

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA  
CCOFI CRUISE 5810  
8 October - 6 November 1958

SIO Reference 59-49  
17 April 1959

ERRATA

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5810

SIO Reference 59-49

1. Station 77.90, first station, page 284:

The station is incorrectly labelled "70.90" instead of 77.90.

2. Station 120.80, page 318:

Latitude should read  $26^{\circ}32'N$  (not  $36^{\circ}32'N$ ).

3. Station D-19 (70.65), first station, page 346:

The station is incorrectly labelled "D-9" instead of D-19.

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PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5810

8 October - 6 November 1958

Sponsored by

Marine Research Committee

SIO Reference 59-14

17 April 1959

Approved for distribution:



Roger Revelle, Director

UNIVERSITY OF CALIFORNIA  
SCIENTIFIC INSTITUTION OF OCEANOGRAPHY


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8 October - 8 November 1958

## FIGURES

1. CCOFI Cruise 5810, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of temperature at 10 meters
4. Horizontal distribution of salinity at 10 meters
5. Horizontal distribution of temperature at 200 meters
6. Horizontal distribution of salinity at 200 meters

Approved for distribution  
  
Roger Revelle, Director

## INTRODUCTION

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

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

## STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.<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 footnotes, three special notations are used without footnotes because their meaning is always the same.

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

p: pretrip or posttrip.

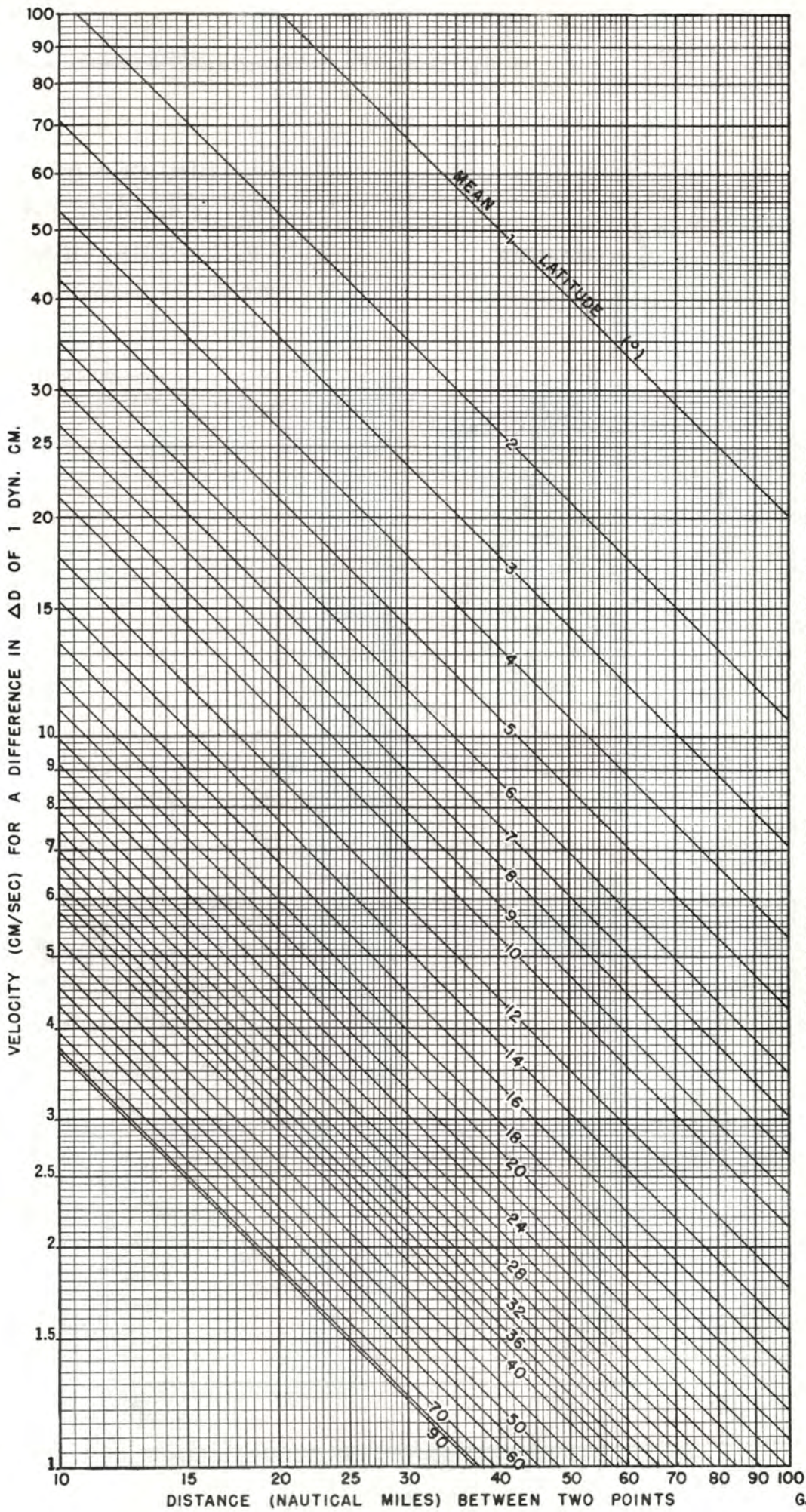
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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

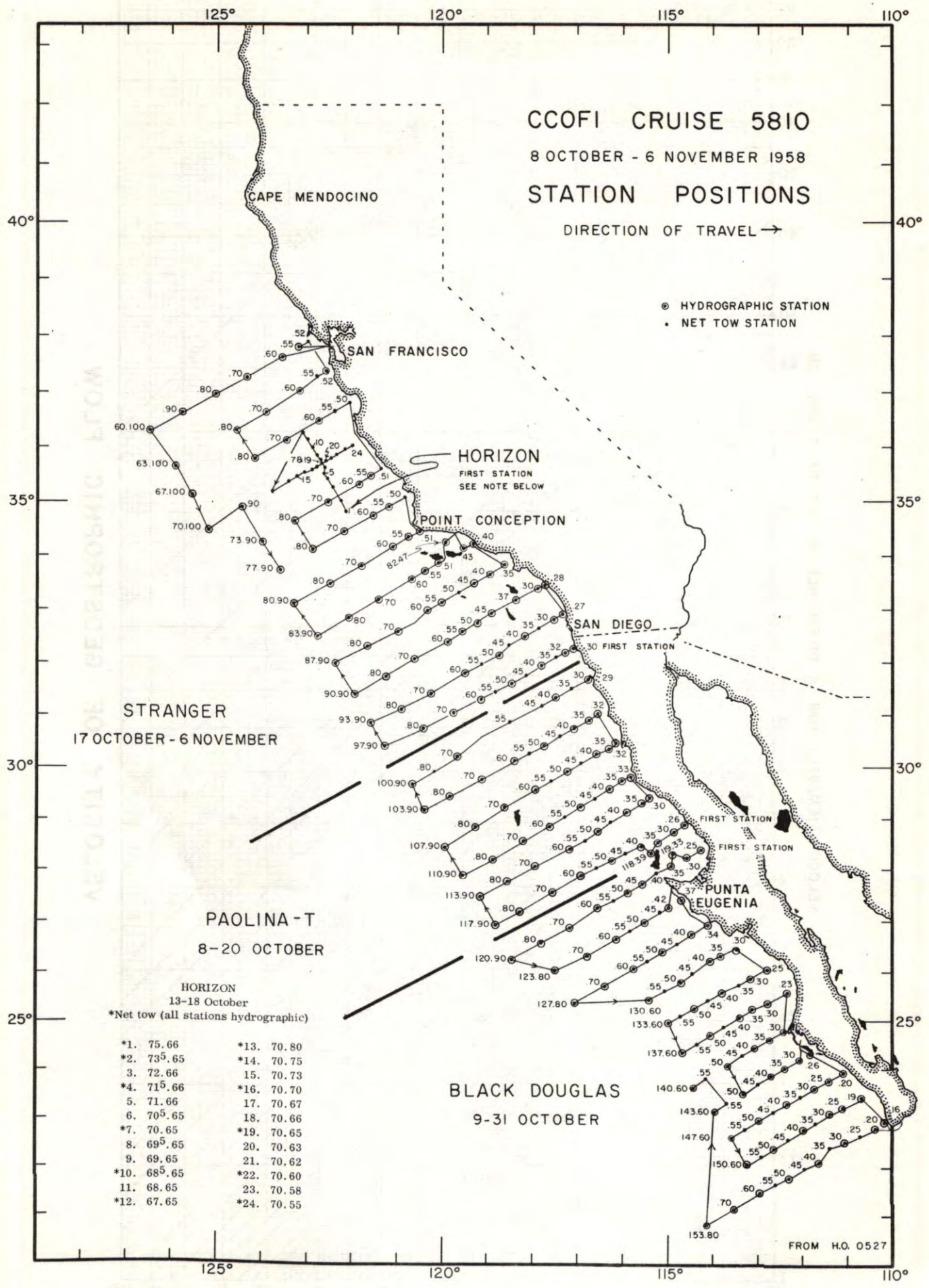
u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

## FORMAT

These data are typed in the format of the University of California Press publication, "Oceanic Observations of the Pacific." So that these pages can be used as copy for the 1958 volume, the first page of the Cruise 5810 data is numbered 272.



VELOCITY OF GEOSTROPHIC FLOW



*1. 75.66	*13. 70.80
*2. 73 <sup>5</sup> .65	*14. 70.75
3. 72.66	15. 70.73
*4. 71 <sup>5</sup> .66	*16. 70.70
5. 71.66	17. 70.67
6. 70 <sup>5</sup> .65	18. 70.66
*7. 70.65	*19. 70.65
8. 69 <sup>5</sup> .65	20. 70.63
9. 69.65	21. 70.62
*10. 68 <sup>5</sup> .65	*22. 70.60
11. 68.65	23. 70.58
*12. 67.65	*24. 70.55

FIGURE 1



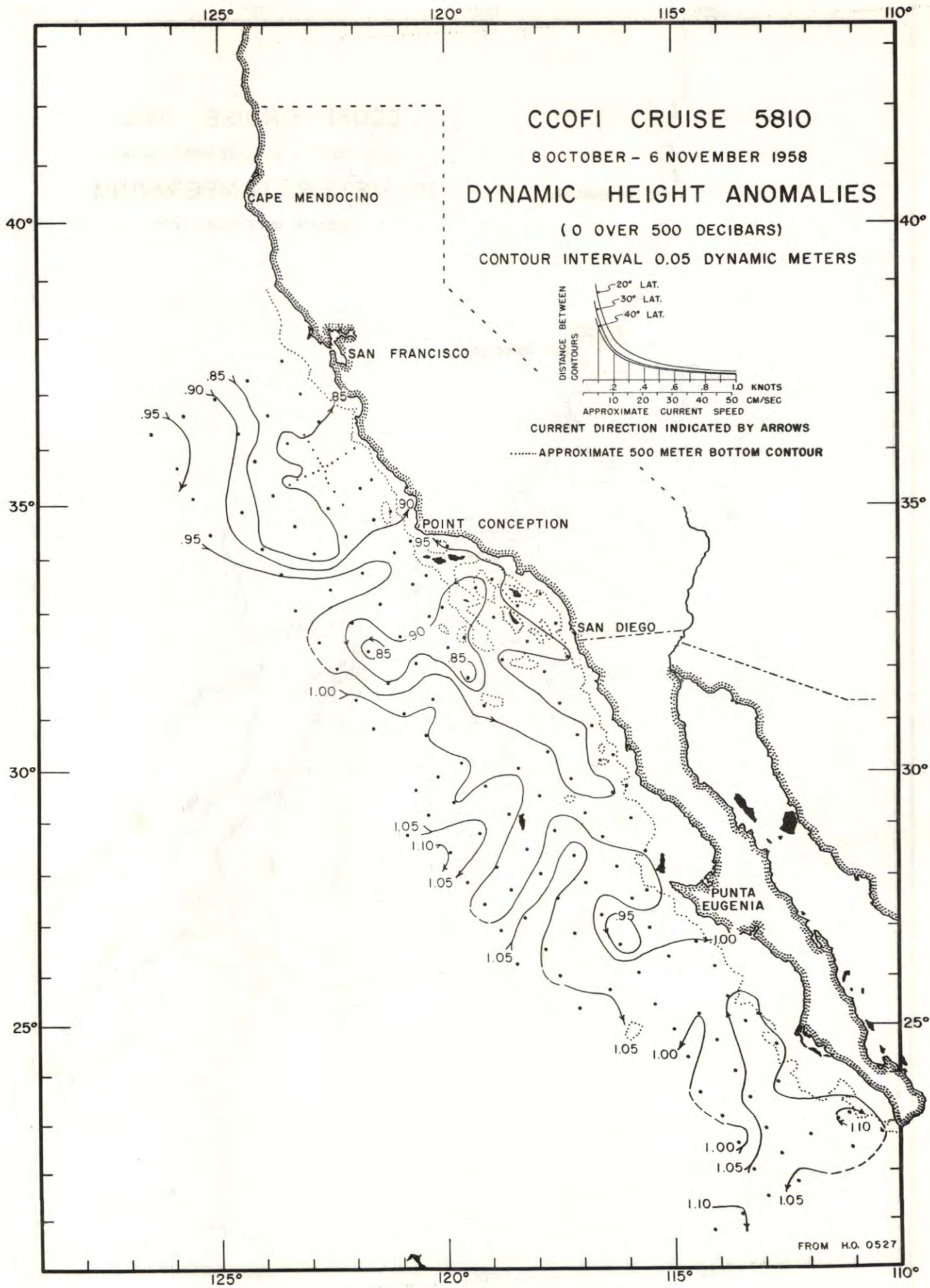


FIGURE 2

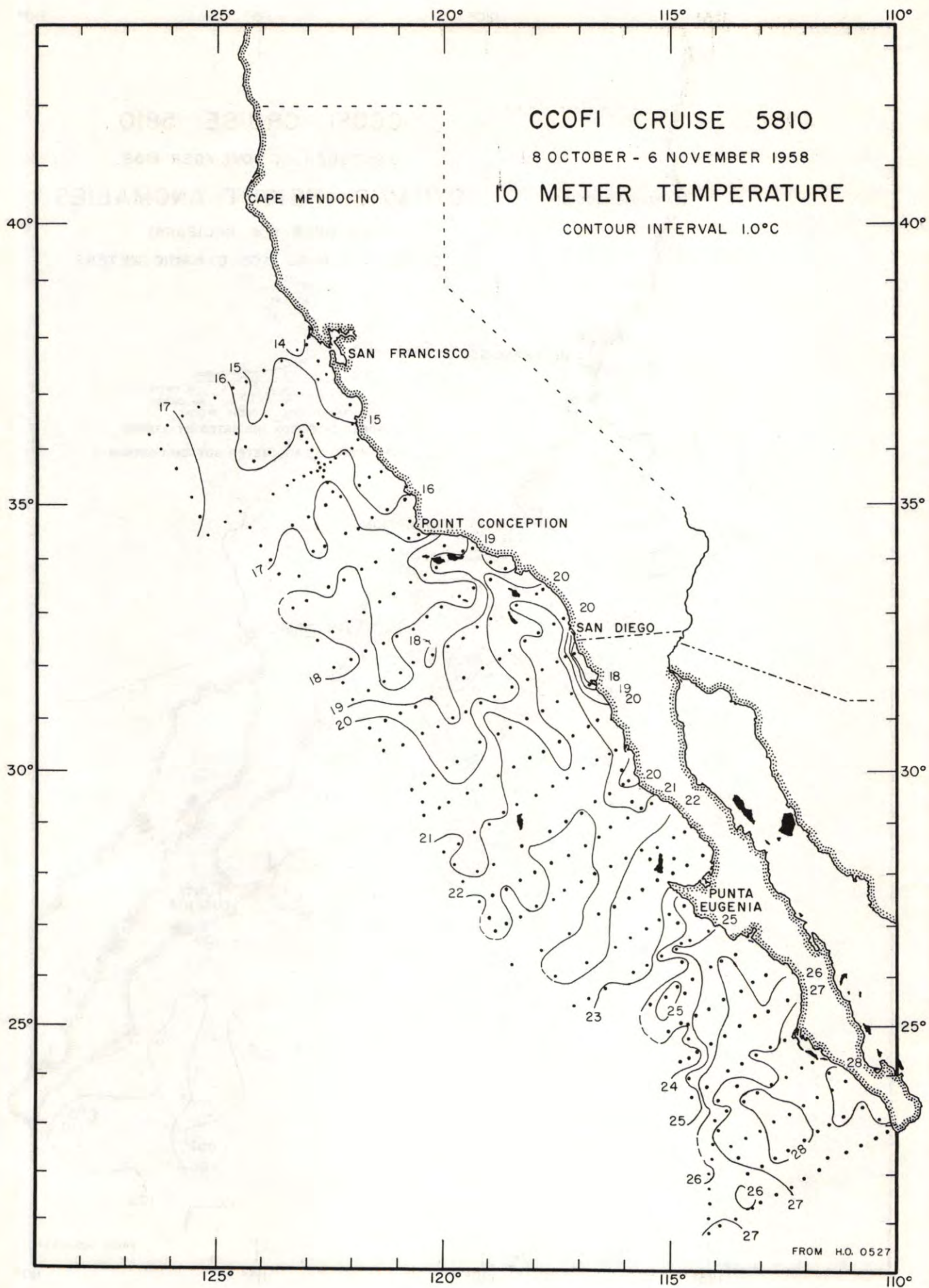


FIGURE 3

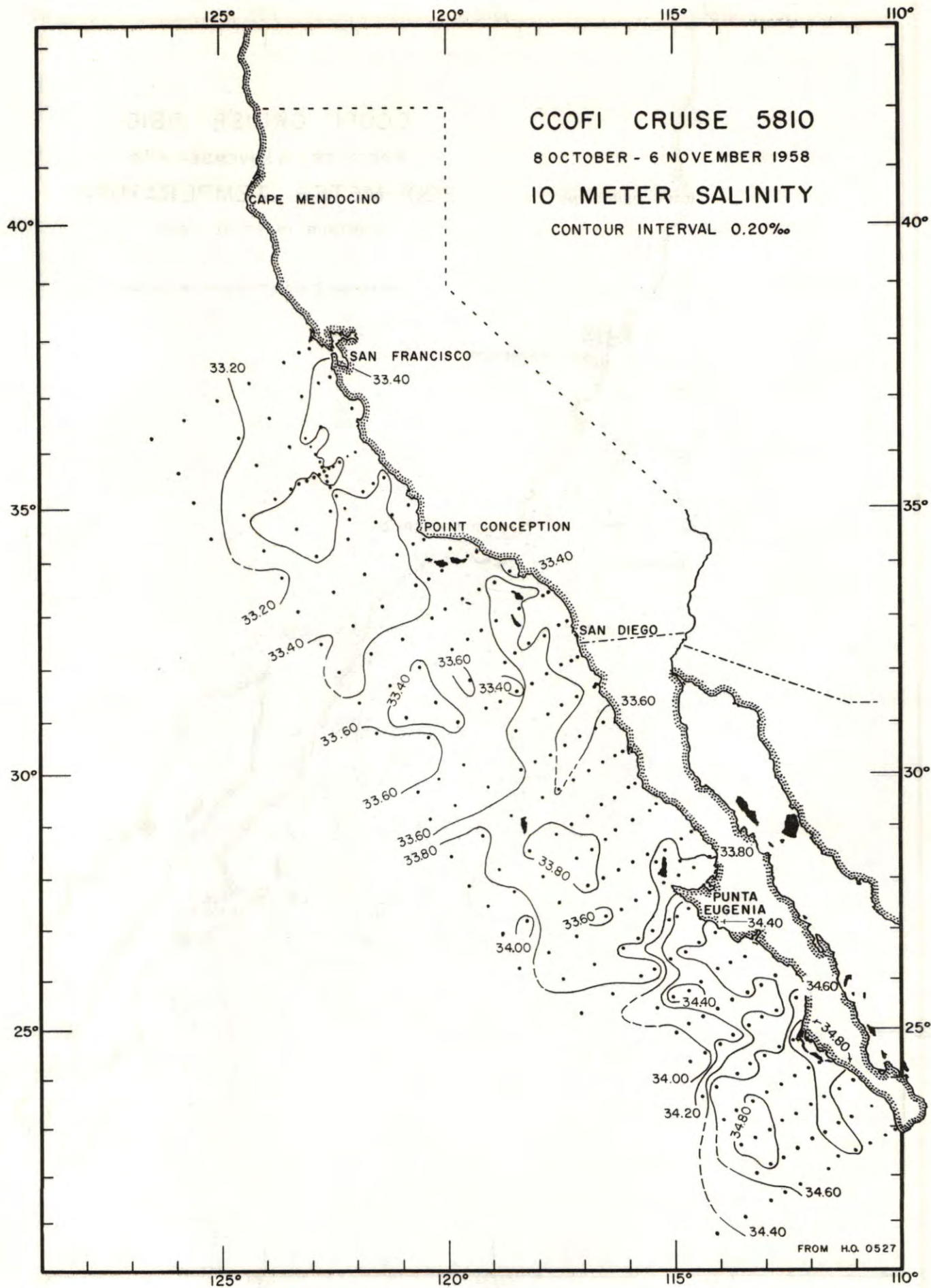


FIGURE 4

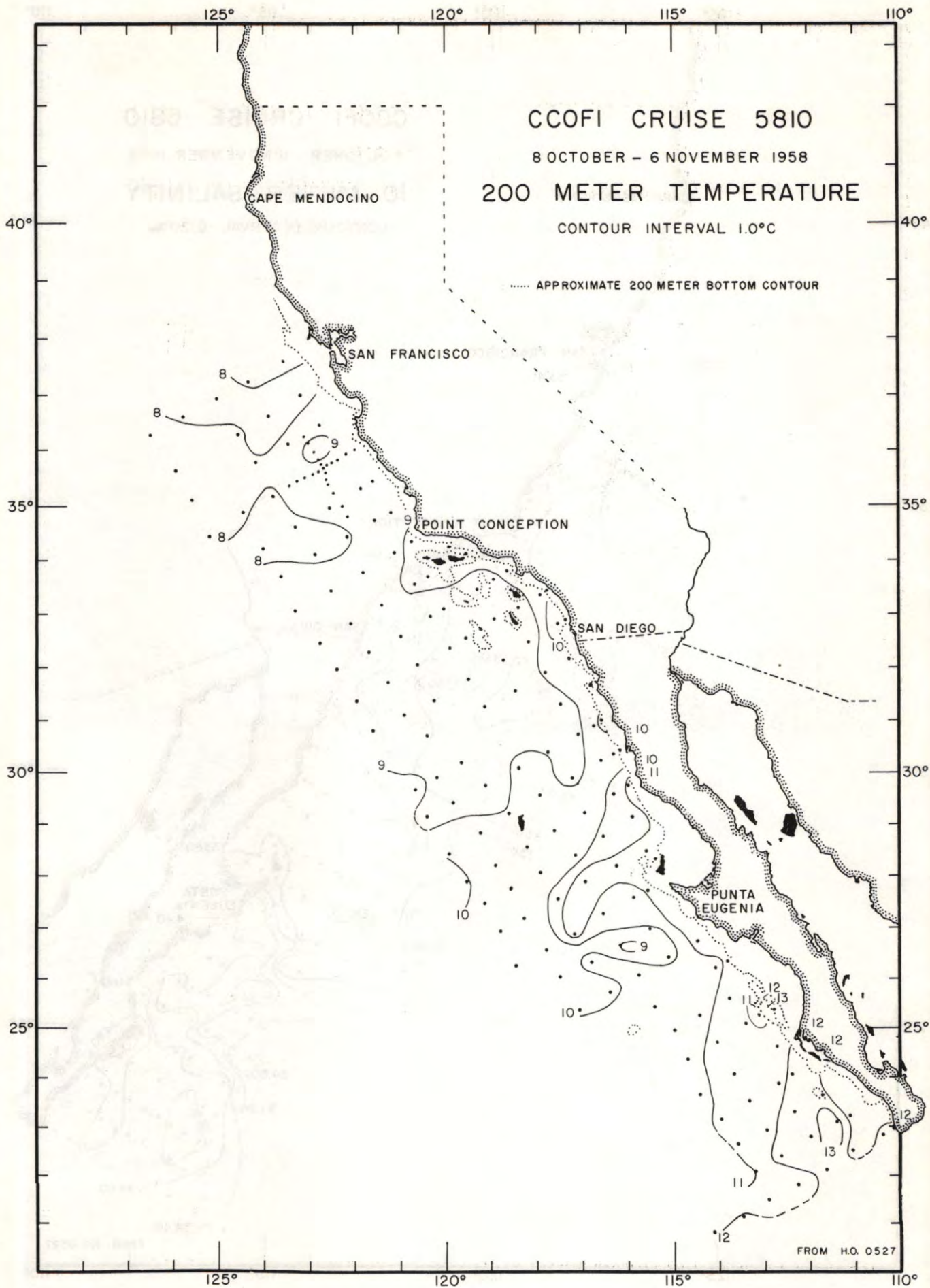


FIGURE 5

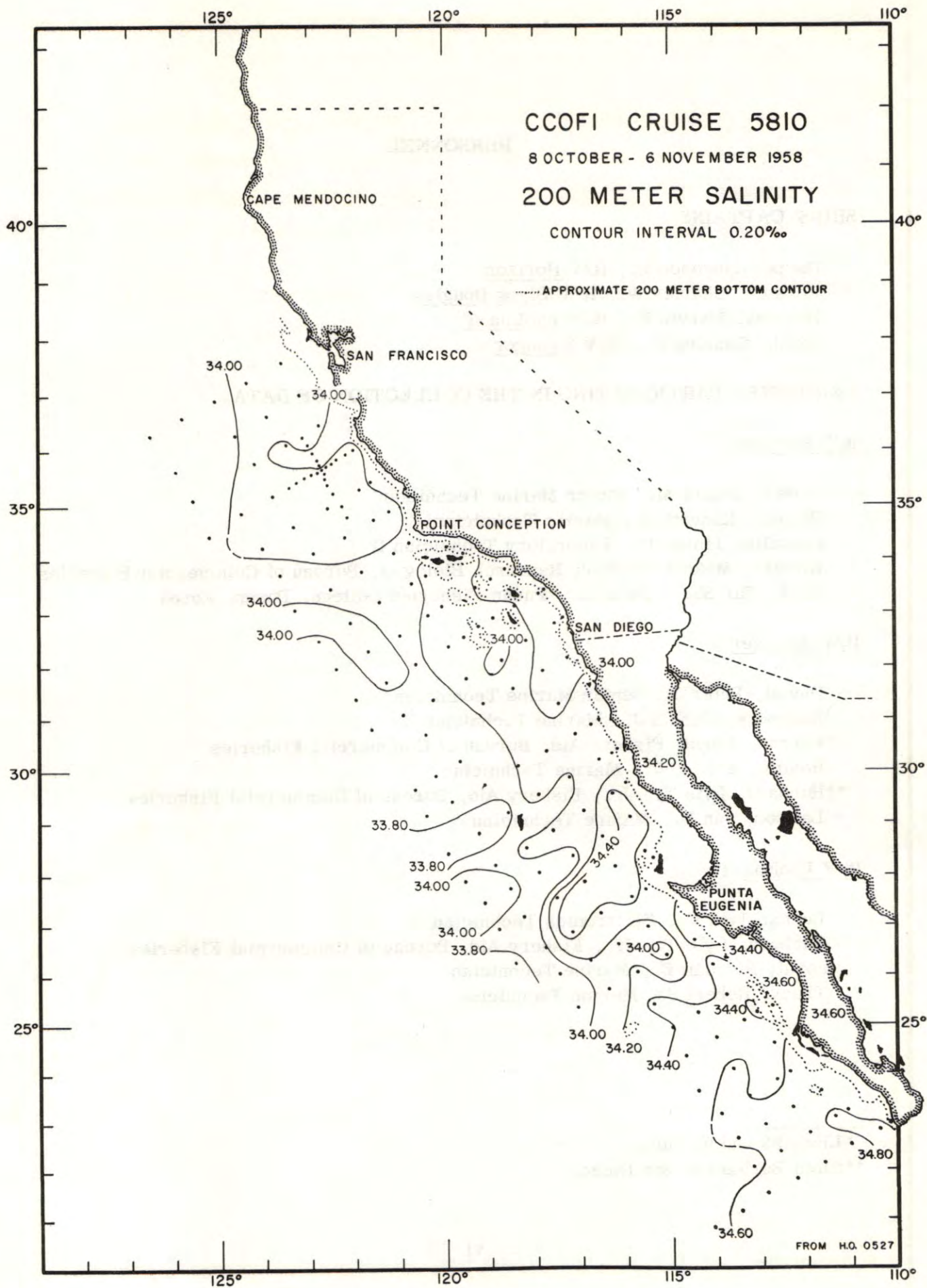


FIGURE 6

PERSONNEL

SHIPS' CAPTAINS

Davis, Laurence E., R/V Horizon  
Forster, Charles W., R/V Black Douglas  
Hopkins, Marvin F., R/V Paolina-T  
Smith, Charles H., R/V Stranger

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Horizon

Brown, Daniel M., Senior Marine Technician  
Bottom, Kenneth S., Marine Technician  
Costello, James P., Laboratory Technician II  
Kimura, Makota, Fishery Research Biologist, Bureau of Commercial Fisheries  
Park, Tai-Soo, Instructor, Pusan Fisheries College, Pusan, Korea

R/V Stranger

Davoll, Peter J., Senior Marine Technician  
Begnoche, Donald J., Marine Technician  
\*Farrar, Lloyd, Fishery Aid, Bureau of Commercial Fisheries  
Hester, Arthur W., Marine Technician  
\*\*Hubbard, Lyle T., Jr., Fishery Aid, Bureau of Commercial Fisheries  
Lawson, Jan B., Marine Technician

R/V Paolina-T

Lucas, Jack C., Electronics Technician  
Hubbard, Lyle T., Jr., Fishery Aid, Bureau of Commercial Fisheries  
Joyal, Norman F., Marine Technician  
Tracy, Robert S., Marine Technician

\*Lines 93 and 97 only.

\*\*Santa Barbara to San Diego.

R/V Black Douglas

Greenbaum, Richard H. , Laboratory Technician II

Blackburn, Gene T. , Fishery Aid, Bureau of Commercial Fisheries

\*Brenner, Robert E. , Marine Technician

\*\*King, Lawrence R. , Marine Technician

Reid, Charles F. , Fishery Research Biologist, Bureau of Commercial Fisheries

\*Lines 127 through 153.

\*\*Lines 120 and 123.

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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	

60.55

STRANGER; November 1, 1958; 1328 GCT; 37°47.5'N, 123°15'W; sounding, 34 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 03°.

3	14.24	33.33	6.11	309	0	(14.24)	(33.33)	(6.11)	(24.87)	(309)	(0.00)
13	13.62	33.35	5.92	296	10	13.82	33.35	5.97	24.97	300	0.03
32	11.16	33.48	4.15	241	20	12.20	33.42	5.12	25.34	264	0.06
51	11.14	33.52	3.71	238	30	11.18	33.47	4.20	25.57	242	0.08
					50	11.14	33.52	3.72	25.62	238	0.13

60.60

STRANGER; November 2, 1958; 2259 GCT; 37°37'N, 123°37'W; sounding, 1800 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 12°.

4	15.03	33.33	5.77	325	0	15.0	(33.33)	(5.77)	(24.71)	(324)	(0.00)
13	15.11	33.32	5.90	328	10	15.09	33.32	5.88	24.68	327	0.03
41	12.46	33.42	4.59	269	20	15.06	33.32	5.90	24.69	326	0.06
55	11.60	33.51	4.02	246	30	14.94	33.32	5.85	24.71	324	0.10
68	10.79	33.55	3.89	230	50	11.90	33.48	4.21	25.46	254	0.16
86	10.01	33.58	3.92	215	75	10.43	33.56	3.91	25.77	223	0.22
113	9.38	33.69	3.52	196	100	9.80	33.66	3.86	25.96	205	0.27
143	8.92	33.86	2.87	177	150	8.82	33.89	2.77	26.30	174	0.36
164	8.66	33.94	2.62	167	200	8.28	34.03	2.40	26.49	155	0.45
187	8.38	34.00	2.57	158	250	8.01	34.12	1.74	26.60	144	0.52
222	8.22	34.05	2.08	152	300	7.55	34.19	1.32	26.72	133	0.60
261	7.92	34.14	1.57	141	400	6.58	34.23	0.85	26.90	117	0.73
302	7.53	34.19	1.30	133	500	5.80	34.25	0.63	27.00	106	0.84
346	7.07	34.21	1.14	125	600	5.27	34.32	0.42	27.10	96	0.95
392	6.60	34.22	0.87	118	700	4.80	34.35	0.39	27.20	87	1.04
437	6.36	34.25	0.70	112	800	4.44	34.40	0.42	27.28	80	1.13
491	5.84	34.25	0.65	106	1000	(3.67)	(34.49)	(0.35)	(27.44)	(65)	(1.29)
556	5.55	34.29	0.45	100							
648	4.98	34.34	0.40	90							
744	4.66	34.37	0.38	84							
836	4.30	34.42	0.46	77							
951	3.88	34.51	0.54	66							
996	3.69	34.49	0.46	66							

60.70

STRANGER; November 3, 1958; 0433 GCT; 37°16.5'N, 124°22'W; sounding, 2160 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 15°.

0	15.02	33.29	6.02	328	0	15.02	33.29	6.02	24.67	328	0.00
11	15.02	33.33	5.98	325	10	15.02	33.32	6.00	24.70	326	0.03
38	13.76	33.29	5.74	303	20	14.60	33.32	5.85	24.78	318	0.06
57	10.86	33.33	4.90	247	30	14.10	33.30	5.79	24.87	309	0.10
70	10.01	33.42	4.34	226	50	11.40	33.32	5.10	25.41	257	0.15
92a)	9.40	33.58	3.86	205	75	9.82	33.46	4.20	25.80	220	0.21
119	8.98	33.83	3.04	180	100	9.23	33.66	3.67	26.05	197	0.27
149	8.59	33.95	2.60	165	150	8.58	33.96	2.59	26.39	164	0.36
176	8.36	34.02	2.36	157	200	8.16	34.08	1.94	26.56	149	0.44
197	8.18	34.07	1.95	150	250	7.54	34.16	1.61	26.70	136	0.51
231	7.78	34.14	1.82	140	300	7.07	34.19	1.14	26.79	127	0.58
276	7.30	34.17	1.28	131	400	6.48	34.25	0.72	26.92	114	0.70
317	6.93	34.20	1.02	124	500	5.81	34.25	0.56	27.00	106	0.82
370	6.63	34.25	0.78	116	600	5.27	34.31	0.44	27.12	95	0.92
416	6.40	34.25	0.69	113	700	4.74	34.37	0.35	27.24	84	1.02
470	6.12	34.25	0.57	110	800	4.32	34.39	0.35	27.29	79	1.11
521	5.62	34.25	0.55	104	1000	3.76	34.48	0.49	27.42	67	1.26
593	5.30	34.31	0.45	96							
695	4.76	34.37	0.36	85							
795	4.33	34.39	0.34	79							
896	4.04	34.43	0.40	74							
1016	3.72	34.48	0.50	67							
1061	3.56	34.52	0.56	62							

a) The bathythermograph recorded a lower temperature (about 0.4°C) at this level.



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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STRANGER; November 3, 1958; 0936 GCT; 36°57.5'N, 125°05'W; sounding, 2240 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 12°.

60.80

0	16.48	33.06	5.39	376	0	16.48	33.06	5.39	24.17	376	0.00
11	16.48	33.10	5.31	373	10	16.48	33.10	5.32	24.20	373	0.04
40	15.57	33.04	5.62	358	20	16.47	33.10	5.31	24.20	372	0.07
58	12.50	33.04	5.71	297	30	16.45	33.10	5.32	24.21	372	0.11
72	11.32	33.08	5.36	273	50	13.60	33.03	5.69	24.78	318	0.18
95	9.78	33.32	4.66	230	75	11.02	33.11	5.25	25.32	266	0.25
123	8.80	33.53	4.54	200	100	9.58	33.36	4.63	25.76	224	0.32
153	8.39	33.75	3.76	173	150	8.40	33.72	3.82	26.22	180	0.42
180	8.16	33.87	3.42	165	200	7.95	33.92	3.13	26.46	158	0.50
203	7.92	33.93	3.11	157	250	7.08	33.98	2.47	26.62	142	0.58
238	7.30	33.98	2.56	145	300	6.41	33.99	2.12	26.72	133	0.65
284	6.59	33.98	2.29	136	400	6.02	34.15	0.93	26.90	116	0.78
325	6.27	34.02	1.78	129	500	5.50	34.19	0.70	26.99	108	0.90
380	6.13	34.14	1.03	118	600	4.82	34.23	0.43	27.10	96	1.01
426	5.88	34.16	0.82	114	700	4.60	34.36	0.35	27.23	85	1.10
481	5.68	34.20	0.58	108	800	4.28	34.36	0.33	27.26	82	1.19
531	5.05	34.14	0.96	106	1000	3.68	34.44	0.46	27.40	69	1.36
606	4.80	34.25	0.40	95							
707	4.58	34.36	0.34	84							
808	4.26	34.36	0.33	81							
909	3.98	34.40	0.41	75							
1028	3.60	34.44	0.49	68							
1074	3.55	34.47	0.55	66							

STRANGER; November 3, 1958; 1449 GCT; 36°38.5'N, 125°49'W; sounding, 2400 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 05°.

60.90

0	16.99	32.99	5.45	392	0	16.99	32.99	5.45	24.00	392	0.00
12	16.99	33.01	4.90u	390	10	16.99	33.01		24.01	391	0.04
40	16.31	33.12	5.50	368	20	16.95	33.04		24.06	386	0.08
74	12.78	33.12	5.28	296	30	16.70	33.08		24.13	379	0.12
87	11.00	33.19	5.14	260	50	15.30	33.12	5.46	24.48	346	0.19
96	10.38	33.33	4.86	239	75	12.68	33.12	5.27	25.02	295	0.27
124	8.89	33.51	4.70	202	100	10.12	33.36	4.82	25.68	232	0.34
155	8.58	33.80	4.39	176	150	8.55	33.74	4.50	26.22	180	0.44
182	8.18	33.89	3.72	164	200	7.98	33.94	3.55	26.47	157	0.52
205	7.91	33.95	3.50	155	250	7.27	33.96	3.24	26.58	146	0.60
241	7.38	33.96	3.31	148	300	6.55	33.98	2.50	26.70	136	0.68
287	6.69	33.96	2.70	138	400	5.74	34.06	1.30	26.88	118	0.81
329	6.22	34.04	2.04	127	500	5.16	34.20	0.68	27.05	102	0.92
387	5.83	34.07	1.34	120	600	4.86	34.30	0.42	27.16	92	1.03
433	5.26	34.05	1.16	115	700	4.56	34.36	0.32	27.24	84	1.12
490	5.17	34.14	0.78	107	800	4.25	34.42	0.27	27.32	76	1.21
542	5.13	34.22	0.49	100	1000	3.68	34.48	0.50	27.42	67	1.36
617	4.78	34.31	0.37	90							
720	4.50	34.37	0.30	82							
825	4.17	34.44	0.27	74							
928	3.88	34.46	0.44	70							
1051	3.54	34.49a)	0.56	64							
1098	3.44	34.51a)	0.59	62							

a) Salinity bottle numbers appear to be recorded in reverse order on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in the order listed.

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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 <sup>3</sup> /g	m	°C	‰	ml/L	g/L	10 cm <sup>3</sup> /g	dyn. m	

60.100 STRANGER; November 3, 1958; 2018 GCT; 36°18.5'N, 126°32.5'W; sounding, 2520 fm; wind, 340°, force 1; weather, partly cloudy; sea, rough; wire angle, 07°.

3	17.81	33.04	5.50	407	0	(17.81)	(33.04)	(5.50)	(23.84)	(407)	(0.00)
12	17.78	33.10	5.41	402	10	17.79	33.09	5.43	23.88	403	0.04
40	16.97	33.04	5.48	388	20	18.00	33.19a)	5.41	23.91	400	0.08
69	14.42	33.04	6.06	334	30	18.00	33.20a)	5.46	23.92	400	0.12
78	12.14	33.01	6.08	293	50	16.44	33.04	5.57	24.16	377	0.20
88	11.66	32.95	6.09	289	75	12.92	33.03	6.08	24.90	306	0.28
114	10.55	33.11	5.17	258	100	10.92	32.98	5.83	25.24	274	0.36
146	9.12	33.42	4.77	212	150	8.97	33.47	4.74	25.96	206	0.48
167	8.50	33.62	4.55	189	200	8.35	33.88	4.26	26.36	167	0.58
191	8.42	33.85	4.41	170	250	7.48	33.94	3.69	26.54	150	0.66
226	7.82	33.92	3.73	156	300	6.68	33.94	3.17	26.65	140	0.73
267	7.24	33.95	3.65	146	400	5.60	33.98	2.03	26.82	124	0.87
308	6.58	33.94	2.99	138	500	5.24	34.14	0.93	26.98	108	0.99
354	6.15	33.97	2.38	131	600	4.91	34.26	0.52	27.12	96	1.10
399	5.61	33.98	2.04	124	700	4.44	34.28	0.45	27.19	89	1.20
445	5.31	34.03	1.41	117	800	4.04	34.29	0.44	27.24	84	1.29
500	5.24	34.14	0.93	108	1000	3.58	34.47	0.54	27.42	67	1.46
566	5.04	34.20	0.57	101							
658	4.66	34.28	0.46	91							
756	4.15	34.28	0.44	86							
848	3.96	34.36	0.44	78							
964	3.70	34.46	0.56	68							
1011	3.56	34.47	0.53	66							

63.52 STRANGER; November 1, 1958; 0555 GCT; 37°22.5'N, 122°38'W; sounding, 40 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

0	14.64	33.40	5.81	312	0	14.64	33.40	5.81	24.84	312	0.00
12	14.50	33.43	5.80	307	10	14.53	33.43	5.80	24.88	308	0.03
31	13.68	33.43	5.26	291	20	14.26	33.43	5.71	24.95	302	0.06
50	12.41	33.47	4.32	264	30	13.71	33.43	5.27	25.06	291	0.09
64	11.90	33.53	4.14	250	50	12.41	33.47	4.32	25.34	264	0.15

63.60 STRANGER; October 31, 1958; 2346 GCT; 37°02.5'N, 123°12'W; sounding, 1330 fm; wind, 150°, force 2; weather, cloudy; sea, rough; wire angle, 03°.

3	15.46	33.23	5.87	341	0	(15.46)	(33.23)	(5.87)	(24.53)	(341)	(0.00)
12	15.38	33.24	5.83	339	10	15.40	33.24	5.85	24.55	340	0.03
41	12.34	33.25	5.33	279	20	15.35	33.24	5.82	24.56	338	0.07
55	10.82	33.22	5.02	254	30	15.32	33.24	5.81	24.57	337	0.10
69	9.72	33.38	4.70	225	50	11.30	33.23	5.13	25.37	262	0.16
89	9.08	33.45	4.56	210	75	9.47	33.41	4.64	25.82	219	0.22
116	8.56	33.66	4.09	186	100	8.86	33.52	4.41	26.00	202	0.28
147	8.26	33.85	3.59	168	150	8.20	33.87	3.54	26.38	165	0.37
169	7.90	33.96	3.37	154	200	7.65	34.04	2.43	26.60	145	0.44
192	7.79	34.04	2.48	147	250	6.92	34.07	2.15	26.72	133	0.52
228	7.20	34.04	2.32	139	300	6.53	34.09	1.70	26.79	127	0.58
270	6.73	34.09	1.98	129	400	5.91	34.18	0.75	26.94	113	0.71
311	6.44	34.09	1.62	126	500	5.34	34.24	0.56	27.06	101	0.82
358	5.94	34.09	1.33	119	600	4.94	34.31	0.44	27.16	92	0.92
405	5.90	34.18	0.74	112	700	4.60	34.36	0.41	27.24	84	1.01
451	5.62	34.21	0.71	107	800	4.34	34.42	0.43	27.31	77	1.10
508	5.29	34.25	0.54	100	1000	3.73	34.48	0.53	27.43	66	1.26
574	5.04	34.29	0.45	94							
668	4.68	34.34	0.42	87							
766	4.44	34.40	0.40	80							
860	4.15	34.44	0.48	74							
979	3.81	34.47	0.51	68							
1025	3.64	34.49	0.54	65							

a) Bathythermograph feature is reflected in salinity curve.

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 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

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STRANGER; October 31, 1958; 1745 GCT; 36°38'N, 123°56'W; sounding, 2080 fm; wind, 140°, force 4; weather, cloudy; sea, very rough; wire angle, 11°.

63.70

0	15.12	33.24	5.87	333	0	15.12	33.24	5.87	24.62	333	0.00
12	15.12	33.26	5.90	332	10	15.12	33.25	5.89	24.62	333	0.03
40	12.62	33.25	5.26	284	20	15.12	33.26	5.90	24.63	332	0.07
58	10.36	33.39	4.33	234	30	14.95	33.26	5.87	24.66	329	0.10
73	9.68	33.43	4.37	220	50	11.07	33.34	4.60	25.49	250	0.16
95	8.94	33.57	4.39	199	75	9.62	33.44	4.37	25.82	219	0.22
122	8.62	33.73	3.58	182	100	8.82	33.61	4.34	26.08	194	0.27
150	8.31	33.87	3.22	167	150	8.31	33.87	3.22	26.37	167	0.36
178	8.02	33.97	2.64	156	200	7.81	34.03	2.28	26.57	148	0.44
196	7.88	34.03	2.32	149	250	7.21	34.06	1.99	26.67	138	0.51
234	7.38	34.05	2.11	141	300	6.87	34.13	1.50	26.78	128	0.58
279	6.96	34.07	1.73	134	400	6.25	34.19	0.86	26.90	116	0.71
321	6.79	34.16	1.23	125	500	5.69	34.27	0.54	27.04	103	0.82
373	6.47	34.18	0.92	120	600	5.16	34.33	0.52	27.15	92	0.92
419	6.06	34.20	0.81	113	700	4.69	34.36	0.46	27.23	85	1.02
474	5.86	34.25	0.63	107	800	4.34	34.42	0.52	27.31	77	1.11
524	5.51	34.30	0.50	99	1000	3.73	34.45	0.54	27.40	68	1.27
597	5.17	34.33	0.52	92							
697	4.70	34.36	0.46	85							
797	4.35	34.42	0.52	77							
897	4.04	34.43	0.49	73							
1015	3.68	34.46	0.57	68							
1061	3.55	34.52	0.80	62							

STRANGER; October 31, 1958; 1202 GCT; 36°19'N, 124°36.5'W; sounding, 2160 fm; wind, 180°, force 5; weather, cloudy; sea, rough; wire angle, 10°.

63.80

0	16.62	33.15	5.44	372	0	16.62	33.15	5.44	24.21	372	0.00
11	16.63	33.17	5.53	371	10	16.63	33.16	5.52	24.22	372	0.04
40	16.28	33.10	5.60	369	20	16.63	33.17	5.53	24.22	371	0.07
54	13.84	33.12	5.89	306	30	16.63	33.17	5.53	24.22	371	0.11
68	12.67	33.10	5.72	296	50	14.70	33.12	5.81	24.62	333	0.18
86	11.89	33.13	5.62	279	75	12.50	33.13	5.67	25.06	291	0.26
113	9.60	33.42	4.60	220	100	11.07	33.30	5.04	25.46	253	0.33
144	8.71	33.73	3.50	183	150	8.60	33.78	3.36	26.24	178	0.44
167	8.40	33.87	3.09	169	200	8.10	34.00	2.47	26.50	154	0.52
189	8.26	33.97	2.59	159	250	7.40	34.08	2.04	26.66	139	0.60
223	7.70	34.06	2.32	144	300	6.75	34.13	1.66	26.79	127	0.66
265	7.26	34.09	1.90	136	400	6.13	34.22	0.76	26.95	112	0.79
307	6.66	34.14	1.61	125	500	5.65	34.25	0.47	27.03	104	0.90
353	6.45	34.18	1.08	119	600	5.12	34.29	0.38	27.12	95	1.01
399	6.14	34.22	0.77	112	700	4.68	34.35	0.36	27.22	86	1.10
445	5.89	34.22	0.49	109	800	4.37	34.40	0.40	27.30	78	1.19
501	5.64	34.25	0.47	104	1000	3.82	34.45	0.55	27.39	70	1.36
566	5.30	34.27	0.41	98							
660	4.83	34.33	0.34	89							
759	4.48	34.38	0.38	82							
853	4.22	34.42	0.42	76							
969	3.88	34.44	0.51	71							
1016	3.78	34.47	0.58	68							

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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	

63,100 STRANGER; November 4, 1958; 0145 GCT; 35°40.5'N, 125°57'W; sounding, 2520 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 09°.

0	17.92	33.08	5.38	407	0	17.92	33.08	5.38	23.84	407	0.00
11	17.88	33.10	5.01	404	10	17.89	33.09	5.02	23.87	405	0.04
40	17.86	33.08	5.24	406	20	17.87	33.09	5.04	23.87	405	0.08
77	13.30	33.00	6.04	315	30	17.87	33.09	5.08	23.87	405	0.12
86	12.71	33.12	5.79	295	50	17.00	33.01	5.36	24.01	391	0.20
114	11.32	33.24	5.26	262	75	13.50	33.00	6.03	24.77	319	0.29
145	9.06	33.42	4.47	212	100	12.01	33.18	5.51	25.20	278	0.37
167	8.60	33.59	4.27	192	150	8.92	33.47	4.41	25.96	205	0.49
190	8.28	33.78	4.25	174	200	8.18	33.83	4.20	26.35	168	0.58
226	7.85	33.93	3.56	156	250	7.40	33.97	3.25	26.58	147	0.66
268	7.01	33.98	2.98	141	300	6.63	33.97	2.62	26.68	137	0.74
308	6.56	33.97	2.49	136	400	5.75	34.05	1.29	26.86	120	0.87
354	6.26	33.99	1.85	131	500	5.27	34.15	0.69	27.00	107	0.99
401	5.74	34.05	1.28	120	600	5.09	34.30	0.38	27.13	94	1.10
447	5.48	34.11	0.96	113	700	4.63	34.33	0.34	27.21	86	1.20
503	5.26	34.16	0.68	106	800	4.26	34.39	0.40	27.29	79	1.29
568	5.22	34.29	0.40	96	1000	3.62	34.46	0.52	27.42	67	1.45
661	4.78	34.31	0.34	90							
759	4.40	34.36	0.35	82							
852	4.08	34.43	0.44	74							
968	3.71	34.45	0.46	69							
1014	3.58	34.49	0.54	64							

67,60 STRANGER; October 30, 1958; 1750 GCT; 36°29.5'N, 122°48'W; sounding, 1450 fm; wind, 230°, force 2; weather, overcast; sea, slight; wire angle, 03°.

0	15.46	33.40	5.66	329	0	15.46	33.40	5.66	24.66	329	0.00
11	15.46	33.40	5.73	329	10	15.46	33.40	5.72	24.66	329	0.03
40	15.26	33.46	5.59	321	20	15.44	33.40	5.72	24.66	329	0.06
54	12.10	33.48	4.33	257	30	15.40	33.42	5.71	24.69	326	0.10
69	10.86	33.57	3.96	230	50	13.72	33.48	4.86	25.09	288	0.16
87	10.12	33.64	3.74	212	75	10.59	33.60	3.89	25.78	222	0.22
116	9.36	33.75	3.48	192	100	9.72	33.68	3.62	26.00	202	0.28
147	9.02	33.92	2.74	174	150	9.01	33.97	2.70	26.33	170	0.37
170	8.94	34.02	2.35	165	200	8.61	34.05	2.15	26.46	158	0.45
193	8.70	34.04	2.20	160	250	8.18	34.13	1.68	26.59	146	0.53
230	8.30	34.09	1.90	151	300	7.43	34.14	1.50	26.70	136	0.60
272	8.01	34.16	1.49	141	400	6.63	34.23	0.82	26.89	118	0.74
314	7.18	34.13	1.49	132	500	5.98	34.28	0.55	27.01	106	0.85
360	6.88	34.20	1.11	123	600	5.38	34.33	0.44	27.13	94	0.96
407	6.60	34.23	0.79	117	700	4.76	34.36	0.44	27.22	86	1.05
454	6.30	34.23	0.67	113	800	4.39	34.40	0.46	27.29	79	1.14
510	5.92	34.30	0.52	103	1000	3.77	34.49	0.67	27.43	66	1.30
576	5.54	34.33	0.45	96							
670	4.90	34.34	0.43	89							
763	4.52	34.39	0.43	81							
864	4.18	34.42	0.50	75							
983	3.82	34.45	0.68	70							
1030	3.70	34.52	0.60	64							

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

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STRANGER; October 30, 1958; 2348 GCT; 36°08'N, 123°29.5'W; sounding, 1900 fm; wind, 200°, force 2; weather, cloudy; sea, slight; wire angle, 05°.

67.70

3	16.00	33.35	5.74	344	0	(16.00)	(33.35)	(5.74)	(24.50)	(344)	(0.00)
13	15.82	33.37	5.76	339	10	15.88	33.36	5.75	24.54	341	0.04
41	15.61	33.35	5.66	336	20	15.76	33.37	5.74	24.56	338	0.07
55	12.49	33.38	4.77	272	30	15.72	33.36	5.72	24.58	337	0.10
70	11.42	33.48	4.12	246	50	13.93	33.35	5.13	24.95	301	0.16
88	10.61	33.57	3.68	225	75	11.22	33.50	4.00	25.60	240	0.23
114	9.94	33.69	3.29	205	100	10.18	33.60	3.45	25.84	217	0.29
146	9.51	33.84	2.78	187	150	9.49	33.85	2.75	26.16	187	0.39
169	9.28	33.90	2.53	180	200	8.88	33.99	2.21	26.36	167	0.48
226	8.55	34.05	1.95	157	250	8.31	34.09	1.85	26.53	151	0.56
267	8.18	34.11	1.77	147	300	7.92	34.14	1.51	26.63	142	0.64
309	7.83	34.15	1.43	140	400	6.99	34.23	0.90	26.83	123	0.78
355	7.40	34.19	1.22	131	500	6.24	34.25	0.56	26.94	112	0.90
401	6.99	34.23	0.88	122	600	5.52	34.32	0.40	27.10	97	1.01
447	6.68	34.25	0.69	117	700	5.01	34.37	0.34	27.19	89	1.11
503	6.22	34.25	0.55	111	800	4.55	34.39	0.34	27.27	81	1.20
569	5.70	34.29	0.45	102	1000	3.88	34.47	0.48	27.40	69	1.37
663	5.20	34.36	0.35	91							
761	4.71	34.38	0.33	83							
855	4.35	34.42	0.36	77							
971	3.98	34.47	0.44	69							
1018	3.82	34.47	0.50	66							

STRANGER; October 31, 1958; 0558 GCT; 35°48'N, 124°12.5'W; sounding, 2180 fm; wind, 210°, force 4; weather, cloudy; sea, moderate; wire angle, 07°.

67.80

0	15.87	33.34	5.76	342	0	15.87	33.34	5.76	24.52	342	0.00
12	15.89	33.36	5.66	341	10	15.89	33.35	5.67	24.53	341	0.03
40	15.02	33.37	5.51	323	20	15.81	33.37	5.58	24.56	339	0.07
59	11.26	33.33	4.67	254	30	15.70	33.37	5.56	24.58	336	0.10
73	10.45	33.36	4.59	238	50	12.10	33.34	4.86	25.30	268	0.16
97	9.34	33.58	3.79	204	75	10.37	33.37	4.57	25.65	235	0.22
124	8.95	33.79	3.01	183	100	9.23	33.62	3.65	26.02	200	0.28
156	8.54	33.93	2.73	166	150	8.60	33.92	2.78	26.35	168	0.37
183	8.21	33.96	2.54	159	200	8.12	34.04	2.05	26.52	152	0.45
205	8.10	34.05	2.02	151	250	7.48	34.09	2.10	26.66	139	0.53
242	7.60	34.09	2.11	141	300	6.80	34.11	1.46	26.77	128	0.60
288	6.88	34.10	1.63	130	400	6.20	34.16	0.92	26.89	118	0.72
330	6.69	34.14	1.26	125	500	5.58	34.22	0.54	27.02	105	0.84
386	6.23	34.15	0.96	119	600	5.05	34.28	0.54	27.12	95	0.95
432	6.00	34.18	0.73	114	700	4.67	34.37		27.23	84	1.04
488	5.65	34.22	0.55	106	800	4.37	34.40		27.29	79	1.13
540	5.37	34.23	0.52	102	1000	3.82	34.48	0.57	27.40	68	1.29
616	4.97	34.31	0.54	92							
719	4.61	34.38	0.38	83							
822	4.31	34.40	0.54a)	78							
926	4.03	34.43	0.54	73							
1048	3.70	34.49	0.59	66							
1102	3.60	34.49	0.70	65							

a) Alternate value, 0.63 ml/L.

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

67.100 STRANGER; November 4, 1958; 0653 GCT; 35°07.5'N, 125°36'W; sounding, 2500 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°.

0	17.24	33.10	5.27	390	0	17.24	33.10	5.27	24.02	390	0.00
12	17.24	33.11	5.31	389	10	17.24	33.11	5.30	24.02	390	0.04
40	14.87	33.16	5.70	335	20	16.92	33.13	5.44	24.11	381	0.08
73	12.67	33.17	5.20	290	30	16.00	33.14	5.58	24.34	359	0.11
86	11.90	33.21	5.33	274	50	14.17	33.16	5.57	24.76	320	0.18
95	11.04	33.26	4.94	256	75	12.54	33.18	5.22	25.10	288	0.26
123	9.25	33.50	4.29	209	100	10.68	33.30	4.80	25.53	246	0.33
155	8.73	33.74	3.61	183	150	8.80	33.71	3.76	26.17	186	0.43
181	8.39	33.91	3.15	165	200	8.11	33.85	3.08	26.45	159	0.52
202	8.09	33.95	3.57 <sub>u</sub>	158	250	7.34	33.88	2.85	26.60	145	0.60
238	7.49	33.98	2.92	148	300	6.66	34.00	2.40	26.70	135	0.67
284	6.83	34.00	2.56	137	400	5.94	34.12	1.04	26.90	117	0.80
324	6.39	34.01	2.11	131	500	5.30	34.16	0.65	27.00	107	0.92
380	6.06	34.09	1.36	121	600	5.06	34.30	0.37	27.14	94	1.03
426	5.76	34.15	0.86	113	700	4.64	34.34	0.31	27.21	86	1.12
482	5.39	34.15	0.71	108	800	4.39	34.39	0.36	27.28	80	1.21
533	5.20	34.22	0.54	101	1000	3.78	34.45	0.55	27.40	69	1.38
605	5.04	34.31	0.35	93							
708	4.62	34.34	0.30	86							
811	4.36	34.40	0.38	79							
914	4.02	34.41	0.44	75							
1034	3.69	34.46	0.59	68							
1081	3.56	34.50	0.64	64							

70.90 STRANGER; November 4, 1958; 1951 GCT; 34°54'N, 124°30.5'W; sounding, 2370 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 17°.

3	16.66	33.39	5.48	356	0	(16.66)	(33.39)	(5.48)	(24.37)	(356)	(0.00)
12	16.66	33.37	5.37	357	10	16.66	33.38	5.36	24.37	356	0.04
39	16.51	33.40	5.36	352	20	16.65	33.38	5.37	24.37	356	0.07
57	13.46	33.33	5.42	294	30	16.60	33.38	5.36	24.39	355	0.11
71	10.88	33.40	4.42	242	50	16.03	33.38	5.37	24.52	342	0.18
92	9.68	33.63	3.51	206	75	10.58	33.45	4.20	25.66	234	0.25
118	9.10	33.77	2.96	186	100	9.45	33.68	3.31	26.04	198	0.30
148	8.65	33.91	2.53	169	150	8.62	33.92	2.50	26.35	168	0.40
174	8.32	34.00	2.19	158	200	8.01	34.02	2.00	26.52	152	0.48
195	8.04	34.02	2.02	152	250	7.66	34.12	1.41	26.66	139	0.55
228	7.83	34.10	1.61	143	300	7.18	34.12	1.18	26.75	131	0.62
270	7.50	34.14	1.26	136	400	6.26	34.20	0.69	26.91	115	0.75
309	7.04	34.14	1.15	130	500	5.62	34.26	0.42	27.04	103	0.86
362	6.44	34.15	0.95	122	600	5.13	34.33	0.30	27.15	92	0.97
406	6.23	34.21	0.68	114	700	4.76	34.33	0.29	27.20	88	1.06
461	5.84	34.22	0.57	109	800	4.44	34.41	0.31	27.29	79	1.15
509	5.58	34.27	0.40	102	1000	3.81	34.52	0.46	27.45	64	1.31
579	5.22	34.33	0.32	93							
678	4.83	34.32	0.28	90							
778	4.50	34.40	0.29	80							
876	4.22	34.43	0.39	75							
997	3.82	34.52	0.45	64							
1042	3.72	34.52	0.57	63							

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; November 4, 1958; 1202 GCT; 34°28'N, 125°13'W; sounding, 2480 fm; wind, 340°, force 3;  
weather, clear; sea, moderate; wire angle, 18°.

70.100

0	16.66	33.13	5.43	375	0	16.66	33.13	5.43	24.18	375	0.00
11	16.62	33.12	5.47	375	10	16.63	33.12	5.46	24.18	375	0.04
38	15.77	33.16	5.67	353	20	16.43	33.12	5.55	24.23	370	0.07
57	13.18	33.13	5.84	303	30	16.05	33.15	5.76	24.34	360	0.11
71	12.52	33.12	5.59	292	50	14.50	33.16	5.80	24.68	328	0.18
92	11.59	33.22	5.28	268	75	12.35	33.13	5.54	25.10	288	0.26
120	9.42	33.39	4.70	220	100	10.88	33.28	5.09	25.48	251	0.33
148	8.88	33.58	3.99	197	150	8.85	33.59	3.93	26.06	196	0.44
174	8.68	33.76	3.52	180	200	8.35	33.89	3.05	26.38	166	0.53
194	8.41	33.86	3.12	170	250	7.58	34.00	2.36	26.57	148	0.61
228	7.97	33.98	2.57	154	300	6.85	34.02	2.03	26.68	136	0.68
270	7.25	34.00	2.18	143	400	6.02	34.09	1.12	26.85	121	0.82
308	6.77	34.02	1.99	135	500	5.46	34.22	0.65	27.03	104	0.93
360	6.2	34.04	1.59	126	600	5.27	34.32	0.40	27.13	94	1.04
404	6.01	34.10	1.11	120	700	4.79	34.37	0.34	27.23	85	1.14
456	5.72	34.18	0.76	110	800	4.44	34.42	0.40	27.30	78	1.22
504	5.44	34.23	0.64	103	1000	3.73	34.44	0.50	27.39	70	1.39
575	5.34	34.31	0.42	96							
672	4.89	34.34	0.33	89							
770	4.54	34.42	0.38	79							
867	4.22	34.43	0.47	75							
984	3.78	34.43	0.47	71							
1028	3.64	34.46	0.54	67							

STRANGER; October 29, 1958; 2245 GCT; 35°29'N, 121°37'W; sounding, 504 fm; wind, 320°, force 2;  
weather, fog; sea, rough; wire angle, 02°.

73.55

7	15.97	33.43	5.67	338	0	16.0	(33.43)	(5.67)	(24.56)	(338)	(0.00)
17	15.66	33.39	5.99	334	10	15.80	33.41	5.81	24.59	336	0.03
45	13.10	33.39	4.77	283	20	15.63	33.39	5.99	24.62	334	0.07
60	12.07	33.45	4.73	259	30	15.58	33.38	5.99	24.62	333	0.10
74	10.92	33.57	4.15	230	50	12.79	33.41	4.75	25.23	275	0.16
92	10.40	33.64	3.56	216	75	10.89	33.57	4.14	25.71	229	0.22
121	10.06	33.73	3.18	205	100	10.30	33.66	3.42	25.88	213	0.28
152	9.57	33.85	3.07	187	150	9.60	33.84	3.08	26.14	188	0.38
183	8.84	33.91	2.93	182	200	8.80	33.99	2.40	26.38	166	0.47
206	8.80	34.02	2.33	163	250	8.40	34.10	2.00	26.53	151	0.55
242	8.46	34.09	2.08	153	300	7.99	34.16	1.57	26.64	141	0.63
285	8.10	34.14	1.67	144	400	7.09	34.22	1.07	26.81	124	0.77
326	7.75	34.20	1.44	134	500	6.21	34.30	0.58	27.00	107	0.89
373	7.27	34.21	1.27	128	600	5.63	34.34	0.44	27.10	97	1.00
421	6.93	34.23	0.91	121	700	5.02	34.39	0.42	27.21	87	1.09
468	6.41	34.27	0.70	112	800	(4.56)	(34.44)		(27.31)	(77)	(1.18)
526	6.02	34.31	0.49	104							
583	5.72	34.33a)	0.44	98							
679	5.14	34.38a)	0.42	88							
780	4.65	34.43a)	0.42	80							

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

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

73.60

STRANGER; October 29, 1958; 1850 GCT; 35°20'N, 121°52.5'W; sounding, 1008 fm; wind, calm; weather, fog; sea, moderate; wire angle, 03°.

0	15.68	33.45	5.70	330	0	15.68	33.45	5.70	24.65	330	0.00
11	15.66	33.42	5.69	331	10	15.66	33.42	5.69	24.64	331	0.03
40	14.83	33.42	5.40	305	20	15.65	33.42	5.69	24.64	331	0.07
54	13.30	33.45	5.07	282	30	15.60	33.42	5.69	24.65	330	0.10
69	11.52	33.49	4.32	246	50	13.78	33.44	5.17	25.05	292	0.16
87	10.32	33.55	3.70	221	75	11.02	33.51	4.07	25.64	236	0.23
115	9.62	33.69	3.43	201	100	9.97	33.63	3.57	25.91	210	0.28
146	9.04	33.80	3.08	183	150	9.00	33.81	3.02	26.20	182	0.38
170	8.74	33.94	2.83	168	200	8.47	34.03	2.40	26.47	157	0.47
192	8.58	34.00	2.49	161	250	7.93	34.15	1.91	26.64	141	0.54
228	8.16	34.13	2.16	145	300	7.42	34.15	1.50	26.71	134	0.62
270	7.72	33.95r	1.71	-	400	6.73	34.27	0.87	26.91	115	0.75
311	7.36	34.15	1.43	133	500	6.00	34.31	0.60	27.03	104	0.86
358	7.09	34.20	1.19	126	600	5.50	34.32	0.46	27.10	97	0.97
404	6.69	34.28	0.85	114	700	4.95	34.36	0.42	27.20	88	1.06
452	6.31	34.29	0.74	109	800	4.54	34.41	0.50	27.28	80	1.16
508	5.96	34.31	0.58	103	1000	3.94	34.51	0.70	27.43	66	1.32
575	5.63	34.31	-	100							
671	5.09	34.36	0.39	90							
770	4.66	34.38	0.46	83							
865	4.30	34.47	0.61	73							
985	3.98	34.51	0.70	67							
1032	3.82	34.51	0.70	66							

73.70

STRANGER; October 29, 1958; 1245 GCT; 34°59.5'N, 122°36.5'W; sounding, 2160 fm; wind, 350°, force 5; weather, overcast; sea, rough; wire angle, 05°.

3	16.86	33.40	5.57	360	0	(16.86)	(33.40)	(5.57)	(24.34)	(360)	(0.00)
12	16.86	33.43	5.65	357	10	16.85	33.42	5.62	24.36	358	0.04
26	16.82	33.39	5.55	360	20	16.85	33.39	5.59	24.35	359	0.07
41	12.68	33.14	5.80	293	30	16.81	33.39	5.54	24.35	359	0.11
70	11.04	33.53	3.91	237	50	11.89	33.23	5.33	25.27	271	0.17
89	10.38	33.58	3.77	220	75	10.84	33.55	3.86	25.69	231	0.23
116	9.26	33.73	3.67	192	100	9.72	33.60	3.77	25.93	208	0.29
148	8.74	33.87	3.10	173	150	8.72	33.89	3.04	26.32	172	0.38
169	8.61	34.00	2.22	162	200	8.32	34.10	1.89	26.54	150	0.47
191	8.39	34.07	1.99	153	250	7.63	34.12	1.71	26.66	140	0.54
228	8.06	34.14	1.72	144	300	6.79	34.07	1.71	26.74	132	0.61
268	7.28	34.09	1.70	137	400	6.08	34.15	0.92	26.90	117	0.74
310	6.64	34.07	1.71	130	500	5.42	34.21	0.61	27.02	105	0.86
357	6.28	34.14	1.26	120	600	5.09	34.33	0.49	27.16	92	0.96
403	6.05	34.15	0.88	117	700	4.74	34.35	0.46	27.22	86	1.05
449	5.67	34.18	0.70	110	800	4.45	34.41	0.48	27.29	79	1.14
506	5.40	34.22	0.60	104	1000	3.80	34.47	0.71	27.40	68	1.30
570	5.19	34.32	0.50	94							
663	4.85	34.34	0.48	89							
762	4.56	34.40	0.46	81							
855	4.28	34.43	0.57	76							
972	3.88	34.47	0.62	69							
1018	3.76	34.46	0.75	68							



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	

STRANGER; October 29, 1958; 0605 GCT; 34°39'N, 123°20'W; sounding, 2240 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 03°.

7380

0	17.00	33.48	5.16	357	0	17.00	33.48	5.16	24.37	357	0.00
11	16.98	33.45	6.30r	358	10	16.97	33.45	5.17	24.36	358	0.04
40	15.15	33.46	5.42	318	20	16.96	33.45	5.17	24.36	358	0.07
59	10.37	33.57	3.63	221	30	16.92	33.45	5.18	24.37	357	0.11
73	9.79	33.60	3.56	210	50	10.86	33.56	4.83	25.70	230	0.16
96	9.16	33.74	2.96	189	75	9.72	33.61	3.50	25.94	208	0.22
123	8.81	33.87	2.67	175	100	9.09	33.76	2.90	26.14	187	0.27
155	8.48	33.95	2.33	164	150	8.57	33.93	2.39	26.38	166	0.36
184	8.19	34.04	2.00	153	200	7.98	34.04	1.89	26.54	150	0.44
206	7.91	34.04	1.86	149	250	7.20	34.07	1.58	26.68	137	0.51
242	7.26	34.06	1.66	139	300	6.83	34.13	1.10	26.78	128	0.58
289	6.94	34.13	1.19	129	400	6.00	34.14	0.66	26.90	116	0.71
331	6.60	34.13	0.95	125	500	5.40	34.23	0.46	27.04	103	0.82
387	6.09	34.14	0.68	118	600	5.00	34.34	0.38	27.18	90	0.92
433	5.64	34.16	0.62	111	700	4.72	34.37	0.36	27.23	85	1.02
490	5.43	34.22	0.50	104	800	4.31	34.41	0.31	27.31	77	1.10
542	5.26	34.24	0.38	101	1000	3.74	(34.47)	0.60	(27.42)	(67)	(1.26)
617	4.93	34.36	0.38	88							
721	4.66	34.37	0.35	84							
826	4.21	34.42	0.32	76							
929	3.93	34.46	0.53	70							
1051	3.62	34.52u	0.64	-							
1098	3.50	34.46u	0.78	-							

STRANGER; November 5, 1958; 0141 GCT; 34°16.5'N, 124°03'W; sounding, 2120 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 26°.

7390

3	16.58	33.39	5.80	354	0	(16.58)	(33.39)	(5.80)	(24.40)	(354)	(0.00)
11	16.59	33.38	5.51	355	10	16.59	33.39	5.53	24.39	355	0.04
37	16.33	33.35	5.56	351	20	16.52	33.37	5.51	24.40	354	0.07
69	11.64	33.28	4.96	264	30	16.44	33.36	5.52	24.41	353	0.11
81	10.38	33.48	4.26	228	50	13.50	33.29	5.21	24.99	298	0.17
89	9.91	33.45	4.40	222	75	11.12	33.34	4.68	25.49	250	0.24
115	8.67	33.62	3.88	191	100	9.00	33.48	4.35	25.95	207	0.30
144	8.32	33.86	3.57	168	150	8.27	33.88	3.51	26.38	166	0.39
169	8.08	33.95	3.01	158	200	7.70	34.01	2.65	26.56	148	0.47
188	7.81	33.99	2.86	151	250	7.27	34.10	1.84	26.70	136	0.54
221	7.54	34.04	2.15	144	300	6.83	34.11	1.44	26.76	129	0.61
262	7.13	34.11	1.72	133	400	6.17	34.22	0.70	26.95	112	0.74
299	6.84	34.11	1.45	129	500	5.63	34.26	0.58	27.04	103	0.85
349	6.35	34.16	1.01	120	600	5.15	34.31	0.52	27.14	93	0.95
391	6.20	34.22	0.71	113	700	4.67	34.38	0.52	27.24	84	1.05
443	5.90	34.24	0.67	108	800	4.37	34.43	0.52	27.32	76	1.14
491	5.66	34.26	0.59	103	1000	3.72	34.49	0.70	27.43	66	1.29
561	5.26	34.29	0.54	97							
658	4.83	34.36	0.50	87							
755	4.50	34.41	0.54	79							
853	4.18	34.45	0.50	73							
968	3.78	34.49	0.64	66							
1012	3.70	34.49	0.73	66							

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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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m	

77.55 STRANGER; October 28, 1958; 0745 GCT; 34°54.5'N, 121°13'W; sounding, 260 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.

0	15.55	33.38	5.46	333	0	15.55	33.38	5.46	24.63	333	0.00
11	15.54	33.40	5.73	331	10	15.54	33.40	5.71	24.64	331	0.03
29	15.42	33.42	5.78	327	20	15.49	33.41	5.75	24.66	329	0.07
38	15.40	33.40	5.56	328	30	15.41	33.40	5.70	24.68	327	0.10
46	14.44	33.42	5.59	306	50	13.60	33.41	5.23	25.06	291	0.16
55	12.81	33.40	4.81	276	75	11.03	33.56	3.95	25.67	233	0.23
63	12.42	33.44	4.66	266	100	10.14	33.72	3.27	25.95	206	0.28
74	11.04	33.55	3.99	234	150	9.56	33.91	2.45	26.20	183	0.38
91	10.44	33.64	3.55	217	200	8.92	34.04	2.29	26.40	164	0.47
99	10.18	33.71	3.31	207	250	8.00	34.06	2.15	26.56	148	0.55
116	9.78	33.82	2.82	193	300	7.32	34.11	1.88	26.70	136	0.62
138	9.62	33.87	2.51	187	400	6.71	34.20	1.61	26.85	121	0.75
164	9.44	33.95	2.38	178	500	(6.06)	(34.29)		(27.01)	(106)	(0.87)
202	8.87	34.04	2.18	163							
265	7.70	34.07	2.14	144							
349	6.99	34.16	1.39	127							
464	6.31	34.27	0.67	110							

77.60 STRANGER; October 28, 1958; 1155 GCT; 34°45'N, 121°34'W; sounding, 410 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 03°.

0	16.92	33.26		371	0	16.92	33.26		24.22	371	0.00
11	16.94	33.25		372	10	16.92	33.25		24.21	372	0.04
40	16.65	33.22		368	20	16.92	33.24		24.21	372	0.07
73	11.56	33.28		263	30	16.90	33.24		24.21	372	0.11
87	10.67	33.55		227	50	14.51	33.23		24.74	322	0.18
96	9.86	33.50		218	75	11.54	33.28		25.37	262	0.25
124	9.00	33.73		188	100	9.63	33.51		25.87	214	0.31
156	8.76	33.95		168	150	8.80	33.93		26.33	170	0.41
184	8.30	34.00		157	200	8.20	34.03		26.51	154	0.49
206	8.18	34.05		152	250	8.07	34.18		26.65	140	0.57
242	8.14	34.16		143	300	7.47	34.24		26.77	128	0.64
290	7.57	34.23		130	400	7.00	34.28		26.88	118	0.76
332	7.28	34.25		125	500	6.30	34.33		27.01	106	0.88
389	7.03	34.27		120	600	5.52	34.33		27.10	97	0.99
436	6.82	34.33		113	700	4.87	34.38		27.22	86	1.09
492	6.38	34.33		107							
544	5.93	34.31		103							
620	5.38	34.34		94							
726	4.79	34.40		83							

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

STRANGER; October 28, 1958; 1734 GCT; 34°27.5'N, 122°12'W; sounding, 2120 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 03°.

77.70

0	17.30	33.24	5.62	382	0	17.30	33.24	5.62	24.10	382	0.00
11	17.30	33.22	5.63	382	10	17.29	33.22	5.63	24.10	382	0.04
25	17.29	33.28	5.68	378	20	17.29	33.26	5.66	24.13	379	0.08
40	16.77	33.42	5.64	356	30	16.86	33.41	5.66	24.35	359	0.11
69	11.21	33.18	5.42	264	50	12.32	33.21	5.50	25.17	281	0.18
88	9.92	33.39	4.88	227	75	11.20	33.35	5.06	25.48	251	0.24
117	9.16	33.71	3.57	192	100	9.11	33.51	4.90	25.95	206	0.30
149	8.73	33.87	3.07	173	150	8.70	33.88	3.02	26.31	172	0.40
171	8.46	33.97	2.62	162	200	7.98	34.04	2.47	26.55	150	0.48
193	8.09	34.04	2.49	151	250	7.24	34.06	2.23	26.67	138	0.55
230	7.38	34.04	2.43	142	300	6.67	34.10	1.58	26.78	128	0.62
271	7.12	34.09	1.75	134	400	5.99	34.19	0.91	26.94	112	0.75
312	6.52	34.11	1.50	125	500	5.60	34.29	0.69	27.06	101	0.86
359	6.31	34.17	1.01	118	600	5.18	34.36	0.36	27.18	90	0.96
404	5.95	34.20	0.87	111	700	4.73	34.41	0.32	27.26	82	1.05
451	6.10	34.31	0.75	105	800	4.43	34.43	0.36	27.32	77	1.14
507	5.57	34.29	0.67	100	1000	3.82	34.50	0.65	27.41	68	1.29
574	5.30	34.34	0.40	93							
668	4.83	34.39	0.32	85							
770	4.51	34.43	0.33	78							
865	4.26	34.44	0.43	75							
985	3.85	34.48	0.59	68							
1033	3.74	34.47	0.75	68							

STRANGER; October 29, 1958; 0003 GCT; 34°07.5'N, 122°54.5'W; sounding, 2300 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°.

77.80

2	16.96	33.42	5.49	360	0	(16.96)	(33.42)	(5.49)	(24.33)	(360)	(0.00)
12	16.93	33.42	5.56	360	10	16.93	33.42	5.52	24.34	360	0.04
40	16.64	33.39	5.58	355	20	16.87	33.42	5.56	24.35	359	0.07
55	11.03	33.40	4.28	245	30	16.80	33.43	5.57	24.36	358	0.11
68	9.91	33.48	4.14	220	50	12.00	33.39	4.51	25.38	261	0.17
87	8.98	33.51	4.37	204	75	9.70	33.50	4.17	25.85	216	0.23
114	9.00	33.81	2.97	182	100	8.73	33.57	3.90	26.06	196	0.28
146	8.58	33.96	2.43	164	150	8.52	33.97	2.40	26.42	162	0.37
167	8.34	34.01	2.31	157	200	7.91	34.04	1.97	26.56	149	0.45
190	8.02	34.04	2.00	151	250	7.41	34.16	1.50	26.72	133	0.52
224	7.56	34.06	1.84	143	300	6.99	34.17	1.10	26.79	126	0.59
266	7.37	34.18	1.32	131	400	6.05	34.23	0.69	26.96	110	0.71
307	6.90	34.17	1.08	125	500	5.56	34.27	0.61	27.06	101	0.82
353	6.13	34.15	0.98	117	600	5.12	34.32	0.34	27.15	93	0.92
399	6.06	34.23	0.70	111	700	4.62	34.34	0.33	27.21	86	1.02
446	5.84	34.23	0.59	108	800	4.29	34.39	0.45	27.30	78	1.11
501	5.56	34.28	0.61	101	1000	3.72	34.47	0.63	27.41	68	1.27
567	5.28	34.31	0.37	95							
661	4.79	34.34	0.32	88							
760	4.40	34.35	0.36	83							
854	4.14	34.46	0.54	72							
971	3.78	34.47	0.56	69							
1018	3.69	34.47	0.68	67							

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

~~70.90~~  
77.90 STRANGER; November 5, 1958; 0650 GCT; 33°44'N, 123°38'W; sounding, 2240 fm; wind, 010°, force 6; weather, clear; sea, very rough; wire angle, 19°.

0	17.75	33.15	5.48	398	0	17.75	33.15	5.48	23.94	398	0.00
11	17.76	33.17	5.62	396	10	17.76	33.17	5.61	23.95	397	0.04
38	17.37	33.18	5.48	387	20	17.76	33.18	5.62	23.96	396	0.08
69	12.98	33.04	6.04	306	30	17.58	33.18	5.56	24.01	391	0.12
83	12.52	33.04	5.83	297	50	15.05	33.09	5.89	24.51	343	0.19
91	12.18	33.08	5.59	288	75	12.76	33.04	5.99	24.94	302	0.27
115	10.22	33.35	4.75	235	100	11.60	33.16	5.30	25.25	273	0.35
143	8.98	33.57	4.02	199	150	8.87	33.62	4.67	26.08	194	0.46
167	8.70	33.78	3.41	180	200	8.31	33.93	2.80	26.41	163	0.55
187	8.44	33.90	3.04	167	250	7.61	34.02	2.14	26.58	147	0.63
219	8.10	33.96	2.44	157	300	7.28	34.13	1.57	26.72	133	0.70
260	7.48	34.04	2.05	143	400	6.19	34.15	1.20	26.88	118	0.84
298	7.30	34.13	1.58	134	500	5.53	34.20	0.69	27.00	106	0.95
350	6.74	34.13	1.32	126	600	5.03	34.27	0.63	27.11	96	1.06
394	6.21	34.14	1.21	119	700	4.56	34.33	0.49	27.22	86	1.16
447	6.00	34.19	0.88	113	800	4.23	34.38	0.50	27.30	78	1.25
495	5.58	34.20	0.81	107	1000	3.75	34.48	0.68	27.43	66	1.40
565	5.22	34.25	0.66	99							
643	4.79	34.31a)	0.57	89							
762	4.34	34.36a)	0.40	81							
861	4.10	34.43a)	0.61	74							
981	3.80	34.47a)	0.66	68							
1027	3.68	34.52a)	0.75	63							

80.51 STRANGER; October 27, 1958; 2235 GCT; 34°26.5'N, 120°32.5'W; sounding, 57 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 05°.

3	17.84	33.43	5.50	379	0	(17.84)	(33.43)	(5.50)	(24.13)	(379)	(0.00)
12	16.85	33.40	5.59	359	10	17.66	33.43	5.51	24.17	375	0.04
34	14.97	33.35	5.69	323	20	15.23	33.36	5.78	24.67	328	0.07
50	13.40	33.37	5.24	290	30	15.08	33.35	5.79	24.71	324	0.10
74	12.29	33.44	4.54	264	50	13.40	33.37	5.24	25.07	290	0.17
					75	(12.27)	(33.44)	(4.53)	(25.36)	(263)	(0.24)

80.55 STRANGER; October 27, 1958; 2005 GCT; 34°22'N, 120°46'W; sounding, 320 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 20°.

4	17.58	33.41	5.41	375	0	17.6	(33.41)	(5.41)	(24.16)	(376)	(0.00)
13	16.60	33.41	5.64	353	10	16.70	33.41	5.63	24.38	355	0.04
32	13.54	33.40	5.15	290	20	16.40	33.41	5.63	24.46	348	0.07
45	12.49	33.42	4.69	269	30	14.85	33.40	5.41	25.00	296	0.10
54	12.05	33.44	4.42	260	50	12.27	33.43	4.55	25.34	264	0.16
63	11.67	33.46	4.30	252	75	11.37	33.53	4.16	25.59	241	0.22-69
72	11.44	33.53	4.18	242	100	10.50	33.58	3.79	25.78	223	0.28
88	11.01	33.53	4.08	235	150	9.94	33.68	3.30	25.95	206	0.39
101	10.50	33.58	3.79	222	200	9.22	33.88	2.83	26.23	180	0.49
113	10.51	33.59	3.72	222	250	8.61	34.07	2.15	26.47	157	0.38
134	10.30	33.66	3.38	213	300	7.92	34.14	1.45	26.64	141	0.65
158	9.76	33.69	3.27	202	400	6.82	34.21	0.78	26.85	121	0.79
191	9.34	33.84	2.94	185	500	6.01	34.27	0.52	27.00	107	0.91
238	8.76	34.04	2.35	161							
313	7.72	34.16	1.25	137							
407	6.78	34.22	0.76	120							
543	5.62	34.30	0.42	100							

a) Salinity bottle numbers from 643 to 1027 meters, inclusive, were listed out of order on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in the order listed.

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; October 27, 1958; 1645 GCT; 34°09.5'N, 121°07'W; sounding, 1040 fm; wind, 360°, force 6; weather, clear; sea, very rough; wire angle, 11°.

80.60

0	17.57	33.22	5.26	389	0	17.57	33.22	5.26	24.03	389	0.00
11	17.56	33.26	5.37	385	10	17.56	33.25	5.36	24.06	386	0.04
30	17.13	33.24	5.44	377	20	17.56	33.26	5.36	24.07	385	0.07
44	16.86	33.35	5.58	363	30	17.13	33.24	5.44	24.16	377	0.12
53	14.31	33.12	5.80	326	50	16.36	33.31	5.64	24.39	355	0.19
62	13.32	33.04	5.93	313	75	12.01	33.09	5.34	25.12	285	0.27
71	12.29	33.06	5.53	292	100	10.52	33.38	4.63	25.63	237	0.34
89	11.22	33.27	4.76	258	150	8.98	33.68	4.00	26.10	192	0.44
103	10.28	33.40	4.59	232	200	8.11	33.93	3.17	26.44	160	0.53
116	9.72	33.44	4.50	220	250	7.63	34.00	2.40	26.57	148	0.61
138	9.26	33.57	4.32	204	300	7.23	34.03	1.93	26.65	140	0.69
165	8.62	33.82	3.51	176	400	6.39	34.14	1.09	26.84	122	0.82
199	8.14	33.93	3.19	160	500	5.67	34.20	0.69	26.98	108	0.94
247	7.66	34.00	2.42	149							
323	7.00	34.05	1.72	136							
420	6.23	34.16	0.94	118							
552	5.18	34.22	0.52	101							

STRANGER; October 27, 1958; 1118 GCT; 33°48'N, 121°50.5'W; sounding, 1920 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 08°.

80.70

3	17.94	33.26	5.32	394	0	(17.94)	(33.26)	(5.32)	(23.98)	(394)	(0.00)
13	17.92	33.24	5.52	394	10	17.93	33.24	5.48	23.98	394	0.04
32	17.87	33.24	5.32	393	20	17.89	33.24	5.42	23.98	394	0.08
41	17.83	33.30	5.34	389	30	17.88	33.24	5.35	23.98	394	0.12
51	16.46	33.31	5.72	358	50	17.00	33.31	5.60	24.24	369	0.19
60	13.84	33.18	-	312	75	12.98	33.37	5.77	25.08	289	0.28
69	13.58	33.26	5.96	301	100	12.25	33.44	5.25	25.36	263	0.35
83	12.90	33.33	5.57	283	150	9.00	33.70	3.92	26.12	190	0.46
96	12.50	33.44	5.33	268	200	8.32	33.91	3.51	26.40	164	0.55
110	11.24	33.42	5.06	247	250	7.53	33.99	2.61	26.57	148	0.63
132	9.62	33.50	4.41	215	300	6.91	34.03	2.08	26.69	136	0.70
159	8.79	33.78	3.78	181	400	6.00	34.11	1.16	26.87	119	0.84
191	8.42	33.89	3.61	167	500	5.47	34.20	0.74	27.02	105	0.96
236	7.73	33.98	2.79	151							
311	6.78	34.04	1.96	134							
405	5.97	34.11	1.12	118							
529	5.34	34.22	0.65	103							

STRANGER; October 27, 1958; 0559 GCT; 33°29'N, 122°32'W; sounding, 2100 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°.

80.80

0	17.75	33.31	5.23	386	0	17.75	33.31	5.23	24.06	386	0.00
12	17.76	33.27	5.12	389	10	17.76	33.28	5.10	24.04	388	0.04
31	17.68	33.30	5.32	385	20	17.72	33.28	5.22	24.05	387	0.08
40	17.71	33.30	5.28	386	30	17.69	33.30	5.30	24.06	386	0.12
49	17.68	33.31	5.18	385	50	17.67	33.31	5.18	24.07	385	0.19
59	15.56	33.41	5.64	331	75	14.30	33.48	5.53	24.97	300	0.28
68	14.88	33.46	5.71	313	100	12.80	33.41	5.11	25.22	276	0.35
82	14.01	33.48	5.46	294	150	9.60	33.58	4.48	25.92	209	0.47
96	13.08	33.42	5.19	280	200	8.63	33.90	3.15	26.33	170	0.57
110	11.92	33.40	4.88	260	250	8.17	34.06	2.42	26.53	151	0.65
132	10.44	33.50	4.53	227	300	7.83	34.15	1.60	26.65	140	0.73
159	9.22	33.62	4.45	199	400	7.16	34.29	0.79	26.86	120	0.86
191	8.73	33.86	3.33	174	500	6.21	34.33	0.50	27.02	105	0.98
238	8.24	34.04	2.53	153							
313	7.77	34.16	1.42	138							
408	7.08	34.30	0.74	119							
532	5.84	34.33	0.45	101							

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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	

80.90

STRANGER; October 27, 1958; 0011 GCT; 33°05'N, 123°20'W; sounding, 2300 fm; wind, 050°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	18.48	33.34	5.05	401	0	18.48	33.34	5.05	23.90	401	0.00
11	18.36	33.33	5.07	399	10	18.37	33.33	5.06	23.93	399	0.04
30	18.34	33.35	5.06	397	20	18.35	33.34	5.06	23.94	398	0.08
40	18.41	33.34	5.03	399	30	18.34	33.35	5.06	23.95	397	0.12
49	18.38	33.35	5.36	398	50	18.35	33.34	5.38	23.94	398	0.20
59	15.45	33.37	5.70	331	75	14.68	33.38	5.69	24.82	314	0.29
68	14.88	33.35	5.71	321	100	13.54	33.49	5.40	25.13	284	0.36
82	14.48	33.46	5.66	305	150	9.73	33.55	3.99	25.88	213	0.49
96	13.78	33.49	5.42	288	200	8.73	34.01	2.78	26.41	163	0.58
110	12.84	33.48	5.33	271	250	8.00	34.05	2.22	26.55	150	0.66
133	10.36	33.48	4.49	227	300	7.32	34.11	1.76	26.70	136	0.74
160	9.45	33.61	3.70	203	400	6.53	34.20	0.88	26.87	119	0.87
192	8.85	34.00	2.90	165	500	5.90	34.28	0.54	27.02	105	0.99
239	8.15	34.03	2.33	153							
313	7.16	34.13	1.64	132							
407	6.48	34.21	0.84	117							
530	5.68	34.31	0.47	100							

82.47

STRANGER; October 25, 1958; 1829 GCT; 34°15'N, 119°58'W; sounding, 311 fm; wind, 260°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°.

0	18.61	33.50	5.50	392	0	18.61	33.50	5.50	24.00	392	0.00
11	18.60	33.51	5.42	392	10	18.60	33.51	5.43	24.00	392	0.04
31	15.53	33.33	5.69	335	20	18.17	33.48	5.47	24.09	383	0.08
40	14.33	33.31	5.68	312	30	15.72	33.34	5.68	24.56	339	0.11
49	13.82	33.29	5.50	304	50	13.78	33.29	5.49	24.94	303	0.18
59	13.07	33.43	5.07	279	75	11.73	33.48	4.26	25.48	251	0.25
68	11.84	33.47	4.32	254	100	11.17	33.55	3.95	25.64	236	0.31
82	11.60	33.50	4.17	247	150	10.13	33.77	3.01	25.99	203	0.42
96	11.26	33.54	4.00	239	200	9.57	33.92	2.38	26.20	183	0.52
110	10.90	33.60	3.78	228	250	8.98	34.06	1.60	26.42	162	0.61
132	10.38	33.71	3.38	211	300	8.40	34.12	1.27	26.55	150	0.69
160	10.02	33.80	2.89	199	400	7.49	34.19	0.68	26.74	132	0.83
192	9.64	33.89	2.49	186	500	6.72	34.24	0.27	26.88	118	0.96
238	9.07	34.05	1.69	165							
312	8.28	34.13	1.20	148							
407	7.40	34.20	0.63	130							
531	6.49	34.25	0.18	114							

83.40

STRANGER; October 24, 1958; 1515 GCT; 34°13'N, 119°22'W; sounding, 12 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 00°.

0	19.61	33.56	5.28	412	0	19.61	33.56	5.28	23.79	412	0.00
12	19.60	33.51	5.32	416	10	19.60	33.52	5.31	23.76	415	0.04

83.43

STRANGER; October 24, 1958; 1644 GCT; 34°08'N, 119°34'W; sounding, 128 fm; wind, 260°, force 3; weather, cloudy; sea, moderate; wire angle, 02°.

0	18.43	33.53	5.78	386	0	18.43	33.53	5.78	24.06	386	0.00
11	18.15	33.48	5.42	383	10	18.16	33.48	5.42	24.09	383	0.04
31	17.34	33.46	5.64	366	20	18.05	33.47	5.44	24.11	381	0.08
49	16.44	33.42	5.53	349	30	17.80	33.47	5.49	24.17	376	0.11
72	12.48	33.44	5.20	267	50	16.40	33.42	5.52	24.46	348	0.19
96	11.38	33.50	3.62	243	75	12.27	33.45	5.07	25.35	263	0.26
119	10.44	33.61	4.12	219	100	11.26	33.52	3.65	25.60	239	0.33
157	9.82	33.82	2.82	194	150	10.20	33.81	2.90	26.01	201	0.44
193	9.26	33.99	2.14	173	200	(9.19)	(34.05)	(2.00)	(26.35)	(168)	(0.53)

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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STRANGER; October 25, 1958; 2215 GCT; 33°52'N, 120°07.5'W; sounding, 80 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 02°.

83.51

0	19.46	33.55	5.37	409	0	19.46	33.55	5.37	23.82	409	0.00
12	19.27	33.52	5.43	407	10	19.32	33.53	5.43	23.84	407	0.04
32	15.09	33.34	5.85	326	20	19.00	33.49	5.50	23.89	402	0.08
50	13.40	33.35	5.18	291	30	15.60	33.35	5.85	24.59	336	0.12
71	11.23	33.52	4.13	239	50	13.40	33.35	5.18	25.06	291	0.18
93	11.05	33.55	4.02	234	75	11.19	33.53	4.13	25.62	238	0.25
					100	(11.02)	(33.56)	(4.02)	(25.67)	(233)	(0.31)

STRANGER; October 26, 1958; 0052 GCT; 33°44'N, 120°24.5'W; sounding, 500 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°.

83.55

3	18.82	33.49	5.48	398	0	(18.82)	(33.49)	(5.48)	(23.93)	(398)	(0.00)
13	18.46	33.52	5.58	388	10	18.58	33.51	5.53	24.01	391	0.04
32	16.87	33.46	5.77	356	20	17.75	33.49	5.69	24.20	373	0.08
41	15.28	33.40	5.75	325	30	16.99	33.47	5.76	24.36	358	0.11
51	14.64	33.36	5.55	315	50	14.68	33.36	5.56	24.78	316	0.18
60	13.97	33.37	5.47	301	75	12.19	33.41	4.88	25.34	264	0.25
70	12.63	33.39	5.12	274	100	10.40	33.59	3.85	25.81	220	0.32
83	11.50	33.44	4.47	250	150	9.60	33.83	2.84	26.11	190	0.42
97	10.56	33.56	3.98	225	200	9.15	34.05	2.22	26.38	166	0.51
111	10.06	33.68	3.46	208	250	8.72	34.16	1.81	26.52	152	0.59
135	9.80	33.78	3.08	196	300	8.02	34.21	1.41	26.68	138	0.67
161	9.44	33.88	2.66	184	400	7.18	34.23	1.01	26.81	125	0.80
193	9.19	34.03	2.24	169	500	6.43	34.28	0.66	26.94	112	0.93
238	8.84	34.14	1.92	155							
311	7.88	34.22	1.33	135							
404	7.16	34.23	1.00	124							
527	6.22	34.29	0.57	108							

STRANGER; October 26, 1958; 0330 GCT; 33°35'N, 120°42.5'W; sounding, 680 fm; wind, 190°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°.

83.60

0	17.72	33.33	5.42	384	0	17.72	33.33	5.42	24.08	384	0.00
11	17.46	33.35	5.40	377	10	17.47	33.35	5.40	24.15	377	0.04
30	16.83	33.35	5.66	363	20	17.11	33.35	5.54	24.25	368	0.08
40	16.56	33.37	5.67	355	30	16.83	33.35	5.66	24.31	363	0.11
49	15.45	33.28	5.86	338	50	14.96	33.26	5.87	24.66	329	0.18
59	14.16	33.25	5.86	313	75	12.88	33.40	5.26	25.20	278	0.26
69	13.62	33.35	5.66	295	100	10.41	33.58	3.91	25.79	221	0.32
82	11.57	33.45	4.53	250	150	9.50	33.83	2.93	26.14	188	0.42
96	10.56	33.53	4.03	227	200	9.19	33.94	2.58	26.28	175	0.52
110	10.16	33.66	3.58	211	250	8.60	34.13	1.95	26.52	152	0.60
132	9.82	33.78	3.06	197	300	8.08	34.21	1.47	26.68	138	0.68
160	9.34	33.86	2.86	183	400	6.95	34.23	1.04	26.84	122	0.81
192	9.24	33.92	2.66	177	500	6.40	34.29	0.60	26.95	110	0.93
238	8.69	34.11	2.06	155							
312	7.98	34.22	1.36	136							
406	6.86	34.23	1.02	121							
531	6.28	34.33	0.48	106							

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

83.70 STRANGER; October 26, 1958; 0829 GCT; 33°13'N, 121°25.5'W; sounding, 2000 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 01°.

0	17.84	33.31	5.44	388	0	17.84	33.31	5.44	24.04	388	0.00
11	17.83	33.30	5.51	388	10	17.83	33.30	5.51	24.04	388	0.04
31	17.68	33.40	5.51	378	20	17.76	33.33	5.51	24.07	385	0.08
40	17.72	33.44	5.45	376	30	17.68	33.40	5.46	24.14	379	0.12
50	15.93	33.35	5.88	342	50	15.93	33.35	5.88	24.52	342	0.19
59	14.34	33.33	6.03	311	75	13.80	33.47	5.73	25.07	290	0.27
69	13.82	33.40	5.73	290	100	11.40	33.49	5.07	25.54	245	0.34
82	13.22	33.49	5.78	278	150	9.12	33.73	4.25	26.12	190	0.44
97	11.72	33.48	5.12	251	200	8.40	33.96	2.97	26.42	162	0.53
110	10.64	33.51	4.93	230	250	7.82	34.09	2.25	26.62	143	0.61
133	9.62	33.60	4.52	207	300	7.19	34.16	1.71	26.75	130	0.68
161	8.88	33.80	4.04	181	400	6.41	34.20	0.96	26.89	117	0.81
193	8.50	33.93	3.11	165	500	5.89	34.25	0.65	27.00	107	0.93
240	7.92	34.07	2.32	147							
315	6.99	34.18	1.56	126							
410	6.36	34.20	0.91	116							
533	5.68	34.29	0.57	102							

83.80 STRANGER; October 26, 1958; 1225 GCT; 32°52'N, 122°05'W; sounding, 2200 fm; wind, 130°, force 2; weather, partly cloudy; sea, smooth; wire angle, 00°.

0	18.11	33.40	5.41	388	0	18.11	33.40	5.41	24.04	388	0.00
12	18.09	33.33	5.36	392	10	18.10	33.33	5.37	24.00	392	0.04
31	17.87	33.40	5.40	383	20	18.00	33.35	5.37	24.03	389	0.08
55	14.52	33.26	5.89	320	30	17.88	33.40	5.39	24.09	383	0.12
64	12.78	33.22	5.59	289	50	15.80	33.31	5.77	24.51	343	0.19
74	12.05	33.35	4.97	266	75	12.00	33.37	4.88	25.35	264	0.26
82	11.46	33.48	4.41	247	100	10.06	33.51	4.64	25.80	220	0.33
96	10.30	33.49	4.71	226	150	8.92	33.87	3.20	26.26	177	0.43
110	9.65	33.58	4.33	209	200	8.25	34.02	2.48	26.49	155	0.51
128	9.24	33.68	3.96	195	250	7.68	34.08	2.43	26.64	141	0.59
146	8.98	33.85	3.33	178	300	7.25	34.15	1.57	26.74	131	0.66
168	8.76	33.95	2.60	167	400	6.89	34.29	0.72	26.90	117	0.79
190	8.39	34.01	2.47	158	500	6.21	34.36	0.57	27.05	102	0.90
237	7.72	34.06	2.44	145							
311	7.18	34.17	1.36	129							
407	6.86	34.31	0.69	115							
531	5.92	34.37	0.54	98							

83.90 STRANGER; October 26, 1958; 1850 GCT; 32°30'N, 122°47'W; sounding, 2000 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 00°.

0	17.68	33.46	5.30	374	0	17.68	33.46	5.30	24.19	374	0.00
12	17.67	33.40	5.30	378	10	17.67	33.41	5.30	24.15	377	0.04
31	17.64	33.39	5.26	378	20	17.65	33.40	5.28	24.14	378	0.08
40	17.65	33.42	5.33	376	30	17.64	33.40	5.27	24.14	378	0.11
50	16.82	33.33	5.50	364	50	16.82	33.33	5.50	24.30	364	0.19
59	14.32	33.21	5.73	319	75	13.23	33.31	5.34	25.07	290	0.27
69	13.57	33.27	5.48	300	100	11.11	33.49	4.15	25.59	240	0.34
82	12.28	33.35	5.20	271	150	8.98	33.73	3.76	26.14	188	0.44
96	11.37	33.48	4.78	245	200	8.35	33.98	2.39	26.44	160	0.53
110	10.42	33.49	4.36	228	250	7.80	34.04	1.89	26.57	148	0.61
132	9.31	33.64	4.15	199	300	7.53	34.11	1.52	26.66	139	0.68
158	8.86	33.79	3.56	181	400	6.54	34.22	0.81	26.89	117	0.82
191	8.50	33.96	2.54	163	500	5.80	34.18	0.52	27.03	104	0.93
236	7.85	34.02	2.00	150							
310	7.50	34.13	1.47	137							
405	6.52	34.23	0.79	116							
528	5.62	34.29	0.46	101							



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

STRANGER; October 24, 1958; 0937 GCT; 33°50'N, 118°37.5'W; sounding, 240 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 03°.

87.35

0	19.52	33.48	5.31	415	0	19.52	33.48	5.31	23.75	415	0.00
12	18.98	33.37	5.55	411	10	19.04	33.38	5.53	23.80	411	0.04
31	16.96	33.40	5.59	362	20	18.30	33.38	5.57	23.98	394	0.08
51	14.00	33.34	5.55	304	30	17.10	33.40	5.59	24.28	365	0.12
74	12.76	33.42	4.89	274	50	14.08	33.34	5.56	24.91	305	0.19
97	12.02	33.52	4.31	253	75	12.74	33.42	4.86	25.25	273	0.26
120	11.22	33.55	4.15	237	100	11.93	33.53	4.27	25.48	251	0.33
157	10.42	33.72	3.27	201	150	10.58	33.68	3.43	25.84	217	0.44
193	9.76	33.88	2.64	188	200	9.67	33.90	2.56	26.17	186	0.55
239	9.30	34.04	2.19	169	250	9.20	34.08	2.10	26.38	165	0.64
285	8.91	34.18	1.75	153	300	8.75	34.20	1.61	26.56	149	0.72
384	7.84	34.28	0.97	130							

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99

STRANGER; October 24, 1958; 0645 GCT; 33°40'N, 118°58.5'W; sounding, 400 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 03°.

87.40

0	20.32	33.63	5.19	425	0	20.32	33.63	5.19	23.66	425	0.00
11	20.31	33.67	5.08	421	10	20.31	33.66	5.09	23.68	422	0.04
31	16.91	33.37	6.02	363	20	20.23	33.67	5.09	23.70	420	0.08
40	16.15	33.37	5.92	346	30	17.02	33.37	6.01	24.28	365	0.12
50	15.06	33.30	5.83	328	50	15.06	33.30	5.83	24.67	328	0.19
59	14.04	33.37	5.47	302	75	12.10	33.42	4.87	25.37	262	0.27
69	13.14	33.40	5.18	282	100	11.28	33.65	3.86	25.69	231	0.33
82	11.80	33.44	4.74	255	150	9.73	33.80	3.25	26.08	194	0.44
96	11.46	33.63	3.94	235	200	8.83	33.98	2.64	26.36	167	0.53
110	10.62	33.68	3.76	217	250	8.39	34.16	2.09	26.58	147	0.61
132	10.14	33.80	3.26	200	300	8.00	34.15	1.70	26.63	142	0.68
159	9.40	33.80	3.24	189	400	7.00	34.25	0.96	26.85	121	0.82
192	8.90	33.94	2.76	171	500	6.54	34.32	0.62	26.97	110	0.94
238	8.44	34.16	2.21	148							
313	7.90	34.15	1.60	140							
407	6.96	34.26	0.93	120							
531	6.42	34.33	0.56	108							

26

STRANGER; October 24, 1958; 0307, 0341 GCT; 33°30'N, 119°19'W; sounding, 850 fm; wind, 310°, force 1; weather, cloudy; sea, moderate; wire angle, 04, 02°.

87.45

2	17.40	33.46	5.61	367	0	(17.40)	(33.46)	(5.61)	(24.26)	(367)	(0.00)
12	17.19	33.43	5.48	365	10	17.22	33.43	5.50	24.28	365	0.04
31	15.23	33.40	5.39	324	20	16.80	33.41	5.43	24.36	357	0.07
					30	15.33	33.40	5.39	24.70	325	0.11
51	12.38	33.40	4.74	269	50	12.49	33.40	4.81	25.28	270	0.17
60	11.50	33.42	4.45	251	75	10.88	33.55	4.07	25.69	231	0.23
69	11.14	33.53	4.21	237	100	10.15	33.59	3.78	25.85	216	0.29
83	10.55	33.57	3.92	224	150	9.34	33.87	2.66	26.20	182	0.39
96	10.28	33.58	3.86	219	200	8.86	34.00	2.30	26.38	165	0.48
110	9.82	33.65	3.48	206	250	8.40	34.16	1.43	26.58	147	0.55
132	9.52	33.76	3.11	193	300	8.00	34.24	1.09	26.70	135	0.63
159	9.24	33.93	2.54	177	400	7.30	34.27	0.69	26.83	123	0.76
191	8.94	33.98	2.38	168	500	6.69	34.31	0.47	26.94	113	0.88
237	8.50	34.14	1.58	150							
311	7.92	34.25	1.04	133							
406	7.23	34.27	0.68	123							
530	6.46	34.32	0.41	109							

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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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m	

87.55

STRANGER; October 23, 1958; 2120 GCT; 33°09'N, 120°03'W; sounding, 700 fm; wind, 310°, force 2; weather, overcast; sea, very rough; wire angle, 03°.

4	18.55	33.51	5.22	390	0	18.6	(33.51)	(5.22)	(24.00)	(392)	(0.00)
13	18.45	33.51	5.52	388	10	18.49	33.51	5.40	24.04	388	0.04
32	15.33	33.40	5.66	326	20	18.23	33.51	5.59	24.10	382	0.08
41	13.60	33.37	5.38	294	30	16.70	33.45	5.66	24.42	352	0.11
51	12.68	33.41	5.06	273	50	12.78	33.40	5.09	25.22	276	0.18
60	11.80	33.40	4.59	258	75	10.65	33.53	4.08	25.70	230	0.24
69	11.04	33.49	4.27	238	100	9.51	33.62	4.05	25.98	204	0.30
82	10.27	33.57	3.95	220	150	8.74	33.87	3.40	26.29	174	0.39
95	9.64	33.60	4.12	207	200	8.30	34.02	2.17	26.48	156	0.47
109	9.33	33.72	3.83	193	250	7.94	34.12	1.64	26.62	143	0.55
131	8.91	33.80	3.75	181	300	7.76	34.16	1.41	26.68	138	0.62
159	8.70	33.89	3.10	171	400	7.09	34.23	0.78	26.82	124	0.76
190	8.40	34.00	2.31	159	500	6.41	34.31	0.51	26.98	109	0.88
237	7.96	34.11	1.71	144							
311	7.71	34.18	1.37	135							
405	7.02	34.24	0.73	122							
529	6.20	34.34	0.47	104							

87.60

STRANGER; October 23, 1958; 1820 GCT; 33°00'N, 120°21'W; sounding, 500 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 06°.

0	18.09	33.48	5.54	382	0	18.09	33.48	5.54	24.10	382	0.00
11	18.08	33.46	5.63	383	10	18.08	33.48	5.61	24.10	382	0.04
30	18.01	33.48	5.96	380	20	18.06	33.47	5.81	24.11	381	0.08
40	17.31	33.46	5.72	365	30	18.01	33.48	5.96	24.12	380	0.11
49	16.37	33.40	5.60	348	50	16.29	33.40	5.60	24.49	345	0.19
58	14.54	33.37	5.80	312	75	13.74	33.45	5.70	25.07	290	0.27
67	14.28	33.40	5.80	305	100	12.03	33.48	5.32	25.43	256	0.34
81	13.18	33.48	5.53	277	150	9.38	33.70	3.88	26.06	196	0.45
94	12.42	33.48	5.40	264	200	8.49	34.01	2.30	26.44	160	0.54
108	11.14	33.48	5.13	240	250	7.89	34.13	1.93	26.63	142	0.62
129	9.72	33.60	4.35	208	300	7.39	34.17	1.55	26.74	132	0.69
157	9.26	33.73	3.69	192	400	6.76	34.27	0.96	26.90	116	0.82
188	8.66	33.96	2.43	166	500	6.09	34.33	0.68	27.03	104	0.93
233	8.02	34.11	2.06	146							
307	7.34	34.18	1.49	131							
400	6.76	34.27	0.96	116							
524	5.96	34.34	0.60	101							

87.70

STRANGER; October 23, 1958; 0843 GCT; 32°36'N, 121°00'W; sounding, 2150 fm; wind, 310°, force 1; weather, overcast; sea, moderate; wire angle, 00°.

3	18.03	33.42	5.36	384	0	(18.03)	(33.42)	(5.36)	(24.08)	(384)	(0.00)
12	18.05	33.42	5.43	385	10	18.05	33.42	5.39	24.07	385	0.04
32	17.97	33.50	5.42	378	20	18.02	33.45	5.45	24.10	382	0.08
41	18.02	33.48	5.32	380	30	17.99	33.46	5.44	24.14	378	0.11
51	15.52	33.33	5.92	335	50	15.60	33.33	5.91	24.58	337	0.19
60	15.22	33.35	5.91	328	75	14.31	33.37	5.79	24.88	308	0.27
70	14.72	33.36	5.81	316	100	11.72	33.48	5.03	25.48	252	0.34
83	14.11	33.48	5.62	296	150	9.26	33.71	4.00	26.09	193	0.45
97	11.98	33.48a)	5.04	255	200	8.40	33.96	2.52	26.42	162	0.54
111	11.04	33.48	4.92	239	250	7.60	34.06	2.03	26.61	144	0.62
134	9.86	33.57	4.48	213	300	7.04	34.11	1.66	26.74	132	0.69
162	8.89	33.82	3.59	179	400	6.13	34.20	0.89	26.92	114	0.82
194	8.52	33.94	2.61	165	500	5.60	34.26	0.41	27.05	102	0.93
241	7.74	34.04	2.10	146							
317	6.88	34.13	1.52	128							
410	6.02	34.21	0.79	112							
532	5.54	34.27	0.37	101							

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

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

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STRANGER; October 23, 1958; 0348 GCT; 32°18'N, 121°42'W; sounding, 2100 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 02°.

87.80

0	18.20	33.51	5.38	382	0	18.20	33.51	5.38	24.10	382	0.00
11	18.18	33.51	5.40	382	10	18.19	33.51	5.39	24.10	382	0.04
31	18.15	33.55	5.35	378	20	18.18	33.53	5.39	24.12	380	0.08
40	18.24	33.58	5.30	378	30	18.18	33.54	5.38	24.14	379	0.11
50	15.09	33.56	5.15	310	50	15.09	33.56	5.15	24.86	310	0.18
59	12.39	33.53	4.17	259	75	10.89	33.62	3.50	25.73	227	0.25
68	11.44	33.58	3.65	239	100	9.37	33.79	2.99	26.14	189	0.30
82	10.27	33.68	3.32	212	150	8.69	34.00	2.32	26.40	164	0.39
95	9.53	33.77	3.05	193	200	8.19	34.09	1.82	26.55	149	0.47
109	9.16	33.83	2.89	183	250	7.40	34.14	1.75	26.71	134	0.54
131	8.82	33.93	2.64	171	300	7.02	34.19	1.26	26.80	126	0.61
159	8.63	34.02	2.17	161	400	6.33	34.30	0.57	26.98	109	0.73
191	8.32	34.08	1.82	152	500	5.65	34.33	0.42	27.09	98	0.84
238	7.47	34.13	1.77	137							
312	6.98	34.20	1.10	124							
409	6.26	34.31	0.52	107							
533	5.44	34.33	0.40	96							

STRANGER; October 22, 1958; 2241 GCT; 32°00'N, 122°23'W; sounding, 2780 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 05°.

87.90

0	17.90	33.28	5.30	392	0	17.90	33.28	5.30	24.01	392	0.00
11	17.84	33.24	5.48	393	10	17.85	33.25	5.47	23.99	393	0.04
31	17.77	33.30	5.44	387	20	17.80	33.26	5.47	24.01	391	0.08
40	17.79	33.30	5.30	388	30	17.78	33.29	5.46	24.04	388	0.12
49	15.42	33.38	5.86	330	50	15.38	33.38	5.85	24.66	329	0.19
58	15.00	33.44	5.79	317	75	14.49	33.52	5.68	24.97	300	0.27
67	14.75	33.48	5.62	309	100	11.88	33.48	5.02	25.45	254	0.34
81	14.25	33.55	5.70	293	150	9.41	33.67	3.92	26.03	198	0.45
94	12.00	33.46	5.11	257	200	8.57	33.91	3.00	26.35	168	0.55
107	11.41	33.52	4.91	243	250	7.95	34.05	2.25	26.56	148	0.63
129	10.15	33.55	4.58	219	300	7.30	34.09	1.86	26.68	138	0.70
156	9.24	33.71	3.78	193	400	6.34	34.22	0.89	26.92	115	0.83
187	8.72	33.86	3.24	174	500	5.80	34.32	0.50	27.06	101	0.94
232	8.15	34.04	2.44	152							
306	7.22	34.09	1.79	136							
400	6.34	34.22	0.89	115							
523	5.72	34.34	0.45	98							

STRANGER; October 21, 1958; 0515 GCT; 33°28.5'N, 117°46.5'W; sounding, 400 fm; wind, 210°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°.

90.28

0	20.68	33.51	5.43	443	0	20.68	33.51	5.43	23.46	443	0.00
11	20.67	33.48	5.20	445	10	20.67	33.48	5.19	23.44	444	0.04
31	16.02	33.27	5.85	351	20	20.08	33.43	5.30	23.56	434	0.09
50	14.16	33.29	5.74	311	30	16.17	33.27	5.83	24.40	354	0.13
74	13.04	33.49	4.60	274	50	14.16	33.29	5.74	24.85	311	0.19
97	12.35	33.68	3.10	248	75	13.03	33.49	4.59	25.24	274	0.27
121	11.56	33.78	2.83	226	100	12.25	33.70	3.06	25.55	245	0.33
157	10.75	33.86	2.79	206	150	10.87	33.85	2.80	25.92	208	0.45
193	10.10	33.97	2.21a)	187	200	9.98	33.98	2.21	26.18	185	0.55
239	9.21	34.05	2.12	168	250	9.07	34.06	2.11	26.39	165	0.64
285	8.54	34.09	1.75	154	300	8.38	34.11	1.62	26.54	150	0.72
382	7.68	34.23	0.99	132							

a) Alternate value, 2.08 ml/L, not used in interpolation.

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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 <sup>3</sup> /g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm <sup>3</sup> /g	dyn. m

90.30 STRANGER; October 21, 1958; 0742, 0815 GCT; 33°24.5'N, 117°55'W; sounding, 350 fm; wind, 210°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°, 01°.

0	20.76	33.58a)	5.38	440	0	20.76	33.58	5.38	23.50	440	0.00
11	20.74	33.60	5.40	438	10	20.74	33.60	5.40	23.52	438	0.04
30	19.51	33.40	5.63	422	20	20.21	33.51	5.52	23.60	430	0.09
39	16.46	33.30	5.99	358	30	19.51	33.40	5.63	23.69	422	0.13
49	15.01	33.29	6.28	328	50	14.92	33.29	6.28	24.70	326	0.20
58	14.04	33.32	6.08	306	75	13.40	33.55	4.82	25.21	277	0.28
					100	11.84	33.64	3.93	25.58	242	0.35
67	14.01	33.51	5.23	292	150	10.86	33.86	2.93	25.92	208	0.46
81	12.68	33.57	4.49	262	200	9.67	33.98	2.80	26.23	180	0.56
95	11.98	33.61	4.05	246	250	8.72	34.06	2.35	26.44	160	0.65
108	11.64	33.69	3.66	234	300	8.36	34.18	1.94	26.60	145	0.72
131	11.30	33.78	2.90	221	400	7.30	34.31	1.06	26.86	120	0.86
158	10.70	33.89	2.96	203	500	6.39	34.35	0.57	27.01	106	0.98
190	9.95	33.96	2.89	186							
236	8.86	34.04	2.48	163							
311	8.24	34.20	1.85	142							
405	7.23	34.32	0.98	119							
530	6.10	34.36	0.44	101							

90.37 STRANGER; October 21, 1958; 1200, 1233 GCT; 33°10.5'N, 118°23.5'W; sounding, 780 fm; wind, 180°, force 3; weather, partly cloudy; sea, moderate; wire angle, 02°, 02°.

0	21.23	33.59	4.86	451	0	21.23	33.59	4.86	23.38	451	0.00
11	21.22	33.60	5.05	450	10	21.22	33.60	5.00	23.38	451	0.04
31	17.62	33.39a)	5.68	377	20	21.20	33.60	5.10	23.39	450	0.09
40	15.41	33.32	5.70	334	30	18.10	33.42	5.64	24.05	387	0.13
					50	14.60	33.34	5.52	24.80	316	0.20
68	13.26	33.40	4.93	285	75	12.62	33.40	4.81	25.25	273	0.28
82	12.44	33.42	4.60	268	100	11.17	33.54	4.17	25.63	237	0.34
96	11.28	33.52	4.25	240	150	9.85	33.83	2.87	26.08	194	0.45
109	10.87	33.57	3.85	230	200	8.85	34.00	2.40	26.38	166	0.54
132	10.18	33.69	3.27	209	250	8.18	34.12	1.80	26.58	147	0.62
158	9.72	33.89	2.73	187	300	7.88	34.14	1.53	26.64	141	0.70
189	9.01	33.96	2.48	172	400	7.23	34.24	0.95	26.82	124	0.84
235	8.33	34.11	1.95	150	500	6.60	34.30	0.55	26.94	112	0.96
309	7.84	34.15	1.49	140							
403	7.20	34.25	0.91	124							
525	6.42	34.31	0.46	110							

90.45 STRANGER; October 21, 1958; 1658, 1716 GCT; 32°55.5'N, 118°56.5'W; sounding, 1105 fm; wind, 160°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°, 17°.

0	20.46	33.76b)	5.20	419	0	20.46	33.76	5.20	23.72	419	0.00
11	20.45	33.75	5.14	419	10	20.45	33.75	5.15	23.72	419	0.04
29	20.42	33.73	5.19	420	20	20.43	33.74	5.16	23.70	420	0.08
43	18.33	33.49	5.56	386	30	20.42	33.73	5.20	23.70	420	0.13
52	15.70	33.32	5.93	340	50	16.15	33.34	5.90	24.46	348	0.20
61	14.24	33.34	5.87	308	75	13.42	33.38	5.45	25.08	289	0.28
70	13.78	33.37	5.62	297	100	10.73	33.48	4.49	25.66	234	0.35
					150	9.25	33.76	3.08	26.12	190	0.46
89	11.40	33.41	4.70	250	200	8.61	34.02	2.22	26.44	160	0.55
101	10.62	33.48	4.44	232	250	8.04	34.17	1.84	26.64	141	0.62
114	10.23	33.66	3.78	212	300	7.82	34.25	1.27	26.73	132	0.69
135	9.92	33.70	3.58	204	400	7.00	34.30	0.72	26.89	118	0.82
161	9.08	33.83	2.94	182	500	6.26	34.35	0.47	27.03	104	0.94
194	8.68	34.00	2.28	163							
243	8.09	34.14	1.89	144							
317	7.78	34.27	1.11	130							
412	6.88	34.30	0.68	116							
546	6.00	34.38	0.37	99							

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

b) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

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; October 21, 1958; 2011 GCT; 32°45.5'N, 119°16'W; sounding, 235 fm; wind, 140°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°.

90.50

2	19.16	33.57	5.25	400	0	(19.16)	(33.57)	(5.25)	(23.91)	(400)	(0.00)
12	19.08	33.55	5.27	400	10	19.09	33.55	5.27	23.92	400	0.04
31	18.48	33.51	5.43	389	20	19.02	33.54	5.29	23.92	399	0.08
49	14.23	33.33	5.80	309	30	18.60	33.51	5.41	24.01	391	0.12
71	12.35	33.40	4.89	268	50	14.20	33.33	5.80	24.88	308	0.19
93	11.36	33.51	4.34	242	75	12.19	33.42	4.76	25.35	264	0.26
115	10.12	33.69	3.70	208	100	11.00	33.56	4.16	25.68	232	0.32
149	9.30	33.83	3.07	185	150	9.26	33.83	3.03	26.18	185	0.43
184	8.68	34.01	2.37	162	200	8.48	34.06	2.15	26.48	156	0.51
228	8.20	34.13	1.87	146	250	8.02	34.14	1.72	26.62	143	0.59
272	7.82	34.14	1.58	140	300	7.60	34.15	1.41	26.68	137	0.66
365	7.17	34.18	1.06	128							

STRANGER; October 21, 1958; 2324 GCT; 32°34'N, 119°34.5'W; sounding, 600 fm; wind, 180°, force 1; weather, cloudy; sea, very rough; wire angle, 10°.

90.55

2	19.26	33.64	5.22	398	0	(19.26)	(33.64)	(5.22)	(23.94)	(398)	(0.00)
12	19.10	33.53	5.22	402	10	19.12	33.56	5.22	23.90	402	0.04
31	19.00	33.53	5.15	400	20	19.05	33.53	5.20	23.90	402	0.08
40	18.08	33.48	5.45	382	30	19.01	33.53	5.17	23.92	400	0.12
50	13.74	33.39	5.51	295	50	13.74	33.39	5.51	25.02	295	0.19
59	13.54	33.35	5.43	294	75	11.80	33.44	4.85	25.43	256	0.26
68	12.46	33.41	4.99	270	100	10.71	33.50	4.32	25.68	232	0.32
82	11.35	33.45	4.75	246	150	9.21	33.76	3.08	26.13	189	0.43
96	10.90	33.48	4.44	237	200	8.50	34.04	1.98	26.47	157	0.51
109	10.22	33.57	4.09	219	250	7.77	34.12	1.61	26.64	140	0.59
132	9.64	33.66	3.44	203	300	7.24	34.20	1.16	26.78	128	0.66
158	9.01	33.80	2.87	183	400	6.69	34.29	0.68	26.92	114	0.79
191	8.62	34.02	2.06	161	500	6.22	34.32	0.54	27.01	106	0.90
236	7.92	34.10	1.74	144							
309	7.16	34.22	1.07	125							
402	6.65	34.30	0.65	113							
523	6.12	34.33	0.52	104							

STRANGER; October 22, 1958; 0239 GCT; 32°24'N, 119°56'W; sounding, 675 fm; wind, 170°, force 3; weather, cloudy; sea, very rough; wire angle, 08°.

90.60

2	19.21	33.49	5.26	408	0	(19.21)	(33.49)	(5.26)	(23.84)	(408)	(0.00)
12	19.03	33.48	5.17	404	10	19.06	33.48	5.19	23.86	405	0.04
31	17.22	33.41	5.72	366	20	19.00	33.48	5.18	23.88	403	0.08
45	14.09	33.30	5.85	309	30	18.40	33.45	5.35	24.04	388	0.12
55	12.94	33.33	5.19	284	50	13.54	33.31	5.58	25.00	297	0.19
64	11.88	33.42	4.39	258	75	11.03	33.48	3.94	25.60	240	0.26
73	11.13	33.48	3.95	240	100	10.22	33.62	3.83	25.85	216	0.31
92	10.42	33.54	3.91	224	150	8.97	33.86	2.60	26.26	178	0.41
106	10.01	33.71	3.74	205	200	8.28	34.10	1.91	26.55	150	0.50
119	9.52	33.72	3.15	196	250	7.69	34.11	1.60	26.64	141	0.57
143	9.06	33.84	2.71	181	300	7.18	34.15	1.28	26.76	130	0.64
170	8.60	33.96	2.35	165	400	6.29	34.25	0.62	26.95	112	0.77
207	8.20	34.11	1.83	148	500	5.78	34.30	0.30	27.05	102	0.88
258	7.56	34.11	1.56	139							
338	6.76	34.23	1.00	119							
437	6.06	34.26	0.50	108							
573	5.50	34.34	0.28	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	$\frac{10^{-5} \delta T}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} \delta T}{10 \text{ cm/g}}$	dyn. m	

90.70 STRANGER; October 22, 1958; 0737 GCT; 32°04'N, 120°38'W; sounding, 2100 fm; wind, 230°, force 2; weather, overcast; sea, very rough; wire angle, 00°.

0	18.05	33.34	5.26	391	0	18.05	33.34	5.26	24.01	391	0.00
11	18.04	33.34	5.29	391	10	18.03	33.34	5.28	24.01	391	0.04
30	17.96	33.33	5.09	389	20	18.00	33.34	5.20	24.02	390	0.08
45	16.15	33.30	5.75	351	30	17.96	33.33	5.09	24.03	389	0.12
54	14.69	33.26	5.85	324	50	15.33	33.28	5.82	24.60	335	0.19
63	13.94	33.24	5.84	310	75	13.80	33.35	5.40	24.98	299	0.27
72	14.09	33.31	5.53	308	100	10.70	33.46	4.78	25.64	236	0.34
91	11.76	33.41	4.99	256	150	8.92	33.76	3.53	26.18	184	0.44
105	10.33	33.48	4.68	227	200	8.20	33.98	2.57	26.46	158	0.38
119	9.70	33.58	4.31	210	250	7.69	34.07	1.99	26.61	144	0.61
142	9.03	33.71	3.70	190	300	7.04	34.10	1.56	26.73	132	0.68
170	8.62	33.87	3.20	172	400	6.21	34.16	0.85	26.88	118	0.81
207	8.13	34.00	2.43	155	500	5.81	34.29	0.44	27.04	103	0.92
260	7.57	34.09	1.86	141							
339	6.50	34.11	1.26	125							
439	6.08	34.23	0.58	111							
577	5.48	34.34	0.36	96							

90.80 STRANGER; October 22, 1958; 1218 GCT; 31°44'N, 121°17'W; sounding, 2100 fm; wind, 240°, force 1; weather, overcast; sea, rough; wire angle, 07°.

0	17.82	33.40	5.28	381	0	17.82	33.40	5.28	24.12	381	0.00
11	17.86	33.44	5.24	380	10	17.86	33.43	5.26	24.13	380	0.04
30	17.79	33.47	5.33	376	20	17.82	33.46	5.30	24.16	377	0.08
39	17.79	33.42	5.24	379	30	17.79	33.47	5.33	24.17	376	0.11
49	14.93	33.31	5.74	324	50	14.90	33.31	5.74	24.71	324	0.18
57	14.66	33.40	5.76	313	75	13.20	33.39	5.49	25.13	284	0.26
66	13.74	33.35	5.65	298	100	10.54	33.42	4.60	25.65	235	0.33
80	12.96	33.40	5.40	278	150	8.79	33.87	2.93	26.29	174	0.43
93	10.88	33.41	4.72	242	200	8.15	34.01	2.29	26.50	154	0.51
106	10.44	33.48	4.36	229	250	7.55	34.10	1.70	26.66	139	0.59
127	9.52	33.58	3.69	207	300	7.18	34.16	1.20	26.76	130	0.66
154	8.72	33.92	2.83	169	400	6.58	34.29	0.61	26.95	112	0.78
186	8.34	33.98	2.41	160	500	5.89	34.32	0.40	27.05	102	0.90
231	7.76	34.07	1.97	145							
305	7.12	34.18	1.13	128							
399	6.58	34.29	0.60	112							
522	5.78	34.33	0.36	100							

90.90 STRANGER; October 22, 1958; 1722 GCT; 31°24'N, 121°58'W; sounding, 2700 fm; wind, 240°, force 2; weather, overcast; sea, rough; wire angle, 04°.

0	18.68	33.44	5.60	399	0	18.68	33.44	5.60	23.93	399	0.00
12	18.68	33.42	5.35	400	10	18.70	33.44	5.36	23.92	400	0.04
31	18.67	33.44	5.42	400	20	18.70	33.44	5.36	23.92	400	0.08
54	18.71	33.44	5.85	400	30	18.70	33.44	5.41	23.92	400	0.12
64	18.70	33.44	5.47	400	50	18.70	33.44	5.81	23.92	400	0.20
73	16.04	33.35	6.01	345	75	15.80	33.35	6.01	24.54	340	0.29
82	15.20	33.35	6.54u	327	100	13.95	33.49	5.98	25.04	293	0.37
95	14.38	33.46	6.00	302	150	9.92	33.60	4.67	25.89	212	0.50
109	13.08	33.52	5.88	273	200	8.94	33.87	3.42	26.26	176	0.60
128	11.22	33.49	5.48	241	250	8.29	34.08	2.41	26.53	152	0.68
145	10.18	33.57	4.71	218	300	7.61	34.11	2.16	26.65	140	0.76
167	9.37	33.70	4.60	196	400	6.58	34.17	1.27	26.85	122	0.90
191	9.04	33.83	3.85	181	500	5.79	34.26	0.86	27.02	105	1.02
236	8.47	34.07	2.53	155							
311	7.49	34.11	2.08	138							
405	6.52	34.18	1.20	120							
529	5.60	34.29	0.78	101							

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

STRANGER; October 20, 1958; 1603, 1623 GCT; 32°55'N, 117°22'W; sounding, 290 fm; wind, 180°, force 3; weather, cloudy; sea, moderate; wire angle, 00°, 00°.

93.27

0	20.49	33.49a)	5.18	439	0	20.49	33.49	5.18	23.50	439	0.00
11	20.48	33.47	5.18	440	10	20.48	33.47	5.18	23.49	440	0.04
30	16.72	33.47	5.57	351	20	19.80	33.47	5.33	23.67	424	0.09
					30	16.72	33.47	5.57	24.43	351	0.12
50	15.15	33.47	5.43	318	50	15.15	33.47	5.43	24.78	318	0.19
74	13.46	33.58	4.42	276	75	13.42	33.58	4.41	25.22	275	0.27
97	12.46	33.64	4.04	253	100	12.33	33.64	3.97	25.49	250	0.34
120	11.58	33.68	3.45	234	150	11.12	33.85	2.64	25.87	214	0.45
157	11.00	33.90	2.52	207	200	9.67	33.94	2.70	26.20	182	0.55
194	9.79	33.93	2.71	185	250	8.92	34.11	2.10	26.45	159	0.64
239	9.01	34.09	2.20	161	300	8.38	34.17	1.58	26.59	146	0.72
285	8.56	34.15	1.68	150							
335	7.94	34.22	1.39	136							

$\frac{1.263}{.98}$

HORIZON; October 13, 1958; 2202, 2232 GCT; <sup>b)</sup> 32°50'N, 117°32'W; sounding, 450 fm; wind, 300°, force 2; weather, fog; sea, moderate; wire angle, 14°, 18°.

93.30

529	6.25	34.26	0.25	111
539	6.08	34.26	0.26	108
548	6.00	34.27	0.16	107
558	5.94	34.31u	0.15	-
568	5.82	34.29	0.23u	104
578	5.78	34.29	0.13	102
588	5.65	34.32	0.17	99
598	5.58	34.31	0.19	98
608	5.49	34.32	0.22	97
618	5.47	34.31	0.18	98
628	5.42	34.34	0.22	-
628	5.40	34.33	0.21	94
640	5.38	34.34	0.23	93
649	5.23	34.34	-	93
659	5.16	34.38	0.20	89
669	5.04	34.38	0.24	88
679	4.96	34.38	0.23	85
689	4.92	34.40	0.26	85
699	4.91	34.41	0.23	84
709	4.85	34.40	0.23	83
719	4.86	34.42	0.26	82
728	4.82	34.40	0.25	83
739	4.81	34.38u	0.23	-

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

b) Test cast.

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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	$\frac{10^{-5} T_3}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} T_3}{cm/g}$	dyn. m

93.30 STRANGER; October 20, 1958; 1315 GCT; 32°50'N, 117°31.5'W; sounding, 565 fm; wind, 240°, force 2; weather, cloudy; sea, rough; wire angle, 03°.

3	21.51	33.53	4.96	462	0	(21.51)	(33.53)	(4.96)	(23.26)	(462)	(0.00)
13	21.49a)	33.55	5.31	461	10	21.50	33.54	5.20	23.27	462	0.05
32	14.80	33.40	5.97	316	20	20.31	33.54	5.56	23.32	456	0.09
41	13.87	33.51	5.56	289	30	16.55	33.42	5.91	24.43	351	0.13
50	13.33	33.55	4.85	275	50	13.33	33.55	4.85	25.23	275	0.20
59	12.68	33.54	4.53	264	75	12.42	33.62	4.05	25.46	253	0.26
68	12.60	33.59	4.42	258	100	12.17	33.73	3.12	25.60	240	0.32
82	12.25	33.66	3.65	247	150	11.41	33.88	2.62	25.84	216	0.44
96	12.16	33.71	3.14	242	200	10.28	33.96	2.70	26.11	191	0.54
109	12.10	33.78	3.01	236	250	9.12	34.07	2.65	26.40	164	0.63
131	11.74	33.84	2.82	224	300	8.30	34.15	2.01	26.58	146	0.72
159	11.28	33.89	2.54	213	400	7.28	34.25	1.27	26.80	125	0.86
191	10.54	33.94	2.69	196	500	6.61	34.33	0.72	26.97	110	0.98
238	9.35	34.05	2.71	170							
311	8.15	34.17	1.88	142							
406	7.24	34.25	1.24	124							
530	6.40	34.36	0.53	105							

93.40 STRANGER; October 20, 1958; 0720 GCT; 32°30'N, 118°12'W; sounding, 940 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 00°.

5	21.13	33.58	5.15	449	0	21.1	(33.58)	(5.15)	(23.41)	(448)	(0.00)
15	21.12	33.60	5.08	447	10	21.12	33.59	5.11	23.41	448	0.04
34	15.83	33.39	5.85	338	20	20.95	33.60	5.10	23.46	444	0.09
48	14.77	33.36	5.68	318	30	17.00	33.43	5.77	24.34	360	0.13
58	14.16	33.39	5.48	303	50	14.65	33.36	5.64	24.81	315	0.20
75	12.76	33.42	4.83	274	75	12.76	33.42	4.83	25.24	274	0.27
94	11.22	33.48	4.34	242	100	10.88	33.52	4.17	25.66	234	0.34
108	10.52	33.58	3.93	222	150	9.40	33.76	3.15	26.11	191	0.44
121	10.06	33.61	3.73	214	200	8.75	34.10	2.32	26.47	157	0.53
144	9.50	33.74	3.23	195	250	8.05	34.13	1.77	26.61	144	0.61
171	9.00	33.87	2.74	178	300	7.60	34.20	1.30	26.72	133	0.68
207	8.68	34.11	2.23	155	400	6.98	34.29	0.71	26.89	118	0.81
259	7.93	34.14	1.68	142	500	6.37	34.34	0.43	27.01	106	0.93
339	7.36	34.26	0.97	125							
438	6.76	34.31	0.58	113							
578	5.82	34.38	0.32	97							

93.50 STRANGER; October 20, 1958; 0101 GCT; 32°09'N, 118°46'W; sounding, 730 fm; wind, 310°, force 6; weather, partly cloudy; sea, high; wire angle, 07°.

3	20.31	33.55	5.23	430	0	(20.31)	(33.55)	(5.23)	(23.60)	(430)	(0.00)
13	20.32	33.55	5.16	430	10	20.32	33.55	5.20	23.60	430	0.04
31	20.28	33.53	5.14	432	20	20.30	33.54	5.15	23.59	431	0.09
42	17.14	33.37	5.67	368	30	20.30	33.54	5.15	23.59	431	0.13
51	16.09	33.33	5.86	348	50	16.20	33.33	5.84	24.44	350	0.21
59	14.60	33.29	5.62	320	75	13.56	33.31	5.44	24.99	297	0.29
68	13.99	33.31	5.44	306	100	11.55	33.38	4.91	25.44	255	0.36
80	13.20	33.31	5.45	290	150	9.42	33.72	3.25	26.07	195	0.47
93	12.08	33.36	5.03	266	200	8.69	33.96	2.43	26.38	166	0.56
107	11.00	33.42	4.81	243	250	8.18	34.13	1.66	26.58	146	0.64
127	10.02	33.59	3.81	215	300	7.61	34.18	1.42	26.71	134	0.72
152	9.39	33.73	3.22	194	400	6.55	34.24	0.80	26.91	116	0.85
181	8.94	33.83	2.87	180	500	6.02	34.33	0.42	27.05	102	0.96
224	8.39	34.08	1.82	154							
294	7.68	34.18	1.44	136							
384	6.68	34.23	0.90	118							
502	6.02	34.34	0.39	102							

a) Alternate value, 20.80°C, not used in 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; October 19, 1958; 1907, 1927 GCT; 31°49'N, 119°31'W; sounding, 2100 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 15°, 18°.

93.60

0	19.85	33.62	5.32	414	0	19.85	33.62	5.32	23.77	414	0.00
11	19.87	33.60	5.12	415	10	19.87	33.60	5.13	23.76	415	0.04
30	18.41	33.62	5.67	380	20	19.61	33.60	5.20	23.82	409	0.08
43	12.84	33.53	4.97	268	30	18.41	33.62	5.67	24.12	380	0.12
52	11.85	33.49	4.32	252	50	11.88	33.49	4.33	25.45	254	0.18
61	11.78	33.55	4.13	246	75	10.41	33.64	3.51	25.84	216	0.24
70	10.87	33.60	3.74	227	100	9.54	33.76	3.00	26.08	194	0.30
88	9.80	33.70	3.15	202	150	8.75	33.98	2.27	26.38	166	0.39
102	9.49	33.78	2.98	192	200	8.10	34.11	1.76	26.58	146	0.47
					250	7.59	34.20		26.72	133	0.54
111	9.28	33.79	2.92	188	300	7.25	34.19		26.78	129	0.61
133	8.92	33.89	2.50	174	400	6.50	34.26	0.57	26.92	114	0.73
158	8.66	34.03	2.14	160	500	5.75	34.31	0.37	27.07	100	0.84
192	8.20	34.09	1.84	149							
241	7.62	34.20	1.32	133							
317	7.14	34.18	1.56a)	128							
413	6.40	34.27	0.49	112							
547	5.47	34.33	0.36	96							

STRANGER; October 19, 1958; 1242 GCT; 31°23.5'N, 120°16'W; sounding, 2800 fm; wind, 340°, force 6; weather, partly cloudy; sea, rough; wire angle, 18°.

93.70

0	18.84	33.31	5.31	412	0	18.84	33.31	5.31	23.80	412	0.00
12	18.87	33.34	5.30	410	10	18.87	33.33	5.31	23.80	411	0.04
30	18.79	33.31	5.25	411	20	18.86	33.33	5.28	23.80	411	0.08
43	18.46	33.40	5.26	396	30	18.79	33.31	5.25	23.80	411	0.12
52	17.39	33.40	5.43	371	50	17.70	33.40	5.39	24.14	378	0.20
61	15.66	33.29	5.58	341	75	14.79	33.36	5.52	24.77	318	0.29
70	15.07	33.33	5.54	326	100	12.95	33.47	5.22	25.24	274	0.37
87	14.08	33.44	5.46	298	150	9.31	33.72	4.10	26.08	194	0.48
100	12.95	33.47	5.22	274	200	8.56	33.90	2.72	26.35	169	0.57
113	11.11	33.46	4.97	241	250	8.02	34.04	2.03	26.54	151	0.66
134	9.94	33.56	4.56	215	300	7.47	34.12	1.62	26.68	137	0.73
158	9.11	33.77	3.91	186	400	6.61	34.17	0.90	26.84	122	0.87
192	8.62	33.87	2.86	172	500	5.98	34.22		26.96	110	0.99
240	8.12	34.02	2.12	154							
313	7.36	34.14	1.49	134							
408	6.58	34.17	0.82	121							
539	5.72	34.25	0.92u	105							

STRANGER; October 19, 1958; 0706 GCT; 31°07'N, 120°56'W; sounding, 2100 fm; wind, 320°, force 6; weather, cloudy; sea, rough; wire angle, 09°.

93.80

0	19.04	33.30	5.60	417	0	19.04	33.30	5.60	23.73	417	0.00
11	19.06	33.33	5.56	416	10	19.06	33.32	5.55	23.75	416	0.04
30	19.04	33.30	5.74	417	20	19.05	33.32	5.65	23.75	416	0.08
45	19.07	33.43	5.87	408	30	19.04	33.30	5.75	23.73	417	0.12
54	16.38	33.40	6.31	349	50	18.89	33.43	5.96	23.87	405	0.21
63	15.52	33.42	6.54	329	75	14.74	33.40	6.50	24.82	314	0.30
72	14.94	33.40	6.54	318	100	12.40	33.46	5.55	25.34	265	0.37
91	13.52	33.48	5.95	284	150	9.52	33.56	4.56	25.92	209	0.49
105	11.81	33.44	5.35	255	200	8.61	33.84	3.20	26.30	174	0.59
118	10.94	33.39	5.13	244	250	7.80	33.95	2.88	26.50	154	0.67
142	9.78	33.50	4.75	217	300	7.15	34.02	2.27	26.64	141	0.75
169	9.04	33.69	4.02	191	400	6.28	34.15	0.91	26.87	119	0.88
207	8.50	33.86	3.05	171	500	5.72	34.23	0.59	27.01	106	1.00
257	7.65	33.96	2.88	152							
337	6.72	34.07	1.33	131							
435	6.05	34.18	0.74	114							
571	5.32	34.29	0.48	97							

a) Uncertain value; sample was drawn after some time delay and from partly empty Nansen bottle.

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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	

93.90 STRANGER; October 19, 1958; 0107 GCT; 30°50'N, 121°35'W; sounding, 2248 fm; wind, 340°, force 6; weather, cloudy; sea, rough; wire angle, 17°.

3	20.36	33.66	5.29	424	0	(20.36)	(33.66)	(5.29)	(23.67)	(424)	(0.00)
12	20.37	33.68	5.26	423	10	20.37	33.68	5.27	23.67	423	0.04
30	20.29	33.65	5.22	423	20	20.32	33.67	5.24	23.67	423	0.08
43	20.20	33.61	5.30	423	30	20.29	33.65	5.22	23.67	423	0.13
52	17.75	33.40	5.92	379	50	19.20	33.51	5.62	23.85	406	0.21
61	16.43	33.35	6.08	354	75	15.00	33.41	5.88	24.77	319	0.30
70	15.42	33.42	5.99	327	100	12.88	33.42	5.26	25.22	276	0.38
87	14.17	33.39	5.64	303	150	9.60	33.60	4.21	25.94	207	0.50
101	12.76	33.42	5.23	274	200	8.58	33.84	3.08	26.30	173	0.59
114	11.42	33.39	5.01	252	250	7.84	33.97	2.36	26.51	153	0.68
135	10.14	33.51	4.64	222	300	7.28	34.03	2.12	26.64	141	0.76
159	9.28	33.65	3.93	198	400	6.30	34.13	1.05	26.85	121	0.89
193	8.64	33.83	3.17	175	500	5.66	34.20	0.62	26.98	108	1.01
241	7.93	33.96	2.40	155							
315	7.08	34.05	2.03	137							
410	6.21	34.14	0.97	119							
542	5.42	34.22	0.48	104							

97.30 STRANGER; October 17, 1958; 0455 GCT; 32°15.5'N, 117°09'W; sounding, 40 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	17.87	33.44	5.59	380	0	17.87	33.44	5.59	24.13	380	0.00
10	17.86	33.49	5.61	376	10	17.86	33.49	5.61	24.17	376	0.04
29	14.14	33.60	4.42	287	20	16.91	33.55	5.38	24.45	349	0.07
38	13.50	33.68	3.75	269	30	14.03	33.61	4.32	25.13	285	0.10
53	12.95	33.69	3.33	258	50	13.09	33.69	3.42	25.38	261	0.16

97.32 PAOLINA-T; October 8, 1958; 0141 GCT;<sup>a)</sup> 32°25'N, 117°25'W; sounding, 450 fm; wind, 240°, force 2; weather, clear; sea, slight; wire angle, 01°.

433	6.92	34.23	0.86	121							
446	6.86	34.27	0.70	118							
456	6.89	34.29	0.68	117							
464	6.90	34.29	0.60	117							
474	6.85	34.30	0.59	115							
484	6.76	34.30	0.51	114							
494	6.65	34.34	0.44	110							
505	6.52	34.29u	0.40	-							
514	6.42	34.34	0.39	107							
524	6.32	34.32	0.32	107							
533	6.19	34.34	0.32	104							
543	6.12	34.34	0.31	103							
554	6.04	34.34	0.26	102							
564	5.92	34.34	0.28	101							
574	5.85	34.36	0.24	98							
584	5.82	34.36	0.28	98							
594	5.80	34.39	0.24	94							

a) Test cast.

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 <sup>3</sup> /g	m	°C	‰	ml/L	g/L	$10^{-5}$ cm <sup>3</sup> /g	dyn. m

STRANGER; October 17, 1958; 0710, 0750 GCT;<sup>a)</sup> 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°, 05°.

97.32

342	7.35	34.16	1.29	132
352	7.31	34.18	-	130
361	7.16	34.18	1.28	128
371	7.10	34.21	-	126
380	7.06	34.21	1.13	125
389	6.97	34.22	-	124
399	6.96	34.21	-	123
408	6.91	34.22	-	122
418	6.82	34.21	-	122
427	6.73	34.25	-	117
437	6.59	34.25	-	116
446	6.55	34.25	-	115
472	6.31	34.31	-	108
482	6.28	34.31	-	108
491	6.30	34.30	-	107
501	6.24	34.33	-	107
510	6.12	34.36	-	105
521	6.08	34.33	-	101
530	6.03	34.34	-	104
539	5.94	34.34	-	102
549	5.92	34.33	-	101
559	5.85	34.38	-	100
568b)	5.88	34.34	-	97

STRANGER; October 17, 1958; 0848 GCT; 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°.

97.32

0	20.77	33.58	5.37	440	0	20.77	33.58	5.37	23.50	440	0.00
12	20.74	33.57	5.31	440	10	20.75	33.57	5.33	23.50	440	0.04
31	16.08	33.50	5.65	335	20	20.63	33.56	5.30	23.52	438	0.09
40	14.99	33.48	5.26	314	30	16.72	33.51	5.62	24.46	348	0.13
50	14.46	33.51	5.13	300	50	14.46	33.51	5.13	24.96	300	0.19
59	13.84	33.44	5.38	294	75	12.63	33.53	4.91	25.35	264	0.26
68	13.14	33.53	5.11	273	100	11.42	33.59	4.30	25.62	238	0.33
82	12.15	33.53	4.73	255	150	9.90	33.75	3.40	26.02	200	0.44
95	11.58	33.57	4.43	242	200	9.21	33.98	2.29	26.31	172	0.53
109	11.12	33.64	4.01	228	250	8.78	34.10	1.82	26.47	157	0.62
131	10.38	33.67	3.77	214	300	7.90	34.14	1.47	26.64	141	0.69
158	9.70	33.80	3.21	193	400	6.78	34.20	0.87	26.84	122	0.83
190	9.27	33.96	2.38	175	500	6.18	34.27	0.74	26.98	108	0.95
236	8.94	34.08	1.94	161							
309	7.76	34.14	1.47	139							
403	6.76	34.20	0.86	121							
528	6.04	34.29	0.72	106							

- a) Test cast.
- b) Possible pretrip.

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

9740

STRANGER; October 17, 1958; 1415 GCT; 31°55.5'N, 117°50'W; sounding, 1000 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°.

0	21.58	33.66	5.10	455	0	21.58	33.66	5.10	23.34	455	0.00
12	21.46	33.69	5.33	450	10	21.47	33.68	5.30	23.37	452	0.04
32	19.56	33.55a)	5.49	412	20	20.98	33.65	5.45	23.50	440	0.09
43p	16.05	33.37	6.28	344	30	19.70	33.56	5.47	23.76	415	0.13
54p	15.02	33.31	6.37	327	50	15.38	33.33	6.37	24.63	332	0.21
75p	13.50	33.24	5.93	301	75	13.50	33.24	5.93	24.96	301	0.29
91p	12.61	33.33	5.62	278	100	11.78	33.39	5.15	25.40	258	0.36
108p	11.01	33.44	4.70	241	150	9.88	33.76	3.80	26.03	199	0.47
134p	10.15	33.61	4.24	215	200	9.10	33.95	2.72	26.30	174	0.57
164p	9.70	33.84	3.35	191	250	8.61	34.13	2.10	26.52	152	0.65
205p	9.02	33.96	2.62	171	300	8.02	34.18	1.58	26.65	140	0.73
257p	8.53	34.14	2.04	151	400	6.85	34.23	0.83	26.86	121	0.86
336p	7.54	34.20	1.27	132	500	5.05	34.28	0.53	27.00	107	0.98
435p	6.52	34.24	0.68	115							
572p	5.74	34.31	0.43	101							

9750

STRANGER; October 17, 1958; 2152 GCT; 31°36'N, 118°29'W; sounding, 1500 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°.

0	20.08	33.36	5.44	438	0	20.08	33.36	5.44	23.52	438	0.00
11	19.68	33.37	5.43	428	10	19.72	33.37	5.43	23.61	429	0.04
30	19.57	33.45	4.77u	420	20	19.63	33.40		23.66	424	0.08
39	18.85	33.49	5.70	399	30	19.57	33.45		23.70	420	0.13
49	16.28	33.40	6.01	347	50	16.23	33.40	6.03	24.48	346	0.20
58	15.74	33.39	6.18	336	75	14.38	33.34	6.27	24.85	311	0.29
67	14.72	33.40	6.41	313	100	12.40	33.37	5.58	25.27	271	0.36
80	14.18	33.30	6.14	310	150	9.15	33.65	4.09	26.06	196	0.48
93	13.16	33.37	5.67	285	200	8.40	34.08	2.67	26.51	153	0.56
107	11.60	33.37	5.51	257	250	7.53	34.06	1.98	26.62	143	0.64
129	9.80	33.55	4.34	214	300	7.30	34.12	1.60	26.70	135	0.71
155	9.12	33.75	3.79	188	400	6.49	(34.18)	0.88	(26.87)	(119)	(0.84)
186	8.69	34.11	2.84	155	500	5.98		0.52			
231	7.76	34.00	2.24	150							
304	7.26	34.12	1.54	134							
397	6.52	34.18	0.90	120							
520	5.90	34.13u	0.49	-							

9760

STRANGER; October 18, 1958; 0346 GCT; 31°18'N, 119°10.5'W; sounding, 1000 fm; wind, 320°, force 4; weather, fog; sea, moderate; wire angle, 06°.

0	19.98	33.51	5.30	425	0	19.98	33.51	5.30	23.66	425	0.00
11	20.00	33.55	5.04	423	10	20.00	33.53	5.09	23.67	424	0.04
30	19.75	33.50	5.84	421	20	19.93	33.54	5.30	23.68	422	0.08
40	16.19	33.34	4.83u	349	30	19.75	33.50	5.84	23.69	421	0.13
50	14.61	33.33	6.65u	317	50	14.61	33.33		24.79	317	0.20
59	13.26	33.34	4.95	289	75	11.65	33.42	4.37	25.45	254	0.27
68	12.12	33.39	4.48	264	100	10.47	33.50	3.83	25.72	228	0.33
82	11.23	33.44	4.26	246	150	9.16	33.81	2.97	26.18	184	0.44
96	10.60	33.48	3.89	232	200	8.42	34.02	1.87	26.47	157	0.52
110	10.12	33.58	3.66	216	250	7.94	34.09	1.72	26.59	145	0.60
134	9.42	33.71	3.39	196	300	7.39	34.17	1.18	26.73	133	0.67
161	9.00	33.87	2.68	178	400	6.63	34.25	0.67	26.91	116	0.80
192	8.53	34.00	1.90	161	500	5.92	34.33	0.45	27.06	101	0.92
237	8.05	34.07	1.81	149							
311	7.26	34.18	1.03	130							
413	6.56	34.26	0.65	114							
526	5.71	34.37a)	0.37	96							

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

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; October 18, 1958; 0940 GCT; 31°01.5'N, 119°47.5'W; sounding, 1950 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 04°.

97.70

0	18.70	33.37	5.69	404	0	18.70	33.37	5.69	23.87	404	0.00
11	18.72	33.35	6.06	406	10	18.72	33.35	6.00	23.86	406	0.04
30	18.60	33.36	5.82	402	20	18.69	33.35	5.98	23.87	404	0.08
					30	18.60	33.36	5.82	23.89	402	0.12

STRANGER; October 18, 1958; 1457 GCT; 30°44.5'N, 120°26'W; sounding, 2100 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 06°.

97.80

0	19.88	33.64	5.41	413	0	19.88	33.64	5.41	23.78	413	0.00
11	19.86	33.62	5.65	414	10	19.86	33.62	5.60	23.77	414	0.04
30	19.88	33.64	5.67	414	20	19.87	33.63	5.66	23.77	414	0.08
40	19.88	33.59	5.71	417	30	19.88	33.64	5.67	23.77	414	0.12
49	17.98	33.50	6.24	377	50	17.78	33.49	6.29	24.19	374	0.20
58	16.50	33.42	6.56	350	75	15.52	33.44	6.33	24.68	327	0.29
67	15.98	33.42	6.31	338	100	13.30	33.48	5.85	25.18	280	0.37
81	15.13	33.46	6.34	317	150	10.00	33.59	4.92	25.87	214	0.49
94	13.98	33.44	6.08	296	200	8.80	33.82	3.39	26.25	178	0.59
105	12.72	33.53	5.66	265	250	8.14	34.02	2.79	26.50	154	0.68
130	11.15	33.55	5.58	235	300	7.47	34.15	2.30	26.70	135	0.75
157	9.64	33.60	4.68	207	400	6.28	34.19	1.30	26.90	116	0.88
188	8.96	33.78	3.53	183	500	5.75	34.23	0.68	27.00	107	1.00
233	8.32	33.96	2.97	161							
307	7.39	34.16	2.22	133							
398	6.30	34.19	1.34	117							
518	5.66	34.24	0.57	105							

STRANGER; October 18, 1958; 2020 GCT; 30°24.5'N, 121°12'W; sounding, 2050 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 10°.

97.90

4	20.58	33.77	5.23	421
13	20.54	33.80	5.33	418
23p	20.45	33.78	5.15	418
33p	17.67	33.54	5.90	418
42p	16.74	33.47	5.86	367
50p	16.14	33.44	5.96	352
63p	15.62	33.48	5.84	341
76p	14.39	33.48	5.70	327
88p	13.48	33.48	5.40	301
109p	11.32	33.49	5.04	283
133p	9.85	33.55	4.55	243
163p	9.20	33.69	4.25	194
202p	8.40	33.91	3.16	167
263p	7.57	34.02	2.31	146
337p	6.70	34.09	1.43	129
430p	5.86	34.13	1.14	116

PAOLINA-T; October 20, 1958; 1819 GCT; 31°40.5'N, 116°46.5'W; sounding, 250 fm; wind, 090°, force 2; weather, cloudy; sea, very rough; wire angle, 04°.

100.30

0	19.06	33.56	5.37	399	0	19.06	33.56	5.37	23.93	399	0.00
9	18.58	33.51	5.53	391	10	18.48	33.51	5.53	24.03	389	0.04
30	15.62	33.48	5.80	327	20	18.06	33.50	5.61	24.13	379	0.08
50	15.08	33.68	4.36	301	30	15.62	33.48	5.80	24.68	327	0.11
75	14.06	33.69	3.49	279	50	15.08	33.68	4.36	24.96	301	0.18
100	12.81	33.78	2.57	248	75	14.06	33.69	3.49	25.18	279	0.25
124	12.25	33.87	2.04	232	100	12.81	33.78	2.57	25.51	248	0.32
165	10.46	33.96	2.43	194	150	11.05	33.93	2.32	25.95	206	0.43
203	9.73	34.05	2.33	176	200	9.78	34.04	2.34	26.26	177	0.53
253	8.96	34.18	2.14	154	250	8.97	34.18	2.17	26.49	155	0.62
300	8.34	34.22	1.40	141	300	8.34	34.22	1.40	26.63	141	0.69
408	6.92	34.23	0.94	121	400	7.04	34.23	0.96	26.83	123	0.83

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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	

100.40

PAOLINA-T; October 20, 1958; 1121 GCT; 31°20.5'N, 117°29'W; sounding, 1100 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 05°.

0	21.18	33.58	5.24	450	0	21.18	33.58	5.24	23.39	450	0.00
11	21.18	33.63	5.11	447	10	21.18	33.62	5.12	23.41	448	0.04
31	19.35	33.50	5.54	410	20	21.19	33.62	5.11	23.43	446	0.09
46	16.62	33.58	5.33	341	30	19.53	33.51	5.50	23.77	414	0.13
56	15.85	33.60	4.93	322	50	16.36	33.59	5.22	24.60	335	0.21
66	14.56	33.56	4.72	299	75	13.92	33.67	4.47	25.19	278	0.28
76	13.92	33.67	4.46	278	100	12.21	33.68	3.87	25.54	245	0.35
95	12.47	33.68	3.99	250	150	10.26	33.78	3.35	25.98	204	0.47
110	11.82	33.69	3.69	237	200	8.76	33.99	2.55	26.39	165	0.56
125	11.60	33.73	3.27	230	250	8.00	34.09	1.97	26.58	146	0.64
149	10.27	33.78	3.35	204	300	7.69	34.16	1.42	26.68	137	0.71
177	9.36	33.91	2.85	180	400	7.08	34.23	0.88	26.82	124	0.85
215	8.48	34.03	2.37	158	500	6.25	34.27	0.64	26.96	110	0.97
269	7.86	34.12	1.79	142	600	5.59	34.35	0.39	27.11	96	1.08
352	7.55	34.22	1.06	130							
456	6.55	34.25	0.73	115							
602	5.58	34.35	0.38	96							

100.70

PAOLINA-T; October 19, 1958; 1435 GCT; 30°12.5'N, 119°40.5'W; sounding, 2000 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 18°.

0	19.74	33.40	4.75	427	0	19.74	33.40	4.75	23.63	427	0.00
11	19.74	33.44	5.11	424	10	19.74	33.44	5.10	23.66	424	0.04
30	19.81	33.42	5.07	427	20	19.77	33.43	5.10	23.64	426	0.08
59	16.44	33.44	5.44	347	30	19.81	33.42	5.07	23.63	427	0.13
68	14.92	33.33	5.75	323	50	18.74	33.43	5.11	23.90	401	0.21
78	14.41	33.46	5.52	303	75	14.60	33.41	5.61	24.86	310	0.30
92	13.38	33.45	5.16	283	100	12.42	33.43	4.91	25.31	267	0.37
107	11.82	33.43	4.81	256	150	9.80	33.60	4.31	25.92	210	0.49
121	10.92	33.48	4.79	237	200	8.72	33.89	2.88	26.32	172	0.59
139	10.28	33.55	4.40	221	250	8.06	34.03	2.55	26.53	151	0.67
158	9.55	33.64	4.29	203	300	7.47	34.08	2.25	26.65	140	0.75
186	8.95a)	33.81	3.42	181	400	6.77	34.16	1.06	26.81	125	0.89
209	8.60	33.93	2.71	167	500	6.24	34.32	0.46	27.00	106	1.01
262	7.92	34.05	2.51	148	600	(5.63)	(34.40)	(0.29)	(27.14)	(93)	(1.11)
344	7.05	34.11	1.65	132							
452	6.49	34.27	0.59	113							
590	5.71	34.39	0.29	94							

100.80

PAOLINA-T; October 19, 1958; 0805 GCT; 29°55'N, 120°12'W; sounding, 1900 fm; wind, 340°, force 7; weather, clear; sea, high; wire angle, 17°.

0	20.54	33.57	4.36	434	0	20.54	33.57	4.36	23.56	434	0.00
12	20.53	33.57	4.90	434	10	20.53	33.57	4.85	23.56	434	0.04
31	20.57	33.57	4.86	436	20	20.55	33.57	4.88	23.55	435	0.09
60	16.00	33.33	5.05	346	30	20.57	33.57	4.86	23.54	436	0.13
69	15.22	33.35	5.79	327	50	17.70	33.39	5.39	24.13	380	0.21
79	14.41	33.38	5.60	309	75	14.83	33.36	5.72	24.77	319	0.30
93	13.47	33.48	5.27	283	100	12.90	33.47	5.03	25.25	273	0.38
108	12.24	33.47	4.79	261	150	9.69	33.62	3.75	25.94	207	0.49
121	10.86	33.48	4.46	236	200	8.80	33.97	2.61	26.36	167	0.59
139	9.96	33.57	3.92	214	250	8.28	34.04	2.16	26.49	155	0.67
158	9.46	33.69	3.54	198	300	7.67	34.11	1.65	26.64	141	0.75
186	8.90	33.86	2.88	176	400	6.88	34.21	0.84	26.84	122	0.89
209	8.77	34.00	2.50	164	500	6.25	34.27	0.43	26.96	110	1.01
262	8.14	34.05	2.05	151	600	(5.57)	(34.33)		(27.10)	(97)	(1.12)
343	7.23	34.18	1.25	129							
450	6.60	34.24	0.50	116							
588	5.62	34.33	0.40	98							

a) Alternate value, 9.19°C, not used in 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 <sup>-5</sup> cm/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m	

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PAOLINA-T; October 19, 1958; 0210 GCT; 29°40.5'N, 120°39.5'W; sounding, 2050 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

100.90

0	20.16	33.51	5.17	429	0	20.16	33.51	5.17	23.61	429	0.00
12	20.16	33.53	4.91	427	10	20.16	33.53	4.93	23.62	428	0.04
31	-	33.57	5.14	-	20	20.14	33.54	4.93	23.64	426	0.08
46	17.58	33.47	5.73	371	30	20.07	33.56	5.18	23.66	424	0.13
55	16.40	33.55	5.70	339	50	16.78	33.50	5.77	24.43	351	0.20
65	16.44	33.68	5.74	330	75	16.37	33.83	5.67	24.78	317	0.29
76	16.36	33.83	5.66	317	100	15.55	33.79	5.31	24.94	302	0.37
93	15.86	33.80	5.39	308	150	10.39	33.59	4.47	25.80	220	0.50
108	15.00	33.79	5.25	291	200	9.22	33.88	2.54	26.21	182	0.60
122	13.50	33.78	5.13	262	250	8.83	34.12	1.82	26.48	156	0.69
145	10.71	33.58	4.71	226	300	8.45	34.19	1.46	26.59	146	0.77
174	9.63a)	33.71	3.44	199	400	7.27	34.23	0.93	26.79	126	0.91
209	9.18	33.96	2.31	172	500	6.28	34.27	0.58	26.96	111	1.03
261	8.76	34.14	1.72	154	600	(5.52)	(34.32)		(27.09)	(98)	(1.14)
340	8.02	34.21	1.23	138							
441	6.80	34.24	0.76	119							
586	5.63	34.31	0.35	100							

PAOLINA-T; October 17, 1958; 0525 GCT; 31°00'N, 116°33.5'W; sounding, 190 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 10°.

103.32

0	20.54	33.60	5.40	432	0	20.54	33.60	5.40	23.58	432	0.00
12	20.41	33.64	4.50	427	10	20.45	33.64	4.57	23.62	428	0.04
32	18.78	33.64	5.09	386	20	20.37	33.64	4.50	23.68	423	0.08
51	15.26	33.64	4.58	307	30	19.17	33.64	4.98	23.96	396	0.13
76	14.30	33.75	3.53	280	50	15.30	33.64	4.61	24.88	308	0.20
100	13.36	33.81	2.81	256	75	14.32	33.74	3.55	25.17	280	0.27
125	12.27	33.86	2.73	233	100	13.36	33.81	2.81	25.42	256	0.34
166	10.80	33.95	2.32	200	150	11.53	33.93	2.48	25.87	214	0.46
205	10.71	34.20	1.56	180	200	10.72	34.18	1.60	26.20	182	0.56
256	9.38	34.24	1.36	156	250	9.50	34.24	1.36	26.46	158	0.65
308	8.30	34.22	1.31	141	300	8.48	34.22	1.32	26.61	144	0.72

PAOLINA-T; October 17, 1958; 0800 GCT; 30°53.5'N, 116°45.5'W; sounding, 930 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

103.35

0	21.32	33.59	5.09	454	0	21.32	33.59	5.09	23.36	454	0.00
12	21.24	33.60	5.09	451	10	21.26	33.60	5.09	23.38	451	0.04
32	18.40	33.40	5.81	394	20	21.18	33.60	5.10	23.40	449	0.09
42	16.34	33.37	5.92	350	30	19.00	33.44	5.41	23.85	406	0.13
52	15.64	33.37	5.86	336	50	15.74	33.37	5.88	24.58	336	0.21
61	14.79	33.46	5.60	311	75	14.07	33.52	5.22	25.06	291	0.28
71	14.24	33.52	5.30	295	100	11.83	33.58	4.29	25.54	245	0.36
86	12.78	33.55	4.71	265	150	9.80	33.76	3.16	26.04	198	0.46
101	11.81	33.58	4.28	245	200	9.41	34.07	2.28	26.34	169	0.56
116	11.36	33.79	3.01	222	250	9.65	34.42	0.68	26.57	147	0.64
141	9.88	33.73	3.43	202	300	8.94	34.38	0.69	26.66	139	0.71
171	9.66	33.95	2.67	182	400	7.30	34.31	0.63	26.86	120	0.85
205	9.38	34.09	2.19	167	500	6.38	34.32	0.44	26.99	108	0.97
255	9.64	34.43	0.66	146							
335	8.32	34.34	0.72	132							
434	6.88	34.31	0.55	115							
564	5.96	34.34	0.36	101							

a) Alternate value, 10.00°C, not used in interpolation.

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

103.40

PAOLINA-T; October 17, 1958; 1143 GCT; 30°44.5'N, 117°06'W; sounding, 1040 fm; wind, 280°, force 2; weather, clear; sea, moderate; wire angle, 00°.

0	21.10	33.56	5.05	450	0	21.10	33.56	5.05	23.39	450	0.00
11	21.12	33.58	5.16	449	10	21.12	33.58	5.15	23.40	449	0.04
31	16.50	33.33	5.94	357	20	19.78	33.40	5.22	23.70	421	0.09
41	15.09	33.44	5.76	319	30	16.75	33.34	5.90	24.32	362	0.13
50	14.05	33.42	5.36	299	50	14.05	33.42	5.36	24.98	299	0.19
60	13.08	33.52	4.77	273	75	12.10	33.55	4.30	25.47	252	0.26
70	12.34	33.53	4.44	259	100	11.02	33.59	4.08	25.70	230	0.32
85	11.68	33.62	4.11	240	150	9.38	33.80	3.28	26.14	188	0.43
101	10.94	33.59	4.08	230	200	8.99	34.05	2.32	26.40	164	0.52
115	10.08	33.78	3.80	202	250	8.52	34.17	1.70	26.56	148	0.60
170	9.04	33.82	3.01	182	300	8.26	34.28	1.02	26.69	136	0.67 - 25
205	8.98	34.08	2.17	162	400	7.40	34.32	0.58	26.85	121	0.80
254	8.44	34.18	1.65	146	500	6.48	34.32	0.41	26.98	109	0.92 -
333	8.14	34.33	0.80	131							
433	7.02	34.32	0.50	116							
562	5.94	34.34	0.33	101							

103.50

PAOLINA-T; October 17, 1958; 1814 GCT; 30°26'N, 117°46.5'W; sounding, 1400 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

0	21.66	33.64	5.10	459	0	21.66	33.64	5.10	23.30	459	0.00
12	21.36	33.69	5.35	447	10	21.38	33.69	5.33	23.41	448	0.04
32	20.20	33.55	4.61u	428	20	21.35	33.69		23.42	446	0.09
42	17.37	33.45	5.82	367	30	21.00	33.65		23.49	441	0.13
51	15.74	33.44	5.37	332	50	15.85	33.44	5.40	24.61	334	0.21
62	15.18	33.48	5.33	317	75	14.02	33.44	5.20	25.00	297	0.29
72	14.24	33.44	5.26	301	100	11.66	33.52	4.36	25.52	247	0.36
84	13.36	33.44	4.94	284	150	9.48	33.78	3.25	26.11	191	0.47
101	11.56	33.53	4.32	244	200	9.00	34.08	1.99	26.43	161	0.56
115	10.24	33.59	3.41	218	250	8.10	34.11	1.96	26.58	146	0.64
140	9.56	33.69	3.34	199	300	7.65	34.18	1.38	26.70	135	0.71
169	9.39	33.96	2.41	177	400	6.86	34.28	0.70	26.89	117	0.84
203	8.95	34.09	1.98	160	500	6.18	34.32	0.46	27.02	105	0.96
253	8.04	34.11	1.96	146							
331	7.48	34.22	1.01	130							
432	6.58	34.30	0.59	112							
563	5.82	34.34	0.37	100							

103.60

PAOLINA-T; October 18, 1958; 0140 GCT; 30°06'N, 118°24'W; sounding, 1700 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 08°.

0	21.66	33.59	4.66	462	0	21.66	33.59	4.66	23.26	462	0.00
12	21.49	33.58	5.06	459	10	21.51	33.58	5.04	23.30	459	0.05
32	20.37	33.52	5.20	434	20	21.34	33.57	5.10	23.33	456	0.09
41	18.52	33.48	5.55	392	30	20.93	33.55	5.14	23.43	446	0.14
51	16.62	33.37	5.82	356	50	16.70	33.37	5.81	24.35	358	0.22
61	15.86	33.48	5.71	331	75	14.20	33.48	5.13	25.00	297	0.30
71	14.78	33.47	5.38	310	100	12.22	33.51	4.54	25.41	258	0.37
86	13.35	33.50	4.81	279	150	10.01	33.70	3.60	25.96	206	0.49
100	12.22	33.51	4.54	258	200	9.13	34.00	2.36	26.34	169	0.58
115	11.06	33.55	4.23	234	250	8.75	34.18	1.70	26.55	150	0.66
140	10.24	33.66	3.77	212	300	8.15	34.24	1.35	26.67	138	0.74
168	9.58	33.78	3.19	193	400	7.06	34.30	0.78	26.88	118	0.87
203	9.08	34.02	2.32	168	500	6.28	34.34	0.48	27.02	105	0.99
251	8.71	34.19	1.67	150							
329	7.76	34.26	1.14	130							
429	6.80	34.40u	0.65	-							
561	5.86	34.36	0.36	99							



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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PAOLINA-T; October 18, 1958; 0752 GCT; 29°44.5'N, 119°08'W; sounding, 1800 fm; wind, 320°, force 2; weather, fog; sea, rough; wire angle, 02°.

103.70

0	20.68	33.56	5.11	439	0	20.68	33.56	5.11	23.50	439	0.00
11	20.67	33.55	5.02	440	10	20.67	33.55	5.03	23.50	440	0.04
31	19.87	33.57	5.25	418	20	20.58	33.55	5.02	23.52	438	0.09
41	17.23	33.48	5.78	362	30	20.08	33.56	5.17	23.66	424	0.13
51	17.02	33.65	5.82	345	50	17.03	33.64	5.82	24.49	345	0.21
61	17.38	33.89	5.65	335	75	16.30	33.83	5.66	24.80	316	0.29
70	16.62	33.82	5.61	324	100	15.88	33.93	5.44	24.98	299	0.37
85	16.04	33.85	5.69	309	150	10.43	33.60	4.66	25.80	220	0.50
100	15.88	33.93	5.44	299	200	8.90	33.91	3.10	26.30	173	0.60
115	14.05	33.77	5.35	273	250	7.95	34.00	2.58	26.52	152	0.68
139	11.02	33.58	4.90	231	300	7.24	34.06	1.94	26.67	138	0.76
168	9.70	33.66	4.28	204	400	6.61	34.22	0.80	26.88	118	0.89
201	8.89	33.91	3.09	173	500	6.12	34.32	0.44	27.03	104	1.01
249	7.96	34.00	2.59	152							
326	6.96	34.09	1.57	132							
426	6.48	34.25	0.61	114							
555	5.71	34.38	0.37	95							

PAOLINA-T; October 18, 1958; 1405 GCT; 29°24'N, 119°51'W; sounding, 1900 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 03°.

103.80

0	20.12	33.39	5.24	438	0	20.12	33.39	5.24	23.52	438	0.00
11	20.12	33.47	4.98	431	10	20.12	33.46	5.00	23.58	432	0.04
31	20.07	33.39	5.08	436	20	20.10	33.43	5.00	23.56	434	0.09
56	16.06	33.26	5.43	352	30	20.07	33.40	5.08	23.54	436	0.13
67	15.20	33.25	5.71	334	50	18.00	33.31	5.26	24.00	392	0.21
77	14.48	33.20	5.28	324	75	14.60	33.21	5.31	24.70	326	0.30
87	13.12	33.22	5.57	296	100	12.10	33.30	5.16	25.27	271	0.38
102	12.02	33.31	5.07	269	150	9.46	33.62	3.77	25.99	203	0.50
117	10.98	33.38	4.58	245	200	8.70	33.94	2.30	26.35	168	0.59
136	9.76	33.60	4.08	209	250	8.20	34.10	1.72	26.56	148	0.67
156	9.36	33.64	3.50	200	300	7.66	34.13	1.38	26.66	139	0.75
180	8.92a)	33.81	2.76	180	400	6.63	34.15	0.98	26.84	122	0.88
205	8.66	33.95	2.26	166	500	5.70	34.28	0.56	27.05	102	1.00
255	8.14	34.11	1.67	147							
333	7.28	34.14	1.18	133							
433	6.10	34.16	0.81	116							
564	5.52	34.40	0.39	92							

PAOLINA-T; October 18, 1958; 1914 GCT; 29°09.5'N, 120°25'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 17°.

103.90

0	20.32	33.40	5.40	442	0	20.32	33.40	5.40	23.48	442	0.00
11	20.18	33.43	5.12	436	10	20.19	33.43	5.13	23.53	436	0.04
30	20.07	33.40	5.22	435	20	20.10	33.41	5.20	23.54	436	0.09
54	17.26	33.37	5.80	370	30	20.07	33.40	5.22	23.54	435	0.13
63	16.66	33.37	5.82	357	50	17.81	33.37	5.74	24.10	383	0.21
72	15.84	33.41	5.89	336	75	15.58	33.40	5.87	24.63	332	0.30
82	15.18	33.38	5.80	325	100	14.26	33.43	5.61	24.94	302	0.38
96	14.46	33.44	5.66	305	150	9.92	33.56	4.29	25.86	215	0.51
109	13.02	33.33	5.34	286	200	8.72	33.84	2.88	26.28	175	0.61
127	10.77	33.42	4.53	239	250	8.00	34.03	2.05	26.54	151	0.69
145	10.04	33.54	4.34	218	300	7.62	34.10	1.52	26.64	140	0.77
167	9.44	33.61	3.92	204	400	6.42	34.14	1.01	26.84	122	0.91
188	8.97	33.78	3.19	183	500	5.73	34.21	0.64	26.99	108	1.03
234	8.14	33.98	2.26	156							
308	7.57	34.11	1.46	139							
406	6.38	34.14	0.99	121							
535	5.50	34.24	0.45	104							

a) Alternate value, 9.06°C, not used in interpolation.

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

10732 PAOLINA-T; October 16, 1958; 2324 GCT; 30°25.5'N, 116°10.5'W; sounding, 190 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 20°.

0	21.82	33.62a)	4.74	465	0	21.82	33.62	4.74	23.24	465	0.00
11	20.57	33.62	4.82b)	432	10	20.67	33.62	4.80	23.56	434	0.04
31	18.20	33.48	5.40	384	20	19.45	33.56	5.10	23.81	408	0.09
50	15.88	33.61	5.01	322	30	18.30	33.49	5.39	24.05	387	0.13
74	14.24	33.68	3.73	284	50	15.88	33.61	5.01	24.74	322	0.20
98	12.76	33.73	2.64	251	75	14.18	33.68	3.67	25.16	282	0.27
123	12.41	33.93	1.86	230	100	12.76	33.76	2.63	25.50	249	0.34
161	11.66	34.16	1.27	200	150	11.95	34.10	1.32	25.92	209	0.46
201	9.80	34.14	1.85	170	200	9.80	34.14	1.85	26.33	170	0.55
250	9.98	34.49	0.92	146	250	9.98	34.49	0.92	26.58	146	0.64

10735 PAOLINA-T; October 16, 1958; 2130 GCT; 30°22.5'N, 116°18'W; sounding, 880 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 07°.

0	21.85	33.66	4.68	462	0	21.85	33.66	4.68	23.26	462	0.00
11	21.28	33.65	4.64	448	10	21.30	33.65	4.64	23.40	449	0.04
31	20.30	33.62	5.36	425	20	21.14	33.65	4.74	23.44	445	0.09
41	17.19	33.37	5.58	369	30	20.60	33.63	5.15	23.58	432	0.13
51	15.68	33.37	5.58	336	50	15.80	33.37	5.58	24.57	338	0.21
60	14.90	33.44	5.08	315	75	13.78	33.54	4.69	25.13	285	0.29
70	13.92	33.54	4.67	288	100	11.98	33.60	4.28	25.53	246	0.36
84	13.03	33.55	4.92	270	150	9.87	33.88	2.56	26.12	190	0.47
100	11.98	33.60	4.28	246	200	9.34	34.14	1.82	26.42	162	0.56
114	12.00	33.90	2.82	225	250	9.90	34.44	0.78	26.55	149	0.64
139	10.02	33.82	2.70	197	300	9.12	34.41	0.68	26.66	139	0.71
167	9.66	34.00	2.26	178	400	7.60	34.35	0.51	26.84	122	0.85
202	9.28	34.15	1.72	161	500	6.60	34.34	0.36	26.98	109	0.97
250	9.90	34.44	0.78	149							
330	8.62	34.39	0.65	133							
429	7.22	34.34	0.46	117							
558	6.03	34.34	0.28	102							

10740 PAOLINA-T; October 16, 1958; 1820 GCT; 30°15'N, 116°34.5'W; sounding, 1500 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 00°.

0	21.68	33.66	4.90	458	0	21.68	33.66	4.90	23.31	458	0.00
12	21.42	33.68	4.87	450	10	21.45	33.68	4.87	23.38	450	0.04
32	21.06	33.66	5.05	441	20	21.28	33.68	4.92	23.43	446	0.09
42	17.32	33.46	5.29	365	30	21.10	33.66	5.03	23.47	442	0.13
52	16.36	33.41	5.80	347	50	16.50	33.42	5.73	24.44	350	0.21
62	15.74	33.53	5.42	325	75	15.66	33.69	5.48	24.84	312	0.30
72	15.78	33.69	5.51	314	100	12.56	33.53	4.73	25.36	263	0.37
87	14.45	33.66	5.08	289	150	9.51	33.67	3.86	26.02	200	0.48
102	12.32	33.52	4.71c)	259	200	9.09	34.08	2.13	26.40	164	0.58
116	11.12	33.58	4.66	233	250	8.94	34.24	1.26	26.56	148	0.66
142	9.80	33.62	4.12	208	300	8.15	34.24	1.12	26.68	138	0.73
171	9.08	33.84	2.98	181	400	7.25	34.31	0.60	26.86	120	0.87
206	9.09	34.11	1.96	161	500	6.66	34.37	0.35	26.99	108	0.99
256	8.86	34.25	1.23	147							
335	7.60	34.23	1.04	131							
434	7.07	34.35	0.43	114							
564	6.24	34.38	0.31	102							

- a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in the order listed.  
 b) Alternate value, 4.34 ml/L, not used in interpolation.  
 c) Alternate value, 4.46 ml/L, not used in 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	$10^{-5} \text{ cm/g}$	m	°C	‰	ml/L	g/L	$10^{-5} \text{ cm/g}$	dyn. m	

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PAOLINA-T; October 16, 1958; 1156 GCT; 29°54'N, 117°14'W; sounding, 1500 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°.

107.50

0	21.02	33.59	4.98	446	0	21.02	33.59	4.98	23.43	446	0.00
11	21.01	33.61	4.82	444	10	21.01	33.61	4.83	23.45	444	0.04
31	19.30	33.46	5.01	412	20	21.00	33.61	4.82	23.45	444	0.09
46	15.66	33.39	5.69	334	30	19.80	33.50	4.82	23.69	421	0.13
56	14.60	33.40	5.58	312	50	15.25	33.39	5.66	24.70	325	0.21
67	13.36	33.51	5.01	279	75	12.48	33.49	4.77	25.35	264	0.28
77	12.35	33.49	4.72	262	100	10.70	33.58	3.84	25.74	226	0.34
96	10.89	33.55	3.89	231	150	9.58	33.86	2.71	26.16	187	0.45
110	10.34	33.66	3.76	214	200	8.60	33.99	2.41	26.42	162	0.54
125	9.97	33.70	3.32	205	250	7.88	34.12	1.82	26.63	142	0.62
150	9.58	33.86	2.71	187	300	7.58	34.21	1.42	26.74	132	0.68
179	9.07a)	33.95	2.61	173	400	6.87	34.29	0.58	26.90	116	0.81
218	8.18	34.04	2.14	153	500	6.14	34.32	0.40	27.02	104	0.93
272	7.76	34.16	1.64	138	600	5.57	34.38	0.31	27.14	94	1.04
357	7.22	34.27	0.93	122							
467	6.38	34.31	0.47	108							
606	5.55	34.38	0.30	94							

PAOLINA-T; October 16, 1958; 0500 GCT; 29°33.5'N, 117°56'W; sounding, 1800 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 18°.

107.60

0	21.48	33.65	5.10	453	0	21.48	33.65	5.10	23.36	453	0.00
11	21.49	33.64	5.15	454	10	21.49	33.64	5.14	23.35	454	0.04
30	21.28	33.69	5.12	445	20	21.39	33.67	5.15	23.40	449	0.09
59	16.52	33.58	5.58	338	30	21.28	33.69	5.12	23.44	445	0.13
68	15.58	33.58	5.24	318	50	17.45	33.60	5.53	24.35	358	0.22
77	13.82	33.55	4.91	285	75	14.20	33.56	4.98	25.05	292	0.30
91	12.42	33.55	4.30	259	100	11.85	33.55	4.17	25.52	248	0.37
104	11.60	33.55	4.14	244	150	9.92	33.76	3.35	26.02	200	0.48
118	10.92	33.55	4.11	232	200	9.27	34.12	2.07	26.41	163	0.57
134	10.58	33.74	3.84	212	250	8.45	34.16	1.65	26.57	148	0.65
152	9.86	33.76	3.30	199	300	7.93	34.18	1.30	26.67	138	0.73
177	9.52b)	33.95	2.44	180	400	6.92	34.22	0.78	26.84	122	0.86
199	9.28	34.12	2.08	163	500	6.12	34.27	0.46	26.99	108	0.98
247	8.48	34.16	1.67	148							
326	7.70	34.19	1.18	135							
431	6.62	34.23	0.66	117							
567	5.67	34.33	0.32	98							

PAOLINA-T; October 15, 1958; 2241 GCT; 29°13'N, 118°38'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°.

107.70

0	21.40	33.64	5.14	452	0	21.40	33.64	5.14	23.37	452	0.00
11	20.95	33.66	4.71	438	10	20.97	33.66	4.71	23.50	439	0.04
31	20.47	33.66	4.98	427	20	20.75	33.66	4.80	23.56	434	0.09
41	17.72	33.46	5.82	375	30	20.50	33.66	4.96	23.62	428	0.13
51	16.89	33.58	5.78	347	50	16.90	33.58	5.79	24.46	348	0.21
61	16.64	33.75	5.67	330	75	16.20	33.83	5.60	24.82	314	0.29
70	16.44	33.83	5.61	319	100	15.15	33.82	5.40	25.05	292	0.37
85	15.78	33.82	5.60	305	150	10.88	33.60	4.71	25.72	228	0.50
99	15.20	33.82	5.42	293	200	9.10	33.78	3.84	26.16	186	0.61
114	14.30	33.78	5.28	278	250	8.02	34.00	2.60	26.51	153	0.69
138	11.80	33.63	4.92	241	300	7.43	34.10	1.92	26.67	138	0.77
166	10.13	33.58	4.42	217	400	6.85	34.25	0.89	26.87	119	0.90
199	9.12	33.77	3.85	187	500	6.26	34.32	0.46	27.01	106	1.02
247	8.06	33.99	2.64	155							
325	7.23	34.13	1.58	133							
422	6.76	34.28	0.68	115							
552	5.94	34.35	0.38	100							

- a) Alternate value, 9.21°C, not used in interpolation.  
b) Alternate value, 9.31°C, not used in interpolation.

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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	

107.80 PAOLINA-T; October 15, 1958; 1617 GCT; 28°49'N, 119°16'W; sounding, 2000 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 05°.

0	20.96	33.80	5.10	429	0	20.96	33.80	5.10	23.61	429	0.00
12	20.96	33.86	4.85	424	10	20.96	33.84	4.88	23.64	426	0.04
32	20.94	33.86	4.96	425	20	20.95	33.86	4.90	23.65	425	0.08
62	18.27	34.13	5.54	339	30	20.94	33.86	4.95	23.65	425	0.13
73	17.96	34.18	5.45	328	50	19.15	34.04	5.44	24.27	366	0.21
83	17.60	34.13	5.51	323	75	17.88	34.17	5.46	24.68	327	0.29
97	16.22	33.94	5.51	306	100	16.04	33.93	5.50	24.94	303	0.37
112	15.52	33.90	5.36	294	150	12.43	33.64	4.94	25.47	252	0.52
126	14.90	33.86	4.96	284	200	9.42	33.74	3.60	26.09	193	0.63
146	12.82	33.64	4.98	259	250	8.60	33.97	2.76	26.40	164	0.72
164	11.16	33.64	4.66	229	300	7.85	34.04	2.17	26.57	148	0.80
192	9.60	33.69	3.80	200	400	6.64	34.16	1.05	26.83	123	0.94
217	9.10	33.87	3.26	179	500	6.07	34.24	0.54	26.96	110	1.07
272	8.24	34.02	2.47	155	600	5.55	34.29	0.38	27.07	100	1.18
355	7.06	34.09	1.62	134							
462	6.26	34.22	0.65	114							
605	5.48	34.30	0.36	98							

107.90 PAOLINA-T; October 15, 1958; 0921 GCT; 28°25'N, 119°58'W; sounding, 2000 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 10°.

0	21.37	33.93	4.97	430	0	21.37	33.93	4.97	23.60	430	0.00
12	21.37	33.93	4.50	430	10	21.37	33.93	4.56	23.60	430	0.04
31	21.38	33.91	4.93	432	20	21.37	33.92	4.72	23.59	431	0.09
61	18.13	33.75	5.35	363	30	21.38	33.91	4.92	23.58	432	0.13
70	17.74	33.76	5.14	353	50	19.00	33.78	5.28	24.11	382	0.21
80	17.48	33.77	5.45	347	75	17.58	33.76	5.35	24.44	350	0.30
95	17.55	33.97	5.16	334	100	17.10	33.95	5.04	24.70	325	0.39
110	16.61	33.90	5.01	317	150	12.16	33.57	4.66	25.46	253	0.54
124	15.34	33.76	5.10	300	200	9.88	33.70	3.68	25.98	204	0.65
142	12.86	33.60	4.95	262	250	8.95	34.00	2.67	26.36	167	0.75
162	11.35	33.53	4.21	241	300	8.28	34.12	1.95	26.56	148	0.83
190	10.06a)	33.62	3.88	213	400	7.26	34.22	1.10	26.79	127	0.98
215	9.60	33.85	2.96	186	500	6.39	34.29	0.74	26.96	110	1.10
268	8.64	34.05	2.52	159	600	(5.93)	(34.35)	(0.33)	(27.07)	(100)	(1.21)
351	7.82	34.19	1.33	136							
460	6.62	34.26	0.89	116							
599	5.93	34.35	0.33	100							

110.33 PAOLINA-T; October 13, 1958; 1225 GCT; 29°50.5'N, 115°52'W; sounding, 40 fm; wind, 330°, force 3; weather, fog; sea, moderate; wire angle, 00°.

0	18.62	33.58	5.34	387	0	18.62	33.58	5.34	24.05	387	0.00
12	18.59	33.65	5.20	381	10	18.60	33.65	5.23	24.11	382	0.04
27	18.43	33.61	5.35	380	20	18.55	33.64	5.23	24.12	381	0.08
47	15.96	33.60	5.26	325	30	18.26	33.60	5.37	24.16	376	0.11
68	15.16	33.69	4.65	301	50	15.58	33.60	5.20	24.75	321	0.18

a) Alternate value, 9.81°C, not used in 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	$\frac{10^{-5}}{10^6} \text{cm}^3/\text{g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10^6} \text{cm}^3/\text{g}$	dyn. m

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PAOLINA-T; October 13, 1958; 1419 GCT; 29°46.5'N, 115°59.5'W; sounding, 600 fm; wind, 280°, force 4; weather, fog; sea, moderate; wire angle, 10°.

110.35

0	19.40	33.60	5.41	404	0	19.40	33.60	5.41	23.87	404	0.00
12	19.28	33.64	5.38	398	10	19.29	33.64	5.39	23.92	399	0.04
31	16.50	33.53	5.62	342	20	19.17	33.64	5.38	23.96	396	0.08
46	15.00	33.74	4.32	295	30	16.60	33.53	5.61	24.50	344	0.12
55	14.74	33.82	3.79	283	50	14.90	33.78	4.06	25.07	290	0.18
65	13.86	33.81	3.22	266	75	13.60	33.85	2.66	25.40	258	0.25
75	13.60	33.85	2.66	258	100	13.38	33.91	2.36	25.49	250	0.31
94	13.50	33.91	2.31	252	150	11.64	34.08	1.88	25.96	205	0.43
109	13.08	33.89	2.49	246	200	11.02	34.31	1.03	26.25	178	0.53
123	12.61	33.95	2.16	232	250	10.04	34.36	0.88	26.46	158	0.61
148	11.66	34.07	1.89	206	300	9.20	34.33	0.93	26.58	146	0.69
176	11.56a)	34.20	1.34	195	400	7.52	34.25	0.87	26.76	129	0.84
216	10.64	34.36	0.92	167	500	6.27	34.26	0.54	26.96	111	0.96
269	9.70	34.36	0.89	152	600	5.68	34.34	0.32	27.09	98	1.07
354	8.30	34.27	0.99	137							
456	6.70	34.24	0.66	118							
600	5.68	34.34	0.32	98							

PAOLINA-T; October 13, 1958; 1800 GCT; 29°35'N, 116°19'W; sounding, 1120 fm; wind, 340°, force 4; weather, fog; sea, moderate; wire angle, 00°.

110.40

4	20.81	33.66	5.35	435	0	20.8	(33.66)	(5.35)	(23.55)	(435)	(0.00)
14	20.66	33.69	5.35	430	10	20.72	33.68	5.35	23.58	432	0.04
34	20.52	33.64	5.26	429	20	20.65	33.67	5.32	23.60	430	0.09
64	13.71	33.64	4.15	276	30	20.64	33.65	5.28	23.59	431	0.13
74	13.12	33.68	3.82	261	50	16.60	33.64	4.69	24.58	336	0.21
83	12.40	33.68	3.60	248	75	13.08	33.68	3.81	25.38	261	0.28
97	11.87	33.80	2.99	230	100	11.78	33.83	2.85	25.74	226	0.34
112	11.60	33.91	2.60	217	150	11.08	34.17	1.86	26.12	189	0.45
127	11.52	34.04	1.96	206	200	10.68	34.44	0.94	26.42	162	0.54
148	11.10	34.16	1.89	190	250	10.07	34.47	0.73	26.54	150	0.62
167	11.02	34.31	1.32	177	300	9.26	34.45	0.73	26.66	139	0.69
196	10.71b)	34.43	0.96	163	400	7.59	34.35	0.74	26.85	121	0.83
221	10.44	34.47	0.81	156	500	6.56	34.34	0.48	26.98	108	0.95
276	9.68	34.47	0.68	144	600	5.98	34.39	0.34	27.09	98	1.06
362	8.16	34.38	0.82	127							
468	6.76	34.33	0.54	112							
613	5.88	34.40	0.31	96							

PAOLINA-T; October 14, 1958; 0054 GCT; 29°13'N, 116°56.5'W; sounding, 1900 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°.

110.50

0	22.08	33.78	4.95	460	0	22.08	33.78	4.95	23.28	460	0.00
12	22.00	33.75	4.94	460	10	22.01	33.76	4.94	23.28	460	0.05
32	21.94	33.77	4.96	457	20	21.97	33.76	4.95	23.31	458	0.09
47	18.04	33.54	5.81	376	30	21.95	33.77	4.96	23.32	457	0.14
56	16.86	33.63	5.82	343	50	17.52	33.58	5.81	24.32	361	0.22
66	16.20	33.60	5.52	330	75	14.54	33.58	5.05	25.00	297	0.30
75	14.54	33.58	5.05	297	100	12.62	33.69	4.32	25.48	251	0.37
95	12.84	33.71	4.46	254	150	10.10	33.82	3.18	26.04	198	0.48
111	12.11	33.66	3.95	245	200	9.37	34.07	2.18	26.35	168	0.58
124	10.96	33.65	3.94	225	250	9.42	34.33	1.12	26.54	150	0.66
148	10.12	33.82	3.21	199	300	9.28	34.45	0.61	26.66	139	0.74
176	9.74	34.00	2.32	179	400	8.08	34.43	0.44	26.84	122	0.87
213	9.20	34.11	2.11	163	500	6.80	34.39	0.38	26.98	108	0.99
267	9.51	34.43	0.79	144	600	(5.90)	(34.40)	(0.26)	(27.11)	(96)	(1.10)
349	8.82	34.46	0.44	131							
451	7.32	34.39	0.44	115							
594	5.94	34.40	0.26	97							

- a) Alternate value, 11.32°C, not used in interpolation.  
b) Alternate value, 10.92°C, not used in interpolation.

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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

110.60

PAOLINA-T; October 14, 1958; 0745 GCT; 28°52.5'N, 117°35.5'W; sounding, 2000 fm; wind, 320°, force 1; weather, fog; sea, moderate; wire angle, 00°.

0	21.80	33.84	4.96	448	0	21.80	33.84	4.96	23.41	448	0.00
12	21.78	33.81	4.97	450	10	21.78	33.82	4.97	23.40	449	0.04
32	21.76	33.91	5.02	442	20	21.77	33.86	4.99	23.44	446	0.09
57	17.96	33.58	5.77	371	30	21.76	33.91	5.01	23.48	442	0.13
67	16.70	33.55	5.84	345	50	19.05	33.66	5.59	24.01	391	0.22
77	15.74	33.58	5.48	322	75	15.95	33.57	5.56	24.68	327	0.31
87	14.98	33.67	5.38	299	100	13.66	33.58	4.76	25.18	280	0.38
102	13.56	33.57	4.70	278	150	10.50	33.73	3.43	25.89	212	0.51
117	12.44	33.57	4.50	257	200	9.39	34.07	2.40	26.34	169	0.60
137	11.04	33.66	3.60	226	250	9.18	34.29	1.32	26.56	149	0.69
155	10.26	33.75	3.39	206	300	8.32	34.28	1.12	26.67	138	0.76
180	9.22	33.82	3.25	185	400	7.18	34.29	0.62	26.86	120	0.89
205	9.42	34.11	2.01	166	500	6.66	34.35	0.38	26.98	109	1.02
254	9.12	34.29	1.28	148							
333	7.78	34.26	0.98	131							
434	6.96	34.31	0.52	116							
564	6.32	34.41	0.25	100							

110.70

PAOLINA-T; October 14, 1958; 1402 GCT; 28°31'N, 118°13'W; sounding, 1600 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

0	21.88	33.78	5.83	455	0	21.88	33.78	5.83	23.34	455	0.00
11	21.88	33.82	4.99	452	10	21.88	33.82	5.01	23.37	452	0.04
31	21.78	33.75	4.98	454	20	21.83	33.78	4.99	23.36	453	0.09
56	15.88	33.57	4.73	326	30	21.78	33.75	4.98	23.35	454	0.14
66	14.14	33.57	4.87	290	50	17.20	33.60	4.78	24.41	353	0.22
76	13.01	33.70	4.20	258	75	13.03	33.70	4.22	25.39	259	0.29
86	12.31	33.59	4.08	253	100	11.50	33.68	3.51	25.68	232	0.36
101	11.49	33.68	3.50	232	150	10.10	33.82	2.97	26.04	198	0.46
115	11.17	33.71	3.28	224	200	9.38	34.08	2.18	26.36	168	0.56
135	10.44	33.77	3.15	208	250	8.88	34.26	1.40	26.58	147	0.64
154	10.00a)	33.84	2.89	195	300	8.16	34.26	1.17	26.68	137	0.71
179	9.53	33.94	2.44	180	400	7.42	34.33	0.50	26.85	121	0.85
203	9.32	34.09	2.05	166	500	6.75	34.36	0.37	26.97	109	0.97
252	8.87	34.26	1.39	147							
331	7.72	34.25	1.03	130							
431	7.32	34.35	0.38	118							
560	6.20	34.36	0.37	103							

110.80

PAOLINA-T; October 14, 1958; 1956, 2026 GCT; 28°11.5'N, 118°53'W; sounding, 2050 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 07°, 05°.

0	21.72	33.71	4.89	455	0	21.72	33.71	4.89	23.34	455	0.00
12	21.04	33.71	4.76	438	10	21.10	33.71	4.77	23.50	440	0.04
32	20.65	33.82	4.94	420	20	20.88	33.75	4.83	23.59	431	0.09
42	18.75	33.78	5.45	376	30	20.73	33.81	4.90	23.68	422	0.13
52	17.64	33.78	5.45	350	50	17.78	33.78	5.45	24.41	353	0.21
62	17.06	33.93	5.29	325	75	16.38	33.92	5.28	24.85	311	0.29
					100	13.95	33.70	5.06	25.21	277	0.37
71	16.62	33.95	5.29	314	150	9.84	33.61	4.01	25.91	210	0.49
86	15.64	33.83	5.26	302	200	8.54	33.89	3.03	26.34	169	0.58
101	13.84	33.69	5.05	275	250	8.38	34.10	2.05	26.53	152	0.67
116	12.15	33.60	4.90	250	300	8.36	34.28	1.40	26.67	138	0.74
139	10.41	33.57	4.37	222	400	7.59	34.36	0.47	26.85	121	0.88
168	9.03b)	33.70	3.52	190	500	6.60	34.37	0.34	27.00	107	1.00
200	8.54	33.89	3.03	169							
248	8.38	34.07	2.12	153							
325	8.32	34.34	0.75	133							
422	7.37	34.36	0.45	118							
550	6.15	34.38	0.29	100							

a) Mean value of 9.94 and 10.05°C.

b) Alternate value, 9.36°C, not used in 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	$\frac{10^{-5}}{10 \text{ cm/g}}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5}}{10 \text{ cm/g}}$	dyn. m	

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PAOLINA-T; October 15, 1958; 0216 GCT; 27°52'N, 119°32.5'W; sounding, 2000+ fm; wind, 350°, force 3; weather, cloudy; sea, moderate; wire angle, 03°.

110.90

0	21.38	33.77	4.87	442	0	21.38	33.77	4.87	23.48	442	0.00
12	21.39	33.82	4.77	438	10	21.39	33.81	4.77	23.50	439	0.04
31	20.99	33.96	4.94	418	20	21.26	33.89	4.81	23.59	431	0.09
40	18.56	33.87	4.91	364	30	21.03	33.95	4.93	23.70	420	0.13
51	17.44	33.86	5.59	340	50	17.50	33.86	5.55	24.52	341	0.20
60	16.66	33.80	5.30	326	75	15.79	33.85	5.50	24.94	303	0.29
69	16.15	33.87	5.59	310	100	14.85	33.81	5.25	25.10	287	0.36
83	15.38	33.82	5.38	297	150	10.40	34.00	2.25	26.13	189	0.48
98	14.92	33.81	5.27	288	200	10.06	34.14	1.78	26.29	174	0.58
112	13.16	33.71	5.01	260	250	9.80	34.24	1.50	26.42	162	0.66
135a)	11.05	33.57	4.25	233	300	9.54	34.32	1.12	26.52	153	0.74
142p)	10.56	33.78	3.10	209	400	8.36	34.36	0.66	26.75	130	0.89
173p)	10.28	34.10	1.94	180	500	7.21	34.38	0.37	26.92	114	1.02
217p)	9.92	34.18	1.69	169							
288p)	9.64	34.31	1.23	155							
381p)	8.48	34.35	0.71	134							
504p)	7.18	34.39	0.36	113							

PAOLINA-T; October 13, 1958; 0655 GCT; 29°23.5'N, 115°23.5'W; sounding, 40 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 00°.

113.30

4	21.20	33.75	5.36	439	0	21.2	(33.75)	(5.36)	(23.50)	(439)	(0.00)
14	21.18	33.72	5.44	440	10	21.19	33.73	5.41	23.49	440	0.04
29	17.50	33.58	5.55	361	20	19.80	33.65	5.50	23.81	410	0.09
49	15.70	33.60	5.00	319	30	17.49	33.58	5.55	24.34	359	0.12
69	15.06	33.89	3.16	285	50	15.69	33.60	4.99	24.77	319	0.19

PAOLINA-T; October 13, 1958; 0429 GCT; 29°18'N, 115°35.5'W; sounding, 120 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°.

113.35

0	20.58	33.74	5.22	423	0	20.58	33.74	5.22	23.67	423	0.00
12	20.56	33.73	5.09	423	10	20.57	33.73	5.16	23.67	423	0.04
21	20.40	33.75	5.28	418	20	20.42	33.75	5.26	23.72	419	0.08
40	16.62	33.75	5.11	328	30	17.38	33.75	5.18	24.49	346	0.12
63	15.12	33.69	4.65	301	50	15.98	33.73	4.97	24.80	316	0.19
87	13.42	33.84	2.55	256	75	14.34	33.74	3.80	25.16	282	0.26
112	12.04	34.11	1.56	210	100	12.40	34.02	1.77	25.77	224	0.33
149	11.52	34.24	1.19	191	150	11.51	34.24	1.18	26.11	191	0.43
189	11.02	34.37	0.95	173							

PAOLINA-T; October 13, 1958; 0043 GCT; 29°08'N, 115°54'W; sounding, 700 fm; wind, 330°, force 5; weather, missing; sea, very rough; wire angle, 22°.

113.40

0	21.42	33.78	5.14	442	0	21.42	33.78	5.14	23.47	442	0.00
12	21.42	33.78	5.17	442	10	21.42	33.78	5.16	23.47	442	0.04
30	20.68	33.70	5.30	429	20	21.41	33.77	5.18	23.47	442	0.09
43	18.38	33.60	5.51	380	30	20.68	33.70	5.30	23.61	429	0.13
52	16.72	33.58	5.46	343	50	17.08	33.58	5.48	24.43	351	0.21
60	15.32	33.59	5.19	312	75	14.42	33.60	4.77	25.04	293	0.29
70	14.79	33.58	4.98	302	100	11.65	33.72	3.51	25.68	232	0.36
86	13.38	33.69	4.08	266	150	11.20	34.22	1.62	26.16	187	0.47
97	11.91	33.70	3.63	238	200	10.66	34.42	0.86	26.41	163	0.56
109	11.37	33.78	3.22	222	250	9.77	34.42	0.84	26.56	149	0.64
128	10.62	33.86	2.77	204	300	8.98	34.41	0.68	26.68	138	0.71
150	11.20	34.22	1.62	187	400	7.88	34.40	0.57	26.84	122	0.84
180	10.95	34.41	0.87	169	500	6.80	34.38	0.38	26.99	108	0.96
223	10.26	34.42	0.91	157							
292	9.08	34.41	0.70	139							
383	8.02	34.40	0.59	124							
521	6.56	34.38	0.32	105							

a) Depth uncertain, possible pretrip; alternate depth, 117 meters.

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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

113.50

PAOLINA-T; October 12, 1958; 1755 GCT; 28°46'N, 116°32.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 13°.

4	22.00	33.80	4.80	456	0	22.0	(33.80)	(4.80)	(23.32)	(456)	(0.00)
14	21.98	33.78	4.37	457	10	21.99	33.79	4.54	23.32	457	0.04
33	20.53	33.66	5.01	428	20	21.96	33.78	4.37	23.32	456	0.09
47	16.40	33.48	5.69	344	30	21.95	33.78	4.36	23.32	456	0.14
57	15.40	33.55	5.00	317	50	16.03	33.50	5.46	24.62	333	0.22
67	14.19	33.55	4.89	292	75	13.50	33.56	4.50	25.20	278	0.29
76	13.48	33.56	4.49	278	100	11.59	33.55	4.78	25.56	244	0.36
96	11.90	33.55	4.75	249	150	10.05	33.70		25.94	207	0.47
110	11.04	33.55	4.83	234	200	10.20	34.24	1.60	26.34	169	0.57
124	10.57	33.57	5.25u	225	250	10.01	34.46	0.78	26.55	149	0.65
173	9.74	33.91	2.75	186	300	9.40	34.49	0.59	26.66	138	0.72
209	10.38	34.35	1.18	163	400	8.10	34.45	0.51	26.84	122	0.86
259	9.88	34.47	0.70	147	500	6.88	34.43	0.41	27.01	106	0.98
337	8.94	34.49	0.53	130	600	(6.10)	(34.46)		(27.14)	(94)	(1.08)
437	7.54	34.42	0.50	116							
580	6.28	34.45	0.33	97							

113.60

PAOLINA-T; October 12, 1958; 0949 GCT; 28°23'N, 117°11'W; sounding, 2000 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 15°.

0	22.19	33.89	4.96	455	0	22.19	33.89	4.96	23.34	455	0.00
10	22.19	33.87	4.84	456	10	22.19	33.87	4.84	23.32	456	0.04
29	22.19	33.87	4.95	456	20	22.19	33.87	4.90	23.32	456	0.09
45	20.80	33.86	5.34	420	30	22.19	33.87	4.95	23.32	456	0.14
55	18.68	33.80	5.60	373	50	19.67	33.83	5.40	23.98	394	0.22
64	18.08	33.80	5.62	358	75	17.48	33.81	5.44	24.50	344	0.31
73	17.60	33.82	5.44	346	100	16.05	33.70	5.48	24.76	320	0.40
92	16.50	33.70	5.48	330	150	10.80	33.57	4.49	25.72	228	0.54
105	15.72	33.69	5.48	313	200	9.75	33.97	2.82	26.22	181	0.64
119	13.42	33.55	5.10	277	250	9.61	34.24	1.55	26.44	160	0.73
142	11.34	33.53	4.80	240	300	8.73	34.21	1.53	26.57	148	0.81
168	10.10a)	33.68	3.76	209	400	7.42	34.26	0.93	26.80	126	0.95
203	9.72	33.98	2.72	180	500	6.72	34.33	0.52	26.96	111	1.08
252	9.60	34.24	1.54	160							
332	8.14	34.20	1.52	140							
432	7.20	34.29	0.74	120							
573	6.09	34.37	0.29	100							

113.70

PAOLINA-T; October 12, 1958; 0241 GCT; 28°02.5'N, 117°57'W; sounding, 1800 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 10°.

0	21.82	33.77	5.05	454	0	21.82	33.77	5.05	23.35	454	0.00
13	21.82	33.75	4.63	455	10	21.82	33.76	4.75	23.34	455	0.04
32	21.52	33.78	4.99	445	20	21.82	33.75	4.63	23.34	455	0.09
56	17.62	33.78	5.73	349	30	21.65	33.76	4.82	23.39	450	0.14
66	16.84	33.75	5.51	334	50	18.25	33.78	5.70	24.30	364	0.22
76	16.18	33.80	5.64	315	75	16.23	33.80	5.63	24.79	317	0.30
85	15.60	33.78	5.56	304	100	13.98	33.80	5.11	25.29	269	0.38
100	13.98	33.80	5.11	269	150	10.60	33.68	4.04	25.84	217	0.50
114	12.34	33.58	4.57	255	200	9.17	33.98	2.91	26.32	171	0.60
134	11.19	33.65	3.93	229	250	8.69	34.13	2.22	26.50	154	0.68
154	10.00	33.66	4.15	209	300	8.05	34.17	1.55	26.64	141	0.76
178	9.56	33.84	3.32	188	400	7.20	34.26	0.74	26.83	123	0.90
202	9.13	33.98	2.87	171	500	6.60	34.32	0.41	26.96	110	1.02
251	8.68	34.13	2.21	154							
330	7.70	34.20	1.25	134							
429	7.01	34.28	0.60	119							
558	6.13	34.34	0.28	103							

a) Alternate value, 10.34°C, not used in interpolation.



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

PAOLINA-T; October 1958; 2049 GCT; 27°44'N, 118°33.5'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°.

113.80

0	22.54	33.86	4.86	466	0	22.54	33.86	4.86	23.22	466	0.00
11	22.34	33.82	4.92	464	10	22.35	33.82	4.92	23.24	464	0.05
30	22.31	33.84	4.80	461	20	22.31	33.83	4.85	23.25	463	0.09
55	15.92	33.57	5.44	326	30	22.31	33.84	4.80	23.27	461	0.14
64	14.60	33.58	5.05	298	50	16.85	33.60	5.39	24.49	345	0.22
74	13.24	33.57	4.62	272	75	13.22	33.57	4.61	25.26	272	0.30
85	12.56	33.56	4.29	260	100	11.78	33.62	3.82	25.58	241	0.36
100	11.78	33.62	3.82	241	150	10.03	33.90	2.82	26.11	191	0.47
114	11.07	33.75	3.30	220	200	9.26	34.17	1.91	26.44	160	0.56
133	10.29	33.79	3.24	204	250	8.66	34.25	1.30	26.60	144	0.64
153	9.96	33.92	2.61	188	300	8.19	34.30	0.98	26.72	134	0.71
178	9.39	34.03	2.35	172	400	7.42	34.38	0.48	26.89	117	0.84
201	9.26	34.17	1.91	160	500	6.58	34.40	0.27	27.02	104	0.96
250	8.66	34.25	1.30	144							
328	7.95	34.32	0.82	128							
427	7.22	34.40	0.36	113							
557	5.98	34.40	0.23	97							

PAOLINA-T; October 11, 1958; 1500 GCT; 27°26.5'N, 119°09'W; sounding, 2000+ fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°.

113.90

0	22.30	33.86	4.73	460	0	22.30	33.86	4.73	23.28	460	0.00
12	22.30	33.82	4.85	463	10	22.30	33.82	4.84	23.26	463	0.05
32	22.31	33.86	4.86	460	20	22.30	33.84	4.85	23.27	461	0.09
57	15.10	33.62	5.22	306	30	22.31	33.86	4.85	23.28	460	0.14
66	13.55	33.60	4.48	276	50	20.00	33.78	4.99	23.85	406	0.22
76	12.72	33.60	4.28	260	75	12.74	33.60	4.29	25.38	260	0.31
86	11.60	33.64	3.58	237	100	11.06	33.64	3.75	25.72	228	0.37
102	10.80	33.61	3.82	225	150	9.88	33.94	2.67	26.16	186	0.48
116	10.62	33.75	3.05	212	200	9.17	34.17	2.00	26.46	158	0.56
136	10.35	33.89	2.76	197	250	8.79	34.23	1.37	26.57	148	0.64
154	9.76	33.95	2.63	183	300	7.97	34.24	1.17	26.70	135	0.72
179	9.36	34.04	2.34	170	400	7.19	34.40	0.45	26.94	112	0.84
204	9.12	34.18	1.88	156	500	6.41	34.40	0.27	27.04	103	0.96
252	8.78	34.23	1.36	147							
331	7.46	34.24	1.05	128							
429	7.08	34.40	0.37	111							
559	5.79	34.39	0.25	95							

PAOLINA-T; October 9, 1958; 1118 GCT; 28°53'N, 117°38'W; sounding, 48 fm; wind, 270°, force 2; weather, clear; sea, slight; wire angle, 00°.

117.26

0	22.34	33.69	5.14	473	0	22.34	33.69	5.14	23.15	473	0.00
11	22.33	33.72	5.24	471	10	22.33	33.72	5.23	23.17	471	0.05
31	19.22	33.63	5.51	398	20	21.75	33.70	5.34	23.32	457	0.09
51	16.04	33.60	5.14	327	30	19.36	33.63	5.51	23.90	401	0.14
76	14.04	33.69	2.85	279	50	16.07	33.60	5.15	24.68	328	0.21
					75	14.05	33.69	2.86	25.18	279	0.28

PAOLINA-T; October 9, 1958; 1413 GCT; 28°44.5'N, 114°52.5'W; sounding, 59 fm; wind, 290°, force 3; weather, cloudy; sea, rough; wire angle, 05°.

117.30

0	22.54	33.78	4.73	472	0	22.54	33.78	4.73	23.16	472	0.00
13	22.56	33.78	4.88	473	10	22.55	33.78	4.82	23.16	472	0.05
23	22.54	33.78	4.82	472	20	22.54	33.78	4.84	23.16	472	0.09
44	22.24	33.83	4.86	460	30	22.53	33.78	4.82	23.17	471	0.14
63	19.48	33.71	4.96	398	50	21.57	33.80	4.91	23.44	445	0.23
88	14.39	33.80	2.04	278	75	17.28	33.74	3.86	24.50	344	0.33

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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	$\frac{10^{-5} T_3}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} T_3}{cm/g}$	dyn. m	

117.35 PAOLINA-T; October 9, 1958; 1727 GCT; 28°31.5'N, 115°14'W; sounding, 80 fm; wind, 280°, force 3; weather, cloudy; sea, rough; wire angle, 03°.

0	22.68	33.83	4.88	472	0	22.68	33.83	4.88	23.16	472	0.00
11	22.68	33.86	4.92	470	10	22.68	33.86	4.91	23.18	470	0.05
31	19.54	33.70	5.36	400	20	22.26	33.84	5.03	23.28	460	0.09
52	16.82	33.53	5.60	349	30	19.60	33.70	5.34	23.90	402	0.14
76	14.24	33.69	4.32	283	50	17.14	33.54	5.59	24.39	355	0.21
102	12.64	33.78	3.68	245	75	14.30	33.68	4.36	25.13	284	0.29
127	11.62	33.91	1.86	217	100	12.75	33.78	3.73	25.51	248	0.36

117.40 PAOLINA-T; October 9, 1958; 2343 GCT; 28°28.5'N, 115°36'W; sounding, 540 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

0	22.23	33.73	5.05	468	0	22.23	33.73	5.05	23.21	468	0.00
11	22.20	33.77	5.11	464	10	22.20	33.76	5.11	23.24	465	0.05
31	19.36	33.58	5.52	405	20	22.20	33.77	5.11	23.25	463	0.09
41	17.14	33.52	5.58	357	30	19.80	33.60	5.48	23.77	414	0.14
51	16.03	33.57	5.69	329	50	16.06	33.57	5.68	24.66	330	0.21
61	15.64	33.51	5.69	325	75	14.92	33.62	5.20	24.96	301	0.29
71	15.04	33.54	5.50	310	100	12.93	33.83	3.50	25.52	247	0.36
85	14.64	33.80	3.98	283	150	11.68	34.00	2.50	25.89	212	0.48
100	12.93	33.83	3.50	247	200	11.34	34.26	1.38	26.16	187	0.58
115	12.12	33.81	3.34	234	250	10.57	34.45	0.74	26.45	159	0.67
139	11.74	33.93	2.70	218	300	9.76	34.43	0.67	26.58	147	0.75
167	11.66	34.04	2.21	208	400	7.78	34.40	0.50	26.86	120	0.88
201	11.34	34.27	1.38	186	500	6.65	34.38	0.31	27.00	106	1.00
249	10.58	34.45	0.74	160							
329	9.24	34.42	0.64	140							
428	7.24	34.39	0.42	114							
560	6.18	34.38	0.23	100							

117.50 PAOLINA-T; October 10, 1958; 0642 GCT; 28°10.5'N, 116°15'W; sounding, 2400 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 06°.

0	21.94	33.69	4.36	463	0	21.94	33.69	4.36	23.26	463	0.00
12	21.92	33.69	4.68	463	10	21.93	33.69	4.60	23.26	463	0.05
31	19.57	33.62	5.02	406	20	21.98	33.68	4.70	23.24	465	0.09
41	18.08	33.55	5.46	377	30	20.80	33.66	4.86	23.55	435	0.14
51	16.34	33.57	5.46	335	50	16.50	33.57	5.46	24.56	339	0.21
60	15.32	33.55	4.86	315	75	14.47	33.60	5.28	25.04	294	0.29
71	14.66	33.58	5.33	300	100	12.48	33.62	4.93	25.44	254	0.36
85	14.04	33.68	5.14	280	150	10.20	33.78	3.37	25.99	203	0.48
99	12.56	33.62	4.96	256	200	11.12	34.43	0.79	26.33	170	0.57
114	11.40	33.57	4.29	239	250	10.44	34.47	0.65	26.48	156	0.66
138	10.08	33.64	3.68	211	300	9.80	34.44	0.56	26.57	148	0.74
167	11.59a)	34.27	1.20	190	400	8.10	34.36	0.51	26.78	128	0.88
201	11.12	34.43	0.79	170	500	7.06	34.37	0.38	26.94	113	1.01
250	10.44	34.47	0.65	156							
330	9.40	34.42	0.53	143							
432	7.54	34.34	0.51	121							
563	6.76	34.41	0.23	105							

a) Alternate value, 11.86°C, not used in interpolation.

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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PAOLINA-T; October 10, 1958; 1333, 1425 GCT; 27°51.5'N, 116°55.5'W; sounding, 2000 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°, 05°.

117.60

0	22.30	33.84	5.02	462	0	22.30	33.84	5.02	23.27	462	0.00
12	22.32	33.84	5.01	462	10	22.32	33.84	5.01	23.27	462	0.05
31	20.34	33.67	5.51	423	20	22.31	33.84	5.02	23.27	462	0.09
41	17.04	33.62	5.67	348	30	20.98	33.72	5.38	23.54	436	0.14
51	16.00	33.55	5.79	329	50	16.07	33.56	5.78	24.65	330	0.21
					75	14.70	33.73	5.13	25.08	289	0.29
60	15.55a)	33.53	5.72	321	100	13.28	33.95	2.51	25.54	245	0.36
70	15.53	33.77	5.43	303	150	12.40	34.32	1.04	26.00	202	0.47
85	13.24	33.66	4.40	266	200	11.69	34.42	0.80	26.22	181	0.57
100	13.28	33.95	2.51	245	250	11.04	34.47	0.70	26.38	166	0.66
114	12.92	34.16	1.46	223	300	10.10	34.46	0.61	26.54	151	0.74
138	12.60	34.31	1.05	206	400	8.72	34.44	0.53	26.75	130	0.89
167	12.19	34.34	0.95	196	500	7.54	34.42	0.46	26.91	116	1.02
201	11.68	34.42	0.79	181							
251	11.02	34.47	0.69	166							
330	9.50	34.45	0.60	142							
431	8.38	34.44	0.51	126							
563	6.72	34.40	0.44	106							

PAOLINA-T; October 10, 1958; 2030 GCT; 27°32.5'N, 117°32.5'W; sounding, 1820 fm; wind, missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 03°.

117.70

0	22.52	33.77	4.24	472	0	22.52	33.77	4.24	23.16	472	0.00
12	22.34	33.74	4.58	470	10	22.35	33.74	4.57	23.18	470	0.05
32	22.20	33.77	4.54	464	20	22.26	33.76	4.57	23.22	466	0.09
42	20.60	33.72	5.10	426	30	22.22	33.77	4.55	23.24	464	0.14
52	18.62	33.74	5.22	376	50	18.88	33.74	5.21	24.11	381	0.22
63	17.55	33.69	5.32	354	75	16.25	33.56	5.69	24.61	334	0.31
72	16.42	33.55	5.75	339	100	14.69	33.64	5.06	25.04	292	0.39
87	15.77	33.65	5.39	317	150	11.60	33.86	2.94	25.80	221	0.52
101	14.46	33.64	5.05	291	200	10.91	34.29	1.40	26.26	177	0.62
116	12.92	33.65	3.86	260	250	10.42	34.46	0.74	26.48	156	0.71
139	12.18	33.84	2.96	232	300	9.10	34.36	0.86	26.62	143	0.79
168	10.06	33.88	2.97	183	400	7.51	34.31	0.64	26.82	123	0.92
201	10.92	34.30	1.38	177	500	6.73	34.32	0.37	26.96	111	1.05
250	10.42	34.46	0.74	156							
327	8.40	34.31	0.91	136							
426	7.30	34.31	0.56	120							
555	6.27	34.34	0.28	105							

PAOLINA-T; October 11, 1958; 0253, 0333 GCT; 27°10.5'N, 118°16'W; sounding, 2100 fm; wind, 280°, force 2; weather, missing; sea, rough; wire angle, 00°, 02°.

117.80

0	22.48	34.05	4.84	451	0	22.48	34.05	4.84	23.38	451	0.00
11	22.34	34.02	4.96	450	10	22.35	34.02	4.95	23.39	450	0.04
31	22.24	33.99	4.91	450	20	22.26	34.00	4.94	23.39	450	0.09
56	18.76	33.82	5.16	373	30	22.24	33.99	4.91	23.39	450	0.14
66	18.16	33.84	5.35	357	50	19.90	33.86	5.03	23.94	398	0.22
76	17.60	33.78	5.35	349	75	17.65	33.78	5.35	24.45	349	0.31
86	17.20	33.78	5.32	339	100	16.32	33.80	5.45	24.76	319	0.40
					150	11.32	33.59	4.15	25.64	236	0.54
98	16.40	33.80	5.45	320	200	9.37	33.97	2.84	26.28	175	0.64
112	14.86	33.71	5.35	294	250	8.75	34.14	2.14	26.51	153	0.73
131	12.94	33.58	4.65	265	300	8.26	34.26	1.42	26.67	138	0.80
150	11.32	33.59	4.15	236	400	7.27	34.34	0.55	26.88	118	0.94
173	9.91	33.77	3.50	199	500	6.48	34.36	0.34	27.00	107	1.06
199	9.38	33.97	2.85	176							
249	8.76	34.14	2.15	154							
327	8.02	34.30	1.00	131							
427	7.02	34.34	0.46	115							
555	6.04	34.37	0.27	100							

a) Alternate value, 15.74°C, not used in interpolation.

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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

117.90 PAOLINA-T; October 11, 1958; 0906 GCT; 26°54'N, 118°49.5'W; sounding, 2000+ fm; wind, missing, force 1; weather, clear; sea, moderate; wire angle, 00°.

0	21.93	33.91	4.55a)	446	0	21.93	33.91	4.55	23.43	446	0.00
11	21.86	33.88	4.76	447	10	21.87	33.89	4.75	23.42	447	0.04
31	21.83	33.90	4.73	444	20	21.85	33.89	4.75	23.43	446	0.09
56	18.44	33.85	5.48	363	30	21.84	33.90	4.74	23.44	445	0.13
66	17.76	33.83	5.35	348	50	19.10	33.86	5.36	24.14	378	0.22
76	17.40	33.84	5.54	340	75	17.45	33.84	5.53	24.54	340	0.30
86	16.94	33.84	5.14	329	100	15.76	33.78	5.16	24.89	307	0.39
101	15.70	33.78	5.16	307	150	10.54	33.66	4.11	25.83	218	0.52
116	13.90	33.71	4.95	274	200	9.38	33.94	2.99	26.25	178	0.62
135	11.63	33.66	4.25	236	250	8.52	34.14	2.08	26.54	150	0.70
155	10.37	33.66	4.08	214	300	7.97	34.22	1.53	26.69	136	0.78
179	10.04b)	33.79	3.47	200	400	6.92	34.32	0.72	26.92	114	0.91
203	9.25c)	33.95	2.93	175	500	6.28	34.38	0.42	27.05	102	1.02
252	8.48	34.14	2.04	150							
332	7.62	34.26	1.26	129							
432	6.67	34.34	0.57	110							
564	5.92	34.42	0.30	94							

118.39 PAOLINA-T; October 9, 1958; 2006 GCT; 28°18.5'N, 115°23'W; sounding, 115 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 02°.

0	22.81	33.84	5.05	475	0	22.81	33.84	5.05	23.13	475	0.00
11	22.52	33.86	5.02	466	10	22.54	33.86	5.03	23.22	466	0.05
31	19.20	33.62	4.83	398	20	21.40	33.78	4.90	23.48	442	0.09
51	16.56	33.56	4.87	341	30	19.35	33.63	4.83	23.90	401	0.13
76	14.66	33.59	5.22	299	50	16.70	33.56	4.86	24.50	344	0.21
102	13.04	33.73	3.86	257	75	14.75	33.59	5.21	24.96	301	0.29
127	12.27	33.95	2.32	226	100	13.30	33.69	4.24	25.34	264	0.36
167	11.61	34.16	1.36	199	150	11.88	34.07	1.70	25.91	210	0.48
208	11.02	34.33	0.87	176	200	11.15	34.30	0.94	26.22	180	0.58

119.33 BLACK DOUGLAS; October 10, 1958; 1741 GCT; 28°19'N, 114°53'W; sounding, 61 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°.

0	22.98	33.77		484	0	22.98	33.77		23.03	484	0.00
9	22.98	33.80		482	10	22.98	33.80		23.05	482	0.05
28	22.94	33.78		482	20	22.96	33.79		23.05	482	0.10
46	22.36	33.75		469	30	22.93	33.78		23.05	482	0.14
69	18.78	33.86		370	50	21.50	33.75		23.43	446	0.24

120.25 BLACK DOUGLAS; October 10, 1958; 1154 GCT; 28°23'N, 114°14.5'W; sounding, 31 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

0	22.28	33.78	5.14	466	0	22.28	33.78	5.14	23.22	466	0.00
9	22.27	33.80	5.17	464	10	22.26	33.80	5.18	23.25	463	0.05
28	18.48	33.70	5.41	374	20	20.70	33.76	5.27	23.65	425	0.09
38	16.75	33.66	5.14	338	30	18.20	33.69	5.38	24.24	368	0.13

120.30 BLACK DOUGLAS; October 10, 1958; 1445 GCT; 28°13'N, 114°34'W; sounding, 51 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

0	22.54	33.85	5.08	467	0	22.54	33.85	5.08	23.21	467	0.00
10	22.54	33.84	5.00	468	10	22.54	33.84	5.00	23.20	468	0.05
29	21.18	33.78	5.18	436	20	22.08	33.81	5.05	23.31	458	0.09
47	18.38	33.68	5.00	374	30	21.08	33.78	5.18	23.56	434	0.14
70	16.21	33.68	4.54	325	50	18.00	33.68	4.92	24.28	365	0.22

- a) Alternate value, 4.80 ml/L, not used in interpolation.  
 b) Alternate value, 9.90°C, not used in interpolation.  
 c) Mean value of 9.19 and 9.31°C.

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 <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; October 10, 1958; 2015 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

120.35

0	23.34	33.88	4.97	486	0	23.34	33.88	4.97	23.01	486	0.00
10	22.84	33.84	4.99	476	10	22.84	33.84	4.99	23.12	476	0.05
29	22.73	33.84	4.98	472	20	22.75	33.84	4.99	23.14	474	0.10
48	22.70	33.92	5.02	466	30	22.73	33.84	4.99	23.16	472	0.14

BLACK DOUGLAS; October 11, 1958; 0147 GCT; 27°43'N, 115°33'W; sounding, 1150 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°.

120.45

0	22.42	33.80	4.87	468	0	22.42	33.80	4.87	23.20	468	0.00
9	22.43	33.78	5.07	469	10	22.44	33.78	5.07	23.19	469	0.05
27	22.43	33.84	5.09	465	20	22.44	33.82	5.08	23.22	466	0.09
40	18.65	33.58	5.98	388	30	22.20	33.82	5.17	23.29	460	0.14
48	17.17	33.56	6.04	354	50	17.00	33.57	6.01	24.44	350	0.22
56	16.62	33.60	5.93	340	75	14.80	33.54	5.73	24.92	305	0.30
65	15.94	33.58	5.88	326	100	13.02	33.58	5.09	25.31	268	0.38
82	14.18	33.53	5.55	293	150	10.50	33.76	3.43	25.92	209	0.50
93	13.46	33.56	5.28	277	200	11.10	34.33	1.30	26.26	177	0.59
106	12.59	33.59	4.89	258	250	10.35	34.41	0.92	26.46	158	0.68
126	10.89	33.56	4.66	231	300	9.06	34.33	1.17	26.61	144	0.76
150	10.50	33.76	3.43	209	400	8.02	34.38	0.53	26.81	125	0.90
182	11.12	34.27	1.45	182	500	6.70	34.34	0.33	26.96	110	1.02
225	10.89	34.45	0.81	165							
293	9.14	34.33	1.19	146							
381	8.24	34.38	0.59	128							
509	6.60	34.34	0.32	109							

BLACK DOUGLAS; October 11, 1958; 0519 GCT; 27°33'N, 115°52.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°.

120.50

0	22.10	33.73	5.09	464	0	22.10	33.73	5.09	23.24	464	0.00
9	22.10	33.76	4.89	462	10	22.10	33.76	4.90	23.26	462	0.05
28	22.12	33.74	5.01	464	20	22.11	33.74	4.98	23.24	464	0.09
42	19.12	33.57	5.37	400	30	22.10	33.74	5.03	23.24	464	0.14
51	17.68	33.55	5.75	367	50	17.83	33.55	5.72	24.22	371	0.22
60	16.95	33.55	5.59	350	75	16.16	33.63	5.39	24.68	327	0.31
69	16.48	33.58	5.58	338	100	13.86	33.75	4.29	25.26	272	0.39
88	15.26	33.78	4.37	297	150	10.59	33.90	3.39	26.01	201	0.50
101	13.80	33.75	4.29	270	200	10.55	34.48	1.50	26.48	156	0.60
115	11.88	33.55	4.93	248	250	10.34	34.52	0.69	26.54	150	0.68
136	10.44	33.68	4.13	214	300	9.50	34.42	0.68	26.60	144	0.75
162	10.74	34.05	2.57	192	400	8.17	34.39	0.48	26.80	126	0.89
197	10.58	-	1.70	-	500	7.05	34.38	0.46	26.94	113	1.02
245	10.40	34.52	0.69	151							
322	9.16	34.38	0.68	142							
417	7.99	34.39	0.46	124							
549	6.53	34.36	0.46	106							

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

120.60

BLACK DOUGLAS; October 11, 1958; 1124 GCT; 27°14.5'N, 116°33'W; sounding, 2000+ fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	21.63	33.56	5.16	464	0	21.63	33.56	5.16	23.24	464	0.00
10	21.63	33.58	5.17	462	10	21.63	33.58	5.17	23.26	462	0.05
29	19.21	33.53	5.74	405	20	20.98	33.56	5.36	23.43	446	0.09
43	16.51	33.53	5.96	342	30	19.06	33.53	5.76	23.90	401	0.13
53	15.46	33.54	5.82	319	50	15.79	33.54	5.90	24.69	326	0.21
62	14.51	33.55	5.24	298	75	13.02	33.65	4.56	25.37	262	0.28
71	13.49	33.65	4.56	271	100	11.67	33.77	4.00	25.72	228	0.34
90	11.98	33.65	4.56	243	150	11.60	34.19	1.52	26.05	197	0.45
104	11.60	33.84	3.06	222	200	10.33	34.23	1.52	26.32	171	0.54
117	11.82	34.04	2.14	211	250	10.11	34.46	0.65	26.54	151	0.63
140	11.72	34.14	1.74	202	300	9.47	34.49	0.56	26.67	138	0.70
167	11.39	34.29	1.30	185	400	8.15	34.43	0.35	26.83	123	0.84
203	10.22	34.23	1.52	170	500	7.12	34.40	0.29	26.96	110	0.96
253	10.10	34.47	0.63	150							
330	8.95	34.47	0.56	132							
426	7.86	34.42	0.30	120							
559	6.52	34.40	0.29	103							

120.70

BLACK DOUGLAS; October 11, 1958; 1650 GCT; 26°52.5'N, 117°10'W; sounding, 2000+ fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.

0	22.02	33.71	5.11	464	0	22.02	33.71	5.11	23.24	464	0.00
10	22.02	33.73	5.17	462	10	22.02	33.73	5.17	23.26	462	0.05
27	21.78	33.71	5.38	457	20	21.90	33.72	5.28	23.30	459	0.09
41	18.68	33.86	5.89	368	30	21.63	33.72	5.41	23.36	452	0.14
49	17.88	33.83	5.99	351	50	17.86	33.83	5.99	24.43	351	0.22
58	17.40	33.82	5.85	341	75	16.30	33.76	5.68	24.75	321	0.30
67	16.91	33.78	5.92	333	100	13.47	33.88	3.73	25.45	254	0.38
84	14.88	33.73	4.94	293	150	12.60	34.25	1.70	25.91	210	0.49
96	13.46	33.73	4.22	264	200	11.94	34.52	0.69	26.25	178	0.59
109	13.54	34.07	2.62	241	250	10.47	34.47	0.93	26.48	156	0.68
129	12.98	34.13	2.14	226	300	9.16	34.34	1.16	26.60	145	0.76
154	12.54	34.27	1.52	208	400	8.27	34.40	0.62	26.79	127	0.90
186	12.25	34.52	0.68	184	500	7.35	34.42	0.32	26.94	113	1.02
231	11.00	34.51	0.82	162							
302	9.10	34.34	1.16	144							
392	8.36	34.40	0.63	128							
522	7.14	34.42	0.27	110							

120.80

BLACK DOUGLAS; October 11, 1958; 2233 GCT; <sup>26°32'N</sup>~~26°32.5'N~~, 117°48.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, missing.

0	22.17	33.71	5.11	467	0	22.17	33.71	5.11	23.21	467	0.00
10	22.16	33.68	5.20	468	10	22.16	33.68	5.20	23.20	468	0.05
28	22.00	33.68	5.51	465	20	22.08	33.68	5.39	23.22	466	0.09
41	20.51	33.67	5.51	427	30	21.97	33.68	5.51	23.24	464	0.14
50	18.73	33.69	5.53	382	50	18.73	33.69	5.53	24.11	382	0.22
59	17.14	33.74	5.57	341	75	15.50	33.60	5.61	24.81	315	0.31
68	16.11	33.62	5.59	327	100	14.80	33.80	4.34	25.11	286	0.39
86	14.80	33.60	5.64	301	150	10.40	33.62	4.01	25.83	218	0.52
98	14.82	33.80	4.39	287	200	9.42	33.94	2.98	26.25	178	0.62
112	13.94	33.81	4.11	268	250	8.84	34.10	2.20	26.46	158	0.70
133	11.19	33.55	4.25	236	300	8.44	34.23	1.44	26.62	143	0.78
158	10.12	33.66	3.83	211	400	7.50	34.34	0.76	26.85	121	0.92
192	9.54	33.91	3.15	182	500	6.68	34.36	0.41	26.98	109	1.04
240	8.96	34.08	2.34	161							
314	8.31	34.27	1.27	137							
408	7.41	34.34	0.71	120							
541	6.42	34.36	0.33	105							

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/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

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BLACK DOUGLAS; October 12, 1958; 0425 GCT; 26°13'N, 118°27.5'W; sounding, 2000+ fm; wind, 010°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°.

12090

0	22.49	33.95	4.89	459	0	22.49	33.95	4.89	23.30	459	0.00
10	22.48	33.94	4.95	459	10	22.48	33.94	4.95	23.30	459	0.05
29	22.50	33.97	4.96	457	20	22.50	33.95	4.96	23.30	458	0.09
42	22.52	34.03	5.07	453	30	22.50	33.97	4.97	23.31	457	0.14
52	20.20	33.81	5.47	409	50	20.72	33.86	5.37	23.72	418	0.22
61	18.94	33.73	5.76	383	75	17.55	33.68	5.83	24.40	354	0.32
70	17.96	33.68	5.83	364	100	16.22	33.71	5.65	24.72	323	0.41
87	16.70	33.68	5.77	336	150	11.41	33.64	4.66	25.66	234	0.55
100	16.22	33.71a)	5.65	323	200	9.70	33.74	3.73	26.04	198	0.66
114	15.32	33.69	5.41	305	250	8.74	34.07	2.38	26.45	159	0.75
136	13.24	33.60	4.82	270	300	8.09	34.15	1.74	26.62	143	0.83
161	10.75	33.66	4.53	221	400	7.05	34.28	0.77	26.86	120	0.97
195	9.80	33.71	3.85	202	500	6.45	34.32	0.45	26.98	108	1.09
242	8.86	34.04	2.50	163							
317	7.86	34.18	1.52	138							
411	6.98	34.29	0.68	118							
542	6.20	34.34	0.34	104							

BLACK DOUGLAS; October 14, 1958; 2218 GCT; 27°24'N, 114°39.5'W; sounding, 40 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°.

12337

0	24.82	34.33	5.06	496	0	24.82	34.33	5.06	22.91	496	0.00
9	24.46	34.35	5.27	484	10	24.46	34.35	5.27	23.04	484	0.05
28	23.30	34.30	4.89	456	20	24.42	34.35	5.26	23.05	483	0.10
47	18.69	34.02	4.81	357	30	22.90	34.28	4.87	23.44	446	0.14

BLACK DOUGLAS; October 13, 1958; 1413 GCT; 27°15'N, 115°00'W; sounding, 850 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.

12342

0	23.53	34.25	4.68	465	0	23.53	34.25	4.68	23.24	465	0.00
10	23.54	34.25	4.68	465	10	23.54	34.25	4.68	23.24	465	0.05
29	19.03	33.75	5.61	384	20	21.35	33.99	5.16	23.66	425	0.09
43	16.96	33.58	5.60	348	30	18.80	33.73	5.60	24.12	380	0.13
53	16.22	33.67	5.43	326	50	16.43	33.64	5.46	24.62	332	0.20
62	15.42	33.60	6.20	-							
72b)	15.04	33.57	5.40	-							
85b)	14.30	33.68	4.93	-							
100b)	13.22	33.63	4.62	-							
120b)	12.92	33.99	3.06	-							
148b)	12.34	34.23	1.80	-							
188b)	11.98	34.61	0.53	-							
250b)	10.94	34.63	0.36	-							
326b)	9.14	34.48	0.66	-							
431b)	7.64	34.47	0.31	-							

- a) The salinity values appear as listed on the data sheet. However, there is doubt concerning the correct order of values between 100 and 317 meters.  
b) Posttrip; depth too uncertain for interpolation.

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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	

123.50

BLACK DOUGLAS; October 13, 1958; 0854 GCT; 26°58'N, 115°30.5'W; sounding, 2000+ fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 18°.

0	22.23	33.82	5.09	461	0	22.23	33.82	5.09	23.28	461	0.00
11	22.22	33.83	5.15	460	10	22.22	33.83	5.14	23.28	460	0.05
30	22.12	33.80	5.18	459	20	22.20	33.82	5.16	23.29	460	0.09
44	18.54	33.80	5.72	369	30	22.12	33.80	5.18	23.29	459	0.14
53	17.18	33.87	5.30	332	50	17.57	33.85	5.38	24.52	342	0.22
62	15.64	33.78	5.16	305	75	15.18	33.86	4.79	25.08	289	0.30
71	15.28	33.83	4.93	294	100	14.05	33.94	3.56	25.38	260	0.37
90	14.76	33.95	3.72	274	150	10.59	33.87	3.28	26.00	202	0.48
103	13.80	33.93	3.57	256	200	9.60	34.18	2.12	26.40	164	0.58
117	11.90	33.68	4.10	239	250	9.87	34.51	0.70	26.62	143	0.66
139	10.92	33.78	3.58	215	300	9.38	34.50	0.40	26.69	136	0.73
166	10.22	33.97	2.90	189	400	7.98	34.40	0.40	26.83	123	0.86
201	9.58	34.18	2.03	164	500	6.82	34.38	0.39	26.98	109	0.99
248	9.88	34.51	0.72	144							
324	9.06	34.49	0.38	133							
419	7.72	34.39	0.41	120							
554	6.22	34.38	0.36	101							

123.60

BLACK DOUGLAS; October 13, 1958; 0203 GCT; 26°38.5'N, 116°08'W; sounding, 2000+ fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 19°.

0	22.06	33.75	5.05	462	0	22.06	33.75	5.05	23.27	462	0.00
11	22.04	33.82	5.14	456	10	22.04	33.81	5.13	23.32	456	0.05
29	21.78	33.73	5.13	455	20	21.93	33.78	5.14	23.33	456	0.09
43	16.50	33.75	5.19	326	30	21.77	33.73	5.13	23.34	454	0.14
52	15.26	33.81	4.17	295	50	15.45	33.80	4.36	24.97	300	0.21
61	14.36	33.94	3.33	267	75	13.75	33.94	2.89	25.44	254	0.28
70	14.22	33.99	2.83	260	100	11.63	33.86	3.14	25.79	222	0.34
88	12.60	33.83	3.10	242	150	10.09	33.98	2.64	26.16	187	0.45
102	11.47	33.86	3.14	219	200	9.00	34.16	2.00	26.48	156	0.53
116	11.07	33.93	2.79	207	250	8.70	34.32	1.17	26.66	140	0.61
137	10.40	33.94	2.69	194	300	8.35	34.36	0.78	26.74	132	0.68
163	9.82	34.04	2.60	178	400	7.21	34.36	0.35	26.91	115	0.81
197	9.02	34.15	2.05	157	500	6.47	34.39	0.35	27.03	104	0.92
245	8.72	34.31	1.20	140							
320	8.16	34.37	0.67	128							
415	7.05	34.36	0.34	114							
550	6.10	34.41	0.36	98							

123.70

BLACK DOUGLAS; October 12, 1958; 1938 GCT; 26°18.5'N, 116°47'W; sounding, 2000+ fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 19°.

0	21.80	33.62	5.05	464	0	21.80	33.62	5.05	23.24	464	0.00
10	21.76	33.64	5.08	461	10	21.76	33.64	5.08	23.28	461	0.05
28	21.68	33.60	4.95	462	20	21.72	33.62	4.97	23.27	462	0.09
41	18.84	33.57	5.85	393	30	21.65	33.60	4.96	23.27	462	0.14
50	17.24	33.66	5.85	349	50	17.24	33.66	5.85	24.45	349	0.22
59	16.75	33.73	5.72	333	75	15.66	33.80	5.48	24.92	304	0.30
68	16.28	33.84	5.68	315	100	12.29	33.62	4.19	25.48	251	0.37
86	13.58	33.59	4.54	277	150	11.47	34.01	2.30	25.94	207	0.49
97	12.31	33.62	4.21	251	200	10.02	34.20	1.85	26.34	169	0.58
110	12.16	33.72	3.54	241	250	9.72	34.31	1.34	26.48	156	0.67
131	11.76	33.95	2.86	216	300	(9.64)	(34.43)	(0.78)	(26.58)	(146)	(0.74)
155	11.41	34.02	2.17	206							
185	10.28	34.14	2.02	178							
228	9.76	34.28	1.59	159							
299	9.64	34.43	0.78	146							
318a)	9.60	34.43	0.69	-							
491a)	8.46	34.50	0.26	-							

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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BLACK DOUGLAS; October 12, 1958; 1228 GCT; 26°00'N, 117°29'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 19°.

123.80

0	21.94	33.67	5.23	464	0	21.94	33.67	5.23	23.24	464	0.00
10	21.95	33.67	5.17	464	10	21.95	33.67	5.17	23.24	464	0.05
28	21.96	33.69	5.23	463	20	21.95	33.68	5.19	23.25	464	0.09
41	19.11	33.68	5.90	391	30	21.70	33.69	5.33	23.32	456	0.14
50	18.10	33.72	6.00	364	50	18.10	33.72	6.00	24.29	364	0.22
59	17.65	33.72	5.94	354	75	17.28	33.86	5.84	24.60	336	0.31
68	17.49	33.85	5.85	341	100	14.98	33.66	5.67	24.97	300	0.39
85	16.92	33.87	5.84	327	150	10.77	33.63	4.30	25.77	224	0.52
97	15.54	33.66	5.76	312	200	9.30	33.92	3.15	26.25	178	0.62
110	13.74	33.68	5.41	274	250	8.69	34.10	2.34	26.48	156	0.71
131	11.92	33.58	4.65	247	300	8.40	34.25	1.61	26.65	140	0.79
155	10.58	33.64	4.22	220	400	7.60	34.34	0.57	26.84	122	0.92
190	9.50	33.87	3.37	185	500	6.66	34.36	0.40	26.98	109	1.04
236	8.80	34.04	2.57	162							
309	8.37	34.27	1.46	138							
402	7.58	34.34	0.58	122							
535	6.32	34.36	0.36	104							

BLACK DOUGLAS; October 15, 1958; 0324 GCT; 26°55.5'N, 114°06'W; sounding, 45 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

127.34

0	24.95	34.53	4.93	485	0	24.95	34.53	4.93	23.02	485	0.00
9	24.92	34.47	4.90	488	10	24.91	34.47	4.90	22.99	488	0.05
28	24.64	34.51	4.93	478	20	24.72	34.50	4.91	23.06	481	0.10
48	20.51	34.11	5.29	395	30	24.59	34.51	4.92	23.12	476	0.14

BLACK DOUGLAS; October 15, 1958; 0713 GCT; 26°43.5'N, 114°29.5'W; sounding, 1650 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 03°.

127.40

0	24.58	34.39	4.89	485	0	24.58	34.39	4.89	23.02	485	0.00
10	24.55	34.39	4.88	484	10	24.55	34.39	4.88	23.04	484	0.05
29	23.43	34.33	5.04	457	20	24.50	34.39	4.90	23.06	482	0.10
43	19.98	34.14	5.12	380	30	23.10	34.31	5.06	23.40	449	0.14
52	19.30	34.14	4.51	363	50	19.42	34.14	4.57	24.28	366	0.22
62	17.01	33.82	4.70	332	75	16.42	33.94	4.93	24.86	311	0.31
71	16.96	33.96	5.18	321	100	13.40	33.86	3.34	25.46	254	0.38
90	14.55	33.86	4.07	276	150	11.00	34.04	2.44	26.05	197	0.50
103	13.06	33.87	3.20	247	200	11.44	34.56	0.57	26.37	166	0.59
116	12.32	33.88	3.13	232	250	10.57	34.54	0.56	26.52	152	0.67
139	11.14	33.93	2.65	208	300	9.45	34.50	0.69	26.68	138	0.75
165	11.37	34.31	1.37	183	400	7.78	34.36	0.53	26.83	123	0.88
200	11.44	34.56	0.57	166	500	6.76	34.34	0.36	26.95	112	1.00
250	10.57	34.54	0.56	152							
326	8.88	34.47	0.73	131							
423	7.46	34.34	0.47	121							
557	6.29	34.34	0.30	105							

BLACK DOUGLAS; October 15, 1958; 1333 GCT; 26°25'N, 115°09'W; sounding, 2000+ fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 02°.

127.50

0	24.26	34.34	4.69	479	0	24.26	34.34	4.69	23.08	479	0.00
10	24.26	34.27	4.67	484	10	24.26	34.27	4.67	23.03	484	0.05
29	22.27	33.79	4.87	464	20	22.35	33.80	4.86	23.22	466	0.10
43	18.73	33.81	5.71	373	30	22.26	33.79	4.88	23.24	464	0.14
52	17.99	33.75	5.79	360	50	18.13	33.77	5.78	24.32	360	0.22
61	17.22	33.65	5.73	350	75	16.42	33.67	5.48	24.65	330	0.31
71	16.68	33.66	5.56	337	100	14.00	33.64	5.08	25.16	282	0.39
89	15.30	33.72	5.25	302	150	10.87	33.70	3.85	25.80	220	0.51
103	13.50	33.62	4.98	273	200	9.52	33.99	2.62	26.26	177	0.62
116	12.18	33.65	3.95	246	250	9.64	34.38	1.14	26.55	150	0.70
140	11.30	33.66	3.90	230	300	8.77	34.35	1.16	26.67	138	0.77
167	10.10	33.77	3.54	202	400	7.32	34.30	1.01	26.84	122	0.91
202	9.48	34.02	2.58	174	500	6.52	34.35	0.57	27.00	107	1.03
250	9.64	34.38	1.14	150							
325	8.29	34.33	1.15	133							
420	7.16	34.29	0.93	120							
553	6.20	34.40	0.37	100							

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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

127.60 BLACK DOUGLAS; October 15, 1958; 1939 GCT; 26°05'N, 115°46'W; sounding, 2000+ fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 05°.

0	22.82	-	5.00	-	0	22.82	(33.71)	5.00	(23.02)	(485)	(0.00)
10	22.48	33.71	5.10	475	10	22.48	33.71	5.10	23.13	475	0.05
29	21.28	34.02	5.50	421	20	22.54	33.78	5.27	23.16	472	0.10
44	19.70	33.95	5.56	386	30	21.16	34.02	5.51	23.72	418	0.14
53	18.40	33.86	5.74	361	50	18.95	33.90	5.67	24.22	372	0.22
62	17.68	33.83	5.74	346	75	17.15	33.86	5.60	24.63	332	0.31
71	17.35	33.87	5.64	336	100	14.56	33.73	5.22	25.11	286	0.39
91	15.71	33.78	5.43	306	150	10.58	33.75	4.04	25.90	211	0.51
103	14.10	33.71	5.12	278	200	10.22	34.23	1.84	26.34	170	0.61
116	12.58	33.63	4.75	255	250	9.70	34.41	1.03	26.56	148	0.69
139	11.00	33.68	4.30	224	300	9.08	34.42	0.93	26.67	138	0.76
165	10.14	33.87	3.30	195	400	7.87	34.40	0.58	26.85	121	0.90
201	10.22	34.24	1.83	170	500	6.95	34.41	0.37	26.98	108	1.02
250	9.70	34.41	1.03	148							
327	8.74	34.42	0.89	132							
424	7.60	34.40	0.49	118							
557	6.45	34.42	0.31	101							

127.70 BLACK DOUGLAS; October 16, 1958; 0142 GCT; 25°45.5'N, 116°23'W; sounding, 2000+ fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 03°.

0	23.10	33.84	5.04	483	0	23.10	33.84	5.04	23.04	483	0.00
10	23.04	33.85	5.07	481	10	23.04	33.85	5.07	23.06	481	0.05
29	22.51	33.78	5.06	471	20	22.58	33.79	5.06	23.16	472	0.10
43	19.76	33.89	5.74	392	30	22.49	33.78	5.06	23.17	471	0.14
53	18.34	33.83	5.94	362	50	18.74	33.85	5.91	24.23	370	0.23
62	17.72	33.80	5.92	350	75	17.27	33.79	5.82	24.54	341	0.32
71	17.38	33.77	5.87	344	100	15.54	33.78	5.65	24.94	303	0.40
89	16.58	33.79	5.75	325	150	11.04	33.69	4.27	25.76	224	0.53
103	15.14	33.77	5.56	295	200	9.66	34.08	2.38	26.32	172	0.63
116	13.70	33.66	5.06	274	250	8.88	34.22	1.85	26.55	150	0.71
137	11.63	33.62	4.61	239	300	8.69	34.34	0.90	26.67	138	0.79
163	10.52	33.79	3.69	208	400	7.57	34.39	0.47	26.88	118	0.92
197	9.67	34.07	2.42	173	500	6.66	34.42	0.36	27.03	104	1.04
245	8.92	34.22	1.89	150							
320	8.59	34.43	0.69	130							
418	7.34	34.38	0.44	116							
545	6.36	34.45	0.30	98							

127.80 BLACK DOUGLAS; October 16, 1958; 0746 GCT; 25°23.5'N, 117°02.5'W; sounding, 2000+ fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 04°.

0	22.82	33.89	5.12	472	0	22.82	33.89	5.12	23.16	472	0.00
9	22.80	33.92	5.06	469	10	22.80	33.92	5.06	23.19	469	0.05
28	22.73	33.93	5.08	466	20	22.77	33.92	5.07	23.20	468	0.09
43	21.62	34.08	5.46	426	30	22.70	33.93	5.09	23.23	466	0.14
52	20.30	34.09	5.53	391	50	21.14	34.09	5.49	23.78	413	0.23
61	19.30	34.02	5.75	372	75	18.39	34.00	5.61	24.43	351	0.32
70	18.74	34.03	5.65	357	100	16.50	33.86	5.47	24.78	318	0.41
89	17.45	33.91	5.58	336	150	12.00	33.74	4.00	25.64	236	0.55
103	16.22	33.86	5.40	312	200	9.97	33.82	3.42	26.06	196	0.66
116	14.44	33.75	4.98	282	250	9.47	34.22	1.83	26.45	159	0.75
139	12.42	33.66	4.26	250	300	8.68	34.29	1.31	26.63	142	0.83
166	11.12	33.80	3.50	217	400	7.56	34.34	0.64	26.84	122	0.96
201	9.94	33.82	3.42	196	500	6.73	34.39	0.37	27.00	107	1.09
249	9.48	34.22	1.85	159							
326	8.36	34.31	1.12	135							
420	7.38	34.35	0.57	118							
551	6.34	34.42	0.31	100							

OBSERVED					INTERPOLATED				COMPUTED		
Z	T	S	O <sub>2</sub>	$\delta T_{3/10}$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_{3/10}$	$\Delta D$
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; October 17, 1958; 1630 GCT; 26°29'N, 113°29'W; sounding, 40 fm; wind, 060°, force 4; weather, clear; sea, rough; wire angle, 00°.

130.30

0	25.98	34.56a)	4.69	513	0	25.98	34.56	4.69	22.73	513	0.00
10	25.76	34.52	4.82	509	10	25.76	34.52	4.82	22.77	509	0.05
29	24.06	34.35	5.25	473	20	25.52	34.49	4.92	22.81	505	0.10
49	19.49	34.04	5.12	374	30	23.89	34.33	5.26	23.19	469	0.15

BLACK DOUGLAS; October 17, 1958; 1327 GCT; 26°21'N, 113°48.5'W; sounding, 200 fm; wind, 100°, force 4; weather, clear; sea, moderate; wire angle, 00°.

130.35

0	26.05	34.47a)	4.70	522	0	26.05	34.47	4.70	22.64	522	0.00
9	26.06	34.43	4.66	525	10	26.05	34.43	4.65	22.60	525	0.05
28	25.84	34.47	4.70	516	20	25.96	34.45	4.67	22.66	520	0.10
47	20.64	34.03	5.73	404	30	25.67	34.46	4.72	22.75	511	0.16
70	17.03	34.05	5.63	316	50	19.76	34.00	5.73	24.08	384	0.25
93	15.78	33.80	3.94	306	75	16.92	34.06	5.39	24.83	313	0.33
115	13.96	33.96	3.19	257	100	15.00	33.83	3.68	25.09	288	0.41
151	13.70	34.46	1.50	216	150	13.70	34.45	1.52	25.84	216	0.54
187	11.66	34.38	1.23	184	200	11.37	34.39	1.21	26.26	177	0.64
233	10.92	34.52	0.70	160							

BLACK DOUGLAS; October 17, 1958; 1038 GCT; 26°14'N, 114°03'W; sounding, 1150 fm; wind, 060°, force 1; weather, clear; sea, moderate; wire angle, 00°.

130.40

0	26.00	34.46	4.63	521	0	26.00	34.46	4.63	22.65	521	0.00
10	25.79	34.42	4.68	518	10	25.79	34.42	4.68	22.68	518	0.05
29	24.47	34.21	4.77	494	20	25.29	34.34	4.70	22.77	509	0.10
44	21.93	33.89	5.37	448	30	24.40	34.20	4.78	22.94	493	0.15
53	18.41	33.64	5.80	377	50	19.40	33.69	5.72	23.94	398	0.24
63	16.39	33.64	5.80	332	75	15.89	33.93	4.40	24.98	299	0.33
72	15.90	33.92	4.46	300	100	13.88	34.04	2.77	25.49	250	0.40
90	13.85	33.96	3.12	256	150	11.26	34.02	2.04	25.98	203	0.51
104	13.43	34.02	2.72	243	200	10.73	34.47	1.04	26.44	160	0.60
117	12.32	33.96	2.64	227	250	9.86	34.43	0.85	26.56	149	0.68
140	11.41	33.98	2.33	209	300	9.42	34.50	0.51	26.68	138	0.76
166	11.07	34.18	1.62	188	400	8.00	34.45	0.37	26.86	120	0.89
200	10.73	34.47	1.04	160	500	6.93	34.43	0.32	27.00	106	1.01
249	9.87	34.43	0.86	150							
324	9.20	34.52	0.38	132							
420	7.73	34.44	0.37	116							
553	6.42	34.43	0.29	100							

BLACK DOUGLAS; October 17, 1958; 0329 GCT; 25°49'N, 114°46'W; sounding, 2000+ fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 03°.

130.50

0	25.62	34.51b)	4.66	506	0	25.62	34.51	4.66	22.80	506	0.00
10	25.38	34.53	4.59	498	10	25.38	34.53	4.59	22.89	498	0.05
29	25.17	34.45	4.66	497	20	25.26	34.49	4.63	22.89	498	0.10
43	18.82	33.78b)	6.00	377	30	25.13	34.44	4.68	22.91	496	0.15
53	16.38	33.71	5.76	326	50	17.00	33.72	5.91	24.55	340	0.23
62	15.70	33.84	4.79	302	75	14.92	33.93	3.83	25.19	279	0.31
72	15.16	33.93	3.98	284	100	12.68	33.90	3.10	25.63	237	0.38
91	13.18	33.89	3.28	247							
105	12.46	33.91	3.00	233							

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

b) Salinity bottle number recorded on the data sheet differs from number on titration sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

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

130.60 BLACK DOUGLAS; October 16, 1958; 2016 GCT; 25°26.5'N, 115°24'W; sounding, 2000+ fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 08°.

0	24.16	34.16	4.70	489	0	24.16	34.16	4.70	22.98	489	0.00
10	24.02	34.16	4.86	486	10	24.02	34.16	4.86	23.01	486	0.05
29	22.74	33.91	4.81	468	20	23.50	34.06	4.83	23.10	478	0.10
43	19.33	33.79	5.56	388	30	22.70	33.90	4.81	23.22	466	0.14
53	18.53	33.84	5.76	366	50	18.73	33.83	5.73	24.21	372	0.23
61	17.80	33.84	5.46	349	75	16.72	33.77	5.42	24.66	329	0.32
70	17.04	33.79	5.43	335	100	14.72	33.69	5.14	25.04	293	0.40
89	15.80	33.72	5.32	313	150	11.00	33.81	3.30	25.87	214	0.52
102	14.40	33.68	5.04	287	200	10.90	34.41	1.13	26.36	168	0.62
115	12.94	33.68	3.99	258	250	10.26	34.43	0.68	26.48	156	0.70
137	11.58	33.73	3.69	230	300	9.40	34.49	0.67	26.67	138	0.78
162	11.66	34.11	1.83	204	400	8.38	34.56	0.41	26.89	118	0.91
196	11.01	34.42	1.16	169	500	7.23	34.51	0.38	27.02	105	1.03
245	10.30	34.42	0.70	157							
319	9.03	34.51	0.65	130							
413	8.22	34.56	0.36	114							
543	6.66	34.47	0.42	100							

133.25 BLACK DOUGLAS; October 18, 1958; 0003 GCT; 26°04.5'N, 112°48'W; sounding, 44 fm; wind, 290°, force 3; weather, clear; sea, rough; wire angle, 00°.

0	26.60	34.42	4.65	542	0	26.60	34.42	4.65	22.43	542	0.00
9	26.00	34.45	4.70	522	10	25.95	34.45	4.71	22.66	520	0.05
28	25.12	34.38	4.81	501	20	25.50	34.42	4.76	22.76	510	0.10
47	20.72	34.14	5.17	398	30	24.55	34.34	4.87	23.00	487	0.15

133.30 BLACK DOUGLAS; October 18, 1958; 0300 GCT; 25°54.5'N, 113°07.5'W; sounding, 110 fm; wind, 310°, force 2; weather, clear; sea, rough; wire angle, 00°.

0	26.42	34.36	4.66	541	0	26.42	34.36	4.66	22.44	541	0.00
9	25.41	34.36	4.78	511	10	25.32	34.36	4.79	22.79	508	0.05
28	23.93	34.32	4.87	471	20	24.57	34.34	4.86	22.99	488	0.10
47	20.32	34.23	4.69	381	30	23.68	34.31	4.87	23.23	465	0.15
71	16.22	33.89	4.62	310	50	19.76	34.15	4.70	24.20	373	0.23
95	14.77	33.93	3.89	276	75	16.21	33.92	4.50	24.89	307	0.32
119	15.27	34.37	2.05	254	100	14.77	33.96	3.87	25.24	274	0.39
147	14.94	34.63	0.95	228	150	(14.87)	(34.65)	(0.90)	(25.75)	(225)	(0.52)

133.40 BLACK DOUGLAS; October 17, 1958; 0923 GCT; 25°34.5'N, 113°45.5'W; sounding, 1400 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°.

0	26.08	34.31	4.61	534	0	26.08	34.31	4.61	22.51	534	0.00
10	25.38	34.23	4.71	519	10	25.38	34.23	4.71	22.67	519	0.05
29	23.84	34.11	4.77	484	20	25.04	34.21	4.72	22.74	512	0.10
44	20.42	33.73	5.57	421	30	23.60	34.08	4.78	23.08	479	0.15
53	18.76	33.68	5.81	383	50	19.30	33.69	5.77	23.96	396	0.24
62	17.68	33.72	5.73	355	75	15.84	33.68	5.60	24.79	317	0.33
72	16.36	33.68	5.62	328	100	13.78	33.76	4.83	25.29	269	0.41
90	14.42	33.70	5.56	286	150	13.00	34.36	1.20	25.91	210	0.53
104	13.52	33.78	3.94	262	200	11.22	34.45	0.86	26.33	171	0.62
118	12.52	33.83	2.98	240	250	10.51	34.50	0.62	26.50	154	0.71
141	11.74	33.94	2.62	217	300	9.75	34.50	0.49	26.63	142	0.78
166	12.19	34.44	1.00	188	400	8.48	34.47	0.33	26.81	125	0.92
203	11.14	34.45	0.87	169	500	7.23	34.45	0.27	26.97	109	1.05
253	10.48	34.51	0.59	154							
330	9.28	34.49	0.45	136							
426	8.17	34.46	0.30	121							
559	6.44	34.44	0.26	100							

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; October 18, 1958; 1551, 1619 GCT; 25°14.5'N, 114°24'W; sounding, 2000 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°, 00°.

133.50

0	25.20	34.18	4.62	518	0	25.20	34.18	4.62	22.68	518	0.00
9	25.02	34.18	4.61	513	10	25.00	34.18	4.60	22.74	512	0.05
28	24.61	34.21	4.60	498	20	24.82	34.20	4.60	22.81	506	0.10
42	19.50	33.70	5.46	399	30	24.54	34.21	4.60	22.90	497	0.15
52	17.18	33.69	5.61	345	50	17.40	33.69	5.60	24.44	350	0.24
61	16.22	33.69	5.48	324	75	14.57	33.66	4.83	25.05	292	0.32
70	15.29	33.69	5.14	304	100	13.18	33.69	4.07	25.36	262	0.39
89	14.13	33.72	4.18	278	150	11.20	34.10	1.65	26.06	196	0.51
103	12.91	33.68	4.05	258	200	10.65	34.46	1.06	26.44	160	0.60
116	12.18	33.68	3.82	244	250	10.09	34.52	0.56	26.58	147	0.68
139	11.83	34.00	2.32	214	300	9.60	34.54	0.37	26.68	137	0.75
166	11.13	34.29	1.37	180	400	8.31	34.51	0.28	26.86	120	0.88
202	10.60	34.47	1.05	158	500	7.08	34.45	0.24	27.00	107	1.00
251	10.07	34.52	0.55	146							
329	9.26	34.54	0.33	132							
427	7.95	34.49	0.27	116							
562	6.52	34.43	0.20	101							

BLACK DOUGLAS; October 18, 1958; 2223 GCT; 24°56'N, 114°59'W; sounding, 2000+ fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

133.60

0	25.40	34.06	4.68	532	0	25.40	34.06	4.68	22.53	532	0.00
10	24.05	33.97	4.95	500	10	24.05	33.97	4.95	22.86	500	0.05
29	23.16	33.90	4.98	480	20	23.28	33.91	4.98	23.04	483	0.10
44	21.02	33.87	5.28	425	30	22.97	33.89	4.99	23.13	475	0.15
53	19.02	33.84	5.54	378	50	19.80	33.86	5.47	23.97	395	0.24
62	17.34	33.80	5.56	341	75	15.86	33.79	5.16	24.87	309	0.32
71	16.08	33.79	5.19	314	100	14.40	33.81	4.23	25.20	278	0.40
90	15.44	33.82	4.80	298	150	11.31	34.11	2.10	26.05	197	0.52
104	13.96	33.80	4.02	269	200	10.64	34.40	1.01	26.39	165	0.61
117	12.60	33.78	3.35	245	250	10.60	34.61	0.38	26.56	148	0.69
139	11.50	33.96	2.52	212	300	9.80	34.57	0.37	26.67	138	0.76
165	10.88	34.22	1.64	182	400	8.20	34.47	0.28	26.85	121	0.90
200	10.64	34.40	1.01	165	500	7.06	34.46	0.17	27.01	106	1.02
250	10.60	34.61	0.38	148							
326	9.39	34.54	0.37	134							
420	7.88	34.46	0.26	117							
555	6.60	34.47	0.13	99							

BLACK DOUGLAS; October 20, 1958; 0238 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

137.23

0	26.96	34.61	4.64	539	0	26.96	34.61	4.64	22.46	539	0.00
10	26.96	34.61	4.71	539	10	26.96	34.61	4.71	22.46	539	0.05
29	25.41	34.72	4.72	485	20	26.48	34.70	4.72	22.68	518	0.11
48	24.68	34.76	4.67	461	30	25.38	34.72	4.72	23.04	484	0.16

BLACK DOUGLAS; October 19, 1958; 2306 GCT; 25°20.5'N, 112°45.5'W; sounding, 200 fm; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°.

137.30

0	26.33	34.33	4.71	540	0	26.33	34.33	4.71	22.45	540	0.00
9	26.08	34.34	4.65	532	10	26.07	34.34	4.65	22.53	532	0.05
28	24.52	34.36	4.82	485	20	25.43	34.35	4.84	22.74	512	0.11
47	18.56	33.94	5.29	359	30	24.00	34.33	4.90	23.15	473	0.16
71	16.81	33.88	5.26	324	50	18.43	33.96	5.30	24.39	355	0.24
95	15.82	34.02	3.85	292	75	16.52	33.88	5.23	24.79	317	0.32
119	15.31	34.33	2.24	258	100	15.67	34.07	3.69	25.12	285	0.40
157	14.94	34.74	0.80	220	150	15.18	34.70	1.04	25.73	227	0.53
195	13.28	34.74	0.40	187	200	13.12	34.74	0.37	26.19	184	0.63
242	11.96	34.70	0.25	165	250	11.80	34.69	0.23	26.41	163	0.72
290	11.28	34.65	0.19	157	300	(11.18)	(34.64)	(0.19)	(26.48)	(156)	(0.80)

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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

137.35 BLACK DOUGLAS; October 19, 1958; 1935 GCT; 25°13'N, 113°04'W; sounding, 600 fm; wind, 180°, force 3; weather, partly cloudy; sea, slight; wire angle, 07°.

0	26.39	34.45	4.56	533	0	26.39	34.45	4.56	22.52	533	0.00
10	26.33	34.47	4.64	530	10	26.33	34.47	4.64	22.55	530	0.05
29	26.06	34.61	4.52	512	20	26.20	34.55	4.59	22.66	520	0.11
44	22.84	34.22	5.20	448	30	26.05	34.61	4.52	22.74	512	0.16
53	21.35	34.25	5.42	406	50	21.78	34.24	5.37	23.72	418	0.25
62	20.20	34.22	5.50	379	75	18.31	34.22	5.17	24.62	333	0.34
71	18.92	34.22	5.54	348	100	15.68	34.14	3.19	25.17	280	0.42
90	16.90	34.20	3.80	302	150	12.58	34.23	2.03	25.90	211	0.54
104	15.16	34.11	2.98	271	200	10.63	34.32	1.32	26.32	171	0.64
117	14.27	34.29	2.12	240	250	10.22	34.52	0.67	26.56	149	0.72
140	13.16	34.23	2.05	222	300	9.60	34.52	0.46	26.67	139	0.80
166	12.48	34.42	1.22	196	400	8.23	34.49	0.33	26.86	120	0.93
201	10.58	34.31	1.32	170	500	6.96	34.47	0.32	27.03	104	1.05
250	10.22	34.52	0.67	149							
327	9.24	34.52	0.42	133							
423	7.92	34.48	0.30	116							
557	6.28	34.47	0.36	95							

137.40 BLACK DOUGLAS; October 19, 1958; 1617, 1643 GCT; 25°03'N, 113°22'W; sounding, 1400 fm; wind, 300°, force 3; weather, rain; sea, moderate; wire angle, 00°, 00°.

0	26.28	34.58	4.56	521	0	26.28	34.58	4.56	22.65	521	0.00
9	26.30	34.57	4.63	522	10	26.29	34.57	4.62	22.64	522	0.05
28	26.06	34.58	4.25	514	20	26.18	34.58	4.47	22.68	518	0.10
43	25.24	34.56	4.72	491	30	26.02	34.58	4.26	22.73	513	0.16
52	23.02	34.33	5.37	445	50	23.60	34.39	5.24	23.32	457	0.25
61	20.88	34.33	5.39	389	75	18.80	34.27	4.85	24.54	341	0.35
71	19.33	34.28	5.12	353	100	15.20	34.01	3.25	25.19	279	0.43
89	16.54	34.13	3.66	299	150	11.87	34.12	1.90	25.96	206	0.55
103	14.90	33.99	3.14	274	200	11.16	34.48	0.81	26.36	167	0.65
117	13.66	34.00	2.59	249	250	10.52	34.59	0.41	26.56	148	0.73
139	12.27	34.04	1.92	220	300	9.90	34.56	0.45	26.65	140	0.81
166	11.99	34.41	1.23	187	400	8.23	34.45	0.37	26.84	122	0.94
201	11.14	34.49	0.80	166	500	7.02	34.43	0.27	26.98	108	1.06
250	10.52	34.59	0.41	148							
329	9.50	34.54	0.46	136							
427	7.74	34.43	0.30	117							
563	6.50	34.43	0.26	101							

137.50 BLACK DOUGLAS; October 19, 1958; 0953 GCT; 24°40'N, 114°01.5'W; sounding, 2000 fm; wind, calm; weather, rain; sea, smooth; wire angle, 00°.

0	25.98	34.32	4.71	531	0	25.98	34.32	4.71	22.55	531	0.00
10	25.92	34.31	4.69	529	10	25.92	34.31	4.69	22.56	529	0.05
29	24.55	34.04a)	4.82	509	20	24.87	34.10	4.79	22.72	514	0.11
44	19.71	33.80	5.67	397	30	24.50	34.03	4.85	22.79	507	0.16
53	18.69	33.80	5.80	373	50	19.02	33.80	5.77	24.12	381	0.24
62	17.35	33.73	5.77	346	75	16.75	33.84	5.46	24.70	325	0.33
71	16.97	33.84	5.60	329	100	13.80	33.74	4.36	25.28	270	0.41
90	14.80	33.76	5.03	289	150	11.32	34.02	2.64	25.97	205	0.53
104	13.38	33.73	4.08	263	200	11.23	34.56	0.54	26.41	163	0.62
117	12.34	33.68	3.84	247	250	10.57	34.61	0.30	26.58	147	0.70
139	11.37	33.89	2.93	215	300	9.82	34.59	0.31	26.68	137	0.78
166	10.98	34.10	2.21	192	400	8.56	34.53	0.30	26.84	122	0.91
201	11.24	34.56	0.52	163	500	7.52	34.52	0.23	26.99	108	1.03
250	10.57	34.61	0.30	147							
327	9.40	34.58	0.32	131							
424	8.27	34.52	0.29	119							
560	6.92	34.52	0.18	100							

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; October 19, 1958; 0350 GCT; 24°20'N, 114°39'W; sounding, 2000+ fm; wind, 300°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

137.60

0	24.70	33.97	4.85	518	0	24.70	33.97	4.85	22.67	518	0.00
9	23.71	33.91	5.01	495	10	23.63	33.91	5.03	22.95	492	0.05
28	23.04	33.93	5.11	475	20	23.23	33.92	5.08	23.07	481	0.10
43	20.68	33.86	5.41	417	30	22.97	33.93	5.12	23.15	473	0.15
52	18.44	33.69	5.78	375	50	18.94	33.73	5.69	24.08	384	0.23
61	16.76	33.65	5.93	339	75	16.53	33.91	5.60	24.82	314	0.32
71	16.65	33.92	5.76	317	100	12.23	33.77	3.70	25.60	239	0.39
89	13.94	33.77	4.30	271	150	11.47	34.27	1.42	26.14	188	0.50
103	12.03	33.78	3.54	234	200	10.88	34.49	0.76	26.42	162	0.59
117	11.98	33.92	2.87	223	250	9.96	34.50	0.58	26.59	146	0.67
139	11.53	34.22	1.61	193	300	9.31	34.50	0.40	26.69	136	0.74
165	11.28	34.36	1.13	178	400	8.18	34.48	0.25	26.86	120	0.87
201	10.86	34.49	0.75	162	500	7.24	34.49	0.20	27.00	106	0.99
249	9.98	34.50	0.59	146							
326	9.00	34.50	0.32	131							
423	7.90	34.47	0.24	117							
557	6.84	34.52	0.15	99							

BLACK DOUGLAS; October 20, 1958; 0857 GCT; 24°45.5'N, 112°24'W; sounding, 60 fm; wind, 240°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

140.30

0	27.42	34.86	4.36	535	0	27.42	34.86	4.36	22.50	535	0.00
9	27.40	34.91	4.50	531	10	27.39	34.91	4.50	22.54	531	0.05
28	26.40	34.83	4.46	506	20	26.68	34.85	4.47	22.73	513	0.11
47	24.38	34.70	4.85	456	30	26.37	34.83	4.47	22.81	505	0.16
71	21.62	34.61	4.10	388	50	24.28	34.70	4.84	23.35	454	0.25

BLACK DOUGLAS; October 20, 1958; 1159 GCT; 24°36'N, 112°43'W; sounding, 500+ fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°.

140.35

0	26.52	34.60	4.56	526	0	26.52	34.60	4.56	22.59	526	0.00
10	26.51	34.58	4.47	527	10	26.51	34.58	4.47	22.58	527	0.05
29	25.69	34.52	4.73	508	20	25.93	34.54	4.65	22.73	513	0.10
43	23.07	34.22	5.19	454	30	25.64	34.51	4.75	22.80	506	0.16
53	22.05	34.16	5.32	431	50	22.47	34.18	5.28	23.48	442	0.25
62	20.93	34.30	4.68	392	75	19.77	34.59	4.43	24.53	342	0.35
72	20.34	34.61	3.54	354	100	16.52	34.59	1.62	25.34	265	0.43
90	17.38	34.53	2.07	289	150	14.92	34.85	0.72	25.89	212	0.54
104	16.30	34.61	1.40	259	200	11.79	34.57	0.70	26.32	171	0.64
117	15.98	34.75	0.92	241	250	11.34	34.68	0.38	26.48	156	0.73
140	14.98	34.79	0.72	217	300	10.57	34.66	0.15	26.61	144	0.80
166	12.60	34.52	1.00	190	400	8.58	34.52	0.25	26.83	123	0.94
202	11.78	34.59	0.68	170	500	7.21	34.46	0.24	26.99	108	1.06
253	11.32	34.69	0.24	155							
331	9.88	34.61	0.15	136							
428	8.01	34.49	0.27	117							
564	6.64	34.45	0.19	101							

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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	$\frac{10^{-5} T_3}{cm/g}$	m	°C	‰	ml/L	g/L	$\frac{10^{-5} T_3}{cm/g}$	dyn. m

140.40 BLACK DOUGLAS; October 20, 1958; 1505 GCT; 24°25.5'N, 113°02'W; sounding, 2000+ fm; wind, 250°, force 1; weather, partly cloudy; sea, moderate; wire angle, 05°.

0	27.06	34.76	4.63	531	0	27.06	34.76	4.63	22.54	531	0.00
10	27.06	34.76	4.70	531	10	27.06	34.76	4.70	22.54	531	0.05
29	27.02	34.78	4.68	528	20	27.05	34.77	4.70	22.56	530	0.11
43	26.90	34.78	4.70	525	30	27.01	34.78	4.68	22.57	528	0.16

140.50 BLACK DOUGLAS; October 20, 1958; 2041, 2058 GCT; 24°05.5'N, 113°39.5'W; sounding, 2000 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°, 00°.

0	27.06	34.57	4.52	545	0	27.06	34.57	4.52	22.40	545	0.00
10	26.80	-	4.65	-	10	26.80	34.58	4.65	22.48	537	0.05
28	26.12	34.58	4.71	516	20	26.17	34.58	4.70	22.68	517	0.11
44	23.00	34.34	5.36	444	30	26.09	34.58	4.72	22.72	514	0.16
53	20.82	34.12	5.50	402	50	21.00	34.13	5.50	23.85	406	0.25
62	19.42	34.19	5.49	362	75	17.22	34.09	4.67	24.79	317	0.34
72	17.70	34.12	4.85	326	100	14.60	34.13	2.35	25.40	258	0.41
90	15.36	33.98	3.40	284	150	12.63	34.50	0.73	26.10	192	0.53
104	14.35	34.19	2.03	248	200	11.60	34.64	0.26	26.40	164	0.62
					250	10.63	34.65	0.31	26.57	148	0.70
118	13.60	34.30	1.57	225	300	10.03	34.62	0.27	26.67	138	0.77
140	12.86	34.43	0.96	202	400	8.86	34.60	0.23	26.85	121	0.91
166	12.38	34.59	0.42	181	500	7.74	34.57	0.22	27.00	107	1.03
199	11.62	34.64	0.26	164							
248	10.78	34.65	0.31	148							
323	9.71	34.61	0.23	134							
419	8.67	34.60	0.22	118							
554	7.04	34.54	0.18	100							

140.60 BLACK DOUGLAS; October 28, 1958; 1320 GCT; 23°37'N, 114°25'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, moderate; wire angle, 18°.

0	24.20	34.29	-	481	0	24.20	34.29	-	23.06	481	0.00
10	24.19	34.29	-	481	10	24.19	34.29	-	23.06	481	0.05
29	24.20	34.31	-	480	20	24.20	34.30	-	23.07	480	0.10
42	23.29	34.27	-	457	30	24.20	34.31	-	23.08	480	0.14
51	20.13	33.89	-	401	50	20.31	33.91	-	23.87	404	0.23
60	18.76	-	-	-	75	17.00	33.78	-	24.60	335	0.32
69	17.82	-	-	-	100	13.70	33.86	-	25.38	260	0.40
86	15.50	33.76	-	304	150	11.78	34.34	-	26.14	189	0.51
99	13.86	33.85	-	264	200	10.64	34.47	-	26.45	159	0.60
112	13.25	34.04	-	238	250	10.32	34.58	-	26.58	146	0.68
131	12.32	34.16	-	211	300	9.55	34.56	-	26.70	135	0.75
155	11.61	34.36	-	184	400	8.59	34.54	-	26.85	121	0.89
187	11.20	34.51	-	166	500	7.52	34.52	-	26.99	108	1.01
233	10.58	34.58	-	150							
304	9.49	34.56	-	134							
396	8.63	34.54	-	122							
524	7.24	34.52	-	104							

143.26 BLACK DOUGLAS; October 22, 1958; 0340 GCT; 24°19'N, 111°48'W; sounding, 37 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	27.77	34.88	4.34	544	0	27.77	34.88	4.34	22.40	544	0.00
9	27.76	34.90	4.05	542	10	27.76	34.90	4.05	22.42	542	0.05
28	27.50	34.88	4.37	536	20	27.75	34.90	4.06	22.42	542	0.11
48	26.76	34.79	4.62	520	30	27.48	34.88	4.39	22.49	536	0.16



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

BLACK DOUGLAS; October 21, 1958; 1451 GCT; 24°11'N, 112°03'W; sounding, 110 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

143.30

0	27.78	34.79	4.83	552	0	27.78	34.79	4.83	22.33	552	0.00
9	27.76	34.79	4.54	551	10	27.76	34.79	4.54	22.34	551	0.06
28	27.67	34.78	4.54	548	20	27.71	34.78	4.54	22.36	549	0.11
47	26.84	34.86	4.51	517	30	27.66	34.78	4.54	22.37	548	0.16
85a)	19.81b)	34.58	4.28								
108a)	18.09	34.58	2.96								
129a)	16.50	34.62	1.47								

BLACK DOUGLAS; October 21, 1958; 1151 GCT; 24°01'N, 112°22'W; sounding, 750 fm; wind, 320°, force 1; weather, clear; sea, smooth; wire angle, 00°.

143.35

0	27.78	34.78	4.54	552	0	27.78	34.78	4.54	22.32	552	0.00
10	27.79	34.78	4.53	552	10	27.79	34.78	4.53	22.32	552	0.06
29	27.54	34.81	4.61	542	20	27.73	34.79	4.56	22.34	550	0.11
44	26.05	34.65	5.10	509	30	27.50	34.81	4.63	22.44	541	0.16
53	22.50	34.64	5.30	409	50	24.63	34.65	5.22	23.20	468	0.27
62	21.16	34.60	4.78	376	75	19.78	34.53	4.88	24.48	346	0.37
72	20.12	34.55	4.08	353	100	17.58	34.55	2.30	25.06	291	0.45
91	18.15	34.46	3.02	312	150	14.30	34.75	0.65	25.95	206	0.57
105	17.20	34.63	1.50	277	200	12.57	34.75	0.40	26.30	173	0.67
119	16.00	34.69	1.16	246	250	11.59	34.72	0.25	26.47	157	0.75
141	14.73	34.76	0.69	214	300	10.46	34.62	0.35	26.60	145	0.83
167	13.16	34.71	0.60	187	400	8.93	34.57	0.26	26.81	125	0.97
203	12.65	34.78	0.32	172							
253	11.52	34.72	0.24	156							
330	9.79	34.56	0.42	139							
427	8.69	34.57	0.18	121							

BLACK DOUGLAS; October 21, 1958; 0835 GCT; 23°51'N, 112°40.5'W; sounding, 1600 fm; wind, 320°, force 1; weather, clear; sea, smooth; wire angle, 05°.

143.40

0	27.04	34.58	5.15	544	0	27.04	34.58	5.15	22.41	544	0.00
10	26.91	34.67	4.57	533	10	26.91	34.67	4.57	22.52	533	0.05
29	25.94	34.45	4.65	520	20	26.18	34.49	4.62	22.61	524	0.11
43	23.44	34.52	5.14	443	30	25.93	34.45	4.66	22.66	520	0.16
53	21.96	34.49	5.02	405	50	22.49	34.51	5.08	23.72	418	0.25
62	19.76	34.21	5.07	369	75	16.20	33.96	4.80	24.92	304	0.34
72	18.04	34.09	5.08	336	100	16.51	34.45	2.40	25.24	274	0.42
90	16.86	34.23	3.47	299	150	12.96	34.38	1.24	25.94	207	0.54
103	16.08	34.46	2.09	265	200	11.29	34.49	0.84	26.34	169	0.63
117	15.02	34.44	1.80	244	250	10.04	34.45	0.80	26.54	151	0.72
139	13.34	34.31	1.40	220	300	9.53	34.50	0.48	26.66	139	0.79
165	12.24	34.48	0.89	187	400	8.40	34.50	0.27	26.84	122	0.92
200	11.29	34.49	0.84	169	500	7.28	34.56	0.27	27.05	102	1.04
249	10.05	34.45	0.82	151							
325	9.35	34.52	0.38	135							
422	8.12	34.49	0.27	118							
558	6.68	34.67	0.28	86							

- a) Pretrip; depth too uncertain for interpolation.  
b) Alternate value, 20.07°C.

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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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m	

143.50 BLACK DOUGLAS; October 21, 1958; 0223 GCT; 23°31'N, 113°18'W; sounding, 1750 fm; wind, 260°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°.

0	28.10	34.84	4.72	558	0	28.10	34.84	4.72	22.26	558	0.00
9	28.09	34.87	4.72	555	10	28.09	34.87	4.72	22.29	555	0.06
28	27.88	34.88	4.47	548	20	28.03	34.88	4.60	22.32	553	0.11
42	24.00	34.49	5.02	461	30	27.87	34.88	4.47	22.37	548	0.17
51	21.20	34.33	5.21	397	50	21.40	34.34	5.20	23.90	401	0.26
61	19.33	34.18	5.20	361	75	17.99	34.23	4.47	24.70	325	0.35
70	18.38	34.20	4.85	336	100	15.70	34.46	1.90	25.41	258	0.43
89	16.74	34.34	2.61	288	150	13.60	34.67	0.65	26.04	198	0.54
102	15.56	34.47	1.79	253	200	11.62	34.60	0.50	26.38	166	0.64
116	14.78	34.47	1.07	237	250	11.30	34.70	0.14	26.51	154	0.72
138	14.00	34.65	0.63	208	300	10.66	34.70	0.29	26.62	143	0.80
164	13.06	34.70	0.68	186	400	8.85	34.55	0.24	26.81	125	0.93
199	11.64	34.60	0.50	167	500	7.39	34.47	0.18	26.97	109	1.06
248	11.32	34.70	0.13	154							
326	10.22	34.69	0.38	136							
422	8.43	34.52	0.21	121							
556	6.70	34.45	0.17	102							

143.60 BLACK DOUGLAS; October 28, 1958; 0117 GCT; 23°07.5'N, 113°55.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°.

0	26.38	34.65		518	0	26.38	34.65		22.68	518	0.00
10	26.38	34.66		518	10	26.38	34.66		22.68	518	0.05
29	26.40	34.67		518	20	26.39	34.66		22.68	518	0.10
42	26.12	34.72		506	30	26.41	34.67		22.68	518	0.16
51	21.80	34.30		415	50	22.23	34.33		23.66	424	0.25
61	20.06	34.47		358	75	17.00	34.27		24.98	299	0.34
69	18.42	34.40		323	100	14.20	34.20		25.55	245	0.41
87	14.71	34.07		264	150	12.00	34.46		26.19	184	0.52
100	14.20	34.20		245	200	11.56	34.66		26.43	161	0.60
113	13.19	34.25		221	250	10.72	34.65		26.58	147	0.68
134	12.48	34.40		197	300	9.90	34.62		26.69	136	0.76
158	11.92	34.53		177	400	8.56	34.56		26.87	119	0.89
191	11.67	34.66		163	500	7.30	34.51		27.01	106	1.01
238	10.92	34.66		150							
312	9.69	34.61		133							
406	8.46	34.56		118							
539	6.76	34.48		101							

147.20 BLACK DOUGLAS; October 22, 1958; 0930 GCT; 23°56'N, 111°03.5'W; sounding, 140 fm; wind, 340°, force 2; weather, clear; sea, smooth; wire angle, 00°.

0	28.04	34.70	4.35	566	0	28.04	34.70	4.35	22.18	566	0.00
9	28.04	34.70	4.51	566	10	28.04	34.70	4.33	22.18	566	0.06
28	28.06	34.67	4.38	569	20	28.05	34.69	4.45	22.16	568	0.11
47	24.98	34.75	4.63	470	30	28.04	34.67	4.39	22.15	569	0.17

147.25 BLACK DOUGLAS; October 22, 1958; 1220 GCT; 23°46.5'N, 111°22.5'W; sounding, 180 fm; wind, 360°, force 3; weather, clear; sea, smooth; wire angle, 05°.

0	28.00	34.78	4.56	559	0	28.00	34.78	4.56	22.25	559	0.00
9	28.00	34.78	4.43	559	10	28.00	34.78	4.43	22.25	559	0.06
28	26.97	34.87	4.59	520	20	27.95	34.79	4.42	22.27	557	0.11
47	22.84	34.67	4.68	416	30	26.89	34.87	4.60	22.68	518	0.17
71	20.42	34.51	3.49	364	50	22.66	34.66	4.66	23.79	412	0.26
					75	(20.00)	(34.49)		(24.39)	(355)	(0.35)

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

BLACK DOUGLAS; October 22, 1958; 1548 GCT; 23°36'N, 111°41.5'W; sounding, 280 fm; wind, 280°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°.

147.30

0	27.67	34.89	4.58	541	0	27.67	34.89	4.58	22.43	541	0.00
10	27.66	34.88	4.56	541	10	27.66	34.88	4.56	22.43	541	0.05
29	27.60	34.88	4.46	539	20	27.66	34.88	4.55	22.43	541	0.11
48	25.74	34.74	4.74	493	30	27.60	34.88	4.46	22.46	539	0.16
72	20.92	34.61	3.97	369	50	25.18	34.72	4.66	23.10	478	0.26
95	17.60	34.61	2.02	288	75	20.02	34.58	3.76	24.45	349	0.37
117	14.59	34.38	1.40	240	100	16.93	34.56	1.79	25.21	276	0.45
153	13.74	34.79	0.44	192	150	13.86	34.78	0.46	26.07	195	0.56
187	12.38	34.74	0.27	170	200	12.14	34.75	0.22	26.39	164	0.66
231	11.82	34.76	0.16	158	250	11.39	34.74	0.15	26.52	152	0.74
275	10.60	34.69	0.15	142							

BLACK DOUGLAS; October 22, 1958; 2142 GCT; 23°16'N, 112°19'W; sounding, 1600 fm; wind, missing, force 1; weather, cloudy; sea, rough; wire angle, 03°.

147.40

0	28.66	34.72	4.36	584	0	28.66	34.72	4.36	21.99	584	0.00
11	28.20	34.69	4.27	572	10	28.21	34.69	4.26	22.11	572	0.06
30	28.11	34.69	4.34	569	20	28.16	34.69	4.29	22.12	571	0.11
44	27.74	34.76	4.64	552	30	28.11	34.69	4.34	22.15	569	0.17
54	23.58	34.52	4.75	447	50	27.06	34.72	4.67	22.52	533	0.28
63	21.81	34.54	3.68	397	75	19.67	34.47	3.75	24.47	347	0.39
73	19.96	34.49	3.75	353	100	16.60	34.30	3.30	25.10	288	0.47
91	17.46	34.29	3.72	308	150	13.81	34.69	0.74	26.01	201	0.60
105	15.84	34.31	2.52	271	200	12.48	34.78	0.25	26.34	170	0.69
118	15.24	34.48	1.06	245	250	11.49	34.71	0.14	26.48	156	0.77
140	14.26	34.67	0.90	211	300	10.44	34.63	0.18	26.61	144	0.85
167	13.08	34.71	0.38	185	400	8.90	34.59	0.15	26.83	123	0.99
202	12.46	34.78	0.25	169	500	7.56	34.54	0.15	27.00	107	1.11
251	11.46	34.71	0.14	156							
331	9.80	34.60	0.22	136							
426	8.60	34.58	0.15	119							
561	6.60	34.51	0.18	96							

BLACK DOUGLAS; October 23, 1958; 0330 GCT; 22°56'N, 112°56.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°.

147.50

0	27.95	34.79	4.49	557	0	27.95	34.79	4.49	22.27	557	0.00
9	27.94	34.83	4.57	553	10	27.94	34.83	4.57	22.31	553	0.06
28	27.61	34.88	4.57	540	20	27.80	34.86	4.57	22.38	547	0.11
43	25.28	34.40	4.90	504	30	27.54	34.87	4.57	22.46	538	0.16
52	22.66	34.27	5.39	440	50	23.16	34.29	5.28	23.38	451	0.26
62	20.42	34.23	5.50	384	75	18.52	34.20	4.91	24.54	340	0.36
71	19.17	34.26	4.91	350	100	15.82	34.32	2.65	25.28	270	0.44
90	15.94	33.91	4.96	302	150	13.06	34.63	0.30	26.12	190	0.56
103	15.60	34.38	2.03	260	200	11.94	34.72	0.14	26.41	163	0.64
117	14.02	34.34	1.65	231	250	11.09	34.72	0.10	26.56	148	0.73
139	13.48	34.60	0.46	201	300	10.41	34.70	0.09	26.67	138	0.80
165	12.49	34.67	0.26	177	400	8.90	34.60	0.10	26.84	122	0.94
200	11.94	34.72	0.14	163	500	7.55	34.55	0.15	27.01	106	1.06
248	11.13	34.72	0.10	149							
325	10.07	34.69	0.09	134							
421	8.60	34.56	0.10	119							
556	6.91	34.54	0.20	98							

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5810

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

147.60 BLACK DOUGLAS; October 23, 1958; 0957 GCT; 22°36'N, 113°34'W; sounding, 2000+ fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°.

0	27.19	34.85	4.61	529	0	27.19	34.85	4.61	22.56	529	0.00
9	27.19	34.83	4.72	530	10	27.17	34.83	4.72	22.54	531	0.05
29	27.00	34.75	4.71	530	20	27.08	34.78	4.71	22.54	531	0.11
43	25.82	34.81	4.95	490	30	27.00	34.76	4.71	22.55	530	0.16
53	20.10	34.52	4.72	355	50	22.29	34.62	4.86	23.87	404	0.25
62	18.43	34.47	3.54	318	75	16.80	34.51	2.02	25.20	277	0.34
71	17.28	34.53	2.17	286	100	14.88	34.52	1.21	25.65	235	0.40
89	15.42	34.43	1.80	253	150	11.94	34.47	0.82	26.21	182	0.51
103	14.74	34.54	1.13	231	200	11.08	34.63	0.47	26.49	155	0.59
116	13.78	34.56	1.03	210	250	10.16	34.60	0.44	26.63	142	0.67
138	12.25	34.45	0.85	189	300	9.50	34.57	0.35	26.72	133	0.74
164	11.66	34.52	0.81	173	400	8.09	34.49	0.25	26.88	118	0.87
198	11.13	34.63	0.49	156	500	7.02	34.50	0.25	27.04	103	0.99
247	10.20	34.60	0.45	142							
322	9.21	34.56	0.32	130							
418	7.81	34.48	0.24	115							
552	6.66	34.52	0.27	97							

150.19 BLACK DOUGLAS; October 24, 1958; 2011 GCT; 23°23.5'N, 110°38'W; sounding, 110 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°.

0	27.88	34.78	4.59	556	0	27.88	34.78	4.59	22.28	556	0.00
10	27.88	34.79	4.74	555	10	27.88	34.79	4.74	22.29	555	0.06
29	27.64	34.83	4.64	544	20	27.88	34.80	4.74	22.30	554	0.11
47	24.87	34.71	4.85	470	30	27.53	34.83	4.66	22.44	540	0.17
70	20.36	34.65	3.60	352	50	24.28	34.70	4.80	23.35	454	0.27
93	17.38	34.57	2.62	286	75	19.62	34.63	3.35	24.60	335	0.36
116	15.73	34.60	1.63	247	100	16.87	34.58	2.35	25.24	274	0.44
143	14.36	34.65	0.83	215	150	(14.00)	(34.65)	(0.83)	(25.94)	(208)	(0.56)

150.25 BLACK DOUGLAS; October 24, 1958; 1507 GCT; 23°11.5'N, 111°05'W; sounding, 620 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

0	28.09	34.69	4.78	568	0	28.09	34.69	4.78	22.16	568	0.00
9	28.14	34.73	4.50	567	10	28.14	34.73	4.50	22.16	567	0.06
28	28.08	34.70	4.57	568	20	28.10	34.71	4.54	22.16	567	0.11
41	26.86	34.71	4.73	529	30	28.07	34.70	4.57	22.17	567	0.17
50	24.20	34.70	5.07	451	50	24.20	34.70	5.07	23.38	451	0.27
60	23.08	34.77	4.60	416	75	21.18	34.73	3.57	24.26	368	0.37
69	21.98	34.72	4.09	389	100	18.41	34.77	1.71	25.02	295	0.46
87	19.37	34.79	2.30	317	150	13.80	34.54	0.92	25.89	212	0.59
100	18.41	34.77	1.71	295	200	11.82	34.62	0.43	26.35	168	0.68
113	17.36	34.73	1.36	274	250	11.25	34.69	0.27	26.52	153	0.77
136	14.54	34.52	1.19	228	300	10.73	34.71	0.16	26.62	143	0.85
161	12.81	34.43	0.90	201	400	8.99	34.60	0.20	26.83	123	0.98
195	11.87	34.60	0.44	171	500	7.45	34.57	0.20	27.04	103	1.11
243	11.38	34.69	0.30	156							
318	10.55	34.71	0.15	140							
414	8.71	34.59	0.20	120							
547	6.80	34.56	0.19	95							

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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m

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BLACK DOUGLAS; October 24, 1958; 1110 GCT; 23°04'N, 111°23'W; sounding, 1500 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 23°.

150.30

0	27.98	34.81	4.64	556	0	27.98	34.81	4.64	22.28	556	0.00
11	28.00	34.84	4.71	555	10	28.00	34.83	4.70	22.29	555	0.06
29	27.93	34.82	4.70	554	20	27.98	34.83	4.71	22.30	554	0.11
43	26.24	34.59	5.04	520	30	27.92	34.82	4.70	22.31	554	0.17
52	21.92	34.18	5.62	427	50	23.00	34.26	5.54	23.40	449	0.27
61	21.99	34.60	5.24	398	75	20.36	34.60	4.34	24.39	355	0.37
70	21.14	34.69	4.47	369	100	16.60	34.30	3.18	25.10	288	0.45
87	18.11	34.36	4.02	318	150	14.96	34.71	0.55	25.77	223	0.58
99	16.68	34.31	3.19	290	200	13.08	34.81	0.21	26.25	178	0.68
112	16.08	34.40	2.37	270	250	12.00	34.90	0.19	26.52	152	0.76
132	15.21	34.60	1.07	236	300	11.14	34.80	0.15	26.62	143	0.84
155	14.88	34.73	0.42	220	400	9.13	34.63	0.10	26.83	123	0.98
186	13.50	34.76	0.21	190	500	7.27	34.57	0.10	27.07	100	1.10
232	12.33	34.92	0.19	156							
305	11.02	34.79	0.14	142							
396	9.20	34.63	0.10	124							
526	6.76	34.56	0.11	94							

BLACK DOUGLAS; October 24, 1958; 0452 GCT; 22°43.5'N, 111°59'W; sounding, 1750 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 02°.

150.40

0	28.18	34.69	4.48	571	0	28.18	34.69	4.48	22.12	571	0.00
10	-	34.71	4.65	-	10	28.18	34.71	4.65	22.14	569	0.06
29	28.06	34.87	4.58	555	20	28.17	34.74	4.62	22.17	567	0.11
44	27.33	34.76	4.71	540	30	28.05	34.87	4.59	22.31	554	0.17
53	24.52	34.58	5.22	469	50	26.47	34.69	4.87	22.68	518	0.28
62	22.79	34.53	5.24	425	75	19.10	34.48	3.97	24.62	333	0.38
72	20.09	34.49	4.38	357	100	16.78	34.59	1.52	25.27	271	0.46
91	17.75	34.56	2.22	295	150	12.59	34.51	0.70	26.11	191	0.58
105	16.08	34.60	1.19	255	200	12.32	34.76	0.20	26.36	167	0.67
118	15.05	34.53	0.97	238	250	11.32	34.76	0.12	26.55	150	0.75
141	13.08	34.52	0.74	199	300	10.48	34.69	0.12	26.65	140	0.83
167	12.69	34.69	0.39	180	400	8.78	34.59	0.19	26.85	121	0.96
202	12.26	34.76	0.19	166	500	7.47	34.57	0.19	27.04	103	1.08
252	11.28	34.76	0.11	149							
329	10.00	34.64	0.13	136							
426	8.29	34.58	0.20	114							
560	6.82	34.57	0.14	95							

BLACK DOUGLAS; October 23, 1958; 2144 GCT; 22°22'N, 112°35'W; sounding, 2000 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 05°.

150.50

0	28.18	34.67	4.51	572	0	28.18	34.67	4.51	22.11	572	0.00
11	28.14	34.70	4.69	569	10	28.15	34.70	4.68	22.14	570	0.06
30	27.84	34.81	4.63	552	20	28.13	34.72	4.70	22.17	567	0.11
45	25.32	34.60	4.97	491	30	27.84	34.81	4.63	22.32	552	0.17
54	22.94	34.54	4.84	428	50	24.10	34.56	4.92	23.30	459	0.27
63	19.92	34.54	4.19	349	75	18.88	34.59	2.82	24.76	320	0.37
73	19.08	34.60	2.87	324	100	15.42	34.26	2.28	25.33	266	0.44
91	16.46	34.33	2.52	283	150	13.59	34.68	0.36	26.05	197	0.56
105	14.84	34.22	2.10	257	200	12.23	34.76	0.13	26.38	166	0.65
118	13.79	34.21	1.94	236	250	11.27	34.72	0.07	26.53	152	0.74
140	13.46	34.58	0.48	202	300	10.48	34.64	0.12	26.62	143	0.81
167	12.89	34.69	0.33	183	400	8.90	34.60	0.18	26.85	121	0.95
201	12.22	34.76	0.12	166	500	7.60	34.56	0.20	27.01	106	1.07
250	11.27	34.72	0.07	152							
326	10.04	34.61	0.14	139							
422	8.58	34.60	0.20	117							
557	6.97	34.53	0.18	100							

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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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m

150.60

BLACK DOUGLAS; October 23, 1958; 1551 GCT; 22°02'N, 113°13'W; sounding, 1900 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 06°.

0	26.74	34.63	4.66	531	0	26.74	34.63	4.66	22.54	531	0.00
10	26.70	34.63	4.71	530	10	26.70	34.63	4.71	22.55	530	0.05
29	26.54	34.69	4.72	520	20	26.63	34.66	4.72	22.60	525	0.11
43	26.22	34.65	4.71	514	30	26.53	34.69	4.72	22.66	520	0.16
53	21.88	34.14	5.54	428	50	25.76	34.59	4.80	22.82	505	0.26
62	20.53	34.05	5.62	400	75	19.34	34.18	5.10	24.32	361	0.37
71	19.38	34.09	5.49	368	100	15.10	33.88	4.70	25.10	287	0.45
90	16.69	34.03	4.74	310	150	12.00	34.20	2.25	25.99	203	0.58
103	15.16	33.93	4.28	284	200	10.93	34.46	0.93	26.39	165	0.67
116	14.96	34.25	2.33	256	250	10.22	34.57	0.51	26.59	145	0.75
138	12.36	34.09	2.26	217	300	9.82	34.64	0.26	26.72	134	0.82
164	11.36	34.24	1.71	188	400	8.52	34.59	0.22	26.90	117	0.95
199	10.94	34.46	0.94	165	500	7.28	34.56	0.26	27.05	102	1.07
247	10.25	34.56	0.53	146							
323	9.63	34.65	0.20	130							
419	8.23	34.58	0.23	114							
553	6.66	34.55	0.27	94							

153.16

BLACK DOUGLAS; October 25, 1958; 1310 GCT; 22°55'N, 110°07'W; sounding, 220 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°.

0	27.90	34.77	4.52	557	0	27.90	34.77	4.52	22.27	557	0.00
8	27.92	34.79	4.61	556	10	27.92	34.78	4.61	22.28	556	0.06
25	27.91	34.76	4.69	558	20	27.91	34.77	4.66	22.27	557	0.11
41	27.52	34.81	4.64	542	30	27.90	34.76	4.69	22.27	557	0.17
63	25.30	34.81	4.35	475	50	26.37	34.81	4.51	22.80	506	0.27
83	19.42	34.56	2.81	335	75	20.42	34.57	3.09	24.34	359	0.38
104	16.24	34.55	1.76	262	100	16.81	34.55	1.94	25.23	275	0.46
137	13.82	34.56	0.89	211	150	13.06	34.57	0.78	26.07	195	0.58
170	12.64	34.63	0.46	183	200	12.08	34.69	0.24	26.35	168	0.67
212	11.88	34.70	0.19	164	250	11.07	34.70	0.14	26.55	150	0.76
254	11.00	34.70	0.14	148							

153.20

BLACK DOUGLAS; October 25, 1958; 1609 GCT; 22°47.5'N, 110°22'W; sounding, 340 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 13°.

0	27.82	34.72	4.69	558	0	27.82	34.72	4.69	22.26	558	0.00
10	27.84	34.75	4.60	557	10	27.84	34.75	4.60	22.27	557	0.06
29	27.82	34.78	4.77	554	20	27.83	34.77	4.63	22.30	554	0.11
43	25.74	34.65	5.14	500	30	27.82	34.78	4.78	22.31	553	0.17
52	23.14	34.61	4.89	428	50	23.60	34.62	4.99	23.49	441	0.27
61	21.80	34.61	4.03	392	75	19.37	34.63	2.66	24.67	328	0.36
70	20.04	34.63	3.06	346	100	16.60	34.58	1.40	25.30	268	0.44
89	17.84	34.64	1.91	292	150	13.36	34.76	0.44	26.16	186	0.55
102	16.30	34.56	1.32	262	200	12.20	34.83	0.21	26.44	160	0.64
115	15.29	34.63	0.99	236	250	11.37	34.82	0.16	26.59	146	0.72
137	13.69	34.69	0.60	199	300	10.61	34.73	0.14	26.66	139	0.79
164	13.01	34.81	0.27	177	400	9.17	34.63	0.15	26.83	123	0.93
199	12.22	34.83	0.24	160	500	7.52	34.56	0.14	27.02	105	1.05
247	11.41	34.83	0.16	146							
323	10.26	34.69	0.14	136							
418	8.88	34.62	0.15	120							
550	6.60	34.52	0.14	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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m

BLACK DOUGLAS; October 25, 1958; 2252 GCT; 22°30'N, 111°02'W; sounding, 1700 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 12°.

153.30

0	27.54	34.86	4.90	539	0	27.54	34.86	4.90	22.46	539	0.00
10	27.54	34.81	4.60	543	10	27.54	34.81	4.60	22.42	543	0.05
29	27.54	34.85	4.60	539	20	27.54	34.83	4.60	22.44	541	0.11
43	27.04	34.77	4.60	530	30	27.54	34.85	4.60	22.46	539	0.16
52	23.00	34.32	5.60	445	50	23.31	34.35	5.55	23.37	452	0.26
61	20.90	34.18	5.60	400	75	19.20	34.12	5.28	24.31	362	0.36
70	19.61	34.07	5.47	375	100	17.37	34.56	2.10	25.11	286	0.45
89	18.28	34.37	3.57	322	150	13.62	34.69	0.49	26.05	197	0.57
103	17.12	34.59	1.81	279	200	11.96	34.65	0.35	26.34	169	0.66
116	16.10	34.63	1.30	253	250	11.28	34.72	0.19	26.53	151	0.74
137	14.43	34.66	0.71	216	300	10.52	34.67	0.19	26.63	142	0.82
163	13.17	34.72	0.39	186	400	8.89	34.61	0.16	26.85	121	0.96
196	12.06	34.65	0.36	171	500	7.60	34.55	0.17	27.00	107	1.08
243	11.39	34.73	0.20	153							
318	10.26	34.66	0.19	139							
412	8.70	34.60	0.16	119							
546	7.04	34.52	0.18	102							

BLACK DOUGLAS; October 26, 1958; 0535 GCT; 22°08'N, 111°37'W; sounding, 1600 fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 11°.

153.40

0	27.18	34.74	4.71	536	0	27.18	34.74	4.71	22.49	536	0.00
11	27.20	34.74	4.66	537	10	27.20	34.74	4.67	22.48	537	0.05
30	27.18	34.75	4.59	536	20	27.19	34.75	4.60	22.49	536	0.11
44	25.02	34.49	5.03	490	30	27.18	34.75	4.59	22.49	536	0.16
53	21.54	34.26	5.28	411	50	22.45	34.30	5.18	23.58	432	0.26
62	19.64	34.20	5.53	367	75	17.53	34.06	5.30	24.68	327	0.35
71	18.47	34.09	5.30	346	100	16.40	34.46	1.91	25.26	272	0.43
92	17.30	34.40	2.71	296	150	13.57	34.72	0.42	26.08	194	0.55
103	15.90	34.48	1.63	260	200	12.17	34.76	0.31	26.39	165	0.64
116	15.10	34.53	1.07	239	250	11.28	34.71	0.12	26.52	152	0.72
138	13.99	34.64	0.56	208	300	10.52	34.66	0.14	26.62	143	0.80
163	13.13	34.76	0.35	183	400	8.98	34.58	0.14	26.82	124	0.94
196	12.22	34.76	0.32	166	500	7.62		0.16			
242	11.40	34.72	0.12	154							
316	10.25	34.64	0.14	140							
409	8.82	34.58	0.14	122							
539	7.11	34.80r	0.18	-							

BLACK DOUGLAS; October 26, 1958; 1147 GCT; 21°47.5'N, 112°14.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 22°.

153.50

0	27.06	34.78	4.71	530	0	27.06	34.78	4.71	22.55	530	0.00
12	27.07	34.76	4.76	532	10	27.07	34.77	4.75	22.54	531	0.05
31	27.04	34.78	4.74	529	20	27.06	34.76	4.74	22.54	531	0.11
44	23.40	34.35	5.50	454	30	27.04	34.78	4.74	22.56	529	0.16
53	21.32	34.20	5.69	409	50	21.94	34.24	5.66	23.68	423	0.25
62	19.41	34.08	5.72	370	75	17.18	34.06		24.76	319	0.35
71	17.66	34.07	-	329	100	14.08	34.03		25.44	255	0.42
89	15.47	33.99	-	286	150	12.09	34.51		26.22	181	0.53
103	13.76	34.04	-	248	200	11.58	34.65		26.42	162	0.62
115	13.22	34.11	-	232	250	11.08	34.70		26.55	150	0.70
137	12.35	34.42	-	193	300	10.52	34.66		26.62	143	0.78
162	11.87	34.56	-	174	400	8.90	34.61		26.85	121	0.91
196	11.62	34.65	-	163	500	7.61	34.57		27.02	105	1.03
244	11.14	34.70	-	151							
319	10.30	34.65	-	140							
414	8.68	34.60	-	119							
546	7.08	34.56	-	99							

SIO		OBSERVED				INTERPOLATED				COMPUTED		
CCOFI	Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$
5810	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

153.60 BLACK DOUGLAS; October 26, 1958; 1815 GCT; 21°28'N, 112°53'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, high; wire angle, 14°.

0	26.23	34.52	4.65a)	524	0	26.23	34.52	4.65	22.62	524	0.00
10	26.21	34.58	4.65	519	10	26.21	34.58	4.65	22.67	519	0.05
29	26.20	34.54	4.68	521	20	26.20	34.56	4.66	22.66	520	0.10
43	25.75	34.50	4.78	511	30	26.20	34.54	4.68	22.65	521	0.16
52	23.32	34.29	5.30	457	50	23.94	34.34	5.17	23.18	470	0.26
61	20.88	34.16	5.66	401	75	18.87	34.10	5.43	24.38	355	0.36
70	20.30	34.17	5.56	385	100	15.71	34.02	4.22	25.08	289	0.44
88	17.69	34.15	4.97	324	150	12.70	34.45	0.88	26.05	197	0.56
101	15.40	34.00	4.10	284	200	11.80	34.69	0.25	26.41	163	0.65
114	13.53	33.91	3.79	253	250	10.89	34.65	0.28	26.54	150	0.74
135	13.13	34.27	1.60	219	300	10.18	34.65	0.24	26.67	138	0.81
159	12.49	34.56	0.56	186	400	8.87	34.60	0.19	26.85	121	0.95
191	11.96	34.70	0.26	165	500	7.51	34.57	0.16	27.03	104	1.06
236	11.08	34.65	0.29	153							
307	10.07	34.65	0.24	136							
399	8.88	34.60	0.19	122							
528	7.09	34.56	0.16	99							

153.70 BLACK DOUGLAS; October 26, 1958; 2338 GCT; 21°07'N, 113°28'W; sounding, 2000+ fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

0	26.24	34.56	4.70a)	522	0	26.24	34.56	4.70	22.64	522	0.00
11	26.22	34.54	4.70	522	10	26.22	34.54	4.70	22.64	522	0.05
30	26.22	34.59	4.71	518	20	26.22	34.57	4.71	22.66	520	0.10
44	23.92	34.49	4.98	459	30	26.22	34.59	4.71	22.67	518	0.16
53	23.29	34.45	5.05	445	50	23.53	34.46	5.02	23.40	449	0.25
62	22.16	34.36	5.22	420	75	20.00	34.21	5.43	24.18	375	0.36
71	20.38	34.23	5.43	383	100	17.80	34.13	4.97	24.67	328	0.45
89	18.87	34.16	5.42	351	150	13.42	34.34	0.97	25.82	220	0.58
102	17.62	34.12	4.90	324	200	12.07	34.70	0.24	26.36	168	0.68
115	15.48	33.98	4.15	287	250	11.21	34.74	0.09	26.55	149	0.76
137	13.42	34.13	0.97	235	300	10.40	34.67	0.11	26.65	140	0.84
162	12.43	34.45	1.01	192	400	8.93	34.58	0.16	26.82	124	0.98
195	12.10	34.67	0.27	170	500	7.63	34.56	0.15	27.00	106	1.10
242	11.40	34.75	0.08	152							
316	10.16	34.65	0.12	138							
410	8.78	34.57	0.16	122							
542	7.14	34.56	0.13	100							

153.80 BLACK DOUGLAS; October 27, 1958; 0504 GCT; 20°47'N, 114°05'W; sounding, 2000+ fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

0	27.24	34.23	4.61a)	575	0	27.24	34.23	4.61	22.08	575	0.00
10	27.22	34.25	4.57	573	10	27.22	34.25	4.57	22.10	573	0.06
43	26.36	34.56	4.70	524	20	27.22	34.26	4.57	22.11	573	0.11
51	23.00	34.04	5.48	466	30	27.20	34.27	4.57	22.12	571	0.17
61	21.75	33.90	5.52	442	50	23.20	34.07	5.46	23.19	469	0.28
71	20.56	34.04	5.57	401	75	20.00	34.05	5.59	24.05	387	0.38
89	18.00	34.06	5.64	338	100	17.50	34.10	5.00	24.73	323	0.47
102	16.04	34.01	4.30	297	150	11.86	34.07	2.32	25.91	210	0.61
116	15.06	34.13	2.87	268	200	11.32	34.53	0.57	26.37	167	0.70
138	12.63	34.04	2.40	226	250	10.68	34.60	0.32	26.54	150	0.78
162	11.75	34.34	1.09	188	300	9.87	34.56	0.27	26.66	140	0.86
198	11.36	34.53	0.61	167	400	8.48	34.56	0.19	26.88	119	1.00
247	10.72	34.60	0.33	151	500	7.31	34.53	0.13	27.03	104	1.11
323	9.47	34.55	0.24	134							
419	8.21	34.56	0.18	115							
553	6.73	34.51	0.11	98							

a) Nine-day interval between treating the oxygen samples with reagents and titration of samples.



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

SIO  
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5810

HORIZON; October 14-15, 1958; 2349, 0013 GCT; 34°50'N, 122°10'W; sounding, 2105 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 33°, 42°.

D-1  
(75.66)

0	17.14	33.35	5.53	369	0	17.14	33.35	5.53	24.24	369	0.00
8	17.13	33.36	5.43	368	10	17.14	33.37	5.43	24.25	368	0.04
22	17.28	33.46	5.47	364	20	17.23	33.41	5.45	24.27	366	0.07
35	13.69	33.04	6.03	320	30	15.75	33.27	5.75	24.50	344	0.11
65	11.82	33.10	5.53	281	50	12.28	33.01	5.28	25.02	295	0.17
85	9.92	33.40	4.55	226	75	10.95	33.25	5.11	25.44	254	0.24
110	9.28	33.49	4.26	210	100	9.51	33.46	4.36	25.85	216	0.30
137	9.04	33.71	3.36	190	150	8.74	33.79	3.50	26.23	180	0.40
159	8.55	33.84	3.59	172	200	8.02	34.01	2.43	26.52	152	0.49
178	8.56	33.96	2.39	164	250	7.29	34.05	2.19	26.65	140	0.56
209	7.83	34.02	2.44	150	300	6.79	34.08	1.89	26.74	131	0.63
					400	6.26		0.99			
234	7.53	34.04	2.22	144	500	6.05		0.50			
269	7.04	34.05	2.17	137	600	5.43		0.30			
316	6.66	34.09	1.48	128	700	4.97		0.30			
354	6.65	34.20	1.02	120	800	4.52		0.31			
401	6.23	-	0.98	-	1000	(3.93)					
445	5.92	-	0.81	-							
509a)	6.08	-	0.45	-							
598	5.44	-	0.31	-							
694	4.99	-	0.30	-							
794	4.53	-	0.31	-							
916	4.13	-	0.34	-							
966	4.02	-	0.47	-							

HORIZON; October 15, 1958; 0320 GCT; 35°02.5'N, 122°17'W; sounding, 2175 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 10°.

D-2  
(73<sup>5</sup>.65)

0	17.24	33.44	5.45	365	0	17.24	33.44	5.45	24.28	365	0.00
10	17.20	33.35	5.50	370	10	17.20	33.35	5.50	24.23	370	0.04
44	12.89	33.06	6.19	303	20	17.17	33.34	5.52	24.23	370	0.07
64	11.20	33.21	5.12	262	30	17.05	33.33	5.58	24.24	369	0.11
78	10.69	33.31	4.95	246	50	12.15	33.11	5.88	25.11	286	0.18
108	9.32	33.54	4.40	206	75	10.80	33.29	5.00	25.50	249	0.24
137	9.13	33.80	3.19	184	100	9.62	33.48	4.52	25.84	217	0.30
176	8.45	33.98	2.46	161	150	9.05	33.91	2.83	26.27	176	0.40
211	7.98	34.04	2.11	149	200	8.10	34.03	2.12	26.52	152	0.48
236	7.51	34.04	2.20	143	250	7.30	34.05	2.14	26.65	140	0.56
286	6.84	34.07	1.86	132	300	6.78	34.08	1.71	26.75	131	0.63
326	6.62	34.08	1.46	129	400	6.35	34.20	0.85	26.90	116	0.76
381	6.50	34.19	1.00	119	500	5.68	34.29	0.58	27.06	101	0.87
441	6.00	34.20	0.64	112	600	5.29	34.35	0.30	27.15	93	0.97
506	5.62	34.30	0.57	100	700	4.84	34.39	0.32	27.23	85	1.07
571	5.37	34.34	0.35	94	800	4.45	34.40	0.33	27.28	80	1.16
626	5.20	34.36	0.28	91	1000	3.77	34.50	0.62	27.44	65	1.32
710	4.80	34.39	0.33	84							
824	4.36	34.42	0.35	77							
943	3.95	34.49	0.47	68							
1043	3.63	34.51	0.72	64							
1187	3.30	34.56	1.00	57							
1237	3.24	34.55	1.01	57							

a) Note similar feature on Station D-3 (72.66).

S10  
CCOF1  
5810

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

D-3  
(72.66) HORIZON; October 15, 1958; 0700 GCT; 35°16.5'N, 122°29'W; sounding, 1955 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 25°.

0	17.03	33.42	5.53	362	0	17.03	33.42	5.53	24.32	362	0.00
9	17.05	33.38	5.62	365	10	17.05	33.38	5.62	24.28	365	0.04
37	14.90	33.21	5.92	331	20	17.02	33.37	5.66	24.28	365	0.07
55	12.71	33.44	4.82	271	30	16.90	33.36	5.69	24.30	363	0.11
69	11.27	33.53	4.03	240	50	12.58	33.27	5.23	25.16	282	0.17
92	10.28	33.65	3.64	214	75	10.98	33.56	3.91	25.68	232	0.24
120	9.78	33.84	2.89	191	100	10.09	33.70	3.14	25.94	207	0.29
152	9.37	33.93	2.66	178	150	9.39	33.92	2.68	26.23	179	0.39
180	9.01	34.02	2.37	167	200	8.75	34.07	2.28	26.45	159	0.48
203	8.67	34.07	2.27	158	250	7.80	34.05	2.40	26.58	146	0.56
240	7.84	34.04	2.44	148	300	7.55	34.18	1.39	26.72	134	0.63
286	7.72	34.18	1.39	136	400	6.84	34.25	0.87	26.88	118	0.76
328	7.20	34.16	1.40	130	500	6.02	34.28	0.50	27.00	106	0.87
384	7.04	34.27	0.86	120	600	5.26	34.34	0.28	27.14	93	0.98
430	6.26	34.22	0.98	114	700	4.77	34.40	0.33	27.25	83	1.07
484a, b)	6.2	34.29	0.57	108	800	4.41	34.43	0.37	27.31	77	1.16
535	5.59	34.26	0.43	103	1000	3.75	34.50	0.52	27.44	65	1.32
609	5.22	34.34	0.28	93							
714	4.70	34.40	0.33	82							
814	4.36	34.43	0.38	76							
925	3.98	34.47	0.41	70							
1050	3.61	34.52	0.58	62							
1096	3.48	34.53	0.63	60							

D-4  
(715.66) HORIZON; October 15, 1958; 0938 GCT; 35°25'N, 122°36.5'W; sounding, 1915 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 30°.

0	17.45	33.55	5.50	362	0	17.45	33.55	5.50	24.32	362	0.00
8	17.44	33.50	5.57	365	10	17.44	33.50	5.57	24.28	365	0.04
35	14.14	33.47	5.28	296	20	17.43	33.50	5.57	24.28	365	0.07
52	11.97	33.44	4.61	258	30	16.83	33.48	5.52	24.40	354	0.11
65	11.09	33.56	4.00	234	50	12.18	33.44	4.70	25.36	262	0.17
88	9.75	33.55	4.56	212	75	10.40	33.56	4.27	25.78	222	0.23
113	9.68	33.72	3.21	199	100	9.70	33.63	3.90	25.96	206	0.29
143	9.30	33.89	2.67	180	150	9.19	33.92	2.60	26.27	176	0.38
170	8.92	33.99	2.45	167	200	8.28	34.06	2.05	26.52	153	0.47
191	8.36	33.98	3.08	159	250	8.06	34.12	1.74	26.60	145	0.54
225	8.26	34.10	1.94	149	300	7.78	34.20	1.29	26.70	135	0.62
269	7.94	34.14	1.56	142	400	7.04	34.26	0.76	26.85	121	0.75
308	7.68	34.22	1.20	132	500	6.11	34.30	0.47	27.01	106	0.87
361	7.26	34.24	0.90	125	600	5.31	34.33	0.32	27.13	94	0.97
406	7.00	34.26	0.73	120	700	4.85	34.36	0.27	27.20	87	1.07
459	6.48	34.27	0.57	113	800	4.46	34.42	0.43	27.30	78	1.16
508	6.02	34.30	0.45	105	1000	3.85	34.49	0.58	27.42	67	1.32
581	5.41	34.32	0.33	96							
682	4.92	34.35	0.25	88							
786	4.50	34.42	0.41	78							
891	4.18	34.44	0.48	74							
1017	3.80	34.49	0.61	67							
1067	3.69	34.50	0.57	65							

a) Note similar feature on Station D-1 (75.66).

b) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth value was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

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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5810

HORIZON; October 15, 1958; 1320 GCT; 35°30'N, 122°40'W; sounding, 1685 fm; wind, 340°, force 4; weather, clear; sea, slight; wire angle, 20°.

D-5  
(71.66)

0	16.71	33.42	5.47	354	0	16.71	33.42	5.47	24.40	354	0.00
9	16.70	33.39	5.59	356	10	16.70	33.39	5.59	24.37	356	0.04
42	13.28	33.42	5.05	284	20	16.68	33.39	5.59	24.38	356	0.07
61	11.85	33.56	4.15	247	30	15.48	33.40	5.39	24.64	331	0.10
76	10.96	33.51	4.26	235	50	12.48	33.47	4.55	25.34	265	0.16
103	10.02	33.62	3.64	212	75	11.00	33.51	4.24	25.64	236	0.23
131	9.49	33.78	3.14	192	100	10.15	33.60	3.74	25.85	216	0.28
168	9.10	33.96	2.46	172	150	9.25	33.89	2.75	26.22	180	0.38
201	8.82	34.05	2.21	162	200	8.83	34.04	2.22	26.42	162	0.47
224	8.50	34.10	1.96	153	250	8.27	34.14	1.73	26.58	147	0.55
270	8.08	34.16	1.60	142	300	7.80	34.18	1.43	26.68	137	0.62
309	7.71	34.18	1.39	135	400	6.69	34.20	1.00	26.85	121	0.76
360	7.27	34.22	1.09	127	500	6.00	34.26	0.50	26.99	108	0.88
415	6.48	34.19	0.99	119	600	5.36	34.32	0.38	27.12	96	0.98
477	6.08	34.22	0.69	112	700	4.81	34.39	0.29	27.24	84	1.08
536	5.91	34.31	0.39	103	800	4.49	34.46	0.35	27.32	76	1.18
588	5.46	34.31	0.41	98	1000	3.85	34.47	0.50	27.40	69	1.33
667	4.94	34.36	0.29	88							
776	4.56	34.45	0.32	77							
890	4.20	34.47	0.43	72							
986	3.90	34.47	0.48	69							
1128	3.39	34.54	0.68	59							
1178	3.33	34.56	0.68	57							

HORIZON; October 15, 1958; 1614, 1805 GCT; 35°38'N, 122°40.5'W; sounding, 1610 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°, 15°.

D-6  
(70<sup>5</sup>.65)

3	16.80	33.37	5.63	360	0	16.80	33.37	5.63	24.33	360	0.00
12	16.81	33.39	5.62	359	10	16.80	33.39	5.62	24.34	360	0.04
31	12.38	33.35	4.79	272	20	16.77	33.39	5.61	24.35	358	0.07
45	11.76	33.42	4.36	256	30	12.45	33.35	4.81	25.24	274	0.10
78	10.12	33.54	3.85	220	50	11.46	33.44	4.25	25.50	249	0.15
105	9.44	33.62	3.58	203	75	10.22	33.53	3.89	25.79	222	0.21
133	9.06	33.75	3.14	187	100	9.58	33.61	3.61	25.96	206	0.27
169	8.94	33.97	2.24	169	150	9.00	33.82	2.89	26.22	181	0.37
203	8.79	34.03	2.06	162	200	8.80	34.03	2.07	26.42	162	0.45
226	8.52	34.05	2.07	156	250	8.39	34.09	1.92	26.52	152	0.53
273	8.22	34.15	1.58	145	300	7.82	34.18	1.37	26.67	138	0.61
310	7.62	34.18	1.29	135	400	6.85	34.22	0.78	26.85	121	0.74
362	7.10	34.22	0.94	124	500	6.12	34.25	0.57	26.97	110	0.86
418	6.76	34.22	0.70	120	600	5.48	34.32	0.36	27.10	97	0.97
479	6.28	34.23	0.62	113	700	4.97	34.37	0.30	27.21	87	1.07
542a)	5.8	34.28	0.44	103	800	4.47	34.42	0.35	27.29	79	1.16
					1000	3.83	34.49	0.54	27.42	67	1.32
695	4.98	34.37	0.30	87							
809	4.44	34.42	0.36	78							
928	4.04	34.49	0.47	69							
1026	3.75	34.49	0.59	66							
1169	3.30	34.51	0.73	60							
1219	3.20	34.54	0.81	57							

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

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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

D-7 (70.65) HORIZON; October 15, 1958; 2005 GCT; 35°43'N, 122°44'W; sounding, 760 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 18°.

0	16.68	33.43	5.65	354	0	16.68	33.43	5.65	24.40	354	0.00
10	16.58	33.37	5.63	355	10	16.58	33.37	5.63	24.39	355	0.04
39	12.27	33.49	4.47	260	20	15.98	33.38	5.50	24.52	342	0.07
58	11.00	33.62	3.81	228	30	14.55	33.42	5.13	24.88	308	0.10
72	10.55	33.64	3.59	218	50	11.40	33.55	4.02	25.59	240	0.16
95	10.00	33.73	3.19	204	75	10.42	33.65	3.52	25.85	216	0.21
125	9.72	33.79	2.90	194	100	9.97	33.74	3.13	26.01	201	0.27
158	9.26	33.87	2.57	182	150	9.39	33.85	2.66	26.18	185	0.37
187	9.02	33.97	2.33	170	200	8.95	34.01	2.22	26.37	166	0.46
211	8.82	34.03	2.12	163	250	8.45	34.04	1.93	26.47	157	0.54
249	8.46	34.03	1.94	158	300	8.10	34.14	1.49	26.61	144	0.62
296	8.18	34.14	1.52	145	400	6.91	34.16	1.01	26.80	126	0.76
339	7.68	34.16	1.18	137	500	6.30	34.25	0.59	26.94	112	0.88
397	6.92	34.16	1.02	126	600	5.55	34.32	0.36	27.09	98	0.99
445	6.72	34.22	0.74	120	700	5.13	34.36	0.30	27.18	90	1.09
502a)	6.3	34.25	0.55	112	800	4.63	34.41	0.28	27.27	81	1.18
556	5.72	34.30	0.39	101	1000	3.93	34.48	0.49	27.40	69	1.35
633	5.43	34.32	0.33	97							
740	4.94	34.39	0.28	86							
847	4.42	34.42	0.30	78							
954	4.06	34.47	0.46	71							
1082	3.71	34.48	0.54	66							
1131	3.61	34.48	0.61	66							

D-8 (69<sup>5</sup>.65) HORIZON; October 15, 1958; 2257 GCT; 35°47'N, 122°46'W; sounding, 1810 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 18°.

0	16.14	33.41	5.73	343	0	16.14	33.41	5.73	24.52	343	0.00
9	16.06	33.40	5.73	342	10	16.04	33.40	5.73	24.53	342	0.03
38	10.98	33.60	3.61	229	20	15.60	33.41	5.63	24.64	331	0.07
57	10.60	33.62	3.39	221	30	13.85	33.49	4.98	25.06	291	0.10
72	10.30	33.68	3.20	212	50	10.69	33.61	3.46	25.77	224	0.15
95	9.82	33.78	2.96	197	75	10.22	33.69	3.17	25.91	210	0.20
123	9.58	33.87	2.60	186	100	9.79	33.80	2.90	26.07	195	0.26
157	9.35	33.95	2.31	176	150	9.40	33.94	2.37	26.24	178	0.35
185	9.12	33.96	2.15	172	200	8.98	33.99	2.23	26.36	168	0.44
208	8.94	34.02	2.27	165	250	8.86	34.16	1.35	26.50	154	0.52
245	8.89	34.16	1.34	154	300	8.38	34.16	1.62	26.58	146	0.60
291	8.47	34.16	1.63	148	400	7.40	34.22	1.08	26.78	128	0.74
333	7.86	34.16	1.45	140	500	6.22	34.24	0.56	26.94	112	0.86
388	7.56	34.21	1.17	131	600	5.58	34.33	0.37	27.10	97	0.98
432	6.89	34.25	0.88	120	700	5.00	34.36	0.36	27.19	88	1.07
487	6.30	34.23	0.59	114	800	4.68	34.38	0.35	27.24	84	1.17
537	6.04	34.27	0.50	108	1000	3.91	34.50	0.48	27.42	67	1.32
612	5.49	34.33	0.36	96							
716	4.92	34.36	0.36	88							
821	4.62	34.38	0.33	84							
929	4.22	34.45	0.42	74							
1055	3.70	34.52	0.55	63							
1105	3.60	34.51	0.61	63							

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

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

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HORIZON; October 16, 1958; 0112 GCT; 35°52'N, 122°50'W; sounding, 1900 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 21°.

D-9  
(69.65)

0	16.16	33.36	5.84	347	0	16.16	33.36	5.84	24.47	347	0.00
10	16.13	33.38	5.83	345	10	16.13	33.38	5.83	24.49	345	0.03
38	12.02	33.49	4.22	255	20	16.00	33.39	5.80	24.53	341	0.07
56	10.93	33.58	3.62	230	30	12.60	33.41	4.75	25.26	272	0.10
70	10.40	33.61	3.44	218	50	11.62	33.55	3.81	25.55	244	0.15
94	10.04	33.68	3.10	208	75	10.30	33.63	3.35	25.85	216	0.21
120	9.72	33.79	2.78	194	100	9.99	33.70	3.03	25.97	205	0.26
151	9.52	33.88	2.43	184	150	9.53	33.88	2.44	26.18	184	0.36
177	9.36	33.93	2.27	178	200	9.15	33.96	2.12	26.30	173	0.45
200	9.15	33.96	2.12	173	250	8.92	34.18	1.77	26.51	153	0.53
235	8.94	34.08	1.89	161	300	8.78	34.24	1.50	26.58	146	0.61
280	8.84	34.25a)	1.57	147	400	7.59	34.23	1.19	26.75	130	0.75
320	8.65	34.22a)	1.42	146	500	6.55	34.26	0.68	26.92	114	0.88
375	7.78	34.23	1.30	133	600	5.69	34.31	0.35	27.07	100	1.00
420	7.42	34.23	1.07	128	700	5.12	34.34	0.28	27.16	91	1.10
474	6.77	34.25	0.80	118	800	4.62	34.36	0.28	27.23	84	1.19
524	6.36	34.26	0.59	112	1000	3.91	(34.50)	0.45	(27.42)	(67)	(1.36)
599	5.70	34.31	0.35	100							
701	5.10	34.34	0.28	91							
803	4.62	34.36	0.28	84							
907	4.26	34.44	0.38	75							
1031	3.80	34.54u	0.50	-							
1080	3.67	34.51u	0.58	-							

HORIZON; October 16, 1958; 0340 GCT; 36°00'N, 122°56'W; sounding, 1870 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 25°.

D-10  
(68<sup>5</sup>.65)

0	16.12	33.43	5.77	341	0	16.12	33.43	5.77	24.54	341	0.00
9	16.13	33.40	5.78	343	10	16.13	33.40	5.78	24.51	343	0.03
27	12.86	33.40	5.76	278	20	16.01	33.40	5.78	24.54	341	0.07
40	11.32	33.60	5.34	235	30	12.38	33.45	5.66	25.34	265	0.10
73	10.14	33.69	3.16	208	50	10.85	33.64	4.75	25.76	224	0.15
101	9.91	33.75	2.95	200	75	10.07	33.70	3.12	25.94	207	0.20
127	9.76	33.82	2.82	193	100	9.93	33.75	2.96	26.01	201	0.25
163	9.46	33.89	2.45	184	150	9.56	33.87	2.56	26.16	186	0.35
195	9.27	33.96	2.23	175	200	9.25	33.98	2.20	26.30	173	0.44
217	9.13	34.02	2.03	168	250	8.87	34.11	1.82	26.46	158	0.53
263	8.79	34.14	1.75	154	300	8.45	34.17	1.54	26.57	147	0.60
299	8.46	34.17	1.54	147	400	7.54	34.20	1.11	26.73	132	0.75
348	8.03	34.18	1.39	140	500	6.42	34.24	0.71	26.92	114	0.88
403	7.50	34.20	1.09	132	600	5.60	34.30	0.39	27.07	100	0.99
462	6.84	34.23	0.90	120	700	5.04	34.36	0.39	27.19	89	1.09
520b)	6.2	34.25	0.59	111	800	4.58	34.40	0.34	27.27	81	1.18
571b)	5.8	34.29	0.38	103	1000	3.88	34.47	0.45	27.40	69	1.35
648	5.28	34.33	0.39	94							
754	4.78	34.40	0.39	84							
867	4.32	34.40	0.28	78							
962	4.02	34.45	0.39	72							
1102	3.57	34.52	0.62	62							
1150	3.49	34.54	0.64	60							

- a) The use of these values results in an unusual density structure, but nevertheless values were accepted in drawing the property curve.
- b) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

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

D-11 (68.65) HORIZON; October 16, 1958; 0703 GCT; 36°09'N, 123°02.5'W; sounding, 1860 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 20°.

0	16.70	33.39	5.68	357	0	16.70	33.39	5.68	24.37	357	0.00
9	16.64	33.37	5.71	357	10	16.63	33.37	5.70	24.37	357	0.04
42	11.02	33.58	3.58	231	20	16.00	33.40	5.48	24.54	341	0.07
61	10.46	33.68	3.24	214	30	13.40	33.49	4.46	25.17	281	0.10
75	10.15	33.66	3.24	211	50	10.76	33.62	3.41	25.77	224	0.15
104	9.79	33.77	2.98	197	75	10.15	33.66	3.24	25.90	211	0.21
132	9.50	33.86	2.64	186	100	9.82	33.74	3.01	26.03	199	0.26
170	9.22	33.98	2.14	173	150	9.38	33.92	2.32	26.23	180	0.35
203	9.02	34.07	1.96	163	200	9.03	34.06	1.99	26.40	164	0.44
227	8.81	34.12	1.89	156	250	8.69	34.13	1.75	26.51	153	0.52
275	8.56	34.14	1.59	151	300	8.30	34.17	1.50	26.60	145	0.60
312	8.21	34.18	1.48	143	400	7.30	34.22	1.10	26.78	127	0.74
365	7.70	34.19	1.20	135	500	6.41	34.23	0.63	26.91	115	0.87
421	7.06	34.23	1.05	124	600	5.54	34.31	0.38	27.09	98	0.98
483	6.56	34.23	0.68	116	700	4.98	34.30	0.33	27.15	92	1.08
545a)	6.0	34.25	0.50	108	800	4.64	34.34	0.32	27.22	86	1.18
598	5.54	34.31	0.38	98	1000	3.95	34.50	0.48	27.41	68	1.34
678	5.06	34.30	0.54u	94							
789	4.68	34.34	0.32	87							
905	4.22	34.47	0.35	72							
1001	3.94	34.50	0.48	67							
1144	3.58	34.49	0.55	64							
1195	3.50	34.55	0.66	59							

D-12 (67.65) HORIZON; October 16, 1958; 1058 GCT; 36°17'N, 123°09'W; sounding, 1890 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 08°.

0	16.45	33.48	5.58	345	0	16.45	33.48	5.58	24.50	345	0.00
10	16.46	33.42	5.48	349	10	16.46	33.42	5.48	24.45	349	0.03
40	13.86	33.48	4.87	290	20	16.43	33.42	5.42	24.46	348	0.07
60	11.29	33.58	3.88	236	30	16.20	33.42	5.28	24.52	343	0.10
75	10.36	33.64	3.75	216	50	12.48	33.53	4.38	25.38	261	0.16
100	9.68	33.75	3.26	196	75	10.36	33.64	3.75	25.85	216	0.22
130	9.33	33.95	2.55	176	100	9.68	33.75	3.26	26.06	196	0.28
165	8.80	34.02	2.24	163	150	9.02	33.99	2.38	26.34	169	0.37
194	8.66	34.16	1.91	151	200	8.69	34.17	1.82	26.54	150	0.45
220	8.82	34.29	1.59	144	250	8.45	34.25	1.61	26.64	141	0.52
259	8.32	34.23	1.63	140	300	7.86	34.24	1.37	26.72	134	0.60
309	7.75	34.24	1.30	132	400	6.84	34.24	0.82	26.86	120	0.72
353	7.42	34.25	1.01	127	500	6.10	34.29	0.51	27.00	107	0.84
412	6.69	34.24	0.78	118	600	5.50	34.34	0.37	27.11	96	0.95
463	6.44	34.31	0.66	109	700	4.98	34.37	0.30	27.20	87	1.05
521	5.94	34.27	0.44	106	800	4.57	34.40	0.30	27.28	80	1.14
577	5.65	34.32	0.38	99	1000	3.95	(34.52)	0.48	(27.43)	(66)	(1.30)
655	5.16	34.36	0.33	90							
764	4.72	34.39	0.28	83							
874	4.28	34.43	0.32	76							
982	4.00	34.51	0.43	67							
1112	3.60	34.56u	0.62	-							
1162	3.46	34.52u	0.59	-							

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature was determined by calculation, using the unprotected thermometer reading.

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/g	m	°C	‰	ml/L	g/L	10 <sup>-5</sup> cm/g	dyn. m

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5810

HORIZON; October 16, 1958; 1852 GCT; 35°12'N, 123°47.5'W; sounding, 2150 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 27°.

D-13  
(70.80)

0	16.72	33.43	5.63	354	0	16.72	33.43	5.63	24.40	354	0.00
9	16.72	33.38	5.63	358	10	16.72	33.38	5.63	24.36	358	0.04
40	12.64	33.39	4.98	274	20	16.67	33.38	5.62	24.37	357	0.07
58	10.64	33.41	4.60	238	30	16.50	33.38	5.58	24.41	353	0.11
71	9.94	33.44	4.70	224	50	11.43	33.40	4.75	25.47	252	0.17
97	9.16	33.64	4.38	197	75	9.65	33.46	4.68	25.83	218	0.23
124	8.94	33.85	2.96	178	100	9.13	33.69	4.30	26.09	193	0.28
159	8.38	33.96	2.69	161	150	8.52	33.93	2.74	26.38	166	0.37
190	8.02	34.05	2.14	150	200	7.97	34.06	2.10	26.57	148	0.45
213	7.83	34.08	1.98	145	250	7.15	34.07	1.91	26.69	136	0.52
256	7.04	34.07	1.90	135	300	6.82	34.14	1.35	26.79	127	0.59
290	6.93	34.13	1.46	129	400	6.28	34.21	0.70	26.91	115	0.71
338	6.57	34.16	1.04	122	500	5.75	34.34	0.39	27.08	99	0.83
391	6.34	34.20	0.73	116	600	5.08	34.36	0.35	27.18	90	0.93
448	6.00	34.25	0.56	108	700	4.68	34.41	0.35	27.26	82	1.02
505	5.74	34.34	0.37	98	800	4.28	34.43	0.43	27.33	76	1.10
556	5.36	34.34	0.35	94	1000	3.62	34.49	0.45	27.44	65	1.26
634	4.90	34.38	0.35	86							
741	4.54	34.43	0.38	78							
856	4.06	34.44	0.46	73							
954	3.75	34.49	0.42	66							
1095	3.38	34.50	0.57	62							
1145	3.30	34.54	0.69	58							

HORIZON; October 16, 1958; 2226, 2250, 2344 GCT; 35°23'N, 123°26.5'W; sounding, 1950 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 10°, 14°, 14°.

D-14  
(70.75)

0	16.94	33.42	5.44	360	0	16.94	33.42	5.44	24.34	360	0.00
11	16.86	33.37	5.52	362	10	16.86	33.37	5.52	24.32	362	0.04
45	13.00	33.43	4.67	278	20	16.79	33.37	5.52	24.34	360	0.07
					30	16.65	33.37	5.50	24.37	357	0.11
64	11.94	33.49	4.19	254	50	12.63	33.45	4.51	25.28	270	0.17
78	10.82	33.58	3.74	228	75	11.12	33.56	3.86	25.66	234	0.23
108	9.76	33.73	3.32	199	100	9.80	33.69	3.45	25.99	203	0.29
137	9.23	33.91	2.70	178	150	9.10	33.96	2.52	26.31	172	0.38
176	8.86	34.06	2.17	161	200	8.59	34.09	1.98	26.49	155	0.47
					250	8.19	34.18	1.51	26.63	142	0.54
215	8.38	34.10	1.86	151	300	7.67	34.23	1.16	26.74	132	0.61
240	8.24	34.16	1.58	144	400	6.38	34.18	0.97	26.88	118	0.74
289	7.81	34.23	1.21	134	500	5.88	34.30	0.44	27.03	104	0.86
330	7.32	34.22	1.06	128	600	5.26	34.39	0.29	27.18	90	0.96
385	6.43	34.16	1.07	121	700	4.85	34.43	0.26	27.26	82	1.05
444	6.30	34.27	0.60	110	800	4.46	34.45	0.32	27.32	76	1.14
510	5.82	34.30	0.42	102	1000	3.84	34.51	0.50	27.43	66	1.29
573	5.38	34.35	0.32	93							
629	5.14	34.42	0.26	86							
712	4.80	34.43	0.28	81							
826	4.37	34.51u	0.34	-							
945	3.98	34.45u	0.45	-							
1044	3.72	34.52	0.57	64							
1188	3.32	34.54	0.74	58							
1239	3.23	34.57	0.81	56							

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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	

D-15  
(70.73) HORIZON; October 17, 1958; 0213, 0225, 0310 GCT; 35°28'N, 123°16.5'W; sounding, 2025 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 10°, 10°, missing.

0	16.92	33.46	5.56	356	0	16.92	33.46	5.56	24.38	356	0.00
10	16.90	33.42	5.56	358	10	16.90	33.42	5.56	24.35	358	0.04
39	13.59	33.17	6.00	308	20	16.87	33.41	5.57	24.35	358	0.07
					30	16.65	33.39	5.63	24.38	356	0.11
60	11.09	33.24	5.04	258	50	12.02	33.20	5.46	25.21	277	0.17
75	9.84	33.39	4.54	226	75	9.84	33.39	4.54	25.74	226	0.23
99	9.40	33.68	3.83	198	100	9.39	33.69	3.80	26.06	196	0.29
129	9.09	33.86	3.03	180	150	8.95	33.95	2.59	26.32	171	0.38
163	8.84	34.00	2.26	166	200	8.59	34.08	1.79	26.48	156	0.46
194	8.63	34.06	1.80	158	250	7.46	34.03	2.30	26.62	143	0.54
218	8.36	34.11	1.77	150	300	6.80	34.04	1.90	26.71	134	0.61
258	7.24	34.02	2.42	142	400	6.67	34.28	0.87	26.92	114	0.74
308	6.77	34.04	1.77	134	500	5.85	34.27	0.47	27.02	105	0.85
352	7.09	34.20	1.01	126	600	5.23	34.32	0.41	27.13	94	0.97
413	6.58	34.28	0.82	113	700	4.75	34.37	0.33	27.23	85	1.05
463	6.12	34.25	0.51	110	800	4.38	(34.43)	0.32	(27.32)	(76)	(1.14)
522	5.69	34.29	0.44	102	1000	3.80	(34.50)	0.52	(27.43)	(66)	(1.30)
653	4.95	34.34	0.37	90							
761	4.52	34.40	0.29	80							
870	4.15	34.26r	0.38	-							
978	3.85	34.30r	0.50	-							
1107	3.58	34.51a)	0.61	63							
1157	3.44	34.52	0.70	61							

D-16  
(70.70) HORIZON; October 17, 1958; 0522, 0615, 0657 GCT; 35°32.5'N, 123°05'W; sounding, 1980 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 24°, 26°, 23°.

0	16.78	33.40a)	5.55	358	0	16.78	33.40	5.55	24.36	358	0.00
10	16.74	33.40	5.37	356	10	16.74	33.40	5.37	24.38	356	0.04
38	13.22	33.35	4.97	288	20	16.62	33.40	5.31	24.40	354	0.07
56	11.53	33.53	3.96	244	30	15.80	33.38	5.19	24.58	337	0.10
69	10.74	33.56	3.73	228	50	11.99	33.47	4.25	25.42	256	0.16
92	10.04	33.68	3.22	208	75	10.49	33.60	3.58	25.79	222	0.22
120	9.63	33.77	2.80	194	100	9.95	33.71	3.12	25.98	203	0.28
153	9.16	33.88a)	2.57	180	150	9.20	33.88	2.61	26.23	180	0.38
181	9.07	34.00	2.20	169	200	8.82	34.04	2.01	26.42	162	0.46
204	8.79	34.05	2.00	161	250	8.10	34.05	2.20	26.54	151	0.54
242	8.18	34.04	2.21	153	300	7.60	34.13	1.77	26.67	138	0.62
287	7.84	34.13	1.79	141	400	6.83	34.19	0.90	26.82	124	0.75
330	7.05	34.11	1.74	132	500	6.03	34.25	0.48	26.98	109	0.87
					600	5.40	34.35	0.35	27.14	94	0.98
391	6.90	34.18	0.96	125	700	4.93	34.40	0.30	27.22	85	1.08
440	6.62	34.23	0.65	118	800	4.46	34.43	0.31	27.30	78	1.16
499	6.03	34.25	0.48	109	1000	3.80	34.48	0.50	27.42	67	1.32
554	5.61	34.33	0.36	98							
636	5.25	34.31u	0.34	-							
745	4.70	34.42	0.28	81							
852	4.26	34.43	0.33	76							
961	3.91	34.47	0.45	69							
1089	3.54	34.52	0.59	62							
1139	3.40	34.52	0.61	61							

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



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

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HORIZON; October 17, 1958; 0918 GCT; 35°38'N, 122°55'W; sounding, 1965 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

D-17  
(70.67)

0	16.82	33.50	5.48	352	0	16.82	33.50	5.48	24.42	352	0.00
11	16.82	33.46	5.23	354	10	16.82	33.46	5.25	24.40	354	0.04
40	14.55	33.43	5.10	308	20	16.81	33.46	5.21	24.40	354	0.07
60	11.63	33.34	4.41	260	30	16.59	33.45	5.16	24.44	350	0.10
75	10.82	33.58	3.64	228	50	12.80	33.37	4.80	25.20	278	0.17
99	9.92	33.65	3.43	208	75	10.82	33.58	3.64	25.72	228	0.23
128	9.32	33.84	2.90	185	100	9.90	33.65	3.42	25.94	207	0.29
163	9.10	34.00	2.28	170	150	9.18	33.97	2.46	26.30	173	0.38
191	8.90	34.11	2.02	158	200	8.85	34.13	1.96	26.48	156	0.47
217	8.76	34.14	1.77	154	250	8.41	34.14	1.62	26.56	149	0.54
256	8.33	34.14	1.59	148	300	7.82	34.16	1.53	26.67	138	0.62
305	7.76	34.17	1.52	137	400	7.15	34.24	0.85	26.83	123	0.75
350	7.16	34.21	1.35	126	500	6.20	34.31	0.56	27.00	106	0.87
409	7.14	34.30	0.76	119	600	5.55	34.39	0.35	27.15	92	0.98
458	6.38	34.25	0.72	113	700	5.06	34.41	0.29	27.22	86	1.07
519	6.13	34.33	0.49	104	800	4.56	34.46	0.32	27.32	76	1.16
573	5.70	34.39	0.37	94	1000	3.79	34.55	0.52	27.47	62	1.31
652	5.29	34.39	0.29	90							
762	4.72	34.45	0.31	79							
871	4.27	34.47	0.33	73							
980	3.85	34.54	0.50	64							
1110	3.46	34.56	0.56	58							
1160	3.35	34.55	0.61	57							

HORIZON; October 17, 1958; 1133 GCT; 35°40.5'N, 122°49'W; sounding, 1745 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 22°.

D-18  
(70.66)

0	16.84	33.42	5.28	358	0	16.84	33.42	5.28	24.36	358	0.00
10	16.82	33.44	5.29	356	10	16.82	33.44	5.29	24.38	356	0.04
38	12.49	33.23	4.92	283	20	16.68	33.44	5.28	24.41	353	0.07
56	11.53	33.37	4.42	256	30	14.82	33.32	5.14	24.74	322	0.10
71	11.12	33.48	3.94	240	50	11.82	33.31	4.60	25.34	265	0.16
94	9.64	33.68	3.38	202	75	10.93	33.51	3.82	25.66	234	0.23
121	9.23	33.81	2.78	186	100	9.54	33.70	3.24	26.04	198	0.28
154	8.88	33.93	2.36	171	150	8.93	33.91	2.42	26.30	173	0.38
182	8.72	33.96	2.20	166	200	8.52	34.00	2.08	26.44	160	0.46
204	8.48	34.01	2.04	160	250	8.21	34.09	1.80	26.55	149	0.54
240	8.31	34.08	1.83	151	300	7.72	34.16	1.37	26.68	137	0.61
286	7.82	34.15	1.48	140	400	6.98	34.21	0.82	26.82	124	0.75
327	7.48	34.18	1.14	133	500	6.35	34.26	0.57	26.95	112	0.87
382	7.08	34.20	0.89	126	600	5.61	34.30	0.36	27.07	100	0.98
428	6.78	34.22	0.72	120	700	4.99	34.36	0.27	27.19	88	1.08
482	6.48	34.25	0.61	114	800	4.46	34.43	0.28	27.30	78	1.17
533	6.08	34.27	0.46	108	1000	3.82	34.48	0.45	27.41	68	1.33
606	5.57	34.30	0.34	100							
708	4.94	34.36	0.26	88							
812	4.42	34.43	0.28	78							
919	4.08	34.45	0.40	72							
1046	3.66	34.50	0.48	64							
1097	3.54	34.51	0.59	62							

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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

D-19  
~~D-9~~

(70.65)

HORIZON; October 17, 1958; 1440 GCT; 35°43'N, 122°43.5'W; sounding, 730 fm; wind, 320°, force 3;  
weather, overcast; sea, rough; wire angle, 19°.

0	16.36	33.37	5.67	350	0	16.36	33.37	5.67	24.44	350	0.00
10	16.36	33.38a)	5.69	350	10	16.36	33.38	5.69	24.44	350	0.04
44	12.43	33.46	4.36	266	20	16.35	33.38	5.68	24.45	349	0.07
63	10.90	33.58	3.29	229	30	16.31	33.38	5.66	24.46	348	0.10
77	10.46	33.64	3.24	218	50	11.85	33.50	3.96	25.47	252	0.16
106	9.98	33.73	2.82	203	75	10.50	33.64	3.25	25.82	218	0.22
136	9.46	33.84	2.67	187	100	10.05	33.72	2.88	25.96	205	0.28
174	9.12	33.94	2.36	174	150	9.32	33.88	2.54	26.21	182	0.38
209	8.72	34.03	1.94	161	200	8.82	34.00	2.07	26.39	165	0.46
233	8.54	34.04	1.76	158	250	8.42	34.07	1.64	26.50	154	0.54
282	8.24	34.20	1.45	142	300	8.02	34.22	1.32	26.68	137	0.62
321	7.75	34.23	1.15	132	400	6.83	34.23	0.88	26.86	120	0.75
375	6.94	34.17	1.07	126	500	6.25	34.29	0.51	26.99	108	0.87
433	6.80	34.25	0.73	118	600	5.40	34.38	0.34	27.16	92	0.98
496	6.28	34.29	0.52	109	700	4.87	34.36	0.28	27.21	87	1.07
560	5.68	34.33	0.38	99	800	4.48	34.41	0.33	27.29	80	1.16
613	5.31	34.38	0.32	90	1000	3.84	34.47	0.43	27.40	69	1.33
696	4.88	34.36	0.28	87							
807	4.45	34.41	0.34	80							
923	4.04	34.47	0.36	71							
1020	3.78	34.47	0.48	68							
1162	3.40	-	-	-							
1211	3.30	34.52	0.66	60							

D-20  
(70.63)

HORIZON; October 17, 1958; 1730 GCT; 35°45'N, 122°38.5'W; sounding, 1270 fm; wind, 330°, force 3;  
weather, fog; sea, moderate; wire angle, 09°.

0	16.12	33.37	5.49	345	0	16.12	33.37	5.49	24.49	345	0.00
9	16.10	33.37	5.61	345	10	16.10	33.37	5.61	24.49	345	0.03
39	11.85	33.48	4.20	253	20	16.08	33.37	5.59	24.50	344	0.07
59	10.97	33.58	3.44	230	30	15.95	33.37	5.55	24.52	342	0.10
73	10.43	33.67	3.12	214	50	11.29	33.54	3.81	25.60	239	0.16
98	9.76	33.80	2.78	194	75	10.40	33.68	3.10	25.87	214	0.22
128	9.34	33.86	2.54	182	100	9.73	33.80	2.77	26.09	193	0.27
162	9.15	33.98	2.22	172	150	9.22	33.88	2.40	26.23	180	0.36
191	8.75	34.09	1.87	157	200	8.67	34.11	1.79	26.50	154	0.45
217	8.52	34.14	1.66	150	250	8.15	34.16	1.43	26.62	143	0.52
255	8.10	34.17	1.39	142	300	7.77	34.20	1.18	26.71	134	0.60
304	7.74	34.21	1.15	134	400	6.98	34.22	0.90	26.83	123	0.73
350	7.38	34.22	0.99	128	500	6.22	34.27	0.48	26.97	110	0.85
409	6.88	34.22	0.90	122	600	5.41	34.33	0.35	27.12	96	0.96
457	6.53	34.25	0.61	115	700	4.96	34.35	0.34	27.19	89	1.06
517	6.10	34.28	0.44	107	800	4.53	34.38	0.34	27.26	82	1.15
569	5.57	34.32	0.35	98	1000	3.83	34.49	0.51	27.42	67	1.31
649	5.20	34.34	0.36	92							
758	4.70	34.36	0.33	86							
866	4.28	34.42	0.35	77							
975	3.92	34.49	0.48	68							
1104	3.52	34.51	0.64	62							
1154	3.43	34.52	0.67	61							

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

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 cm/g	m	°C	‰	ml/L	g/L	10 cm/g	dyn. m

S10  
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5810

HORIZON; October 17, 1958; 1947 GCT; 35°48'N, 122°33'W; sounding, 1755 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 10°.

D-21  
(70.62)

0	16.18	33.40	5.98	344	0	16.18	33.40	5.98	24.50	344	0.00
10	16.14	33.40	6.04	343	10	16.14	33.40	6.04	24.51	343	0.03
39	12.22	33.50	4.36	258	20	16.10	33.40	6.03	24.52	342	0.07
59	10.86	33.58	3.57	229	30	15.00	33.42	5.54	24.78	318	0.10
75	10.38	33.64	3.24	216	50	11.40	33.55	3.88	25.59	240	0.16
98	9.92	33.73	3.04	202	75	10.38	33.64	3.24	25.85	216	0.21
128	9.58	33.85	2.54	188	100	9.90	33.74	3.03	26.01	201	0.27
163	9.14	33.94	2.32	174	150	9.32	33.90	2.41	26.23	180	0.36
192	8.88	34.05	1.98	162	200	8.78	34.07	1.89	26.45	159	0.45
217	8.56	34.11	1.74	153	250	8.45	34.14	1.51	26.55	150	0.53
257	8.44	34.14	1.49	150	300	7.86	34.17	1.32	26.67	138	0.60
305	7.77	34.18	1.29	136	400	6.99	34.23	0.85	26.84	122	0.74
349	7.24	34.19	1.12	129	500	6.10	34.25	0.54	26.97	110	0.86
407	6.93	34.24	0.79	120	600	5.42	34.29	0.33	27.08	99	0.97
457	6.42	34.25	0.69	114	700	4.96	34.34	0.29	27.18	90	1.07
516	5.99	34.25	0.48	108	800	4.58	34.40	0.27	27.27	81	1.17
569	5.62	34.28	0.35	102	1000	3.94	34.49	0.46	27.40	68	1.32
646	5.18	34.30	0.31	95							
756	4.74	34.38	0.29	84							
865	4.34	34.42	0.29	77							
974	4.02	34.47	0.43	70							
1104	3.59	34.52	0.57	62							
1153	3.48	34.53	0.66	61							

HORIZON; October 17, 1958; 2202 GCT; 35°53'N, 122°23'W; sounding, 1715 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 20°.

D-22  
(70.60)

0	16.16	33.37	5.33	346	0	16.16	33.37	5.33	24.48	346	0.00
10	16.00	33.37	4.97u	343	10	16.00	33.37	5.52	24.51	343	0.03
24	15.88	33.38	5.67	340	20	15.92	33.38	5.61	24.54	340	0.07
39	12.74	33.29	4.83	283	30	15.60	33.37	5.60	24.61	334	0.10
72	10.92	33.55	3.59	232	50	12.00	33.37	4.42	25.34	264	0.16
96	10.24	33.68	3.14	211	75	10.79	33.57	3.49	25.72	228	0.22
123	9.62	33.80	2.78	192	100	10.15	33.71	3.07	25.94	207	0.28
155	9.16	33.89	2.47	178	150	9.21	33.87	2.51	26.22	181	0.38
183	8.86	34.02	2.03	165	200	8.72	34.02	2.05	26.42	162	0.46
206	8.64	34.02	2.05	161	250	8.26	34.13	1.70	26.58	147	0.54
243	8.32	34.12	1.73	148	300	7.68	34.16	1.37	26.68	137	0.62
290	7.80	34.16	1.42	138	400	6.80	34.23	0.80	26.86	120	0.75
332	7.38	34.18	1.12	131	500	6.15	34.30	0.47	27.01	106	0.87
388	6.88	34.21	0.89	122	600	5.49	34.33	0.32	27.10	97	0.97
435	6.58	34.27	0.59	114	700	5.00	34.37	0.25	27.20	88	1.07
491	6.24	34.29	0.50	109	800	4.61	34.44	0.26	27.29	79	1.16
542	5.77	34.33	0.40	99	1000	3.94	34.51	0.43	27.42	66	1.32
617	5.42	34.33	0.30	96							
721	4.89	34.38	0.23	86							
827	4.52	34.45	0.28	76							
934	4.18	34.49	0.39	70							
1060	3.73	34.53	0.49	63							
1109	3.61	34.55	0.59	60							

SIO		OBSERVED					INTERPOLATED				COMPUTED		
CCOFI	Z	T	S	O <sub>2</sub>	$\delta T_3$	Z	T	S	O <sub>2</sub>	$\sigma_t$	$\delta T_3$	$\Delta D$	
5810	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	

D-23 (70.58) HORIZON; October 18, 1958; 0032 GCT; 35°58'N, 122°12'W; sounding, 970 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.

0	16.39	33.51	5.29	340	0	16.39	33.51	5.29	24.54	340	0.00
9	16.34	33.49	5.43	341	10	16.34	33.49	5.43	24.53	341	0.03
38	12.95	33.39	4.50	280	20	16.23	33.48	5.42	24.54	340	0.07
57	11.61	33.53	3.84	245	30	15.18	33.44	5.11	24.76	320	0.10
72	10.96	33.62	3.43	227	50	11.87	33.48	3.98	25.45	254	0.16
96	10.11	33.62	3.47	213	75	10.81	33.62	3.43	25.76	225	0.22
124	9.42	33.83	2.95	187	100	10.02	33.64	3.43	25.91	210	0.27
157	9.24	33.93	2.40	177	150	9.25	33.93	2.41	26.26	177	0.37
187	8.88	34.00	2.23	166	200	8.76	34.07	1.97	26.45	159	0.45
211	8.66	34.09	1.81	156	250	8.30	34.14	1.59	26.58	147	0.53
249	8.30	34.14	1.59	147	300	7.59	34.13	1.51	26.67	138	0.61
298	7.60	34.13	1.53	138	400	6.70	34.18	0.90	26.84	122	0.74
341	7.18	34.14	1.25	131	500	6.07	34.29	0.46	27.00	106	0.86
399	6.70	34.18	0.90	122	600	5.48	34.30	0.34	27.09	98	0.97
447	6.43	34.27	0.59	112	700	5.03	34.38	0.30	27.20	88	1.07
504	6.02	34.29	0.42	106	800	4.57	34.43	0.31	27.30	78	1.16
557	5.60	34.29	0.39	100	1000	3.83	34.49	0.47	27.42	67	1.32
634	5.42	34.31	0.31	97							
741	4.79	34.42	0.30	82							
848	4.37	34.44	0.33	76							
956	3.96	34.48	0.45	68							
1085	3.59	34.52	0.55	62							
1135	3.48	34.55	0.64	59							

D-24 (70.55) HORIZON; October 18, 1958; 0245 GCT; 36°03'N, 122°02'W; sounding, 690 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 16°.

0	15.14	33.47	5.51	317	0	15.14	33.47	5.51	24.79	317	0.00
9	15.11	33.41	5.68	321	10	15.10	33.41	5.68	24.75	321	0.03
38	14.02	33.46	5.14	296	20	14.95	33.41	5.60	24.79	317	0.06
57	11.52	33.38	4.48	254	30	14.68	33.43	5.48	24.86	310	0.10
72	10.55	33.40	4.37	237	50	13.74	33.45	5.04	25.07	290	0.16
95	9.89	33.56	3.97	214	75	10.44	33.42	4.32	25.66	234	0.22
123	9.54	33.78	3.15	192	100	9.80	33.60	3.83	25.91	210	0.28
157	9.38	33.95	2.50	177	150	9.41	33.89	2.62	26.21	182	0.38
186	8.90	34.04	2.24	163	200	8.80	34.05	2.12	26.43	161	0.46
209	8.75	34.06	2.04	159	250	8.15	34.12	1.65	26.58	146	0.54
248	8.15	34.12	1.65	146	300	7.78	34.22	1.26	26.72	133	0.61
298	7.78	34.22	1.26	133	400	6.98	34.23	0.88	26.84	122	0.74
341	7.59	34.23	0.99	130	500	6.15	34.30	0.65	27.00	106	0.86
400	6.98	34.23	0.88	122	600	5.53	34.31	0.40	27.09	98	0.97
448	6.60	34.25	0.73	116	700	5.18	34.36	0.29	27.17	90	1.07
506	6.09	34.30	0.64	106	800	4.76	34.41	0.37	27.26	82	1.17
560	5.71a)	34.30	0.43	101	1000	3.92	34.52	0.48	27.43	66	1.33
639	5.39	34.33	0.35	95							
748	5.02	34.38	0.28	88							
857	4.46	34.43	0.43	78							
965	4.02	34.51	0.45	68							
1095	3.67	34.52	0.57	63							
1145	3.51	34.52	0.60	61							

a) Mean value of 5.68 and 5.74°C.

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
60.52-S	XI-1	1030	37°53.5'	123°02.0'	43	calm		overcast	slight	14.10	33.26
63.55-S	1	0330	37°16.0'	122°50.0'	120	calm		cloudy	rough	14.99	33.46
67.50-S	X-30	1145	36°49.0'	122°04.5'	52	calm		fog	moderate	14.86	33.41
67.55-S	30	1433	36°39.0'	122°26.0'	1120	160°	2	fog	slight	14.94	-
73.51-S	30	0115	35°36.5'	121°22.0'	160	320°	2	fog	moderate	15.56	33.39
77.50-S	28	0430	35°04.0'	120°52.0'	72	340°	5	partly cloudy	very rough	16.08	33.42
87.50-S	24	0015	33°20.0'	119°39.5'	40	320°	3	cloudy	very rough	17.78	33.48
93.35-S	20	1015	32°40.0'	117°52.0'	300	240°	3	clear	rough	20.81	33.64
93.45-S	20	0415	32°20.0'	118°32.0'	700	320°	6	clear	high	20.11	33.61
93.55-S	19	2205	31°57.5'	119°08.0'	880	340°	6	cloudy	very rough	19.52	-
97.35-S	17	1055	32°05.5'	117°29.0'	525	320°	3	partly cloudy	moderate	21.53	33.57
97.45-S	17	1710	31°45.0'	118°09.0'	800	320°	2	partly cloudy	rough	20.28	33.64
97.55-S	18	0020	31°26.0'	118°52.0'	400	320°	4	fog	rough	19.27	33.49
100.29-P	20	1930	31°42.0'	116°43.5'	60	090°	2	cloudy	very rough	17.41	33.57
100.35-P	20	1454	31°30.5'	117°10.5'	620	340°	4	overcast	rough	21.19	33.63
100.45-P	20	0720	31°10.5'	117°49.5'	900	340°	4	partly cloudy	very rough	21.09	33.77
100.55-P	20	0110	30°52.0'	118°29.5'	1300	340°	6	overcast	high	21.14	33.64
103.45-P	17	1459	30°35.0'	117°24.0'	1300	280°	2	clear	moderate	20.91	33.58
103.55-P	17	2124	30°16.0'	118°05.5'	1400	280°	2	clear	moderate	21.41	33.65

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters	
						Dir	Force			T	S
107.45-P	X-16	1503	30°04.0'	116°54.0'	1100	340°	3	clear	moderate	21.58	33.68
107.55-P	16	0823	29°44.0'	117°34.5'	1800	340°	3	clear	moderate	21.10	33.57
110.45-P	13	2130	29°24.0'	116°37.5'	450	340°	2	fog	moderate	21.30	33.62
110.55-P	14	0400	29°02.5'	117°16.0'	2000	320°	2	fog	moderate	21.64	33.71
113.45-P	12	2110	28°57.0'	116°15.5'	500	330°	5	cloudy	rough	21.15	33.64
113.55-P	12	1335	28°34.5'	116°50.5'	1900	320°	5	cloudy	rough	22.21	33.93
117.45-P	10	0310	28°19.0'	115°55.0'	1700	320°	3	partly cloudy	moderate	21.64	33.68
117.55-P	10	1005	28°01.0'	116°34.5'	1900	320°	3	partly cloudy	moderate	22.02	33.78
120.40-B	10	2230	27°56.5'	115°14.0'	21	310°	4	partly cloudy	moderate	22.76	33.82
120.55-B	11	0825	27°23.0'	116°12.5'	2000	320°	3	partly cloudy	moderate	22.18	33.75
123.45-B	13	1210	27°10.0'	115°10.0'	-	-	-	missing	missing	22.88	34.04
123.55-B	13	0525	26°48.0'	115°49.5'	-	-	-	missing	missing	22.24	33.76
127.45-B	15	1015	26°33.5'	114°48.5'	1800	320°	2	clear	moderate	25.22	34.57
127.55-B	15	1640	26°13.5'	115°27.0'	2000+	340°	4	clear	moderate	22.53	33.78
130.45-B	17	0630	25°59.0'	114°27.0'	1700	calm		clear	calm	24.77	34.25
130.55-B	17	0000	25°38.0'	115°03.0'	2000+	320°	2	clear	rough	25.18	34.45
133.35-B	18	0550	25°45.0'	113°23.0'	380	130°	2	cloudy	slight	26.15	34.43
133.45-B	18	1240	25°24.5'	114°04.5'	2000	calm		partly cloudy	moderate	25.14	34.21
133.55-B	18	1910	25°05.0'	114°42.0'	2000	270°	2	cloudy	rough	24.66	34.16

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
137.45-B	X-19	1300	24°51.0'	113°42.5'	1650	310°	4	cloudy	slight	26.04	34.09
137.55-B	19	0650	24°30.0'	114°20.5'	2000+	060°	1	cloudy	slight	23.90	33.91
140.45-B	20	1750	24°16.0'	113°21.0'	2000+	280°	2	overcast	moderate	26.68	34.56
140.55-B	28	1200	23°47.0'	114°07.0'	2000+	330°	3	overcast	rough	26.60	34.89
143.45-B	21	0530	23°41.5'	112°59.5'	1800	330°	1	cloudy	slight	28.06	34.72
143.55-B	28	0430	23°19.0'	113°40.5'	2000+	320°	4	partly cloudy	rough	26.92	34.77
147.35-B	22	1830	23°26.5'	112°00.5'	1600	-	1	overcast	rough	27.98	34.70
147.45-B	23	0045	23°06.0'	112°38.0'	1800	320°	3	cloudy	rough	28.32	34.67
147.55-B	23	0630	22°46.0'	113°15.5'	2000	320°	2	partly cloudy	rough	27.32	34.87
150.35-B	24	0755	22°54.0'	111°41.0'	1600	320°	2	clear	rough	27.90	34.81
150.45-B	24	0050	22°32.5'	112°17.5'	1800	340°	3	partly cloudy	very rough	28.23	34.75
150.55-B	23	1845	22°12.0'	112°54.0'	1900	320°	4	partly cloudy	rough	27.56	34.81
153.25-B	25	1940	22°38.0'	110°42.5'	1300	340°	5	partly cloudy	very rough	27.66	34.61
153.35-B	26	0210	22°23.0'	111°23.5'	1800	320°	5	partly cloudy	rough	27.88	34.73
153.45-B	26	0845	21°58.0'	111°56.0'	1700	320°	5	partly cloudy	rough	27.06	-
153.55-B	26	1450	21°37.5'	112°33.0'	2000	320°	5	partly cloudy	rough	26.44	34.54

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

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