

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5801
8 January - 2 February 1958

SIO Reference 59-3
15 January 1959

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

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CCOFI CRUISE 5801

8 January - 2 February 1958

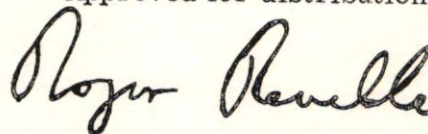
Sponsored by

Marine Research Committee

SIO Reference 59-3

15 January 1959

Approved for distribution:

A handwritten signature in dark ink, appearing to read "Roger Revelle". The signature is fluid and cursive, with the first name "Roger" and last name "Revelle" clearly distinguishable.

Roger Revelle, Director

CONTENTS

List of Figures.	ii
Introduction	iii
Personnel	v
Tabulated Data.	1
Distribution List	48

FIGURES

1. CCOFI Cruise 5801, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Surface currents measured by geomagnetic electrokinetograph (GEK)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of temperature at 200 meters
7. Horizontal distribution of salinity at 200 meters

INTRODUCTION

The data presented in this report were collected on the one hundred and fourth consecutive cruise of the California Cooperative Oceanic Fisheries Investigations program. The R/V Black Douglas of the U. S. Fish and Wildlife Service, the R/V Paolina-T 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.
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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.
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Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve, " depending upon whether the property curve was drawn through the value or not.

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

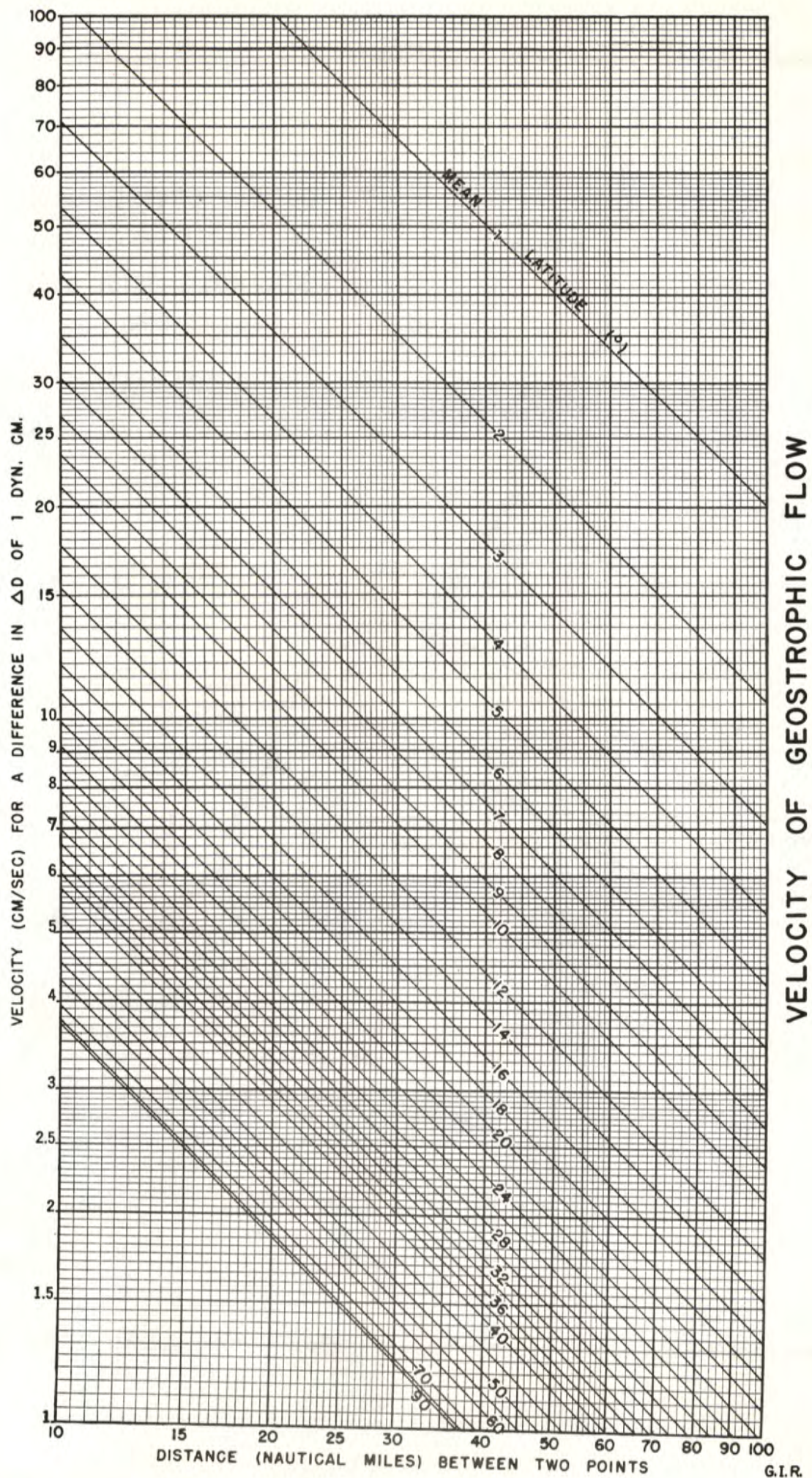
To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip.

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

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

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



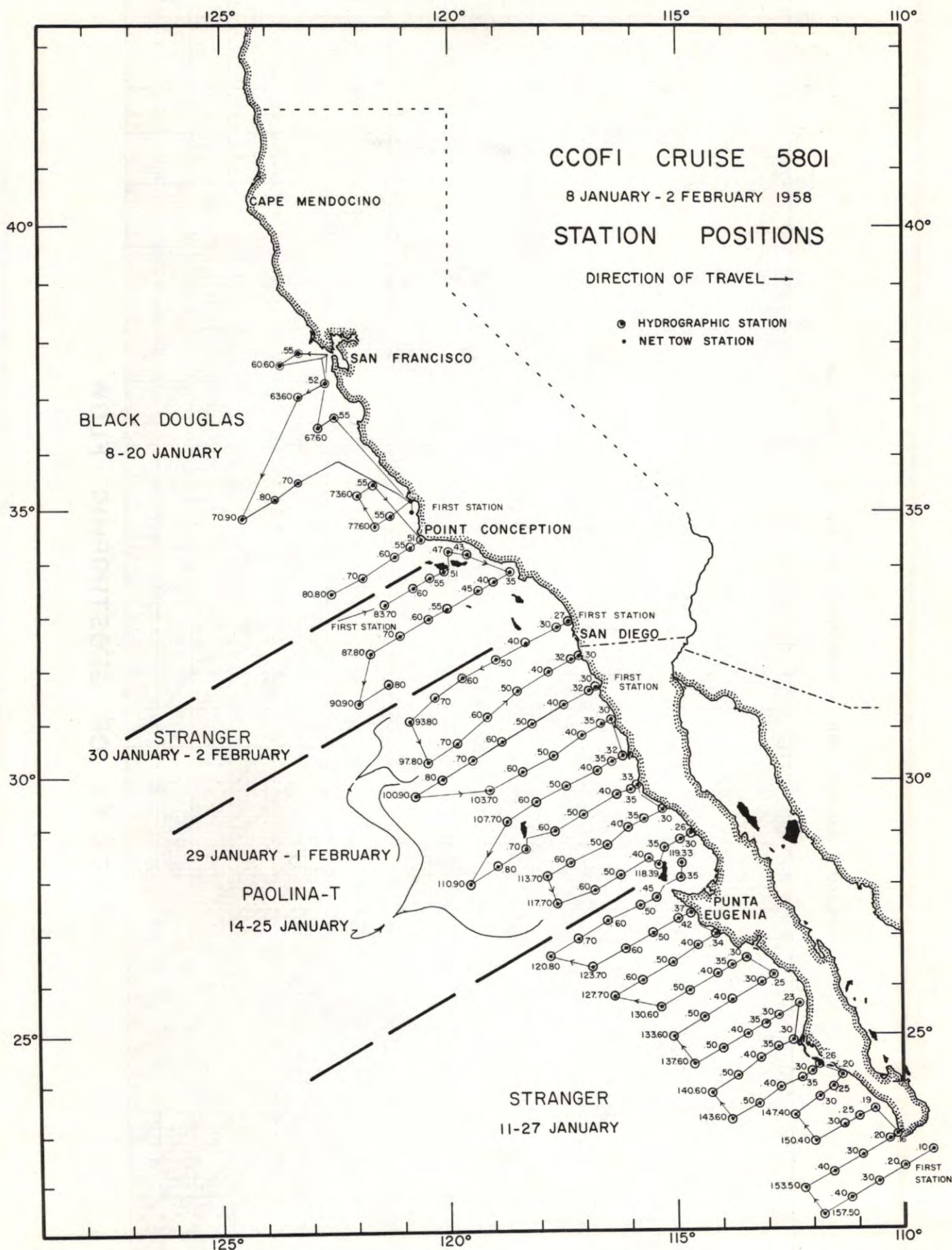


FIGURE 1

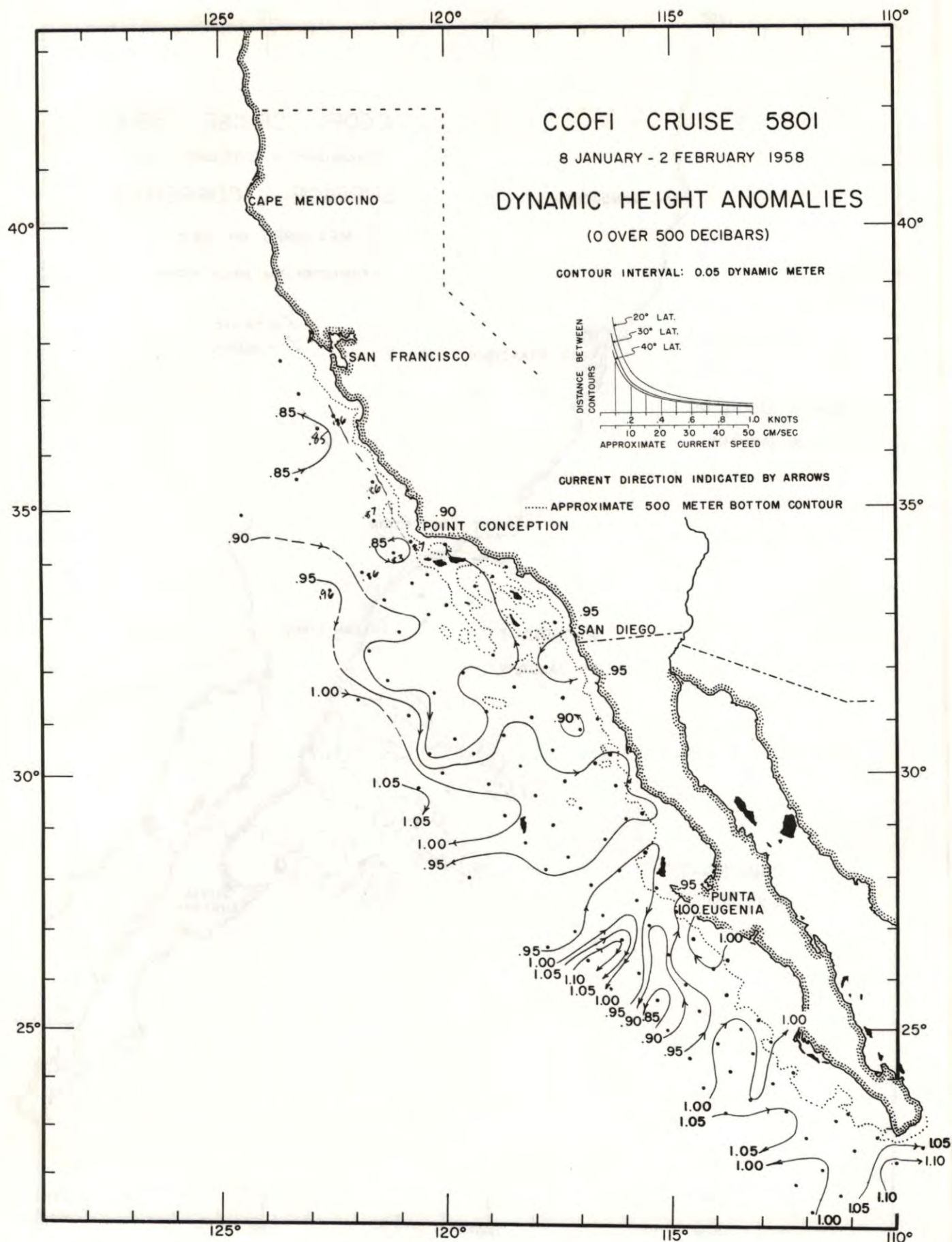


FIGURE 2

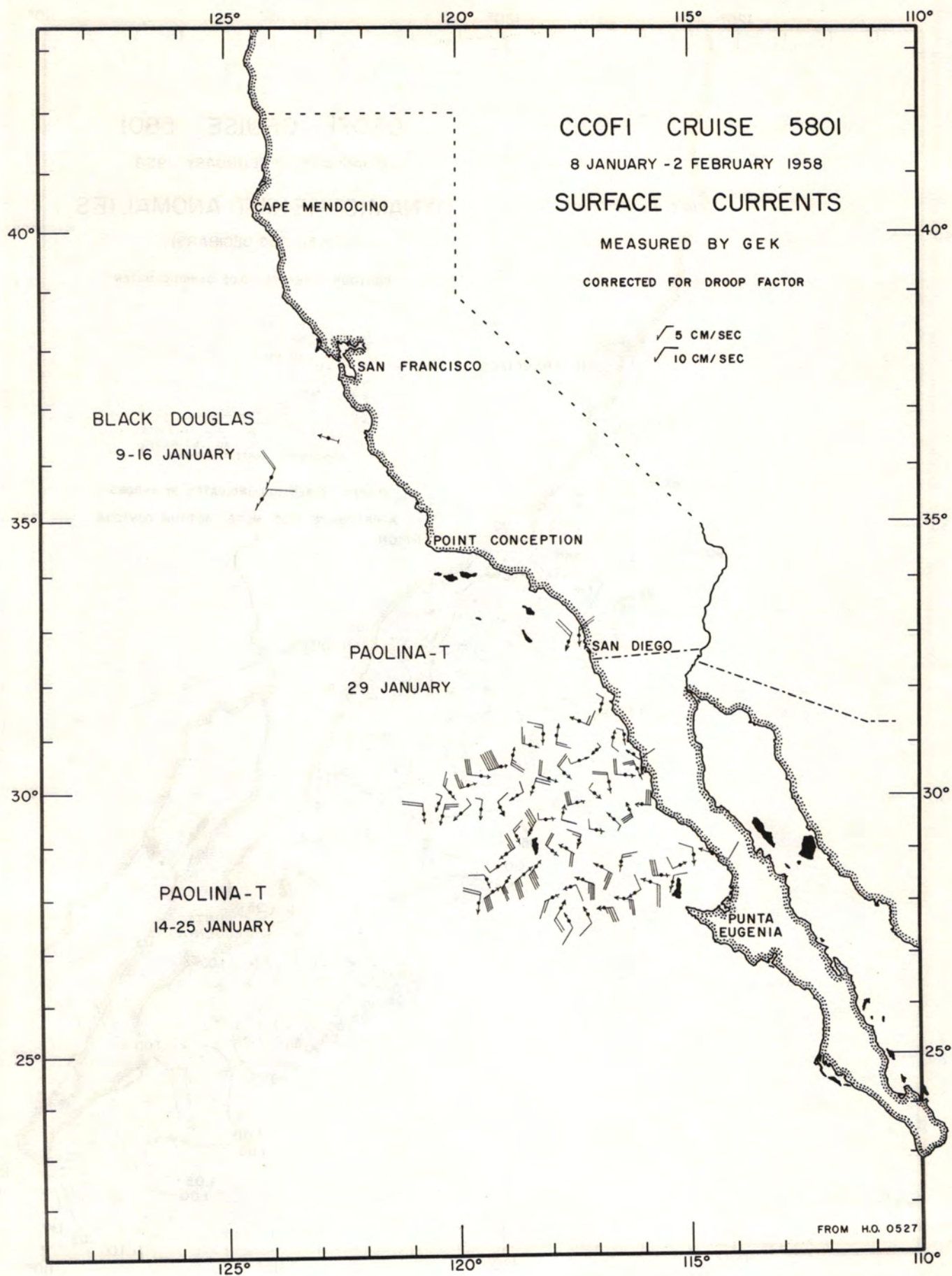


FIGURE 3

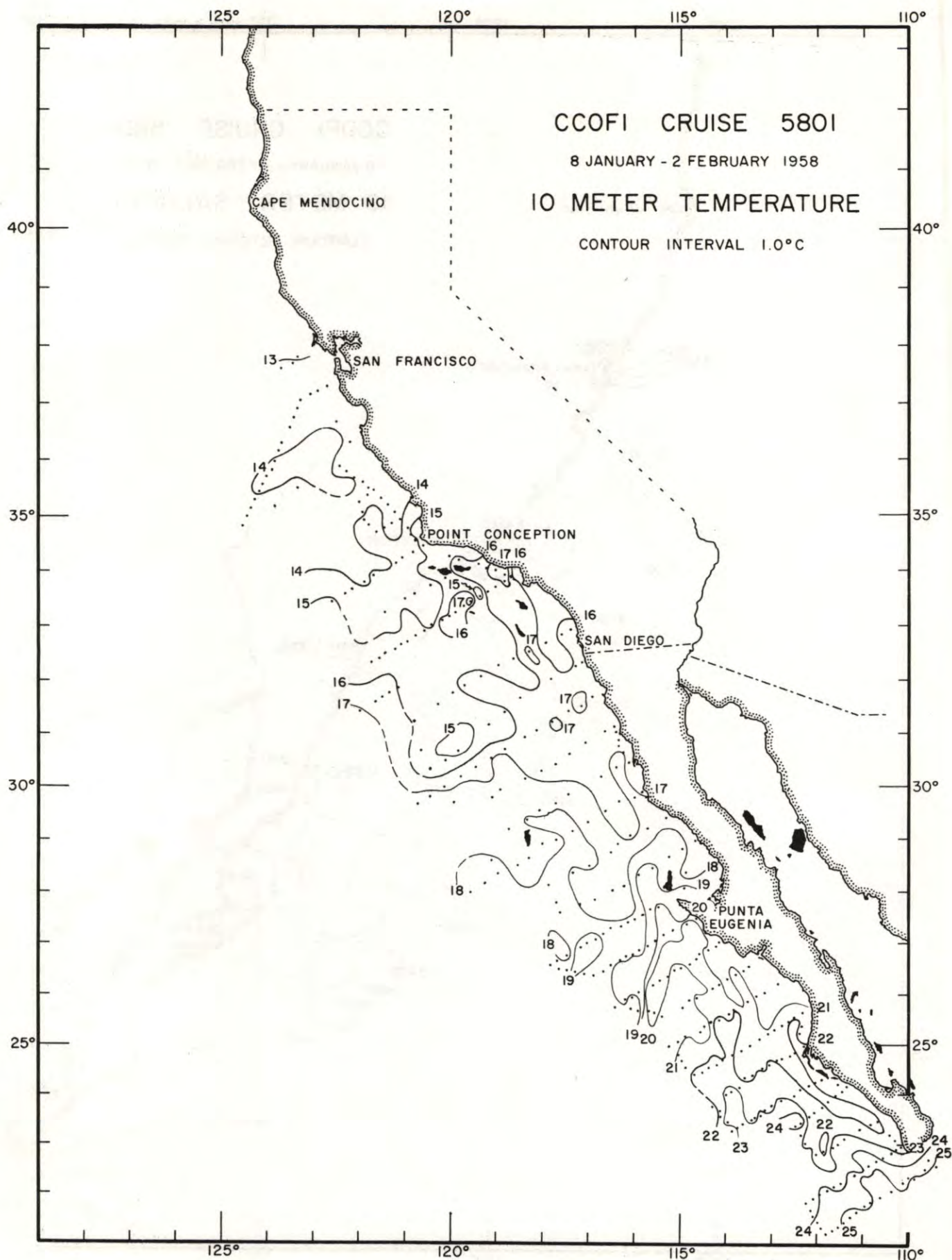


FIGURE 4

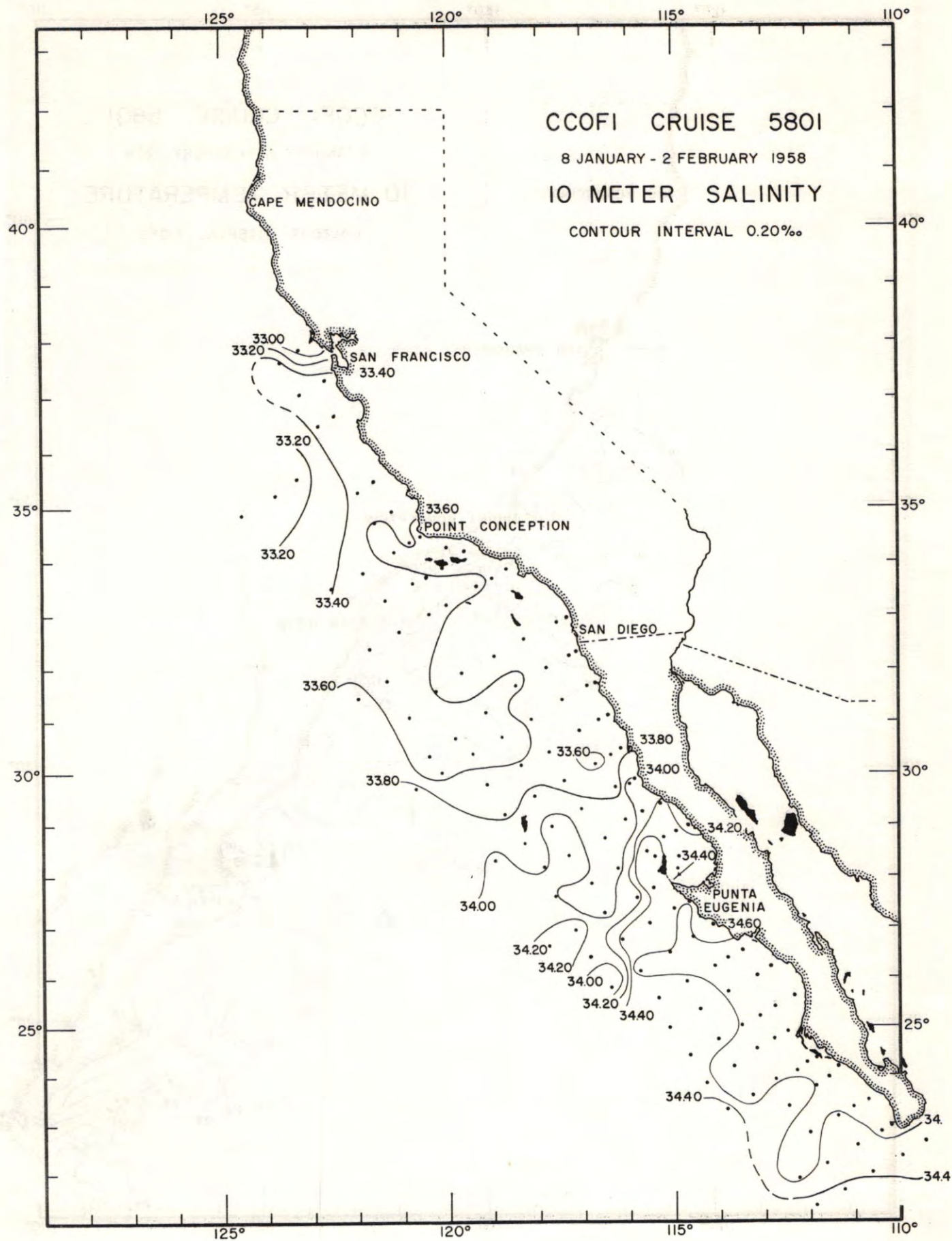


FIGURE 5

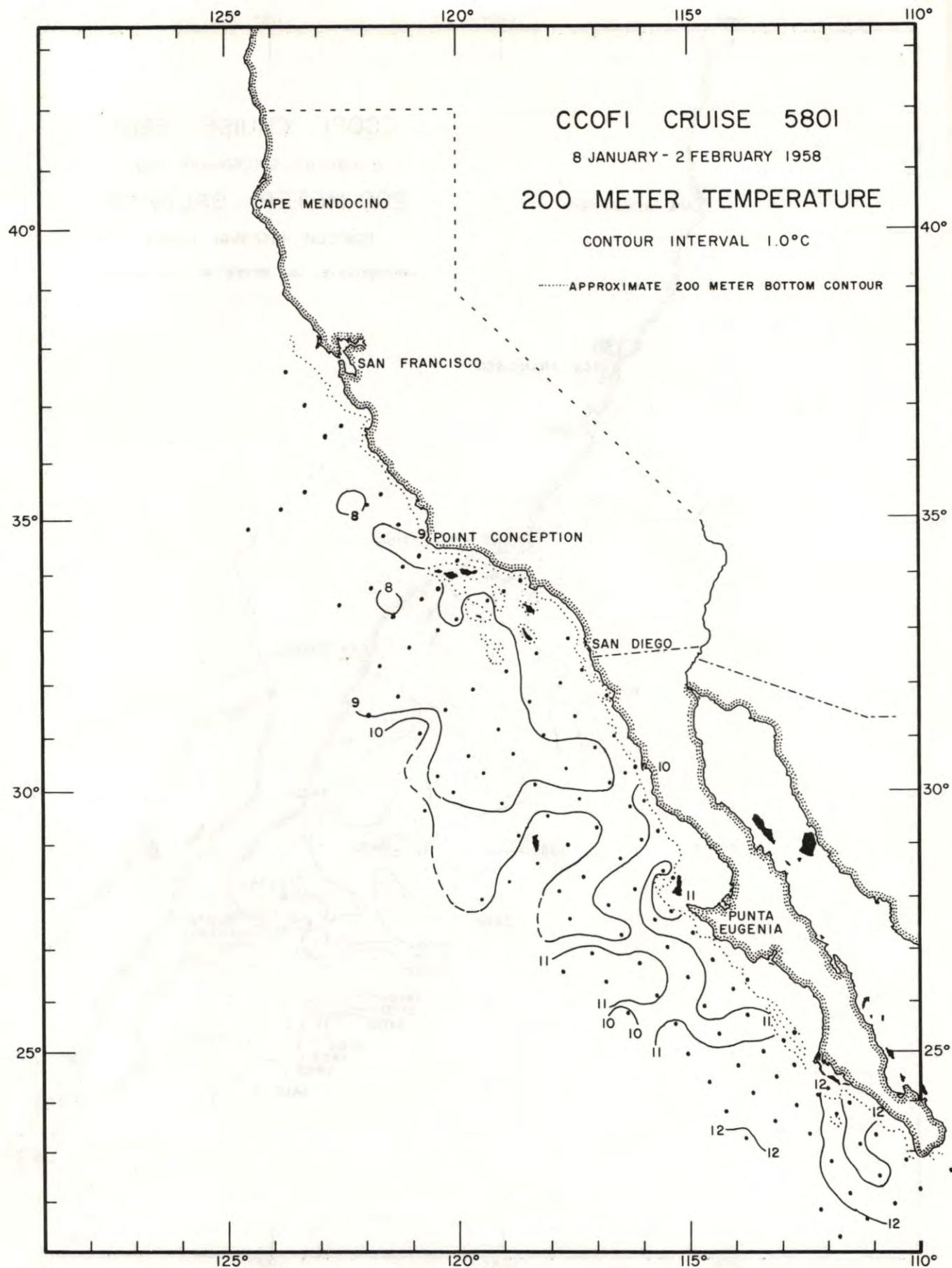


FIGURE 6

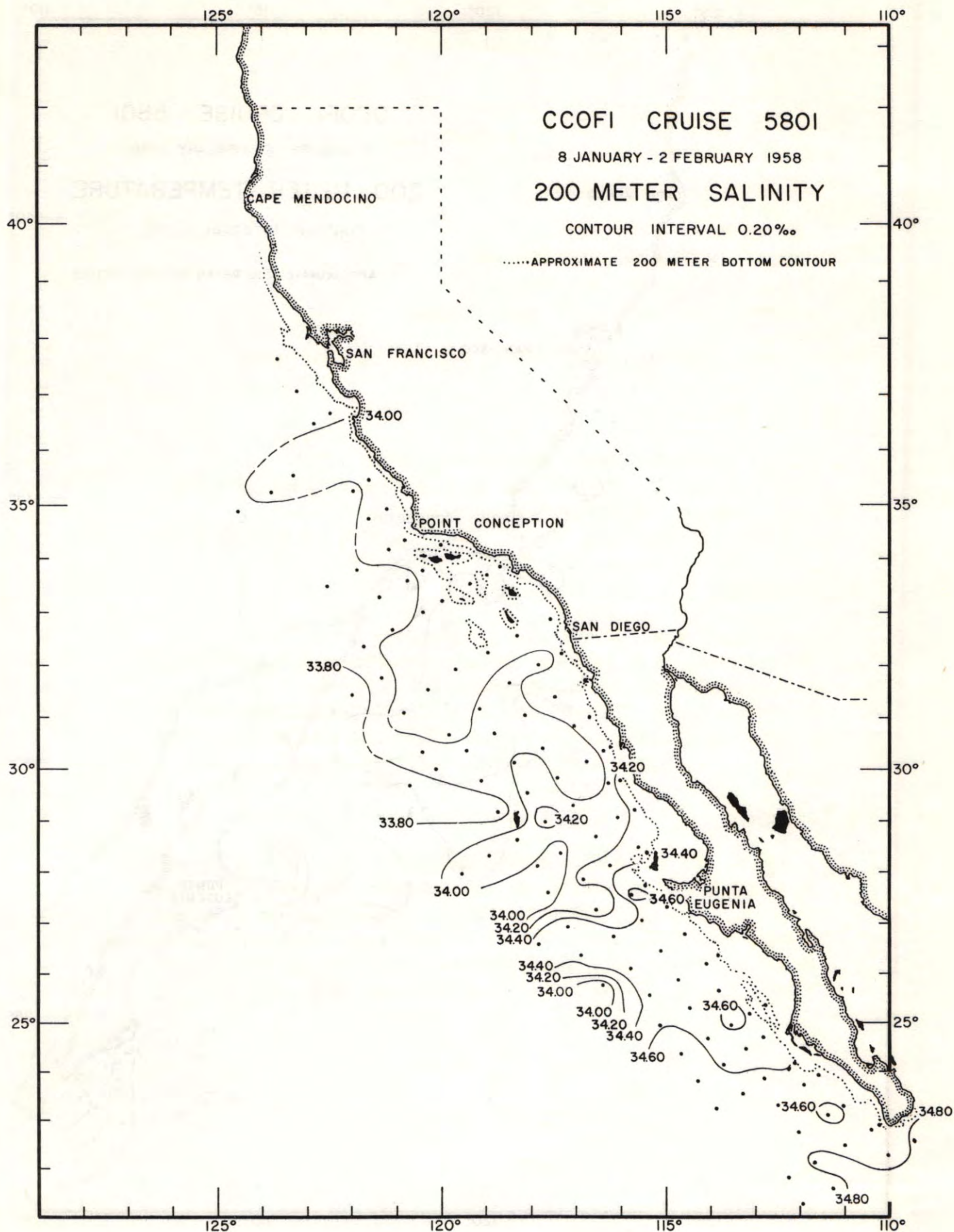


FIGURE 7

PERSONNEL

SHIPS' CAPTAINS

Colbeth, Clifford W., R/V Stranger
Davis, Laurence E., R/V Paolina-T
Forster, Charles W., R/V Black Douglas

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Black Douglas

Gilkey, Robert W., Senior Marine Technician
Bower, Donald R., Fishery Aid, U. S. Fish and Wildlife Service
Lucas, Jack C., Electronics Technician
Vorobiov, Alexander V., Fishery Aid, U. S. Fish and Wildlife Service

R/V Paolina-T

Brown, Daniel M., Senior Marine Technician
Brennan, Robert E., Marine Technician (northern portion of cruise)
Kiwala, Robert S., Marine Technician
Reid, Charles F., Fishery Aid, U. S. Fish and Wildlife Service
Smith, Alan C., Marine Technician, Inter-American Tropical Tuna
Commission (southern portion of cruise)

R/V Stranger

Reith, A. Dougall, Senior Marine Technician
Brennan, Robert E., Marine Technician (southern portion of cruise)
Froerer, Arthur I., Marine Technician (southern portion of cruise)
Gilkey, Robert W., Senior Marine Technician (northern portion of cruise)
McMillan, Wesley W., Marine Technician (northern portion of cruise)
Tubbs, Paul E., Fishery Aid, U. S. Fish and Wildlife Service

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

SIO
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BLACK DOUGLAS; January 14, 1958; 0155 GCT; 37°47.5'N, 123°15'W; sounding, 60 fm; wind, 290°, force 4; weather, partly cloudy; sea, very rough; wire angle, 06°.

60.55

0	12.69	32.95	6.00	307	0	12.69	32.95	6.00	24.89	307	0.00
10	12.68	32.98	5.86	305	10	12.68	32.98	5.86	24.91	305	0.03
29	12.96	33.26	5.79	289	20	12.78	33.12	5.83	25.02	294	0.06
48	13.12	33.36	5.89	285	30	13.00	33.28	5.81	25.08	289	0.09
72	11.82	33.44	4.88	255	50	13.14	33.37	5.80	25.14	284	0.15
95	11.16	33.46	4.60	242	75	11.73	33.44	4.83	25.45	254	0.21
					100	(11.00)	(33.46)	(4.51)	(25.60)	(239)	(0.28)

BLACK DOUGLAS; January 14, 1958; 0520 GCT; 37°37'N, 123°37'W; sounding, 1600 fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 04°.

60.60

0	13.50	33.40	6.03	290	0	13.50	33.40	6.03	25.07	290	0.00
10	13.50	33.40	6.08	290	10	13.50	33.40	6.08	25.07	290	0.03
29	13.50	33.40	6.07	290	20	13.50	33.40	6.08	25.07	290	0.06
44	13.50	33.41	5.98	288	30	13.50	33.40	6.07	25.07	290	0.09
53	13.32	33.40	5.94	286	50	13.41	33.40	5.94	25.10	287	0.14
62	11.83	33.39	5.39	259	75	10.90	33.45	4.86	25.61	239	0.21
72	11.18	33.43	5.00	245	100	9.87	33.55	4.31	25.86	215	0.27
92	9.97	33.52	4.44	218	150	9.32	33.74	3.49	26.10	192	0.37
106	9.86	33.68a)	4.29	-	200	8.59	33.92	2.88	26.36	167	0.46
120	9.72	33.64	3.93	206	250	8.10	34.05	2.10	26.54	150	0.54
143	9.41	33.72	3.64	195	300	7.68	34.13	1.56	26.66	139	0.62
169	9.15	33.80	3.07	185	400	6.69	34.18	1.05	26.84	122	0.75
206	8.48	33.93	2.85	166	500	5.79	34.22	0.68	26.99	108	0.87
255	8.04	34.07	2.00	149							
331	7.31	34.16	1.32	132							
427	6.42	34.18	0.96	119							
564	5.28	34.27	0.47	99							

BLACK DOUGLAS; January 16, 1958; 0527 GCT; 37°19'N, 122°36'W; sounding, 48 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 03°.

63.52

0	13.24	33.43	5.99	282	0	13.24	33.43	5.99	25.16	282	0.00
10	13.24	33.42	6.01	283	10	13.24	33.42	6.01	25.15	283	0.03
30	13.24	33.42	6.12	283	20	13.24	33.42	6.06	25.15	283	0.06
49	12.65	33.46b)	5.19	269	30	13.24	33.42	6.12	25.15	283	0.08
72	11.21	33.49	5.54	241	50	12.60	33.46	5.14	25.30	268	0.14
					71	(11.00)	(33.49)	(4.47)	(25.63)	(237)	(0.20)

BLACK DOUGLAS; January 16, 1958; 0953 GCT; 37°02.5'N, 123°11.5'W; sounding, 1700 fm; wind, 300°, force 4; weather, missing; sea, moderate; wire angle, 03°.

63.60

0	13.68	33.51	5.73	286	0	13.68	33.51	5.73	25.12	286	0.00
10	13.66	33.99	5.85	286	10	13.66	33.49	5.85	25.11	286	0.03
29	13.67	33.52	5.85	284	20	13.66	33.51	5.85	25.12	285	0.06
44	13.64	33.51	5.84	284	30	13.67	33.52	5.84	25.13	284	0.08
54	13.68	33.50	5.80	286	50	13.68	33.50	5.82	25.12	286	0.14
64	13.65	33.52b)	5.71	283	75	12.70	33.48	5.46	25.30	269	0.21
73	12.90	33.48	5.53	272	100	10.75	33.59	4.04	25.74	226	0.28
91	11.06	33.57	4.20	233	150	9.36	33.79	3.08	26.13	189	0.38
105	10.62	33.59	4.04	224	200	8.39	33.96	2.59	26.43	161	0.47
119	9.96	33.62	3.94	210	250	7.78	34.04	2.35	26.58	147	0.55
141	9.29	33.69	3.42	195	300	7.18	34.08	1.92	26.70	136	0.62
168	8.76	33.85	2.89	176	400	6.41	34.20	0.89	26.89	117	0.75
203	8.35	33.97	2.55	160	500	5.95	34.27	0.66	27.00	106	0.87
252	7.72	34.04	2.33	146							
330	6.88	34.11	1.53	130							
427	6.32	34.22	0.81	114							
564	5.58	34.30	0.55	100							

- a) Loose bottle cap; value does not fall on property curve.
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	$\frac{10^{-5}}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{cm/g}$	dyn. m

67.55 BLACK DOUGLAS; January 9, 1958; 1740 GCT; 36°39'N, 122°26'W; sounding, 1100 fm; wind, 140°, force 3; weather, cloudy; sea, very rough; wire angle, 02°.

0	13.69	33.51	5.78	285	0	13.69	33.51	5.78	25.12	285	0.00
10	13.67	33.48	5.97	287	10	13.67	33.48	5.97	25.10	287	0.03
29	13.54	33.47	5.72	285	20	13.62	33.48	5.77	25.11	286	0.06
39	13.44	33.46	3.75r	284	30	13.53	33.47	5.72	25.12	285	0.08
59	13.05	33.45	5.32	278	50	13.30	33.46	5.59	25.17	281	0.14
69	11.68	33.42	4.84	255	75	11.31	33.45	4.64	25.53	246	0.21
82	10.98	33.49	4.30	237	100	10.10	33.50	4.32	25.78	222	0.27
96	10.28	33.48	4.42	227	150	9.00	33.80		26.20	183	0.37
108	9.86	33.55	4.12	215	200	8.30	33.96	2.30	26.43	161	0.46
131	9.14	33.61	3.00r	199	250	8.23	34.14	1.58	26.58	146	0.54
157	8.99	33.86	4.06r	178	300	7.53	34.20	1.40	26.74	132	0.61
187	8.48	33.93	2.59	165	400	6.70	34.18	0.89	26.84	122	0.74
231	8.16	34.07	1.92	150	500	6.02	34.23	0.68	26.96	110	0.86
304	7.45	34.20	1.37	131							
395	6.73	34.18a)	0.90	122							
518	5.85	34.24	0.65	108							

67.60 BLACK DOUGLAS; January 9, 1958; 2115 GCT; 36°29'N, 122°47.5'W; sounding, 1600 fm; wind, 120°, force 5; weather, cloudy; sea, very rough; wire angle, 14°.

0	13.99	33.48	6.14	293	0	13.99	33.48	6.14	25.04	293	0.00
10	13.99	33.48	6.24	293	10	13.99	33.48	6.24	25.04	293	0.03
28	13.94	33.49	5.84	291	20	13.97	33.48	5.85	25.04	292	0.06
38	13.95	33.49	5.87	292	30	13.95	33.49	5.85	25.06	291	0.09
47	13.96	33.53	5.84	290	50	13.85	33.52	5.71	25.10	287	0.14
56	12.88	33.47	5.00	273	75	11.62	33.59	3.98	25.59	241	0.21
65	12.23	33.58	4.23	253	100	10.42	33.56	4.33	25.78	223	0.27
78	11.36	33.59	3.96	236	150	8.74	33.83	3.33	26.26	176	0.37
91	10.64	33.50	4.44	231	200	8.14	33.99	2.43	26.48	156	0.46
104	10.30	33.60	4.03	218	250	7.49	34.06	2.00	26.64	142	0.53
124	9.22	33.65	3.87	197	300	7.01	34.11	1.51	26.74	132	0.60
148	8.76	33.81	3.37	178	400	6.45	34.18	0.93	26.87	119	0.73
178	8.40	33.96	2.57	162	500	(5.95)	(34.28)	(0.53)	(27.01)	(106)	(0.85)
220	7.84	34.02	2.28	150							
288	7.11	34.09	1.58	134							
376	6.60	34.16	1.04	122							
494	5.98	34.27	0.58	107							

70.70 BLACK DOUGLAS; January 17, 1958; 1555 GCT; 35°32'N, 123°17'W; sounding, 2000 fm; wind, 390°, force 6; weather, fog; sea, very rough; wire angle, 08°.

0	13.33	33.13		306	0	13.33	33.13		24.91	306	0.00
10	13.32	33.12		307	10	13.32	33.12		24.90	307	0.03
29	13.28	33.15		304	20	13.30	33.14		24.92	305	0.06
44	13.10	33.18		298	30	13.27	33.15		24.94	303	0.09
53	13.08	33.22		295	50	13.10	33.22		25.01	296	0.15
62	12.20	33.23		278	75	10.65	33.16		25.42	256	0.22
72	10.92	33.15		261	100	9.43	33.41		25.82	218	0.28
90	9.64	33.28		231	150	8.87	33.84		26.25	178	0.38
104	9.08	33.44		211	200	8.30	34.05		26.51	153	0.46
117	9.00	33.58		199	250	7.69	34.07		26.61	143	0.54
139	8.94	33.78		183	300	7.29	34.12		26.70	135	0.61
163	8.78	33.94		169	400	6.60	34.21		26.88	118	0.74
197	8.38	34.04		155	500	5.93	34.25		26.98	108	0.86
245	7.79	34.07		145							
323	7.09	34.15		130							
421	6.50	34.22		117							
561	5.48	34.26		102							

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

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

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BLACK DOUGLAS; January 17, 1958; 0940 GCT; 35°13'N, 123°48'W; sounding, 2000 fm; wind, 320°, force 5; weather, fog; sea, very rough; wire angle, 20°.

70.80

0	13.66	33.12		313	0	13.66	33.12		24.82	313	0.00
9	13.68	33.13		313	10	13.68	33.13		24.83	313	0.03
27	13.65	33.14		312	20	13.66	33.14		24.84	312	0.06
41	13.64	33.21		306	30	13.64	33.16		24.86	310	0.09
50	13.72	33.27		304	50	13.72	33.27		24.93	304	0.16
59	13.14	33.30		290	75	10.69	33.46		25.66	234	0.22
67	11.08	33.33		251	100	10.15	33.69		25.92	209	0.28
83	10.44	33.62		219	150	9.46	33.87		26.18	185	0.38
95	-	33.68		-	200	8.93	34.02		26.39	165	0.47
108	10.02	33.71		205	250	8.40	34.11		26.54	150	0.55
127	9.72	33.78		195	300	8.03	34.19		26.65	140	0.62
151	9.44	33.87		184							
183	9.12	33.98		171							
228	8.60	34.08		156							
300	8.03	34.19		140							

BLACK DOUGLAS; January 17, 1958; 0305 GCT; 34°53'N, 124°30'W; sounding, 2000 fm; wind, 300°, force 4; weather, fog; sea, high; wire angle, 15°.

70.90

0	13.61	33.13		311	0	13.61	33.13		24.85	311	0.00
10	13.62	33.15		310	10	13.62	33.15		24.86	310	0.03
29	13.64	33.20		307	20	13.63	33.18		24.88	308	0.06
43	13.62	33.22		305	30	13.63	33.20		24.89	307	0.09
52	13.22	33.23		297	50	13.37	33.23		24.97	299	0.15
62	12.42	33.24		282	75	11.09	33.22		25.39	260	0.22
71	11.39	33.21		265	100	9.28	33.38		25.82	218	0.28
91	10.06	33.28		238	150	8.85	33.78		26.20	182	0.39
105	9.08	33.41		213	200	8.01	33.92		26.45	159	0.47
119	9.14	33.54		204	250	7.39	33.96		26.56	148	0.55
141	8.92	33.72		187	300	6.85	34.00		26.67	138	0.62
168	8.72	33.84		176	400	6.57	34.12		26.82	124	0.76
203	7.96	33.92		158	500	6.10	34.22		26.95	112	0.88
250	7.39	33.96		148							
326	6.61	34.02		133							
435	6.51	34.20		118							
570	5.64	34.22		106							

BLACK DOUGLAS; January 19, 1958; 2113 GCT; 35°27.5'N, 121°37.5'W; sounding, 550 fm; wind, calm; weather, cloudy; sea, rough; wire angle, 00°.

73.55

0	14.12	33.57	6.17	289	0	14.12	33.57	6.17	25.08	289	0.00
10	13.88	33.53	6.19	287	10	13.88	33.53	6.19	25.10	287	0.03
29	13.87	33.55	6.03	285	20	13.88	33.54	6.10	25.11	286	0.06
39	13.81	33.56	6.05	284	30	13.87	33.55	6.05	25.12	285	0.09
49	13.82	33.60	5.96	281	50	13.82	33.60	5.96	25.17	281	0.14
59	13.80	33.60	5.95	281	75	12.46	33.55	4.85	25.39	259	0.21
68	13.14	33.55	5.35	271	100	10.50	33.62	3.83	25.81	219	0.27
82	11.62	33.57	4.28	243	150	9.01	33.94	2.79	26.30	173	0.37
96	10.66	33.60	3.89	224	200	8.50	34.05	2.24	26.48	156	0.45
110	10.12	33.67	3.68	210	250	7.74	34.08	2.02	26.62	143	0.53
133	9.59	33.85	2.95	188	300	7.35	34.11	1.75	26.69	136	0.60
159	8.74	33.96	2.74	167	400	6.72	34.16	0.97	26.82	124	0.74
191	8.64	34.03	2.34	160	500	6.17	34.26	0.72	26.97	110	0.86
233	7.96	34.07	2.14	147							
306	7.33	34.11	1.74	136							
397	6.74	34.15	0.99	125							
517	6.05	34.27	0.67	108							

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5801

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

73.60

BLACK DOUGLAS; January 19, 1958; 1815 GCT; 35°17'N, 121°57'W; sounding, 500 fm; wind, 140°, force 2; weather, clear; sea, moderate; wire angle, 05°.

0	13.59	33.48	5.94	286	0	13.59	33.48	5.94	25.11	286	0.00
10	13.60	33.46	6.12	287	10	13.60	33.46	6.12	25.10	287	0.03
29	13.60	33.49	6.08	284	20	13.60	33.47	6.11	25.11	286	0.06
39	12.88	33.42	5.64	276	30	13.59	33.49	6.07	25.13	284	0.08
48	11.60	33.37	5.16	257	50	11.43	33.38	5.12	25.46	253	0.14
58	11.14	33.40	4.97	247	75	10.43	33.48	4.64	25.71	229	0.20
67	10.78	33.45	4.79	237	100	9.17	33.68	3.92	26.08	194	0.25
81	10.06	33.50	4.61	222	150	8.84	33.90	3.06	26.30	173	0.35
94p	9.29	33.66	4.04	197	200	8.00	33.98	2.65	26.50	154	0.43
123p	8.96	33.76	3.57	185	250	7.44	34.08	2.07	26.66	140	0.50
165p	8.51	33.91	3.05	167	300	7.00	34.15	1.62	26.77	128	0.57
233p	7.60	34.05	2.21	144	400	6.28	34.16	1.08	26.88	118	0.70
321p	6.84	34.16	1.45	125							
434p	6.00	34.16	0.95	115							

77.55

BLACK DOUGLAS; January 19, 1958; 0835 GCT; 34°54.5'N, 121°13'W; sounding, 290 fm; wind, 030°, force 4; weather, clear; sea, moderate; wire angle, 15°.

0	13.86	33.55	5.87	286	0	13.86	33.55	5.87	25.11	286	0.00
9	13.85	33.55	6.15	286	10	13.85	33.55	6.15	25.11	286	0.03
28	13.85	33.53	6.12	286	20	13.85	33.54	6.14	25.11	286	0.06
46	13.22	33.49	5.95	278	30	13.84	33.53	6.11	25.11	286	0.08
69	10.88	33.51	4.74	234	50	12.82	33.49	5.82	25.27	271	0.14
91	10.40	33.50	4.75	227	75	10.70	33.50	4.74	25.69	231	0.20
113	10.10	33.64	3.83	212	100	10.28	33.52	4.60	25.77	223	0.26
148	9.46	33.84a)	3.49	187	150	9.41	33.87	3.46	26.19	184	0.36
184	8.48	34.09	2.98	154	200	8.28	34.08	2.77	26.54	151	0.45
228	8.06	34.07	2.54	149	250	7.93	34.08	2.44	26.58	146	0.53
273	7.78	34.11	2.26	142	300	7.51	34.16	1.95	26.71	134	0.60
368	7.12	34.23	1.07	124							

77.60

BLACK DOUGLAS; January 19, 1958; 1237 GCT; 34°44'N, 121°34'W; sounding, 500 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 10°.

0	14.37	33.60	5.88	292	0	14.37	33.60	5.88	25.05	292	0.00
10	14.36	33.60	5.92	292	10	14.36	33.60	5.92	25.05	292	0.03
29	19.38	33.62	5.89	291	20	14.37	33.61	5.90	25.06	291	0.06
38	14.32	33.63	5.94	289	30	14.38	33.62	5.90	25.06	291	0.09
48	13.92	33.60	5.77	283	50	13.75	33.60	5.66	25.18	280	0.14
57	12.55	33.64	4.20	254	75	10.91	33.72	3.45	25.82	219	0.21
67	11.52	33.67	3.73	234	100	10.20	33.83	2.90	26.03	199	0.26
81	10.58	33.76	3.24	210	150	9.72	33.97	2.46	26.22	181	0.36
108	10.08	33.86	2.81	195	200	9.40	34.06	2.40	26.34	169	0.44
130	9.88	33.91	2.64	188	250	8.90	34.15	1.98	26.49	155	0.53
157	9.66	33.99	2.44	179	300	8.52	34.22	1.61	26.60	144	0.60
186	9.54	34.04	2.46	173	400	7.39	34.22	1.32	26.78	128	0.75
229	9.08	34.11	2.14	101	500	6.70	34.24	0.48	26.89	117	0.87
300	8.52	34.22	1.61	144							
389	7.46	34.22	1.36	130							
508	6.62	34.25	0.36	116							

80.51

BLACK DOUGLAS; January 20, 1958; 0650 GCT; 34°26.5'N, 120°32.5'W; sounding, 59 fm; wind, 040°, force 3; weather, clear; sea, rough; wire angle, 04°.

0	15.41	33.64	6.00	311	0	15.41	33.64	6.00	24.85	311	0.00
9	15.40	33.64	6.07	310	10	15.40	33.64	6.05	24.86	310	0.03
29	13.83	33.54	5.34	286	20	15.00	33.60	5.92	24.91	305	0.06
48	13.47	33.53a)	5.14	280	30	13.81	33.54	5.33	25.12	285	0.09
72	12.08	33.58	4.32	250	50	13.44	33.53	5.06	25.19	279	0.15
					75	(11.86)	(33.60)		(25.54)	(245)	(0.21)

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

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5801

BLACK DOUGLAS; January 20, 1958; 0920 GCT; 34°19'N, 120°48'W; sounding, 420 fm; wind, 320°, force 3; weather, clear; sea, slight; wire angle, 07°.

80.55

0	14.18	33.58	6.07	289	0	14.18	33.58	6.07	25.08	289	0.00
10	14.16	33.58	6.17	289	10	14.16	33.58	6.17	25.08	289	0.03
29	14.01	33.66u	5.97	-	20	14.10	33.58	6.08	25.10	288	0.06
38	13.83	33.58	5.81	283	30	14.00	33.58	5.94	25.11	286	0.09
47	12.41	33.53	4.90	260	50	12.21	33.52	4.86	25.42	256	0.14
57	11.85	33.51	4.83	251	75	11.13	33.57	4.39	25.66	234	0.20
66	11.41	33.54	4.58	241	100	10.50	33.61	3.95	25.81	220	0.26
80	11.00	33.58	4.33	231	150	9.57	33.99	2.54	26.26	177	0.36
94	10.69	33.59	4.10	225	200	9.13	34.07	2.08	26.39	164	0.45
107	10.28	33.64	3.81	215	250	8.77	34.13	1.68	26.49	154	0.53
130	9.78	33.83	2.97	192	300	8.14	34.16	1.46	26.61	144	0.60
156	9.54	34.00	2.50	176	400	7.00	34.18	1.15	26.80	126	0.74
187	9.23	34.04	2.23	168	500	6.23	34.21	0.75	26.92	114	0.87
231	8.95	34.11	1.81	159							
302	8.13	34.16	1.44	143							
393	7.06	34.18	1.18	127							
514	6.16	34.21	0.72	103							

BLACK DOUGLAS; January 20, 1958; 1245 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

80.60

0	14.46	33.66	6.40	289	0	14.46	33.66	6.40	25.08	289	0.00
9	14.45	33.64	5.90	290	10	14.45	33.64	5.90	25.07	290	0.03
28	14.46	33.68	5.94	288	20	14.46	33.66	5.92	25.08	288	0.06
37	14.23	33.64	5.85	286	30	14.42	33.67	5.92	25.10	287	0.09
46	13.83	33.60	5.59	281	50	13.33	33.58	5.27	25.24	274	0.14
55	11.82	33.54	4.61	247	75	10.62	33.67	3.65	25.83	218	0.20
63	10.97	33.60	4.03	228	100	10.06	33.84	2.97	26.06	196	0.26
76	10.60	33.68	3.62	217	150	9.39	34.06	2.29	26.34	169	0.35
88	10.19	33.82	3.31	200	200	8.90	34.12	1.99	26.46	158	0.43
100	10.06	33.84	2.97	196	250	8.33	34.23	1.46	26.64	141	0.51
120	9.99	33.91	2.89	190	300	7.90	34.25	1.25	26.72	133	0.58
145	9.44	34.05	2.36	171	400	7.00	34.25	0.80	26.85	121	0.71
182	9.10	34.08	2.16	164	500	(6.09)	(34.30)	(0.53)	(27.02)	(105)	(0.83)
217	8.69	34.16	1.70	151							
283	8.05	34.25	1.34	135							
368	7.28	34.24	0.93	126							
484	6.22	34.29	0.55	108							

BLACK DOUGLAS; January 20, 1958; 1910, 1940 GCT; 33°47'N, 121°52'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 26°, 15°.

80.70

0	14.05	33.58	287	0	14.05	33.58	25.10	287	0.00
8	14.06	33.55	289	10	14.05	33.55	25.08	289	0.03
26	14.03	33.55	288	20	14.05	33.55	25.08	289	0.06
40	14.02	33.57	287	30	14.03	33.55	25.09	288	0.09
48	13.99	33.56	287	50	13.97	33.55	25.10	287	0.14
57	13.92	33.55	287	75	11.88	33.35	25.36	263	0.21
66	12.59	33.37	274	100	10.10	33.36	25.67	233	0.28
83	11.35	33.34	255	150	8.79	33.73	26.18	185	0.38
				200	8.02	33.95	26.47	157	0.47
98	10.20	33.35	235	250	7.43	34.04	26.62	142	0.54
112	9.66	33.42	221	300	6.92	34.12	26.76	130	0.62
132	9.30	33.60	202	400	6.10	34.18	26.91	115	0.74
158	8.61	33.77	179	500	5.70	34.24	27.01	106	0.86
193	8.10	33.94	159						
240	7.55	34.02	146						
314	6.77	34.14	126						
412	6.04	34.18	114						
541	5.54	34.27	101						

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5801

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	

80.80 BLACK DOUGLAS; January 21, 1958; 0105 GCT; 33°29'N, 122°32'W; sounding, 2000 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°.

0	14.98	33.40		320	0	14.98	33.40		24.76	320	0.00	
10	14.99	33.39		320	10	14.99	33.39		24.76	320	0.03	
34	15.00	33.41		319	20	15.00	33.40		24.76	320	0.06	
43	15.00	33.39		320	30	15.00	33.41		24.77	319	0.10	
57	15.00	33.39		320	50	15.00	33.39		24.76	320	0.16	
66	14.98	33.38		320	75	14.96	33.39		24.77	319	0.24	
75	14.96	33.39		319	100	13.70	33.40		25.02	295	0.32	
93	14.30	33.40		305	150	9.83	33.51		25.84	216	0.44	
110	12.60	33.39		273	200	8.83	33.94		26.34	170	0.54	
124	10.95	33.39		244	250	8.10	34.02		26.51	153	0.63	
146	9.92	33.49		219	300	7.45	34.08		26.65	140	0.70	
181	9.12	33.80		185	400	6.67	34.18		26.84	122	0.84	
217	8.64	33.99		163	500	5.95	34.25		26.98	108	0.96	
271	7.78	34.04		147	600	(5.44)	(34.29)		(27.08)	(99)	(1.07)	
352	7.02	34.14		129								
458	6.20	34.22		113								
599	5.46	34.29		99								

82.47 STRANGER; January 31, 1958; 1512 GCT; 34°13'N, 119°58'W; sounding, 307 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 05°.

0	15.32	33.67	5.59	306	0	15.32	33.67	5.59	24.90	306	0.00	
10	14.93	33.62	5.76	303	10	14.93	33.62	5.76	24.94	303	0.03	
29	14.52	33.62	5.57	294	20	14.67	33.61	5.57	25.00	297	0.06	
54	14.50	33.63	5.90	293	30	14.52	33.62	5.58	25.03	294	0.09	
64	13.78	33.64	5.25	277	50	14.51	33.63	5.83	25.04	293	0.15	
73	12.22	33.61	4.65	251	75	12.00	33.62	4.50	25.53	246	0.22	
83	11.66	33.63	4.14	239	100	11.09	33.67	3.91	25.74	226	0.28	
96	11.24	33.66	4.01	229	150	10.07	33.88	2.92	26.04	194	0.38	
110	10.74	33.74	3.52	215	200	9.48	34.07	2.30	26.34	170	0.47	
128	10.47	33.81	3.22	205	250	8.98	34.15	1.64	26.48	156	0.56	
146	10.17	33.87	3.01	196	300	8.33	34.21	1.30	26.62	143	0.64	
169	9.83	33.96	2.64	184	400	7.20	34.25	0.91	26.82	124	0.77	
191	9.58	34.05	2.40	173	500	6.63	34.29	0.35	26.93	113	0.90	
236	9.14	34.13	1.77	160								
309	8.20	34.22	1.24	140								
400	7.20	34.25	0.91	124								
524	6.53	34.31	0.23	111								

83.43 STRANGER; January 31, 1958; 1815 GCT; 34°08'N, 119°34'W; sounding, 115 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°.

0	15.81	33.69	5.67	316	0	15.81	33.69	5.67	24.80	316	0.00	
10	15.84	33.68	5.73	317	10	15.84	33.68	5.73	24.79	317	0.03	
29	15.82	33.69	5.65	316	20	15.83	33.68	5.70	24.80	316	0.06	
49	14.62	33.58	5.28	299	30	15.81	33.69	5.64	24.80	316	0.09	
73	11.88	33.60	4.29	244	50	14.49	33.58	5.23	25.00	296	0.16	
97	10.90	33.78	3.29	214	75	11.81	33.60	4.22	25.56	244	0.22	
120	10.11	33.88	2.69	194	100	10.76	33.81	3.15	25.91	210	0.28	
148	9.78	33.94a	2.44	184	150	(9.77)	(33.94)	(2.43)	(26.19)	(184)	(0.38)	

83.51 STRANGER; January 31, 1958; 1117 GCT; 33°52'N, 120°08.5'W; sounding, 75 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 05°.

0	15.55	33.64	5.86	313	0	15.55	33.64	5.86	24.83	313	0.00	
10	15.59	33.66	5.78	313	10	15.59	33.66	5.78	24.83	313	0.03	
29	14.72	33.60	5.55	299	20	15.53	33.66	5.73	24.85	311	0.06	
49	13.59	33.52	5.21	282	30	14.68	33.60	5.54	24.98	298	0.09	
73	11.96	33.53	4.59	251	50	13.52	33.52	5.19	25.16	281	0.15	
98	11.16	33.58	4.22	233	75	11.89	33.53	4.56	25.49	250	0.22	
					100	(11.10)	(33.58)	(4.20)	(25.69)	(231)	(0.29)	

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	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

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5801

STRANGER; January 31, 1958; 0805 GCT; 33°44'N, 120°24.5'W; sounding, 650 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 20°.

8355

0	14.52	33.60	5.78	295	0	14.52	33.60	5.78	25.02	295	0.00
8	14.52	33.60	5.83	295	10	14.52	33.60	5.83	25.02	295	0.03
32	14.52	33.61	5.82	295	20	14.52	33.60	5.83	25.02	295	0.06
41	14.48	33.59	5.80	295	30	14.52	33.60	5.82	25.02	295	0.09
55	13.21	33.54	5.16	274	50	14.01	33.57	5.52	25.10	287	0.15
64	11.93	33.54	4.74	250	75	11.30	33.56	4.33	25.63	237	0.21
73	11.36	33.56	4.37	239	100	10.23	33.65	3.81	25.88	213	0.27
90	10.77	33.61	4.05	224	150	9.48	33.95	2.69	26.24	179	0.37
107	10.00	33.68	3.71	207	200	8.93	34.13	2.00	26.47	157	0.45
120	9.84	33.75	3.39	199	250	8.41	34.19	1.74	26.60	145	0.53
142	9.60	33.91	2.88	184	300	7.89	34.23	1.43	26.71	134	0.60
175	9.13	34.07	2.24	164	400	7.04	34.25	0.95	26.84	122	0.74
211	8.85	34.15	1.93	154	500	6.31	34.27	0.69	26.96	110	0.86
262	8.28	34.20	1.71	142	600	(5.80)	(34.38)		(27.11)	(96)	(0.97)
340	7.54	34.25	1.20	128							
445	6.64	34.25	0.84	116							
588	5.82	34.36	0.47	98							

STRANGER; January 31, 1958; 0420 GCT; 33°34'N, 120°45'W; sounding, 2300 fm; wind, 340°, force 6; weather, partly cloudy; sea, high; wire angle, 06°.

8360

0	14.38	33.44	6.02	304	0	14.38	33.44	6.02	24.92	304	0.00
10	14.42	33.45	5.97	304	10	14.42	33.45	5.97	24.92	304	0.03
29	14.41	33.46	6.06	303	20	14.41	33.46	6.01	24.93	303	0.06
58	13.88	33.45	5.84	294	30	14.40	33.46	6.05	24.94	302	0.09
67	12.12	33.36	5.34	267	50	14.10	33.46	5.92	25.00	297	0.15
76	11.02	33.33	5.22	250	75	11.10	33.33	5.24	25.48	251	0.22
91	10.02	33.46	4.60	224	100	9.70	33.53	4.30	25.88	213	0.28
105	9.59	33.55	4.22	210	150	9.04	33.80	3.21	26.19	183	0.38
119	9.39	33.69	3.72	196	200	8.44	33.98	2.66	26.43	161	0.46
138	9.20	33.76	3.30	189	250	7.79	34.06	2.29	26.59	146	0.54
156	8.98	33.82	3.18	181	300	7.26	34.13	1.72	26.72	133	0.62
183	8.67	33.94	2.72	167	400	6.48	34.24	0.94	26.92	115	0.74
206	8.38	-	2.66	-	500	5.98	34.31	0.65	27.04	103	0.86
256	7.68	34.07	2.22	144							
333	6.91	34.17	1.34	126							
436	6.32	34.26	0.78	111							
570	5.62	34.37	0.57	95							

STRANGER; January 30, 1958; 2345 GCT; 33°17'N, 121°21'W; sounding, 2100 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 09°.

8370

0	14.07	33.49	5.97	294	0	14.07	33.49	5.97	25.03	294	0.00
10	14.08	33.49	6.12	294	10	14.08	33.49	6.12	25.03	294	0.04
29	13.96	33.49	5.94	292	20	14.04	33.49	6.00	25.04	293	0.07
58	13.86	33.48	5.89	290	30	13.95	33.49	5.93	25.05	292	0.10
68	13.24	33.49	5.67	278	50	13.93	33.48	5.90	25.06	291	0.16
77	11.16	33.36	5.01	250	75	11.71	33.39	5.19	25.42	257	0.22
92	10.27	33.40	4.64	233	100	10.28	33.54	4.17	25.79	222	0.29
105	9.85	33.55	4.03	214	150	8.65	33.82	3.11	26.27	176	0.39
119	9.30	33.58	3.81	204	200	8.00	33.97	2.37	26.49	155	0.47
137	8.80	33.78	3.28	181	250	7.54	34.05	1.97	26.62	144	0.55
155	8.61	33.84	3.08	174	300	7.03	34.10	1.50	26.72	133	0.62
181	8.22	33.92	2.68	162	400	6.30	34.17	0.81	26.89	118	0.75
204	7.96	33.98	2.28	154	500	5.77	34.24	0.50	27.01	106	0.86
252	7.54	34.05	1.96	143							
327	6.80	34.13	1.23	127							
428	6.14	34.19	0.70	114							
560	5.46	34.28	0.40	100							

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5801

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

87.35 STRANGER; February 1, 1958; 0014 GCT; 33°50'N, 118°37.5'W; sounding, 295 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 02°.

0	15.94	33.64	5.93	322	0	15.94	33.64	5.93	24.74	322	0.00
10	15.85	33.64	5.81	320	10	15.85	33.64	5.81	24.76	320	0.03
30	15.78	33.65	5.66	317	20	15.80	33.64	5.70	24.77	319	0.06
39	15.69	33.68	5.59	313	30	15.78	33.65	5.66	24.79	317	0.10
49	14.50	33.58	5.11	297	50	14.47	33.58	5.10	25.01	296	0.16
58	14.18	33.58	5.02	291	75	13.20	33.55	4.66	25.25	273	0.23
68	13.55	33.55	4.84	279	100	11.50	33.56	4.20	25.59	241	0.29
82	12.84	33.55	4.45	266	150	10.06	33.80	3.01	26.02	200	0.40
96	11.86	33.53	4.36	249	200	9.21	34.06	2.22	26.38	166	0.50
110	10.86	33.68	3.72	221	250	8.98	34.17	1.70	26.50	154	0.58
133	10.52	33.71	3.36	213	300	8.70	34.21	1.59	26.57	148	0.66
160	9.78	33.89	2.81	187	400	7.78	34.25	1.01	26.75	131	0.80
192	9.27	34.04	2.27	169	500	7.04	34.29	0.66	26.88	118	0.93
239	9.01	34.15	1.78	157							
312	8.62	34.22	1.57	146							
405	7.71	34.25	0.99	131							
529	6.89	34.30	0.58	116							

87.40 STRANGER; February 1, 1958; 0406 GCT; 33°40'N, 118°58.5'W; sounding, 485 fm; wind, calm; weather, overcast; sea, rough; wire angle, 00°.

0	15.94	33.66	5.75	321	0	15.94	33.66	5.75	24.75	321	0.00
10	15.84	33.62	5.47	321	10	15.84	33.62	5.47	24.75	321	0.03
30	15.63	33.62	5.50	317	20	15.74	33.62	5.48	24.77	319	0.06
39	15.16	33.59	5.78	309	30	15.63	33.62	5.50	24.79	317	0.10
49	14.50	33.53	5.64	300	50	14.46	33.53	5.62	24.98	299	0.16
58	13.90	33.51	5.41	290	75	13.41	33.53	5.09	25.20	278	0.23
68	13.62	33.53	5.29	282	100	11.21	33.54	4.27	25.63	237	0.30
82	12.72	33.45	5.00	271	150	10.01	33.84	3.03	26.06	196	0.40
97	11.38	33.53	4.36	241	200	9.42	34.08	2.15	26.36	168	0.50
111	10.84	33.60	3.92	227	250	8.98	34.19	1.60	26.50	154	0.58
134	10.22	33.78	3.31	204	300	8.30	34.22	1.27	26.64	140	0.66
162	9.89	33.86	2.81	192	400	7.29	34.30	0.84	26.84	122	0.79
194	9.47	34.06	2.20	170	500	6.73	34.31	0.54	26.94	113	0.91
240	9.08	34.18	1.71	156							
313	8.10	34.23	1.16	137							
406	7.23	34.30	0.81	121							
531	6.60	34.31	0.48	111							

87.45 STRANGER; February 1, 1958; 0700 GCT; 33°30'N, 119°19'W; sounding, 915 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 00°.

0	14.77	33.57	5.94	302	0	14.77	33.57	5.94	24.94	302	0.00
10	14.75	33.59	5.96	300	10	14.75	33.59	5.96	24.96	300	0.03
30	14.34	33.55	5.74	295	20	14.60	33.58	5.88	24.98	299	0.06
39	12.92	33.48	5.04	273	30	14.34	33.55	5.74	25.02	295	0.09
49	12.50	33.51	4.96	263	50	12.44	33.51	4.93	25.37	262	0.14
58	11.66	33.51	4.53	248	75	10.96	33.59	4.04	25.71	229	0.21
68	11.21	33.56	4.28	237	100	10.25	33.68	3.60	25.90	211	0.26
82	10.74	33.61	3.81	224	150	9.50	33.95	2.67	26.24	179	0.36
96	10.33	33.66	3.67	214	200	8.91	34.11	2.05	26.46	158	0.45
110	10.10	33.73	3.42	205	250	8.61	34.18	1.51	26.56	149	0.52
133	9.71	33.87	2.90	188	300	8.22	34.21	1.25	26.64	141	0.60
160	9.40	34.00	2.59	174	400	7.46	34.23	0.81	26.76	129	0.74
191	9.00	34.07	2.21	162	500	6.82	34.31	0.53	26.92	114	0.87
237	8.74	34.16	1.66	151							
311	8.16	34.22	1.20	138							
404	7.42	34.23	0.80	129							
529	6.62	34.33	0.49	110							

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/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

S10

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5801

STRANGER; February 1, 1958; 1315 GCT; 33°10'N, 120°00.5'W; sounding, 650 fm; wind, 340°, force 3;
weather, overcast; sea, high; wire angle, 00°.

87.55

0	15.62	33.58	5.78	320	0	15.62	33.58	5.78	24.76	320	0.00
10	15.64	33.58	5.80	320	10	15.64	33.58	5.80	24.76	320	0.03
30	15.63	33.58	5.72	320	20	15.64	33.58	5.77	24.76	320	0.06
54	13.12	33.40	5.37	282	30	15.63	33.58	5.72	24.76	320	0.10
64	12.40	33.40	5.11	269	50	13.78	33.44	5.45	25.05	292	0.16
73	11.62	33.39	5.00	256	75	11.80	33.42	4.78	25.43	256	0.22
83	11.59	33.51	4.51	246	100	10.89	33.63	3.60	25.76	225	0.29
96	11.05	33.61	3.69	230	150	9.67	33.88	2.73	26.15	187	0.39
110	10.53	33.67	3.55	216	200	9.02	34.10	2.01	26.43	161	0.48
128	10.06	33.79	3.15	200	250	8.51	34.17	1.69	26.58	147	0.56
146	9.75	33.86	2.80	190	300	8.08	34.21	1.33	26.66	138	0.63
169	9.42	33.98	2.45	176	400	7.42	34.25	0.89	26.79	127	0.77
191	9.12	34.09	2.12	162	500	6.72	34.31	0.58	26.94	113	0.89
237	8.62	34.16	1.77	150							
311	8.00	34.22	1.29	137							
404	7.40	34.25	0.88	126							
527	6.48	34.33	0.52	108							

STRANGER; February 1, 1958; 1605 GCT; 33°00'N, 120°21.5'W; sounding, 355 fm; wind, 140°, force 4;
weather, overcast; sea, high; wire angle, 05°.

87.60

0	14.51	33.49	5.83	303	0	14.51	33.49	5.83	24.94	303	0.00
10	14.52	33.46	5.75	305	10	14.52	33.46	5.75	24.91	305	0.03
29	14.52	33.48	5.72	304	20	14.52	33.48	5.73	24.92	304	0.06
53	14.51	33.48	5.79	303	30	14.52	33.48	5.72	24.92	304	0.09
63	13.80	33.44	4.19u	293	50	14.51	33.48	5.76	24.92	304	0.15
73	12.94	33.39	5.40	280	75	12.80	33.39	5.30	25.21	277	0.22
82	12.03	33.39	5.07	263	100	10.49	33.44	4.50	25.68	232	0.29
96	10.69	33.42	4.65	237	150	9.25	33.75	3.25	26.12	190	0.40
111	10.07	33.51	4.14	221	200	8.40	34.03	2.38	26.47	157	0.48
129	9.46	33.60	3.89	205	250	8.05	34.14	1.73	26.62	143	0.56
148	9.26	33.74	3.28	191	300	7.50	34.17	1.30	26.71	134	0.63
170	8.63	33.86	2.87	173	400	6.55	34.22	0.71	26.89	117	0.76
192	8.46	34.00	2.48	160	500	5.89	34.26	0.46	27.01	106	0.88
238	8.16	34.14	1.83	145							
310	7.40	34.17	1.24	133							
401	6.55	34.22	0.71	117							
524	5.78	34.27	0.43	104							

STRANGER; February 1, 1958; 2053 GCT; 32°39.5'N, 121°02'W; sounding, 2100 fm; wind, 140°, force 4;
weather, cloudy; sea, high; wire angle, 03°.

87.70

0	15.02	33.48	5.72	315	0	15.02	33.48	5.72	24.81	315	0.00
10	15.03	33.48	5.76	315	10	15.03	33.48	5.76	24.81	315	0.03
30	14.98	33.48	5.84	313	20	15.01	33.48	5.80	24.82	314	0.06
54	14.94	33.48	5.83	313	30	14.98	33.48	5.84	24.83	313	0.09
64	14.94	33.49	5.78	312	50	14.94	33.48	5.83	24.83	313	0.16
74	14.96	33.48	5.84	313	75	14.96	33.48	5.83	24.84	312	0.24
83	14.24	33.45	5.65	300	100	12.23	33.39	5.33	25.32	266	0.31
97	12.74	33.39	5.40	276	150	9.43	33.59	3.92	25.97	205	0.43
111	11.07	33.40	5.08	246	200	8.32	33.96	2.79	26.44	160	0.52
129	10.18	33.53	4.41	221	250	7.59	34.07	1.92	26.62	143	0.60
147	9.47	33.58	4.03	206	300	7.04	34.13	1.42	26.75	130	0.67
170	9.16	33.79	3.40	186	400	6.37	34.20	0.83	26.90	116	0.79
193	8.49	33.93	2.97	165	500	5.73	34.26	0.49	27.03	104	0.91
239	7.72	34.05	2.09	145							
311	6.97	34.14	1.36	128							
404	6.36	34.20	0.83	116							
529	5.58	34.29	0.39	100							

S10

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5801

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

87.80 STRANGER; February 2, 1958; 0135 GCT; 32°19.5'N, 121°43'W; sounding, 2250 fm; wind, 140°, force 5; weather, partly cloudy; sea, high; wire angle, 05°.

0	14.94	33.51	5.90	310	0	14.94	33.51	5.90	24.86	310	0.00
10	14.95	33.49	5.65	312	10	14.95	33.49	5.65	24.84	312	0.03
29	14.90	33.52	5.63	309	20	14.93	33.51	5.64	24.86	310	0.06
58	14.87	33.49	5.74	310	30	14.90	33.52	5.63	24.87	309	0.09
68	13.88	33.48	5.58	291	50	14.89	33.49	5.70	24.86	310	0.16
78	12.81	33.44	5.34	274	75	13.21	33.46	5.45	25.18	280	0.23
92	11.54	33.37	4.95	255	100	11.00	33.38	4.80	25.54	245	0.30
106	10.72	33.40	4.72	239	150	9.03	33.66	3.63	26.09	193	0.41
120	9.91	33.52	4.30	218	200	8.38	33.99	2.60	26.45	159	0.50
139	9.40	33.58	4.04	205	250	7.61	34.07	2.04	26.62	143	0.57
157	8.82	33.77	3.35	182	300	7.05	34.11	1.55	26.74	132	0.64
184	8.59	33.89	2.93	170	400	6.39	34.21	0.80	26.90	116	0.77
206	8.28	34.02	2.39	155	500	5.77	34.29	0.48	27.05	102	0.89
256	7.50	34.07	1.98	141							
333	6.80	34.14	1.25	126							
436	6.18	34.25	0.61	110							
570	5.32	34.33	0.39	94							

90.80 STRANGER; February 2, 1958; 1448 GCT; 31°45'N, 121°19'W; sounding, 2100 fm; wind, 200°, force 3; weather, partly cloudy; sea, very rough; wire angle, 08°.

0	15.92	33.54	5.60	329	0	15.92	33.54	5.60	24.66	329	0.00
10	15.92	33.55	5.71	328	10	15.92	33.55	5.71	24.67	328	0.03
29	15.02	33.49	5.68	314	20	15.88	33.54	5.70	24.69	327	0.06
39	15.00	33.49	5.80	313	30	15.02	33.49	5.69	24.82	314	0.10
49	15.00	33.50	5.74	312	50	15.00	33.50	5.74	24.84	312	0.16
58	14.96	33.50	5.76	311	75	14.02	33.46	5.48	25.02	295	0.24
67	14.62	33.46	5.68	308	100	10.48	33.40	4.60	25.65	235	0.30
81	13.54	33.47	5.27	285	150	8.80	33.79	3.40	26.23	180	0.41
95	10.75	33.40	4.64	240	200	8.21	33.98	2.48	26.47	157	0.49
109	10.01	33.42	4.52	227	250	7.68	34.06	1.94	26.61	144	0.67
131	9.02	33.66	3.54	194	300	7.05	34.12	1.63	26.75	130	0.64
158	8.72	33.85	3.36	174	400	6.35	34.21	0.87	26.91	115	0.77
190	8.35	33.96	2.64	161	500	5.65	34.30	0.50	27.06	101	0.88
235	7.82	34.05	2.01	147							
308	6.94	34.14	1.56	128							
398	6.37	34.20	0.89	117							
521	5.60	34.32	0.47	98							

90.90 STRANGER; February 2, 1958; 0948 GCT; 31°25'N, 121°59'W; sounding, 2150 fm; wind, 180°, force 3; weather, drizzle; sea, very rough; wire angle, 08°.

0	16.76	33.68	5.47	336	0	16.76	33.68	5.47	24.58	336	0.00
10	16.76	33.68	5.47	336	10	16.76	33.68	5.47	24.58	336	0.03
29	16.76	33.72a)	5.48	334	20	16.76	33.70	5.47	24.59	336	0.07
53	16.76	33.70	5.42	336	30	16.76	33.71	5.47	24.61	334	0.10
63	16.75	33.70	5.43	334	50	16.76	33.70	5.45	24.59	336	0.17
73	16.78	33.71	5.48	335	75	16.78	33.70	5.46	24.59	336	0.25
82	16.78	33.70	5.38	336	100	14.02	33.46	5.67	25.01	295	0.33
96	14.56	33.48	5.73	304	150	10.42	33.44	4.78	25.69	231	0.46
109	13.06	33.45	5.44	277	200	9.00	33.74	3.47	26.16	187	0.57
129	11.92	33.44	5.32	256	250	8.26	33.94	2.75	26.43	161	0.66
147	10.58	33.43	4.84	235	300	7.55	34.06	1.95	26.63	142	0.74
169	9.69	33.53	4.47	213	400	6.60	34.16	1.10	26.82	122	0.88
192	9.18	33.67	3.66	195	500	6.15	34.28	0.60	26.99	108	1.00
236	8.44	33.91	2.97	166							
308	7.41	34.07	1.81	140							
398	6.61	34.16	1.11	123							
520	6.02	34.30	0.48	106							

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	$\frac{1}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{1}{10} \text{ cm/g}$	dyn. m	

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5801

PAOLINA-T; January 29, 1958; 2351 GCT; 32°55'N, 117°20'W; sounding, 70 fm; wind, 270°, force 3; weather, cloudy; sea, moderate; wire angle, 00°.

93.27

0	16.55	33.66	5.54	334	0	16.55	33.66	5.54	24.61	334	0.00
10	16.22	33.66	5.54	327	10	16.22	33.66	5.54	24.68	327	0.03
30	15.79	33.61	5.58	320	20	16.01	33.64	5.57	24.72	323	0.06
50	14.42	33.54	5.00	298	30	15.79	33.61	5.58	24.75	320	0.10
76	12.30	33.57	4.35	255	50	14.42	33.54	5.00	24.99	298	0.16
					75	12.40	33.57	4.36	25.42	257	0.23

PAOLINA-T; January 30, 1958; 0235 GCT; 32°50'N, 117°33'W; sounding, 470 fm; wind, 290°, force 3; force 3; weather, cloudy; sea, very rough; wire angle, 05°.

93.30

0	16.28	33.66	5.45	327	0	16.28	33.66	5.45	24.68	327	0.00
10	16.28	33.64	5.43	328	10	16.28	33.64	5.43	24.67	328	0.03
30	15.87	33.68	5.54	317	20	16.10	33.66	5.50	24.72	323	0.06
40	15.63	33.68	5.37	312	30	15.87	33.68	5.54	24.79	317	0.10
51	14.80	33.59	5.19	302	50	14.90	33.60	5.19	24.94	303	0.16
61	13.82	33.58	4.66	283	75	12.26	33.44	4.98	25.36	263	0.23
70	12.52	33.45	5.02	267	100	11.35	33.55	4.15	25.61	239	0.29
85	11.86	33.44	4.79	256	150	9.84	33.75	3.40	26.03	199	0.41
99	11.36	33.55	4.18	239	200	9.70	34.08	2.00	26.30	173	0.50
113	11.10	33.58	3.90	233	250	9.22	34.19	1.66	26.47	157	0.58
136	10.09	33.66	3.75	210	300	8.81	34.25	1.43	26.59	146	0.66
165	9.66	33.95	2.62	182	400	8.05	34.26	0.97	26.70	135	0.81
198	9.70	34.07	2.02	173	500	7.03	34.28	0.62	26.84	122	0.94
246	9.22	34.19	1.70	157							
322	8.64	34.27	1.35	142							
418	7.98	34.26	0.94	133							
546	6.86	34.31	0.57	114							

PAOLINA-T; January 30, 1958; 0849 GCT; 32°31'N, 118°15'W; sounding, 800 fm; wind, 230°, force 4; force 4; weather, overcast; sea, rough; wire angle, 12°.

93.40

0	16.41	33.72		326	0	16.41	33.72		24.69	326	0.00
10	16.43	33.69		329	10	16.43	33.69		24.66	329	0.03
30	16.42	33.69		329	20	16.43	33.69		24.66	329	0.06
59	16.26	33.68		325	30	16.42	33.69		24.66	329	0.10
68	14.06	33.55		289	50	16.38	33.69		24.68	327	0.16
78	13.57	33.53		281	75	13.70	33.54		25.14	284	0.24
92	12.62	33.53		263	100	12.37	33.55		25.41	259	0.31
106	12.14	33.60		250	150	10.64	33.74		25.88	213	0.43
120	11.53	33.55		243	200	9.55	34.03		26.29	174	0.53
137	11.02	33.70		223	250	8.76	34.22		26.56	148	0.61
154	10.54	33.75		211	300	8.04	34.23		26.68	137	0.68
181	9.82	33.96		184	400	7.08	34.29		26.86	120	0.82
204	9.49	34.04		172	500	6.50	34.33		26.98	108	0.94
254	8.72	34.22		148							
332	7.60	34.23		131							
435	6.92	34.31		115							
572	5.98	34.35		100							

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5801

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	

93.50

PAOLINA-T; January 30, 1958; 1502 GCT; 32°13'N, 118°55'W; sounding, 730 fm; wind, 300°, force 2; weather, drizzle; sea, very rough; wire angle, 12°.

0	15.36	33.64	5.74	309	0	15.36	33.64	5.74	24.87	309	0.00
10	15.36	33.66	5.71	308	10	15.36	33.66	5.71	24.88	308	0.03
30	15.38	33.60	5.69	313	20	15.36	33.63	5.70	24.85	311	0.06
59	12.60	33.40	5.21	273	30	15.38	33.60	5.69	24.83	313	0.09
67	11.64	33.43	4.80	253	50	15.20	33.58	5.61	24.85	311	0.16
76	11.00	33.49	4.44	238	75	11.05	33.49	4.47	25.61	239	0.22
90	10.48	33.51	4.36	227	100	10.28	33.55	4.23	25.80	221	0.28
102	10.22	33.57	4.15	219	150	9.49	33.93	2.57	26.23	180	0.38
118	9.94	33.78	3.34	199	200	8.79	34.13	2.11	26.49	155	0.47
136	9.60	33.86	2.89	187	250	8.24	34.21	1.68	26.64	141	0.54
154	9.43	33.96	2.49	177	300	7.80	34.25	1.25	26.74	131	0.61
182	8.92	34.09	2.24	160	400	7.08	34.29	0.73	26.87	119	0.74
204	8.79	34.13	2.08	155	500	6.46	34.33	0.48	26.99	108	0.86
254	8.20	34.22	1.64	140							
333	7.51	34.27	1.00	126							
437	6.86	34.30	0.63	115							
572	5.98	34.37	0.38	99							

93.60

PAOLINA-T; January 30, 1958; 2115 GCT; 31°53'N, 119°40'W; sounding, 1880 fm; wind, 340°, force 5; weather, cloudy; sea, very high; wire angle, 22°.

0	16.20	33.62		329	0	16.20	33.62		24.66	329	0.00
9	16.21	33.62		329	10	16.21	33.62		24.66	329	0.03
32	16.19	33.61		329	20	16.21	33.62		24.66	329	0.06
60	14.87	33.54a)		307	30	16.19	33.61		24.66	329	0.10
69	14.14	33.48		296	50	16.00	33.59		24.69	326	0.16
92	11.76	33.39		258	75	13.60	33.45		25.09	288	0.24
111	10.86	33.50		234	100	11.38	33.42		25.50	249	0.31
124	10.22	33.55		220	150	9.06	33.73		26.13	189	0.42
141	9.34	33.65		199	200	8.75	34.01		26.41	163	0.51
162	8.86	33.82		179	250	8.74	34.21		26.56	148	0.59
191	8.70	34.00		163	300	7.95	34.24		26.71	134	0.66
216	8.84	34.09		159	400	6.94	34.30		26.90	116	0.79
270	8.32	34.22		142	500	6.20	34.36		27.04	103	0.91
352	7.38	34.27		124	600	5.58	34.40		27.16	92	1.01
458	6.52	34.33		109							
600	5.58	34.40		92							

93.70

PAOLINA-T; January 31, 1958; 0304 GCT; 31°32'N, 120°16'W; sounding, 2200 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 08°.

0	15.72	33.59		320	0	15.72	33.59		24.76	320	0.00
10	15.74	33.60		321	10	15.74	33.60		24.75	321	0.03
30	15.71	33.58		321	20	15.72	33.59		24.75	321	0.06
60	15.42	33.57		317	30	15.71	33.58		24.75	321	0.10
71	13.16	33.45		280	50	15.58	33.57		24.77	319	0.16
79	12.30	33.40		267	75	12.70	33.42		25.25	273	0.23
95	10.77	33.45		237	100	10.65	33.46		25.66	234	0.30
109	10.52	33.48		230	150	9.39	33.81		26.15	187	0.41
123	10.14	33.54		220	200	8.72	34.03		26.43	161	0.50
142	9.46	33.71		196	250	8.01	34.11		26.60	145	0.57
161	9.32	33.86		183	300	7.69	34.24		26.75	131	0.64
189	9.07	34.02		167	400	6.81	34.31		26.93	114	0.77
211	8.28	34.04		154	500	5.96	34.35		27.07	100	0.88
263	7.99	34.18		139	600	(5.25)	34.38		(27.17)	(90)	(0.98)
343	7.34	34.29		123							
448	6.39	34.33		107							
586	5.38	34.38		91							

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	

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PAOLINA-T; January 31, 1958; 0923 GCT; 31°04'N, 120°50'W; sounding, 2100 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 02°.

9380

0	16.05	33.57	5.60	329	0	16.05	33.57	5.60	24.66	329	0.00
10	16.05	33.54	5.65	331	10	16.05	33.54	5.65	24.64	331	0.03
30	16.05	33.55	5.67	330	20	16.05	33.54	5.66	24.64	331	0.06
60	15.78	33.49	5.64	329	30	16.05	33.55	5.67	24.65	330	0.10
71	15.30	33.48	5.67	320	50	15.95	33.53	5.67	24.66	329	0.16
81	14.40	33.44	5.68	304	75	15.00	33.47	5.68	24.82	314	0.24
95	12.62	33.39	5.52	274	100	12.08	33.39	5.39	25.35	264	0.32
110	11.24	33.40	5.09	249	150	11.02	33.88	1.73	25.92	209	0.44
124	10.86	33.49	2.24	235	200	10.32	34.06	2.07	26.19	184	0.54
143	11.05	33.85	1.83	212	250	9.12	34.12	1.20	26.44	160	0.63
162	10.96	33.93	1.64	205	300	8.52	34.20	0.85	26.59	146	0.71
191	10.54	34.04	2.14	189	400	7.50	34.26	0.45	26.79	127	0.85
214	9.84	34.09	1.67	174	500	6.40	34.27	0.34	26.95	112	0.97
267	8.83	34.14	1.05	155	600	(5.82)	(34.32)	(0.36)	(27.06)	(101)	(1.09)
348	8.14	34.26a)	0.65	136							
454	6.78	34.25	0.34	118							
591	5.88	34.31	0.36	102							

PAOLINA-T; February 1, 1958; 2330 GCT; 32°15'N, 117°08'W; sounding, 28 fm; wind, 120°, force 1; weather, partly cloudy; sea, rough; wire angle, 00°.

9730

0	16.74	33.66		338	0	16.74	33.66		24.56	338	0.00
20	16.22	33.68		325	10	16.45	33.68		24.68	327	0.03
40	15.38	33.65		308	20	16.22	33.68		24.70	325	0.06
					30	16.18	33.68		24.71	324	0.10

PAOLINA-T; February 1, 1958; 2150 GCT; 32°11.5'N, 117°17'W; sounding, 710 fm; wind, 230°, force 2; weather, partly cloudy; sea, rough; wire angle, 08°.

9732

0	17.08	33.71		341	0	17.08	33.71		24.53	341	0.00
10	16.42	33.68		330	10	16.42	33.68		24.65	330	0.03
30	16.26	33.68		325	20	16.32	33.68		24.68	327	0.07
55	14.23	33.55		293	30	16.26	33.68		24.70	325	0.10
65	13.10	33.47		275	50	15.32	33.65		24.88	308	0.16
74	12.56	33.48		266	75	12.46	33.48		25.34	264	0.23
84	11.62	33.46		251	100	11.05	33.56		25.66	234	0.30
99	11.09	33.55		235	150	9.85	34.01		26.22	180	0.40
133p	10.16	33.93		191	200	9.73	34.08		26.31	173	0.49
197p	9.74	34.16		175	250	9.39	34.22		26.47	157	0.57
278p	9.18	34.31		147	300	9.00	34.33		26.61	144	0.65
393p	8.26	34.34		131							

PAOLINA-T; February 1, 1958; 1813 GCT; 32°00'N, 117°40'W; sounding, 850 fm; wind, calm; weather, cloudy; sea, very rough; wire angle, 00°.

9740

0	16.63	33.68	5.25	334	0	16.63	33.68	5.25	24.61	334	0.00
10	16.45	33.68	5.50	330	10	16.45	33.68	5.50	24.65	330	0.03
30	16.43	33.64	5.39	333	20	16.43	33.67	5.44	24.64	331	0.07
41	16.40	33.64	5.39	332	30	16.43	33.64	5.39	24.62	333	0.10
51	16.38	33.68	4.97	328	50	16.38	33.68	4.98	24.66	329	0.16
60	16.37	33.68	5.02	328	75	14.59	33.47	4.50	24.90	306	0.24
69	15.54	33.53	4.56	321	100	11.93	33.44	4.12	25.42	257	0.32
84	13.32	33.43	4.46	284	150	10.04	33.52	2.86	25.81	220	0.44
99	11.96	33.44	4.13	258	200	9.40	33.96	2.10	26.26	177	0.54
113	11.36	33.42	3.42	249	250	8.36	34.03	1.49	26.48	156	0.62
137	10.46	33.45	3.14	231	300	8.17	34.17	1.27	26.62	143	0.70
165	9.69	33.64	2.46	206	400	7.27	34.28	0.66	26.84	122	0.84
199	9.41	33.95	2.22	178	500	6.50	34.34	0.50	26.99	108	0.96
247	8.40	34.02	1.53	157							
324	8.11	34.20	1.22	140							
421	7.07	34.30	0.59	118							
550	6.24	34.36	0.48	103							

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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

97.50 PAOLINA-T; February 1, 1958; 1147, 1212 GCT; 31°37'N, 118°27'W; sounding, 770 fm; wind, 090°, force 2; weather, cloudy; sea, moderate; wire angle, 03°, 03°.

0	16.36	33.62a)		332	0	16.36	33.62		24.63	332	0.00
10	16.38	33.58		336	10	16.38	33.58		24.59	336	0.03
30	16.44	33.70		328	20	16.41	33.61		24.61	334	0.07
56	15.78	33.68		315	30	16.44	33.70		24.67	328	0.10
65	14.74	33.62		298	50	16.30	33.70		24.70	325	0.16
75	14.24	33.62		287	75	14.24	33.62		25.10	287	0.24
85	13.72	33.60		280	100	12.70	33.71		25.47	252	0.31
99	12.72	33.71		253	150	10.06	33.68		25.93	208	0.43
114	11.87	33.71		237	200	9.01	33.98		26.33	170	0.52
133	10.66	33.64		221	250	8.27	34.11		26.56	149	0.60
157	10.06	33.69		207	300	7.85	34.17		26.67	138	0.68
176	9.51	33.80		191	400	6.94	34.27		26.87	119	0.81
200	9.01	33.98		170	500	6.30	34.28		26.97	110	0.93
248	8.30	34.11		149							
322	7.62	34.20		133							
420	6.76	34.27		116							
551	6.02	34.28		107							

97.60 PAOLINA-T; February 1, 1958; 0503 GCT; 31°08'N, 119°07'W; sounding, 1800 fm; wind, 320°, force 2; weather, cloudy; sea, high; wire angle, 00°.

0	16.31	33.68		327	0	16.31	33.68		24.68	327	0.00
10	16.31	33.58		334	10	16.31	33.58		24.61	334	0.03
30	15.67	33.57		321	20	16.02	33.57		24.67	328	0.07
55	15.36	33.55		316	30	15.67	33.57		24.75	321	0.10
64	14.82	33.50		309	50	15.42	33.55		24.79	317	0.16
74	13.32	33.46		281	75	13.28	33.46		25.17	281	0.24
83	12.35	33.43		266	100	10.98	33.40		25.56	244	0.30
98	11.02	33.40		245	150	9.22	33.69		26.08	194	0.41
113	10.48	33.51		227	200	8.29	33.95		26.43	161	0.50
132	9.60	33.58		208	250	7.75	34.03		26.57	147	0.58
150	9.22	33.69		194	300	7.29	34.10		26.70	136	0.66
174	8.24	33.92		170	400	6.46	34.21		26.89	117	0.79
198	8.32	33.95		162	500	5.82	34.30		27.04	103	0.90
245	7.80	34.02		149							
321	7.10	34.13		131							
417	6.30	34.23		113							
544	5.62	34.33		98							

97.70 PAOLINA-T; January 31, 1958; 2208 GCT; 30°39'N, 119°48'W; sounding, 2180 fm; wind, 360°, force 3; weather, cloudy; sea, high; wire angle, 04°.

0	15.60	33.58	5.51	319	0	15.60	33.58	5.51	24.77	319	0.00
10	15.38	33.57	5.70	315	10	15.38	33.57	5.70	24.81	315	0.03
30	15.42	33.55	5.72	317	20	15.41	33.56	5.71	24.79	317	0.06
55	15.00	33.55	5.45	309	30	15.42	33.55	5.72	24.79	317	0.09
65	12.18	33.40	5.07	265	50	15.39	33.55	5.67	24.79	317	0.16
74	11.63	33.40	4.90	255	75	11.63	33.40	4.87	25.44	255	0.23
84	11.16	33.46	4.50	242	100	10.30	33.50	4.25	25.75	225	0.29
98	10.40	33.49	4.30	227	150	9.20	33.80	3.04	26.17	185	0.40
113	9.85	33.55	4.00	214	200	8.40	34.02	2.22	26.46	158	0.48
133	9.52	33.68	3.43	200	250	7.59	34.05	1.82	26.62	144	0.56
153	9.18	33.82	2.98	184	300	7.12	34.12	1.33	26.72	133	0.63
177	8.87	33.95	2.48	169	400	6.30	34.19	0.86	26.89	117	0.76
201	8.38	34.02	2.17	157	500	5.61	34.27	0.53	27.05	102	0.87
249	7.60	34.05	1.83	144							
326	6.98	34.14	1.16	129							
424	6.10	34.20	0.77	114							
552	5.36	34.32	0.41	95							

a) 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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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5801

PAOLINA-T; January 31, 1958; 1543 GCT; 30°17'N, 120°25'W; sounding, 2070 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 10°.

97.80

0	15.44	33.49	5.52	322	0	15.44	33.49	5.52	24.74	322	0.00
10	15.44	33.50	5.58	321	10	15.44	33.50	5.58	24.75	321	0.03
30	15.47	33.51	5.54	321	20	15.46	33.50	5.56	24.75	321	0.06
54	14.94	33.48	5.84	313	30	15.47	33.51	5.54	24.75	321	0.10
65	14.24	33.43	5.67	301	50	15.30	33.50	5.65	24.78	318	0.16
74	13.55	33.51	5.85	284	75	13.45	33.49	5.85	25.16	282	0.24
82	12.48	33.40	5.47	270	100	10.93	33.46	4.86	25.61	238	0.30
97	11.16	33.46	4.94	243	150	9.34	33.71	3.53	26.08	194	0.41
111	10.34	33.48	4.41	228	200	8.42	33.93	2.64	26.40	164	0.50
130	9.76	33.57	4.13	211	250	8.04	34.10	1.96	26.59	146	0.58
148	9.34	33.68	3.55	197	300	7.45	34.16	1.47	26.71	134	0.66
171	9.14	33.86	2.93	181	400	6.70	34.30	0.69	26.93	114	0.78
194	8.50	33.91	2.73	167	500	5.99	34.35	0.47	27.06	101	0.90
239	8.14	34.09	2.09	148							
314	7.33	34.17	1.32	132							
408	6.68	34.31	0.67	112							
534	5.70	34.36	0.41	96							

PAOLINA-T; January 14, 1958; 0540 GCT; 31°41'N, 116°46.5'W; sounding, 210 fm; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 03°.

100.30

0	16.38	33.68		328	0	16.38	33.68		24.67	328	0.00
10	16.38	33.71		326	10	16.38	33.71		24.69	326	0.03
30	15.88	33.68		318	20	16.35	33.71		24.69	326	0.06
51	14.43	33.59		294	30	15.88	33.68		24.78	318	0.10
76	13.20	33.59		270	50	14.45	33.59		25.02	294	0.16
101	11.93	33.68		240	75	13.24	33.59		25.28	270	0.23
125	10.71	33.85		206	100	11.97	33.68		25.59	240	0.29
164	10.03	34.04		182	150	10.22	33.98		26.14	188	0.40
203	9.61	34.29		156	200	9.66	34.28		26.47	157	0.49
252	9.14	34.25		151	250	9.18	34.25		26.53	152	0.57
299	8.61	34.29		141	300	(8.61)	(34.29)		(26.65)	(140)	(0.64)

PAOLINA-T; January 14, 1958; 0755 GCT; 31°37'N, 116°54.5'W; sounding, missing; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 20°.

100.32

1	16.10	33.69	6.09a)	321	0	(16.10)	(33.69)	(6.10)	(24.75)	(321)	(0.00)
10	16.14	33.68	5.65	323	10	16.14	33.68	5.65	24.72	323	0.03
29	16.07	33.66	5.69	323	20	16.11	33.67	5.68	24.73	323	0.06
47	14.29	33.54	5.06	294	30	16.06	33.66	5.68	24.73	323	0.10
68	12.78	33.58	4.78	262	50	14.04	33.54	5.00	25.06	290	0.16
88	11.82	33.62	4.12	243	75	12.42	33.59	4.60	25.43	255	0.23
106	11.29	33.71	3.74	226	100	11.45	33.67	3.89	25.68	232	0.29
130	10.80	33.81	-	211	150	10.52	33.91	2.71	26.03	199	0.40
150	10.52	33.91	2.71	199							

a) All oxygen values doubtful.

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5801

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

100.40

PAOLINA-T; January 14, 1958; 1355 GCT; 31°21'N, 117°27'W; sounding, 1320 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 00°.

0	16.65	33.75	5.69a)	329	0	16.65	33.75	5.69	26.66	329	0.00
10	16.68	33.71	5.45	333	10	16.68	33.71	5.45	26.62	333	0.03
30	16.68	33.73b)	5.38	332	20	16.68	33.72	5.41	26.63	332	0.07
45	16.67	33.73	5.55	331	30	16.68	33.73	5.38	26.63	332	0.10
56	16.67	33.73	5.53	331	50	16.67	33.73	5.54	26.64	331	0.17
65	15.46	33.64	5.33	311	75	13.83	33.54	5.30	25.12	286	0.24
74	13.89	33.55	5.30	286	100	11.65	33.46	5.38	25.48	251	0.31
95	11.98	33.46	5.38	256	150	10.00	33.92	3.93	26.13	190	0.43
109	11.28	33.48	5.36	243	200	9.61	34.13	1.94	26.36	168	0.52
123	10.83	33.50	4.95	234	250	8.63	34.17	1.96	26.55	150	0.60
147	10.04	33.90	4.00	192	300	8.10	34.27	1.65	26.70	135	0.67
176	10.20	34.08	1.74	181	400	7.28	34.36	0.63	26.90	117	0.80
215	9.20	34.14	2.09	161	500	6.36	34.37	0.41	27.03	104	0.92
268	8.39	34.20	1.89	144	600	(5.81)	(34.40)	(0.29)	(27.13)	(94)	(1.02)
350	7.78	34.36	0.81	123							
453	6.74	34.35	0.49	110							
594	5.84	34.40	0.30	95							

100.50

PAOLINA-T; January 14, 1958; 2025 GCT; 31°01'N, 118°07.5'W; sounding, 935 fm; wind, 340°, force 3; weather, clear; sea, very rough; wire angle, 08°.

0	16.59	33.64	-	336	0	16.59	33.64		24.59	336	0.00
11	16.48	33.67	5.63	332	10	16.49	33.66		24.63	332	0.03
30	16.43	33.64	5.77	332	20	16.46	33.65	5.70	24.63	332	0.07
55	16.41	33.66	5.68	331	30	16.43	33.64	5.77	24.63	332	0.10
66	14.80	33.51b)	5.91	307	50	16.42	33.66	5.73	24.64	331	0.17
75	13.45	33.42	5.77	287	75	13.45	33.42	5.77	25.10	287	0.24
85	13.01	33.44	5.80	278	100	11.89	33.44	5.44	25.42	257	0.31
99	11.90	33.44	5.45	257	150	9.95	33.69	4.47	25.96	206	0.43
114	11.36	33.44	5.34	247	200	9.07	33.97	2.86	26.32	171	0.53
132	10.72	33.46	5.10	235	250	8.29	34.12	2.34	26.56	149	0.61
151	9.90	-	4.44	-	300	7.85	34.21	1.55	26.70	136	0.68
175	9.59	33.83	3.27	189	400	7.00	34.28	0.84	26.88	118	0.82
197	9.14	33.96	2.87	173	500	6.24	34.33	0.61	27.01	106	0.93
244	8.39	34.10	2.42	151							
321	7.68	34.24	1.30	131							
417	6.89	34.29	0.79	117							
545	5.98	34.35	0.53	101							

100.60

PAOLINA-T; January 15, 1958; 0350 GCT; 30°41'N, 118°47'W; sounding, 1640 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 02°.

0	16.22	33.52	5.79	337	0	16.22	33.52	5.79	24.58	337	0.00
11	16.22	33.52b)	5.56	337	10	16.22	33.52	5.58	24.58	337	0.03
30	16.19	33.50	5.69	337	20	16.21	33.51	5.60	24.58	337	0.07
55	16.16	33.53	5.62	334	30	16.19	33.50	5.69	24.58	337	0.10
65	16.14	33.53	5.40	334	50	16.16	33.52	5.64	24.60	335	0.17
76	15.83	33.69u	5.74	-	75	15.86	33.53	5.70	24.67	328	0.25
86	15.34	33.53	5.42	317	100	13.54	33.42	5.74	25.09	288	0.33
101	13.41	33.42	5.76	286	150	9.44	33.61	4.25	25.98	204	0.45
115	12.28	33.48	4.70	265	200	8.72	33.88	3.29	26.31	173	0.55
134	10.10	33.49	4.81	223	250	8.05	34.04	2.43	26.54	151	0.63
154	9.28	33.66	4.08	197	300	7.45	34.09	1.83	26.66	139	0.71
176	8.91	33.82	3.68	180	400	6.60	34.23	0.92	26.89	117	0.84
200	8.72	33.88	3.29	173	500	5.99	34.32	0.49	27.04	103	0.96
249	8.06	34.04	2.43	151							
325	7.20	34.11	1.57	134							
421	6.44	34.26	0.74	113							
550	5.74	34.34	0.38	99							

- a) Oxygen values somewhat unreliable owing to titration difficulties.
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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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5801

PAOLINA-T; January 15, 1958; 1130 GCT; 30°20'N, 119°26'W; sounding, 2000 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 13°.

100.70

0	16.36	33.52	6.01	339	0	16.36	33.52	6.01	24.55	339	0.00
11	16.36	33.55	5.47	338	10	16.36	33.55	5.50	24.57	338	0.03
30	16.36	33.57	5.61	336	20	16.36	33.56	5.52	24.58	337	0.07
54	16.36	-	5.57	-	30	16.36	33.57	5.61	24.59	336	0.10
63	16.28	33.55	5.63	335	50	16.36	33.57	5.57	24.59	336	0.17
74	15.06	33.49	5.32	314	75	15.04	33.49	5.36	24.82	314	0.25
84	14.34	33.46	5.43	302	100	12.70	33.42	5.75	25.26	272	0.32
98	12.85	33.42	5.75	275	150	9.70	33.66	3.88	25.98	204	0.44
112	11.48	33.43	5.32	250	200	8.41	33.94	3.14	26.40	164	0.54
131	11.03	33.72	3.57	221	250	7.62	34.04	2.75	26.60	145	0.62
150	9.70	33.66	3.88	204	300	7.22	34.11	1.89	26.71	134	0.69
172	9.03	33.81	3.38	183	400	6.40	34.22	0.91	26.91	115	0.82
195	8.50	33.93	3.18	165	500	5.80	34.32	0.50	27.07	100	0.93
240	7.75	34.02	2.80	148							
314	7.04	34.13	1.63	131							
407	6.36	34.23	0.80	114							
532	5.66	34.34	0.43	97							

PAOLINA-T; January 15, 1958; 1845 GCT; 29°58.5'N, 120°05.5'W; sounding, 1940 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°.

100.80

0	16.31	33.51	5.67a)	339	0	16.31	33.51	5.67	24.56	339	0.00
10	16.31	33.51	5.62	339	10	16.31	33.51	5.62	24.56	339	0.03
31	16.30	33.53	5.74	338	20	16.31	33.52	5.67	24.56	339	0.07
56	16.20	33.53	5.42	335	30	16.31	33.53	5.73	24.57	338	0.10
65	16.08	33.51	5.37	334	50	16.25	33.53	5.58	24.58	336	0.17
74	15.86	33.53	5.86	328	75	15.86	33.53	5.86	24.67	328	0.25
84	15.68	33.54	6.05	324	100	13.75	33.49	5.90	25.10	287	0.33
98	13.84	33.49	5.91	290	150	10.53	33.57	5.04	25.76	225	0.46
113	13.02	33.57	5.54	268	200	8.84	33.82	3.75	26.24	179	0.56
132	11.60	33.51	5.45	246	250	8.07	33.98	2.86	26.48	156	0.65
151	10.44	33.57	5.00	222	300	7.37	34.05	2.25	26.64	141	0.72
174	9.59	33.62	4.39	205	400	6.39	34.21	0.99	26.91	116	0.86
198	8.88	33.82	3.80	179	500	5.76	34.29	0.53	27.05	102	0.97
246	8.11	33.98b)	2.88	156							
322	7.05	34.08	2.04	134							
418	6.28	34.22	0.77	114							
544	5.51	34.32	0.43	97							

PAOLINA-T; January 16, 1958; 0122 GCT; 29°39'N, 120°43'W; sounding, 2130 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 15°.

100.90

0	17.65	33.87	5.30	343	0	17.65	33.87	5.30	24.51	343	0.00
10	17.66	33.86	5.53	344	10	17.66	33.86	5.53	24.50	344	0.03
31	17.65	33.86	5.50	344	20	17.65	33.86	5.52	24.50	344	0.07
54	17.66	33.86	5.51	344	30	17.65	33.86	5.50	24.50	344	0.10
63	17.66	33.86	5.51	344	50	17.65	33.86	5.51	24.50	344	0.17
72	17.66	33.87b)	5.51	344	75	17.66	33.86	5.50	24.50	344	0.26
80	17.66	33.86	5.49	344	100	17.54	33.87	5.48	24.53	341	0.35
95	17.65	33.87	5.48	343	150	13.26	33.70	5.31	25.36	263	0.50
109	16.01	33.75	5.84	316	200	10.21	33.70	4.52	25.92	209	0.62
126	14.90	33.71	5.64	295	250	8.59	33.93	3.15	26.37	167	0.71
145	13.65	33.71	5.38	270	300	7.83	34.11	2.47	26.62	143	0.80
167	11.84	33.64	5.12	241	400	6.92	34.20	1.17	26.83	123	0.93
190	10.65	33.66	4.77	219	500	5.97	34.28	0.53	27.00	106	1.05
234	8.89	33.86	3.40	176							
307	7.72	34.13	2.04	140							
400	6.92	34.20	1.17	123							
526	5.76	34.29	0.45	102							

a) All oxygen values doubtful.

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

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5801

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

103.30 PAOLINA-T; January 17, 1958; 1625 GCT; 31°05'N, 116°25'W; sounding, 38 fm; wind, 090°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	16.41	33.58	5.60	337	0	16.41	33.58	5.60	24.58	337	0.00
10	16.40	33.68	5.66	329	10	16.40	33.68	5.66	24.66	329	0.03
30	16.41	33.66	5.71	331	20	16.41	33.67	5.68	24.65	330	0.07
50	15.69	33.60	5.71	319	30	16.41	33.66	5.71	24.64	331	0.10
					50	15.69	33.60	5.71	24.77	319	0.16

103.35 PAOLINA-T; January 17, 1958; 1357 GCT; 31°00.5'N, 116°39.5'W; sounding, 830 fm; wind, 040°, force 1; weather, missing; sea, rough; wire angle, 00°.

0	16.56	33.64	5.55	335	0	16.56	33.64	5.55	24.60	335	0.00
10	16.56	33.64	5.60	335	10	16.56	33.64	5.60	24.60	335	0.03
30	16.40	33.65	5.65	331	20	16.49	33.65	5.64	24.62	333	0.07
55	15.84	33.58	5.63	324	30	16.40	33.65	5.65	24.64	331	0.10
65	13.09	33.42	5.55	280	50	16.18	33.63	5.65	24.67	328	0.17
74	12.42	33.40	5.35	270	75	12.39	33.40	5.31	25.29	269	0.24
84	11.65	33.47	4.89	251	100	11.08	33.48	4.70	25.60	240	0.31
98	11.12	33.48	4.71	240	150	10.60	33.93	2.79	26.03	198	0.42
112	10.60	33.52	4.53	229	200	9.70	34.17	1.67	26.38	166	0.51
131	10.59	33.78	3.75	209	250	9.26	34.30	1.22	26.55	150	0.59
150	10.60	33.93	2.79	198	300	8.87	34.34	1.01	26.64	141	0.66
174	9.86	34.05	2.33	178	400	7.76	34.34	0.69	26.82	124	0.80
197	9.71	34.17	1.77	166	500	6.69	34.35	0.48	26.97	110	0.92
246	9.32	34.30	1.27	150							
322	8.70	34.35	0.93	138							
420	7.50	34.34	0.66	121							
549	6.34	34.36	0.41	104							

103.40 PAOLINA-T; January 17, 1958; 1001 GCT; 30°48'N, 117°01.5'W; sounding, 1030 fm; wind, 020°, force 1; weather, missing; sea, rough; wire angle, 00°.

0	16.47	33.62	5.53	335	0	16.47	33.62	5.53	24.60	335	0.00
10	16.46	33.64	5.62	334	10	16.46	33.64	5.62	24.61	334	0.03
30	16.37	33.61	5.64	333	20	16.40	33.62	5.63	24.62	333	0.07
55	14.87	33.51a)	5.80	309	30	16.37	33.61	5.64	24.62	333	0.10
65	12.72	33.38	5.59	276	50	16.16	33.59	5.67	24.66	329	0.17
75	12.22	-	4.99	-	75	12.22	33.41	4.99	25.34	265	0.24
85	11.54	33.51b)	4.64	245	100	11.02	33.60	4.00	25.70	230	0.30
100	11.02	33.60	4.00	230	150	9.74	33.84	3.20	26.12	191	0.41
114	10.74	33.65	3.67	222	200	8.65	34.02	2.57	26.43	161	0.50
134	10.21	33.65	3.67	213	250	7.95	34.12	2.21	26.62	144	0.58
152	9.70	33.86	3.18	189	300	7.66	34.28	1.63	26.78	128	0.65
177	9.36	34.04	2.54	170	400	6.79	34.24	0.91	26.87	119	0.78
200	8.65	34.02	2.57	161	500	6.03	34.29	0.53	27.01	106	0.90
248	7.98	34.11	2.23	145							
324	7.59	34.31	1.38	124							
420	6.54	34.22	0.80	117							
549	5.88	34.34	0.47	100							

- a) Cracked bottle; 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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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5801

PAOLINA-T; January 17, 1958; 0325 GCT; 30°24'N, 117°42.5'W; sounding, 1140 fm; wind, 320°, force 2;
weather, clear; sea, rough; wire angle, 06°.

103.50

0	16.46	-	5.71	-	0	16.46	(33.62)	5.71	(24.60)	(335)	(0.00)
10	16.42	33.62	5.63	334	10	16.42	33.62	5.63	24.61	334	0.03
30	16.39	33.60	5.71	334	20	16.40	33.61	5.69	24.61	334	0.07
55	15.98	33.55	5.62	329	30	16.39	33.60	5.71	24.61	334	0.10
66	14.78	33.44	5.89	312	50	16.18	33.57	5.65	24.63	332	0.17
75	13.56	33.43	5.88	288	75	13.56	33.43	5.88	25.09	288	0.24
85	12.16	33.40	5.50	265	100	11.10	33.48	5.26	25.59	240	0.31
99	11.14	33.48	5.28	241	150	9.52	33.79	3.47	26.11	191	0.42
113	10.49	33.44	5.04	233	200	8.66	33.99	2.71	26.40	164	0.51
131	9.78	33.60	4.14	210	250	7.91	34.10	2.12	26.60	144	0.59
150	9.52	33.79	3.47	191	300	7.90	34.13	1.74	26.64	141	0.66
174	9.31	33.87	3.03	182	400	7.23	34.29	0.86	26.85	121	0.80
197	8.73	33.98	2.76	165	500	6.31	34.37	0.49	27.04	103	0.92
244	7.99	34.07	2.32	148							
320	7.88	34.14	1.69	141							
415	7.06	34.32	0.73	117							
542	5.99	34.38	0.40	98							

PAOLINA-T; January 16, 1958; 2118 GCT; 30°07.5'N, 118°21'W; sounding, 1890 fm; wind, 320°, force 3;
weather, cloudy; sea, very rough; wire angle, 12°.

103.60

0	16.77	33.64	5.73	340	0	16.77	33.64	5.73	24.55	340	0.00
10	16.64	33.61a)	5.68	340	10	16.64	33.61	5.68	24.55	340	0.03
30	16.63	33.64	5.89	337	20	16.63	33.63	5.83	24.57	338	0.07
55	16.58	33.65	5.69	335	30	16.63	33.64	5.89	24.58	337	0.10
64	16.45	33.62	5.67	334	50	16.59	33.65	5.74	24.60	335	0.17
73	15.12	33.51	5.90	314	75	14.81	33.49	5.90	24.87	309	0.25
83	14.00	33.47	5.90	294	100	12.33	33.43	5.62	25.33	265	0.32
97	12.54	33.43	5.63	269	150	9.98	33.57	4.73	25.86	215	0.44
111	11.73	33.44	5.57	254	200	9.04	34.02	2.83	26.36	167	0.54
131	10.52	33.44	5.06	233	250	8.76	34.21	1.78	26.56	148	0.62
149	10.01	33.54	4.77	218	300	7.83	34.19	1.67	26.69	136	0.70
172	9.39	-	3.50	-	400	6.85	34.22	0.95	26.85	121	0.83
195	9.02	33.93	2.99	174	500	6.22		0.68			
243	8.88	34.21	1.87	151							
318	7.44	34.19	1.63	131							
413	6.80	34.23	0.90	120							
538	5.95	-	0.61	-							

PAOLINA-T; January 16, 1958; 1446 GCT; 29°46.5'N, 119°04.5'W; sounding, 1830 fm; wind, 320°, force 5;
weather, cloudy; sea, very rough; wire angle, 03°.

103.70

0	16.73	33.73	5.43	332	0	16.73	33.73	5.43	24.63	332	0.00
10	16.75	33.66	5.59	338	10	16.75	33.66	5.59	24.57	338	0.03
30	16.76	33.66	5.65	338	20	16.76	33.66	5.62	24.57	338	0.07
56	16.64	33.61	5.55	340	30	16.76	33.66	5.65	24.57	338	0.10
66	16.62	33.62	5.24	338	50	16.65	33.62	5.58	24.55	340	0.17
76	16.18	33.57	5.57	332	75	16.22	33.57	5.57	24.62	333	0.25
86	15.34	33.58	5.63	313	100	14.50	33.51	5.80	24.96	301	0.33
100	14.50	33.51	5.80	301	150	10.34	33.43	5.24	25.69	231	0.47
114	12.88	33.43	5.62	276	200	8.83	33.86	3.24	26.28	175	0.57
133	11.16	33.41	5.25	246	250	8.13	34.07	2.49	26.55	150	0.65
152	10.25	33.44	5.24	229	300	7.47	34.12	2.04	26.68	137	0.73
176	9.31	33.68a)	3.96	196	400	6.61	34.19	1.02	26.86	120	0.86
199	8.83	33.86	3.27	176	500	5.99	34.26	0.61	26.99	108	0.98
248	8.13	34.06	2.50	150							
324	7.20	34.14	1.81	132							
420	6.46	34.20	0.92	118							
548	5.68	34.30	0.49	101							

a) Possible evaporation; value falls on property curve.

S10

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5801

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	

107.32

PAOLINA-T; January 17, 1958; 2238 GCT; 30°23.5'N, 116°10.5'W; sounding, 320 fm; wind, 040°, force 2; weather, cloudy; sea, rough; wire angle, 07°.

0	16.77	33.69	5.63	336	0	16.77	33.69	5.63	24.59	336	0.00
10	16.74	33.69	5.57	336	10	16.74	33.69	5.57	24.59	336	0.03
30	16.66	33.68	5.61	334	20	16.70	33.69	5.59	24.59	336	0.07
50	16.08	33.67	5.68	322	30	16.66	33.68	5.61	24.61	334	0.10
74	14.58	33.70	4.29	289	50	16.08	33.67	5.68	24.74	322	0.17
98	12.80	33.71	4.02	254	75	14.51	33.70	4.25	25.09	288	0.24
122	12.12	33.73	3.74	239	100	12.73	33.71	4.02	25.47	252	0.31
161	10.44	33.95	2.65	195	150	10.90	33.88	2.98	25.94	207	0.43
198	9.86	34.13	2.07	172	200	9.86	34.14	1.99	26.31	171	0.53
245	9.44	34.31	1.31	152	250	9.42	34.31	1.30	26.54	151	0.61
293	9.15	34.36	1.05	143	300	9.11	34.36	1.02	26.62	143	0.68
393	8.30	34.42	0.71	126	400	(8.21)	(34.42)	(0.69)	(26.81)	(125)	(0.82)

107.35

PAOLINA-T; January 18, 1958; 0135 GCT; 30°20'N, 116°23'W; sounding, 950 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 09°.

0	17.18	33.79a)	5.59	338	0	17.18	33.79	5.59	24.57	338	0.00
10	17.18	33.76	5.58	340	10	17.18	33.76	5.58	24.55	340	0.03
30	17.19	33.75	5.62	341	20	17.18	33.75	5.60	24.54	341	0.07
55	17.14	33.77	5.60	338	30	17.19	33.75	5.62	24.54	341	0.10
65	16.65	33.65	5.67	336	50	17.18	33.76	5.61	24.56	339	0.17
75	14.93	33.48	5.92	313	75	14.93	33.48	5.92	24.83	313	0.25
83	13.95	33.78b)	5.47	-	100	12.23	33.51	5.28	25.39	259	0.32
98	12.38	33.51	5.30	260	150	9.78	33.73	3.92	26.02	200	0.44
113	11.12	33.45	5.17	243	200	9.61	34.06	2.44	26.30	173	0.53
131	10.11	33.62	4.31	213	250	8.56	34.14	2.08	26.55	150	0.62
150	9.78	33.73	3.92	200	300	8.56	34.28	1.39	26.65	140	0.69
173	9.28	33.86	3.28	185	400	7.65	34.36	0.72	26.84	122	0.83
197	9.64	34.05	2.45	174	500	6.73	34.35	0.60	26.97	110	0.95
244	8.56	34.13	2.16	151							
321	8.57	34.34	1.10	136							
417	7.45	34.36	0.68	119							
544	6.39	34.34	0.57	106							

107.40

PAOLINA-T; January 18, 1958; 0555 GCT; 30°10'N, 116°43'W; sounding, 1550 fm; wind, 040°, force 3; weather, missing; sea, rough; wire angle, 07°.

0	16.52	33.60	5.98	337	0	16.52	33.60	5.98	24.58	337	0.00
11	16.50	33.58	5.72	338	10	16.50	33.58	5.74	24.57	338	0.03
31	16.46	33.58	5.64	337	20	16.48	33.58	5.67	24.57	338	0.07
56	16.38	33.58	5.65	334	30	16.46	33.58	5.66	24.58	337	0.10
66	15.84	33.58	5.65	324	50	16.43	33.58	5.64	24.58	337	0.17
75	14.70	33.49	5.56	307	75	14.70	33.49	5.56	24.89	307	0.25
84	13.52	33.44	5.74	287	100	12.39	33.42	5.56	25.31	267	0.32
98	12.50	33.42	5.56	270	150	9.87	33.52	4.76	25.84	217	0.44
112	11.60	33.45	5.50	251	200	8.84	33.87	3.14	26.28	175	0.54
130	10.66	34.44	5.26	235	250	8.45	34.10	2.21	26.52	153	0.63
149	9.90	33.51	4.81	217	300	7.82	34.15	1.77	26.65	140	0.70
173	9.42	33.71	3.89	196	400	6.76	34.22	1.06	26.86	120	0.84
195	8.92	33.84	3.29	179	500	6.00	34.27	0.74	27.00	107	0.96
242	8.56	34.09	2.33	154							
319	7.52	34.16	1.62	135							
416	6.66	34.23	0.98	118							
543	5.74	34.29	0.65	102							

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

b) Possible evaporation; 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/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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PAOLINA-T; January 18, 1958; 1235 GCT; 29°50'N, 117°23.5'W; sounding, 1470 fm; wind, 270°, force 1; weather, clear; sea, very rough; wire angle, 06°.

107.50

0	17.02	33.69	5.58	342	0	17.02	33.69	5.58	24.52	342	0.00
10	17.04	33.70	5.57	342	10	17.04	33.70	5.57	24.52	342	0.03
31	17.16	33.73	5.45	342	20	17.10	33.71	5.57	24.52	342	0.07
55	17.01	33.72	5.57	340	30	17.16	33.73	5.45	24.52	342	0.10
65	17.01	33.73	5.59	339	50	17.04	33.72	5.55	24.54	340	0.17
75	15.89	33.72a)	5.45	315	75	15.89	33.72	5.45	24.81	315	0.25
84	15.04	33.63	5.25	304	100	13.32	33.60	4.94	25.27	271	0.33
99	13.40	33.60	4.96	273	150	10.74	33.77	3.48	25.88	213	0.45
113	12.42	33.65	4.34	251	200	9.35	33.97	2.84	26.27	176	0.55
133	11.23	33.64	4.07	230	250	8.74	34.13	2.30	26.50	154	0.63
152	10.70	33.79	3.40	210	300	8.74	34.31	1.30	26.65	140	0.71
176	9.80	33.90	3.21	188	400	7.90	34.41	0.47	26.85	121	0.84
201	9.33	33.97	2.84	175	500	6.84	34.41	0.36	27.00	107	0.96
249	8.74	34.13	2.33	154							
327	8.72	34.39	0.77	134							
426	7.56	34.41	0.40	116							
554	6.42	34.40	0.35	100							

PAOLINA-T; January 18, 1958; 1853 GCT; 29°32'N, 118°01.5'W; sounding, 1850 fm; wind, 270°, force 2; weather, fog; sea, very rough; wire angle, 08°.

107.60

0	17.42	33.86	5.66	339	0	17.42	33.86	5.66	24.56	339	0.00
10	17.36	33.85	5.56	338	10	17.36	33.85	5.56	24.57	338	0.03
30	17.38	33.84	5.61	339	20	17.36	33.84	5.57	24.57	338	0.07
50	18.01	34.12	5.57	333	30	17.38	33.84	5.61	24.56	339	0.10
60	18.52	34.34	5.39	329	50	18.01	34.12	5.57	24.62	333	0.17
70	18.53	34.33	5.32	330	75	18.52	34.34	5.33	24.66	329	0.25
80	18.48	34.34	5.34	328	100	15.05	33.87	4.16	25.11	286	0.33
89	17.46	34.22	5.17	313	150	11.05	33.78	3.68	25.84	217	0.46
99	15.24	33.89	4.16	289	200	10.05	34.07	2.39	26.24	179	0.56
112	13.12	33.73	4.26	258	250	9.86	34.34	1.34	26.48	156	0.64
132	11.72	33.68	4.05	236	300	9.16	34.34	1.25	26.60	145	0.72
151	11.02	33.79	3.67	216	400	7.85	34.34	0.79	26.80	126	0.86
198	10.06	34.04	2.46	182	500	6.81	34.34	0.43	26.95	112	0.98
246	9.91	34.34	1.38	157							
347	8.47	34.34	1.11	135							
444	7.39	34.34	0.60	119							
548	6.32	34.36	0.31	104							

PAOLINA-T; January 19, 1958; 0245 GCT; 29°10'N, 118°42'W; sounding, 1640 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 11°.

107.70

0	17.37	33.75	5.42	345	0	17.37	33.75	5.42	24.49	345	0.00
10	17.38	33.77	5.51	344	10	17.38	33.77	5.51	24.50	344	0.03
30	17.32	33.75	5.32	343	20	17.35	33.76	5.40	24.50	344	0.07
54	17.30	33.77	5.44	342	30	17.32	33.75	5.32	24.51	343	0.10
63	17.31	33.75	5.46	343	50	17.30	33.76	5.43	24.52	342	0.17
74	17.33	33.75	5.73	343	75	17.33	33.75	5.72	24.51	343	0.26
84	17.08	33.75	5.63	339	100	14.82	33.60	5.90	24.96	301	0.34
99	14.89	33.60	5.91	303	150	11.30	33.45	5.19	25.53	246	0.48
113	14.08	33.58	5.70	288	200	9.55	33.73	3.90	26.07	195	0.59
131	12.86	33.53a)	5.60	268	250	8.26	33.99	2.82	26.46	158	0.68
151	11.20	33.45	5.16	244	300	7.55	34.09	2.15	26.65	140	0.76
175	10.06	33.49	4.77	222	400	6.58	34.18	1.08	26.85	121	0.90
199	9.59	33.72	3.91	197	500	5.82	34.25	0.63	27.00	107	1.01
245	8.36	33.98	2.88	160							
322	7.26	34.11	1.86	134							
418	6.46	34.19	0.95	119							
544	5.50	34.28	0.50	101							

a) Possible evaporation; value falls on property curve.

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5801

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

110.33 PAOLINA-T; January 21, 1958; 2020 GCT; 29°50'N, 115°52'W; sounding, 57 fm; wind, 300°, force 5; weather, cloudy; sea, moderate; wire angle, 00°.

0	16.56	33.88	5.46	317	0	16.56	33.88	5.46	24.79	317	0.00
10	16.78	33.98	5.43	315	10	16.78	33.98	5.43	24.81	315	0.03
30	17.00	34.09	5.38	312	20	16.90	34.04	5.40	24.83	313	0.06
50	17.20	34.18	5.10	310	30	17.00	34.09	5.38	24.84	312	0.09
75	17.10	34.16	5.13	309	50	17.20	34.18	5.10	24.86	310	0.16
					75	17.10	34.16	5.13	24.87	309	0.24

110.35 PAOLINA-T; January 21, 1958; 1838 GCT; 29°46.5'N, 115°59'W; sounding, 740 fm; wind, 250°, force 4; weather, partly cloudy; sea, rough; wire angle, 00°.

0	17.21	34.14	5.18	313	0	17.21	34.14	5.18	24.83	313	0.00
10	17.20	34.16	5.18	312	10	17.20	34.16	5.18	24.84	312	0.03
30	17.20	34.14	5.28	313	20	17.20	34.15	5.24	24.84	312	0.06
40	17.16	34.14	5.20	312	30	17.20	34.14	5.28	24.83	313	0.09
50	17.00	34.13	5.03	309	50	17.00	34.13	5.03	24.87	309	0.16
59	15.52	33.99	3.69	288	75	14.76	33.89	3.17	25.18	279	0.23
69	15.02	33.90	3.36	284	100	13.42	33.87	3.20	25.46	253	0.30
84	14.37	33.88	3.02	271	150	11.40	33.87	3.03	25.84	216	0.42
98	13.46	33.87	3.20	254	200	10.62	34.22	1.67	26.26	177	0.52
112	13.00	33.90	2.87	243	250	9.84	34.31	1.41	26.46	158	0.60
136	11.78	33.80	3.39	228	300	9.36	34.37	1.02	26.58	146	0.68
165	11.10	34.02	2.65	200	400	8.29	34.45	0.68	26.82	124	0.82
198	10.63	34.22	1.70	178	500	7.15	34.39	0.50	26.94	113	0.94
246	9.86	34.31	1.41	158							
323	9.17	34.39	0.86	141							
421	8.03	34.46	0.64	120							
548	6.65	34.33	0.42	110							

110.40 PAOLINA-T; January 21, 1958; 1605 GCT; 29°42.5'N, 116°19'W; sounding, 1250 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	16.70	33.74	5.37	332	0	16.70	33.74	5.37	24.63	332	0.00
10	16.72	33.72	5.47	333	10	16.72	33.72	5.47	24.62	333	0.03
30	16.65	33.74	5.32	330	20	16.71	33.72	5.44	24.62	333	0.07
55	16.12	33.66	5.51	324	30	16.65	33.74	5.32	24.65	330	0.10
65	15.50	33.70	5.44	308	50	16.25	33.68	5.48	24.69	326	0.16
74	14.46	33.49	5.38	302	75	14.44	33.49	5.36	24.96	301	0.24
84	13.94	33.56	5.16	287	100	12.83	33.53	5.10	25.31	267	0.32
99	12.93	33.54	5.10	269	150	10.56	33.80	3.02	25.94	208	0.44
113	11.65	33.43	5.08	252	200	9.62	34.04	2.40	26.29	174	0.53
132	10.60	33.57	4.32	225	250	8.71	34.11	2.34	26.49	155	0.62
152	10.56	33.82	3.01	206	300	8.62	34.20	1.64	26.58	147	0.69
176	9.60	33.84	3.05	189	400	7.39	34.23	1.17	26.79	127	0.84
199	9.65	34.04	2.42	175	500	6.51	34.26	0.75	26.93	114	0.96
248	8.72	34.09	2.36	157							
325	8.55	34.27	1.30	141							
422	7.03	34.23	1.13	123							
551	6.28	34.29	0.52	108							

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	

PAOLINA-T; January 21, 1958; 0922 GCT; 29°19'N, 117°00'W; sounding, 1950 fm; wind, 330°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°.

110.50

0	17.27	33.88	5.47	334	0	17.27	33.88	5.47	24.61	334	0.00
10	17.28	33.82	5.46	338	10	17.28	33.82	5.46	24.57	338	0.03
30	17.33	33.85	5.36	337	20	17.30	33.83	5.41	24.57	338	0.07
50	17.70	34.01	5.42	334	30	17.33	33.85	5.36	24.58	337	0.10
65	18.14	34.17	5.38	333	50	17.70	34.01	5.42	24.61	334	0.17
75	18.24	34.23	5.14	331	75	18.24	34.23	5.14	24.64	331	0.25
85	18.10	34.20	5.16	330	100	14.28	33.63	4.87	25.10	288	0.33
100	14.28	33.63	4.87	288	150	10.73	33.71	3.62	25.84	217	0.46
113	12.47	33.58	4.80	257	200	10.13	34.06	2.18	26.22	181	0.56
133	11.46	33.55	4.61	241	250	9.46	34.29	1.52	26.50	154	0.64
152	10.70	33.73	3.50	215	300	9.22	34.39	1.01	26.62	143	0.72
175	10.60	33.89	2.77	201	400	8.20	34.39	0.56	26.79	127	0.86
199	10.17	34.05	2.20	182	500	7.23	34.39	0.32	26.92	114	0.99
246	9.52	34.27	1.65	156							
322	9.09	34.40	0.82	140							
419	8.00	34.39	0.52	124							
546	6.82	34.39	0.25	108							

PAOLINA-T; January 21, 1958; 0241 GCT; 28°57'N, 117°40'W; sounding, 1920 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

110.60

0	18.08	34.21	5.30	329	0	18.08	34.21	5.30	24.66	329	0.00
10	17.94	34.16	5.46	329	10	17.94	34.16	5.46	24.66	329	0.03
30	17.90	34.22	5.33	323	20	17.92	34.20	5.40	24.70	325	0.06
55	17.99	34.18	5.20	328	30	17.90	34.22	5.33	24.72	323	0.10
66	18.15	34.23	5.15	329	50	17.96	34.20	5.23	24.69	326	0.16
75	18.12	34.24	5.06	327	75	18.12	34.24	5.06	24.68	327	0.24
85	15.77	34.07	3.67	287	100	13.98	33.91	3.21	25.37	261	0.32
100	13.98	33.91	3.21	261	150	10.88	33.91		25.97	205	0.44
114	13.45	33.96	2.86	248	200	10.40	34.29	1.57	26.35	169	0.53
134	12.11	33.96	2.56	222	250	10.32	34.42	0.87	26.47	157	0.62
153	10.85	33.93	2.65	203	300	9.41	34.40	0.80	26.61	144	0.69
177	10.60	34.14	1.92	183	400	8.02	34.39	0.55	26.81	125	0.84
201	10.40	34.29	1.57	168	500	7.13	34.39	0.36	26.94	112	0.96
250	10.32	34.42	0.87	157							
328	8.86	34.39	0.73	137							
426	7.80	34.39	0.50	121							
554	6.66	34.39	0.26	106							

PAOLINA-T; January 20, 1958; 0329 GCT; 28°38'N, 118°18'W; sounding, 1750 fm; wind, 020°, force 4; weather, partly cloudy; sea, rough; wire angle, 02°.

110.70

0	17.54	33.97a)	5.47	333	0	17.54	33.97	5.47	24.62	333	0.00
10	17.53	33.90	5.44	338	10	17.53	33.90	5.44	24.57	338	0.03
30	17.43	33.88	5.41	338	20	17.50	33.89	5.43	24.57	338	0.07
55	17.49	33.96a)	5.40	332	30	17.43	33.88	5.41	24.57	338	0.10
66	17.62	-	5.33	-	50	17.48	33.94	5.40	24.62	333	0.17
75	17.72	-	5.16	-	75	17.72	34.20	5.16	24.75	321	0.25
85	16.42	33.94	4.93	311	100	13.45	33.69	4.23	25.31	267	0.32
98	13.80	33.73	4.19	271	150	11.02	33.85	3.13	25.89	212	0.45
114	12.28	33.58b)	4.42	253	200	10.28	34.16	2.06	26.27	176	0.55
133	11.85	33.80	3.46	229	250	9.83	34.38	1.27	26.52	153	0.63
153	10.94	-	3.07	-	300	8.78	34.33	1.15	26.65	140	0.71
177	10.98	-	2.06	-	400	7.57	34.32	0.70	26.83	123	0.84
201	10.24	34.16	2.06	176	500	6.30	34.28	0.61	26.97	109	0.97
249	9.84	34.38	1.27	153							
320p	8.36	34.31	1.12	135							
401p	7.54	34.32	0.68	123							
511p	6.12	34.28	0.61	107							

- a) This salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, it is assumed that this salinity value is listed correctly.
b) Loose bottle cap; value falls on property curve.

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5801

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

110.80

PAOLINA-T; January 19, 1958; 2123 GCT; 28°19'N, 118°55.5'W; sounding, 2030 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 05°.

0	18.14	34.02	5.28	344	0	18.14	34.02	5.28	24.51	344	0.00
10	18.08	34.02	5.53	342	10	18.08	34.02	5.53	24.53	342	0.03
30	18.05	34.02	5.49	341	20	18.06	34.02	5.51	24.53	342	0.07
55	18.05	34.04	5.44	340	30	18.05	34.02	5.49	24.53	341	0.10
65	18.04	34.02	5.40	340	50	18.05	34.02	5.45	24.54	340	0.17
75	18.05	-	5.40	-	75	18.05	34.02	5.40	24.54	340	0.26
84	17.32	-	5.34	-	100	14.10	33.77	4.84	25.24	274	0.34
99	14.19	33.78	4.88	275	150	11.90	33.96	2.52	25.82	218	0.46
113	13.16	33.61	4.31	267	200	10.23	34.15	1.88	26.27	176	0.56
132	11.87	33.68	3.89	239	250	8.92	34.20	1.83	26.53	152	0.64
151	11.90	-	2.48	-	300	8.89	34.39	1.15	26.68	137	0.72
174	10.31	33.93	2.69	194	400	7.81	34.42	0.48	26.86	120	0.85
199	10.26	34.15	1.88	177	500	6.82		0.45			
246	8.93	34.20	1.86	152							
322	8.85	34.47	0.72	131							
418	7.54	34.40	0.47	117							
545	6.45	-	0.45	-							

110.90

PAOLINA-T; January 19, 1958; 1450 GCT; 27°55.5'N, 119°32.5'W; sounding, 2180 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°.

0	17.45	33.88	5.56	338	0	17.45	33.88	5.56	24.57	338	0.00
10	17.43	33.87	5.56	338	10	17.43	33.87	5.56	24.57	338	0.03
29	17.46	33.87	5.51	338	20	17.43	33.87	5.54	24.57	338	0.07
58	17.48	33.89	5.56	338	30	17.46	33.87	5.51	24.57	338	0.10
67	17.50	33.89	5.52	338	50	17.46	33.88	5.53	24.57	338	0.17
76	17.49	33.93	5.37	325	75	17.49	33.92	5.40	24.60	335	0.25
90	15.12	33.73	5.18	298	100	13.28	33.63	4.73	25.30	268	0.33
104	12.76	33.62	4.55	259	150	10.78	33.92	2.85	26.00	202	0.45
117	11.96	33.72	3.87	237	200	9.46	34.11	2.42	26.36	167	0.54
136	10.96	33.84	3.40	211	250	8.34	34.13	2.38	26.56	148	0.62
153	10.74	33.94	2.78	200	300	7.98	34.23	1.73	26.70	135	0.70
180	10.04	34.04	2.56	181	400	6.90	34.25	1.00	26.86	120	0.83
203	9.40	34.12	2.40	165	500	6.00	34.30	0.54	27.03	104	0.94
254	8.27	34.13	2.37	148							
333	7.86	34.25	1.34	133							
436	6.36	34.25	0.87	113							
571	5.84	34.38	0.33	97							

113.30

PAOLINA-T; January 22, 1958; 0203 GCT; 29°23'N, 115°17.5'W; sounding, 30 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 03°.

0	17.68	34.21	5.29	319	0	17.68	34.21	5.29	24.77	319	0.00
10	17.69	34.20	5.20	320	10	17.69	34.20	5.20	24.76	320	0.03
30	17.67	34.19	5.23	320	20	17.68	34.19	5.22	24.76	320	0.06
40	17.66	34.20	5.24	319	30	17.67	34.19	5.23	24.76	320	0.09

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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PAOLINA-T; January 22, 1958; 0558 GCT; 29°12.5'N, 115°41'W; sounding, 530 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°.

133.35

0	17.38	34.06		323	0	17.38	34.06		24.73	323	0.00
9	17.38	34.08		322	10	17.38	34.08		24.74	322	0.03
32	17.38	34.07		322	20	17.38	34.08		24.74	322	0.06
60	16.76	33.94		318	30	17.38	34.07		24.74	322	0.10
69	16.66	33.96		315	50	17.10	34.00		24.75	320	0.16
82	15.89	33.94		298	75	16.38	33.95		24.87	309	0.24
91	14.45	33.84		276	100	13.64	33.80		25.36	263	0.31
108	13.08	33.78		253	150	11.87	34.07		25.91	210	0.43
121	12.64	33.86a)		239	200	10.68	34.27		26.29	174	0.53
139	12.16	34.02a)		219	250	10.03	34.44		26.53	152	0.61
187	10.94	34.19		185	300	9.38	34.43		26.63	142	0.69
213	10.51	34.32b)		169	400	8.19	34.39		26.79	127	0.83
266	9.84	34.47		146	500	7.29	34.39		26.92	115	0.96
347	8.78	34.36		137	600	(6.43)	(34.32)		(26.99)	(108)	(1.07)
453	7.71	34.41		119							
597	6.44	34.33		108							

PAOLINA-T; January 22, 1958; 1225 GCT; 29°03'N, 116°04'W; sounding, 450 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 16°.

113.40

0	17.07	33.91		328	0	17.07	33.91		24.67	328	0.00
10	17.08	33.91		328	10	17.08	33.91		24.67	328	0.03
33	17.09	33.88		329	20	17.08	33.90		24.67	328	0.06
63	17.08	33.93		325	30	17.08	33.88		24.66	329	0.10
72	14.78	33.57c)		302	50	17.08	33.90		24.68	327	0.16
87	13.33	33.51		278	75	14.30	33.55		25.03	294	0.24
97	14.02	33.84		267	100	13.86	33.84		25.35	264	0.31
116	12.53	33.82		240	150	11.00	33.84		25.89	212	0.43
129	11.90	33.86		226	200	9.52	34.04		26.30	173	0.53
149	11.10	33.84		213	250	9.05	34.24		26.54	151	0.61
172	10.06	34.02		184	300	8.74	34.29		26.63	142	0.69
200	9.52	34.04		173	400	7.82	34.35		26.81	125	0.83
229	9.20	34.20		156	500	6.62	34.37		27.00	107	0.95
285	8.86	34.28		145	600	5.91	34.39		27.10	97	1.06
371	8.16	34.34		130							
481	6.80	34.37		110							
627	5.80	34.39		96							

PAOLINA-T; January 22, 1958; 1847 GCT; 28°41'N, 116°30'W; sounding, 2200 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°.

113.50

0	17.34	33.91	5.42	333	0	17.34	33.91	5.42	24.62	333	0.00
10	17.34	33.91	5.34	333	10	17.34	33.91	5.34	24.62	333	0.03
29	17.38	33.91	5.39	334	20	17.36	33.91	5.36	24.62	333	0.07
58	17.96	34.23	5.24	324	30	17.38	33.91	5.38	24.61	334	0.10
68	17.99	34.19	5.28	327	50	17.93	34.20	5.27	24.70	325	0.16
77	17.92	34.22	4.93	324	75	17.94	34.20	5.00	24.69	326	0.25
91	15.37	33.93	4.19	288	100	14.02	33.81	3.88	25.28	270	0.32
105	13.44	33.78	3.75	261	150	10.21	33.73	3.66	25.94	207	0.44
118	12.26	33.77	3.48	239	200	9.48	34.05	2.44	26.32	171	0.54
136	10.84	33.66	4.05	223	250	9.48	34.34	1.56	26.55	150	0.62
153	10.11	33.75	3.57	203	300	9.10	34.38	0.90	26.65	140	0.70
181	9.50	33.93	3.00	181	400	8.02	34.41	0.80	26.83	123	0.83
203	9.48	34.07	2.38	170	500	7.12	34.43	0.52	26.98	109	0.95
253	9.40	34.34b)	1.34	149							
331	8.88	34.39	0.81	137							
433	7.62	34.42	0.78	117							
568	6.58	34.43	0.32	102							

a) Possible evaporation; value falls on property curve.

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

c) This salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, it is assumed that this salinity value is listed correctly.

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5801

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

113.60 PAOLINA-T; January 23, 1958; 0135 GCT; 28°20.5'N, 117°20.5'W; sounding, 2000+ fm; wind, 300°, force 5; weather, partly cloudy; sea, high; wire angle, 06°.

0	17.66	34.05	5.16	330	0	17.66	34.05	5.16	24.65	330	0.00
10	17.91	34.11	5.40	331	10	17.91	34.11	5.40	24.64	331	0.03
30	18.42	34.31a)	5.06	329	20	18.00	34.15	5.33	24.64	331	0.07
60	18.33	34.29	5.15	328	30	18.42	34.31	5.06	24.66	329	0.10
70	18.29	34.27	5.20	329	50	18.36	34.30	5.10	24.67	328	0.16
80	17.84	34.16	5.12	326	75	18.17	34.24	5.18	24.67	328	0.25
96	15.33	33.93	3.93	287	100	14.78	33.91	3.70	25.20	278	0.32
111	13.90	33.92	3.20	259	150	12.69	34.09	2.27	25.77	224	0.45
125	13.38	34.04	2.45	240	200	9.50	33.96	3.10	26.25	178	0.55
145	12.99	34.10	2.24	228	250	9.03	34.20	2.19	26.50	154	0.64
164	10.84	33.91	2.82	204	300	8.55	34.26	1.52	26.63	142	0.71
194	9.54	33.89	3.29	185	400	7.76	34.34	0.62	26.82	124	0.85
218	9.40	34.09	2.50	167	500	7.01	34.39	0.39	26.96	111	0.97
271	8.82	34.23	1.95	148	600	(6.10)	(34.41)	(0.37)	(27.09)	(98)	(1.08)
352	8.10	34.30	0.90	132							
459	7.37	34.38	0.42	116							
599	6.14	34.41	0.37	98							

113.70 PAOLINA-T; January 23, 1958; 0705 GCT; 28°04.5'N, 117°51'W; sounding, 1840 fm; wind, 300°, force 3; weather, clear; sea, very rough; wire angle, 05°.

0	18.12	33.99	5.28	345	0	18.12	33.99	5.28	24.49	345	0.00
10	18.13	34.00	5.38	345	10	18.13	34.00	5.38	24.49	345	0.03
30	18.12	34.01	5.20	344	20	18.12	34.00	5.28	24.49	345	0.07
54	17.77	33.98	5.38	338	30	18.12	34.01	5.20	24.50	344	0.10
63	17.72	34.03	5.35	332	50	17.81	33.98	5.36	24.56	339	0.17
74	17.81	34.09	5.33	331	75	17.78	34.09	5.33	24.65	331	0.26
82	15.84	33.78	5.34	310	100	13.62	33.79	4.13	25.36	263	0.33
97	13.94	33.79	4.23	270	150	10.30	33.79	3.78	25.98	203	0.45
112	12.72	33.77	3.81	247	200	9.23	33.98	2.81	26.30	173	0.55
131	12.07	33.84	3.42	231	250	8.63	34.21	2.22	26.58	147	0.63
150	10.30	33.79	3.78	203	300	8.37	34.31	1.12	26.70	135	0.70
174	9.60	33.86	3.21	187	400	7.83	34.40	0.55	26.85	121	0.84
198	9.24	33.97	2.83	174	500	6.92	34.41	0.38	26.98	108	0.95
247	8.66	34.20	2.26	148							
324	8.30	34.34	0.94	132							
422	7.62	34.42	0.48	117							
550	6.44	34.40	0.35	103							

117.26 PAOLINA-T; January 25, 1958; 1240 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 00°.

0	17.21	34.16	5.38	312	0	17.21	34.16	5.38	24.84	312	0.00
10	17.23	34.18	5.40	311	10	17.23	34.18	5.40	24.85	311	0.03
30	17.25	34.20	5.34	310	20	17.24	34.19	5.36	24.86	310	0.06
51	17.20	34.17	5.28	311	30	17.25	34.20	5.34	24.86	310	0.09
					50	17.20	34.17	5.28	24.85	311	0.16

117.30 PAOLINA-T; January 25, 1958; 0945 GCT; 28°48'N, 114°56'W; sounding, 50 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°.

0	18.00	34.33	5.26	318	0	18.00	34.33	5.26	24.78	318	0.00
10	18.03	34.34	5.28	318	10	18.03	34.34	5.28	24.78	318	0.03
30	18.03	34.36	5.24	316	20	18.03	34.35	5.26	24.79	317	0.06
49	17.72	34.29	5.41	314	30	18.03	34.36	5.24	24.80	316	0.10
74	17.22	34.16	5.15	312	50	17.72	34.28	5.41	24.82	314	0.16
					75	(17.20)	(34.15)	(5.12)	(24.84)	(312)	(0.24)

a) 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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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5801

PAOLINA-T; January 25, 1958; 0650 GCT; 28°38'N, 115°16'W; sounding, 100 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 10°.

11735

0	18.22	34.35	5.24	322	0	18.22	34.35	5.24	24.74	332 322	0.00
10	18.26	34.37	5.33	320	10	18.26	34.37	5.33	24.76	320	0.03
30	18.18	34.36	5.30	320	20	18.20	34.37	5.30	24.76	320	0.06
49	18.08	34.32	5.26	320	30	18.18	34.36	5.30	24.76	320	0.10
74	17.88	34.30a)	5.09	317	50	18.07	34.32	5.24	24.76	320	0.16
99	16.94	34.16	4.19	306	75	17.85	34.30	5.05	24.80	316	0.24
123	13.59	33.87	3.22	256	100	16.84	34.14	4.14	24.92	305	0.32

PAOLINA-T; January 24, 1958; 0708 GCT; 28°27'N, 115°35'W; sounding, 450 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 08°.

11740

0	19.19	34.54	5.18	330	0	19.19	34.54	5.18	24.65	330	0.00
10	19.20	34.56	5.13	330	10	19.20	34.56	5.13	24.65	330	0.03
30	19.21	34.56	5.21	330	20	19.21	34.56	5.19	24.65	330	0.07
40	19.01	34.51	5.08	329	30	19.21	34.56	5.21	24.65	330	0.10
50	17.97	34.31	4.31	317	50	17.97	34.31	4.31	24.79	317	0.16
59	17.37	34.27	4.06	308	75	15.95	34.18	3.41	25.15	282	0.24
69	16.53	34.22	3.63	293	100	14.46	34.08	2.85	25.40	259	0.31
83	15.22	34.13	3.12	271	150	12.32	34.18	1.83	25.91	210	0.43
97	14.58	34.08	2.89	261	200	11.09	34.36	1.23	26.28	175	0.52
112	13.90	34.10	2.44	246	250	10.46	34.41	1.06	26.44	160	0.61
135	12.82	34.14	1.95	223	300	10.10	34.47	0.79	26.55	150	0.69
163	11.93	34.23	1.71	198	400	8.73	34.44	0.59	26.75	131	0.84
197	11.15	34.36	1.26	176	500	7.62	34.39	0.46	26.87	119	0.97
244	10.52	34.41	1.09	161							
321	9.96	34.49	0.67	146							
417	8.48	34.43	0.58	128							
545	7.32	34.38	0.41	116							

PAOLINA-T; January 24, 1958; 0107 GCT; 28°06.5'N, 116°13.5'W; sounding, 2450 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 10°.

11750

1	17.72	34.00	5.47	335	0	(17.72)	(34.00)	(5.47)	(24.60)	(335)	(0.00)
10	17.46	33.98	5.54	330	10	17.46	33.98	5.54	24.65	330	0.03
30	17.48	34.01	5.43	329	20	17.46	33.99	5.50	24.66	329	0.07
55	18.08	34.24	5.20	326	30	17.48	34.01	5.43	24.66	329	0.10
63	17.61	34.16	4.77	321	50	18.12	34.23	5.22	24.68	327	0.16
73	16.17	33.92	4.46	306	75	15.83	33.87	4.47	24.94	303	0.24
84	14.45	33.73	4.47	284	100	13.47	33.78	3.66	25.38	261	0.32
99	13.51	33.78	3.71	262	150	11.20	34.00	2.24	25.99	203	0.43
113	12.98	33.89	2.87	243	200	10.86	34.36	1.15	26.32	171	0.53
132	12.17	34.00	2.42	220	250	9.80	34.36	1.08	26.51	153	0.61
150	11.20	34.00	2.24	203	300	9.29	34.41	0.76	26.63	142	0.69
174	11.16	34.17	1.73	190	400	8.18	34.40	0.53	26.80	126	0.82
197	10.93	34.36	1.18	172	500	7.06	34.38	0.38	26.94	113	0.95
243	9.90	34.36	1.11	155							
318	9.12	34.42	0.67	139							
412	8.04	34.40	0.52	124							
537	6.69	34.37	0.33	108							

a) Possible evaporation; value falls on property curve.

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5801

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

PAOLINA-T; January 23, 1958; 1943 GCT; 27°49'N, 116°50'W; sounding, 2000 fm; wind, 040°, force 3; weather, clear; sea, slight; wire angle, 04°.

0	17.45	33.96	5.50	332	0	17.45	33.96	5.50	24.63	332	0.00
10	17.30	33.99	5.47	326	10	17.30	33.99	5.47	24.69	326	0.03
30	17.29	33.91	5.57	332	20	17.29	33.95	5.51	24.66	329	0.06
55	17.26	33.96	5.44	327	30	17.29	33.91	5.57	24.63	332	0.10
65	17.61	34.13	5.33	323	50	17.26	33.95	5.47	24.67	328	0.16
74	16.92	34.00	5.05	317	75	16.75	33.97	5.01	24.81	315	0.24
84	14.57	33.68	4.64	290	100	13.02	33.68	3.87	25.39	260	0.32
98	13.11	33.68	3.95	262	150	11.60	34.14	1.98	26.02	200	0.43
114	12.54	33.86	3.09	238	200	10.39	34.28	1.48	26.35	169	0.53
133	12.25	34.04	2.24	219	250	9.81	34.42	0.85	26.56	149	0.61
152	11.54	34.15	1.96	198	300	9.22	34.42	0.73	26.64	141	0.68
175	10.86	34.22	1.64	182	400	8.08	34.40	0.48	26.81	125	0.82
200	10.39	34.28	1.48	169	500	7.15	34.40	0.36	26.95	111	0.95
248	9.82	34.42	0.85	149							
325	8.95	34.41	0.58	137							
422	7.90	34.40	0.44	122							
550	6.70	34.41	0.32	105							

117.70

PAOLINA-T; January 23, 1958; 1323 GCT; 27°32.5'N, 117°33'W; sounding, 2000 fm; wind, 040°, force 3; weather, missing; sea, moderate; wire angle, 02°.

0	17.98	-	5.21	-	0	17.98	(34.01)	5.21	(24.54)	(341)	(0.00)
10	18.00	34.01	5.29	341	10	18.00	34.01	5.29	24.54	341	(0.03)
30	17.99	-	5.45	-	20	17.99	(34.01)	5.37	(24.54)	(341)	(0.07)
55	17.98	-	5.38	-	30	17.99	(34.01)	5.45	(24.54)	(341)	(0.10)
65	17.99	-	5.41	-	50	17.98	(34.01)	5.38	(24.54)	(341)	(0.17)
75	17.99	34.04a)	5.41	-	75	17.99	(34.01)	5.41	(24.54)	(341)	(0.26)
85	17.99	33.96	5.42	344	100	15.49	33.73	5.44	24.91	305	(0.34)
99	15.60	33.73	5.48	308	150	11.98	33.82	3.55	25.69	231	(0.47)
115	14.32	33.86b)	3.86	272	200	9.57	33.90	3.16	26.19	184	(0.58)
133	13.46	33.98	3.03	246	250	8.49	34.09	2.65	26.50	154	(0.66)
154	11.63	33.78	3.69	227	300	8.03	34.18	1.87	26.65	140	(0.74)
176	9.93	33.68c)	4.21	206	400	7.05	34.27	0.96	26.86	120	(0.88)
201	9.54	33.93	3.12	181	500	6.31		0.52			
248	8.52	34.07	2.70	156							
325	7.85	34.22c)	1.47	134							
423	6.85	34.29	0.87	116							
550	6.08	-	0.35	-							

118.39 PAOLINA-T; January 25, 1958; 0250 GCT; 28°18.5'N, 115°24.5'W; sounding, 163 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	18.99	34.52	5.62	327	0	18.99	34.52	5.62	24.68	327	0.00
10	19.00	34.48	5.07	331	10	19.00	34.48	5.07	24.64	331	0.03
30	17.18	34.09	5.31	316	20	17.61	34.17	5.29	24.76	320	0.06
50	17.12	34.04u	5.15	-	30	17.18	34.09	5.31	24.80	316	0.10
75	16.37	34.07	4.18	300	50	17.12	34.13	5.15	24.84	312	0.16
99	14.04	33.94	3.17	260	75	16.37	34.07	4.18	24.97	300	0.24
124	13.38	34.01	2.71	242	100	14.00	33.94	3.14	25.39	260	0.31
163	11.47	34.19	1.82	194	150	12.18	34.13	2.13	25.90	211	0.43
201	10.34	34.31	1.27	166	200	10.39	34.31	1.31	26.37	167	0.52

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

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

c) 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

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STRANGER; January 27, 1958; 1020 GCT; 28°19'N, 114°53'W; sounding, 60 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 03°.

119.33

0	17.64	34.21	5.26	318	0	17.64	34.21	5.26	24.78	318	0.00
10	17.66	34.22	5.27	318	10	17.66	34.22	5.27	24.78	318	0.03
29	17.66	34.21	5.27	319	20	17.66	34.22	5.27	24.78	318	0.06
49	17.66	34.20	5.29	320	30	17.66	34.21	5.27	24.77	319	0.10
74	17.65	34.19	5.30	320	50	17.66	34.20	5.29	24.76	320	0.17
99	17.66	34.20	5.26	320	75	17.65	34.20	5.30	24.76	320	0.25
					100	(17.66)	(34.20)		(27.76)	(320)	(0.33)

STRANGER; January 27, 1958; 0802 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 00°.

120.35

0	17.74	34.26	5.18	317	0	17.74	34.26	5.18	24.79	317	0.00
10	17.76	34.25	5.17	318	10	17.76	34.25	5.17	24.78	318	0.03
29	17.75	34.25	5.23	317	20	17.76	34.25	5.20	24.78	318	0.06
49	17.52	34.22	5.20	314	30	17.75	34.25	5.23	24.79	317	0.10
73	17.44	34.21	5.12	313	50	17.51	34.22	5.19	24.82	314	0.16
					75	(17.44)	(34.21)	(5.11)	(24.83)	(313)	(0.24)

STRANGER; January 26, 1958; 0348 GCT; 27°40'N, 115°28'W; sounding, 1150 fm; wind, 040°, force 5; weather, cloudy; sea, moderate; wire angle, 06°.

120.45

0	19.95	34.53	4.97	351	0	19.95	34.53	4.97	24.43	351	0.00
10	19.98	34.54	5.11	350	10	19.98	34.54	5.11	24.44	350	0.04
29	19.96	34.53	4.96	351	20	19.97	34.54	5.03	24.44	350	0.07
53	19.30	34.51	4.97	336	30	19.96	34.53	4.96	24.43	351	0.10
63	18.90	34.44	4.74	331	50	19.60	34.52	4.96	24.52	342	0.17
73	17.88a)	34.51	3.87	302	75	17.60	34.46	3.68	24.98	299	0.25 - .70
82	16.42	34.18	3.14	293	100	13.63	33.96	3.02	25.48	251	0.32
95	14.24	33.92	3.30	266	150	11.74	34.26	1.48	26.09	193	0.44
110	12.98	34.04	2.53	232	200	10.89	34.48	0.88	26.41	163	0.53
128	12.44	34.13	2.02	216	250	10.71	34.59	0.39	26.53	151	0.61
147	11.84	34.25	1.51	196	300	10.02	34.55	0.38	26.61	144	0.68
170	11.29	34.34	1.13	180	400	8.88	34.50	0.30	26.76	129	0.82
192	10.95	34.43	0.98	167	500	7.68	34.43	0.38	26.89	117	0.95
237	10.82	34.59	0.45	154							
310	9.90	34.54	0.37	142							
401	8.87	34.50	0.29	129							
530	7.28	34.40	0.41	114							

STRANGER; January 26, 1958; 0002 GCT; 27°30'N, 115°49'W; sounding, 2200 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 14°.

120.50

0	18.24	34.19	5.18	334	0	18.24	34.19	5.18	24.61	334	0.00
10	18.26	34.20	5.23	334	10	18.26	34.20	5.23	24.61	334	0.03
28	18.36	34.27	5.16	331	20	18.31	34.23	5.19	24.63	332	0.07
57	18.71	34.41	5.05	329	30	18.37	34.28	5.15	24.64	331	0.10
66	18.82	34.51	5.07	324	50	18.60	34.36	5.06	24.66	329	0.16
75	18.83	34.51	5.03	324	75	18.83	34.51	5.03	24.71	324	0.25 - .71
89	17.14	34.24	3.86	304	100	14.90	34.11	2.75	25.33	266	0.32
102	14.60	34.09	2.64	261	150	12.67	34.40	0.89	26.01	201	0.44
115	13.49	34.05	2.38	242	200	11.90	34.60	0.45	26.32	171	0.53
133	12.91	34.27	1.47	215	250	11.01	34.61	0.35	26.49	155	0.62
149	12.68	34.40	0.95	201	300	10.15	34.55	0.36	26.60	145	0.69
176	12.26	34.52	0.60	184	400	8.75	34.46	0.31	26.76	129	0.84
196	11.99	34.60	0.49	173	500	7.50	34.41	0.30	26.91	116	0.96
244	11.11	34.61	0.35	157							
319	9.82	34.53	0.36	141							
418	8.53	34.45	0.30	127							
551	6.83	34.39	0.28	108							

a) Mean value of 17.82 and 17.94°C.

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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

120.60

STRANGER; January 25, 1958; 1910 GCT; 27°13'N, 116°31'W; sounding, 2050 fm; wind, 360°, force 3; weather, cloudy; sea, moderate; wire angle, 16°.

0	18.00	33.97	5.18	344	0	18.00	33.97	5.18	24.50	344	0.00
9	18.02	33.95	5.24	346	10	18.02	33.95	5.24	24.48	346	0.03
28	17.98	33.99	5.37	342	20	18.00	33.98	5.31	24.51	343	0.07
51	18.00	34.13	5.30	332	30	17.98	34.00	5.37	24.53	341	0.10
60	18.00	34.13	5.38	332	50	18.00	34.12	5.31	24.62	333	0.17
69	17.98	34.12	5.28	332	75	17.69	34.08	5.21	24.66	329	0.25
78	16.98	33.97	5.20	320	100	14.90	33.84	4.70	25.12	285	0.33
91	14.98	33.76	4.74	293	150	10.70	33.88	2.95	25.97	204	0.45
104	13.32	33.66	4.30	267	200	9.12	34.09	2.73	26.39	164	0.55
120	12.17	33.74	3.44	240	250	8.77	34.17	2.10	26.53	152	0.63
136	11.34	33.86	2.98	216	300	8.14	34.24	1.51	26.66	139	0.70
156	10.47	33.89	2.95	199	400	7.32	34.32	0.65	26.86	120	0.84
177	9.56	34.04	3.02	173	500	(6.62)	(34.40)	(0.33)	(27.03)	(104)	(0.96)
220	9.04	33.89r	2.51	-							
288	8.38	34.23	1.66	141							
375	7.54	34.30	0.79	124							
496	6.63	34.40	0.34	105							

120.70

STRANGER; January 25, 1958; 1349 GCT; 26°52.5'N, 117°10'W; sounding, 2150 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 03°.

0	18.68	34.25	5.14	339	0	18.68	34.25	5.14	24.56	339	0.00
10	18.70	34.24	5.16	341	10	18.70	34.24	5.16	24.53	341	0.03
30	18.69	34.25	5.09	340	20	18.70	34.24	5.13	24.54	340	0.07
54	18.70	34.25	5.15	340	30	18.69	34.25	5.09	24.54	340	0.09
64	18.71	34.25	5.12	341	50	18.70	34.25	5.13	24.54	340	0.16
73	18.71	34.25	5.11	341	75	18.67	34.24	5.08	24.54	340	0.24
83	16.34	34.01	4.73	303	100	14.10	33.88	5.10	25.32	266	0.32
97	14.40	33.86	5.13	273	150	11.63	34.14	2.13	26.02	200	0.44
112	13.34	33.99	4.78	243	200	11.39	34.51	0.44	26.34	169	0.53
129	12.40	34.04	3.90	222	250	10.23	34.50	0.52	26.54	150	0.62
148	11.70	34.14	2.21	202	300	9.60	34.47	0.43	26.63	142	0.69
170	11.63	34.33	0.89	187	400	8.28	34.47	0.36	26.84	122	0.83
193	11.54	34.50	0.44	172	500	6.92	34.40	0.28	26.98	109	0.95
237	10.45	34.51	0.54	153							
310	9.46	34.47	0.41	140							
403	8.21	34.47	0.35	121							
526	6.61	34.38	0.25	106							

120.80

STRANGER; January 25, 1958; 0902 GCT; 26°32.5'N, 117°48.5'W; sounding, 2150 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 00°.

0	18.76	34.47	4.92	325	0	18.76	34.47	4.92	24.70	325	0.00
10	18.76	34.29	5.26	338	10	18.76	34.29	5.26	24.57	338	0.03
30	18.77	34.27	5.12	340	20	18.76	34.28	5.17	24.56	339	0.07
54	18.78	34.28	5.17	339	30	18.77	34.27	5.12	24.55	340	0.10
63	18.77	34.27	5.27	340	50	18.78	34.28	5.15	24.56	339	0.17
73	17.71	34.09	5.29	328	75	17.35	34.05	5.30	24.72	323	0.25
83	15.18	33.81	5.30	293	100	13.00	33.64	5.20	25.36	262	0.33
112	11.86	33.58	4.82	246	150	11.80	34.09	1.60	25.94	207	0.44
131	10.94	33.69	3.92	222	200	11.67	34.54		26.31	172	0.54
149	11.74	34.06	1.69	208	250	10.60	34.56	0.75	26.52	152	0.62
172	12.12	34.47	0.92	185	300	9.87	34.57	0.60	26.66	139	0.70
196	12.14	34.63	0.70	174	400	8.39	34.43	0.36	26.80	126	0.83
240	10.86	34.56	0.78	156	500	7.30	34.47	0.30	26.98	109	0.95
312	9.72	34.57	0.55	137							
404	8.32	34.43	0.34	126							
527	7.03	34.48	0.29	105							

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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5801

STRANGER; January 24, 1958; 0919 GCT; 27°24'N, 114°40'W; sounding, 39 fm; wind, 020°, force 3; weather, clear; sea, moderate; wire angle, 00°.

123.37

0	20.08	34.57a)	4.84	351	0	20.08	34.57	4.84	24.43	351	0.00
10	20.11	34.60	5.00	349	10	20.11	34.60	5.00	24.45	349	0.04
30	19.74	34.52	4.98	346	20	19.98	34.57	4.99	24.46	348	0.07
49	18.99	34.42	4.86	334	30	19.74	34.52	4.98	24.48	346	0.10
					50	(18.94)	(34.42)		(24.62)	(333)	(0.16)

STRANGER; January 24, 1958; 1205 GCT; 27°16'N, 114°59'W; sounding, 1000 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 06°.

123.42

0	20.12	34.67	5.02	344	0	20.12	34.67	5.02	24.50	344	0.00
10	20.13	34.58	4.91	351	10	20.13	34.58	4.91	24.43	351	0.03
29	20.14	34.56	4.92	353	20	20.13	34.57	4.92	24.42	352	0.07
58	20.06	34.54	5.01	353	30	20.14	34.56	4.92	24.41	353	0.10
68	17.10	34.08	4.41	315	50	20.11	34.56	4.96	24.41	353	0.18
78	15.05	33.95	3.63	282	75	15.60	33.97	3.85	25.07	290	0.26
92	13.60	33.91	3.40	254	100	13.25	33.96	3.10	25.56	244	0.32
105	13.10	34.00	2.74	238	150	11.80	34.19	1.78	26.03	199	0.44
120	12.94	34.16	2.00	223	200	11.19	34.44	0.95	26.32	171	0.53
138	12.09	34.15	1.93	208	250	10.52	34.52	0.63	26.50	154	0.61
156	11.64	34.22	1.68	195	300	10.02	34.55	0.47	26.61	144	0.69
183	11.28	34.37	1.20	177	400	8.80	34.52	0.34	26.80	126	0.83
206	11.14	34.47	0.89	167	500	7.60	34.46	0.30	26.94	113	0.96
255	10.46	34.52	0.62	152							
333	9.68	34.56	0.36	137							
435	8.31	34.49	0.34	121							
568	6.94	34.45	0.24	105							

STRANGER; January 24, 1958; 1628, 1702 GCT; 27°00'N, 115°32'W; sounding, 2050 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 00°, 08°.

123.50

0	19.15	34.56	4.89	328	0	19.15	34.56	4.89	24.67	328	0.00
10	19.30	34.59	4.91	330	10	19.30	34.59	4.91	24.65	330	0.03
30	19.06	34.57	5.08	326	20	19.20	34.58	5.00	24.67	328	0.06
59	16.43	34.09	3.82	300	30	19.06	34.57	5.08	24.69	326	0.10
69	15.56	34.11	3.09	279	50	19.00	34.55	5.07	24.70	325	0.16
78	14.68b)	34.02	3.05	267	75	15.03	34.06	3.05	25.26	272	0.24
92	13.42	34.02	2.75	244	100	13.39	34.11	2.74	25.65	235	0.30
107	12.82	34.13	2.06	223	150	11.57	34.28	1.40	26.14	189	0.41
121	12.24	34.22	1.72	206	200	10.78	34.44	1.05	26.40	164	0.50
140	11.74	34.25	1.47	194	250	10.20	34.55	0.67	26.59	146	0.58
158	11.40	34.31	1.34	184	300	9.60	34.54	0.55	26.68	137	0.65
186	10.90	34.38	1.06	170	400	8.50	34.52	0.39	26.84	122	0.78
208	10.70	34.49	1.03	159	500	7.42	34.52	0.32	27.00	107	0.90
256	10.14	34.55	0.64	145							
335	9.20	34.52	0.51	132							
436	8.12	34.52	0.35	117							
571	6.76	34.51	0.29	98							

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, it is assumed that the salinity values are in the order listed.

b) Alternate value, 14.46°C, not used in interpolation.

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5801

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

123.60

STRANGER; January 24, 1958; 2159, 2225 GCT; 26°42'N, 116°10'W; sounding, 2100 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 09°, 10°.

0	18.70	34.43	5.25	327	0	18.70	34.43	5.25	24.68	327	0.00
10	18.70	34.43	5.26	327	10	18.70	34.43	5.26	24.68	327	0.03
29	18.56	34.41	5.23	325	20	18.62	34.42	5.25	24.69	326	0.06 07
53	18.56	34.41	5.17	325	30	18.56	34.41	5.23	24.70	325	0.10
62	18.54	34.42	5.24	322	50	18.56	34.41	5.20	24.70	325	0.16
72	18.54	34.40	5.24	326	75	18.53	34.40	5.24	24.70	325	0.24
82	18.52	34.40	5.25	325	100	14.87	33.94	3.90	25.21	277	0.32
96	14.89	33.86	4.52	284	150	12.10	34.10	2.13	25.90	212	0.56 44
110	14.82	34.16	2.50	260	200	11.41	34.47	0.85	26.31	172	0.66 54
130	12.90	34.03	2.51	232	250	10.74	34.55	0.60	26.49	155	0.75 62
148	12.18	34.09	2.18	214	300	9.86	34.52	0.47	26.63	142	0.83 70
171	12.22	34.37	1.13	194	400	8.32	34.43	0.40	26.80	126	0.96 84
					500	7.23	34.41	0.26	26.94	112	1.09 96
188	11.86	34.49	0.79	179							
234	11.12	34.56	0.64	161							
307	9.77	34.52	0.47	141							
400	8.32	34.43	0.40	125							
524	7.00	34.41	0.22	109							

123.70

STRANGER; January 25, 1958; 0312 GCT; 26°18.5'N, 116°54'W; sounding, 2050 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°.

0	18.38	34.07	5.22	345	0	18.38	34.07	5.22	24.49	345	0.00
10	18.38	34.05	5.15	347	10	18.38	34.05	5.15	24.47	347	0.03
29	18.28	34.06	5.17	344	20	18.32	34.06	5.16	24.49	345	0.07
58	18.34	34.04	5.28	347	30	18.29	34.06	5.18	24.50	344	0.10
68	18.35	34.05	5.18	346	50	18.33	34.04	5.25	24.48	346	0.17
78	18.39	34.06	4.51	346	75	18.37	34.06	4.65	24.48	346	0.26
92	18.45	34.09	4.21	346	100	17.74	34.00	3.99	24.59	336	0.35
106	15.78	33.78	3.65	308	150	12.63	34.18	1.90	25.85	216	0.59 48
120	13.68	33.66	2.76	274	200	11.98	34.50	0.87	26.22	181	0.69 58
139	12.22	33.73	2.37	242	250	10.50	34.46	0.89	26.46	158	0.78 67
156	12.54	34.23	1.87	210	300	9.63	34.45	0.70	26.60	144	0.86 75
184	12.18	34.42	1.20	189	400	8.42	34.47	0.40	26.81	124	1.00 89
206	11.92	34.51	0.84	178	500	7.30	34.45	0.34	26.96	110	1.13 91
255	10.38	34.45	0.90	156							
331	9.22	34.45	0.60	138							
433	8.04	34.47	0.33	119							
564	6.57	34.41	0.34	103							

127.34

STRANGER; January 24, 1958; 0500 GCT; 26°58'N, 114°10'W; sounding, 50 fm; wind, 020°, force 5; weather, clear; sea, rough; wire angle, 00°.

0	19.99	34.55	5.10	350	0	19.99	34.55	5.10	24.44	350	0.00
10	20.02	34.54	5.07	352	10	20.02	34.54	5.07	24.42	352	0.04
28	19.96	34.56	5.06	348	20	20.00	34.55	5.07	24.44	350	0.07
49	19.80	34.53	5.03	346	30	19.94	34.56	5.06	24.46	348	0.10
73	18.05	34.26	4.76	324	50	19.77	34.53	5.03	24.48	346	0.17
					75	(17.40)	(34.16)	(4.66)	(24.80)	(316)	(0.26)

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

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STRANGER; January 24, 1958; 0135 GCT; 26°45'N, 114°34'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 17°.

127.40

0	21.06	34.60	4.95	374	0	21.06	34.60	4.95	24.19	374	0.00
10	21.07	34.60	5.03	374	10	21.07	34.60	5.03	24.19	374	0.04
28	20.68	34.60	5.01	364	20	21.04	34.60	5.03	24.20	373	0.07
56	20.24	34.60	5.07	353	30	20.65	34.60	5.01	24.30	363	0.11
66	20.23	34.60	5.15	352	50	20.32	34.60	5.03	24.39	354	0.18
75	20.20	34.60	5.03	351	75	20.20	34.60	5.03	24.43	351	0.27
89	18.92	34.32	4.85	340	100	16.44	33.95	4.73	24.86	310	0.36
102	15.84	33.88	4.72	302	150	11.75	34.11	2.08	25.96	205	0.48
116	14.22	34.05	2.90	356	200	11.28	34.43	0.90	26.30	173	0.58
133	12.56	33.98	2.73	229	250	10.43	34.48	0.74	26.49	155	0.66
150	11.75	34.11	2.08	205	300	9.97	34.53	0.49	26.61	144	0.74
176	11.36	34.25	1.51	187	400	8.70	34.46	0.33	26.77	129	0.88
197	11.30	34.42	0.92	174	500	7.53	34.42	0.30	26.91	115	1.01
246	10.50	34.47	0.75	157							
321	9.80	34.53	0.39	141							
422	8.33	34.44	0.33	125							
553	7.01	34.42	0.28	109							

STRANGER; January 23, 1958; 2036 GCT; 26°23'N, 115°07'W; sounding, 2000 fm; wind, 020°, force 4; weather, clear; sea, rough; wire angle, 00°.

127.50

0	20.79	34.60	4.90	366	0	20.79	34.60	4.90	24.27	366	0.00
10	20.80	34.60	4.90	367	10	20.80	34.60	4.90	24.26	367	0.04
30	20.74	34.60	4.93	366	20	20.79	34.60	4.92	24.26	367	0.07
58	20.04	34.51	4.97	354	30	20.74	34.60	4.93	24.27	366	0.11
68	19.72	34.50	5.04	347	50	20.30	34.54	4.96	24.36	358	0.18
78	19.10	34.47	4.93	334	75	19.30	34.48	4.99	24.57	338	0.27
92	14.54	33.86	3.99	276	100	13.44	33.91	3.30	25.49	251	0.34
106	12.90	33.94	2.87	238	150	11.50	34.36	1.22	26.21	182	0.45
121	12.15	34.07	2.42	215	200	10.96	34.54	0.70	26.45	159	0.54
139	11.62	34.26	1.50	192	250	10.51	34.62	0.33	26.58	147	0.62
157	11.44	34.39	1.14	179	300	9.90	34.60	0.33	26.67	138	0.69
185	11.04	34.52	0.89	163	400	8.86	34.56	0.30	26.82	124	0.83
207	10.90	34.55	0.59	157	500	7.79	34.52	0.19	26.95	112	0.95
258	10.42	34.62	0.32	145							
336	9.41	34.57	0.38	132							
438	8.54	34.56	0.18	119							
573	6.68	34.43	0.22	103							

STRANGER; January 23, 1958; 1627 GCT; 26°04'N, 115°45'W; sounding, 2100 fm; wind, 340°, force 3; weather, clear; sea, very rough; wire angle, 04°.

127.60

0	21.08	34.58	4.93	376	0	21.08	34.58	4.93	24.17	376	0.00
10	21.09	34.61	5.03	374	10	21.09	34.61	5.03	24.19	374	0.04
30	21.07	34.60	4.97	374	20	21.08	34.61	5.00	24.19	374	0.08
59	19.82	34.61	4.85	341	30	21.07	34.60	4.97	24.19	374	0.11
69	17.59	34.12	4.37	323	50	21.04	34.60	4.97	24.21	372	0.19
78	16.06	33.94	4.30	302	75	16.47	33.99	4.30	24.88	308	0.27
92	14.01	34.02	2.93	255	100	13.09	34.05	2.36	25.66	234	0.34
107	12.80	34.07	2.24	227	150	11.90	34.41	1.10	26.17	186	0.45
121	12.50	34.23	1.68	210	200	11.17	34.53	0.58	26.40	164	0.54
140	12.17	34.38	1.18	192	250	10.42	34.56	0.53	26.56	148	0.62
158	11.72	34.42	1.06	181	300	9.60	34.54	0.46	26.68	137	0.69
185	11.07	34.45	0.90	168	400	8.38	34.50	0.24	26.84	122	0.82
208	11.20	34.57	0.52	161	500	7.29	34.46	0.21	26.97	109	0.95
258	10.26	34.56	0.54	146							
336	9.13	34.52	0.28	131							
440	7.96	34.48	0.24	116							
575	6.42	34.43	0.21	100							

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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	$\frac{1}{10} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$\frac{1}{10} \text{ cm/g}$	dyn. m

127.70

STRANGER; January 23, 1958; 1112 GCT; 25°44'N, 116°25'W; sounding, 2100 fm; wind, 360°, force 5; weather, clear; sea, very rough; wire angle, 12°.

0	18.01	33.95	5.42	346	0	18.01	33.95	5.42	24.48	346	0.00
9	18.02	33.93	5.43	348	10	18.02	33.93	5.44	24.46	348	0.03
28	18.00	33.94	5.44	346	20	18.01	33.93	5.44	24.47	347	0.07
57	18.46	34.23	5.34	335	30	18.00	33.95	5.44	24.48	346	0.10
67	18.66	34.27	5.30	337	50	18.15	34.07	5.41	24.54	340	0.17
76	18.72	34.33	5.34	335	75	18.71	34.33	5.33	24.60	335	0.26
91	15.27	33.68	5.62	304	100	14.48	33.68	5.64	25.09	288	0.34
105	14.10	33.69	5.67	280	150	10.63	33.55	4.70	25.73	227	0.46
117	12.90	33.64	5.07	260	200	9.46	33.96	2.97	26.25	178	0.57
136	11.59	33.55	5.08	243	250	8.34	34.06	2.70	26.50	154	0.65
153	10.50	33.55	4.61	225	300	7.87	34.15	2.01	26.65	140	0.73
179	10.11	33.88	3.10	194	400	6.88	34.26	0.96	26.87	119	0.86
200	9.46	33.96	2.97	178	500	6.20	34.34	0.50	27.03	104	0.98
248	8.37	34.05	2.71	155							
324	7.64	34.20	1.55	133							
423	6.62	34.27	0.82	115							
556	5.97	34.40	0.30	97							

130.30

STRANGER; January 22, 1958; 1141 GCT; 26°28.5'N, 113°30'W; sounding, 45 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 00°.

0	20.56	34.72	4.98	352	0	20.56	34.72	4.98	24.42	352	0.00
10	20.60	34.72	4.94	353	10	20.60	34.72	4.94	24.41	353	0.04
30	20.60	34.72	4.88	353	20	20.60	34.72	4.92	24.41	353	0.07
49	20.58	34.71	4.91	353	30	20.60	34.72	4.88	24.41	353	0.10
73	18.70	34.40	3.71	329	50	20.58	34.71	4.90	24.41	353	0.17
					75	(18.30)	(34.35)	(3.40)	(24.72)	(324)	(0.26)

130.35

STRANGER; January 22, 1958; 1425 GCT; 26°19'N, 113°49'W; sounding, 340 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 02°.

0	21.54	34.63	4.85	384	0	21.54	34.63	4.85	24.08	384	0.00
10	21.54	34.65	4.92	382	10	21.54	34.65	4.92	24.10	382	0.04
30	21.56	34.64	4.99	384	20	21.55	34.65	4.96	24.09	383	0.08
59	18.82	34.17	4.70	349	30	21.56	34.64	4.99	24.08	384	0.11
69	17.54	34.03	4.80	328	50	21.28	34.58	4.97	24.12	381	0.19
79	16.52	33.94	4.78	312	75	17.00	33.98	4.80	24.76	320	0.28
93	14.54	33.91	3.81	372	100	13.47	33.97	3.07	25.52	247	0.35
107	12.90	34.02	2.56	233	150	12.40	34.43	0.91	26.08	194	0.46
121	12.70	34.21	1.73	215	200	11.61	34.57	0.58	26.35	168	0.55
140	12.34	34.33	1.25	200	250	10.88	34.60	0.40	26.50	154	0.64
158	12.44	34.51	0.62	189	300	10.26	34.60	0.31	26.61	144	0.71
184	11.80	34.55	0.64	173	400	9.06	34.56	0.26	26.78	127	0.85
208	11.50	34.58	0.55	166	500	7.79	34.49	0.25	26.94	113	0.98
257	10.78	34.60	0.39	152							
334	9.88	34.59	0.27	138							
436	8.60	34.54	0.26	122							
566	7.00	34.45	0.25	106							

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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5801

STRANGER; January 22, 1958; 1741 GCT; 26°10'N, 114°07'W; sounding, 1300 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 10°.

130.40

0	21.46	34.67	4.76	380	0	21.46	34.67	4.76	24.13	380	0.00
10	21.22	34.63	4.76	376	10	21.22	34.63	4.76	24.16	376	0.04
29	21.42	34.62	4.87	382	20	21.34	34.62	4.78	24.14	379	0.08
58	20.82	34.56	4.97	371	30	21.42	34.61	4.90	24.10	382	0.11
67	20.41	34.59	4.80	357	50	21.01	34.57	4.96	24.18	375	0.19
77	20.34	34.60	4.90	355	75	20.37	34.60	4.88	24.38	356	0.28
91	16.58	33.96	4.53	312	100	14.80	33.82	4.31	25.12	285	0.36
105	14.02	33.78	4.15	272	150	11.88	34.18	1.77	25.98	203	0.48
119	12.93	33.91	3.03	242	200	11.30	34.52	0.75	26.36	167	0.58
137	12.52	34.14	2.01	217	250	10.80	34.60	0.50	26.52	153	0.66
155	11.72	34.18	1.70	199	300	10.08	34.58	0.40	26.63	142	0.74
183	11.28	34.43	0.98	173	400	8.70	34.50	0.35	26.79	126	0.88
205	11.32	34.54	0.70	165	500	7.51	34.45	0.30	26.94	113	1.00
255	10.72	34.60	0.50	151							
332	9.61	34.56	0.35	136							
433	8.25	34.47	0.36	122							
567	6.91	34.45	0.20	105							

STRANGER; January 22, 1958; 2230 GCT; 25°51'N, 114°45'W; sounding, 1950 fm; wind, 310°, force 6; weather, cloudy; sea, very rough; wire angle, 13°.

130.50

0	20.52	34.60	4.99	359	0	20.52	34.60	4.99	24.35	359	0.00
9	20.53	34.59	5.02	360	10	20.53	34.59	5.02	24.34	360	0.04
28	20.52	34.60	4.99	359	20	20.53	34.60	5.01	24.35	359	0.07
57	20.46	34.56	4.87	360	30	20.52	34.60	4.94	24.35	359	0.11
67	20.02	34.45	4.97	358	50	20.50	34.57	4.90	24.34	360	0.18
76	17.54	34.09	4.49	324	75	17.78	34.11	4.52	24.65	329	0.26
90	14.65	34.09	2.76	262	100	13.40	34.01	2.60	25.57	242	0.34
104	13.14	34.00	2.57	238	150	11.78	34.28	1.36	26.10	192	0.45
117	12.80	34.17	1.84	220	200	11.15	34.54	0.71	26.41	163	0.54
135	11.82	34.24	1.50	192	250	10.37	34.52	0.70	26.54	151	0.62
154	11.76	34.40	0.72	183	300	9.79	34.52	0.51	26.64	141	0.69
181	11.37	34.52	-	167	400	8.50	34.50	0.31	26.83	123	0.83
203	11.10	34.54	0.71	162	500	7.30	34.47	0.29	26.98	108	0.95
251	10.36	34.52	0.70	150							
327	9.52	34.52	0.43	137							
427	8.10	34.49	0.29	118							
558	6.68	34.46	0.29	101							

STRANGER; January 23, 1958; 0402 GCT; 25°32'N, 115°24'W; sounding, 2100 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 22°.

130.60

0	20.50	34.56	4.93	362	0	20.50	34.56	4.93	24.31	362	0.00
9	20.52	34.56	5.08	363	10	20.52	34.56	5.08	24.31	363	0.04
32	20.46	34.58	5.03	360	20	20.50	34.57	5.05	24.32	362	0.07
59	16.78	34.04	4.30	311	30	20.47	34.58	5.03	24.33	360	0.11
68	14.49	33.87	3.69	274	50	19.60	34.46	4.78	24.47	347	0.18
81	13.32	33.95	2.87	245	75	13.85	33.90	3.29	25.39	260	0.26
90	12.91	34.09	2.33	228	100	12.55	34.18	1.92	25.87	214	0.32
108	12.36	34.23	1.62	207	150	11.91	34.49	0.90	26.23	180	0.42
120	12.31	34.31	1.26	200	200	11.05	34.55	0.70	26.43	161	0.50
137	12.15	34.43	1.07	188	250	10.24	34.53	0.55	26.56	148	0.58
157	11.79	34.51	0.79	176	300	9.66	34.54	0.45	26.67	138	0.66
181	11.35	34.53	0.71	166	400	8.18	34.46	0.34	26.84	122	0.79
205	10.98	34.55	0.69	159	500	6.89	34.42	0.27	27.00	107	0.87
254	10.17	34.53	0.51	147							
330	9.34	34.54	0.40	133							
429	7.66	34.42	0.31	117							
567	6.26	34.43	0.24	98							

0.91

S10

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5801

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

133.25

STRANGER; January 22, 1958; 0705 GCT; 26°09'N, 112°51'W; sounding, 43 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 00°.

0	20.40	34.72	4.94	348	0	20.40	34.72	4.94	24.46	348	0.00
10	20.44	34.72	4.80	249	10	20.44	34.72	4.80	24.45	349	0.03
29	20.43	34.72	4.93	349	20	20.44	34.72	4.80	24.45	349	0.07
49	20.44	34.70	4.80	351	30	20.43	34.72	4.93	24.44	350	0.10
60	20.44	34.72	4.86	350	50	20.44	34.70	4.80	24.43	351	0.17

133.30

STRANGER; January 22, 1958; 0423 GCT; 25°59'N, 113°10'W; sounding, 95 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 08°.

0	20.70	34.60	5.00	364	0	20.70	34.60	5.00	24.29	364	0.00
10	20.72	34.63	5.03	363	10	20.72	34.63	5.03	24.30	363	0.04
29	20.74	34.60	4.99	365	20	20.73	34.62	5.01	24.29	364	0.07
47	20.42	34.61	4.90	357	30	20.73	34.60	4.96	24.28	365	0.11
72	18.21	34.66	3.63	299	50	20.37	34.61	4.90	24.39	355	0.18
96	14.38	34.33	3.04	239	75	17.64	34.63	3.46	25.09	288	0.26
119	13.74	34.44	1.02	218	100	14.03	34.32	2.98	25.67	233	0.33
147	13.10	34.53	0.40	199	150	(13.02)	(34.54)	(0.35)	(26.05)	(197)	(0.44)

133.40

STRANGER; January 21, 1958; 2323 GCT; 25°39'N, 113°48.5'W; sounding, 1750 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 03°.

0	21.86	34.61	4.73	394	0	21.86	34.61	4.73	23.98	394	0.00
10	21.86	34.61	4.91	394	10	21.86	34.61	4.91	23.98	394	0.04
29	21.64	34.60	4.87	389	20	21.79	34.61	4.89	24.00	392	0.08
39	21.27	34.54	4.81	383	30	21.61	34.60	4.86	24.04	388	0.12
49	20.91	34.51	4.83	376	50	20.90	34.51	4.85	24.17	376	0.19
58	20.62	34.53	5.02	367	75	18.73	34.20	4.64	24.50	344	0.28
69	19.81	34.34	4.85	361	100	14.20	33.90	3.62	25.32	266	0.36
82	16.29	33.96	4.33	306	150	12.09	34.37	1.13	26.11	191	0.48
96	14.44	33.87	3.91	274	200	10.93	34.52	0.78	26.44	160	0.56
111	13.71	34.14	2.21	239	250	10.60	34.59	0.42	26.55	149	0.64
135	12.84	34.42	1.03	202	300	9.82	34.55	0.33	26.65	140	0.72
161	11.54	34.34	1.18	184	400	8.75	34.52	0.29	26.81	125	0.86
193	11.00	34.51	0.80	162	500	7.56	34.48	0.25	26.96	111	0.98
239	10.76	34.60	0.46	152							
312	9.64	34.54	0.31	138							
406	8.72	34.52	0.29	125							
530	7.18	34.47	0.24	107							

133.50

STRANGER; January 21, 1958; 1847 GCT; 25°19'N, 114°26'W; sounding, 1400 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 06°.

0	20.46	34.52	4.59	364	0	20.46	34.52	4.59	24.29	364	0.00
10	20.48	34.50	4.67	366	10	20.48	34.50	4.67	24.27	366	0.04
29	20.15	34.52	4.67	356	20	20.30	34.51	4.67	24.32	361	0.07
53	20.05	34.52	4.85	354	30	20.14	34.52	4.69	24.38	356	0.11
63	17.84	34.22	4.61	322	50	20.06	34.52	4.83	24.40	354	0.18
72	15.10	33.92	3.89	284	75	14.54	33.89	3.76	25.24	274	0.26
82	13.92	33.86	3.65	264	100	12.10	33.77	3.41	25.62	238	0.32
95	12.54	33.78	3.43	243	150	11.40	34.34	1.30	26.21	182	0.43
109	11.80	33.77	3.39	231	200	10.73	34.46	0.80	26.42	162	0.52
128	11.50	33.98	2.46	210	250	10.10	34.51	0.52	26.56	148	0.60
146	11.41	34.30	1.39	185	300	9.68	34.55	0.21	26.68	138	0.67
169	11.00	34.38	1.21	172	400	8.77	34.55	0.21	26.83	123	0.81
191	10.79	34.43	0.88	164	500	7.70	34.49	0.20	26.94	113	0.93
237	10.25	34.49	0.63	151							
311	9.60	34.56	0.20	135							
404	8.75	34.55	0.21	123							
529	7.34	34.46	0.20	110							

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

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5801STRANGER; January 21, 1958; 1355 GCT; 24°57'N, 115°03'W; sounding, 2100 fm; wind, 340°, force 4;
weather, partly cloudy; sea, rough; wire angle, 04°.

133.60

0	20.38	34.51	4.94	362	0	20.38	34.51	4.94	24.31	362	0.00
10	20.40	34.52	5.12	363	10	20.40	34.52	5.12	24.30	363	0.04
30	20.05	34.51	5.16	354	20	20.29	34.52	5.14	24.33	360	0.07
54	17.00	34.04	4.68	316	30	20.05	34.51	5.16	24.40	354	0.11
63	14.79	33.85	4.09	282	50	19.20	34.40	5.08	24.54	341	0.18
73	13.97	33.96	3.01	257	75	13.82	33.97	2.95	25.44	255	0.25
83	13.22	33.99	2.66	241	100	12.43	34.08	2.20	25.81	220	0.31
97	12.58	34.07	2.27	222	150	11.50	34.43	0.96	26.26	175	0.41
111	11.90	34.14	1.91	205	200	11.18	34.60	0.48	26.46	158	0.50
129	12.04	34.34	1.15	193	250	10.11	34.55	0.54	26.60	145	0.58
148	11.52	34.43	0.99	177	300	9.36	34.50	0.42	26.69	136	0.65
171	11.22	34.49	0.75	168	400	8.02	34.47	0.30	26.88	118	0.78
195	11.21	34.60	0.48	160	500	7.06	34.44	0.25	26.99	108	0.90
239	10.36	34.56	0.55	147							
314	9.16	34.49	0.39	133							
407	7.94	34.47	0.30	117							
531	6.83	34.43	0.25	106							

STRANGER; January 20, 1958; 1423 GCT; 25°34'N, 112°19'W; sounding, 40 fm; wind, 090°, force 1;
weather, partly cloudy; sea, rough; wire angle, 00°.

137.23

0	21.18	34.72	4.87	368	0	21.18	34.72	4.87	24.25	368	0.00
9	21.19	34.74	4.92	366	10	21.18	34.74	4.91	24.27	366	0.04
29	20.88	34.68	4.85	364	20	21.00	34.69	4.86	24.29	365	0.07
48	20.83	34.70	4.86	361	30	20.88	34.68	4.85	24.30	363	0.11

STRANGER; January 20, 1958; 1745 GCT; 25°19'N, 112°46'W; sounding, 180 fm; wind, 020°, force 2;
weather, partly cloudy; sea, rough; wire angle, 00°.

137.30

0	21.23	34.61		377	0	21.23	34.61		24.15	377	0.00
10	21.22	34.63		376	10	21.22	34.63		24.17	376	0.04
27	21.20	34.60		379	20	21.21	34.61		24.15	377	0.08
49	20.88	34.60		369	30	21.18	34.60		24.16	377	0.11
73	18.86	34.36		336	50	20.86	34.60		24.24	368	0.19
96	15.80	34.38		265	75	18.70	34.36		24.62	332	0.28
119	14.09	34.38		229	100	15.40	34.38		25.43	256	0.35
155	12.19	34.56		179	150	12.39	34.53		26.17	185	0.46
191	11.60	34.65		163	200	11.51	34.65		26.43	161	0.55
235	11.20	34.65		155	250	11.10	34.65		26.50	154	0.63
282	10.94	34.65		151							

STRANGER; January 20, 1958; 2035 GCT; 25°10'N, 113°04'W; sounding, 800 fm; wind, 020°, force 3;
weather, partly cloudy; sea, rough; wire angle, 02°.

137.35

0	21.58	34.66	4.90	383	0	21.58	34.66	4.90	24.10	383	0.00
10	21.39	34.67	4.97	377	10	21.39	34.67	4.97	24.16	377	0.04
30	20.72	34.56	4.76	368	20	21.10	34.63	4.91	24.20	372	0.08
39	20.04	34.40	4.38	363	30	20.72	34.56	4.76	24.25	368	0.11
48	18.84	34.24	4.02	344	50	18.75	34.24	4.00	24.52	343	0.18
58	18.32	34.22	3.85	333	75	16.50	34.09	3.69	24.94	303	0.26
67	17.63	34.08	4.03	327	100	15.05	34.22	2.40	25.38	261	0.34
81	15.84	34.11	3.36	285	150	12.37	34.45	1.01	26.10	192	0.45
95	15.37	34.23	2.41	266	200	11.10	34.49	0.83	26.38	166	0.54
110	13.90	34.15	2.35	242	250	11.02	34.66	0.27	26.53	152	0.62
132	12.92	34.36	1.21	208	300	10.46	34.64	0.25	26.61	144	0.70
160	12.10	34.48	0.93	184	400	9.15	34.58	0.30	26.78	128	0.84
192	11.32	34.49	0.84	169	500	7.84	34.46	0.26	26.87	117	0.97
237	11.10	34.66	0.29	153							
311	10.32	34.63	0.25	142							
405	9.06	34.57	0.30	127							
531	7.42	34.42	0.25	114							

S10

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5801

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

137.40

STRANGER; January 20, 1958; 2330 GCT; 24°57'N, 113°29'W; sounding, 2000 fm; wind, 030°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	22.18	34.60	4.87	403	0	22.18	34.60	4.87	23.88	403	0.00
10	22.20	34.61a)	4.81	403	10	22.20	34.61	4.81	23.88	403	0.04
29	22.12	34.60	4.90	402	20	22.16	34.60	4.86	23.89	402	0.08
59	22.10	34.60	4.80	401	30	22.12	34.60	4.90	23.90	402	0.12
68	21.29	34.58	4.58	381	50	22.11	34.60	4.86	23.90	402	0.20
78	18.00	34.21	3.85	327	75	19.30	34.35	4.12	24.47	347	0.29
92	16.02	34.14a)	3.09	287	100	14.85	34.06	2.98	25.30	268	0.37
106	14.16	34.02	2.93	257	150	12.50	34.57	0.86	26.18	185	0.49
120	13.65	34.21	1.80	233	200	11.70	34.61	0.29	26.36	168	0.58
138	12.87	34.38	1.11	206	250	11.08	34.61	0.23	26.48	156	0.66 ⁵⁹
156	12.36	34.63	0.70	177	300	10.33	34.58	0.18	26.59	146	0.74
183	11.91	34.60	0.33	172	400	8.92	34.58	0.20	26.82	124	0.88
207	11.60	34.61	0.28	166	500	7.68	34.52	0.23	26.96	110	1.00
256	10.98	34.61	0.22	155							
335	9.82	34.57	0.16	139							
437	8.42	34.58b)	0.21	117							
570	6.88	34.43b)	0.25	106							

137.50

STRANGER; January 21, 1958; 0400 GCT; 24°41'N, 114°03'W; sounding, 1995 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°.

0	22.31	34.53	4.99	411	0	22.31	34.53	4.99	23.80	411	0.00
10	22.36	34.53	4.87	413	10	22.36	34.53	4.87	23.78	413	0.04
29	22.10	34.47	5.05	411	20	22.25	34.50	4.99	23.79	412	0.08
54	21.70	34.45	4.89	401	30	22.07	34.47	5.05	23.81	410	0.12
64	20.12	34.27	4.78	373	50	21.79	34.45	4.92	23.88	403	0.20
73	17.94	34.07	4.31	335	75	17.72	34.06	4.28	24.63	332	0.30
83	16.60	34.03	3.89	308	100	14.75	34.01	3.06	25.28	270	0.37
97	15.10	34.00	3.26	278	150	12.68	34.47	0.84	26.06	196	0.49
111	13.62	34.05	2.44	245	200	11.65	34.59	0.42	26.36	168	0.58
129	12.34	34.08	2.14	218	250	11.10	34.65	0.29	26.51	153	0.66
148	12.72	34.47	0.89	196	300	10.14	34.58	0.27	26.62	142	0.74
170	11.84	34.47	0.80	180	400	8.88	34.53	0.21	26.79	126	0.88
192	11.72	34.58	0.48	169	500	7.61	34.46	0.24	26.93	112	1.01
237	11.28	34.66	0.30	156							
311	9.94	34.57	0.27	140							
404	8.82	34.53	0.21	126							
529	7.22	34.44	0.27	111							

137.60

STRANGER; January 21, 1958; 0902 GCT; 24°23'N, 114°40'W; sounding, 2000 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 02°.

0	22.71	34.58b)	4.78	419	0	22.71	34.58	4.78	23.22	419	0.00
10	22.71	34.59	4.84	418	10	22.71	34.59	4.84	23.73	418	0.04
29	22.30	34.56	4.80	409	20	22.53	34.58	4.82	23.77	414	0.08
53	21.54	34.40	4.70	400	30	22.29	34.56	4.80	23.82	409	0.12
63	19.89	34.40b)	4.68	359	50	21.77	34.45	4.73	23.88	403	0.20
73	17.96	34.22	4.43	325	75	17.35	34.15	4.24	24.81	315	0.30
83	16.28	34.04	3.80	300	100	14.13	34.13	2.41	25.51	248	0.37
96	14.46	34.11	2.57	257	150	12.43	34.53	0.60	26.16	186	0.48
110	13.60	34.15	2.16	236	200	11.23	34.61	0.44	26.45	159	0.56
130	12.82	34.40	1.13	203	250	10.60	34.59	0.34	26.56	149	0.64
148	12.46	34.53	0.61	187	300	9.88	34.57	0.31	26.66	140	0.72
171	11.88	34.58	0.52	173	400	8.66	34.51	0.24	26.81	125	0.86
193	11.38	34.61	0.47	161	500	7.49	34.48	0.20	26.96	110	0.98
238	10.72	34.60	0.35	151							
312	9.73	34.56	0.30	137							
405	8.60	34.51	0.24	124							
529	7.09	34.48	0.20	105							

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	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m

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STRANGER; January 20, 1958; 0917 GCT; 24°49'N, 112°29'W; sounding, 65 fm; wind, 360°, force 3;
weather, clear; sea, rough; wire angle, 00°.

140.30

0	21.98	34.72	4.83	389	0	21.98	34.72	4.83	24.03	389	0.00
10	21.98	34.70	4.94	390	10	21.98	34.70	4.94	24.02	390	0.04
29	21.88	34.72	4.90	387	20	21.94	34.71	4.92	24.03	389	0.08
49	21.55	34.70	4.67	379	30	21.87	34.72	4.89	24.06	386	0.12
73	17.56	34.20	3.76	317	50	21.54	34.70	4.64	24.14	378	0.19
97	16.10	34.35	2.31	273	75	17.40	34.20	3.69	24.83	313	0.28
					100	(15.98)	(34.37)	(2.13)	(25.29)	(269)	(0.35)

STRANGER; January 20, 1958; 0703 GCT; 24°41'N, 112°47'W; sounding, 390 fm; wind, 300°, force 3;
weather, partly cloudy; sea, rough; wire angle, 06°.

140.35

0	21.84	34.66	4.81	390	0	21.84	34.66	4.81	24.02	390	0.00
10	21.84	34.64	4.84	392	10	21.84	34.64	4.84	24.00	392	0.04
29	21.09	34.62	4.92	373	20	21.50	34.63	4.90	24.09	383	0.08
39	20.94	34.62	4.91	369	30	21.08	34.62	4.92	24.20	373	0.12
48	20.88	34.62	4.94	370	50	20.85	34.62	4.94	24.27	366	0.19
58	20.67	34.61	4.62	363	75	18.63	34.30	4.01	24.60	335	0.28
67	19.46	34.39	4.31	349	100	15.75	34.20	2.88	25.21	277	0.36
82	18.04	34.25	3.79	325	150	13.17	34.45	0.94	25.95	206	0.48
96	16.08	34.22	2.98	283	200	11.82	34.52	0.71	26.27	176	0.58
110	15.00	34.13	2.67	267	250	11.48	34.68	0.28	26.46	158	0.66
133	13.92	34.40	1.16	224	300	10.09	34.61	0.30	26.66	139	0.74
160	12.76	34.47	0.85	197	400	8.63	34.54	0.25	26.84	122	0.87
191	11.86	34.51	0.75	177	500	7.58	34.48	0.22	26.95	112	1.00
237	11.74	34.69	0.28	161							
309	9.82	34.60	0.30	138							
402	8.62	34.70r	0.25	-							
529	7.34	34.47	0.21	109							

STRANGER; January 20, 1958; 0323 GCT; 24°29'N, 113°11'W; sounding, 1850 fm; wind, 310°, force 3;
weather, partly cloudy; sea, very rough; wire angle, 06°.

140.40

0	21.50	34.67	380	0	21.50	34.67	24.12	380	0.00
10	21.50	34.66	381	10	21.50	34.66	24.11	381	0.04
29	21.16	34.59	377	20	21.36	34.62	24.12	380	0.08
39	20.89	34.58	371	30	21.15	34.59	24.16	376	0.11
49	20.24	34.43	365	50	20.23	34.43	24.29	364	0.19
58	19.86	34.43	355	75	17.45	34.15	24.78	318	0.27
68	18.31	34.22	333	100	14.98	33.99	25.22	276	0.35
82	16.80	34.11	306	150	12.23	34.33	26.05	197	0.47
96	15.40	33.98	286	200	11.81	34.58	26.32	171	0.56
110	14.17	34.03	256	250	10.99	34.60	26.49	155	0.64
134	12.66	34.25	211	300	10.52	34.63	26.59	146	0.72
160	12.02	34.38	190	400	9.11	34.52	26.74	131	0.87
193	11.87	34.57	173	500	7.98	34.45	26.88	118	1.00
237	11.17	34.59	159						
310	10.42	34.63	144						
403	9.06	34.52	130						
526	7.68	34.46	115						

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5801

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

140.50

STRANGER; January 19, 1958; 2210 GCT; 24°07'N, 113°41'W; sounding, 1750 fm; wind, 310°, force 3; weather, partly cloudy; sea, high; wire angle, 00°.

0	22.32	34.70	4.77	401	0	22.32	34.70	4.77	23.90	401	0.00
10	22.28	34.70	4.81	399	10	22.28	34.70	4.81	23.92	399	0.04
30	22.17	34.72	4.80	393	20	22.23	34.71	4.80	23.96	396	0.08
59	22.16	34.70	4.75	395	30	22.17	34.72	4.80	23.98	393	0.12
69	22.18	34.72	4.76	398	50	22.16	34.71	4.75	23.98	394	0.20
78	22.14	34.70	4.84	394	75	22.17	34.71	4.80	23.98	394	0.30
92	20.25	34.42	4.11	366	100	17.72	34.14	3.90	24.70	325	0.39
107	16.54	34.04	3.83	305	150	12.01	34.23	1.57	26.01	201	0.52
122	14.65	34.12	2.60	260	200	11.16	34.51	0.69	26.39	165	0.61
140	12.32	34.16	1.93	212	250	10.67	34.61	0.38	26.55	149	0.69
158	11.85	34.30	1.35	193	300	10.00	34.62	0.31	26.67	138	0.77
186	11.36	34.47	0.84	171	400	8.72	34.56	0.27	26.84	122	0.90
208	11.04	34.53	0.59	162	500	7.71	34.54	0.21	26.98	109	1.02
258	10.60	34.63	0.36	147							
336	9.50	34.60	0.30	131							
440	8.27	34.54	0.25	117							
573	7.06	34.54	0.16	100							

140.60

STRANGER; January 19, 1958; 1758 GCT; 23°46'N, 114°16'W; sounding, 2000 fm; wind, 310°, force 3; weather, partly cloudy; sea, high; wire angle, 02°.

0	22.50	34.57	4.58	414	0	22.50	34.57	4.58	23.77	414	0.00
10	22.47	34.53	4.74	416	10	22.47	34.53	4.74	23.75	416	0.04
29	22.30	34.52	4.78	412	20	22.41	34.53	4.75	23.77	414	0.08
59	19.82	34.16	4.90	374	30	22.30	34.52	4.77	23.79	412	0.12
68	17.78	34.02	4.55	335	50	21.00	34.33	4.86	24.01	391	0.20
78	16.44	33.94	4.32	311	75	16.86	33.96	4.42	24.77	319	0.29
92	15.26	33.97	3.50	283	100	14.22	33.93	3.18	25.34	265	0.37
106	13.44	33.90	2.99	252	150	12.01	34.39	1.00	26.14	189	0.48
121	12.78	34.07	2.26	226	200	11.63	34.63	0.45	26.39	165	0.57
139	11.96	34.13	1.78	207	250	11.03	34.66	0.27	26.52	152	0.65
157	12.02	34.50	0.71	182	300	10.37	34.64	0.21	26.63	142	0.73
185	11.90	34.60	0.52	171	400	8.88	34.58	0.29	26.83	123	0.87
207	11.52	34.64	0.41	162	500	7.50	34.51	0.30	26.98	108	0.99
257	10.98	34.66	0.23	150							
335	9.84	34.62	0.20	135							
439	8.28	34.55	0.32	116							
572	6.66	34.47a)	0.24	100							

143.26

STRANGER; January 18, 1958; 1741 GCT; 24°19'N, 111°48'W; sounding, 40 fm; wind, calm; weather, partly cloudy; sea, rough; wire angle, 00°.

0	22.54	34.70		406	0	22.54	34.70		23.85	406	0.00
10	22.54	34.69		406	10	22.54	34.69		23.85	406	0.04
29	22.44	34.72		402	20	22.50	34.71		23.87	404	0.08
49	22.02	34.69		393	30	22.43	34.72		23.90	401	0.12
73	19.84	34.49		350	50	21.98	34.68		24.00	392	0.20
					75	(19.62)	(34.47)		(24.48)	(346)	(0.29)

143.30

STRANGER; January 18, 1958; 1956 GCT; 24°11'N, 112°03'W; sounding, 120 fm; wind, 250°, force 3; weather, partly cloudy; sea, very rough; wire angle, 00°.

0	22.43	34.58	4.79	412	0	22.43	34.58	4.79	23.80	412	0.00
10	22.23	34.64	4.82	402	10	22.23	34.64	4.82	23.90	402	0.04
29	21.98	34.69	4.79	391	20	22.10	34.67	4.81	23.96	396	0.08
49	21.26	34.86	4.67	360	30	21.97	34.69	4.78	24.02	390	0.12
73	16.68	34.13	3.44	302	50	21.21	34.86	4.66	24.34	359	0.19
97	14.90	34.25	2.12	255	75	16.58	34.13	3.40	24.97	300	0.28
120	13.72	34.38	1.29	222	100	14.73	34.27	2.00	25.49	250	0.35
157	12.74	34.54	0.61	191	150	12.87	34.51	0.73	26.06	196	0.46
195	12.24	34.61	0.45	177	200	(12.21)	(34.62)	(0.44)	(26.27)	(176)	(0.55)

a) Possible evaporation; value falls on property curve.

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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5801

STRANGER; January 18, 1958; 2258, 2325 GCT; 24°01'N, 112°22'W; sounding, 1400 fm; wind, 290°, force 4; weather, cloudy; sea, very rough; wire angle, 24°, 35°.

143.35

0	22.28	34.60	4.79	406	0	22.28	34.60	4.79	23.85	406	0.00
8	22.16	34.64	4.94	400	10	22.13	34.64	4.94	23.93	399	0.04
27	21.96	34.67	4.94	392	20	22.02	34.66	4.94	23.97	395	0.08
54	21.84	34.69	4.97	388	30	21.95	34.67	4.95	24.01	391	0.12
62	21.72	34.65	4.85	387	50	21.86	34.69	4.96	24.03	389	0.20
71	21.48	34.67	4.87	380	75	21.37	34.66	4.85	24.15	377	0.29
83	20.66	34.52	4.54	370	100	16.48	34.14	3.56	25.00	297	0.38
94	18.26	34.23	4.21	331	150	12.99	34.44	1.01	25.99	203	0.50
106	15.32	34.10	2.92	275	200	11.86	34.60	0.42	26.33	170	0.60
121	13.82	34.22	2.02	236	250	11.31	34.62	0.32	26.44	160	0.68
137	13.28	34.34	1.45	216	300	10.58	34.61	0.30	26.56	148	0.76
161	12.72	34.51	0.73	193	400	9.02	34.54	0.25	26.78	128	0.90
180	12.06	34.57	0.56	177	500	7.81	34.51	0.25	26.94	113	1.03
224	11.63	34.62	0.35	166							
294	10.64	34.61	0.30	149							
379	9.32	34.55	0.26	132							
504	7.74	34.51	0.25	111							

STRANGER; January 19, 1958; 0212 GCT; 23°51'N, 112°47'W; sounding, 1700 fm; wind, 230°, force 2; weather, partly cloudy; sea, very rough; wire angle, 05°.

143.40

0	23.12	34.62	4.78	427	0	23.12	34.62	4.78	23.63	427	0.00
10	23.12	34.61	4.89	428	10	23.12	34.61	4.89	23.62	428	0.04
29	23.12	34.61	4.85	428	20	23.12	34.61	4.87	23.62	428	0.08
58	22.98	34.61	4.87	423	30	23.11	34.61	4.85	23.63	427	0.13
67	22.02	34.44	4.93	411	50	23.04	34.61	4.86	23.64	426	0.21
77	20.90	34.36	4.83	387	75	21.10	34.37	4.85	24.01	391	0.32
91	17.52	34.11	3.86	322	100	15.96	34.08	3.29	25.06	290	0.40
104	15.44	34.08	3.09	280	150	12.69	34.32	1.40	25.95	206	0.52
118	13.78	34.18	2.07	237	200	11.90	34.65	0.35	26.36	168	0.62
136	12.84	34.20	1.81	218	250	11.21	34.68	0.17	26.51	153	0.70
154	12.62	34.41	1.16	199	300	10.42	34.65	0.16	26.63	142	0.78
181	12.23	34.60	0.46	178	400	8.90	34.55	0.17	26.81	125	0.92
203	11.84	34.66	0.34	166	500	7.67	34.51	0.24	26.95	111	1.04
253	11.19	34.68	0.17	153							
330	9.92	34.62	0.16	126							
435	8.42	34.53	0.19	120							
566	6.95	34.49	0.31	102							

STRANGER; January 19, 1958; 0702 GCT; 23°31'N, 113°15'W; sounding, 1900 fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 03°.

143.50

0	23.32	34.67		429	0	23.32	34.67		23.61	429	0.00
10	23.32	34.65		431	10	23.32	34.65		23.59	431	0.04
29	23.33	34.65		431	20	23.32	34.65		23.59	431	0.08
59	23.23	34.68		426	30	23.33	34.65		23.59	431	0.13
68	20.72	34.35		383	50	23.33	34.65		23.59	431	0.21
78	17.63	34.05		330	75	18.29	34.11		24.54	340	0.31
92	15.38	33.96		286	100	14.00	34.97		25.40	258	0.39
107	13.26	33.98		242	150	11.97	34.38		26.13	189	0.50
120	12.52	34.16		215	200	11.56	34.66		26.43	161	0.59
139	12.14	34.34		195	250	10.82	34.64		26.55	150	0.67
157	11.86	34.42		184	300	10.03	34.61		26.66	139	0.74
185	11.62	34.56		170	400	8.78	34.57		26.84	122	0.88
207	11.56	34.67		160	500	7.80	34.54		26.97	110	1.00
258	10.66	34.63		148							
336	9.53	34.60		131							
441	8.34	34.55		117							
573	7.16	34.53		102							

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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

143.60

STRANGER; January 19, 1958; 1235 GCT; 23°13'N, 113°51'W; sounding, 2000 fm; wind, 310°, force 4; weather, partly cloudy; sea, very rough; wire angle, 00°.

0	22.76	34.35	4.62	436	0	22.76	34.35	4.62	23.54	436	0.00
10	22.77	34.34	4.84	437	10	22.77	34.34	4.84	23.53	437	0.04
30	22.76	34.34	4.84	437	20	22.76	34.34	4.84	23.53	437	0.09
59	22.40	34.52	4.43	415	30	22.76	34.34	4.84	23.53	437	0.13
68	21.08	34.42	3.84	387	50	22.70	34.35	4.84	23.55	435	0.22
78	19.55	34.36	3.40	352	75	20.20	34.38	3.56	24.26	367	0.32
92	17.52	34.30	2.95	309	100	16.65	34.35	2.48	25.12	286	0.40
106	16.09	34.38a)	2.11	271	150	13.20	34.54	0.78	26.02	200	0.52
120	14.93	34.45	1.39	241	200	12.10	34.68	0.35	26.34	169	0.62
139	13.84	34.54	0.89	213	250	11.42	34.68	0.18	26.47	157	0.70
157	12.88	34.54	0.73	194	300	10.69	34.66	0.18	26.58	146	0.78
184	12.34	34.65	0.51	176	400	9.35	34.61	0.30	26.77	128	0.92
207	12.00	34.69	0.30	167	500	8.21	34.56	0.31	26.91	115	1.05
257	11.37	34.68	0.16	156							
337	10.14	34.64	0.20	139							
441	8.88	34.59	0.35	122							
574	7.27	34.51	0.23	105							

147.20

STRANGER; January 17, 1958; 1317 GCT; 24°07'N, 111°20'W; sounding, 60 fm; wind, 040°, force 4; weather, cloudy; sea, very rough; wire angle, 00°.

0	22.36	34.69	4.84	401	0	22.36	34.69	4.84	23.90	401	0.00
10	22.36	34.69	4.89	401	10	22.36	34.69	4.89	23.90	401	0.04
29	22.24	34.71	4.73	397	20	22.30	34.70	4.81	23.92	400	0.08
49	21.79	34.70	4.58	385	30	22.23	34.71	4.72	23.96	396	0.12
74	20.54	34.60	3.41	360	50	21.77	34.70	4.55	24.07	384	0.20
98	17.66	34.42	2.58	303	75	20.49	34.60	3.37	24.35	359	0.29
					100	(17.40)	(34.41)	(2.52)	(24.99)	(298)	(0.38)

147.25

STRANGER; January 17, 1958; 1042 GCT; 23°56'N, 111°35'W; sounding, 175 fm; wind, 050°, force 4; weather, overcast; sea, high; wire angle, 00°.

0	22.17	34.67	4.42	398	0	22.17	34.67	4.42	23.94	398	0.00
10	22.17	34.67	4.91	398	10	22.17	34.67	4.91	23.94	398	0.04
29	22.20	34.68	4.96	398	20	22.18	34.67	4.92	23.94	398	0.08
48	21.97	34.72	4.84	388	30	22.20	34.69	4.95	23.95	397	0.12
72	19.99	34.44	4.30	357	50	21.90	34.72	4.83	24.04	388	0.20
97	15.44	34.18	2.79	272	75	19.22	34.38	4.11	24.49	345	0.29
120	14.24	34.35	1.73	235	100	15.22	34.19	2.62	25.32	266	0.37
156	12.78	34.54	0.72	192	150	13.00	34.51	0.88	26.03	199	0.48
193	12.04	34.63	0.43	172	200	11.96	34.63	0.40	26.33	170	0.58
240	11.36	34.65	0.26	158	250	(11.20)	(34.65)	(0.23)	(26.49)	(155)	(0.66)

147.30

STRANGER; January 17, 1958; 0755 GCT; 23°43'N, 111°52'W; sounding, 235 fm; wind, 100°, force 4; weather, cloudy; sea, moderate; wire angle, 12°.

0	22.48	34.58	4.64	413	0	22.48	34.58	4.64	23.78	413	0.00
9	22.49	34.60	4.77	413	10	22.48	34.60	4.78	23.78	413	0.04
28	22.20	34.65a)	4.86	400	20	22.38	34.64	4.81	23.86	406	0.08
47	21.53	34.56	4.76	389	30	22.19	34.65	4.86	23.93	399	0.12
72	19.38	34.31	4.24	352	50	21.35	34.54	4.72	24.06	386	0.20
95	15.57b)	34.01	3.34	289	75	18.87	34.26	4.13	24.50	344	0.29
118	14.23	34.22	2.12	244	100	15.25	34.02	3.12	25.17	280	0.37
154	12.80	34.57	0.53	190	150	12.93	34.54	0.65	26.08	194	0.49
191	12.34	34.61	0.40	179	200	12.20	34.62	0.37	26.28	175	0.58
237	11.38	34.67	0.29	157	250	11.16	34.66	0.28	26.51	153	0.67
285	10.59	34.64	0.26	145	300	10.39	34.63	0.24	26.62	143	0.75
382	9.46	34.59	0.17	131							

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

b) Mean value of 15.49 and 15.64°C.

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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5801

STRANGER; January 17, 1958; 0248 GCT; 23°18'N, 112°27'W; sounding, 1800 fm; wind, 110°, force 2; weather, rain; sea, rough; wire angle, 14°.

147.40

0	24.02	34.55		458	0	24.02	34.55		23.31	458	0.00
10	24.03	34.56		457	10	24.03	34.56		23.32	457	0.04
28	23.78	34.60		446	20	23.87	34.59		23.39	450	0.09
43	23.32	34.65		431	30	23.77	34.60		23.44	445	0.14
52	22.97	34.65		420	50	23.02	34.65		23.69	422	0.22
61	21.72	34.57		393	75	20.75	34.50		24.21	372	0.32
70	21.20	34.54		381	100	16.84	34.30		25.03	294	0.41
88	18.96	34.34		339	150	12.40	34.37		26.05	198	0.53
101	16.64	34.30		289	200	11.49	34.62		26.40	164	0.62
115	13.41	33.95		248	250	11.00	34.65		26.52	152	0.70
136	12.83	34.32		209	300	10.48	34.64		26.61	144	0.77
161	12.04	34.40		189	400	9.38	34.60		26.77	129	0.92
195	11.57	34.61		164	500	8.02	34.54		26.94	113	1.05
241	11.08	34.65		154							
316	10.30	34.64		141							
409	9.25	34.60		127							
543	7.28	34.51		106							

STRANGER; January 16, 1958; 0900 GCT; 23°23'N, 110°39'W; sounding, 100 fm; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 00°.

150.19

0	22.04	34.72		390	0	22.04	34.72		24.02	390	0.00
10	22.06	34.77		388	10	22.06	34.77		24.04	388	0.04
30	22.04	34.72		390	20	22.06	34.75		24.03	389	0.08
49	20.58	34.52		367	30	22.04	34.72		24.02	390	0.12
73	17.63	34.55		295	50	20.43	34.52		24.30	364	0.19
97	15.46	34.52		247	75	17.41	34.55		25.07	290	0.27
121	14.08	34.63		211	100	15.46	34.60		25.58	242	0.34
150	13.49	34.63		200	150	13.49	34.63		26.02	200	0.45

STRANGER; January 16, 1958; 1232 GCT; 23°12'N, 111°02'W; sounding, 650 fm; wind, 040°, force 4; weather, overcast; sea, moderate; wire angle, 10°.

150.25

0	22.28	34.71	4.65	398	0	22.28	34.71	4.65	23.94	398	0.00
10	22.29	34.70	4.70	399	10	22.29	34.70	4.70	23.93	399	0.04
29	22.30	34.71	4.78	398	20	22.29	34.70	4.74	23.93	399	0.08
43	22.24	34.70	4.77	397	30	22.30	34.71	4.78	23.94	398	0.12
53	20.88	34.56	3.70	372	50	22.02	34.68	4.64	23.99	393	0.20
62	19.77	34.51	3.36	347	75	19.00	34.52	2.71	24.67	328	0.29
72	19.28	34.53	2.78	334	100	15.78	34.39	1.87	25.35	264	0.36
90	16.52	34.28	2.69	288	150	13.55	34.63	0.63	26.01	200	0.48
105	15.45	34.45	1.46	252	200	12.19	34.66	0.37	26.31	172	0.57
120	14.37	34.54	1.05	223	250	11.49	34.70	0.20	26.47	157	0.66
142	13.86	34.63	0.73	207	300	10.73	34.66	0.17	26.58	146	0.74
168	12.66	34.62	0.49	184	400	9.25	34.57	0.16	26.76	129	0.88
204	12.12	34.67	0.36	170	500	8.07	34.55	0.16	26.94	113	1.01
253	11.45	34.70	0.20	156							
331	10.26	34.63	0.16	141							
426	8.87	34.56	0.16	124							
564	7.44	34.55	0.16	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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

150.30

STRANGER; January 16, 1958; 1550 GCT; 23°03'N, 111°21'W; sounding, 1550 fm; wind, 040°, force 4; weather, drizzle; sea, moderate; wire angle, 00°.

0	23.62	34.55	4.57	446	0	23.62	34.55	4.57	23.43	446	0.00
9	23.62	34.54	4.78	446	10	23.62	34.54	4.79	23.43	446	0.04
33	22.74	34.70	5.00	411	20	22.84	34.69	5.00	23.77	414	0.09
62	22.40	34.68	4.63	403	30	22.77	34.70	5.00	23.79	412	0.13
72	20.67	34.48	4.02	373	50	22.58	34.69	4.90	23.84	407	0.21
86	17.87	34.28	3.39	318	75	19.67	34.40	3.78	24.41	353	0.30
96	16.97	34.31	2.72	295	100	16.65	34.35	2.39	25.11	286	0.38
114	15.50	34.52	1.27	248	150	13.40	34.61	0.52	26.03	199	0.51
128	14.48	34.60	0.87	221	200	11.58	34.59	0.43	26.37	166	0.60
146	13.62	34.61	0.56	203	250	11.13	34.69	0.26	26.53	152	0.68
169	12.44	34.61	0.43	181	300	10.60	34.67	0.26	26.62	143	0.76
196	11.62	34.58	0.48	168	400	8.92	34.54	0.22	26.79	126	0.90
224	11.37	34.69	0.26	155	500	7.70	34.53	0.15	26.96	110	1.02
280	10.83	34.69	0.27	146	600	6.84	34.51	0.14	27.08	99	1.14
377	9.24	34.55	0.24	131							
472	8.01	34.53	0.16	114							
617	6.72	34.51	0.13	97							

150.40

STRANGER; January 16, 1958; 2059 GCT; 22°44'N, 112°00'W; sounding, 1800 fm; wind, 050°, force 6; weather, cloudy; sea, very rough; wire angle, 32°.

0	22.68	34.73	4.88	407	0	22.68	34.73	4.88	23.84	407	0.00
8	22.66	34.69	4.85	410	10	22.66	34.70	4.86	23.82	409	0.04
29	22.54	34.76	4.91	401	20	22.62	34.75	4.88	23.86	405	0.08
54	22.32	34.71	4.91	399	30	22.53	34.76	4.91	23.91	401	0.12
62	22.04	34.72	-	391	50	22.36	34.72	4.91	23.92	400	0.20
74	21.94	34.75	4.76	386	75	21.93	34.75	4.76	24.06	386	0.30
81	21.60	34.71	4.86	380	100	20.73	34.59	4.34	24.28	365	0.40
96	21.06	34.63	4.59	371	150	13.67	34.58	0.83	25.95	206	0.53
106	17.84	34.33	3.09	314	200	12.29	34.76	0.35	26.36	167	0.62
120	15.02	34.29	2.78	255	250	11.15	34.70	0.31	26.54	151	0.71
136	14.17	34.50	1.19	222	300	10.22	34.63	0.30	26.64	141	0.78
155	13.48	34.61	0.71	200	400	9.10	34.60	0.20	26.80	125	0.92
175	12.90	34.70	0.53	183	500	(7.61)	(34.55)	(0.16)	(27.00)	(107)	(1.04)
215	11.97	34.77	0.29	160							
276	10.60	34.65	0.33	145							
357	9.65	34.61	0.26	132							
482	7.94	34.56	0.16	111							

153.16

STRANGER; January 16, 1958; 0446 GCT; 22°55'N, 110°07'W; sounding, 280 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 02°.

0	22.67	34.68	4.92	411	0	22.67	34.68	4.92	23.80	411	0.00
10	22.56	34.70	4.85	406	10	22.56	34.70	4.85	23.85	406	0.04
30	22.54	34.70	4.81	405	20	22.55	34.70	4.83	23.85	406	0.08
49	22.30	34.67	4.49	401	30	22.54	34.70	4.81	23.86	405	0.12
73	19.81	34.51	3.22	348	50	22.29	34.67	4.48	23.90	401	0.20
97	16.44	34.49	1.74	271	75	19.51	34.50	3.11	24.52	342	0.30
120	14.70	34.52	0.98	231	100	16.19	34.49	1.60	25.34	265	0.37
159	13.55	34.63	0.50	200	150	13.79	34.61	0.60	25.94	207	0.49
195	12.68	34.87u	0.34	-	200	12.60	34.68	0.33	26.25	178	0.59
242	11.83	34.71	0.23	162	250	11.70	34.71	0.22	26.44	160	0.68
289	11.23	34.70	0.19	152	300	11.10	34.69	0.17	26.54	150	0.76
390	9.81	34.60	0.16	136	400	(9.65)	(34.59)	(0.16)	(26.71)	(134)	(0.90)

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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STRANGER; January 16, 1958; 0105, 0150 GCT; 22°47'N, 110°22'W; sounding, 750 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 12°, 16°.

153.20

0	23.74	34.58	4.79	447	0	23.74	34.58	4.79	23.42	447	0.00
9	23.42	34.65	4.76	433	10	23.40	34.65	4.74	23.58	432	0.04
28	22.54	34.60	4.23	413	20	22.90	34.62	4.48	23.69	421	0.09
38	22.51	34.69	4.13	406	30	22.53	34.60	4.20	23.78	412	0.13
48	21.60	34.63	4.05	386	50	21.55	34.63	4.02	24.08	384	0.21
57	21.42	34.65	3.98	379	75	19.89	34.51	3.81	24.43	351	0.30
67	20.76	34.59	3.95	367	100	16.30	34.33	2.29	25.19	279	0.38
81	18.88	34.42	3.53	332	150	13.24	34.56	0.90	26.03	199	0.50
94	17.08	34.27	2.89	301	200	12.31	34.72	0.23	26.32	171	0.59
108	15.54	34.45	1.53	254	250	11.47	34.68	0.18	26.45	158	0.68
130	13.52	34.44	0.95	214	300	10.94	34.67	0.23	26.55	150	0.76
156	13.20	34.60	0.89	196	400	9.55	34.60	0.16	26.73	132	0.90
					500	8.10	34.52	0.20	26.90	116	1.03
188	12.53	34.72	0.30	174							
232	11.74	34.68	0.16	162							
304	10.87	34.67	0.26	149							
394	9.62	34.60	0.16	133							
515	7.90	34.51	0.21	114							

STRANGER; January 15, 1958; 1857 GCT; 22°27'N, 110°59'W; sounding, 1600 fm; wind, 040°, force 4; weather, cloudy; sea, rough; wire angle, 03°.

153.30

0	24.44	34.49	4.71	473	0	24.44	34.49	4.71	23.15	473	0.00
10	24.44	34.50	4.73	473	10	24.44	34.50	4.73	23.15	473	0.05
28	24.36	34.49	4.74	271	20	24.40	34.49	4.73	23.16	472	0.09
44	24.27	34.52	4.67	467	30	24.35	34.49	4.74	23.18	470	0.14
53	24.20	34.56	4.67	461	50	24.23	34.55	4.67	23.26	463	0.24
63	22.48	34.45	3.65	422	75	19.02	34.39	3.14	24.57	338	0.34
71	20.12	34.42	3.37	362	100	16.19	34.43	1.77	25.28	270	0.41
90	16.86	34.31	2.49	293	150	13.30	34.60	0.49	26.05	198	0.53
104	15.83	34.45	1.50	260	200	11.73	34.65	0.26	26.39	165	0.62
117	13.28	34.13	2.19	232	250	11.06	34.69	0.24	26.54	151	0.70
140	13.58	34.60	0.63	203	300	10.43	34.67	0.20	26.64	141	0.78
168	12.54	34.60	0.41	183	400	8.97	34.55	0.20	26.80	126	0.92
204	11.62	34.65	0.25	163	500	7.61	34.51	0.20	26.97	110	1.04
256	11.00	34.69	0.24	149							
334	9.86	34.64	0.18	134							
433	8.41	34.51	0.24	121							
571	6.97	34.51	0.16	101							

STRANGER; January 15, 1958; 1324 GCT; 22°06'N, 111°36'W; sounding, 1800 fm; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

153.40

0	24.08	34.54	460	0	24.08	34.54	23.28	460	0.00
10	24.08	34.56	459	10	24.08	34.56	23.30	459	0.04
29	24.07	34.61	455	20	24.07	34.58	23.32	457	0.09
39	24.04	34.57	456	30	24.05	34.60	23.34	455	0.14
49	23.64	34.56	446	50	23.53	34.56	23.46	443	0.23
58	22.60	34.52	420	75	19.53	34.52	24.52	342	0.32
68	20.39	34.45	367	100	17.35	34.61	25.15	282	0.40
82	18.84	34.58	320	150	13.94	34.79	26.06	196	0.52
96	17.70	34.60	391	200	12.05	34.81	26.46	158	0.61
111	16.28	34.65	256	250	10.89	34.74	26.62	143	0.69
134	14.64	34.74	214	300	9.94	34.68	26.73	132	0.76
161	13.43	34.81	185	400	8.28	34.59	26.91	115	0.89
193	12.24	34.82	161	500	6.97	34.55	27.09	98	1.00
239	11.12	34.76	146						
313	9.68	34.66	130						
406	8.28	34.58	114						
530	6.53	34.54	93						

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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

153.50

STRANGER; January 15, 1958; 0750 GCT; 21°46'N, 112°14'W; sounding, 1800 fm; wind, 360°, force 1; weather, cloudy; sea, moderate; wire angle, 06°.

0	23.62	34.63	4.64	440	0	23.62	34.63	4.64	23.50	440	0.00
10	23.57	34.64	4.81	438	10	23.57	34.64	4.81	23.52	438	0.04
29	23.48	34.63	4.73	437	20	23.54	34.64	4.81	23.52	438	0.09
39	22.32	34.51	4.31	413	30	23.46	34.62	4.72	23.54	436	0.13
48	21.06	34.45	3.64	384	50	20.95	34.45	3.60	24.11	382	0.21
58	20.08	34.51	3.33	355	75	17.33	34.41	2.46	25.00	297	0.30
67	18.70	34.47	2.81	324	100	14.91	34.34	1.63	25.50	249	0.37
82	16.38	34.36	2.22	278	150	11.82	34.40	0.90	26.18	184	0.48
96	15.20	34.33	1.78	256	200	11.30	34.69	0.42	26.50	154	0.56
110	14.15	34.42	1.26	227	250	10.78	34.66	0.27	26.57	148	0.64
132	12.26	34.31	1.23	200	300	10.22	34.68	0.21	26.68	137	0.71
160	11.62	34.50	0.72	174	400	8.62	34.57	0.33	26.86	120	0.85
193	11.38	34.69	0.48	156	500	7.47	34.53	0.34	27.00	107	0.97
239	10.88	34.66	0.28	150							
312	10.06	34.68	0.20	134							
407	8.52	34.56	0.34	119							
530	7.20	34.52	0.34	103							

157.10

STRANGER; January 14, 1958; 0615 GCT; 22°33'N, 109°23'W; sounding, 1600 fm; wind, 040°, force 3; weather, clear; sea, moderate; wire angle 13°.

0	24.68	34.45a)	4.64	484	0	24.68	34.45	4.64	23.04	484	0.00
10	24.69	34.44	4.68	484	10	24.69	34.44	4.68	23.04	484	0.05
29	24.22	34.47	4.62	469	20	24.67	34.44	4.68	23.04	484	0.10
43	23.30	34.58	4.67	435	30	24.21	34.47	4.62	23.20	468	0.14
52	22.71	34.60	4.31	418	50	22.78	34.60	4.34	23.71	420	0.23
62	22.42	34.65	4.33	406	75	21.63	34.69	3.78	24.11	382	0.33
71	21.98	34.70	4.00	390	100	16.90	34.59	1.97	25.25	273	0.42
89	18.81	34.57	2.64	320	150	13.81	34.74	0.52	26.05	197	0.53
103	16.36	34.60	1.74	261	200	12.49	34.81	0.36	26.36	167	0.63
116	15.20	34.58	1.09	237	250	11.46	34.77	0.21	26.54	151	0.71
137	14.21	34.69	0.60	209	300	10.70	34.74	0.09	26.64	141	0.78
162	13.46	34.78	0.47	188	400	9.19	34.59	0.12	26.79	127	0.92
196	12.60	34.81	0.39	169	500	7.85	34.53	0.11	26.95	112	1.05
242	11.61	34.78	0.25	153							
316	10.47	34.72	0.08	138							
408	9.05	34.58	0.12	126							
544	7.28	34.52	0.09	104							

157.20

STRANGER; January 14, 1958; 1109 GCT; 22°13'N, 110°00'W; sounding, 1700 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 15°.

0	24.91	34.50	4.71	486	0	24.91	34.50	4.71	23.01	486	0.00
9	24.94	34.50	4.64	487	10	24.94	34.50	4.64	23.00	487	0.05
28	24.85	34.47	4.65	487	20	24.93	34.48	4.64	23.00	487	0.10
42	24.44	34.60	4.67	466	30	24.84	34.47	4.66	23.01	486	0.15
51	24.12	34.69	4.36	450	50	24.15	34.69	4.39	23.38	451	0.24
60	23.96	34.74	4.38	442	75	23.66	34.91	4.44	23.69	421	0.35
69	23.80	34.87	4.49	428	100	21.90	35.07	3.68	24.32	362	0.45
88	22.98	35.03	4.09	394	150	14.85	34.56	1.00	25.68	232	0.60
101	21.84	35.07	3.65	360	200	12.81	34.74	0.37	26.25	178	0.70
113	19.22	34.78	2.29	314	250	11.85	34.75	0.26	26.44	160	0.79
135	16.34	34.58	1.33	262	300	11.09	34.71	0.27	26.56	149	0.87
159	14.20	34.56	0.83	218	400	9.46	34.60	0.14	26.75	130	1.02
192	13.05	34.73	0.42	183	500	7.98	34.57	0.21	26.96	110	1.14
238	12.01	34.75	0.25	163							
311	10.92	34.70	0.27	147							
405	9.38	34.60	0.12	129							
541	7.39	34.56	0.27	103							

a) 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 cm/g	m	°C	‰	ml/L	g/L	10 ⁻⁵ cm/g	dyn. m

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STRANGER; January 14, 1958; 1616 GCT; 21°52'N, 110°38'W; sounding, 1700 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 15°.

157.30

0	25.04	34.43		495	0	25.04	34.43		22.92	495	0.00
10	25.04	34.43		495	10	25.04	34.43		22.92	495	0.05
28	25.04	34.43		495	20	25.04	34.43		22.92	495	0.10
42	24.66	34.56		475	30	25.04	34.43		22.92	495	0.15
52	24.46	34.67		461	50	24.49	34.66		23.27	462	0.24
61	24.06	34.72		446	75	(23.70)	(34.86)		(23.65)	(425)	(0.36)
71	23.94	34.85		433							

STRANGER; January 14, 1958; 2100 GCT; 21°32.5'N, 111°14.5'W; sounding, 1705 fm; wind, 020°, force 3; weather, overcast; sea, moderate; wire angle, 04°.

157.40

0	25.30	34.27	4.62	514	0	25.30	34.27	4.62	22.72	514	0.00
9	25.34	34.25	4.81	516	10	25.34	34.25	4.81	22.70	516	0.05
29	25.03	34.42	4.77	495	20	25.30	34.26	4.81	22.71	515	0.10
43	24.89	34.45	4.79	489	30	25.01	34.43	4.77	22.93	494	0.15
53	22.86	34.40	4.60	436	50	24.29	34.44	4.75	23.15	473	0.25
62	20.98	34.37	3.52	388	75	18.30	34.35	2.62	24.72	324	0.35
72	18.80	34.34	2.86	336	100	15.33	34.51	1.01	25.54	245	0.42
91	16.08	34.45	1.21	266	150	13.20	34.73	0.42	26.16	186	0.53
105	14.92	34.54	0.94	235	200	11.89	34.73	0.25	26.42	162	0.62
120	14.28	34.58	0.70	218	250	11.32	34.74	0.17	26.54	151	0.70
143	13.46	34.73	0.42	191	300	10.57	34.70	0.16	26.64	141	0.78
170	12.37	34.70	0.26	173	400	9.09	34.59	0.20	26.80	126	0.92
207	11.84	34.73	0.25	161	500	7.93	34.54	0.20	26.95	112	1.04
258	11.21	34.74	0.16	149							
336	9.92	34.63	0.15	135							
436	8.62	34.57	0.21	120							
574	7.13	34.52	0.15	102							

STRANGER; January 15, 1958; 0202, 0230 GCT; 21°12'N, 111°52'W; sounding, 1650 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 02°, 02°.

157.50

0	24.14	34.36a)	4.76	474	0	24.14	34.36	4.76	23.14	474	0.00
10	24.14	34.36	4.77	474	10	24.14	34.36	4.77	23.14	474	0.05
29	24.12	34.42	4.77	470	20	24.14	34.39	4.77	23.16	472	0.09
43	23.94	34.49	4.79	459	30	24.10	34.45	4.77	23.21	467	0.14
53	22.38	34.35	4.70	426	50	23.61	34.48	4.77	23.37	452	0.23
62	20.66	34.40	3.84	378	75	17.29	34.11	4.07	24.79	317	0.33
71	17.72	34.09	4.07	329	100	14.22	34.13	2.38	25.49	250	0.40
90	15.79	34.27	2.35	273	150	13.02	34.71	0.18	26.18	185	0.51
104	13.75	34.10	2.39	243	200	11.71	34.71	0.21	26.44	160	0.60
118	14.14	34.62	0.23	213	250	10.87	34.69	0.17	26.58	147	0.68
140	13.35	34.69	0.18	192	300	10.13	34.65	0.16	26.68	137	0.75
167	12.58	34.72	0.14	175	400	8.72	34.58	0.19	26.86	120	0.88
203	11.61	34.71	0.21	158	500	7.47	34.53	0.18	27.00	107	1.00
254	10.80	34.69	0.16	146							
332	9.67	34.63	0.16	132							
430	8.28	34.56	0.20	115							
569	6.79	34.51	0.15	99							

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

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