

CORRECTIONS MADE :

STATION POSITIONS  $\frac{1}{18}$

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5603  
4-19 March 1956

and

CCOFI Cruise 5604  
5-27 April 1956

SIO Reference 60-6  
10 November 1959

UNIVERSITY OF CALIFORNIA  
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5603  
4-19 March 1956

and

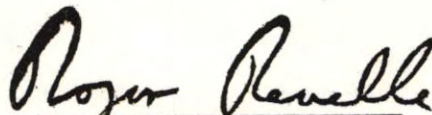
CCOFI CRUISE 5604  
5-27 April 1956

Sponsored by

Marine Research Committee

SIO Reference 60-6  
28 March 1960

Approved for distribution:

  
Roger Revelle, Director

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*[Faint signature and text]*

## INTRODUCTION

The data presented in this report were collected on the eighty-second and eighty-third consecutive cruises of the California Cooperative Oceanic Fisheries Investigations program. The R/V Black Douglas of the U. S. Fish and Wildlife Service and the R/V Stranger of the Scripps Institution participated in the eighty-second and eighty-third cruises; the R/V Spencer F. Baird of the Scripps Institution also participated in the eighty-third 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.

The stations occupied in the Gulf of California are based on a special grid; therefore, they appear following the data obtained in the normal station pattern. In each group stations are listed in numerical order. The designation "G" in the station number is used to denote Gulf of California stations.

## STANDARD PROCEDURES

Processing of the Cruise 5604 data was carried out using the method described by Klein.<sup>1/</sup> 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  $\Delta D$ . 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, messenger times and wire angles are given in the order of increasing depth. A line is left blank between the observed data of each cast.

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<sup>1/</sup> Klein, Hans T. A new technique for processing physical oceanographic data. MS.

## FOOTNOTES

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

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

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

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

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

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

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

p: pretrip or posttrip.

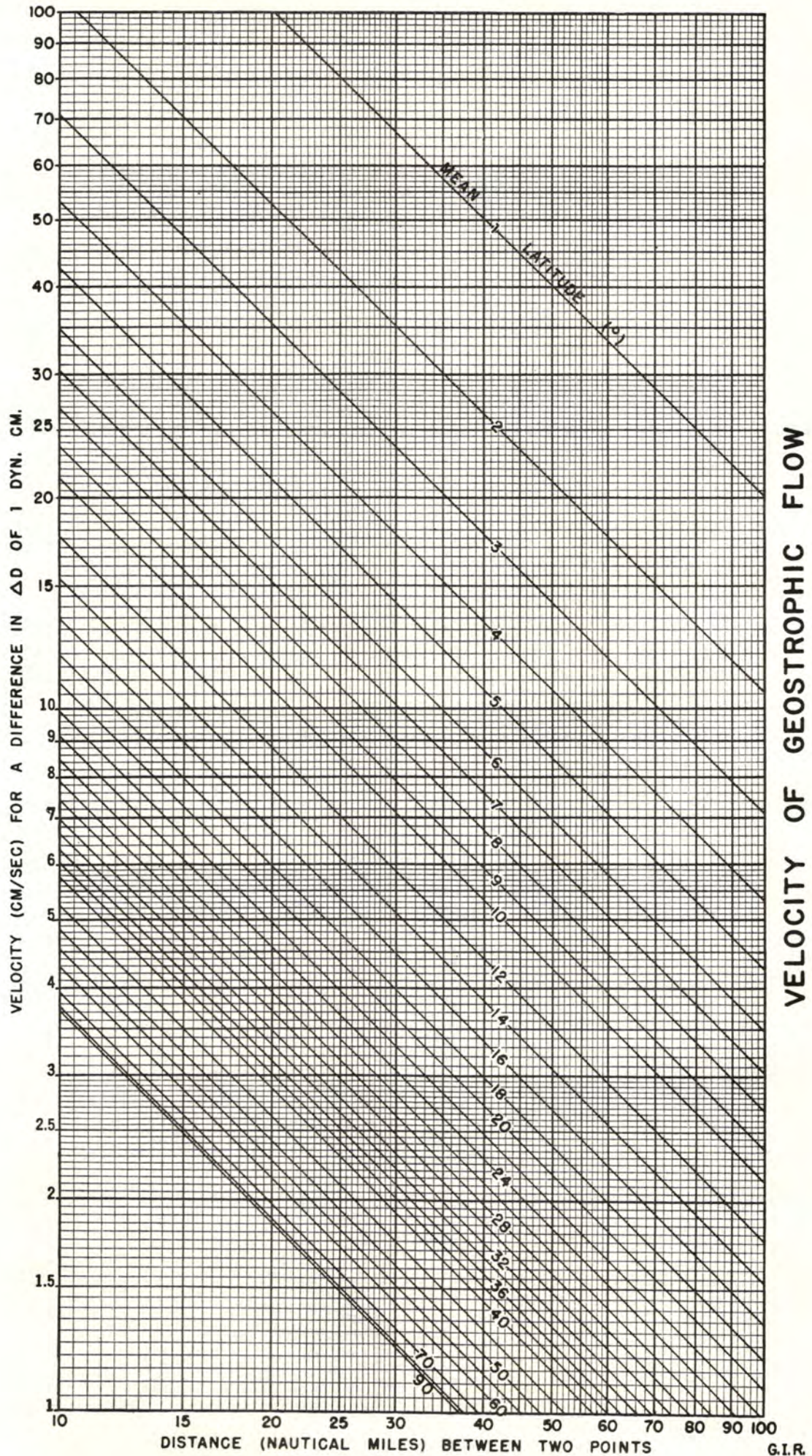
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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

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

## FORMAT

These data are typed in the format of the University of California Press publication, Oceanic Observations of the Pacific. So that these pages can be used as copy for the 1956 volume, the first page of the Cruise 5603 data is numbered 56.



## FIGURES

1. CCOFI Cruise 5604, station positions
2. Horizontal distribution of dynamic height anomaly ( $\eta$  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

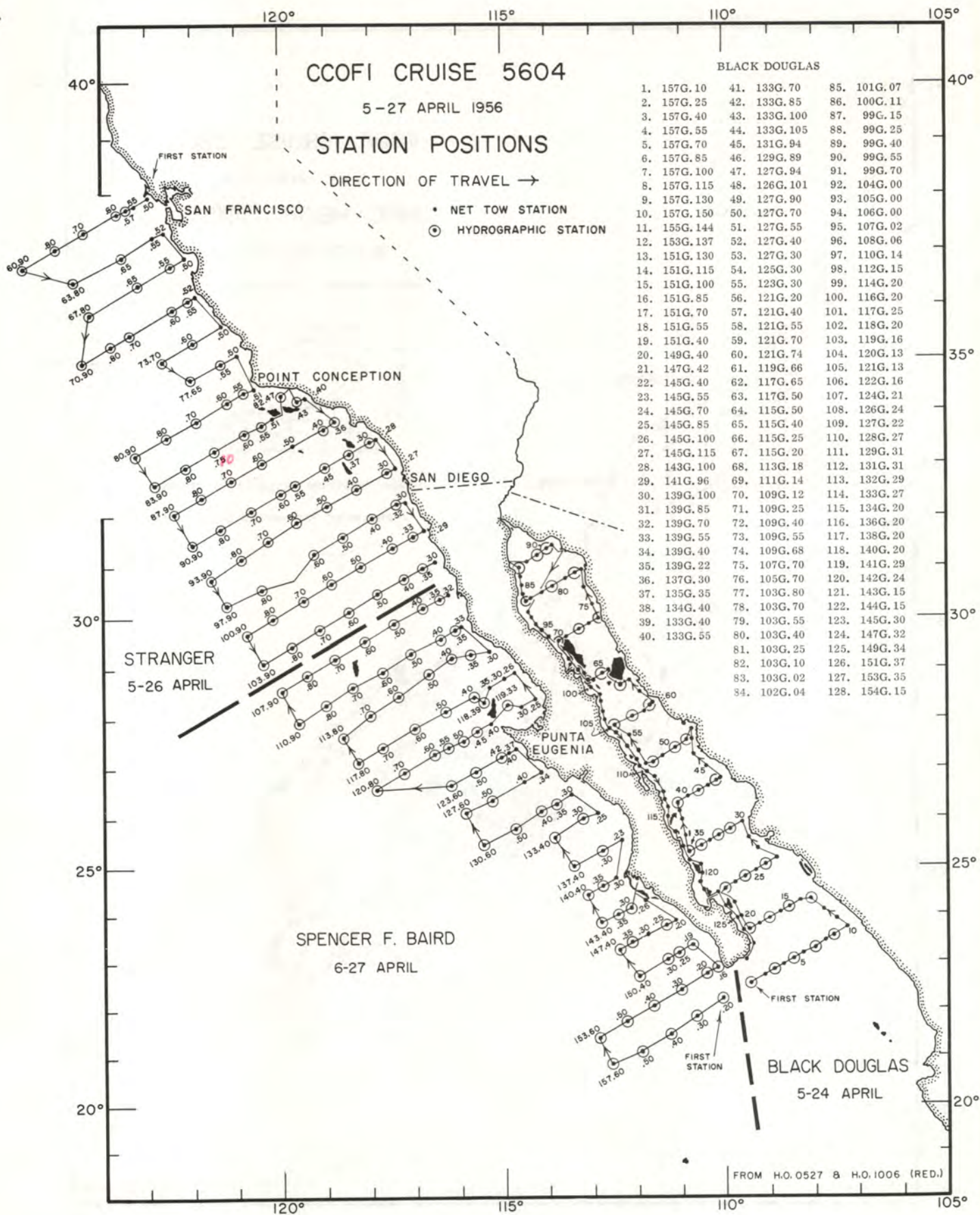


FIGURE 1



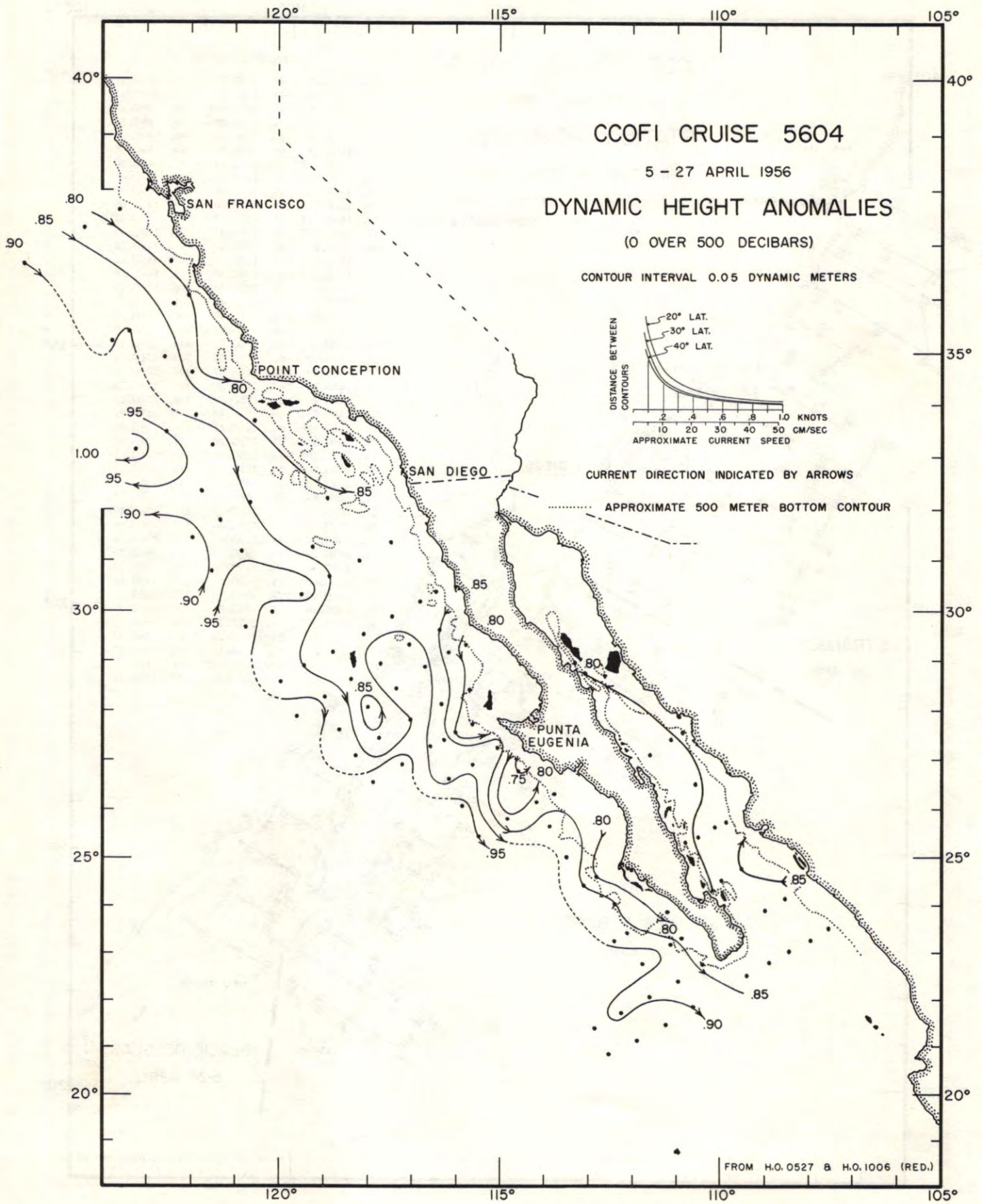


FIGURE 2

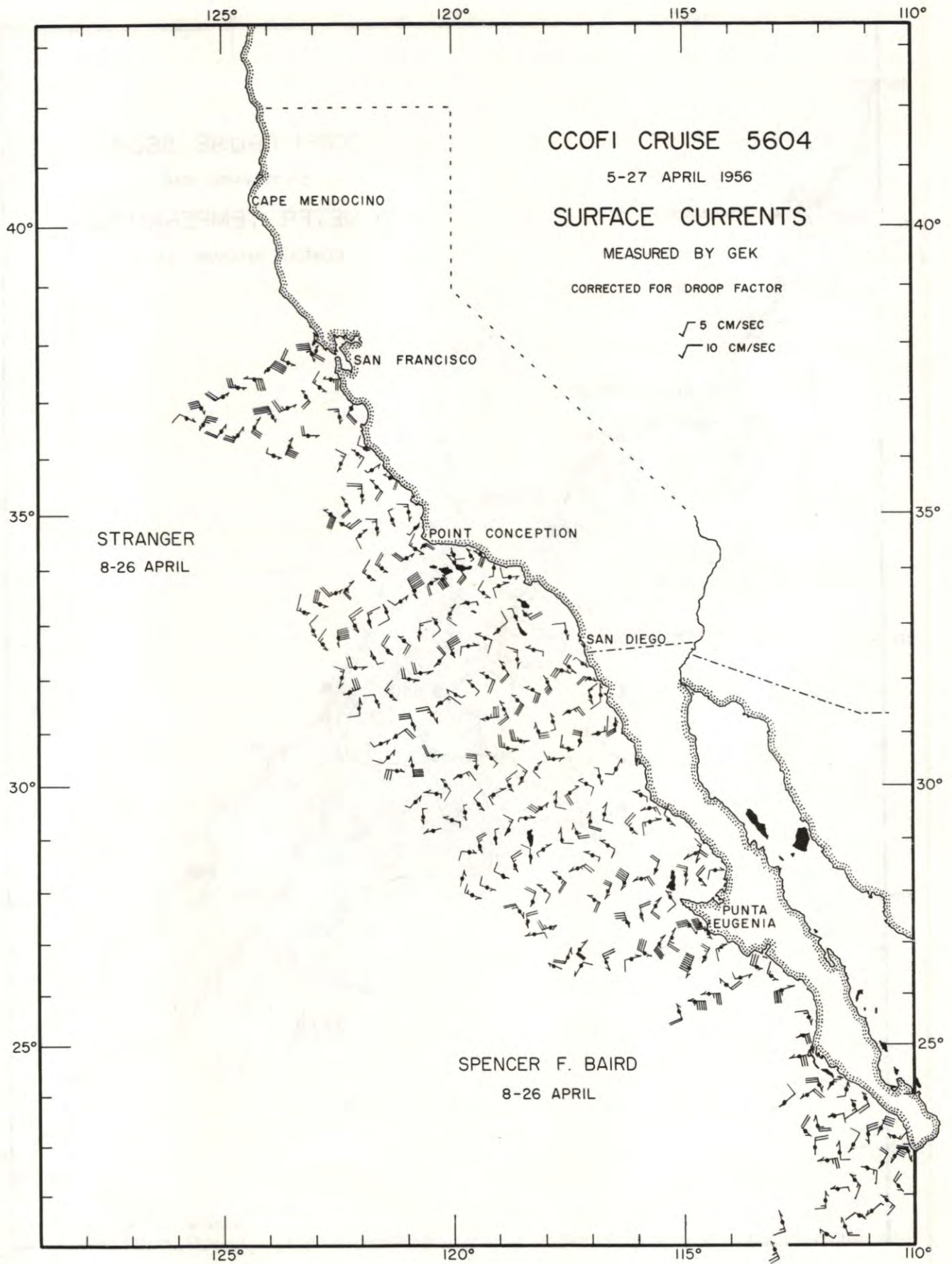


FIGURE 3

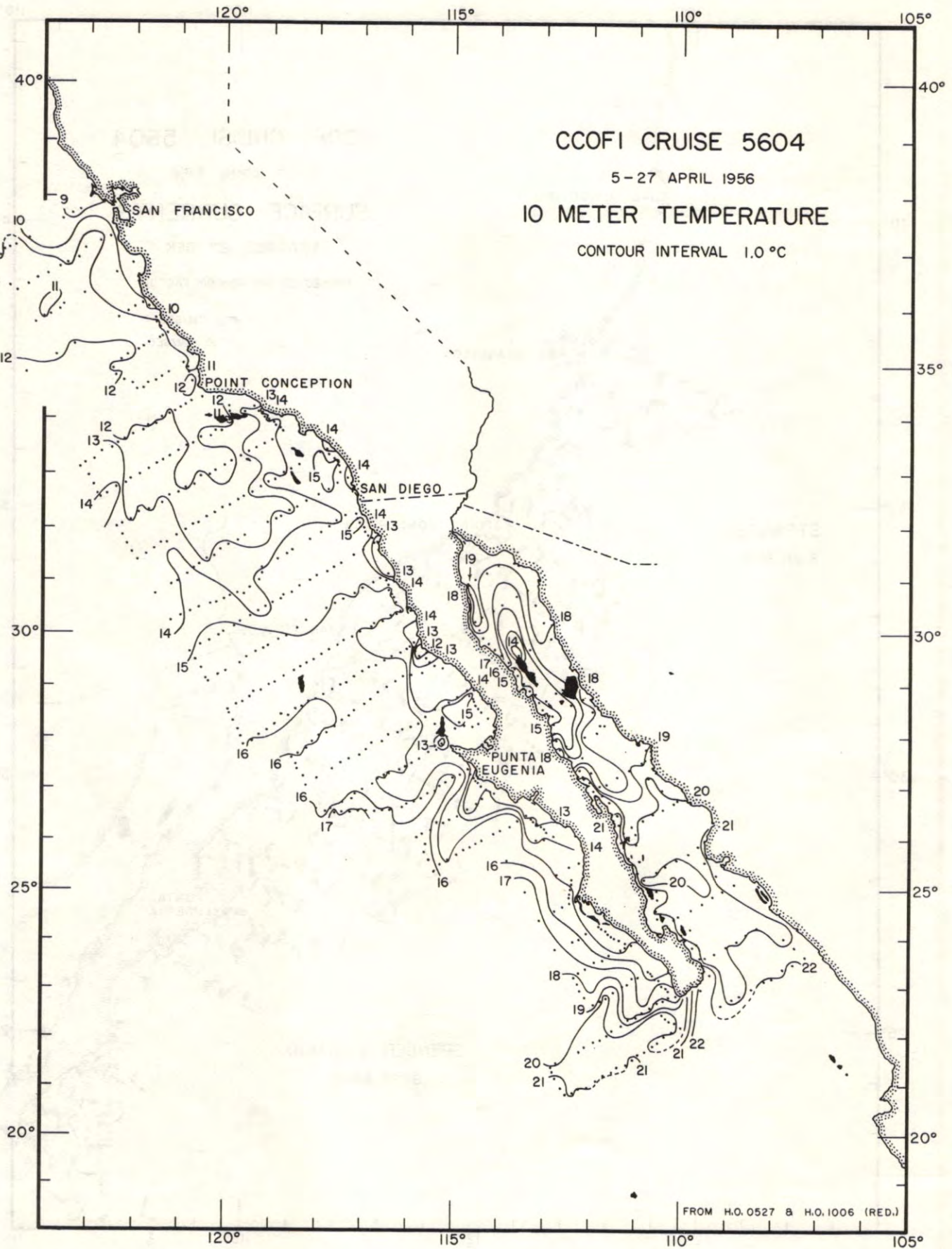


FIGURE 4

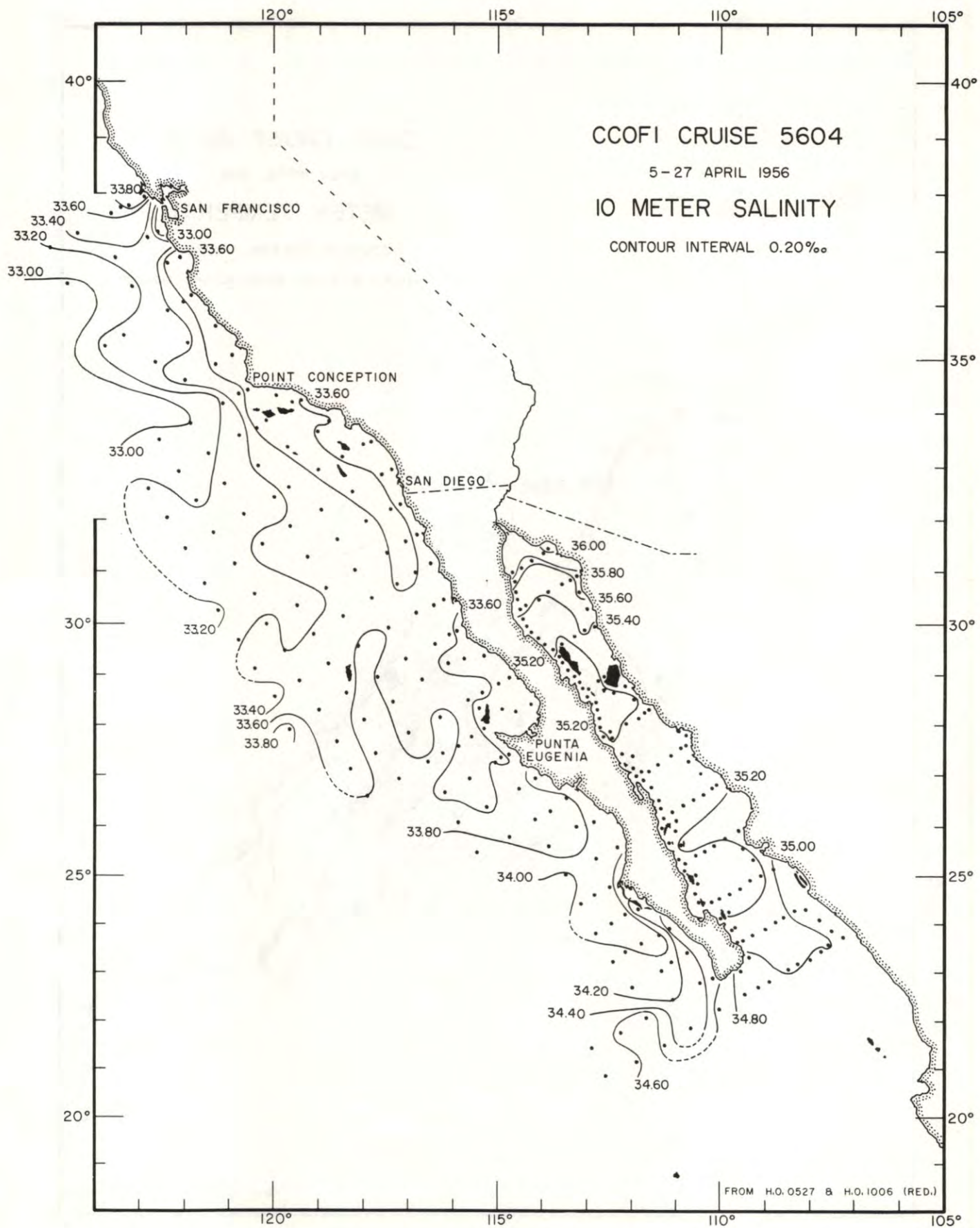


FIGURE 5

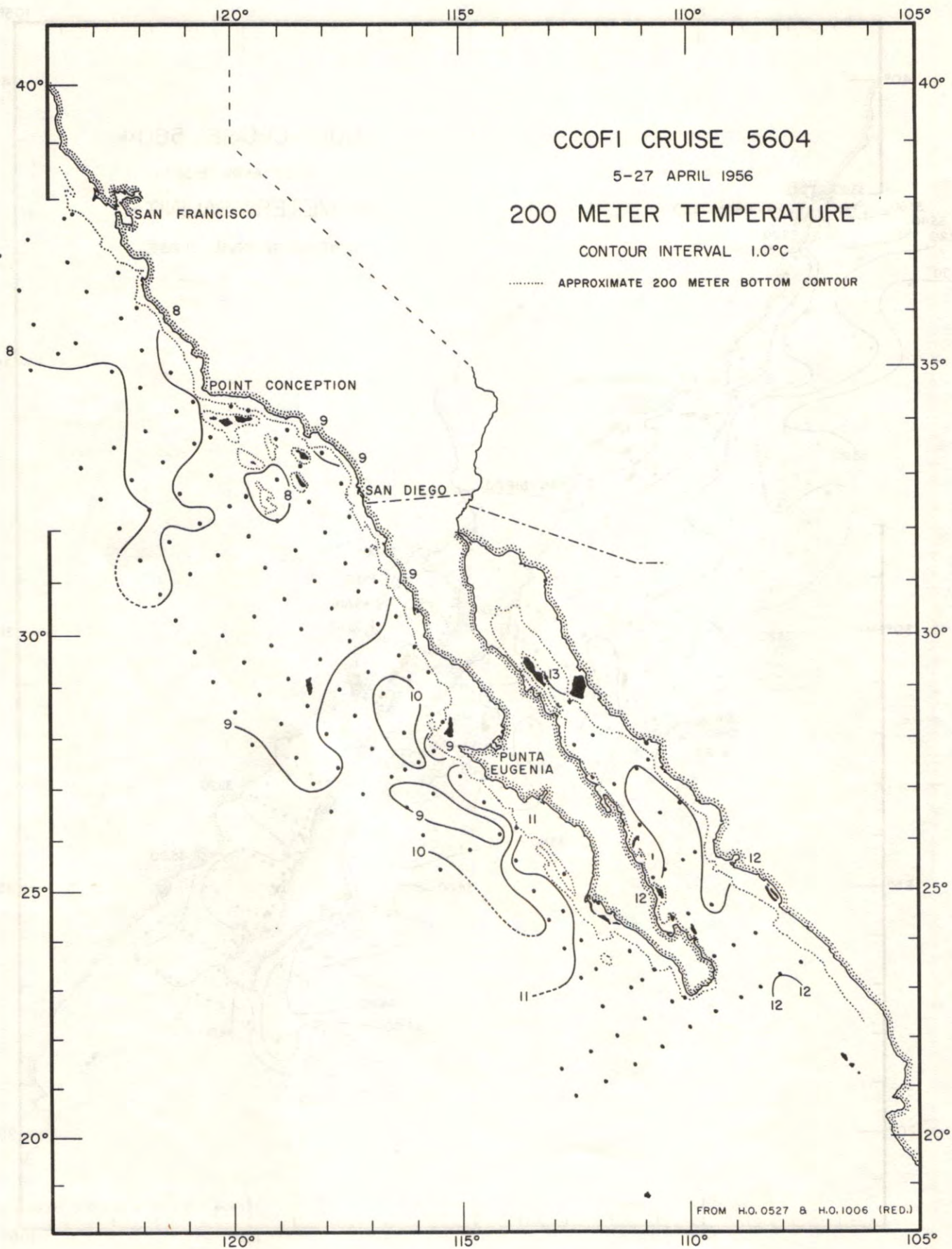


FIGURE 6

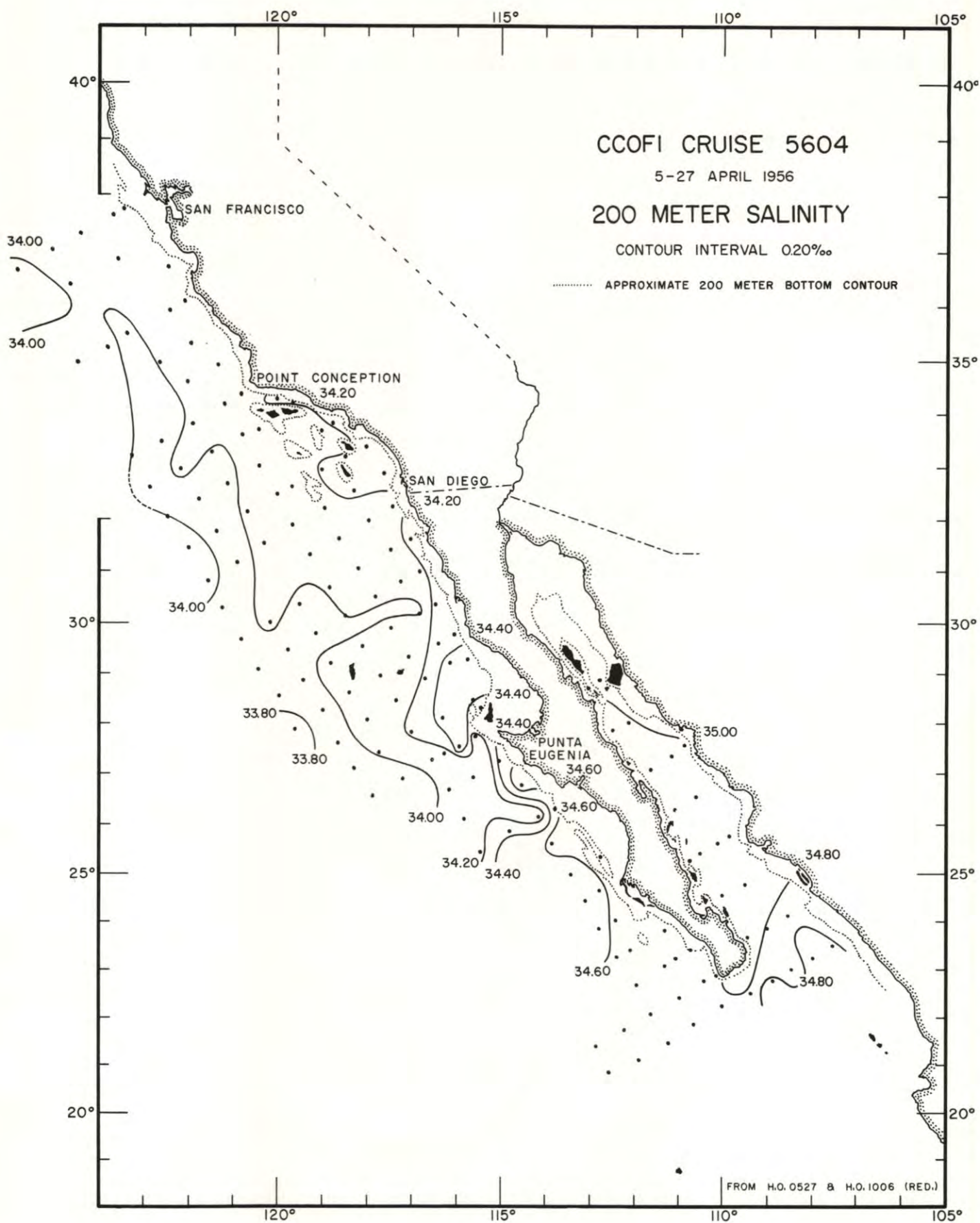


FIGURE 7

PERSONNEL  
Cruise 5604

SHIPS' CAPTAINS

Cole, Walter C., R/V Spencer F. Baird  
Davis, Laurence E., R/V Stranger  
Forster, Charles W., R/V Black Douglas

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Black Douglas

Kramer, David, Fishery Research Biologist, U. S. Fish and Wildlife Service  
Farrar, Lloyd J., Fishery Aid, U. S. Fish and Wildlife Service  
Reith, A. Dougall, Senior Marine Technician  
Wolf, Robert S., Fishery Research Biologist, U. S. Fish and Wildlife Service  
Burnette, J. G., Chairman, Marine Research Committee  
Dempsey, J. H., Visiting observer

R/V Spencer F. Baird

Cunningham, Leonard M., Jr., Senior Marine Technician  
Bower, Donald R., Fishery Aid, U. S. Fish and Wildlife Service  
Christiansen, Neils B., Marine Technician  
Cunnison, Earl P., Marine Technician

R/V Stranger

Gilkey, Robert W., Senior Marine Technician  
Bryer, Bruce A., Marine Technician  
Jaynes, John M., Marine Technician  
Watson, Frank H., Fishery Aid, U. S. Fish and Wildlife Service

SIO

CCOFI  
5604

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
m	°C	‰	ml/L	$\frac{-5}{10} \frac{T_3}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{-5}{10} \frac{T_3}{cm/g}$	dyn. m	

60.57 STRANGER; April 9, 1956; 0210 GCT; 37°43.5'N, 123°24'W; sounding, 1000 fm; wind, 350°, force 4; weather, clear; sea, high; wire angle, 20°.

0	8.94	33.69	4.77	190	0	8.94	33.69	4.77	26.12	190	0.00
9	8.92	33.67	4.70	191	10	8.89	33.67	4.70	26.11	191	0.02
33	8.65	33.74	4.00r	182	20	8.81	33.69	4.64	26.16	186	0.04
43	8.55	33.77	4.52	178	30	8.70	33.73	4.60	26.20	183	0.06
56	8.52	33.84	4.22	172	50	8.53	33.81	4.35	26.28	175	0.09
66	8.59	33.89u	4.05	-	75	8.44	33.87	3.59	26.34	169	0.14
75	8.44	33.87	3.59	169	100	8.41	33.91	2.90	26.37	166	0.18
93	8.40	33.87	3.00	168	150	(8.06)	(34.05)	(2.09)	(26.56)	(149)	(0.26)
110	8.41	33.93	3.72r	164							
123	8.36	33.98	2.69	160							
143	8.10	34.04	2.17	152							
174a)	7.76	34.13	1.85	140							
235a)	7.37	34.20	1.31	129							
376a)	6.49	34.25	1.06	114							

60.60 STRANGER; April 9, 1956; 0518 GCT; 37°37.5'N, 123°37'W; sounding, 1750 fm; wind, 270°, force 7; weather, clear; sea, high; wire angle, 30°.

0	9.04	33.66	4.61	194	0	9.04	33.66	4.61	26.08	194	0.00
8	9.02	33.65	4.92	194	10	9.01	33.65	4.92	26.08	194	0.02
32	8.97	33.66	4.87	192	20	8.98	33.65	4.90	26.09	193	0.04
52	9.06	33.73	3.61	189	30	8.97	33.66	4.88	26.10	192	0.06
62	9.08	33.80	3.03	184	50	9.02	33.72	3.80	26.13	189	0.10
69	9.08	33.82	3.02	182	75	9.01	33.84	2.84	26.23	180	0.14
85	8.90	33.86	2.71	177	100	8.82	33.88	2.60	26.29	174	0.19
100	8.82	33.88	2.60	174	150	8.27	34.02	2.01	26.48	156	0.27
127	8.65	33.98	2.25	164	200	7.67	34.10	1.81	26.64	141	0.34
150	8.27	34.02	2.01	156	250	7.10	34.14	1.61	26.75	130	0.41
188	7.82	34.09	1.85	144	300	6.78	34.20	1.15	26.85	121	0.48
253	7.04	34.14	1.60	130	400	6.17	34.25	0.62	26.96	110	0.60
333	6.57	34.23	0.85	116	500	5.60	34.29	0.43	27.07	100	0.71
449	5.90	34.27	0.51	105	600	5.10	34.34	0.33	27.16	91	0.81
588	5.15	34.33	0.33	92	700	4.75	34.39	0.34	27.24	83	0.90
773	4.46	34.43	0.35	78	800	4.38	34.44	0.38	27.32	76	0.98
1013	3.86	34.51	0.55	66	1000	3.88	34.51	0.55	27.43	66	1.14

60.70 STRANGER; April 9, 1956; 1255 GCT; 37°17'N, 124°20.5'W; sounding, 2170 fm; wind, 320°, force 7; weather, clear; sea, high; wire angle, 20°.

0	9.46	33.50	5.91	212	0	9.46	33.50	5.91	25.89	212	0.00
9	9.42	33.49	5.80	212	10	9.42	33.49	5.78	25.89	212	0.02
33	9.41	33.57	5.52	206	20	9.41	33.52	5.64	25.91	210	0.04
57	8.87	33.82	3.64	179	30	9.41	33.56	5.56	25.94	207	0.06
67	8.78	33.86	2.66	174	50	9.01	33.76	4.05	26.17	185	0.10
75	8.62	33.89	2.86	171	75	8.62	33.89	2.86	26.32	171	0.15
93	8.46	33.95	2.38	164	100	8.39	33.97	2.25	26.43	161	0.19
112	8.30	33.99	2.11	158	150	8.00	34.09	1.78	26.58	146	0.27
145	8.03	34.09	1.80	147	200	7.79	34.13	1.63	26.64	141	0.34
176	7.88	34.11	1.70	143	250	7.65	34.15	1.52	26.68	137	0.41
222	7.72	34.14	1.60	138	300	7.44	34.16	1.37	26.71	134	0.48
301	7.44	34.16	1.36	134	400	6.74	34.23	0.90	26.88	118	0.61
407	6.67	34.24	0.87	117	500	5.93	34.29	0.59	27.03	104	0.72
550	5.54	34.32	0.51	98	600	5.28	34.35	0.48	27.16	92	0.82
711	4.81	34.40	0.42	84	700	4.83	34.40	0.43	27.24	84	0.92
926	3.97	34.45	0.51	71	800	4.49	34.42	0.42	27.29	79	1.01
1198	3.32	34.54	0.92	58	1000	3.73	34.47	0.65	27.42	67	1.16

a) Pretrip; too uncertain for interpolation.



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

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STRANGER; April 9, 1956; 1927 GCT; 36°58.5'N, 125°00'W; sounding, 2400 fm; wind, 340°, force 6; weather, cloudy; sea, very rough; wire angle, 22°.

60.80

0	11.04	33.17	6.47	262	0	11.04	33.17	6.47	25.36	262	0.00
8	10.76	33.20	6.19	254	10	10.70	33.20	6.16	25.45	254	0.03
32	9.95	33.46	6.00	222	20	10.34	33.33	6.10	25.62	238	0.05
55	9.36	33.58	4.28	204	30	10.00	33.44	6.02	25.76	224	0.07
64	9.16	33.65	3.92	196	50	9.46	33.55	4.66	25.93	208	0.12
75	9.08	33.70	3.50	191	75	9.08	33.70	3.50	26.11	191	0.17
93	8.85	33.82	2.70	179	100	8.79	33.89	2.50	26.30	173	0.21
111	8.68	33.93	2.35	168	150	7.98	34.00	2.21	26.51	153	0.30
142	8.09	33.97	2.30	157	200	7.36	34.08	1.90	26.67	138	0.37
175	7.61	34.07	1.96	143	250	6.97	34.12	1.67	26.76	130	0.44
219	7.16	34.09	1.82	135	300	6.65	34.17	1.38	26.84	122	0.50
293	6.71	34.16	1.40	124	400	5.96	34.22	0.78	26.97	109	0.62
397	5.97	34.22	0.81	110	500	5.37	34.31	0.50	27.11	96	0.73
535	5.22	34.33	0.47	94							

STRANGER; April 10, 1956; 0209 GCT; 36°37'N, 125°47'W; sounding, 2000+ fm; wind, 250°, force 2; weather, overcast; sea, rough; wire angle, 04°.

60.90

0	11.71	33.10	6.54	279	0	11.71	33.10	6.54	25.18	279	0.00
10	11.56	33.11	6.39	275	10	11.56	33.11	6.39	25.23	275	0.03
36	11.47	33.07u	6.34	-	20	11.50	33.11	6.35	25.24	274	0.06
61	11.26	33.11	6.34	271	30	11.47	33.11	6.34	25.24	274	0.08
70	10.94	33.11	6.53	265	50	11.41	33.11	6.34	25.26	272	0.14
80	10.46	33.26	6.15	246	75	10.71	33.17	6.39	25.43	256	0.20
100	9.83	33.30	5.92	233	100	9.83	33.30	5.92	25.67	233	0.26
119	9.06	33.66	3.59	194	150	8.47	33.87	2.77	26.34	170	0.36
152	8.43	33.88	2.76	168	200	7.75	33.99	2.84	26.54	150	0.44
184	8.00	33.98	2.73	154							
231	7.23	34.01	3.06	142							
280p	6.82	34.05	2.04	134							
368p	6.13	34.14	1.55	118							
487p	5.38	34.27	0.52	99							
619p	4.76	34.33	0.52	88							
793p	4.24	34.45	0.36	74							
1012p	3.52	34.51	0.51	62							

STRANGER; April 10, 1956; 1609 GCT; 36°49.5'N, 123°31'W; sounding, 2100 fm; wind, 290°, force 5; weather, rain; sea, moderate; wire angle, 15°.

63.65

0	10.88	33.21	6.21	256	0	10.88	33.21	6.21	25.43	256	0.00
10	10.86	33.22	6.40	255	10	10.86	33.22	6.40	25.44	255	0.03
29	10.87	33.22	6.26	255	20	10.87	33.22	6.32	25.44	255	0.05
43	10.29	33.26	6.03	242	30	10.87	33.22	6.25	25.44	255	0.08
52	9.90	33.39	5.20	227	50	9.99	33.36	5.40	25.70	230	0.12
63	9.62	33.58	4.02	208	75	9.55	33.68	3.37	26.02	200	0.18
71	9.57	33.64	3.50	202	100	8.72	33.85	2.70	26.28	175	0.23
89	8.62	33.68	3.66	186	150	8.07	33.96	2.25	26.47	157	0.31
102	8.73	33.86	2.62	174	200	7.58	34.04	1.87	26.60	144	0.39
116	8.46	33.87	2.52	170	250	7.09	34.08	1.70	26.70	135	0.46
138	8.16	33.93	2.36	160	300	6.76	34.14	1.27	26.80	126	0.52
165	7.98	34.00	2.12	153	400	6.10	34.19	0.82	26.92	114	0.65
199	7.59	34.04	1.88	144	500	5.55	34.25	0.56	27.04	103	0.76
251	7.08	34.08	1.69	135							
326	6.62	34.16	1.13	123							
425	5.95	34.20	0.73	111							
565	5.20	34.29	0.42	96							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

63.80 STRANGER; April 10, 1956; 0845, 0915 GCT; 36°21'N, 124°36'W; sounding, 2400 fm; wind, 260°, force 4; weather, drizzle; sea, moderate; wire angle, 15°, 24°.

0	11.45	32.96	6.36	284	0	11.45	32.96	6.36	25.13	284	0.00
10	11.47	32.95	6.32	286	10	11.47	32.95	6.32	25.11	286	0.03
29	11.42	32.92	6.36	287	20	11.45	32.93	6.35	25.10	287	0.06
57	11.12	33.12	6.24	267	30	11.42	32.92	6.35	25.11	286	0.08
66	11.06	33.18	6.24	262	50	11.19	33.04	6.28	25.24	274	0.14
75	9.47	32.97	5.97	251	75	9.47	32.97	5.97	26.49	251	0.21
89	9.45	33.34	4.79	224	100	8.69	33.42	4.98	25.95	206	0.26
102	8.62	33.43	4.99	205	150	8.07	33.85	3.51	26.38	165	0.36
116	8.45	33.60	4.38	189	200	7.49	34.03	2.24	26.60	144	0.44
133	8.36	33.78	3.55	175	250	7.01	34.05	1.87	26.69	136	0.51
152	8.04	33.86	3.50	164	300	6.58	34.11	1.60	26.80	126	0.58
178	7.74	33.96	2.89	152	400	5.92	34.21	0.80	26.96	110	0.70
200	7.44	34.03	2.30	-	500	5.25	34.24	0.54	27.07	100	0.81
252	7.04	34.06	1.84	-							
193a)	7.62	34.01	2.23	-							
243	7.06	34.05	1.96	-							
319	6.41	34.13	1.50	122							
418	5.82	34.22	0.69	108							
553	4.86	34.25	0.49	95							

67.55 STRANGER; April 11, 1956; 0656 GCT; 36°39'N, 122°26'W; sounding, 1100 fm; wind, 190°, force 5; weather, showers; sea, rough; wire angle, 15°.

0	10.10	33.63	5.56	213	0	10.10	33.63	5.56	25.88	213	0.00
9	10.10	33.62	5.64	213	10	10.10	33.62	5.63	25.88	213	0.02
29	9.37	33.78	4.37	189	20	9.70	33.69	5.10	26.01	201	0.04
43	9.37	33.80	4.21	188	30	9.37	33.78	4.35	26.13	189	0.06
52	9.20	33.86	3.64	181	50	9.22	33.86	3.70	26.22	181	0.10
62	9.06	33.89	3.25	176	75	8.77	33.93	2.47	26.34	169	0.14
72	8.81	33.92	2.53	171	100	8.58	34.00	2.00	26.42	162	0.19
90	8.58	33.97	2.23	164	150	8.28	34.11	1.50	26.55	149	0.26
104	8.56	34.01	1.94	160	200	7.79	34.15	1.46	26.66	139	0.34
118	8.21	34.00	2.23	156	250	7.37	34.18	1.23	26.74	131	0.40
141	8.33	34.09	1.63	151	300	7.08	34.20	1.04	26.80	126	0.47
170	8.12	34.13	1.43	145	400	6.50	34.24	0.71	26.91	115	0.59
209	7.71	34.15	1.46	138	500	5.87	34.30	0.51	27.04	103	0.71
260	7.31	34.36r	1.19	-	600	(5.33)	(34.35)		(27.15)	(92)	(0.81)
338	6.90	34.21	0.92	122							
441	6.20	34.27	0.59	109							
582	5.43	34.34	0.44	95							

67.65 STRANGER; April 11, 1956; 1246 GCT; 36°19'N, 123°09'W; sounding, 1800 fm; wind, 210°, force 6; weather, showers; sea, rough; wire angle, 20°.

0	11.08	33.13	6.35	265	0	11.08	33.13	6.35	25.33	265	0.00
9	11.08	33.14	6.31	264	10	11.08	33.14	6.30	25.34	264	0.03
35	10.98	33.19	6.18	259	20	11.03	33.16	6.21	25.36	262	0.05
62	10.69	33.30	6.14	246	30	11.00	33.18	6.20	25.38	260	0.08
70	10.28	33.28	5.92	241	50	10.90	33.24	6.17	25.45	254	0.13
82	9.22	33.36	5.02	218	75	9.80	33.30	5.57	25.68	232	0.19
92	9.00	33.53	4.25	202	100	9.10	33.69	3.69	26.10	192	0.24
109	9.04	33.84	3.09	180	150	8.63	33.98	2.38	26.40	164	0.33
122	8.97	33.90	2.79	174	200	7.82		2.31			
139	8.76	33.96	2.45	167	250	7.19		1.89			
162	8.50	34.00	2.37	160	300	6.68		1.36			
188	7.96	34.04	2.40	150	400	6.08		0.73			
214	7.68	-	2.05	-	500	5.60		0.51			
267	6.98	-	1.79	-	600	(5.16)					
338p	6.44	-	0.91	-							
443p	5.92	-	0.65	-							
584p	5.22	-	0.33	-							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

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STRANGER; April 11, 1956; 2112 GCT; 35°48.5'N, 124°13.5'W; sounding, 2000+ fm; wind, 250°, force 7; weather, partly cloudy; sea, high; wire angle, 45°.

67.80

0	11.56		6.32		0	11.56		6.32			
8	11.50		6.29		10	11.50		6.20			
24	11.50		5.88		20	11.50		5.95			
32	11.50		6.32		30	11.50		6.25			
42	10.98		6.34		50	10.15		6.39			
49	10.18		6.39		75	9.55		5.79			
56	9.84		6.19		100	8.97		4.52			
72	9.74		6.07		150	8.22		2.70			
84	9.12		5.13								
94	9.00		4.78								
110	8.82		4.15								
135	8.32		3.80								
162	8.22		2.66								

STRANGER; April 13, 1956; 0933 GCT; 36°03.5'N, 122°01'W; sounding, 650 fm; wind, 020°, force 2; weather, clear; sea, slight; wire angle, 06°.

70.55

0	10.51	33.58	5.89	222	0	10.51	33.58	5.89	25.78	222	0.00
10	10.52	33.58	6.00	222	10	10.52	33.58	6.00	25.78	222	0.02
30	9.85	33.64	4.51	208	20	10.15	33.61	5.00	25.86	215	0.04
56	9.49	33.84	4.47	187	30	9.85	33.64	4.51	25.94	208	0.06
65	9.18	33.85	3.72	182	50	9.60	33.81	4.49	26.11	191	0.10
75	9.19	33.89	3.53	179	75	9.19	33.89	3.53	26.24	179	0.15
95	8.84	33.98	2.88	167	100	8.77	33.99	2.63	26.39	165	0.20
110	8.60	34.02	2.30	160	150	8.21	34.08	2.05	26.54	150	0.27
143	8.32	34.07	2.08	152	200	7.69	34.13	1.60	26.66	139	0.35
173	7.89	34.10	1.93	144	250	7.38	34.21	1.34	26.77	128	0.42
214	7.62	34.14	1.57	137	300	7.05	34.25	1.10	26.64	122	0.48
281	7.14	34.25	1.16	123	400	6.55	34.25	0.77	26.91	115	0.60
396	6.57	34.25	0.78	115	500	5.83	34.29	0.48	27.04	103	0.71
535	5.62	34.32	0.42	98	600	5.27	34.36	0.39	27.17	91	0.82
692	4.91	34.42	0.38	83	700	4.86	34.43	0.40	27.26	82	0.91
899	4.25	34.52	0.48	68	800	4.59	34.46	0.42	27.34	75	0.99
1159	3.58	34.54	0.66	60	1000	3.93	34.53	0.56	27.45	64	1.14

STRANGER; April 13, 1956; 0631 GCT; 35°53'N, 122°22'W; sounding, 1600 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 00°.

70.60

0	11.16	33.40	6.34	247	0	11.16	33.40	6.34	25.52	247	0.00
10	11.15	33.39	6.32	248	10	11.15	33.39	6.32	25.51	248	0.02
30	10.60	33.43	6.00	235	20	11.10	33.39	6.31	25.52	247	0.05
55	9.34	33.63	4.12	200	30	10.60	33.43	6.00	25.65	235	0.07
64	9.13	33.69	3.70	192	50	9.85	33.54	5.14	25.86	215	0.12
74	8.96	33.85	3.19	178	75	8.95	33.85	3.18	26.25	178	0.17
93	8.83	33.91	2.87	172	100	8.79	33.92	2.54	26.33	170	0.21
109	8.70	33.95	2.34	167	150	8.30	34.06	2.11	26.51	153	0.29
143	8.38	34.02	2.17	157	200	7.98	34.14	1.55	26.63	142	0.37
170	8.15	34.11	1.92	147	250	7.58	34.19	1.48	26.72	133	0.44
214	7.89	34.15	1.50	140	300	7.10	34.22	1.42	26.82	124	0.50
286	7.23	34.22	1.47	126	400	6.17	34.23	0.78	26.96	111	0.62
398	6.15	34.23	0.79	111	500	5.75	34.31	0.57	27.06	101	0.74
542	5.63	34.32	0.54	99	600	5.40	34.33	0.54	27.12	95	0.84
702	4.94	34.36	0.55	88	700	4.96	34.36	0.55	27.20	88	0.94
910	4.24	34.43	0.52	75	800	4.62	34.39	0.53	27.26	82	1.03
1171	3.40	34.52	0.93	61	1000	3.95	34.46	0.62	27.39	70	1.19

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OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_{-5}^3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{-5}^3$	$\Delta D$	
m	°C	‰	ml/L	10 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m	

70.70

STRANGER; April 12, 1956; 2144, 2215, 2243 GCT; 35°26'N, 123°20.5'W; sounding, 2000+ fm; wind, 140°, force 7; weather, cloudy; sea, high; wire angle, 14°, 15°, 20°.

0	12.03	33.29	6.27	270	0	12.03	33.29	6.27	25.28	270	0.00
10	12.00	33.24	6.39	273	10	12.00	33.24	6.39	25.25	273	0.03
29	11.81	33.40	6.45	258	20	11.91	33.34	6.44	25.34	264	0.05
53	11.76	33.42	6.41	256	30	11.80	33.41	6.45	25.40	258	0.08
64	11.66	33.42	6.09	254	50	11.77	33.42	6.43	25.43	256	0.13
73	11.20	33.48	5.96	242	75	11.17	33.48	5.94	25.59	241	0.19
93	10.74	33.53	5.68	230	100	10.57	33.55	5.50	25.74	226	0.25
					150	8.52	33.91	3.44	26.36	167	0.35
133	8.92	33.73	3.52	186	200	7.85	33.98	2.53	26.52	152	0.43
160	8.36	33.97	3.40	160	250	7.17	34.03	2.17	26.65	140	0.51
201	7.84	33.98	2.52	152	300	6.60	34.08	1.70	26.78	128	0.58
265	6.98	34.05	2.05	135	400	5.80	34.15	0.85	26.94	113	0.70
377	5.95	34.13	1.00	116	500	5.45	34.23	0.60	27.03	104	0.81
509	5.43	34.23	0.57	103	600	5.15	34.33	0.44	27.15	92	0.92
					700	4.78	34.42	0.39	27.26	82	1.01
663	4.87	34.40	0.39	84	800	4.40	34.46	0.39	27.33	75	1.10
863	4.18	34.48	0.41	71	1000	3.79	34.52	0.58	27.45	64	1.25
1116	3.46	34.54	0.72	60							

70.80

STRANGER; April 12, 1956; 1815 GCT; 35°14.5'N, 123°45'W; sounding, 2200 fm; wind, 150°, force 7; weather, drizzle; sea, high; wire angle, 14°.

0	11.96	33.30	6.16	268	0	11.96	33.30	6.16	25.30	268	0.00
10	11.94	33.28	6.28	269	10	11.94	33.28	6.28	25.29	269	0.03
29	11.92	33.37	5.93	262	20	11.93	33.32	6.10	25.32	266	0.05
53	11.61	33.48	6.14	249	30	11.92	33.37	5.94	25.36	262	0.08
64	11.16	33.50	5.82	240	50	11.72	33.47	6.08	25.48	252	0.13
73	10.68	33.53	5.51	229	75	10.61	33.54	5.43	25.72	228	0.19
93	10.24	33.66	5.05	212	100	10.19	33.69	5.02	25.92	209	0.25
107	10.10	33.71	5.00	206	150	8.79	33.83	3.00	26.26	177	0.34
141	8.95	33.78	3.29	183	200	7.79	34.05	2.50	26.58	147	0.43
165	8.52	33.92	2.66	167	250	7.08	34.03	2.29	26.67	138	0.50
210	7.59	34.05	2.47	144	300	6.58	34.04	1.95	26.74	131	0.57
275	6.78	34.03	2.15	134	400	5.90	34.15	0.95	26.92	114	0.70
390	5.97	34.13	1.00	116	500	5.27	34.24	0.54	27.07	100	0.81
525	5.11a)	34.27	0.48	97	600	4.90	34.35	0.41	27.19	89	0.91
682	4.80	34.38	0.40	85	700	4.79	34.38	0.40	27.24	84	1.00
888	4.06	34.48	0.56	70	800	4.50	34.43	0.42	27.30	78	1.09
1150	3.44	34.52	0.85	61	1000	3.67	34.51	0.75	27.45	64	1.24

70.90

STRANGER; April 12, 1956; 1043 GCT; 34°54'N, 124°26'W; sounding, 2260 fm; wind, 200°, force 8; weather, showers; sea, high; wire angle, 20°.

0	12.08	-	6.68	-	0	12.08	-	6.68			
10	12.05	-	6.32	-	10	12.05	-	6.32			
33	12.07	-	6.49	-	20	12.05	-	6.40			
62	11.47	-	6.26	-	30	12.06	-	6.46			
76	10.48	-	5.57	-	50	12.06	-	6.49			
93	9.66	-	5.28	-	75	10.55	-	5.59			
112	9.36	-	3.50	-	100	9.52	-	5.10			
144	8.63	-	3.32	-	150	8.59	-	3.25			
168	8.48	33.95	3.01	164	200	8.08	34.08	2.19	26.56	148	
192	7.95	34.03	2.46	150	250	7.49	34.10	1.91	26.66	138	
233	7.66	34.09	2.01	142	300	6.94	34.14	1.62	26.78	128	
302	6.90	34.14	1.61	128	400	6.19	34.19	0.85	26.91	115	
409	6.15	34.20	0.80	114	500	5.69	34.27	0.54	27.04	103	
554	5.43	34.31	0.46	97	600	5.23	34.34	0.40	27.14	93	
718	4.71	34.42	0.32	81	700	4.79	34.41	0.32	27.25	83	
931	4.00	34.49	0.45	68	800	4.42	34.45	0.33	27.32	76	
1210	3.29	34.56	0.83	57	1000	3.82	34.51	0.54	27.43	66	

a) Mean value of 5.08 and 5.14°C.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta_T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta_T$	$\Delta D$	
m	°C	‰	ml/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	m	°C	‰	ml/L	g/L	$10^{-5} \frac{3}{\text{cm}^3/\text{g}}$	dyn. m	

STRANGER; April 13, 1956; 2023 GCT; 35°18'N, 121°57'W; sounding, 1300 fm; wind, 310°, force 1; weather, cloudy; sea, rough; wire angle, 00°.

73.60

0	12.0	33.30	6.32	268	0	12.0	33.30	6.32	25.30	268	0.00
10	11.98	33.30	6.43	268	10	11.98	33.30	6.43	25.30	268	0.03
30	11.95	33.30	5.78	268	20	11.98	33.30	6.05	25.30	268	0.05
39	11.74	33.37	5.26	259	30	11.95	33.30	5.78	25.30	268	0.08
50	11.34	33.40	5.64	250	50	11.34	33.40	5.64	25.49	250	0.13
59	11.14	33.47	5.53	242	75	10.60	33.51	4.73	25.71	229	0.19
69	10.76	33.46	4.64	235	100	9.95	33.68	4.20	25.95	206	0.25
83	10.38	33.62	4.86	218	150	8.50	33.88	2.61	26.34	169	0.34
99	9.97	33.68	4.22	206	200	7.60	34.02	2.21	26.59	146	0.42
111	9.37	33.67	3.35	198	250	7.55	34.18	1.96	26.72	133	0.49
136	8.80	33.84	2.58	176	300	7.22	34.22	1.35	26.80	126	0.56
166	8.19	33.91	2.63	162	400	6.47	34.26	0.76	26.94	113	0.68
198	7.61	34.02	2.23	146	500	5.75	34.32	0.50	27.07	100	0.79
247	7.56	34.18	1.97	133							
323	7.07	34.23	1.14	123							
420	6.32	34.27	0.70	110							
547	5.46	34.34	0.42	95							

STRANGER; April 14, 1956; 0105 GCT; 34°58'N, 122°39'W; sounding, 2200 fm; wind, 330°, force 3; weather, cloudy; sea, rough; wire angle, 03°.

73.70

0	11.75	33.36	5.51	260	0	11.75	33.36	5.51	25.38	260	0.00
10	11.58	33.37	5.83	256	10	11.58	33.37	5.83	25.43	256	0.03
30	11.02	33.48	5.57	239	20	11.33	33.43	5.77	25.52	247	0.05
46	10.52	33.51	5.13	228	30	11.02	33.48	5.57	25.61	239	0.08
56	10.32	33.59	4.59	219	50	10.42	33.53	4.75	25.76	225	0.12
66	10.06	33.62	4.62	213	75	10.05	33.62	4.41	25.89	212	0.18
76	10.02	33.62	4.40	212	100	9.80	33.83	4.10	26.09	193	0.23
95	9.80	33.73	4.59	200	150	8.84	33.97	2.27	26.36	167	0.32
109	9.35	33.84	3.28	185	200	8.01	34.03	2.19	26.53	151	0.40
123	9.16	33.91	2.46	176	250	7.40	34.07	2.00	26.65	140	0.47
146	8.86	33.97	2.28	168	300	6.89	34.11	1.60	26.76	129	0.54
176	8.54	34.02	2.12	159	400	6.19	34.21	0.85	26.94	113	0.67
214	7.75	34.04	2.19	147	500	5.83	34.27	0.57	27.02	105	0.78
267	7.26	34.08	1.88	137	600	(5.27)	(34.33)	(0.39)	(27.14)	(93)	(0.89)
348	6.34	34.16	1.21	119							
450	6.03	34.24	0.65	110							
592	5.30	34.33	0.40	94							

STRANGER; April 14, 1956; 1115 GCT; 34°54.5'N, 121°16'W; sounding, 250 fm; wind, 300°, force 6; weather, partly cloudy; sea, very rough; wire angle, 06°.

77.55

0	11.18	33.68	6.23	227	0	11.18	33.68	6.23	25.73	227	0.00
10	11.17	33.66	6.09	228	10	11.17	33.66	6.09	25.72	228	0.02
30	11.16	33.68	6.04	226	20	11.17	33.67	6.07	25.73	227	0.05
49	10.68	33.76	5.19	212	30	11.16	33.68	6.04	25.74	226	0.07
73	9.98	33.83	3.88	196	50	10.68	33.76	5.18	25.89	212	0.11
98	9.38	33.91	2.59	180	75	9.79	33.85	3.50	26.12	191	0.16
120	9.28	33.93	2.49	177	100	9.37	33.91	2.57	26.23	180	0.21
159	8.82	34.04	1.89	162	150	8.92	34.01	2.00	26.38	165	0.30
199	8.64	34.09	1.72	156	200	8.64	34.09	1.70	26.48	156	0.38
247	8.20	34.18	1.37	143	250	8.17	34.19	1.34	26.63	142	0.45
296	7.89	34.23	1.12	134	300	7.85	34.23	1.13	26.72	133	0.52
398	7.00	34.28	0.77	118	400	(6.99)	(34.28)	(0.76)	(26.88)	(118)	(0.65)

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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

77.65

STRANGER; April 14, 1956; 0619 GCT; 34°35'N, 121°57'W; sounding, 2100 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°.

0	11.48	33.48	6.32	247	0	11.48	33.48	6.32	25.52	247	0.00
10	11.46	33.48	6.21	246	10	11.46	33.48	6.21	25.53	246	0.02
29	10.26	33.60	5.12	217	20	10.79	33.53	5.51	25.69	231	0.05
44	10.24	33.68	5.37	211	30	10.25	33.60	5.13	25.84	217	0.07
55	10.10	33.76	4.92	202	50	10.19	33.72	5.17	25.94	207	0.11
63	9.70	33.79	4.33	194	75	9.19	33.78	3.30	26.16	187	0.16
74	9.20	33.78	3.32	187	100	8.98	33.93	2.47	26.31	172	0.21
94	8.98	33.91	2.55	174	150	8.28	34.01	2.05	26.48	156	0.29
110	8.99	33.98	2.41	169	200	7.30	34.04	2.44	26.65	140	0.36
123	8.72	33.98	2.17	165	250	6.82	34.09	1.73	26.75	130	0.43
146	8.34	34.01	1.99	157	300	6.55	34.11	1.40	26.81	125	0.50
177	7.68	33.98	2.56	150	400	5.89	34.19	0.94	26.96	111	0.62
214	7.09	34.07	2.30	135	500	5.39	34.29	0.58	27.09	98	0.73
266	6.76	34.09	1.58	129	600	(5.10)	(34.41)	(0.34)	(27.22)	(86)	(0.83)
347	6.22	34.15	1.20	118							
451	5.60	34.23	0.72	105							
593	5.14	34.40	0.37	87							

80.55

STRANGER; April 14, 1956; 2039 GCT; 34°19'N, 120°48'W; sounding, 414 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 08°.

0	11.36	33.49	6.06	244	0	11.36	33.49	6.06	25.56	244	0.00
10	11.32	33.49	6.16	243	10	11.32	33.49	6.16	25.57	243	0.02
30	10.93	33.57	5.89	230	20	11.30	33.49	6.16	25.57	242	0.05
45	10.16	33.71	5.07	207	30	10.93	33.57	5.89	25.70	230	0.07
54	9.32	33.71	3.95	194	50	9.55	33.71	4.30	26.04	198	0.11
65	9.10	33.80	3.45	184	75	9.06	33.86	3.22	26.24	179	0.16
75	9.06	33.86	3.22	179	100	8.83	34.02	2.52	26.40	164	0.21
95	8.90	33.99	2.78	167	150	8.19	34.05	2.37	26.52	152	0.28
109	8.69	34.04	1.75	160	200	7.45	34.10	2.22	26.67	138	0.36
123	8.37	34.03	2.47	156	250	7.38	34.15	1.65	26.72	133	0.43
146	8.23	34.05	2.38	153	300	7.16	34.21	1.10	26.80	126	0.49
176	7.70	34.06	2.30	144	400	6.68	34.30	0.82	26.94	113	0.62
212	7.39	34.11	2.16	136	500	6.07	34.37	0.62	27.07	100	0.73
263	7.35	34.16	1.55	132	600	(5.20)	(34.40)		(27.20)	(88)	(0.82)
343	6.97	34.25	0.92	120							
444	6.45	34.35	0.78	106							
587	5.32	34.40	0.37	89							

80.60

STRANGER; April 14, 1956; 2321, 2337, 2354 GCT; 34°08.5'N, 121°09'W; sounding, 1200 fm; wind, 290°, force 5; weather, overcast; sea, very rough; wire angle, 16°, 22°, 20°.

0	11.90	33.16	6.52	277	0	11.90	33.16	6.52	25.21	277	0.00
9	11.84	33.20	6.31	274	10	11.83	33.20	6.30	25.25	273	0.03
29	10.95	33.46	6.04	238	20	11.80	33.24	6.18	25.28	270	0.05
42	10.84	33.54	5.77	231	30	10.92	33.47	6.03	25.62	238	0.08
					50	10.72	33.55	5.40	25.72	228	0.13
53	10.62	33.56	5.24	226	75	9.00	33.67	3.95	26.10	192	0.18
					100	8.40	33.91	3.10	26.38	166	0.22
63	9.88	33.67	3.54	206	150	8.39	34.05	2.13	26.49	155	0.31
68	9.30	33.64	4.20	199	200	7.43	34.07	2.13	26.65	140	0.38
87	8.70	33.76	3.55	181	250	6.93	34.10	1.55	26.74	131	0.45
99	8.41	33.91	3.12	166	300	6.50	34.12	1.29	26.82	124	0.51
112	8.39	33.93	2.63	164	400	5.75	34.20	0.75	26.98	109	0.64
135	8.49	34.02	2.13	159	500	5.30	34.29	0.47	27.10	97	0.74
161	8.21	34.06	2.14	152							
197	7.48	34.07	2.15	141							
246	6.98	34.10	1.60	131							
324	6.30	34.13	1.17	121							
421	5.60	34.22	0.64	106							
558	5.16	34.33	0.37	93							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{10}^{-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{10}^{-5}$	$\Delta D$
m	°C	‰	ml/L	cm/g	m	°C	‰	ml/L	g/L	cm/g	dyn. m

STRANGER; April 15, 1956; 0434 GCT; 33°48.5'N, 121°51'W; sounding, 2000 fm; wind, 320°, force 6; weather, rain; sea, high; wire angle, 07°.

80.70

0	12.20	33.00	4.94	295	0	12.20	33.00	4.94	25.02	295	0.00
10	12.20	33.00	4.75	295	10	12.20	33.00	4.75	25.02	295	0.03
31	12.20	33.02	-	293	20	12.20	33.01	4.55	25.03	294	0.06
60	10.76	33.12	-	261	30	12.20	33.02	4.40	25.04	293	0.09
74	9.84	33.22	5.16	238	50	11.43	33.08	4.65	25.23	275	0.14
93	9.51	33.43	4.37	217	75	9.82	33.22	5.16	25.62	238	0.21
108	9.12	33.61	3.76	198	100	9.31	33.52	4.03	25.93	208	0.27
133	8.74	33.77	3.41	181	150	8.53	33.87	2.75	26.33	170	0.36
162	8.37	33.93	2.43	164	200	7.65	34.02	2.82	26.58	147	0.44
192	7.79	34.01	2.83	149	250	7.20	34.08	2.01	26.69	136	0.51
213	7.51	34.02	2.66	145	300	6.81	34.16	1.45	26.81	125	0.58
293	6.86	34.16	1.49	126	400	5.92	34.20	0.75	26.96	111	0.70
397	5.97	34.20	0.75	111	500	5.38	34.29	0.44	27.09	98	0.81
540	5.19	34.33	0.41	93	600	4.99	34.37	0.35	27.20	88	0.91
700	4.75	34.43	0.34	80	700	4.75	34.43	0.34	27.28	80	1.00
910	4.08	34.49	0.52	69	800	4.45	34.46	0.39	27.33	75	1.08
1170	3.44	34.56	0.86	58	1000	3.87	34.51	0.63	27.43	66	1.24

STRANGER; April 15, 1956; 0925 GCT; 33°29'N, 122°32'W; sounding, 2000+ fm; wind, 320°, force 5; weather, missing; sea, rough; wire angle, 30°.

80.80

0	13.07	33.16	5.98	299	0	13.07	33.16	5.98	24.98	299	0.00
8	13.05	33.16	6.05	299	10	13.05	33.16	6.07	24.98	299	0.03
27	12.77	33.12	6.44	296	20	12.87	33.14	6.33	25.00	297	0.06
49	12.35	33.10	6.27	290	30	12.70	33.11	6.44	25.02	295	0.09
57	12.34	33.11	6.39	290	50	12.35	33.10	6.28	25.07	290	0.15
66	12.00	33.17	5.26	278	75	11.50	33.20	5.37	25.30	268	0.22
83	10.96	33.22	5.50	256	100	10.11	33.26	5.11	25.60	240	0.28
95	10.25	33.24	5.24	243	150	8.90	33.70	3.87	26.14	188	0.39
123	9.59	33.49	4.60	214	200	8.20	33.92	2.52	26.42	162	0.48
145	9.00	33.67	4.10	192	250	7.53	34.05	1.80	26.62	143	0.56
178	8.50	-	2.89	-	300	7.05	34.10	1.37	26.72	133	0.63
232	7.76	34.02	2.06	148	400	6.19	34.24	0.80	26.95	112	0.76
323	6.85	34.13	1.18	128							
432	6.00	34.26	0.71	107							

STRANGER; April 15, 1956; 1416 GCT; 33°09'N, 123°13.5'W; sounding, 2400 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 18°.

80.90

0	13.41	33.13	5.99	307	0	13.41	33.13	5.99	24.89	307	0.00
9	13.39	33.12	5.99	308	10	13.40	33.12	5.99	24.88	308	0.03
33	13.41	33.19u	5.99	-	20	13.40	33.13	5.99	24.89	307	0.06
61	13.40	33.15	5.98	306	30	13.41	33.13	5.99	24.89	307	0.09
76	13.16	33.14	6.01	302	50	13.41	33.15	5.99	24.90	306	0.15
93	11.80	33.13	6.08	278	75	13.18	33.14	6.01	24.94	302	0.23
111	11.42	33.24	5.66	263	100	11.68	33.14	5.99	25.23	275	0.30
143	9.58	33.53	4.40	211	150	9.41	33.61	4.00	25.99	203	0.42
165	9.20	33.87	2.74	180	200	8.85	34.01	2.16	26.39	165	0.52
192	8.92	33.98	2.23	168	250	8.60	34.13	1.86	26.53	151	0.60
229	8.70	34.09	1.96	156	300	8.35	34.19	1.53	26.61	144	0.68
297	8.36	34.19	1.54	144	400	7.87	34.25	1.11	26.72	133	0.82
402	7.86	34.25	1.10	132	500	7.08	34.26	0.72	26.85	121	0.95
544	6.64	34.27	0.61	115	600	6.12	34.29	0.48	27.00	106	1.07
707	5.19	34.34	0.36	92	700	5.22	34.34	0.36	27.14	93	1.18
926	4.24	34.47	0.40	72	800	4.79	34.40	0.36	27.25	83	1.27
1198	3.44	34.55	0.78	58	1000	3.95	34.50	0.53	27.42	67	1.44

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\frac{\delta T}{10} \frac{3}{cm/g}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\frac{\delta T}{10} \frac{3}{cm/g}$	$\Delta D$
m	°C	‰	ml/L		m	°C	‰	ml/L	g/L		dyn. m

82.47 STRANGER; April 16, 1956; 1826 GCT; 34°15'N, 119°58'W; sounding, 300 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 04°.

0	12.91	33.62	6.13	262	0	12.91	33.62	6.13	25.37	262	0.00
10	12.59	33.62	5.91	256	10	12.59	33.62	5.91	25.43	256	0.03
30	11.39	33.67	5.02	231	20	12.16	34.64	5.59	25.52	247	0.05
39	10.06	33.73	3.56	204	30	11.39	33.67	5.02	25.69	231	0.08
49	9.74	33.77	3.03	196	50	9.70	33.77	3.03	26.06	196	0.12
59	9.55	33.82	2.60	189	75	9.25	33.86	2.42	26.20	182	0.16
69	9.32	33.85	2.58	183	100	9.09	33.98	2.23	26.33	170	0.21
83	9.24	33.87	2.29	181	150	8.69	34.09	1.73	26.48	156	0.29
95	9.12	33.95	2.26	173	200	8.26	34.21	1.21	26.64	141	0.37
111	9.01	34.02	2.18	166	250	7.91	34.22	0.89	26.70	135	0.44
135	8.81	34.05	1.76	161	300	7.59	34.22	0.75	26.74	131	0.51
163	8.58	34.13	1.73	152	400	6.90	34.27	0.48	26.88	118	0.63
196	8.31	34.21	1.25	142	500	(6.47)	(34.25)	(0.24)	(26.93)	(114)	(0.75)
244	7.95	34.22	0.90	136							
291	7.64	34.22	0.78	132							
392	6.94	34.27	0.50	118							
492	6.48	34.25	0.24	114							

83.43 STRANGER; April 17, 1956; 2020 GCT; 34°08.5'N, 119°34.5'W; sounding, 132 fm; wind, 270°, force 2; weather, haze; sea, moderate; wire angle, 03°.

0	12.95	33.67	5.98	259	0	12.95	33.67	5.98	25.40	259	0.00
10	12.34	33.68	5.97	247	10	12.34	33.68	5.97	25.52	247	0.03
30	11.85	33.65	5.16	240	20	12.10	33.66	5.65	25.55	244	0.05
50	11.06	33.74	4.26	220	30	11.85	33.65	5.16	25.59	240	0.07
75	10.12	33.78	3.28	202	50	11.06	33.74	4.26	25.80	220	0.12
99	9.51	33.90	2.69	182	75	10.12	33.78	3.28	26.00	202	0.17
123	8.81	34.11	1.87	157	100	9.50	33.91	2.69	26.20	182	0.22
161	8.64	34.17	1.72	150	150	8.68	34.16	1.75	26.53	151	0.30
199	8.44	34.22	1.41	143	200	(8.42)	(34.22)	(1.40)	(26.62)	(143)	(0.38)

83.55 STRANGER; April 16, 1956; 1241 GCT; 33°42.5'N, 120°23.5'W; sounding, 500 fm; wind, 320°, force 7; weather, overcast; sea, high; wire angle, 10°.

0	12.11	33.64	5.67	246	0	12.11	33.64	5.67	25.53	246	0.00
10	12.10	33.68	5.71	243	10	12.10	33.68	5.71	25.57	243	0.02
30	11.58	33.74	5.05	229	20	11.94	33.71	5.50	25.62	238	0.05
46	10.01	33.87	3.52	193	30	11.58	33.74	5.05	25.71	229	0.07
55	9.74	33.86	3.26	190	50	9.85	33.87	3.36	26.11	191	0.11
65	9.46	33.89	2.97	183	75	9.00	33.96	2.43	26.33	170	0.16
75	9.00	33.96	2.43	170	100	8.79	34.03	2.20	26.42	162	0.20
96	8.81	34.02	2.21	163	150	8.44	34.11	1.90	26.52	152	0.28
110	8.75	34.07	2.15	159	200	8.24	34.14	1.61	26.58	146	0.36
124	8.60	34.10	1.93	154	250	8.13	34.21	1.38	26.65	140	0.43
147	8.47	34.10	1.92	152	300	7.82	34.23	1.20	26.71	134	0.50
175	8.36	34.13	1.78	149	400	7.08	34.25	0.84	26.84	122	0.63
213	8.20	34.14	1.48	145	500	6.33	34.30	0.58	26.98	108	0.75
264	8.09	34.22	1.31	138	600	(5.54)	(34.35)		(27.12)	(95)	(0.86)
344	7.51	34.23	1.05	129							
444	6.76	34.27	0.70	116							
584	5.66	34.34	0.42	97							



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

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STRANGER; April 16, 1956; 0925 GCT; 33°33.5'N, 120°45'W; sounding, 800 fm; wind, 320°, force 6; weather, missing; sea, very rough; wire angle, 33°.

83.60

0	11.87	33.33	6.34	264	0	11.87	33.33	6.34	25.34	264	0.00
8	11.84	33.32	-	264	10	11.84	33.32	6.42	25.34	264	0.03
25	11.82	33.34u	-	-	20	11.82	33.33	6.50	25.34	264	0.05
37	11.86	33.34	6.65	264	30	11.83	33.33	6.57	25.34	264	0.08
45	11.78	33.31u	6.28u	-	50	11.68	33.36	6.54	25.40	259	0.13
50	11.68	33.36	-	259	75	10.78	33.56	5.71	25.71	229	0.19
58	11.56	33.35	6.28	257	100	8.63	33.76	3.52	26.23	180	0.24
68	11.20	33.30	6.11	255	150	8.23	34.04	2.36	26.50	154	0.33
74	10.81	33.55	5.55u	230	200	7.50	34.08	2.19	26.65	140	0.40
78	10.55	33.58	5.80u	223	250	6.78	34.07	1.92	26.74	131	0.47
88	9.70	33.68	4.74	202	300	6.40	34.12	1.47	26.83	123	0.54
98	8.66	33.75	3.63	181							
114	8.59	33.89	2.89	170							
138	8.39	33.99	2.40	160							
175	7.93	34.09	2.28	145							
234	6.93	34.06	2.02	134							
340	6.18	34.15	1.10	118							

STRANGER; April 16, 1956; 0421 GCT; 33°14'N, 121°25.5'W; sounding, 2000+ fm; wind, 320°, force 5; weather, missing; sea, very rough; wire angle, 07°.

83.70

0	12.46	33.14	6.22	289	0	12.46	33.14	6.22	25.08	289	0.00
10	12.42	33.14	6.26	288	10	12.42	33.14	6.26	25.09	288	0.03
29	12.47	33.15	6.35	288	20	12.46	33.15	6.30	25.09	288	0.06
44	12.50	33.23	6.21	283	30	12.48	33.16	6.35	25.09	288	0.09
54	11.58	33.29	5.99	262	50	11.98	33.26	6.10	25.26	272	0.14
64	11.29	33.35	5.66	253	75	10.37	33.41	5.18	25.67	233	0.20
73	10.51	33.39	5.30	236	100	9.45	33.55	4.18	25.94	207	0.26
93	9.63	33.52	4.42	213	150	8.63	33.84	3.11	26.29	174	0.36
108	9.29	33.58	3.92	203	200	7.89	33.97	2.46	26.51	153	0.44
122	9.12	33.68	3.07	193	250	7.32	34.05	1.93	26.65	140	0.52
147	8.69	33.82	3.12	176	300	6.90	34.10	1.50	26.75	130	0.58
175	8.22	33.91	2.83	163	400	6.10	34.17	0.89	26.90	116	0.71
214	7.72	34.00	2.29	149	500	5.42	34.24	0.58	27.05	102	0.83
268	7.16	34.07	1.79	136	600	5.07	34.31	0.36	27.14	93	0.93
352	6.47	34.14	1.11	122							
456	5.64	34.20	0.70	108							
600	5.07	34.31	0.36	93							

STRANGER; April 15, 1956; 2343 GCT; 32°54'N, 122°07.5'W; sounding, 2000+ fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 03°.

83.80

0	12.56	33.10	6.14	293	0	12.56	33.10	6.14	25.04	293	0.00
10	12.50	33.12	6.26	291	10	12.50	33.12	6.26	25.06	291	0.03
30	12.44	33.12	6.24	291	20	12.50	33.12	6.25	25.06	291	0.06
55	11.78	33.12	6.36	278	30	12.44	33.12	6.24	25.06	291	0.09
64	11.20	33.24	6.41	260	50	12.00	33.12	6.31	25.14	283	0.14
73	10.32	33.31	6.17	239	75	10.22	33.33	6.04	25.64	236	0.21
83	9.98	33.36	5.54	230	100	8.90	33.38	5.50	25.89	212	0.27
98	8.98	33.37	5.48	214	150	8.40	33.89	3.19	26.36	167	0.36
112	8.65	33.53	5.58	197	200	7.90	34.04	2.36	26.56	149	0.44
131	8.51	33.82	3.94	174	250	7.20	34.05	2.29	26.67	138	0.51
150	8.40	33.89	3.19	167	300	6.97	34.16	1.35	26.79	126	0.58
175	8.25	34.00	2.46	157	400	6.08	34.19	1.07	26.93	114	0.71
198	7.94	34.04	2.37	149	500	5.43	34.26	0.70	27.06	101	0.82
246	7.26	34.05	2.32	139							
324	6.82	34.18	1.21	124							
420	5.90	34.19	1.02	111							
548	5.26	34.30	0.50	96							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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

83.90 STRANGER; April 15, 1956; 1858 GCT; 32°34'N, 122°48'W; sounding, 2000+ fm; wind, 350°, force 4; weather, overcast; sea, rough; wire angle, 08°.

0	14.06	33.25	5.85	311	0	14.06	33.25	5.85	24.85	311	0.00
10	14.04	33.26	5.90	310	10	14.04	33.26	5.90	24.86	310	0.03
30	14.04	33.26	5.92	310	20	14.04	33.26	5.91	24.86	310	0.06
55	14.05	33.25	5.90	311	30	14.04	33.26	5.92	24.86	310	0.09
64	14.05	33.24	5.88	312	50	14.05	33.25	5.91	24.85	311	0.16
74	12.62	33.07	6.13	297	75	12.40	33.05	6.13	25.02	295	0.23
84	12.54	33.11	6.09	292	100	11.88	33.25	5.87	25.28	270	0.30
98	11.99	33.23	5.92	274	150	9.57	33.53	4.33	25.90	211	0.42
112	11.10	33.30	5.36	253	200	8.70	33.85	3.19	26.29	174	0.52
130	10.11	33.32	5.23	235	250	7.85	34.06	2.43	26.58	147	0.60
149	9.58	33.53	4.34	211	300	7.18	34.06	2.12	26.68	137	0.68
172	9.13	33.69	3.66	192	400	6.69	34.21	0.95	26.86	120	0.81
197	8.75	33.82	3.26	177	500	5.98	34.26	0.69	27.00	107	0.93
243	7.96	34.05	2.51	149							
318	7.00	34.07	1.94	134							
413	6.62	34.22	0.91	118							
540	5.54	34.27	0.62	102							

87.36 STRANGER; April 18, 1956; 0339 GCT; 33°47.5'N, 118°43.5'W; sounding, 490 fm; wind, 260°, force 3; weather, partly cloudy; sea, slight; wire angle, 08°.

0	14.81	33.61	7.18	300	0	14.81	33.61	7.18	24.97	300	0.00
10	14.30	33.60	6.32	290	10	14.30	33.60	6.32	25.07	290	0.03
29	11.95	33.58	6.07	247	20	13.29	33.59	6.19	25.26	272	0.06
39	10.62	33.60	4.09	223	30	11.70	33.58	5.92	25.56	244	0.08
49	10.28	33.62	4.01	216	50	10.25	33.62	4.00	25.85	216	0.13
59	9.88	33.74	3.54	201	75	9.60	33.85	2.98	26.14	188	0.18
68	9.69	33.81	3.11	192	100	9.10	33.99	2.70	26.34	170	0.22
82	9.52	33.89	2.87	183	150	8.85	34.20	2.10	26.54	150	0.31
97	9.18	33.96	2.77	173	200	8.63	34.27	1.51	26.63	142	0.38
111	8.95	34.06	2.49	162	250	8.32	34.28	1.30	26.68	137	0.45
135	8.90	34.14	2.55	156	300	7.95	34.29	1.21	26.74	131	0.52
165	8.80	34.23	1.89	147	400	7.00	34.32	0.78	26.90	116	0.65
198	8.66	34.27	1.52	142	500	6.20	34.38	0.53	27.06	101	0.76
246	8.35	34.28	1.30	137							
323	7.74	34.29	1.14	128							
420	6.82	34.33	0.70	113							
549	5.92	34.40	0.46	96							

87.40 STRANGER; April 18, 1956; 0615 GCT; 33°38.5'N, 118°58'W; sounding, 450 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 04°.

0	14.17	33.58	5.52	289	0	14.17	33.58	5.52	25.08	289	0.00
10	13.98	33.58	5.99	285	10	13.98	33.58	5.99	25.12	285	0.03
30	12.53	33.60	5.93	256	20	13.59	33.59	5.99	25.21	277	0.06
40	10.86	33.66	3.74	222	30	12.53	33.60	5.93	25.43	256	0.08
51	10.08	33.68	2.65	208	50	10.13	33.67	2.68	25.91	210	0.13
60	9.73	33.78	2.95	195	75	9.52	33.78	2.68	26.09	193	0.18
70	9.56	33.96r	2.97	-	100	9.22	33.93	2.60	26.27	176	0.23
85	9.52	33.78	2.46	192	150	8.77	34.10	2.18	26.48	156	0.31
100	9.22	33.93	2.60	176	200	8.25	34.19	1.70	26.62	143	0.39
114	9.15	33.97	2.29	172	250	8.04	34.25	1.19	26.70	135	0.46
136	8.99	34.07	2.32	162	300	7.51	34.27	1.07	26.79	126	0.52
165	8.56	34.13	1.98	151	400	6.70	34.29	0.45	26.92	114	0.65
198	8.26	34.18	1.71	143	500	6.19	34.32	0.46	27.01	106	0.76
244	8.10	34.25	1.20	136							
320	7.33	34.27	1.01	124							
416	6.62	34.29	0.45	113							
543	6.00	34.33	0.49	102							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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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STRANGER; April 18, 1956; 1512, 1531 GCT; 33°00'N, 120°22'W; sounding, 340 fm; wind, 320°, force 5; weather, overcast; sea, moderate; wire angle, 00°, 03°.

87.60

0	11.61	33.39	6.25	255	0	11.61	33.39	6.25	25.44	255	0.00
10	11.59	33.42	6.36	253	10	11.59	33.42	6.36	25.46	253	0.03
31	11.62	33.48	6.11	249	20	11.42	33.42	6.34	25.49	250	0.05
40	11.01	33.47	5.79	239	30	11.61	33.48	6.12	25.50	249	0.08
50	11.10	33.57	5.73	233	50	11.10	33.57	5.73	25.67	233	0.12
60	11.04	33.63	5.48	228	75	10.60	33.67	5.06	25.84	217	0.18
69	10.90	33.69	-	221	100	9.60	33.72	3.71	26.04	198	0.23
84	9.91	33.60	4.52	211	150	8.50	34.00	2.30	26.44	160	0.32
98	9.63	33.71	3.82	199	200	8.22	34.12	1.83	26.57	148	0.40
112	9.35	33.80	3.37	188	250	6.80	34.07	1.97	26.73	132	0.47
136	8.74	33.98	2.40	165	300	6.31	34.13	1.51	26.85	121	0.54
165	8.32	34.03	2.15	155	400	6.23	34.29	0.65	27.98	109	0.65
198	8.24	34.12	1.84	148	500	6.00	34.35	0.50	27.07	100	0.76
245	6.90	34.07	1.97	133							
323	6.22	34.16	1.12	118							
420	6.24	34.32	0.59	106							
546	5.74	34.36	0.44	97							

STRANGER; April 18, 1956; 2020 GCT; 32°40'N, 121°03'W; sounding, 340 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 08°.

87.70

0	12.56	33.19	6.27	287	0	12.56	33.19	6.27	25.10	287	0.00
10	12.48	33.22	6.29	284	10	12.48	33.22	6.29	25.13	284	0.03
30	12.46	33.24	6.24	282	20	12.48	33.23	6.26	25.14	283	0.06
40	11.95	33.30	6.30	268	30	12.46	33.24	6.24	25.15	282	0.08
50	11.74	33.34	6.47	262	50	11.74	33.34	6.47	25.37	262	0.14
60	11.52	33.31	6.16	260	75	10.55	33.35	5.55	25.59	241	0.20
68	10.81	33.31	5.73	247	100	9.80	33.55	5.17	25.88	212	0.26
83	10.28	33.39	5.39	233	150	8.79	33.73	3.66	26.18	184	0.36
98	9.87	33.57	5.21	213	200	8.12	33.96	2.69	26.46	158	0.45
111	9.37	33.49	4.54	211	250	7.50	34.04	2.06	26.61	143	0.52
136	8.98	33.66	3.92	192	300	7.01	34.06	1.88	26.71	134	0.60
170	8.52	33.82	3.27	174	400	6.15	34.16	1.20	26.89	117	0.72
198	8.17	33.96	2.74	158	500	5.60	34.26	0.77	27.05	102	0.84
246	7.54	34.04	2.09	144							
324	6.76	34.08	1.76	130							
420	6.00	34.19	1.07	112							
548	5.36	34.30	0.61	97							

STRANGER; April 19, 1956; 0052 GCT; 32°20'N, 121°43'W; sounding, 2000+ fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 08°.

87.80

0	13.06	33.12	6.53	302	0	13.06	33.12	6.53	24.95	302	0.00
10	13.00	33.12	6.45	300	10	13.00	33.12	6.45	24.96	300	0.03
30	12.88	33.11	6.78	299	20	12.98	33.12	6.50	24.97	300	0.06
35p	12.66	-	-	-	30	12.88	33.11	6.78	24.98	299	0.09
44p	12.29	33.05	6.40	293	50	11.95	33.10	6.47	25.14	283	0.15
54p	11.71	33.14	6.48	276	75	11.00	33.27	5.63	25.46	253	0.22
74p	11.02	33.27	5.64	254	100	9.75	33.45	5.03	25.80	220	0.28
89p	9.98	33.40	5.15	227	150	8.97	33.67	4.15	26.11	191	0.38
120	9.44	33.52	4.85	210	200	8.00	33.95	2.91	26.47	157	0.47
144	9.04	33.62	4.35	196	250	7.30	34.08	2.25	26.68	137	0.54
173	8.55	33.85	3.24	172	300	6.88	34.13	1.68	26.78	128	0.61
212	7.79	33.98	2.81	152	400	6.20	34.21	0.86	26.94	113	0.74
265	7.17	34.10	2.05	134	500	5.68	34.30	0.55	27.07	100	0.85
348	6.54	34.17	1.25	121	600	(5.28)	(34.41)	(0.50)	(27.20)	(88)	(0.95)
450	5.91	34.25	0.64	107							
594	5.28	34.40	0.50	89							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$\frac{10^{-5}}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{cm/g}$	dyn. m

87.90

STRANGER; April 19, 1956; 0530 GCT; 32°00'N, 122°24'W; sounding, 2000+ fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 11°.

0	13.88	33.28	5.86	306	0	13.88	33.28	5.86	24.90	306	0.00
10	13.87	33.25	5.95	307	10	13.87	33.25	5.95	24.89	307	0.03
30	13.86	33.27	5.95	306	20	13.86	33.26	5.95	24.89	307	0.06
59	13.70	33.22	6.02	306	30	13.86	33.27	5.95	24.90	306	0.09
68	13.04	33.18	5.95	297	50	13.81	33.25	5.99	24.90	306	0.15
78	12.62	33.20	5.84	288	75	12.78	33.19	5.89	25.06	291	0.23
92	11.78	33.22	5.74	271	100	11.19	33.22	5.69	25.38	261	0.30
105	10.82	33.22	5.61	254	150	9.11	33.64	3.99	26.06	196	0.41
120	10.06	33.33	5.11	234	200	8.20	33.97	2.73	26.46	158	0.50
138	9.51	33.49	4.40	213	250	7.59	34.05	2.33	26.62	143	0.58
157	8.92	33.75	3.73	185	300	7.15	34.10	1.95	26.71	134	0.65
184	8.46	33.93	3.00	165	400	6.42	34.21	1.00	26.89	117	0.78
207	8.08	33.99	2.63	155	500	5.87	34.30	0.55	27.04	103	0.90
258	7.50	34.06	2.26	142							
337	6.85	34.13	1.65	128							
442	6.19	34.25	0.68	110							
577	5.52	34.34	0.44	96							

90.30

STRANGER; April 20, 1956; 1853 GCT; 33°24'N, 117°55.5'W; sounding, 260 fm; wind, direction missing, force 1; weather, fog; sea, slight; wire angle, 03°.

0	15.22	33.58	6.00	311	0	15.22	33.58	6.00	24.85	311	0.00
10	15.00	33.55	6.04	309	10	15.00	33.55	6.04	24.87	309	0.03
30	10.78	33.57	4.15	228	20	12.70	33.55	5.17	25.35	263	0.06
39	10.14	33.61	3.39	214	30	10.78	33.57	4.15	25.72	228	0.08
49	9.98	33.66	3.32	208	50	9.95	33.67	3.30	25.93	208	0.13
58	9.68	33.76	2.90	196	75	9.47	33.85	2.70	26.16	186	0.18
69	9.48	33.82	2.80	188	100	9.30	33.99	2.27	26.30	173	0.22
83	9.44	33.86	2.60	185	150	9.19	34.22	1.60	26.50	154	0.30
97	9.34	33.97	2.31	175	200	9.01	34.27	1.37	26.57	148	0.38
110	9.26	34.12	2.22	163	250	8.63	34.31	1.33	26.66	139	0.45
135	9.23	34.20	1.73	156	300	8.14	34.33	1.08	26.75	130	0.52
163	9.16	34.07 <sub>r</sub>	1.57	-	400	7.06	34.35	0.72	26.92	114	0.65
197	9.02	34.27	1.38	148							
244	8.67	34.31	1.34	140							
321	7.89	34.34	0.97	126							
417	6.88	34.35	0.68	112							
475a)	6.36	34.34	-	-							

90.37

STRANGER; April 20, 1956; 1537 GCT; 33°10.5'N, 118°23'W; sounding, 650 fm; wind, calm; weather, clear; sea, rough; wire angle, 04°.

0	14.37	33.58	6.43	293	0	14.37	33.58	6.43	25.04	293	0.00
10	14.32	33.58	6.48	292	10	14.32	33.58	6.48	25.05	292	0.03
30	12.19	33.66	5.92	246	20	13.55	33.60	6.31	25.22	276	0.06
39	10.91	33.60	5.00	228	30	12.19	33.66	5.92	25.53	246	0.08
49	10.29	33.64	4.22	214	50	10.28	33.64	4.17	25.87	214	0.13
59	10.05	33.69	3.96	207	75	9.59	33.84	3.50	26.14	188	0.18
69	9.78	33.83	3.76	192	100	9.11	33.92	2.59	26.28	175	0.23
83	9.33	33.86	3.08	183	150	8.90	34.19	2.25	26.52	152	0.31
97	9.16	33.90	2.63	177	200	8.21	34.20	1.70	26.64	141	0.38
112	9.01	34.02	2.48	166	250	8.26	34.28	1.13	26.69	136	0.45
135	9.01	34.11	2.40	160	300	7.76	34.29	1.08	26.77	128	0.52
164	8.72	34.20	2.10	148	400	6.80	34.31	0.85	26.92	114	0.65
197	8.21	34.20	1.75	141	500	6.16	34.33	0.63	27.02	105	0.76
245	8.28	34.27	1.17	137							
322	7.53	34.29	1.04	125							
417	6.67	34.31	0.83	112							
549	5.92	34.33	0.56	101							

a) Owing to an error in reading the fathometer, the deepest Nansen bottle of this cast rested on the bottom. After determining the correct depth of the bottom from the fathometer, the values obtained at this depth were accepted.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$	
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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STRANGER; April 20, 1956; 1048 GCT; 32°54.5'N, 118°55.5'W; sounding, 950 fm; wind, 270°, force 4; weather, clear; sea, rough; wire angle, 00°.

90.45

0	14.11	33.62	6.58	285	0	14.11	33.62	6.58	25.12	285	0.00
10	14.10	33.64	7.08	283	10	14.10	33.64	7.08	25.14	283	0.03
30	11.73	33.62	4.95	240	20	13.08	33.63	6.03	25.33	265	0.06
40	10.52	33.67	4.31	216	30	11.73	33.62	4.95	25.59	240	0.08
49	9.92	33.73	3.85	202	50	9.88	33.73	3.81	26.00	202	0.13
59	9.48	33.80	3.34	190	75	8.98	33.91	2.80	26.29	174	0.17
69	9.18	33.87	2.92	180	100	8.53	34.01	2.37	26.44	160	0.22
85	8.68	33.97	2.61	165	150	8.05	34.17	1.64	26.64	141	0.29
98	8.56	34.01	2.42	160	200	7.65	34.21	1.39	26.73	132	0.36
113	8.43	34.06	2.24	155	250	7.30	34.26	1.10	26.82	124	0.42
137	8.18	34.12	1.79	147	300	7.04	34.30	0.85	26.88	118	0.49
165	7.96	34.19	1.54	138	400	6.42	34.33	0.62	26.99	108	0.60
199	7.67	34.21	1.40	133	500	6.00	34.34	0.49	27.05	102	0.71
247	7.34	34.26	1.13	124							
323	6.90	34.31	0.77	115							
419	6.34	34.33	0.60	106							
552	5.80	34.34	0.42	99							

STRANGER; April 20, 1956; 0524, 0601 GCT; 32°34.5'N, 119°37'W; sounding, 500 fm; wind, 300°, force 6; weather, cloudy; sea, very rough; wire angle, 15°, 20°.

90.55

0	12.11	33.51	6.64	255	0	12.11	33.51	6.64	25.44	255	0.00
9	12.10	33.49	6.57	257	10	12.10	33.49	6.56	25.43	256	0.03
28	11.59	-	5.84	-	20	11.87	33.50	6.18	25.47	252	0.05
42	10.97	33.58	5.46	230	30	11.50	33.54	5.78	25.57	242	0.08
51	10.19	33.56	4.95	219	50	10.21	33.56	4.96	25.82	219	0.12
61	10.00	33.58	4.74	214	75	9.70	33.65	4.20	25.97	204	0.17
70	9.85	33.62	4.42	209	100	8.98	33.77	3.29	26.18	184	0.22
88	9.22	33.72	3.57	192	150	8.19	33.97	2.60	26.46	158	0.31
101	8.96	33.77	3.28	184	200	8.01	34.14	1.77	26.63	142	0.39
116	8.53	33.86	2.89	171	250	7.62	34.22	1.21	26.73	132	0.46
138	8.28	33.95	2.74	161	300	7.29	34.25	1.04	26.82	124	0.52
					400	6.70	34.31	0.63	26.94	112	0.64
161	8.09	33.99	2.47	155	500	6.15	34.35	0.43	27.05	102	0.75
199	8.01	34.14	1.78	143							
250	7.62	34.22	1.21	132							
329	7.10	34.27	0.92	120							
427	6.54	34.33	0.55	109							
565	5.80	34.37	0.36	97							

STRANGER; April 20, 1956; 0225 GCT; 32°24.5'N, 119°57.5'W; sounding, 400 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 24°.

90.60

0	12.35	33.26	6.24	278	0	12.35	33.26	6.24	25.19	278	0.00
8	12.30	33.26	6.35	277	10	12.25	33.26	6.35	25.21	276	0.03
27	11.75	33.34	6.31	262	20	11.95	33.31	6.34	25.31	267	0.05
42	11.56	33.36	6.09	256	30	11.71	33.35	6.31	25.39	260	0.08
50	11.12	33.36	6.00	249	50	11.12	33.36	6.00	25.50	249	0.13
61	10.98	33.40	5.82	244	75	10.33	33.47	5.28	25.72	228	0.19
70	10.59	33.46	5.48	232	100	9.29	33.60	4.11	26.00	202	0.25
86	9.81	33.48	4.77	219	150	8.45	33.95	2.61	26.41	163	0.34
98	9.34	33.58	4.16	204	200	8.05	34.15	1.84	26.62	143	0.41
110	9.08	33.73	3.57	189	250	7.78	34.23	1.47	26.72	133	0.48
129	8.66	33.87	3.02	172	300	7.41	34.24	1.15	26.78	127	0.55
152	8.41	33.96	2.56	162	400	6.61	34.31	0.70	26.96	111	0.67
183	8.15	34.07	2.03	150	500	6.00	34.35	0.41	27.07	100	0.78
229	7.89	34.22	1.62	135							
298	7.42	34.24	1.16	127							
389	6.70	34.30	0.72	113							
521	5.85	34.36	0.35	98							

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5604

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m	

90.70

STRANGER; April 19, 1956; 2123 GCT; 32°04.5'N, 120°38'W; sounding, 2000+ fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	13.14	33.35	6.38	286	0	13.14	33.35	6.38	25.11	286	0.00
10	12.53	33.33	6.25	276	10	12.53	33.33	6.25	25.21	276	0.03
29	11.91	33.40	6.25	260	20	12.15	33.36	6.25	25.31	267	0.06
49	11.62	33.42	6.75u	253	30	11.90	33.40	6.24	25.39	260	0.08
59	11.23	33.48	5.78	242	50	11.61	33.42	6.12	25.46	253	0.13
68	10.96	33.51	5.29	235	75	10.90	33.53	5.32	25.68	232	0.19
82	10.82	33.55	5.35	230	100	10.40	33.58	5.24	25.79	221	0.25
97	10.50	33.57	5.30	223	150	8.57	33.85	3.41	26.31	172	0.35
130	9.22	33.68	3.77	195	200	7.90	34.02	2.62	26.54	150	0.43
158	8.35	33.91	3.26	165	250	7.21	34.06	2.25	26.68	137	0.51
194	7.99	34.01	2.68	152	300	6.75	34.11	1.59	26.78	128	0.58
257	7.16	34.07	2.18	136	400	6.20	34.22	0.81	26.94	113	0.70
352	6.41	34.16	1.10	120	500	5.85	34.29	0.51	27.04	103	0.81
469	6.00	34.28	0.60	106	600	5.30	34.33	0.39	27.14	94	0.92
614	5.21	34.34	0.38	92	700	4.83	34.43	0.40	27.27	81	1.01
811	4.54	34.48	0.44	75	800	4.58	34.47	0.43	27.33	75	1.10
1054	3.76	34.49	0.77	66	1000	3.90	34.49	0.70	27.42	67	1.25

90.80

STRANGER; April 19, 1956; 1552 GCT; 31°44'N, 121°19.5'W; sounding, 2000+ fm; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 05°.

0	13.97	33.36	6.12	301	0	13.97	33.36	6.12	24.96	301	0.00
10	13.95	33.35	6.08	301	10	13.95	33.35	6.08	24.96	301	0.03
30	13.94	33.37	6.22	300	20	13.95	33.37	6.16	24.96	301	0.06
49	12.42	33.33	6.40	274	30	13.94	33.37	6.22	24.97	300	0.09
60	11.76	33.32	6.03	263	50	12.40	33.33	6.39	25.24	274	0.15
69	11.30	33.31	5.68	256	75	11.11	33.33	5.65	25.48	251	0.21
84	10.78	33.40	5.59	240	100	10.16	33.53	5.27	25.79	221	0.27
98	10.20	33.27r	5.32	-	150	8.65	33.87	2.80	26.30	173	0.37
132	9.13	33.76	3.43	188	200	8.19	33.99	2.55	26.48	156	0.46
160	8.50	33.91	2.71	167	250	7.62	34.07	2.41	26.62	143	0.53
198	8.20	33.99	2.56	156	300	7.13	34.11	2.00	26.72	133	0.60
265	7.44	34.09	2.33	139	400	6.33	34.21	0.98	26.90	116	0.73
366	6.59	34.16	1.21	122	500	5.70	34.34	0.58	27.09	98	0.84
491	5.75	34.33	0.59	99	600	5.21	34.40	0.45	27.20	88	0.94
640	5.02	34.42	0.44	84	700	4.82	34.44	0.50	27.28	80	1.03
840	4.25	34.51	0.74	69	800	4.45	34.49	0.67	27.36	73	1.11
1090	3.54	34.55	0.90	60	1000	3.79	34.54	0.85	27.46	63	1.26

90.90

STRANGER; April 19, 1956; 1016 GCT; 31°24.5'N, 121°58.5'W; sounding, 2000+ fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 05°.

0	13.77	33.37	6.04	297	0	13.77	33.37	6.04	25.00	297	0.00
10	13.75	33.35	6.10	298	10	13.75	33.35	6.10	24.99	298	0.03
30	13.76	33.37	6.12	297	20	13.75	33.37	6.11	25.00	297	0.06
50	11.66	33.35	5.80	259	30	13.76	33.37	6.12	25.00	297	0.09
59	10.78	33.32	5.41	246	50	11.66	33.35	5.80	25.40	259	0.14
69	10.08	33.34	5.13	234	75	10.00	33.36	5.01	25.70	230	0.21
84	9.85	33.51	4.57	217	100	9.42	33.66	3.78	26.03	199	0.26
99	9.42	33.66	3.79	199	150	8.53	33.94	2.56	26.38	165	0.35
133	8.87	33.86	2.95	176	200	7.84	34.07	2.30	26.59	146	0.43
162	8.32	33.98	2.47	159	250	7.15	34.09	1.81	26.71	134	0.50
200	7.84	34.07	2.30	146	300	6.59	34.14	1.30	26.82	124	0.57
269	6.88	34.11	1.60	130	400	5.95	34.25	0.69	27.00	107	0.69
371	6.10	34.22	0.77	112	500	5.49	34.33	0.52	27.11	96	0.80
497	5.52	34.33	0.53	97	600	5.10	34.37	0.40	27.19	89	0.89
649	4.95	34.39	0.37	86	700	4.85	34.40	0.39	27.24	84	0.98
848	4.23	34.51	0.60	69	800	4.50	34.47	0.49	27.33	75	1.07
1104	3.58	34.56	0.82	59	1000	3.75	34.55	0.78	27.48	62	1.22

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
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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STRANGER; April 21, 1956; 0152 GCT; 32°50'N, 117°31.5'W; sounding, 470 fm; wind, 270°, force 1; weather, fog; sea, slight; wire angle, 02°.

93.30

0	14.94	33.56	7.13	306	0	14.94	33.56	7.13	24.90	306	0.00
10	14.34	33.57	6.80	294	10	14.34	33.57	6.80	25.03	294	0.03
30	11.53	33.58	5.37	240	20	13.35	33.58	6.35	25.25	273	0.06
41	10.52	33.60	3.98	222	30	11.53	33.58	5.37	25.59	240	0.08
51	10.11	33.69	3.75	208	50	10.14	33.69	3.76	25.93	208	0.13
60	9.90	33.71	3.38	203	75	9.65	33.81	3.00	26.10	192	0.18
70	9.76	33.78	3.10	196	100	9.43	33.96	2.60	26.26	177	0.23
84	9.49	33.87	2.78	185	150	9.05	34.18	2.10	26.48	156	0.31
100	9.43	33.96	2.60	177	200	8.73	34.29	1.59	26.63	142	0.38
114	9.20	34.05	2.88	167	250	8.44	34.33	1.45	26.70	135	0.46
137	9.24	34.14	2.16	161	300	8.05	34.37	1.18	26.80	126	0.52
166	8.86	34.22	2.03	149	400	7.26	34.38	0.71	26.91	115	0.65
200	8.73	34.29	1.59	142	500	6.53	34.37	0.52	27.01	106	0.76
248	8.46	34.33	1.47	135							
324	7.86	34.38	1.06	123							
422	7.10	34.38	0.65	112							
549	6.20	34.36	0.48	102							

STRANGER; April 21, 1956; 0615 GCT; 32°30'N, 118°13'W; sounding, 950 fm; wind, 290°, force 3; weather, fog; sea, rough; wire angle, 08°.

93.40

0	13.48	33.63	6.29	272	0	13.48	33.63	6.29	25.26	272	0.00
10	13.43	33.63	6.38	271	10	13.43	33.63	6.38	25.27	271	0.03
30	11.85	33.61	5.99	244	20	12.60	33.62	6.25	25.42	256	0.05
40	11.71	33.64	5.69	239	30	11.85	33.61	5.99	25.56	244	0.08
51	11.02	33.61	4.94	229	50	11.07	33.61	4.99	25.71	229	0.13
60	9.85	33.63	3.42	208	75	9.57	33.73	3.00	26.06	196	0.18
70	9.59	33.70	3.05	199	100	9.37	33.90	2.75	26.22	181	0.23
84	9.55	33.77	3.72u	193	150	9.05	34.11	1.91	26.44	160	0.31
98	9.36	33.89	2.81	181	200	8.82	34.27	1.31	26.60	144	0.39
112	9.59	34.13	1.89	167	250	8.30	34.26	1.27	26.67	138	0.46
135	9.27	34.11	1.87	164	300	7.49	34.26	0.94	26.80	126	0.53
162	8.92	34.14	1.95	156	400	6.58	34.33	0.56	26.98	109	0.65
194	8.83	34.27	1.32	145	500	6.15	34.33	0.39	27.03	104	0.76
240	8.42	34.26	1.29	140							
314	7.28	34.27	0.85	123							
408	6.51	34.33	0.55	108							
533	6.08	34.33	0.35	103							

STRANGER; April 21, 1956; 1048 GCT; 32°10'N, 118°53'W; sounding, 700+ fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 00°.

93.50

0	13.39	33.56	6.21	276	0	13.39	33.56	6.21	25.22	276	0.00
10	13.43	33.54	6.17	278	10	13.43	33.54	6.17	25.20	278	0.03
31	13.16	33.53	5.70	273	20	13.38	33.54	6.00	25.21	277	0.06
46	12.02	33.55	5.31	251	30	13.19	33.53	5.71	25.25	273	0.08
56	11.40	33.53	4.83u	241	50	11.77	33.54	5.28	25.52	247	0.13
65	10.98	33.57	5.12	231	75	10.38	33.60	4.30	25.82	219	0.19
76	10.30	33.60	4.22	218	100	9.37	33.80	3.07	26.14	188	0.24
96	9.49	33.77	3.11	192	150	8.55	34.05	2.49	26.46	158	0.33
110	9.07	33.87	2.91	178	200	8.00	34.07	2.11	26.56	148	0.41
124	8.75	33.96	2.64	166	250	8.23	34.30	1.15	26.71	134	0.48
149	8.56	34.04	2.49	158	300	7.82	34.38	0.80	26.84	122	0.55
176	8.42	34.08	2.16	153	400	6.77	34.36	0.65	26.98	109	0.67
215	8.14	34.16	1.67	143	500	5.99	34.35	0.59	27.07	100	0.78
269	8.14	34.33	0.98	130	600	(5.53)	(34.38)	(0.39)	(27.14)	(93)	(0.88)
351	7.26	34.39	0.64	114							
453	6.25	34.33	0.65	105							
598	5.56	34.38	0.40	93							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$\frac{-5}{10} \frac{T_3}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{-5}{10} \frac{T_3}{cm/g}$	dyn. m

93.60

STRANGER; April 21, 1956; 1532 GCT; 31°50'N, 119°34'W; sounding, 900+ fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 04°.

0	12.69	33.49	5.64	267	0	12.69	33.49	5.64	25.31	267	0.00
10	12.66	33.48	5.72	267	10	12.66	33.48	5.72	25.31	267	0.03
31	12.44	33.48	6.34	264	20	12.60	33.48	5.90	25.32	266	0.05
41	12.01	33.51	5.86	254	30	12.45	33.48	6.33	25.34	264	0.08
51	11.72	33.58	6.00	243	50	11.75	33.58	5.99	25.56	243	0.13
61	11.45	33.57	5.37	240	75	10.79	33.59	4.76	25.74	226	0.19
71	11.02	33.57	5.06	232	100	9.83	33.71	3.63	26.00	202	0.24
84	10.18	33.66	3.76	211	150	8.92	34.00	2.52	26.37	166	0.34
99	9.85	33.71	3.64	202	200	8.44	34.16	2.18	26.56	148	0.42
113	9.44	33.87	3.05	184	250	8.04	34.23	1.57	26.68	137	0.49
138	9.16	33.96	2.68	173	300	7.63	34.26	1.08	26.77	128	0.56
166	8.65	34.07	2.39	157	400	6.80	34.28	0.71	26.90	116	0.68
200	8.44	34.16	2.18	148	500	6.11	34.32	0.59	27.03	104	0.80
247	8.08	34.23	1.61	137							
324	7.47	34.27	0.95	126							
422	6.60	34.29	0.68	113							
549	5.86	34.34	0.56	100							

93.70

STRANGER; April 21, 1956; 2025, 2057 GCT; 31°30'N, 120°14'W; sounding, 2000 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 22°, 21°.

0	13.56	33.62	6.23	275	0	13.56	33.62	6.23	25.23	275	0.00
9	13.50	33.56	6.75	278	10	13.50	33.56	6.72	25.20	278	0.03
28	13.08	33.53	6.40	272	20	13.35	33.54	6.61	25.22	276	0.06
43	11.48	33.53	4.96	243	30	12.95	33.53	6.27	25.28	270	0.08
53	11.02	33.69	4.67	223	50	11.20	33.63	4.78	25.70	230	0.13
61	10.42	33.58	4.21	222	75	10.03	33.66	3.73	25.92	209	0.19
70	10.11	33.65	3.72	211	100	9.81	33.70	3.40	26.00	202	0.24
					150	9.05	33.98	2.62	26.33	170	0.33
86	9.97	33.67	3.76	207	200	8.58	34.16	2.22	26.55	149	0.42
99	9.82	33.70	3.41	202	250	7.80	34.14	2.11	26.65	140	0.49
112	9.53	33.78	3.19	192	300	7.31	34.16	1.67	26.74	131	0.56
134	9.30	33.88	2.88	181	400	6.59	34.26	0.85	26.92	114	0.68
160	8.91	34.03	2.48	164	500	6.00	34.33	0.63	27.06	101	0.80
196	8.65	34.16	2.24	151							
243	7.86	34.14	2.14	140							
321	7.14	34.18	1.49	128							
416	6.50	34.28	0.77	112							
553	5.66	34.36	0.60	96							

93.80

STRANGER; April 22, 1956; 0154, 0237, 0253 GCT; 31°09'N, 120°51'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 25°, 26°, 24°.

0	14.19	33.31	6.00	309	0	14.19	33.31	6.00	24.87	309	0.00
8	14.14	33.31	6.10	308	10	14.12	33.31	6.10	24.88	308	0.03
32	13.72	33.30	6.16	301	20	14.00	33.30	6.11	24.90	306	0.06
					30	13.79	33.30	6.13	24.95	302	0.09
43	13.32	33.30	6.24	293	50	12.90	33.29	6.15	25.11	286	0.15
57	12.57	33.29	6.00	280	75	11.88	33.40	5.67	25.39	260	0.22
67	12.50	33.39	5.80	272	100	10.86	33.45	5.23	25.62	238	0.28
75	11.88	33.40	5.67	260	150	9.17	33.76	3.60	26.15	187	0.39
					200	8.26	33.96	2.75	26.44	160	0.48
93	11.02	33.44	5.44	241	250	7.40	34.03	2.31	26.63	142	0.56
108	10.66	33.46	4.98	234	300	6.72	34.11	1.87	26.78	127	0.62
121	9.94	33.55	4.34	216	400	5.88	34.17	1.11	26.94	113	0.75
142	9.32	33.72	3.80	193	500	5.40	34.24	0.58	27.05	102	0.86
177	8.61	33.89	2.14u	170	600	(5.25)	(33.37)		(27.17)	(90)	(0.96)
210	8.10	33.98	2.62	156							
261	7.20	34.05	2.21	138							
340	6.35	34.15	1.56	120							
443	5.60	34.19	0.79	108							
586	5.26	34.36	0.39	92							



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm/g}$	dyn. m

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STRANGER; April 22, 1956; 0759 GCT; 30°45.5'N, 121°32'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 05°.

93.90

0	13.86	33.35	6.21	300	0	13.86	33.35	6.21	24.97	300	0.00
10	13.84	33.37	6.32	298	10	13.84	33.37	6.32	24.99	298	0.03
30	13.69	33.35	6.26	297	20	13.82	33.37	6.31	24.99	298	0.06
44	12.82	33.28	6.19	285	30	13.69	33.35	6.26	25.00	297	0.09
54	11.54	33.28	6.03	262	50	11.93	33.26	6.10	25.28	270	0.15
64	11.25	33.33	5.87	254	75	10.99	33.33	5.89	25.51	248	0.21
73	11.03	33.33	5.90	250	100	10.05	33.51	4.60	25.79	221	0.27
93	10.18	33.42	5.09	229	150	8.60	33.89	2.80	26.33	170	0.37
106	10.00	33.57	4.38	215	200	7.99	34.02	2.28	26.53	151	0.45
120	9.23	33.69	3.63	194	250	7.23	34.10	1.88	26.70	135	0.52
144	8.65	33.88	2.82	171	300	6.79	34.14	1.41	26.80	126	0.59
172	8.37	33.93	2.71	164	400	5.90	34.20	0.90	26.96	110	0.71
209	7.82	34.05	2.16	147	500	5.30	34.32	0.50	27.12	95	0.82
260	7.10	34.11	1.79	133	600	(5.24)	(34.41)		(27.21)	(87)	(0.92)
341	6.44	34.16	1.13	120							
441	5.56	34.23	0.71	104							
583	5.25	34.40	0.40	88							

STRANGER; April 23, 1956; 2000 GCT; 32°13'N, 117°22'W; sounding, 730 fm; wind, 170°, force 2; weather, overcast; sea, moderate; wire angle, 04°.

97.32

0	14.94	33.59	6.38	304	0	14.94	33.59	6.38	24.92	304	0.00
10	14.02	33.66	6.59	281	10	14.02	33.66	6.59	25.16	281	0.03
31	11.93	33.65	5.81	242	20	13.00	33.66	6.30	25.38	260	0.06
41	11.29	33.64	5.35	232	30	11.98	33.65	5.82	25.57	243	0.08
50	10.90	33.69	4.83	221	50	10.90	33.69	4.83	25.80	221	0.13
60	10.06	33.66	4.36	209	75	9.65	33.70	3.70	26.02	200	0.18
70	9.80	33.67	4.01	205	100	9.12	33.85	2.85	26.23	180	0.23
85	9.36	33.79	3.14	189	150	8.68	34.06	2.30	26.46	158	0.31
101	9.10	33.86	2.84	180	200	8.25	34.15	1.82	26.59	146	0.39
113	8.92	33.90	2.81	174	250	8.10	34.27	1.30	26.71	134	0.46
137	8.81	34.02	2.36	163	300	7.57	34.26	1.11	26.79	127	0.53
166	8.53	34.09	2.21	154	400	6.78	34.31	0.70	26.94	113	0.65
198	8.24	34.14	1.88	146	500	6.19	34.35	0.45	27.04	103	0.77
244	8.17	34.27	1.32	135							
319	7.38	34.26	1.06	125							
414	6.66	34.32	0.68	111							
546	5.97	34.36	0.36	100							

STRANGER; April 23, 1956; 1542 GCT; 31°55.5'N, 117°53.5'W; sounding, 400 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 14°.

97.40

0	14.75	33.56	6.40	303	0	14.75	33.56	6.40	24.94	303	0.00
10	14.71	33.55	6.43	303	10	14.71	33.55	6.43	24.94	303	0.03
29	14.22	33.54	6.28	293	20	14.54	33.55	6.38	24.98	299	0.06
43	13.68	33.51	6.28	285	30	14.21	33.54	6.28	25.04	293	0.09
53	13.34	33.49	6.22	280	50	13.45	33.49	6.24	25.16	282	0.15
64	12.11	33.43	5.89	262	75	10.90	33.43	5.39	25.60	240	0.21
73	11.04	33.43	5.49	243	100	9.80	33.59	4.58	25.90	211	0.27
92	9.98	33.51	4.50	219	150	9.03	33.88	3.07	26.26	177	0.37
106	9.77	33.63	4.61	207	200	8.02	34.03	2.63	26.53	151	0.45
120	9.53	33.75	3.43	194	250	7.69	34.12	2.17	26.65	140	0.52
143	9.18	33.84	3.05	182	300	7.40	34.22	1.68	26.78	128	0.59
169	8.71	33.95	3.19	167	400	6.70	34.27	1.02	26.91	115	0.72
206	7.97	34.05	2.53	149	500	6.12	34.35	0.68	27.05	102	0.83
255	7.66	34.13	2.12	139							
333	7.22	34.25	1.49	124							
431	6.46	34.29	0.87	111							
569	5.88	34.43	0.57	93							

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5604

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{3-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{3-5}$	$\Delta D$
m	°C	‰	ml/L	10 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

97.50

STRANGER; April 23, 1956; 1122 GCT; 31°34.5'N, 118°32'W; sounding, 1300 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 00°.

0	14.35	33.53	6.24	297	0	14.35	33.53	6.24	25.00	297	0.00
10	14.34	33.49	6.34	299	10	14.34	33.49	6.34	24.98	299	0.03
30	14.32	33.56	6.16	294	20	14.33	33.54	6.24	25.00	297	0.06
39	13.94	33.55	6.33	287	30	14.32	33.56	6.16	25.03	294	0.09
50	13.50	33.51	6.21	281	50	13.50	33.51	6.21	25.16	281	0.15
59	12.38	33.46	5.76	264	75	10.72	33.48	4.70	25.67	233	0.21
69	11.30	33.46	4.70	245	100	9.86	33.56	4.51	25.87	214	0.27
84	10.18	33.51	4.68	222	150	8.87	33.95	2.71	26.34	169	0.36
97	9.96	33.54	4.58	216	200	8.15	34.04	2.55	26.52	152	0.44
114	9.44	33.72	3.67	195	250	7.73	34.13	1.90	26.65	140	0.52
137	9.14	33.91	2.76	176	300	7.20	34.20	1.27	26.79	127	0.59
166	8.52	33.99	2.69	161	400	6.52	34.30	0.70	26.96	111	0.71
199	8.14	34.04	2.56	152	500	6.00	34.36	0.52	27.07	100	0.82
248	7.76	34.13	1.93	140							
326	6.94	34.24	1.02	121							
415	6.42	34.31	0.62	109							
545	5.77	34.38	0.50	96							

97.60

STRANGER; April 23, 1956; 0614, 0626 GCT; 31°15'N, 119°10.5'W; sounding, 2000+ fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 08°, 08°.

0	13.95	33.60	6.12	283	0	13.95	33.60	6.12	25.14	283	0.00
10	13.94	33.57	6.12	285	10	13.94	33.57	6.12	25.12	285	0.03
					20	13.91	33.57	6.12	25.12	285	0.06
35	13.83	33.57	6.11	284	30	13.86	33.57	6.11	25.12	285	0.09
45	12.96	33.52	5.90	270	50	12.65	33.49	5.80	25.31	267	0.14
60	12.00	33.44	5.55	259	75	10.57	33.43	4.97	25.66	234	0.20
70	10.82	33.41	5.10	240	100	9.60	33.61	3.87	25.95	206	0.26
79	10.34	33.45	4.82	230	150	8.63	33.88	2.90	26.32	171	0.35
98	9.64	33.59	3.91	208	200	8.06	34.08	2.21	26.57	148	0.43
117	9.01	33.82	3.30	181	250	7.65	34.17	1.76	26.69	136	0.51
131	8.95	33.82	3.18	180	300	7.20	34.20	1.25	26.79	127	0.57
154	8.56	33.91	2.81	168	400	6.57	34.31	0.60	26.96	111	0.70
191	8.14	34.03	2.29	153	500	6.00	34.38	0.46	27.09	98	0.80
229	7.84	34.16	1.95	139	600	5.47	34.38	0.45	27.15	92	0.90
285	7.36	34.19	1.38	130							
370	6.72	34.27	0.69	116							
481	6.10	34.38	0.46	100							
628	5.34	34.38	0.44	91							

97.80

STRANGER; April 22, 1956; 1846, 1903, 1918 GCT; 30°34'N, 120°22.5'W; sounding, 2000+ fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°, 25°, 25°.

0	14.46	33.30	6.08	316	0	14.46	33.30	6.08	24.80	316	0.00
9	14.44	33.31	6.03	315	10	14.43	33.31	6.01	24.81	315	0.03
					20	14.36	33.30	5.78	24.82	314	0.06
28	14.26	33.29	5.62	312	30	14.22	33.29	5.65	24.84	312	0.09
55	13.62	33.30	6.48	300	50	14.14	33.29	5.73	24.86	310	0.16
65	13.10	33.33	6.24	287	75	12.94	33.44	5.95	25.22	276	0.23
					100	11.30	33.40	5.41	25.49	250	0.30
75	12.94	33.44	5.95	276							
88	11.98	33.42	5.58	260							
100	11.30	33.40	6.21u	250							
112	10.50	33.47	5.20	231							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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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STRANGER; April 22, 1956; 1333 GCT; 30°15'N, 121°12'W; sounding, 2000+ fm; wind, 310°, force 5; weather, clear; sea, rough; wire angle, 15°.

97.90

0	13.85	33.21	5.99	310	0	13.85	33.21	5.99	24.86	310	0.00
9	13.84	33.19	6.01	312	10	13.84	33.19	6.03	24.84	312	0.03
28	13.84	33.19	6.67	312	20	13.84	33.19	6.30	24.84	312	0.06
39	13.68	33.19	6.14	308	30	13.83	33.19	6.66	24.84	312	0.09
49	13.44	33.22	6.29	302	50	13.43	33.22	6.28	24.95	302	0.15
58	12.96	33.21	6.09	293	75	12.35	33.27	6.10	25.20	278	0.23
66	12.39	33.20	5.95	284	100	11.30	33.32	5.71	25.44	255	0.30
81	12.30	33.30	6.20	274	150	9.24	33.63	4.26	26.03	199	0.41
94	11.68	33.31	5.59	263	200	8.45	33.89	3.11	26.35	168	0.50
107	10.81	33.35	5.88	245	250	7.86	34.03	2.50	26.55	149	0.58
127	10.00	33.49	4.93	221	300	7.40	34.10	2.14	26.68	137	0.66
154	9.17	33.65	4.19	196	400	6.06	34.14	1.41	26.89	117	0.79
185	8.65	33.84	3.37	174	500	5.41	34.24	0.73	27.05	102	0.90
229	8.04	33.99	2.65	154							
300	7.40	34.10	2.14	137							
392	6.15	34.13	1.48	119							
516	5.39	34.25	0.66	101							

STRANGER; April 24, 1956; 0409 GCT; 31°35'N, 116°59'W; sounding, 700 fm; wind, 280°, force 2; weather, missing; sea, moderate; wire angle, 07°.

100.33

0	14.93	33.57	6.41	306	0	14.93	33.57	6.41	24.90	306	0.00
10	13.96	33.61	6.41	283	10	13.96	33.61	6.41	25.14	283	0.03
31	12.27	33.64	5.77	249	20	13.10	33.63	6.13	25.34	264	0.06
41	11.70	33.62	5.48	240	30	12.30	33.64	5.79	25.49	250	0.08
50	11.21	33.61	4.94	232	50	11.21	33.61	4.94	25.68	232	0.13
60	10.40	33.58	3.99	221	75	10.00	33.77	3.48	26.01	200	0.18
70	10.14	33.77	3.71	202	100	9.35	33.82	3.02	26.16	187	0.23
85	9.70	33.77	2.62	196	150	9.02	34.16	2.15	26.48	156	0.32
99	9.38	33.82	3.02	187	200	8.91	34.29	1.53	26.59	145	0.40
113	9.23	33.92	2.72	177	250	8.50	34.30	1.18	26.67	138	0.47
136	9.01	34.09	2.42	161	300	7.94	34.27	1.14	26.73	132	0.54
166	9.02	34.22	1.95	152	400	7.21	34.30	0.81	26.86	120	0.67
198	8.93	34.29	1.54	145	500	6.72	34.34	0.68	26.96	110	0.79
246	8.53	34.30	1.18	138							
322	7.69	34.27	1.10	129							
418	7.18	34.31	0.78	119							
546	6.44	34.36	0.63	106							

STRANGER; April 24, 1956; 0758 GCT; 31°20.5'N, 117.26.5'W; sounding, 1000 fm; wind, 290°, force 3; weather, missing; sea, rough; wire angle, 06°.

100.40

0	14.38	33.62	6.39	291	0	14.38	33.62	6.39	25.06	291	0.00
10	14.35	33.60	6.37	292	10	14.35	33.60	6.37	25.05	292	0.03
29	12.58	33.64	6.21	255	20	13.90	33.62	6.35	25.15	282	0.06
48	11.69	33.59	5.55	242	30	12.56	33.64	6.19	25.45	254	0.08
59	10.65	33.60	4.30	224	50	11.50	33.59	5.37	25.61	238	0.13
68	10.36	33.62	4.13	217	75	10.15	33.64	3.87	25.89	212	0.19
83	9.86	33.69	3.47	204	100	9.50	33.82	3.03	26.14	188	0.24
97	9.56	33.80	3.07	191	150	9.19	34.09	2.31	26.40	164	0.33
130	9.25	33.93	2.82	177	200	8.80	34.13	2.02	26.49	155	0.41
158	9.15	34.11	2.16	162	250	7.85	34.10	1.96	26.62	143	0.49
196	8.85	34.13	2.03	156	300	7.30	34.18	1.65	26.75	130	0.56
263	7.75	34.13	1.93	140	400	6.66	34.33	0.75	26.97	110	0.68
362	6.82	34.29	1.07	116	500	6.35	34.37	0.44	27.03	104	0.79
485	6.41	34.36	0.44	105	600	5.79	34.41	0.45	27.14	94	0.90
634	5.55	34.42	0.46	90	700	5.20	34.44	0.45	27.24	84	0.99
832	4.64	34.47	0.43	77	800	4.75	34.47	0.43	27.30	78	1.08
1082	3.92	34.52	1.58u	66	1000	4.15	34.51		27.40	68	1.24

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{3-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{3-5}$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

100.50 STRANGER; April 24, 1956; 1302 GCT; 31°00.5'N, 118°08'W; sounding, 900+ fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 04°.

0	14.79	33.58	5.93	302	0	14.79	33.58	5.93	24.95	302	0.00
10	14.78	33.55	5.87	304	10	14.78	33.55	5.87	24.93	304	0.03
31	14.48	33.55	5.91	298	20	14.70	33.55	5.88	24.95	302	0.06
51	13.36	33.52	5.94	278	30	14.53	33.55	5.90	24.98	299	0.09
60	12.39	33.49	5.29	262	50	13.41	33.52	5.94	25.20	278	0.15
70	11.26	33.49	4.51	242	75	10.88	33.50	4.25	25.66	234	0.21
85	10.28	33.58	3.82	219	100	9.82	33.75	3.23	26.03	199	0.27
100	9.82	33.75	3.23	199	150	8.61	33.99	2.70	26.41	163	0.36
133	8.88	33.93	2.78	171	200	8.00	34.11	2.22	26.60	145	0.44
162	8.47	34.02	2.63	158	250	7.60	34.17	1.72	26.70	135	0.51
199	8.00	34.11	2.24	145	300	7.30	34.22	1.27	26.79	127	0.58
265	7.49	34.18	1.54	133	400	6.71	34.33	0.65	26.96	111	0.70
366	6.87	34.31	0.76	115	500	6.27	34.36	0.42	27.04	103	0.81
490	6.28	34.36	0.43	104	600	5.59	34.39	0.31	27.14	93	0.91
639	5.36	34.40	0.31	90	700	5.05	34.43	0.34	27.24	84	1.01
839	4.66	34.47	0.40	77	800	4.79	34.46	0.38	27.29	79	1.10
1090	3.86	34.52	0.67	65	1000	4.19	34.50	0.55	27.40	69	1.26

100.60 STRANGER; April 24, 1956; 1745 GCT; 30°40.5'N, 118°47'W; sounding, 1500+ fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 14°.

0	14.26	33.40	6.54	304	0	14.26	33.40	6.54	24.92	304	0.00
9	14.15	33.42	6.07	300	10	14.15	33.42	6.07	24.96	300	0.03
29	13.63	33.40	6.09	292	20	13.95	33.41	6.07	25.00	297	0.06
48	12.50	33.40	6.11	271	30	13.60	33.40	6.09	25.06	291	0.09
58	11.93	33.39	5.95	261	50	12.39	33.40	6.10	25.29	269	0.15
68	11.66	33.44	6.01	253	75	11.30	33.45	5.67	25.53	246	0.21
81	10.88	33.46	5.07	238	100	9.77	33.57	4.00	25.90	211	0.27
95	9.94	33.54	4.13	216	150	8.78	33.88	2.91	26.30	173	0.36
128	9.06	33.78	3.36	185	200	8.10	34.06	2.27	26.55	150	0.45
154	8.72	33.89	2.84	172	250	7.50	34.13	1.91	26.69	136	0.52
190	8.21	34.04	2.36	153	300	6.90	34.15	1.57	26.79	127	0.59
253	7.46	34.13	1.87	136	400	6.11	34.24	0.86	26.96	110	0.71
347	6.40	34.18	1.28	118	500	5.80	34.32	0.60	27.06	101	0.82
466	5.90	34.30	0.63	103	600	5.30	34.39	0.50	27.18	89	0.92
609	5.26	34.40	0.49	89	700	4.85	34.44	0.52	27.27	81	1.01
801	4.51	34.47	0.59	75	800	4.52	34.47	0.58	27.33	75	1.10
1044	3.80	34.52	0.80	64	1000	3.90	34.51	0.77	27.43	66	1.25

100.70 STRANGER; April 24, 1956; 2252 GCT; 30°21'N, 119°27'W; sounding, 2000 fm; wind, 220°, force 1; weather, cloudy; sea, moderate; wire angle, 07°.

0	14.42	33.31	5.99	314	0	14.42	33.31	5.99	24.82	314	0.00
10	14.22	33.31	7.04u	310	10	14.22	33.31		24.86	310	0.03
30	13.82	33.31	6.28	303	20	14.00	33.31	6.20	24.90	306	0.06
50	13.80	33.35	6.24	299	30	13.82	33.31	6.28	24.94	303	0.09
59	13.56	33.34	6.44	295	50	13.80	33.35	6.24	24.98	299	0.15
69	13.10	33.33	6.28	287	75	12.89	33.32	6.17	25.14	284	0.23
84	12.50	33.31	5.95	278	100	11.67	33.42	5.40	25.45	254	0.29
97	11.84	33.40	5.44	259	150	9.45	33.61	4.63	25.99	203	0.41
129	10.22	33.52	5.17	222	200	8.83	33.94	2.95	26.34	170	0.50
157	9.31	33.64	4.45	199	250	8.12	34.10	2.36	26.57	148	0.58
193	8.94	33.90	3.06	174	300	7.50	34.20	1.57	26.74	131	0.66
257	8.02	34.11	2.28	145	400	6.43	34.27	0.72	26.94	112	0.78
353	6.95	34.26	0.87	119	500	5.52	34.33	0.62	27.11	96	0.89
474	5.71	34.29	0.64	102	600	5.23	34.41	0.60	27.20	88	0.99
620	5.23	34.41	0.61	88	700	5.02	34.44	0.58	27.25	83	1.08
813	4.44	34.50	0.53	72	800	4.57	34.49	0.53	27.34	74	1.17
1063	3.72	34.53	1.07	63	1000	3.91	34.53	0.90	27.44	65	1.32

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
m	°C	‰	ml/L	$\frac{10^{-5} \text{ } ^\circ\text{C}}{\text{cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} \text{ } ^\circ\text{C}}{\text{cm/g}}$	dyn. m

STRANGER; April 25, 1956; 0527 GCT; 30°00'N, 120°09'W; sounding, 2000+ fm; wind, 220°, force 3; weather, cloudy; sea, rough; wire angle, 00°.

100.80

0	15.86	33.50	5.63	330	0	15.86	33.50	5.63	24.65	330	0.00
10	15.39	33.49	5.80	321	10	15.39	33.49	5.80	24.74	321	0.03
30	15.17	33.48	5.76	317	20	15.24	33.48	5.77	24.77	318	0.06
51	14.32	33.44	6.02	303	30	15.17	33.48	5.76	24.79	317	0.10
61	13.52	33.43	5.94	288	50	14.35	33.44	6.01	24.93	304	0.16
71	12.90	33.44	5.49	275	75	12.60	33.44	5.38	25.29	269	0.23
91p	11.34	33.43	5.03	248	100	10.63	33.41	4.91	25.63	237	0.29
113p	9.79	33.40	4.76	224	150	8.80	33.84	3.22	26.27	176	0.40
140p	8.94	33.76	3.56	185	200	8.19	34.04	2.19	26.52	152	0.48
192p	8.26	34.02	2.29	155	250	7.55	34.16	1.72	26.71	134	0.56
272p	7.28	34.19	1.50	129	300	6.95	34.21	1.22	26.83	123	0.62
374p	6.17	34.25	0.60	110	400	6.03	34.27	0.49	27.00	107	0.74
501p	5.76	34.36	0.34	97	500	5.77	34.36	0.34	27.10	97	0.85
678p	4.88	34.43	0.34	82	600	5.30	34.40	0.34	27.19	89	0.95
912p	4.20	34.49	0.53	70	700	4.80	34.44	0.36	27.27	81	1.04
					800	4.53	34.46	0.43	27.32	76	1.12

STRANGER; April 25, 1956; 1010, 1047 GCT; 29°41'N, 120°46'W; sounding, 2000+ fm; wind, 220°, force 4; weather, overcast; sea, moderate; wire angle, 04°, 04°.

100.90

0	14.68	33.26	6.00	323	0	14.68	33.26	6.00	24.72	323	0.00
10	14.61	33.32	5.97	317	10	14.61	33.32	5.97	24.79	317	0.03
31	14.48	33.33	5.89	314	20	14.55	33.33	5.91	24.81	315	0.06
50	13.76	33.22	6.21	307	30	14.49	33.33	5.90	24.82	314	0.10
60	13.66	33.22	6.04	306	50	13.76	33.22	6.21	24.89	307	0.16
70	13.20	33.23	6.02	296	75	13.18	33.28	5.90	25.05	292	0.23
85	13.00	33.40a)	5.69	-	100	11.86	33.30	5.97	25.31	267	0.30
99	11.90	33.30	5.97	267	150	9.60	33.65	4.00	26.00	202	0.42
133	10.53	33.45	4.95	233	200	8.50	33.92	2.96	26.36	167	0.52
					250	7.93	34.09	2.23	26.59	146	0.60
162	9.06	33.79	3.46	184	300	7.40	34.16	1.58	26.72	133	0.67
202	8.50	33.92	2.95	166	400	6.55	34.25	0.99	26.91	115	0.80
268	7.70	34.13	1.90	139	500	5.93	34.30	0.63	27.03	104	0.91
369	6.79	34.22	1.09	120	600	5.39	34.35	0.42	27.14	94	1.02
493	5.98	34.30	0.65	104	700	4.95	34.40		27.23	85	1.11
643	5.18	34.37	0.38	90	800	4.60	34.47		27.32	76	1.20
844	4.43	34.50	0.76u	72	1000	3.98	34.55		27.45	64	1.36
1097	3.70	34.58b)	0.75	59							

STRANGER; April 26, 1956; 1923 GCT; 30°59'N, 116°47'W; sounding, 1000 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 04°.

103.35

0	15.57	33.62	5.94	315	0	15.57	33.62	5.94	24.81	315	0.00
10	14.64	33.60	6.00	298	10	14.64	33.60	6.00	24.99	298	0.03
30	14.27	33.58	5.87	291	20	14.45	33.59	5.93	25.03	294	0.06
40	13.72	33.57	5.70	281	30	14.27	33.58	5.87	25.06	291	0.09
49	13.30	33.57	5.47	273	50	13.28	33.57	5.45	25.25	273	0.15
60	12.15	33.56	4.88	252	75	10.12	33.61	3.69	25.87	214	0.21
69	10.66	33.58	3.84	225	100	9.66	33.86	2.95	26.14	188	0.26
84	9.76	33.66	3.52	204	150	8.70	34.02	2.42	26.43	161	0.35
98	9.71	33.86	2.98	189	200	8.63	34.17	1.75	26.55	149	0.42
113	8.95	33.82	2.84	180	250	7.96	34.21	1.39	26.68	137	0.50
136	8.51	33.94	2.69	165	300	7.67	34.28	0.88	26.78	128	0.57
164	8.88	34.11	2.09	158	400	6.88	34.32	0.50	26.92	114	0.69
196	8.63	34.17	1.77	150	500	6.14	34.33	0.38	27.03	104	0.80
244	8.00	34.20	1.43	138							
319	7.57	34.29	0.77	126							
413	6.76	34.32	0.49	112							
540	5.90	34.33	0.34	101							

- a) Loose bottle cap; value does not fall on property curve.  
b) Loose bottle cap; value falls on property curve.

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{30}^{-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{30}^{-5}$	$\Delta D$
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

103.40 STRANGER; April 26, 1956; 1625 GCT; 30°47'N, 117°11'W; sounding, 1000 fm; wind, direction missing, force 1; weather, cloudy; sea, slight; wire angle, 00°.

0	15.50	33.75	6.04	304	0	15.50	33.75	6.04	24.92	304	0.00
10	14.89	33.71	5.96	295	10	14.89	33.71	5.96	25.02	295	0.03
30	12.44	33.71	4.56	247	20	14.44	33.71	5.81	25.11	286	0.06
40	10.35	33.82	3.15	202	30	12.44	33.71	4.56	25.52	247	0.08
50	9.68	33.89	2.82	186	50	9.68	33.89	2.82	26.16	186	0.13
61	9.52	33.95	2.52	179	75	9.27	33.94	2.55	26.27	176	0.17
71	9.31	33.94	2.53	177	100	8.97	34.04	2.37	26.39	164	0.22
84	9.18	33.97	2.66	172	150	8.45	34.12	1.99	26.53	151	0.30
101	8.97	34.04	2.36	164	200	8.06	34.18	1.72	26.64	141	0.37
114	8.82	34.04	2.30	162	250	7.50	34.20	1.22	26.74	131	0.44
138	8.58	34.11	2.02	153	300	7.34	34.26	0.97	26.82	124	0.50
166	8.30	34.13	1.97	148	400	6.65	34.33	0.49	26.96	110	0.63
197	8.11	34.18	1.74	141	500	6.10	34.35	0.32	27.05	102	0.74
245	7.52	34.20	1.24	132							
318	7.24	34.28	0.84	122							
415	6.57	34.33	0.44	110							
542	5.90	34.36	0.27	99							

103.50 STRANGER; April 26, 1956; 1149 GCT; 30°29.5'N, 117°46'W; sounding, 1000 fm; wind, 180°, force 1; weather, cloudy; sea, slight; wire angle, 00°.

0	14.99	33.52	6.18	310	0	14.99	33.52	6.18	24.86	310	0.00
10	14.98	33.49	5.91	312	10	14.98	33.49	5.91	24.84	312	0.03
30	14.12	33.44	6.22	299	20	14.60	33.46	6.05	24.89	307	0.06
40	13.91	33.46	6.04	293	30	14.12	33.44	6.22	24.98	299	0.09
49	13.68	33.45	5.86	289	50	13.68	33.45	5.85	25.08	289	0.15
59	13.02	33.44	5.55	278	75	11.20	33.42	4.92	25.53	246	0.22
68	12.05	33.43	5.28	261	100	10.40	33.49	4.49	25.72	228	0.28
76	11.19	33.42	4.91	246	150	9.04	33.85	2.91	26.24	179	0.38
95	10.52	33.47	4.56	231							
107	10.22	33.51	4.36	223							
129	9.48	33.72	3.15	196							
154	8.99	33.87	2.89	177							

103.60 STRANGER; April 26, 1956; 0602, 0634 GCT; 30°08.5'N, 118°25'W; sounding, 1000+ fm; wind, 160°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°, 00°.

0	14.68	33.47	6.02	308	0	14.68	33.47	6.02	24.88	308	0.00
10	14.18	33.45	6.06	299	10	14.18	33.45	6.06	24.98	299	0.03
30	14.54r	33.39	6.05	-	20	13.85	33.42	6.06	25.03	294	0.06
56	12.74	33.42	6.10	274	30	13.50	33.39	6.05	25.07	290	0.09
66	12.62	33.44	5.91	270	50	12.81	33.41	6.10	25.22	276	0.15
76	12.30	33.51	5.76	259	75	12.35	33.51	5.77	25.39	260	0.21
					100	10.45	33.44	4.80	25.68	232	0.28
84	11.46	33.40	5.41	252	150	9.19	33.77	3.30	26.14	188	0.38
99	10.46	33.44	4.82	232	200	8.47	34.00	2.46	26.44	160	0.47
113	9.74	33.54	4.29	213	250	8.01	34.09	2.10	26.58	147	0.54
134	9.30	33.68	3.86	196	300	7.30	34.11	1.80	26.69	136	0.62
153	9.16	33.80	3.08	185	400	6.58	34.25	0.88	26.91	115	0.75
176	9.00	33.93	2.57	173	500	6.08	34.33	0.48	27.04	103	0.86
200	8.47	34.00	2.46	160							
249	8.02	34.09	2.10	147							
326	6.98	34.12	1.63	130							
423	6.46	34.28	0.71	112							
552	5.75	34.36	0.34	97							

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m	

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STRANGER; April 26, 1956; 0138 GCT; 29°47.5'N, 119°04.5'W; sounding, 1800 fm; wind, 140°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

103.70

0	16.27	33.58	5.74	333	0	16.27	33.58	5.74	24.62	333	0.00
10	15.55	33.53	5.68	321	10	15.55	33.53	5.68	24.74	321	0.03
30	15.35	33.54	5.74	316	20	15.43	33.54	5.70	24.77	318	0.06
41	15.24	33.51	5.75	316	30	15.35	33.54	5.74	24.80	316	0.10
51	15.02	33.53	5.72	311	50	15.07	33.53	5.73	24.85	311	0.16
62	14.72	33.50	5.88	306	75	14.52	33.48	5.85	24.93	304	0.24
70	14.64	33.49	5.87	306	100	13.20	33.50	5.45	25.22	276	0.31
85	13.78	33.49	5.78	288	150	9.49	33.62	3.77	25.98	203	0.43
100	13.20	33.50	5.45	276	200	8.62	33.93	2.82	26.36	167	0.52
114	12.30	33.54	5.02	257	250	7.87	34.05	2.32	26.56	148	0.61
137	10.14	33.49	4.54	223	300	7.35	34.14	1.60	26.71	134	0.68
166	9.09	33.80	3.13	184	400	6.32	34.27	0.85	26.96	111	0.81
198	8.63	33.93	2.84	168	500	5.60	34.30	0.57	27.07	100	0.92
247	7.90	34.04	2.34	149							
322	7.15	34.17	1.88	129							
418	6.17	34.28	0.76	108							
546	5.34	34.31	0.49	96							

STRANGER; April 25, 1956; 1948 GCT; 29°28.5'N, 119°43'W; sounding, 1900 fm; wind, 140°, force 3; weather, overcast; sea, moderate; wire angle, 02°.

103.80

0	16.02	33.43	5.69	339	0	16.02	33.43	5.69	24.56	339	0.00
10	15.42	33.40	5.84	328	10	15.42	33.40	5.84	24.67	328	0.03
31	15.00	33.44	5.97	316	20	15.21	33.41	5.90	24.72	324	0.07
40	14.80	33.48	6.11	310	30	15.01	33.44	5.96	24.79	317	0.10
50	14.42	33.42	5.92	306	50	14.42	33.42	5.92	24.90	306	0.16
60	13.76	33.55r	6.42	-	75	12.90	33.34	5.93	25.15	282	0.23
70	13.26	33.34	6.08	289	100	11.16	33.38	5.54	25.50	249	0.30
84	12.17	33.36	5.77	267	150	9.33	33.69	4.30	26.06	196	0.41
98	11.26	33.37	5.60	251	200	8.27	33.95	2.87	26.44	160	0.50
112	10.57	33.48	4.73	231	250	7.64	34.07	2.50	26.62	143	0.58
136	9.77	33.58	4.63	211	300	7.03	34.11	1.81	26.73	132	0.65
165	8.92	33.81	3.72	180	400	6.47	34.29	0.75	26.96	111	0.78
198	8.30	33.95	2.89	161	500	5.98	34.33	0.58	27.06	101	0.89
246	7.70	34.07	2.52	144							
324	6.78	34.14	1.46	126							
419	6.44	34.31	0.72	109							
547	5.44	34.34	0.50	95							

STRANGER; April 25, 1956; 1516 GCT; 29°07'N, 120°23'W; sounding, 2000+ fm; wind, 140°, force 3; weather, overcast; sea, moderate; wire angle, 07°.

103.90

0	15.57	33.44	5.82	328	0	15.57	33.44	5.82	24.67	328	0.00
10	15.51	33.53	5.72	320	10	15.51	33.53	5.72	24.75	320	0.03
30	15.09	33.51	5.87	314	20	15.09	33.51	5.87	24.82	314	0.06
56	13.74	33.45	6.14	290	30	15.09	33.51	5.87	24.82	314	0.10
66	13.00	33.45	5.59	276	50	14.88	33.58	5.80	24.92	304	0.16
75	12.56	33.44	5.45	269	75	12.56	33.44	5.45	25.29	269	0.23
84	11.82	33.44	5.24	256	100	11.16	33.42	4.80	25.53	246	0.29
99	11.18	33.42	4.81	246	150	9.15	33.73	3.34	26.12	190	0.40
114	10.36	33.51	4.51	225	200	8.43	33.97	2.66	26.42	162	0.49
133	9.68	33.64	3.71	205	250	7.67	34.15	2.00	26.68	137	0.57
151	9.14	33.73	3.33	190	300	7.22	34.19	1.61	26.77	128	0.64
174	8.77	33.88	2.89	173	400	6.30	34.21	0.90	26.92	114	0.76
197	8.44	33.97	2.68	162	500	5.63	34.29	0.63	27.06	101	0.88
244	7.76	34.14	2.07	139							
319	7.09	34.20	1.48	126							
414	6.18	34.22	0.80	112							
541	5.44	34.33	0.56	96							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
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

107.35 SPENCER F. BAIRD; April 26, 1956; 2345 GCT; 30°20.5'N, 116°22.5'W; sounding, 970 fm; wind, 220°, force 1; weather, cloudy; sea, slight; wire angle, 15°.

0	16.19	33.57	5.80	332	0	16.19	33.57	5.80	24.63	332	0.00
10	15.06	33.53	5.97	311	10	15.06	33.53	5.97	24.85	311	0.03
29	14.41	33.54	6.33	297	20	14.63	33.53	6.24	24.94	302	0.06
39	14.29	33.57	6.00	293	30	14.41	33.54	6.33	25.00	297	0.09
50	14.22	33.58	6.00	290	50	14.22	33.58	6.00	25.07	290	0.15
59	13.61	33.55	5.75	280	75	12.52	33.48	5.40	25.32	266	0.22
69	13.02	33.50	5.61	273	100	10.86	33.50	4.44	25.66	234	0.28
83	11.82	33.46	5.04	254	150	9.66	33.96	2.84	26.23	180	0.39
96	11.02	33.47	4.64	240	200	9.89	34.38	1.15	26.51	153	0.47
110	10.58	33.66	3.68	218	250	9.38	34.42	0.68	26.63	142	0.55
132	10.07	33.80	2.97	199	300	8.13	34.35	0.81	26.76	129	0.62
158	9.47	34.01	2.80	174	400	7.20	34.33	0.56	26.88	118	0.75
187	9.90	34.35	1.26	156	500	6.53	34.37	0.36	27.01	106	0.86
230	9.82	34.45	0.64	147							
299	8.17	34.35	0.82	129							
390	7.24	34.33	0.60	119							
513	6.45	34.38	0.34	104							

107.40 SPENCER F. BAIRD; April 26, 1956; 2028, 2045 GCT; 30°12'N, 116°44'W; sounding, 1570 fm; wind, 150°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°, 02°.

0	15.82	33.56	6.63	325	0	15.82	33.56	6.63	24.70	325	0.00
10	15.11	33.56	6.65	310	10	15.11	33.56	6.65	24.86	310	0.03
30	14.80	33.55	6.60	304	20	14.94	33.56	6.64	24.89	307	0.06
40	14.28	33.57	6.16	292	30	14.80	33.55	6.60	24.92	304	0.09
50	13.76	33.56	6.14	282	50	13.76	33.56	6.14	25.15	282	0.15
60	13.08	33.51	5.67	274	75	12.12	33.48	5.33	25.41	258	0.22
71	12.36	33.48	5.45	262	100	10.95	33.49	4.76	25.64	236	0.28
86	11.60	33.48	5.04	248	150	9.24	33.81	3.23	26.16	186	0.39
					200	8.38	34.00	2.96	26.46	158	0.48
100	10.95	33.49	4.76	236	250	7.67	34.11	2.46	26.65	140	0.55
114	9.99	33.58	4.04	214	300	7.27	34.14	1.91	26.73	132	0.62
136	9.39	33.73	3.37	194	400	6.24	34.22	1.18	26.93	113	0.75
163	9.07	33.88	3.10	178	500	6.08	34.34	0.70	27.05	102	0.86
195	8.44	33.98	2.99	161							
242	7.76	34.11	2.57	142							
318	7.09	34.16	1.72	129							
414	6.14	34.24	1.09	111							
541	6.07	34.38	0.56	100							

107.50 SPENCER F. BAIRD; April 26, 1956; 1601 GCT; 29°53.5'N, 117°23'W; sounding, 1500 fm; wind, 220°, force 2; weather, cloudy; sea, slight; wire angle, 05°.

0	15.72	33.57	6.05	322	0	15.72	33.57	6.05	24.73	322	0.00
10	15.19	33.58	6.04	310	10	15.19	33.58	6.04	24.86	310	0.03
31	14.96	33.60	6.11	304	20	15.00	33.65	6.09	24.91	305	0.06
41	14.52	33.48	6.30	304	30	14.98	33.61	6.09	24.92	304	0.09
51	14.84	33.60	6.04	302	50	14.84	33.60	6.05	24.94	302	0.15
61	13.37	33.48	5.76	281	75	12.68	33.52	5.33	25.32	266	0.22
71	12.90	33.51	5.38	270	100	11.04	33.63	4.18	25.72	228	0.29
85	12.08	33.53	5.18	254	150	9.61	33.93	2.76	26.21	182	0.39
99	11.08	33.63	4.21	229	200	8.80	34.12	2.34	26.48	156	0.48
113	10.30	33.70	3.66	210	250	8.06	34.16	1.96	26.63	142	0.55
137	9.82	33.83	3.17	193	300	7.35	34.20	1.40	26.75	130	0.62
164	9.38	34.04	2.47	170	400	6.74	34.32	0.77	26.94	112	0.75
195	8.86	34.11	2.34	158	500	6.27	34.40	0.53	27.07	100	0.86
241	8.19	34.16	2.04	144							
316	7.19	34.21	1.24	126							
410	6.70	34.33	0.74	111							
536	6.08	34.42	0.44	97							



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{cm/g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{cm/g}$	dyn. m

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SPENCER F. BAIRD; April 26, 1956; 1107 GCT; 29°32'N, 118°01.5'W; sounding, 2000 fm; wind, 180°, force 2; weather, cloudy; sea, slight; wire angle, 10°.

107.60

0	16.32	33.65	5.65	329	0	16.32	33.65	5.65	24.66	329	0.00
10	15.92	33.63	5.71	322	10	15.92	33.63	5.71	24.73	322	0.03
29	15.63	33.80u	5.64	-	20	15.74	33.61	5.67	24.76	320	0.06
39	15.14	33.55	5.81	311	30	15.60	33.60	5.66	24.79	317	0.10
49	14.66	33.55	5.75	302	50	14.57	33.55	5.74	24.94	302	0.16
58	13.73	33.51	5.60	285	75	12.91	33.54	5.13	25.30	268	0.23
68	13.20	33.53	5.29	274	100	11.48	33.56	4.40	25.60	240	0.29
82	12.59	33.54	4.99	262	150	9.37	33.81	3.24	26.15	187	0.40
95	11.73	33.55	4.57	246	200	8.82	34.08	2.40	26.45	159	0.49
109	11.10	33.59	3.99	232	250	8.46	34.22	1.64	26.62	143	0.57
132	10.14	33.68	3.45	209	300	7.71	34.23	1.24	26.73	132	0.64
159	9.11	33.88	3.14	178	400	7.00	34.32	0.64	26.91	115	0.77
192	8.82	34.05	2.47	162	500	6.20	34.34	0.44	27.03	104	0.88
238	8.60	34.21	1.78	146							
313	7.59	34.23	1.16	130							
408	6.96	34.33	0.61	114							
532	5.97	34.34	0.40	100							

SPENCER F. BAIRD; April 26, 1956; 0608, 0628 GCT; 29°12'N, 118°42.5'W; sounding, 1450 fm; wind, 160°, force 2; weather, cloudy; sea, slight; wire angle, 02°, 03°.

107.70

0	16.11	33.60	5.70	328	0	16.11	33.60	5.70	24.67	328	0.00
10	15.52	33.55	5.87	319	10	15.52	33.55	5.87	24.76	319	0.03
31	14.96	33.58	5.92	305	20	15.15	33.57	5.91	24.85	311	0.06
40	14.84	33.58	5.84	303	30	14.97	33.58	5.92	24.91	305	0.09
50	14.64	33.59	5.83	298	50	14.64	33.59	5.83	24.99	298	0.16
60	13.63	33.51	5.75	284	75	12.72	33.53	5.07	25.34	264	0.22
69	13.08	33.52	5.32	272	100	11.10	33.54	4.72	25.64	236	0.29
84	12.18	33.55	4.80	254	150	9.07	33.75	3.59	26.15	187	0.40
98	11.25	33.54	4.74	238	200	8.58	34.05	2.72	26.47	157	0.48
111	9.88	33.51	4.40	218	250	7.76	34.11	2.14	26.64	141	0.56
135	9.34	33.64	3.96	200	300	7.30	34.18	1.58	26.75	130	0.63
163	8.90	33.84	3.33	178	400	6.42	34.21	1.03	26.90	116	0.76
195	8.66	34.04	2.80	160	500	5.90	34.30	0.61	27.04	103	0.87
242	7.84	34.10	2.24	144							
319	7.14	34.19	1.44	127							
413	6.34	34.22	0.97	115							
540	5.72	34.34	0.46	98							

SPENCER F. BAIRD; April 26, 1956; 0113 GCT; 28°52'N, 119°22'W; sounding, 2020 fm; wind, 180°, force 1; weather, cloudy; sea, slight; wire angle, 02°.

107.80

0	16.38	33.48	5.78	343	0	16.38	33.48	5.78	24.51	343	0.00
10	15.62	33.48	5.91	327	10	15.62	33.48	5.91	24.68	327	0.03
30	15.45	33.48	5.81	323	20	15.52	33.48	5.86	24.70	325	0.06
55	15.12	33.48	6.00	316	30	15.45	33.48	5.81	24.72	323	0.10
66	13.91	33.42	6.24	296	50	15.21	33.48	5.94	24.78	318	0.16
76	13.29	33.39	5.59	286	75	13.30	33.39	5.60	25.11	286	0.24
84	13.06	33.40	5.51	281	100	12.44	33.41	5.35	25.29	269	0.31
100	12.44	33.41	5.35	269	150	9.40	33.68	4.26	26.05	197	0.43
114	11.50	33.49	5.22	246	200	8.42	33.95	2.88	26.42	162	0.52
134	10.10	33.56	4.59	217	250	7.62	34.08	2.43	26.63	142	0.60
151	9.38	33.68	4.23	197	300	7.12	34.15	2.02	26.76	129	0.67
172	8.94	33.80	3.38	182	400	6.47	34.26	1.13	26.93	113	0.79
196	8.52	33.93	2.93	166	500	5.96	34.34	0.64	27.07	100	0.90
242	7.76	34.06	2.47	145							
318	6.98	34.18	1.88	125							
413	6.40	34.28	1.00	111							
540	5.72	34.37	0.49	96							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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

107.90 SPENCER F. BAIRD; April 25, 1956; 2042 GCT; 28°32'N, 119°55.5'W; sounding, 2260 fm; wind, 180°, force 1; weather, overcast; sea, moderate; wire angle, 05°.

0	15.91	33.37	5.93	340	0	15.91	33.37	5.93	24.54	340	0.00
10	15.32	33.35	5.90	330	10	15.32	33.35	5.90	24.65	330	0.03
30	15.04	33.33	5.85	326	20	15.19	33.34	5.87	24.67	328	0.07
40	14.90	33.34	5.79	322	30	15.04	33.33	5.85	24.69	326	0.10
50	14.86	33.33	5.82	321	50	14.86	33.33	5.82	24.74	321	0.16
59	14.77	33.37	5.73	316	75	14.28	33.35	5.74	24.88	308	0.24
70	14.54	33.35	5.76	314	100	12.61	33.40	5.48	25.25	273	0.32
84	13.48	33.35	5.68	293	150	9.90	33.53	4.58	25.85	216	0.44
97	12.78	33.40	5.52	276	200	8.56	33.92	3.02	26.36	167	0.54
111	12.10	33.40	5.32	264	250	7.67	34.06	2.81	26.61	144	0.62
134	10.71	33.41	5.02	238	300	7.21	34.14	1.93	26.73	132	0.69
162	9.50	33.63	4.23	202	400	6.38	34.23	1.03	26.92	114	0.83
195	8.68	33.90	3.08	170	500	5.72	34.31	0.69	27.07	100	0.93
241	7.78	34.04	2.86	146							
317	7.09	34.16	1.64	128							
413	6.26	34.24	0.95	112							
539	5.52	34.34	0.58	96							

110.35 SPENCER F. BAIRD; April 24, 1956; 1018, 1052 GCT; 29°45'N, 116°00'W; sounding, 610 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 23°, 26°.

0	14.91	33.62	6.43	301	0	14.91	33.62	6.43	24.95	301	0.00
9	14.87	33.58	6.36	304	10	14.87	33.58	6.35	24.93	303	0.03
28	13.85	33.53	6.20	287	20	14.38	33.55	6.28	25.01	296	0.06
42	12.62	33.57	5.14	260	30	13.72	33.53	6.15	25.14	283	0.09
52	11.70	33.55	4.93	245	50	11.86	33.55	4.96	25.51	248	0.14
61	10.80	33.54	4.67	230	75	10.25	33.52	4.20	25.78	223	0.20
					100	9.70	33.94	2.70	26.20	183	0.25
69	10.39	33.51	4.61	226	150	9.43	34.13		26.38	165	0.34
86	10.02	33.77	3.12	201	200	9.09	34.27	1.99	26.55	149	0.42
97	9.79	33.92	2.71	186	250	9.40	34.47	0.84	26.66	139	0.49
109	9.58	33.96	2.70	179	300	8.83	34.42	0.65	26.71	134	0.56
128	9.58	33.97	2.49	179	400	7.88	34.40	0.60	26.85	121	0.70
149	9.44	34.13	3.11u	165	500	6.52	34.33	0.76	26.98	109	0.82
180	9.28	34.22	2.14	156							
223	8.92	34.33	1.65	142							
292	8.91	34.42	0.68	135							
385	8.01	34.41	0.58	123							
523	6.18	34.31	0.80	106							

110.40 SPENCER F. BAIRD; April 24, 1956; 1355 GCT; 29°36.5'N, 116°20.5'W; sounding, 1165 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 02°.

0	15.11	33.65	5.61	304	0	15.11	33.65	5.61	24.92	304	0.00
10	14.86	33.58	5.77	304	10	14.86	33.58	5.77	24.92	304	0.03
30	14.58	33.59	5.84	297	20	14.70	33.59	5.81	24.96	300	0.06
55	12.66	33.55	4.98	263	30	14.58	33.59	5.84	25.00	297	0.09
65	11.58	33.53	4.24	244	50	13.60	33.57	5.50	25.20	278	0.15
75	11.30	33.62	3.97	233	75	11.30	33.62	3.97	25.67	233	0.21
94	10.64	33.66	3.52	219	100	10.54	33.72	3.45	25.89	212	0.27
109	10.40	33.78	3.32	206	150	9.54	33.97	2.57	26.25	178	0.37
142	9.66	33.93	2.66	183	200	9.78	34.32	1.60	26.48	156	0.45
170	9.36	34.07	2.29	168	250	9.48	34.41	0.90	26.61	144	0.53
213	9.62	34.34	1.20	152	300	8.58	34.37	0.90	26.71	134	0.60
277	8.86	34.37	0.97	138	400	7.50	34.38	0.45	26.88	118	0.73
390	7.60	34.38	0.47	119	500	6.45	34.35	0.45	27.00	107	0.85
526	6.20	34.34	0.44	104	600	5.92	34.45	0.33	27.16	92	0.95
682	5.73	34.47	0.29	88	700	5.65	34.47	0.30	27.21	87	1.05
885	4.58	34.48	0.44	75	800	5.12	34.47	0.36	27.27	81	1.14
1145	3.72	34.54	0.76	62	1000	4.05	34.51	0.62	27.41	68	1.30



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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm/g}$	dyn. m

110.80

SPENCER F. BAIRD; April 25, 1956; 0958 GCT; 28°15'N, 118°56.5'W; sounding, 2200 fm; wind, 220°, force 1; weather, cloudy; sea, moderate; wire angle, 12°.

0	16.22	33.50	5.71	338	0	16.22	33.50	5.71	24.57	338	0.00
10	15.54	33.48	5.71	324	10	15.54	33.48	5.71	24.71	324	0.03
30	15.77	33.59	5.78	322	20	15.61	33.52	5.74	24.72	323	0.06
59	15.93	33.76u	5.62	-	30	15.77	33.59	5.78	24.74	322	0.10
75	15.84	33.72	5.69	314	50	15.90	33.67	5.65	24.77	319	0.16
94	13.44	33.40	5.53	288	75	15.84	33.72	5.69	24.82	314	0.24
108	12.57	33.51	5.45	264	100	13.05	33.43	5.50	25.20	278	0.32
132	11.37	33.60	5.03	236	150	10.00	33.62	4.20	25.90	211	0.44
159	9.54	33.63	3.91	203	200	8.78	33.88	3.41	26.30	173	0.54
186	9.16	33.81	3.73	184	250	7.80	34.03	2.68	26.56	148	0.62
218	8.34	33.94	2.97	162	300	7.32	34.12	2.20	26.70	135	0.69
280	7.44	34.08	2.43	140	400	6.72	34.29	0.84	26.92	114	0.82
379	6.90	34.25	1.01	120	500	6.00	34.33	0.54	27.05	102	0.94
511	5.92	34.33	0.52	101	600	5.40	34.34	0.47	27.13	94	1.04
660	5.02	34.35	0.46	90	700	4.90	34.37	0.47	27.21	87	1.14
860	4.20	34.44	0.61	74	800	4.49	34.41	0.52	27.28	80	1.23
1112	3.64	34.53	0.81	62	1000	3.74	34.52	0.78	27.46	63	1.38

110.90

SPENCER F. BAIRD; April 25, 1956; 1505 GCT; 27°53'N, 119°34'W; sounding, 2240 fm; wind, 260°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

0	16.81	33.82	5.64	328	0	16.81	33.82	5.64	24.67	328	0.00
10	16.56	33.81	5.62	322	10	16.56	33.81	5.62	24.73	322	0.03
30	16.59	33.96	5.67	312	20	16.57	33.88	5.65	24.79	317	0.06
51	16.66	33.98	5.59	313	30	16.59	33.96	5.67	24.84	312	0.10
61	16.66	33.99	5.54	312	50	16.66	33.98	5.59	24.83	313	0.16
71	16.70	34.02	5.53	310	75	16.68	34.03	5.53	24.86	310	0.24
85	16.62	33.98u	5.52	-	100	16.50	34.03	5.48	24.90	306	0.31
100	16.50	34.03	5.48	306	150	12.69	33.72	5.17	25.48	251	0.46
133	13.83	33.80	5.25	267	200	9.70	33.71	4.19	26.03	199	0.57
161	11.98	33.68	5.06	240	250	8.48	33.96	3.24	26.41	163	0.66
197	9.80	33.70	4.27	202	300	7.73	34.11	2.37	26.64	141	0.74
261	8.30	34.00	3.07	157	400	6.88	34.29	0.96	26.90	116	0.88
356	7.15	34.22	1.48	125	500	6.34	34.37	0.37	27.04	103	0.99
474	6.48	34.36	0.41	106	600	5.60	34.38	0.34	27.14	93	1.10
617	5.45	34.39	0.34	92	700	5.05	34.44	0.38	27.24	84	1.19
809	4.63	34.47	0.44	77	800	4.69	34.47	0.44	27.31	77	1.28
1058	3.76	34.50	0.72	65	1000	3.93	34.49	0.65	27.42	67	1.44

113.35

SPENCER F. BAIRD; April 24, 1956; 0049 GCT; 29°18'N, 115°41'W; sounding, 685 fm; wind, 300°, force 2; weather, missing; sea, moderate; wire angle, 22°.

0	14.12	33.62	6.71	285	0	14.12	33.62	6.71	25.12	285	0.00
9	13.72	33.62	6.77	277	10	13.68	33.62	6.77	25.21	277	0.03
29	13.33	33.64	6.52	268	20	13.52	33.63	6.73	25.25	273	0.06
42	12.38	33.65	5.74	250	30	13.29	33.64	6.50	25.30	268	0.08
52	10.70	33.62	3.97	223	50	10.90	33.62	4.20	25.74	226	0.13
61	10.25	33.66	3.49	213	75	9.70	33.77	3.10	26.07	195	0.18
70	9.83	33.73	3.25	201	100	9.39	33.96	2.47	26.27	176	0.23
87	9.52	33.87	2.70	185	150	9.20	34.16	1.87	26.45	159	0.32
99	9.40	33.96	2.43	176	200	9.62	34.41	1.02	26.58	146	0.40
113	9.22	33.96	2.58	174	250	9.02	34.39	0.73	26.67	138	0.47
133	9.34	-	2.21	-	300	8.10	34.37	0.64	26.79	127	0.54
159	9.41	34.26	1.74	155	400	7.18	34.38	0.57	26.93	113	0.66
193	9.62	34.40	1.09	148	500	6.69	34.40	0.50	27.01	106	0.77
243	9.14	34.40	0.74	140							
317	7.86	34.36	0.61	124							
412	7.08	34.38	0.56	112							
550	6.50	34.41	0.43	102							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
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

SPENCER F. BAIRD; April 23, 1956; 2140 GCT; 29°12'N, 116°07'W; sounding, 870 fm; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 16°.

113.40

0	15.58	33.67	6.04	312	0	15.58	33.67	6.04	24.84	312	0.00
10	15.32	33.68	6.12	305	10	15.32	33.68	6.12	24.91	305	0.03
29	15.18	33.65	6.07	305	20	15.23	33.66	6.09	24.91	305	0.06
43	14.02	33.59	5.90	286	30	15.13	33.65	6.04	24.92	304	0.09
52	12.78	33.56	5.30	264	50	13.00	33.56	5.40	25.30	268	0.15
63	11.94	33.57	5.24	248	75	11.09	33.62	4.15	25.71	229	0.21
72	11.24	33.60	4.34	234	100	10.00	33.81	3.34	26.04	198	0.27
90	10.32	33.73	3.34	208	150	9.32	34.09	2.46	26.38	166	0.36
104	9.90	33.83	3.32	196	200	9.98	34.42	0.96	26.52	152	0.44
117	9.69	33.86	3.01	189	250	8.80	34.33	1.45	26.65	140	0.51
139	9.41	34.02	2.61	173	300	8.44	34.35	1.00	26.72	133	0.58
164	9.26	34.16	2.12	160	400	7.38	34.36	0.57	26.89	117	0.71
198	9.97	34.41	1.12	152	500	6.59	34.37	0.39	27.01	106	0.83
246	8.90	34.33	1.47	142							
321	8.34	34.36	0.89	131							
418	7.18	34.36	0.52	115							
554	6.28	34.38	0.32	102							

SPENCER F. BAIRD; April 23, 1956; 1738 GCT; 28°53'N, 116°37.5'W; sounding, 2200 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 05°.

113.50

0	15.34	33.57	5.93	314	0	15.34	33.57	5.93	24.82	314	0.00
10	15.29	33.56	5.94	313	10	15.29	33.56	5.94	24.83	313	0.03
30	15.18	33.58	5.77	310	20	15.22	33.57	5.80	24.84	312	0.06
60	13.94	33.50	5.98	290	30	15.18	33.58	5.77	24.86	310	0.09
71	13.44	33.51	5.97	281	50	14.97	33.57	5.77	24.89	307	0.16
79	12.83	33.48	5.50	271	75	13.14	33.49	5.77	25.22	276	0.23
95	12.06	33.50	5.10	255	100	11.87	33.51	4.96	25.48	251	0.30
110	11.46	33.53	5.62u	243	150	10.57	33.93	2.90	26.05	197	0.41
124	10.90	33.68	-	222	200	10.50	34.26	1.93	26.31	172	0.50
143	10.59	33.86	3.01	203	250	10.05	34.53	1.22	26.60	145	0.58
162	10.54	34.04	2.51	189	300	9.33	34.47	0.94	26.67	138	0.66
189	10.57	34.18	2.08	179	400	7.90	34.37	0.86	26.82	124	0.79
212	10.23	34.34	1.53	162	500	6.78	34.35	0.69	26.96	110	0.92
264	9.95	34.54	1.10	142	600	(5.79)	(34.34)		(27.08)	(99)	(1.02)
342	8.68	34.40	0.88	133							
447	7.32	34.36	0.81	117							
585	5.94	34.34	0.44	100							

SPENCER F. BAIRD; April 23, 1956; 1211 GCT; 28°27'N, 117°18'W; sounding, 2000 fm; wind, 280°, force 3; weather, fog; sea, moderate; wire angle, 16°.

113.60

0	15.65	33.60	5.72	319	0	15.65	33.60	5.72	24.76	319	0.00
10	15.62	33.59	5.91	319	10	15.62	33.59	5.91	24.76	319	0.03
34	15.51	33.60	5.94	315	20	15.60	33.59	5.93	24.78	318	0.06
62	14.86	33.57	5.84	304	30	15.53	33.59	5.94	24.79	317	0.10
73	14.38	33.50	5.98	300	50	15.25	33.60	5.91	24.86	310	0.16
86	13.32	33.52	5.46	277	75	14.20	33.49	5.94	25.00	297	0.23
95	13.18	33.55	5.28	272	100	12.97	33.55	5.15	25.30	268	0.30
113	11.50	33.52	4.56	244	150	9.85	33.80	3.50	26.06	196	0.42
128	10.60	33.58	4.06	224	200	9.32	34.04	2.60	26.33	170	0.52
146	9.92	33.73	3.60	202	250	8.52	34.17	2.10	26.58	147	0.60
166	9.72	33.93	2.76	184	300	8.08	34.22	1.56	26.67	138	0.67
193	9.22	34.00	2.78	172	400	7.23	34.29	0.77	26.85	121	0.80
219	8.94	34.09	2.46	160	500	6.50	34.35	0.45	27.00	107	0.92
274	8.31	34.20	1.83	143	600	5.82	34.36	0.35	27.09	98	1.03
356	7.58	34.26	1.02	128							
463	6.78	34.34	0.50	111							
608	5.78	34.36	0.34	97							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

113.70

SPENCER F. BAIRD; April 23, 1956; 0650 GCT; 28°03'N, 117°55.5'W; sounding, 1750 fm; wind, 320°, force 4; weather, fog; sea, moderate; wire angle, 16°.

0	16.02	33.71	5.72	318	0	16.02	33.71	5.72	24.78	318	0.00
10	16.00	33.73	5.72	316	10	16.00	33.73	5.72	24.80	316	0.03
34	15.69	33.76	5.77	308	20	15.91	33.75	5.72	24.82	314	0.06
43	15.38	33.74	5.84	302	30	15.79	33.76	5.74	24.87	309	0.09
58	12.72	33.65	4.60	256	50	14.05	33.69	5.38	25.19	279	0.15
68	12.03	33.66	3.89	244	75	11.80	33.70	3.62	25.64	236	0.22
77	11.72	33.71	3.56	234	100	10.77	33.76	3.14	25.87	214	0.28
95	10.98	33.73	3.24	219	150	9.24	33.97	2.70	26.29	174	0.37
114	10.19	33.86	2.86	196	200	9.06	34.15	1.96	26.46	158	0.45
127	9.42	33.89	2.96	182	250	8.00	34.19	1.47	26.67	138	0.53
149	9.23	33.97	2.76	174	300	7.90	34.27	1.00	26.74	131	0.60
185	9.22	34.13	2.01	162	400	6.78	34.30	0.70	26.92	114	0.73
220	8.72	34.16	1.93	152	500	6.09	34.37	0.47	27.06	101	0.84
274	8.15	34.27	1.07	135	600	5.54	34.41	0.36	27.18	90	0.94
357	7.12	34.27	0.86	121							
464	6.34	34.34	0.51	105							
609	5.45	34.42	0.35	89							

113.80

SPENCER F. BAIRD; April 23, 1956; 0115 GCT; 27°37'N, 118°33'W; sounding, 2200 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 24°.

0	15.50	33.47	6.20	325	0	15.50	33.47	6.20	24.70	325	0.00
9	15.38	33.44	6.17	324	10	15.38	33.44	6.15	24.71	324	0.03
32	15.15	33.44	6.03	320	20	15.25	33.44	6.08	24.73	322	0.06
40	14.99	33.43	6.07	317	30	15.15	33.44	6.04	24.76	320	0.10
54	14.92	33.47	6.05	312	50	14.93	33.46	6.05	24.82	314	0.16
62	14.46	33.43	6.45	306	75	13.69	33.39	6.17	25.03	294	0.24
70	14.02	33.40	6.19	300	100	12.36	33.42	5.68	25.31	267	0.31
86	13.00	33.39	6.15	280	150	10.22	33.69	4.93	25.91	210	0.43
102	12.29	33.42	5.67	265	200	8.86	33.95	3.44	26.34	169	0.53
116	11.58	33.39	5.52	255	250	8.32	34.08	2.85	26.52	152	0.61
133	10.40	33.46	5.07	230	300	7.47	34.17	2.43	26.72	133	0.68
164	9.40	33.75	4.08	192	400	6.56	34.22	1.20	26.89	117	0.81
195	8.93	33.92	3.49	172	500	6.14	34.32	0.50	27.02	105	0.93
243	8.41	34.07	2.91	154							
316	7.25	34.18	2.28	130							
413	6.46	34.23	1.05	116							
549	6.03	34.45	0.41	94							

117.40

SPENCER F. BAIRD; April 21, 1956; 2327, 2347 GCT; 28°26'N, 115°35'W; sounding, 560 fm; wind, 340°, force 3; weather, fog; sea, moderate; wire angle, 20°, 27°.

0	14.78	33.58	6.13	302	0	14.78	33.58	6.13	24.94	302	0.00
9	14.02	33.58	6.30	286	10	14.02	33.58	6.30	25.11	286	0.03
32	12.31	33.58	5.41	254	20	13.99	33.58	6.30	25.11	286	0.06
42	11.30	33.57	4.07	237	30	12.60	33.58	5.63	25.40	259	0.08
57	10.70	33.71	3.33	216	50	10.91	33.67	3.52	25.78	223	0.13
66	10.54	33.71	3.29	213	75	10.18	33.82	2.82	26.03	199	0.19
75	10.18	33.82	2.82	199	100	9.68	33.92	2.58	26.18	184	0.24
94	9.82	33.89	2.67	189	150	9.24	34.16	1.85	26.45	159	0.32
111	9.40	33.98	-	175	200	9.56	34.41	0.83	26.58	146	0.40
126	9.48	34.11	1.99	167	250	9.31	34.45	0.53	26.66	139	0.47
148	9.21	34.16	1.99	159	300	9.00	34.45	0.50	26.71	134	0.54
183	9.47	34.33	1.35	151	400	8.05	34.43	0.35	26.84	122	0.67
					500	6.99	34.41	0.29	26.99	108	0.79
216	9.59	34.45	0.62	143	600	6.35	34.40	0.30	27.06	101	0.90
270	9.15	34.45	0.52	136							
352	8.65	34.44	0.44	130							
459	7.34	34.42	0.28	113							
609	6.32	34.40	0.30	101							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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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SPENCER F. BAIRD; April 22, 1956; 0607 GCT; 28°08'N, 116°15'W; sounding, 2200 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 30°.

117.50

0	15.41	33.64	6.63	311	0	15.41	33.64	6.63	24.85	311	0.00
8	15.42	33.64	5.98	311	10	15.42	33.64	5.98	24.85	311	0.03
31	15.41	33.64	5.97	311	20	15.42	33.64	5.98	24.85	311	0.06
39	15.32	33.64	5.92	308	30	15.41	33.64	5.97	24.85	311	0.09
52	15.21	33.61	5.85	308	50	15.24	33.62	5.86	24.88	308	0.16
61	14.45	33.58	5.73	295	75	12.30	33.56	4.77	25.44	255	0.22
70	12.86	33.58	5.04	264	100	10.98	33.69	3.91	25.78	222	0.29
86	11.54	33.54	4.32	243	150	9.30	34.02	2.70	26.32	171	0.38
102	10.90	33.69	3.89	221	200	10.30	34.42	1.00	26.48	156	0.47
115	10.11	33.73	3.80	205	250	9.75	34.48	0.91	26.62	143	0.54
132	10.04	33.98	2.97	186	300	9.25	34.50	0.50	26.71	134	0.62
159	9.60	34.14	2.14	166	400	8.15	34.47	0.47	26.85	121	0.75
187	10.30	34.38	1.03	160	500	7.14	34.45	0.32	27.00	107	0.87
229	9.98	34.45	1.01	150							
295	9.30	34.50	0.51	135							
384	8.32	34.47	0.47	123							
516	7.00	34.45	0.28	106							

SPENCER F. BAIRD; April 22, 1956; 1049, 1111 GCT; 27°47.5'N, 116°56'W; sounding, 1840 fm; wind, 300°, force 3; weather, fog; sea, moderate; wire angle, 13°, 16°.

117.60

0	15.25	33.55	5.82	314	0	15.25	33.55	5.82	24.82	314	0.00
10	15.22	33.55	5.88	313	10	15.22	33.55	5.88	24.83	313	0.03
34	15.20	33.55	5.85	312	20	15.22	33.55	5.87	24.84	312	0.06
44	15.06	33.55	6.02	310	30	15.21	33.55	5.87	24.84	312	0.09
58	14.18	33.53	5.92	293	50	14.83	33.55	6.02	24.91	305	0.16
69	13.92	33.51	5.78	290	75	13.62	33.57	5.65	25.19	279	0.23
78	13.42	33.59	5.57	274	100	11.68	33.56	4.60	25.54	245	0.30
97	11.86	33.55	4.73	248	150	10.32	34.06	2.24	26.18	184	0.40
116	10.96	33.62	3.80	227	200	9.73	34.23	1.59	26.42	162	0.49
130	10.52	33.77	3.10	209	250	9.75	34.33	1.38	26.50	154	0.57
154	10.27	34.07	2.13	183	300	9.00	34.31	1.10	26.61	144	0.65
192	9.72	34.20	1.71	164	400	7.00	34.32	0.80	26.91	115	0.78
					500	6.75	34.38	0.43	26.99	108	0.90
229	9.78	34.31	1.55	157	600	6.11	34.45	0.36	27.13	94	1.01
282	9.48	34.34	1.06	150							
365	7.21	34.18	1.33	129							
473	6.88	34.36	0.46	111							
617	6.00	34.46	0.34	92							

SPENCER F. BAIRD; April 22, 1956; 1549 GCT; 27°24'N, 117°39.5'W; sounding, 2215 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

117.70

0	15.83	33.78	6.07	309	0	15.83	33.78	6.07	24.87	309	0.00
10	15.80	33.75	5.92	310	10	15.80	33.75	5.92	24.86	310	0.03
30	15.78	33.75	5.72	310	20	15.80	33.75	5.82	24.86	310	0.06
45	15.66	33.73	5.79	309	30	15.78	33.75	5.72	24.86	310	0.09
55	14.14	33.58	6.02	289	50	15.22	33.68	5.90	24.93	303	0.15
65	13.67	33.57	5.88	280	75	12.89	33.56	5.09	25.32	266	0.22
75	12.89	33.56	5.09	266	100	11.33	33.65	3.73	25.69	231	0.29
94	11.62	33.62	3.93	239	150	9.52	33.99	2.86	26.26	177	0.39
108	10.94	33.69	3.50	222	200	8.90	34.14	2.07	26.48	156	0.48
123	10.06	33.73	3.44	205	250	7.98	34.17	1.80	26.65	140	0.55
146	9.62	33.98	2.90	179	300	7.45	34.22	1.39	26.76	129	0.62
172	9.48	34.13	2.14	166	400	6.70	34.31	0.78	26.94	112	0.75
208	8.62	34.13	2.10	152	500	6.16	34.37	0.51	27.06	101	0.86
259	7.86	34.18	1.70	138							
338	7.11	34.26	1.09	121							
437	6.48	34.33	0.65	108							
578	5.76	34.40	0.36	94							

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OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
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	

117.80 SPENCER F. BAIRD; April 22, 1956; 2005 GCT; 27°06'N, 118°11.5'W; sounding, 2400 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.

0	15.76	33.49	5.77	329	0	15.76	33.49	5.77	24.66	329	0.00
9	15.46	33.49	5.92	322	10	15.45	33.49	5.94	24.73	322	0.03
28	15.38	33.49	5.98	320	20	15.39	33.49	5.97	24.74	321	0.06
56	15.21	33.48	5.78	318	30	15.35	33.49	5.98	24.76	320	0.10
65	15.07	33.51	6.36	314	50	15.27	33.49	5.82	24.78	318	0.16
74	15.15	33.68	5.87	302	75	15.13	33.68	5.87	24.94	302	0.24
88	13.53	33.42	5.97	288	100	12.32	33.39	5.80	25.30	268	0.31
101	12.30	33.39	5.78	268	150	10.41	33.57	4.69	25.78	222	0.43
114	12.24	33.57	5.45	254	200	8.90	33.93	3.52	26.32	171	0.53
131	10.84	33.48	4.78	236	250	8.40	34.11	2.80	26.54	150	0.62
149	10.42	33.57	4.70	222	300	7.34	34.12	2.05	26.70	135	0.69
175	9.56	33.71	4.10	198	400	6.79	34.41	0.74	27.01	106	0.82
196	8.94	33.91	3.56	173	500	6.20	34.41	0.48	27.08	99	0.92
244	8.50	34.11	2.88	152							
320	7.02	34.13	1.78	130							
421	6.72	34.41	0.61	105							
554	5.80	34.40	0.43	95							

118.39 SPENCER F. BAIRD; April 21, 1956; 1351, 1403 GCT; 28°18.5'N, 115°24'W; sounding, 130 fm; wind, 340°, force 3; weather, fog; sea, moderate; wire angle, 11°, 11°.

0	14.77	33.62	6.58	298	0	14.77	33.62	6.58	24.99	298	0.00
10	14.50	33.64	6.80	292	10	14.50	33.64	6.80	25.05	292	0.03
30	12.04	33.64	4.55	245	20	13.36	33.64	5.82	25.29	269	0.06
49	10.70	33.80	2.98	209	30	12.04	33.64	4.55	25.54	245	0.08
73	10.22	33.89	2.57	195	50	10.68	33.80	2.95	25.92	209	0.13
					75	10.19	33.90	2.54	26.08	194	0.18
96	9.81	33.98	2.24	182	100	9.78	34.00	2.18	26.23	180	0.23
120	9.76	34.17	1.65	166	150	9.76	34.29	1.26	26.47	157	0.31
158	9.76	34.31	1.25	156	200	(9.56)	(34.37)	(1.15)	(26.55)	(149)	(0.39)
196	9.60	34.35	1.16	151							

119.33 SPENCER F. BAIRD; April 20, 1956; 2134 GCT; 28°18'N, 114°53.5'W; sounding, 60 fm; wind, 330°, force 4; weather, clear; sea, rough; wire angle, 12°.

0	15.30	33.65	6.05	307	0	15.30	33.65	6.05	24.89	307	0.00
10	15.13	33.63	6.20	306	10	15.13	33.63	6.20	24.90	306	0.03
29	14.84	33.66	5.98	297	20	14.96	33.65	6.07	24.95	301	0.06
49	14.62	33.64	5.97	294	30	14.82	33.66	5.98	25.00	297	0.09
73	13.53	33.58	5.82	276	50	14.61	33.64	5.97	25.03	294	0.15
					75	(13.33)	(33.58)	(5.79)	(25.25)	(273)	(0.22)

120.45 SPENCER F. BAIRD; April 20, 1956; 0522 GCT; 27°44'N, 115°33'W; sounding, 1700 fm; wind, 330°, force 4; weather, overcast; sea, moderate; wire angle, 25°.

0	14.44	33.58	6.83	295	0	14.44	33.58	6.83	25.02	295	0.00
9	14.38	33.58	6.61	294	10	14.36	33.58	6.59	25.04	293	0.03
22p	14.02	33.56	5.31	288	20	14.12	33.57	5.35	25.08	289	0.06
34	12.53	33.57	5.24	258	30	13.04	33.57	5.30	25.30	268	0.09
42	11.61	33.52	4.76	246	50	11.20	33.58	4.49	25.66	234	0.14
56	11.28	33.76	3.75	223	75	10.19	33.80	3.22	26.01	201	0.19
61p	10.86	33.75	3.42	216	100	9.64	33.90	2.97	26.18	185	0.24
75p	10.19	33.80	3.22	201	150	9.81	34.25	1.70	26.43	161	0.33
100p	9.64	33.90	2.97	185	200	8.64	34.19	2.13	26.56	148	0.41
139p	9.14	34.09	2.47	163	250	8.13	34.23	1.40	26.67	138	0.48
179p	8.98	34.18	2.19	154	300	7.68	34.29	1.06	26.80	126	0.55
238p	8.22	34.22	1.50	140	400	7.33	34.47	0.47	26.98	109	0.67
326p	7.49	34.34	0.86	121	500	7.02	34.47	0.47	27.02	105	0.78
441p	7.30	34.47	0.44	108							
588p	6.31	34.46	0.52	96							



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{-5}^3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{-5}^3$	$\Delta D$
m	°C	‰	ml/L	10 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

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SPENCER F. BAIRD; April 20, 1956; 0016 GCT; 27°31.5'N, 115°52.5'W; sounding, 2200 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 22°.

120.50

0	14.77	33.60	6.34	300	0	14.77	33.60	6.34	24.96	300	0.00
9	14.74	33.59	6.42	300	10	14.73	33.59	6.42	24.96	300	0.03
32	13.26	33.57	6.28	273	20	14.17	33.58	6.41	25.07	290	0.06
41	12.62	33.57	5.82	261	30	13.40	33.57	6.32	25.23	275	0.09
56	11.34	33.57	4.58	237	50	11.85	33.57	5.03	25.53	246	0.14
65	10.67	33.58	4.16	226	75	10.15	33.60	3.87	25.86	215	0.20
74	10.18	33.60	3.89	215	100	10.07	33.96	2.39	26.14	188	0.25
91	10.08	33.86	2.90	195	150	9.21	34.13	2.19	26.42	162	0.34
109	10.03	34.04	2.31	181	200	10.03	34.47	0.86	26.55	149	0.42
122	9.50	34.07	2.45	170	250	8.86	34.38	0.91	26.67	138	0.49
141	9.14	34.06	2.45	165	300	7.74	34.26	1.03	26.75	130	0.56
174	10.09	34.42	1.00	154	400	6.78	34.27	0.80	26.89	117	0.68
207	9.98	34.47	0.84	148	500	6.18	34.38	0.45	27.07	100	0.80
257	8.70	34.36	0.93	136							
333	7.28	34.23	1.06	126							
435	6.58	34.31	0.65	111							
571	5.78	34.44	0.25	91							

SPENCER F. BAIRD; April 20, 1956; 0132, 0152 GCT;<sup>a)</sup> 27°31.5'N, 115°52.2'W; sounding, 2200 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°, 25°.

120.50

128	9.77	34.01	2.58	179							
141	9.47	34.07	2.58	170							
154	9.27	34.08	2.43	166							
167	9.59	34.25	1.89	158							
181	10.02	34.40	1.32	154							
194	10.30	34.48	0.81	153							
207	10.27	34.51	0.75	150							
220	10.18	34.52	0.64	148	150	9.32					
232	9.10	34.32	1.30	145	200	10.28					
					250	9.00					
240	9.38	34.40	0.86	144	300	8.10					
254	8.84	34.34	1.25	140							
267	8.58	34.31	1.27	138							
281	8.46	34.33	1.06	135							
294	8.06	34.30	1.30	132							
308	8.16	34.34	0.94	130							

SPENCER F. BAIRD; April 19, 1956; 2048 GCT; 27°23'N, 116°12'W; sounding, 2100 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 38°.

120.55

0	15.54	33.64	6.00	313	0	15.54	33.64	6.00	24.83	313	0.00
8	15.47	33.64	6.10	311	10	15.43	33.65	6.09	24.85	311	0.03
24	15.37	33.66	5.89	308	20	15.38	33.65	5.90	24.88	308	0.06
44	15.32	33.64	5.19	308	30	15.37	33.65	5.89	24.88	308	0.09
51	14.75	33.58	6.02	301	50	14.80	33.59	6.01	24.94	302	0.15
59	14.12	33.72 <sup>u</sup>	6.00	-	75	12.79	33.49	5.40	25.29	269	0.22
73	12.92	33.49	5.48	272	100	11.28	33.58	4.60	25.64	236	0.29
83	12.27	33.53	5.18	257							
107	10.98	33.61	4.26	228							
130	10.41	33.83	3.08	203							

a) Special cast.

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5604

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m

120.60

SPENCER F. BAIRD; April 19, 1956; 1740 GCT; 27°18'N, 116°29.5'W; sounding, 2100 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 22°.

0	15.22	33.56	6.09	312	0	15.22	33.56	6.09	24.84	312	0.00
9	15.17	33.61	6.02	307	10	15.15	33.61	6.01	24.89	307	0.03
33	15.11	33.59	5.97	307	20	15.13	33.60	6.00	24.89	307	0.06
57	13.72	33.55	6.14	282	30	15.12	33.59	5.98	24.89	307	0.09
66	13.32	33.53	5.70	276	50	14.95	33.58	5.98	24.92	304	0.15
75	12.77	33.53	5.41	266	75	12.77	33.53	5.41	25.32	266	0.22
94	11.81	33.55	4.88	247	100	11.60	33.58	4.70	25.60	240	0.29
113	11.11	33.69	4.26	225	150	10.22	33.90	3.22	26.08	194	0.40
145	10.35	33.87	3.33	198	200	9.50	34.15	2.75	26.40	164	0.49
175	9.61	34.04	2.78	174	250	9.97	34.47	1.34	26.58	147	0.57
216	8.90	34.13	2.57	156	300	9.30	34.47	1.30	26.68	137	0.64
285	9.56	34.49	1.33	140	400	7.59	34.39	1.01	26.88	118	0.78
380	7.92	34.39	1.08	123	500	6.58	34.41	0.85	27.04	103	0.89
512	6.45	34.42	0.82	101	600	5.93	34.49	0.39	27.19	89	0.99
655	5.60	34.52	0.22	83	700	5.35	34.53	0.26	27.28	80	1.08
859	4.63	34.54	0.52	71	800	4.87	34.53	0.45	27.34	74	1.17
1126	3.80	34.58	1.70r	60	1000	4.20	34.56		27.44	65	1.32

120.70

SPENCER F. BAIRD; April 19, 1956; 1211 GCT; 26°53.5'N, 117°09.5'W; sounding, 2100 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 14°.

0	16.18	33.73	5.79	320	0	16.18	33.73	5.79	24.76	320	0.00
9	16.18	33.74	5.82	320	10	16.18	33.74	5.80	24.76	320	0.03
33	16.13	33.74	5.70	318	20	16.17	33.74	5.72	24.76	319	0.06
61	15.95	33.66r	5.82	-	30	16.15	33.74	5.70	24.76	319	0.10
231	9.04	34.02	2.99	167	50	16.05	33.73	5.74	24.79	317	0.16
301	8.32	34.22	1.64	141	75	15.4	(33.65)		(24.87)	(309)	(0.24)
407	7.04	34.29	0.78	118	100	14.5	(33.60)		(25.02)	(295)	(0.31)
552	6.08	34.41	0.64	97	150	11.2	(33.63)		(25.68)	(232)	(0.45)
714	5.26	34.44	0.44	86	200	9.5	(33.91)		(26.20)	(183)	(0.55)
933	4.35	34.51	0.62	70	250	8.83	34.09	2.60	26.45	159	(0.64)
1204	3.60	34.54	0.88	61	300	8.32	34.22	1.64	26.64	141	(0.72)
					400	7.15	34.29	0.80	26.86	120	(0.86)
					500	6.37	34.38	0.69	27.04	103	(0.97)
					600	5.82	34.42	0.58	27.13	94	(1.08)
					700	5.35	34.43	0.45	27.21	87	(1.17)
					800	4.93	34.47	0.46	27.29	79	(1.26)
					1000	4.09	34.52	0.70	27.42	67	(1.42)

120.80

SPENCER F. BAIRD; April 19, 1956; 0503 GCT; 26°33'N, 117°49'W; sounding, 2125 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 15°.

0	15.87	33.58	5.79	325	0	15.87	33.58	5.79	24.70	325	0.00
10	15.86	33.60	5.74	323	10	15.86	33.60	5.74	24.72	323	0.03
34	16.11	33.71	5.74	320	20	15.97	33.66	5.74	24.74	321	0.06
64	16.32	33.80	5.98	318	30	16.08	33.69	5.74	24.76	320	0.10
78	15.35	33.58	5.86	313	50	16.21	33.75	5.82	24.76	319	0.16
98	14.57	33.49	5.99	304	75	15.60	33.64	5.88	24.81	315	0.24
117	13.78	33.60	5.60	280	100	14.48	33.49	5.98	24.94	302	0.32
151	11.35	33.52	4.80	241	150	11.40	33.52	4.81	25.58	242	0.46
174	10.09	33.68	4.00	208	200	9.50	33.87	3.55	26.18	185	0.56
202	9.46	33.87	3.52	185	250	8.83	34.17	2.70	26.51	153	0.65
237	9.00	34.09	2.97	161	300	8.25	34.35	1.92	26.75	130	0.72
304	8.20	34.36	1.80	129	400	7.20	34.34	0.89	26.89	117	0.85
408	7.16	34.34	0.87	116	500	6.39	34.37	0.44	27.03	104	0.97
547	6.06	34.38	0.34	99	600	5.75	34.40	0.30	27.13	94	1.07
705	5.24	34.43	0.30	86	700	5.27	34.43	0.30	27.21	87	1.17
919	4.31	34.49	0.60	71	800	4.83	34.45	0.41	27.28	80	1.26
1190	3.60	34.58	0.75	58	1000	4.00	34.51	0.68	27.42	67	1.42

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
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

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SPENCER F. BAIRD; April 18, 1956; 0753 GCT; 27°14'N, 114°59'W; sounding, 560 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 26°.

123.42

0	16.07	33.77	5.72	315	0	16.07	33.77	5.72	24.81	315	0.00
9	16.02	33.75	5.70	315	10	16.02	33.75	5.70	24.81	315	0.03
28	15.99	33.75	5.78	314	20	16.00	33.75	5.77	24.81	315	0.06
54	15.68	33.68	5.47	313	30	15.95	33.74	5.78	24.82	314	0.09
63	14.77	33.60	5.90	300	50	15.75	33.70	5.47	24.83	313	0.16
72	13.69	33.52	5.90	289	75	13.70	33.53	5.73	25.13	284	0.23
85	12.88	33.58	5.18	264	100	11.49	33.58	4.71	25.60	240	0.30
98	11.66	33.57	4.80	243	150	9.60	33.93	2.80	26.21	182	0.40
110	10.59	33.64	4.06	219	200	10.14	34.37	1.26	26.46	158	0.49
125	10.00	33.72	3.69	204	250	9.92	34.52	0.58	26.62	143	0.57
140	9.66	33.83	3.21	190	300	9.23	34.49	0.50	26.70	135	0.64
163	10.10	34.19	1.98	171	400	8.10	34.46	0.58	26.86	120	0.77
181	9.91	34.22	1.87	166	500	7.05	34.45	0.34	27.01	106	0.89
222	10.26	34.51	0.82	150							
290	9.38	34.50	0.50	136							
379	8.34	34.46	0.60	124							
512	6.91	34.45	0.31	104							

SPENCER F. BAIRD; April 18, 1956; 1214 GCT; 26°55.5'N, 115°33'W; sounding, 1800 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 18°.

123.50

0	15.32	33.57	6.02	314	0	15.32	33.57	6.02	24.82	314	0.00
9	15.28	33.57	5.99	313	10	15.27	33.57	5.98	24.83	313	0.03
33	15.20	33.57	5.98	311	20	15.25	33.57	5.98	24.84	312	0.06
43	14.76	33.63	6.16	297	30	15.21	33.57	5.98	24.84	312	0.09
57	13.98	33.58	5.97	285	50	14.40	33.61	6.06	25.05	292	0.15
66	13.20	33.54	5.92	273	75	12.73	33.58	5.43	25.38	261	0.22
75	12.73	33.58	5.43	261	100	10.95	33.57	5.05	25.70	230	0.29
93	11.28	33.53	5.38	240	150	9.41	33.94	2.93	26.24	179	0.39
111	10.41	33.69	4.05	213	200	8.60	34.07	2.60	26.48	156	0.47
124	9.82	33.75	3.96	199	250	8.70	34.27	1.43	26.62	143	0.55
147	9.47	33.93	2.96	180	300	8.52	34.36	0.95	26.71	134	0.62
181	8.93	34.05	2.82	163	400	7.93	34.44	0.60	26.87	119	0.75
216	8.86	34.20	2.02	151	500	6.83	34.44	0.40	27.02	105	0.87
271	8.60	34.29	1.21	140	600	6.08	34.44	0.25	27.13	94	0.98
351	8.43	34.43	0.78	128							
455	7.26	34.44	0.49	110							
601	6.04	34.44	0.24	94							

SPENCER F. BAIRD; April 18, 1956; 1709, 1816 GCT; 26°39'N, 116°07.5'W; sounding, 2100 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°, 16°.

123.60

0	15.22	33.57	6.06	312	0	15.22	33.57	6.06	24.84	312	0.00
11	15.15	33.56	5.92	311	10	15.15	33.56	5.93	24.85	311	0.03
34	15.18	33.57	5.85	310	20	15.16	33.57	5.90	24.86	310	0.06
44	14.73	33.55	6.00	303	30	15.18	33.57	5.89	24.86	310	0.09
59	14.32	33.52	5.99	297	50	14.55	33.53	6.00	24.96	300	0.15
69	13.85	33.57	5.85	284	75	13.63	33.58	5.78	25.20	278	0.23
78	13.46	33.58	5.74	276	100	11.72	33.56	4.60	25.54	245	0.29
					150	9.70	33.79	3.37	26.08	194	0.40
					200	9.00	34.06	2.75	26.41	163	0.50
					250	8.50	34.20	1.75	26.58	146	0.57
					300	8.01	34.25	1.48	26.70	135	0.65
					400	6.95	34.29	0.99	26.89	117	0.78
					500	6.20	34.33	0.60	27.02	105	0.89
					600	5.70	34.39	0.37	27.13	94	1.00
88	12.57	33.56	5.26	260							
106	11.49	33.57	4.42	240							
120	11.13	33.69	4.02	225							
142	9.95	33.75	3.50	201							
178	9.22	33.95	3.04	175							
215	8.82	34.11	2.47	157							
268	8.36	34.23	1.58	141							
351	7.43	34.27	1.30	125							
459	6.44	34.31	0.71	109							
603	5.70	34.39	0.37	94							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	10 <sup>-5</sup> cm <sup>3</sup> /g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

127.40

SPENCER F. BAIRD; April 17, 1956; 2059 GCT; 26°44'N, 114°29.5'W; sounding, 1800 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	13.99	33.75	7.87	273	0	13.99	33.75	7.87	25.25	273	0.00
10	12.69	33.78	6.04	246	10	12.69	33.78	6.04	25.53	246	0.03
30	11.35	33.76	3.70	224	20	11.74	33.76	4.50	25.70	230	0.05
40	11.18	33.87	2.99	213	30	11.35	33.76	3.70	25.76	224	0.07
50	11.34	34.08	2.08	200	50	11.34	34.08	2.08	26.02	200	0.11
60	10.50	34.14	2.07	181	75	10.30	34.30	1.50	26.38	166	0.16
71	10.16	34.25	1.73	168	100	10.45	34.36	1.26	26.40	164	0.20
86	10.46	34.35	1.30	165	150	10.90	34.58	0.54	26.49	155	0.28
100	10.45	34.36	1.26	164	200	10.55	34.62	0.42	26.59	145	0.36
114	10.67	34.44	1.09	162	250	10.16	34.64	0.35	26.67	138	0.43
138	10.92	34.56	0.54	157	300	9.58	34.60	0.33	26.73	132	0.50
165	10.22	34.49	1.01	151	400	8.47	34.56	0.28	26.88	118	0.63
197	10.56	-	0.45	-	500	7.46	34.51	0.24	27.00	107	0.75
244	10.22	34.64	0.35	140							
319	9.34	34.59	0.32	129							
413	8.34	34.56	0.28	116							
539	7.04	34.49	0.22	104							

127.50

SPENCER F. BAIRD; April 17, 1956; 1326, 1411, 1503 GCT; 26°20'N, 115°12'W; sounding, 1750 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 32°, 40°, 40°.

0	14.35	33.58	6.01	293	0	14.35	33.58	6.01	25.04	293	0.00
8	14.34	33.58	6.09	293	10	14.29	33.58	6.09	25.05	292	0.03
30	13.88	33.58	5.98	284	20	14.08	33.58	6.08	25.09	288	0.06
39	13.92	33.59	6.03	284	30	13.88	33.58	6.06	25.13	284	0.09
51	13.86	33.60	5.94	282	50	13.87	33.60	5.97	25.15	282	0.14
60	13.77	33.57	5.83	282	75	12.55	33.53	5.24	25.36	262	0.21
68	12.78	33.51	5.32	267	100	10.64	33.62	4.39	25.78	222	0.27
					150	10.4					
73a)	12.75	33.53	5.38	266	200	10.4					
90	11.87	33.57	4.79	247							
100	10.64	33.62	4.39	222							
116	10.02	33.70	3.65	206							

127.60

SPENCER F. BAIRD; April 17, 1956; 0832 GCT; 26°03.5'N, 115°48'W; sounding, 2125 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 29°.

0	16.39	33.78	5.70	321	0	16.39	33.78	5.70	24.74	321	0.00
9	16.36	33.78	5.77	320	10	16.36	33.78	5.77	24.76	320	0.03
31	16.37	33.80	5.75	320	20	16.36	33.79	5.77	24.76	320	0.06
40	16.49	33.83	5.73	320	30	16.37	33.80	5.77	24.76	320	0.10
53	16.71	33.92	5.68	318	50	16.67	33.90	5.69	24.76	319	0.16
62	16.73	33.91	5.61	319	75	16.49	33.86	5.72	24.79	317	0.24
71	16.56	33.87	5.70	318	100	15.50	33.72	5.83	24.90	306	0.32
88	16.35	33.85	5.75	315	150	11.07	33.59	4.34	25.68	232	0.46
104	15.12	33.68	5.84	301	200	9.54	34.02	2.88	26.29	174	0.56
116	14.14	33.66	5.59	283	250	8.99	34.17	1.99	26.50	154	0.64
134	12.56	33.58	4.94	258	300	8.10	34.20	1.83	26.65	140	0.72
162	10.14	33.66	3.92	210	400	6.90	34.26	1.00	26.87	119	0.85
190	9.64	33.93	3.29	183	500	6.40	34.36	0.50	27.02	105	0.97
235	9.22	34.14	2.09	161							
305	8.02	34.20	1.80	138							
402	6.88	34.26	0.98	118							
539	6.26	34.40	0.38	100							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$	
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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SPENCER F. BAIRD; April 16, 1956; 1321 GCT; 26°16'N, 113°47'W; sounding, 330 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 21°.

130.35

0	15.80	33.75	5.75	311	0	15.80	33.75	5.75	24.85	311	0.00
9	15.77	33.76	5.81	309	10	15.75	33.75	5.79	24.87	309	0.03
28	15.75	33.75	5.66	309	20	15.75	33.75	5.71	24.87	309	0.06
38	14.74	33.74	5.92	289	30	15.70	33.75	5.66	24.87	309	0.09
47	13.86	33.66	5.50	277	50	13.70	33.65	5.43	25.23	275	0.15
56	13.33	33.63	5.30	269	75	11.52	33.57	4.41	25.58	241	0.22
65	12.10	33.57	4.73	251	100	10.66	33.88	2.70	26.00	202	0.27
79	11.36	33.58	4.27	237	150	10.52	34.43	1.12	26.44	160	0.36
92	10.99	33.79	3.03	215	200	10.30	34.57	0.51	26.58	146	0.44
104	10.43	33.91	2.65	197	250	9.92	34.59	0.42	26.67	138	0.51
124	9.64	33.99	2.78	179	300	9.42	34.59	0.37	26.75	130	0.58
150	10.52	34.43	1.12	160	400	8.33	34.57	0.29	26.90	116	0.71
179	10.52	34.56	0.61	150	500	(7.40)	(34.52)		(27.01)	(106)	(0.83)
222	10.16	34.58	0.44	143							
265	9.79	34.59	0.40	136							
359	8.76	34.58	0.29	120							
453	7.82	34.54	0.28	111							

SPENCER F. BAIRD; April 16, 1956; 1627 GCT; 26°07.5'N, 114°06.5'W; sounding, 1180 fm; wind, 290°, force 3; weather, cloudy; sea, moderate; wire angle, 12°.

130.40

0	15.65	33.77	5.79	306	0	15.65	33.77	5.79	24.90	306	0.00
10	15.64	33.75	5.85	307	10	15.64	33.75	5.85	24.89	307	0.03
34	14.29	33.63	4.88r	288	20	15.64	33.75	5.85	24.89	307	0.06
44	13.98	33.60	5.76	284	30	15.47	33.73	5.85	24.92	304	0.09
58	12.94	33.68	4.84	258	50	13.72	33.61	5.58	25.21	277	0.15
67	11.57	33.59	4.30	240	75	11.09	33.57	3.96	25.67	233	0.21
77	11.00	33.57	3.86	232	100	10.98	33.97	2.52	26.00	202	0.27
95	10.69	33.85	2.79	206	150	9.14	34.07	2.67	26.40	164	0.36
115	10.06	33.93	3.51	190	200	8.77	34.19	2.18	26.54	150	0.44
128	9.53	33.95	2.90	179	250	8.60	34.35	1.15	26.69	136	0.52
151	9.14	34.07	2.65	164	300	8.23	34.39	0.58	26.79	127	0.58
188	8.90	34.16	2.37	154	400	7.61	34.44	(0.32)	26.91	115	0.71
227	8.45	34.26	1.67	141	500	6.72	34.47	(0.28)	27.06	101	0.82
283	8.32	34.38	0.87	129	600	6.02	34.47	(0.26)	27.16	92	0.92
367	7.86	34.43	0.34	119							
478	6.90	34.47	0.66u	103							
624	5.82	34.47	0.24	90							

SPENCER F. BAIRD; April 16, 1956; 2117 GCT; 25°49'N, 114°44'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 17°.

130.50

0	15.52	33.79	6.48	302	0	15.52	33.79	6.48	24.94	302	0.00
9	15.44	33.78	6.04	301	10	15.44	33.78	6.03	24.95	301	0.03
33	14.01	33.63	5.65	283	20	15.12	33.75	5.93	25.00	297	0.06
57	12.31	33.71	4.58	244	30	14.29	33.65	5.72	25.10	287	0.09
68	11.70	33.71	3.82	234	50	12.78	33.69	4.94	25.44	255	0.14
77	11.55	33.75	3.67	227	75	11.58	33.73	3.72	25.70	230	0.20
97	10.41	33.90	2.71	198	100	10.32	33.93	2.52	26.08	194	0.26
117	10.16	34.08	2.14	180	150	9.89	34.24	1.83	26.40	164	0.35
150	9.89	34.24	1.83	164	200	9.53	34.39	1.13	26.58	146	0.43
182	9.62	34.36	1.33	151	250	9.21	34.43	0.67	26.66	139	0.50
226	9.40	34.42	0.82	142	300	8.73	34.45	0.53	26.75	130	0.57
303	8.72	34.45	0.52	130	400	7.76	34.48	0.26	26.92	114	0.70
407	7.70	34.48	0.25	113	500	6.68	34.46	0.25	27.06	101	0.81
546	6.18	34.45	0.25	95	600	5.75	34.46	0.30	27.18	90	0.91
705	5.10	34.48	0.42	81	700	5.15	34.48	0.42	27.26	82	1.00
920	4.24	34.55	0.64	66	800	4.76	34.51	0.52	27.34	74	1.08
1189	3.54	34.57	0.86	58	1000	3.95	34.56	0.74	27.46	63	1.23

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
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

130.60

SPENCER F. BAIRD; April 17, 1956; 0250 GCT; 25°26'N, 115°25'W; sounding, 2000 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 23°.

0	16.45	33.83	5.84	319	0	16.45	33.83	5.84	24.76	319	0.00
9	16.39	33.84	5.80	317	10	16.39	33.85	5.79	24.79	317	0.03
28	16.45	33.86	5.72	317	20	16.41	33.85	5.75	24.79	317	0.06
56	16.44	33.89	5.76	315	30	16.45	33.86	5.73	24.79	317	0.10
69	16.40	33.89	5.97	314	50	16.44	33.88	5.74	24.80	316	0.16
87	14.97	33.66	5.87	300	75	16.38	33.89	5.97	24.83	313	0.24
102	13.93	33.68	5.40	277	100	14.04	33.68	5.45	25.18	280	0.31
124	12.16	33.53	5.00	254	150	11.40	33.78	3.38	25.78	223	0.44
150	-	33.78	3.38	-	200	10.17	34.18	2.26	26.30	173	0.54
175	10.82	34.05	2.30	193	250	9.36	34.35	1.52	26.56	148	0.62
202	10.10	34.18	2.27	172	300	8.90	34.40	1.00	26.69	136	0.70
257	9.29	34.36	1.40	146	400	8.00	34.47	0.36	26.88	118	0.83
345	8.49	34.43	0.67	128	500	7.07	34.50	0.20	27.03	104	0.95
462	7.39	34.50	0.20	107	600	6.22	34.49	0.25	27.14	93	1.05
596	6.22	34.49	0.25	93	700	5.58	34.51	0.36	27.24	84	1.14
781	5.05	34.52	0.45	78	800	4.95	34.52	0.47	27.32	76	1.23
1029	4.16	34.53	0.60	67	1000	4.20	34.53	0.58	27.41	68	1.39

133.30

SPENCER F. BAIRD; April 16, 1956; 0301 GCT; 25°59'N, 113°10'W; sounding, 90 fm; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 15°.

0	14.04	33.67	6.05	281	0	14.04	33.67	6.05	25.16	281	0.00
9	13.68	33.66	5.82	274	10	13.65	33.66	5.80	25.25	273	0.03
28	12.96	33.78	5.15	251	20	13.21	33.72	5.42	25.38	260	0.05
46	12.74	33.82	4.72	244	30	12.91	33.78	5.07	25.49	250	0.08
68	10.71	34.02	1.99	194	50	12.55	33.85	4.38	25.61	239	0.13
91	10.07	34.15	2.22	174	75	10.40	34.07	2.10	26.18	185	0.18
114	10.74	34.61	1.03	150	100	10.10	34.26	2.01	26.38	166	0.23
					150	11.2					

133.40

SPENCER F. BAIRD; April 15, 1956; 2155 GCT; 25°35.5'N, 113°50'W; sounding, 1800 fm; wind, 300°, force 5; weather, clear; sea, rough; wire angle, 40°.

0	16.07	33.78	5.85	314	0	16.07	33.78	5.85	24.82	314	0.00
8	15.98	33.75	5.80	314	10	15.95	33.73	5.80	24.81	315	0.03
28	15.90	33.72	5.79	315	20	15.93	33.73	5.80	24.81	315	0.06
35	15.86	33.75	5.72	312	30	15.88	33.73	5.77	24.82	314	0.09
46	15.32	33.75	5.75	300	50	15.09	33.72	5.78	24.99	298	0.16
54	14.88	33.70	5.79	295	75	13.18	33.57	5.35	25.28	270	0.23
62	14.36	33.66	5.74	287	100	11.76	33.55	4.68	25.53	246	0.29
76	13.10	33.57	5.30	269	150	11.23	34.40	1.04	26.29	174	0.40
90	12.41	33.56	4.86	258	200	11.14	34.61	0.47	26.46	158	0.48
100	11.76	33.55	4.68	246	250	10.33	34.57	0.62	26.58	146	0.56
116	10.66	33.64	3.83	221	300	9.73	34.56	0.56	26.68	137	0.63
143a)	11.16	34.34	1.21	177	400	8.55	34.54	0.26	26.85	121	0.76
169	11.47	34.56	0.62	167	500	(7.02)	(34.48)	(0.25)	(27.03)	(104)	(0.88)
210	10.94	34.59	0.50	155							
272	10.05	34.57	0.65	142							
357	9.14	34.56	0.31	128							
482	7.32	34.49	0.25	107							

a) Although there is some difference between the property curves of the regular and special casts on this station, the resulting  $\Delta T$  values are very close.

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
m	°C	‰	ml/L	$\frac{10^{-5} T}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} T}{10 \text{ cm/g}}$	dyn. m

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SPENCER F. BAIRD; April 15, 1956; 2231 GCT; <sup>a)</sup> 25°35.5'N, 113°50'W; sounding, 1800 fm; wind, 300°, force 5; weather, clear; sea, rough; wire angle, 17°.

133.40

129b)	10.71	33.92	2.70	201							
144	10.03	33.97	2.72	186							
158	10.91	34.33	1.49	173							
172	11.02	34.42	1.03	169							
186	10.86	34.45	0.95	164							
199	10.66	34.45	0.85	161							
213	10.44	34.49	0.83	154							
227	10.32	34.53	0.60	149	150	10.19					
241	10.17	34.52	0.56	147	200	10.65					
254	9.87	34.48	0.61	146	250	9.98					
268	9.62	34.44	0.77	145	300	9.34					
282	9.62	34.52	0.47	139							
296	9.37	34.52	0.50	134							
310	9.32	34.52	0.40	134							
323	9.17	34.52	0.28	132							

SPENCER F. BAIRD; April 15, 1956; 0928 GCT; 25°19.5'N, 112°44'W; sounding, 300 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 37°.

137.30

0	14.93	33.84	6.06	286	0	14.93	33.84	6.06	25.11	286	0.00
8	14.90	33.84	5.77	285	10	14.85	33.84	5.74	25.13	284	0.03
29	14.31	33.87	5.60	271	20	14.64	33.85	5.67	25.19	279	0.06
36	13.99	33.86	5.00	265	30	14.29	33.87	5.58	25.28	270	0.08
49	12.88	33.91	2.71	240	50	12.85	33.91	2.71	25.60	240	0.14
57	12.66	33.96	2.64	233	75	12.04	34.00	2.06	25.83	218	0.19
65	12.52	33.96	2.27	230	100	11.87	34.35	1.17	26.13	189	0.24
79	11.92	34.04	2.00	213	150	11.50	34.63	0.42	26.42	162	0.33
92	11.93	34.29	1.24	195	200	11.06	34.66	0.38	26.52	152	0.41
102	11.86	34.36	1.16	189	250	10.75	34.67	0.37	26.58	146	0.49
116	11.84	34.54	0.60	175	300	10.52	34.64	0.31	26.61	144	0.56
141	11.58	34.60	0.45	165	400	10.24					
165	11.40	34.65	0.39	159	500	(10.21)					
203	11.02	34.66	0.52u	152							
261	10.70	34.67	0.37	145							
344	10.34	34.60	0.26	144							
469	10.21c)	-	-	-							

SPENCER F. BAIRD; April 15, 1956; 1446 GCT; 25°00.5'N, 113°23.5'W; sounding, 1100 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°.

137.40

0	17.60	34.08	5.70	326	0	17.60	34.08	5.70	24.69	326	0.00
9	17.57	34.07	5.67	326	10	17.56	34.07	5.70	24.69	326	0.03
32	17.55	34.08	6.07	325	20	17.55	34.08	5.80	24.69	326	0.06
59	17.49	34.08	5.82	324	30	17.55	34.08	6.00	24.70	325	0.10
68	14.70	33.72	5.82	290	50	17.50	34.08	5.90	24.70	325	0.16
83	13.09	33.62	5.11	266	75	13.78	33.64	5.54	25.20	278	0.24
91	12.66	33.70	3.92	252	100	12.20	33.78	3.66	25.62	238	0.30
110	11.80	33.85	3.40	225	150	10.91	34.22	1.88	26.21	182	0.41
124	11.36	34.04	2.47	203	200	10.40	34.44	1.31	26.46	158	0.49
141	10.99	34.17	2.00	187	250	9.78	34.49	0.95	26.61	144	0.57
164	10.80	34.30	1.63	174	300	9.22	34.53	0.49	26.73	132	0.64
189	10.48	34.42	1.31	160	400	8.15	34.51	0.32	26.90	116	0.77
215	10.24	34.46	1.28	153	500	7.16	34.49	0.33	27.02	105	0.89
266	9.60	34.50	0.79	140	600	(6.22)	(34.49)		(27.14)	(93)	(0.99)
343	8.77	34.55	0.30	123							
445	7.64	34.49	0.34	112							
582	6.40	34.49	0.30	95							

a) Special cast.

b) Although there is some difference between the property curves of the regular and special casts on this station, the resulting  $\Delta T$  values are very close.

c) The unusually high temperatures at the deeper levels have been carefully verified.

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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

140.35 SPENCER F. BAIRD; April 14, 1956; 2130 GCT; 24°37'N, 112°44'W; sounding, 580 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

0	15.54	33.86	5.92	297	0	15.54	33.86	5.92	25.00	297	0.00
9	15.47	33.89	6.22	294	10	15.46	33.89	6.22	25.04	293	0.03
33	14.60	33.87	4.81	277	20	15.34	33.89	6.10	25.07	290	0.06
43	13.48	33.95	4.44	249	30	15.11	33.88	5.62	25.11	286	0.09
58	12.40	34.05	2.32	221	50	12.40	33.98	2.55	25.74	226	0.14
67	12.41	34.11	2.14	217	75	12.37	34.14	1.93	25.87	214	0.19
76	12.36	34.14	1.92	214	100	11.33	34.14	2.08	26.06	196	0.25
94	11.50	34.14	2.00	198	150	10.65	34.40	1.45	26.38	166	0.34
113	11.04	34.13	2.22	191	200	10.24	34.52	1.05	26.56	148	0.42
126	10.74	34.23	1.90	178	250	10.23	34.64	0.55	26.66	139	0.49
147	10.68	34.38	1.51	167	300	9.78	34.65	0.23	26.73	132	0.56
182	10.44	34.47	1.13	156	400	8.47	34.58	0.24	26.89	117	0.69
216	10.06	34.58	0.92	142	500	7.66	34.56	0.24	27.00	107	0.80
268	10.28	34.67	0.32	138	600	(6.73)	(34.55)	(0.20)	(27.12)	(95)	(0.91)
348	8.97	34.61	0.22	121							
451	8.08	34.56	0.25	112							
595	6.80	34.55	0.20	96							

140.40 SPENCER F. BAIRD; April 14, 1956; 1818 GCT; 24°24.5'N, 113°04'W; sounding, 1900 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 37°.

0	17.17	33.98	5.72	324	0	17.17	33.98	5.72	24.71	324	0.00
8	17.15	33.96	5.70	324	10	17.10	33.95	5.69	24.71	324	0.03
29	16.20	33.86	5.67	311	20	16.68	33.91	5.67	24.78	318	0.06
36	15.45	33.80	5.85	300	30	16.14	33.86	5.70	24.87	309	0.10
48	14.84	33.77	5.89	289	50	14.77	33.76	5.86	25.09	288	0.16
56	14.32	33.71	5.52	283	75	12.09	33.74	3.76	25.61	239	0.22
64	12.98	33.69	4.64	258	100	11.44	34.11	2.12	26.02	200	0.28
78	11.96	33.75	3.57	235	150	11.64	34.49	1.21	26.28	175	0.37
93	11.61	34.04	2.34	208	200	10.08	34.44	1.20	26.52	152	0.46
103	11.40	34.12	2.12	198	250	9.48	34.49	0.76	26.66	139	0.53
121	11.23	34.21	2.12	189	300	8.96	34.48	0.46	26.75	130	0.60
150	11.64	34.49	1.21	175	400	8.08	34.46	0.32	26.86	120	0.73
179	10.44	34.37	1.41	164	500	7.14	34.47	0.25	27.01	106	0.85
223	9.80	34.48	0.99	145							
289	9.04	34.49	0.50	132							
378	8.24	34.46	0.34	122							
500	7.14	34.47	0.25	106							

143.30 SPENCER F. BAIRD; April 14, 1956; 0421 GCT; 24°11'N, 112°03'W; sounding, 110 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 24°.

0	15.33	33.92	5.57	288	0	15.33	33.92	5.57	25.09	288	0.00
9	15.28	33.92	5.52	287	10	15.25	33.92	5.51	25.11	286	0.03
28	14.85	33.91	5.47	279	20	15.10	33.92	5.50	25.13	284	0.06
46	12.67	33.91	3.33	236	30	14.75	33.91	5.42	25.21	277	0.08
69	11.89	34.04	2.84	213	50	12.50	33.92	3.24	25.68	232	0.14
93	11.20	34.15	1.97	192	75	11.68	34.07	2.67	25.95	206	0.19
114	11.66	34.54	0.98	172	100	11.29	34.28	1.68	26.18	185	0.24
142	11.75	34.68	0.34	163	150	(11.73)	(34.70)	(0.31)	(26.43)	(161)	(0.33)



OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$	
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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SPENCER F. BAIRD; April 14, 1956; 0725 GCT; 24°01'N, 112°22'W; sounding, 1760 fm; wind, 320°, force 7; weather, clear; sea, rough; wire angle, 22°.

143.35

0	16.81	33.93	5.48	320	0	16.81	33.93	5.48	24.76	320	0.00
9	16.78	33.93	5.52	318	10	16.78	33.93	5.65	24.78	318	0.03
28	16.78	33.93	5.94	318	20	16.78	33.93	5.80	24.78	318	0.06
42	16.70	33.93	5.60	317	30	16.77	33.93	5.85	24.78	318	0.10
52	16.60	33.92	5.69	316	50	16.63	33.92	5.65	24.80	316	0.16
61	15.46	33.82	5.70	299	75	14.98	34.08	4.08	25.28	270	0.23
70	14.98	33.98	4.42	277	100	12.71	34.14	1.95	25.81	220	0.29
87	13.26	34.03	2.76	239	150	12.01	34.62	0.57	26.33	170	0.39
100	12.71	34.14	1.95	220	200	11.62	34.77	0.27	26.50	154	0.47
112	12.46	34.34	1.43	201	250	10.98	34.75	0.25	26.61	144	0.55
132	11.96	34.52	0.82	178	300	10.20	34.72	0.25	26.71	134	0.62
155	12.02	34.67	0.50	168	400	8.90	34.62	0.15	26.86	120	0.75
185	11.79	34.78	0.30	156	500	7.50	34.57	0.14	27.03	104	0.87
227	11.32	34.76	0.24	149							
290	10.35	34.73	0.27	135							
373	9.24	34.64	0.15	124							
500	7.50	34.57	0.14	104							

SPENCER F. BAIRD; April 14, 1956; 1059, 1120 GCT; 23°50.5'N, 112°43'W; sounding, 1850 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 44°, 50°.

143.40

0	17.12	33.98	5.79	323	0	17.12	33.98	5.79	24.72	323	0.00
9	17.14	33.98	5.66	324	10	17.14	33.98	5.64	24.71	324	0.03
23	17.13	33.97	5.61	324	20	17.14	33.97	5.62	24.71	324	0.06
32	17.04	33.92	5.77	324	30	17.09	33.96	5.62	24.71	324	0.10
					50	14.58	33.69	5.88	25.07	290	0.16
31	17.06	33.95	5.65	324	75	12.39	33.46	4.84	25.34	264	0.23
37	16.20	33.80	5.74	316	100	11.71	33.82	2.84	25.75	225	0.29
44	15.35	33.70	5.90	305	150	11.27	34.34	1.24	26.23	180	0.39
56	13.92	33.68	5.78	277	200	10.36	34.46	0.74	26.49	155	0.48
65	13.29	33.60	5.48	271	250	9.50	(34.47)	0.60	(26.65)	(140)	(0.55)
73	12.60	33.48	4.92	267	300	8.82		0.52			
87	11.52	33.53	4.52	243							
100	11.71	33.82	2.84	225							
118	11.32	34.04	2.07	202							
145	11.27	34.30	1.34	183							
184	10.64	34.45	0.82	160							
248	9.54	34.47	0.60	141							
349	8.23	-	0.47	-							

SPENCER F. BAIRD; April 12, 1956; 1845 GCT; 23°49'N, 111°20'W; sounding, 1535 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 19°.

147.25

0	15.17	33.85	4.95	290	0	15.17	33.85	4.95	25.07	290	0.00
9	14.79	33.93	4.96	276	10	14.78	33.93	4.94	25.22	276	0.03
28	14.54	33.93	4.74	271	20	14.65	33.93	4.87	25.25	273	0.06
44	13.31	33.92	3.30	248	30	14.50	33.93	4.70	25.28	270	0.08
53	14.10	34.40	1.33	228	50	12.90	33.94	3.00	25.62	238	0.13
62	14.14	34.49	1.12	222	75	13.87	34.53	0.78	25.87	214	0.19
72	13.99	34.46u	0.86	-	100	13.06	34.67	0.41	26.14	188	0.24
90	13.36	34.60	0.47	198	150	12.03	34.75	0.19	26.42	162	0.33
103	13.00	34.67	0.39	187	200	11.27	34.76	0.17	26.56	148	0.41
117	12.74	34.67	0.34	182	250	10.62	34.70	0.16	26.63	142	0.48
139	12.32	34.77	0.20	166	300	9.92	34.65	0.16	26.71	134	0.55
163	11.76	34.74	0.18	158	400	8.80	34.61	0.17	26.86	120	0.68
197	11.30	34.76	0.18	149	500	7.69	34.55	0.15	26.99	108	0.80
244	10.72	34.71	0.16	143							
318	9.71	34.64	0.15	131							
412	8.68	34.60	0.17	118							
543	7.17	34.52	0.13	103							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{-5}^3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{-5}^3$	$\Delta D$
m	°C	‰	ml/L	10 <sup>-5</sup> cm <sup>3</sup> /g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

147.35

SPENCER F. BAIRD; April 12, 1956; 1112, 1148 GCT; 23°26'N, 112°04'W; sounding, 1900 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°, 15°.

0	17.45	34.04	5.55	326	0	17.45	34.04	5.55	24.69	326	0.00
10	17.43	34.04	5.72	325	10	17.43	34.04	5.72	24.70	325	0.03
29	17.36	34.05	5.49	322	20	17.40	34.04	5.60	24.71	324	0.06
44	16.32	34.13	5.10	294	30	17.35	34.05	5.48	24.73	322	0.10
53	15.54	34.05	4.94	283	50	15.85	34.08	5.03	25.10	287	0.16
63	14.30	33.98	3.72	263	75	13.00	33.98	3.22	25.62	237	0.22
73	13.08	34.31r	3.26	-	100	13.10	34.34	1.70	25.89	212	0.28
94	13.12	34.30	1.93	216	150	12.48	34.67	0.54	26.27	176	0.38
108	13.01	34.41	1.34	206	200	11.60	34.74	0.27	26.49	155	0.46
123	12.93	34.52	1.03	196	250	10.73	34.69	0.30	26.61	144	0.54
146	12.56	34.65	0.62	180	300	9.88	34.64	0.23	26.71	134	0.61
172	12.16	34.74	0.34	166	400	8.50	34.55	0.20	26.87	119	0.74
208	11.42	34.74	0.27	153	500	7.39	34.53	0.27	27.02	105	0.86
255	10.66	34.69	0.30	144							
334	9.33	34.60	0.18	128							
433	8.11	34.54	0.22	114							
576	6.53	34.52	0.32	94							

147.40

SPENCER F. BAIRD; April 12, 1956; 0723 GCT; 23°15'N, 112°21'W; sounding, 1800+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 28°.

0	18.10	34.11	4.95	336	0	18.10	34.11	4.95	24.59	336	0.00
9	18.08	34.12	5.74	335	10	18.07	34.12	5.70	24.60	335	0.03
28	18.07	34.12	5.52	334	20	18.07	34.12	5.60	24.60	335	0.07
40	17.59	34.03	5.62	330	30	18.02	34.12	5.52	24.61	334	0.10
50	16.48	33.86	5.61	317	50	16.48	33.86	5.61	24.79	317	0.16
68a)	15.96	33.78	5.55	312							
84	13.24	33.69	3.92	263							
116	11.86	34.04	2.35	212							
151	11.86	34.65	0.40	167							
188	11.26	34.67	0.32	155							
307	9.96	34.61	0.58	137							
390	8.50	34.55	0.19	119							
527	7.04	34.51	0.16	102							

150.19

SPENCER F. BAIRD; April 11, 1956; 1257 GCT; 23°23'N, 110°43'W; sounding, 195 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°.

0	15.42	34.29	4.98	263	0	15.42	34.29	4.98	25.35	263	0.00
9	15.40	34.31	4.62	262	10	15.40	34.31	4.60	25.38	261	0.03
27	15.38	34.38	4.48	255	20	15.39	34.34	4.52	25.40	259	0.05
44	15.26	34.38	4.47	253	30	15.38	34.38	4.47	25.44	256	0.08
64	12.63	34.25	1.50	211	50	14.65	34.35	4.12	25.56	243	0.13
85	12.88	34.56	0.63	193	75	12.78	34.41	1.03	26.01	201	0.18
103	12.72	34.77	0.29	174	100	12.78	34.76	0.38	26.27	176	0.23
136	12.06	34.77	0.20	162	150	11.87	34.75	0.19	26.44	160	0.32
168	11.69	34.74	0.18	157	200	11.37	34.74	0.17	26.52	152	0.40
211	11.26	34.74	0.15	150	250	10.75	34.71	0.15	26.62	143	0.47
257	10.66	34.70	0.15	142							

a) Pretrip; depth too uncertain for interpolation.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
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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SPENCER F. BAIRD; April 11, 1956; 1553 GCT; 23°12.5'N, 111°02'W; sounding, 600 fm; wind, 320°, force 5; weather, cloudy; sea, moderate; wire angle, 43°.

150.25

0	17.50	34.07	5.64	325	0	17.50	34.07	5.64	24.70	325	0.00
8	17.48	34.08	5.56	324	10	17.46	34.09	5.53	24.72	323	0.03
26	17.04	34.13	5.19	310	20	17.20	34.11	5.36	24.80	316	0.06
33	16.87	34.19	4.66	302	30	16.95	34.18	4.97	24.92	304	0.10
45	16.51	34.17	3.79	295	50	16.08	34.10	3.23	25.06	291	0.15
52	15.80	34.05	2.94	289	75	12.57	33.79	1.50	25.56	243	0.22
59	14.89	34.02	2.11	272	100	11.92	34.18	1.43	25.98	204	0.28
73	12.61	33.79	1.51	244	150	12.22	34.72	0.26	26.34	169	0.37
88	12.30	34.02	1.47	222	200	11.74	34.76	0.15	26.48	156	0.45
99	11.92	34.16	1.45	204	250	11.09	34.76	0.14	26.60	145	0.53
112	12.06	34.42	1.23	188	300	10.44	34.70	0.15	26.66	139	0.60
133	12.15	34.63	0.70	174	400	9.11	34.60	0.17	26.81	125	0.74
155	12.23	34.75	0.16	166	500	(7.84)	(34.51)		(26.93)	(113)	(0.86)
189	11.86	34.76	0.15	159							
245	11.19	34.76	0.14	147							
327	10.06	34.67	0.15	135							
451	8.45	34.55	0.18	119							

SPENCER F. BAIRD; April 11, 1956; 1915, 1932 GCT; 23°04.5'N, 111°19'W; sounding, 1350 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 26°, 31°.

150.30

0	-	34.05	5.66	-	0	18.0	34.05	5.66	24.57	338	0.00
9	18.00	34.06	5.50	337	10	17.99	34.06	5.50	24.58	337	0.03
34	17.96	34.07	5.50	335	20	17.98	34.06	5.50	24.59	336	0.07
60	17.44	34.22	5.50	312	30	17.96	34.07	5.50	24.59	336	0.10
69	16.70	34.17	5.07	300	50	18.18	34.19	5.34	24.62	333	0.17
83	14.40	33.86	4.14	274	75	16.10	34.10	4.80	25.05	292	0.25
					100	12.77	34.12	2.55	25.78	222	0.31
87	13.06	33.94	2.94	241	150	12.54	34.73	0.50	26.29	174	0.41
103	12.76	34.14	2.51	221	200	11.80	34.77	0.23	26.47	157	0.49
115	12.91	34.42	1.10	203	250	11.20	34.73	0.16	26.55	149	0.57
131	12.74	34.63	0.67	184	300	10.39	34.69	0.17	26.67	138	0.65
149	12.58	34.73	0.51	174	400	8.78	34.55	0.23	26.83	123	0.78
171	12.09	34.76	0.26	163	500	7.50	34.50	0.25	26.99	108	0.90
194	11.84	34.77	0.25	158							
242	11.31	34.74	0.16	151							
315	10.14	34.68	0.18	135							
413	8.58	34.54	0.23	121							
552	6.90	34.49	0.25	102							

SPENCER F. BAIRD; April 12, 1956; 0048, 0111 GCT; 22°41'N, 111°55'W; sounding, 1320 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 24°, 27°.

150.40

0	18.51	34.15	5.34	343	0	18.51	34.15	5.34	24.51	343	0.00
9	18.52	34.16	5.39	342	10	18.52	34.16	5.39	24.52	342	0.03
32	-	34.33r	5.44r	-	20	18.51	34.16	5.39	24.52	342	0.07
55	17.54	34.14	5.30	320	30	18.50	34.16	5.39	24.52	342	0.10
					50	18.06	34.16	5.36	24.64	331	0.17
70	15.66	33.91	5.03	296	75	15.10	33.87	4.78	25.10	287	0.25
86	14.20	33.81	4.23	273	100	13.32	33.80	3.45	25.43	256	0.32
102	13.18	33.81	3.30	253	150	12.90	34.74	0.18	26.24	179	0.42
131	12.98	34.62	0.50	190	200	11.78	34.78	0.17	26.48	156	0.51
158	12.54	34.74	0.18	173	250	11.00	34.72	0.16	26.58	146	0.58
200	11.78	34.78	0.17	156	300	10.12	34.67	0.14	26.69	136	0.66
268	10.70	34.70	0.13	143	400	8.53	34.57	0.15	26.88	118	0.79
362	9.10	34.61	0.14	124	500	7.28	34.51	0.17	27.02	105	0.91
490	7.40	34.51	0.18	107	600	6.40	34.52	0.16	27.14	93	1.01
639	6.16	34.52	0.16	90	700	5.80	34.51	0.17	27.22	86	1.11
843	4.99	34.51	0.23	77	800	5.25	34.51	0.20	27.28	80	1.20
1105	4.02	34.60	0.50	60	1000	4.30	34.57	0.38	27.44	65	1.36

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T$	$\Delta D$
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

153.16 SPENCER F. BAIRD; April 11, 1956; 0631 GCT; 22°54.5'N, 110°07'W; sounding, 220 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 38°.

0	17.59	33.58	5.04	290	0	17.59	34.58	5.04	25.07	290	0.00
8	17.52	34.58	4.92	288	10	17.45	34.57	4.91	25.10	287	0.03
24	15.56	34.34	3.85	262	20	16.02	34.39	4.03	25.30	268	0.06
39	15.59	34.61	2.80	243	30	15.33	34.37	3.56	25.44	255	0.08
59	15.18	34.63	1.72	233	50	15.42	34.63	1.80	25.62	238	0.13
79	13.49	34.57	2.26	204	75	13.74	34.57	2.23	25.93	208	0.19
98	12.88	34.72	0.33	181	100	12.85	34.72	0.32	26.23	180	0.24
126	12.43	34.77	0.22	169	150	12.18	34.81	0.18	26.43	161	0.32
156	12.12	34.81u	0.16	160	200	11.82	34.79	0.12	26.48	156	0.40
193	11.92	34.79	0.12	158							
233	11.40	34.78	0.12	149							

153.20 SPENCER F. BAIRD; April 11, 1956; 0324, 0350 GCT; 22°48.5'N, 110°22'W; sounding, 410 fm; wind, 320°, force 7; weather, partly cloudy; sea, rough; wire angle, 15°, 20°.

0	17.87	34.28	5.86	318	0	17.87	34.28	5.86	24.78	318	0.00
9	18.02	34.29	5.67	321	10	18.01	34.29	5.64	24.76	320	0.03
29	17.22	34.24	5.60	306	20	17.74	34.28	5.63	24.80	316	0.06
43	14.86	33.91	4.09	279	30	17.16	34.23	5.57	24.91	305	0.09
53	14.46	34.16	3.10	253	50	14.60	34.12	3.40	25.38	260	0.15
62	13.92	34.22	2.27	238	75	13.40	34.46	1.35	25.87	214	0.21
72	13.50	34.38	1.42	218	100	13.22	34.62	0.56	26.08	194	0.26
90	13.06	34.52	0.96	199	150	12.29	34.75	0.25	26.35	168	0.35
103	13.24	34.65	0.50	192	200	11.54	34.76	0.20	26.51	153	0.43
117	12.97	34.70	0.34	183	250	10.90	34.70	0.23	26.58	146	0.51
138	12.49	34.74	0.26	172	300	10.28	34.67	0.21	26.66	139	0.58
164	12.04	34.76	0.25	162	400	9.08	34.61	0.15	26.82	124	0.72
199	11.56	34.76	0.20	153	500	7.87	34.58	0.14	26.99	108	0.84
248	10.92	34.70	0.24	146							
323	9.99	34.65	0.20	135							
428	8.74	34.60	0.13	119							
569	7.00	34.56	0.15	97							

153.30 SPENCER F. BAIRD; April 10, 1956; 2251 GCT; 22°28'N, 110°59'W; sounding, 1280 fm; wind, 310°, force 6; weather, cloudy; sea, rough; wire angle, 16°.

0	18.47	34.20	5.48	338	0	18.47	34.20	5.48	24.57	338	0.00
10	18.37	34.20	5.41	335	10	18.37	34.20	5.41	24.60	335	0.03
29	17.62	34.14	5.48	322	20	17.97	34.17	5.46	24.66	329	0.07
43	17.45	34.34	5.15	304	30	17.61	34.14	5.48	24.73	322	0.10
53	16.68	34.20	4.74	297	50	17.18	34.30	4.97	24.96	300	0.16
63	15.21	34.09	4.18	273	75	14.04	34.02	3.00	25.42	257	0.23
72	14.01	33.97	3.39	258	100	13.78	34.56	0.83	25.91	210	0.29
91	14.50	34.60	1.46	222	150	11.74	34.52	0.95	26.29	174	0.39
106	13.37	34.54	0.61	203	200	11.56	34.70	0.36	26.46	158	0.47
120	12.77	34.54	0.57	192	250	10.72	34.67	0.18	26.58	146	0.55
143	11.92	34.52	0.95	177	300	9.91	34.67	0.14	26.73	132	0.62
169	11.36	34.54	0.80	166	400	8.61	34.64	0.12	26.92	114	0.75
204	11.56	34.71	0.18	157	500	7.53	34.60	0.16	27.05	102	0.86
253	10.68	34.67	0.19	145							
329	9.50	34.67	0.12	126							
426	8.34	34.63	0.12	111							
563	6.80	34.57	0.19	94							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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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SPENCER F. BAIRD; April 10, 1956; 1552 GCT; 22°05'N, 111°36'W; sounding, 1800 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

153.40

0	20.47	34.67	5.10	353	0	20.47	34.67	5.10	24.41	353	0.00
10	20.47	34.65	5.07	354	10	20.47	34.65	5.07	24.40	354	0.04
24	20.46	34.65	5.05	354	20	20.47	34.65	5.05	24.40	354	0.07
43	20.42	34.68	5.12	351	30	20.45	34.67	5.10	24.41	353	0.11
53	19.53	34.56	4.93	337	50	19.89	34.61	5.03	24.51	343	0.18
61	18.46	34.54	4.10	313	75	14.20	34.20	2.58	25.54	245	0.25
71	14.90	34.25	2.75	255	100	12.57	34.27	1.78	25.93	208	0.31
89	12.74	34.13	2.08	222	150	11.79	34.55	0.71	26.29	174	0.40
104	12.53	34.29	1.75	206	200	11.45	34.70	0.28	26.49	155	0.49
117	12.38	34.34	1.57	199	250	10.55	34.67	0.16	26.63	142	0.56
139	12.08	34.54	0.75	179	300	9.92	34.63	0.15	26.70	135	0.64
167	11.38	34.56	0.66	165	400	8.68	34.58	0.15	26.86	120	0.77
204	11.45	34.73	0.24	154	500	7.53	34.55	0.16	27.01	106	0.89
253	10.50	34.67	0.16	142							
333	9.58	34.61	0.15	131							
431	8.27	34.57	0.15	115							
572	6.82	34.52	0.19	98							

SPENCER F. BAIRD; April 10, 1956; 1019 GCT; 21°46'N, 112°13'W; sounding, 1935 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 13°.

153.50

0	20.6	34.78	5.07	346	0	20.6	34.78	5.07	24.48	346	0.00
10	20.57	34.76	5.08	349	10	20.57	34.76	5.08	24.45	349	0.03
29	20.54	34.77	5.06	347	20	20.55	34.76	5.07	24.46	348	0.07
43	20.00	34.63	5.10	345	30	20.54	34.77	5.06	24.47	347	0.10
53	19.46	34.65	4.52	330	50	19.63	34.65	4.70	24.60	335	0.17
62	18.38	34.51	4.00	313	75	16.78	34.49	2.76	25.20	278	0.25
71	17.26	34.48	3.19	290	100	14.91	34.54	1.32	25.66	234	0.31
91	15.50	34.52	1.67	248	150	12.99	34.75	0.37	26.23	180	0.42
105	14.66	34.55	1.15	229	200	11.57	34.77	0.26	26.51	153	0.50
118	14.03	34.64	0.77	209	250	10.80	34.71	0.18	26.61	144	0.58
140	13.26	34.72	0.49	188	300	9.87	34.68	0.16	26.74	131	0.65
166	12.54	34.79	0.26	169	400	8.55	34.62	0.16	26.91	115	0.78
203	11.50	34.76	0.26	152	500	7.56	34.58	0.16	27.04	103	0.89
253	10.74	34.70	0.16	144							
330	9.36	34.66	0.16	124							
427	8.25	34.61	0.15	112							
563	6.91	34.56	0.16	96							

SPENCER F. BAIRD; April 10, 1956; 0518 GCT; 21°26'N, 112°50.5'W; sounding, 2085 fm; wind, 220°, force 6; weather, partly cloudy; sea, rough; wire angle, 13°.

153.60

0	20.07	34.55	5.25	352	0	20.07	34.55	5.25	24.42	352	0.00
10	20.14	34.55	5.31	353	10	20.14	34.55	5.31	24.41	353	0.04
29	20.17	34.56	5.26	353	20	20.16	34.55	5.27	24.41	353	0.07
58	20.05	34.58	5.23	349	30	20.17	34.57	5.25	24.41	353	0.11
68	18.80	34.42	4.79	330	50	20.11	34.58	5.24	24.44	350	0.18
78	17.45	34.33	4.47	305	75	17.82	34.35	4.58	24.84	312	0.26
93	15.19	34.33	3.22	255	100	14.27	34.33	2.38	25.63	237	0.33
107	13.52	34.33	1.62	222	150	12.61	34.69	0.42	26.24	179	0.44
122	13.12	34.38	1.29	210	200	11.89	34.78	0.17	26.46	158	0.52
141	12.74	34.60a)	0.58	187	250	11.15	34.75	0.23	26.58	147	0.60
159	12.52	34.73	0.36	173	300	10.23	34.69	0.16	26.69	136	0.67
186	12.06	34.79	0.20	160	400	8.60	34.61	0.24	26.90	116	0.80
209	11.79	34.78	0.15	156	500	7.29	34.57	0.29	27.06	101	0.92
260	11.00	34.74	0.23	145							
338	9.57	34.65a)	0.14	128							
444	7.97	34.59	0.32	108							
579	6.45	34.55	0.20	92							

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

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm/g}$	dyn. m

157.20 SPENCER F. BAIRD; April 9, 1956; 0135 GCT; 22°17.5'N, 110°01'W; sounding, 1790 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 33°.

0	20.68	34.90	4.85	342	0	20.68	34.90	4.85	24.52	342	0.00
8	19.76	34.74	5.09	330	10	19.00	34.63	5.00	24.76	320	0.03
26	16.33	34.34	4.28	279	20	16.49	34.35	4.35	25.15	282	0.06
34	15.72	34.33	2.51	267	30	16.16	34.33	4.05	25.22	276	0.09
42	13.70	34.31	3.83	226	50	15.35	34.78	1.45	25.74	226	0.14
51	15.38	34.78	1.32	226	75	14.28	34.79	0.50	25.98	203	0.20
60	15.20	34.79	0.99	222	100	13.33	34.80	0.25	26.20	183	0.24
72	14.44	34.79	0.58	206	150	12.08	34.80	0.15	26.44	160	0.33
84	13.83	34.78	0.31	195	200	11.46	34.77	0.16	26.53	151	0.41
95	13.44	34.81	0.28	185	250	10.85	34.72	0.10	26.61	144	0.48
111	13.11	34.79	0.22	180	300	10.24	34.68	0.10	26.68	137	0.56
128	12.65	34.80	0.19	171	400	8.67	34.58	0.10	26.86	120	0.69
149	12.12	34.80	0.13	161							
182	11.72	34.79	0.18	154							
240	10.95	34.73	0.09	145							
318	10.00	34.67	0.10	134							
432	8.02	34.54	0.10	113							

157.30 SPENCER F. BAIRD; April 9, 1956; 0715 GCT; 21°52'N, 110°38'W; sounding, 1780 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 13°.

0	19.19	34.34	5.28	346	0	19.19	34.34	5.28	24.48	346	0.00
10	19.17	34.31	5.48	347	10	19.17	34.31	5.48	24.47	347	0.03
34	18.16	34.29	5.42	325	20	18.77	34.30	5.48	24.57	338	0.07
44	17.95	34.27	5.28	321	30	18.26	34.29	5.46	24.68	327	0.10
59	17.53	34.36	4.58	305	50	17.81	34.28	5.05	24.79	317	0.17
69	17.15	34.36	4.97	296	75	17.00	34.40	4.92	25.07	290	0.24
78	17.31	34.56	4.39	285	100	16.37	34.87	2.21	25.58	241	0.31
97	16.62	34.88	2.46	246	150	12.63	34.71	0.28	26.26	177	0.41
116	14.73	34.79	1.02	212	200	11.80	34.71	0.19	26.43	161	0.50
130	13.91	34.76	0.39	198	250	11.06	34.71	0.13	26.55	149	0.58
153	12.52	34.71	0.28	175	300	10.31	34.71	0.12	26.70	135	0.65
189	11.94	-	0.22	-	400	8.95	34.68	0.10	26.90	116	0.78
226	11.44	34.71	0.13	155	500	7.44	34.53	0.15	27.01	106	0.90
282	10.54	34.71	0.12	140	600	6.50	34.52	0.21	27.13	94	1.00
367	9.44	34.73	0.09	121							
476	7.74	34.54	0.13	110							
622	6.37	34.52	0.23	92							

157.40 SPENCER F. BAIRD; April 9, 1956; 1233 GCT; 21°31'N, 111°12'W; sounding, 1830 fm; wind, 310°, force 4; weather, clear; sea, rough; wire angle, 22°.

0	20.61	34.47	5.78	371	0	20.61	34.47	5.78	24.22	371	0.00
9	20.61	34.43	5.18	374	10	20.60	34.43	5.18	24.19	374	0.04
28	20.41	34.43	5.33	369	20	20.49	34.42	5.25	24.21	372	0.07
56	20.20	34.46	5.15	362	30	20.41	34.43	5.33	24.24	369	0.11
66	18.62	34.19	5.66	343	50	20.27	34.46	5.18	24.30	363	0.18
74	16.72	33.93	5.06	317	75	16.43	33.91	4.98	24.83	313	0.27
88	14.20	33.87	4.03	269	100	13.39	34.12	2.68	25.67	233	0.34
102	13.36	34.14	2.51	232	150	12.48	34.65	0.45	26.24	179	0.44
116	13.28	34.31	1.66	219	200	11.69	34.76	0.17	26.48	156	0.53
133	12.92	34.58	0.57	191	250	11.10	34.72	0.38	26.55	149	0.61
151	12.45	34.65	0.42	178	300	10.27	34.65	0.23	26.66	139	0.68
178	11.98	34.72	0.19	164	400	8.93	34.62	0.17	26.85	121	0.82
199	11.70	34.76	0.17	156	500	7.65	34.55	0.20	27.00	107	0.94
249	11.14	34.72	0.39	149							
325	9.82	34.63	0.18	134							
423	8.62	34.61	0.17	117							
554	6.90	34.51	0.23	100							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{3-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{3-5}$	$\Delta D$
m	°C	‰	ml/L	10 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

SPENCER F. BAIRD; April 9, 1956; 1833 GCT; 21°10'N, 111°52'W; sounding, 1800 fm; wind, 210°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°.

157.50

0	20.89	34.56	5.00	372	0	20.89	34.56	5.00	24.21	372	0.00
10	20.84	34.59	5.11	368	10	20.84	34.59	5.11	24.25	368	0.04
30	20.95	34.59	5.46	371	20	20.92	34.59	5.30	24.23	370	0.07
58	20.73	34.58	4.90	366	30	20.95	34.59	5.46	24.22	371	0.11
68	19.55	34.52	5.29	340	50	20.82	34.59	5.00	24.25	368	0.18
78	16.92	34.06	4.93	312	75	17.95	34.24	5.16	24.72	323	0.27
92	14.48	34.11	2.74	257	100	14.06	34.25	1.95	25.61	239	0.34
106	13.78	34.36	1.30	224	150	12.19	34.67	0.35	26.32	171	0.44
120	13.04	34.57	0.49	195	200	11.42	34.70	0.20	26.48	156	0.53
138	12.36	34.62	0.48	178	250	10.89	34.72	0.18	26.60	145	0.60
157	12.21	34.72	0.26	168							
186	11.60	34.70	0.30	158							
209	11.34	34.70	0.08	154							
261	10.72	34.72	0.21	142							

SPENCER F. BAIRD; April 9, 1956; 2355 GCT; 20°54'N, 112°30.5'W; sounding, 1785 fm; wind, 290°, force 4; weather, partly cloudy; sea, rough; wire angle, 06°.

157.60

0	21.06	34.52	5.06	379	0	21.06	34.52	5.06	24.14	379	0.00
10	21.04	34.52	4.80	379	10	21.04	34.52	4.80	24.14	379	0.04
30	20.81	34.51	5.06	374	20	20.92	34.52	4.90	24.17	376	0.08
60	20.30	34.50	5.09	361	30	20.81	34.51	5.06	24.19	374	0.11
70	19.12	34.23	5.20	351	50	20.42	34.49	5.10	24.28	365	0.19
80	16.18	34.02	4.43	299	75	17.70	34.10	4.95	24.68	327	0.27
94	14.50	34.11	2.54	257	100	14.22	34.21	1.90	25.56	243	0.35
109	13.88	34.38	1.14	225	150	12.70	34.70	0.28	26.24	179	0.45
123	13.22	34.41	1.08	210	200	11.72	34.76	0.12	26.48	156	0.54
143	12.92	34.70	0.29	183	250	10.88	34.71	0.15	26.60	145	0.62
162	12.27	34.70	0.28	171	300	9.96	34.67	0.14	26.72	133	0.69
191	11.88	34.76	0.14	159	400	8.46	34.58	0.15	26.89	117	0.82
215	11.44	34.75	0.12	153	500	7.40	34.53	0.18	27.02	105	0.93
266	10.60	34.70	0.16	141	600	(6.35)	(34.52)		(27.14)	(93)	(1.04)
346	9.20	34.63	0.13	124							
450	7.94	34.55	0.18	111							
585	6.51	34.52	0.14	94							

BLACK DOUGLAS; April 18, 1956; 0410 GCT; 30°58'N, 114°40'W; sounding, 12 fm; wind, calm; weather, clear; sea, slight; wire angle, 03°.

99G.15

0	18.69	35.82	5.77	226	0	18.69	35.82	5.77	25.74	226	0.00
10	18.67	35.84	5.41	224	10	18.67	35.84	5.41	25.76	224	0.02
19	18.20	35.87	5.10	210							

BLACK DOUGLAS; April 18, 1956; 2228 GCT; 31°10.5'N, 114°15'W; sounding, 15 fm; wind, 150°, force 4; weather, partly cloudy; sea, moderate; wire angle, 00°.

99G.40

0	18.08	35.65	5.10	223	0	18.08	35.65	5.10	25.78	223	0.00
10	17.98	35.68	4.92	219	10	17.98	35.68	4.92	25.82	219	0.02
19	18.05	35.79	4.67	213							

BLACK DOUGLAS; April 19, 1956; 0010 GCT; 31°18'N, 114°00'W; sounding, 10 fm; wind, 140°, force 4; weather, clear; sea, moderate; wire angle, 00°.

99G.55

0	18.68	35.88	5.24	221	0	18.68	35.88	5.24	25.80	221	0.00
10	18.70	35.90	5.16	220	10	18.70	35.90	5.16	25.81	220	0.02

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta_T$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta_T$	$\Delta D$
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

103G.02

BLACK DOUGLAS; April 17, 1956; 2312 GCT; 30°17'N, 114°30'W; sounding, 22 fm; wind, 220°, force 3; weather, clear; sea, moderate; wire angle, 00°.

0	17.59	35.65	5.67	212	0	17.59	35.65	5.67	25.89	212	0.00
10	17.07	35.45	5.04	214	10	17.07	35.45	5.04	25.87	214	0.02
29	14.89	35.28	2.70	180	20	16.08	35.35	3.95	26.02	200	0.04

103G.40

BLACK DOUGLAS; April 17, 1956; 1715 GCT; 30°36'N, 113°52'W; sounding, 45 fm; wind, 220°, force 6; weather, clear; sea, rough; wire angle, 10°.

0	16.01	-	5.15	-	0	16.01	(35.43)	5.15	(26.09)	(193)	(0.00)
9	16.03	35.43	5.15	193	10	16.02	35.42	5.14	26.08	194	0.02
28	16.00	35.35	5.10	198	20	16.02	35.38	5.12	26.06	196	0.04
47	15.74	35.35	4.64	193	30	15.97	35.35	5.06	26.09	193	0.06
71	14.70	35.26	2.73	177	50	15.65	35.35	4.41	26.12	190	0.10
					75	(14.52)	(35.24)		(26.28)	(175)	(0.14)

103G.70

BLACK DOUGLAS; April 17, 1956; 1133 GCT; 30°51'N, 113°22'W; sounding, 22 fm; wind, 240°, force 2; weather, clear; sea, slight; wire angle, 05°.

0	17.92	35.48	6.68	232	0	17.92	35.48	6.68	25.68	232	0.00
10	17.58	35.46	6.48	225	10	17.58	35.46	6.48	25.75	225	0.02
29	17.10	35.48	5.17	213	20	17.27	35.47	5.83	25.83	218	0.04

109G.12

BLACK DOUGLAS; April 16, 1956; 1955 GCT; 29°30'N, 113°46'W; sounding, 165 fm; wind, 180°, force 1; weather, cloudy; sea, smooth; wire angle, 07°.

0	16.87	35.31	5.46	220	0	16.87	35.31	5.46	25.81	220	0.00
10	15.85	35.30	5.11	198	10	15.85	35.30	5.11	26.04	198	0.02
29	14.71	35.19	4.03	182	20	15.00	35.22	4.38	26.15	187	0.04
48	14.53	35.21	3.79	177	30	14.70	35.19	3.98	26.21	182	0.06
71	14.20	35.17	3.50	173	50	14.49	35.21	3.73	26.27	176	0.09
94	13.99	35.13	3.35	172	75	14.15	35.17	3.46	26.30	173	0.14
118	13.15	35.09	2.65	158	100	13.78	35.12	3.20	26.35	168	0.18
154	12.95	35.05	2.30	158	150	12.96	35.05	2.32	26.46	158	0.26
191	12.83	35.01u	2.16	-	200	(12.82)		(2.11)			

109G.40

BLACK DOUGLAS; April 16, 1956; 2351 GCT; 29°44'N, 113°18'W; sounding, 130 fm; wind, calm; weather, overcast; sea, smooth; wire angle, 03°.

0	17.60	35.41	5.89	230	0	17.60	35.41	5.89	25.70	230	0.00
10	16.56	35.37	5.80	208	10	16.56	35.37	5.80	25.93	208	0.02
29	16.46	35.35	5.65	208	20	16.52	35.36	5.76	25.93	208	0.04
48	15.79	35.37	4.94	192	30	16.44	35.35	5.61	25.93	208	0.06
71	14.36	35.21	3.53	173	50	15.61	35.36	4.73	26.13	189	0.10
94	13.80	35.12	3.00	169	75	14.21	35.19	3.39	26.31	172	0.15
117	13.54	35.08	2.81	167	100	13.72	35.11	2.96	26.34	169	0.19
145	12.85	35.02	2.16	158	150	(12.79)	(35.02)	(2.07)	(26.47)	(157)	(0.27)

109G.68

BLACK DOUGLAS; April 17, 1956; 0334 GCT; 29°58'N, 112°50.5'W; sounding, 40 fm; wind, calm; weather, cloudy; sea, calm; wire angle, 00°.

0	17.90	35.43	6.00	235	0	17.90	35.43	6.00	25.65	235	0.00
10	17.00	35.34	5.39	221	10	17.00	35.34	5.39	25.80	221	0.02
29	15.57	35.34	4.35	190	20	16.14	35.34	4.82	26.00	202	0.04
48	14.72	35.26	3.10	177	30	15.42	35.34	4.24	26.15	187	0.06



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

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BLACK DOUGLAS; April 16, 1956; 1440 GCT; 28°58.5'N, 113°18'W; sounding, 650 fm; wind, calm; weather, partly cloudy; sea, calm; wire angle, 05°.

113G.18

0	14.81	35.11	4.51	190	0	14.81	35.11	4.51	26.12	190	0.00
10	14.76	35.13	4.49	188	10	14.76	35.13	4.49	26.14	188	0.02
29	14.58	35.13	4.22	184	20	14.65	35.13	4.40	26.16	186	0.04
43	14.45	35.11	4.07	183	30	14.58	35.13	4.22	26.18	184	0.06
52	14.32	35.11	3.86	180	50	14.34	35.11	3.90	26.22	181	0.09
62	14.31	35.12	3.73	179	75	14.21	35.12	3.67	26.25	178	0.14
71	14.21	35.11	3.67	178	100	14.08	35.10	3.51	26.27	176	0.18
80	14.20	35.12	3.63	177	150	13.38	35.07	2.88	26.40	164	0.27
95	14.12	35.09	3.56	177	200	12.89	35.02	2.36	26.44	160	0.35
104	14.05	35.10	3.48	175	250	12.77	35.01	2.25	26.47	157	0.43
127	13.62	35.26r	3.11	-	300	12.64	35.00	2.12	26.48	156	0.51
153	13.35	35.07	2.82	164	400	12.32	34.96	1.85	26.52	152	0.67
202	12.86	35.01	2.34	159	500	11.92	34.94	1.56	26.58	146	0.82
260	12.74	35.01	2.21	156	600	11.64	34.92	1.33	26.61	144	0.98
364	12.46	34.97	1.94	155							
483	11.99	34.95	1.61	147							
609	11.62	34.92	1.29	143							

BLACK DOUGLAS; April 16, 1956; 1136 GCT; 28°42'N, 113°04.5'W; sounding, 600 fm; wind, calm; weather, clear; sea, smooth; wire angle, 00°.

115G.20

0	14.59	35.08	3.77	188	0	14.59	35.08	3.77	26.14	188	0.00
10	14.48	35.10	3.66	184	10	14.48	35.10	3.66	26.18	184	0.02
29	14.35	35.08	3.74	183	20	14.41	35.09	3.72	26.18	184	0.04
43	14.07	35.07	3.41	178	30	14.33	35.08	3.74	26.21	182	0.06
53	13.72	35.06	3.07	172	50	13.83	35.06	3.20	26.29	174	0.09
62	13.49	35.07	2.89	167	75	13.44	35.05	2.84	26.36	167	0.13
72	13.44	35.06	2.83	166	100	13.33	35.05	2.74	26.39	165	0.18
81	13.44	35.03	2.85	168	150	13.11	35.03	2.52	26.42	162	0.26
96	13.34	35.06	2.75	164	200	12.82	35.00	2.31	26.45	159	0.34
105	13.33	35.01	2.72	169	250	12.56	35.00	1.78	26.49	155	0.42
128	13.26	35.05	2.74	163	300	12.33	34.98	1.85	26.52	152	0.50
155	13.06	35.03	2.47	151	400	12.17	34.97	1.88	26.55	149	0.65
204	12.80	35.00	2.29	159	500	11.84	(34.96)	1.61	(26.61)	(144)	(0.80)
263	12.48	34.99	1.77	154	600	11.74		1.63			
368	12.22	34.97	1.92	150							
489	11.88	34.96	1.61	145							
616	11.73	35.07u	1.63	-							

BLACK DOUGLAS; April 16, 1956; 0815 GCT; 28°52'N, 112°45'W; sounding, 250 fm; wind, 340°, force 3; weather, clear; sea, slight; wire angle, 03°.

115G.40

0	15.58	35.21	4.82	199	0	15.58	35.21	4.82	26.03	199	0.00
10	15.18	35.16	4.28	194	10	15.18	35.16	4.28	26.08	194	0.02
29	14.78	35.15	3.91	186	20	14.89	35.16	4.04	26.12	189	0.04
48	14.69	35.14	3.84	186	30	14.78	35.15	3.90	26.16	186	0.06
72	14.59	35.12	3.76	185	50	14.69	35.14	3.83	26.16	186	0.09
96	14.55	35.14	3.71	182	75	14.58	35.12	3.75	26.18	184	0.14
119	14.44	35.14	3.63	180	100	14.53	35.14	3.69	26.21	182	0.19
156	13.93	35.12	3.59	172	150	14.03	35.12	3.60	26.30	173	0.28
192	13.15	35.07	2.34	160	200	12.95	35.06	2.23	26.47	157	0.36
237	12.19	35.00	1.96	147	250	12.04	34.98	1.91	26.58	146	0.44
283	11.82	34.94	1.82	145							

SIO		OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$		
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		
117G.50	BLACK DOUGLAS; April 16, 1956; 0322 GCT; 28°39.5'N, 112°24.5'W; sounding, 100 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 03°.												
0	15.90	35.15	4.71	210	0	15.90	35.15	4.71	25.91	210	0.00		
10	15.89	35.12	4.71	212	10	15.89	35.12	4.71	25.89	212	0.02		
29	15.30	35.13	4.06	199	20	15.40	35.11	4.18	25.99	203	0.04		
48	14.40	35.08	3.17	184	30	15.29	35.13	4.05	26.03	199	0.06		
71	13.88	35.04	3.18	177	50	14.37	35.08	3.17	26.20	183	0.10		
96	13.38	35.03	2.97	167	75	13.78	35.04	3.14	26.28	175	0.14		
120	13.16	35.00	2.82	165	100	13.31	35.02	2.94	26.38	166	0.19		
148	13.15	35.03	2.80	162	150	(13.13)	(35.03)	(2.78)	(26.42)	(162)	(0.27)		
121G.20	BLACK DOUGLAS; April 15, 1956; 0620, 0642 GCT; 27°50'N, 112°31'W; sounding, 280 fm; wind, 280°, force 1; weather, clear; sea, slight; wire angle, 10°, 22°.												
0	15.82	35.12	4.66	211	0	15.82	35.12	4.66	25.90	211	0.00		
9	15.69	35.12	4.40	208	10	15.68	35.12	4.40	25.93	208	0.02		
28	15.28	35.12	3.97	199	20	15.46	35.12	4.16	25.98	203	0.04		
47	14.98	35.08	3.63	196	30	15.27	35.12	3.96	26.03	199	0.06		
70	14.46	35.06	3.16	187	50	14.91	35.08	3.57	26.07	195	0.10		
92	13.82	35.04	2.65	176	75	14.30	35.06	3.06	26.18	184	0.15		
					100	13.77	35.02	2.56	26.28	175	0.19		
109	13.71	35.01	2.41	175	150	12.77	34.95	1.64	26.43	161	0.28		
142	12.81	34.96	1.70	162	200	12.34	34.91	1.35	26.47	157	0.36		
176	12.65	34.94	1.54	160	250	11.60	34.83	0.94	26.54	150	0.44		
219	12.06	34.88	1.18	154	300	10.78	34.76	0.66	26.65	140	0.51		
261	11.41	34.81	0.83	148									
356	9.74	34.70	0.46	127									
121G.40	BLACK DOUGLAS; April 15, 1956; 1004 GCT; 28°01'N, 112°08'W; sounding, 300 fm; wind, 320°, force 3; weather, clear; sea, slight; wire angle, 22°.												
0	18.18	35.26		254	0	18.18	35.26		25.45	254	0.00		
9	18.12	35.26		252	10	18.11	35.26		25.47	252	0.03		
27	15.86	35.17		208	20	18.05	35.26		25.48	251	0.05		
44	14.78	35.12		189	30	15.40	35.14		26.01	200	0.07		
67	14.15	35.04		182	50	14.20	35.00		26.16	186	0.11		
88	13.73	35.01		176	75	14.01	35.03		26.23	180	0.16		
108	13.38	34.97		172	100	13.52	34.99		26.29	174	0.20		
141	12.75	34.94		162	150	12.66	34.93		26.43	161	0.29		
174	12.42	34.91		158	200	12.00	34.86		26.50	154	0.37		
217	11.87	34.87		151	250	11.60	34.87		26.58	146	0.44		
260	11.04	34.76		144	300	10.43	34.72		26.67	138	0.51		
354	9.66	34.68		128									
121G.70	BLACK DOUGLAS; April 15, 1956; 1350 GCT; 28°15'N, 111°42'W; sounding, 30 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 00°.												
0	18.14	35.27	5.84	252	0	18.14	35.27	5.84	25.47	252	0.00		
10	18.11	35.28	5.87	251	10	18.11	35.28	5.87	25.48	251	0.03		
29	15.65	35.17	4.02	204	20	16.91	35.23	5.14	25.73	227	0.05		
48	15.35	35.13	3.35	200	30	15.65	35.16	4.01	25.98	204	0.07		

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_{-5}^3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{-5}^3$	$\Delta D$	
m	°C	‰	ml/L	10 <sup>-5</sup> cm <sup>3</sup> /g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m	

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BLACK DOUGLAS; April 14, 1956; 2111 GCT; 27°06'N, 111°37'W; sounding, 900 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

127G.40

0	18.08	35.26	5.88	254	0	18.08	35.26	5.88	25.45	254	0.00
9	18.00	35.28	5.85	248	10	17.99	35.28	5.84	25.51	248	0.02
27	15.84	35.21	4.72	205	20	16.69	35.25	5.22	25.81	220	0.05
40	15.45	35.19	4.40	198	30	15.68	35.20	4.59	26.00	202	0.07
53	15.33	35.17	4.23	197	50	15.37	35.18	4.27	26.04	198	0.11
62	15.12	35.17	4.12	193	75	14.69	35.12	3.61	26.15	187	0.16
71	14.80	35.16	3.75	186	100	14.25	35.07	3.00	26.21	182	0.20
83	14.53	35.07	3.36	188	150	12.77	34.91	0.80	26.40	164	0.29
92	14.48	35.08	3.28	186	200	12.09	34.87	0.75	26.49	155	0.37
105	14.07	35.05	2.76	180	250	11.50	34.82	0.56	26.56	148	0.45
130	13.32	35.35r	1.72	-	300	10.91	34.77	0.46	26.64	141	0.52
156	12.63	34.90	0.74	163	400	9.69	34.72	0.37	26.81	125	0.66
207	12.01	34.87	0.75	154	500	8.49	34.64	0.29	26.93	113	0.78
268	11.26	34.79	0.50	146	600	7.50	34.59	0.22	27.05	102	0.90
373	10.00	34.74	0.38	128							
498	8.52	34.64	0.29	113							
625	7.24	34.58	0.20	99							

BLACK DOUGLAS; April 14, 1956; 1628 GCT; 27°23'N, 111°08.5'W; sounding, 1080 fm; wind, 300°, force 5; weather, partly cloudy; sea, rough; wire angle, 19°.

127G.70

0	19.09	35.35	5.82	269	0	19.09	35.35	5.82	25.29	269	0.00
10	19.10	35.31	5.86	272	10	19.10	35.31	5.86	25.26	272	0.03
29	16.73	35.23	5.19	223	20	19.09	35.31	5.85	25.26	272	0.05
42	15.83	35.17	4.50	208	30	16.52	35.22	5.10	25.81	220	0.08
52	15.46	35.13	3.84	202	50	15.51	35.14	3.96	25.98	203	0.12
60	14.69	35.08	2.90	190	75	14.00	34.99	1.62	26.20	183	0.17
69	14.48	35.08	2.61	186	100	13.49	34.97	1.33	26.29	174	0.22
78	13.65	34.92	0.88r	181	150	12.61	34.91	0.73	26.42	162	0.30
90	13.72	34.96	1.54	180	200	11.85	34.87	0.46	26.54	150	0.38
98	13.54	34.97	1.36	175	250	11.34	34.78	0.34	26.58	147	0.45
120	13.13	34.94	1.09	169	300	10.71	34.76	0.28	26.66	139	0.53
145	12.70	34.91	0.78	163	400	9.41	34.70	0.21	26.84	122	0.66
190	11.99	34.88	0.50	152	500	8.13	34.64	0.17	26.99	108	0.78
246	11.39	34.79	0.34	148	600	(6.81)	(34.62)		(27.16)	(92)	(0.89)
346	10.10	34.74	0.25	130							
458	8.64	34.65	0.18	114							
582	7.07	34.62	0.14	94							

BLACK DOUGLAS; April 14, 1956; 1225 GCT; 27°33'N, 110°49'W; sounding, 400 fm; wind, 300°, force 5; weather, clear; sea, very rough; wire angle, 18°.

127G.90

0	19.31	35.29	5.93	279	0	19.31	35.29	5.93	25.19	279	0.00
9	19.31	35.34	5.97	275	10	19.30	35.34	5.97	25.23	275	0.03
27	18.08	35.27	5.44	251	20	19.30	35.34	5.97	25.23	275	0.06
40	16.49	35.24	4.92	217	30	17.61	35.26	5.26	25.60	240	0.08
50	15.97	35.17	4.24	210	50	15.97	35.17	4.24	25.91	210	0.13
58	15.72	35.23	4.06	201	75	14.90	35.08	1.82	26.08	194	0.18
67	15.25	35.17	2.76	195	100	14.57	35.04	1.56	26.12	190	0.23
75	14.90	35.08	1.82	194	150	13.66	35.11	1.00	26.36	167	0.32
87	14.80	35.07	1.70	193	200	12.79	35.01	0.92	26.47	157	0.40
96	-	35.04	1.57	-	250	11.79	34.87	0.64	26.54	150	0.48
117	14.22	35.05	1.53	183	300	10.98	34.81	0.40	26.66	139	0.55
141	13.78	35.10	1.03	170	400	9.61	34.73	0.19	26.83	123	0.69
187	12.84	35.01	0.93	159	500	8.49	(34.66)	0.14	(26.95)	(111)	(0.81)
242	11.92	34.88	0.67	151	600	(7.23)					
341	10.33	34.77	0.24	131							
456	9.00	34.69	0.16	116							
580	7.52	34.79u	0.12	-							

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OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
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

133G.40

BLACK DOUGLAS; April 13, 1956; 1328 GCT; 26°16'N, 111°04.5'W; sounding, 280 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 09°.

0	20.07	35.31	5.85	296	0	20.07	35.31	5.85	25.01	296	0.00
10	20.08	35.28	5.92	299	10	20.08	35.28	5.92	24.98	299	0.03
28	17.73	35.25	5.29	244	20	18.78	35.26	5.68	25.30	268	0.06
47	17.16	35.21	4.79	232	30	17.65	35.25	5.24	25.56	243	0.08
71	15.90	35.16	4.02	210	50	17.04	35.20	4.70	25.68	232	0.13
93	14.72	35.08	2.78	191	75	15.68	35.15	3.80	25.96	205	0.19
116	14.18	35.01	2.14	185	100	14.55	35.06	2.57	26.14	188	0.24
152	12.71	34.91	0.99	164	150	12.73	34.91	1.01	26.40	164	0.32
188	11.75	34.85	0.56	150	200	11.57	34.83	0.51	26.56	148	0.40
233	11.12	34.79	0.44	144	250	10.90	34.78	0.40	26.65	140	0.48
279	10.54	34.78	0.34	134	300	10.31	34.76	0.30	26.74	131	0.55
376	9.56	34.70	0.27	124							

133G.70

BLACK DOUGLAS; April 13, 1956; 1852 GCT; 26°31'N, 110°35.5'W; sounding, 750 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 29°.

0	20.46	35.30	6.30	307	0	20.46	35.30	6.30	24.89	307	0.00
8	20.20	35.30	6.25	300	10	20.06	35.29	6.24	25.00	297	0.03
26	18.41	35.24	6.20	261	20	19.26	35.26	6.22	25.18	280	0.06
38	17.08	35.19	4.29	233	30	17.99	35.22	5.87	25.47	252	0.09
51	15.94	35.16	4.08a)	210	50	16.07	35.16	4.08	25.88	213	0.13
59	15.47	35.16	3.83a)	200	75	14.94	35.11	2.97	26.09	193	0.18
67	15.17	35.13	3.19	196	100	13.72	34.98	1.24	26.25	178	0.23
80	14.78	35.09	2.84	191	150	12.38	34.85	0.53	26.42	162	0.32
88	14.13	35.00	1.85	184	200	11.74	34.79	0.26	26.49	155	0.40
102	13.66	34.97	1.18	178	250	11.20	34.80	0.33	26.61	144	0.47
126	12.99	34.90	0.72	169	300	10.53	34.77	0.29	26.71	134	0.54
152	12.34	34.85	0.51	161	400	9.10	(34.70)	0.18	(26.89)	(117)	(0.67)
201	11.73	34.79	0.23	154	500	7.97	(34.66)	0.15	(27.04)	(103)	(0.79)
260	11.08	34.80	0.33	142	600	7.09	(34.64)	0.15	(27.14)	(93)	(0.89)
363	9.59	34.72	0.20	123							
485	8.12	34.82u	0.15	-							
618	6.96	34.63	0.14	92							

133G.100

BLACK DOUGLAS; April 14, 1956; 0000 GCT; 26°46'N, 110°07'W; sounding, 100 fm;<sup>b)</sup> wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.

0	21.29	35.26	6.67	332	0	21.29	35.26	6.67	24.63	332	0.00
10	18.94	35.26	6.32	272	10	18.94	35.26	6.32	25.26	272	0.03
28	16.03	35.15	3.85	213	20	16.89	35.19	4.73	25.71	229	0.06
44	15.40	35.12	2.81	202	30	15.92	35.14	3.68	25.90	211	0.08
67	14.99	35.07	2.38	197	50	15.24	35.10	2.63	26.02	200	0.12
89	14.94	35.12	1.98	192	75	14.98	35.09	2.23	26.06	196	0.17
110	14.59	35.07	1.90	188	100	14.77	35.10	1.94	26.12	190	0.22
145	13.90	35.19u	1.54	-	150	13.79	35.04	1.54	26.29	174	0.31
181	13.19	35.01	1.62	165	200	12.71	34.97	1.38	26.45	159	0.39
225	12.12	34.91	0.64	153							

a) The oxygen samples at 51 and 59 meters appear to have been reversed; they are assumed to be in the order listed.

b) Depth of cast is greater than sounding by 14 fathoms (42 m).

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_{-5}^{+3}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{-5}^{+3}$	$\Delta D$	
m	°C	‰	ml/L	10 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m	

SIO  
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BLACK DOUGLAS; April 13, 1956; 0458 GCT; 25°15'N, 110°49'W; sounding, 450 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

139G.22

0	20.56	35.30	6.27	309	0	20.56	35.30	6.27	24.87	309	0.00
10	19.45	35.27	6.21	284	10	19.45	35.27	6.21	25.13	284	0.03
29	16.90	35.21	4.67	228	20	18.08	35.24	5.58	25.46	253	0.06
43	16.08	35.12	3.54	216	30	16.83	35.21	4.60	25.73	227	0.08
53	15.46	35.10	3.32	205	50	15.69	35.10	3.38	25.93	208	0.12
62	15.01	35.11	3.19	-	75	14.74	35.04	2.33	26.08	194	0.17
72	14.82	35.04	2.43	196	100	13.77	34.98	1.18	26.24	179	0.22
81	14.46	35.03	2.13	189	150	13.03	34.95	1.16	26.36	167	0.31
96	13.87	34.99	0.89	180	200	11.97	34.87	0.66	26.52	152	0.39
105	13.65	34.96	1.37	178	250	11.40	34.83	0.69	26.58	146	0.46
127	13.18	34.96	1.10	168	300	10.70	34.78	0.56	26.69	136	0.54
157	12.95	34.94	1.18	166	400	9.05	34.67	0.20	26.88	118	0.67
205	11.89	34.87	0.64	151	500	8.05	34.60	0.20	26.98	109	0.79
264	11.26	34.82	0.70	144	600	7.24	34.59	0.14	27.09	98	0.90
368	9.48	34.70	0.19	123							
488	8.18	34.61	0.20	110							
620	7.09	34.59	0.13	97							

BLACK DOUGLAS; April 13, 1956; 0217 GCT; 25°24'N, 110°31.5'W; sounding, 600 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 05°.

139G.40

0	21.78	35.33	5.76	339	0	21.78	35.33	5.76	24.56	339	0.00
10	20.40	35.30	6.23	306	10	20.40	35.30	6.23	24.90	306	0.03
29	17.80	35.26	5.05	245	20	19.09	35.28	5.78	25.24	274	0.06
43	16.98	35.19	4.20	231	30	17.80	35.26	5.01	25.55	244	0.09
52	16.75	35.19	4.13	226	50	16.79	35.19	4.16	25.72	228	0.13
61	16.35	35.15	3.73	220	75	15.42	35.01	2.27	25.91	210	0.19
70	15.77	35.07	2.86	214	100	13.84	34.84	0.54	26.12	190	0.24
79	15.16	34.97	1.81	208	150	12.71	34.88	0.44	26.38	166	0.33
93	14.30	34.88	0.93	197	200	11.90	34.82	0.30	26.49	155	0.41
102	13.74	34.83	0.47	189	250	11.19	34.79	0.20	26.61	144	0.49
124	13.12	34.88	0.49	173	300	10.50	34.75	0.17	26.69	136	0.56
151	12.70	34.88	0.43	165	400	9.11	34.67	0.12	26.86	120	0.69
202	11.86	34.82	0.30	154	500	7.71	34.61	0.11	27.03	104	0.81
261	11.02	34.78	0.20	143	600	6.81	34.57	0.16	27.13	94	0.91
366	9.60	34.70	0.14	125							
487	7.85	34.61	0.11	106							
614	6.72	34.57	0.16	93							

BLACK DOUGLAS; April 12, 1956; 2209 GCT; 25°37.5'N, 110°06'W; sounding, 1200 fm; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 01°.

139G.70

0	21.63	35.26	6.14	340	0	21.63	35.26	6.14	24.54	340	0.00
10	20.02	35.23	6.24	302	10	20.02	35.23	6.24	24.94	302	0.03
29	18.05	35.19	4.80	256	20	18.97	35.21	5.54	25.22	276	0.06
43	16.86	35.15	3.97	232	30	18.00	35.18	4.61	25.49	250	0.09
52	15.87	35.08	2.97	215	50	16.11	35.10	3.22	25.83	218	0.13
62	15.57	35.05	2.54	210	75	14.61	35.01	1.89	26.08	194	0.19
71	14.96	35.02	2.21	200	100	13.60	34.96	1.07	26.26	177	0.23
80	14.20	34.99	1.50	186	150	12.32	34.86	0.26	26.44	160	0.32
94	13.65	34.96	1.08	178	200	11.71	34.84	0.20	26.53	151	0.40
103	13.58	34.96	1.05	176	250	11.35	34.80	0.31	26.56	148	0.47
126	13.12	34.96	0.97	167	300	10.92	34.76	0.33	26.62	143	0.55
153	12.23	34.85	0.24	159	400	9.61	34.69	0.19	26.80	126	0.69
203	11.68	34.84	0.20	150	500	7.88	34.61	0.15	27.01	106	0.81
262	11.28	34.78	0.33	147	600	6.95	34.62	0.16	27.16	92	0.91
368	10.16	34.72	0.24	133							
490	8.00	34.61	0.14	108							
618	6.81	34.62	0.16	91							

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OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_{3-5}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{3-5}$	$\Delta D$	
m	°C	‰	ml/L	10 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m	

139G.85

BLACK DOUGLAS; April 12, 1956; 1943 GCT; 25°45'N, 109°50'W; sounding, 650 fm; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 02°.

0	21.33	35.23	6.22	335	0	21.33	35.23	6.22	24.60	335	0.00
10	19.22	35.20	6.07	284	10	19.22	35.20	6.07	25.13	284	0.03
29	18.45	35.16	5.17	268	20	18.60	35.14	5.32	25.25	273	0.06
43	17.81	35.12	4.73	256	30	18.44	35.17	5.16	25.31	267	0.09
57	16.71	35.15	3.91	228	50	17.30	35.13	4.36	25.55	244	0.14
66	15.97	35.14	3.17	212	75	15.18	35.07	2.55	26.01	201	0.19
75	15.18	35.07	2.55	201	100	13.70	34.94	0.80	26.23	180	0.24
89	14.30	34.97	1.35	190	150	12.59	34.85	0.45	26.38	166	0.33
98	13.75	34.94	0.84	180	200	11.62	34.75	0.35	26.48	156	0.41
112	13.64	34.90u	0.59	-	250	11.38	34.81	0.28	26.58	147	0.49
139	12.98	34.93	0.62a)	167	300	10.87	34.79	0.41	26.66	139	0.56
167	12.20	34.81	0.25	161	400	9.41	34.69	0.20	26.83	123	0.70
222	11.66	34.81	0.21	152	500	8.12	34.62	0.15	26.99	108	0.82
286	11.06	34.80	0.41	142	600	7.10	34.59	0.13	27.10	97	0.92
397	9.46	34.69	0.20	123							
526	7.81	34.61	0.14	105							
662	6.54	34.58	0.12	90							

145G.40

BLACK DOUGLAS; April 11, 1956; 2135 GCT; 24°32'N, 109°59'W; sounding, 420 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 06°.

0	21.13	35.32	5.97	323	0	21.13	35.32	5.97	24.72	323	0.00
10	20.36	35.31	6.04	304	10	20.36	35.31	6.04	24.92	304	0.03
29	18.99	35.31	5.40	270	20	20.00	35.34	5.96	25.04	293	0.06
38	16.80	35.10	3.57	234	30	18.80	35.30	5.27	25.32	266	0.09
48	16.60	35.12	3.43	228	50	16.54	35.12	3.40	25.73	227	0.14
57	16.14	35.10	3.24	219	75	15.03	34.98	1.77	25.96	205	0.19
67	15.59	35.01	2.47	214	100	14.15	34.99	1.36	26.14	188	0.24
81	14.74	35.01	1.32	196	150	12.51	34.83	0.48	26.38	166	0.33
96	14.37	34.99	1.51	191	200	11.69	34.81	0.28	26.52	152	0.41
110	13.68	35.01	0.98	175	250	10.99	34.75	0.18	26.61	144	0.49
133	12.90	34.88	0.66	169	300	10.31	34.74	0.20	26.72	133	0.56
160	12.32	34.82	0.40	162	400	9.10	34.66	0.13	26.86	120	0.69
192	11.81	34.82	0.30	154	500	(7.89)	(34.60)		(26.99)	(108)	(0.81)
237	11.17	34.76	0.18	146							
283	10.53	34.75	0.20	136							
380	9.34	34.67	0.14	123							
472	8.23	34.61	0.13	111							

145G.70

BLACK DOUGLAS; April 12, 1956; 0157 GCT; 24°47'N, 109°31'W; sounding, 900 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 09°.

0	22.04	35.31	6.09	348	0	22.04	35.31	6.09	24.46	348	0.00
9	20.31	35.28	5.90	305	10	20.20	35.28	5.87	24.96	300	0.03
28	18.39	35.26	5.62	259	20	19.02	35.27	5.71	25.24	274	0.06
42	17.55	35.22	4.57	242	30	18.27	35.26	5.54	25.43	256	0.09
52	17.24	35.22	4.52	235	50	17.31	35.22	4.54	25.63	237	0.14
61	16.89	35.17	4.27	231	75	16.44	35.18	4.14	25.80	221	0.19
71	16.67	35.19	4.24	224	100	14.69	34.93	1.50	25.01	201	0.25
81	15.72	35.07	2.98	212	150	12.94	34.90	0.57	26.32	171	0.34
95	14.87	34.94	1.75	204	200	12.11	34.84	0.46	26.46	158	0.42
104	14.52	34.93	1.32	197	250	11.60	34.78	0.27	26.52	152	0.50
127	13.64	34.97	1.08	177	300	11.09	34.74	0.25	26.58	147	0.58
154	12.82	34.87	0.54	169	400	9.89	34.67	0.26	26.73	132	0.72
204	12.05	34.83	0.44	157	500	8.28	34.58	0.13	26.92	114	0.85
262	11.47	34.77	0.24	151	600	7.18	34.54	0.10	27.06	101	0.96
368	10.33	34.70	0.28	137							
488	8.44	34.59	0.13	116							
615	7.05	34.54	0.10	100							

a) Mean value of 0.60 and 0.65 ml/L.

OBSERVED					INTERPOLATED				COMPUTED			
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
m	°C	‰	ml/L	$10^{-5} \text{ cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm}^3/\text{g}$	dyn. m	

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BLACK DOUGLAS; April 12, 1956; 0712 GCT; 25°02.5'N, 109°02.5'W; sounding, 115 fm; wind, 320°, force 1; weather, clear; sea, slight; wire angle, 10°.

145G.100

0	21.27	35.23	5.56	333	0	21.27	35.23	5.56	24.62	333	0.00
9	20.28	35.25	5.74	306	10	20.20	35.25	5.74	24.92	304	0.03
28	18.45	35.19	5.29	266	20	19.19	35.22	5.56	25.15	282	0.06
46	17.12	35.19	4.30	235	30	17.90	35.15	5.02	25.44	255	0.09
67	16.04	34.96	1.42	227	50	16.92	35.16	3.86	25.68	232	0.14
89	14.66	34.92	0.60	202	75	15.52	34.94	0.91	25.83	218	0.19
109	14.26	34.91	0.74	194	100	14.41	34.92	0.68	26.05	197	0.25
140	13.60	34.88	0.66	183	150	(13.38)	(34.88)	(0.57)	(26.24)	(179)	(0.34)
146a)	13.10	34.87	0.44	-							

BLACK DOUGLAS; April 10, 1956; 0131 GCT; 23°40'N, 109°27.5'W; sounding, 260 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

151G.40

0	21.73	35.16	6.10	350	0	21.73	35.16	6.10	24.44	350	0.00
10	20.74	35.16	6.15	324	10	20.74	35.16	6.15	24.71	324	0.03
29	17.48	35.17	4.36	245	20	18.53	35.16	5.09	25.28	270	0.06
48	16.67	35.12	3.62	230	30	17.43	35.17	4.31	25.55	244	0.09
72	15.11	34.99	2.03	206	50	16.58	35.11	3.51	25.72	228	0.14
96	14.00	34.89	1.01	190	75	15.00	34.98	1.92	25.98	204	0.19
119	13.22	34.96	0.73	170	100	13.86	34.89	0.97	26.16	186	0.24
156	12.39	34.88	0.39	160	150	12.44	34.88	0.42	26.43	161	0.33
193	11.86	34.85	0.22	153	200	(11.78)	(34.85)	(0.20)	(26.53)	(151)	(0.40)

BLACK DOUGLAS; April 9, 1956; 2054 GCT; 23°55'N, 108°59'W; sounding, 1400 fm; wind, 300°, force 2; weather, partly cloudy; sea, calm; wire angle, 03°.

151G.70

0	21.68	35.13	5.80	351	0	21.68	35.13	5.80	24.43	351	0.00
10	20.74	35.14	-	326	10	20.74	35.14	5.64	24.69	326	0.03
28	20.34	35.10	5.50	318	20	20.49	35.11	5.55	24.73	322	0.07
43	16.55	35.08	3.21	230	30	20.29	35.10	5.45	24.80	316	0.10
52	15.48	34.96	1.75	216	50	15.68	34.97	1.97	25.82	219	0.15
61	14.63	34.96	1.26	198	75	14.09	34.92	0.86	26.13	189	0.20
71	14.22	34.92	1.01	193	100	13.19	34.86	0.26	26.27	176	0.25
79	13.84	34.94	0.67	184	150	12.18	34.84	0.06	26.45	159	0.33
94	13.29	34.85	0.29	179	200	11.49	34.79	0.06	26.54	150	0.41
102	13.18	34.87	0.25	175	250	10.89	34.75	0.07	26.63	142	0.49
126	12.60	34.83	0.17	168	300	10.31	34.70	0.08	26.69	136	0.56
153	12.12	34.84	0.05	158	400	9.08	34.62	0.08	26.83	123	0.69
204	11.42	34.79	0.07	150	500	7.80	34.57	0.09	26.99	108	0.81
263	10.76	34.74	0.08	140	600	6.75	34.55	0.14	27.12	95	0.92
369	9.47	34.64	0.08	128							
490	7.91	34.57	0.08	109							
617	6.60	34.55	0.15	94							

BLACK DOUGLAS; April 9, 1956; 1638 GCT; 24°10'N, 108°30.5'W; sounding, 750 fm; wind, 230°, force 1; weather, partly cloudy; sea, smooth; wire angle, 03°.

151G.100

0	21.19	35.04	5.43	345	0	21.19	35.04	5.43	24.49	345	0.00
10	21.14	35.02	5.48	345	10	21.14	35.02	5.48	24.49	345	0.03
28	18.56	34.95	4.28	286	20	20.05	34.99	5.06	24.76	320	0.07
43	16.44	34.84	2.29	245	30	18.45	34.94	4.17	25.15	282	0.10
52	14.92	34.76	0.59	218	50	15.18	34.77	0.80	25.73	227	0.15
62	14.36	34.78	0.48	206	75	13.87	34.83	0.33	26.11	191	0.20
71	14.00	34.83	0.46	194	100	13.17	34.81	0.06	26.23	180	0.25
80	13.67	34.83	0.13	188	150	12.31	34.80	0.07	26.40	164	0.33
95	13.28	34.80	0.08	182	200	11.61	34.79	0.07	26.52	152	0.41
105	13.03	34.81	0.05	177	250	11.23	34.78	0.07	26.58	147	0.49
127	12.60	34.80	0.08	170	300	10.83	34.74	0.07	26.63	142	0.56
153	12.26	34.80	0.06	163	400	9.45	34.64	0.09	26.78	128	0.70
204	11.55	34.79	0.08	151	500	7.76	34.55	0.10	26.99	108	0.83
261	11.15	34.77	0.05	146	600	6.80	34.53	0.09	27.09	98	0.93
367	10.00	34.67	0.08	134							
487	7.91	34.56	0.10	110							
621	6.62	34.52	0.08	96							

a) The ship apparently drifted into shallower water while occupying this station, so that the last Nansen bottle of this cast rested on the bottom.

SIO		OBSERVED					INTERPOLATED				COMPUTED		
CCOFI	Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
5604	m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m	

151G.130 BLACK DOUGLAS; April 9, 1956; 1235 GCT; 24°20'N, 108°02'W; sounding, 25 fm; wind, calm; weather, clear; sea, smooth; wire angle, 02°.

0	20.40	34.96	6.24	332	0	20.40	34.96	6.24	24.63	332	0.00
10	19.46	34.92	5.63	310	10	19.46	34.92	5.63	24.86	310	0.03
29	16.12	34.73	1.04	245	20	17.83	34.83	3.40	25.20	278	0.06
38	15.24	34.70	0.30	230	30	15.98	34.73	0.86	25.56	243	0.09

157G.10 BLACK DOUGLAS; April 8, 1956; 0747, 0805 GCT; 22°33'N, 109°23'W; sounding, 1500 fm; wind, 240°, force 3; weather, clear; sea, moderate; wire angle, 06°, 10°.

0	21.51	34.90	5.13	363	0	21.51	34.90	5.13	24.30	363	0.00
12	21.50	34.93	4.91	361	10	21.50	34.92	4.96	24.32	361	0.04
31	18.06	34.71	3.57	291	20	20.28	34.85	4.26	24.59	336	0.07
45	17.76	35.03	0.94u	261	30	18.10	34.71	3.57	25.05	292	0.10
59	16.28a)	34.90	3.50	237	50	17.51	35.01		25.43	256	0.16
68	15.34	34.88	1.92	218	75	14.92	34.85	0.89	25.90	211	0.22
78	14.74	34.84	0.49	209	100	13.38	34.90	0.28	26.26	177	0.27
92	13.84	34.91	0.13	186	150	12.20	34.83	0.14	26.47	157	0.35
101	13.29	34.89	0.31	176	200	11.52	34.79	0.10	26.54	150	0.43
114	12.91	34.85	0.39	171	250	10.84	34.76	0.09	26.64	141	0.50
142	12.28	34.84	0.15	161	300	10.19	34.72	0.11	26.72	133	0.57
					400	8.82	34.65	0.10	26.90	116	0.70
169	11.98	34.81	0.11	157	500	7.44	34.60	0.09	27.06	101	0.82
222	11.20	34.78	0.08	146	600	6.50	34.57	0.09	27.18	90	0.92
285	10.39	34.73	0.11	136							
394	8.89	34.66	0.10	117							
538	7.02	34.58	0.09	96							
674	5.97	34.56	0.08	84							

157G.40 BLACK DOUGLAS; April 8, 1956; 1305 GCT; 22°49'N, 108°52'W; sounding, 1750 fm; wind, 200°, force 2; weather, partly cloudy; sea, slight; wire angle, 05°.

0	20.67	34.83	5.19	347	0	20.67	34.83	5.19	24.47	347	0.00
9	20.66	34.86	5.13	344	10	20.66	34.86	5.13	24.50	344	0.03
28	18.57	34.71	4.12	303	20	20.66	34.86	5.13	24.50	344	0.07
43	16.82	34.94	2.27	246	30	18.39	34.72	3.99	24.98	299	0.10
57	15.77	34.78	1.36	235	50	16.28	34.92	2.17	25.55	244	0.16
66	15.08	34.83	0.87	216	75	14.64	34.79	0.78	25.90	211	0.21
75	14.64	34.79	0.78	211	100	13.64	34.80	0.33	26.12	190	0.26
89	14.19	34.85	0.45	196	150	12.33	34.86	0.19	26.44	160	0.35
98	13.74	34.80	0.37	191	200	11.56	34.83	0.10	26.56	148	0.43
112	13.22	34.81	0.25	181	250	10.89	34.76	0.08	26.63	142	0.50
139	12.53	34.83	0.22	166	300	10.24	34.70	0.08	26.69	136	0.58
166	12.07	34.88	0.13	154	400	8.93	34.60	0.09	26.84	122	0.71
219	11.28	34.80	0.08	146	500	7.57	34.55	0.10	27.01	106	0.83
282	10.47	34.72	0.08	138	600	6.63	34.53	0.08	27.12	95	0.93
390	9.07	34.61	0.09	123							
517	7.38	34.54	0.10	104							
648	6.26	34.52	0.08	91							

a) Mean value of 16.22 and 16.35° C.



OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
m	°C	‰	ml/L	$10^{-5}$ cm/g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm/g	dyn. m

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BLACK DOUGLAS; April 8, 1956; 1716 GCT; 23°01.5'N, 108°26'W; sounding, 1600 fm; wind, 140°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°.

157G.70

0	21.75	35.03	5.63	360	0	21.75	35.03	5.63	24.34	360	0.00
11	21.51	35.05	5.38	352	10	21.52	35.05	5.38	24.41	353	0.04
30	17.95	35.16	4.35	256	20	19.23	35.14	4.62	25.09	288	0.07
43	17.04	35.09	3.48	240	30	17.95	35.16	4.35	25.43	256	0.10
54	16.22	35.01	2.47	228	50	16.50	35.04	2.82	25.68	232	0.14
63	14.98	34.85	0.81	213	75	14.60	34.92	0.34	26.02	200	0.20
73	14.46	34.85	0.40	202	100	13.42	34.84	0.34	26.21	182	0.25
82	13.95	34.85	0.32	192	150	12.37	34.79	0.10	26.38	166	0.34
96	13.55	34.85	0.35	184	200	11.58	34.78	0.08	26.52	152	0.42
105	13.29	34.83	0.30	180	250	10.99	34.74	0.06	26.60	145	0.49
128	12.78	34.80	0.17	172	300	10.34	34.68	0.06	26.67	138	0.56
154	12.28	34.79	0.09	164	400	8.82	34.59	0.07	26.84	122	0.70
205	11.47	34.78	0.08	151	500	7.48	34.56	0.07	27.03	104	0.82
266	10.80	34.72	0.05	143	600	6.61	34.52	0.07	27.11	96	0.92
371	9.25	34.60	0.07	127							
493	7.56	34.56	0.06	105							
624	6.42	34.51	0.07	94							

BLACK DOUGLAS; April 8, 1956; 2206 GCT; 23°18'N, 107°58'W; sounding, 1260 fm; wind, 280°, force 1; weather, overcast; sea, slight; wire angle, 00°.

157G.100

0	22.80	34.98	-	392	0	22.80	34.98		24.00	392	0.00
10	21.97	34.97	-	371	10	21.97	34.97		24.22	371	0.04
29	19.73	34.99	4.92	311	20	21.85	34.97		24.26	367	0.08
43	17.57	34.89	2.78	266	30	19.31	34.98	4.51	24.94	302	0.11
53	15.70	34.76	1.09	235	50	16.25	34.80	1.56	25.55	244	0.16
63	14.85	34.72	0.55	220	75	14.19	34.75	0.34	25.98	204	0.22
72	14.28	34.74	-	206	100	13.58	34.77	0.28	26.12	190	0.27
81	14.07	34.76	0.30	201	150	12.60	34.83	0.16	26.35	168	0.36
96	13.76	34.75	0.28	195	200	12.02	34.81	0.11	26.46	158	0.44
106	13.29	34.81	0.30	182	250	11.49	34.79	0.10	26.54	150	0.52
131	12.82	34.81	0.08	173	300	10.85	34.76	0.11	26.64	141	0.60
158	12.50	34.83	0.20	166	400	9.18	34.67	0.07	26.85	121	0.73
209	11.92	34.80	0.09	156	500	7.17	34.60	0.08	27.10	97	0.84
268	11.29	34.79	0.12	147	600	6.43	34.57	0.08	27.18	90	0.94
373	9.70	34.69	0.07	127							
493	7.26	34.60	0.08	98							
620	6.32	34.56	0.08	89							

BLACK DOUGLAS; April 9, 1956; 0208 GCT; 23°33'N, 107°31'W; sounding, 850 fm; wind, 240°, force 2; weather, overcast; sea, slight; wire angle, 06°.

157G.130

0	22.13	34.99	5.49	373	0	22.13	34.99	5.49	24.20	373	0.00
9	21.84	35.01	5.47	364	10	21.80	35.01	5.46	24.30	363	0.04
28	18.16	34.96	4.42	275	20	21.44	35.01	5.39	24.40	354	0.07
43	15.70	34.71	1.30	238	30	17.51	34.90	3.73	25.34	264	0.10
52	15.24	34.72	0.77	228	50	15.34	34.71	0.88	25.70	230	0.15
62	14.64	34.81	0.54	209	75	13.99	34.84	0.38	26.08	194	0.21
71	14.16	34.85	0.40	196	100	13.19	34.82	0.22	26.24	179	0.25
80	13.79	34.82	0.34	190	150	12.20	34.83	0.15	26.44	160	0.34
94	13.23	34.80	0.13	182	200	11.52	34.80	0.08	26.53	151	0.42
104	13.13	34.84	0.34	176	250	10.89	34.75	0.08	26.63	142	0.49
127	12.64	34.82	0.23	169	300	10.24	34.70	0.09	26.70	135	0.57
153	12.14	34.83	0.13	158	400	8.92	34.62	0.09	26.86	120	0.70
203	11.50	34.79	0.08	150	500	7.74	34.56	0.10	27.00	107	0.82
262	10.76	34.74	0.09	140	600	6.77	34.53	0.10	27.10	97	0.93
367	9.37	34.64	0.09	125							
487	7.86	34.57	0.09	108							
619	6.58	34.52	0.11	95							

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
60.50-S	IV-8	2130	37°57.5'	122°53.0'	25	320°	4	clear	moderate	8.70	33.96
60.55-S	9	0025	37°47.0'	123°15.0'	69	310°	5	clear	very rough	8.86	33.89
63.52-S	10	2235	37°17.5'	122°36.0'	48	150°	6	rain	rough	10.33	32.94
63.55-S	10	2050	37°11.5'	122°49.0'	160	180°	5	cloudy	rough	11.41	33.30
67.50-S	11	0315	36°49.5'	122°05.0'	52	200°	5	rain	moderate	9.82	33.90
70.52-S	13	1115	36°08.5'	121°50.5'	400	310°	1	clear	slight	10.39	33.75
73.50-S	13	1600	35°37.0'	121°17.0'	54	080°	2	cloudy	rough	10.67	33.73
77.50-S	14	1400	35°04.0'	120°54.5'	111	320°	5	showers	rough	11.38	33.66
80.51-S	14	1835	34°25.5'	120°32.5'	82	290°	4	cloudy	rough	11.72	33.69
83.40-S	17	2200	34°13.5'	119°21.5'	12	270°	2	partly cloudy	moderate	12.40	33.58
83.51-S	16	1455	33°51.5'	120°08.0'	62	310°	5	cloudy	moderate	-	33.64
87.50-S	18	1030	33°20.0'	119°40.0'	42	290°	3	missing	moderate	12.12	33.68
90.28-S	20	2020	33°28.0'	117°46.0'	45	270°	3	fog	slight	13.71	33.52
93.27-S	21	0020	32°55.5'	117°20.0'	150	270°	3	fog	slight	13.70	33.52
97.30-S	23	2200	32°16.0'	117°09.0'	28	180°	2	overcast	rough	14.55	33.57
100.29-S	24	0200	31°42.0'	116°43.0'	90	320°	3	overcast	rough	12.69a)	33.58
103.30-S	26	2155	31°07.0'	116°28.0'	40	220°	3	clear	slight	12.44	33.57

a) Alternate value, 12.50°C.

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
107.32-F	IV-27	0135	30°26.0'	116°11.0'	-	-	-	missing	missing	14.98	33.58
110.33-F	24	0845	29°50.5'	115°52.5'	45	320°	2	overcast	rough	13.30a)	33.61
113.30-F	24	0337	29°21.0'	115°16.0'	35	320°	2	overcast	moderate	13.74	33.66
117.26-F	21	0707	28°56.0'	114°41.0'	37	320°	3	fog	moderate	13.79	33.63
117.30-F	21	0905	28°48.0'	114°56.5'	55	330°	3	fog	moderate	13.89	33.65
117.35-F	21	1122	28°38.0'	115°16.0'	110	320°	3	fog	moderate	14.97	33.57
120.25-F	21	0231	28°23.5'	114°14.5'	27	320°	4	fog	moderate	14.30	33.64
120.30-F	21	0000	28°13.0'	114°34.5'	55	320°	4	fog	moderate	14.43	33.69
120.40-F	20	1813	27°53.0'	115°14.0'	30	320°	4	clear	moderate	12.67	33.75
123.37-F	18	0443	27°23.0'	114°40.0'	30	300°	3	clear	moderate	14.31	33.69
123.40-F	18	0620	27°18.5'	114°51.0'	230	320°	3	clear	moderate	15.36	33.58
127.34-F	17	2359	26°55.5'	114°06.0'	45	300°	3	partly cloudy	moderate	12.63	33.82
130.30-F	16	1032	26°28.5'	113°23.5'	45	290°	4	clear	moderate	12.74	33.78
133.25-F	16	0553	26°04.0'	112°49.0'	40	320°	4	clear	rough	13.46b)	33.93
137.23-F	15	0535	25°34.0'	112°16.5'	30	280°	5	clear	rough	14.60	33.95
140.30-F	15	0027	24°47.0'	112°26.0'	60	320°	5	clear	rough	15.14	33.98

a) Alternate value 13.75°C.

b) Alternate value 13.67°C.

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

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Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
143.26-F	IV-13	0235	24°19.0'	111°48.0'	40	300°	3	partly cloudy	moderate	13.49	34.29
147.20-F	12	2125	23°56.0'	111°04.0'	80	270°	3	partly cloudy	moderate	15.28	34.49
147.30-F	12	1530	23°36.5'	111°42.5'	250	320°	4	partly cloudy	rough	16.24	33.87
99G.25-B	18	2030	31°03.0'	114°30.0'	12	150°	4	partly cloudy	moderate	17.98	35.76
99G.70-B	19	0100	31°22.0'	113°52.0'	5	140°	3	clear	moderate	19.40a)	36.02a)
100G.11-B	18	0245	30°47.5'	114°38.0'	13	110°	2	clear	slight	18.50	35.70
101G.07-B	18	0130	30°37.0'	114°37.0'	12	110°	2	clear	slight	17.54	35.50
102G.04-B	18	0010	30°26.5'	114°34.0'	15	180°	3	clear	moderate	17.62	35.44
103G.10-B	17	2210	30°20.0'	114°22.0'	43	210°	3	clear	moderate	16.34	35.46
103G.25-B	17	1920	30°28.5'	114°07.0'	90	170°	4	clear	rough	16.28	35.34
103G.55-B	17	1350	30°43.5'	113°37.0'	35	220°	5	partly cloudy	rough	16.34	35.41
103G.80-B	17	1025	30°55.0'	113°13.5'	8	070°	1	clear	smooth	18.98	35.79
104G.00-B	20	0555	30°07.5'	114°26.5'	45	calm		clear	calm	17.60	35.34
105G.00-B	20	0730	29°58.5'	114°21.0'	50	180°	1	clear	smooth	17.14	35.32

a) Depth, 9 meters.

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
105G.70-B	IV-17	0755	30°33.5'	113°10.5'	20	070°	2	cloudy	smooth	18.44	35.61
106G.00-B	20	0845	29°50.0'	114°15.0'	48	calm		clear	calm	17.31	35.37
107G.02-B	20	0950	29°42.5'	114°07.0'	60	180°	2	clear	smooth	17.06	35.34
107G.70-B	17	0550	30°16.5'	112°59.5'	30	220°	2	cloudy	smooth	18.35	35.50
108G.06-B	20	1100	29°35.5'	113°57.5'	160	170°	1	clear	calm	17.85	35.33
109G.25-B	16	2150	29°36.5'	113°33.0'	130	080°	2	cloudy	smooth	13.91	35.08
109G.55-B	17	0150	29°51.5'	113°03.5'	55	calm		cloudy	calm	17.54	35.43
110G.14-B	20	1330	29°22.5'	113°38.0'	200	calm		clear	calm	15.76a)	35.16
111G.14-B	16	1715	29°13.5'	113°33.0'	250	calm		cloudy	calm	14.32	35.11
112G.15-B	20	1600	29°05.5'	113°26.0'	360	calm		clear	calm	15.75	35.12
114G.20-B	21	0045	28°50.5'	113°10.0'	900	290°	2	partly cloudy	slight	15.48	35.11
115G.25-B	16	1015	28°44.5'	112°58.0'	50	360°	2	clear	slight	15.53	35.09
115G.50-B	16	0630	28°57.0'	112°35.0'	50	360°	2	clear	slight	16.32	35.33
116G.20-B	21	0315	28°33.5'	112°59.0'	200	300°	2	clear	slight	14.12	35.14
117G.25-B	21	0455	28°27.0'	112°48.0'	240	300°	1	clear	smooth	14.46	35.04
117G.65-B	15	1900	28°47.0'	112°10.0'	10	250°	3	clear	moderate	17.90	35.25
118G.20-B	21	0630	28°16.0'	112°47.5'	65	calm		clear	smooth	15.43	35.06

a) Alternate value, 15.56°C.

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
119G.16-B	IV-21	0750	28°05.5'	112°45.5'	30	calm		clear	smooth	15.90	35.13
119G.66-B	15	1650	28°30.0'	111°57.0'	6	320°	2	clear	slight	17.38	35.16
120G.13-B	21	0925	27°55.0'	112°43.0'	133	calm		clear	smooth	17.18	35.19
121G.13-B	21	1047	27°46.5'	112°37.5'	240	calm		clear	smooth	17.22	35.23
121G.55-B	15	1200	28°08.0'	111°51.0'	180	330°	2	clear	slight	18.20a)	35.29
121G.74-B	15	1430	28°17.0'	111°38.0'	15	320°	2	clear	slight	17.78	35.23
122G.16-B	21	1205	27°39.5'	112°28.5'	240	calm		clear	smooth	17.00	35.15
122G.16-B	21	1240	27°39.5'	112°28.5'	240	calm		clear	smooth	17.06	35.16
123G.30-B	15	0325	27°37.5'	112°10.0'	640	320°	2	clear	moderate	16.88	35.31
124G.21-B	21	1522	27°24.5'	112°13.0'	320	calm		cloudy	smooth	19.17	35.28
125G.30-B	15	0115	27°20.5'	111°59.0'	720	340°	2	clear	moderate	18.52	35.30
126G.24-B	21	1745	27°08.5'	111°59.0'	115	calm		cloudy	smooth	20.28	35.35
126G.101-B	13	1005	27°46.0'	110°45.0'	20	320°	5	clear	moderate	18.51	35.25
127G.22-B	21	1915	26°59.0'	111°55.0'	30	calm		cloudy	smooth	20.68	35.33
127G.30-B	14	2315	27°03.0'	111°47.5'	410	320°	5	partly cloudy	rough	18.37	35.26
127G.55-B	14	1915	27°12.5'	111°25.0'	1050	330°	5	partly cloudy	rough	18.32b)	35.28

a) Alternate value, 18.08°C.

b) Alternate value, 18.43°C.

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
127G.94-B	IV-13	0835	27°34.5'	110°46.0'	25	330°	3	clear	moderate	18.47	35.23
128G.27-B	21	2045	26°53.0'	111°44.5'	210	calm		cloudy	smooth	20.58	35.32
129G.31-B	21	2215	26°46.0'	111°35.5'	300	calm		cloudy	smooth	19.82	35.29
129G.89-B	14	0605	27°15.0'	110°40.5'	240	260°	2	clear	moderate	19.22	35.28
131G.31-B	22	0030	26°29.0'	111°24.0'	200	calm		clear	calm	20.85a)	35.34
131G.94-B	14	0325	27°00.5'	110°23.5'	240	310°	2	clear	moderate	20.48	35.26
132G.29-B	22	0200	26°19.0'	111°21.0'	210	calm		clear	calm	20.45	35.32
133G.27-B	22	0330	26°09.5'	111°16.0'	260	calm		clear	calm	19.48	35.30
133G.55-B	13	1535	26°23.5'	110°50.0'	1480	320°	3	partly cloudy	slight	20.30	35.32
133G.85-B	13	2120	26°38.5'	110°21.5'	590	330°	4	partly cloudy	moderate	19.98	35.26
133G.105-B	14	0100	26°48.5'	110°02.0'	25	320°	3	partly cloudy	moderate	20.18	35.26
134G.20-B	22	0515	25°57.5'	111°18.0'	165	calm		cloudy	calm	20.74	35.37
134G.40-B	13	1150	26°07.5'	110°59.0'	420	320°	1	clear	smooth	19.69	35.30
135G.35-B	13	1007	25°56.0'	110°58.5'	460	320°	1	clear	slight	19.63	35.26
136G.20-B	22	0730	25°40.0'	111°07.5'	125	calm		cloudy	calm	20.38	35.34
137G.30-B	23	0740	25°36.0'	110°52.0'	260	270°	3	partly cloudy	moderate	-	35.26
138G.20-B	20	1002	25°22.5'	110°56.0'	115	calm		cloudy	calm	20.82	35.31

a) Alternate value, 20.96°C.

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

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Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
139G.55-B	IV-13	0015	25°30.5'	110°20.5'	1230	320°	1	partly cloudy	smooth	20.53	35.31
139G.100-B	12	1700	25°54.0'	109°34.5'	15	calm		partly cloudy	smooth	19.18	35.19
140G.20-B	22	1213	25°05.5'	110°45.5'	380	calm		cloudy	calm	20.49	35.32
141G.29-B	22	1404	25°01.0'	110°31.5'	270	calm		missing	calm	21.09	35.29
141G.96-B	12	1450	25°34.5'	109°27.0'	320	calm		partly cloudy	calm	21.90	35.25
142G.24-B	23	1000	24°50.0'	110°30.5'	260	180°	3	partly cloudy	slight	21.22	35.33
143G.15-B	23	1150	24°37.0'	110°33.5'	250	180°	3	partly cloudy	slight	20.84	35.34
143G.100-B	12	1220	25°19.0'	109°13.0'	32	calm		clear	calm	21.34	35.26
144G.15-B	23	1300	24°28.0'	110°28.0'	100	150°	3	partly cloudy	slight	20.60	35.34
145G.30-B	23	1535	24°27.0'	110°08.5'	420	170°	2	clear	slight	21.58	35.26
145G.55-B	11	2330	24°39.5'	109°45.0'	940	320°	1	cloudy	slight	20.48	35.23
145G.85-B	12	0500	24°54.5'	109°16.5'	900	320°	1	clear	slight	21.13a)	35.25
145G.115-B	12	0905	25°09.5'	108°48.0'	12	320°	1	clear	slight	18.78	35.00
147G.32-B	23	1755	24°10.5'	109°56.0'	120	calm		clear	calm	20.65	35.19
147G.42-B	10	0630	24°15.5'	109°46.5'	830	240°	1	partly cloudy	smooth	20.31	35.21
149G.34-B	23	2025	23°54.5'	109°43.5'	250	calm		partly cloudy	calm	21.18	35.16
149G.40-B	10	0400	23°57.5'	109°38.0'	550	290°	2	partly cloudy	slight	21.42	35.16

a) Alternate value, 21.31°C.



Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
151G.37-B	IV-23	2240	23°38.5'	109°30.5'	45	120°	3	partly cloudy	slight	21.58	35.19
151G.55-B	9	2300	23°47.5'	109°13.5'	1000	360°	2	partly cloudy	moderate	21.47	35.12
151G.85-B	9	1840	24°02.5'	108°45.0'	950	230°	1	partly cloudy	smooth	20.17	35.12
151G.115-B	9	1417	24°17.5'	108°16.5'	125	230°	1	overcast	smooth	20.52	34.96
153G.35-B	24	0110	23°20.0'	109°21.0'	480	190°	3	clear	slight	22.34	34.96
153G.137-B	9	1005	24°07.0'	107°44.0'	36	-	1	clear	missing	20.28	34.90
154G.15-B	24	0400	23°01.5'	109°34.0'	140	240°	3	clear	slight	22.25	34.82
155G.144-B	9	0730	23°55.0'	107°28.0'	50	320°	1	overcast	slight	20.96	34.89
157G.25-B	8	1030	22°42.0'	109°06.0'	1650	240°	3	clear	moderate	20.95	34.89
157G.55-B	8	1500	22°55.0'	108°41.0'	1700	240°	2	partly cloudy	slight	21.77a)	-
157G.85-B	8	1940	23°10.5'	108°12.5'	1500	140°	2	partly cloudy	moderate	21.74	35.02
157G.115-B	9	0028	23°27.0'	107°42.0'	650	240°	2	overcast	slight	21.52	34.99
157G.150-B	9	0510	23°43.0'	107°12.0'	50	320°	2	overcast	slight	21.46	34.82

a) Alternate value, 21.89°C.

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

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