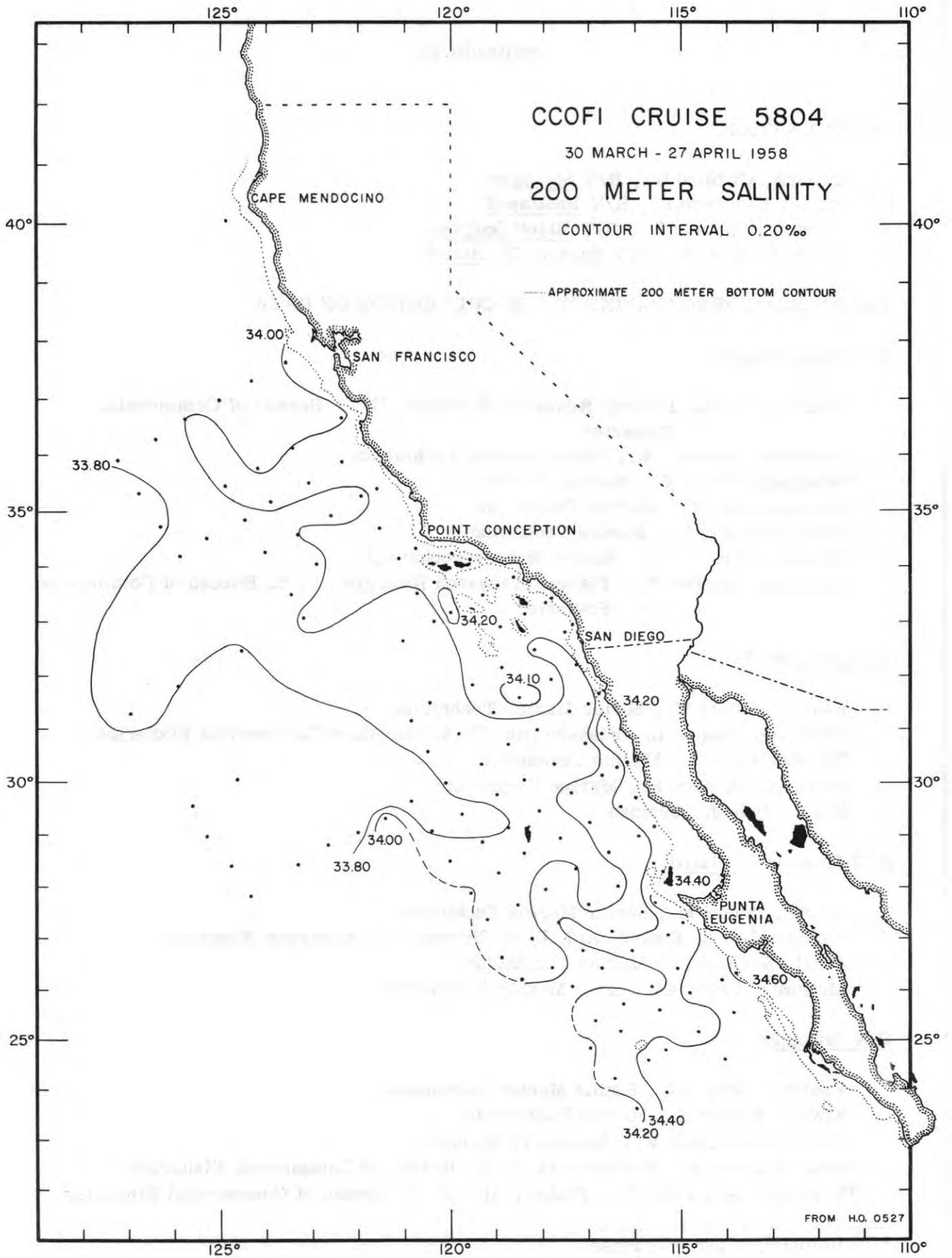


FIGURE 7

PERSONNEL

SHIPS' CAPTAINS

Colbeth, Clifford W., R/V Stranger
Davis, Laurence E., R/V Paolina-T
Forster, Charles W., R/V Black Douglas
Phinney, Alan W., R/V Spencer F. Baird

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Black Douglas

Kramer, David, Fishery Research Biologist, U. S. Bureau of Commercial Fisheries
Anderson, Norman E., Senior Marine Technician
*Brennan, Robert E., Marine Technician
*Conway, John B., Marine Technician
*Joyal, Norman F., Marine Technician
*Stover, Allan J., Jr., Senior Marine Technician
Vrooman, Andrew M., Fishery Research Biologist, U. S. Bureau of Commercial Fisheries

R/V Paolina-T

Gilkey, Robert W., Senior Marine Technician
Anderson, James L., Fishery Aid, U. S. Bureau of Commercial Fisheries
Davoll, Peter J., Marine Technician
Goffman, Jackson E., Marine Technician
Rice, Clyde J., Seaman

R/V Spencer F. Baird

Brown, Daniel M., Senior Marine Technician
Farrar, Lloyd, Fishery Aid, U. S. Bureau of Commercial Fisheries
Joyal, Norman F., Marine Technician
McGuire, Francis J., Jr., Marine Technician

R/V Stranger

Froerer, Arthur I., Senior Marine Technician
Kiwala, Robert S., Marine Technician
McMillan, Wesley W., Marine Technician
*Reid, Charles F., Fishery Aid, U. S. Bureau of Commercial Fisheries
*Vorobiov, Alexander V., Fishery Aid, U. S. Bureau of Commercial Fisheries

*Participated in part of cruise

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

SPENCER F. BAIRD; March 31, 1958; 1432 GCT; 40°14.5'N, 124°31.5'W; sounding, 105 fm; wind, 200°, force 4; weather, showers; sea, very high; wire angle, 24°.

47.50

0	11.92	32.88		298	0	11.92	32.88		24.99	298	0.00
9	12.04	32.89		300	10	12.04	32.89		24.97	300	0.03
27	12.03	32.92		298	20	12.04	32.90		24.97	300	0.06
46	11.18	33.26		257	30	12.03	32.93		25.00	297	0.09
70	9.80	33.56		213	50	10.85	33.33		25.53	246	0.14
91	9.23	33.72		192	75	9.63	33.59		25.93	208	0.20
113	9.02	33.78		185	100	9.20	33.77		26.14	188	0.25

SPENCER F. BAIRD; March 31, 1958; 1813 GCT; 40°04.5'N, 124°55'W; sounding, 670 fm; wind, 160°, force 6; weather, showers; sea, very high; wire angle, 35°.

47.55

0	11.82	32.86	5.70	298	0	11.82	32.86	5.70	24.98	298	0.00
8	11.82	32.89	5.93	297	10	11.82	32.88	5.93	25.00	297	0.03
29	11.83	32.86	5.94	298	20	11.82	32.87	5.93	24.98	298	0.06
37	11.81	32.88	5.87	296	30	11.82	32.87	5.91	24.98	298	0.09
49	11.23	33.24	5.08	260	50	11.18	33.25	5.02	25.40	258	0.14
56	10.77	33.32	4.75	246	75	8.91	33.28	4.40	25.81	220	0.20
63	10.15	33.33	4.37	235	100	8.56	33.51	3.95	26.05	197	0.26
77	8.91	33.34	4.34	215	150	8.42	33.88	2.68	26.35	168	0.35
90	8.74	33.45	4.14	204	200	7.96	33.99	2.08	26.51	153	0.43
100	8.56	33.51	3.95	197	250	7.56	34.02	1.87	26.59	146	0.51
116	8.40	33.54	3.94	193	300	7.09	34.09	1.45	26.71	134	0.58
142	8.55	33.82	2.90	174	400	6.25	34.18	0.79	26.90	117	0.71
170	8.18	33.95	2.31	159							
214	7.88	34.00	2.03	152							
282	7.25	34.04	1.67	140							
316p	6.98	34.13	1.30	129							
440p	5.90	34.19	0.61	112							

BLACK DOUGLAS; April 17, 1958; 0713 GCT; 37°47.5'N, 123°15'W; sounding, 65 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 13°.

60.55

0	13.20	31.83	6.19	399	0	13.20	31.83	6.19	23.92	399	0.00
10	13.12	31.90	6.15	393	10	13.12	31.90	6.15	23.99	393	0.04
29	10.94	33.21	4.98	257	20	12.80	32.53	6.04	24.54	340	0.08
48	10.74	33.42	4.14	238	30	10.93	33.21	4.94	25.42	257	0.11
72	9.90	33.64	3.35	208	50	10.73	33.42	4.14	25.62	238	0.16
95	9.16	33.84	2.59	182	75	9.80	33.67	3.22	25.97	205	0.21
					100	(9.10)	(33.86)	(2.55)	(26.24)	(179)	(0.26)

BLACK DOUGLAS; April 17, 1958; 1039, 1054 GCT; 37°37'N, 123°37'W; sounding, 1700 fm; wind, 280°, force 4; weather, drizzle; sea, very rough; wire angle, 04°, 05°.

60.60

0	13.37	32.28	6.12	369	0	13.37	32.28	6.12	24.24	369	0.00
10	13.35	32.29	6.13	368	10	13.35	32.29	6.13	24.25	368	0.04
29	13.00	32.82	5.78	322	20	13.22	32.52	6.02	24.46	348	0.07
43	12.42	33.21	5.20	284	30	12.97	32.83	5.76	24.74	322	0.11
51	11.98	33.34	4.65	266	50	12.02	33.34	4.65	25.32	267	0.16
60	11.34	33.35	4.80	253	75	10.31	33.49	4.31	25.74	226	0.23
69	10.58	33.42	4.57	236	100	9.26	33.63	3.74	26.03	199	0.28
86	9.67	33.59	3.79	209	150	8.69	33.89	2.68	26.32	171	0.37
					200	8.04	34.02	2.14	26.53	152	0.46
					250	7.59	34.12	1.60	26.66	139	0.53
100	9.26	33.63	3.74	199	300	7.14	34.13	1.36	26.74	131	0.60
113	9.01	33.75	3.21	187	400	6.32	34.21	0.60	26.91	115	0.73
135	8.77	33.87	2.78	173	500	5.80	34.23	0.60	27.00	107	0.84
162	8.60	34.01	2.32	161							
197	8.04	34.02	2.14	152							
251	7.59	34.12	1.60	139							
323	6.91	34.14	1.20	128							
420	6.22	34.22	0.59	115							
556	5.50	34.23	0.63	104							

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5804

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O ₂	δT_3	Z	T	S	O ₂	σ_t	δT_3	ΔD
m	°C	‰	ml/L	10 ⁻⁵ cm ³ /g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm ³ /g	dyn. m

60.70

BLACK DOUGLAS; April 17, 1958; 1815, 1832 GCT; 37°17'N, 124°21.5'W; sounding, 2170 fm; wind, 270°, force 3; weather, cloudy; sea, very rough; wire angle, 15°, 16°.

0	13.31	33.05	6.08	312	0	13.31	33.05	6.08	24.84	312	0.00
9	13.24	33.06	6.14	310	10	13.23	33.06	6.15	24.87	309	0.03
28	13.06	33.06	6.22	306	20	13.08	33.06	6.21	24.89	307	0.06
52	13.05	33.06	6.33	306	30	13.06	33.06	6.22	24.91	306	0.09
61	12.89	33.06	6.04	303	50	13.05	33.06	6.31	24.91	306	0.15
70	12.85	33.03	6.07	304	75	12.76	33.03	6.02	24.94	303	0.23
79	12.62	33.04	5.92	299	100	10.40	33.22	5.50	25.51	248	0.30
92	10.87	33.16	5.56	260	150	9.15	33.68	3.46	26.08	194	0.41
					200	8.40	33.94	2.35	26.41	163	0.50
107p	10.52	33.42	4.45	234	250	7.30	33.97	2.97	26.59	146	0.58
124p	9.85	33.61	3.65	210	300	6.57	34.00	2.34	26.71	134	0.65
139p	9.54	33.63	3.59	204	400	(6.00)	(34.09)	(0.65)	(26.86)	(120)	(0.78)
158p	9.08	33.73	3.27	189							
175p	8.80	33.85	2.62	176							
220p	8.11	33.96	2.28	158							
260p	6.97	33.97	3.20	141							
312p	6.52	34.00	2.21	133							
390p	6.12	34.07	1.35	123							

60.80

BLACK DOUGLAS; April 18, 1958; 0044 GCT; 36°57'N, 125°04'W; sounding, 2300 fm; wind, 270°, force 3; weather, drizzle; sea, high; wire angle, 07°.

0	13.71	33.04	6.08	320	0	13.71	33.04	6.08	24.76	320	0.00
9	13.59	33.07	6.11	315	10	13.58	33.07	6.11	24.81	315	0.03
29	13.37	33.02	6.15	315	20	13.43	33.04	6.14	24.81	315	0.06
53	13.27	33.04	6.18	312	30	13.37	33.02	6.15	24.81	315	0.10
62	13.12	33.04	6.10	309	50	13.30	33.04	6.17	24.83	313	0.16
72	13.04	33.03	5.97	308	75	12.95	33.04	5.91	24.90	306	0.24
81	12.48	33.09	5.82	294	100	10.55	33.25	5.45	25.52	248	0.30
94	11.08	33.22	5.56	259	150	8.84	33.58	4.70	26.06	196	0.42
107	10.07	33.28	5.37	238	200	8.18	33.88	4.04	26.39	164	0.51
124	9.28	33.47	5.19	211	250	7.32	33.97	3.28	26.57	147	0.59
142	8.96	33.55	4.96	200	300	6.58	33.99	2.34	26.70	135	0.66
164	8.62	33.66	4.28	188	400	5.72	34.04	1.28	26.86	120	0.79
186	8.40	33.80	4.18	174	500	5.18	34.11	0.74	26.97	109	0.91
229	7.64	33.93	3.65	154							
300	6.58	33.99	2.34	135							
390	5.76	34.04	1.32	121							
510	5.14	34.14	0.71	106							

60.90

BLACK DOUGLAS; April 18, 1958; 0701 GCT; 36°37'N, 125°47'W; sounding, 2300 fm; wind, 270°, force 3; weather, overcast; sea, high; wire angle, 07°.

0	13.21	33.00	6.14	314	0	13.21	33.00	6.14	24.82	314	0.00
10	13.20	33.04	6.14	310	10	13.20	33.04	6.14	24.86	310	0.03
29	12.84	32.96	6.18	310	20	13.02	33.00	6.17	24.86	310	0.06
52	12.80	32.99	6.13	306	30	12.83	32.97	6.18	24.87	309	0.09
62	12.60	33.03	5.95	300	50	12.80	32.98	6.13	24.89	307	0.15
70	11.58	33.08	5.55	278	75	10.50	33.16	5.22	25.45	254	0.22
80	9.66	33.25	4.96	234	100	8.97	33.43	4.47	25.92	209	0.28
93	9.20	33.38	4.50	217	150	8.30	33.84	3.20	26.34	170	0.38
106	8.76	33.46	4.44	204	200	8.00	34.00	2.28	26.51	153	0.46
124	8.53	33.58	4.17	192	250	7.25	34.03	2.04	26.65	140	0.54
141	8.34	33.71	3.46	180	300	6.81	34.04	1.61	26.71	134	0.61
164	8.28	33.91	2.94	164	400	5.65	34.01	1.35	26.84	122	0.74
186	8.18	33.97	2.36	158	500	5.00	34.09	0.80	26.98	109	0.86
231	7.48	34.02	2.16	145							
303	6.79	34.04	1.59	134							
395	5.70	34.01	1.37	123							
516	4.98	34.10	0.72	108							

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

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BLACK DOUGLAS; April 18, 1958; 1311 GCT; 36°17'N, 126°27'W; sounding, 2400 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 05°.

60.100

0	13.39	32.99	6.09	318	0	13.39	32.99	6.09	24.78	318	0.00
10	13.40	33.02	6.10	316	10	13.40	33.02	6.10	24.80	316	0.03
29	13.10	33.03	6.07	309	20	13.26	33.03	6.08	24.84	312	0.06
53	13.06	33.04	6.08	308	30	13.09	33.03	6.07	24.87	309	0.09
63	13.06	33.03	6.08	308	50	13.06	33.04	6.07	24.88	308	0.16
72	13.08	33.04	6.03	308	75	13.10	33.07	6.02	24.90	306	0.23
80	13.12	33.10	6.00	304	100	11.30	33.28	5.60	25.41	258	0.30
94	12.00	33.22	5.73	275	150	9.02	33.61	5.05	26.05	197	0.42
107	10.48	33.31	5.45	242	200	8.30	33.90	4.25	26.39	165	0.51
124	9.79	33.40	5.32	224	250	7.72	33.98	3.40	26.53	151	0.59
141	9.17	33.55	5.17	204	300	7.00	34.03	2.50	26.68	137	0.67
169	8.86	33.68	4.66	189	400	6.20	34.11	1.28	26.85	121	0.80
186	8.52	33.84	4.40	172	500	5.33	34.16	0.87	27.00	107	0.92
230	7.95	33.96	3.66	155							
302	6.98	34.04	2.38	136							
393	6.23	34.11	1.30	122							
515	5.18	34.17	0.83	104							

BLACK DOUGLAS; April 18, 1958; 2014 GCT; 35°55'N, 127°15'W; sounding, 2400 fm; wind, 280°, force 2; weather, overcast; sea, high; wire angle, 06°.

60.110

0	14.68	33.26	5.89	323	0	14.68	33.26	5.89	24.73	323	0.00
10	14.57	33.30	5.92	318	10	14.57	33.30	5.92	24.78	318	0.03
29	14.54	33.36a)	5.84	-	20	14.55	33.31	5.86	24.80	316	0.06
53	14.46	33.34	5.87	313	30	14.54	33.32	5.84	24.81	315	0.10
63	14.42	33.35	5.84	311	50	14.48	33.33	5.86	24.82	314	0.16
72	14.40	33.34	5.87	311	75	14.38	33.34	5.88	24.85	311	0.24
81	14.34	33.34	5.90	310	100	12.00	33.30	5.58	25.29	270	0.31
94	13.54	33.32	5.74	296	150	9.18	33.45	4.92	25.90	211	0.43
108	10.67	33.28	5.46	248	200	8.55	33.82	3.45	26.29	174	0.53
126	9.79	33.31	5.21	231	250	8.00	33.94	2.66	26.47	157	0.61
144	9.33	33.40	5.03	217	300	7.30	34.01	2.42	26.62	143	0.69
166	8.96	33.57	4.50	199	400	6.32	34.05	1.42	26.79	127	0.83
189	8.68	33.77	3.85	180	500	5.60	34.16	0.76	26.97	110	0.95
233	8.20	33.91	2.78	163							
305	7.24	34.02	2.37	141							
397	6.36	34.05	1.45	127							
517	5.45	34.20	0.64	106							

BLACK DOUGLAS; April 16, 1958; 2136 GCT; 37°19'N, 122°36'W; sounding, 45 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 15°.

63.52

0	13.92	32.10	6.34	393	0	13.92	32.10	6.34	23.99	393	0.00
10	13.16	32.61	6.11	341	10	13.16	32.61	6.11	24.54	341	0.04
29	12.50	32.62	5.32	328	20	12.78	32.61	5.68	24.62	333	0.07
48	11.62	33.32	4.66	261	30	12.48	32.62	5.31	24.68	328	0.10
72	9.77	33.60	3.75	209	50	11.55	33.32	4.64	25.38	260	0.16
					75	(9.64)	(33.62)	(3.53)	(26.04)	(198)	(0.22)

a) Possible evaporation; value does not fall on property curve.

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

63.110

BLACK DOUGLAS; April 19, 1958; 0223 GCT; 35°21.5'N, 126°46'W; sounding, 2400 fm; wind, 270°, force 2; weather, overcast; sea, high; wire angle, 11°.

0	14.94	33.34	5.84	322	0	14.94	33.34	5.84	24.74	322	0.00
10	14.86	33.37	5.89	319	10	14.86	33.37	5.89	24.77	319	0.03
28	14.50	33.34	5.90	314	20	14.64	33.36	5.90	24.80	315	0.06
51	14.49	33.34	5.92	314	30	14.50	33.34	5.90	24.82	314	0.10
60	14.48	33.34	5.82	314	50	14.49	33.34	5.91	24.82	314	0.16
69	14.48	33.38	5.81	310	75	14.46	33.40	5.80	24.87	309	0.24
78	14.42	33.40	5.78	308	100	11.90	33.38	5.55	25.37	262	0.31
91	13.34	33.44	5.67	283	150	9.24	33.54	4.74	25.96	206	0.43
105	11.12	33.36	5.48	249	200	8.52	33.76	3.57	26.25	178	0.52
122	10.31	33.40	5.30	233	250	7.84	33.94	3.02	26.49	155	0.61
140	9.78	33.46	5.16	220	300	7.00	33.97	2.30	26.63	142	0.68
162	9.13	33.55	4.59	203	400	6.30	34.10	1.32	26.84	122	0.82
185	8.72	33.66	3.88	189	500	5.58	34.15	0.70	26.96	111	0.94
229	8.17	33.93	3.22	160							
302	6.99	33.97	2.29	142							
393	6.34	34.10	1.36	123							
513	5.48	34.16	0.65	109							

67.55

BLACK DOUGLAS; April 16, 1958; 1148 GCT; 36°38.5'N, 122°24.5'W; sounding, 1200 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 15°.

0	13.83	32.51	6.04	361	0	13.83	32.51	6.04	24.32	361	0.00
10	13.82	32.47	6.13	364	10	13.82	32.47	6.13	24.29	364	0.04
28	13.34	32.93	6.08	320	20	13.80	32.57	6.15	24.38	356	0.07
42	12.55	33.17	5.68	288	30	13.23	32.98	6.05	24.81	315	0.10
51	11.37	33.22	5.55	264	50	11.48	33.22	5.55	25.33	266	0.16
60	10.23	33.26	5.32	242	75	9.82	33.43	4.30	25.78	222	0.22
69	9.82	33.40	4.55	255	100	9.82	33.68	3.35	25.97	205	0.28
85	9.92	33.58	3.93	213	150	8.98	33.90	2.68	26.28	175	0.37
98	9.84	33.66	3.46	206	200	8.25	33.99	2.40	26.46	158	0.46
111	9.68	33.83	2.98	191	250	7.62	34.07	1.83	26.62	143	0.54
132	9.45	33.89	2.69	183	300	7.20	34.10	1.36	26.70	135	0.61
158	8.80	33.90	2.68	172	400	6.46	34.20	0.95	26.88	118	0.74
193	8.33	33.98	2.46	159	500	5.82	34.26	0.60	27.01	106	0.86
240	7.78	34.05	1.96	146							
314	7.12	34.12	1.30	132							
408	6.39	34.21	0.90	116							
539	5.74	34.27	0.52	104							

67.60

BLACK DOUGLAS; April 16, 1958; 0740 GCT; 36°28.5'N, 122°46'W; sounding, 1600 fm; wind, 330°, force 6; weather, clear; sea, high; wire angle, 23°.

0	14.13	32.83	5.93	343	0	14.13	32.83	5.93	24.51	343	0.00
9	14.10	32.84	5.95	342	10	14.10	32.84	5.96	24.52	342	0.03
27	13.40	33.01	6.07	316	20	14.06	32.87	5.98	24.55	339	0.07

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

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BLACK DOUGLAS; April 15, 1958; 2228 GCT; 36°08'N, 123°29.5'W; sounding, 1971 fm; wind, 330°, force 6; weather, partly cloudy; sea, high; wire angle, 12°.

67.70

0	13.22	33.03	6.05	312	0	13.22	33.03	6.05	24.84	312	0.00
10	13.22	33.04	6.14	311	10	13.22	33.04	6.14	24.85	311	0.03
29	13.10	33.05	6.14	308	20	13.19	33.05	6.14	24.86	310	0.06
57	12.78	33.04	5.99	302	30	13.09	33.05	6.14	24.89	307	0.09
67	11.79	33.22	5.36	271	50	12.85	33.04	6.05	24.93	303	0.15
76	11.02	33.30	4.95	252	75	11.03	33.30	4.95	25.46	253	0.22
89	9.74	33.39	4.72	224	100	8.95	33.38	4.69	25.88	213	0.28
103	8.81	33.38	4.68	211	150	8.63	33.87	3.18	26.32	172	0.38
116	8.68	33.55	4.64	196	200	8.26	34.00	2.51	26.48	156	0.46
134	9.13	33.78	3.30	186	250	7.94	34.08	1.96	26.59	146	0.54
151	8.63	33.88	3.18	171	300	7.63	34.12	1.66	26.66	139	0.61
177	8.62	33.96	2.52	165	400	6.76	34.18	1.03	26.83	123	0.75
199	8.28	34.00	2.51	157	500	5.92	34.24	0.54	26.98	108	0.87
247	7.98	34.08	2.01	146							
323	7.44	34.14	1.51	135							
421	6.58	34.19	0.90	120							
551	5.70	34.28	0.43	102							

BLACK DOUGLAS; April 15, 1958; 1521 GCT; 35°47.5'N, 124°12'W; sounding, 2150 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 08°.

67.80

0	13.78	33.22	6.01	308	0	13.78	33.22	6.01	24.88	308	0.00
10	13.76	33.21	6.02	308	10	13.76	33.21	6.02	24.88	308	0.03
29	13.76	33.18	6.00	310	20	13.76	33.19	6.01	24.86	310	0.06
57	13.44	33.17	5.92	305	30	13.76	33.18	6.00	24.86	310	0.09
66	13.16	33.22	5.77	296	50	13.68	33.18	5.98	24.87	309	0.15
75	12.28	33.40a)	5.24	267	75	12.28	33.40	5.24	25.31	267	0.23
88	11.56	33.39	5.00	255	100	10.60	33.50	4.51	25.70	230	0.29
102	10.56	33.51	4.48	228	150	9.28	33.78	3.20	26.14	188	0.40
115	10.18	33.58	4.11	217	200	8.36	33.98	2.60	26.45	159	0.48
132	9.42	33.63	3.87	202	250	7.68	34.08	2.16	26.61	144	0.56
150	9.28	33.78	3.20	188	300	7.15	34.06	1.83	26.67	138	0.63
176	8.68	33.84	3.14	175	400	6.28	34.12	1.05	26.85	121	0.77
198	8.38	33.98	2.61	160	500	5.66	34.19	0.78	26.97	110	0.89
247	7.76	34.08	2.19	144							
323	6.92	34.04	1.66	135							
422	6.13	34.15	0.93	117							
551	5.39	34.22	0.70	103							

BLACK DOUGLAS; April 15, 1958; 0746 GCT; 35°28'N, 124°55'W; sounding, 2440 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 20°.

67.90

0	13.99	33.17	5.86	316	0	13.99	33.17	5.86	24.80	316	0.00
10	14.00	33.20	5.96	314	10	14.00	33.20	5.96	24.82	314	0.03
28	13.97	33.19	5.88	314	20	13.98	33.20	5.94	24.82	314	0.06
55	13.76	33.24	5.96	306	30	13.97	33.19	5.88	24.83	313	0.09
64	12.99	33.31	5.45	286	50	13.85	33.22	5.93	24.86	310	0.16
73	11.37	33.37	4.92	253	75	11.23	33.38	4.72	25.50	249	0.23
85	10.32	33.44	4.35	230	100	9.82	33.48	4.22	25.82	219	0.29
98	9.83	33.48	4.24	219	150	9.10	33.83	2.68	26.21	182	0.39
111	9.71	33.58	3.91	210	200	8.26	34.01	2.20	26.48	156	0.47
126	9.33	33.68	3.40	196	250	7.70	34.05	2.05	26.60	145	0.55
143	9.22	33.78	2.72	188	300	7.25	34.10	1.62	26.70	136	0.62
167	8.77	33.93	2.55	169	400	6.54	34.18	0.80	26.86	120	0.75
187	8.58	34.00	2.31	162	500	5.93	34.23	0.52	26.97	109	0.87
232	7.92	34.02	2.13	151							
303	7.21	34.11	1.55	134							
398	6.56	34.18	0.81	120							
523	5.80	34.23	0.47	107							

a) Possible evaporation; value falls on property curve.

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

67.110

BLACK DOUGLAS; April 19, 1958; 0830 GCT; 34°46'N, 126°19'W; sounding, 2400 fm; wind, 330°, force 4; weather, drizzle; sea, high; wire angle, 12°.

0	14.40	33.19	5.78	332	0	14.40	33.19	5.78	24.74	322	0.00
10	14.40	33.22	5.92	320	10	14.40	33.22	5.92	24.76	320	0.03
28	14.33	33.19	5.96	321	20	14.39	33.22	5.93	24.75	321	0.06
53	14.13	33.19	5.92	317	30	14.32	33.19	5.95	24.76	320	0.10
62	14.10	33.18	5.94	317	50	14.14	33.19	5.93	24.77	319	0.16
71	14.09	33.22	5.91	314	75	14.09	33.21	5.93	24.81	315	0.24
80	14.10	33.19	5.94	316	100	13.90	33.23	5.74	24.86	310	0.32
94	14.02	33.21	5.82	312	150	9.59	33.51	4.93	25.88	214	0.45
107	12.38	33.31	5.52	275	200	8.56	33.74	3.94	26.23	180	0.55
124	10.46	33.30	5.17	242	250	7.90	33.98	3.05	26.51	153	0.63
141	9.83	33.45	4.93	222	300	7.01	34.03	2.42	26.67	138	0.71
163	9.20	33.58	4.91	202	400	6.07	34.03	1.72	26.80	126	0.84
185	8.74	33.69	4.22	187	500	5.40	34.11	1.08	26.95	112	0.97
229	8.20	33.93	3.40	161							
300	7.01	34.03	2.42	138							
390	6.15	34.03	1.76	127							
509	5.34	34.13	1.01	110							

70.52

SPENCER F. BAIRD; April 9, 1958; 0905 GCT; 36°06.5'N, 121°49.5'W; sounding, 590 fm; wind, 320°, force 7; weather, clear; sea, very rough; wire angle, 47°.

0	13.42	33.04	5.78	314	0	13.42	33.04	5.78	24.82	314	0.00
8	13.47	33.04	5.78	315	10	13.46	33.04	5.75	24.81	315	0.03
25	13.46	33.04	5.67	315	20	13.46	33.04	5.68	24.81	315	0.06
32	13.44	33.10	5.63	310	30	13.44	33.08	5.63	24.84	312	0.09
42	13.02	33.23	5.26	293							
49	11.90	33.42	4.56	258							
121a)	9.84	33.77	2.90	-							
145a)	8.95	33.99	2.12	-							
184a)	8.50	34.01	1.90	-							
245a)	7.68	34.09	1.53	-							
412a)	6.54	34.16	0.83	-							
576a)	5.57	34.24	0.39	-							

70.60

BLACK DOUGLAS; April 14, 1958; 0629 GCT; 35°53'N, 122°23'W; sounding, 1650 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

0	14.36	33.12	6.38	327	0	14.36	33.12	6.38	24.68	327	0.00
10	13.58	33.18	6.19	307	10	13.58	33.18	6.19	24.89	307	0.03
29	13.56	33.26	6.14	301	20	13.57	33.23	6.18	24.94	303	0.06
38	13.54	33.26	6.04	300	30	13.56	33.26	6.14	24.96	300	0.09
48	13.50	33.26	5.92	300	50	13.46	33.27	5.86	24.98	298	0.15
57	12.68	33.40	5.24	274	75	10.65	33.48	4.60	25.68	232	0.22
66	11.74	33.47	4.75	252	100	9.38	33.55	4.06	25.94	207	0.27
79	10.16	33.48	4.55	224	150	8.68	33.90	2.72	26.33	170	0.37
92	9.44	33.52	4.25	210	200	8.12	34.07	2.25	26.56	149	0.45
106	9.35	33.57	4.00	205	250	7.72	34.14	1.66	26.66	139	0.52
128	8.74	33.74	3.52	183	300	7.18	34.16	1.43	26.76	130	0.59
155	8.66	33.95	2.68	166	400	6.25	34.23	0.85	26.94	113	0.72
186	8.24	34.04	2.47	154	500	5.72	34.28	0.54	27.05	102	0.83
230	7.92	34.12	1.81	143							
302	7.17	34.16	1.42	129							
393	6.31	34.22	0.88	114							
513	5.70	34.29	0.52	102							

a) Pretrip; depth too uncertain for interpolation.

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

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BLACK DOUGLAS; April 14, 1958; 1122 GCT; 35°32.5'N, 123°07.5'W; sounding, 2000 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 17°.

70.70

0	13.83	33.08	5.96	320	0	13.83	33.08	5.96	24.76	320	0.00
10	13.80	33.04	5.91	322	10	13.80	33.04	5.91	24.74	322	0.03
28	13.50	33.11	5.94	310	20	13.67	33.07	5.91	24.79	317	0.06
55	13.02	33.07	6.02	305	30	13.45	33.11	5.96	24.86	310	0.10
64	12.93	33.07	5.95	303	50	13.16	33.07	6.00	24.90	306	0.16
73	11.26	33.22	5.42	262	75	11.22	33.23	5.40	25.38	261	0.23
85	10.42	33.45	4.54	231	100	9.72	33.63	3.95	25.96	206	0.29
98	9.72	33.62	3.95	207	150	8.90	33.86	2.77	26.27	176	0.38
111	9.62	33.71	3.68	199	200	8.46	34.08	1.96	26.51	153	0.47
127	9.22	33.78	2.89	188	250	7.85	34.11	1.74	26.63	142	0.54
144	8.93	33.84	2.78	178	300	7.42	34.13	1.35	26.70	135	0.62
170	8.82	33.96	2.23	168	400	6.60	34.18	0.99	26.85	121	0.75
191	8.60	34.07	2.01	157	500	5.88	34.21	0.80	26.97	110	0.87
238	7.98	34.11	1.78	144							
312	7.33	34.14	1.19	133							
409	6.52	34.19	0.98	119							
535	5.62	34.22	0.65	106							

BLACK DOUGLAS; April 14, 1958; 1825 GCT; 35°12'N, 123°55'W; sounding, 2300 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 10°.

70.80

0	13.87	-	5.61	-	0	13.87	(33.15)	5.61	(24.81)	(315)	(0.00)
11	13.79	33.15	5.84	314	10	13.80	33.15	5.83	24.82	314	0.03
30	13.80	33.15	5.99	314	20	13.80	33.15	5.90	24.82	314	0.06
59	13.58	33.20	5.83	306	30	13.80	33.15	5.99	24.82	314	0.09
69	11.32	33.33	5.06	255	50	13.60	33.18	5.85	24.88	308	0.16
77	10.94	33.38	4.53	244	75	11.20	33.38	4.50	24.50	249	0.23
91	9.97	33.43	4.51	225	100	9.74	33.49	4.30	24.84	217	0.28
105	9.64	33.51	4.18	214	150	8.52	33.78	3.72	26.25	178	0.39
118	8.88	33.50	4.54	203	200	8.56	34.05	2.17	26.46	158	0.47
136	8.52	33.64	4.35	187	250	7.80	34.07	2.09	26.60	145	0.55
153	8.59	33.83	3.56	174	300	7.40	34.17	1.80	26.73	132	0.62
179	8.74	34.00	2.39	164	400	6.75	34.27	0.80	26.90	116	0.75
201	8.56	34.05	2.17	157	500	5.58	34.26	0.54	27.02	105	0.86
250	7.80	34.07	2.09	145							
326	7.27	34.20	1.22	128							
424	6.55	34.28	0.72	113							
524	5.40	34.24	0.51	102							

BLACK DOUGLAS; April 15, 1958; 0013 GCT; 34°53'N, 124°30'W; sounding, 2260 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 00°.

70.90

0	14.15	33.26	5.94	312	0	14.15	33.26	5.94	24.84	312	0.00
10	14.16	33.23	5.90	315	10	14.16	33.23	5.90	24.81	315	0.03
30	14.13	33.26	5.90	312	20	14.14	33.25	5.90	24.83	313	0.06
59	13.74	33.29	5.89	302	30	14.13	33.26	5.90	24.84	312	0.09
68	13.55	33.28	5.80	299	50	13.78	33.29	5.90	24.94	303	0.16
78	11.73	33.44	4.69	254	75	11.74	33.42	5.71	25.43	256	0.22
92	10.43	33.47	4.43	230	100	9.93	33.49	4.32	25.81	220	0.29
106	9.68	33.51	4.21	215	150	8.88	33.79	3.00	26.21	182	0.39
119	9.44	33.60	3.79	204	200	8.35	33.97	2.42	26.44	160	0.47
137	9.08	33.70	3.31	191	250	7.74	34.04	2.08	26.58	147	0.55
156	8.81	33.83	2.88	178	300	7.28	34.11	1.75	26.70	135	0.62
183	8.46	33.94	2.53	164	400	6.46	34.21	0.95	26.89	117	0.76
204	8.30	33.98	2.31	159	500	5.80	34.22	0.64	26.98	108	0.87
254	7.66	34.04	2.06	146							
331	7.01	34.16	1.40	128							
432	6.20	34.22	0.79	113							
563	5.41	34.21	0.53	104							

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

70.100

BLACK DOUGLAS; April 19, 1958; 2141 GCT; 34°31'N, 125°14'W; sounding, 2400 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 26°.

0	14.09	33.17	5.93	318	0	14.09	33.17	5.93	24.78	318	0.00
8	14.06	33.15	5.96	319	10	14.04	33.15	5.96	24.78	318	0.03
26	13.88	33.14	5.96	316	20	13.95	33.14	5.96	24.79	317	0.06
53	13.58	33.07	6.06	316	30	13.83	33.13	5.97	24.80	316	0.10
61	13.56	33.08	6.01	314	50	13.62	33.08	6.03	24.80	316	0.16
69	13.56	33.06	6.01	315	75	13.56	33.06	5.97	24.81	315	0.24
80	13.52	33.06	5.91	315	100	10.82	33.13	5.58	25.38	261	0.31
92	11.78	33.12a)	5.65	278	150	8.92	33.60	4.70	26.06	196	0.42
104	10.46	33.13	5.56	255	200	8.30	33.89	3.65	26.39	165	0.52
119	9.80	33.31	9.80	231	250	7.40	33.96	2.95	26.56	148	0.60
133	9.14	33.44	4.91	211	300	6.88	34.01	2.16	26.78	137	0.67
155	8.86	33.63	4.68	193	400	6.17	34.11	1.12	26.85	121	0.81
174	8.82	33.80	3.12	180	500	(5.35)	(34.11)	(0.92)	(26.96)	(111)	(0.93)
215	7.88	33.93	4.02	157							
283	7.04	33.98	2.35	142							
372	6.38	34.11	1.25	123							
492	5.42	34.11	0.92	112							

70.110

BLACK DOUGLAS; April 19, 1958; 1432 GCT; 34°13'N, 125°54'W; sounding, 2400+ fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 16°.

0	13.93	33.05	5.93	323	0	13.93	33.05	5.93	24.73	323	0.00
9	13.92	33.10	5.96	319	10	13.92	33.09	5.96	24.76	320	0.03
28	13.91	33.04	5.92	324	20	13.91	33.09	5.94	24.76	320	0.06
55	14.02	33.12	5.83	320	30	13.91	33.05	5.92	24.74	322	0.10
64	14.11	33.23	5.80	314	50	14.00	33.10	5.88	24.74	322	0.16
73	14.14	33.22	5.75	315	75	14.14	33.23	5.75	24.82	314	0.24
85	14.12	33.23	5.75	314	100	11.72	33.29	5.44	25.34	265	0.31
97	12.40	33.28	-	278	150	9.46	33.61	3.83	25.96	204	0.43
110	11.25	33.47	5.39	243	200	8.75	33.92	2.55	26.34	169	0.53
126	10.67	33.46	5.24	235	250	7.97	34.04	2.00	26.53	151	0.61
143	9.48	33.58	3.87	207	300	7.00	34.07	1.75	26.70	135	0.68
167	9.37	33.72	2.75	194	400	6.60	34.18	0.86	26.85	121	0.82
187	8.98	33.88	2.63	176	500	5.94	34.22	0.79	26.96	110	0.94
232	8.24	34.00	2.13	157							
302	6.99	34.07	1.75	134							
395	6.66	34.18	0.90	122							
516	5.78	34.22	0.79	108							

73.55

BLACK DOUGLAS; April 12, 1958; 2020 GCT; 35°27.5'N, 121°37.5'W; sounding, 550 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 06°.

0	14.19	33.01	6.03	332	0	14.19	33.01	6.03	24.63	332	0.00
10	13.54	33.04	6.12	316	10	13.54	33.04	6.12	24.80	316	0.03
28	13.32	33.01a)	6.04	315	20	13.40	33.02	6.10	24.81	315	0.06
38	12.68	33.14	5.68	293	30	13.22	33.02	5.98	24.84	312	0.10
48	11.93	33.21	5.42	274	50	11.68	33.20	5.44	25.27	271	0.15
57	11.34	33.26	5.26	260	75	10.38	33.50	4.24	25.73	227	0.22
66	10.77	33.43	4.63	238	100	9.66	33.58	3.88	25.92	209	0.27
79	10.27	33.51	4.15	224	150	8.64	33.86	2.94	26.31	172	0.37
93	9.92	33.58	3.82	213	200	8.08	34.01	2.23	26.50	154	0.45
106	9.32	33.58	4.12	204	250	7.60	34.13	1.65	26.68	138	0.52
128	8.82	33.69a)	3.56	188	300	7.40	34.20	1.35	26.75	131	0.59
155	8.60	33.89	2.71	170	400	6.32	34.20	1.15	26.90	116	0.72
186	8.22	33.98	2.36	158	500	5.62	34.22	0.70	27.01	106	0.84
231	7.74	34.09	1.78	142							
303	7.40	34.20	1.33	130							
394	6.39	34.20	1.16	117							
515	5.55	34.23	0.66	104							

a) Possible evaporation; value falls on property curve.

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

BLACK DOUGLAS; April 12, 1958; 1647 GCT; 35°18'N, 121°58.5'W; sounding, 1200 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 00°.

73.60

0	14.06	32.97	5.90	332	0	14.06	32.97	5.90	24.63	332	0.00
10	13.72	33.02	6.00	321	10	13.72	33.02	6.00	24.75	321	0.03
30	13.60	32.99	5.98	321	20	13.65	33.00	5.99	24.75	321	0.06
40	13.44	33.04	6.04	315	30	13.60	32.99	5.98	24.75	321	0.10
49	12.88	33.14	5.71	296	50	12.78	33.15	5.68	25.02	295	0.16
59	11.19	33.22	5.57	260	75	10.15	33.25	5.40	25.58	241	0.22
68	10.22	33.20	5.56	246	100	9.04	33.35	4.87	25.84	216	0.28
82	9.55	33.21	5.41	235	150	8.34	33.78	3.49	26.28	174	0.38
95	9.12	33.31	5.00	221	200	7.83	33.98	3.08	26.52	152	0.46
109	8.86	33.46	4.69	206	250	7.20	34.02	1.95	26.64	141	0.54
131	8.60	33.65	3.94	188	300	6.70	34.02	1.63	26.71	134	0.61
158	8.27	33.81	3.47	171	400	(6.20)	(34.20)	(0.72)	(26.92)	(115)	(0.74)
190	7.94	33.95a)	3.15	156							
235	7.34	34.02	2.15	142							
307	6.63	34.02	1.55	133							
398	6.22	34.18	0.74	116							

BLACK DOUGLAS; April 12, 1958; 1003 GCT; 34°58'N, 122°39'W; sounding, 2229 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 03°.

73.70

0	14.03	33.22	5.91	314	0	14.03	33.22	5.91	24.82	314	0.00
10	14.04	33.26	5.75	310	10	14.04	33.26	5.75	24.86	310	0.03
30	13.77	33.24	5.90	306	20	13.97	33.26	5.77	24.87	309	0.06
54	12.89	33.36	5.56	281	30	13.77	33.24	5.90	24.90	306	0.09
63	12.71	33.37a)	5.51	266	50	13.62	33.26	5.76	24.95	302	0.15
73	11.59	33.36	5.09	257	75	11.48	33.36	5.04	25.44	255	0.22
83	11.04	33.40	4.70	245	100	9.30	33.33	4.91	25.79	222	0.28
96	9.43	33.30	4.92	227	150	8.39	33.70	3.87	26.23	180	0.39
110	9.08	33.47	4.34	208	200	7.88	33.98	3.28	26.51	153	0.47
128	8.96	33.64	3.69	194	250	7.14	34.01	2.53	26.65	140	0.54
146	8.43	33.69	3.89	183	300	6.68	34.06	1.70	26.74	132	0.62
168	8.22	33.81	3.80	171	400	6.04	34.15	0.86	26.90	116	0.74
191	8.03	33.96	3.49	157	500	5.60	34.21	0.36	27.00	106	0.86
235	7.30	34.00	2.76	143							
307	6.63	34.06	1.59	130							
398	6.07	34.14	0.89	118							
520	5.54	34.25	0.23	103							

BLACK DOUGLAS; April 12, 1958; 0253 GCT; 34°38'N, 123°21.5'W; sounding, 2150 fm; wind, 340°, force 4; weather, clear; sea, very rough; wire angle, 10°.

73.80

0	14.33	33.22	5.85	319	0	14.33	33.22	5.85	24.77	319	0.00
10	14.29	33.26	5.95	315	10	14.29	33.26	5.95	24.81	315	0.03
29	14.06	33.25	5.99	311	20	14.15	33.26	5.98	24.83	313	0.06
52	13.76	33.27	5.88	304	30	14.05	33.25	5.99	24.85	311	0.09
61	11.84	33.35	5.36	263	50	13.78	33.26	5.90	24.91	305	0.16
70	11.07	33.32	5.17	251	75	10.54	33.33	5.44	25.58	242	0.22
79	10.16	33.35	5.62	234	100	9.43	33.44	4.43	25.85	216	0.28
97	9.52	33.41	4.59	219	150	8.80	33.90	2.76	26.31	172	0.38
106	9.28	33.60	4.02	202	200	8.13	34.00	2.25	26.49	155	0.46
124	9.17	33.76	3.27	188	250	7.60	34.06	1.93	26.62	143	0.54
142	8.91	33.84	3.01	179	300	7.04	34.10	1.66	26.72	133	0.61
168	8.71	33.93	2.60	169	400	6.12	34.10	1.12	26.84	122	0.74
186	8.34	33.98	2.39	159	500	5.72	34.21	0.60	26.99	108	0.86
231	7.82	34.04	2.04	148							
304	7.00	34.10a)	1.63	132							
396	6.16	34.09	1.15	122							
516	5.70	34.22	0.56	107							

a) Possible evaporation; value falls on property curve.

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

73.90

BLACK DOUGLAS; April 11, 1958; 2020 GCT; 34°18'N, 124°04'W; sounding, 2300 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	14.05	33.26	6.02	310	0	14.05	33.26	6.02	24.86	310	0.00
9	14.03	33.30	5.94	308	10	14.02	33.30	5.93	24.88	308	0.03
27	13.94	33.26	5.92	308	20	13.97	33.28	5.92	24.88	308	0.06
54	13.94	33.26	5.96	308	30	13.94	33.26	5.93	24.88	308	0.09
64	12.45	33.35	5.41	274	50	13.94	33.26	5.95	24.88	308	0.15
72	11.42	33.36	5.08	255	75	11.02	33.38	5.24	25.54	246	0.22
84	10.16	33.48	5.71	224	100	9.80	33.48	4.47	25.82	218	0.28
96	9.91	33.48	4.47	220	150	8.74	33.80	3.36	26.24	179	0.38
108	9.50	33.50	4.48	212	200	8.05	33.98	2.54	26.49	155	0.47
124	9.08	33.58	4.18	200	250	7.43	34.03	2.02	26.62	143	0.54
140	8.87	33.74	3.55	185	300	7.10	34.10	1.58	26.72	134	0.62
164	8.56	33.86	3.15	171	400	6.38	34.16	0.90	26.86	120	0.75
183	8.30	33.95	2.77	161							
228	7.64	34.01	2.22	148							
298	7.13	34.09	1.60	135							
392	6.46	34.15	1.00	122							
424p	6.21	34.19	0.75	115							

77.55

SPENCER F. BAIRD; April 9, 1958; 2335, 2350 GCT; 34°57.5'N, 121°13.5'W; sounding, 320 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 35°, 41°.

0	14.11	33.45	5.78	298
9	14.14	33.41	5.76	301
22a)	14.00	33.48	5.18	294
31a)	13.48	33.56	4.27	278
39a)	12.26	33.66	3.65	247
55a)	11.04	33.72	3.24	222
70a)	10.24	33.82	2.85	201
82a)	9.94	33.86	2.62	193
103a)	9.68	33.90	2.37	186
136a)	9.37	33.98	2.27	175
168a)	8.88	34.02	2.22	165
217a)	8.44	34.06	1.91	155
295a)	8.15	34.14	1.54	145

77.60

SPENCER F. BAIRD; April 10, 1958; 0313 GCT; 34°52'N, 121°35.5'W; sounding, 1000 fm; wind, 330°, force 6; weather, partly cloudy; sea, very rough; wire angle, 31°.

0	13.64	33.44	5.72	289	0	13.64	33.44	5.72	25.08	289	0.00
8	13.66	33.44	5.73	290	10	13.63	33.44	5.73	25.08	290	0.03
30	13.57	33.43	5.68	288	20	13.62	33.43	5.73	25.08	289	0.06
39	13.47	33.45	-	285	30	13.57	33.43	5.68	25.09	288	0.09
52	13.28	33.45	5.53	281	50	13.32	33.45	5.54	25.15	282	0.14
60	12.60	33.40	5.01	272	75	10.66	33.46	4.21	25.65	235	0.21
68	11.65	33.42	4.62	254	100	9.68	33.56	3.89	25.91	210	0.26
83	10.22	33.49	4.01	225	150	8.54	33.90	2.75	26.36	168	0.36
100	9.68	33.56	3.89	210	200	8.33	34.08	1.84	26.52	152	0.44
111	9.29	33.60	3.76	202	250	7.85	34.14	1.47	26.64	141	0.52
129	8.89	33.77	3.13	183	300	7.27	34.15	1.28	26.74	132	0.59
160	8.42	33.94	2.64	164	400	6.50	34.21	0.74	26.89	118	0.72
192	8.39	34.05	2.02	155	500	(5.63)	(34.22)		(27.00)	(106)	(0.83)
248	7.87	34.14	1.49	141							
314	7.14	34.16	1.22	130							
358p	6.82	34.20	0.97	122							
477p	5.85	34.22	0.50	109							

a) Pretrip; depth too uncertain for interpolation.

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

SPENCER F. BAIRD; April 10, 1958; 0850 GCT; 34°22'N, 122°16'W; sounding, 2000+ fm; wind, 340°, force 7; weather, clear; sea, high; wire angle, 40°.

77.70

0	13.78	33.02	5.92	322	0	13.78	33.02	5.92	24.74	322	0.00
7	13.84	32.99	5.92	327	10	13.84	32.99	5.90	24.68	327	0.03
27	13.88	33.04	5.89	323	20	13.85	33.03	5.89	24.71	324	0.06
49	13.95	33.35	5.76	302	30	13.93	33.09	5.80	24.76	320	0.10
54	13.33	33.37	5.53	288	50	13.92	33.36	5.72	24.95	301	0.16
64	12.62	33.49	4.42	266	75	11.21	33.60	3.80	25.67	233	0.23
70	11.19	33.53	4.21	238	100	10.11	33.66	3.58	25.91	210	0.28
83	10.86	33.61	3.78	227							
93	10.42	33.64	3.64	217							
108	9.85	33.70	3.51	204							
220a)	8.74	34.09	2.10	-							
340a)	7.43	34.24	1.11	-							
501a)	6.24	34.28	-	-							

SPENCER F. BAIRD; April 10, 1958; 1325 GCT; 34°03'N, 122°57.5'W; sounding, 2000+ fm; wind, 360°, force 6; weather, overcast; sea, very high; wire angle, 25°.

77.80

0	14.55	33.30	5.78	317	0	14.55	33.30	5.78	24.79	317	0.00
9	14.56	33.29	5.79	318	10	14.56	33.29	5.79	24.78	318	0.03
31	14.56	33.29	5.82	318	20	14.56	33.29	5.80	24.78	318	0.06
57	14.55	33.31	5.78	317	30	14.56	33.29	5.81	24.78	318	0.10
65	14.55	33.33	5.78	317	50	14.56	33.30	5.78	24.79	317	0.16
85	12.44	33.35	5.47	274	75	14.25	33.33	5.74	24.87	309	0.24
102	10.87	33.35	5.05	246	100	11.00	33.35	5.07	25.51	248	0.31
115	10.21	33.39	4.96	232	150	9.21	33.62	3.78	26.02	200	0.42
131	9.48	33.46	4.74	215	200	8.57	33.94	2.30	26.38	166	0.51
153	9.18	33.64	3.63	197	250	7.86	34.03	1.99	26.56	149	0.59
178	8.78	33.84	2.92	176	300	7.33	34.09	1.60	26.68	137	0.67
205	8.51	33.95	2.21	164	400	6.48	34.17	0.96	26.86	120	0.80
258	7.76	34.04	1.96	146	500	5.72	34.22	0.69	26.99	107	0.92
340	7.00	34.13	1.22	130	600	(5.09)	(34.24)	(0.38)	(27.08)	(99)	(1.03)
449	6.05	34.20	0.81	113							
595	5.17	34.24	0.38	99							

BLACK DOUGLAS; April 11, 1958; 1055 GCT; 33°31.5'N, 123°30'W; sounding, 2400 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 18°.

77.90

0	14.97	33.43	5.77	317	0	14.97	33.43	5.77	24.79	317	0.00
10	14.96	33.43	5.81	317	10	14.96	33.43	5.81	24.79	317	0.03
28	14.96	33.42	5.82	317	20	14.96	33.42	5.81	24.79	317	0.06
55	14.96	33.43	5.90	317	30	14.96	33.42	5.82	24.79	317	0.10
64	14.94	33.43	5.84	316	50	14.96	33.42	5.88	24.79	317	0.16
73	14.89	33.42	5.80	316	75	14.88	33.42	5.78	24.80	316	0.24
85	14.20	33.39	5.67	304	100	11.58	33.39	5.34	25.43	256	0.31
98	11.82	33.39	5.38	259	150	9.24	33.62	4.08	26.03	199	0.42
111	10.35	33.37	5.06	235	200	8.36	33.96	2.76	26.43	161	0.52
128	10.00	33.46	4.68	224	250	7.86	34.03	2.26	26.55	149	0.60
145	9.39	33.58	4.22	205	300	7.30	34.08	2.04	26.67	138	0.67
171	8.82	33.82	3.26	178	400	6.40	34.17	1.16	26.87	119	0.80
193	8.46	33.94	2.86	164	500	5.88	34.25	0.60	26.99	108	0.92
240	7.98	34.02	2.31	151							
315	7.14	34.09	1.99	134							
414	6.32	34.18	0.96	117							
544	5.64	34.29	0.43	101							

a) Pretrip; depth too uncertain for interpolation.

S10

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

80.51

BLACK DOUGLAS; April 9, 1958; 2114 GCT; 34°26.5'N, 120°32.5'W; sounding, 45 fm; wind, 280°, force 5; weather, clear; sea, very rough; wire angle, 10°.

0	13.72	33.51	5.46	286	0	13.72	33.51	5.46	25.12	286	0.00
15	13.62	33.56	5.46	280	10	13.66	33.55	5.46	25.16	282	0.03
29	12.01	33.57	4.32	250	20	13.59	33.56	5.45	25.18	279	0.06
48	11.35	33.58	4.00	237	30	12.00	33.57	4.32	25.51	249	0.08
58	10.98	33.64	3.77	226	50	11.30	33.58	3.96	25.64	236	0.13

80.55

BLACK DOUGLAS; April 10, 1958; 0223 GCT; ^{a)} 34°19'N, 120°48'W; sounding, 420 fm; wind, 280°, force 7; weather, clear; sea, very rough; wire angle, missing.

0	13.90	33.45	5.79	294	0	13.90	33.45	5.79	25.03	294	0.00
9	13.90	33.47	5.88	292	10	13.89	33.47	5.88	25.05	292	0.03
32	13.63	33.47	5.69	287	20	13.75	33.47	5.76	25.08	289	0.06
41	13.60	33.46	5.56	287	30	13.64	33.47	5.71	25.10	287	0.09
54	12.28	33.51	4.65	258	50	13.45	33.46	5.34	25.14	283	0.14
63	10.90	33.53	4.29	233	75	10.42	33.53	4.24	25.76	224	0.21
72	10.55	33.53	4.24	227	100	10.02	33.67	3.55	25.93	208	0.26
88	10.36	33.60	3.78	218	150	9.32	33.92	2.68	26.24	179	0.36
104	9.92	33.68	3.51	206	200	8.70	34.01	2.40	26.41	162	0.45
116	9.80	33.75	3.27	199	250	7.98	34.10	1.85	26.59	146	0.52
137	9.49	33.84	2.97	187	300	7.48	34.19	1.36	26.74	132	0.60
170	9.18	33.96	2.52	174	400	6.61	34.29	0.74	26.94	113	0.72
203	8.62	34.02	2.38	160	500	5.90	34.35	0.67	27.07	100	0.83
254	7.98	34.11	1.81	144							
330	7.23	34.22	1.11	127							
429	6.38	34.31	0.60	108							
562b)	5.73	34.36	0.72	97							

80.60

BLACK DOUGLAS; April 10, 1958; 0555 GCT; 34°09'N, 121°09'W; sounding, 1250 fm; wind, 300°, force 7; weather, clear; sea, high; wire angle, 37°.

0	13.84	33.33	5.88	302	0	13.84	33.33	5.88	24.95	302	0.00
8	13.82	33.35	5.98	300	10	13.82	33.35	5.97	24.97	300	0.03
28	13.82	33.33	5.88	302	20	13.82	33.34	5.90	24.97	300	0.06
36	13.80	33.34	6.12	300	30	13.82	33.34	5.95	24.97	300	0.09
47	12.91	33.49	5.05	272	50	12.78	33.49	5.03	25.29	269	0.15
56	12.56	33.49	5.00	265	75	11.23	33.65	4.35	25.70	230	0.21
63	12.08	33.57	4.87	251	100	10.08	33.72	3.32	25.95	206	0.26
78	11.07	33.67	4.01	226	150	9.28	33.99	2.38	26.30	173	0.36
92	10.30	33.69	3.46	211	200	8.84	34.11	2.04	26.46	158	0.44
102	10.05	33.74	3.28	204	250	8.10	34.13	1.64	26.60	145	0.52
120	9.81	33.81	3.07	194	300	7.45	34.16	1.28	26.72	134	0.59
146	9.34	33.97	2.41	175	400	6.72	34.24	1.02	26.88	118	0.72
173	9.15	34.04	2.23	167	500	(5.99)	(34.29)	(0.53)	(27.01)	(106)	(0.84)
214	8.66	34.12	1.94	154							
278	7.68	34.14	1.39	138							
366	6.94	34.22	1.10	122							
492	6.04	34.28	0.55	107							

a) Owing to difficulty in tripping Nansen bottles, five casts were made on this station; times of observation, wire angles and depths of casts were not recorded.

b) Possible pretrip; depth uncertain. Alternate depth, 537 meters.

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

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BLACK DOUGLAS; April 10, 1958; 1335 GCT; 33°47'N, 121°54'W; sounding, 2000 fm; wind, 300°, force 6; weather, overcast; sea, very rough; wire angle, 13°.

80.70

0	13.91	33.20	6.09	312	0	13.91	33.20	6.09	24.84	312	0.00
10	13.89	33.19	5.98	312	10	13.89	33.19	5.98	24.84	312	0.03
29	13.94	33.24	5.94	310	20	13.90	33.22	5.96	24.86	310	0.06
43	13.85	33.33	5.87	302	30	13.94	33.26	5.93	24.88	308	0.09
52	12.73	33.40	5.20	275	50	13.40	33.37	5.56	25.08	290	0.15
62	11.58	33.37	4.85	256	75	10.20	33.34	4.82	25.64	236	0.22
71	10.86	33.40	4.60	242	100	9.50	33.55	4.07	25.92	209	0.28
89	9.83	33.46	4.42	221	150	8.77	33.78	3.27	26.23	180	0.37
102	9.48	33.57	4.04	207							
116	9.72	33.68	3.39	202							
138	9.03	33.74	3.32	188							
164	8.52	33.81	3.16	175							
200	8.56	33.82a)	2.99	-							
249b)	7.94	34.11	1.73	144							
422b)	6.24	34.18	1.08	116							
559b)	5.36	34.29	0.43	98							

BLACK DOUGLAS; April 10, 1958; 2020 GCT; 33°27'N, 122°35'W; sounding, 2200 fm; wind, 330°, force 6; weather, cloudy; sea, very rough; wire angle, 02°.

80.80

0	14.23	33.22	5.81	317	0	14.23	33.22	5.81	24.79	317	0.00
10	14.22	33.27	5.90	314	10	14.22	33.27	5.90	24.82	314	0.03
29	14.22	33.22	5.95	317	20	14.22	33.23	5.93	24.80	316	0.06
59	14.21	33.24	5.85	315	30	14.22	33.22	5.95	24.79	317	0.09
252c)	8.02	34.02	2.05	152	50	14.21	33.23	5.88	24.80	316	0.16
329	7.00	34.10	1.25	132							
429	6.00	34.16	0.85	115							
563	5.27	34.24	0.42	101							

BLACK DOUGLAS; April 11, 1958; 0327 GCT; 33°06'N, 123°14'W; sounding, 2150 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 18°.

80.90

0	15.19	33.44	5.83	320	0	15.19	33.44	5.83	24.75	320	0.00
9	15.16	33.44	5.81	319	10	15.16	33.44	5.81	24.76	319	0.03
28	15.18	33.47	5.83	318	20	15.16	33.46	5.82	24.77	318	0.06
53	15.18	33.45	5.76	319	30	15.18	33.46	5.83	24.77	318	0.10
62	15.18	33.48	5.76	317	50	15.18	33.46	5.78	24.76	319	0.16
70	15.20	33.48	5.86	317	75	15.18	33.48	5.84	24.79	317	0.24
82	14.96	33.49	5.72	312	100	12.55	33.45	5.47	25.30	268	0.31
94	13.42	33.48	5.58	283	150	9.30	33.68	3.45	26.06	196	0.43
107	11.18	33.40	5.20	247	200	8.61	34.08	2.08	26.48	156	0.52
123	9.90	33.48	4.71	220	250	8.20	34.24	1.44	26.67	138	0.59
140	9.50	33.59	4.09	206	300	7.80	34.29	1.03	26.76	129	0.66
166	9.00	33.86	2.78	178	400	7.00	34.31	0.66	26.90	116	0.79
186	8.75	34.02	2.34	162							
233	8.38	34.19	1.63	144							
305	7.79	34.29	1.01	128							
312p	7.68	34.27r	0.98	-							
412p	6.91	34.31	0.62	115							

- a) Possible evaporation; value does not fall on property curve.
 b) Pretrip; depth too uncertain for interpolation.
 c) Possible pretrip, 252 to 563 meters.

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

80.110

BLACK DOUGLAS; April 6, 1958; 1708, 1725, 1758 GCT; 32°29'N, 124°34.5'W; sounding, 2500 fm; wind, 240°, force 6; weather, partly cloudy; sea, high; wire angle, 18°, 21°, 21°.

0	14.55	33.21	5.52	324	0	14.55	33.21	5.52	24.72	324	0.00
9	14.54	33.22	5.74	323	10	14.54	33.22	5.75	24.72	323	0.03
28	14.54	33.22	5.78	323	20	14.54	33.22	5.77	24.72	323	0.06
56	14.53	33.22	5.80	323	30	14.54	33.22	5.78	24.72	323	0.10
					50	14.54	33.22	5.79	24.72	323	0.16
64	14.53	33.21	5.79	324	75	14.49	33.19	5.78	24.71	324	0.24
73	14.48	33.18	5.78	325	100	13.18	33.52	5.59	25.22	275	0.32
85	14.94	33.53	5.72	308	150	10.08	33.54	5.16	25.81	239	0.44
98	13.34	33.52	5.60	278	200	(8.80)	(33.79)	(4.00)	(26.22)	(181)	(0.55)
					250	(8.03)	(33.90)	(3.48)	(26.42)	(162)	(0.63)
109	12.36	33.52	5.48	259	300	(7.25)	(33.97)	(2.74)	(26.59)	(145)	(0.71)
148	10.15	33.53	5.21	220	400	6.52	34.06	1.70	26.76	129	(0.86)
196	8.84	33.78	4.03	182	500	5.94	34.17	0.98	26.93	113	(0.98)
321	6.92	34.00	2.36	138							
422	6.44	34.07	1.61	127							
551	5.42	34.28	0.51	100							

80.130

BLACK DOUGLAS; April 6, 1958; 0412, 0433, 0449 GCT; 31°49'N, 125°56'W; sounding, 2400 fm; wind, 260°, force 4; weather, drizzle; sea, very rough; wire angle, 10°, 02°, 02°.

0	15.32	33.36	5.33	329	0	15.32	33.36	5.33	24.66	329	0.00
10	15.33	33.42	5.34	324	10	15.33	33.42	5.34	24.71	324	0.03
29	15.34	33.39	5.47	327	20	15.33	33.40	5.40	24.69	326	0.06
58	15.44	33.66u	5.37	-	30	15.34	33.40	5.46	24.68	327	0.10
67	15.37	33.40	5.39	327	50	15.41	33.40	5.40	24.68	327	0.16
76	15.40	33.42	5.67	326	75	15.39	33.40	5.65	24.68	327	0.24
88	15.32	33.42	5.73	324	100	14.42	33.67	5.67	25.10	288	0.32
103	14.02	33.68	5.64	279	150	10.15	33.48	5.30	25.76	225	0.45
					200	8.96	33.80	3.92	26.20	182	0.56
119	13.06	33.53	5.60	272	250	8.26	34.02	2.40	26.48	156	0.64
136	11.39	33.51	5.52	243	300	7.60	34.06	2.00	26.62	143	0.72
					400	6.67	34.12	1.12	26.80	126	0.86
155	9.84	33.48	5.22	220	500	5.97	34.22	0.58	26.96	110	0.98
182	9.06	33.75	4.50	187							
203	8.93	33.84	3.23	178							
252	8.22	34.02	2.38	155							
328	7.27	34.07	1.84	138							
427	6.50	34.40u	0.86	-							
557	5.57	34.29	0.48	100							

80.145

BLACK DOUGLAS; April 5, 1958; 1931, 1959 GCT; 31°18.5'N, 126°58'W; sounding, 2400 fm; wind, 250°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°, 22°.

0	15.57	33.37		333	0	15.57	33.37		24.62	333	0.00
9	15.57	33.37		333	10	15.56	33.37		24.62	333	0.03
28	15.53	33.39		331	20	15.54	33.37		24.62	333	0.07
54	15.54	33.40		331	30	15.53	33.40		24.64	331	0.10
63	15.54	33.40		331	50	15.54	33.40		24.64	331	0.17
72	15.57	33.44		328	75	15.57	33.45		24.68	327	0.25
84	15.56	33.45		327	100	13.92	33.40		24.98	299	0.33
96	14.87	33.40		317	150	10.36	33.45		25.70	230	0.46
					200	8.73	33.82		26.26	177	0.56
114	12.58	33.42		270	250	7.99	33.97		26.49	155	0.65
131	11.65	33.42		254	300	7.42	34.03		26.62	143	0.73
148	10.52	33.44		233	400	6.68	34.15		26.82	124	0.87
193	8.86	33.78		182	500	5.98	34.21		26.95	111	0.99
239	8.12	33.95		158							
311	7.31	34.04		140							
404	6.65	34.16		123							
523	5.81	34.22		108							

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

PAOLINA-T; April 2, 1958; 0215 GCT; 34°14.5'N, 119°55'W; sounding, 310 fm; wind, 290°, force 4; weather, rain; sea, rough; wire angle, 00°.

82.47

0	14.82	33.45	6.03	312	0	14.82	33.45	6.03	24.84	312	0.00
10	14.84	33.41	5.79	315	10	14.84	33.41	5.79	24.81	315	0.03
30	13.93	33.53	5.44	288	20	14.69	33.42	5.65	24.84	312	0.06
40	13.06	33.58	5.83	268	30	13.93	33.53	5.44	25.09	288	0.09
50	12.40	33.61	4.57	254	50	12.40	33.61	4.57	25.45	254	0.15
60	11.83	33.62	4.09	242	75	10.82	33.69	3.28	25.81	220	0.21
70	11.20	33.65	3.49	229	100	10.10	33.80	2.78	26.02	200	0.26
84	10.37	33.76	3.01	207	150	9.53	34.02	2.15	26.29	174	0.35
99	10.14	33.80	2.81	201	200	8.94	34.13	1.58	26.47	157	0.44
113	9.93	33.89	2.67	190	250	8.47	34.16	1.44	26.56	148	0.52
137	9.70	33.99	2.41	179	300	8.00	34.21	0.95	26.68	137	0.59
166	9.32	34.04	1.91	170	400	7.28	34.23	0.75	26.80	126	0.72
199	8.97	34.13	1.61	158	500	(6.57)	(34.28)	(0.26)	(26.94)	(112)	(0.85)
248	8.50	34.16	1.46	149							
296	8.02	34.21	0.97	138							
398	7.30	34.23	0.76	127							
498	6.59	34.28	0.28	113							

PAOLINA-T; April 1, 1958; 2214 GCT; 34°09'N, 119°33.5'W; sounding, 130 fm; wind, 220°, force 3; weather, rain; sea, rough; wire angle, 03°.

83.43

0	14.96	33.42	5.81	317	0	14.96	33.42	5.81	24.79	317	0.00
9	14.96	33.45	5.88	315	10	14.96	33.46	5.87	24.82	314	0.03
29	14.82	33.52	5.75	307	20	14.94	33.49	5.83	24.85	311	0.06
49	13.10	33.56	4.99	270	30	14.82	33.52	5.75	24.89	307	0.09
74	11.50	33.58	4.08	240	50	13.05	33.56	4.95	25.29	269	0.15
97	10.76	33.66	3.57	220	75	11.47	33.58	4.07	25.60	239	0.21
122	10.22	33.77	3.18	204	100	10.66	33.67	3.53	25.82	218	0.27
160	9.13	34.09	1.99	163	150	9.35	34.03	2.25	26.32	171	0.37
199	8.85	34.17	1.58	153	200	(8.84)	(34.18)	(1.56)	(26.52)	(152)	(0.46)

PAOLINA-T; April 2, 1958; 0715 GCT; 33°52'N, 120°07.5'W; sounding, 71 fm; wind, 270°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°.

83.51

0	14.21	33.51	5.65	295	0	14.21	33.51	5.65	25.01	295	0.00
10	14.20	33.48	5.60	297	10	14.20	33.48	5.60	25.00	297	0.03
29	13.81	33.53	5.47	286	20	14.08	33.50	5.54	25.03	294	0.06
48	11.71	33.60	4.21	242	30	13.77	33.53	5.43	25.11	286	0.09
72	11.26	33.58	3.99	236	50	11.65	33.60	4.19	25.59	241	0.14
95	10.52	33.69	3.43	214	75	11.18	33.59	3.92	25.66	234	0.20
117	10.18	33.82	3.09	199	100	10.25	33.70	3.38	25.92	210	0.26

PAOLINA-T; April 2, 1958; 1042 GCT; 33°44.5'N, 120°23'W; sounding, 630 fm; wind, 270°, force 4; weather, partly cloudy; sea, high; wire angle, 10°.

83.55

0	14.12	33.50	5.70	294	0	14.12	33.50	5.70	25.03	294	0.00
10	14.12	33.51	5.93	294	10	14.12	33.51	5.93	25.03	294	0.03
30	13.41	33.51	5.42	280	20	14.03	33.51	5.91	25.05	292	0.06
44	12.37	33.58	4.52	255	30	13.41	33.51	5.42	25.18	280	0.09
54	11.30	33.66	3.84	230	50	11.78	33.64	4.07	25.60	240	0.14
63	10.40	33.56	3.82	222	75	10.20	33.69	3.28	25.92	210	0.20
73	10.25	33.68	3.32	211	100	9.74	33.82	2.80	26.09	193	0.25
92	9.66	33.74	3.04	197	150	9.40	33.99	2.23	26.28	175	0.34
107	9.80	33.87	2.60	190	200	9.01	34.09	1.93	26.43	161	0.42
122	9.64	33.92	2.47	184	250	8.47	34.20	1.32	26.60	145	0.50
145	9.44	33.97	2.27	177	300	8.02	34.24	1.12	26.69	136	0.58
174	9.18	34.06	2.09	166	400	7.12	34.26	0.84	26.83	123	0.71
212	8.93	34.11	1.80	158	500	6.03	34.29	0.65	27.01	106	0.83
264	8.30	34.22	1.25	141	600	(5.44)	(34.33)		(27.11)	(96)	(0.93)
346	7.75	34.25	1.00	131							
448	6.50	34.26	0.74	114							
589	5.53	34.33	0.51	97							

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

83.60

PAOLINA-T; April 2, 1958; 1449 GCT; 33°35'N, 120°43'W; sounding, 800 fm; wind, 220°, force 4; weather, cloudy; sea, high; wire angle, 16°.

0	14.48	33.30	5.65	316	0	14.48	33.30	5.65	24.80	316	0.00
10	14.48	33.33	5.76	314	10	14.48	33.33	5.76	24.82	314	0.03
29	14.47	33.31	5.80	315	20	14.48	33.31	5.78	24.81	315	0.06
43	14.24	33.38	5.88	305	30	14.47	33.32	5.81	24.81	315	0.09
52	13.93	33.38	5.88	299	50	14.00	33.38	5.88	24.96	300	0.16
61	13.60	33.41	5.66	291	75	12.23	33.39	5.20	25.31	268	0.23
70	12.86	33.40	5.27	277	100	10.22	33.38	4.84	25.67	233	0.29
87	10.68	33.33	5.03	244	150	9.22	33.71	3.31	26.09	193	0.40
100	10.22	33.38	4.84	233	200	8.54	33.97	2.24	26.41	163	0.49
113	9.69	33.44	4.53	220	250	8.04	34.08	1.70	26.57	148	0.57
135	9.46	33.62	3.71	203	300	7.47	34.09	1.53	26.65	140	0.64
162	9.03	33.79	3.01	184	400	6.83	34.22	1.09	26.85	121	0.78
196	8.58	33.96	2.30	164	500	6.27	34.30	0.68	26.99	108	0.90
245	8.12	34.08	1.73	149							
322	7.28	34.09	1.47	137							
418	6.74	34.25	1.01	118							
553	5.94	34.31	0.56	103							

87.35

PAOLINA-T; April 6, 1958; 1405 GCT; 33°50'N, 118°37.5'W; sounding, 350 fm; wind, 140°, force 5; weather, cloudy; sea, very rough; wire angle, 17°.

0	15.34	33.42	5.93	325	0	15.34	33.42	5.93	24.70	325	0.00
10	15.34	33.44	5.85	324	10	15.34	33.44	5.85	24.72	324	0.03
20	15.32	33.46	5.85	322	20	15.32	33.46	5.85	24.74	322	0.06
38	14.52	33.52	5.58	301	30	15.25	33.47	5.82	24.76	320	0.10
48	12.87	33.53	4.75	268	50	12.65	33.53	4.62	25.34	264	0.16
57	11.97	33.58	4.07	248	75	10.76	33.68	3.73	25.81	220	0.22
76	10.75	33.68	3.72	220	100	10.38	33.71	3.42	25.91	210	0.27
89	10.40	33.70	3.46	212	150	9.80	33.92	2.88	26.17	186	0.37
102	10.36	33.72	-	210	200	9.02	34.15	2.07	26.47	157	0.46
115	10.15	33.81	3.18	200	250	8.70	34.17	1.77	26.54	150	0.54
136	9.93	33.89	3.01	190	300	8.41	34.30	1.49	26.69	136	0.61
162	9.66	33.95	2.68	182	400	7.71	34.36	0.84	26.84	122	0.74
193	9.08	34.14	2.11	159	500	6.65	34.38	0.40	27.00	107	0.86
236	8.79	34.16	1.85	152							
309	8.38	34.31	1.44	135							
400	7.71	34.36	0.84	122							
523	6.42	34.38	0.34	104							

87.40

PAOLINA-T; April 6, 1958; 1035 GCT; 33°40'N, 118°58.5'W; sounding, 480 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 08°.

0	14.79	33.54	5.24	305	0	14.79	33.54	5.24	24.92	305	0.00
10	14.68	33.49	5.07	306	10	14.68	33.49	5.07	24.90	306	0.03
30	13.70	33.58	4.89	280	20	14.63	33.49	5.06	24.92	305	0.06
40	12.96	33.53	4.16	270	30	13.70	33.58	4.89	25.18	280	0.09
50	11.76	33.49	3.99	251	50	11.76	33.49	3.99	25.48	251	0.14
60	11.50	33.53	4.21	243	75	10.69	33.58	4.00	25.73	227	0.20
69	11.10	33.56	4.03	234	100	10.14	33.70	3.40	25.94	208	0.26
83	10.48	33.67u	3.75	223	150	9.61	34.00	2.52	26.25	178	0.35
97	10.22	33.66	3.45	212	200	8.98	34.15	1.79	26.48	156	0.44
111	9.94	33.78	3.20	199	250	8.58	34.23	1.45	26.60	145	0.52
135	9.77	33.97	2.78	182	300	8.20	34.28	1.23	26.70	135	0.59
163	9.46	34.02	2.32	174	400	7.30	34.31	0.72	26.85	121	0.72
196	9.02	34.14	1.87	158	500	6.55	34.35	0.60	26.99	108	0.84
244	8.63	34.22	1.49	146							
320	8.03	34.30	1.15	131							
416	7.20	34.31	0.67	119							
543	6.22	34.38	0.59	101							

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

PAOLINA-T; April 6, 1958; 0646 GCT; 33°30'N, 119°18'W; sounding, 920 fm; wind, 160, force 3; weather, partly cloudy; sea, high; wire angle, 03°.

87.45

0	14.40	33.51	5.82	299	0	14.40	33.51	5.82	24.98	299	0.00
10	14.38	33.52	5.83	298	10	14.38	33.52	5.83	24.99	298	0.03
30	14.22	33.51	5.76	295	20	14.32	33.52	5.81	25.00	296	0.06
40	14.12	33.51	5.74	293	30	14.22	33.51	5.76	25.02	295	0.09
50	13.37	33.58	5.27	274	50	13.37	33.58	5.27	25.24	274	0.15
59	11.98	33.55	4.45	250	75	10.37	33.60	3.95	25.82	218	0.21
69	11.26	33.58	4.11	235	100	9.80	33.69	3.24	25.98	203	0.27
83	10.22	33.68	3.30	211	150	9.40	33.91	2.54	26.22	180	0.36
97	9.86	33.68	-	205	200	8.79	34.17	1.66	26.52	152	0.44
112	9.70	33.73	3.22	199	250	8.45	34.22	1.34	26.62	143	0.52
137	9.48	33.86	2.72	186	300	7.95	34.25	1.07	26.72	134	0.59
165	9.22	33.98	2.39	173	400	7.23	34.36	0.70	26.91	116	0.72
198	8.81	34.14	1.74	155	500	6.55	34.36	0.43	27.00	107	0.83
246	8.54	34.22	1.37	145							
324	7.75	34.26	0.95	130							
421	7.10	34.38	0.62	113							
549	6.20	34.34	0.35	104							

PAOLINA-T; April 6, 1958; 0036 GCT; 33°10.5'N, 120°01'W; sounding, 640 fm; wind, 180°, force 3; weather, partly cloudy; sea, high; wire angle, 14°.

87.55

0	14.88	33.46	5.86	313	0	14.88	33.46	5.86	24.83	313	0.00
10	14.52	33.44	5.82	307	10	14.52	33.44	5.82	24.89	307	0.03
29	14.06	33.46	5.77	296	20	14.27	33.45	5.80	24.95	302	0.06
39	13.50	33.46	5.52	285	30	14.04	33.46	5.76	25.02	295	0.09
48	12.78	33.46	5.12	271	50	12.67	33.47	5.07	25.29	269	0.15
59	12.25	33.57	4.69	254	75	10.62	33.49	4.33	25.69	232	0.21
67	11.61	33.51	4.36	247	100	9.54	33.52	3.93	25.90	212	0.27
81	10.22	33.49	4.30	225	150	9.00	33.83	3.04	26.23	180	0.36
96	9.64	33.50	4.05	215	200	8.66	34.22	1.80	26.59	146	0.45
111	9.32	33.63	3.70	200	250	8.07	34.19	1.44	26.66	139	0.52
134	9.16	33.73	3.50	190	300	7.83	34.18	1.28	26.68	137	0.59
162	8.92	33.93	2.68	172	400	6.98	34.29	0.73	26.88	118	0.72
196	8.76	34.22	1.88	148	500	6.02	34.36	0.47	27.06	101	0.84
243	8.16	34.20	1.50	140							
320	7.67	34.18	1.19	135							
415	6.83	34.31	0.67	114							
540	5.76	34.36	0.44	97							

PAOLINA-T; April 5, 1958; 2105, 2120 GCT; 33°02'N, 120°22.5'W; sounding, 2100 fm; wind, 300°, force 3; weather, partly cloudy; sea, high; wire angle, 00°, 00°.

87.60

0	15.42	33.53	5.84	319	0	15.42	33.53	5.84	24.77	319	0.00
10	14.98	33.48	5.81	313	10	14.98	33.48	5.81	24.83	313	0.03
30	14.94	33.55	5.76	307	20	14.96	33.52	5.79	24.86	310	0.06
60	14.42	33.51	5.74	300	30	14.94	33.55	5.76	24.89	307	0.09
70	13.70	33.49	5.50	287	50	14.86	33.55	5.74	24.90	306	0.15
80	12.09	33.48	4.81	258	75	12.62	33.48	5.02	25.32	266	0.23
					100	11.22	33.53	4.51	25.62	238	0.29
95	11.46	33.48	4.60	246	150	9.50	33.76	3.22	26.08	194	0.40
110	10.72	33.62	4.34	224	200	8.72	33.97	2.61	26.38	166	0.49
125	10.26	33.62	3.75	216	250	8.26	34.25	1.73	26.66	139	0.57
144	9.93	33.77	3.16	199	300	7.63	34.29	1.38	26.80	126	0.64
163	9.42	33.92	2.78	180	400	6.92	34.27	0.95	26.88	118	0.76
192	8.71	33.93	2.68	168	500	6.30	(34.24)		(26.94)	(113)	(0.88)
216	8.78	34.06	2.10	160	600	(5.65)					
268	8.02	34.28	1.61	133							
350	7.23	34.29	1.15	121							
456	6.57	34.25	0.66	115							
593	5.67	-	-	-							

S10

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5804

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

87.70

PAOLINA-T; April 5, 1958; 1458 GCT; 32°39.5'N, 121°03'W; sounding, 2100 fm; wind, 300°, force 3; weather, partly cloudy; sea, very high; wire angle, 08°.

0	15.38	33.58	5.57	314	0	15.38	33.58	5.57	24.82	314	0.00
10	15.38	33.58	5.56	314	10	15.38	33.58	5.56	24.82	314	0.03
30	15.38	33.58	5.48	314	20	15.38	33.58	5.52	24.82	314	0.06
60	15.32	33.59	5.50	312	30	15.38	33.58	5.48	24.82	314	0.09
70	14.54	33.54	5.41	300	50	15.36	33.59	5.48	24.83	313	0.16
80	13.62	33.52	5.43	283	75	14.05	33.53	5.41	25.06	291	0.23
95	12.10	33.45	5.06	260	100	11.60	33.45	4.92	25.48	251	0.30
110	10.75	33.48	4.69	234	150	9.50	33.67	3.72	26.02	200	0.42
124	10.35	33.53	-	224	200	8.53	33.95	2.87	26.39	165	0.51
144	9.66	33.62	3.87	206	250	7.86	34.05	2.37	26.57	147	0.59
163	9.16	33.77	3.46	187	300	7.22	34.11	1.82	26.70	135	0.66
191	8.66	33.90	2.95	170	400	6.26	34.22	0.64	26.93	114	0.79
214	8.30	34.00	2.71	158	500	5.84	34.29	0.56	27.03	104	0.90
266	7.63	34.07	2.23	143	600	(5.45)	(34.35)	(0.63)	(27.13)	(94)	(1.01)
347	6.71	34.16	1.11	124							
452	6.03	34.25	0.56	109							
591	5.52	34.34	0.62	96							

90.28

PAOLINA-T; April 8, 1958; 0039 GCT; 33°28.5'N, 117°47'W; sounding, 210 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 07°.

0	15.89	32.84	5.73	378	0	15.89	32.84	5.73	24.14	378	0.00
10	15.95	33.19	5.62	354	10	15.95	33.19	5.62	24.40	354	0.04
30	15.18	33.56	5.34	311	20	15.88	33.24	5.58	24.45	349	0.07
51	13.04	33.64	4.49	264	30	15.18	33.56	5.34	24.85	311	0.10
74	11.05	33.68	3.73	224	50	13.12	33.64	4.50	25.34	264	0.16
98	10.30	33.85	3.12	199	75	11.00	33.69	3.69	25.78	223	0.22
122	9.83	33.95	2.66	185	100	10.23	33.85	3.03	26.04	198	0.28
161	9.16	34.09	2.18	163	150	9.34	34.06	2.32	26.35	168	0.37
201	8.92	34.16	1.86	154	200	8.92	34.16	1.87	26.49	155	0.45

90.30

PAOLINA-T; April 8, 1958; 0247 GCT; 33°24.5'N, 117°55'W; sounding, 350 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°.

0	15.69	33.43	5.19	332	0	15.69	33.43	5.19	24.63	332	0.00
9	15.70	33.38	5.51	336	10	15.70	33.38	5.51	24.59	336	0.03
27	15.46	33.55	5.51	318	20	15.62	33.40	5.51	24.62	333	0.07
36	14.11	33.55	5.19	290	30	14.82	33.55	5.35	24.92	305	0.10
45	13.20	33.57	5.09	271	50	12.45	33.57	4.77	25.42	257	0.15
54	12.08	33.57	4.52	251	75	11.02	33.59	4.08	25.70	230	0.22
63	11.66	33.58	4.31	243	100	10.24	33.76	3.34	25.97	204	0.27
76	10.96	33.59	4.05	230	150	9.07	33.96	2.56	26.32	172	0.37
91	10.46	33.69	3.54	214	200	8.73	34.10	1.85	26.48	156	0.45
104	10.18	33.77	3.26	203	250	8.43	34.19	1.67	26.60	145	0.53
126	9.64	33.86	-	188	300	8.17	34.24	1.31	26.68	137	0.60
152	9.04	33.97	2.51	171	400	7.26	34.27	0.79	26.83	123	0.73
182	8.82	34.06	1.93	161	500	6.43	34.30	0.44	26.97	110	0.85
226	8.54	34.16	1.74	149							
298	8.18	34.24	1.32	138							
389	7.34	34.27	0.85	124							
511	6.38	34.31	0.40	108							

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

PAOLINA-T; April 8, 1958; 1805 GCT; 33°10.5'N, 118°23.5'W; sounding, 650 fm; wind, 270°, force 4; weather, clear; sea, very rough; wire angle, 12°.

90.37

0	15.22	33.53	5.64	315	0	15.22	33.53	5.64	24.81	315	0.00
10	15.08	33.50	5.44	314	10	15.08	33.50	5.44	24.82	314	0.03
30	15.04	33.52	5.67	312	20	15.06	33.51	5.53	24.84	312	0.06
39	14.92	33.53	5.41	308	30	15.04	33.52	5.67	24.84	312	0.09
49	13.70	33.54	4.95	283	50	13.60	33.54	4.93	25.16	282	0.15
58	13.02	33.53	4.74	271	75	12.28	33.52	4.53	25.41	258	0.22
68	12.64	33.52	4.47	265	100	10.60	33.56	4.60	25.74	226	0.28
83	10.83	33.55	4.79	230	150	9.67	33.91	2.67	26.17	186	0.39
97	10.64	33.55	-	227	200	8.86	34.14	1.90	26.49	155	0.47
111	10.34	33.68	3.92	212	250	8.34	34.20	1.59	26.62	143	0.55
136	9.88	33.81	2.92	196	300	8.02	34.25	1.28	26.70	135	0.62
163	9.47	34.01	2.41	174	400	7.34	34.26	0.77	26.81	125	0.75
196	8.92	34.14	1.92	156	500	6.62	34.30	0.46	26.95	112	0.88
244	8.37	34.19	1.61	144							
319	7.90	34.27	1.12	132							
415	7.24	34.26	0.74	124							
541	6.18	34.34	0.31	104							

PAOLINA-T; April 8, 1958; 2338 GCT; 32°55'N, 118°56.5'W; sounding, 935 fm; wind, 290°, force 6; weather, clear; sea, high; wire angle, 28°.

90.45

0	14.52	33.50	5.89	302	0	14.52	33.50	5.89	24.95	302	0.00
9	14.48	33.46	5.88	304	10	14.47	33.46	5.87	24.93	304	0.03
27	14.30	33.50	5.80	298	20	14.37	33.49	5.86	24.97	300	0.06
40	14.26	33.48	5.63	298	30	14.26	33.49	5.71	24.99	298	0.09
48	14.28	33.48	5.48	299	50	14.24	33.49	5.43	24.99	298	0.15
56	13.85	33.51	5.40	288	75	11.85	33.52	4.44	25.49	250	0.22
64	12.72	33.51	4.69	266	100	10.22	33.57	3.99	25.82	219	0.28
80	11.46	33.53	4.35	242	150	9.30	33.81	3.00	26.16	186	0.38
91	10.60	33.54	4.22	227	200	9.12	34.04	2.10	26.36	167	0.47
104	10.08	33.58	3.87	216	250	8.50	34.14	1.65	26.54	150	0.55
123	9.56	33.68	3.54	200	300	7.98	34.25	1.14	26.71	134	0.62
146	9.25	33.78	3.20	188	400	7.26	34.29	0.57	26.84	122	0.76
177	9.42	33.97	2.44	177	500	6.75	34.31	0.51	26.94	113	0.88
222	8.84	34.07	1.92	160							
291	8.07	34.24	1.25	136							
380	7.34	34.28	0.60	123							
510	6.68	34.32	0.50	112							

PAOLINA-T; April 12, 1958; 0315, 0334 GCT; 30°06'N, 124°38'W; sounding, 2000 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 12°, 12°.

90.130

0	16.94	33.82	5.15	330	0	16.94	33.82	5.15	24.65	330	0.00
10	16.92	33.77	4.97	334	10	16.92	33.77	4.97	24.61	334	0.03
29	16.86	33.78	5.10	331	20	16.89	33.77	5.03	24.63	332	0.07
59	16.86	33.82	5.02	329	30	16.86	33.78	5.09	24.64	331	0.10
68	16.86	33.85	5.03	326	50	16.86	33.80	5.04	24.65	330	0.16
78	16.88	33.84	5.02	327	75	16.87	33.85	5.02	24.68	327	0.25
					100	16.85	33.92	5.06	24.74	322	0.33
93	16.94	33.84	5.07	329	150	11.70	33.52	4.98	25.52	248	0.47
108	16.63	34.06	5.05	305	200	9.60	33.70	4.06	26.03	199	0.59
122	14.50	33.75	5.33	283	250	8.41	33.91	3.20	26.38	165	0.68
142	12.42	33.59	5.03	256	300	7.60	34.00	2.47	26.58	147	0.76
161	10.70	33.44	4.84	236	400	6.43	34.12	1.24	26.82	124	0.90
190	9.58	33.59	4.30	206	500	5.80	34.21	0.60	26.98	109	1.02
213	9.16	33.72	3.95	191	600	(5.30)	(34.30)	(0.32)	(27.12)	(96)	(1.13)
266	8.16	33.96	2.88	158							
347	6.98	34.06	1.85	134							
454	6.03	34.17	0.82	115							
592	5.36	34.29	0.33	98							

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

90.145 PAOLINA-T; April 12, 1958; 1305 GCT; 29°36'N, 125°38'W; sounding, 2360 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 10°.

0	17.47	34.06	5.19	325	0	17.47	34.06	5.19	24.70	325	0.00
10	17.46	34.04	5.40	326	10	17.46	34.04	5.40	24.69	326	0.03
30	17.46	34.04	5.39	326	20	17.46	34.04	5.39	24.69	326	0.06
55	17.50	34.06	5.45	327	30	17.46	34.04	5.39	24.69	326	0.10
64	17.50	34.08	5.34	326	50	17.49	34.06	5.43	24.69	326	0.16
74	17.49	34.09	5.33	323	75	17.49	34.09	5.32	24.72	324	0.24
84	17.50	34.06	5.26	327	100	17.51	34.06	5.34	24.68	327	0.33
98	17.50	34.06	5.33	327	150	14.49	33.90	5.15	25.26	272	0.48
113	17.53	34.05	-	327	200	11.13	33.66	4.80	25.73	227	0.61
131	16.61	34.04	5.46	307	250	9.55	33.78	4.09	26.10	192	0.72
150	14.49	33.90	5.15	272	300	8.55	34.02	3.18	26.44	160	0.81
174	12.46	33.69	5.03	249	400	6.90	34.14	1.62	26.78	128	0.96
197	11.30	33.66	4.86	230	500	5.91	34.18	1.03	26.94	113	1.09
244	9.64	33.76	4.16	196							
320	8.17	34.10	2.71	148							
417	6.70	34.14	1.48	125							
544	5.52	34.20	0.80	106							

93.27 PAOLINA-T; April 19, 1958; 0014 GCT; 32°56'N, 117°20'W; sounding, 227 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 02°.

0	17.80	33.37	5.66	383	0	17.80	33.37	5.66	24.10	383	0.00
11	17.30	33.41	5.68	368	10	17.35	33.41	5.67	24.24	369	0.04
30	14.50	33.55	5.20	298	20	15.70	33.51	5.54	24.70	325	0.07
50	13.36	33.55	5.10	276	30	14.50	33.55	5.20	24.99	298	0.10
75	11.34	33.58	4.16	236	50	13.36	33.55	5.10	25.22	276	0.16
100	10.67	33.68	3.66	218	75	11.34	33.58	4.16	25.64	236	0.22
123	9.64	33.81	3.26	192	100	10.67	33.68	3.66	25.83	218	0.28
162	9.01	33.84	3.15	180	150	9.10	33.83	3.17	26.21	182	0.38
202	8.78	34.02	2.48	163	200	8.80	34.02	2.48	26.40	164	0.47
250	8.32	34.07	2.14	152	250	8.32	34.07	2.14	26.52	152	0.55
299	8.26	34.23	1.31	140	300	(8.25)	(34.23)	(1.25)	(26.66)	(140)	(0.63)

93.30 PAOLINA-T; April 19, 1958; 0251 GCT; 32°50'N, 117°31.5'W; sounding, 430 fm; wind, calm; weather, overcast; sea, rough; wire angle, 02°.

0	17.74	33.49	5.62	373	0	17.74	33.49	5.62	24.20	373	0.00
10	16.63	33.48	5.41	349	10	16.63	33.48	5.41	24.45	349	0.04
30	12.94	33.52	5.10	270	20	14.25	33.51	5.17	25.01	296	0.07
40	12.36	33.51	5.03	260	30	12.94	33.52	5.10	25.28	270	0.10
50	11.52	33.51	4.45	245	50	11.52	33.51	4.45	25.54	245	0.15
60	11.19	33.55	4.13	236	75	10.35	33.60	3.75	25.83	218	0.20
69	10.48	33.58	3.78	222	100	10.05	33.70	3.53	25.94	207	0.26
84	10.22	33.65	3.70	213	150	9.40	33.96	2.75	26.26	177	0.36
98	10.10	33.69	3.52	208	200	9.04	34.12	2.13	26.45	159	0.44
113	9.64	33.71	3.61	199	250	8.61	34.16	1.80	26.56	149	0.52
137	9.34	33.86	3.08	183	300	8.22	34.22	1.36	26.65	140	0.60
166	9.10	34.01	2.63	169	400	7.27	34.26	0.73	26.82	124	0.73
199	9.04	34.12	2.14	160	500	6.40	34.30	0.49	26.97	108	0.86
247	8.62	34.16	1.87	150							
324	8.01	34.25	1.12	135							
422	7.04	34.26	0.67	121							
550	6.10	34.33	0.43	104							

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

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PAOLINA-T; April 19, 1958; 0930 GCT; 32°30'N, 118°12'W; sounding, 920 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 10°.

9340

0	16.50	33.60	5.55	337	0	16.50	33.60	5.55	24.58	337	0.00
10	16.49	33.61	5.61	336	10	16.49	33.61	5.61	24.59	336	0.03
30	15.73	33.58	5.65	322	20	16.10	33.59	5.61	24.68	327	0.07
40	15.40	33.56	5.77	316	30	15.73	33.58	5.65	24.74	322	0.10
49	14.62	33.53	5.60	302	50	14.55	33.53	5.56	24.95	302	0.16
59	13.70	33.55	5.04	282	75	12.23	33.52	4.77	25.41	258	0.23
68	12.85	33.55	4.91	266	100	10.78	33.62	3.94	25.76	225	0.29
82	11.77	33.49	4.59	251	150	9.62	33.83	2.88	26.13	190	0.40
96	10.98	33.58	4.10	230	200	9.05	33.98	1.41	26.33	170	0.49
111	10.40	33.69	3.54	213	250	8.30	34.12	1.78	26.56	149	0.57
134	9.87	33.78	3.11	198	300	7.74	34.17	1.03	26.68	137	0.64
163	9.45	33.88	2.72	184	400	7.00	34.28	0.21	26.87	119	0.78
195	9.12	33.96	2.47	173	500	6.25	34.32		27.01	106	0.89
242	8.40	34.11	1.88	150							
319	7.56	34.19	0.56	133							
413	6.92	34.29	0.19	117							
538	5.93	34.33	-	101							

PAOLINA-T; April 19, 1958; 1657 GCT; 32°10'N, 118°53'W; sounding, 820 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 07°.

9350

0	16.00	33.55	5.07	330	0	16.00	33.55	5.07	24.65	330	0.00
10	15.95	33.53	4.01	330	10	15.95	33.53	4.01	24.65	330	0.03
30	15.60	33.51	4.93	324	20	15.76	33.52	4.45	24.68	327	0.07
40	15.43	33.47	5.65	323	30	15.60	33.51	4.93	24.72	324	0.10
50	15.10	33.49	5.74	315	50	15.10	33.49	5.74	24.81	315	0.16
60	14.38	33.49	5.48	300	75	13.23	33.50	5.03	25.20	277	0.24
70	13.65	33.50	5.18	285	100	11.65	33.42	4.87	25.45	254	0.30
84	12.54	33.49	4.89	265	150	9.52	33.80	2.87	26.12	190	0.42
99	11.70	33.42	4.89	255	200	8.78	34.04	2.32	26.43	161	0.50
113	10.84	33.51	4.06	234	250	8.08	34.14	1.83	26.61	144	0.58
137	9.82	33.68	3.25	204	300	7.80	34.22	1.22	26.71	134	0.66
166	9.21	33.91	2.58	178	400	7.04	34.26	0.62	26.85	121	0.79
199	8.80	34.04	2.33	162	500	6.28	34.28	0.42	26.98	109	0.91
247	8.14	34.13	1.88	145							
324	7.66	34.24	1.05	131							
421	6.86	34.27	0.55	118							
549	5.98	34.29	0.39	105							

PAOLINA-T; April 20, 1958; 0020 GCT; 31°50'N, 119°33'W; sounding, 1120 fm; wind, 320°, force 6; weather, clear; sea, very high; wire angle, 20°.

9360

0	16.38	33.58	5.47	336	0	16.38	33.58	5.47	24.59	336	0.00
11	16.35	33.55	5.58	337	10	16.35	33.55	5.58	24.58	337	0.03
29	16.22	33.56	5.47	334	20	16.27	33.56	5.47	24.60	335	0.07
57	15.67	33.51	5.61	326	30	16.22	33.56	5.47	24.62	333	0.10
66	15.54	33.49	5.55	324	50	15.93	33.54	5.55	24.66	329	0.17
75	15.32	33.51	5.58	318	75	15.32	33.51	5.58	24.78	318	0.25
90	13.55	33.55	5.22	280	100	12.54	33.50	4.99	25.34	264	0.32
103	12.24	33.49	4.92	260	150	10.00	33.60	3.93	25.88	213	0.44
117	11.22	33.49	4.60	241	200	9.05	34.02	2.32	26.36	167	0.54
134	10.80	33.58	4.13	228	250	8.20	34.10	2.04	26.56	149	0.62
152	9.92	33.60	3.90	212	300	7.70	34.21	1.20	26.72	134	0.69
178	9.31	33.82	3.09	186	400	6.86	34.35	0.43	26.95	112	0.82
197	9.11	34.02	2.33	168	500	6.25	34.34	0.34	27.02	105	0.93
245	8.23	34.09	2.07	150							
318	7.56	34.27	0.97	127							
416	6.80	34.35	0.41	111							
546	5.96	34.33	0.32	102							

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

93.70 PAOLINA-T; April 20, 1958; 1551 GCT; 31°30'N, 120°29'W; sounding, 2050 fm; wind, 300°, force 4; weather, clear; sea, high; wire angle, 07°.

0	16.03	33.48	4.12	335	0	16.03	33.48	4.12	24.60	335	0.00
10	16.00	33.51	5.33	333	10	16.00	33.51	5.33	24.62	333	0.04
30	16.00	33.47	5.37	336	20	16.00	33.47	5.35	24.61	334	0.07
45	15.77	33.47	5.46	330	30	16.00	33.47	5.37	24.59	336	0.11
55	15.38	33.48	5.20	322	50	15.58	33.48	5.35	24.68	327	0.17
65	14.28	33.43	5.04	303	75	13.12	33.37	5.52	25.13	284	0.25
75	13.12	33.37	5.52	284	100	10.75	33.37	4.54	25.58	242	0.32
95	11.13	33.35	4.59	250	150	8.86	33.79	2.96	26.21	182	0.42
109	10.20	33.43	4.48	228	200	8.34	33.99	2.33	26.46	158	0.51
124	9.58	33.51	3.97	213	250	7.70	34.05	1.82	26.60	145	0.59
148	8.94	33.75	3.10	186	300	7.20	34.12	1.20	26.72	134	0.66
176	8.64	33.97a)	2.59	165	400	6.60	34.19	0.67	26.86	120	0.79
214	8.15	34.00	2.23	155	500	5.95	34.25	0.39	26.99	108	0.91
266	7.52	34.07	1.60	141	600	5.25)	(34.31)		(27.12)	(95)	(1.02)
346	6.92	34.16	0.97	126							
447	6.30	34.22	0.51	114							
589	5.37	34.31	0.32	96							

93.80 PAOLINA-T; April 20, 1958; 2148 GCT; 31°11'N, 120°53'W; sounding, 2060 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 16°.

0	16.35	33.57	5.57	336	0	16.35	33.57	5.57	24.59	336	0.00
10	16.28	33.50	5.51	339	10	16.28	33.50	5.51	24.56	339	0.03
29	16.10	33.52	5.62	334	20	16.17	33.51	5.58	24.59	336	0.07
43	15.85	33.53	5.69	328	30	16.10	33.52	5.62	24.61	334	0.10
53	14.98	33.40	5.72	319	50	15.20	33.43	5.71	24.75	321	0.17
62	14.81	33.42	5.69	314	75	14.45	33.41	5.75	24.88	308	0.24
72	14.65	33.42	5.78	311	100	10.86	33.37	4.93	25.54	245	0.32
92	12.03	33.36	5.26	265	150	9.18	33.69	3.57	26.08	194	0.43
105	10.62	33.38	4.82	240	200	8.56	33.93	2.59	26.38	166	0.52
119	10.17	33.52	4.29	221	250	7.95	33.98	2.20	26.50	154	0.60
142	9.29	33.63	3.73	200	300	7.38	34.03	1.71	26.63	142	0.68
170	9.00	33.86	3.08	178	400	6.39	34.18	0.77	26.88	118	0.81
206	8.46	33.94	2.54	164	500	5.75	34.25	0.43	27.01	106	0.93
258	7.84	33.99	2.15	151							
337	6.95	34.09	1.31	132							
436	6.13	34.22	0.58	112							
574	5.39	34.27	0.34	100							

93.145 PAOLINA-T; April 12, 1958; 1827 GCT; 29°01'N, 125°19'W; sounding, 2350 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 05°.

0	17.32	33.96	5.19	329	0	17.32	33.96	5.19	24.66	329	0.00
10	17.28	33.89	5.46	333	10	17.28	33.89	5.46	24.62	333	0.03
30	17.28	33.94	5.43	329	20	17.28	33.92	5.45	24.64	331	0.07
60	17.28	33.95	5.38	328	30	17.28	33.94	5.43	24.66	329	0.10
70	17.29	33.96	5.30	328	50	17.28	33.94	5.40	24.66	329	0.16
80	17.28	33.95	5.41	328	75	17.28	33.95	5.35	24.67	328	0.25
94	17.64	34.13	5.27	324	100	17.62	34.13	5.38	24.72	324	0.33
108	17.50	34.12	5.47	322	150	14.18	33.84	5.28	25.28	270	0.48
123	16.96	34.05	5.40	314	200	11.00	33.66	4.86	25.76	225	0.61
141	15.20	33.94	5.30	284	250	9.10	33.86	3.64	26.24	179	0.71
160	13.72	33.81	5.26	263	300	8.27	34.01	2.72	26.48	156	0.80
188	11.87	33.68	5.03	238	400	7.01	34.10	1.74	26.72	133	0.95
211	10.23	33.64	4.66	214	500	5.99	34.16	1.07	26.92	115	1.08
262	8.88	33.91	3.37	173	600	(5.22)	(34.23)		(27.06)	(101)	(1.20)
343	7.68	34.07	2.22	143							
448	6.44	34.12	1.37	124							
584	5.37	34.22	0.62	103							

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

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

PAOLINA-T; April 22, 1958; 1410 GCT; 32°15.5'N, 117°08.5'W; sounding, 30 fm; wind, 250°, force 4; weather, overcast; sea, rough; wire angle, 17°.

97.30

0	17.96	33.49	5.61	378	0	17.96	33.49	5.61	24.14	378	0.00
10	16.66	33.48	5.97	349	10	16.66	33.48	5.97	24.45	349	0.04
29	15.22	33.48	5.91	318	20	16.43	33.48	5.97	24.50	344	0.07
39	14.48	33.49	5.82	302	30	15.15	33.48	5.90	24.79	317	0.10
48	12.70	33.49	5.09	268							

PAOLINA-T; April 22, 1958; 1224 GCT; 32°12.5'N, 117°17'W; sounding, 420 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

97.32

0	19.00	33.60	5.03	394	0	19.00	33.60	5.03	23.98	394	0.00
10	16.72	33.58	6.87	343	10	16.72	33.58	6.87	24.52	343	0.04
30	15.58	33.58	5.57	318	20	15.75	33.58	5.63	24.74	322	0.07
40	14.30	33.55	5.62	294	30	15.58	33.58	5.57	24.78	318	0.10
50	12.96	33.48	4.96	273	50	12.96	33.48	4.96	25.25	273	0.16
61	11.64	33.47	4.55	250	75	10.70	33.50	4.22	25.68	232	0.22
71	10.96	33.49	4.31	237	100	9.70	33.58	3.85	25.92	210	0.28
85	10.24	33.52	4.09	223	150	8.85	33.84	3.03	26.25	178	0.38
100	9.70	33.58	3.85	210	200	8.17	33.99	2.30	26.48	156	0.46
114	9.57	33.66	3.33	202	250	7.43	34.03	1.87	26.62	143	0.54
139	9.09	33.79	3.14	185	300	7.00	34.08	1.42	26.71	134	0.61
168	8.59	33.89	2.85	170	400	6.73	34.20	0.54	26.85	121	0.74
200	8.17	33.99	2.30	156	500	6.26	34.31	0.35	26.99	108	0.86
247	7.48	34.03	1.90	144							
323	6.85	34.11	1.17	130							
418	6.68	34.25	0.49	117							
544	5.88	34.33	0.28	101							

PAOLINA-T; April 22, 1958; 0630 GCT; 31°55.5'N, 117°50'W; sounding, 650 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 16°.

97.40

0	18.18	33.57	5.28	377	0	18.18	33.57	5.28	24.16	372	0.00
10	16.56	33.53	5.76	343	10	16.56	33.53	5.76	24.52	343	0.04
29	15.32	33.55	5.78	315	20	15.70	33.54	5.78	24.72	324	0.07
43	13.79	33.53	5.55	285	30	15.28	33.55	5.76	24.82	314	0.10
53	12.55	33.53	4.89	262	50	12.82	33.53	5.04	25.32	266	0.16
62	11.80	33.53	4.47	248	75	11.30	33.54	4.14	25.61	239	0.22
72	11.40	33.53	4.20	242	100	10.63	33.59	3.75	25.77	224	0.28
91	10.82	33.57	3.95	229	150	9.27	33.84	3.18	26.19	184	0.38
105	10.52	33.61	3.64	220	200	8.17	34.02	2.26	26.50	154	0.47
119	9.88	33.65	3.57	208	250	7.45	34.06	1.80	26.63	142	0.54
142	9.35	33.77	3.36	190	300	6.99	34.10	1.31	26.74	132	0.62
169	8.69	33.93	2.74	169	400	6.30	34.22	0.65	26.92	114	0.74
205	8.11	34.03	2.22	152	500	5.81	34.30	0.32	27.05	102	0.86
255	7.40	34.06a)	1.76	140							
332	6.78	34.14	1.09	126							
429	6.15	34.25	0.51	110							
566	5.64	34.35	0.28	97							

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

S10

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5804

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

97.50

PAOLINA-T; April 21, 1958; 2339 GCT; 31°36'N, 118°31'W; sounding, 1335 fm; wind, 320°, force 5;
weather, clear; sea, very rough; wire angle, 25°.

0	17.32	33.60	5.41	355	0	17.32	33.60	5.41	24.39	355	0.00
9	16.97	33.58	4.99	348	10	16.93	33.58	4.99	24.46	348	0.04
27	15.31	33.55	5.12	315	20	16.50	33.57	5.01	24.56	338	0.07
42	14.96	33.48	5.12	313	30	15.22	33.53	5.12	24.82	314	0.10
50	14.49	33.49	5.55	302	50	14.49	33.49	5.55	24.94	302	0.16
60	12.98	33.48	4.19	274	75	11.59	33.48	4.27	25.50	249	0.23
69	12.02	33.48	4.55	256	100	10.11	33.60	3.63	25.87	214	0.29
86	10.84	33.49	3.70	235	150	9.16	33.92	2.68	26.27	176	0.39
98	10.18	33.58	3.66	217	200	8.74	34.12	1.86	26.49	155	0.48
110	9.98	33.65	3.57	209	250	8.22	34.19	1.33	26.63	142	0.55
130	9.63	33.78	3.17	194	300	7.60	34.22	0.93	26.74	131	0.62
152	9.14	33.93	2.67	175	400	6.54	34.31	0.49	26.96	110	0.75
183	8.92	34.03	2.10	164	500	6.12	34.34	0.37	27.03	104	0.86
225	8.44	34.18	1.53	146							
295	7.64	34.22	0.98	132							
382	6.64	34.30	0.53	112							
510	6.10	34.34	0.36	103							

97.60

PAOLINA-T; April 21, 1958; 1753 GCT; 31°19'N, 119°05.5'W; sounding, 1820 fm; wind, 320°, force 4;
weather, clear; sea, high; wire angle, 17°.

0	16.52	33.57	5.61	340	0	16.52	33.57	5.61	24.55	340	0.00
10	16.18	33.55	5.55	333	10	16.18	33.55	5.55	24.62	333	0.03
29	16.12	33.53	5.42	333	20	16.16	33.54	5.51	24.62	333	0.07
43	15.93	33.54	5.35	328	30	16.09	33.53	5.40	24.62	333	0.10
53	15.53	33.47	5.69	325	50	15.70	33.51	5.52	24.69	326	0.17
62	14.30	33.40	5.73	305	75	12.86	33.47	5.04	25.25	273	0.24
71	13.31	33.45	5.19	282	100	10.93	33.52	4.35	25.66	234	0.31
89	11.52	33.50	4.61	246	150	9.40	33.82	2.97	26.16	187	0.42
102	10.84	33.53	4.31	232	200	8.67	34.05	2.29	26.45	159	0.50
115	10.32	33.58	4.02	220	250	8.26	34.15	1.58	26.59	146	0.58
136	9.70	33.69	3.36	202	300	7.87	34.20	1.15	26.68	137	0.65
162	9.20	33.90	2.82	178	400	6.96	34.28	0.56	26.88	118	0.78
195	8.76	34.02	2.40	162	500	6.25	34.31	0.36	27.00	106	0.90
244	8.31	34.14	1.66	147							
317	7.73	34.22	1.06	133							
409	6.86	34.29	0.52	116							
540	6.00	34.32	0.32	103							

97.70

PAOLINA-T; April 21, 1958; 1045, 1101 GCT; 30°56'N, 119°51'W; sounding, 1930 fm; wind, 320°, force 5;
weather, clear; sea, high; wire angle, 05°, 05°.

0	16.26	33.49	5.43	339	0	16.26	33.49	5.43	24.55	339	0.00
10	16.20	33.52	5.44	336	10	16.20	33.52	5.44	24.59	336	0.03
					20	16.14	33.54	5.40	24.62	333	0.07
30	15.93	33.58	5.37	326	30	15.93	33.58	5.37	24.70	326	0.10
60	15.05	33.54	5.50	311	50	15.36	33.55	5.46	24.80	316	0.16
70	14.76	33.53	5.40	305	75	14.40	33.52	5.36	24.98	298	0.24
79	13.79	33.50	5.34	288	100	11.45	33.43	4.91	25.49	250	0.31
93	11.91	33.44	4.84	257	150	9.22	33.66	3.66	26.06	196	0.42
108	10.94	33.43	5.00	241	200	8.25	33.96	2.58	26.44	160	0.51
122	10.01	33.50	4.42	221	250	7.60	34.07	2.02	26.63	142	0.59
141	9.54	33.58	3.99	207	300	7.09	34.12	1.53	26.74	132	0.66
161	8.96	33.77	3.35	184	400	6.35	34.20	0.81	26.90	116	0.79
188	8.46	33.91	2.84	166	500	5.75	34.26	0.46	27.02	105	0.91
212	8.14	34.00	2.44	155	600	(5.25)	(34.35)	(0.42)	(27.15)	(92)	(1.01)
264	7.42	34.09	1.86	139							
346	6.77	34.16	1.19	124							
453	6.00	34.23	0.53	110							
590	5.30	34.34	0.42	93							

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

PAOLINA-T; April 21, 1958; 0353 GCT; 30°36'N, 120°31'W; sounding, 2100 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 10°.

97.80

0	16.10	33.39	5.55	343	0	16.10	33.39	5.55	24.52	343	0.00
10	16.05	33.41	5.52	341	10	16.05	33.41	5.52	24.54	341	0.03
30	15.81	33.37	5.48	339	20	15.96	33.40	5.50	24.55	340	0.07
45	15.55	33.38	5.55	332	30	15.81	33.37	5.48	24.56	339	0.10
55	15.32	33.39	5.66	327	50	15.42	33.39	5.62	24.66	329	0.17
74	15.10	33.40	5.59	321	75	15.08	33.40	5.58	24.75	321	0.25
94	14.00	33.40	5.48	299	100	13.40	33.39	5.46	25.08	289	0.33
108	12.44	33.37	5.46	272	150	9.60	33.50	4.19	25.87	214	0.45
122	11.16	33.38	4.68	248	200	8.62	33.81	2.82	26.27	176	0.55
147	9.72	33.48	4.24	217	250	7.98	34.01	2.10	26.53	152	0.64
174	8.87	33.68	3.36	189	300	7.20	34.04	1.67	26.66	139	0.71
212	8.50	33.88	2.59	169	400	6.16	34.14	0.92	26.88	118	0.85
263	7.76	34.03	1.94	148	500	5.70	34.26	0.40	27.03	104	0.96
342	6.66	34.05	1.42	132	600	(5.25)	(34.35)		(27.16)	(92)	(1.07)
442	5.92	34.21	0.62	110							
582	5.36	34.34	0.11	94							

PAOLINA-T; April 13, 1958; 0032 GCT; 28°26.5'N, 124°47'W; sounding, 2330 fm; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 00°.

97.145

0	18.84	34.32	5.36	338	0	18.84	34.32	5.36	24.56	338	0.00
10	18.27	34.27	5.36	328	10	18.27	34.27	5.36	24.67	328	0.03
30	18.22	34.28	5.32	327	20	18.23	34.28	5.34	24.68	327	0.07
55	18.22	34.27	5.37	327	30	18.22	34.28	5.32	24.68	327	0.10
65	18.22	34.29	5.29	326	50	18.22	34.27	5.34	24.68	327	0.16
75	18.23	34.30	5.36	326	75	18.23	34.30	5.36	24.69	326	0.24
85	18.23	34.27	5.34	327	100	18.16	34.34	5.32	24.76	320	0.33
100	18.16	34.34	5.32	320	150	14.46	33.92	5.07	25.28	270	0.48
116	16.94	34.13	5.32	308	200	10.85	33.68	4.38	25.80	221	0.60
134	15.46	33.96	5.23	288	250	9.26	33.91	3.36	26.24	178	0.70
154	14.42	33.93	5.05	269	300	8.33	34.01	2.92	26.47	157	0.79
179	12.50	33.77	4.90	244	400	6.89	34.12	1.50	26.76	129	0.94
202	10.76	33.68	4.32	219	500	5.99	34.18	0.85	26.94	113	1.07
249	9.30	33.91	3.39	179							
326	7.94	34.05	2.66	148							
422	6.63	34.14	1.29	124							
549	5.58	34.22	0.68	105							

PAOLINA-T; April 16, 1958; 0700 GCT; 31°41'N, 116°46.5'W; sounding, 260 fm; wind, calm; weather, clear; sea, moderate; wire angle, 09°.

100.30

0	17.54	33.52	5.87	366	0	17.54	33.52	5.87	24.27	366	0.00
10	16.84	33.50	5.90	352	10	16.84	33.50	5.90	24.42	352	0.04
30	14.98	33.55	5.82	308	20	15.60	33.54	5.88	24.74	322	0.07
50	12.52	33.57	4.60	258	30	14.98	33.55	5.82	24.88	308	0.10
74	10.38	33.50	4.45	226	50	12.52	33.57	4.60	25.40	258	0.16
99	9.90	33.68	4.04	205	75	10.35	33.50	4.45	25.75	225	0.22
123	9.67	33.84	3.31	190	100	9.86	33.69	4.04	25.96	205	0.27
161	9.52	34.06	2.37	171	150	9.45	33.96	3.18	26.26	177	0.37
197	9.18	34.14	2.00	160	200	9.07	34.14	1.98	26.46	158	0.45
245	8.90	34.20	1.63	151	250	8.84	34.22	1.55	26.56	149	0.53
292	8.32	34.29	1.03	136	300	8.22	34.29	0.99	26.70	135	0.60
391	7.09	34.27	0.68	121	400	(6.98)	(34.27)	(0.64)	(26.87)	(119)	(0.74)

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

100.35

PAOLINA-T; April 16, 1958; 0353 GCT; 31°30'N, 117°00.5'W; sounding, 660 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 10°.

0	17.35	33.58	5.62	358	0	17.35	33.58	5.62	24.36	358	0.00
10	16.77	33.56	5.68	346	10	16.77	33.56	5.68	24.48	346	0.04
30	15.68	33.57	5.73	322	20	16.10	33.57	5.70	24.64	331	0.07
40	15.12	33.56	5.80	310	30	15.68	33.57	5.73	24.74	322	0.10
49	14.01	33.53	5.77	290	50	13.95	33.53	5.74	25.08	289	0.16
59	13.47	33.49	5.50	282	75	12.20	33.48	5.03	25.40	259	0.23
69	12.90	33.49	-	271	100	10.77	33.51	4.55	25.67	233	0.29
83	11.24	33.48	4.72	242	150	9.36	33.85	3.15	26.18	184	0.40
98	10.86	33.50	4.58	235	200	8.35	33.96	2.77	26.42	162	0.49
112	10.06	33.57	4.17	216	250	7.62	34.05	2.26	26.61	144	0.57
136	9.66	33.74	3.42	197	300	7.25	34.09	1.80	26.69	136	0.64
165	9.00	33.90	2.95	176	400	6.35	34.20	0.84	26.90	116	0.77
197	8.40	33.95	2.81	163	500	5.98	34.30	0.40	27.02	105	0.88
244	7.71	34.04	2.32	146							
322	7.05	34.12	1.49	131							
418	6.23	34.22	0.76	113							
544	5.90	34.33	0.32	101							

100.40

PAOLINA-T; April 15, 1958; 2325 GCT; 31°21'N, 117°24'W; sounding, 1085 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

0	17.10	33.49	5.57	358	0	17.10	33.49	5.57	24.36	358	0.00
10	16.00	33.49	5.63	334	10	16.00	33.49	5.63	24.61	334	0.03
30	15.48	33.50	5.63	323	20	15.72	33.49	5.63	24.68	327	0.07
54	15.00	33.51	5.70	312	30	15.48	33.50	5.63	24.73	323	0.10
64	13.80	33.42	5.75	294	50	15.03	33.51	5.68	24.83	313	0.16
74	12.57	33.40	5.26	272	75	12.43	33.40	5.22	25.28	270	0.24
83	11.85	33.45	5.10	255	100	10.98	33.48	4.34	25.62	238	0.30
99	11.02	33.48	4.38	239	150	9.54	33.85	2.97	26.15	187	0.41
113	10.50	33.53	-	226	200	8.82	33.97	2.53	26.36	167	0.50
131	10.02	33.71	3.50	205	250	7.86	34.05	2.37	26.57	148	0.58
149	9.57	33.85	3.01	187	300	7.32	34.09	1.84	26.68	137	0.65
174	9.16	33.94	2.66	174	400	6.40	34.17	0.90	26.87	119	0.78
197	8.86	33.96	2.53	169	500	5.88	34.26	0.50	27.00	106	0.90
245	7.96	34.05	2.44	149							
321	7.05	34.11	1.53	132							
416	6.32	34.19	0.81	116							
542	5.72	34.29	0.42	102							

100.50

PAOLINA-T; April 15, 1958; 1654 GCT; 31°01'N, 118°07.5'W; sounding, 950 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 15°.

0	16.53	33.49	5.66	345	0	16.53	33.49	5.66	24.49	345	0.00
10	16.48	33.47	5.68	346	10	16.48	33.47	5.68	24.48	346	0.03
29	16.45	33.58	5.67	337	20	16.46	33.53	5.68	24.53	342	0.07
53	16.40	33.63	5.61	332	30	16.44	33.58	5.66	24.58	337	0.10
62	16.37	33.64a)	5.66	331	50	16.41	33.62	5.61	24.61	334	0.17
72	16.08	33.55	5.67	372	75	15.96	33.55	5.68	24.66	329	0.25
81	15.60	33.55	-	321	100	13.94	33.55	5.65	25.10	287	0.33
94	14.28	33.66b)	5.82	-	150	10.10	33.52	4.30	25.80	220	0.46
108	12.54	33.38	5.48	273	200	9.29	33.91	2.79	26.24	179	0.56
127	10.85	33.37	5.09	244	250	8.16	34.04	2.32	26.52	153	0.64
145	10.22	33.48	4.48	225	300	7.55	34.08	1.87	26.64	141	0.72
168	9.82	33.73	3.76	201	400	6.56	34.16	0.93	26.84	122	0.86
191	9.46	33.86	3.04	186	500	5.83	34.23		26.99	108	0.98
237	8.32	34.02	2.44	156							
311	7.42	34.09	1.77	138							
405	6.53	34.17	0.91	120							
530	5.64	34.25	-	104							

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

b) Broken bottle cap; value does not fall on property curve.

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

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PAOLINA-T; April 15, 1958; 1041 GCT; 30°45.5'N, 118°46'W; sounding, 1550 fm; wind, 360°, force 4; weather, clear; sea, very rough; wire angle, 08°.

100.60

0	16.42	33.43	5.63	348	0	16.42	33.43	5.63	24.46	348	0.00
10	16.40	33.40	5.63	349	10	16.40	33.40	5.63	24.45	349	0.03
30	15.76	33.40	5.66	335	20	16.38	33.40	5.63	24.45	349	0.07
45	15.72	33.41	5.70	334	30	15.76	33.40	5.66	24.60	335	0.10
55	15.52	33.42	5.66	328	50	15.62	33.42	5.68	24.64	331	0.17
65	15.22	33.40	5.73	324	75	15.10	33.45	5.72	24.78	318	0.25
75	15.10	33.45	5.72	318	100	12.22	33.43	5.39	25.36	263	0.33
94	12.77	33.43	5.51	273	150	9.35	33.62	4.03	26.01	201	0.44
108	11.54	33.44	5.22	250	200	8.63	33.87	2.89	26.31	172	0.54
123	10.29	33.46	4.80	228	250	7.80	34.00	2.23	26.55	150	0.62
146	9.41	33.61	4.10	203	300	7.20	34.06	1.74	26.67	138	0.69
174	8.98	33.70	3.54	189	400	6.47	34.22	0.87	26.90	116	0.82
211	8.48	33.96	2.64	163	500	5.80	34.29	0.52	27.04	103	0.94
264	7.56	34.02	2.11	146	600	(5.20)	(34.32)		(27.14)	(94)	(1.04)
344	6.87	34.13	1.30	128							
445	6.11	34.26	0.64	109							
587	5.32	34.32	0.35	95							

PAOLINA-T; April 15, 1958; 0433 GCT; 30°22.5'N, 119°20.5'W; sounding, 2000 fm; wind, 360°, force 5; weather, clear; sea, very rough; wire angle, 08°.

100.70

0	16.22	33.46	5.70	341	0	16.22	33.46	5.70	24.54	341	0.00
10	16.20	33.42	5.71	343	10	16.20	33.42	5.71	24.51	343	0.03
30	15.50	33.43	5.72	328	20	15.55	33.43	5.72	24.66	329	0.07
59	14.70	33.44	5.89	310	30	15.50	33.43	5.72	24.67	328	0.10
69	13.55	33.42	5.66	288	50	15.23	33.43	5.78	24.74	322	0.16
79	12.68	33.39	5.50	275	75	13.20	33.41	5.57	25.14	283	0.24
93	11.01	33.34	5.16	249	100	10.45	33.37	5.00	25.63	237	0.31
108	10.07	33.40	4.85	230	150	9.05	33.69	3.53	26.11	191	0.42
122	9.71	33.44	-	220	200	8.35	33.92	2.50	26.40	164	0.51
141	9.26	33.57	4.02	204	250	7.64	34.03	1.96	26.58	146	0.59
160	8.83	33.78	3.17	182	300	7.17	34.11	1.53	26.72	134	0.66
189	8.50	33.88	2.63	169	400	6.38	34.20	0.76	26.90	116	0.79
212	8.18	33.95	2.34	159	500	5.80	34.26	0.46	27.02	105	0.90
265	7.49	34.06	1.85	142	600	(5.20)	(34.36)		(27.17)	(91)	(1.01)
346	6.77	34.16	1.16	124							
452	6.02	34.22	0.55	111							
589	5.28	34.34	0.37	94							

PAOLINA-T; April 14, 1958; 2158 GCT; 30°01'N, 120°07'W; sounding, 2120 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°.

100.80

0	16.30	33.49	5.57	341	0	16.30	33.49	5.57	24.54	341	0.00
10	16.20	33.48	5.66	339	10	16.20	33.48	5.66	24.56	339	0.03
29	16.28	33.58	5.50	334	20	16.23	33.53	5.60	24.59	336	0.07
58	16.35	33.62	5.53	332	30	16.28	33.58	5.50	24.62	333	0.10
68	16.06	33.57	5.58	329	50	16.35	33.61	5.52	24.63	332	0.17
77	15.30	33.38	5.65	327	75	15.37	33.40	5.65	24.67	328	0.25
92	15.48	33.52	5.65	321	100	15.72	33.64	5.70	24.79	317	0.33
106	15.02	33.57	5.70	308	150	10.20	33.48	4.58	25.76	225	0.47
120	12.71	33.46	5.46	270	200	8.81	33.82	3.38	26.25	178	0.57
139	11.22	33.42	5.19	247	250	8.00	34.01	2.56	26.52	152	0.66
157	9.78	33.53	4.27	214	300	7.55	34.12	1.79	26.67	138	0.73
185	9.06	33.74	3.70	188	400	6.65	34.20	1.16	26.86	120	0.86
207	8.72	33.85	3.28	174	500	5.80	34.25	0.77	27.01	106	0.98
259	7.88	34.03	2.42	150							
337	7.29	34.17	1.40	131							
440	6.24	34.21	1.03	114							
574	5.36	34.29	0.41	98							

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

100.90

PAOLINA-T; April 14, 1958; 1517 GCT; 29°40'N, 120°52'W; sounding, 2120 fm; wind, 020°, force 4; weather, partly cloudy; sea, rough; wire angle, 08°.

0	16.62	33.72	5.65	331	0	16.62	33.72	5.65	24.64	331	0.00
10	16.62	33.70	5.62	332	10	16.62	33.70	5.62	24.63	332	0.03
30	16.58	33.69	5.61	332	20	16.61	33.70	5.62	24.63	332	0.07
60	16.55	33.68	5.62	332	30	16.58	33.69	5.61	24.63	332	0.10
69	16.48	33.67	5.60	332	50	16.56	33.69	5.62	24.63	332	0.16
79	16.43	33.64	5.61	332	75	16.45	33.65	5.61	24.63	332	0.25
94	15.74	33.53	5.66	326	100	15.00	33.39	5.76	24.76	320	0.33
109	14.84	33.37	5.77	319	150	11.53	33.44	5.24	25.48	251	0.48
123	14.19	33.52	-	294	200	9.64	33.65	3.96	25.98	203	0.59
143	11.92	33.43	5.34	258	250	8.75	33.96	2.70	26.37	167	0.69
162	10.90	33.45	4.99	239	300	7.98	34.07	2.09	26.58	147	0.77
190	9.84	33.60	4.26	211	400	6.82	34.18	1.26	26.82	124	0.91
213	9.40	33.72	3.43	195	500	6.02	34.24	0.68	26.96	110	1.03
265	8.47	34.03	2.43	158	600	(5.48)	(34.25)		(27.05)	(102)	(1.15)
344	7.40	34.11	1.76	137							
450	6.39	34.22	0.90	115							
585	5.52	34.25	0.42	102							

100.100

PAOLINA-T; April 14, 1958; 0718 GCT; 29°21'N, 121°26'W; sounding, 2360 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 15°.

0	16.66	33.62	5.52	339	0	16.66	33.62	5.52	24.56	339	0.00
10	16.58	33.60	5.53	338	10	16.58	33.60	5.53	24.57	338	0.03
29	16.39	33.58	5.54	336	20	16.45	33.59	5.54	24.58	337	0.07
58	16.38	33.62	5.60	333	30	16.38	33.59	5.54	24.60	335	0.10
68	16.36	33.60	5.60	334	50	16.38	33.61	5.55	24.62	333	0.17
77	16.03	33.58	5.66	328	75	16.17	33.59	5.63	24.65	330	0.25
92	14.51	33.45	5.77	306	100	13.55	33.45	5.56	25.10	287	0.33
106	12.80	33.46	5.31	272	150	11.26	33.86	2.15	26.86	215	0.45
121	11.59	33.51	4.42	246	200	10.75	34.01	1.60	26.07	195	0.56
141	11.38	33.83	2.36	219	250	10.22	34.14	1.46	26.26	177	0.65
159	11.16	33.89	2.00	211	300	9.62	34.24	1.32	26.45	159	0.74
188	10.86	33.96	1.76	201	400	8.20	34.29	0.96	26.71	135	0.89
211	10.66	34.04	1.54	191	500	6.90	34.30	0.66	26.91	116	1.02
263	10.07	34.17	1.44	172	600	(5.90)	(34.33)		(27.06)	(101)	(1.14)
343	9.02	34.29	1.16	147							
447	7.46	34.29	0.80	124							
582	6.07	34.33	0.42	104							

100.110

PAOLINA-T; April 14, 1958; 0212 GCT; 29°04'N, 122°02'W; sounding, 2200 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°.

0	18.18	33.77	5.50	362	0	18.18	33.77	5.50	24.31	362	0.00
10	17.18	33.77	5.56	340	10	17.18	33.77	5.56	24.55	340	0.04
30	17.09	33.82	5.50	334	20	17.11	33.78	5.51	24.58	337	0.07
55	17.04	33.83	5.49	331	30	17.09	33.82	5.50	24.61	334	0.10
65	17.02	33.82	5.50	332	50	17.06	33.82	5.49	24.63	332	0.17
75	17.00	33.80	5.52	334	75	17.00	33.80	5.52	24.61	334	0.25
85	16.98	33.78	5.53	334	100	17.07	33.87	5.52	24.66	330	0.34
99	17.05	33.87	5.52	330	150	13.12	33.74	5.15	25.42	257	0.48
114	16.08	33.86	5.56	309	200	9.70	33.64	4.32	25.96	205	0.60
132	14.54	33.79	5.45	281	250	8.75	33.88	3.42	26.30	173	0.70
151	13.04	33.74	5.13	256	300	8.06	34.03	2.54	26.53	152	0.78
175	11.46	33.64	4.76	234	400	6.92	34.13	1.38	26.77	129	0.93
199	9.72	33.64	4.33	206	500	6.08	34.20	0.73	26.94	113	1.06
247	8.80	33.86	3.55	175							
325	7.78	34.09	2.13	143							
422	6.68	34.14	1.18	125							
550	5.71a)	34.25	0.50	105							

a) Mean value of 5.65 and 5.77°C.

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

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PAOLINA-T; April 13, 1958; 2052 GCT; 28°50'N, 122°41'W; sounding, 2250 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°.

100.120

0	17.72	34.02	5.49	334	0	17.72	34.02	5.49	24.61	334	0.00
10	17.54	34.00	5.44	330	10	17.54	34.00	5.44	24.65	330	0.03
30	17.50	34.01	5.40	329	20	17.50	34.00	5.42	24.65	330	0.07
55	17.55	34.04	5.44	328	30	17.50	34.01	5.40	24.66	329	0.10
65	17.58	34.06	5.39	328	50	17.54	34.02	5.43	24.66	329	0.16
75	17.62	34.09	5.46	327	75	17.62	34.09	5.46	24.68	327	0.25
85	17.68	34.09	5.43	327	100	17.64	34.09	5.42	24.68	327	0.33
100	17.64	34.09	5.42	327	150	13.50	33.74	5.24	25.34	264	0.48
115	17.51	34.16	5.38	318	200	10.37	33.68	4.48	25.88	213	0.60
134	14.53	33.78	5.36	282	250	8.82	33.91	3.24	26.32	171	0.70
153	12.94	33.69	5.22	258	300	8.02	33.98	2.62	26.50	154	0.79
178	11.37	33.64	5.04	232	400	6.76	34.15	1.44	26.80	126	0.93
201	10.34	33.68	4.46	212	500	6.01	34.29	0.57	27.01	106	1.05
249	8.83	33.91	3.26	172							
326	7.63	34.02	2.36	147							
423	6.50	34.20	1.15	118							
552	5.90	34.32a)	0.47	102							

PAOLINA-T; April 13, 1958; 1517 GCT; 28°27'N, 123°21'W; sounding, 2350 fm; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 00°.

100.130

0	17.79	34.09	5.39	330	0	17.79	34.09	5.39	24.65	330	0.00
10	17.80	34.09	5.39	330	10	17.80	34.09	5.39	24.65	330	0.03
30	17.78	34.09	5.31	330	20	17.79	34.09	5.33	24.65	330	0.07
55	17.76	34.08	5.36	329	30	17.78	34.09	5.31	24.65	330	0.10
65	17.70	34.05	5.30	331	50	17.76	34.08	5.34	24.66	329	0.16
74	17.58	34.05	5.38	328	75	17.58	34.05	5.38	24.66	329	0.25
84	17.64	34.07	5.37	329	100	17.69	34.12	5.40	24.69	326	0.33
99	17.69	34.12	5.40	326	150	14.62	33.90	5.13	25.23	275	0.48
113	17.76	34.18a)	5.38	323	200	10.96	33.68	4.50	25.78	223	0.61
139	16.11	34.11a)	5.22	291	250	9.17	33.89	3.70	26.24	179	0.71
153	14.28	33.86	5.10	271	300	8.07	34.00	2.94	26.49	155	0.80
177	12.09	33.71	4.74	240	400	6.84	34.12	1.67	26.77	128	0.95
201	10.94	33.68	4.49	222	500	6.30	34.25	0.75	26.94	112	1.08
249	9.22	33.89	3.76	179							
326	7.66	34.04a)	2.63	146							
424	6.72	34.14	1.34	126							
551	6.08	34.34	0.44	103							

PAOLINA-T; April 13, 1958; 0628 GCT; 27°52'N, 124°22'W; sounding, 2300 fm; wind, 180°, force 2; weather, overcast; sea, rough; wire angle, 05°.

100.145

0	17.86	33.99	5.38	339	0	17.86	33.99	5.38	24.56	339	0.00
10	17.74	33.95	5.39	339	10	17.74	33.95	5.39	24.56	339	0.03
30	17.72	34.00	5.41	335	20	17.93	33.98	5.40	24.57	338	0.07
55	17.74	33.99	5.34	336	30	17.72	34.00	5.41	24.60	335	0.10
64	17.73	33.99	5.38	336	50	17.74	33.99	5.37	24.59	336	0.17
74	17.70	33.98	5.38	336	75	17.69	33.99	5.39	24.59	336	0.25
84	17.58	34.00	5.41	332	100	17.65	34.05	5.33	24.66	330	0.34
99	17.64	34.05	5.33	330	150	13.35	33.81	5.10	25.42	257	0.48
113	16.99	34.03	5.42	316	200	10.60	33.69	4.54	25.85	216	0.60
132	14.59	33.83	5.24	280	250	9.06	33.89	3.67	26.26	177	0.71
151	13.26	33.80	5.10	256	300	8.06	34.05	2.64	26.54	151	0.79
175	11.70	33.68	4.68	236	400	7.23	34.20	1.28	26.78	128	0.94
199	10.62	33.69	4.55	216	500	6.58	34.27	0.65	26.92	114	1.06
247	9.18	33.88	3.73	179							
324	7.78	34.09	2.25	143							
420	7.13	34.23	1.09	124							
546	6.20	34.29	0.44	108							

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

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

103.30

BLACK DOUGLAS; April 23, 1958; 1242 GCT; 31°05'N, 116°25'W; sounding, 38 fm; wind, 280°, force 3; weather, partly cloudy; sea, rough; wire angle, 02°.

0	17.46	33.53	5.68	364	0	17.46	33.53	5.68	24.29	364	0.00
10	17.42	33.58	5.83	359	10	17.42	33.58	5.83	24.34	359	0.04
29	14.30	33.48	5.85	300	20	14.90	33.50	5.84	24.88	308	0.07
48	11.73	33.45	4.95	253	30	14.28	33.48	5.85	24.97	299	0.10

103.35

BLACK DOUGLAS; April 23, 1958; 1601 GCT; 30°55.5'N, 116°45'W; sounding, 1000 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 23°.

0	17.07	33.52	5.82	356	0	17.07	33.52	5.82	24.38	356	0.00
8	16.84	33.54	5.94	349	10	16.74	33.54	5.94	24.47	347	0.04
27	12.64	33.49	5.33	267	20	14.40	33.52	5.52	24.98	298	0.07
40	11.46	33.55	4.58	241	30	12.30	33.50	5.18	25.39	260	0.10
49	10.88	33.54	4.43	232	50	10.85	33.54	4.42	25.68	232	0.14
58	10.61	33.59	4.16	224	75	10.03	33.69	3.62	25.95	206	0.20
65	10.28	33.88r	4.00	-	100	9.29	33.81	3.43	26.16	186	0.25
81	9.93	33.71	3.57	203	150	8.76	34.05	2.46	26.42	160	0.34
92	9.42	33.91r	3.53	-	200	9.02	34.33	1.14	26.61	144	0.41
102	9.28	33.82	3.41	186	250	8.55	34.33	0.91	26.68	137	0.48
120	9.20	33.93	2.90	176	300	8.00	34.30	0.80	26.75	131	0.55
140	8.76	34.00	2.58	164	400	7.16	34.29	0.70	26.86	120	0.68
169	9.21	34.27	1.45	151	500	(6.20)	(34.31)	(0.53)	(27.01)	(106)	(0.80)
209	8.94	34.34	1.06	142							
274	8.23	34.31	0.85	133							
359	7.48	34.29	0.75	125							
484	6.36	34.31	0.55	108							

103.40

BLACK DOUGLAS; April 23, 1958; 1937 GCT; 30°45'N, 117°05.5'W; sounding, 800 fm; wind, 300°, force 4; weather, cloudy; sea, high; wire angle, 16°.

0	17.45	33.54	-	362	0	17.45	33.54		24.31	362	0.00
9	17.34	33.53	5.62	360	10	17.30	33.53	5.62	24.34	360	0.04
28	16.04	33.51	5.68	334	20	16.84	33.52	5.64	24.43	351	0.07
42	15.08	33.47	5.77	316	30	15.90	33.51	5.68	24.64	331	0.10
51	14.59	33.45	5.84	307	50	14.65	33.45	5.84	24.87	309	0.17
60	14.02	33.45	5.78	296	75	12.68	33.48	5.45	25.30	268	0.24
69	13.26	33.47	5.60	280	100	11.26	33.44	5.06	25.54	246	0.31
87	11.76	33.48	5.16	251	150	9.85	33.77	3.44	26.05	197	0.42
100	11.26	33.44	5.06	246	200	9.22	33.96	2.53	26.29	174	0.51
112	10.78	33.53	4.65	231	250	9.32	34.21	1.18	26.55	150	0.60
134	10.29	33.69	3.78	211	300	8.82	34.34	1.04	26.65	140	0.67
158	9.54	33.81	3.17	190	400	7.11	34.27	1.12	26.85	121	0.81
192	9.22	33.93	2.53	176	500	6.34	34.30	0.77	27.01	106	0.93
239	9.48	34.29	1.27	154							
311	8.72	34.34	1.04	138							
400	7.11	34.27a)	1.12	121							
528	6.20	34.31	0.62	106							

a) Possible evaporation; value falls on property curve.

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

BLACK DOUGLAS; April 24, 1958; 0250 GCT; 30°22'N, 117°45'W; sounding, 1200 fm; wind, 310°, force 5; weather, haze; sea, high; wire angle, 18°.

103.50

0	17.27	33.68u	5.52	-	0	17.27	(33.60)	5.52	(24.40)	(353)	(0.00)
9	17.26	33.60	5.59	353	10	17.25	33.60	5.60	24.40	353	0.04
27	16.95	33.62	5.60	346	20	17.08	33.62	5.60	24.46	348	0.07
40	16.61	33.58	5.64	341	30	16.87	33.61	5.60	24.50	344	0.10
47	16.12	33.58	5.74	330	50	16.08	33.61	5.74	24.68	327	0.17
56	16.06	33.64	5.73	325	75	15.36	33.58	5.74	24.82	314	0.25
63	15.66	33.61	5.75	318	100	13.40	33.58	5.01	25.23	275	0.33
79	15.22	33.57	5.74	312	150	10.46	33.65	4.16	25.84	217	0.45
92	14.37	33.56	5.59	295	200	9.22	33.98	2.91	26.30	173	0.55
104	13.06	33.59	4.86	267	250	8.82	34.12	2.00	26.48	156	0.63
124	11.50	33.61	4.47	237	300	8.53	34.22	1.60	26.60	145	0.71
149	10.49	33.65	4.17	217	400	6.86	34.23	1.17	26.85	121	0.85
182	9.70	33.97	2.98	181	500	5.91	34.24	0.75	26.98	108	0.97
229	8.90	34.04	2.46	163							
302	8.53	34.22	1.60	144							
394	6.94	34.23	1.18	121							
525	5.75	34.25	0.67	105							

BLACK DOUGLAS; April 24, 1958; 0952 GCT; 30°06'N, 118°25.5'W; sounding, 1700 fm; wind, 340°, force 5; weather, clear; sea, high; wire angle, 14°.

103.60

0	17.10	33.59	5.61	351	0	17.10	33.59	5.61	24.43	351	0.00
9	17.14	33.58	5.64	352	10	17.14	33.58	5.63	24.42	352	0.04
28	17.38	33.81a)	5.53	341	20	17.27	33.64	5.58	24.42	352	0.07
57	17.30	33.87	5.68	335	30	17.38	33.83	5.54	24.56	339	0.10
66	16.98	33.78	5.71	334	50	17.36	33.85	5.64	24.58	337	0.17
75	17.00	33.81	5.55	333	75	17.00	33.81	5.55	24.62	333	0.26
88	16.38	33.87	5.48	314	100	14.46	33.67	5.18	25.09	288	0.34
101	14.35	33.66	5.18	287	150	10.67	33.57	4.49	25.74	226	0.46
114	12.92	33.58	5.14	265	200	9.12	33.85	3.17	26.22	181	0.57
132	11.57	33.53	4.78	244	250	8.52	33.97	2.53	26.42	162	0.66
150	10.67	33.57	4.49	226	300	7.55	34.02	2.03	26.59	146	0.74
176	9.46	33.66	4.06	200	400	6.80	34.33	1.01	26.94	113	0.87
198	9.16	33.84	3.21	182	500	6.20	34.33	0.47	27.02	105	0.98
246	8.58	33.97	2.57	164							
321	7.25	34.07	1.77	138							
420	6.71	34.33	0.93	111							
547	5.89	34.33	0.36	101							

BLACK DOUGLAS; April 24, 1958; 1543 GCT; 29°48.5'N, 119°01'W; sounding, 1850 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 18°.

103.70

0	16.30	33.46	5.75	342	0	16.30	33.46	5.75	24.52	342	0.00
9	16.28	33.46	5.78	342	10	16.27	33.46	5.78	24.53	341	0.03
27	16.26	33.48	5.79	340	20	16.26	33.47	5.78	24.53	341	0.07
55	16.37	33.63	5.64	332	30	16.26	33.51	5.79	24.57	338	0.10
64	16.18	33.56	5.63	332	50	16.35	33.59	5.69	24.61	334	0.17
73	15.67	33.45	5.66	330	75	15.65	33.45	5.67	24.66	329	0.25
86	15.52	33.49	5.71	323	100	15.70	33.66	5.64	24.81	315	0.34
99	15.70	33.66	5.64	315	150	10.50	33.54	4.77	25.75	225	0.47
112	13.70	33.58	5.61	280	200	9.01	33.84	3.33	26.23	180	0.57
130	11.69	33.44	5.29	253	250	8.24	34.04	2.52	26.50	154	0.66
148	10.58	33.53	4.80	228	300	7.49	34.09	2.14	26.65	140	0.73
175	9.42	33.60	4.05	204	400	6.47	34.18	0.92	26.87	119	0.87
197	9.06	33.75	3.56	188	500	5.98	34.25	0.58	26.99	108	0.99
245	8.34	34.03	2.52	155							
321	7.23	34.11	1.82	136							
420	6.34	34.19	0.81	117							
548	5.77	34.31	0.48	100							

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

S10

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5804

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

103.80

BLACK DOUGLAS; April 24, 1958; 2250 GCT; 29°26.5'N, 119°45.5'W; sounding, 1900 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 17°.

0	16.93	33.64	5.72	343	0	16.93	33.64	5.72	24.51	343	0.00
9	16.92	33.62	3.96u	345	10	16.91	33.62	5.72	24.49	345	0.03
28	16.77	33.62	5.66	341	20	16.85	33.62	5.71	24.51	343	0.07
56	17.03	33.80	5.64	335	30	16.77	33.62	5.66	24.55	340	0.10
65	17.05	33.84	5.70	332	50	16.79	33.66	5.65	24.56	339	0.17
74	16.82	33.77	5.67	332	75	16.80	33.77	5.67	24.63	332	0.25
88	16.45	33.76	5.70	324	100	16.12	33.69	5.70	24.74	322	0.34
102	16.11	33.69	5.70	322	150	11.22	33.55	4.83	25.63	237	0.48
115	14.08	33.54	6.14	391	200	9.47	33.76	3.65	26.09	193	0.59
132	12.78	33.48	5.47	270	250	8.83	34.04	2.27	26.42	162	0.68
149	11.24	33.55	4.83	238	300	7.87	34.07	2.14	26.58	146	0.76
175	10.34	33.60	4.43	218	400	6.78	34.13	1.17	26.79	127	0.90
196	9.52	33.75	3.68	194	500	6.10	34.23	0.59	26.96	111	1.03
245	8.94	34.02	2.33	165							
318	7.55	34.08	2.08	141							
416	6.66	34.15	1.07	122							
541	5.82	34.27	0.47	104							

103.90

BLACK DOUGLAS; April 25, 1958; 0459 GCT; 29°06'N, 120°25'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 16°.

0	17.45	33.84	5.47	340	0	17.45	33.84	5.47	24.54	340	0.00
10	17.48	33.80	5.50	344	10	17.48	33.80	5.50	24.50	344	0.03
29	17.42	33.82	5.56	342	20	17.46	33.81	5.52	24.52	343	0.07
56	17.35	33.80	5.58	341	30	17.42	33.81	5.54	24.53	341	0.10
65	17.24	33.80	5.58	339	50	17.37	33.80	5.55	24.53	341	0.17
74	16.90	33.77	5.58	333	75	16.88	33.77	5.58	24.62	333	0.26
87	16.86	33.82	5.59	329	100	16.74	33.87	5.52	24.74	322	0.34
100	16.74	33.87	5.52	322	150	11.37	33.62	4.36	25.65	235	0.48
113	15.16	33.74	5.26	298	200	9.64	33.80	3.39	26.10	192	0.59
130	12.92	33.62	4.74	262	250	9.18	34.16	1.92	26.46	158	0.68
148	11.44	33.62	4.39	236	300	8.37	34.20	1.61	26.62	143	0.76
174	10.27	33.75	3.60	206	400	7.25	34.27	0.81	26.83	123	0.89
196	9.70	33.80	3.42	193	500	6.48	34.31	0.46	26.98	109	1.02
244	9.28	34.15	2.08	161							
319	8.16	34.22	1.55	138							
416	7.06	34.28	0.70	120							
541	6.21	34.33	0.38	105							

107.32

BLACK DOUGLAS; April 27, 1958; 0441 GCT; 30°26'N, 116°11'W; sounding, 350 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 24°.

0	16.14	33.57	5.81	331	0	16.14	33.57	5.81	24.64	331	0.00
9	16.12	33.53	5.86	333	10	16.10	33.53	5.86	24.62	333	0.03
27	15.00	33.55	6.00	308	20	16.06	33.55	5.88	24.80	316	0.07
44	12.69	33.50	5.84	267	30	14.68	33.56	5.97	24.96	301	0.10
66	11.32	33.60	4.19	235	50	12.23	33.52	5.28	25.42	257	0.15
87	10.39	33.80	3.29	204	75	10.40	33.62	4.00	25.83	218	0.21
107	10.14	33.90	2.93	193	100	10.23	33.87	3.03	26.06	196	0.26
140	9.74	34.03	2.41	177	150	9.62	34.06	2.29	26.30	173	0.36
173	9.36	34.13	2.00	164	200	9.69	34.26	1.05	26.45	159	0.44
205	9.68	34.20u	1.01	-	250	9.17	34.40	0.76	26.64	141	0.52
259	9.06	34.42	0.72	138							

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

BLACK DOUGLAS; April 27, 1958; 0159 GCT; 30°20'N, 116°23'W; sounding, 900 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

107.35

0	17.43	33.61	5.66	357	0	17.43	33.61	5.66	24.37	357	0.00
9	17.44	33.60	5.60	358	10	17.44	33.60	5.60	24.37	357	0.04
28	16.62	33.59	5.72	340	20	17.43	33.60	5.61	24.37	357	0.07
41	15.30	33.55	5.91	315	30	16.00	33.53	6.04	24.63	332	0.11
50	14.23	33.55a)	5.76	293	50	14.23	33.55	5.76	25.04	293	0.17
59	13.24	33.54	5.44	274	75	11.80	33.53	4.47	25.51	248	0.24
67	12.40	33.51	4.96	261	100	10.22	33.60	4.05	25.83	218	0.30
83	11.24	33.57	4.33	236	150	9.27	33.96	2.66	26.28	175	0.39
95	10.46	33.58	4.22	222	200	8.35	34.08	2.09	26.52	152	0.47
107	10.04	33.69	3.68	207	250	7.83	34.16	1.74	26.66	139	0.55
126	9.67	33.93	2.79	183	300	7.48	34.18	1.34	26.72	133	0.62
150	9.27	33.96	2.66	175	400	6.87	34.32	0.50	26.92	114	0.75
183	8.61	34.05	2.24	158	500	6.32	34.34	0.40	27.01	106	0.86
221	8.04	34.13	1.91	144							
298	7.48	34.18	1.35	133							
387	6.94	34.32	0.52	115							
516	6.26	34.34	0.40	105							

BLACK DOUGLAS; April 26, 1958; 2214 GCT; 30°10.5'N, 116°43'W; sounding, 1400 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 11°.

107.40

0	16.91	33.51	5.56	352	0	16.91	33.51	5.56	24.42	352	0.00
10	17.00	33.58	5.61	350	10	17.00	33.58	5.61	24.44	350	0.04
29	16.18	33.49	5.72	337	20	16.90	33.58	5.65	24.47	347	0.07
43	13.50	33.51	5.66	281	30	15.50	33.42	5.85	24.67	328	0.10
52	12.93	33.49	5.48	272	50	13.00	33.50	5.51	25.25	273	0.16
61	11.82	33.49	5.14	252	75	11.00	33.56	4.38	25.68	232	0.23
70	11.18	33.53	4.58	237	100	10.28	33.75	3.82	25.95	206	0.28
88	10.60	33.66	3.99	218	150	9.25	33.99	2.60	26.32	172	0.38
100	10.28	33.75	3.82	206	200	8.50	34.04	2.32	26.47	157	0.46
114	10.00	33.77	3.33	200	250	7.88	34.12	2.30	26.63	142	0.54
136	9.52	33.94	2.71	180	300	7.48	34.23	1.18	26.76	129	0.61
162	9.03	34.01	2.53	168	400	6.60	34.26	0.75	26.91	115	0.74
196	8.56	34.04	2.31	158	500	(6.00)	(34.35)		(27.07)	(100)	(0.85)
243	7.98	34.10	2.34	145							
298p	7.48	34.23	1.28	129							
374p	6.74	34.25	0.80	117							
484p	6.12	34.33	0.43	104							

BLACK DOUGLAS; April 26, 1958; 1446 GCT; 29°50.5'N, 117°23.5'W; sounding, 1500 fm; wind, 310°, force 5; weather, partly cloudy; sea, high; wire angle, 27°.

107.50

0	17.13	33.58	5.74	352	0	17.13	33.58	5.74	24.42	352	0.00
9	17.13	33.58	5.79	352	10	17.13	33.58	5.78	24.42	352	0.04
26	16.83	33.57	5.67	347	20	17.05	33.58	5.77	24.43	351	0.07
39	15.23	33.53	5.85	315	30	16.50	33.55	5.67	24.61	334	0.10
48	14.32	33.51	5.89	297	50	13.85	33.49	5.73	25.06	291	0.17
56	12.74	33.48	5.09	259	75	11.27	33.56	4.31	25.62	237	0.23
64	11.90	33.53	4.60	250	100	10.52	33.63	3.90	25.82	219	0.29
80	11.14	33.57	4.25	234	150	9.41	33.84	2.96	26.17	186	0.39
92	10.80	33.61	4.11	226	200	8.95	34.12	1.81	26.46	158	0.48
103	10.42	33.64	3.87	217	250	8.39	34.15	1.53	26.58	147	0.56
120	9.91	33.72	3.57	203	300	7.25	34.09	1.51	26.68	137	0.63
140	9.56	33.78	3.21	192	400	6.65	34.17	0.79	26.84	122	0.77
166	9.32	33.95	2.70	176							
202	8.89	34.13	1.81	156							
260	7.87	34.07	1.86	146							
333	6.99	34.11	1.23	131							
442	6.52	34.22	0.62	117							

a) Possible evaporation; value falls on property curve.

S10

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

107.60

BLACK DOUGLAS; April 26, 1958; 0737 GCT; 29°31'N, 118°03'W; sounding, 1800 fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 26°.

0	16.90	33.59	5.60	347	0	16.90	33.59	5.60	24.47	347	0.00
9	16.88	33.57	5.61	348	10	16.87	33.57	5.60	24.47	347	0.03
26	16.86	33.58	5.57	346	20	16.86	33.57	5.59	24.47	347	0.07
53	16.16	33.58	5.70	331	30	16.84	33.58	5.57	24.48	346	0.10
62	15.99	33.58	5.71	327	50	16.35	33.58	5.69	24.60	335	0.17
70	15.86	33.57	5.72	325	75	15.72	33.56	5.72	24.72	323	0.25
82	15.38	33.53	5.72	318	100	14.39	33.53	5.71	24.99	298	0.33
95	14.72	33.53	5.76	304	150	10.96	33.52	4.72	25.66	234	0.47
107	13.80	33.55	5.60	284	200	9.38	33.92	3.06	26.24	179	0.57
122	12.99	33.46	5.43	275	250	8.64	34.08	2.33	26.47	157	0.66
135	12.15	33.48	5.20	258	300	8.33	34.22	1.59	26.64	141	0.74
156	10.40	33.56	4.47	222	400	7.41	34.29	0.96	26.83	123	0.88
174	9.90	33.77	3.55	199	500	(5.98)	(34.24)		(26.98)	(109)	(1.00)
213	9.21	33.96	2.71	174							
276	8.55	34.16	1.87	148							
362	7.87	34.30	1.06	129							
478	6.32	34.25	0.85	112							

107.70

BLACK DOUGLAS; April 26, 1958; 0053 GCT; 29°11'N, 118°43'W; sounding, 1650 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 16°.

0	17.53	33.78	5.57	346	0	17.53	33.78	5.57	24.48	346	0.00
10	17.54	33.73	5.59	350	10	17.54	33.73	5.59	24.44	350	0.03
29	17.36	33.68	5.60	350	20	17.44	33.70	5.59	24.44	350	0.07
56	17.19	33.82	5.70	336	30	17.36	33.68	5.62	24.45	349	0.10
64	17.14	33.86	5.67	332	50	17.20	33.80	5.68	24.57	338	0.17
73	17.00	33.84	5.66	330	75	16.98	33.84	5.66	24.66	329	0.26
90	16.66	33.84	5.66	323	100	13.90	33.55	5.64	25.11	286	0.34
98	14.16	33.57	5.66	290	150	10.27	33.49	4.69	25.74	226	0.46
111	12.49	33.46	5.55	266	200	8.89	33.80	3.38	26.22	181	0.57
128	11.00	33.40	5.19	244	250	8.41	34.04	2.30	26.48	156	0.65
146	10.41	33.47	-	229	300	8.06	34.14	1.10	26.62	143	0.73
172	9.56	33.57	4.27	208	400	7.05	34.22	0.94	26.82	124	0.87
193	9.00	33.74	3.55	187	500	6.22	34.23	0.75	26.94	112	0.99
241	8.50	34.00	2.50	160							
316	7.95	34.16	0.92	140							
414	6.92	34.23	0.94	122							
541	5.90	34.23	0.63	108							

107.80

BLACK DOUGLAS; April 25, 1958; 1753 GCT; 28°54.5'N, 119°19'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°.

0	17.77	33.93	5.64	341	0	17.77	33.93	5.64	24.54	341	0.00
10	17.79	33.89	5.62	344	10	17.79	33.89	5.62	24.50	344	0.03
28	17.74	33.86	5.56	346	20	17.77	33.88	5.61	24.49	345	0.07
57	17.66	33.93	5.58	339	30	17.74	33.86	5.56	24.49	345	0.10
66	17.52	33.95	5.52	334	50	17.69	33.90	5.56	24.52	342	0.17
75	17.52	33.96	5.53	334	75	17.52	33.96	5.53	24.61	334	0.26
88	17.26	34.03	5.44	322	100	16.76	33.97	5.28	24.80	316	0.34
102	16.74	33.96	5.28	315	150	12.02	33.69	3.72	25.59	240	0.48
115	15.26	33.84	4.94	293	200	10.08	33.89	2.93	26.09	193	0.59
133	12.86	33.57	4.89	265	250	8.73	34.07	2.43	26.46	158	0.68
151	11.99	33.69	3.70	240	300	8.18	34.15	1.82	26.60	145	0.76
177	11.07	33.96	2.92	204	400	7.52	34.30	0.76	26.81	125	0.90
199	10.10	33.89	2.93	193	500	6.71	34.33	0.40	26.96	111	1.02
248	8.79	34.07	2.44	160							
324	8.04	34.18	1.56	140							
422	7.38	34.31	0.57	122							
551	6.28	34.34	0.37	105							

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

S10
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BLACK DOUGLAS; April 25, 1958; 1041 GCT; 28°32.5'N, 120°01.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 20°.

10790

0	17.40	33.77	5.46	344	0	17.40	33.77	5.46	24.50	344	0.00
9	17.50	33.76	5.48	347	10	17.50	33.76	5.48	24.47	347	0.03
28	17.44	33.84	5.51	341	20	17.49	33.81	5.49	24.51	344	0.07
55	17.36	33.80	5.50	342	30	17.44	33.84	5.51	25.54	341	0.10
64	16.86	33.70	5.52	338	50	17.38	33.81	5.50	24.54	341	0.17
72	16.91	33.80	5.49	331	75	16.88	33.80	5.46	24.64	331	0.26
85	16.25	33.84	5.38	314	100	15.20	33.71	5.38	24.96	301	0.34
98	15.45	33.75	5.31	303	150	11.53	33.60	4.23	25.61	238	0.47
111	14.40	33.69	4.98	286	200	9.58	33.93	2.88	26.20	182	0.58
127	13.07	33.65	4.51	264	250	8.72	34.04	2.68	26.44	160	0.67
143	11.95	33.59	4.41	247	300	8.20	34.16	1.66	26.61	144	0.75
165	10.63	33.71	3.50	216	400	7.43	34.29	0.69	26.82	124	0.89
184	9.96	33.87	2.94	192	500	(6.76)	(34.32)	(0.43)	(26.94)	(112)	(1.01)
225	9.04	33.98	2.84	170							
292	8.28	34.13	1.82	148							
380	7.58	34.28	0.78	126							
495	6.80	34.32	0.43	113							

STRANGER; April 27, 1958; 1941 GCT; 29°50.5'N, 115°52'W; sounding, 46 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 09°.

11033

0	16.44	33.53	5.55	341	0	16.44	33.53	5.55	24.54	341	0.00
10	16.36	33.54	5.66	338	10	16.36	33.54	5.66	24.57	338	0.03
30	14.12	33.48	5.90	296	20	15.34	33.52	5.81	24.78	318	0.07
50	11.88	33.42	4.93	258	30	14.12	33.48	5.90	25.01	296	0.10
75	10.68	33.77	3.03	212	50	11.88	33.42	4.93	25.41	258	0.15
					75	10.68	33.77	3.03	25.90	211	0.21

STRANGER; April 27, 1958; 1800 GCT; 29°45'N, 115°58'W; sounding, 320 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.

11035

0	16.64	33.58	5.46	342	0	16.64	33.58	5.46	24.53	342	0.00
9	16.59	33.54	5.58	343	10	16.57	33.54	5.59	24.52	343	0.03
28	15.78	33.60	5.72	321	20	16.18	33.57	5.68	24.63	332	0.07
37	14.18	33.55	5.68	292	30	15.52	33.60	5.72	24.80	316	0.10
46	12.36	33.44	5.40	265	50	11.74	33.47	4.95	25.47	252	0.16
55	11.33	33.49	4.71	243	75	10.80	33.71	3.52	25.82	218	0.22
64	11.10	33.49	4.67	239	100	10.10	33.88	2.60	26.08	194	0.27
75	10.80	33.71	3.52	218	150	9.75	34.18	1.69	26.37	166	0.36
87	10.34	33.78	3.51	205	200	9.34	34.30	1.02	26.54	151	0.44
99	10.12	33.88	2.70	194	250	9.36	34.38	0.79	26.60	145	0.52
119	9.94	34.03	2.29	180	300	8.86	34.36	0.65	26.66	139	0.59
143	9.96	34.18	1.68	169	400	7.53	34.32	0.48	26.83	123	0.72
171	9.01	34.14	1.74	158							
213	9.46	34.38	0.80	147							
255	9.30	34.38	0.78	144							
348	8.22	34.34	0.56	131							
441	6.90	34.30	0.44	116							

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

110.40 STRANGER; April 27, 1958; 1456 GCT; 29°35'N, 116°19'W; sounding, 1400 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 10°.

0	17.30	33.69	5.45	348	0	17.30	33.69	5.45	24.46	348	0.00
10	17.31	33.66	5.50	351	10	17.31	33.66	5.50	24.43	351	0.03
29	17.28	33.70	5.52	348	20	17.30	33.69	5.51	24.46	348	0.07
44	17.06	33.68	5.53	347	30	17.28	33.70	5.52	24.48	347	0.10
53	15.81	33.62	5.72	320	50	16.23	33.64	5.66	24.67	328	0.17
63	14.55	33.58	5.70	297	75	13.50	33.55	5.37	25.18	279	0.25
72	13.82	33.55	5.54	285	100	11.52	33.57	4.41	25.58	241	0.31
90	11.92	33.54	4.58	250	150	9.87	33.96	2.95	26.18	184	0.42
104	11.38	33.58	4.34	237	200	9.37	34.24	1.53	26.49	155	0.51
118	10.38	33.68	3.73	213	250	9.08	34.34	0.90	26.61	144	0.58
141	9.87	33.84	3.08	193	300	8.44	34.33	0.79	26.70	135	0.66
169	9.98	34.17	1.77	170	400	7.30	34.31	0.54	26.85	121	0.79
207	9.26	34.26	1.46	154	500	6.55	34.32	0.43	26.97	110	0.91
258	8.93	34.34	0.90	141	600	(5.86)	(34.41)		(27.13)	(94)	(1.02)
338	8.04	34.32	0.69	130							
438	6.98	34.30	0.48	117							
583	5.98	34.40	0.35	97							

110.50 STRANGER; April 27, 1958; 0911 GCT; 29°16'N, 116°59'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 17°.

0	17.19	33.68	5.32	346	0	17.19	33.68	5.32	24.48	346	0.00
10	17.20	33.65	5.33	349	10	17.20	33.65	5.33	24.45	349	0.03
28	17.19	33.69	5.40	345	20	17.20	33.67	5.37	24.47	347	0.07
43	16.32	33.55	5.36	337	30	17.18	33.69	5.40	24.49	345	0.10
52	15.44	33.51	5.67	321	50	15.57	33.52	5.62	24.72	324	0.17
62	14.41	33.48	5.80	302	75	12.25	33.42	4.65	25.33	265	0.24
71	12.68	33.40	4.78	274	100	10.58	33.53	4.20	25.73	227	0.31
89	11.22	33.50	4.40	241	150	9.55	33.88	2.87	26.18	185	0.41
102	10.50	33.54	4.17	225	200	8.77	34.05	2.10	26.44	160	0.50
115	10.14	33.64	3.62	212	250	8.48	34.25	1.38	26.64	141	0.58
137	9.74	33.84	3.12	191	300	7.69	34.25	1.12	26.75	130	0.65
163	9.40	33.91	2.65	180	400	6.65	34.30	0.50	26.94	112	0.77
199	8.77	34.05	2.10	160	500	6.10	34.36	0.32	27.06	102	0.88
249	8.50	34.25	1.39	142							
326	7.26	34.25	0.98	125							
425	6.48	34.32	0.40	109							
565	5.76	34.39	0.29	95							

110.60 STRANGER; April 27, 1958; 0319 GCT; 28°58'N, 117°37'W; sounding, 2000 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°.

0	16.87	33.58	5.36	347	0	16.87	33.58	5.36	24.47	347	0.00
9	16.90	33.60	5.56	346	10	16.89	33.60	5.56	24.49	346	0.03
28	16.75	33.58	5.54	344	20	16.81	33.59	5.55	24.50	344	0.07
54	16.63	33.68	5.57	334	30	16.74	33.58	5.55	24.51	343	0.10
63	16.47	33.68	5.62	331	50	16.66	33.66	5.56	24.59	336	0.17
71	16.16	33.66	5.55	325	75	15.68	33.58	5.58	24.75	320	0.25
84	14.84	33.46	5.67	312	100	13.72	33.52	5.20	25.12	285	0.33
95	14.16	33.53	5.24	293	150	10.30	33.66	3.75	25.88	213	0.46
108	13.00	33.50	5.15	272	200	9.62	33.92	2.53	26.19	183	0.56
124	11.60	33.53	4.71	245	250	9.12	34.14	1.54	26.45	159	0.64
140	10.68	33.57	4.17	226	300	8.71	34.26	1.17	26.60	144	0.72
166	9.98	33.78	3.30	199	400	7.44	34.24	0.80	26.78	128	0.86
185	9.77	33.86	2.87	190	500	6.54	34.26	0.48	26.92	114	0.99
231	9.30	34.07	1.87	167							
304	8.69	34.27	1.16	143							
401	7.42	34.24	0.79	128							
530	6.26	34.27	0.42	110							

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

STRANGER; April 26, 1958; 1544 GCT; 28°42'N, 118°25'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 09°.

110.70

0	17.16	33.67	5.41	346	0	17.16	33.67	5.41	24.48	346	0.00
10	17.16	33.66	5.38	347	10	17.16	33.66	5.38	24.47	347	0.03
30	17.12	33.67	5.35	345	20	17.14	33.66	5.36	24.48	346	0.07
45	16.36	33.59	5.54	335	30	17.12	33.67	5.35	24.49	345	0.10
68p	16.14	33.58	5.51	330	50	16.32	33.59	5.54	24.61	334	0.17
77p	15.84	33.57	5.60	325	75	15.92	33.57	5.58	24.69	326	0.25
87p	15.33	33.57	5.56	314	100	14.15	33.52	5.50	25.04	293	0.33
103p	13.81a)	33.51	5.49	288	150	10.22	33.58	4.20	25.83	218	0.46
123p	11.87	33.48	4.91	254	200	9.59	33.89	2.86	26.18	185	0.56
151p	10.19	33.59	4.17	217	250	8.94	34.13	2.00	26.47	157	0.65
190p	9.78	33.85	3.09	191	300	8.12	34.20	1.54	26.65	140	0.73
255p	8.86	34.14	1.96	155	400	7.11	34.25	0.98	26.84	122	0.86
337p	7.56	34.23	1.28	130							
464p	6.63	34.28	0.65	114							

STRANGER; April 26, 1958; 0942, 1020 GCT; 28°17'N, 118°59.5'W; sounding, 2150 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 19°, 20°.

110.80

0	17.86	33.92	5.35	344	0	17.86	33.92	5.35	24.50	344	0.00
10	17.88	34.04b)	5.37	-	10	17.88	33.92	5.37	24.50	344	0.03
28	17.84	33.92	5.43	344	20	17.86	33.92	5.39	24.50	344	0.07
56	17.84	33.90	5.49	346	30	17.84	33.91	5.43	24.49	345	0.10
65	17.49	33.92	5.54	336	50	17.84	33.90	5.47	24.48	346	0.17
74	17.28	33.89	5.52	333	75	17.27	33.89	5.52	24.62	333	0.26
87	16.97	33.98	5.59	319	100	15.08	33.78	5.14	25.03	294	0.34
100	15.08	33.78	5.14	294	150	10.60	33.62	4.32	25.80	221	0.47
114	13.08	33.61	4.97	266	200	9.10	33.87	3.17	26.24	179	0.57
133	11.72	33.58	4.74	243	250	8.20	34.05	2.30	26.52	152	0.65
151	10.51	33.63	4.27	219	300	7.68	34.16	1.66	26.68	137	0.73
178	9.68	33.75	3.60	197							
201	9.09	33.87	3.16	179							
251	8.19	34.05	2.29	152							
326	7.48	34.20	1.43	131							
549	6.30	34.37	0.40	103							

STRANGER; April 26, 1958; 0400 GCT; 27°53'N, 119°33'W; sounding, 2300 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 03°.

110.90

0	18.20	33.98	5.31	348	0	18.20	33.98	5.31	24.46	348	0.00
10	18.20	34.02	5.34	345	10	18.20	34.02	5.34	24.49	345	0.03
30	18.18	33.97	5.32	348	20	18.20	33.97	5.33	24.46	348	0.07
60	17.71	33.96	5.34	338	30	18.18	33.97	5.32	24.46	348	0.10
69	17.68	33.96	5.35	337	50	17.87	33.96	5.32	24.52	342	0.17
79	17.59	33.96	5.30	335	75	17.62	33.96	5.32	24.59	336	0.26
93	15.64	33.77	5.38	306	100	14.05	33.64	5.17	25.14	283	0.34
108	13.13	33.58	4.96	269	150	9.84	33.86	3.21	26.11	191	0.46
121	12.10	33.59	4.59	249	200	9.06	34.01	2.57	26.35	169	0.55
139p	10.30	33.77	3.47	205	250	8.52	34.14	1.86	26.55	150	0.63
164p	9.52	33.92c)	2.97	182	300	8.18	34.26	1.30	26.69	136	0.70
185p	9.30	33.96	2.78	175							
231p	8.65	34.10	2.18	155							
302p	8.16	34.26	1.28	136							
396p	7.48	34.38	0.61	118							
518p	6.76	34.39	0.34	107							

- a) Alternate value, 14.21°C, not used in interpolation.
 b) Loose bottle cap; value does not fall on property curve.
 c) Loose bottle cap; value falls on property curve.

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

113.30 STRANGER; April 24, 1958; 1042 GCT; 29°20'N, 115°21'W; sounding, 50 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 00°.

0	16.20	33.71	5.61	322	0	16.20	33.71	5.61	24.73	322	0.00
10	16.20	33.80	5.64	316	10	16.20	33.80	5.64	24.80	316	0.03
20	15.36	33.71	5.55	304	20	15.36	33.71	5.55	24.92	304	0.06
30	15.04	33.66	5.43	302	30	15.04	33.66	5.43	24.95	302	0.09
40	13.54	33.66	4.03	271	50	12.20	33.73	2.99	25.58	241	0.15
50	12.20	33.73	2.99	241	75	11.48	33.78	2.57	25.76	224	0.20
75	11.48	33.78	2.57	224							

113.35 STRANGER; April 24, 1958; 1313 GCT; 29°12'N, 115°36'W; sounding, 570 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 09°.

0	16.03	33.59	5.81	327	0	16.03	33.59	5.81	24.68	327	0.00
10	16.04	33.66	5.82	322	10	16.04	33.66	5.82	24.73	322	0.03
30	14.66	33.58	5.16	300	20	15.66	33.63	5.50	24.80	316	0.06
40	12.90	33.55	4.96	267	30	14.66	33.58	5.16	24.97	300	0.10
49	12.13	33.58	4.30	250	50	12.12	33.58	4.29	25.49	250	0.15
58	11.82	33.59	3.90	244	75	10.88	33.69	3.22	25.80	221	0.21
68	11.26	33.69	3.27	227	100	9.97	33.78	3.08	26.03	199	0.26
82	10.60	33.69	3.21	216	150	9.68	34.08	2.00	26.30	173	0.36
95	10.13	33.78	3.10	202	200	9.88	34.37	1.05	26.50	154	0.44
108	9.78	33.78	3.06	196	250	9.40	34.41	0.74	26.62	143	0.52
131	9.77	33.96	2.58	182	300	8.82	34.39	0.64	26.68	127	0.59
158	9.68	34.13	1.89	169	400	7.58	34.39	0.46	26.87	119	0.72
189	9.91	34.34	1.12	157	500	6.60	34.40	0.31	27.02	105	0.84
235	9.58	34.42	0.77	146							
310	8.68	34.38	0.62	125							
403	7.56	34.39	0.45	118							
529	6.26	34.40	0.27	100							

113.40 STRANGER; April 24, 1958; 1629 GCT; 29°00.5'N, 115°56.5'W; sounding, 1000 fm; wind, 280°, force 2; weather, partly cloudy; sea, very rough; wire angle, 10°.

0	17.26	33.61	5.40	353	0	17.26	33.61	5.40	24.41	353	0.00
10	17.25	33.66	5.58	349	10	17.25	33.66	5.58	24.45	349	0.04
30	16.29	33.62	5.73	331	20	16.96	33.65	5.63	24.51	344	0.07
44	16.00	33.61	5.59	325	30	16.29	33.62	5.73	24.64	331	0.10
53	15.68	33.58	5.70	321	50	15.81	33.59	5.66	24.73	323	0.17
64	15.00	33.57	5.70	307	75	12.85	33.52	5.13	25.30	269	0.24
72	13.18	33.51	5.28	275	100	11.56	33.54	4.54	25.56	244	0.31
90	12.00	33.55	4.70	251	150	9.97	33.83	3.06	26.07	195	0.42
104	11.38	33.53	4.48	241	200	9.02	34.07	2.20	26.41	163	0.51
118	10.31	33.62	3.99	216	250	8.26	34.14	1.77	26.58	147	0.59
142	10.14	33.73	3.35	206	300	7.85	34.17	1.55	26.67	138	0.66
170	9.56	33.96a)	2.56	179	400	7.20	34.31	0.80	26.87	119	0.80
207	8.90	34.09	2.12	160	500	6.58	34.37	0.30	27.00	107	0.91
259	8.18	34.14	1.72	145	600	(5.58)	(34.37)		(27.13)	(94)	(1.02)
340	7.50	34.23	1.40b)	129							
441	7.00	34.36	0.38	113							
582	5.78	34.37	0.26	97							

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

b) Mean value of 1.10 and 1.71 ml/L.

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

STRANGER; April 24, 1958; 2223 GCT; 28°42'N, 116°36'W; sounding, 2000 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 00°.

113.50

0	17.52	33.66	5.45	355	0	17.52	33.66	5.45	24.39	355	0.00
10	17.47	33.68	5.56a)	353	10	17.47	33.68	5.56	24.41	353	0.04
30	17.12	33.66	5.54	346	20	17.34	33.67	5.56	24.44	350	0.07
58	15.71	33.60	5.78	320	30	17.12	33.66	5.54	24.48	346	0.10
67	13.48	33.49	5.53	283	50	16.50	33.63	5.64	24.60	335	0.17
76	12.74	33.48	5.00	269	75	12.80	33.48	5.03	25.27	271	0.25
90	11.73	33.49	4.58	250	100	11.27	33.53	4.50	25.60	239	0.31
104	11.09	33.54	4.46	236	150	9.80	33.80	3.16	26.07	195	0.42
118	10.28	33.63	3.85	215	200	8.75	34.04	2.43	26.43	161	0.51
136	9.88	33.76	3.40	200	250	7.98	34.12	2.00	26.61	144	0.59
156	9.70	33.84	3.00	190	300	7.39	34.19	1.34	26.75	130	0.66
184	8.84	33.96	2.68	168	400	6.77	34.27	0.67	26.90	116	0.79
208	8.67	34.06	2.30	158	500	6.19	34.32	0.36	27.02	105	0.90
260	7.80	34.13	1.79	141	600	(5.59)	(34.34)		(27.11)	(96)	(1.01)
341	7.04	34.24	0.96	123							
449	6.47	34.30	0.45	110							
587	5.66	34.34	0.30	97							

STRANGER; April 25, 1958; 0553 GCT; 28°22'N, 117°16.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 23°.

113.60

0	17.18	33.63	5.23	350	0	17.18	33.63	5.23	24.44	350	0.00
9	17.18	33.63	5.50	350	10	17.18	33.63	5.50	24.44	350	0.04
32	17.08	33.61	5.31	350	20	17.15	33.62	5.40	24.44	350	0.07
60	16.02	33.60	5.45	327	30	17.09	33.62	5.32	24.44	350	0.10
68	15.88	33.58	5.56	325	50	16.18	33.60	5.41	24.65	330	0.17
81	15.18	33.62	4.99	307	75	15.64	33.59	5.42	24.77	319	0.25
90	14.00	33.50	5.56	292	100	12.60	33.48	5.16	25.31	267	0.33
106	11.80	33.48	4.86	252	150	9.96	33.68	3.77	25.95	206	0.45
118	11.06	33.48	4.65	239	200	8.92	34.02	2.50	26.38	165	0.54
134	10.49	33.62	4.19	220	250	8.77	34.23	1.68	26.57	147	0.62
153	9.90	33.69	3.70	205	300	8.38	34.32	1.04	26.70	135	0.70
177	9.82	33.98	2.60	182	400	6.90	34.25	0.80	26.86	120	0.83
202	8.91	34.02	2.50	165	500	6.05	34.27	0.65	26.99	107	0.95
251	8.76	34.23	1.67	147							
327	8.10	34.33	0.90	130							
429	6.54	34.23	0.80	117							
568	5.69	34.34	0.34	98							

STRANGER; April 25, 1958; 1151 GCT; 27°57'N, 117°56.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 09°.

113.70

0	18.04	33.84	5.31	355	0	18.04	33.84	5.31	24.39	355	0.00
10	18.06	33.85	5.31	355	10	18.06	33.85	5.31	24.39	355	0.04
30	18.04	33.86	5.36	353	20	18.05	33.86	5.34	24.40	354	0.07
58	17.44	33.93	5.32	334	30	18.04	33.86	5.36	24.41	353	0.11
67	17.37	33.96	5.41	330	50	17.65	33.90	5.33	24.54	341	0.18
76	17.18	33.93	5.33	328	75	17.21	33.93	5.34	24.67	328	0.26
90	16.07	33.87	5.25	308	100	15.20	33.79	5.09	25.02	295	0.34
104	14.78	33.75	5.04	290	150	10.75	33.63	3.97	25.78	223	0.47
118	13.06	33.63	4.68	264	200	10.46	34.17	1.85	26.24	178	0.57
137	11.55	33.59	4.38	240	250	10.03	34.28	1.29	26.41	163	0.66
155	10.52	33.66	3.85	217	300	9.15	34.29	1.18	26.56	149	0.74
182	10.38	34.03	2.45	187	400	7.87	34.34	0.67	26.80	126	0.88
205	10.32	34.18	1.81	177	500	7.01	34.38	0.32	26.95	112	1.01
257	9.96	34.29	1.26	161	600	(6.10)	(34.36)		(27.06)	(101)	(1.12)
338	8.44	34.29	1.11	138							
444	7.48	34.38	0.40	118							
583	6.24	34.36	0.32	103							

a) Mean value of 5.38 and 5.75 ml/L.

S10

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

113.80 STRANGER; April 25, 1958; 1655 GCT; 27°40'N, 118°32'W; sounding, 2150 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 14°.

0	18.20	33.93	5.34	351	0	18.20	33.93	5.34	24.43	351	0.00
9	18.20	33.95	5.47	350	10	18.20	33.95	5.47	24.44	350	0.04
28	18.18	33.93	5.44	351	20	18.19	33.94	5.46	24.44	350	0.07
55	17.62	33.93	5.48	338	30	18.17	33.93	5.44	24.44	350	0.10
64	17.50	33.94	5.56	334	50	17.74	33.93	5.45	24.54	341	0.17
73	17.26	33.91	5.56	332	75	17.22	33.90	5.55	24.64	331	0.26
86	16.99	33.86	5.50	329	100	16.82	33.96	5.46	24.78	318	0.34
99	16.83	33.96	5.46	318	150	11.57	33.72	3.94	25.70	230	0.48
113	14.64	33.73	5.05	288	200	9.60	33.91	2.75	26.20	183	0.58
130	12.87	33.60	4.70	263	250	8.72	34.09	2.05	26.47	157	0.67
148	11.66	33.73	3.96	232	300	8.58	34.18	1.50	26.56	148	0.75
176	10.29	33.77	3.38	205	400	7.64	34.34	0.52	26.83	123	0.89
198	9.62	33.90	2.77	185	500	6.77	34.35	0.36	26.96	111	1.01
249	8.72	34.09	2.05	157							
329	8.40	34.27	0.80	139							
433	7.36	34.42u	0.48	-							
568	6.09	34.33	0.26	103							

113.90 STRANGER; April 25, 1958; 2213 GCT; 27°23'N, 119°12'W; sounding, 2300 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 08°.

0	18.60	33.98	5.32	357	0	18.60	33.98	5.32	24.36	357	0.00
10	18.58	34.07	5.33	351	10	18.58	34.07	5.33	24.43	351	0.04
30	18.49	33.97	5.32	355	20	18.55	34.03	5.33	24.42	352	0.07
59	18.45	34.02	5.40	351	30	18.49	33.97	5.32	24.39	355	0.10
68	18.06	34.05	5.41	340	50	18.47	34.00	5.36	24.41	353	0.18
77	17.33	33.94	5.49	330	75	17.54	33.97	5.47	24.62	333	0.26
91	16.02	33.82	5.48	311	100	15.23	33.73	5.34	24.96	301	0.34
104	14.90	33.69	5.28	296	150	11.04	33.54	4.91	25.66	234	0.48
118	13.13	33.60	4.91	268	200	9.42	33.82	3.51	26.15	188	0.58
136	11.84	33.57	4.92	246	250	8.58	34.01	2.66	26.43	161	0.67
155	10.75	33.53	4.84	231	300	8.40	34.20	1.70	26.61	144	0.75
183	9.62	33.68	3.74	201	400	7.68	34.33	0.64	26.81	125	0.89
206	9.35	33.85	3.41	184	500	6.79	34.34	0.36	26.95	112	1.02
257	8.48	34.02	2.59	159							
337	8.28	34.30	1.03	135							
442	7.23	34.33	0.45	118							
579	6.09	34.34	0.31	103							

117.26 STRANGER; April 24, 1958; 0508 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 300°, force 4; weather, clear; sea, very rough; wire angle, 09°.

0	17.68	33.81	5.76	348	0	17.68	33.81	5.76	24.46	348	0.00
10	17.70	33.89	5.81	343	10	17.70	33.89	5.81	24.51	343	0.03
20	17.42	33.78	5.84	344	20	17.42	33.78	5.84	24.50	344	0.07
40	14.06	33.57	5.38	288	30	15.00	33.61	5.53	24.92	305	0.10
60	12.39	33.84	2.18	237	50	12.20	33.68	4.00	25.54	245	0.16

117.30 STRANGER; April 24, 1958; 0210 GCT; 28°48'N, 114°56'W; sounding, 50 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 12°.

0	16.94	33.68	5.87	340	0	16.94	33.68	5.87	24.55	340	0.00
10	16.88	33.82	5.97	330	10	16.88	33.82	5.97	24.65	330	0.03
20	16.26	33.69	5.96	325	20	16.26	33.69	5.96	24.70	325	0.07
39	12.40	33.52	4.53	260	30	14.30	33.57	5.28	25.06	292	0.10
59	11.08	33.68	3.56	225	50	11.34	33.60	3.84	25.64	236	0.15
84	11.10	34.07a)	1.89	197	75	11.09	33.94	2.40	25.95	206	0.20

a) Possible evaporation; value falls on property curve.

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

STRANGER; April 23, 1958; 2326 GCT; 28°38'N, 115°16'W; sounding, 94 fm; wind, 310°, force 4; weather, cloudy; sea, high; wire angle, 10°.

117.35

0	17.18	33.58	5.66	353	0	17.18	33.58	5.66	24.40	353	0.00
10	16.88	33.62	5.88	344	10	16.88	33.62	5.88	24.50	344	0.03
30	16.30	33.61	5.66	332	20	16.30	33.61	5.66	24.63	332	0.07
49	15.38	33.58	5.71	314	30	16.30	33.61	5.66	24.63	332	0.10
72	12.58	33.46	5.16	268	50	15.26	33.57	5.71	24.84	312	0.17
96	11.16	33.57	4.17	234	75	12.32	33.46	5.02	25.35	263	0.24
119	10.09	33.84	3.19	197	100	10.88	33.62	3.94	25.74	226	0.30
147	10.24	34.06	2.02	183	150	(10.28)	(34.10)	(1.87)	(26.22)	(181)	(0.40)

STRANGER; April 23, 1958; 2013 GCT; 28°28'N, 115°35.5'W; sounding, 520 fm; wind, 310°, force 3; weather, cloudy; sea, high; wire angle, 06°.

117.40

0	17.57	33.65	5.58	357	0	17.57	33.65	5.58	24.36	357	0.00
10	17.48	33.73	5.50	350	10	17.48	33.73	5.50	24.44	350	0.04
29	17.16	33.65	5.50a)	348	20	17.33	33.70	5.50	24.45	349	0.07
58	16.44	33.61	5.71	335	30	17.14	33.65	5.50	24.46	348	0.10
68	16.04	33.58	5.81b)	328	50	16.66	33.62	5.64	24.56	339	0.17
77	14.99	33.62	5.69	303	75	15.30	33.60	5.74	24.84	312	0.26
91	12.86	33.54	5.20c)	267	100	11.98	33.54	4.73	25.48	251	0.33
105	11.64	33.56	4.52	244	150	10.05	33.95	2.64	26.14	188	0.44
118	11.07	33.66	3.90	226	200	9.52	34.21	1.49	26.43	161	0.53
137	10.64	33.86	3.02	204	250	9.39	34.32	1.02	26.54	150	0.61
155	9.83	33.98	2.53	182	300	8.93	34.42	0.80	26.69	136	0.68
183	9.72	34.15	1.73	168	400	7.66	34.40	0.47	26.87	119	0.81
207	9.47	34.22	1.48	159	500	6.48	34.36	0.33	27.01	106	0.93
259	9.34	34.37	0.95	145	600	(5.48)	(34.40)		(27.16)	(91)	(1.04)
339	8.46	34.43	0.66	127							
444	7.04	34.36	0.38	114							
583	5.66	34.39	0.30	94							

STRANGER; April 23, 1958; 1527 GCT; 28°02.5'N, 116°22'W; sounding, 2200 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

117.50

0	17.32	33.62	5.49	353	0	17.32	33.62	5.49	24.40	353	0.00
10	17.34	33.69	5.53	349	10	17.34	33.69	5.53	24.45	349	0.04
28	17.24	33.64	5.60	351	20	17.32	33.68	5.54	24.44	350	0.07
56	16.38	33.61	5.70	334	30	17.19	33.64	5.62	24.44	350	0.10
63	16.28	33.59	5.66	333	50	16.55	33.63	5.69	24.59	336	0.17
73	15.92	33.55	5.69	328	75	15.82	33.55	5.69	24.70	326	0.26
87	15.21	33.58	5.64	311	100	13.23	33.51	5.21	25.21	277	0.33
99	13.28	33.51	5.24	278	150	10.34	33.68	3.65	25.89	212	0.46
111	12.40	33.49	5.08	262	200	9.45	33.99	2.60	26.27	176	0.55
129	11.16	33.62	4.73	230	250	9.01	34.16	1.80	26.48	156	0.64
145	10.46	33.65	3.90	217	300	8.57	34.31	1.38	26.67	138	0.72
172	9.86	33.82	3.18	195	400	7.12	34.33	0.82	26.90	117	0.85
194	9.51	33.96	2.68	178	500	6.30	34.33	0.55	27.01	106	0.96
241	9.06	34.14	1.89	158							
317	8.38	34.33	1.26	134							
418	6.89	34.33	0.76	114							
558	5.84	34.33	0.37	100							

- a) Mean value of 5.18 and 5.81 ml/L.
 b) Alternate value, 5.66 ml/L, not used in interpolation.
 c) Alternate value, 4.96 ml/L, not used in interpolation.

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

117.60

STRANGER; April 23, 1958; 0800 GCT; 27°41'N, 117°00'W; sounding, 2150 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 14°.

0	18.01	33.81	5.25a)	356	0	18.01	33.81	5.25	24.38	356	0.00
10	18.02	33.88	5.04b)	351	10	18.02	33.88	5.04	24.43	351	0.04
29	17.64	33.79	5.52	349	20	18.02	33.88	5.04	24.43	351	0.07
57	17.16	33.86	5.56	332	30	17.63	33.79	5.53	24.45	349	0.10
66	17.18	33.89	5.26	331	50	17.18	33.85	5.56	24.61	334	0.17
75	17.16	33.95	5.22	326	75	17.16	33.95	5.22	24.69	326	0.26
89	16.56	33.96	4.95	312	100	14.80	33.79	4.86	25.10	287	0.34
101	14.68	33.78	4.85	286	150	10.95	33.77	3.33	25.84	216	0.46
116	12.46	33.65	4.12	252	200	9.48	33.97	2.65	26.25	178	0.56
133	11.72	33.68	3.73	236	250	9.32	34.18	1.77	26.45	159	0.65
151	10.94	33.77	3.32	216	300	8.27	34.28	1.45	26.69	136	0.72
178	9.98	33.87	3.02	192	400	7.36	34.30	0.82	26.83	123	0.86
200	9.48	33.97	2.65	178	500	6.66	34.32	0.50	26.95	112	0.98
250	9.32	34.18	1.77	159							
327	7.78	34.29	1.32	128							
430	7.20	34.30	0.64	120							
566	6.14	34.33	0.46	104							

117.70

STRANGER; April 23, 1958; 0155 GCT; 27°20'N, 117°39.5'W; sounding, 2100+ fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 10°.

0	18.24	33.85	5.44	358	0	18.24	33.85	5.44	24.36	358	0.00
10	18.24	33.96	5.48	350	10	18.24	33.96	5.48	24.44	350	0.04
30	17.88	33.89	5.48	347	20	18.08	33.92	5.48	24.45	349	0.07
59	17.31	33.93	5.52	331	30	17.88	33.89	5.48	24.47	347	0.10
69	17.26	34.07	5.42	320	50	17.46	33.91	5.52	24.59	336	0.17
88p	16.88	33.99	5.02	317	75	17.19	34.06	5.34	24.77	319	0.26
102p	14.94	33.84	4.35	286	100	15.25	33.97	4.40	25.06	291	0.33
116p	12.57	33.63	4.20	255	150	10.70	33.66	3.75	25.80	220	0.46
135p	11.04	33.58	4.20	232	200	10.37	34.20	1.48	26.29	174	0.56
153p	10.62	33.72	3.54	214	250	9.72	34.41	1.00	26.56	149	0.64
182p	10.55	33.97	2.30	195	300	9.27	34.43	0.66	26.65	140	0.72
205p	10.32	34.22	1.47	172	400	8.10	34.42	0.36	26.83	123	0.85
257p	9.64	34.42	0.95	147	500	7.00	34.40	0.30	26.97	110	0.98
337p	8.83	34.43	0.44	134							
444p	7.55	34.42	0.34	115							
582p	6.18	34.36	0.25	102							

117.80

STRANGER; April 22, 1958; 1900, 1946 GCT; 27°02.5'N, 118°14.5'W; sounding, 2400 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 12°, 14°.

0	18.14	33.77	5.56	362	0	18.14	33.77	5.56	24.31	362	0.00
10	18.14	33.73	5.44	365	10	18.14	33.73	5.44	24.28	365	0.04
29	17.59	33.77	5.58c)	349	20	17.92	33.75	5.46	24.35	358	0.07
58	17.02	33.76	5.73d)	337	30	17.57	33.76	5.59	24.46	348	0.11
67	17.14	33.87	5.52	331	50	16.83	33.67	5.76	24.54	340	0.18
77	16.72	33.82	5.48	326	75	16.75	33.82	5.49	24.69	326	0.26
90	17.10	34.04	5.31	318	100	15.40	33.80	5.12	24.98	298	0.34
104	14.85	33.73	5.09	292	150	11.48	33.63	4.56	25.64	236	0.47
117	13.51	33.64	4.97	272	200	9.39	33.95	2.74	26.25	178	0.58
135	12.17	33.62	4.23	248	250	8.99	34.16	1.99	26.48	156	0.66
154	11.30	33.64	4.65	232	300	8.47	34.24	1.47	26.63	142	0.74
					400	7.40	34.28	0.77	26.82	124	0.88
					500	6.59	34.30	0.49	26.95	112	1.00
179	9.85	33.83	3.20	194							
202	9.39	33.95	2.74	177							
253	8.98	34.16	1.98	156							
333	8.11	34.26	1.13	135							
438	7.04	34.28	0.63	120							
575	5.94	34.33	0.33	101							

- a) Alternate value, 5.52 ml/L, not used in interpolation.
b) Alternate value, 5.74 ml/L, not used in interpolation.
c) Alternate value, 5.12 ml/L, not used in interpolation.
d) Alternate value, 5.15 ml/L, not used in interpolation.

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

STRANGER; April 22, 1958; 1208 GCT; 26°39.5'N, 118°54.5'W; sounding, 2200 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°.

117.90

0	18.56	34.04	5.22	352	0	18.56	34.04	5.22	24.42	352	0.00
10	18.58	34.02	5.22	354	10	18.58	34.02	5.22	24.40	354	0.04
28	18.38	34.02	5.22	349	20	18.44	34.02	5.22	24.43	351	0.07
57	18.38	34.09	5.20	344	30	18.38	34.02	5.22	24.45	349	0.10
66	18.33	34.14	5.20	339	50	18.38	34.07	5.20	24.48	346	0.17
74	18.21	34.10	4.88	339	75	18.20	34.10	4.88	24.55	339	0.26
88	17.82	34.04	5.28	335	100	16.69	33.89	5.28	24.76	320	0.34
100	16.69	33.89	5.28	320	150	11.84	33.58	4.68	25.54	246	0.48
115	14.18	33.68	5.08	282	200	9.91	33.93	2.97	26.16	187	0.60
132	13.20	33.64	4.92	266	250	9.02	34.08	2.42	26.41	163	0.68
150	11.84	33.58	4.68	246	300	8.68	34.18	1.60	26.55	150	0.77
176	10.35	33.64	4.11	216	400	7.70	34.28	0.87	26.78	128	0.91
200	9.91	33.93	2.97	187	500	6.79	34.32	0.45	26.94	113	1.04
248	9.06	34.07	2.49	164							
327	8.48	34.23	1.30	143							
428	7.38	34.29	0.72	123							
563	6.36	34.34	0.27	106							

STRANGER; April 20, 1958; 1817 GCT; 28°18.5'N, 115°24'W; sounding, 150 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°.

118.39

0	16.99	33.62	5.32	346	0	16.99	33.62	5.32	24.48	346	0.00
10	16.88	33.58	5.28	347	10	16.88	33.58	5.28	24.47	347	0.03
30	16.72	33.61	5.27	341	20	16.77	33.60	5.27	24.51	343	0.07
49	14.37	33.59	5.10	293	30	16.72	33.61	5.27	24.54	341	0.10
73	11.30	33.59	4.04	235	50	14.15	33.59	5.10	25.09	288	0.17
96	11.04	33.87	2.55	210	75	11.38	33.63	3.72	25.66	234	0.23
118	11.16	34.17	1.70	190	100	10.80	33.90	2.40	25.97	204	0.29
155	10.74	34.20	1.59	181	150	10.78	34.20	1.59	26.21	182	0.38
192	10.36	34.33	1.15	165	200	10.26	34.36	1.08	26.43	161	0.47
240	9.93	34.42	0.73	151	250	(9.83)	(34.43)	(0.68)	(26.56)	(149)	(0.55)

STRANGER; April 11, 1958; 1856 GCT; 28°19'N, 114°53'W; sounding, 50 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°.

119.33

0	16.71	33.75	5.83	330	0	16.71	33.75	5.83	24.65	330	0.00
25	16.46	33.75	5.73	325	10	16.50	33.75	5.75	24.69	326	0.03
45	15.77	33.69	5.75	314	20	16.48	33.75	5.73	24.70	326	0.06
65	13.94	33.68	4.49	280	30	16.40	33.75	5.73	24.72	324	0.10
77	13.72	33.65	4.44	275	50	15.35	33.69	5.57	24.92	305	0.16
					75	13.75	33.66	4.45	25.22	276	0.23

STRANGER; April 11, 1958; 1507 GCT; 28°23'N, 114°14.5'W; sounding, 30 fm; wind, missing, force 1; weather, clear; sea, moderate; wire angle, 00°.

120.25

0	16.52	33.79	5.45a)	324	0	16.52	33.79	5.45	24.72	324	0.00
10	16.49	33.78	5.60	324	10	16.49	33.78	5.60	24.72	324	0.03
20	16.42	33.74	5.59	325	20	16.42	33.74	5.59	24.70	325	0.06
30	16.23	33.74	5.68	321	30	16.23	33.74	5.68	24.75	321	0.10
40	15.20	33.70	5.36	302							

STRANGER; April 11, 1958; 1242 GCT; 28°13'N, 114°35'W; sounding, 45 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°.

120.30

0	16.24	33.84	5.61	314	0	16.24	33.84	5.61	24.82	314	0.00
10	16.22	33.81	5.68	315	10	16.22	33.81	5.68	24.81	315	0.03
30	15.95	33.78	5.53	312	20*	16.10	33.80	5.58	24.82	314	0.06
40	15.70	33.73	5.66	310	30	15.95	33.78	5.53	24.84	312	0.09
50	14.96	33.80	4.94	290	50	14.96	33.80	4.94	25.07	290	0.15
60	13.04	33.63	4.59	264							

a) Alternate value, 5.94 ml/L, not used in interpolation.

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

120.35

STRANGER; April 11, 1958; 0951 GCT; 28°02'N, 114°59.5'W; sounding, 43 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 03°.

0	16.12	-	5.76	-	0	16.12	(33.89)	5.76	(24.88)	(308)	(0.00)
10	16.10	33.89	5.86	308	10	16.10	33.89	5.86	24.88	308	0.03
20	16.12	33.78	5.81	315	20	16.12	33.78	5.81	24.81	315	0.06
30	16.08	33.78	5.60	314	30	16.08	33.78	5.60	24.82	314	0.09
50	14.24	33.66	5.26	285	50	14.24	33.66	5.26	25.12	285	0.15
60	13.06	33.65	4.97	263							

120.45

STRANGER; April 20, 1958; 2339 GCT; 27°43'N, 115°33'W; sounding, 1500 fm; wind, 310°, force 3; weather, fog; sea, moderate; wire angle, 21°.

0	17.13	33.62	5.36	350	0	17.13	33.62	5.36	24.44	350	0.00
9	17.15	33.62	5.44	350	10	17.14	33.62	5.44	24.44	350	0.04
28	16.66	33.64	5.44	338	20	16.92	33.63	5.44	24.50	344	0.07
56	14.98	33.60	5.32	304	30	16.56	33.64	5.43	24.60	335	0.10
65	14.84	33.77	4.63	289	50	15.25	33.60	5.34	24.86	310	0.17
66p	13.80	33.84	4.64	263	75	12.80	33.73	4.07	25.47	252	0.24
75p	12.80	33.73	4.07	252	100	11.66	33.94	2.62	25.85	216	0.30
82p	12.34	33.84	3.10	236	150	11.38	34.42	0.80	26.28	175	0.40
91p	11.98	33.84	3.14	229	200	10.52	34.50	0.84	26.49	155	0.48
103p	11.60	34.00	2.42	210	250	9.93	34.57	0.51	26.65	140	0.56
113p	11.52	34.07	2.08	204	300	9.22	34.50	0.43	26.71	134	0.63
132pa)	11.45	34.34	1.13	183	400	7.70	34.41	0.44	26.88	118	0.76
148p	11.40	34.41	0.80	177							
183p	10.74	34.47	0.93	161							
239p	10.05	34.58	0.56	142							
319p	8.96	34.48	0.41	132							
428p	7.22	34.39	0.48	114							

120.50

STRANGER; April 21, 1958; 0313 GCT; 27°32'N, 115°50.5'W; sounding, 2300 fm; wind, 320°, force 3; weather, fog; sea, very rough; wire angle, 00°.

0	17.84	33.93b)	5.24	343	0	17.84	33.93	5.24	24.51	343	0.00
10	17.84	33.90	5.67	345	10	17.84	33.90	5.67	24.49	345	0.03
30	17.70	33.93	5.05	340	20	17.79	33.92	5.32	24.52	343	0.07
45	17.26	33.86	5.11	335	30	17.70	33.93	5.05	24.55	340	0.10
55	16.50	33.87	5.46	317	50	16.95	33.86	5.23	24.67	328	0.17
65	14.48	33.73	5.28c)	285	75	13.94	33.92	3.30	25.38	260	0.24
74	14.06	33.93	3.31	262	100	12.06	33.85	2.70	25.70	230	0.30
93	12.10	33.78	3.20	235	150	10.10	34.02	2.20	26.19	184	0.41
106	12.04	33.93	2.55d)	224	200	9.06	34.18	1.98	26.48	156	0.50
120	11.29	34.05b)	2.04e)	201	250	8.83	34.30	1.36	26.62	143	0.57
144	10.33	34.02	2.17	187	300	8.61	34.33	0.87	26.68	138	0.64
172	9.38	34.04	2.27	171	400	7.72	34.34	0.46	26.82	124	0.78
209	9.03	34.21	1.94	153	500	6.77	34.36	0.34	26.96	110	0.90
261	8.81	34.31	1.32	142	600	(5.92)	(34.41)		(27.12)	(95)	(1.01)
342	8.28	34.34	0.62	132							
443	7.24	34.34	0.41	118							
587	6.06	34.40	0.27	98							

- The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.
- Possible evaporation; value falls on property curve.
- Alternate value, 4.78 ml/L, not used in interpolation.
- Alternate value, 3.30 ml/L, not used in interpolation.
- Alternate value, 2.67 ml/L, not used in interpolation.

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

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STRANGER; April 21, 1958; 1106 GCT; 27°09.5'N, 116°29'W; sounding, 2020 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°.

120.60

0	17.40	33.67	5.32	352	0	17.40	33.67	5.32	24.42	352	0.00
10	17.40	33.67	5.42	352	10	17.40	33.67	5.42	24.42	352	0.04
30	16.82	33.64	5.43	341	20	17.40	33.67	5.42	24.43	351	0.07
59	16.49	33.73	5.36	328	30	16.82	33.64	5.43	24.53	341	0.10
73	15.96	33.67	5.57	320	50	16.59	33.71	5.37	24.64	331	0.17
86	15.02	33.69	5.36	299	75	15.85	33.67	5.55	24.79	317	0.25
104	12.12	33.50	4.94	256	100	12.82	33.54	5.10	25.32	267	0.33
121	10.98	33.58	4.16	230	150	10.95	33.97	2.63	26.00	202	0.44
139	10.71	33.83	3.20	208	200	(9.44)	(34.12)	(2.03)	(26.38)	(166)	(0.54)
148	10.92	33.95	2.79	202	250	(9.59)	(34.31)	(1.00)	(26.50)	(154)	(0.62)
156	11.06	34.01	2.32	200	300	(8.93)	(34.32)	(0.78)	(26.62)	(143)	(0.70)
165	11.06	34.12	1.84	192	400	7.80	34.34	0.46	26.82	124	(0.84)
174	10.54	34.11	2.01	184	500	6.81	34.36	0.33	26.96	110	(0.96)
183	9.70	34.06	2.61	174							
193	9.53	34.11	2.11	167							
366	8.12	34.34	0.56	130							
526	6.57	34.36	0.30	107							

STRANGER; April 21, 1958; 1849 GCT; 26°47'N, 117°08.5'W; sounding, 2100 fm; wind, 310°, force 3; weather, fog; sea, rough; wire angle, 08°.

120.70

0	17.92	33.69	5.81	362	0	17.92	33.69	5.81	24.31	362	0.00
10	17.88	33.71	5.28	360	10	17.88	33.71	5.28	24.33	360	0.04
30	17.06	33.68	5.20	342	20	17.46	33.70	5.20	24.42	352	0.07
59	16.66	33.72	5.44	332	30	17.06	33.68	5.20	24.51	343	0.11
68	16.88	33.84	5.22	328	50	16.74	33.70	5.40	24.60	335	0.17
78	16.78	33.87	5.16	324	75	16.83	33.87	5.17	24.70	325	0.26
92	15.16	33.71	5.14	300	100	13.39	33.74	4.82	25.36	263	0.33
105	12.87	33.75a)	4.71	252	150	10.43	33.63	3.70	25.84	217	0.45
119	11.62	33.53	4.55	246	200	9.86	34.13	2.00	26.32	171	0.55
137	10.72	33.59	3.90	226	250	9.64	34.22	1.11	26.50	154	0.64
156	10.33	33.66	3.64	214	300	8.72	34.33	1.02	26.66	139	0.71
184	9.66	33.94	2.66	183	400	7.30	34.31	0.70	26.86	120	0.85
207	9.94	34.19	1.72	168	500	6.63	34.31	0.38	26.96	111	0.97
258	9.48	34.34	1.05	150							
338	8.00	34.32	0.97	129							
443	6.97	34.31	0.48	116							
578	5.98	34.34	0.30	101							

STRANGER; April 21, 1958; 2350 GCT; 26°29'N, 117°47'W; sounding, 2160 fm; wind, 270°, force 4; weather, cloudy; sea, rough; wire angle, 09°.

120.80

0	18.21	33.72	5.28	367	0	18.21	33.72	5.28	24.25	367	0.00
10	18.14	33.73	5.26	365	10	18.14	33.73	5.26	24.28	365	0.04
30	17.62	33.77	5.44	350	20	17.85	33.75	5.35	24.37	356	0.07
59	17.18	33.82	5.46	336	30	17.62	33.77	5.44	24.44	350	0.11
68	17.14	33.86	5.38	332	50	17.36	33.80	5.45	24.56	339	0.18
77	16.88	33.86	5.27	327	75	16.91	33.86	5.28	24.68	328	0.26
90	16.88	33.97	5.15	319	100	15.98	33.84	5.02	24.88	308	0.34
104	15.17	33.75b)	4.94	297	150	11.37	33.85	2.98	25.84	217	0.47
118	13.19	33.66	4.30	264	200	9.10	33.93	2.96	26.29	174	0.57
136	12.04	33.72	3.43	239	250	8.99	34.18	1.80	26.49	155	0.66
155	11.12	33.89	2.94	210	300	8.86	34.32	0.80	26.63	142	0.73
183	9.38	33.81	3.37	187	400	7.86	34.36	0.37	26.82	124	0.87
206	9.04	33.96	2.89	172	500	6.95	34.36	0.32	26.95	112	1.00
258	8.99	34.20	1.59	153	600	(5.97)	(34.36)		(27.08)	(99)	(1.11)
337	8.69	34.36	0.56	137							
441	7.42	34.36	0.35	119							
580	6.20	34.36	0.25	103							

- a) This value was accepted after careful investigation.
b) Possible evaporation; value falls on property curve.

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

120.90 STRANGER; April 22, 1958; 0558, 0629 GCT; 26°13'N, 118°27'W; sounding, 2250 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°, 11°.

0	18.60	33.96	5.19	359	0	18.60	33.96	5.19	24.34	359	0.00
10	18.62	34.00	5.19	356	10	18.62	34.00	5.19	24.38	356	0.04
30	18.29	33.96	5.17	352	20	18.45	33.98	5.18	24.40	354	0.07
59	18.12	33.99	5.22	345	30	18.29	33.96	5.17	24.42	352	0.11
68	18.27	34.11	5.20	340	50	18.14	33.98	5.21	24.48	346	0.18
77	17.92	34.06	5.19	335	75	18.03	34.08	5.19	24.58	337	0.26
91	17.44	34.00	5.04	329	100	16.08	33.83	5.07	24.85	311	0.34
104	15.46	33.77	5.09	302	150	11.02	33.72	3.63	25.80	221	0.48
117	13.82	33.66	4.74	277	200	9.91	33.99	2.58	26.20	183	0.58
135	11.84	33.64	4.33	241	250	9.95	34.28	1.50	26.42	162	0.67
153	10.90	33.73	3.50	118	300	9.54	34.37	0.84	26.56	148	0.75
180	10.24	33.86	2.99	198	400	8.28	34.42	0.45	26.80	126	0.89
					500	7.20	34.41	0.34	26.95	112	1.02
203	9.89	34.00	2.52	182							
255	9.95	34.30	1.38	160							
334	9.14	34.41	0.62	140							
440	7.84	34.42a)	0.40	120							
575	6.34	34.38	0.27	103							

123.37 STRANGER; April 11, 1958; 0229 GCT; 25°24.5'N, 114°42'W; sounding, 35 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 05°.

0	16.81	34.04	5.64	312	0	16.81	34.04	5.64	24.84	312	0.00
10	16.77	34.05	5.69	310	10	16.77	34.05	5.69	24.86	310	0.03
30	13.34	33.78	3.92	258	20	16.00	33.98	5.46	24.98	298	0.06
50	12.12	34.05	2.37	216	30	13.34	33.78	3.92	25.40	258	0.09
					50	12.12	34.05	2.37	25.85	216	0.14

123.42 STRANGER; April 11, 1958; 0002 GCT; 27°18'N, 114°57'W; sounding, 400 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 23°.

0	17.94	34.07	5.53	336	0	17.94	34.07	5.53	24.59	336	0.00
9	17.90	34.14	5.60	329	10	17.88	34.14	5.59	24.65	330	0.03
28	17.65	34.05b)	5.45	330	20	17.74	34.09	5.49	24.65	330	0.07
55	17.69	34.10	5.49	327	30	17.66	34.05	5.47	24.65	330	0.10
64	17.12	34.20	4.73	307	50	17.69	34.09	5.49	24.66	329	0.16
74	15.42	33.96	4.32	288	75	15.38	33.96	4.31	25.10	287	0.24
88	13.96	33.90	3.64	262	100	13.13	33.84	3.64	25.49	250	0.31
101	13.04	33.83	3.64	250	150	9.95	34.03	2.57	26.22	181	0.42
115	12.05	34.04	2.46	216	200	9.95	34.33	1.24	26.46	158	0.50
131	11.62	34.20	1.79	196	250	9.51	34.47	0.77	26.64	141	0.58
146	10.01	34.02	2.60	182	300	9.21	34.50	0.53	26.71	134	0.65
169	10.26	34.29	1.76	166	400	7.42	34.42	0.44	26.92	114	0.78
188	10.04	34.31	1.38	162	500	6.77	34.43	0.26	27.02	105	0.89
231	9.61	34.44	0.88	145							
299	9.22	34.50	0.53	134							
392	7.53	34.42	0.47	115							
518	6.64	34.43	0.25	103							

a) Possible evaporation; value falls on property curve.

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

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

STRANGER; April 10, 1958; 2027 GCT; 27°05.5'N, 115°16'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 02°.

123.50

0	17.45	33.99	5.54	330	0	17.45	33.99	5.54	24.65	330	0.00
10	17.44	33.96	5.50	332	10	17.44	33.96	5.50	24.63	332	0.03
30	17.21	33.99	5.49	324	20	17.37	33.97	5.49	24.66	329	0.07
45	16.88	34.00	5.62	316	30	17.21	33.99	5.49	24.71	324	0.10
55	13.64	33.58	4.98	279	50	14.00	33.62	5.08	25.14	283	0.16
64	14.10	33.95	4.19	261	75	13.28	33.89	2.87	25.49	250	0.23
74	13.38	33.89	2.92	252	100	12.18	33.96	2.56	25.77	224	0.29
93	12.51	33.97	2.60	229	150	10.22	34.08	2.20	26.22	181	0.39
108	11.78	33.95	2.56	217	200	9.41	34.24	1.43	26.48	156	0.48
122	11.28	34.01	2.33	204	250	9.19	34.41	0.96	26.65	140	0.55
145	10.38	34.06	2.21	185	300	8.63	34.43	0.62	26.75	130	0.62
173	9.74	34.15	1.85	168	400	7.58	34.42	0.37	26.91	116	0.75
210	9.30	34.28	1.29	152	500	6.80	34.43	0.30	27.02	105	0.86
261	9.15	34.42	0.87	139							
339	8.09	34.43	0.48	122							
439	7.26	34.42	0.34	112							
579	6.14	34.45	0.29	95							

STRANGER; April 10, 1958; 1458 GCT; 26°45'N, 116°04.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°.

123.60

0	17.15	33.88	5.45	331	0	17.15	33.88	5.45	24.64	331	0.00
10	17.16	33.81	5.56	336	10	17.16	33.81	5.56	24.59	336	0.03
35	17.15	33.88	5.51	331	20	17.16	33.84	5.54	24.61	334	0.07
64	14.75	33.59	5.42	301	30	17.16	33.87	5.53	24.63	332	0.10
74	13.83	33.58	5.16	283	50	17.00	33.87	5.47	24.67	328	0.17
88	12.68	33.55	4.71	263	75	13.78	33.58	5.13	25.16	282	0.24
98a)	11.98	33.58	4.54	248	100	11.82	33.60	4.48	25.55	244	0.31
117	11.30	33.80	3.33	220	150	11.47	34.27	1.45	26.14	188	0.42
131	11.49	34.07	2.24	204	200	10.22	34.36	1.19	26.43	161	0.51
149	11.52	34.27	1.44	189	250	9.71	34.44	0.94	26.59	146	0.58
171	10.52	34.27	1.66	172	300	8.92	34.42	0.96	26.70	135	0.66
197a)	10.26	34.34	1.21	162	400	7.55	34.39	0.53	26.88	118	0.79
223	10.14	34.45	0.87	152	500	6.55	34.36	0.40	27.00	107	0.91
275	9.25	34.43	1.06	140	600	5.89	34.42	0.27	27.13	94	1.01
356	8.07	34.41	0.63	124							
460	6.84	34.36	0.46	111							
601	5.88	34.42	0.27	94							

STRANGER; April 10, 1958; 0947 GCT; 26°25.5'N, 116°43'W; sounding, 2000+ fm; wind, 360°, force 4; weather, partly cloudy; sea, high; wire angle; 17°.

123.70

0	17.56	34.00	5.54	332	0	17.56	34.00	5.54	24.63	332	0.00
10	17.56	33.92	5.60	338	10	17.56	33.92	5.60	24.57	338	0.03
29	17.56	33.98	5.60	333	20	17.56	33.95	5.60	24.60	335	0.07
57	17.56	33.95	5.55	335	30	17.56	33.98	5.60	24.62	333	0.10
67	17.32	33.98	5.59	328	50	17.56	33.96	5.56	24.60	335	0.17
77	17.02	34.00	5.63	320	75	17.07	34.00	5.63	24.74	322	0.25
91	16.48	33.98	5.49	309	100	15.20	33.87	4.98	25.09	288	0.33
105	14.39	33.81	4.67	277	150	10.62	33.76	3.92	25.89	212	0.45
120	12.35	33.74	4.20	244	200	9.59	34.12	2.67	26.36	168	0.55
138	11.40	33.76	3.94	225	250	9.53	34.40	1.50	26.58	146	0.63
156	10.18	33.78	3.90	202	300	8.83	34.38	1.07	26.68	137	0.70
183a)	9.65	33.99	3.17	178	400	7.80	34.40	0.66	26.86	120	0.84
205	9.58	34.15	2.61	165	500	6.99	34.44	0.43	27.00	106	0.95
253	9.52	34.41	1.43	145							
330	8.39	34.37	0.88	131							
433	7.54	34.42	0.58	116							
567	6.36	34.46	0.32	97							

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

123.80

STRANGER; April 10, 1958; 0413 GCT; 26°06'N, 117°21'W; sounding, 2000+ fm; wind, 360°, force 4, weather, clear; sea, very rough; wire angle, 13°.

0	17.55	33.86	5.54	342	0	17.55	33.86	5.54	24.52	342	0.00
10	17.56	33.82	5.52	344	10	17.56	33.82	5.52	24.50	344	0.03
30	17.46	33.86	4.11u	339	20	17.53	33.84	5.52	24.52	342	0.07
59	16.60	33.78	5.59	326	30	17.46	33.86	5.53	24.55	339	0.10
68	16.78	33.89	5.55	322	50	16.80	33.80	5.59	24.65	330	0.17
78	16.56	33.81u	5.19	-	75	16.63	33.88	5.28	24.76	320	0.25
92	14.98	33.69	4.18	298	100	13.97	33.71	4.15	25.23	275	0.33
106	13.28	33.72	4.16	262	150	10.70	33.88	3.18	25.98	204	0.45
120a)	12.08	33.67	4.19	243	200	9.77	34.15	2.26	26.35	169	0.54
137	10.96	33.71	3.95	221	250	9.20	34.33	1.55	26.58	146	0.62
155	10.62	33.93	2.96	199	300	8.88	34.41	1.42	26.70	135	0.70
181	10.12	34.10	2.39	178	400	7.90	34.45	0.61	26.88	118	0.83
204a)	9.70	34.16	2.24	167	500	6.46	34.47	0.24	27.09	98	0.94
254	9.17	34.34	1.52	145							
330	8.70	34.44	1.36	130							
432	7.46	34.45	0.29	112							
566	6.27	34.47	0.23	95							

127.34

STRANGER; April 8, 1958; 1839 GCT; 26°56'N, 114°08'W; sounding, 40 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 07°.

0	15.63	34.04	4.81	286	0	15.63	34.04	4.81	25.11	286	0.00
10	15.32	34.00	4.90	282	10	15.32	34.00	4.90	25.16	282	0.03
20	15.24	34.05	4.81	277	20	15.24	34.05	4.81	25.21	277	0.06
30	15.20	34.05	4.62	276	30	15.20	34.05	4.62	25.22	276	0.08
50	13.64	34.18	2.11	235	50	13.64	34.18	2.11	25.65	235	0.14
60	13.14	34.12	2.17	230							

127.40

STRANGER; April 8, 1958; 2342 GCT; 26°44'N, 114°27'W; sounding, 1600 fm; wind, 270°, force 5; weather, clear; sea, high; wire angle, 41°.

0	17.08	33.91	5.53	327	0	17.08	33.91	5.53	24.68	327	0.00
8	17.06	33.88	-	329	10	17.06	33.88	5.57	24.67	328	0.03
27	17.06	33.93	5.57	325	20	17.06	33.91	5.57	24.69	326	0.06
49	17.06	34.11	5.40	312	30	17.09	33.95	5.56	24.71	324	0.10
57	15.66	33.91	4.94	296	50	16.79	34.08	5.35	24.88	308	0.16
68	14.26	33.81	4.57	274	75	13.45	33.76	4.24	25.36	262	0.23
76	13.40	33.76	4.22	261	100	(12.68)	(33.96)	(3.02)	(25.67)	(233)	(0.30)
89	12.86	33.78	3.96	250							
98	12.76	33.96	3.02	234							
110p	11.20	33.86	3.11	214							
123p	10.46	33.95	2.71	194							
148p	10.34	34.11	2.29	181							
256p	9.38	34.38	1.00	145							
360p	8.32	34.42	0.58	126							

- a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

STRANGER; April 9, 1958; 0518 GCT; 26°25'N, 115°03'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 22°.

127.50

0	17.52	34.00	6.46	330	0	17.52	34.00	6.46	24.65	330	0.00
9	17.52	33.98	6.44	332	10	17.52	33.98	6.43	24.63	332	0.03
32	17.52	33.96	6.37	333	20	17.52	33.97	6.41	24.63	332	0.07
60	17.44	33.96	6.35	332	30	17.52	33.96	6.38	24.62	333	0.10
69	17.44	33.99	6.48	330	50	17.48	33.96	6.36	24.63	332	0.17
83	17.46	34.14	6.31	319	75	17.45	34.05	6.41	24.70	325	0.25
91	16.33	34.05	5.59	300	100	15.08	33.96	5.21	25.18	280	0.33
108	14.16	33.91	4.97	265	150	11.66	34.09	3.17	25.96	206	0.45
121	12.96	33.90	4.22	242	200	10.98	34.39	2.11	26.33	170	0.54
138	12.16	34.02	3.57	218	250	10.03	34.45	1.80	26.54	151	0.62
159a)	11.34	34.14	2.94	195	300	9.37	34.44	1.73	26.65	140	0.70
185	11.12	34.31	2.33	179	400	8.18	34.42	0.91	26.82	124	0.84
209	10.88	34.41	1.97	168	500	7.11	34.43	0.28	26.98	109	0.96
260	9.84	34.45	1.79	147	600	(6.27)	(34.45)		(27.10)	(97)	(1.07)
339	8.87	34.43	1.64	134							
441	7.62	34.42	0.41	117							
581	6.40	34.45	0.22	98							

STRANGER; April 9, 1958; 1120 GCT; 26°05.5'N, 115°38.5'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 34°.

127.60

0	18.36	34.27	5.21	330	0	18.36	34.27	5.21	24.65	330	0.00
8	18.34	34.25	5.28	331	10	18.34	34.25	5.27	24.64	331	0.03
29	18.36	34.26	5.13	330	20	18.35	34.26	5.25	24.64	331	0.07
54	18.41	34.27	5.36	332	30	18.37	34.27	5.16	24.64	331	0.10
61	18.38	34.25	-	332	50	18.40	34.27	5.31	24.63	332	0.16
72	18.42	34.25	-	333	75	18.42	34.27		24.63	332	0.25
79	18.42	34.27	-	332	100	17.56	34.27		24.84	312	0.33
94	17.96	34.28	-	320	150	11.97	33.88		25.74	226	0.47
104	17.18	34.26	-	304	200	11.13	34.07		26.05	197	0.57
118	14.82	33.91	-	278	250	10.60	34.22		26.26	177	0.67
136	13.20	33.83	-	252	300	10.07	34.42		26.51	153	0.76
157	11.40	33.89	-	215	400	8.99	34.53		26.77	129	0.90
179a)	10.70	33.83	-	208							
189p	11.19	34.29r	-	-							
262p	10.44	34.27	-	171							
357p	9.57	34.54	-	136							
486p	7.59	34.46	-	114							

STRANGER; April 9, 1958; 1630 GCT; 25°44.5'N, 116°16.5'W; sounding, 2000 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 14°.

127.70

0	17.68	34.02	5.57	333	0	17.68	34.02	5.57	24.62	333	0.00
10	17.66	34.00	5.58	334	10	17.66	34.00	5.58	24.61	334	0.03
34	17.66	34.04b)	5.47	331	20	17.66	34.01	5.53	24.62	333	0.07
63	17.60	34.03	5.29	330	30	17.66	34.03	5.48	24.63	332	0.10
73	17.32	34.04	5.41	323	50	17.64	34.03	5.36	24.64	331	0.17
87	16.72	33.95	5.21	316	75	17.22	34.03	5.40	24.74	322	0.25
97	15.35	33.86	4.92	294	100	14.98	33.86	4.74	25.12	285	0.33
115	13.18	33.89	3.51	247	150	11.04	33.96	2.66	25.98	203	0.45
129	12.32	33.86	3.25	234	200	11.05	34.34	1.30	26.27	176	0.54
147	11.10	33.93	2.73	207	250	10.38	34.49	0.81	26.50	154	0.63
170	10.94	34.08	2.19	193	300	9.63	34.49	0.74	26.64	141	0.70
196	11.06	34.31	-	178	400	8.60	34.48	0.37	26.80	126	0.84
222	10.86	34.47	0.79	163	500	7.45	34.46	0.31	26.95	112	0.97
274	9.94	34.49	0.85	146	600	6.21	34.41	0.42	27.08	99	1.08
354	9.08	34.49	0.48	133							
460	7.93	34.47	0.30	117							
600	6.21	34.41	0.42	99							

- a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.
- b) Possible evaporation; value falls on property curve.

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

127.80 STRANGER; April 9, 1958; 2147 GCT; 25°25'N, 116°51'W; sounding, 2000 fm; wind, 300°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°.

0	19.36	34.49	5.32	339	0	19.36	34.49	5.32	24.56	339	0.00
10	19.29	34.49	5.34	337	10	19.29	34.49	5.34	24.58	337	0.03
30	19.14	34.49	5.06	334	20	19.20	34.49	5.19	24.60	335	0.07
59	19.12	34.48	5.24	333	30	19.14	34.49	5.06	24.61	334	0.10
69	19.06	34.47	5.18	332	50	19.13	34.49	5.13	24.61	334	0.17
79	17.55	34.23	4.87	315	75	18.78	34.43	5.08	24.65	330	0.25
93	14.68	33.84	4.55	281	100	14.42	33.80	4.50	25.24	274	0.33
108	13.70	33.77	4.37	266	150	11.60	33.94	2.83	25.86	214	0.45
123	12.68	33.77	3.79	247	200	11.12	34.37	1.31	26.28	175	0.55
141	11.74	33.88	3.08	221	250	10.56	34.47	0.87	26.46	158	0.64
159	11.50	34.01	2.51	208	300	9.82	34.51	0.56	26.62	143	0.71
186	11.16	34.23	1.62	186	400	8.42	34.46	0.39	26.81	125	0.85
208	11.08	34.40	1.18	172	500	7.30	34.44	0.34	26.96	110	0.98
257	10.42	34.48	0.82	155							
334	9.38	34.52	0.42	135							
437	7.92	34.43	0.39	120							
570	6.64	34.47	0.25	100							

130.30 STRANGER; April 7, 1958; 1823 GCT; 26°31'N, 113°35.5'W; sounding, 25 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	16.26	34.02	5.24	301	0	16.26	34.02	5.24	24.96	301	0.00
10	16.14	34.00	5.27	300	10	16.14	34.00	5.27	24.97	300	0.03
20	15.77	33.98	4.94	293	20	15.77	33.98	4.94	25.04	293	0.06
30	14.42	-	3.48	-	30	14.42	-	3.48	-	-	-

130.35 STRANGER; April 7, 1958; 1613 GCT; 26°22.5'N, 113°48.5'W; sounding, 200 fm; wind, 320°, force 2; weather, cloudy; sea, very rough; wire angle, 00°.

0	16.94	33.97	5.28	320	0	16.94	33.97	5.28	24.76	320	0.00
10	16.92	33.99	5.36	318	10	16.92	33.99	5.36	24.78	318	0.03
30	17.00	34.02	5.04	317	20	16.97	34.00	5.20	24.78	318	0.06
50	17.02	34.09	5.32	313	30	17.00	34.02	5.04	24.79	317	0.10
60	16.31	34.05	4.87	300	50	17.02	34.09	5.32	24.83	313	0.16
74a)	14.78	33.88	4.01	280	75	14.63	33.88	3.97	25.21	277	0.23
98	12.58	33.90	3.06	235	100	12.50	33.90	3.00	25.66	234	0.30
121	12.00	34.20	1.64	203	150	11.75	34.54	0.60	26.30	173	0.40
158	11.64	34.56	0.50	170	200	11.02	(34.61)	0.40	(26.48)	(156)	(0.48)
176	11.38	34.56	0.41	165	250	10.62	-	0.36	-	-	-
195	11.04	34.60	0.40	157	300	(9.97)	-	-	-	-	-
242	10.74	34.69u	0.38	-	-	-	-	-	-	-	-
290	10.08	34.57	0.24	-	-	-	-	-	-	-	-

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

STRANGER; April 7, 1958; 1256, 1317 GCT; 26°12'N, 114°07'W; sounding, 1000 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 09°, 09°.

130.40

0	17.26	33.99	5.50	325	0	17.26	33.99	5.50	24.71	325	0.00
10	17.26	34.02	5.56	323	10	17.26	34.02	5.56	24.73	323	0.03
30	17.27	34.06a)	5.44	-	20	17.27	34.02	5.49	24.73	323	0.06
60	17.18	34.02	5.33	321	30	17.27	34.02	5.44	24.73	323	0.10
69	16.02	33.86	5.08	307	50	17.23	34.02	5.37	24.74	322	0.16
79	14.86	33.82	4.59	286	75	15.30	33.83	4.78	25.03	294	0.24
93	13.14	33.81	3.53	252	100	12.43	33.79	3.49	25.58	241	0.31
107	12.02	33.77	3.48	235	150	11.60	34.34	1.04	26.17	185	0.42
120	11.66	33.88	3.10	220	200	10.98	34.51	0.57	26.42	162	0.50
138	11.80	34.20	1.63	199	250	10.39	34.56	0.53	26.56	149	0.58
156	11.52	34.40	0.91	180	300	9.67	34.56	0.52	26.68	137	0.66
184	11.27	34.51b)	0.85	170	400	8.25	34.48	0.34	26.85	121	0.79
206	10.88	34.51	0.54	160	500	7.00	34.43	0.25	26.99	108	0.91
257	10.30	34.56	0.53c)	147							
336	9.10	34.55	0.49	128							
439	7.76	34.44	0.28	117							
573	6.14	34.43	0.24	96							

STRANGER; April 7, 1958; 0712 GCT; 25°57.5'N, 114°49'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 15°.

130.50

0	17.34	33.89	5.36	334	0	17.34	33.89	5.36	24.61	334	0.00
10	17.35	33.95	5.05	330	10	17.35	33.95	5.05	24.65	330	0.03
29	17.35	33.94	5.34	331	20	17.35	33.94	5.20	24.64	331	0.07
58	17.60	34.07	5.30	327	30	17.35	33.94	5.34	24.64	331	0.10
68	17.56	34.11	5.28	323	50	17.35	33.94	5.34	24.64	331	0.16
77	17.01	34.04	5.22	316	75	17.20	34.07	5.23	24.78	318	0.25
92	16.09	33.98	4.59	300	100	14.57	33.96	4.48	25.28	270	0.32
104	13.94	33.95b)	4.44	258	150	11.54	34.15	2.10	26.04	198	0.44
119	12.64	33.92	4.30	235	200	11.26	34.52	0.83	26.38	166	0.53
135	11.90	34.02	3.65	214	250	10.52	34.56	0.78	26.55	150	0.61
152	11.51	34.16	2.05	197	300	9.58	34.51	0.64	26.67	139	0.69
180	11.32	34.42	1.04	174	400	8.06	34.43	0.59	26.84	122	0.82
200	11.26	34.52	-	166	500	7.00	34.45	0.47	27.00	107	0.94
249	10.54	34.56	0.79	150							
325	9.08	34.48	0.61	134							
424	7.76	34.42	0.59	118							
558	6.59	34.48	0.37	98							

- a) Possible evaporation; value does not fall on property curve.
- b) Possible evaporation; value falls on property curve.
- c) Alternate value, 0.71 ml/L, not used in interpolation.

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

130.60 STRANGER; April 7, 1958; 0133 GCT; 25°38'N, 115°28'W; sounding, 2000+ fm; wind, 320°, force 2; weather, partly cloudy; sea, high; wire angle, 07°.

0	19.63	34.55	5.28	341	0	19.63	34.55	5.28	24.54	341	0.00
10	19.68	34.46	5.23	349	10	19.68	34.46	5.23	24.45	349	0.03
29	19.67	34.58	5.34	340	20	19.68	34.52	5.25	24.50	344	0.07
58	18.61	34.29	5.28	336	30	19.66	34.58	5.34	24.55	339	0.10
68	17.88	34.19	5.32	325	50	19.08	34.43	5.31	24.58	337	0.17
78	17.70	34.19	5.40	321	75	17.77	34.19	5.39	24.74	322	0.25
92	16.35	33.99	4.84	305	100	15.20	33.90	4.43	25.09	288	0.33
106	14.48	33.85	4.22	276	150	11.28	33.95	2.68	25.92	209	0.46
120	13.14	33.78	3.93	254	200	10.78	34.32	1.70	26.30	173	0.55
138a)	11.86	33.88	3.03	224	250	9.81	34.34	1.47	26.48	156	0.64
156	11.08	33.97	2.54	204	300	9.18	34.38	1.06	26.63	142	0.72
184	10.72	34.11	2.13	187	400	8.28	34.43	0.44	26.81	125	0.85
206a)	10.79	34.36	1.24	170	500	7.27	34.47	0.27	26.98	109	0.98
257	9.64	34.34	1.49	153							
336	8.90	34.40	0.74b)	136							
442	7.84	34.45	0.32	117							
578	6.58	34.49	0.23	98							

130.70 STRANGER; April 6, 1958; 1924, 1944 GCT; 25°12'N, 116°19'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, high; wire angle, 08°, 09°.

0	19.57	34.51	5.34	342	0	19.57	34.51	5.34	24.52	342	0.00
10	19.54	34.52	5.30	341	10	19.54	34.52	5.30	24.53	341	0.03
30	19.26	34.44	5.27	340	20	19.40	34.48	5.27	24.53	341	0.07
60	19.17	34.43	5.24	338	30	19.26	34.44	5.27	24.54	340	0.10
70	19.14	34.43	5.38	338	50	19.19	34.43	5.25	24.56	338	0.17
80	18.30	34.34	5.38	324	75	18.98	34.42	5.38	24.60	335	0.25
94	15.94	34.01	4.69	295	100	15.18	33.93	4.69	25.14	284	0.33
108	14.06	33.84	4.69	268	150	11.56	33.99	2.80	25.91	210	0.46
123	12.56	33.78	3.82	244	200	10.67	34.30	1.56	26.31	172	0.55
143	11.78	33.89	3.21	222	250	10.30	34.49	1.02	26.52	152	0.64
162	11.28	34.13	2.13	196	300	9.50	34.50	0.67	26.66	139	0.71
192	10.80	34.29	1.60	175	400	8.20	34.46	0.47	26.85	121	0.85
215	10.82	34.40	1.14	168	500	7.18	34.47	0.45	27.00	107	0.97
255	10.14	34.49	1.00	149							
332	9.14	34.50	0.46	133							
433	7.74	34.45	0.49	116							
566	6.70	34.51	0.41	98							

130.80 STRANGER; April 6, 1958; 1426 GCT; 24°51'N, 116°56.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, high; wire angle, 03°.

0	19.26	34.45	5.25	339	0	19.26	34.45	5.25	24.56	339	0.00
10	19.24	34.42	5.23	341	10	19.24	34.42	5.23	24.54	341	0.03
30	19.25	34.42	5.20	341	20	19.25	34.42	5.22	24.54	341	0.07
60	19.25	34.39	5.09	343	30	19.25	34.42	5.20	24.54	341	0.10
70	19.24	34.42	4.94	341	50	19.25	34.40	5.15	24.52	342	0.17
80	18.79	34.30	5.28	338	75	19.13	34.39	5.00	24.54	340	0.26
94	17.62	34.22	5.00	317	100	16.52	34.10	4.89	24.91	305	0.34
109	14.42	33.77	4.78	280	150	11.33	33.86	3.47	25.85	216	0.47
123	12.83	33.71	4.00	254	200	10.17	34.18	1.97	26.31	172	0.57
142	11.61	33.78	3.69	227	250	9.67	34.40	1.28	26.56	149	0.65
160	11.07	33.93	3.22	206	300	9.05	34.42	0.91	26.68	137	0.72
189	10.33	34.09	2.44	182	400	8.03	34.43	0.42	26.84	122	0.86
210	10.10	34.25	1.63	167	500	7.07	34.45	0.33	27.00	107	0.98
260	9.54	34.41	1.27	146							
337	8.68	34.43	0.53	131							
440	7.60	34.43	0.36	116							
572	6.54	34.48	0.32	98							

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

b) Alternate value, 1.32 ml/L, not used in interpolation.

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

STRANGER; April 5, 1958; 0215 GCT; 26°02.5'N, 112°54.5'W; sounding, 57 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 05°.

133.25

0	18.97	34.37	4.59	338	0	18.97	34.37	4.59	24.57	338	0.00
10	18.96	34.52	4.65	326	10	18.96	34.52	4.65	24.69	326	0.03
30	18.98	34.50	4.71	328	20	18.97	34.51	4.68	24.67	328	0.06
50	18.70	34.51	-	321	30	18.98	34.50	4.71	24.67	328	0.10
75	14.96	34.08	-	269	50	18.70	34.51	-	24.75	321	0.16
					75	14.96	34.08	-	25.29	269	0.24

STRANGER; April 5, 1958; 0430 GCT; 25°54'N, 113°09.5'W; sounding, 100 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 12°.

133.30

0	18.52	34.46	5.38	320	0	18.52	34.46	5.38	24.76	320	0.00
10	18.52	34.41	5.42	324	10	18.52	34.41	5.42	24.71	324	0.03
29	18.54	34.47	5.37	320	20	18.53	34.44	5.39	24.74	322	0.06
48	18.51	34.38	5.35	326	30	18.54	34.47	5.36	24.76	320	0.10
72	16.71	34.15	4.39	301	50	18.48	34.37	5.34	24.69	326	0.16
95	14.26	33.93	3.41	266	75	16.42	34.12	4.27	25.00	297	0.24
118	13.16	34.40	1.05	209	100	13.54	33.95	2.93	25.49	250	0.31
146	12.34	34.51	0.57	186	150	(12.22)	(34.52)	(0.51)	(26.19)	(183)	(0.42)

STRANGER; April 5, 1958; 1032 GCT; 25°34'N, 113°50'W; sounding, 1100 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 07°.

133.40

0	18.86	34.48	5.34	327	0	18.86	34.48	5.34	24.68	327	0.00
10	18.85	34.50	5.23	326	10	18.85	34.50	5.23	24.69	326	0.03
35	18.86	34.45	5.29	329	20	18.85	34.48	5.24	24.68	327	0.06
65	17.84	34.16	5.25	326	30	18.85	34.46	5.25	24.67	328	0.10
74	17.07	34.13	5.20	311	50	18.79	34.43	5.27	24.65	330	0.16
88	15.26	33.96	3.96	284	75	16.95	34.12	5.17	24.87	309	0.24
98	13.68	33.82	3.69	262	100	13.56	33.82	3.63	25.39	260	0.32
117	12.54	34.00	2.58	227	150	11.91	34.38	0.93	26.15	188	0.43
130a)	12.04	34.11	2.08	211	200	11.08	34.48	0.62	26.38	166	0.52
148	11.94	34.36	0.94	190	250	10.47	34.54	0.47	26.53	152	0.60
171	11.64	34.45	0.76	178	300	9.84	34.54	0.31	26.64	141	0.68
199	11.11	34.48	0.62	167	400	8.21	34.44	0.27	26.83	123	0.81
226	10.72	34.52	0.55	157	500	6.99	34.44	0.25	27.00	107	0.93
280	10.16	34.56	0.36	144	600	6.19	34.43	0.41	27.10	97	1.04
363	8.74	34.45	0.29	130							
470	7.28	34.44b)	0.23	110							
611	6.10	34.43	0.43	96							

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

b) Possible evaporation; value falls on property curve.

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

133.50 STRANGER; April 5, 1958; 1623 GCT; 25°12'N, 114°35'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 10°.

0	18.96	34.40	5.04	335	0	18.96	34.40	5.04	24.60	335	0.00
10	18.95	34.40	5.18	335	10	18.95	34.40	5.18	24.60	335	0.03
30	18.94	34.41	5.13	334	20	18.95	34.40	5.16	24.60	335	0.07
60	18.94	34.41	5.12	334	30	18.94	34.41	5.13	24.61	334	0.10
69	18.91	34.36	5.12	337	50	18.94	34.41	5.13	24.61	334	0.17
78	18.72	34.34	5.22	334	75	18.82	34.35	5.17	24.60	335	0.25
93	17.57	34.13	5.03	322	100	17.30	34.09	4.98	24.77	319	0.34
107	15.98	33.95	4.54	299	150	11.94	34.18	1.87	25.98	203	0.46
121	13.26	33.87	3.15	250	200	10.48	34.32	1.47	26.36	168	0.56
140	12.28	34.09	2.22	216	250	9.40	34.34	1.32	26.56	149	0.64
157	11.70	34.22	1.65	196	300	8.99	34.38	0.91	26.66	139	0.71
186	11.24	34.34	1.33	179	400	8.20	34.46	0.34	26.84	122	0.85
209	10.01	34.31	1.51	161	500	7.25	34.45	0.25	26.96	110	0.97
259	9.27	34.34	1.26	146							
337	8.72	34.42	0.58	132							
439	7.86	34.46	0.25	117							
572	6.41	34.42	0.26	101							

133.65 STRANGER; April 6, 1958; 0037, 0102 GCT; 24°49'N, 115°20'W; sounding, 2000+ fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 32°, 45°.

0	19.53	-	5.28	-	0	19.53	(34.44)	5.28	(24.47)	(347)	(0.00)
8	19.48	34.44	5.26	346	10	(19.47)	(34.44)	(5.24)	(24.49)	(345)	(0.03)
34	19.42	34.45	5.19	343	20	(19.45)	(34.44)	(5.21)	(24.50)	(344)	(0.07)
55	18.89	34.34	5.28	338	30	(19.44)	(34.45)	(5.20)	(24.51)	(344)	(0.10)
63	18.75	34.31	5.39	337	50	19.37	34.44	5.19	24.53	342	(0.17)
75	17.80	34.12	5.22	328	75	17.80	34.12	5.22	24.67	328	(0.26)
82	17.51	34.05	5.30	326	100	17.20	34.11	5.10	24.81	315	(0.34)
88	17.12	33.96	5.48	324	150	12.19	34.18	1.87	25.94	207	(0.46)
95	17.54	34.18	5.18	318	200	11.60	34.54	0.60	26.33	170	(0.56)
102	16.82	34.04	5.08	312	250	11.01	34.62	0.41	26.50	154	(0.64)
107a)	15.02	33.85	4.10	287	300	10.09	34.55	0.41	26.60	145	(0.72)
109	14.66	33.86	4.06	279							
117	13.26	33.84	4.12	252							
155	12.04	34.24	1.51	201							
228	11.37	34.64	0.41	159							
379	8.58	34.42	0.41	130							

133.70 STRANGER; April 6, 1958; 0350 GCT; 24°38.5'N, 115°41'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 15°.

0	20.42	34.64	5.14	354	0	20.42	34.64	5.14	24.40	354	0.00
10	20.40	34.64	5.11	354	10	20.40	34.64	5.11	24.40	354	0.04
34	20.39	34.63	5.10	354	20	20.40	34.64	5.10	24.40	354	0.07
63	20.26	34.60	5.09	353	30	20.39	34.64	5.10	24.40	354	0.11
72	18.93	34.31	4.85	342	50	20.36	34.62	5.10	24.40	354	0.18
87	16.44	34.00	4.28	306	75	18.30	34.22	4.71	24.62	333	0.26
96	14.30	33.78	4.44	278	100	14.02	33.80	4.29	25.28	270	0.34
115a)	13.31	33.92	3.24	248	150	11.23	34.05	2.49	26.01	201	0.46
129	12.48	34.05	2.81	223	200	11.19	34.51	0.85	26.38	166	0.55
149a)	11.26	34.05	2.51	201	250	10.59	34.54	0.70	26.52	153	0.63
172	10.93	34.24	1.89	181	300	10.38	34.66	0.24	26.64	141	0.71
199	11.22	34.51	0.82	166	400	8.70	34.58	0.33	26.86	120	0.84
226	10.56	34.43	1.06	160	500	7.40	34.57	0.23	27.05	102	0.96
280	10.66	34.67	0.22	145	600	6.40	34.53	0.19	27.15	92	1.06
360	9.24	34.58	0.37	129							
466	7.80	34.58	0.25	107							
606	6.36	34.53	0.19	92							

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

STRANGER; April 6, 1958; 0859 GCT; 24°15'N, 116°25'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 07°.

133.80

0	20.32	34.67	5.02	349	0	20.32	34.67	5.02	24.45	349	0.00
10	20.30	34.61	5.02	353	10	20.30	34.61	5.02	24.41	353	0.04
30	20.30	34.67	5.00	349	20	20.30	34.64	5.01	24.43	351	0.07
60	20.30	34.66	5.10	350	30	20.30	34.67	5.00	24.45	349	0.10
70	20.25	34.67	5.14	348	50	20.30	34.66	5.05	24.45	349	0.18
80	19.92	34.54	5.02	349	75	20.13	34.64	5.13	24.46	348	0.26
94	16.73	34.29	3.94	292	100	16.20	34.24	3.47	25.14	284	0.34
108	15.57	34.18	2.71	274	150	13.13	34.38	1.52	25.90	211	0.47
123a)	14.86	34.26	1.99	254	200	10.62	34.34	1.37	26.35	168	0.56
142	13.81	34.45	1.40	219	250	10.02	34.52	0.65	26.59	145	0.65
160	12.18	34.27	1.67	201	300	9.62	34.58	0.33	26.71	134	0.72
187	11.04	34.33	1.40	176	400	8.60	34.56	0.23	26.86	120	0.85
209	10.38	34.35	1.37	164	500	7.45	34.54	0.26	27.01	106	0.97
259	9.99	34.54	0.55	143							
337	9.28	34.60	0.24	128							
439	8.18	34.54	0.23	115							
572	6.64	34.54	0.30	96							

STRANGER; April 4, 1958; 1851 GCT; 25°34'N, 112°18.5'W; sounding, 42 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 08°.

137.23

0	18.69	34.56	5.20	317	0	18.69	34.56	5.20	24.79	317	0.00
10	18.68	34.59	5.25	315	10	18.68	34.59	5.25	24.81	315	0.03
30	18.66	34.57	5.11	315	20	18.67	34.58	5.20	24.81	315	0.06
40	18.41	34.51	4.69	314	30	18.66	34.57	5.11	24.81	315	0.09
50	15.88	34.36	2.18	268	50	15.88	34.36	2.18	25.30	268	0.15
60	15.62	34.37	2.07	261							

STRANGER; April 4, 1958; 1501 GCT; 25°14'N, 112°44.5'W; sounding, 130 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 10°.

137.30

0	19.15	34.60	5.21	325	0	19.15	34.60	5.21	24.70	325	0.00
10	19.15	34.63	5.25	323	10	19.15	34.63	5.25	24.72	323	0.03
30	19.14	34.60	5.17	325	20	19.14	34.62	5.20	24.71	324	0.06
40	19.10	34.62	5.16	322	30	19.14	34.60	5.17	24.70	325	0.10
50	18.98	34.63	5.15	319	50	18.98	34.63	5.15	24.77	319	0.16

STRANGER; April 4, 1958; 1135 GCT; 25°04.5'N, 113°05'W; sounding, 600 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 25°.

137.35

0	19.18	34.54	5.22	330	0	19.18	34.54	5.22	24.65	330	0.00
9	19.17	34.59	5.26	327	10	19.17	34.59	5.26	24.68	327	0.03
27	19.18	34.54	5.29	330	20	19.18	34.57	5.27	24.67	328	0.06
55	19.16	34.52	5.26	331	30	19.18	34.54	5.28	24.64	331	0.10
64	19.10	34.55	5.10	328	50	19.17	34.53	5.27	24.64	331	0.16
72	17.96	34.31	4.90	318	75	17.10	34.21	4.60	24.90	306	0.24
85	15.05	34.04	3.45	274	100	13.96	34.04	2.88	25.47	252	0.32
97	14.25	34.04	2.97	258	150	11.63	34.34	1.10	26.16	186	0.42
109	12.84	34.02	2.56	232	200	11.02	34.57	0.53	26.46	158	0.51
124	11.95	34.05	2.14	213	250	10.33	34.58	0.44	26.58	146	0.59
139	11.60	34.22	1.70	194	300	9.61	34.55	0.52	26.68	137	0.66
161	11.68	34.45	0.82	178	400	8.27	34.54	0.31	26.89	117	0.79
179	11.35	34.54	0.75	166	500	(6.61)	(34.43)	(0.24)	(27.05)	(102)	(0.91)
221	10.75	34.59	0.38	152							
284	9.81	34.55	0.54	140							
372	8.70	34.56	0.36	122							
487	6.84	34.43	0.24	106							

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

137.40 STRANGER; April 4, 1958; 0833 GCT; 24°55'N, 113°24'W; sounding, 1200 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 11°.

0	19.07	34.44		335	0	19.07	34.44		24.60	335	0.00
10	19.06	34.51		330	10	19.06	34.51		24.65	330	0.03
29	18.54	34.34		330	20	18.83	34.45		24.65	330	0.07
58	17.08	34.04		318	30	18.54	34.34		24.66	330	0.10
68	16.62	34.02		309	50	17.15	34.05		24.77	319	0.16
77	15.90	33.95		298	75	16.08	33.97		24.96	301	0.24
92	13.65	33.86		258	100	(13.22)	(33.94)		(25.56)	(244)	(0.31)
100a)	13.21	33.94		244							
123a)	12.44	34.14		-							
141a)	11.76	34.20		-							
184a)	10.88	34.36		-							
250a)	10.46	34.56		-							
337a)	9.25	34.52		-							
448a)	7.58	34.45		-							

137.50 STRANGER; April 4, 1958; 0252 GCT; 24°38'N, 114°00'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 12°.

0	18.18	34.09	5.54	339	0	18.18	34.09	5.54	24.56	339	0.00
10	18.18	34.16	5.80	334	10	18.18	34.16	5.80	24.61	334	0.03
29	17.82	34.11	5.57	330	20	17.98	34.13	5.71	24.64	331	0.07
58	16.96	34.07	5.59	312	30	17.83	34.11	5.57	24.66	329	0.10
68	16.82	34.09	5.26	308	50	17.17	34.08	5.58	24.79	317	0.16
77	16.00	33.98	4.60	298	75	16.37	34.03	4.84	24.94	302	0.24
91	13.37	33.69	4.20	266	100	12.48	33.71	4.03	25.51	248	0.31
104	12.32	33.71	3.99	245	150	11.95	34.31	1.65	26.08	194	0.42
119	11.92	33.78	3.56	232	200	10.99	34.46	1.03	26.38	166	0.52
136	11.85	34.07	2.13	210	250	10.39	34.53	0.72	26.54	150	0.60
153	11.96	34.35	1.32	191	300	9.60	34.51	0.46	26.66	139	0.67
180	11.43	34.44	0.90	175	400	8.23	34.46	0.29	26.84	122	0.81
202	10.95	34.46	1.03	165	500	7.06	34.43	0.25	26.98	108	0.93
251	10.38	34.53	0.72	150							
327	9.17	34.50	0.34	133							
427	7.93	34.45	0.29	119							
556	6.41	34.42	0.25	100							

137.60 STRANGER; April 3, 1958; 2120 GCT; 24°19.5'N, 114°37.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, high; wire angle, 20°.

0	20.30	34.58	5.22	356	0	20.30	34.58	5.22	24.38	356	0.00
28	19.96	34.55	5.20	349	10	20.18	34.57	5.21	24.40	353	0.04
47	19.92	34.52	5.13	350	20	20.03	34.56	5.20	24.44	350	0.07
69	19.34	34.47	5.37	340	30	19.96	34.54	5.20	24.45	349	0.10
82	18.31	34.16	5.47	338	50	19.90	34.52	5.13	24.44	350	0.18
91	17.92	34.09	5.27	333	75	19.07	34.41	5.42	24.57	338	0.26
99	16.86	34.05	4.87	312	100	16.65	34.04	4.73	24.88	308	0.34
107	15.44	33.97	3.67	287	150	12.63	34.44	0.94	26.05	197	0.47
116b)	13.98	33.93	3.32	260							
124	13.89	34.23	2.09	236							
132	13.70	34.42	1.42	218							
150	12.63	34.44	0.94	197							
213p	10.81	34.47	0.88	-							
314p	9.45	34.56	0.48	-							

a) Pretrip; depth too uncertain for interpolation.

b) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

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

STRANGER; April 3, 1958; 1518, 1559 GCT; 23°59.5'N, 115°17.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, cloudy; sea, high; wire angle, 10°, 22°.

137.70

0	20.66	34.62	5.17	362	0	20.66	34.62	5.17	24.32	362	0.00
10	20.66	34.61	5.21	362	10	20.66	34.61	5.21	24.32	362	0.04
30	20.65	34.60	5.21	363	20	20.66	34.60	5.21	24.32	363	0.07
59	20.22	34.52	5.43	358	30	20.65	34.60	5.21	24.31	363	0.11
68	19.66	34.40	5.22	352	50	20.57	34.58	5.28	24.32	362	0.18
78	19.42	34.37	5.17	349	75	19.50	34.38	5.19	24.44	350	0.27
92	17.45	34.14	4.52	319	100	16.58	34.05	4.46	24.90	306	0.35
106	15.94	34.00	4.45	295	150	11.49	33.85	3.04	25.81	220	0.48
120	14.44	34.01	3.24	264	200	11.25	34.51	0.85	26.37	167	0.58
139	11.98	33.80	3.22	232	250	10.79	34.60	0.52	26.52	152	0.66
157	11.25	33.89	2.93	212	300	9.99	34.60	0.51	26.67	138	0.74
					400	8.40	34.48	0.27	26.83	123	0.88
171	10.61	34.04	2.29	191	500	7.41	34.47	0.22	26.96	110	1.00
193	11.17	34.45	1.14	169							
242	10.92	34.60	0.53	154							
319	9.66	34.60	0.51	134							
419	8.15	34.46	0.21	121							
553	7.04	34.48	0.25	105							

STRANGER; April 3, 1958; 1017 GCT; 23°39.5'N, 115°55'W; sounding, 2100 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 15°.

137.80

0	21.06	34.67	4.86	368	0	21.06	34.67	4.86	24.25	368	0.00
10	21.04	34.67	4.87	368	10	21.04	34.67	4.87	24.25	368	0.04
29	21.02	34.70	5.12	365	20	21.03	34.69	5.07	24.26	367	0.07
53	20.10	34.49	5.15	357	30	21.02	34.70	5.12	24.28	365	0.11
63	19.63	34.42	5.27	351	50	20.83	34.62	5.13	24.32	361	0.18
72	19.13	34.34	5.33	344	75	19.00	34.33	5.35	24.52	342	0.27
82	18.84	34.25u	5.38	-	100	18.57	34.30	5.43	24.62	333	0.36
96	18.60	34.30	5.43	334	150	11.90	33.79	3.56	25.68	232	0.50
109	17.97	34.24	5.19	324	200	10.20	34.13	1.90	26.26	177	0.60
127	14.23	33.69	4.59	282	250	9.87	34.30	1.29	26.45	159	0.69
144	12.40	33.78a)	3.80	241	300	10.00	34.51	0.42	26.59	146	0.77
164	10.92	33.79	3.17	214	400	8.76	34.50	0.23	26.80	126	0.91
184	10.34	34.03	2.43	186	500	(7.48)	(34.48)	(0.14)	(26.96)	(110)	(1.04)
225	10.06	34.22	1.67	168							
289	10.10	34.50	0.51	148							
371	9.10	34.51	0.27	132							
481	7.77	34.49	0.17	115							

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
43.50-F	IV-1	1030	40°48.0'	124°57.0'	-	-	-	missing	missing	11.57	32.77	11.73	33.03
43.60-F	1	0130	40°28.0'	125°43.0'	1260	210°	9	rain	very high	11.89	32.92	11.98	32.90
47.60-F	III-31	2130	39°54.0'	125°18.0'	-	170°	8	rain	very high	11.80	-	9.93	33.48
60.52-B	IV-17	0450	37°53.5'	123°02.0'	45	340°	5	cloudy	high	12.87	32.74	10.32	33.57
60.65-B	17	1345	37°27.0'	123°59.5'	2000	280°	4	drizzle	very rough	13.61	32.03	12.86	32.84
67.50-B	16	1500	36°49.0'	122°04.5'	55	090°	3	clear	moderate	14.03	32.50	10.02	33.57
67.65-B	16	0245	36°19.0'	123°09.0'	1790	330°	6	cloudy	high	13.14	32.97	12.78	33.00
70.55-B	14	0130	36°03.0'	122°02.0'	750	300°	3	cloudy	moderate	13.75	32.86	12.11	33.40
70.65-B	14	0750	35°43.0'	122°45.0'	730	310°	4	overcast	moderate	14.11	33.02	13.36	33.07
70.75-B	14	1508	35°21.0'	123°31.5'	2000	310°	4	overcast	very rough	13.63	33.16	13.78	33.20a)
70.85-B	14	2201	34°59.0'	124°18.0'	2300	340°	5	overcast	high	14.12	33.22	13.90	33.26
73.51-F	9	1345	35°34.0'	121°20.5'	260	330°	4	partly cloudy	very rough	13.45	33.22	12.78	33.37
73.65-B	12	1310	35°10.0'	122°19.0'	2150	320°	2	clear	rough	13.94	33.19	13.66	33.21
73.75-B	12	0630	34°48.0'	123°01.5'	2100	320°	3	clear	rough	13.82	33.08	13.74	33.12
73.85-B	11	2350	34°28.5'	123°42.5'	2250	340°	4	clear	rough	14.20	33.22	14.01	33.25
77.50-F	9	2030	35°01.5'	120°52.5'	85	320°	5	clear	very rough	13.88	33.20	12.75	33.47
77.65-F	10	0505	34°32.0'	121°55.0'	2100	320°	6	partly cloudy	high	13.74	32.90	13.69	32.95

a) Loose bottle cap.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
77.75-F	IV-11	1030	34°14.0'	122°34.5'	2350	340°	6	cloudy	high	14.12	33.29	14.13	33.26
77.85-F	11	0535	33°53.5'	123°17.5'	2500	340°	6	clear	very high	14.42	33.21	14.38	33.19
80.65-B	10	1005	33°59.0'	121°30.0'	1850	300°	7	clear	very rough	13.79	33.40	13.74	33.37
80.75-B	10	1640	33°40.0'	122°15.0'	2200	350°	6	overcast	very rough	13.89	33.34	13.86	33.30
80.85-B	10	2315	33°18.0'	122°52.0'	2160	330°	6	overcast	high	15.16	33.40	15.10	33.40
83.40-P	1	2000	34°14.0'	119°22.0'	12	300°	6	rain	rough	14.89	33.28	-	-
83.65-P	4	1625	33°28.0'	121°07.5'	1900	270°	6	partly cloudy	very high	14.92	33.34	14.94	33.36
83.70-P	4	1930	33°16.5'	121°27.0'	2000	270°	6	partly cloudy	very high	14.92	33.38	14.92	33.39
83.75-P	4	2307	33°08.0'	121°43.0'	2150	300°	6	partly cloudy	very high	14.91	33.36	14.79	33.34
83.80-P	5	0229	32°59.0'	121°58.0'	2060	320°	6	partly cloudy	very high	14.97	33.38	14.94	33.35
87.50-P	6	0400	33°20.0'	119°39.5'	40	180°	4	partly cloudy	high	14.08	33.40	12.74	33.50
87.65-P	5	1825	32°50.0'	120°42.0'	2070	320°	4	partly cloudy	high	14.86	33.48	14.83	33.48
87.75-P	5	1130	32°30.0'	121°23.0'	2300	300°	4	partly cloudy	very high	15.32	33.53	15.33	33.54
87.80-P	5	0800	32°20.0'	121°44.0'	2160	290°	4	partly cloudy	very high	15.30	33.53	15.26	33.49
90.50-P	9	0400	32°45.0'	119°16.5'	200	300°	7	clear	very high	15.13	33.49	14.93	33.48
90.55-P	9	1440	32°32.0'	119°36.5'	450	320°	6	cloudy	very high	14.64	33.46	14.55	33.46
90.60-P	9	1915	32°26.0'	119°57.0'	600	310°	7	partly cloudy	very high	14.51	33.46	13.47	33.49
90.65-P	9	2315	32°15.5'	120°18.0'	2050	320°	6	cloudy	very high	14.79	33.50	14.72	33.46
90.70-P	10	0443	32°02.0'	120°45.0'	2000	320°	6	partly cloudy	very high	14.84	33.53	14.86	33.51

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
90.75-P	IV-10	0737	31°55.0'	120°58.0'	2240	320°	7	partly cloudy	very high	15.28	33.53	15.26	33.51
90.80-P	10	1130	31°45.0'	121°16.0'	1950	320°	6	partly cloudy	very high	15.51	33.57	15.48	33.57
90.85-P	10	1520	31°35.0'	121°39.5'	2150	340°	6	cloudy	very high	15.01	33.47	15.04	33.47
90.90-P	10	1905	31°27.0'	121°57.5'	2100	330°	6	cloudy	very high	14.92	33.37	14.88	33.44
90.100-P	11	0325	31°06.0'	122°33.0'	2200	330°	6	overcast	very high	16.74	33.75	16.72	33.72
90.110-P	11	1000	30°45.0'	123°08.5'	2200	330°	6	partly cloudy	high	16.98	33.86	17.00	33.83
90.120-P	11	1855	30°26.5'	123°58.0'	2300	330°	6	partly cloudy	high	16.80	33.76	16.75	33.81
93.35-P	19	0630	32°40.0'	117°52.0'	270	320°	3	missing	rough	16.56	33.48	12.98	33.52
93.45-P	19	1330	32°20.0'	118°33.0'	920	330°	4	overcast	very rough	16.34	33.58	12.68	33.49
93.55-P	19	2020	32°00.0'	119°13.0'	850	320°	4	cloudy	high	16.16	33.50	15.66	33.53
93.65-P	20	0548	31°41.5'	119°55.0'	2035	330°	5	clear	very high	16.37	33.55	16.26	33.56
93.75-P	20	1745	31°26.0'	120°38.0'	2000	320°	5	clear	high	16.06	33.49	15.83	33.53
97.35-P	22	0945	32°04.0'	117°28.5'	650	270°	3	clear	very rough	18.09	33.56	12.38	33.48
97.45-P	22	0247	31°43.0'	118°09.5'	750	330°	5	partly cloudy	very rough	17.58	33.56	14.16	33.49
97.55-P	21	2025	31°26.0'	118°50.0'	670	320°	5	clear	high	16.70	33.55	-	-
97.65-P	21	1430	31°06.0'	119°31.0'	1950	330°	5	clear	very rough	16.30	33.41	15.48	33.42
97.75-P	21	0720	30°46.0'	120°11.0'	2000	330°	4	clear	high	16.48	33.49	15.70	33.58
100.29-P	16	0813	31°42.0'	116°43.5'	95	calm		clear	moderate	16.78	33.48	12.54	33.55
100.45-P	15	2010	31°12.0'	117°48.0'	790	320°	4	clear	rough	16.40	33.55	15.93	33.51

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
100.55-P	IV-15	1405	30°57.0'	118°26.5'	1150	360°	4	clear	rough	16.79	33.61	16.36	33.61
100.65-P	15	0724	30°33.5'	119°04.5'	1750	360°	5	clear	rough	16.42	33.44	15.50	33.33
100.75-P	15	0127	30°10.5'	119°47.0'	1600	360°	5	clear	rough	16.26	-	15.28	33.34
100.85-P	14	1840	29°51.0'	120°26.5'	2080	360°	5	partly cloudy	rough	16.76	33.69	16.50	33.69
103.45-B	23	2308	30°35.0'	117°26.0'	900	320°	4	cloudy	high	17.32	33.60	15.58	33.49
103.55-B	24	0605	30°16.5'	118°04.0'	1500	310°	5	clear	high	16.90	33.55	16.86	33.65
103.65-B	24	1305	29°57.0'	118°43.5'	1900	340°	5	partly cloudy	high	17.46	33.73	17.47	33.78
103.75-B	24	2000	29°36.0'	119°25.0'	1850	320°	6	cloudy	high	16.89	33.62	16.82	33.64
103.85-B	25	0200	29°17.0'	120°05.0'	2000	310°	5	cloudy	very rough	17.19	33.67	17.06	33.68
107.45-B	26	1856	29°58.0'	117°03.5'	850	310°	5	partly cloudy	very rough	17.09	33.57	11.04	33.42
107.55-B	26	1103	29°40.5'	117°42.0'	1800	300°	5	partly cloudy	very rough	16.91	33.58	15.55	33.48
107.65-B	26	0415	29°21.5'	118°21.0'	1500	320°	4	partly cloudy	very rough	17.43	33.73	17.16	33.75
107.75-B	25	2100	29°02.0'	119°00.0'	1900	330°	5	partly cloudy	very rough	17.30	33.71	17.02	33.65
107.85-B	25	1416	28°42.0'	119°40.5'	2000	340°	5	cloudy	very rough	17.83	33.89	17.86	33.95
110.45-S	27	1215	29°25.5'	116°39.0'	500	360°	5	partly cloudy	very rough	17.06	33.66	16.82	33.65
110.55-S	27	0625	29°06.5'	117°19.0'	1900	360°	5	cloudy	very rough	16.88	33.58	14.76	33.50
110.65-S	27	0030	28°46.5'	117°57.0'	2000	360°	5	partly cloudy	very rough	17.34	33.68	17.24	33.70
110.75-S	26	1300	28°29.5'	118°42.5'	2200	340°	4	cloudy	very rough	17.82	33.89	17.81	33.87
110.85-S	26	0705	28°04.0'	119°16.0'	2200	340°	5	partly cloudy	very rough	18.16	34.01	18.07	33.98

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
113.45-S	IV-24	2000	28°48.0'	116°18.5'	1200	320°	4	partly cloudy	very rough	17.50	33.66	15.90	33.57
113.55-S	25	0130	28°32.0'	116°57.0'	2400	320°	4	partly cloudy	very rough	17.64	33.70	16.12	33.66
113.65-S	25	0920	28°08.5'	117°34.0'	2130	320°	4	partly cloudy	very rough	17.12	33.68	16.48	33.62
113.75-S	25	1445	28°47.0'	118°18.0'	2100	320°	5	cloudy	very rough	18.00	33.96	18.07	33.96
113.85-S	25	1950	27°31.0'	118°52.0'	2200	340°	5	partly cloudy	very rough	18.34	33.98	18.05	33.96
117.45-S	23	1655	28°13.0'	116°02.5'	2350	290°	3	cloudy	very rough	17.67	33.77	16.84	33.74
117.55-S	23	1045	27°51.0'	116°40.5'	1850	320°	4	cloudy	rough	17.42	33.68	16.92	33.82
117.65-S	23	0500	27°31.0'	117°19.0'	2000	340°	4	partly cloudy	very rough	18.16	33.89	17.56	33.96
117.75-S	22	2250	27°11.5'	117°58.5'	2300	320°	3	cloudy	very rough	18.44	34.02	17.60	33.97
117.85-S	22	1610	26°50.0'	118°35.0'	2300	320°	4	cloudy	rough	18.31	33.92	17.99	33.98
120.40-S	22	0755	27°56.5'	115°14.0'	20	320°	4	clear	rough	17.12	33.93	-	-
120.55-S	21	0630	27°21.0'	116°10.0'	2000	310°	2	fog	moderate	17.26	33.66	16.17	33.60
120.65-S	21	1530	26°58.0'	116°47.5'	2200	310°	3	fog	rough	17.36	33.68	15.96	33.67
120.75-S	21	2130	26°35.0'	117°30.5'	2100	270°	3	cloudy	rough	17.94	33.73	-	-
120.85-S	22	0310	26°21.0'	118°07.0'	2250	280°	3	cloudy	rough	18.62	33.90	17.78	33.97
123.45-S	10	2220	27°12.0'	115°08.0'	1800	320°	4	clear	rough	17.66	34.03a)	18.10	33.87
123.55-S	10	1735	26°54.0'	115°36.5'	2000	340°	4	clear	rough	17.22	33.88	14.76	33.86

a) Possible evaporation.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
127.45-S	IV-9	0220	26°34.5'	114°46.0'	2000	300°	5	cloudy	high	17.39	33.92	17.10	33.89
127.55-S	9	0810	26°14.0'	115°23.0'	2000+	320°	5	clear	high	17.96	34.14	17.97	-
130.45-S	7	0955	26°07.0'	114°31.5'	2000	320°	3	cloudy	very rough	17.10	33.91	17.12	33.88
130.55-S	7	0415	27°48.0'	115°08.5'	2000+	320°	3	partly cloudy	very rough	18.32	34.23	18.27	34.23
133.45-S	5	1340	25°21.0'	114°14.0'	2000	320°	5	partly cloudy	high	18.68	34.39	18.66	34.39
133.55-S	5	1915	25°03.0'	114°53.5'	2000	320°	6	clear	high	20.02	34.63	19.48	34.54
137.45-S	4	0530	24°46.0'	113°44.0'	1890	320°	4	clear	very rough	18.86	34.31	18.28	34.40
137.55-S	4	0020	24°28.0'	114°18.5'	2000	310°	6	partly cloudy	high	19.54	34.61	17.40	33.95

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

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Los Angeles 4, California

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Marine Resources Operations
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Terminal Island, California

Herrn Professor Dr. A. Defant
Sternwartestrasse 38
Innsbruck
Austria

Director of Research
Fish Commission of Oregon
Route 1, Box 31A
Clackamas, Oregon

Mr. Jeffery D. Frautschy
University of California
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Mr. Seth Gordon, Director
California Department of Fish and Game
926 J Street
Sacramento 14, California

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c/o Seafarers' International Union
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Tokai Regional Fisheries Research
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340 State Office Building
1400 S. W. Fifth Avenue
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University of California
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La Jolla, California

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Washington 25, D. C.

Dr. John P. Tully
Pacific Oceanographic Group
P. O. Drawer 6
Nanaimo, B. C.
Canada

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National Academy of Sciences
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Washington 25, D. C.

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University of California
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Los Angeles 24, California

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University of California
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La Jolla, California

Dr. Lionel A. Walford, Chief
Atlantic Fishery Oceanographic
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U. S. Bureau of Commercial Fisheries
734 Jackson Place, N. W.
Washington 25, D. C.

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University of California
Scripps Institution of Oceanography
La Jolla, California

Dr. Kozo Yoshida
Geophysical Institute
Tokyo University
Bunkyo-ku
Tokyo, Japan