MRS. MARGARET K. ROBINSON
UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY
LA JOLLA, CALIF.

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

DATA REPORT

PHYSICAL AND CHEMICAL DATA
CCOFI CRUISE 5210
(MLR 42)
8-22 October 1952

SIO Reference 57-13
19 March 1957

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5210

(MLR 42)

8-22 October 1952

Sponsored by

Marine Research Committee

SIO Reference 57-13

19 March 1957

Approved for distribution:

Roger Revelle

Roger Revelle, Director

CONTENTS

FIGURES

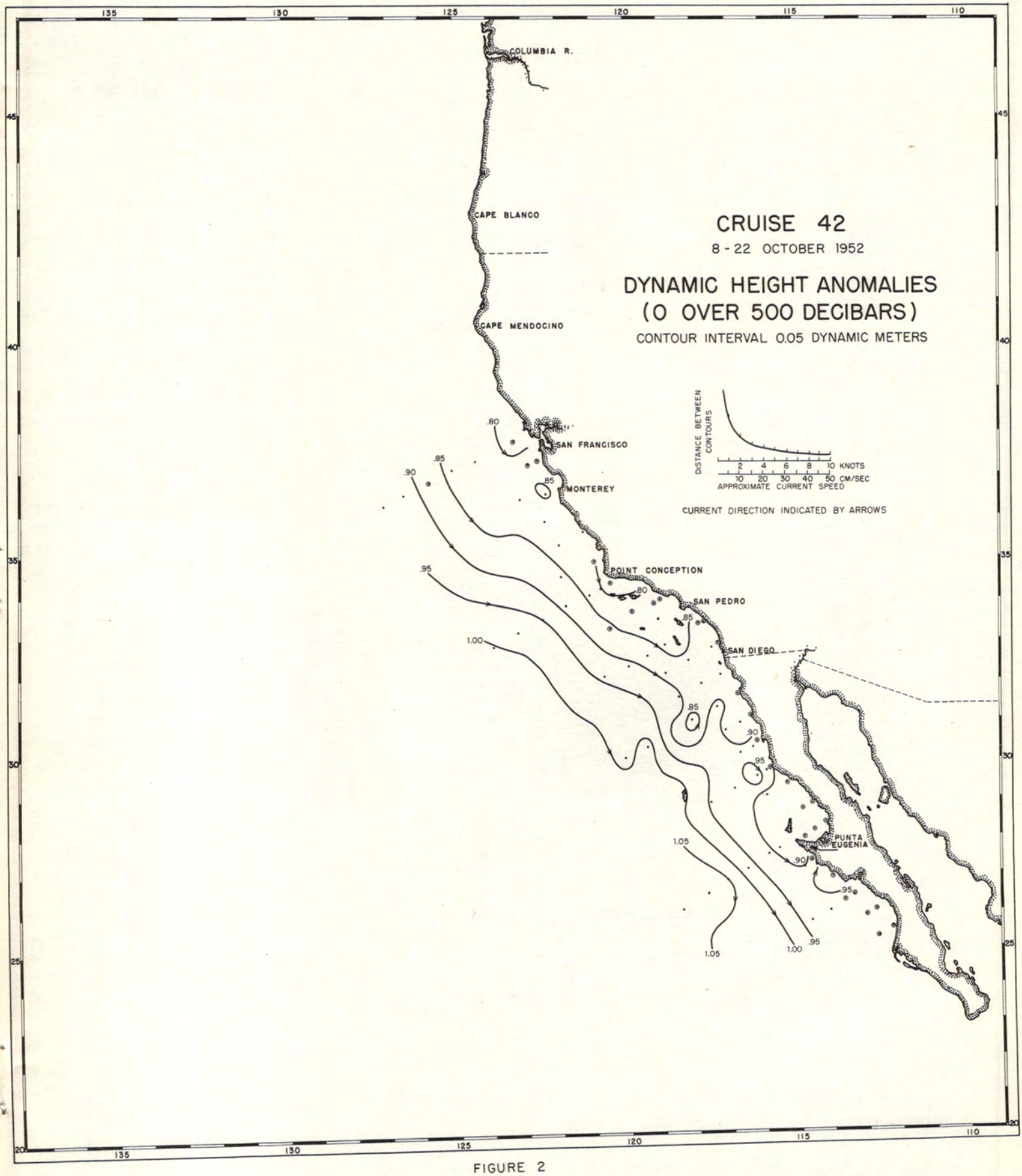
CRUISE 42
8 - 22 OCTOBER 1952
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.05 DYNAMIC METERS
DISTANCE BETWEEN CONTOURS
2 4 6 8 10 KNOTS
10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
CURRENT DIRECTION INDICATED BY ARROWS
COLUMBIA R.
CAPE BLANCO
CAPE MENDOCINO
SAN FRANCISCO
MONTEREY
POINT CONCEPTION
SAN PEDRO
SAN DIEGO
PUNTA EUGENIA
135
130
125
120
115
110
45
40
35
30
25
20
.80
.85
.90
.95
1.00
1.05

FIGURE 2

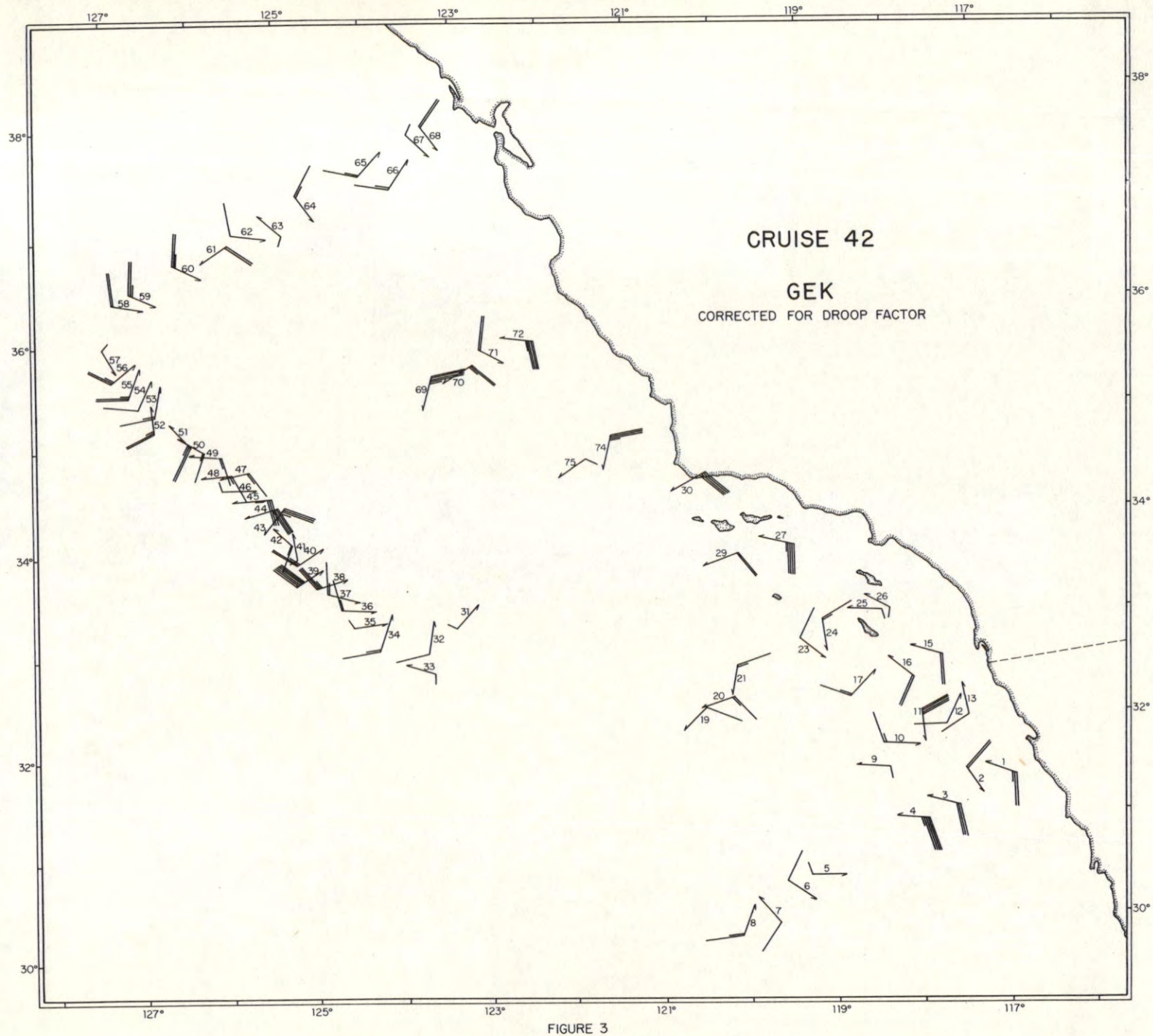
CRUISE 42
GEK
CORRECTED FOR DROOP FACTOR
127°
125°
123°
121°
119°
117°
38°
36°
34°
32°
30°

FIGURE 3

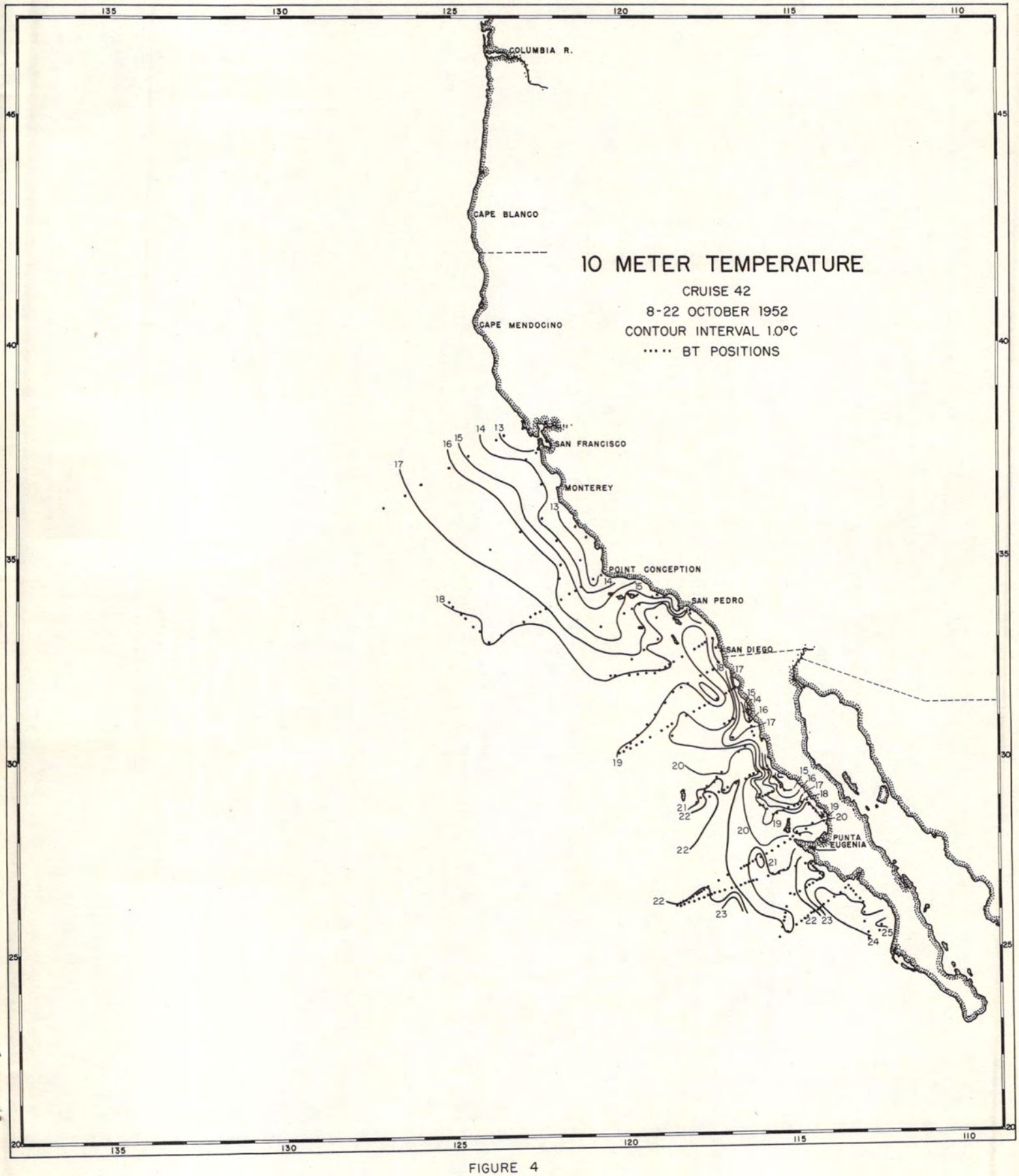
10 METER TEMPERATURE
CRUISE 42
8-22 OCTOBER 1952
CONTOUR INTERVAL 1.0°C
•••• BT POSITIONS
COLUMBIA R.
CAPE BLANCO
CAPE MENDOCINO
SAN FRANCISCO
MONTEREY
POINT CONCEPTION
SAN PEDRO
SAN DIEGO
PUNTA EUGENIA
135
130
125
120
115
110
45
40
35
30
25
20

FIGURE 4

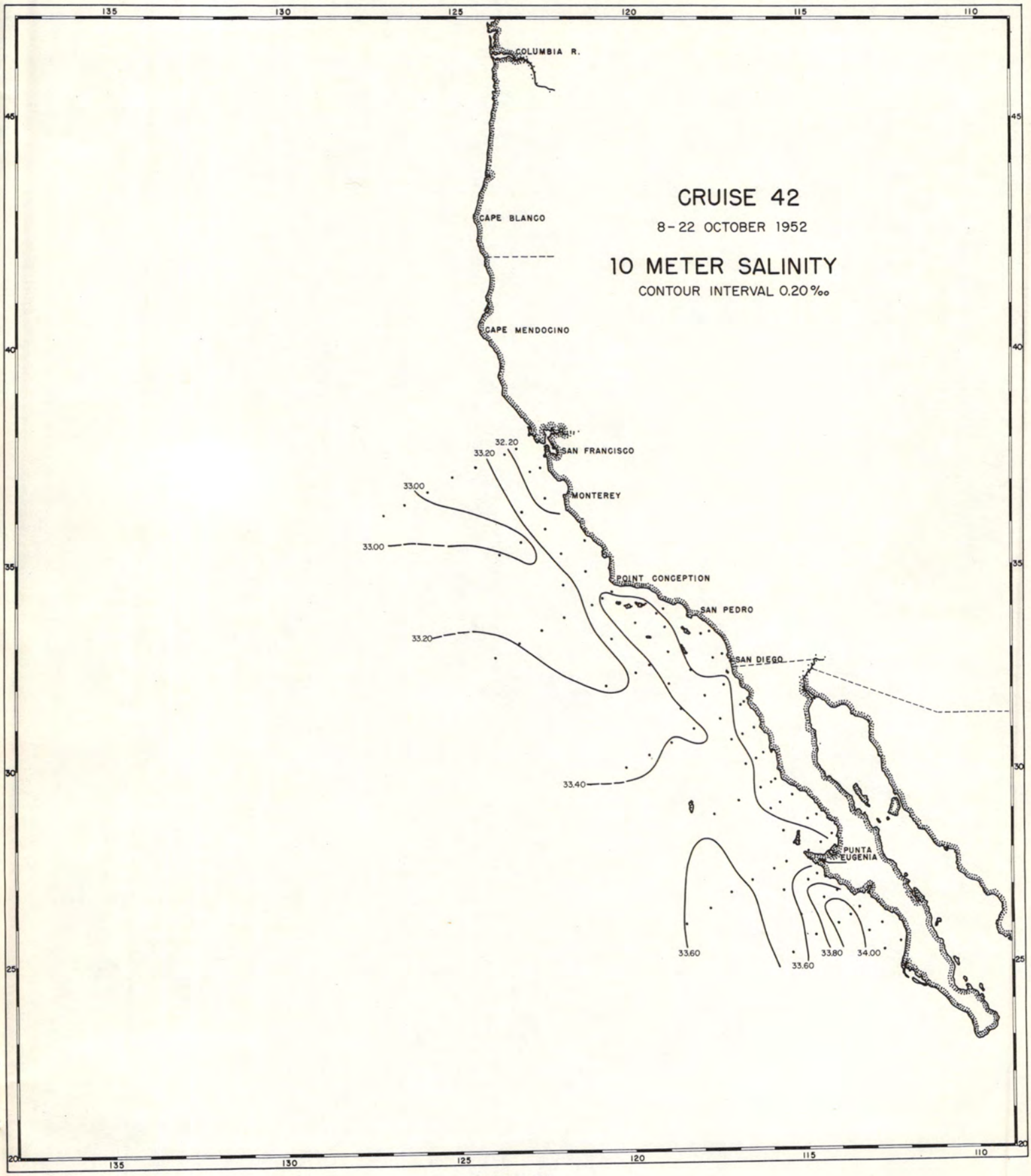
CRUISE 42
8-22 OCTOBER 1952
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
COLUMBIA R.
CAPE BLANCO
CAPE MENDOCINO
SAN FRANCISCO
MONTEREY
POINT CONCEPTION
SAN PEDRO
SAN DIEGO
PUNTA EUGENIA
32.20
33.20
33.00
33.00
33.20
33.40
33.60
33.60
33.80
34.00
135
130
125
120
115
110
45
40
35
30
25
20

FIGURE 5

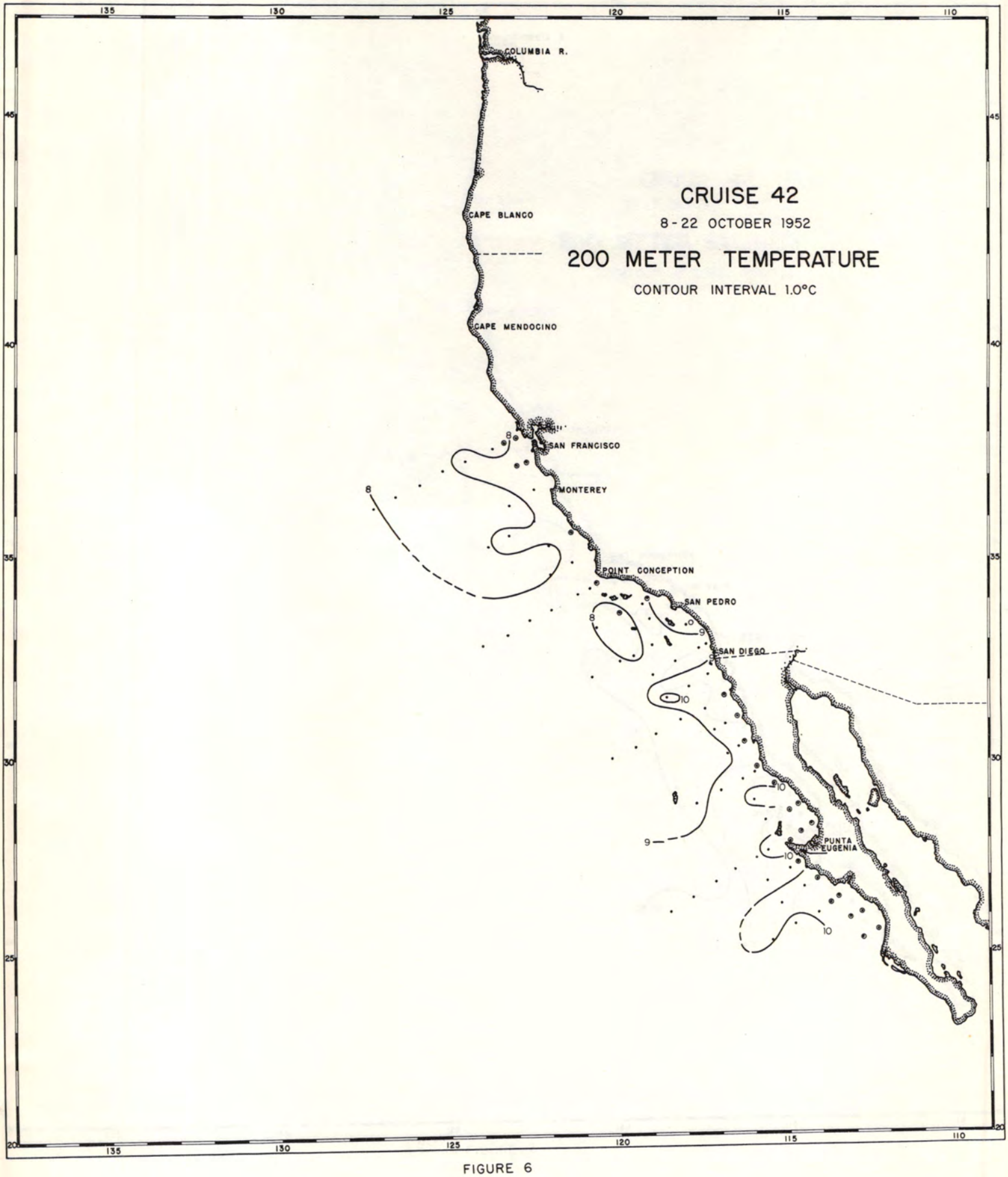
CRUISE 42
8 - 22 OCTOBER 1952
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
COLUMBIA R.
CAPE BLANCO
CAPE MENDOCINO
SAN FRANCISCO
MONTEREY
POINT CONCEPTION
SAN PEDRO
SAN DIEGO
PUNTA EUGENIA
135
130
125
120
115
110
45
40
35
30
25
20
8
9
10

FIGURE 6

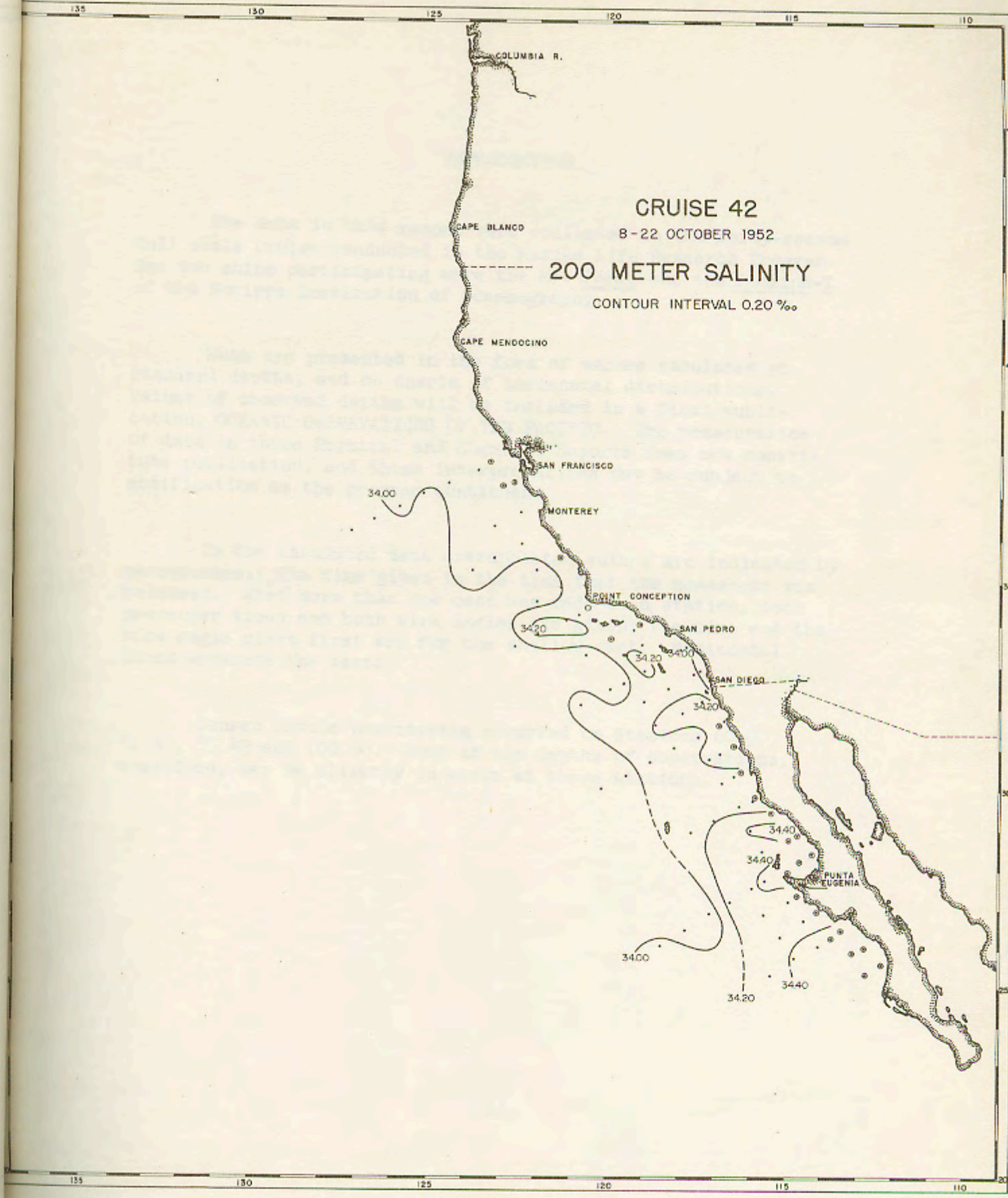
CRUISE 42
8-22 OCTOBER 1952
200 METER SALINITY
CONTOUR INTERVAL 0.20 ‰
COLUMBIA R.
CAPE BLANCO
CAPE MENDOCINO
SAN FRANCISCO
MONTEREY
POINT CONCEPTION
SAN PEDRO
SAN DIEGO
PUNTA EUGENIA
34.00
34.20
34.40
135
130
125
120
115
110

FIGURE 7

INTRODUCTION.

The data in this report were collected on the forty-second full scale cruise conducted in the Marine Life Research Program. The two ships participating were the M/V Crest and the Paolina-T of the Scripps Institution of Oceanography.

Data are presented in the form of values tabulated at standard depths, and on charts of horizontal distributions. Values of observed depths will be included in a final publication, OCEANIC OBSERVATIONS OF THE PACIFIC. The presentation of data in these Physical and Chemical Reports does not constitute publication, and these interpretations may be subject to modification as the program continues.

In the tabulated data extrapolated values are indicated by parentheses. The time given is the time that the messenger was released. When more than one cast was made on a station, both messenger times and both wire angles are given; the time and the wire angle given first are for the shallow cast. Horizontal lines separate the casts.

Nansen bottle pretripping occurred on Stations 60.90, 63.52, 85.40 and 100.50. Some of the depths of observations, therefore, may be slightly in error at these stations.

PERSONNEL

Ships' Captains

Colbeth, Clifford W., RV CREST
Newbegin, Robert, RV PAOLINA T

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV CREST

Gilkey, Robert W., Sr. Marine Technician
Howell, Robert W., Marine Technician
King, Robert D., Marine Technician
Duiker, Wesley J., Marine Technician
Whitney, Ralph E., Marine Technician

RV PAOLINA T

Coolidge, Richard N., Marine Technician (in charge)
Wyllie, John G., Marine Technician
Kircher, Robert J., Marine Technician
Lamplugh, Robert W., Marine Technician

STATION 60.55 (Interpolated Values at Standard Depths)

CREST: 37°48' 123°16'; October 19, 1952; 2003 GCT; wire angle: 8°; sounding: 85 fms; depth of observation: 123 m; weather: fog; sea: smooth; wind: 320°; force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	12.95	33.06	24.92		.000	6.31
10	11.66	33.10	25.20		.029	6.10
20	10.77	33.17	25.41		.056	5.56
30	10.72	33.34	25.55		.081	4.93
50	9.87	33.55	25.86		.127	3.83
75	9.34	33.74	26.10		.178	2.90
100	9.26	33.84	26.19		.226	2.10

STATION 60.60 (Interpolated Values at Standard Depths)

CREST: 37°38' 123°38'; October 19, 1952; 1649 GCT; wire angle: 0°; sounding: 1650 fms; depth of observation: 971 m; weather: fog; sea: smooth; wind: 25°, force 2.

0	14.31	33.19	24.75		.000	6.13
10	14.00	33.22	24.83		.032	6.20
20	13.25	33.22	24.99		.062	6.15
30	11.95	33.22	25.24		.091	5.97
50	10.64	33.43	25.64		.142	4.50
75	9.43	33.61	25.98		.197	3.55
100	8.73	33.79	26.23		.246	3.02
150	8.28	33.94	26.42		.332	2.47
200	7.77	34.04	26.58		.410	2.28
250	7.28	34.05	26.65		.484	2.15
300	6.90	34.09	26.74		.554	1.82
400	6.60	34.23	26.89		.683	0.91
500	5.71	34.25	27.02		.800	0.70
600	5.12	34.32	27.14		.906	0.41
700	4.56	34.38	27.26		1.001	0.36
800	4.12	34.42	27.33		1.087	0.34
1000	(3.71)	(34.43)	(27.38)		(1.248)	(0.41)

STATION 60.70 (Interpolated Values at Standard Depths)

CREST: 37° 20' 124°23'; October 19, 1952; 1105 GCT; wire angle: 3°; sounding; 2000 fms; depth of observation; 586 m; weather: fog; sea: smooth; wind: 90°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5 s$	ΔD (dyn.m.)	O_2 (ml/L)
0	15.93	32.98	24.23		.000	5.33
10	14.05	33.14	24.76		.034	5.60
20	13.60	33.13	24.85		.066	6.20
30	12.12	33.12	25.13		.096	5.92
50	10.93	33.22	25.42		.150	5.37
75	9.00	33.32	25.82		.210	3.70
100	8.68	33.61	26.10		.261	2.83
150	8.34	33.94	26.41		.351	2.42
200	8.23	34.08	26.54		.431	2.21
250	7.52	34.08	26.64		.506	1.61
300	6.92	34.09	26.73		.576	1.29
400	6.25	34.15	26.87		.706	0.80
500	5.60	34.19	26.98		.825	0.61
600	(5.16)	(34.30)	(27.12)		(.933)	-

STATION 60.80 (Interpolated Values at Standard Depths)

CREST: 37°04' 125°07'; October 19, 1952; 0527 GCT; wire angle: 0°; sounding: 2000 fms; depth of observation: 1163 m; weather: partly cloudy; sea: smooth; wind: 160°, force 2.

0	16.89	33.04	24.06	.000	5.62
10	16.56	33.04	24.13	.038	5.65
20	16.05	33.05	24.26	.076	5.88
30	15.00	33.07	24.51	.111	5.87
50	10.46	33.07	25.39	.172	5.47
75	9.00	33.27	25.79	.232	4.70
100	8.54	33.46	26.01	.285	3.99
150	7.86	33.87	26.43	.377	3.06
200	7.48	33.99	26.58	.455	2.59
250	6.90	34.05	26.71	.527	1.81
300	6.52	34.12	26.81	.594	1.31
400	5.78	34.15	26.93	.718	0.87
500	5.19	34.23	27.06	.830	0.52
600	4.86	34.33	27.18	.931	0.38
700	4.50	34.39	27.27	1.023	0.36
800	4.18	34.42	27.33	1.109	0.36
1000	3.60	34.48	27.44	1.265	0.55

STATION 60.90 (Interpolated Values at Standard Depths)

CREST: 36°46' 125°46'; October 19, 1952; 0052 GCT; wire angle: 6°; sounding: 2000 fms; depth of observation: 389 m; weather: partly cloudy; sea: smooth; wind: 200°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.19	33.06	24.00		.000	5.62
10	16.78	33.06	24.10		.039	5.74
20	16.67	33.06	24.12		.077	5.60
30	16.58	33.02	24.11		.115	5.90
50	10.70	33.08	25.36		.180	5.62
75	8.86	33.40	25.91		.239	4.40
100	8.32	33.66	26.20		.289	3.71
150	7.53	33.91	26.51		.374	2.95
200	7.29	34.05	26.65		.448	2.23
250	6.67	34.04	26.73		.518	2.03
300	6.08	34.06	26.82		.584	1.76

STATION 60.100 (Interpolated Values at Standard Depths)

CREST: 36°27' 126°30'; October 18, 1952; 1939 GCT; wire angle: 8°; sounding: 2000 fms; depth of observation: 1140 m; weather: partly cloudy; sea: smooth; wind: 190°, force 3.

0	17.27	32.83	23.81		.000	5.31
10	17.17	32.84	23.84		.041	5.42
20	16.87	32.87	23.93		.081	5.60
30	15.91	32.90	24.18		.120	5.82
50	13.81	32.81	24.56		.192	6.13
75	10.35	32.84	25.23		.269	5.81
100	9.12	32.97	25.53		.334	5.55
150	8.19	33.55	26.13		.444	4.31
200	7.55	33.88	26.48		.532	3.82
250	7.02	33.98	26.63		.608	3.11
300	6.50	34.01	26.73		.678	2.39
400	5.69	34.11	26.91		.807	1.20
500	5.05	34.16	27.03		.922	0.83
600	4.68	34.31	27.19		1.024	0.53
700	4.34	34.36	27.26		1.116	0.73
800	4.08	34.40	27.32		1.202	0.82
1000	3.62	(34.50)	(27.45)		(1.357)	-

STATION 60.110 (Interpolated Values at Standard Depths)

CREST: 36°12' 127°07'; October 18, 1952; 1539 GCT; wire angle: 5°; sounding: 2000 fms; depth of observation: 579 m; weather: partly cloudy; sea: smooth; wind: 200°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.49	32.92	23.83		.000	5.69
10	17.51	32.97	23.86		.041	5.42
20	17.34	32.97	23.90		.081	6.08
30	17.32	32.97	23.90		.121	5.44
50	13.22	32.86	24.71		.194	6.47
75	10.80	32.90	25.20		.270	6.30
100	9.34	33.07	25.58		.335	5.01
150	8.62	33.52	26.04		.446	3.90
200	8.09	33.89	26.41		.538	3.29
250	7.47	33.99	26.58		.617	2.88
300	6.81	34.01	26.69		.690	2.54
400	5.97	34.11	26.88		.822	1.15
500	5.36	34.20	27.02		.939	0.71
600	(4.82)	(34.22)	(27.10)		(1.046)	-

STATION 63.52 (Interpolated Values at Standard Depths)

CREST: 37°19' 122°36'; October 20, 1952; 0150 GCT; wire angle: 14°; sounding: 40 fms; depth of observation: 48 m; weather: overcast; sea: moderate; wind: 350°, force 5.

0	13.28	33.21	24.97	.000	6.15
10	13.17	33.17	24.96	.030	6.18
20	13.03	33.22	25.03	.060	6.14

STATION 63.55 (Interpolated Values at Standard Depths)

CREST: 37°14' 122°50'; October 20, 1952; 0250 GCT; wire angle: 8°; sounding: 155 fms; depth of observation: 153 m; weather: fog; sea: slight; wind: 340°, force 4.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	14.23	33.06	24.66		.000	5.90
10	14.20	33.12	24.71		.033	6.13
20	11.30	33.13	25.29		.062	5.89
30	10.58	33.14	25.42		.089	5.50
50	10.01	33.29	25.64		.138	4.84
75	9.65	33.49	25.85		.195	4.33
100	9.49	33.63	25.99		.248	3.51
150	8.30	33.85	26.35		.341	2.76

STATION 67.55 (Interpolated Values at Standard Depths)

CREST: 36°39' 122°26'; October 20, 1952; 0709 GCT; wire angle: 7°: sounding: 1150 fms; depth of observation: 581 m; weather: fog; sea: smooth; wind: 340°, force 5.

0	14.36	33.10	24.67		.000	5.97
10	14.36	33.12	24.68		.033	5.91
20	14.24	33.08	24.68		.066	6.03
30	13.20	33.10	24.90		.097	5.97
50	11.15	33.37	25.50		.153	5.01
75	9.89	33.45	25.78		.212	4.32
100	9.50	33.75	26.08		.265	3.00
150	8.94	33.95	26.33		.357	2.12
200	8.64	34.06	26.46		.441	1.81
250	8.34	34.14	26.57		.519	1.50
300	7.82	34.14	26.65		.593	1.46
400	6.81	34.18	26.82		.731	0.95
500	5.60	34.15	26.95		.854	0.99

STATION 67.65 (Interpolated Values at Standard Depths)

CREST: 36°19' 123°09'; October 20, 1952; 1154 GCT; wire angle: 10°; sounding: 1750 fms; depth of observation: 630 m; weather: cloudy; sea: smooth; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	14.43	33.19	24.72		.000	6.08
10	14.48	33.21	24.73		.032	6.08
20	14.27	33.31	24.85		.064	6.03
30	12.74	33.35	25.19		.094	5.89
50	11.05	33.46	25.59		.146	4.64
75	9.54	33.54	25.91		.202	3.50
100	8.84	33.71	26.15		.252	3.09
150	8.26	33.94	26.42		.341	2.60
200	7.90	34.02	26.54		.420	2.27
250	7.82	34.15	26.65		.494	1.65
300	7.34	34.20	26.76		.564	1.19
400	6.35	34.24	26.93		.690	0.80
500	5.70	34.28	27.04		.804	0.59
600	5.10	34.34	27.16		.908	0.42

STATION 70.60 (Interpolated Values at Standard Depths)

CREST: 35°52' 122°23'; October 21, 1952; 0552 GCT; wire angle: 26°; sounding: not taken; depth of observation: 1093 m; weather: overcast; sea: slight; wind: 330°, force 5.

0	13.62	33.27	24.95		.000	6.09
10	13.51	33.27	24.97		.030	6.01
20	13.31	33.30	25.04		.060	6.00
30	13.10	33.29	25.07		.089	5.93
50	11.60	33.26	25.33		.145	4.50
75	10.10	33.57	25.84		.205	3.68
100	9.30	33.72	26.09		.257	3.56
150	8.61	34.00	26.42		.347	2.20
200	8.00	34.08	26.57		.426	1.99
250	7.64	34.13	26.66		.499	1.60
300	6.99	34.16	26.78		.568	1.31
400	5.87	34.14	26.91		.694	0.98
500	5.20	34.23	27.06		.807	0.54
600	4.94	34.31	27.16		.909	0.45
700	4.69	34.39	27.25		1.004	0.35
800	4.36	34.46	27.34		1.090	0.40
1000	3.81	34.53	27.45		1.245	0.55

STATION 70.70 (Interpolated Values at Standard Depths)

CREST: 35°33'123°06'; October 21, 1952; 0013 GCT; wire angle: 18°; sounding: 2000 fms; depth of observation: 614 m; weather: partly cloudy; sea: slight; wind: 340°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	16.67	32.97	24.06		.000	5.28
10	16.64	32.97	24.06		.039	5.26
20	14.05	32.83	24.52		.075	5.45
30	12.90	32.98	24.87		.108	3.77
50	10.81	32.90	25.20		.167	4.67
75	10.31	33.50	25.75		.230	3.93
100	9.56	33.72	26.05		.283	2.28
150	9.04	33.97	26.33		.376	2.04
200	8.70	34.15	26.52		.458	1.69
250	8.30	34.24	26.65		.533	1.36
300	7.64	34.20	26.72		.604	1.49
400	6.89	34.29	26.90		.734	0.77
500	5.68	34.23	27.01		.852	0.61
600	5.24	34.32	27.13		.959	0.34

STATION 70.80 (Interpolated Values at Standard Depths)

CREST: 35°17' 123°46'; October 20, 1952; 1911 GCT; wire angle: 20°; sounding: 2000 fms; depth of observation: 1072 m; weather: partly cloudy; sea: moderate; wind: 340°,force 4.

0	16.47	33.04	24.16		.000	5.60
10	16.30	33.01	24.17		.038	5.67
20	15.80	33.26	24.48		.074	5.82
30	15.13	33.17	24.55		.108	5.98
50	11.70	33.08	25.18		.170	5.98
75	10.38	33.30	25.58		.236	4.92
100	9.82	33.57	25.89		.293	4.00
150	8.42	33.88	26.35		.389	2.63
200	7.90	34.01	26.53		.470	2.36
250	7.36	34.11	26.69		.544	1.92
300	6.79	34.11	26.77		.612	1.60
400	6.01	34.18	26.93		.738	1.00
500	5.76	34.30	27.05		.852	0.49
600	5.30	34.39	27.18		.954	0.42
700	4.85	34.42	27.25		1.048	0.41
800	4.50	34.45	27.32		1.135	0.42
1000	3.90	34.51	27.43		1.295	0.60

STATION 73.50 (Interpolated Values at Standard Depths)

CREST: 35°36' 121°18'; October 21, 1952; 1613 GCT; wire angle: 0°; sounding: 60 fms; depth of observation: 75 m; weather: overcast; sea: moderate; wind: 230°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	12.14	33.33	25.29		.000	5.31
10	12.14	33.38	25.33		.027	5.23
20	11.98	33.40	25.37		.053	5.08
30	11.96	33.40	25.38		.079	5.04
50	10.92	33.55	25.68		.129	3.89
75	10.42	33.64	25.84		.185	3.31

STATION 73.60 (Interpolated Values at Standard Depths)

CREST: 35°18' 121°58'; October 21, 1952; 1042, 1053 GCT; wire angle: 20°, 20°; sounding: 1000 fms; depth of observation: 574 m; weather: overcast; sea: slight; wind: 340°, force 5:

0	14.26	33.31	24.85		.000	5.77
10	14.25	33.33	24.87		.031	6.00
20	14.10	33.30	24.87		.062	5.56
30	13.67	33.31	24.97		.092	5.56
50	11.50	33.34	25.41		.148	5.47
75	10.05	33.55	25.83		.208	3.90
100	9.15	33.72	26.11		.259	3.03
150	8.19	33.90	26.40		.349	2.63
200	7.45	33.97	26.57		.428	2.80
250	7.20	34.04	26.66		.502	2.07
300	6.89	34.16	26.79		.570	1.47
400	6.25	34.24	26.94		.694	0.88
500	5.83	34.33	27.07		.807	0.49

STATION 77.55 (Interpolated Values at Standard Depths)

CREST: 37°52' 121°18'; October 21, 1952; 2038 GCT; wire angle: 10°; sounding: 200 fms; depth of observation: 288 m; weather: overcast; sea: slight; wind: 330°, force 4.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	13.99	33.27	24.87		.000	5.68
10	13.58	33.30	24.98		.030	5.78
20	13.40	33.30	25.02		.060	5.78
30	13.10	33.30	25.08		.089	5.72
50	11.81	33.33	25.35		.145	5.28
75	9.90	33.35	25.70		.207	4.36
100	9.14	33.35	25.83		.263	4.24
150	8.95	33.66	26.10		.367	3.35
200	8.70	34.00	26.40		.457	2.11
250	8.00	34.10	26.59		.537	1.83

STATION 77.65 (Interpolated Values at Standard Depths)

CREST: 34°34' 121°55'; October 22, 1952; 0124 GCT; wire angle: 15°; sounding: not taken; depth of observation: 579 m; weather: overcast; sea: slight; wind: 350°, force 4.

0	15.78	33.09	24.35		.000	5.68
10	15.78	33.09	24.35		.036	5.76
20	15.69	33.12	24.39		.072	5.75
30	14.80	33.01	24.50		.107	6.23
50	10.78	32.97	25.26		.168	5.64
75	9.45	33.31	25.75		.231	4.35
100	9.16	33.59	26.01		.285	3.58
150	8.33	33.81	26.31		.379	3.59
200	7.97	33.95	26.48		.462	2.53
250	7.56	34.04	26.61		.539	2.35
300	7.15	34.11	26.72		.611	1.41
400	6.21	34.13	26.86		.743	1.18
500	5.65	34.19	26.98		.863	0.58

STATION 80.51 (Interpolated Values at Standard Depths)

CREST: 34°26' 120°32'; October 15, 1952; 2107 GCT; wire angle: 15°; sounding: 50 fms; depth of observation: 72 m; weather: cloudy; sea: moderate; wind: 340°, force 6.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	13.84	33.39	25.00	296.9	.000	5.77
10	12.90	33.35	25.16	282.1	.029	5.52
20	11.07	33.39	25.53	246.6	.055	4.42
30	10.81	33.45	25.62	238.0	.080	4.11
50	10.45	33.53	25.75	226.5	.126	3.75
75	(10.08)	(33.62)	(25.88)	(214.3)	(.181)	(3.25)

STATION 80.55 (Interpolated Values at Standard Depths)

CREST: 34°19' 120°48'; October 15, 1952; 2331 GCT; wire angle: 14°; sounding: 400 fms; depth of observation: 568 m; weather: overcast; sea: rough; wind: 330°, force 5.

0	12.94	33.42	25.20	277.4	.000	5.47
10	12.70	33.46	25.28	270.3	.027	5.63
20	12.53	33.42	25.28	270.3	.054	5.63
30	12.53	33.42	25.28	270.6	.081	5.35
50	10.40	33.12	25.44	256.0	.134	5.10
75	9.35	33.56	25.96	207.2	.192	3.85
100	9.08	33.77	26.16	187.9	.241	3.20
150	9.04	34.09	26.42	164.6	.329	2.14
200	8.19	34.09	26.55	152.7	.409	2.14
250	7.87	34.17	26.66	143.0	.483	1.55
300	7.75	34.23	26.73	137.6	.553	1.06
400	6.23	34.18	26.90	121.9	.682	1.04
500	5.97	34.27	27.00	113.2	.800	0.58

STATION 80.60 (Interpolated Values at Standard Depths)

CREST: 34°09' 121°09'; October 16, 1952; 0236 GCT; wire angle: 28°; sounding: 1200 fms; depth of observation: 1080 m; weather: cloudy; sea: moderate; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	14.13	33.24	24.82	313.6	.000	5.86
10	14.12	33.22	24.81	315.2	.031	5.87
20	14.10	33.22	24.81	315.0	.063	5.87
30	13.92	33.24	24.87	310.3	.094	5.80
50	10.89	33.58	25.71	230.2	.148	4.14
75	9.90	33.74	26.01	202.5	.202	3.25
100	9.26	34.00	26.31	173.7	.249	2.45
150	8.97	34.19	26.51	156.1	.332	1.96
200	8.72	34.24	26.59	149.5	.408	1.70
250	8.60	34.26	26.62	147.1	.482	1.43
300	8.32	34.29	26.69	141.6	.554	1.18
400	7.92	34.32	26.77	135.2	.693	0.88
500	7.33	34.30	26.84	129.6	.825	0.74
600	6.37	34.38	27.04	111.7	.946	0.61
700	5.48	34.52	27.26	90.8	1.047	0.39
800	4.87	34.48	27.30	87.1	1.136	0.41
1000	4.02	34.48	27.39	78.6	1.301	0.53

STATION 80.70 (Interpolated Values at Standard Depths)

CREST: 33°49' 121°51'; October 16, 1952; 0802 GCT; wire angle: 17°; sounding: 2000 fms; depth of observation: 580 m; weather: overcast; sea: moderate; wind: 330°, force 5.

0	15.95	33.12	24.34	360.0	.000	5.31
10	15.90	33.12	24.35	359.2	.036	5.35
20	15.79	33.12	24.37	357.2	.072	5.46
30	15.64	33.13	24.41	353.5	.107	5.51
50	12.20	32.90	24.94	303.2	.173	6.00
75	10.40	32.87	25.24	275.0	.245	5.65
100	9.42	33.30	25.74	228.0	.308	4.45
150	9.40	34.08	26.35	170.9	.408	1.91
200	8.94	34.21	26.53	155.1	.489	1.71
250	8.28	34.21	26.63	146.0	.565	1.49
300	7.42	34.15	26.71	138.8	.636	1.50
400	6.38	34.19	26.89	123.1	.767	0.95
500	5.82	34.26	27.01	112.0	.884	0.51
600	(5.62)	(34.38)	(27.13)	(101.8)	(.991)	-

STATION 80.80 (Interpolated Values at Standard Depths)

CREST: 33°29' 122°33'; October 16, 1952; 1322 GCT; wire angle: 18°; sounding: 2000 fms; depth of observation: 1081 m; weather: cloudy; sea: moderate; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.52	33.15	23.99		.000	5.41
10	17.52	33.13	23.98		.039	5.36
20	17.52	33.12	23.97		.079	5.39
30	17.53	33.11	23.96		.118	5.46
50	15.48	32.94	24.30		.195	5.90
75	13.12	33.04	24.87		.279	6.03
100	11.43	32.99	25.16		.353	5.74
150	9.31	33.35	25.80		.480	4.46
200	8.43	33.92	26.38		.578	3.20
250	7.54	34.01	26.58		.658	3.06
300	7.10	34.06	26.69		.731	2.24
400	6.55	34.21	26.88		.863	1.00
500	5.88	34.26	27.00		.981	0.56
600	5.36	34.36	27.15		1.088	0.39
700	4.95	34.39	27.22		1.184	0.31
800	4.56	34.43	27.30		1.275	0.32
1000	3.90	34.51	27.43		1.436	0.55

STATION 80.90 (Interpolated Values at Standard Depths)

CREST: 33°09' 123°13'; October 16, 1952; 1845 GCT; wire angle: 10°; sounding: 2150 fms; depth of observation: 571 m; weather: partly cloudy; sea: slight; wind: 350°, force 4.

0	17.90	33.19	23.93		.000	5.68
10	17.87	33.19	23.94		.040	5.53
20	17.88	33.19	23.94		.080	5.71
30	17.91	33.18	23.92		.120	5.74
50	16.70	33.04	24.10		.198	6.00
75	12.37	32.90	24.91		.284	6.18
100	10.98	32.96	25.21		.357	6.15
150	9.31	33.40	25.84		.482	4.50
200	8.62	33.81	26.27		.582	3.06
250	7.93	34.02	26.54		.666	2.47
300	7.44	34.12	26.69		.740	1.85
400	6.48	34.15	26.84		.874	1.08
500	5.71	34.25	27.02		.993	0.60

STATION 80.100 (Interpolated Values at Standard Depths)

CREST: 32°48' 123°54'; October 16, 1952; 2352 GCT; wire angle: 4°; sounding: 2000 fms; depth of observation: 1162 m; weather: partly cloudy; sea: slight; wind: 300°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.35	33.30	23.91		.000	5.30
10	18.22	33.31	23.95		.040	5.31
20	18.20	33.30	23.94		.080	5.32
30	18.18	33.30	23.95		.119	5.45
50	15.68	33.31	24.54		.193	6.01
75	13.99	33.33	24.92		.274	6.01
100	13.05	33.33	25.11		.349	5.74
150	10.22	33.24	25.56		.482	5.22
200	8.72	33.62	26.10		.593	4.17
250	7.94	33.97	26.50		.681	3.29
300	7.33	34.05	26.65		.757	2.87
400	6.29	34.08	26.81		.895	1.73
500	5.58	34.19	26.99		1.017	0.92
600	5.08	34.31	27.14		1.124	0.50
700	4.69	34.38	27.24		1.219	0.39
800	4.33	34.43	27.32		1.307	0.38
1000	3.78	34.51	27.44		1.465	0.67

STATION 85.38 (Interpolated Values at Standard Depths)

CREST: 34°00' 119°02'; October 15, 1952; 0035 GCT; wire angle: 4°; sounding: 50 fms; depth of observation: 75 m; weather: cloudy; sea: slight; wind: 290°, force 5.

0	15.73	33.36	24.57	337.8	.000	6.06
10	15.12	33.32	24.67	328.2	.033	6.06
20	13.90	33.29	24.91	306.0	.065	6.58
30	11.97	33.20	25.22	276.6	.094	5.56
50	10.81	33.28	25.49	251.0	.147	4.59
75	10.06	33.39	25.71	231.0	.207	4.18

STATION 85.40 (Interpolated Values at Standard Depths)

CREST: 33°54' 119°10'; October 15, 1952; 0211 GCT; wire angle: 3°; sounding: 410 fms; depth of observation: 381 m; weather: overcast; sea: slight; wind: 310°; force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	15.97	33.48	24.61	334.1	.000	6.00
10	15.68	33.44	24.64	331.2	.033	5.27
20	14.28	33.42	24.93	304.0	.065	5.76
30	12.36	33.27	25.20	278.5	.094	6.00
50	11.02	33.30	25.47	253.0	.147	4.98
75	10.28	33.53	25.78	224.2	.207	5.05
100	9.78	33.66	25.96	207.0	.261	3.49
150	9.29	33.99	26.30	175.9	.357	2.53
200	8.96	34.17	26.50	158.4	.440	1.54
250	8.53	34.22	26.60	149.0	.517	1.38
300	8.05	34.25	26.70	140.5	.589	1.35

STATION 85.50 (Interpolated Values at Standard Depths)

CREST: 33°40' 119°54'; October 15, 1952; 0654 GCT; wire angle: 0°; sounding: 75 fms; depth of observation: 100 m; weather: overcast; sea: slight; wind: 300°, force 4.

0	16.73	33.44	24.40	353.7	.000	5.72
10	16.25	33.48	24.54	340.5	.035	5.65
20	13.17	33.39	25.13	284.5	.066	5.57
30	12.21	33.40	25.33	266.2	.093	5.19
50	10.55	33.51	25.72	229.6	.143	4.16
75	9.53	33.75	26.07	196.7	.196	3.15
100	9.30	33.89	26.22	182.4	.244	2.76

STATION 85.60 (Interpolated Values at Standard Depths)

CREST: 33°18' 120°33'; October 15, 1952; 1208 GCT; wire angle: 20°; sounding: 600 fms; depth of observation: 595 m; weather: overcast; sea: moderate; wind: 320°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	15.62	33.19	24.46	347.9	.000	5.77
10	15.62	33.24	24.50	344.5	.035	5.65
20	15.60	33.25	24.51	343.6	.069	5.56
30	15.59	33.23	24.50	345.2	.103	5.55
50	13.10	33.17	24.98	300.1	.168	6.00
75	10.58	33.48	25.69	232.9	.235	4.69
100	9.54	33.50	25.88	215.0	.291	3.80
150	8.55	33.84	26.30	175.6	.388	3.27
200	7.99	33.99	26.50	157.2	.471	2.50
250	7.58	34.06	26.62	147.0	.547	1.93
300	7.12	34.12	26.73	136.9	.618	1.43
400	6.46	34.23	26.91	121.2	.747	0.82
500	6.25	34.31	27.00	113.9	.865	0.44
600	(5.47)	(34.36)	(27.13)	(101.3)	(.972)	(0.42)

STATION 90.28 (Interpolated Values at Standard Depths)

CREST: 33°29' 117°47'; October 14, 1952; 1652 GCT; wire angle: 3°; sounding: 100 fms; depth of observation: 100 m; weather: overcast; sea: smooth; wind: 30°; force 2.

0	18.16	33.40	24.03	389.1	.000	5.33
10	17.66	33.38	24.14	379.3	.038	5.59
20	16.10	33.31	24.45	350.0	.075	5.87
30	14.60	33.26	24.74	322.4	.108	5.93
50	11.17	33.28	25.43	257.1	.166	5.08
75	9.90	33.39	25.73	228.4	.227	4.33
100	10.16	33.62	25.87	216.1	.283	3.18

STATION 90.30 (Interpolated Values at Standard Depths)

CREST: 33°26' 117°55'; October 14, 1952; 1514 GCT; wire angle: 5°; sounding: 300 fms; depth of observation: 390 m; weather: overcast; sea: smooth; wind: 250°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.67	33.41	23.91	400.4	.000	5.43
10	18.64	33.37	23.89	403.0	.040	5.40
20	17.40	33.28	24.12	381.0	.079	5.95
30	14.82	33.20	24.64	331.3	.115	6.10
50	11.71	33.13	25.21	277.6	.176	5.58
75	10.59	33.46	25.67	234.5	.240	3.99
100	10.25	33.61	25.85	218.3	.296	3.32
150	9.92	33.95	26.17	188.9	.398	2.48
200	9.64	34.15	26.37	170.6	.488	1.92
250	9.52	34.29	26.50	159.4	.571	1.40
300	8.10	34.23	26.68	142.8	.646	1.29
400	(7.13)	(34.34)	(26.90)	(122.3)	(.778)	(0.68)

STATION 90.45 (Interpolated Values at Standard Depths)

CREST: 32°54' 118°56'; October 13, 1952; 2113 GCT; wire angle: 7°; sounding: 800 fms; depth of observation: 627 m; weather: overcast; sea: moderate; wind: 300°, force 4.

0	16.91	33.42	24.34	359.1	.000	5.60
10	16.86	33.41	24.35	359.0	.036	5.67
20	15.99	33.44	24.57	338.1	.071	5.92
30	13.70	33.44	25.06	291.3	.102	5.59
50	11.30	33.46	25.54	246.1	.156	4.49
75	9.61	33.60	25.95	208.3	.213	3.58
100	9.03	33.81	26.20	184.2	.262	3.11
150	8.47	34.04	26.47	159.6	.348	2.70
200	8.42	34.22	26.62	146.5	.424	1.65
250	8.11	34.29	26.72	137.6	.495	1.15
300	7.61	34.29	26.79	131.2	.562	0.96
400	6.94	34.31	26.90	121.8	.689	0.54
500	6.32	34.33	27.00	113.4	.806	0.34
600	5.80	34.25	27.01	113.7	.920	0.42

STATION 90.53 (Interpolated Values at Standard Depths)

CREST: 32°38' 119°29'; October 13, 1952; 1630 GCT; wire angle: 36°; sounding: 700 fms; depth of observation: 850 m; weather: cloudy; sea: moderate; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5 s$	ΔD (dyn.m.)	O_2 (ml/L)
0	16.23	33.37	24.46	347.8	.000	5.64
10	16.25	33.39	24.47	347.1	.035	5.74
20	16.21	33.38	24.48	347.2	.069	5.69
30	14.80	33.29	24.72	324.3	.103	5.70
50	12.59	33.11	25.03	294.9	.165	5.83
75	10.65	33.22	25.47	253.2	.233	5.00
100	9.67	33.49	25.85	217.8	.292	4.05
150	8.68	33.88	26.31	174.6	.390	2.82
200	7.98	33.99	26.51	157.0	.473	2.60
250	7.79	34.11	26.63	146.2	.549	1.82
300	7.58	34.17	26.70	139.6	.621	1.32
400	6.97	34.28	26.88	124.5	.753	0.90
500	6.18	34.34	27.03	110.7	.870	0.40
600	5.60	34.20	26.99	114.8	.983	0.38
700	5.08	34.23	27.08	107.2	1.094	0.34
800	4.61	34.26	27.15	100.2	1.197	0.41

STATION 90.60 (Interpolated Values at Standard Depths)

CREST: 32°28' 119°51'; October 13, 1952; 1222 GCT; wire angle: 36°; sounding: 750 fms; depth of observation: 509 m; weather: overcast; sea: moderate; wind: 330°, force 4.

0	17.05	33.19	24.14	379.0	.000	6.00
10	16.72	33.19	24.21	372.0	.038	5.41
20	16.32	33.25	24.35	359.1	.074	5.75
30	16.18	33.26	24.39	355.6	.110	5.05
50	14.70	33.14	24.62	333.8	.179	6.00
75	11.40	33.17	25.30	269.7	.254	5.20
100	9.96	33.32	25.67	235.0	.317	4.60
150	8.75	33.79	26.23	182.3	.422	3.20
200	8.07	33.98	26.48	159.1	.507	3.21
250	7.62	34.05	26.60	148.3	.584	2.20
300	7.28	34.18	26.76	134.6	.654	1.42
400	6.29	34.18	26.89	122.7	.783	0.83
500	5.79	34.23	26.99	113.8	.901	0.55

STATION 90.70 (Interpolated Values at Standard Depths)

CREST: 32°04' 120°40'; October 13, 1952; 0613 GCT; wire angle: 30°; sounding: 2000 fms; depth of observation: 1181 m; weather: overcast; sea: moderate; wind: 340°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.41	33.22	24.07	385.0	.000	5.69
10	17.40	33.21	24.07	385.8	.039	5.64
20	17.40	33.20	24.06	386.8	.077	5.56
30	17.38	33.17	24.04	388.8	.116	5.70
50	14.28	33.07	24.66	330.4	.188	6.34
75	11.81	33.10	25.17	282.1	.264	5.52
100	10.22	33.29	25.60	241.5	.330	4.80
150	9.00	33.72	26.14	191.3	.438	3.43
200	8.39	34.02	26.47	160.8	.526	2.69
250	8.01	34.15	26.63	146.5	.603	1.85
300	7.65	34.25	26.76	134.7	.673	1.42
400	6.77	34.29	26.91	121.0	.801	0.88
500	6.02	34.35	27.06	107.9	.915	0.61
600	5.46	34.39	27.16	99.0	1.019	0.41
700	4.83	34.41	27.25	90.7	1.113	0.49
800	4.48	34.44	27.31	85.2	1.201	0.56
1000	3.98	34.54	27.44	73.7	1.360	0.72

STATION 93.27 (Interpolated Values at Standard Depths)

CREST: 32°55' 117°21'; October 12, 1952; 0625 GCT; wire angle: 20°; sounding: 200 fms; depth of observation: 280 m; weather: overcast; sea: smooth; wind: 320°, force 2.

0	18.30	33.40	24.00	392.4	.000	5.64
10	18.13	33.39	24.03	389.5	.039	5.83
20	16.48	33.30	24.35	359.0	.077	6.50
30	13.55	33.17	24.89	308.2	.110	6.67
50	11.14	33.15	25.33	266.2	.167	5.95
75	10.18	33.44	25.73	229.2	.229	4.28
100	9.83	33.67	25.96	207.1	.284	3.85
150	8.91	33.87	26.27	178.8	.380	3.48
200	8.32	33.96	26.43	164.2	.466	3.04
250	8.12	34.15	26.61	148.1	.544	1.98

STATION 93.30 (Interpolated Values at Standard Depths)

CREST: 32°50' 117°32'; October 12, 1952; 0911 GCT; wire angle: 20°; sounding: 510 fms; depth of observation: 517 m; weather: cloudy; sea: smooth; wind: 360°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	19.00	33.35	23.78	412.7	.000	5.41
10	19.00	33.35	23.78	413.0	.041	5.15
20	18.90	33.33	23.79	412.4	.083	5.80
30	14.85	33.22	24.65	330.5	.120	5.90
50	12.22	33.22	25.19	280.1	.181	5.78
75	11.08	33.43	25.56	245.0	.246	4.30
100	9.96	33.55	25.85	218.0	.304	3.80
150	9.83	34.04	26.25	180.8	.404	2.02
200	8.92	34.13	26.47	160.7	.489	2.38
250	8.61	34.20	26.57	151.7	.567	1.80
300	8.25	34.30	26.71	139.8	.640	1.10
400	7.12	34.33	26.90	122.9	.772	0.75
500	6.35	34.35	27.02	112.3	.889	0.59

STATION 93.40 (Interpolated Values at Standard Depths)

CREST: 32°30' 118°12'; October 12, 1952; 1427 GCT; wire angle: 2°; sounding: 800 fms; depth of observation: 630 m; weather: cloudy; sea: smooth; wind: 220°, force 4.

0	18.61	33.39	23.91	400.5	.000	5.51
10	18.60	33.40	23.92	399.8	.040	5.42
20	17.18	33.40	24.27	367.2	.078	5.91
30	15.12	33.30	24.66	330.2	.113	6.02
50	12.08	33.13	25.14	284.2	.175	5.50
75	10.73	33.26	25.49	251.6	.242	4.85
100	9.72	33.50	25.85	217.9	.300	4.30
150	9.21	33.98	26.31	175.4	.399	2.74
200	8.55	34.10	26.50	157.3	.482	2.63
250	7.87	34.15	26.65	144.4	.557	2.00
300	7.37	34.19	26.75	135.2	.627	1.45
400	6.82	34.31	26.92	120.2	.755	0.75
500	6.22	34.37	27.05	109.0	.869	0.48
600	5.68	34.38	27.12	102.5	.975	0.38

STATION 93.50 (Interpolated Values at Standard Depths)

CREST: 32°11' 118°53'; October 12, 1952; 1929 GCT; wire angle: 20°; sounding: 750 fms; depth of observation: 1070 m; weather: overcast; sea: moderate; wind: 300°, force 4.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.50	33.48	24.25	368.1	.000	5.90
10	17.48	33.46	24.24	369.4	.037	5.45
20	17.46	33.46	24.24	369.2	.074	5.26
30	17.20	33.45	24.30	364.4	.110	5.47
50	13.38	33.13	24.89	308.4	.178	6.09
75	11.15	33.25	25.41	259.5	.249	4.93
100	9.96	33.46	25.78	224.7	.309	3.43
150	8.81	33.84	26.26	179.6	.410	3.14
200	8.42	34.05	26.49	159.1	.495	2.65
250	8.18	34.14	26.59	149.7	.572	1.90
300	7.80	34.26	26.74	136.1	.644	1.10
400	7.07	34.30	26.88	124.4	.774	0.64
500	6.42	34.36	27.01	112.5	.892	0.42
600	5.73	34.38	27.12	103.2	1.000	0.42
700	5.12	34.42	27.22	93.6	1.098	0.39
800	4.61	34.46	27.31	85.4	1.188	0.42
1000	3.90	34.51	27.43	74.9	1.348	0.64

STATION 97.32 (Interpolated Values at Standard Depths)

CREST: 32°11' 117°18'; October 10, 1952; 1328 GCT; wire angle: 2°; sounding: 720 fms; depth of observation: 626 m; weather: cloudy; sea: moderate; wind: 330°, force 3.

0	19.34	33.40	23.73	417.3	.000	-
10	19.35	33.43	23.75	415.7	.042	-
20	17.64	33.35	24.12	381.4	.081	-
30	13.95	33.19	24.82	314.5	.116	-
50	11.23	33.33	25.46	254.4	.173	-
75	10.34	33.53	25.77	225.2	.233	-
100	10.01	33.73	25.98	205.6	.287	-
150	9.42	34.02	26.30	175.7	.382	-
200	9.38	34.28	26.51	156.8	.465	-
250	8.87	34.31	26.62	147.6	.541	-
300	8.51	34.33	26.69	141.5	.614	-
400	7.07	34.34	26.91	121.4	.745	-
500	6.42	34.35	27.01	113.2	.862	-
600	5.73	34.39	27.13	102.4	.970	-

STATION 97.40 (Interpolated Values at Standard Depths)

CREST: 31°55' 117°50'; October 10, 1952; 0743,0800 GCT; wire angle: 22°,25°; sounding: 850 fms; depth of observation: 567 m; weather: partly cloudy; sea: slight; wind: 340°,force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.90	33.44	23.88	403.8	.000	-
10	18.89	33.41	23.86	406.0	.040	-
20	18.91	33.44	23.87	404.6	.081	-
30	14.20	33.33	24.88	309.2	.117	-
50	11.28	33.37	25.48	252.3	.173	-
75	10.03	33.55	25.84	218.7	.232	-
100	9.68	33.79	26.08	195.8	.284	-
150	9.72	34.12	26.33	173.1	.376	-
200	9.47	34.24	26.47	161.2	.459	-
250	8.41	34.18	26.59	150.2	.537	-
300	8.26	34.29	26.70	140.7	.610	-
400	7.17	34.27	26.84	128.0	.744	-
500	6.58	34.36	26.99	114.6	.865	-

STATION 97.50 (Interpolated Values at Standard Depths)

CREST: 31°35' 118°30'; October 10, 1952; 0145 GCT; wire angle: 15°; sounding: 600 fms; depth of observation: 616 m; weather: partly cloudy; sea: moderate; wind: 320°, force 4.

0	18.54	33.40	23.94	398.1	.000	-
10	18.52	33.40	23.94	397.9	.040	-
20	18.53	33.37	23.92	400.7	.080	-
30	17.35	33.30	24.15	378.7	.119	-
50	11.63	33.26	25.33	266.6	.183	-
75	10.22	33.60	25.84	218.1	.244	-
100	10.06	33.84	26.06	198.2	.296	-
150	10.08	34.10	26.26	180.4	.390	-
200	10.04	34.22	26.36	172.0	.479	-
250	9.73	34.32	26.49	160.5	.562	-
300	9.27	34.37	26.60	150.4	.639	-
400	8.19	34.35	26.76	137.0	.783	-
500	7.04	34.34	26.91	122.5	.913	-
600	6.32	34.39	27.05	110.3	1.029	-

STATION 100.29 (Interpolated Values at Standard Depths)

CREST: 31°42' 116°46'; October 8, 1952; 0437 GCT; wire angle: 30°; sounding: 200 fms; depth of observation: 262 m; weather: clear; sea: moderate; wind: 340°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	16.24	33.35	24.45		.000	6.73
10	14.28	33.29	24.83		.033	6.11
20	12.89	33.26	25.09		.063	5.86
30	11.90	33.30	25.31		.091	5.40
50	10.96	33.49	25.63		.142	4.21
75	10.57	33.56	25.75		.200	3.62
100	10.39	33.66	25.86		.255	3.30
150	9.82	34.02	26.24		.355	2.33
200	9.71	34.22	26.41		.442	1.55
250	9.30	34.32	26.56		.522	1.22

STATION 100.30 (Interpolated Values at Standard Depths)

CREST: 31°40' 116°46'; October 8, 1952; 0608 GCT; wire angle: 12°; sounding: 50 fms; depth of observation: 73 m; weather: clear; sea: moderate; wind: 330°, force 5.

0	17.66	33.38	24.14	.000	5.64
10	17.64	33.37	24.13	.038	5.69
20	13.55	33.31	24.99	.072	6.10
30	13.02	33.28	25.08	.101	5.88
50	10.92	33.46	25.61	.154	4.02
75	(10.45)	(33.61)	(25.81)	(.212)	(3.46)

STATION 100.40 (Interpolated Values at Standard Depths)

CREST: 31°19' 117°26'; October 8, 1952; 1135 GCT; wire angle: 35°; sounding: 1100 fms; depth of observation: 972 m; weather: clear; sea: moderate; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	19.17	33.46	23.82		.000	5.13
10	19.15	33.42	23.80		.041	5.16
20	19.14	33.42	23.80		.082	5.18
30	17.25	33.38	24.23		.121	5.18
50	13.56	33.23	24.93		.189	5.21
75	10.83	33.34	25.53		.258	5.25
100	10.50	33.69	25.86		.316	2.40
150	10.34	34.03	26.16		.417	1.54
200	9.91	34.14	26.32		.509	1.72
250	9.38	34.26	26.50		.592	1.62
300	9.01	34.33	26.61		.670	1.19
400	7.33	34.29	26.83		.809	0.81
500	6.47	34.34	26.99		.930	0.44
600	5.74	34.41	27.14		1.038	0.28
700	5.22	34.43	27.22		1.136	0.28
800	4.80	34.46	27.29		1.226	0.36
1000	(4.06)	(34.52)	(27.42)		(1.390)	(0.51)

STATION 100.50 (Interpolated Values at Standard Depths)

CREST: 31°01' 118°07'; October 8, 1952; 1805 GCT; wire angle: 10°; sounding: 900 fms; depth of observation: 583 m; weather: clear; sea: moderate; wind: 330°, force 5.

0	18.44	33.35	23.92		.000	-
10	18.45	33.37	23.94		.040	-
20	17.74	33.37	24.11		.079	-
30	16.26	33.27	24.38		.116	-
50	12.05	33.40	25.36		.178	-
75	9.61	33.57	25.92		.237	-
100	9.25	33.77	26.14		.287	-
150	8.93	34.02	26.38		.377	-
200	8.24	34.12	26.57		.457	-
250	7.97	34.21	26.68		.530	-
300	7.54	34.24	26.77		.599	-
400	6.82	34.29	26.91		.726	-
500	6.22	34.35	27.03		.842	-
600	5.63	(34.43)	(27.16)		(.947)	-

STATION 100.60 (Interpolated Values at Standard Depths)

CREST: 30°41' 118°48'; October 8, 1952; 2346 GCT; wire angle: 38°; sounding: 1250 fms; depth of observation: 823 m; weather: partly cloudy; sea: moderate; wind: 340°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	19.36	33.49	23.80		.000	-
10	19.32	33.47	23.79		.041	-
20	19.29	33.42	23.76		.083	-
30	18.32	33.35	23.95		.123	-
50	14.00	33.34	24.93		.193	-
75	11.43	33.41	25.48		.263	-
100	10.05	33.64	25.90		.321	-
150	9.32	33.95	26.27		.419	-
200	8.87	34.17	26.51		.503	-
250	8.07	34.19	26.65		.579	-
300	7.83	34.29	26.76		.648	-
400	7.00	34.31	26.90		.777	-
500	6.31	34.32	27.00		.895	-
600	5.69	34.36	27.11		1.004	-
700	5.14	34.43	27.23		1.103	-
800	4.69	34.49	27.33		1.191	-

STATION 100.70 (Interpolated Values at Standard Depths)

CREST: 30°20' 119°27'; October 9, 1952; 0546 GCT; wire angle: 23°; sounding: 2000 fms; depth of observation: 586 m; weather: clear; sea: moderate; wind: 320°, force 5.

0	19.39	33.37	23.70		.000	-
10	19.39	33.37	23.70		.042	-
20	19.37	33.39	23.72		.084	-
30	19.00	33.32	23.76		.126	-
50	17.26	33.28	24.15		.205	-
75	15.08	33.39	24.73		.293	-
100	12.61	33.22	25.11		.370	-
150	9.60	33.44	25.82		.497	-
200	8.81	33.87	26.28		.597	-
250	7.98	34.05	26.55		.680	-
300	7.46	34.11	26.67		.754	-
400	6.62	34.22	26.88		.887	-
500	5.97	34.30	27.03		1.005	-
600	(5.42)	(34.34)	(27.12)		(1.111)	-

STATION 100.80 (Interpolated Values at Standard Depths)

CREST: 30°02' 120°07'; October 9, 1952; 1124 GCT; wire angle: 22°; sounding: 1350 fms; depth of observation: 1234 m; weather: partly cloudy; sea: moderate; wind: 330°, force 5.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.93	33.35	23.80		.000	-
10	18.94	33.39	23.83		.041	-
20	18.96	33.40	23.83		.082	-
30	18.95	33.39	23.83		.123	-
50	15.10	33.32	24.68		.197	-
75	13.82	33.18	24.84		.277	-
100	12.17	33.10	25.10		.352	-
150	9.44	33.46	25.86		.479	-
200	8.69	33.91	26.33		.577	-
250	7.89	34.05	26.57		.658	-
300	7.16	34.13	26.73		.730	-
400	6.46	34.23	26.91		.859	-
500	5.99	34.34	27.05		.974	-
600	5.32	34.42	27.20		1.075	-
700	4.88	34.47	27.29		1.166	-
800	4.52	34.51	27.36		1.250	-
1000	3.91	34.56	27.47		1.402	-

STATION 103.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 31°04' 116°25'; October 8, 1952; 2140 GCT; wire angle: 6°; sounding: 43 fms; depth of observation: 30 m; weather: clear; sea: moderate; wind: 300°, force 4.

0	14.65	33.26	24.73		.000	6.04
10	14.62	33.28	24.75		.032	6.29
20	13.91	33.24	24.87		.064	6.31
30	12.10	33.22	25.21		.093	5.84

STATION 103.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 30°54' 116°48'; October 8, 1952; 1640, 1707 GCT; wire angle: 5°, 10°; sounding: 1200 fms; depth of observation: 688 m; weather: clear; sea: rough; wind: 330°, force 4.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.48	33.46	24.00		.000	5.38
10	18.48	33.35	23.91		.040	5.43
20	18.44	33.38	23.95		.080	5.47
30	16.50	33.38	24.41		.117	5.51
50	11.44	33.30	25.39		.179	5.30
75	10.20	33.56	25.82		.239	4.00
100	9.81	33.67	25.97		.292	3.61
150	9.24	34.09	26.39		.386	2.52
200	9.25	34.26	26.52		.467	1.57
250	8.92	34.30	26.60		.543	1.20
300	8.46	34.35	26.71		.615	1.07
400	7.15	34.34	26.90		.746	0.73
500	6.29	34.35	27.02		.863	0.42
600	5.69	34.39	27.13		.969	0.31
700	(5.20)	(34.42)	(27.21)		(1.068)	-

STATION 103.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 30°46' 117°06'; October 8, 1952; 1056, 1211 GCT; wire angle: 27°; sounding: 940 fms; depth of observation: 508 m; weather: clear; sea: rough; wind: 280°, force 4.

0	19.12	33.44	23.82	.000	5.47
10	19.09	33.42	23.81	.041	5.73
20	19.08	33.46	23.85	.082	6.99
30	15.65	33.29	24.53	.119	6.65
50	12.72	33.34	25.18	.182	5.60
75	11.25	33.41	25.51	.248	4.49
100	10.17	33.64	25.88	.306	3.07
150	9.55	33.89	26.18	.406	2.81
200	9.21	34.22	26.49	.493	1.56
250	8.72	34.43	26.74	.566	0.93
300	8.47	34.44	26.78	.634	0.54
400	7.26	34.35	26.89	.762	0.16
500	6.26	34.25	26.95	.883	0.11

STATION 107.32 (Interpolated Values at Standard Depths)

PAOLINA T.: 30°26' 116°12'; October 9, 1952; 0258 GCT; wire angle: 3°; sounding: 360 fms; depth of observation: 99 m; weather: clear; sea: rough; wind: 320°, force 1.

Depth (m).	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5 s$	ΔD (dyn.m.)	O_2 (ml/L)
0	16.10	33.26	24.41		.000	5.87
10	16.12	33.24	24.39		.035	5.84
20	15.86	33.24	24.45		.071	5.94
30	14.62	33.17	24.66		.105	6.26
50	12.82	33.30	25.13		.166	5.63
75	11.09	33.42	25.55		.232	4.35
100	(10.52)	(33.68)	(25.85)		(.290)	(3.21)

STATION 107.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 30°18' 116°24'; October 9, 1952; 0536 GCT; wire angle: 18°; sounding: 1050 fms; depth of observation: 608 m; weather: clear; sea: rough; wind: 300°, force 4.

0	19.19	33.37	23.75	.000	5.04
10	19.17	33.39	23.77	.042	5.45
20	19.17	33.40	23.78	.083	5.32
30	18.75	33.31	23.81	.124	5.26
50	15.00	33.20	24.61	.199	5.19
75	12.20	33.19	25.17	.276	5.18
100	10.20	33.36	25.66	.341	4.53
150	9.37	33.91	26.23	.446	2.76
200	9.16	34.18	26.47	.531	2.04
250	9.08	34.33	26.60	.609	1.21
300	8.29	34.33	26.72	.681	0.97
400	7.18	34.32	26.88	.812	0.73
500	6.52	34.36	27.00	.931	0.63
600	5.58	34.38	27.14	1.039	0.38

STATION 107.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 30°10' 116°12'; October 9, 1952; 0933 GCT; wire angle: 22°; sounding: 1690 fms; depth of observation: 594 m; weather: partly cloudy; sea: moderate; wind: 310°, force 4.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5 s$	ΔD (dyn.m.)	O_2 (ml/L)
0	20.03	33.49	23.62		.000	5.23
10	20.00	33.42	23.58		.043	5.21
20	19.68	33.42	23.66		.086	5.24
30	19.51	33.36	23.66		.128	5.30
50	15.70	33.27	24.51		.205	5.98
75	13.40	33.40	25.09		.285	5.79
100	11.08	33.39	25.53		.352	4.08
150	9.50	33.88	26.18		.461	3.32
200	8.97	34.12	26.45		.548	2.58
250	8.98	34.34	26.63		.626	1.36
300	8.90	34.46	26.73		.697	0.78
400	7.73	34.44	26.89		.827	0.53
500	6.36	34.37	27.03		.945	0.53
600	(5.63)	(34.36)	(27.11)		(1.052)	(0.32)

STATION 110.33 (Interpolated Values at Standard Depths)

PAOLINA T.: 29°48' 115°51'; October 10, 1952; 1724 GCT; wire angle: 5°; sounding: 40 fms; depth of observation: 30 m; weather: overcast; sea: slight; wind: 300°, force 3.

0	16.25	33.33	24.43		.000	5.91
10	16.14	33.30	24.43		.035	5.99
20	14.22	33.22	24.79		.069	6.15
30	13.47	33.24	24.96		.099	5.97

STATION 110.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 29°42' 115°56'; October 10, 1952; 1512 GCT; wire angle: 13°; sounding: 650 fms; depth of observation: 582 m; weather: overcast; sea: slight; wind: 300°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.03	33.34	24.02		.000	5.54
10	18.04	33.37	24.04		.039	5.52
20	18.01	33.35	24.03		.078	5.50
30	17.84	33.36	24.08		.117	6.00
50	12.97	33.19	25.02		.185	5.82
75	11.67	33.46	25.48		.253	4.67
100	10.95	33.54	25.67		.315	4.04
150	9.49	33.91	26.21		.420	3.08
200	9.22	34.16	26.45		.507	2.19
250	8.70	34.29	26.63		.584	1.43
300	8.64	34.39	26.72		.655	0.88
400	7.98	34.42	26.84		.789	0.52
500	6.76	34.38	26.98		.911	0.37
600	(5.75)	(34.38)	(27.12)		(1.021)	-

STATION 110.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 29°33' 116°16'; October 10, 1952; 1110 GCT; wire angle: 16°; sounding: 1350 fms; depth of observation: 574 m; weather: overcast; sea: moderate; wind: 290°, force 3.

0	19.65	33.42	23.67	.000	5.22
10	19.65	33.37	23.63	.043	5.20
20	19.56	33.37	23.66	.085	5.24
30	19.17	33.36	23.75	.127	5.50
50	16.70	33.31	24.31	.205	6.08
75	13.89	33.30	24.92	.289	6.06
100	11.97	33.46	25.42	.360	4.75
150	9.72	33.70	26.01	.476	3.80
200	9.39	34.14	26.40	.568	2.21
250	9.07	34.29	26.57	.648	1.44
300	8.55	34.36	26.71	.721	0.97
400	7.66	34.41	26.88	.854	0.54
500	6.93	34.42	26.99	.973	0.36

STATION 113.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 29°22' 115°22'; October 10, 1952; 2223 GCT; wire angle: 15°; sounding: 42 fms; depth of observation: 29 m; weather: clear; sea: moderate; wind: 340°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	17.51	33.37	24.16		.000	6.01
10	15.20	33.26	24.61		.036	5.55
20	14.52	33.31	24.79		.068	5.37

STATION 113.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 29°02' 115°58'; October 11, 1952; 0409 GCT; wire angle: 6°; sounding: 1050 fms; depth of observation: 656 m; weather: clear; sea: rough; wind: 330°, force 4.

0	18.21	33.33	23.96	.000	5.56
10	17.98	33.31	24.00	.039	5.67
20	15.65	33.33	24.56	.076	5.98
30	15.20	33.36	24.69	.109	5.97
50	12.90	33.41	25.20	.170	4.69
75	10.72	33.47	25.66	.234	4.68
100	11.21	33.98	25.96	.290	1.38
150	10.21	34.26	26.36	.384	1.80
200	10.04	34.41	26.50	.466	1.20
250	9.80	34.52	26.63	.542	0.80
300	9.07	34.45	26.70	.614	0.79
400	7.54	34.36	26.86	.748	0.57
500	6.76	34.36	26.97	.870	0.39
600	5.95	34.39	27.10	.981	0.33

STATION 117.26 (Interpolated Values at Standard Depths)

PAOLINA T.: 28°54' 114°40'; October 11, 1952; 1918 GCT; wire angle: 3°; sounding: 42 fms; depth of observation: 50 m; weather: cloudy; sea: moderate; wind: 320°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	19.06	33.37	23.78		.000	5.39
10	18.07	33.35	24.01		.040	5.57
20	16.53	33.33	24.36		.078	5.81
30	14.68	33.28	24.74		.112	5.73
50	12.26	33.37	25.30		.171	4.24

STATION 117.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 28°47' 114°56'; October 11, 1952; 1639 GCT; wire angle: 3°; sounding: 58 fms; depth of observation: 50 m; weather: overcast; sea: moderate; wind: 300°, force 4.

0	17.47	33.34	24.15		.000	5.77
10	17.34	33.30	24.15		.038	5.65
20	13.88	33.34	24.95		.072	5.54
30	12.71	33.22	25.09		.101	5.66
50	12.32	33.44	25.34		.157	4.22

STATION 117.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 28°29' 115°37'; October 11, 1952; 1004 GCT; wire angle: 17°: sounding: 600 fms; depth of observation: 576 m; weather: cloudy; sea: moderate; wind: 300°, force 3.

0	18.46	33.48	24.02		.000	5.52
10	18.47	33.46	24.00		.039	5.54
20	15.46	33.30	24.58		.076	5.69
30	14.78	33.30	24.73		.109	5.98
50	13.00	33.34	25.13		.169	5.40
75	11.45	33.70	25.70		.234	3.27
100	11.72	33.98	25.87		.290	2.27
150	10.16	34.11	26.25		.389	2.10
200	9.70	34.25	26.44		.476	1.69
250	9.61	34.38	26.55		.555	1.13
300	9.03	34.40	26.66		.630	0.83
400	7.85	34.36	26.81		.768	0.59
500	6.66	34.36	26.98		.891	0.42

STATION 120.25 (Interpolated Values at Standard Depths)

PAOLINA T.: 28°24' 114°16'; October 12, 1952; 0009 GCT; wire angle: 5°; sounding: 44 fms; depth of observation: 31 m; weather: overcast; sea: slight; wind: 300°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	18.94	33.37	23.81		.000	5.43
10	18.70	33.35	23.86		.041	5.47
20	17.82	33.35	24.07		.080	5.59
30	16.36	33.37	24.43		.117	5.82

STATION 120.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 28°11' 114°35'; October 13, 1952; 0817 GCT; wire angle: 4°; sounding: 50 fms; depth of observation: 50 m; weather: overcast; sea: slight; wind: 330°, force 3.

0	20.14	33.49	23.60		.000	5.25
10	20.14	33.46	23.57		.043	5.18
20	20.16	33.48	23.58		.086	5.24
30	20.13	33.49	23.60		.130	5.25
50	18.56	33.44	23.96		.212	5.35

STATION 120.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°59' 114°57'; October 13, 1952; 1141 GCT; wire angle: 2°; sounding: 47 fms; depth of observation: 50 m; weather: cloudy; sea: slight; wind: 300°, force 2.

0	19.80	33.48	23.68		.000	5.30
10	19.83	33.46	23.65		.042	5.25
20	19.79	33.48	23.68		.085	5.18
30	19.70	33.44	23.67		.127	5.23
50	18.44	33.38	23.95		.209	5.35

STATION 120.45 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°42' 115°36'; October 13, 1952; 2220 GCT; wire angle: 7°; sounding: 1470 fms; depth of observation: 1203 m; weather: partly cloudy; sea: moderate; wind: 330°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	19.19	33.44	23.80		.000	5.36
10	19.18	33.44	23.81		.041	5.36
20	19.00	33.33	23.77		.082	5.91
30	15.60	33.33	24.57		.120	6.00
50	13.77	33.34	24.97		.184	5.22
75	11.18	33.80	25.83		.249	4.20
100	10.40	33.71	25.90		.303	3.48
150	10.05	34.06	26.23		.402	2.12
200	10.83	34.59	26.51		.487	0.50
250	10.28	34.51	26.54		.566	0.58
300	9.07	34.45	26.70		.640	0.60
400	7.62	34.42	26.90		.772	0.50
500	6.88	34.42	27.00		.891	0.28
600	5.60	34.42	27.17		.997	0.27
700	5.07	34.43	27.24		1.093	0.30
800	4.66	34.45	27.30		1.182	0.36
1000	3.89	34.56	27.47		1.340	0.61
1200	3.51	34.72	27.63		1.467	0.80

STATION 120.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°32' 115°52'; October 14, 1952; 0334 GCT; wire angle: 23°; sounding: 2150 fms; depth of observation: 612 m; weather: partly cloudy; sea: slight; wind: 320°, force 2.

0	20.52	33.60	23.58		.000	5.19
10	19.29	33.53	23.85		.042	5.39
20	18.75	33.50	23.96		.082	5.38
30	17.66	33.44	24.18		.121	6.22
50	14.42	33.49	24.95		.189	6.11
75	11.68	33.46	25.47		.258	3.83
100	10.70	33.75	25.88		.317	3.24
150	9.96	34.05	26.24		.416	2.23
200	9.42	34.26	26.49		.501	1.75
250	8.96	34.31	26.60		.578	1.28
300	8.74	34.23	26.58		.654	0.81
400	7.30	34.27	26.82		.795	0.54
500	6.64	34.44	27.05		.914	0.42
600	5.97	34.47	27.16		1.019	0.37

STATION 120.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°11' 116°30'; October 14, 1952; 1015 GCT; wire angle: 21°; sounding: 2150 fms; depth of observation: 1117 m; weather: partly cloudy; sea: moderate; wind: 330°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	20.73	33.57	23.50		.000	5.20
10	20.73	33.53	23.47		.044	5.16
20	20.73	33.51	23.45		.088	5.15
30	20.70	33.49	23.45		.133	5.22
50	16.41	33.28	24.35		.214	5.79
75	15.45	33.61	24.82		.298	5.77
100	12.90	33.47	25.25		.372	5.44
150	9.69	33.71	26.02		.491	4.01
200	9.75	34.29	26.46		.583	1.73
250	9.96	34.45	26.55		.662	0.67
300	9.21	34.45	26.67		.736	0.50
400	7.97	34.40	26.83		.873	0.39
500	6.93	34.39	26.97		.997	0.28
600	6.10	34.40	27.09		1.109	0.27
700	5.46	34.40	27.17		1.211	0.32
800	4.89	34.42	27.25		1.307	0.40
1000	4.06	34.48	27.39		1.478	0.63

STATION 120.70 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°50' 117°09'; October 14, 1952; 1700 GCT; wire angle: 6°; sounding: 2100 fms; depth of observation: 648 m; weather: cloudy; sea: moderate; wind: 310°, force 2.

0	21.68	33.75	23.38		.000	5.17
10	21.68	33.75	23.38		.045	5.08
20	21.67	33.73	23.37		.090	5.09
30	21.66	33.69	23.34		.136	5.19
50	18.02	33.47	24.12		.220	5.50
75	15.64	33.48	24.68		.309	5.68
100	14.33	33.45	24.94		.388	5.48
150	10.47	33.41	25.65		.524	4.54
200	9.37	33.87	26.20		.630	3.38
250	8.37	34.01	26.46		.717	2.64
300	8.18	34.17	26.62		.795	1.33
400	7.47	34.26	26.79		.935	0.78
500	6.50	34.34	26.99		1.059	0.41
600	5.84	34.35	27.08		1.170	0.28

STATION 120.80 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°29' 117°48'; October 14, 1952; 2328 GCT; wire angle: 9°; sounding: 2140 fms; depth of observation: 1180 m; weather: cloudy; sea: slight; wind: 330°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	10^5S	ΔD (dyn.m.)	O_2 (ml/L)
0	22.33	33.77	23.21		.000	4.89
10	22.33	33.68	23.15		.047	4.96
20	22.29	33.76	23.22		.094	4.93
30	22.23	33.77	23.24		.141	4.97
50	19.59	33.60	23.82		.228	5.60
75	16.55	33.46	24.46		.323	5.78
100	15.08	33.48	24.80		.407	5.62
150	11.31	33.61	25.66		.546	4.07
200	9.77	33.88	26.14		.653	3.16
250	9.03	34.09	26.42		.743	2.41
300	8.78	34.24	26.58		.823	1.39
400	7.58	34.31	26.81		.964	0.69
500	6.44	34.26	26.93		1.090	0.49
600	5.77	34.35	27.09		1.203	0.33
700	5.30	34.39	27.18		1.305	0.36
800	4.90	34.43	27.26		1.399	0.39
1000	4.06	34.49	27.40		1.569	0.64

STATION 120.90 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°08' 118°26'; October 15, 1952; 0606 GCT; wire angle: 10°; sounding: 2500 fms; depth of observation: 615 m; weather: overcast; sea: moderate; wind: 330°, force 3.

0	21.82	33.60	23.23		.000	5.23
10	21.84	33.60	23.22		.047	4.96
20	21.81	33.60	23.23		.093	5.12
30	21.83	33.60	23.22		.140	5.05
50	19.90	33.69	23.81		.228	5.69
75	16.70	33.71	24.62		.321	5.85
100	15.72	33.73	24.85		.402	5.63
150	11.27	33.82	25.83		.536	4.08
200	9.96	34.03	26.22		.637	3.26
250	9.47	34.25	26.48		.724	2.18
300	8.78	34.34	26.66		.801	1.33
400	7.63	34.34	26.83		.938	0.59
500	6.67	34.41	27.02		1.058	0.56
600	5.96	34.39	27.10		1.167	0.33

STATION 123.37 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°24' 114°39'; October 16, 1952; 1455 GCT; wire angle: 0°; sounding: 40 fms; depth of observation: 51 m; weather: overcast; sea: smooth; wind: 320°, force 1.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	21.92	33.79	23.34		.000	5.09
10	20.56	33.68	23.63		.044	4.83
20	18.35	33.57	24.11		.085	5.29
30	16.32	33.52	24.56		.121	5.18
50	15.36	33.53	24.78		.187	4.57

STATION 123.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 27°16' 114°56'; October 16, 1952; 1141 GCT; wire angle: 0°; sounding: 540 fms; depth of observation: 606 m; weather: clear; sea: slight; wind: 320°, force 2.

0	21.57	33.82	23.46		.000	5.18
10	21.39	33.78	23.48		.044	5.12
20	16.30	33.31	24.40		.084	5.98
30	14.94	33.33	24.72		.118	5.94
50	13.97	33.57	25.11		.179	4.48
75	11.90	33.58	25.53		.246	3.93
100	11.63	33.85	25.79		.305	2.92
150	10.17	34.03	26.19		.408	2.35
200	9.79	34.23	26.41		.497	1.76
250	9.60	34.45	26.61		.576	0.85
300	9.02	34.42	26.68		.648	0.65
400	7.79	34.42	26.87		.783	0.45
500	6.59	34.34	26.98		.904	0.32
600	5.90	-	-		-	0.22

STATION 123.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°54' 115°37'; October 16, 1952; 0429 GCT; wire angle: 15°; sounding: 1970 fms; depth of observation: 566 m; weather: cloudy; sea: slight; wind: 320°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	21.04	33.58	23.42		.000	5.32
10	21.04	33.58	23.42		.045	5.16
20	20.92	33.57	23.45		.089	5.22
30	20.53	33.57	23.55		.133	5.32
50	14.84	33.35	24.76		.209	6.17
75	12.75	33.47	25.28		.283	4.95
100	11.03	33.54	25.65		.347	3.50
150	10.02	34.02	26.20		.452	2.45
200	9.62	34.25	26.45		.539	1.93
250	8.26	34.17	26.60		.617	2.00
300	8.08	34.34	26.76		.688	1.05
400	7.87	34.42	26.86		.818	0.38
500	6.48	34.38	27.02		.938	0.33

STATION 127.34 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°55' 114°06'; October 16, 1952; 2145 GCT; wire angle: 2°; sounding: 46 fms; depth of observation: 51 m; weather: cloudy; sea: smooth; wind: 320°, force 1.

0	23.56	33.78	22.87		.000	4.96
10	23.07	33.80	23.03		.049	5.02
20	22.26	33.69	23.17		.097	5.13
30	17.80	33.51	24.20		.139	5.89
50	15.30	33.53	24.79		.208	5.16

STATION 127.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°43' 114°30'; October 17, 1952; 0129 GCT; wire angle: 2°; sounding: 1650 fms; depth of observation: 613 m; weather: cloudy; sea: slight; wind: 270°, force 1.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	23.99	33.93	22.86		.000	5.31
10	23.94	33.91	22.86		.050	5.29
20	23.76	33.93	22.92		.100	5.14
30	21.00	33.50	23.37		.147	6.20
50	13.55	33.53	25.16		.221	5.03
75	12.55	33.76	25.54		.287	2.92
100	11.74	33.96	25.85		.345	2.70
150	11.49	34.31	26.17		.447	1.20
200	10.18	34.31	26.40		.536	1.48
250	9.75	34.39	26.54		.617	0.90
300	9.45	34.45	26.63		.693	0.38
400	7.79	34.38	26.84		.831	0.42
500	6.94	34.43	27.00		.952	0.20
600	6.17	34.47	27.13		1.061	0.22

STATION 127.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°28' 115°10'; October 17, 1952; 0744 GCT; wire angle: 0°; sounding: 2200 fms; depth of observation: 604 m; weather: cloudy; sea: calm; wind: calm.

0	21.26	33.64	23.41	.000	5.36
10	21.04	33.60	23.44	.045	5.32
20	19.62	33.49	23.73	.088	5.50
30	17.23	33.29	24.17	.128	5.92
50	14.58	33.28	24.76	.197	5.95
75	13.10	33.63	25.33	.271	4.13
100	10.57	33.64	25.81	.332	3.72
150	9.93	34.05	26.24	.433	2.44
200	10.06	34.33	26.44	.519	0.97
250	9.68	34.51	26.64	.597	0.64
300	9.20	34.52	26.73	.668	0.31
400	7.76	34.53	26.96	.795	0.27
500	6.77	34.44	27.03	.910	0.28
600	6.03	34.43	27.12	1.017	0.24

STATION 130.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°30' 113°28'; October 18, 1952; 1244 GCT; wire angle: 0°; sounding: 41 fms; depth of observation: 51 m; weather: clear; sea: slight; wind: 350°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	23.54	33.86	22.94		.000	4.98
10	23.55	33.87	22.94		.049	5.03
20	22.22	33.78	23.25		.097	5.09
30	18.67	33.57	24.03		.140	5.65
50	16.28	33.49	24.54		.213	5.48

STATION 130.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°18' 113°43'; October 18, 1952; 0932 GCT; wire angle: 8°; sounding: 70 fms; depth of observation: 74 m; weather: clear; sea: moderate; wind: 320°, force 4.

0	24.19	34.07	22.90		.000	4.96
10	24.18	34.11	22.94		.050	4.81
20	24.21	34.09	22.91		.099	4.78
30	18.60	33.43	23.94		.144	5.59
50	15.90	33.51	24.65		.217	5.65
75	(13.68)	(33.81)	(25.35)		(.291)	(3.87)

STATION 130.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°09' 114°05'; October 18, 1952; 0543 GCT; wire angle: 15°; sounding: 1150 fms; depth of observation: 1186 m; weather: clear; sea: moderate; wind: 360°, force 2.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	24.47	34.05	22.81		.000	4.85
10	24.45	34.09	22.84		.050	5.00
20	24.44	33.86	22.67		.102	5.20
30	18.60	33.46	23.97		.147	5.51
50	14.47	33.28	24.78		.219	6.23
75	12.77	33.61	25.38		.291	4.25
100	11.49	33.79	25.77		.353	3.05
150	10.82	34.24	26.24		.455	1.73
200	10.48	34.47	26.48		.541	0.83
250	9.57	34.43	26.60		.618	1.01
300	9.64	34.54	26.67		.692	0.40
400	7.84	34.48	26.91		.825	0.32
500	6.60	34.40	27.02		.942	0.26
600	5.78	34.43	27.15		1.048	0.27
700	5.23	34.47	27.25		1.143	0.30
800	4.75	34.49	27.32		1.231	0.37
1000	3.98	34.52	27.43		1.391	0.61

STATION 130.50 (Interpolated Values at Standard Depths)

PACLINA T.: 25°49' 114°46'; October 17, 1952; 2325 GCT; wire angle: 5°; sounding: 2060 fms; depth of observation: 599 m; weather: clear; sea: smooth; wind: 320°, force 1.

0	21.94	33.71	23.28		.000	5.15
10	21.45	33.69	23.40		.046	5.23
20	21.25	33.71	23.47		.090	5.27
30	19.60	33.44	23.70		.133	5.90
50	14.57	33.31	24.78		.208	5.94
75	11.90	33.43	25.41		.280	4.70
100	10.98	33.75	25.83		.340	3.29
150	9.75	34.11	26.32		.438	2.27
200	9.65	34.46	26.61		.519	1.36
250	9.58	34.47	26.63		.593	0.54
300	8.69	34.47	26.77		.663	0.39
400	7.41	34.46	26.96		.788	0.33
500	6.42	34.42	27.06		.901	0.29
600	(5.66)	(34.42)	(27.16)		(1.005)	(0.22)

STATION 130.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 25°20' 115°26'; October 17, 1952; 1653 GCT; wire angle: 7°; sounding: 2200 fms; depth of observation: 1178 m; weather: partly cloudy; sea: smooth; wind: 270°, force 1.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5 S$	ΔD (dyn.m.)	O_2 (ml/L)
0	21.75	33.57	23.22		.000	4.91
10	21.76	33.55	23.21		.047	4.95
20	21.73	33.57	23.23		.093	5.01
30	21.68	33.58	23.25		.140	5.09
50	19.25	33.68	23.97		.226	5.64
75	16.44	33.75	24.71		.316	5.50
100	13.59	33.64	25.24		.392	4.33
150	11.02	34.04	26.04		.511	2.79
200	10.00	34.27	26.40		.603	1.76
250	9.33	34.35	26.58		.683	1.28
300	9.23	34.45	26.67		.757	0.68
400	7.88	34.45	26.88		.891	0.34
500	6.88	34.41	26.99		1.011	0.25
600	6.18	34.40	27.08		1.123	0.25
700	5.54	34.41	27.17		1.226	0.30
800	4.96	34.43	27.25		1.322	0.36
1000	4.18	(34.53)	27.42		1.491	(0.51)

STATION 133.25 (Interpolated Values at Standard Depths)

PAOLINA T.: 26°04' 112°48'; October 18, 1952; 1822 GCT; wire angle: 5°; sounding: 55 fms; depth of observation: 50 m; weather: clear; sea: rough; wind: 330°, force 4.

0	23.81	33.82	22.83		.000	4.81
10	23.80	33.82	22.83		.050	4.92
20	17.25	33.62	24.42		.093	5.04
30	15.81	33.58	24.72		.127	5.22
50	13.58	33.68	25.27		.187	4.01

STATION 133.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 25°55' 113°08'; October 18, 1952; 2046 GCT; wire angle: 2°; sounding: 100 fms; depth of observation: 100 m; weather: clear; sea: moderate; wind: 360°, force 3.

Depth (m)	T (°C)	S (‰)	σ_t (mg/cm^3)	$10^5\delta$	ΔD (dyn.m.)	O_2 (ml/L)
0	23.82	33.85	22.85		.000	5.00
10	23.78	33.84	22.85		.050	5.03
20	18.27	33.55	24.12		.094	5.60
30	16.41	33.57	24.58		.130	5.34
50	14.60	33.53	24.95		.194	5.09
75	12.98	33.71	25.42		.265	3.80
100	12.66	33.96	25.67		.326	2.57

STATION 137.23 (Interpolated Values at Standard Depths)

PAOLINA T.: 25°34' 112°19'; October 19, 1952; 0610 GCT; wire angle: 0°; sounding: 45 fms; depth of observation: 50 m; weather: clear; sea: slight; wind: 300°, force 2.

0	24.72	33.93	22.64		.000	4.79
10	24.74	33.95	22.65		.052	4.78
20	23.04	33.95	23.15		.102	5.08
30	19.61	33.73	23.92		.146	5.54
50	15.78	33.48	24.65		.219	5.75

STATION 137.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 25°20' 112°44'; October 19, 1952; 0201 GCT; wire angle: 10°; sounding: 140 fms; depth of observation: 124 m; weather: clear; sea: rough; wind: 320°, force 4.

0	24.10	33.86	22.77		.000	5.14
10	24.09	33.86	22.77		.051	4.86
20	23.98	33.89	22.83		.102	4.88
30	21.00	33.89	23.67		.148	5.47
50	17.10	33.74	24.54		.225	5.50
75	14.40	33.46	24.93		.305	5.42
100	12.83	33.70	25.44		.376	3.40

DISTRIBUTION LIST

Dr. E. H. Ahlstrom
U. S. Fish & Wildlife Service
c/o Scripps Institution of Oceanography
La Jolla, California

British Joint Services
(Navy Staff)
1910 K Street N.W.
Washington, D. C.

Librarian (4)
Department of Fish & Game
California State Fisheries Laboratory
Terminal Island, California

Chief, Division of Fisheries
Commonwealth Scientific & Industrial
Research Organization
P. O. Box 21
Crunulla, NSW, AUSTRALIA

Herrn Professor Dr. A. Defant
Sternwartestrasse 38
Innsbruck
AUSTRIA

Mr. Seth Gordon, Director
California Department of Fish & Game
Marine Fisheries Branch
926 J Street
Sacramento 14, California

Mr. John Hawk
c/o Seafarers' International Union
of North America
450 Harrison Street
San Francisco 5, California

Mr. Milton C. James
Pacific Mar. Fish. Comm.
340 State Office Building
1400 S. W. Fifth Avenue
Portland 1, Oregon

Mr. Joseph Mardesich
Franco-Italian Packing Company
Fish Harbor Wharf
Terminal Island, California

Dr. J. L. McHugh
Virginia Fisheries Laboratory
Gloucester Point, Virginia

Dr. Rolf L. Bolin
Hopkins Marine Station
Pacific Grove, California

Mr. J. G. Burnette, Chairman
Marine Research Committee
P. O. Box 807
Los Altos, California

Mr. Ray Cannon
Research Education
Ocean Fish Protective Association
645 N. Serrano Street
Los Angeles 4, California

Dr. R. S. Croker
California Department of Fish & Game
926 J Street
Sacramento 14, California

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

Hancock Library of Biology & Oceanography
Allan Hancock Foundation
University of Southern California
Los Angeles 7, California

Dr. Robert W. Hiatt
University of Hawaii
Honolulu, T. H.

Dr. H. Kitamura
Oceanographic Section
Kobe Marine Observatory
Kobe, JAPAN

Mr. J. C. Marr
U. S. Fish & Wildlife Service
c/o Scripps Institution of Oceanography
La Jolla, California

Dr. H. J. McLellan
Atlantic Oceanographic Group
St. Andrews, New Brunswick
CANADA

Mr. Arthur H. Mendonca
c/o R. E. Booth Company, Inc.
280 Battery Street
San Francisco 11, California

Mr. John V. Morris
French Sardine Company
582 Tuna Street
Terminal Island, California

Dr. Yngve H. Olsen
Journal of Marine Research
Yale University
New Haven, Connecticut

Dr. E. L. Pickard
Institute of Oceanography
University of British Columbia
Vancouver, B. C.
CANADA

Dr. D. W. Pritchard
Chesapeake Bay Institute
The Johns Hopkins University
121 Maryland Hall
Baltimore 18, Maryland

Dr. Gordon A. Riley
Bingham Oceanographic Foundation
Yale University
New Haven, Connecticut

Mr. J. F. Theodore Saur
Code 2235
U. S. Navy Electronics Laboratory
San Diego 52, California

Dr. M. B. Schaefer
Inter-American Tropical Tuna Commission
c/o Scripps Institution of Oceanography
La Jolla, California

Mr. O. E. Sette, Chief
Ocean Research
U. S. Fish & Wildlife Service
450-B Jordan Hall
Stanford, California

Mr. W. E. Stewart
c/o California State Chamber of Commerce
350 Bush Street
San Francisco 4, California

Dr. R. C. Miller
California Academy of Sciences
Golden Gate Park
San Francisco 18, California

Dr. A. W. H. Needler, Director
Pacific Biological Station
Nanaimo, B. C.
CANADA

Librarian
Pacific Oceanic Fishery Investigations
P. O. Box 3830
Honolulu, T. H.

Mr. Don Powell
U. S. Fish & Wildlife Service
2725 Montlake Boulevard
Seattle 2, Washington

Dr. Roger Revelle
University of California
Scripps Institution of Oceanography
La Jolla, California

Mrs. Margaret K. Robinson
University of California
Scripps Institution of Oceanography
La Jolla, California

Mr. Don T. Saxby
California Packing Corporation
215 Freemont Street
San Francisco, California

Library
Scripps Institution of Oceanography
La Jolla, California

President Robert G. Sproul
University of California
Berkeley 4, California

Miss Margaret Storey, Librarian
Natural History Museum
Stanford, California

Dr. Harald U. Sverdrup
Norwegian Polar Institute
Observatoriegt 1
Oslo, NORWAY

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

Library (2)
U. S. Navy Electronics Laboratory
San Diego 52, California

University of California (2)
General Library
Berkeley 4, California
Att'n: Gifts & Exchange Department

Librarian
University of Washington
Oceanographic Laboratories
Friday Harbor, Washington

Director
University of Washington
School of Fisheries
Seattle 4, Washington

Mr. Richard C. Vetter
Geophysics Branch
Office of Naval Research
Washington 25, D. C.

Dr. Boyd W. Walker
University of California
Department of Zoology
Los Angeles 24, California

Department of Oceanography
Texas A.& M. College
College Station, Texas

U. S. Hydrographic Office (2)
Navy Department
Washington 25, D. C.
Att'n: Mr. John Lyman

University of California
Department of Zoology
Berkeley 4, California

Director
University of Miami
Marine Laboratory
Coral Gables, Florida

Librarian (2)
University of Washington
Oceanographic Laboratories
Seattle 5, Washington

Mr. Gilbert C. Van Camp, Sr.
772 Tuna Street
Terminal Island, California

Dr. Lionel A. Walford
Chief, Branch of Fishery Biology
U. S. Fish & Wildlife Service
Washington 25, D. C.

Director
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts