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STATIONS POSITIONS +<sup>HP</sup>

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

## data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5802  
7-24 February 1958

and

CCOFI Cruise 5803  
27 February - 21 March 1958

SIO Reference 59-8  
1 February 1959

STK57900  
UNIVERSITY OF CALIFORNIA  
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PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5802

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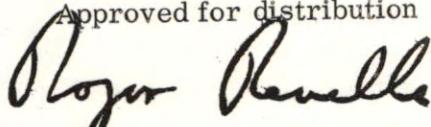
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Marine Research Committee

SIO Reference 59-8

1 February 1959

Approved for distribution



Roger Revelle, Director

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## INTRODUCTION

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

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

## STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.<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, each messenger time and wire angle is given in the order of increasing depth. A line is left blank between the observed data of each cast.

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1/

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

## FOOTNOTES

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

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

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

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

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

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

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

p: pretrip or posttrip.

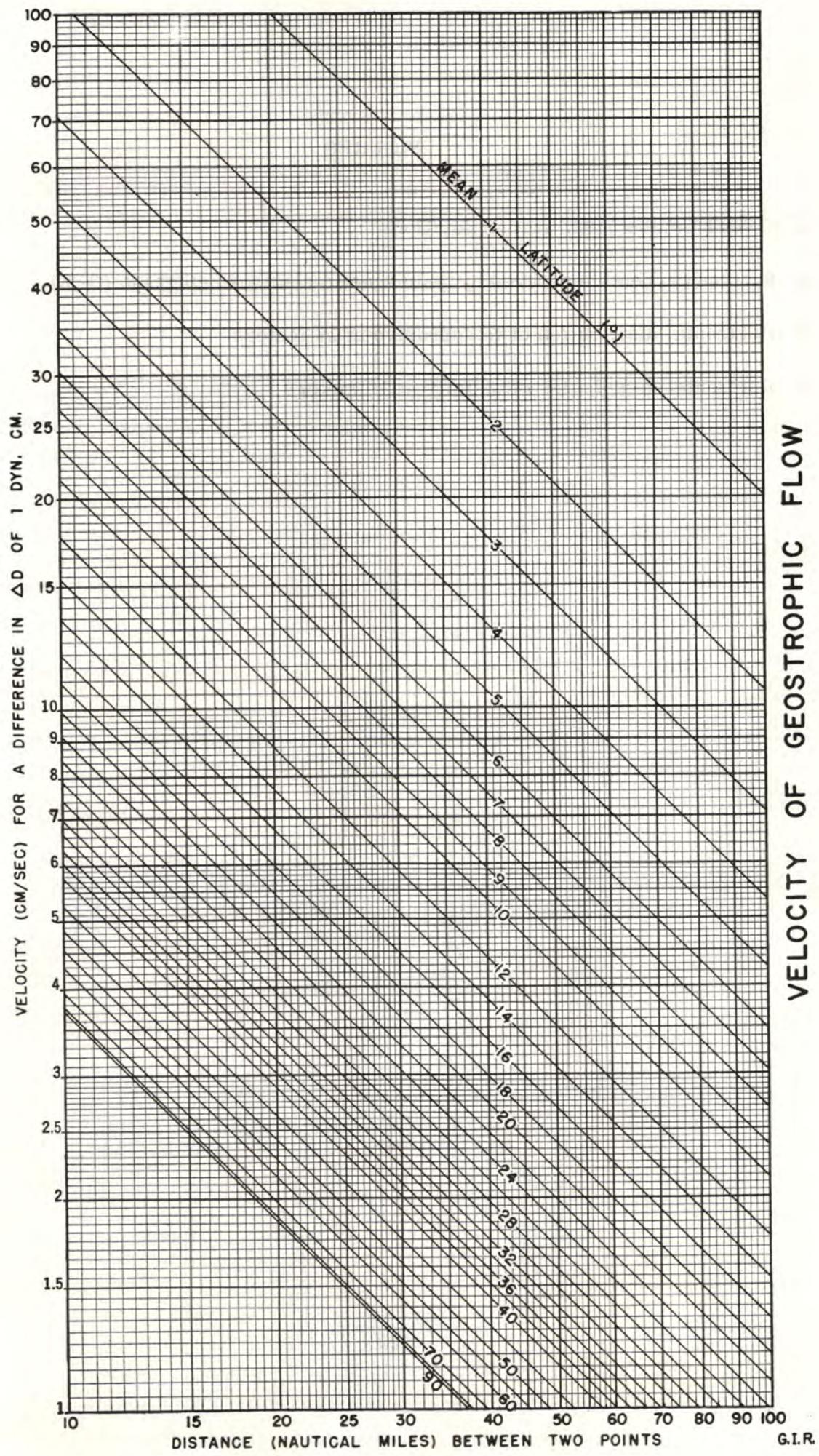
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

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

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

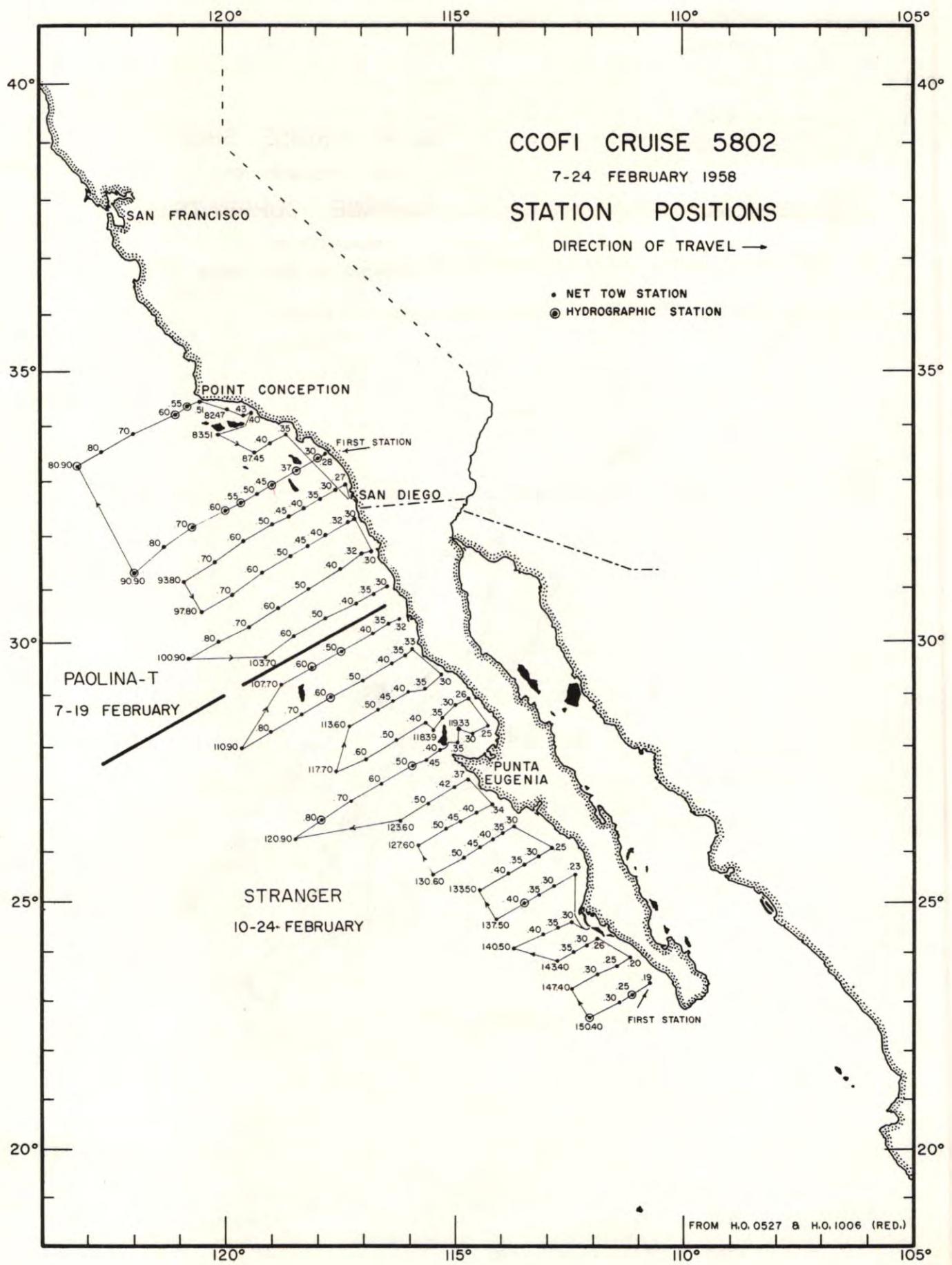
## FORMAT

These data are typed in the format of the University of California Press publication, "Oceanic Observations of the Pacific." So that these pages can be used as copy for the 1958 volume, the first page of the Cruise 5802 data is numbered 48; Cruise 5803, 61.



## FIGURES

1. CCOFI Cruise 5802, station positions
2. Surface currents measured by geomagnetic electrokinetograph (GEK)
3. Horizontal distribution of temperature at 10 meters
4. Horizontal distribution of salinity at 10 meters



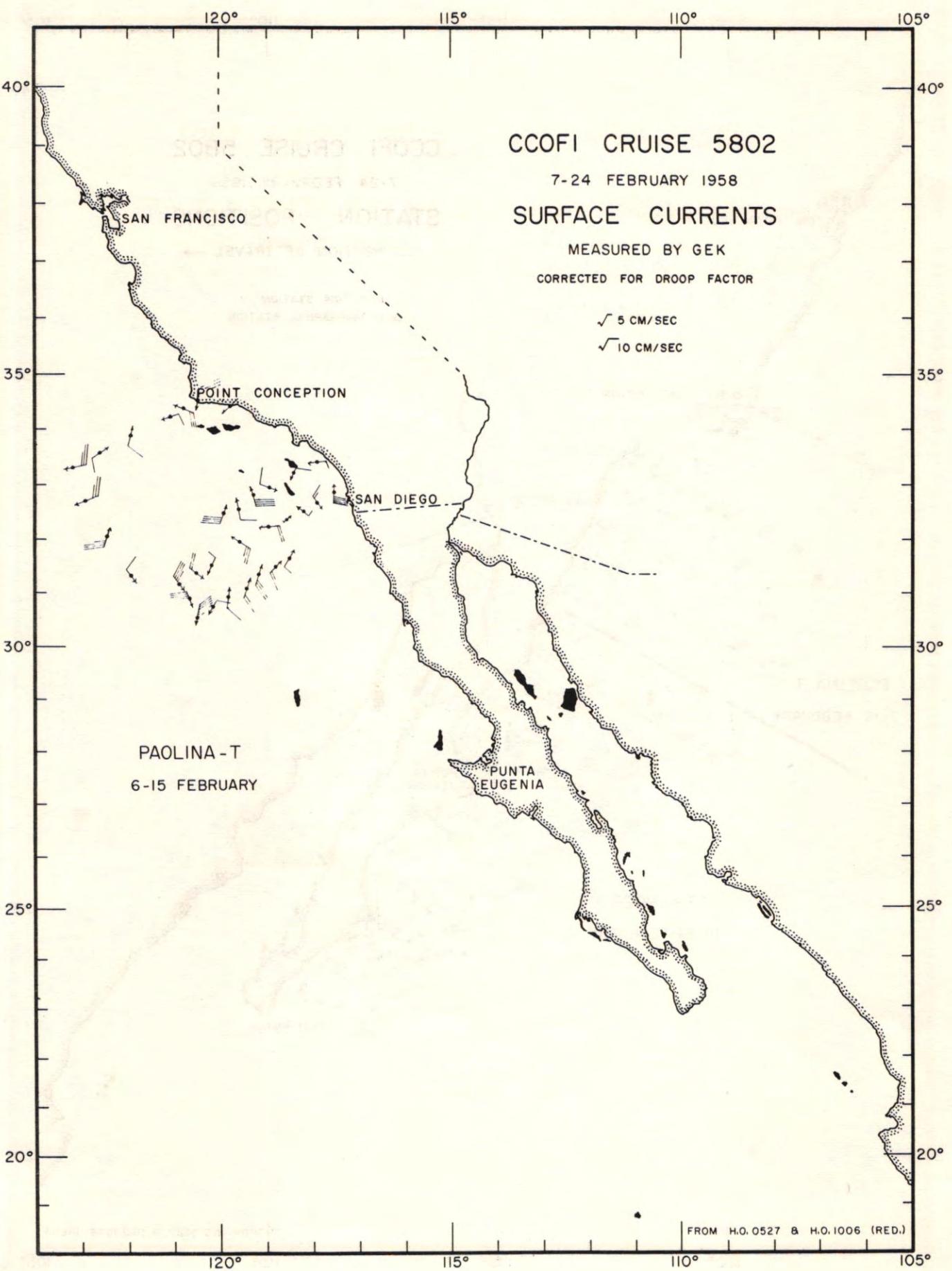


FIGURE 2

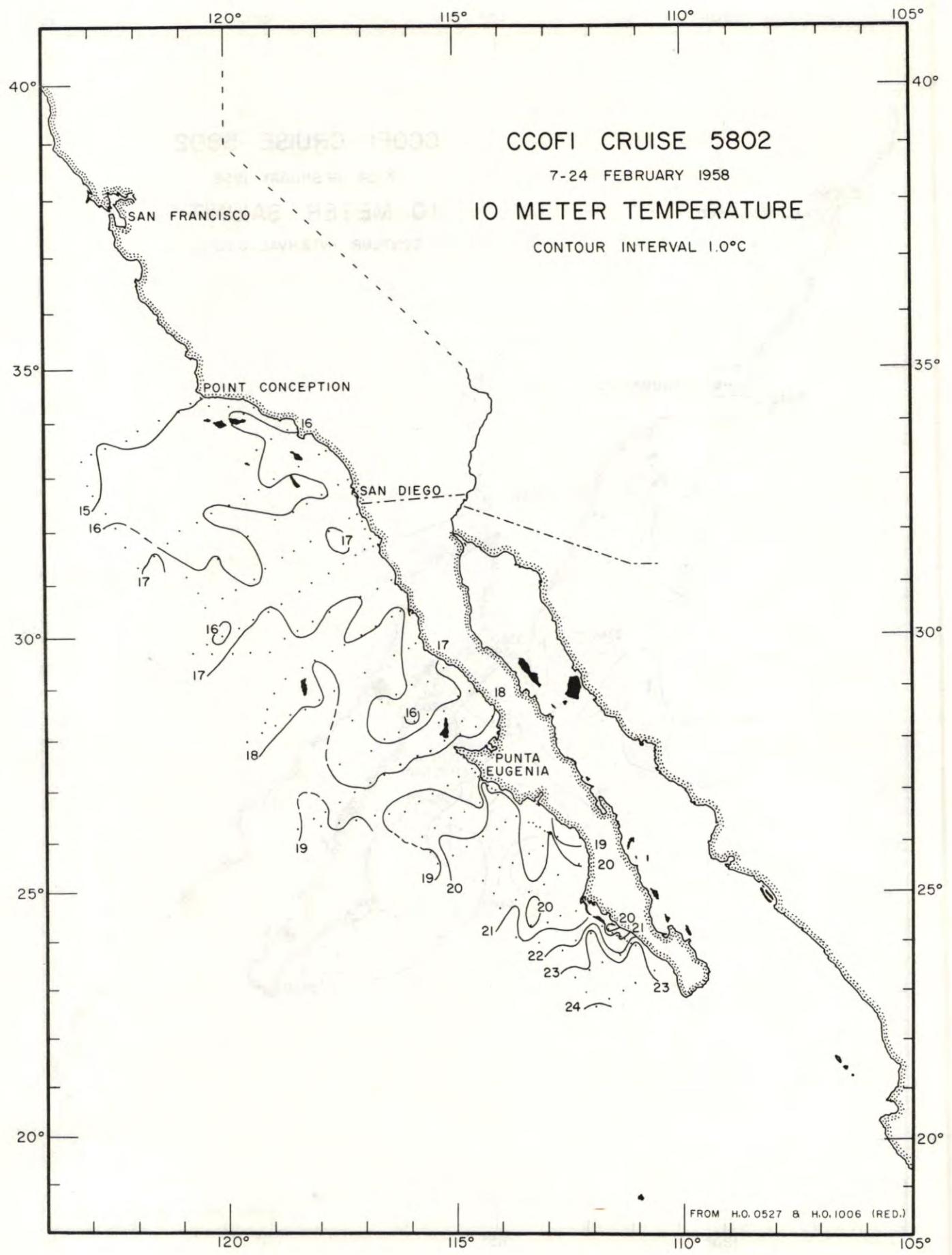


FIGURE 3

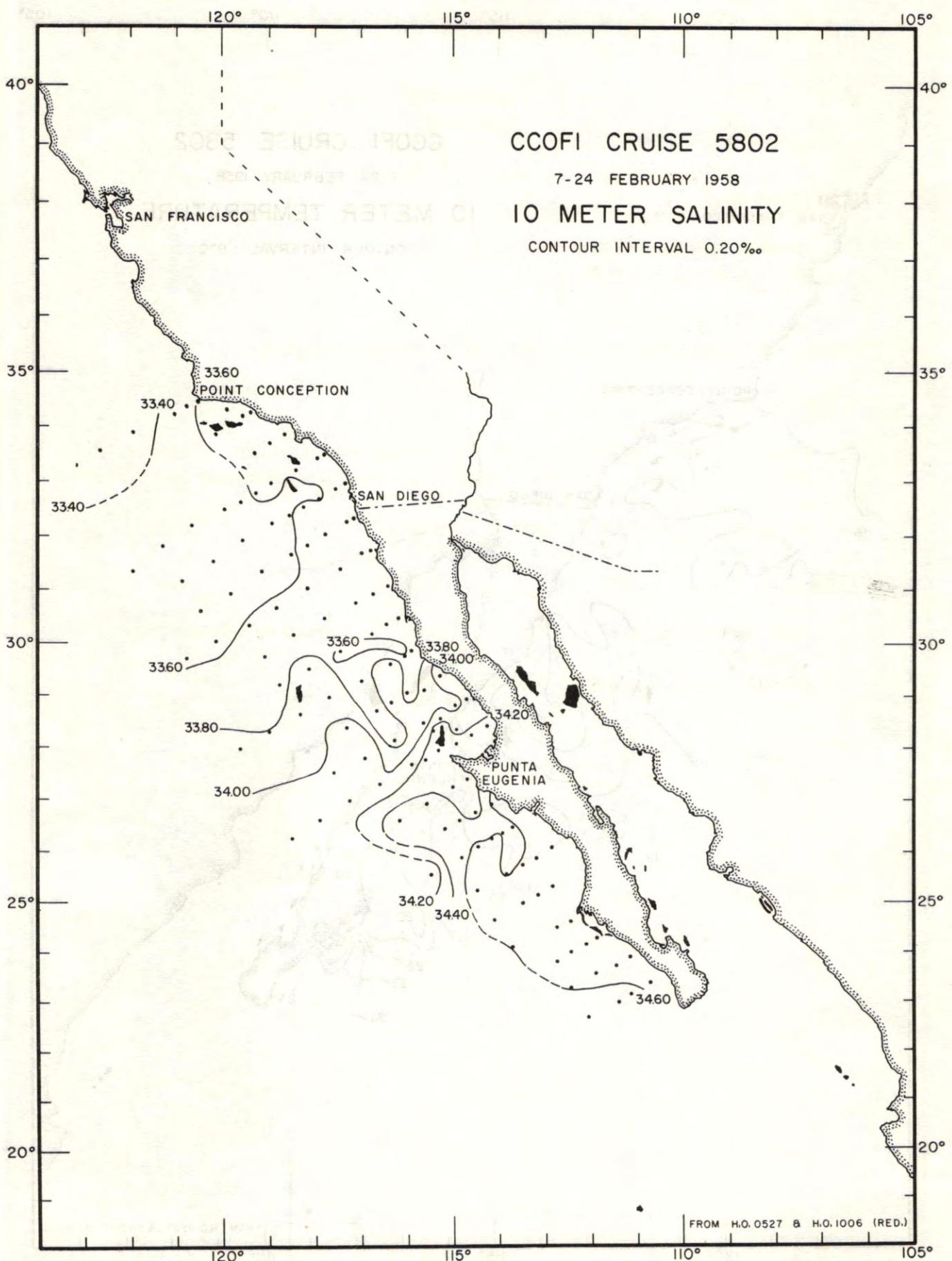


FIGURE 4

**PERSONNEL**  
Cruise 5802

**SHIPS' CAPTAINS**

Colbeth, Clifford W., R/V Stranger  
Miller, Frank, R/V Paolina-T

**PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA**

R/V Paolina-T

Farrar, Lloyd, Fishery Aid, U. S. Bureau of Commercial Fisheries  
Anderson, James L., Fishery Aid, U. S. Bureau of Commercial Fisheries  
Froerer, Arthur I., Marine Technician  
McMillan, Wesley W., Marine Technician

R/V Stranger

Vorobiov, Alexander V., Fishery Aid, U. S. Bureau of Commercial  
Fisheries  
Davoll, Peter J., Marine Technician

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S ‰	O <sub>2</sub> ml/L	δT <sub>3</sub> 10 <sup>-5</sup> cm/g	Z m	T °C	S ‰	O <sub>2</sub> ml/L	σ <sub>t</sub> g/L	δT <sub>3</sub> 10 <sup>-5</sup> cm/g	ΔD dyn. m	

80.55	PAOLINA-T; February 10, 1958; 1652 GCT; 34°19'N, 120°48.5'W; sounding, 415 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 04°.	0	15.13	33.55	311	0	15.13	33.55		24.85	311	0.00
		10	15.12	33.56	310	10	15.12	33.56		24.86	310	0.03
		30	15.14	33.58	310	20	15.13	33.57		24.86	310	0.06
		60	13.86	33.55	286	30	15.14	33.58		24.86	310	0.09
		69	12.93	33.51	270	50	14.61	33.57		24.98	299	0.15
		79	12.32	33.58	254	75	12.50	33.56		25.39	259	0.22
		93	11.10	33.62	230	100	10.87	33.67		25.79	222	0.28
		107	10.76	33.73	216	150	9.81	33.90		26.15	187	0.39
		122	10.48	33.77	208	200	9.32	34.04		26.34	170	0.48
		141	9.96	33.85	194	250	8.84	34.16		26.50	154	0.56
		160	9.72	33.93	184	300	8.48	34.21		26.60	145	0.64
		189	9.44	34.00	175	400	7.62	34.27		26.78	128	0.78
		214	9.15	34.09	163	500	6.86	34.29		26.90	116	0.91
		267	8.75	34.18	150	600	(6.00)	(34.30)		(27.02)	(105)	(1.02)
		350	8.00	34.25	134							
		457	7.22	34.29	121							
		595	6.02	34.30	105							

80.60	PAOLINA-T; February 10, 1958; 1337 GCT; 34°11.5'N, 121°03'W; sounding, 670 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 07°.	0	14.98	33.53	309	0	14.98	33.53		24.87	309	0.00
		10	14.97	33.51	310	10	14.97	33.51		24.86	310	0.03
		29	14.71	33.49	307	20	14.83	33.50		24.87	309	0.06
		45	14.43	33.53	298	30	14.70	33.49		24.90	306	0.09
		54	13.85	33.50	289	50	14.16	33.52		25.03	294	0.15
		64	13.40	33.48	282	75	11.96	33.46		25.43	256	0.22
		73	12.12	33.46	259	100	10.65	33.56		25.74	227	0.28
		92	11.20	33.51	240	150	9.52	33.96		26.24	179	0.38
		106	10.26	33.60	217	200	9.21	34.09		26.39	165	0.47
		121	9.65	33.65	204	250	8.46	34.14		26.56	149	0.55
		144	9.52	33.91	182	300	7.82	34.18		26.68	137	0.63
		172	9.50	34.02	174	400	7.00	34.24		26.85	121	0.76
		211	9.06	34.11	161	500	6.24	34.26		26.96	110	0.88
		263	8.21	34.15	145	600	(5.65)	(34.31)		(27.08)	(100)	(0.99)
		344	7.46	34.22	129							
		446	6.60	34.25	116							
		589	5.71	34.30	101							

80.90	PAOLINA-T; February 9, 1958; 2025 GCT; 33°16.5'N, 123°11.5'W; sounding, 2300+ fm; wind, 320°, force 1; weather, cloudy; sea, high; wire angle, 00°.	1	15.20	33.31	330	0	(15.20)	(33.32)		(24.64)	(331)	(0.00)
		11	14.93	33.30	325	10	14.94	33.30		24.69	326	0.03
		31	15.06	33.50	314	20	14.97	33.40		24.76	320	0.06
		56	14.76	33.49	308	30	15.06	33.49		24.82	314	0.10
		66	14.37	33.40	306	50	14.83	33.49		24.87	309	0.16
		75	13.78	33.41	294	75	13.78	33.41		25.03	294	0.23
		85	13.14	33.44	280	100	12.21	33.38		25.31	267	0.30
		99	12.26	33.38	268	150	9.58	33.50		25.88	213	0.43
		114	11.56	33.42	252	200	8.62	33.89		26.33	170	0.52
		133	10.03	33.46	224	250	8.02	34.12		26.60	145	0.60
		152	9.52	33.51	212	300	7.43	34.14		26.70	135	0.68
		176	8.90	33.76	184	400	6.60	34.18		26.85	121	0.81
		200	8.62	33.89	170	500	6.00	34.25		26.98	109	0.93
		248	8.07	34.12	145							
		325	7.21	34.14	132							
		422	6.43	34.20	117							
		549	5.72	34.28	103							

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OBSERVED					INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O <sub>2</sub> ml/L	δT <sub>3</sub> 10 <sup>-5</sup> cm/g	Z m	T °C	S ‰	O <sub>2</sub> ml/L	σ <sub>t</sub> g/L	δT <sub>3</sub> 10 <sup>-5</sup> cm/g	ΔD dyn. m

PAOLINA-T; February 7, 1958; 0905, 0928 GCT; 33°24'N, 117°57'W; sounding, 220 fm; wind, missing, force 1; weather, overcast; sea, slight; wire angle, 00°, 00°.

1	16.32	33.66	329	0	(16.32)	(33.65)		(24.66)	(329)	(0.00)
11	16.34	33.70	326	10	16.33	33.70		24.68	327	0.03
31	16.20	33.66	326	20	16.28	33.68		24.70	326	0.06
51	15.48	33.62	314	30	16.22	33.66		24.70	326	0.10
75	13.77	33.53	285	50	15.50	33.62		24.82	314	0.16
101	12.34	33.56	256	75	13.77	33.53		25.12	285	0.24
126	11.22	33.58	235	100	12.40	33.56		25.41	258	0.31
164	10.32	33.84a)	200	150	10.59	33.77		25.91	210	0.42
204	9.12	33.89	178	200	9.21	33.88		26.23	180	0.52
251	9.30	34.27	152	250	9.30	34.26		26.51	153	0.61
301	8.99	34.37	140	300	8.99	34.37		26.65	140	0.68
340	8.51	34.34	135							

PAOLINA-T; February 7, 1958; 1335 GCT; 33°11'N, 118°23.5'W; sounding, 630 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

0	16.25	33.66	327	0	16.25	33.66		24.68	327	0.00
10	16.26	33.65	328	10	16.26	33.65		24.67	328	0.03
30	16.20	33.67	325	20	16.23	33.66		24.68	327	0.06
56	15.40	33.56a)	316	30	16.20	33.67		24.70	325	0.10
65	14.26	33.46	300	50	16.08	33.65		24.72	324	0.16
75	13.32	33.45	282	75	13.32	33.45		25.16	282	0.24
85	12.91	33.52	269	100	11.80	33.51		25.49	250	0.31
99	11.88	33.51	251	150	10.37	33.79		25.97	204	0.42
113	10.80	33.48	235	200	9.65	34.00		26.25	178	0.52
132	10.46	33.60	220	250	8.51	34.14		26.55	149	0.60
152	10.37	33.82	202	300	8.05	34.20		26.66	139	0.68
176	10.06	33.96	187	400	7.30	34.31		26.85	121	0.81
199	9.68	34.00	178	500	6.62	34.34		26.98	109	0.93
247	8.59	34.13	152							
323	7.92	34.22	136							
420	7.18	34.33	117							
548	6.27	34.34	105							

PAOLINA-T; February 7, 1958; 1905 GCT; 32°55.5'N, 118°56'W; sounding, 940 fm; wind, 190°, force 1; weather, cloudy; sea, moderate; wire angle, 00°.

0	16.51	33.71a)	329	0	16.51	33.71		24.66	329	0.00
11	16.40	33.69	328	10	16.40	33.70		24.67	328	0.03
30	16.38	33.68	328	20	16.39	33.69		24.67	328	0.06
54	16.38	33.70	326	30	16.38	33.68		24.67	328	0.10
63	15.91	33.73	314	50	16.38	33.69		24.68	327	0.16
72	15.14	33.66	303	75	14.80	33.63		24.98	299	0.24
81	14.22	33.58	290	100	12.20	33.50		25.41	258	0.31
95	12.57	33.48	266	150	10.43	33.80		25.96	205	0.43
109	11.68	33.57	244	200	9.62	34.05		26.30	174	0.52
126	11.00	33.70	222	250	8.92	34.22		26.54	150	0.61
146	10.56	33.77	209	300	8.43	34.24		26.63	142	0.68
168	9.94	33.90	190	400	7.45	34.30		26.82	124	0.82
197	9.62	34.02	176	500	6.74	34.34		26.96	111	0.94
244	9.00	34.22	152							
319	8.28	34.24	140							
414	7.34	34.31	121							
538	6.46	34.34	107							

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

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	OBSERVED					INTERPOLATED				COMPUTED		
	Z m	T °C	S %	O <sub>2</sub> ml/L	δ <sub>T</sub> 10 <sup>-5</sup> cm <sup>3</sup> /g	Z m	T °C	S %	O <sub>2</sub> ml/L	σ <sub>t</sub> g/L	δ <sub>T</sub> 10 <sup>-5</sup> cm <sup>3</sup> /g	ΔD dyn. m

90.55

PAOLINA-T; February 8, 1958; 0225 GCT; 32°35.5'N, 119°38'W; sounding, 500 fm; wind, 190°, force 4; weather, overcast; sea, very rough; wire angle, 00°.

0	15.20	33.52	315	0	15.20	33.52	24.81	315	0.00
10	15.21	33.49	317	10	15.21	33.49	24.79	317	0.03
31	15.06	33.52	312	20	15.15	33.50	24.81	315	0.06
56	14.06	33.48	295	30	15.06	33.52	24.84	312	0.09
65	12.44	33.43	268	50	14.85	33.52	24.88	308	0.16
75	11.85	33.44	256	75	11.85	33.44	25.43	256	0.23
84	10.86	33.48	236	100	10.02	33.54	25.82	218	0.29
99	10.06	33.54	219	150	9.38	33.82	26.15	187	0.39
113	9.74	33.62	207	200	8.90	34.04	26.40	164	0.48
132	9.52	33.75	194	250	8.45	34.23	26.62	143	0.56
151	9.38	33.82	187	300	7.99	34.27	26.72	133	0.63
175	9.19	33.92a)	177	400	7.11	34.30	26.87	119	0.76
199	8.93	34.03	164	500	6.72	34.31	26.94	113	0.88
246	8.51	34.22	144						
323	7.74	34.28	128						
420	7.00	34.30	117						
548	6.54	34.33	109						

90.60

PAOLINA-T; February 8, 1958; 0611 GCT; 32°26.5'N, 119°59'W; sounding, 540 fm; wind, 190°, force 4; weather, drizzle; sea, very rough; wire angle, 15°.

0	16.06	33.60	327	0	16.06	33.60	24.68	327	0.00
10	16.07	33.55	331	10	16.07	33.55	24.64	331	0.03
28	16.02	33.59	327	20	16.03	33.57	24.66	329	0.06
52	15.48	33.58	316	30	16.02	33.59	24.69	326	0.10
61	15.12	33.51	314	50	15.58	33.58	24.78	318	0.16
71	14.82	33.53	307	75	14.18	33.50	25.01	296	0.24
80	13.42	33.46	284	100	11.23	33.44	25.54	245	0.31
94	11.82	33.43	256	150	9.65	33.66	25.98	203	0.42
108	10.67	33.47	233	200	8.98	34.01	26.38	166	0.51
127	10.00	33.59	214	250	8.24	34.15	26.59	146	0.59
146	9.74	33.64	206	300	8.01	34.23	26.68	137	0.67
169	9.18	33.90	178	400	7.09	34.32	26.89	177	0.80
193	9.03	33.98	170	500	6.28	34.34	27.02	105	0.92
240	8.35	34.13	148						
315	7.97	34.25	134						
410	6.99	34.33	115						
534	6.11	34.34	103						

90.70

PAOLINA-T; February 8, 1958; 1240 GCT; 32°08'N, 120°40.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 21°.

0	15.24	33.48	319	0	15.24	33.48	24.77	319	0.00
10	15.22	33.48	318	10	15.22	33.48	24.78	318	0.03
34	15.00	33.50	312	20	15.13	33.49	24.80	316	0.06
61	14.88	33.53	308	30	15.02	33.50	24.82	314	0.10
70	14.61	33.49	305	50	14.97	33.52	24.86	310	0.16
83	12.40	33.41	268	75	13.63	33.44	25.08	289	0.23
91	11.42	33.42	250	100	10.67	33.46	25.66	234	0.30
109	10.26	33.49	225	150	9.22	33.67	26.07	195	0.41
124	9.67	33.56	211	200	8.26	33.99	26.46	158	0.50
141	9.38	33.61	202	250	7.48	34.06	26.63	142	0.57
164	9.00	33.77	185	300	7.05	34.10	26.72	133	0.64
191	8.46	33.95	164	400	6.42	34.20	26.89	117	0.77
218	7.92	34.04	149	500	5.86	34.26	27.01	106	0.89
273	7.30	34.07	138	600	5.30	34.32	27.12	95	1.00
356	6.67	34.17a)	122						
464	6.03	34.24	110						
606	5.26	34.33	94						

a) Possible evaporation; value falls on property curve.

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OBSERVED					INTERPOLATED				COMPUTED		
Z m	T °C	S %	O <sub>2</sub> ml/L	δT 10 <sup>-5</sup> cm <sup>3</sup> /g	Z m	T °C	S %	O <sub>2</sub> ml/L	σ <sub>t</sub> g/L	δT 10 <sup>-5</sup> cm <sup>3</sup> /g	ΔD dyn. m

PAOLINA-T; February 9, 1958; 0145 GCT; 31°17'N, 121°57'W; sounding, 2200 fm; wind, 320°, force 4;  
weather, cloudy; sea, rough; wire angle, 05°. 90.90

0	16.75	33.69	336	0	16.75	33.69	24.59	336	0.00
11	16.74	33.62	340	10	16.74	33.63	24.55	340	0.03
31	16.66	33.58a)	335	20	16.68	33.65	24.57	338	0.07
41	16.64	33.68	334	30	16.66	33.67	24.59	336	0.10
51	16.64	33.68	334	50	16.64	33.68	24.61	334	0.17
61	16.64	33.66	336	75	16.66	33.68	24.60	335	0.25
70	16.66	33.65	337	100	16.61	33.68	24.62	333	0.34
85	16.66	33.68	334	150	13.10	33.47	25.22	276	0.49
99	16.61	33.68	334	200	9.42	33.60	25.98	204	0.62
114	15.56	33.52	322	250	8.41	34.07	26.50	154	0.71
136	14.46	33.48	303	300	7.83	34.12	26.63	142	0.79
164	10.96	33.46	239	400	6.69	34.16	26.82	124	0.92
196	9.54	33.58	207	500	5.96	34.26	26.99	108	1.05
244	8.50	34.05	157						
319	7.66	34.13	139						
413	6.51	34.16	121						
538	5.86	34.33	101						

STRANGER; February 24, 1958; 0815 GCT; 29°50.5'N, 117°23.5'W; sounding, 1550 fm; wind, 340°, force 4;  
weather, partly cloudy; sea, moderate; wire angle, 04°. 107.50

0	16.58	33.60	5.53	338	0	16.58	33.60	5.53	24.56	338	0.00
10	16.58	33.56	5.51	341	10	16.58	33.56	5.51	24.54	341	0.03
29	16.60	33.59	5.55	340	20	16.59	33.57	5.53	24.54	341	0.07
39	16.60	33.67	5.51	334	30	16.60	33.60	5.54	24.55	340	0.10
44	16.52	33.66	5.62	332	50	16.50	33.71	5.62	24.66	329	0.17
49	16.42	33.66	5.62	331							
54	16.89	33.84	5.62	328							
58	17.48	34.05	5.38	326							
69	16.84	33.96	5.26	318							

STRANGER; February 24, 1958; 0305 GCT; 29°31'N, 118°03'W; sounding, 1800 fm; wind, 320°, force 4;  
weather, cloudy; sea, rough; wire angle, 05°. 107.60

0	17.66	33.95	5.45	338	0	17.66	33.95	5.45	24.57	338	0.00
10	17.67	33.98	5.41	336	10	17.67	33.98	5.41	24.59	336	0.03
29	17.66	33.99	5.45	334	20	17.67	33.99	5.44	24.60	335	0.07
54	17.58	33.96	5.33	334	30	17.66	33.99	5.45	24.61	334	0.10
63	17.60	33.98	5.38	333	50	17.59	33.97	5.34	24.61	334	0.17
83	17.54	33.99	5.37	332	75	17.56	33.98	5.38	24.62	333	0.25
97	15.68	33.78	5.33	306	100	15.20	33.72	5.30	24.97	300	0.33
112	13.38	33.50	5.17	280	150	10.90	33.66	3.84	25.78	223	0.46
130	11.90	33.54	4.61	249	200	10.09	34.15	1.98	26.30	173	0.56
148	10.98	33.64	3.88	226	250	9.59	34.28	1.40	26.48	156	0.65
172	10.32	33.90	2.96	196	300	9.19	34.42	0.85	26.65	140	0.72
195	10.18	34.11	2.08	178	400	8.00	34.35	0.74	26.79	127	0.86
240	9.68	34.25	1.52	160	500	6.90	34.36	0.50	26.96	111	0.99
314	9.09	34.42	0.76	138							
406	7.94	34.35	0.74	126							
528	6.60	34.38	0.36	106							

a) Possible evaporation; value falls on property curve.

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S %	O <sub>2</sub> ml/L	δT 10 <sup>-5</sup> cm <sup>3</sup> /g	Z m	T °C	S %	O <sub>2</sub> ml/L	σ <sub>t</sub> g/L	δT 10 <sup>-5</sup> cm <sup>3</sup> /g	ΔD dyn. m	

11060

STRANGER; February 22, 1958; 2305 GCT; 28°56.5'N, 117°39'W; sounding, 2000 fm; wind, direction missing, force 1; weather, cloudy; sea, moderate; wire angle, 05°.

0	17.96	34.00	5.37	341	0	17.96	34.00	5.37	24.54	341	0.00
10	17.69	33.92	5.33	340	10	17.69	33.92	5.33	24.54	340	0.03
29	17.64	34.00	5.35	334	20	17.66	33.97	5.34	24.59	336	0.07
53	17.60	34.02	5.38	331	30	17.64	34.00	5.35	24.62	333	0.10
73	17.64	34.04	5.37	330	50	17.61	34.01	5.36	24.63	332	0.17
83	17.78	34.17	5.03	324	75	17.69	34.06	5.37	24.65	330	0.25
97	17.52	34.19	4.66	317	100	17.37	34.17	4.66	24.82	314	0.33
111	16.62	34.05	4.67	307	150	12.32	33.86	3.07	25.67	233	0.47
131	13.58	33.73	4.10	266	200	10.60	34.19	1.68	26.23	180	0.58
149	12.36	33.86	3.14	234	250	9.97	34.21	1.01	26.36	167	0.67
171	11.54	34.12	1.88	201	300	9.35	34.37	0.84	26.59	145	0.75
194	10.76	34.18	1.75	182	400	7.82	34.32	0.70	26.79	127	0.89
242	10.03	34.20	1.07	170	500	6.89	34.33	0.44	26.93	114	1.02
315	9.18	34.40	0.81	141							
407	7.73	34.31	0.69	126							
531	6.64	34.34	0.32	110							

12050

STRANGER; February 19, 1958; 0045 GCT; 27°37.5'N, 115°52'W; sounding, 2400 fm; wind, 360°, force 1; weather, cloudy; sea, moderate; wire angle, 04°.

0	18.55	34.22	5.32	338	0	18.55	34.22	5.32	24.56	338	0.00
10	18.36	34.15	5.35	338	10	18.36	34.15	5.35	24.56	338	0.03
20	18.30	34.22	5.23	333	20	18.30	34.22	5.23	24.62	333	0.07
39	18.25	34.22	5.19	332	30	18.25	34.22	5.19	24.63	332	0.10
64	17.49	34.16	5.15	318	50	18.22	34.22	5.16	24.64	331	0.17
93	13.54	33.85	3.68	257	75	15.97	34.03	4.81	25.04	293	0.24
108	12.85	33.87	3.27	243	100	13.15	33.86	3.46	25.50	249	0.31
121	12.24	33.88	3.14	231	150	10.83	33.93	2.86	26.00	202	0.43
140	11.51	33.96	2.75	212	200	10.00	34.22	1.87	26.37	167	0.52
158	10.20	33.90	2.94	194	250	9.26	34.31	1.31	26.56	149	0.60
181	10.01	34.07	2.73	179	300	8.16	34.26	1.31	26.70	136	0.68
203	9.88	34.22	1.83	165	400	7.58	34.41	0.37	26.89	117	0.81
248	9.33	34.31	1.31	149	500	6.87	34.42	0.23	27.00	107	0.92
321	7.73	34.25	1.32	131							
411	7.58	34.42	0.33	116							
532	6.57	34.41	0.23	103							

12080

STRANGER; February 18, 1958; 1050 GCT; 26°35'N, 117°50'W; sounding, 1900 fm; wind, direction missing, force 1; weather, cloudy; sea, slight; wire angle, 00°.

0	18.59	34.22	5.25	340	0	18.59	34.22	5.25	24.54	340	0.00
10	18.60	34.09	5.24	349	10	18.60	34.09	5.24	24.45	349	0.03
30	18.61	34.18	5.27	344	20	18.60	34.13	5.25	24.48	346	0.07
54	18.83	34.26	5.29	343	30	18.61	34.18	5.27	24.50	344	0.10
64	18.80	34.26	5.19	342	50	18.82	34.24	5.29	24.52	343	0.17
83	18.44	34.22	5.25	336	75	18.61	34.24	5.22	24.56	338	0.26
98	14.26	33.69	4.88	282	100	14.01	33.67	4.88	25.18	279	0.34
112	12.60	33.60	4.93	258	150	11.78	34.08	2.17	25.93	208	0.46
130	11.38	33.64	4.29	233	200	11.33	34.45	1.02	26.32	172	0.56
148	11.76	34.05	2.31	209	250	10.97	34.61	0.46	26.50	154	0.64
171	11.72	34.31	1.35	190	300	10.05	34.58	0.36	26.64	141	0.72
194	11.42	34.43	1.05	176	400	8.59	34.51	0.30	26.81	125	0.85
239	11.18	34.61	0.53	157	500	7.40	34.49	0.20	26.98	108	0.98
313	9.80	34.57	0.36	138							
406	8.50	34.50	0.29	123							
528	7.08	34.49	0.19	104							

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

STRANGER; February 14, 1958; 1540 GCT; 25°00'N, 113°23.5'W; sounding, 1775 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 05°. 137.40

0	20.57	34.65	5.01	357	0	20.57	34.65	5.01	24.37	357	0.00
10	20.60	34.61	5.03	361	10	20.60	34.61	5.03	24.32	361	0.04
29	20.44	34.66	4.94	353	20	20.55	34.64	4.98	24.37	357	0.07
39	20.34	34.67	4.99	350	30	20.43	34.66	4.94	24.41	353	0.11
48	20.21	34.69	4.99	345	50	20.20	34.68	4.97	24.49	345	0.18
67	20.02	34.65	4.85	344	75	19.50	34.58	4.40	24.60	335	0.26
83	18.52a)	34.49	3.87	318	100	15.80	34.28	2.68	25.26	272	0.34
96	16.26	34.31	2.83	280	150	12.49	34.41	1.07	26.06	196	0.46
110	14.08	34.16	2.33	245	200	11.82	34.60	0.37	26.34	170	0.55
133	13.08	34.31	1.45	215	250	11.12	34.66	0.27	26.51	153	0.63
160	12.16	34.45	0.89	187	300	10.31	34.61	0.29	26.62	143	0.71
194	11.91	34.42r	0.44	-							
240	11.25	34.67	0.26	155							
315	10.01	34.59b)	0.31	141							

STRANGER; February 10, 1958; 2023 GCT; 23°10'N, 111°03'W; sounding, 750 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°. 150.25

0	23.56	34.54	4.46	444	0	23.56	34.54	4.46	23.45	444	0.00
10	23.44	34.57	4.48	440	10	23.44	34.57	4.48	23.50	440	0.04
30	23.14	34.60	4.54	429	20	23.28	34.58	4.51	23.55	435	0.09
39	23.13	34.61	4.44	428	30	23.14	34.60	4.54	23.61	429	0.13
49	22.78	34.73	4.33	410	50	22.66	34.73	4.28	23.84	407	0.21
58	21.81	34.67	3.80	388	75	19.60	34.54	2.80	24.54	341	0.31
69	20.37	34.49	3.10	364	100	16.63	34.64	1.35	25.35	263	0.39
82	18.74	34.65	2.36	312	150	12.90	34.60	0.54	26.12	190	0.50
96	17.20	34.68	1.52	274	200	11.81	34.73	0.16	26.44	159	0.59
110	15.12	34.50	1.03	242	250	11.17	34.73	0.12	26.56	149	0.67
133	13.79	34.49	0.88	215	300	10.58	34.69	0.13	26.64	142	0.74
164p	12.33	34.70	0.29	172							
228p	11.42	34.74	0.11	153							
324p	10.32	34.67	0.13	139							

STRANGER; February 11, 1958; 0350 GCT; 22°42'N, 111°57.5'W; sounding, 1750 fm; wind, 360°, force 4; weather, missing; sea, moderate; wire angle, 10°. 150.40

0	23.66	34.57	4.80	446	0	23.66	34.57	4.80	23.43	446	0.00
10	23.70	34.58	4.77	445	10	23.70	34.58	4.77	23.44	445	0.04
29	23.46	34.67	4.83	433	20	23.61	34.64	4.80	23.50	439	0.09
38	23.08	34.65	4.79	424	30	23.43	34.67	4.83	23.57	433	0.13
47	22.66	34.72	4.48	407	50	22.49	34.72	4.33	23.89	403	0.22
57	21.12	34.63	3.70	373	75	19.71	35.06	3.07	24.92	304	0.30
66	19.58	34.68	2.67	330	100	17.13	34.95	1.92	25.47	252	0.38
78	19.71	35.12	3.15	302	150	13.62	34.62	0.44	26.00	202	0.49
90	18.47	35.07	2.50	275	200	11.83	34.66		26.38	165	0.58
101	16.82	34.92	1.81	248	250	10.99	34.62	0.23	26.50	154	0.66
120	15.49	34.79	0.95	228	300	10.38	34.61	0.15	26.61	144	0.74
144	13.99	34.63	0.50	209	400	9.06	34.60	0.13	26.82	124	0.88
172	12.18	34.61	0.35	175	500	(7.65)	(34.50)		(26.96)	(111)	(1.01)
213	11.42	34.62	0.30	162							
278	10.65	34.61	0.19	149							
361	9.58	34.63	0.15	130							
474	8.04	34.53	0.13	114							

a) Alternate value, 18.66°C, not used in interpolation.

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

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Force	Weather	Sea	10 Meters		50 Meters	
										T	S	T	S
80.51-P	II-10	1910	34° 26.5'	120° 32.0'	50	320°	5	partly cloudy	very rough	15.12	33.62	14.76	33.63
80.70-P	10	0730	33° 51.0'	121° 53.0'	2000+	320°	2	cloudy	very rough	14.44	33.29	13.72	33.51
80.80-P	10	0140	33° 31.0'	122° 40.0'	2200	270°	3	cloudy	very rough	15.24	33.26	14.92	33.26
82.47-P	10	2340	34° 16.5'	119° 55.0'	270	320°	6	clear	very rough	15.48	33.65	13.82	33.62
83.40-P	11	0414	34° 14.0'	119° 22.5'	13	320°	1	clear	rough	16.05	33.63	-	-
83.43-P	11	0230	34° 08.0'	119° 34.0'	140	320°	5	partly cloudy	very rough	16.00	33.65	14.08	33.59
83.51-P	11	1150	33° 52.0'	120° 08.5'	53	320°	6	clear	very rough	15.34	33.63	14.56	33.62
87.35-P	12	1100	33° 50.0'	118° 38.5'	417	320°	3	fog	rough	16.10	33.66	16.09	33.68
87.40-P	12	0810	33° 40.5'	118° 59.0'	470	320°	4	clear	rough	16.35	33.71	14.30	33.56
87.45-P	12	0500	33° 29.0'	119° 19.0'	910	300°	5	partly cloudy	rough	15.56	33.65	12.82	33.64
90.28-P	7	0640	33° 28.5'	117° 46.5'	240	-	1	overcast	slight	16.28	33.68	15.03	33.62
90.50-P	7	2230	32° 45.0'	119° 16.5'	195	190°	2	cloudy	rough	15.62	33.63	14.31	33.59
90.80-P	8	1820	31° 45.5'	121° 19.0'	205	320°	4	cloudy	rough	15.42	33.50	14.66	33.44
93.27-P	13	2320	32° 56.0'	117° 19.0'	65	270°	2	partly cloudy	rough	16.48	33.75	13.42	33.63
93.30-P	14	0125	32° 50.0'	117° 31.5'	500	270°	2	cloudy	rough	16.26	33.68	15.02	33.67
93.35-P	14	0445	32° 40.0'	117° 52.0'	200	270°	3	partly cloudy	rough	16.20	33.60	15.40	33.57
93.40-P	14	0805	32° 30.0'	118° 12.5'	800	270°	4	partly cloudy	very rough	16.31	33.80	16.10	33.60
93.45-P	14	1125	32° 20.0'	118° 32.5'	910	320°	4	cloudy	very rough	15.80	33.55	15.82	33.58
93.50-P	14	1440	32° 11.5'	118° 54.0'	830	320°	4	cloudy	very rough	15.99	33.56	16.02	33.58

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
93.60-P	II-14	1940	31° 53.0'	119° 33.0'	1160	320°	4	partly cloudy	very rough	15.95	33.59	15.58	33.53
93.70-P	15	0040	31° 29.0'	120° 11.0'	2200	320°	4	partly cloudy	very rough	15.89	33.58	15.72	33.53
93.80-P	15	0645	31° 07.0'	120° 52.0'	2278	320°	3	cloudy	rough	16.30	33.53	15.18	33.35
97.30-P	16	1640	32° 15.5'	117° 07.0'	26	320°	4	cloudy	moderate	16.36	33.66	-	-
97.32-P	16	1530	32° 13.0'	117° 16.5'	732	320°	3	cloudy	moderate	16.22	33.64	12.93	33.51
97.40-P	16	1122	31° 57.5'	117° 46.0'	860	340°	3	partly cloudy	moderate	16.69	33.69	16.68	33.68
97.45-P	16	0825	31° 46.0'	118° 09.0'	650	320°	4	clear	rough	16.40	33.65	16.28	33.66
97.50-P	16	0530	31° 35.5'	118° 30.0'	1150	320°	3	cloudy	rough	16.22	33.56	15.72	33.55
97.60-P	16	0000	31° 18.0'	119° 07.0'	1730	320°	3	cloudy	rough	15.98	33.53	15.72	33.51
97.70-P	15	1810	30° 53.5'	119° 47.0'	1920	320°	3	cloudy	rough	15.90	33.53	15.37	33.51
97.80-P	15	1200	30° 34.0'	120° 27.5'	2100	320°	3	drizzle	rough	16.18	33.53	15.83	33.48
100.30-P	16	2140	31° 40.5'	116° 46.5'	240	320°	3	cloudy	moderate	16.13	33.65	12.23	33.66
100.32-P	16	2310	31° 38.0'	116° 57.5'	630	320°	3	cloudy	moderate	16.62	33.69	15.46	33.58
100.40-P	17	0345	31° 21.0'	117° 27.0'	1100	040°	2	cloudy	moderate	16.64	33.65	16.46	33.64
100.50-P	17	0910	31° 00.0'	118° 07.0'	900	340°	2	overcast	moderate	16.66	33.65	16.66	33.66
100.60-P	17	1450	30° 38.5'	118° 46.0'	1720	340°	2	overcast	moderate	16.64	33.66	16.58	33.66
100.70-P	17	2020	30° 18.0'	119° 24.5'	2100	-	1	overcast	rough	16.90	33.66	16.37	33.58
100.80-P	18	0105	30° 01.0'	120° 07.0'	2180	-	1	overcast	rough	15.84	33.53	15.08	33.46
100.90-P	18	0625	29° 41.0'	120° 46.0'	2800	240°	3	cloudy	rough	16.46	33.59	16.29	33.58

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
103.30-P	II-19	1500	31°03.0'	116°24.5'	40	180°	4	overcast	rough	-	33.68	-	33.55
103.35-P	19	1230	30°53.5'	116°43.0'	950	180°	6	cloudy	very rough	16.49	33.67	16.44	33.68
103.40-P	19	0920	30°43.0'	117°04.5'	1000	180°	5	overcast	moderate	16.64	33.66	16.60	33.66
103.50-P	19	0345	30°27.0'	117°45.0'	1530	160°	3	cloudy	moderate	16.68	33.71	16.40	33.68
103.60-P	18	2225	30°08.0'	118°25.5'	1800	200°	4	cloudy	moderate	16.54	33.66	16.40	33.58
103.70-P	18	1725	29°43.0'	119°03.0'	1870	200°	4	overcast	moderate	16.98	33.74	16.96	33.74
107.32-S	24	1750	30°28.0'	116°12.0'	310	320°	3	cloudy	rough	16.50	33.63	15.12	33.58
107.35-S	24	1605	30°21.5'	116°24.0'	800	330°	3	cloudy	rough	16.69	33.68	16.42	33.69
107.40-S	24	1245	30°10.0'	116°43.0'	1600	320°	3	clear	very rough	16.50	33.62	16.22	33.60
107.70-S	23	2220	29°10.0'	118°44.0'	1750	320°	4	cloudy	rough	16.97	33.69	16.79	33.68
110.33-S	22	1020	29°50.5'	115°52.0'	50	310°	3	partly cloudy	moderate	16.68	33.67	16.32	33.69
110.35-S	22	1130	29°46.5'	116°00.0'	750	310°	3	partly cloudy	moderate	16.42	33.60	15.74	33.58
110.40-S	22	1415	29°36.5'	116°19.5'	1245	340°	3	partly cloudy	very rough	17.42	33.96	17.60	34.10
110.50-S	22	1810	29°16.5'	116°59.0'	1650	320°	3	cloudy	rough	16.73	33.70	17.50	33.99
110.70-S	23	0400	28°36.5'	118°18.0'	1950	320°	3	cloudy	moderate	17.60	33.96	17.50	33.99
110.80-S	23	0820	28°16.5'	118°57.5'	2200	320°	3	partly cloudy	rough	17.28	33.80	17.22	33.81
110.90-S	23	1300	27°56.5'	119°36.0'	2125	320°	2	partly cloudy	rough	17.40	33.85	17.34	33.84
113.30-S	22	0520	29°22.5'	115°17.5'	30	300°	3	missing	moderate	17.47	34.16	16.57	34.10
113.35-S	22	0235	29°07.0'	115°37.0'	850	340°	3	partly cloudy	high	16.76	33.90	14.24	33.75

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
113.40-S	II-22	0015	29°02.0'	115°58.5'	1050	320°	4	partly cloudy	very rough	16.57	-	15.99	33.69
113.45-S	21	2200	28°52.0'	116°18.0'	1150	310°	3	partly cloudy	very rough	17.32	33.87	17.08	33.89
113.50-S	21	1920	28°42.0'	116°37.5'	1900	320°	3	partly cloudy	very rough	16.76	33.74	16.48	33.75
113.60-S	21	1445	28°22.0'	117°17.0'	2050	320°	5	cloudy	very rough	17.48	34.05	17.62	34.13
117.26-S	20	0720	28°56.0'	114°41.0'	42	270°	6	clear	moderate	17.50	34.15	17.18	34.15
117.30-S	20	0915	28°48.0'	114°56.5'	55	230°	1	clear	slight	16.92	33.82	16.22	33.85
117.35-S	20	1200	28°32.5'	115°15.0'	85	230°	4	clear	slight	17.52	34.16	17.56	34.19
117.40-S	20	1710	28°28.0'	115°35.5'	535	220°	4	rain	moderate	17.07	33.91	17.04	34.01
117.50-S	20	2150	28°07.0'	116°14.0'	2300	270°	4	cloudy	high	16.75	33.74	16.29	33.74
117.60-S	21	0255	27°45.5'	116°52.0'	1875	320°	6	cloudy	high	18.00	34.25	17.92	34.23
117.70-S	21	0725	27°30.0'	117°32.0'	2000	320°	6	partly cloudy	high	17.90	34.01	17.93	34.02
118.39-S	20	1350	28°18.5'	115°24.0'	145	220°	4	cloudy	moderate	17.66	34.22	17.45	34.21
119.33-S	19	2310	28°19.0'	114°53.0'	60	200°	3	overcast	moderate	17.68	34.17	17.54	34.17
120.25-S	20	0305	28°23.0'	114°14.5'	37	220°	4	overcast	moderate	17.90	34.22	16.78	34.14
120.30-S	20	0120	28°13.0'	114°34.0'	50	200°	3	drizzle	moderate	17.78	34.22	17.48	34.22
120.35-S	19	2120	28°03.0'	114°54.0'	43	200°	2	overcast	moderate	17.94	34.24	17.58	34.19
120.40-S	19	0540	27°57.0'	115°15.0'	26	270°	1	cloudy	moderate	17.78	34.23	17.74a)	34.18

a) Depth, 40 meters.

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
120.45-S	II-19	0320	27°44.0'	115°33.0'	2150	360°	1	cloudy	moderate	18.68	34.31	17.78	34.24
120.60-S	18	2010	27°18.0'	116°32.0'	2000	-	1	cloudy	slight	18.11	34.04	18.00	34.02
120.70-S	18	1550	26°57.0'	117°13.0'	2050	-	1	cloudy	moderate	18.20	34.11	18.17	34.11
120.90-S	18	0520	26°13.0'	118°27.5'	2200	320°	1	missing	slight	18.70	34.15	18.53	34.16
123.37-S	17	0525	27°24.0'	114°40.0'	45	320°	2	missing	slight	18.56	34.38	17.47	34.30
123.42-S	17	0740	27°14.5'	114°58.0'	1700	320°	2	missing	slight	18.18	34.29	17.58	34.20
123.50-S	17	1140	26°55.5'	115°31.5'	1700	310°	3	partly cloudy	moderate	19.08	34.51	19.06	34.51
123.60-S	17	1515	26°36.5'	116°07.0'	2025	320°	2	partly cloudy	slight	19.92	34.55	19.70	34.52
127.34-S	17	0110	26°55.0'	114°07.0'	40	320°	2	cloudy	moderate	20.35	34.60	18.55	34.40
127.40-S	16	2240	26°44.0'	114°30.0'	1700	300°	2	cloudy	moderate	18.56	34.36	18.14	34.33
127.45-S	16	2005	26°34.5'	114°50.0'	1850	330°	3	partly cloudy	moderate	19.94	34.54	18.86	34.51
127.50-S	16	1730	26°25.0'	115°08.0'	600	320°	3	partly cloudy	moderate	19.74	34.56	19.37	34.56
127.60-S	16	1300	26°06.5'	115°47.0'	2100	320°	3	clear	moderate	19.76	-	19.72	-
130.30-S	15	1830	26°28.0'	113°42.5'	40	040°	2	clear	moderate	20.18	34.58	19.60	34.62
130.35-S	15	2000	26°24.0'	114°49.5'	75	360°	1	clear	moderate	20.46	34.60	19.60	34.60
130.40-S	15	2200	26°14.0'	114°08.5'	750	340°	2	clear	rough	20.95	34.60	20.40	34.61
130.45-S	16	0140	26°05.0'	114°26.5'	2000	320°	2	clear	moderate	20.40	34.61	19.60	34.58
130.50-S	16	0445	25°53.0'	114°48.0'	1000	330°	4	clear	rough	20.18	34.59	19.70	34.56
130.60-S	16	0900	25°33.5'	115°26.0'	2100	340°	3	clear	moderate	18.36	34.07	18.38	34.11

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
133.25-S	II-15	1300	26°05.5'	112°49.5'	40	320°	3	clear	rough	19.44	34.69	19.30a)	34.68
133.30-S	15	1030	25°55.0'	113°08.0'	120	360°	3	partly cloudy	rough	19.94	34.66	19.84	34.69
133.35-S	15	0750	25°45.0'	113°26.0'	500	330°	4	partly cloudy	rough	20.48	34.61	19.90	34.61
133.40-S	15	0550	25°34.5'	113°45.5'	1650	320°	4	partly cloudy	rough	20.84	34.60	20.79	34.62
133.50-S	15	0100	25°13.0'	114°25.5'	2050	320°	2	clear	rough	21.08	34.61	20.96	34.56
137.23-S	14	0700	25°34.0'	112°18.5'	40	320°	4	partly cloudy	rough	20.21	-	20.04	34.69
137.30-S	14	1015	25°20.0'	112°45.5'	160	310°	4	partly cloudy	rough	21.16	34.61	21.14	34.62
137.35-S	14	1300	25°10.0'	113°04.5'	850	320°	4	cloudy	rough	20.66	34.61	19.73	34.61
137.50-S	14	2020	24°40.0'	114°01.5'	2000	330°	3	cloudy	rough	21.46	34.61	21.46	34.54
140.30-S	12	2230	24°38.0'	112°23.0'	88	310°	3	clear	moderate	21.68	34.63	19.29	34.47
140.35-S	12	2000	24°31.0'	112°41.0'	600	320°	2	clear	moderate	20.98	34.62	20.52	34.70
140.40-S	12	1720	24°23.0'	113°00.0'	1900	340°	3	clear	moderate	21.16	-	20.94	34.61
140.50-S	12	1250	24°05.0'	113°40.0'	2000	320°	4	partly cloudy	rough	21.42	34.60	21.35	34.63
143.26-S	12	0000	24°19.0'	111°48.0'	40	320°	4	clear	rough	21.30	34.61	20.75	34.56
143.30-S	12	0155	24°11.0'	112°03.0'	110	320°	3	clear	moderate	22.68	34.65	21.83	34.63
143.35-S	12	0430	24°01.0'	112°22.0'	950	330°	4	clear	rough	22.14	34.67	21.74	34.61
143.40-S	12	0645	23°51.0'	112°40.0'	1700	320°	4	clear	rough	22.66	34.62	21.52	34.61

a) Depth, 30 meters.

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

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	10 Meters		50 Meters	
						Dir	Force			T	S	T	S
147.20-S	II-11	1900	23°56.0'	111°03.0'	80	330°	4	clear	rough	22.82	34.61	20.82	34.60
147.25-S	11	1645	23°47.0'	111°23.0'	160	360°	5	partly cloudy	rough	21.60	34.70	21.39	34.67
147.30-S	11	1340	23°35.5'	111°47.0'	560	320°	3	partly cloudy	rough	23.50	34.62	23.50	34.61
147.40-S	11	0845	23°17.0'	112°22.0'	1800	320°	4	missing	rough	23.24	34.60	22.90	34.67
150.19-S	10	1640	23°24.0'	110°38.5'	100	220°	2	clear	smooth	22.73	34.61	21.94	34.70
150.30-S	10	2315	23°01.0'	111°19.0'	1450	330°	3	partly cloudy	smooth	23.64	34.55	22.63	34.56

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