

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6707  
19 June - 20 July 1967

and

CalCOFI Cruise 6712  
5-20 December 1967

SIO Reference 69-8

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Sponsored by  
Marine Research Committee

SIO Reference 69-8

Approved for distribution:

*W. A. Nierenberg*  
W. A. Nierenberg, Director

CONTENTS

INTRODUCTION . . . . .	iii
CRUISE 6707	
List of Figures . . . . .	viii
Personnel . . . . .	x
Tabulated Data . . . . .	1
CRUISE 6712	
List of Figures . . . . .	xii
Personnel . . . . .	xiv
Tabulated Data . . . . .	47
DISTRIBUTION LIST . . . . .	69



## INTRODUCTION

The data in this report were collected on Cruises 6707 and 6712 of the California Cooperative Fisheries Investigations (CalCOFI) program by the RV Ellen B. Scripps and RV Horizon of the Scripps Institution of Oceanography. The first two digits in this cruise-numbering system represent the year of the cruise; the last two digits, the month. The cruises preceding these in the series are 6607, 6609 and Special Cruise 6608 all of which appear in SIO Ref. 68-21; and 6610, 6612 and Special Cruise 6611 all of which appear in SIO Ref. 69-2.

These data were collected in part and processed completely by personnel of the Data Collection and Processing Group (DCPG, MLR), Scripps Institution of Oceanography.

### TABULATED DATA

Data for both cruises presented in this report were obtained by bottle casts and by the in situ Salinity/Temperature/Depth Monitoring and Recording System (STD) and appear in two forms:

1. For each station on which an STD lowering was made, temperature and salinity values at standard levels of depth were read, corrections applied as indicated by continuing comparison with the bottle cast observations and the usual computations carried out. These data appear on the right half of the page under Standard Levels of Depth.

2. For those stations on which a bottle cast only was made or on which a bottle cast was made in addition to the STD lowering, the bottle cast data appear on the left of the page under Observed Levels of Depth, and standard depth values interpolated and computed from the bottle cast data, to the right.

The data tabulated are of the same type as have previously appeared in these reports; the column headings from the computer are explained as follows:

Z	Depth in meters	
T	Temperature	° C
S	Salinity	‰
OXY	Oxygen	ml/L
PHO	Phosphate	µg at/L
SIL	Silicate	µg at/L
NIT	Nitrite	µg at/L
D*T	$\delta T$	cl/ton
SIG*T	$\sigma_t$	g/L
DD	$\Delta D$	dyn. m

## STANDARD PROCEDURES

### In situ Salinity/Temperature/Depth Recorder

The manufacturer of the STD claims for the temperature an accuracy of  $\pm 0.05^{\circ}\text{C}$  on all ranges with repeatability of  $\pm 0.01^{\circ}\text{C}$  and for the salinity an accuracy of  $\pm 0.03\text{‰}$  on all ranges with repeatability of  $\pm 0.01\text{‰}$ .<sup>1/</sup> Except for the depth range corresponding to the steepest part of the thermocline, where the salinity trace appears to fluctuate more widely than the bottle samples can confirm, the results of this cruise support the manufacturer's claims.

Continuing comparison of the data from each STD lowering with the sample bottle observations for the corresponding location resulted in the following corrections being applied to the standard depth values tabulated for the STD.

For Cruise 6707 the temperature was accepted without correction but attempts at adjusting the salinity resulted in corrections varying from  $-0.53\text{‰}$  to  $+0.05\text{‰}$ . This wide range was not the result of sensor malfunction but of various adjustments made to keep the analogue recorder in operation.

Cruise 6712 required temperature corrections varying with depth of  $-0.07^{\circ}\text{C}$  at the surface to  $-0.15^{\circ}\text{C}$  at 500 meters. The salinity again required a greater correction varying from  $+0.40\text{‰}$  to  $-0.04\text{‰}$ .

### Hydrographic Casts

The observed data have been plotted and then evaluated using the method described by Klein.<sup>2/</sup> This involves consideration of their variation as functions of density or depth and their relations to each other, and comparison with concurrent bathythermograph or STD observations and with previous or adjacent observations. The Nansen-bottle-cast data are tabulated at observed depths; the values at standard depths are computer interpolations according to a modified Rattray technique,<sup>3/</sup> except that some property values at standard depths have been determined from consideration of other information such as bathythermograph traces and adjacent stations. These property values were entered in the "observed" columns to prevent instabilities or to indicate features not covered by the hydrographic cast. The values are indicated by notations (see FOOTNOTES).

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<sup>1/</sup>In situ Salinity/Temperature/Depth Monitoring and Recording System, Model 9006, Tech. Rep. No. 102, HYTECH Marine Products, The Bissett-Berman Corporation.

<sup>2/</sup>Klein, Hans T. A new technique for processing physical oceanographic data. MS.

<sup>3/</sup>Rattray, Maurice (1962). Interpolation errors and oceanographic sampling. Deep-Sea Res. 9: 25-37.



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 or the STD are recorded in hundredths of a degree. The salinity values obtained by salinometer are recorded to three decimal places, provided they meet accepted standards. The values recorded "have a reproducibility of  $\pm 0.004\%$  salinity at the 95 per cent probability level, and a probable accuracy of  $\pm 0.01\%$  salinity or better at the same level of probability."<sup>4/</sup> The values are recorded to two decimal places when only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

On stations consisting of bottle casts only, extrapolated values and values interpolated between remote observations are not indicated but can be determined from the tabulation of observed depths. A hyphen is used to indicate a missing observed or interpolated value. The time on these stations is the time of messenger release for the bottle cast. The time listed for all STD stations is the startdown time for the lowering, usually about one-half hour before the bottle cast. When more than one bottle cast was made on station, messenger times and wire angles are given in the order of increasing depth and a significant change in position during a multiple cast is listed similarly. Multiple casts are indicated by a letter following all observed depths of each cast except the cast originating at the surface. Footnotes corresponding to each letter will explain the type of cast.

On stations where more than one cast was lowered, slight discrepancies in the property values may be noted. These may be caused by changes in geographical position, real changes with time, slight errors in measurement or a combination of these factors. Values at standard depths in the area of these discrepancies may be determined from reconciliation of the plotted observed values and entered in the "observed" columns with notations.

#### FOOTNOTES

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

Values which are not used in interpolation because they seem to be in error without apparent reason are indicated by the following notation.

u: uncertain value

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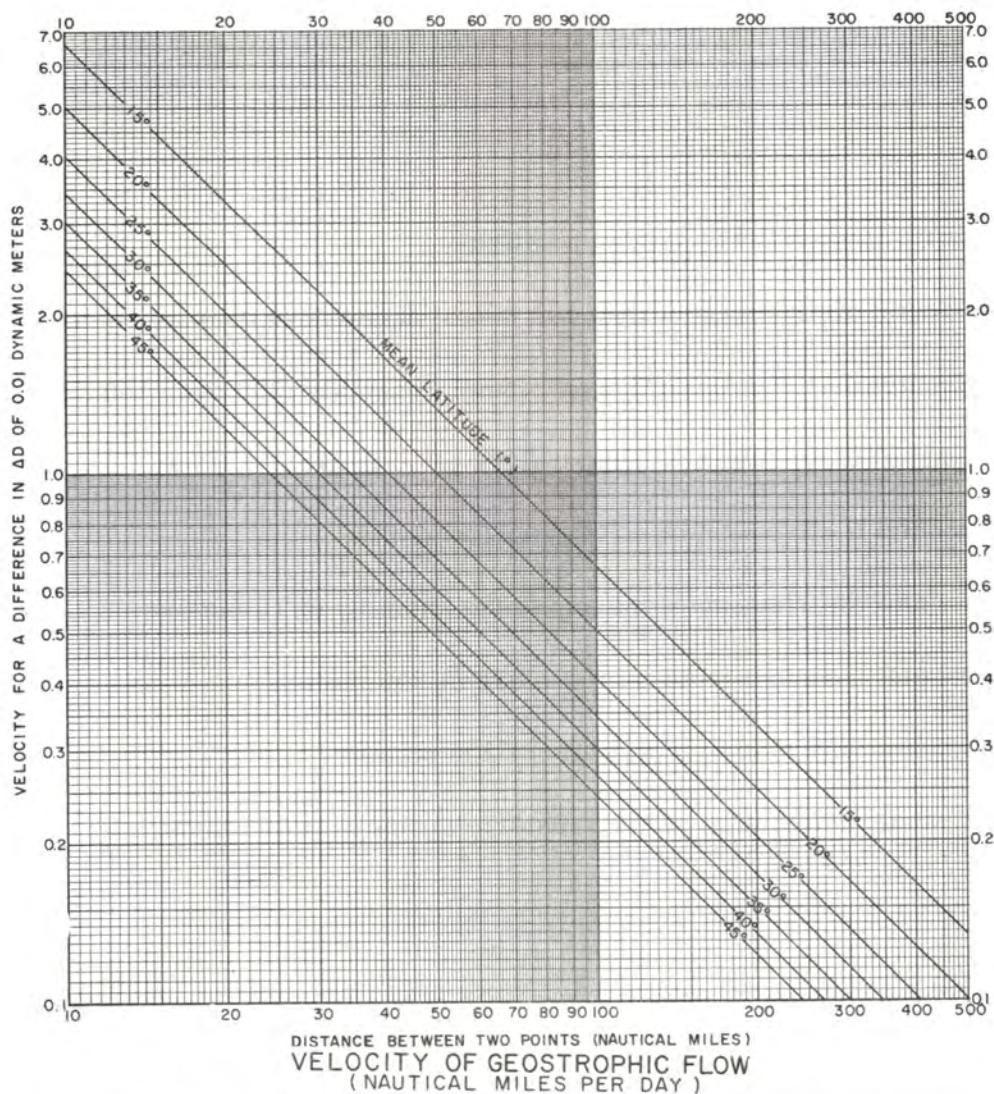
<sup>4/</sup>Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

Values at standard levels of depth entered in the observed columns to limit machine interpolations may have either of the following notations.

k: a value determined from another measurement  
such as a bathythermogram or STD recording.

g: a value determined from considerations such as  
stability or previous or surrounding stations.





cm/sec	0	1	2	3	4	5	6	7	8	9
0	<i>KNOTS</i> 0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.17	
	<i>NM/DAY</i>	0.47	0.93	1.40	1.86	2.33	2.80	3.26	3.73	4.20
10	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33	0.35	0.37
	4.66	5.13	5.59	6.06	6.53	6.99	7.46	7.93	8.39	8.86
20	0.39	0.41	0.43	0.45	0.47	0.49	0.51	0.52	0.54	0.56
	9.32	9.79	10.26	10.72	11.19	11.66	12.12	12.59	13.05	13.52
30	0.58	0.60	0.62	0.64	0.66	0.68	0.70	0.72	0.74	0.76
	13.99	14.45	14.92	15.38	15.85	16.32	16.78	17.25	17.72	18.18
40	0.78	0.80	0.82	0.84	0.85	0.87	0.89	0.91	0.93	0.95
	18.65	19.11	19.58	20.05	20.51	20.98	21.45	21.91	22.38	22.84
50	0.97	0.99	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.15
	23.31	23.78	24.24	24.71	25.17	25.64	26.11	26.57	27.04	27.51
60	1.17	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.34
	27.98	28.44	28.90	29.37	29.84	30.30	30.77	31.24	31.70	32.17
70	1.36	1.38	1.40	1.42	1.44	1.46	1.48	1.50	1.52	1.53
	32.63	33.10	33.57	34.03	34.50	34.96	35.43	35.90	36.36	36.83
80	1.55	1.57	1.59	1.61	1.63	1.65	1.67	1.69	1.71	1.73
	37.30	37.76	38.23	38.69	39.16	39.63	40.09	40.56	41.03	41.49
90	1.75	1.77	1.79	1.81	1.83	1.85	1.86	1.88	1.90	1.92
	41.96	42.42	42.89	43.36	43.82	44.29	44.76	45.22	45.69	46.15
100	1.94	1.96	1.98	2.00	2.02	2.04	2.06	2.08	2.10	2.12
	46.62	47.09	47.55	48.02	48.48	48.95	49.42	49.88	50.35	50.82

CONVERSION TABLE  
(CENTIMETERS / SECOND - KNOTS - NAUTICAL MILES / DAY)

1cm/sec = 0.019 kts = 0.466 NAUTICAL MILES / DAY  
 1kt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec  
 1NAUTICAL MILE / DAY = 0.042 kts = 2.14 cm/sec



FIGURES  
Cruise 6707

1. CalCOFI Cruise 6707, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

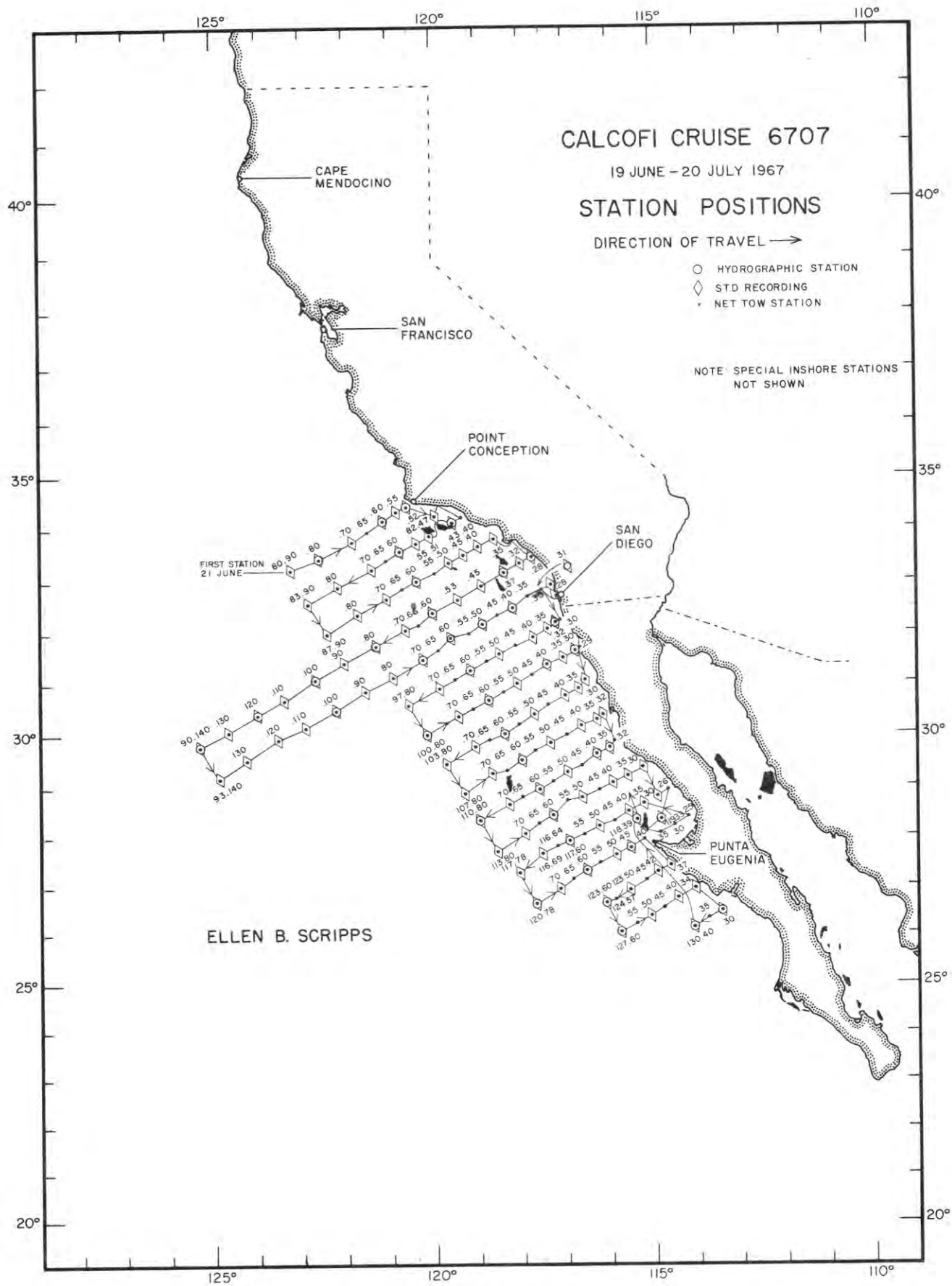


FIGURE 1



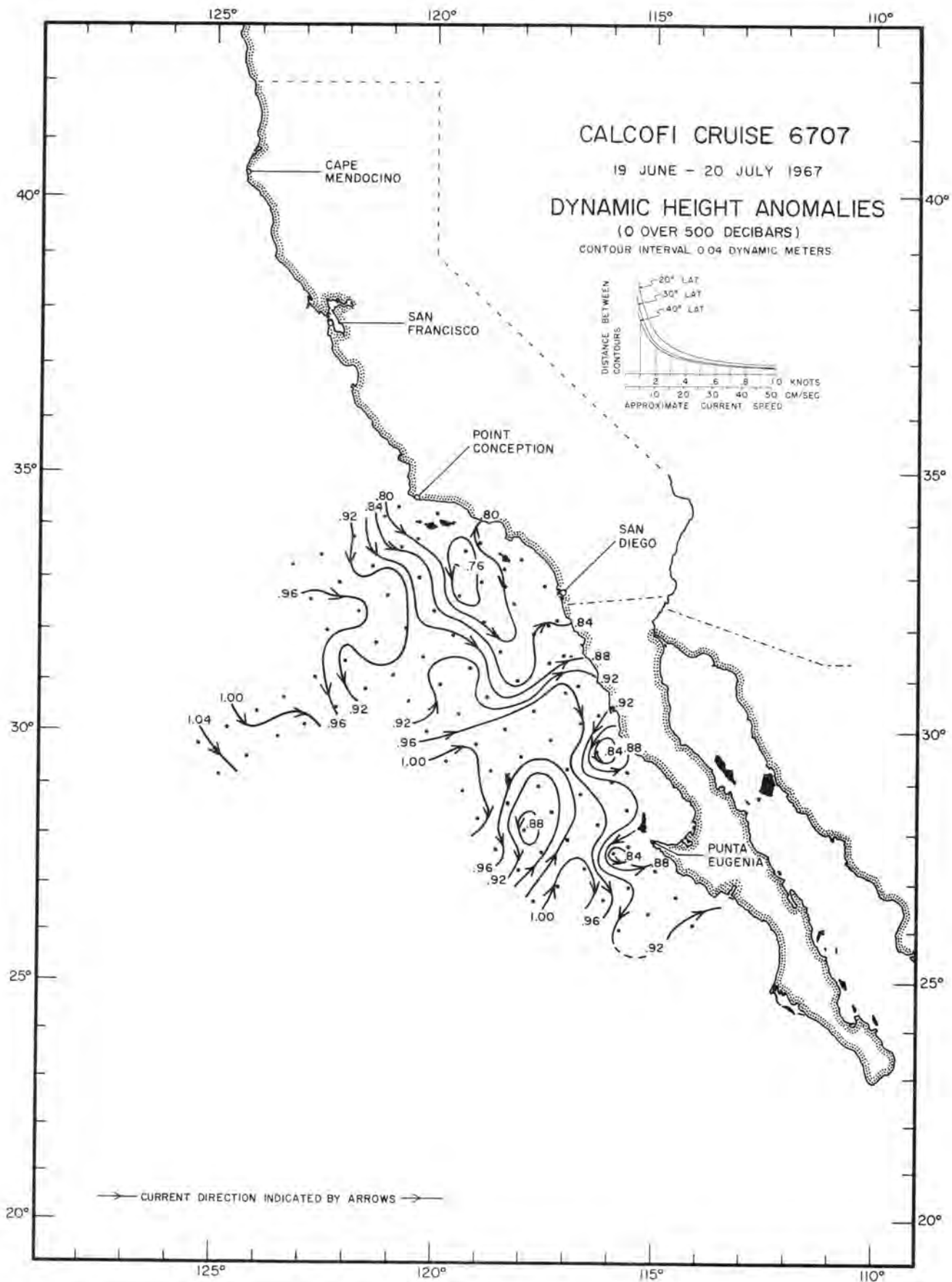


FIGURE 2

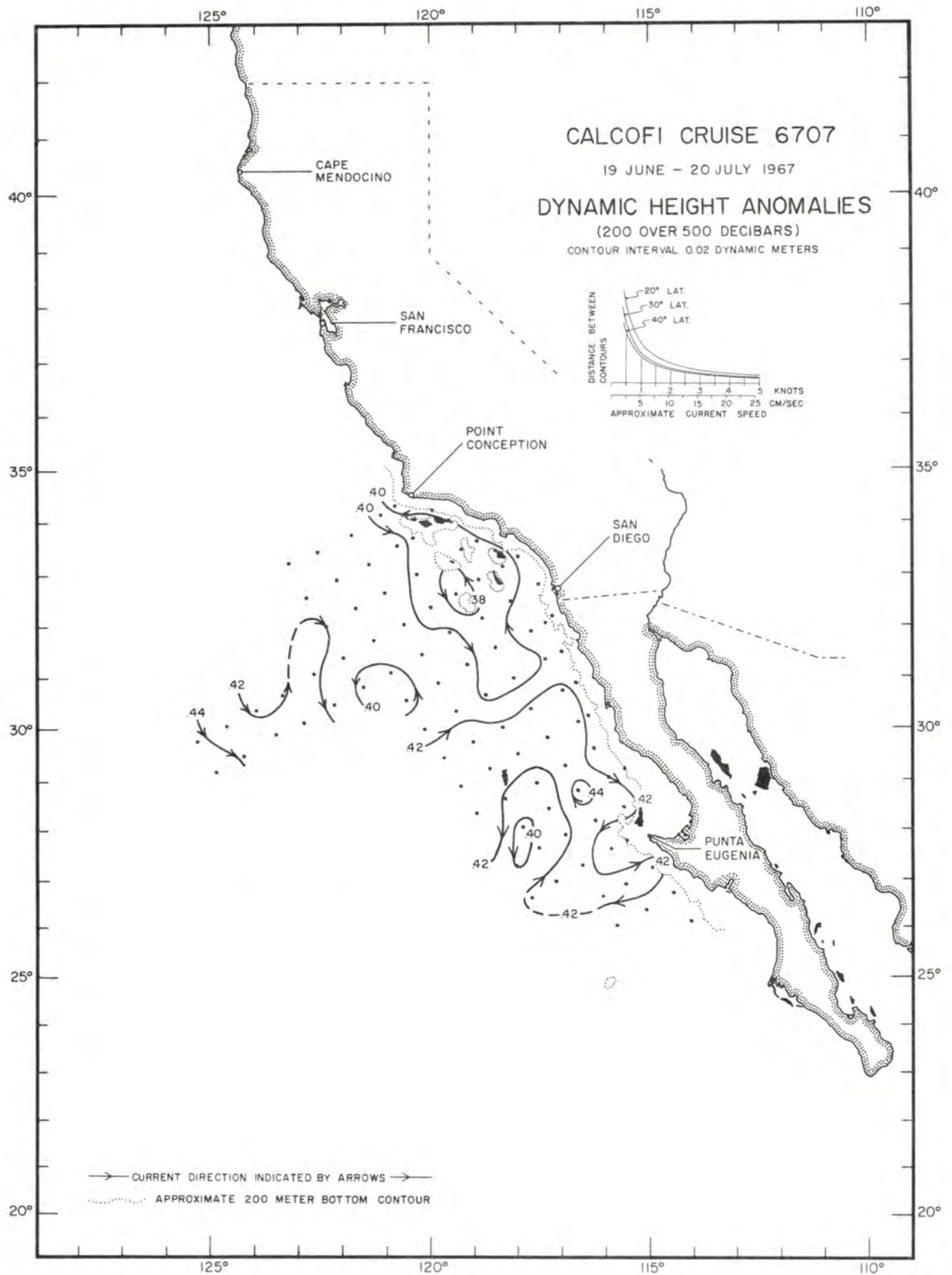


FIGURE 3



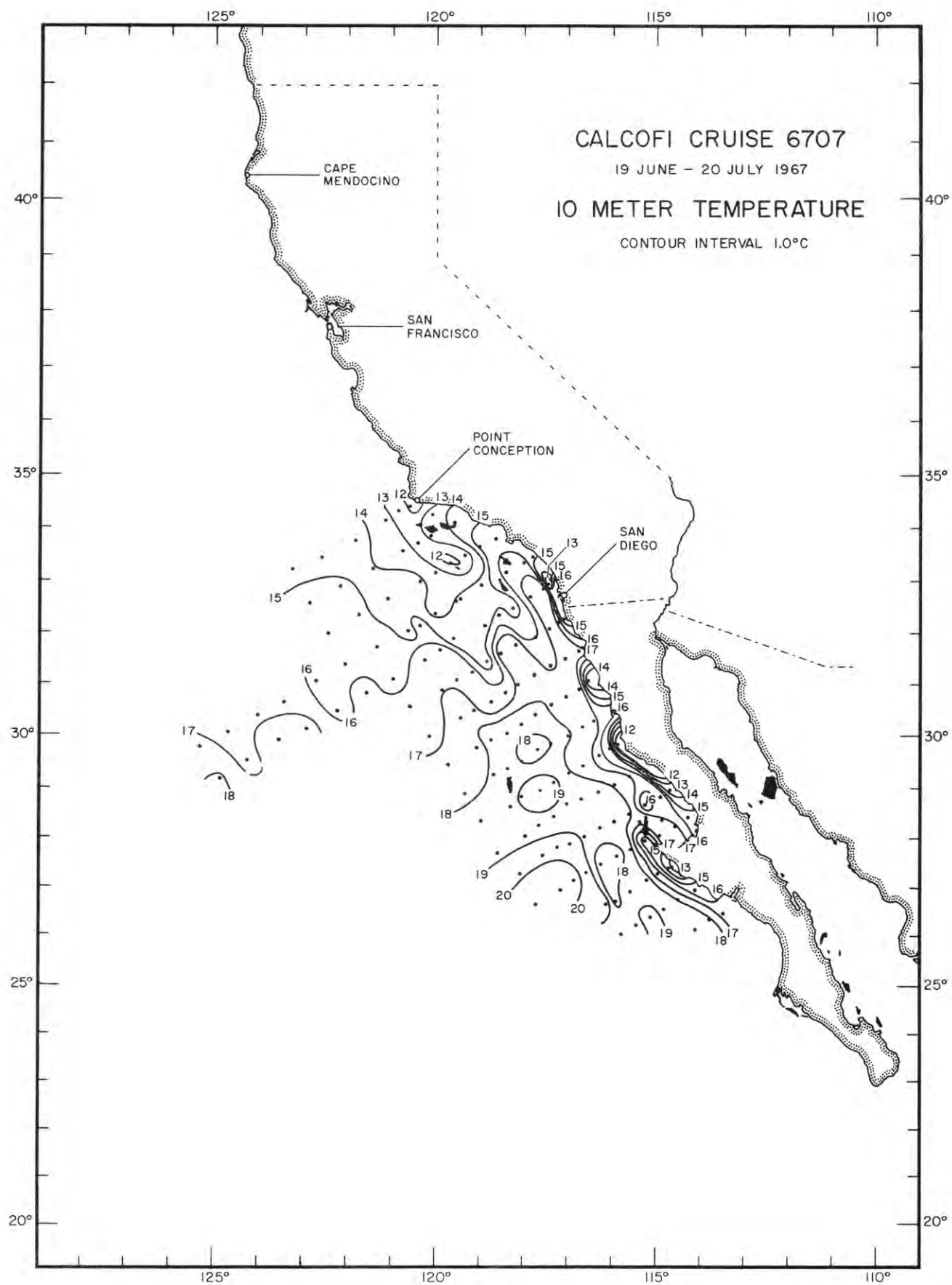


FIGURE 4

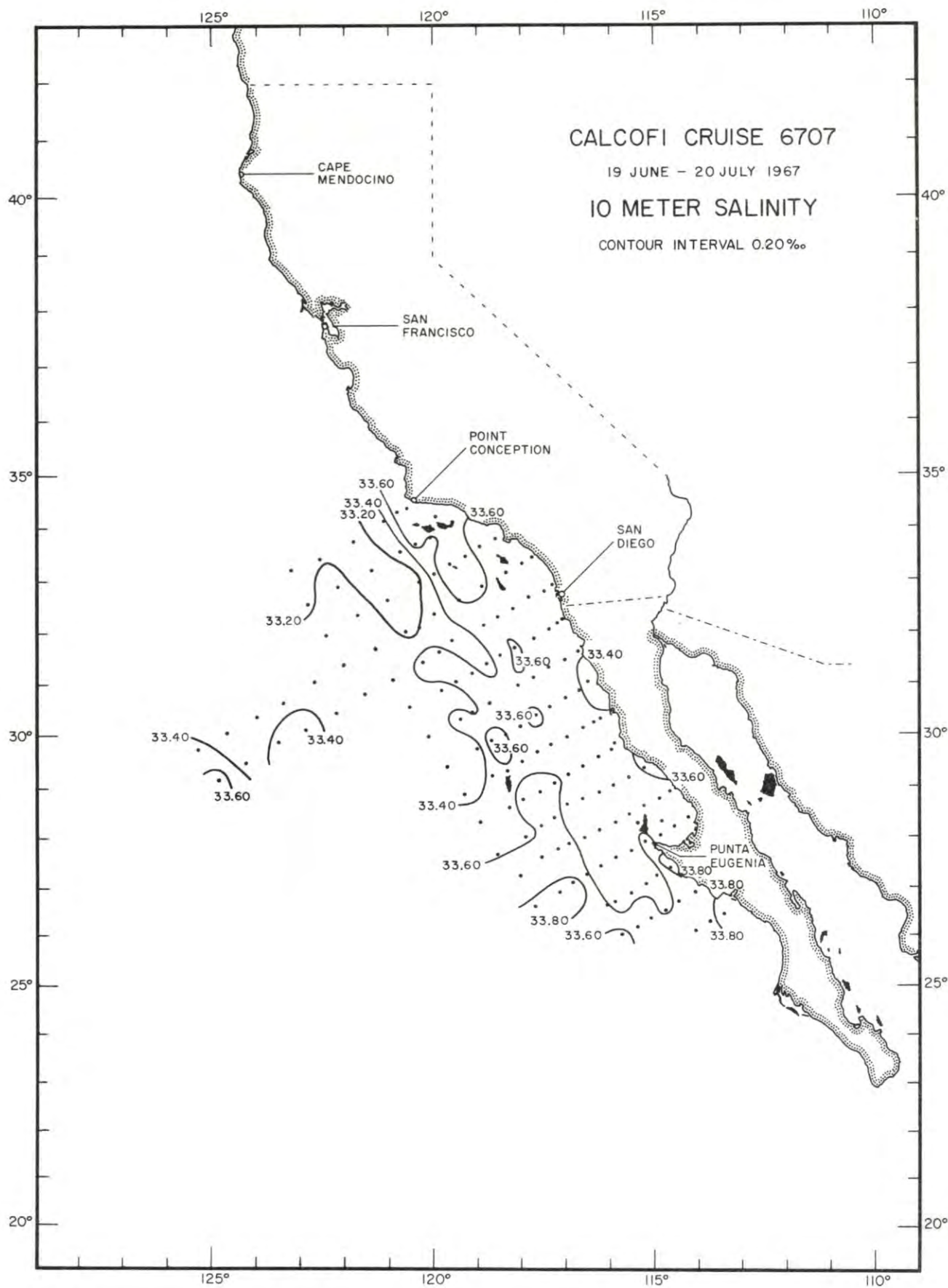


FIGURE 5



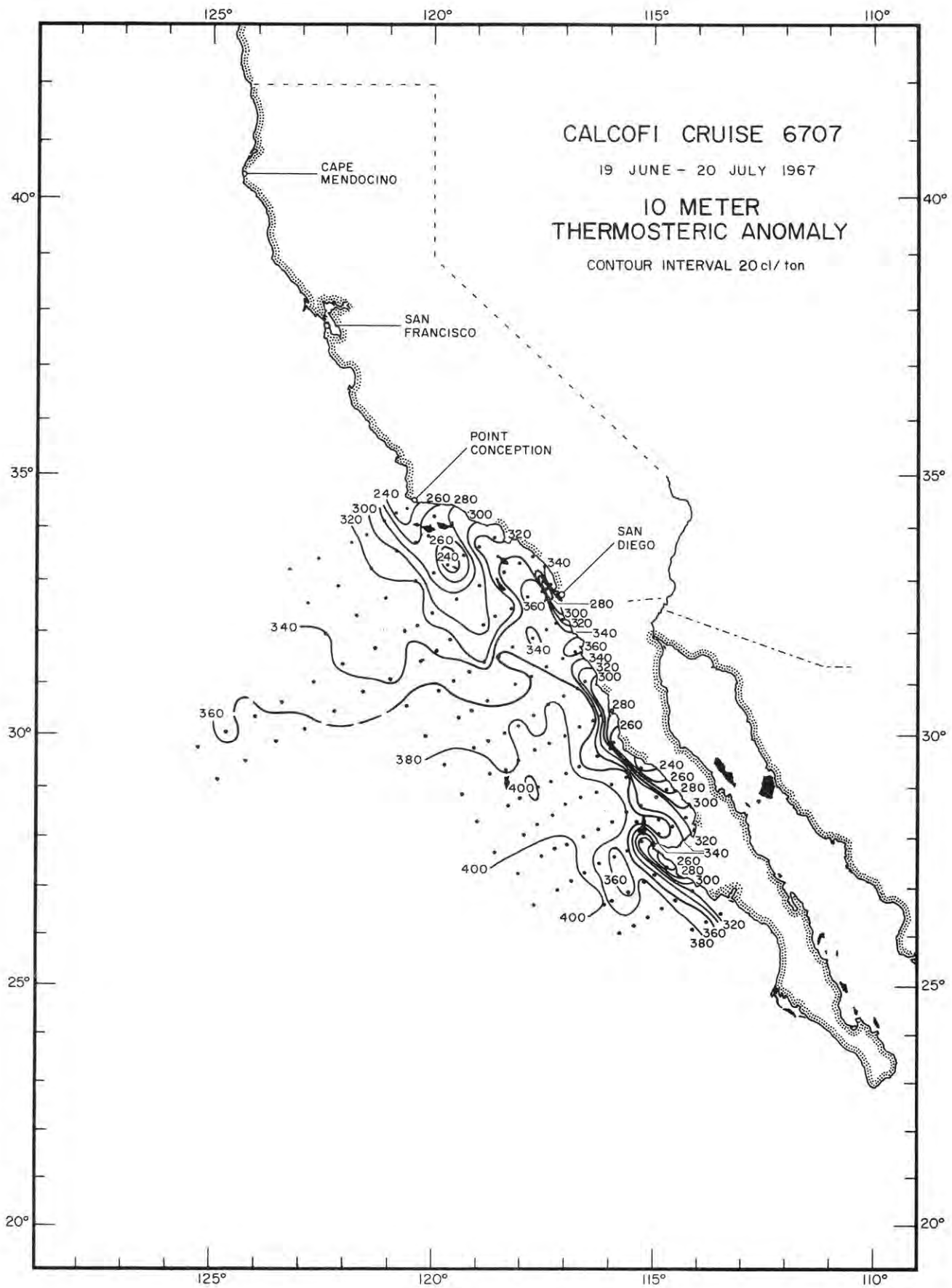


FIGURE 6

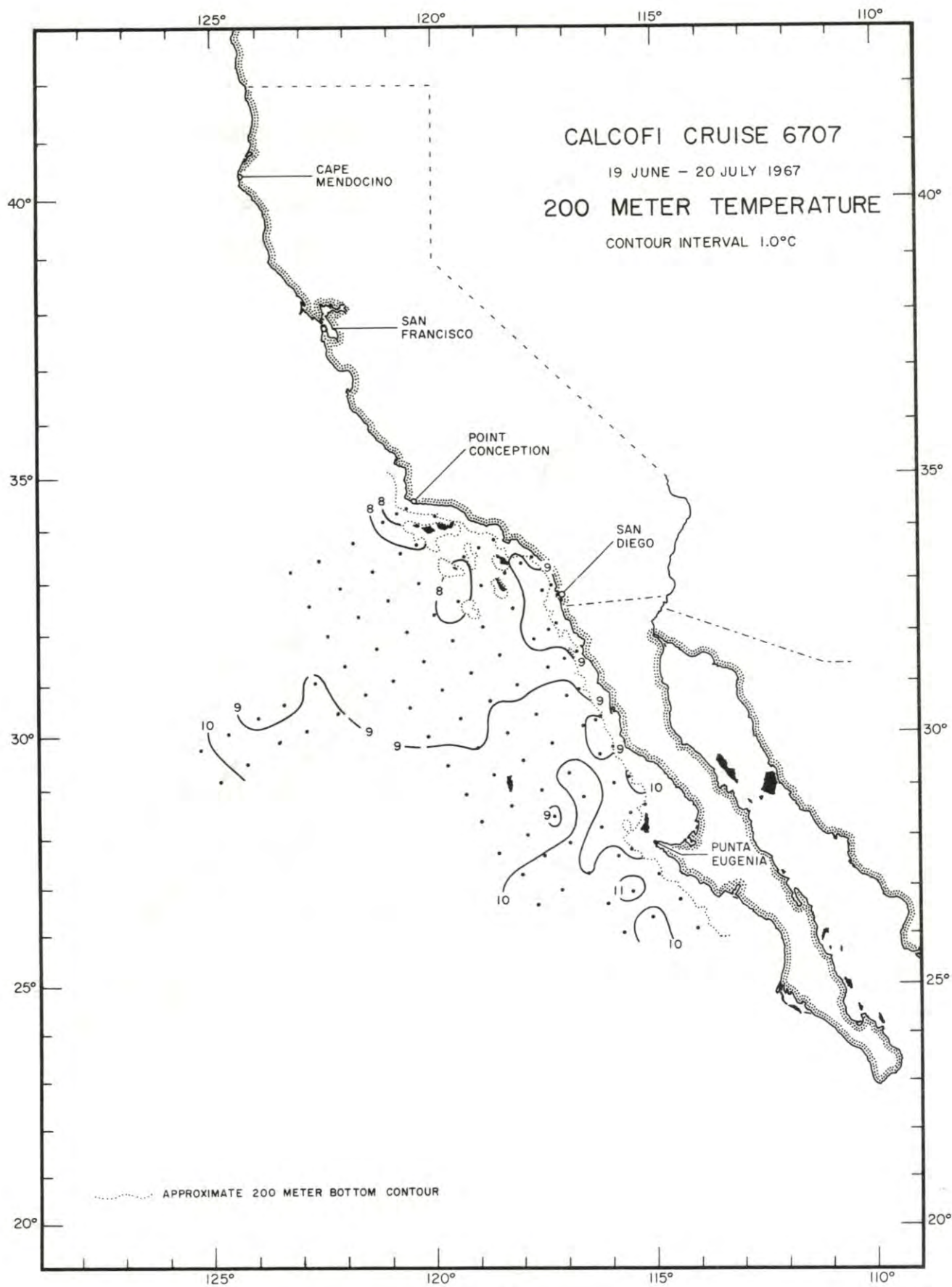


FIGURE 7



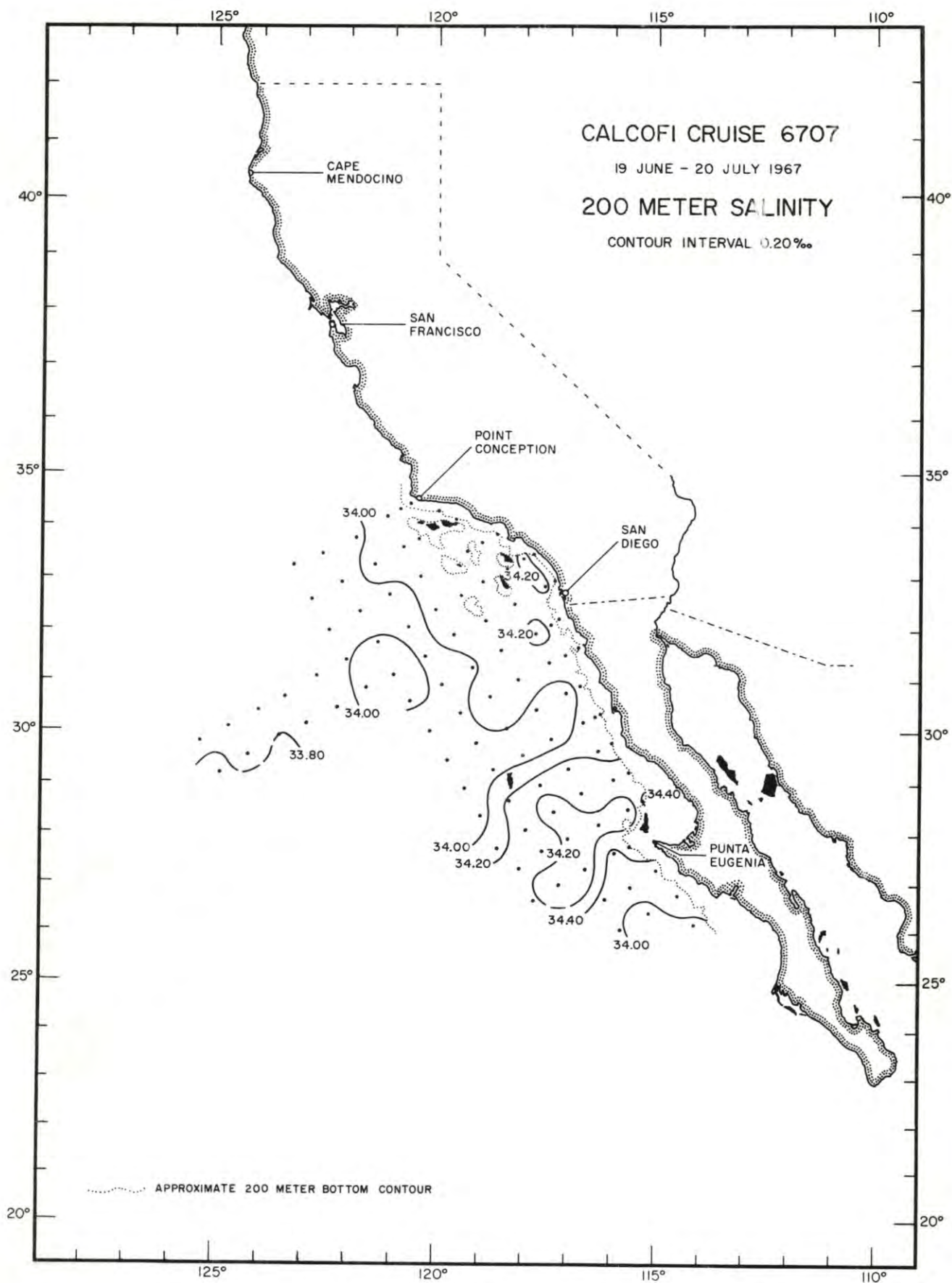


FIGURE 8

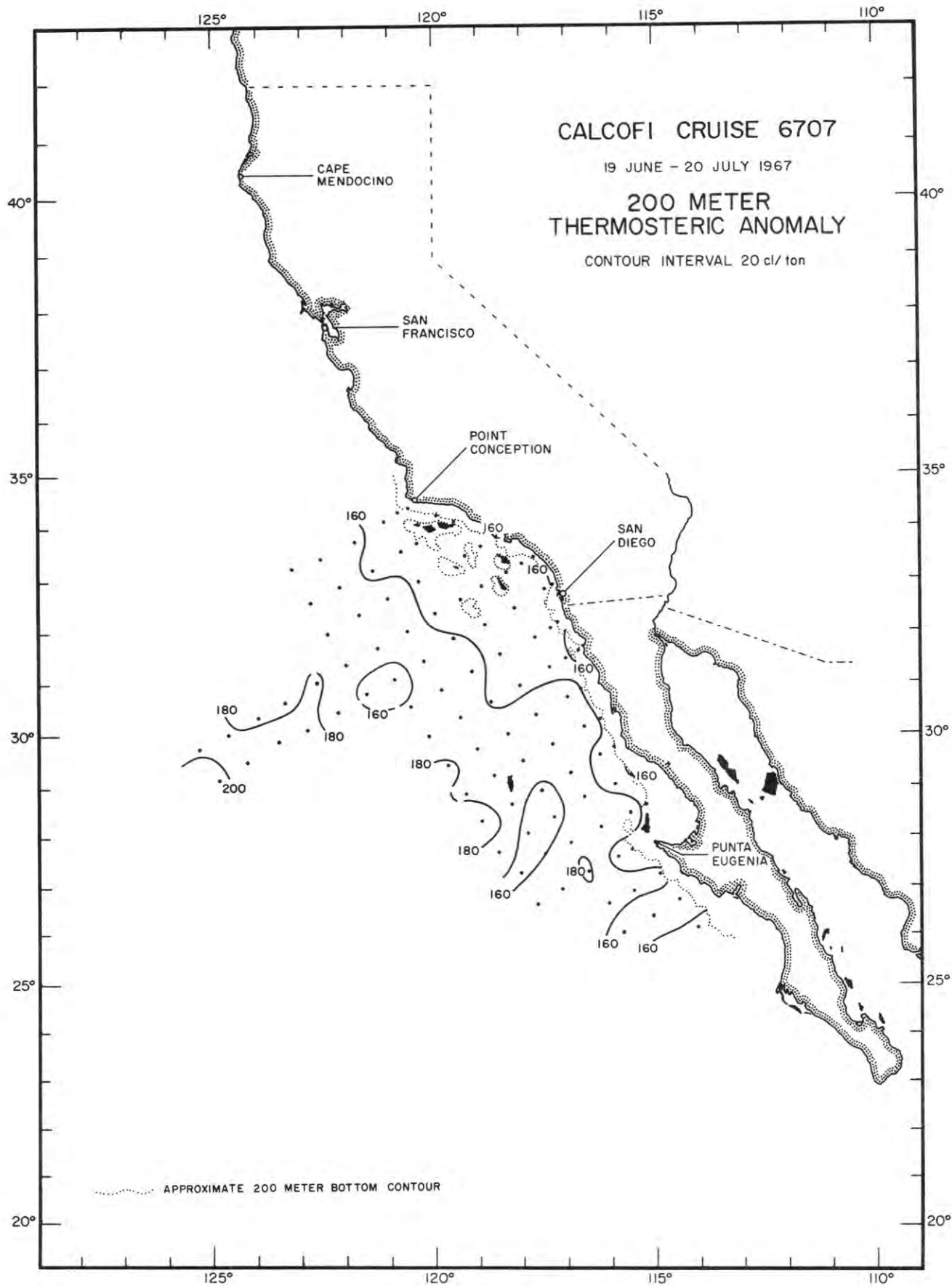


FIGURE 9

PERSONNEL  
Cruise 6707

SHIP'S CAPTAIN

Miller, Frank, RV Ellen B. Scripps

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Ellen B. Scripps

Bryan, Walter R., Senior Marine Technician (in charge)  
Daniel, Dick A., Marine Technician  
Graham, Jerry B., Electronics Technician  
Hamlin, Burnette W., Marine Technician  
Kellogg, Durrant, Marine Technician  
Palmer, Don H., Marine Technician  
Reeder, David G., Biological Technician, Bureau of Commercial Fisheries



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.52 CALCOFI CRUISE 6707 80.52														
ELLEN B. SCRIPPS, JUNE 22 1967, 0928 GMT, 34 24.5N 120 36.5W, SOUNDING 170 FM, WIND 330 FORCE 6, WEATHER MISSING, SEA VERY ROUGH.														
								0	11.95	33.78	-	25.67	232.8	0
								10	11.94	33.78	-	25.67	232.6	.023
								20	11.15	33.80	-	25.83	217.3	.046
								30	10.84	33.81	-	25.90	211.2	.067
								50	10.12	33.85	-	26.05	196.4	.108
								75	9.45	33.91	-	26.21	181.3	.156
								100	9.20	33.96	-	26.29	173.8	.201
								125	8.98	33.99	-	26.35	168.2	.244
								150	8.83	34.03	-	26.41	163.0	.286
								200	8.56	34.09	-	26.50	154.5	.367
								250	8.25	34.14	-	26.58	146.3	.444

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.52 CALCOFI CRUISE 6707 80.52														
ELLEN B. SCRIPPS, JUNE 22 1967, 1006 GMT, 34 24.5N 120 36.5W, SOUNDING 170 FM, WIND 330 FORCE 6, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 16.														
1	12.16	33.724	5.76	-	-	-	240.7	0	12.16	33.724	5.76	25.59	240.7	0
11	12.10	33.732	5.77	-	-	-	239.0	10	12.12	33.730	5.79	25.60	239.6	.024
31	10.72	33.803	4.24	-	-	-	209.7	20	11.55	33.759	5.20	25.73	227.2	.047
45	10.06	33.854	3.27	-	-	-	195.1	30	10.80	33.799	4.34	25.90	211.5	.069
55	9.58	33.910	2.74	-	-	-	183.3	50	9.80	33.883	2.97	26.13	188.8	.110
71	9.44	33.928	2.71	-	-	-	179.8	75	9.41	33.929	2.70	26.23	179.3	.156
85	9.36	33.934	2.65	-	-	-	178.1	100	9.28	33.958	2.55	26.28	175.1	.201
105	9.25	33.967	2.51	-	-	-	174.0	125	9.17	33.991	2.40	26.32	171.0	.244
130	9.14	33.994	2.40	-	-	-	170.3	150	9.00	33.997	2.50	26.35	168.0	.287
150	9.00	33.997	2.50	-	-	-	168.0							

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.55 CALCOFI CRUISE 6707 80.55														
ELLEN B. SCRIPPS, JUNE 22 1967, 0640 GMT, 34 20N 120 50W, SOUNDING 450 FM, WIND 320 FORCE 6, WEATHER CLOUDY, SEA VERY ROUGH.														
								0	12.16	33.76	-	25.62	238.0	0
								10	12.16	33.76	-	25.62	238.0	.024
								20	12.11	33.77	-	25.63	236.4	.048
								30	11.50	33.76	-	25.74	226.3	.071
								50	9.79	33.83	-	26.09	192.6	.113
								75	9.08	34.00	-	26.34	169.0	.158
								100	8.80	34.06	-	26.43	160.3	.200
								125	8.69	34.07	-	26.46	157.9	.240
								150	8.57	34.09	-	26.49	154.7	.280
								200	8.34	34.15	-	26.58	146.9	.357
								250	8.16	34.17	-	26.62	142.8	.431
								300	7.83	34.20	-	26.69	135.9	.503
								400	7.09	34.22	-	26.81	124.4	.639
								500	6.41	34.25	-	26.93	113.4	.765
								600	5.89	34.26	-	27.00	106.3	.882

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.60 CALCOFI CRUISE 6707 80.60														
ELLEN B. SCRIPPS, JUNE 22 1967, 0216 GMT, 34 09N 121 09W, SOUNDING 1200 FM, WIND 330 FORCE 6, WEATHER OVERCAST, SEA HIGH.														
								0	13.29	33.39	-	25.11	286.3	0
								10	13.28	33.39	-	25.11	286.1	.029
								20	13.19	33.41	-	25.14	282.9	.057
								30	11.97	33.43	-	25.40	258.9	.084
								50	11.35	33.60	-	25.64	235.5	.134
								75	10.11	33.72	-	25.96	205.8	.189
								100	9.57	33.81	-	26.12	190.6	.239
								125	8.96	33.93	-	26.31	172.3	.285
								150	8.51	33.98	-	26.42	162.0	.328
								200	7.96	34.07	-	26.57	147.4	.407
								250	7.55	34.10	-	26.65	139.5	.480
								300	6.98	34.13	-	26.76	129.6	.550
								400	6.48	34.15	-	26.84	121.8	.680
								500	5.86	34.23	-	26.98	108.2	.801
								600	5.36	34.30	-	27.10	97.2	.911

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

INPUT							COMPUTED		INPUT							COMPUTED	
Z	T	S	XY	PHU	SIL	NIT	D*F	Z	T	S	OXY	SIG*F	D*F	DD			
80.60							CALCOFI CRUISE 6707								80.60		
ELLEN B. SCRIPPS, JUNE 22 1967, 0326 GMT, 34 09N 121 09W, SOUNDING 1200 FM, WIND 330 FORCE 6, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 21.																	
1	13.37	33.386A	6.24	-	-	-	288.1	0	13.37	33.386	6.24	25.09	288.1	0			
11	13.34	33.384	6.23	-	-	-	287.7	10	13.35	33.383	6.24	25.09	287.8	.029			
20	13.27K	-	-	-	-	-	-	20	13.27	33.404	6.09	25.12	284.9	.057			
35	12.10	33.469	5.82	-	-	-	258.4	30	12.50	33.443	5.91	25.31	267.6	.085			
44	11.94	33.521	5.75	-	-	-	251.7	50	11.70	33.561	5.55	25.55	244.5	.137			
60	11.18	33.619	5.13	-	-	-	231.1	75	10.32	33.655	4.61	25.87	214.0	.194			
74	10.36	33.650	4.67	-	-	-	215.1	100	9.46	33.811	3.18	26.14	188.7	.245			
93	9.68	33.761	3.45	-	-	-	196.0	125	8.85	33.948	2.83	26.34	169.3	.290			
116	9.02	33.914	2.84	-	-	-	174.4	150	8.32	33.977	2.82	26.44	159.4	.332			
136	8.65	33.973	2.88	-	-	-	164.5	200	7.91	34.071	2.31	26.58	146.6	.410			
163	8.06	33.980	3.39U	-	-	-	155.5	250	7.47	34.106	1.80	26.67	138.0	.483			
192	7.98	34.059	2.42	-	-	-	148.5	300	7.08	34.157	1.31	26.77	128.9	.552			
229	7.62	34.095	1.95	-	-	-	140.8	400	6.22	34.184	.88	26.90	116.0	.679			
258	7.42	34.110	1.75	-	-	-	137.0	500	5.91	34.281	.54	27.02	105.0	.796			
305	7.03	34.162	1.26	-	-	-	127.9	600	5.52	34.343	.40	27.11	95.8	.903			
363	6.44	34.158	1.06	-	-	-	120.7										
466	5.98	34.249	.58	-	-	-	108.2										
556	5.72	34.321	.46	-	-	-	99.8										
629	5.36	34.352A	.35	-	-	-	93.3										

80.70

## CALCOFI CRUISE 6707

80.70

ELLEN B. SCRIPPS, JUNE 21 1967, 1250 GMT, 33 45N 121 50W, SOUNDING 2100 FM, WIND 340 FORCE 6, WEATHER OVERCAST, SEA HIGH.

0	14.21	33.10	-	24.70	325.5	0
10	14.21	33.10	-	24.70	325.5	.033
20	14.21	33.10	-	24.70	325.5	.065
30	14.21	33.10	-	24.70	325.5	.098
50	14.20	33.17	-	24.75	320.2	.163
75	12.45	33.22	-	25.14	283.1	.238
100	11.02	33.27	-	25.45	254.2	.306
125	9.98	33.49	-	25.80	220.8	.366
150	9.32	33.70	-	26.07	194.9	.419
200	8.72	33.96	-	26.37	166.5	.511
250	7.96	34.05	-	26.56	148.9	.591
300	7.46	34.12	-	26.68	136.8	.665
400	6.45	34.18	-	26.87	119.1	.798
500	5.90	34.20	-	26.96	110.9	.919
600	5.27	34.29	-	27.10	96.9	1.030

80.80

## CALCOFI CRUISE 6707

80.80

ELLEN B. SCRIPPS, JUNE 21 1967, 1331 GMT, 33 27N 122 34.5W, SOUNDING 2140 FM, WIND 340 FORCE 6, WEATHER CLOUDY, SEA VERY ROUGH.

0	14.86	33.198	-	24.63	332.0	0
10	14.85	33.198	-	24.63	331.8	.033
20	14.85	33.198	-	24.63	331.8	.066
30	14.85	33.198	-	24.63	331.8	.100
50	14.83	33.208	-	24.64	330.7	.166
75	12.64	33.178	-	25.07	290.2	.244
100	11.10	33.258	-	25.42	257.0	.313
125	10.04	33.468	-	25.76	224.0	.374
150	9.36	33.67	-	26.04	197.7	.427
200	8.68	33.94	-	26.36	167.4	.520
250	7.91	34.03	-	26.55	149.7	.601
300	7.46	34.09	-	26.66	139.0	.676
400	6.46	34.14	-	26.84	122.3	.812
500	5.80	34.18	-	26.95	111.2	.934
600	5.29	34.25	-	27.07	100.1	1.047

- A) THE SALINITY BOTTLE ORDER DIFFERS ON THE ORIGINAL DATA AND SALINITY DETERMINATION SHEETS. THEY ARE ASSUMED TO BE IN THE CORRECT ORDER.  
 B) THERE WAS NO SALINITY RECORDS ABOVE 150 METERS. THE LISTED VALUES WERE EXTRAPOLATED FROM COMPARISON WITH THE HYDROGRAPHIC DATA FOR THE STATION.

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

INPUT							COMPUTED	INPUT							COMPUTED
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
80.80							CALCOFI CRUISE 6707							80.80	
ELLEN B. SCRIPPS, JUNE 21 1967, 1432 GMT, 33 27N 122 34.5W, SOUNDING 2140 FM, WIND 340 FORCE 6, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 20.															
1	14.90	33.211	6.04	-	-	-	331.3	0	14.90	33.211	6.04	24.64	331.3	0	
10	14.90	33.212	6.04	-	-	-	331.2	10	14.90	33.212	6.04	24.64	331.2	.033	
29	14.89	33.207	6.02	-	-	-	331.4	20	14.90	33.210	6.02	24.64	331.3	.066	
50	14.85K	33.20 G	-	-	-	-	331.1	30	14.89	33.207	6.02	24.64	331.4	.100	
56	13.72	33.157	6.19	-	-	-	311.7	50	14.85	33.200	6.12	24.64	331.1	.166	
65	12.95	33.135	6.36	-	-	-	298.6	75	12.34	33.152	6.13	25.11	286.0	.244	
79	12.14	33.165	5.98	-	-	-	281.5	100	11.13	33.250	5.28	25.41	257.6	.312	
93	11.56	33.209	5.53	-	-	-	268.0	125	9.99	33.422	4.78	25.74	226.0	.373	
106	10.76	33.290	5.08	-	-	-	248.3	150	9.49	33.653	3.86	26.01	201.0	.427	
129	9.88	33.454	4.71	-	-	-	221.8	200	8.63	33.946	3.18	26.37	166.2	.520	
148	9.52	33.634	3.93	-	-	-	202.9	250	7.86	34.028	2.70	26.55	149.1	.601	
176	9.09	33.858	3.21	-	-	-	179.6	300	7.22	34.048	2.20	26.66	138.9	.675	
204	8.55	33.955	3.17	-	-	-	164.4	400	6.29	34.109	1.28	26.83	122.5	.811	
231	8.12	34.010	2.88	-	-	-	154.1	500	5.66	34.191	.80	26.98	108.8	.933	
278	7.50	34.040	2.43	-	-	-	143.3	600	5.26	34.286	.42	27.10	97.1	1.042	
330	6.87	34.060	1.90	-	-	-	133.4								
414	6.20	34.121	1.18	-	-	-	120.5								
496	5.68	34.187	.82	-	-	-	109.3								
581	5.32	34.267	.49	-	-	-	99.2								

80.90

CALCOFI CRUISE 6707

80.90

ELLEN B. SCRIPPS, JUNE 21 1967, 0825 GMT, 33 13.5N 123 15W, SOUNDING 2240 FM, WIND 330 FORCE 5, WEATHER CLOUDY, SEA VERY ROUGH.

0	14.85	33.15	-	24.60	334.8	0
10	14.85	33.15	-	24.60	334.8	.033
20	14.85	33.15	-	24.60	334.8	.067
30	14.80	33.15	-	24.61	333.7	.100
50	13.75	33.20	-	24.87	309.1	.165
75	12.84	33.19	-	25.04	292.5	.241
100	11.80	33.28	-	25.31	266.9	.311
125	10.50	33.35	-	25.60	239.6	.375
150	9.35	33.61	-	26.00	202.0	.431
200	8.62	33.97	-	26.39	164.3	.524
250	7.82	34.05	-	26.58	146.9	.604
300	7.20	34.06	-	26.67	137.8	.677
400	5.95	34.07	-	26.85	121.3	.812
500	5.36	34.15	-	26.98	108.4	.932
600	5.00	34.23	-	27.09	98.4	1.042

82.47

CALCOFI CRUISE 6707

82.47

ELLEN B. SCRIPPS, JUNE 22 1967, 1536 GMT, 34 15N 119 58.5W, SOUNDING 320 FM, WIND CALM, WEATHER OVERCAST, SEA MODERATE.

0	14.00	33.72	-	25.22	275.9	0
10	13.94	33.72	-	25.23	274.7	.028
20	12.77	33.74	-	25.48	250.7	.054
30	11.65	33.70	-	25.67	233.3	.078
50	10.55	33.80	-	25.94	207.1	.122
75	9.68	33.90	-	26.17	185.7	.172
100	9.08	34.01	-	26.35	168.2	.216
125	8.89	34.05	-	26.41	162.4	.258
150	8.74	34.08	-	26.46	157.9	.299
200	8.46	34.13	-	26.54	150.1	.378
250	8.15	34.17	-	26.62	142.6	.453
300	7.78	34.19	-	26.69	135.9	.525
400	6.98	34.23	-	26.84	122.2	.659
500	6.47	34.24	-	26.91	114.9	.784



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	STL	VIT	0*1	Z	T	S	OXY	SIG*1	0*1	00		
83.43								CALCOFI CRUISE 6707								83.43
ELLEN B. SCRIPPS, JUNE 22 1967, 1955 GMT, 34 08.5N 119 34W, SOUNDING 143 FM, WIND 280 FORCE 3, WEATHER OVERCAST, SEA SLIGHT.																
								0	14.76	33.62	-	24.98	298.5	0		
								10	14.09	33.67	-	25.16	281.3	.029		
								20	13.65	33.69	-	25.23	275.1	.057		
								30	13.41	33.67	-	25.30	268.0	.084		
								50	11.50	33.61	-	25.62	237.3	.135		
								75	10.70	33.67	-	25.81	219.2	.192		
								100	9.96	33.79	-	26.03	198.3	.245		
								125	8.77	34.09	-	26.46	157.6	.290		
								150	8.51	34.15	-	26.55	149.3	.329		
								200	8.42	34.17	-	26.58	146.5	.404		

83.43 CALCOFI CRUISE 6707 83.43  
 ELLEN B. SCRIPPS, JUNE 22 1967, 2022 GMT, 34 08.5N 119 34W, SOUNDING 143 FM, WIND 280 FORCE 3, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 03.

0	14.28	33.677	7.33	-	-	-	284.6	0	14.28	33.677	7.33	25.13	284.6	0
10	14.10	33.68	7.21	-	-	-	280.8	10	14.10	33.680	7.21	25.17	280.8	.028
28	13.49	33.683	6.67	-	-	-	268.6	20	13.88	33.689	7.05	25.22	275.8	.056
42	11.90	33.600	5.00	-	-	-	245.1	30	13.26	33.670	6.43	25.33	265.2	.083
52	11.34	33.609	4.55	-	-	-	234.6	50	11.42	33.604	4.61	25.63	236.5	.134
65	10.92	33.646	4.19	-	-	-	224.7	75	10.39	33.698	3.79	25.89	212.0	.190
78	10.23	33.714	3.68	-	-	-	208.2	100	9.57	33.841	3.22	26.14	188.3	.241
95	9.80	33.776	3.47	-	-	-	196.7	125	8.68	34.111	2.05	26.49	154.7	.284
116	8.86	34.054	2.34	-	-	-	161.6	150	8.53	34.162	1.79	26.56	148.7	.322
133	8.59	34.140	1.88	-	-	-	151.3							
157	8.51	34.167	1.76	-	-	-	148.1							
178	8.48	34.168	1.72	-	-	-	147.6							

83.51 CALCOFI CRUISE 6707 83.51  
 ELLEN B. SCRIPPS, JUNE 24 1967, 0122 GMT, 33 52N 120 07.5W, SOUNDING 50 FM, WIND 270 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE.

0	13.85	33.59	-	25.15	282.4	0
10	13.20	33.60	-	25.29	269.1	.028
20	11.02	33.66	-	25.75	225.4	.052
30	10.43	33.74	-	25.92	209.6	.074
50	9.52	33.91	-	26.20	182.4	.114
75	9.38	33.93	-	26.24	178.8	.159

83.55 CALCOFI CRUISE 6707 83.55  
 ELLEN B. SCRIPPS, JUNE 24 1967, 0332 GMT, 33 44N 120 24W, SOUNDING 540 FM, WIND 290 FORCE 5, WEATHER OVERCAST, SEA ROUGH.

0	12.69	33.60	-	25.39	259.5	0
10	12.66	33.61	-	25.40	258.2	.026
20	12.27	33.62	-	25.49	250.3	.051
30	12.19	33.63	-	25.51	248.1	.076
50	11.70	33.59	-	25.57	242.3	.126
75	10.00	33.73	-	25.98	203.3	.182
100	9.51	33.91	-	26.20	182.3	.230
125	9.16	33.97	-	26.31	172.4	.275
150	8.84	34.02	-	26.40	163.9	.318
200	7.96	34.05	-	26.56	148.9	.398
250	7.60	34.13	-	26.67	137.9	.471
300	6.96	34.11	-	26.74	130.9	.541
400	6.52	34.17	-	26.85	120.8	.671
500	6.10	34.19	-	26.92	114.1	.795
600	5.54	34.27	-	27.05	101.5	.910

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*1	Z	T	S	OXY	SIG*1	D*1	DD
83.60														
CALCOFI CRUISE 6707														
83.60														
ELLEN B. SCRIPPS, JUNE 24 1967, 0723 GMT, 33 34N 120 45W, SOUNDING 880 FM, WIND 310 FORCE 5, WEATHER MISSING, SEA ROUGH.														
								0	13.38	33.23	-	24.97	299.7	0
								10	13.38	33.23	-	24.97	299.7	.030
								20	13.40	33.24	-	24.97	299.4	.060
								30	12.95	33.43	-	25.21	276.9	.089
								50	10.72	33.29	-	25.52	247.6	.141
								75	10.30	33.55	-	25.79	221.5	.200
								100	9.57	33.74	-	26.06	195.8	.253
								125	8.91	33.87	-	26.27	176.0	.300
								150	8.78	33.98	-	26.38	165.9	.343
								200	8.10	34.04	-	26.53	151.6	.424
								250	7.80	34.09	-	26.61	143.7	.500
								300	7.37	34.11	-	26.69	136.3	.572
								400	6.73	34.21	-	26.85	120.4	.706
								500	5.77	34.21	-	26.98	108.7	.827
								600	5.32	34.27	-	27.08	99.0	.937

83.60														
CALCOFI CRUISE 6707														
83.60														
ELLEN B. SCRIPPS, JUNE 24 1967, 0816 GMT, 33 34N 120 45W, SOUNDING 880 FM, WIND 310 FORCE 5, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 30.														
0	13.42	33.241	5.96	-	-	-	299.7	0	13.42	33.241	5.96	24.97	299.7	0
9	13.42	33.243	6.23	-	-	-	299.6	10	13.42	33.245	6.25	24.97	299.4	.030
10	13.42K	-	-	-	-	-	-	20	13.46	33.260	6.31	24.97	299.1	.060
20	13.46K	33.26 G	-	-	-	-	299.1	30	13.30	33.266	6.19	25.01	295.5	.090
28	13.43	33.255	6.23	-	-	-	298.9	50	11.90	33.483	5.77	25.45	253.8	.145
37	12.71	33.326	6.02	-	-	-	280.1	75	10.27	33.467	4.59	25.73	227.2	.205
51	11.83	33.490	5.74	-	-	-	252.0	100	9.94	33.719	4.07	25.98	203.2	.260
64	10.34	33.349	5.05	-	-	-	237.0	125	8.98	33.822	3.40	26.22	180.7	.308
87	10.16	33.657	4.24	-	-	-	211.3	150	8.87	33.963	2.84	26.35	168.6	.352
105	9.82	33.733	4.02	-	-	-	200.2	200	8.25	34.034	2.45	26.50	154.2	.435
125	8.98	33.822	-	-	-	-	180.7	250	7.83	34.064	2.17	26.59	146.0	.512
144	8.94	33.943	2.85	-	-	-	171.1	300	7.51	34.107	1.83	26.67	138.3	.585
171	8.56	34.000	2.79	-	-	-	161.2	400	6.62	34.199	.93	26.86	119.9	.719
203	8.22	34.036	2.41	-	-	-	153.6	500	5.75	34.250	.63	27.01	105.4	.838
231	7.98	34.057	2.23	-	-	-	148.6							
277	7.63	34.069	2.12	-	-	-	142.9							
329	7.34	34.160	1.42	-	-	-	132.2							
411	6.50	34.204	.89	-	-	-	118.0							
492	5.80	34.245	.66	-	-	-	106.4							
574	5.36	34.304	.34	-	-	-	96.9							

83.70														
CALCOFI CRUISE 6707														
83.70														
ELLEN B. SCRIPPS, JUNE 24 1967, 1359 GMT, 33 14N 121 25.5W, SOUNDING 2100 FM, WIND 340 FORCE 5, WEATHER OVERCAST, SEA VERY ROUGH.														
								0	14.02	33.13	-	24.76	319.5	0
								10	14.03	33.13	-	24.76	319.7	.032
								20	14.02	33.13	-	24.76	319.5	.064
								30	14.02	33.12	-	24.75	320.3	.096
								50	13.88	33.14	-	24.80	316.0	.160
								75	12.42	33.22	-	25.15	282.5	.235
								100	11.28	33.29	-	25.42	257.1	.303
								125	9.78	33.53	-	25.86	214.6	.363
								150	9.17	33.87	-	26.23	180.0	.413
								200	8.39	34.03	-	26.47	156.5	.498
								250	7.93	34.09	-	26.59	145.5	.576
								300	7.42	34.14	-	26.70	134.7	.648
								400	6.44	34.17	-	26.86	119.8	.781
								500	5.99	34.20	-	26.94	112.0	.902
								600	5.43	34.27	-	27.07	100.2	1.015

83.80														
CALCOFI CRUISE 6707														
83.80														
ELLEN B. SCRIPPS, JUNE 24 1967, 1934 GMT, 32 54.5N 122 10W, SOUNDING 2230 FM, WIND 340 FORCE 3, WEATHER CLOUDY, SEA ROUGH.														
								0	15.29	33.23	-	24.57	338.0	0
								10	15.27	33.23	-	24.57	337.6	.034
								20	15.27	33.24	-	24.58	336.8	.068
								30	15.26	33.24	-	24.58	336.6	.101
								50	14.00	33.21	-	24.83	313.3	.167
								75	12.60	33.18	-	25.08	288.8	.242
								100	11.29	33.20	-	25.34	263.9	.312
								125	10.25	33.43	-	25.71	229.6	.374
								150	9.55	33.65	-	25.99	202.1	.429
								200	8.47	33.96	-	26.41	162.9	.522
								250	7.91	34.02	-	26.54	150.4	.602
								300	7.22	34.06	-	26.67	138.0	.676
								400	6.14	34.11	-	26.85	120.6	.810
								500	5.60	34.19	-	26.98	108.2	.931
								600	5.17	34.30	-	27.12	95.0	1.039

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*<sup>T</sup> Z T S OXY SIG\*<sup>T</sup> D\*<sup>T</sup> DD  
 83.90 CALCOFI CRUISE 6707 83.90

ELLEN B. SCRIPPS, JUNE 25 1967, 0038 GMT, 32 34.5N 122 50W, SOUNDING 2220 FM, WIND 320 FORCE 3, WEATHER CLOUDY,  
 SEA ROUGH.

0	15.14	33.18	-	24.56	338.5	0
10	15.13	33.19	-	24.57	337.6	.034
20	15.10	33.20	-	24.58	336.2	.068
30	15.08	33.22	-	24.60	334.4	.101
50	15.07	33.22	-	24.61	334.2	.168
75	13.10	33.24	-	25.03	293.7	.247
100	12.61	33.30	-	25.17	280.1	.319
125	11.15	33.26	-	25.42	257.1	.387
150	9.92	33.51	-	25.82	218.3	.447
200	8.85	33.91	-	26.31	172.2	.547
250	8.05	33.97	-	26.48	156.1	.631
300	7.43	34.06	-	26.64	140.8	.707
400	6.08	34.09	-	26.85	121.3	.843
500	5.67	34.19	-	26.98	109.0	.964
600	5.24	34.30	-	27.11	95.8	1.073

87.35

CALCOFI CRUISE 6707

87.35

ELLEN B. SCRIPPS, JUN 26 1967, 1127 GMT, 33 50N 118 37.5W, SOUNDING 200 FM, WIND 090 FORCE 1, WEATHER MISSING,  
 SEA SLIGHT.

0	15.98	33.51	-	24.63	332.2	0
10	15.30	33.50	-	24.77	318.5	.033
20	13.20	33.48A	-	25.20	277.9	.062
30	12.15	33.46A	-	25.39	259.9	.089
50	10.58	33.50	-	25.70	229.8	.139
75	9.92	33.73	-	25.99	202.1	.193
100	9.41	33.91	-	26.22	180.7	.241
125	9.20	33.98	-	26.31	172.3	.286
150	9.08	34.03	-	26.37	166.7	.329
200	8.91	34.09	-	26.44	159.7	.412
250	8.54	34.17	-	26.56	148.3	.491
300	8.34	34.21	-	26.62	142.4	.566

87.40

CALCOFI CRUISE 6707

87.40

ELLEN B. SCRIPPS, JUNE 26 1967, 0825 GMT, 33 40N 118 58.5W, SOUNDING 460 FM, WIND 090 FORCE 2, WEATHER OVERCAST,  
 SEA SLIGHT.

0	16.59	33.48	-	24.46	347.6	0
10	15.45	33.46A	-	24.71	324.5	.034
20	14.15	33.44A	-	24.97	299.4	.065
30	12.90	33.51A	-	25.28	270.1	.093
50	11.50	33.61A	-	25.62	237.3	.144
75	10.00	33.65	-	25.92	209.3	.200
100	9.55	33.82	-	26.13	189.5	.251
125	9.24	33.91	-	26.25	178.1	.297
150	8.99	33.97	-	26.33	169.8	.341
200	8.68	34.10	-	26.48	155.5	.424
250	8.14	34.18	-	26.63	141.8	.501
300	7.60	34.18	-	26.71	134.2	.572
400	6.88	34.27	-	26.88	117.9	.704
500	6.27	34.31	-	26.99	107.2	.823
600	5.67	34.38	-	27.13	94.8	.931

87.45

CALCOFI CRUISE 6707

87.45

ELLEN B. SCRIPPS, JUNE 26 1967, 0532 GMT, 33 30N 119 19W, SOUNDING 890 FM, WIND CALM, WEATHER OVERCAST,  
 SEA MODERATE.

0	14.50	33.65	-	25.06	291.0	0
10	12.25	33.63	-	25.50	249.2	.027
20	10.55	33.72	-	25.88	213.0	.050
30	10.05	33.79	-	26.02	199.7	.071
50	9.62	33.86	-	26.15	187.7	.110
75	9.13	33.98	-	26.32	171.2	.155
100	8.78	34.02	-	26.41	163.0	.197
125	8.61	34.06	-	26.46	157.5	.238
150	8.47	34.11	-	26.53	151.7	.277
200	8.02	34.16	-	26.63	141.5	.352
250	7.66	34.22	-	26.73	132.1	.422
300	7.57	34.27	-	26.78	127.1	.489
400	6.82	34.27	-	26.89	117.1	.617
500	6.22	34.33	-	27.02	105.1	.734
600	5.71	34.38	-	27.12	95.2	.842

A) THE SALINITY RECORDING WAS OFF SCALE AT THESE DEPTHS. THE VALUES WERE  
 INTERPOLATED BY COMPARISON WITH PREVIOUS AND ADJACENT OBSERVATIONS.



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
87.50 CALCOFI CRUISE 6707 87.50														
ELLEN B. SCRIPPS, JUNE 26 1967, 0310 GMT, 33 20N 119 39.5W, SOUNDING 45 FM, WIND 300 FORCE 2, WEATHER OVERCAST, SEA MODERATE.														
								0	14.55	33.65	-	25.05	292.0	0
								10	12.00	33.73	-	25.62	237.4	.026
								20	10.57	33.79	-	25.93	208.2	.049
								30	10.34	33.83	-	26.00	201.5	.069
								50	9.55	33.96	-	26.24	179.2	.108
								75	8.93	34.03	-	26.39	164.5	.151

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
87.60 CALCOFI CRUISE 6707 87.60														
ELLEN B. SCRIPPS, JUNE 25 1967, 2045 GMT, 33 00N 120 21.5W, SOUNDING 430 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA MODERATE.														
								0	14.62	33.19	-	24.68	327.1	0
								10	14.17	33.16	-	24.75	320.3	.032
								20	13.45	33.17	-	24.91	305.5	.064
								30	13.05	33.18	-	24.99	297.1	.094
								50	12.32	33.19	-	25.14	282.9	.152
								75	11.85	33.46	-	25.44	254.6	.220
								100	10.22	33.46	-	25.73	226.9	.280
								125	9.52	33.70	-	26.04	198.0	.334
								150	8.95	33.89	-	26.28	175.2	.381
								200	8.41	34.07	-	26.50	153.8	.465
								250	7.57	34.07	-	26.63	142.0	.541
								300	7.29	34.15	-	26.73	132.2	.612
								400	6.49	34.22	-	26.89	116.7	.741
								500	5.96	34.28	-	27.01	105.7	.859
								600	5.28	34.35	-	27.15	92.5	.965

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
87.60 CALCOFI CRUISE 6707 87.60														
ELLEN B. SCRIPPS, JUNE 25 1967, 2134 GMT, 33 00N 120 21.5W, SOUNDING 430 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 12.														
1	14.66	33.180	6.04	-	-	-	328.7	0	14.66	33.180	6.04	24.66	328.7	0
11	14.27	33.153	6.17	-	-	-	322.8	10	14.31	33.155	6.16	24.72	323.6	.033
30	13.26	33.173	6.33	-	-	-	301.6	20	13.79	33.160	6.27	24.83	312.8	.064
39	12.90	33.162	6.31	-	-	-	295.7	30	13.26	33.173	6.33	24.95	301.6	.095
53	12.18	33.185	6.04	-	-	-	280.7	50	12.33	33.177	6.11	25.13	284.0	.154
68	11.80	33.233	5.77	-	-	-	270.4	75	11.56	33.279	5.68	25.36	262.7	.223
92	10.82	33.415	5.18	-	-	-	240.1	100	10.36	33.475	4.59	25.72	228.0	.285
111	9.78	33.559	3.69	-	-	-	212.5	125	9.46	33.675	2.76	26.03	198.9	.338
129	9.41	33.708	2.60	-	-	-	195.7	150	9.04	33.864	3.21	26.24	178.4	.386
148	9.08	33.849	3.23	-	-	-	180.2	200	8.24	34.088	2.23	26.54	150.0	.470
176	8.50	34.021	2.56	-	-	-	158.8	250	7.49	34.064	1.76	26.63	141.3	.545
209	8.15	34.095	2.10U	-	-	-	148.2	300	7.12	34.137	1.50	26.74	131.0	.615
238	7.62	34.052	2.42U	-	-	-	144.0	400	6.55	34.209	.67	26.88	118.2	.745
285	7.22	34.124	1.61	-	-	-	133.2	500	5.84	34.290	.51	27.03	103.6	.862
337	6.90	34.161	1.22	-	-	-	126.3	600	5.33	34.332	.35	27.13	94.5	.967
418	6.44	34.223	.54	-	-	-	115.8							
499	5.85	34.289	.51	-	-	-	103.7							
581	5.41	34.327	.39	-	-	-	95.7							

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
87.70 CALCOFI CRUISE 6707 87.70														
ELLEN B. SCRIPPS, JUNE 25 1967, 1527 GMT, 32 39.5N 121 03W, SOUNDING 2125 FM, WIND 330 FORCE 4, WEATHER OVERCAST, SEA MODERATE.														
								0	14.22	33.15	-	24.73	322.0	0
								10	14.21	33.15	-	24.74	321.8	.032
								20	14.15	33.14	-	24.74	321.4	.064
								30	14.10	33.16	-	24.77	318.9	.096
								50	13.79	33.15	-	24.82	313.5	.160
								75	13.70	33.17	-	24.86	310.3	.238
								100	12.50	33.17	-	25.09	287.7	.314
								125	10.45	33.29	-	25.56	243.2	.381
								150	9.75	33.59	-	25.91	209.7	.438
								200	8.75	33.92	-	26.33	169.9	.534
								250	8.08	34.04	-	26.53	151.3	.617
								300	7.40	34.08	-	26.66	138.9	.692
								400	6.55	34.15	-	26.83	122.6	.828
								500	6.04	34.26	-	26.98	108.1	.949
								600	5.40	34.27	-	27.07	99.9	1.060

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	∅*T	Z	T	S	OXY	SIG*T	∅*T	DD			
87.80								CALCOFI CRUISE 6707								87.80	
ELLEN B. SCRIPPS, JUNE 25 1967, 1026 GMT, 32 21N 121 44.5W, SOUNDING 2150 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA ROUGH.																	
								0	15.41	33.26	-	24.56	338.3	0			
								10	15.41	33.26	-	24.56	338.3	.034			
								20	15.41	33.26	-	24.56	338.3	.068			
								30	15.42	33.26	-	24.56	338.5	.102			
								50	15.32	33.25	-	24.57	337.2	.169			
								75	13.53	33.21	-	24.92	304.1	.250			
								100	12.07	33.19	-	25.19	278.4	.323			
								125	10.70	33.29	-	25.52	247.3	.390			
								150	9.79	33.49	-	25.83	217.8	.448			
								200	8.81	33.90	-	26.31	172.3	.548			
								250	8.26	34.01	-	26.48	156.1	.632			
								300	7.49	34.06	-	26.63	141.6	.709			
								400	6.23	34.13	-	26.86	120.2	.845			
								500	5.62	34.21	-	27.00	106.9	.964			
								600	5.27	34.29	-	27.10	96.9	1.072			

87.90 CALCOFI CRUISE 6707 87.90  
 ELLEN B. SCRIPPS, JUNE 25 1967, 0519 GMT, 32 00N 122 27.5W, SOUNDING 2000 FM, WIND 340 FORCE 5, WEATHER MISSING, SEA ROUGH.

								0	15.57	33.28	-	24.54	340.2	0
								10	15.58	33.29	-	24.55	339.7	.034
								20	15.58	33.29	-	24.55	339.7	.068
								30	15.58	33.29	-	24.55	339.7	.102
								50	15.50	33.28	-	24.56	338.7	.170
								75	14.04	33.29	-	24.88	308.2	.251
								100	12.28	33.23	-	25.18	279.2	.325
								125	10.55	33.30	-	25.55	244.1	.391
								150	9.86	33.47	-	25.80	220.3	.450
								200	8.80	33.95	-	26.35	168.5	.549
								250	8.22	33.99	-	26.47	157.0	.632
								300	7.43	34.05	-	26.63	141.6	.709
								400	6.34	34.11	-	26.83	123.0	.847
								500	5.65	34.17	-	26.96	110.2	.969
								600	5.06	34.25	-	27.10	97.6	1.080

90.28 CALCOFI CRUISE 6707 90.28  
 ELLEN B. SCRIPPS, JUNE 27 1967, 1059 GMT, 33 28.5N 117 46.5W, SOUNDING 160 FM, WIND 320 FORCE 1, WEATHER OVERCAST, SEA SLIGHT.

								0	17.18	33.57	-	24.40	354.2	0
								10	15.80	33.47	-	24.64	331.2	.034
								20	12.45	33.51	-	25.37	261.7	.064
								30	10.93	33.49	-	25.63	236.4	.089
								50	10.39	33.66	-	25.86	214.8	.134
								75	9.80	33.87	-	26.12	189.8	.185
								100	9.50	33.96	-	26.24	178.4	.232
								125	9.17	34.04	-	26.36	167.4	.275
								150	9.06	34.09	-	26.42	162.0	.317
								200	8.80	34.12	-	26.48	155.8	.398
								250	8.48	34.22	-	26.61	143.7	.475
								300	7.96	34.21	-	26.68	137.0	.548

90.28 CALCOFI CRUISE 6707 90.28  
 ELLEN B. SCRIPPS, JUNE 27 1967, 1205 GMT, 33 28.5N 117 46.5W, SOUNDING 160 FM, WIND 320 FORCE 1, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 00.

1	17.12	33.552	6.68	-	-	-	354.2	0	17.12	33.552	6.68	24.40	354.2	0
10	14.70K	-	-	-	-	-	-	10	14.70	33.447	7.02	24.86	309.9	.033
11	13.40	33.440	7.0	-	-	-	284.7	20	12.30	33.435	5.97	25.34	264.5	.062
20	12.30K	-	-	-	-	-	-	30	10.94	33.484	4.58	25.63	237.1	.087
31	10.83	33.492	4.43	-	-	-	234.6	50	10.40	33.607	3.90	25.82	219.0	.133
46	10.54	33.587	3.96	-	-	-	222.7	75	9.85	33.820	3.14	26.08	194.3	.185
56	10.20	33.640	3.80	-	-	-	198.7	100	9.32	33.984	2.82	26.29	173.8	.231
71	9.94	33.779	3.25	-	-	-	213.2	125	9.16	34.049	2.52	26.37	166.5	.274
86	9.60	33.919	2.90	-	-	-	183.0	150	9.10	34.078	2.39	26.40	163.5	.316
105	9.24	33.998	2.79	-	-	-	171.6	200	8.86	34.159	1.95	26.50	153.9	.397
130	9.14	34.057	2.46	-	-	-	165.7	250	8.47	34.195	1.66	26.59	145.4	.474
150	9.10	34.078	2.39	-	-	-	163.5							
185	8.91	34.116	2.20	-	-	-	157.8							
214	8.79	34.187	1.78	-	-	-	150.7							
254	8.42	34.196	1.65	-	-	-	144.6							

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D* <sup>2</sup> T	Z	T	S	OXY	SIG* <sup>2</sup> T	D* <sup>2</sup> T	DD		
90.32								CALCOFI CRUISE 6707								90.32
ELLEN B. SCRIPPS, JUNE 27 1967, 1413 GMT, 33 21N 118 01.5W, SOUNDING 400 FM, WIND 290 FORCE 7, WEATHER OVERCAST, SEA MODERATE.																
								0	16.56	33.47A	-	24.46	347.7	0		
								10	16.34	33.45A	-	24.50	344.3	.035		
								20	15.25	33.41A	-	24.71	324.0	.068		
								30	12.55	33.37A	-	25.24	273.9	.098		
								50	11.25	33.38A	-	25.49	250.0	.151		
								75	10.23	33.70	-	25.92	209.3	.208		
								100	9.67	33.85	-	26.13	189.2	.259		
								125	9.40	33.98	-	26.28	175.4	.305		
								150	9.25	34.05	-	26.36	167.9	.348		
								200	9.08	34.22	-	26.52	152.7	.430		
								250	8.54	34.23	-	26.61	143.8	.506		
								300	8.17	34.28	-	26.70	134.8	.578		
								400	7.13	34.27	-	26.85	121.2	.712		
								500	6.65	34.30	-	26.94	112.7	.836		
								600	5.97	34.34	-	27.06	101.3	.950		

90.37

CALCOFI CRUISE 6707

90.37

ELLEN B. SCRIPPS, JUNE 27 1967, 1655 GMT, 33 11N 118 22.5W, SOUNDING 635 FM, WIND 280 FORCE 7, WEATHER PARTLY CLOUDY, SEA SLIGHT.

								0	16.89	33.48	-	24.39	354.3	0
								10	16.39	33.46	-	24.50	344.7	.035
								20	15.27	33.43	-	24.72	322.9	.068
								30	13.40	33.40	-	25.09	287.6	.099
								50	11.18	33.48	-	25.58	241.4	.152
								75	10.83	33.62	-	25.75	225.1	.211
								100	10.35	33.75	-	25.94	207.5	.265
								125	9.42	33.99	-	26.28	174.9	.314
								150	9.11	34.07	-	26.39	164.2	.357
								200	8.08	34.13	-	26.60	144.6	.436
								250	7.99	34.21	-	26.68	137.4	.508
								300	7.27	34.17	-	26.75	130.5	.577
								400	6.62	34.25	-	26.90	116.1	.706
								500	6.08	34.33	-	27.03	103.4	.822
								600	5.47	34.38	-	27.15	92.4	.927

90.37

CALCOFI CRUISE 6707

90.37

ELLEN B. SCRIPPS, JUNE 27 1967, 1748 GMT, 33 11N 118 22.5W, SOUNDING 635 FM, WIND 280 FORCE 7, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 05.

1	17.12	33.451	6.12	-	-	-	361.6	0	17.12	33.451	6.12	24.32	361.6	0
11	16.71	33.439	6.17	-	-	-	353.3	10	16.79	33.441	6.17	24.39	354.9	.036
31	13.44	33.378	6.16	-	-	-	290.0	20	15.40	33.413	6.17	24.68	326.9	.070
41	12.05	33.358	5.58	-	-	-	265.7	30	13.63	33.381	6.16	25.03	293.5	.101
50	11.47	33.380	5.25	-	-	-	253.8	50	11.47	33.380	5.25	25.45	253.8	.156
65	11.28	33.456	4.89	-	-	-	244.9	75	10.99	33.543	4.41	25.66	233.6	.217
80	10.84	33.586	4.18	-	-	-	227.8	100	10.43	33.673	3.86	25.86	214.5	.274
100	10.43	33.673	3.86	-	-	-	214.5	125	9.42	33.963	2.91	26.26	176.9	.323
125	9.42	33.963	2.91	-	-	-	176.9	150	9.13	34.034	2.69	26.36	167.2	.367
145	9.24	34.034	2.67	-	-	-	168.9	200	8.27	34.098	2.31	26.55	149.7	.448
175	8.54	34.035	2.76	-	-	-	158.3	250	8.20	34.197	1.51	26.63	141.4	.523
206	8.24	34.116	2.17	-	-	-	147.9	300	7.62	34.201	1.39	26.72	132.9	.593
235	8.25	34.177	1.70	-	-	-	143.6	400	6.53	34.231	.85	26.90	116.3	.723
274	8.03	34.213	1.31	-	-	-	137.7	500	6.13	34.324	.52	27.02	104.4	.840
333	7.05	34.181	1.53	-	-	-	126.8							
407	6.50	34.239	.76	-	-	-	115.4							
481	6.24	34.310	.57	-	-	-	106.8							
560	5.64	34.359	.37	-	-	-	96.0							

A) THE SALINITY RECORDING WAS OFF SCALE AT THESE DEPTHS. THE VALUES WERE EXTRAPOLATED BY COMPARISON WITH PREVIOUS AND ADJACENT OBSERVATIONS.



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*<sup>T</sup> Z T S OXY SIG\*<sup>T</sup> D\*<sup>T</sup> DD  
 90.45 CALCOFI CRUISE 6707 90.45

ELLEN B. SCRIPPS, JUNE 27 1967, 2142 GMT, 32 54.5N 118 55.5W, SOUNDING 920 FM, WIND 280 FORCE 6, WEATHER PARTLY CLOUDY, SEA SLIGHT.

0	15.86	33.59	-	24.72	323.7	0
10	14.67	33.63	-	25.01	295.9	.031
20	13.39	33.61	-	25.26	272.0	.059
30	12.65	33.70	-	25.48	251.4	.086
50	10.60	33.63	-	25.80	220.5	.133
75	9.58	33.83	-	26.13	189.3	.185
100	9.24	33.89	-	26.23	179.6	.231
125	8.83	33.99	-	26.38	165.9	.275
150	8.45	34.07	-	26.50	154.4	.316
200	8.14	34.16	-	26.61	143.2	.391
250	7.75	34.21	-	26.71	134.0	.463
300	7.31	34.22	-	26.78	127.3	.530
400	6.71	34.27	-	26.90	115.7	.657
500	6.22	34.31	-	27.00	106.6	.775
600	5.60	34.37	-	27.13	94.7	.882

90.53 CALCOFI CRUISE 6707 90.53

ELLEN B. SCRIPPS, JUNE 28 1967, 0136 GMT, 32 39N 119 28.5W, SOUNDING 705 FM, WIND 290 FORCE 3, WEATHER CLOUDY, SEA MODERATE.

0	14.60	33.61	-	25.01	296.0	0
10	14.11	33.60	-	25.10	286.9	.029
20	13.78	33.61	-	25.18	279.6	.058
30	12.85	33.56	-	25.33	265.5	.085
50	9.81	33.72	-	26.01	201.0	.132
75	9.19	33.88	-	26.23	179.5	.180
100	8.95	33.96	-	26.33	170.0	.224
125	8.75	34.03	-	26.42	161.8	.266
150	8.30	34.06	-	26.51	153.0	.306
200	7.80	34.15	-	26.66	139.2	.380
250	7.62	34.19	-	26.71	133.7	.450
300	7.32	34.23	-	26.79	126.7	.518
400	6.60	34.29	-	26.94	112.8	.643
500	5.99	34.35	-	27.06	100.8	.756
600	5.66	34.37	-	27.12	95.4	.861

90.60 CALCOFI CRUISE 6707 90.60

ELLEN B. SCRIPPS, JUNE 28 1967, 0524 GMT, 32 22N 120 00W, SOUNDING 1090 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA SLIGHT.

0	14.00	33.27	-	24.87	308.9	0
10	13.72	33.25	-	24.91	304.8	.031
20	13.43	33.32	-	25.03	294.1	.061
30	13.34	33.33	-	25.05	291.6	.090
50	12.75	33.27	-	25.12	284.9	.148
75	11.07	33.26	-	25.43	255.8	.216
100	9.99	33.47	-	25.78	222.4	.276
125	9.33	33.70	-	26.07	195.0	.329
150	8.73	33.94	-	26.35	168.2	.375
200	8.01	34.03	-	26.53	151.1	.456
250	7.59	34.11	-	26.66	139.3	.531
300	7.15	34.18	-	26.77	128.1	.600
400	6.48	34.25	-	26.92	114.3	.726
500	6.11	34.34	-	27.04	103.0	.841
600	5.62	34.38	-	27.13	94.2	.947

90.60 CALCOFI CRUISE 6707 90.60

ELLEN B. SCRIPPS, JUNE 28 1967, 0612 GMT, 32 22N 120 00W, SOUNDING 1090 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 17.

1	14.04	33.280	6.41	-	-	308.9	0	14.04	33.280	6.41	24.87	308.9	0	
10	13.98	33.270	6.52	-	-	308.5	.031	10	13.98	33.270	6.52	24.88	308.5	.031
30	13.51	33.310	6.88	-	-	296.4	.061	20	13.74	33.288	6.80	24.94	302.5	.061
39	13.45	33.309	6.48	-	-	295.3	.091	30	13.51	33.310	6.88	25.00	296.4	.091
53	12.54	33.190	6.35	-	-	286.9	.150	50	12.77	33.214	6.39	25.08	289.5	.150
68	11.66	33.263	5.91	-	-	265.7	.219	75	11.16	33.302	5.56	25.45	254.3	.219
92	10.14	33.408	4.73	-	-	229.4	.279	100	9.95	33.461	4.52	25.78	222.5	.279
111	9.76	33.548	4.30	-	-	213.0	.331	125	9.28	33.699	3.98	26.08	194.3	.331
128	9.18	33.732	3.90	-	-	190.4	.378	150	8.84	33.910	3.25	26.31	172.1	.378
147	8.90	33.895	3.28	-	-	174.0	.461	200	8.07	34.009	3.04	26.51	153.4	.461
175	8.38	33.980	3.21	-	-	160.1	.536	250	7.74	34.118	1.76	26.64	140.8	.536
206	8.02	34.017	2.95	-	-	152.2	.606	300	7.20	34.155	1.40	26.75	130.7	.606
233	7.96	34.112	2.01	-	-	144.3	.735	400	6.61	34.245	.75	26.90	116.3	.735
278	7.34	34.131	1.58	-	-	134.3	.851	500	6.05	34.317	.42	27.03	104.1	.851
329	7.08	34.191	1.18	-	-	126.4								
407	6.96	34.249	.72	-	-	115.4								
487	6.12	34.309	.45	-	-	105.4								
568	5.74	34.347	.37	-	-	98.0								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.70														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JUNE 28 1967, 1104 GMT, 32 04N 120 38.5W, SOUNDING 1975 FM, WIND 300 FORCE 7, WEATHER MISSING, SEA SLIGHT.														
								0	15.00	33.21	-	24.61	333.4	0
								10	14.86	33.19	-	24.63	332.0	.033
								20	14.46	33.19	-	24.71	323.9	.066
								30	14.20	33.23	-	24.80	315.8	.098
								50	13.85	33.26	-	24.90	306.7	.161
								75	13.30	33.33	-	25.06	290.9	.236
								100	11.38	33.37	-	25.46	253.0	.304
								125	10.40	33.47	-	25.71	229.1	.365
								150	9.44	33.71	-	26.06	196.0	.419
								200	8.70	33.97	-	26.38	165.5	.511
								250	8.22	34.10	-	26.56	148.8	.591
								300	7.67	34.15	-	26.68	137.4	.665
								400	6.52	34.17	-	26.85	120.8	.800
								500	6.12	34.29	-	27.00	106.9	.920
								600	5.63	34.33	-	27.09	98.0	1.029

90.80														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JUNE 28 1967, 1527 GMT, 31 44.5N 121 19W, SOUNDING 2100 FM, WIND 290 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.														
								0	15.30	33.22	-	24.56	338.9	0
								10	15.30	33.23	-	24.56	338.2	.034
								20	15.30	33.23	-	24.56	338.2	.068
								30	15.24	33.23	-	24.58	337.0	.102
								50	14.27	33.20	-	24.76	319.4	.167
								75	13.04	33.17	-	24.99	297.7	.245
								100	11.90	33.31	-	25.32	266.5	.316
								125	10.84	33.45	-	25.62	237.8	.380
								150	10.05	33.67	-	25.93	208.6	.436
								200	8.93	34.01	-	26.38	166.0	.532
								250	8.21	34.09	-	26.55	149.4	.612
								300	7.72	34.11	-	26.64	141.1	.687
								400	6.86	34.21	-	26.84	122.1	.824
								500	6.12	34.27	-	26.98	108.3	.946
								600	5.66	34.33	-	27.09	98.4	1.056

90.80														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JUNE 28 1967, 1609 GMT, 31 44.5N 121 19W, SOUNDING 2100 FM, WIND 290 FORCE 2, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 03.														
1	15.40	33.232	6.15	-	-	-	340.1	0	15.40	33.232	6.15	24.54	340.1	0
11	15.38	33.229	6.17	-	-	-	339.9	10	15.38	33.229	6.17	24.55	340.0	.034
31	15.33	33.226	6.29	-	-	-	339.1	20	15.36	33.227	6.24	24.55	339.7	.068
41	15.28	33.224	6.23	-	-	-	338.2	30	15.33	33.226	6.29	24.55	339.2	.102
50	14.30	33.176	6.52	-	-	-	321.7	50	14.30	33.176	6.52	24.74	321.7	.168
65	13.79	33.189	6.60	-	-	-	310.7	75	13.30	33.181	6.49	24.95	301.8	.247
79	13.08	33.179	6.43	-	-	-	297.8	100	11.91	33.231	6.04	25.25	272.5	.319
99	11.96	33.225	6.10	-	-	-	273.8	125	10.84	33.431	4.78	25.60	239.2	.384
125	10.84	33.431	4.78	-	-	-	239.2	150	10.08	33.651	4.57	25.91	210.4	.441
145	10.22	33.601	4.79	-	-	-	216.4	200	8.99	33.998	2.96	26.36	167.7	.537
175	9.45	33.878	3.30	-	-	-	183.7	250	8.21	34.080	2.52	26.54	150.1	.618
204	8.92	34.010	2.92	-	-	-	165.8	300	7.73	34.131	1.73	26.65	139.6	.693
234	8.40	34.059	2.81	-	-	-	154.5	400	6.83	34.214	1.58	26.84	121.4	.829
274	7.97	34.107	2.03	-	-	-	144.8	500	6.09	34.276	.86	26.99	107.5	.950
333	7.44	34.158	1.52	-	-	-	133.7							
408	6.76	34.220	1.59	-	-	-	120.1							
483	6.20	34.265	.95	-	-	-	109.7							
562	5.74	34.318	.70	-	-	-	100.2							

90.90														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JUNE 28 1967, 2042 GMT, 31 24N 122 02W, SOUNDING 2250 FM, WIND 300 FORCE 1, WEATHER CLOUDY, SEA MODERATE.														
								0	15.63	33.23	-	24.49	345.1	0
								10	15.20	33.21	-	24.57	337.6	.034
								20	14.76	33.24	-	24.69	326.3	.067
								30	14.58	33.22	-	24.71	324.1	.100
								50	12.70	33.20	-	25.08	289.1	.162
								75	11.75	33.27	-	25.31	266.8	.231
								100	10.60	33.41	-	25.63	236.8	.295
								125	9.91	33.66	-	25.94	207.1	.351
								150	9.45	33.83	-	26.15	187.2	.401
								200	8.73	33.99	-	26.39	164.5	.490
								250	8.05	34.08	-	26.57	147.9	.570
								300	7.54	34.13	-	26.68	137.1	.644
								400	6.70	34.21	-	26.86	120.1	.778
								500	6.12	34.29	-	27.00	106.9	.898
								600	5.59	34.37	-	27.13	94.6	1.006

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
90.100	CALCOFI CRUISE 6707							90.100							
ELLEN B. SCRIPPS, JUNE 29 1967, 0136 GMT, 31 04N 122 41W, SOUNDING 2200 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA MODERATE.															
								0	16.28	33.25	-	24.36	357.6	0	
								10	15.93	33.25	-	24.44	350.1	.035	
								20	15.89	33.25	-	24.45	349.2	.070	
								30	15.81	33.25	-	24.47	347.5	.105	
								50	14.74	33.19	-	24.65	329.6	.173	
								75	13.30	33.15	-	24.92	304.1	.253	
								100	12.24	33.23	-	25.19	278.5	.326	
								125	11.78	33.28	-	25.32	266.6	.395	
								150	10.47	33.47	-	25.70	230.2	.458	
								200	9.10	33.82	-	26.20	182.6	.563	
								250	8.19	34.01	-	26.49	155.1	.649	
								300	7.51	34.05	-	26.62	142.7	.726	
								400	6.53	34.13	-	26.82	123.9	.864	
								500	5.69	34.21	-	26.99	107.7	.986	
								600	5.27	34.30	-	27.11	96.2	1.095	

90.100 CALCOFI CRUISE 6707 90.100  
 ELLEN B. SCRIPPS, JUNE 29 1967, 0221 GMT, 31 04N 122 41W, SOUNDING 2200 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 10.

1	16.32	33.238	4.82	-	-	-	359.4	0	16.32	33.238	4.82	24.34	359.4	0
11	16.06	33.240	5.60	-	-	-	353.6	10	16.08	33.240	5.54	24.40	354.1	.036
31	15.90	33.240	6.02	-	-	-	350.2	20	15.96	33.241	5.95	24.43	351.3	.071
41	15.82	33.233	5.85	-	-	-	349.0	30	15.91	33.240	6.01	24.44	350.3	.106
54	14.78	33.190	6.39	-	-	-	330.4	50	15.13	33.204	6.20	24.58	336.7	.175
70	14.06	33.179	6.48	-	-	-	316.7	75	13.76	33.179	6.48	24.85	310.9	.256
94	12.69	33.187	6.44	-	-	-	289.9	100	12.46	33.199	6.36	25.12	284.8	.331
114	12.03	33.239	6.11	-	-	-	274.1	125	11.74	33.273	5.87	25.32	266.4	.401
134	11.46	33.313	5.60	-	-	-	258.5	150	10.60	33.436	4.83	25.65	234.8	.464
153	10.44	33.462	4.69	-	-	-	230.3	200	9.37	33.800	3.74	26.14	188.2	.572
182	9.94	33.663	4.03	-	-	-	207.3	250	8.31	34.006	3.23	26.47	157.1	.660
216	8.87	33.906	3.54	-	-	-	172.8	300	7.59	34.060	2.42	26.62	143.1	.738
245	8.39	33.998	3.30	-	-	-	158.9	400	6.57	34.144	1.25	26.82	123.4	.876
293	7.67	34.051	2.53	-	-	-	144.8	500	5.76	34.212	.69	26.98	108.3	.998
347	7.14	34.113	1.77	-	-	-	133.0	600	5.27	34.303	.37	27.11	95.9	1.107
431	6.26	34.158	1.03	-	-	-	118.4							
514	5.67	34.224	.63	-	-	-	106.4							
597	5.28	34.300	.38	-	-	-	96.3							

90.110 CALCOFI CRUISE 6707 90.110  
 ELLEN B. SCRIPPS, JUNE 29 1967, 0702 GMT, 30 39N 123 24W, SOUNDING 2150 FM, WIND 300 FORCE 2, WEATHER DRIZZLE, SEA MODERATE.

								0	16.43	33.29	-	24.36	358.0	0
								10	16.16	33.29	-	24.42	352.1	.036
								20	16.10	33.31	-	24.45	349.4	.071
								30	16.06	33.30	-	24.45	349.2	.106
								50	15.66	33.25	-	24.50	344.3	.175
								75	14.60	33.22	-	24.71	324.5	.259
								100	12.85	33.21	-	25.06	291.2	.337
								125	11.00	33.29	-	25.47	252.4	.405
								150	9.82	33.51	-	25.84	216.8	.465
								200	8.86	33.90	-	26.30	173.1	.564
								250	8.14	34.02	-	26.50	153.7	.648
								300	7.51	34.05	-	26.62	142.7	.724
								400	6.29	34.11	-	26.83	122.4	.862
								500	5.82	34.23	-	26.99	107.7	.983
								600	5.26	34.29	-	27.10	96.8	1.091

90.120 CALCOFI CRUISE 6707 90.120  
 ELLEN B. SCRIPPS, JUNE 29 1967, 1122 GMT, 30 23N 124 00W, SOUNDING 2300 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA MODERATE.

								0	17.05	33.35	-	24.26	367.3	0
								10	16.89	33.35	-	24.30	363.8	.037
								20	16.85	33.35	-	24.30	362.9	.073
								30	16.79	33.35	-	24.32	361.5	.109
								50	16.53	33.33	-	24.36	357.3	.181
								75	14.00	33.15	-	24.78	317.7	.266
								100	12.40	33.17	-	25.11	285.8	.342
								125	11.04	33.19	-	25.38	260.4	.411
								150	10.14	33.49	-	25.77	223.3	.472
								200	8.85	33.89	-	26.29	173.7	.573
								250	8.01	34.03	-	26.53	151.1	.656
								300	7.43	34.09	-	26.66	130.6	.731
								400	6.40	34.13	-	26.84	122.5	.867
								500	5.74	34.21	-	26.98	108.3	.988
								600	5.18	34.29	-	27.11	95.9	1.097



OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT							COMPUTED							
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.120							CALCOFI CRUISE 6707							90.120
ELLEN B. SCRIPPS, JUNE 29 1967, 1206 GMT, 30 23N 124 00W, SOUNDING 2300 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 00.														
1	17.11	33.320	4.97	-	-	-	370.9	0	17.11	33.320	4.97	24.22	370.9	0
11	16.94	33.315	5.94	-	-	-	367.4	10	16.95	33.315	5.87	24.25	367.7	.037
31	16.88	33.315	6.08	-	-	-	366.1	20	16.91	33.315	6.02	24.26	366.7	.074
41	16.88	33.313	6.07	-	-	-	366.2	30	16.88	33.315	6.08	24.27	366.1	.110
51	16.42	33.298	6.18	-	-	-	357.2	50	16.49	33.301	6.16	24.35	358.5	.183
66	14.76	33.201	6.48	-	-	-	329.2	75	14.02	33.168	6.61	24.79	316.7	.268
80	13.65	33.154	6.64	-	-	-	310.5	100	12.12	33.097	6.40	25.11	286.1	.344
100	12.12	33.097	6.40	-	-	-	286.1	125	11.05	33.197	5.66	25.38	260.2	.413
124	11.09	33.187	5.69	-	-	-	261.5	150	10.20	33.458	4.90	25.74	226.7	.474
144	10.42	33.403	5.10	-	-	-	234.3	200	9.04	33.819	3.82	26.21	181.8	.578
173	9.48	33.642	4.23	-	-	-	201.6	250	8.25	34.000	2.93	26.47	156.7	.665
203	9.00	33.835	3.79	-	-	-	180.0	300	7.57	34.072	2.06	26.63	141.8	.742
234	8.48	33.958	3.31	-	-	-	163.2	400	6.41	34.115	1.40	26.82	123.6	.880
273	7.93	34.042	2.40	-	-	-	149.1	500	5.75	34.208	.56	26.98	108.6	1.002
332	7.16	34.092	1.82	-	-	-	134.8							
407	6.35	34.117	1.36	-	-	-	122.6							
482	5.86	34.192	.67	-	-	-	111.1							
561	5.39	34.255	.37	-	-	-	100.9							

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT							COMPUTED							
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.130							CALCOFI CRUISE 6707							90.130
ELLEN B. SCRIPPS, JUNE 29 1967, 1652 GMT, 30 03.5N 124 40.5W, SOUNDING 2400 FM, WIND 270 FORCE 2, WEATHER OVERCAST, SEA MODERATE.														
								0	16.51	33.27	-	24.32	361.2	0
								10	16.34	33.27	-	24.36	357.5	.036
								20	16.31	33.27	-	24.37	356.8	.072
								30	16.26	33.27	-	24.38	355.7	.107
								50	16.07	33.33	-	24.47	347.2	.178
								75	14.94	33.20	-	24.62	332.9	.263
								100	12.77	33.13	-	25.01	295.6	.343
								125	11.60	33.18	-	25.27	270.8	.414
								150	10.45	33.30	-	25.57	242.4	.479
								200	9.16	33.81	-	26.18	184.3	.587
								250	8.57	33.99	-	26.42	162.1	.676
								300	7.68	34.04	-	26.59	145.7	.755
								400	6.20	34.05	-	26.80	125.8	.896
								500	5.51	34.14	-	26.96	110.9	1.020
								600	5.05	34.24	-	27.09	98.2	1.131

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT							COMPUTED							
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.140							CALCOFI CRUISE 6707							90.140
ELLEN B. SCRIPPS, JUNE 29 1967, 2137 GMT, 29 45N 125 20.5W, SOUNDING 2420 FM, WIND 280 FORCE MISSING, WEATHER CLOUDY, SEA MODERATE.														
								0	18.40	33.43	-	23.99	392.6	0
								10	17.35	33.45	-	24.26	366.8	.038
								20	17.33	33.46	-	24.28	365.6	.075
								30	17.45	33.57	-	24.33	360.4	.111
								50	16.75	33.53	-	24.47	347.5	.182
								75	15.90	33.65	-	24.75	320.2	.266
								100	15.42	33.79	-	24.97	299.8	.344
								125	14.61	33.81	-	25.16	281.5	.418
								150	12.30	33.52	-	25.40	258.2	.486
								200	10.12	33.82	-	26.03	198.6	.602
								250	8.70	33.99	-	26.40	164.0	.695
								300	8.00	34.04	-	26.54	150.2	.776
								400	7.00	34.14	-	26.76	129.2	.921
								500	6.21	34.23	-	26.94	112.4	1.048
								600	5.58	34.28	-	27.06	101.2	1.162

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT							COMPUTED							
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.140							CALCOFI CRUISE 6707							90.140
ELLEN B. SCRIPPS, JUNE 29 1967, 2215 GMT, 29 45N 125 20.5W, SOUNDING 2420 FM, WIND 280 FORCE MISSING, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 16.														
1	18.38	33.433	5.99	-	-	-	391.9	0	18.38	33.433	5.99	24.00	391.9	0
10	17.42	33.443	6.08	-	-	-	368.9	10	17.42	33.443	6.08	24.24	368.9	.038
29	17.50	33.542	6.02	-	-	-	363.5	20	17.29	33.490	6.07	24.31	362.6	.075
39	17.50	33.585	6.00	-	-	-	360.4	30	17.51	33.548	6.01	24.30	363.4	.111
53	16.52	33.515	6.45	-	-	-	343.5	50	16.76	33.532	6.36	24.46	347.7	.182
68	15.86	33.552	6.26	-	-	-	326.5	75	16.00	33.664	6.21	24.74	321.2	.266
92	16.44	33.957	6.13	-	-	-	309.5	100	16.33	34.026	6.10	24.94	302.0	.345
111	15.94	34.054	6.05	-	-	-	291.6	125	15.12	33.952	5.96	25.16	281.6	.419
130	14.70	33.887	5.92	-	-	-	277.7	150	12.23	33.547	5.63	25.44	255.0	.487
149	12.28	33.541	5.64	-	-	-	256.3	200	10.31	33.834	4.53	26.01	200.7	.603
178	11.48	33.869	5.15	-	-	-	217.9	250	8.80	33.969	3.83	26.36	167.1	.697
212	9.69	33.796	4.20	-	-	-	193.5	300	8.02	34.038	3.64	26.54	150.6	.779
240	9.01	33.941	3.77	-	-	-	172.3	400	7.07	34.132	1.51	26.75	130.6	.925
287	8.17	34.025	3.98	-	-	-	153.7	500	6.32	34.247	.65	26.94	112.5	1.053
338	7.66	34.070	2.42	-	-	-	143.2	600	5.53	34.288	.41	27.07	100.0	1.166
419	6.90	34.153	1.35	-	-	-	126.9							
500	6.32	34.247	.65	-	-	-	112.5							
582	5.68	34.287	.45	-	-	-	101.8							



## UNUSUAL LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D* <sup>T</sup>	Z	T	S	OXY	SIG* <sup>T</sup>	D* <sup>T</sup>	DD		
93.20								CALCOFI CRUISE 6707								93.28
ELLEN B. SCRIPPS, JULY 2 1967, 1728 GMT, 32 54.5N 117 21.5W, SOUNDING 250 FM, WIND 220 FORCE 2, WEATHER OVERCAST, SEA SMOOTH.																
								0	19.28	33.27	-	23.65	425.3	0		
								10	16.00	33.41	-	24.55	339.9	.038		
								20	11.73	33.43	-	25.44	254.7	.068		
								30	10.50	33.71	-	25.88	213.0	.091		
								50	10.07	33.81	-	26.03	148.5	.133		
								75	9.87	33.89	-	26.13	189.4	.182		
								100	9.73	33.95	-	26.20	182.7	.229		
								125	9.65	34.00	-	26.25	177.8	.274		
								150	9.49	34.09	-	26.35	168.6	.318		
								200	9.28	34.15	-	26.43	160.9	.402		
								250	8.57	34.17	-	26.56	148.7	.482		
								300	8.27	34.24	-	26.66	139.2	.556		
								400	7.60	34.27	-	26.78	127.5	.696		

93.31 (CONVAT 1)

CALCOFI CRUISE 6707

93.31

ELLEN B. SCRIPPS, JUNE 19 1967, 2326 GMT, 32 48.5N 117 35W, SOUNDING 510 FM, WIND 300 FORCE 3, WEATHER CLEAR, SEA SLIGHT, WIRE ANGLE 12. A)

1	17.62	33.558	5.50	-	-	-	365.1	0	17.62	33.558	5.50	24.28	365.1	0
11	16.94	33.545	-	-	-	-	350.7	10	17.18	33.558	6.40	24.39	355.2	.036
20	13.04	33.316	6.42	-	-	-	287.0	20	13.04	33.316	6.42	25.10	287.0	.068
29	11.84	33.346	5.55	-	-	-	262.8	30	11.79	33.359	5.51	25.38	260.8	.096
39	11.50	33.480	5.27	-	-	-	246.9	50	10.97	33.524	4.49	25.65	234.5	.145
49	11.02	33.513	4.59	-	-	-	236.2	75	10.24	33.754	3.45	25.96	205.5	.201
58	10.59	33.618	3.83	-	-	-	221.2	100	9.72	33.939	2.92	26.19	183.3	.250
68	10.35	33.673	3.69	-	-	-	213.2	125	9.33	34.021	2.69	26.32	171.2	.295
78	10.20	33.790	3.33	-	-	-	202.1	150	8.76	34.044	2.75	26.43	160.9	.337
88	10.02	33.863	3.02	-	-	-	193.8							
97	9.78	33.920	2.94	-	-	-	185.8							
107	9.60	33.975	2.86	-	-	-	178.8							
117	9.48	33.984	2.78	-	-	-	176.3							
127	9.28	34.031	2.67	-	-	-	169.7							
136	9.04	34.051	2.68	-	-	-	164.6							
146	8.84	34.062	2.62	-	-	-	160.8							
156	8.63	34.049	2.73	-	-	-	158.6							
166	-	34.145	2.11	-	-	-	-							

93.31 (CONVAT 11)

CALCOFI CRUISE 6707

93.31

ELLEN B. SCRIPPS, JULY 2 1967, 1532 GMT, 32 48.5N 117 35W, SOUNDING 510 FM, WIND 360 FORCE 1, WEATHER OVERCAST, SEA SMOOTH, WIRE ANGLE 12.

1	18.24	33.540	-	-	-	-	380.8	0	18.24	33.540		24.12	380.8	0
12	17.18	33.526	-	-	-	-	357.4	10	17.61	33.538		24.27	366.4	.037
24	12.31	33.363	-	-	-	-	270.0	20	13.97	33.413		24.99	297.8	.071
40	10.88	33.514	-	-	-	-	233.8	30	11.38	33.392		25.48	251.3	.098
55	10.46	33.706	-	-	-	-	212.6	50	10.55	33.644		25.82	218.7	.145
74	9.94	33.824	-	-	-	-	195.4	75	9.92	33.830		26.07	194.7	.197
99	9.66	33.954	-	-	-	-	181.3	100	9.65	33.957		26.22	181.0	.245
118	9.47	33.999	-	-	-	-	175.0	125	9.38	34.013		26.30	172.6	.289
137	9.24	34.040	-	-	-	-	168.4	150	9.13	34.086		26.40	163.3	.332
166	9.03	34.144	-	-	-	-	157.5	200	8.95	34.221		26.54	150.7	.412
195	8.94	34.211	-	-	-	-	151.2	250	8.96	34.272		26.58	146.9	.489
235	9.03	34.269	-	-	-	-	148.3	300	8.55	34.276		26.64	140.6	.563
264	8.86	34.275	-	-	-	-	145.2	400	7.66	34.302		26.80	126.0	.703
314	8.42	34.276	-	-	-	-	138.7	500	6.89	34.307		26.91	115.3	.830
387	7.74	34.299	-	-	-	-	127.3							
488	7.02	34.307	-	-	-	-	117.0							
508	6.79	34.305	-	-	-	-	114.1							
533	6.40	34.294	-	-	-	-	110.0							

A) THREE NANSEN BOTTLE CASTS AND TWO S/T/D LOWERINGS WERE MADE TO COOPERATE IN A TEST PROGRAM FOR A BUOY ANCHORED AT THIS POSITION.

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	DOY	PHO	SIL	NIT	D*T	Z	T	S	DOY	SIG*T	D*T	DD		
93.31 (CONVAIR III)								CALCOFI CRUISE 6707								93.31
ELLEN B. SCRIPPS, JULY 2 1967, 1549 GMT, 32 48.5N 117 35W, SOUNDING 510 FM, WIND 360 FORCE 1, WEATHER OVERCAST, SEA SMOOTH.																
								0	18.10	33.52	-	24.14	379.0	0		
								10	17.00	33.42	-	24.32	361.1	.037		
								20	12.50	33.37	-	25.25	272.9	.069		
								30	11.15	33.42	-	25.54	245.3	.095		
								50	10.50	33.62	-	25.81	219.6	.141		
								75	9.90	33.82	-	26.07	195.1	.194		
								100	9.59	33.96	-	26.23	179.8	.241		
								125	9.35	34.01	-	26.31	172.4	.285		
								150	8.99	34.07	-	26.41	162.4	.328		
								200	9.05	34.25	-	26.54	150.0	.408		
								250	8.88	34.27	-	26.59	145.9	.484		
								300	8.63	34.32	-	26.66	138.5	.558		
								400	7.60	34.30	-	26.80	125.3	.695		
								500	6.91	34.31	-	26.91	115.3	.823		
								600	5.98	34.32	-	27.04	102.9	.940		

Z	T	S	DOY	PHO	SIL	NIT	D*T	Z	T	S	DOY	SIG*T	D*T	DD		
93.31 (CONVAIR III)								CALCOFI CRUISE 6707								93.31
ELLEN B. SCRIPPS, JULY 4 1967, 0606 GMT, 32 48.5N 117 35W, SOUNDING 520 FM, WIND 170 FORCE 1, WEATHER MISSING, SEA SMOOTH.																
								0	18.46	33.56	-	24.08	384.5	0		
								10	17.00	33.37	-	24.29	364.8	.037		
								20	13.20	33.41	-	25.14	283.1	.070		
								30	12.03	33.37	-	25.34	264.4	.097		
								50	10.97	33.57	-	25.69	231.2	.147		
								75	10.14	33.80	-	26.01	200.4	.201		
								100	9.55	33.95	-	26.23	179.9	.249		
								125	9.34	34.05	-	26.34	169.2	.294		
								150	9.22	34.14	-	26.43	160.7	.335		
								200	8.90	34.21	-	26.54	150.7	.415		
								250	8.93	34.27	-	26.58	146.7	.491		
								300	8.51	34.32	-	26.68	136.7	.565		
								400	7.55	34.28	-	26.80	126.1	.702		
								500	6.62	34.29	-	26.93	113.1	.829		

Z	T	S	DOY	PHO	SIL	NIT	D*T	Z	T	S	DOY	SIG*T	D*T	DD		
93.31 (CONVAIR III)								CALCOFI CRUISE 6707								93.31
ELLEN B. SCRIPPS, JULY 4 1967, 0701 GMT, 32 48.5N 117 35W, SOUNDING 520 FM, WIND 170 FORCE 1, WEATHER MISSING, SEA SMOOTH, WIRE ANGLE 00.																
0	18.35	33.553	-	-	-	-	382.4	0	18.35	33.553	-	24.10	382.4	0		
10	17.46	33.524	-	-	-	-	363.9	10	17.46	33.524	-	24.29	363.9	.037		
20	12.99	33.357	-	-	-	-	283.0	20	12.99	33.357	-	25.14	283.0	.070		
40	11.34	33.501	-	-	-	-	242.6	30	12.08	33.388	-	25.34	264.0	.097		
55	10.54	33.621	-	-	-	-	220.2	50	10.76	33.580	-	25.73	226.9	.146		
75	10.10	33.785	-	-	-	-	200.9	75	10.10	33.785	-	26.01	200.9	.200		
100	9.62	33.928	-	-	-	-	182.6	100	9.62	33.928	-	26.20	182.6	.249		
120	9.37	34.029	-	-	-	-	171.3	125	9.34	34.050	-	26.34	169.2	.293		
140	9.28	34.105	-	-	-	-	164.2	150	9.22	34.130	-	26.42	161.4	.335		
170	9.10	34.166	-	-	-	-	157.0	200	8.98	34.201	-	26.52	152.5	.415		
199	8.98	34.200	-	-	-	-	152.6	250	8.96	34.262	-	26.57	147.7	.493		
238	8.98	34.252	-	-	-	-	148.8	300	8.54	34.276	-	26.64	140.4	.567		
269	8.88	34.273	-	-	-	-	145.7	400	7.53	34.283	-	26.80	125.7	.706		
318	8.31	34.278	-	-	-	-	136.9	500	6.58	34.296	-	26.94	112.1	.832		
392	7.62	34.282	-	-	-	-	126.9									
491	6.64	34.292	-	-	-	-	113.2									
511	6.50	34.300	-	-	-	-	110.8									
536	6.30	34.306	-	-	-	-	107.9									

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
93.40								CALCOFI CRUISE 6707								93.40	
ELLEN B. SCRIPPS, JULY 2 1967, 0824 GMT, 32 31N 118 11.5W, SOUNDING 965 FM, WIND CALM, WEATHER MISSING, SEA SLIGHT.																	
								0	15.19	33.52	-	24.81	314.7	0			
								10	14.80	33.55	-	24.92	304.4	.031			
								20	13.80	33.55	-	25.13	284.4	.060			
								30	13.00	33.46	-	25.22	275.6	.089			
								50	11.07	33.42	-	25.55	243.9	.141			
								75	10.44	33.57	-	25.78	222.3	.199			
								100	9.90	33.72	-	25.99	202.5	.253			
								125	9.15	33.89	-	26.25	178.2	.301			
								150	8.72	33.99	-	26.39	164.3	.344			
								200	8.36	34.07	-	26.51	153.1	.425			
								250	8.13	34.16	-	26.62	143.1	.501			
								300	7.65	34.20	-	26.72	133.4	.573			
								400	6.67	34.22	-	26.87	118.9	.704			
								500	6.11	34.28	-	26.99	107.5	.824			
								600	5.66	34.35	-	27.10	96.9	.933			

93.40								CALCOFI CRUISE 6707								92.40	
ELLEN B. SCRIPPS, JULY 2 1967, 0908 GMT, 32 31N 118 11.5W, SOUNDING 965 FM, WIND CALM, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 04.																	
1	15.22	33.492	-	-	-	-	317.4	0	15.22	33.492	-	24.78	317.4	0			
11	14.91	33.552	-	-	-	-	306.6	10	14.96	33.549	-	24.88	307.7	.031			
31	13.28	33.455	-	-	-	-	281.3	20	14.26	33.531	-	25.02	295.0	.061			
41	12.44	33.378	-	-	-	-	271.3	30	13.38	33.464	-	25.15	282.5	.090			
51	11.18	33.393	-	-	-	-	247.8	50	11.30	33.389	-	25.49	250.1	.144			
66	10.83	33.462	-	-	-	-	236.8	75	10.51	33.537	-	25.74	225.8	.204			
81	10.28	33.595	-	-	-	-	217.8	100	9.71	33.777	-	26.07	195.2	.257			
101	9.68	33.786	-	-	-	-	194.1	125	9.21	33.896	-	26.24	178.7	.304			
126	9.20	33.899	-	-	-	-	178.3	150	8.94	33.952	-	26.33	170.5	.348			
145	9.00	33.941	-	-	-	-	172.1	200	8.41	34.075	-	26.51	153.4	.431			
174	8.68	34.009	-	-	-	-	162.3	250	8.12	34.168	-	26.62	142.3	.507			
203	8.38	34.083	-	-	-	-	152.4	300	7.70	34.199	-	26.71	134.2	.578			
233	8.24	34.152	-	-	-	-	145.3	400	6.76	34.218	-	26.86	120.3	.711			
274	7.92	34.179	-	-	-	-	138.7	500	6.13	34.295	-	27.00	106.6	.831			
333	7.41	34.219	-	-	-	-	128.7										
408	6.69	34.218	-	-	-	-	119.3										
483	6.22	34.282	-	-	-	-	108.7										
563	5.83	34.336	-	-	-	-	99.9										

93.50								CALCOFI CRUISE 6707								93.50	
ELLEN B. SCRIPPS, JULY 2 1967, 0225 GMT, 32 10N 118 53W, SOUNDING 780 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA MODERATE.																	
								0	15.11	33.59	-	24.88	307.9	0			
								10	14.22	33.54	-	25.03	293.4	.030			
								20	13.35	33.49	-	25.17	280.1	.059			
								30	12.90	33.51	-	25.28	270.1	.086			
								50	11.05	33.35	-	25.50	248.8	.138			
								75	10.00	33.61	-	25.89	212.2	.196			
								100	9.32	33.82	-	26.16	186.0	.247			
								125	9.05	33.95	-	26.31	172.2	.292			
								150	8.58	34.04	-	26.45	158.5	.334			
								200	8.16	34.14	-	26.60	145.0	.411			
								250	7.75	34.20	-	26.70	134.8	.483			
								300	7.40	34.23	-	26.78	127.8	.551			
								400	6.56	34.27	-	26.92	113.8	.677			
								500	6.05	34.32	-	27.03	103.8	.792			
								600	5.60	34.36	-	27.12	95.4	.899			

93.50								CALCOFI CRUISE 6707								93.50	
ELLEN B. SCRIPPS, JULY 2 1967, 0311 GMT, 32 10N 118 53W, SOUNDING 780 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 24.																	
1	15.02	33.587	-	-	-	-	306.3	0	15.02	33.587	-0	24.90	306.3	0			
9	14.78	33.585	-	-	-	-	301.5	10	14.72	33.583	0	24.96	300.4	.030			
32	12.52	33.409	-	-	-	-	270.4	20	13.91	33.533	0	25.09	287.8	.060			
41	11.35	33.270	-	-	-	-	259.8	30	12.78	33.434	0	25.24	273.5	.088			
54	10.60	33.488	-	-	-	-	231.0	50	10.74	33.402	0	25.50	239.8	.139			
68	10.38	33.567	-	-	-	-	221.6	75	10.08	33.601	0	25.87	214.2	.196			
85	9.64	33.656	-	-	-	-	203.1	100	9.38	33.788	0	26.13	189.3	.247			
108	9.31	33.858	-	-	-	-	183.0	125	9.04	33.944	0	26.31	172.5	.293			
125	9.04	33.944	-	-	-	-	172.5	150	8.54	34.057	0	26.47	156.6	.335			
151	8.52	34.061	-	-	-	-	156.1	200	8.14	34.145	0	26.60	144.4	.412			
177	8.28	34.100	-	-	-	-	149.7	250	7.69	34.191	0	26.70	134.7	.483			
212	8.07	34.165	-	-	-	-	141.9	300	7.26	34.227	0	26.80	126.1	.551			
238	7.82	34.180	-	-	-	-	137.2	400	6.64	34.262	0	26.91	115.4	.677			
282	7.38	34.219	-	-	-	-	128.3	500	6.03	34.316	0	27.03	103.8	.793			
342	7.02	34.239	-	-	-	-	122.0	600	5.54	34.358	0	27.12	94.9	.899			
434	6.42	34.278	-	-	-	-	111.4										
520	5.92	34.326	-	-	-	-	101.7										
595	5.56	34.356	-	-	-	-	95.3										



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
93.60 CALCOFI CRUISE 6707 93.60														
ELLEN B. SCRIPPS, JULY 1 1967, 2026 GMT, 31 54N 119 37W, SOUNDING 1300 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE.														
								0	14.69	33.21	-	24.68	327.1	0
								10	14.63	33.21	-	24.69	325.9	.033
								20	14.61	33.21	-	24.70	325.5	.065
								30	14.00	33.20	-	24.82	314.0	.097
								50	12.90	33.16	-	25.01	295.8	.158
								75	11.42	33.23	-	25.34	264.0	.229
								100	10.60	33.43	-	25.65	235.3	.292
								125	9.93	33.67	-	25.95	206.7	.348
								150	9.37	33.87	-	26.20	183.0	.397
								200	8.68	34.01	-	26.41	162.2	.485
								250	7.90	34.10	-	26.60	144.3	.564
								300	7.30	34.13	-	26.71	133.9	.635
								400	6.60	34.21	-	26.87	118.8	.767
								500	6.02	34.28	-	27.00	106.4	.886
								600	5.60	34.34	-	27.10	96.9	.994

93.60 CALCOFI CRUISE 6707 93.60  
 ELLEN B. SCRIPPS, JULY 1 1967, 2113 GMT, 31 54N 119 37W, SOUNDING 1300 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 22.

1	14.71	33.219	-	-	-	-	326.8	0	14.71	33.219	-	24.68	326.8	0
11	14.68	33.215	5.26U	-	-	-	326.5	10	14.68	33.215	-	24.69	326.6	.033
29	14.60	33.230	6.37	-	-	-	323.8	20	14.64	33.235	-	24.71	324.3	.065
38	13.56	33.150	6.60	-	-	-	309.1	30	14.49	33.221	6.41	24.73	322.2	.098
52	12.92	33.142	6.55	-	-	-	297.5	50	12.98	33.142	6.58	24.98	298.7	.160
66	12.11	33.185	6.20	-	-	-	279.5	75	11.50	33.222	6.03	25.32	265.9	.231
75	11.50K	-	-	-	-	-	-	100	10.60	33.393	5.15	25.62	238.1	.294
89	11.28	33.303	5.67	-	-	-	256.2	125	10.00	33.628	4.07	25.90	210.9	.351
108	10.12	33.467	4.74	-	-	-	224.7	150	9.52	33.852	3.58	26.16	186.7	.401
126	9.99	33.638	4.04	-	-	-	210.0	200	8.75	34.000	2.94	26.40	164.0	.491
144	9.64	33.817	3.66	-	-	-	191.2	250	8.05	34.066	2.44	26.55	149.0	.571
172	9.11	33.932	3.33	-	-	-	174.5	300	7.37	34.112	1.86	26.69	136.2	.645
204	8.70	34.007	2.89	-	-	-	162.7	400	6.63	34.212	.88	26.87	119.0	.777
232	8.30	34.046	2.64	-	-	-	154.0	500	6.01	34.283	.52	27.01	106.1	.896
279	7.66	34.094	2.10	-	-	-	141.4							
328	7.03	34.136	1.55	-	-	-	129.8							
407	6.60	34.219	.83	-	-	-	118.1							
489	6.07	34.276	.55	-	-	-	107.3							
574	5.72	34.326	.39	-	-	-	99.4							

93.70 CALCOFI CRUISE 6707 93.70  
 ELLEN B. SCRIPPS, JULY 1 1967, 1430 GMT, 31 29N 120 15.5W, SOUNDING 1950 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA MODERATE.

0	16.48	33.46	-	-	-	-	346.7	0	16.48	33.46	-	24.47	346.7	0
10	16.48	33.46	-	-	-	-	346.7	10	16.48	33.46	-	24.47	346.7	.035
20	16.47	33.46	-	-	-	-	346.5	20	16.47	33.46	-	24.48	346.5	.069
30	16.46	33.47	-	-	-	-	345.5	30	16.46	33.47	-	24.49	345.5	.104
50	14.36	33.27	-	-	-	-	316.0	50	14.36	33.27	-	24.80	316.0	.170
75	12.45	33.30	-	-	-	-	277.2	75	12.45	33.30	-	25.20	277.2	.245
100	11.00	33.44	-	-	-	-	241.3	100	11.00	33.44	-	25.58	241.3	.310
125	10.04	33.57	-	-	-	-	215.8	125	10.04	33.57	-	25.85	215.8	.368
150	9.55	33.75	-	-	-	-	194.7	150	9.55	33.75	-	26.07	194.7	.420
200	8.68	33.99	-	-	-	-	163.7	200	8.68	33.99	-	26.40	163.7	.511
250	8.02	34.07	-	-	-	-	148.2	250	8.02	34.07	-	26.56	148.2	.591
300	7.46	34.11	-	-	-	-	137.5	300	7.46	34.11	-	26.67	137.5	.665
400	6.52	34.19	-	-	-	-	119.3	400	6.52	34.19	-	26.87	119.3	.799
500	5.83	34.26	-	-	-	-	105.6	500	5.83	34.26	-	27.01	105.6	.917
600	5.38	34.33	-	-	-	-	95.2	600	5.38	34.33	-	27.12	95.2	1.024

93.70 CALCOFI CRUISE 6707 93.70  
 ELLEN B. SCRIPPS, JULY 1 1967, 1518 GMT, 31 29N 120 15.5W, SOUNDING 1950 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 09.

0	16.60	33.413	-	-	-	-	352.7	0	16.60	33.413	-	24.41	352.7	0
10	16.59	33.414	-	-	-	-	352.5	10	16.59	33.414	-	24.41	352.5	.035
30	16.58	33.424	-	-	-	-	351.5	20	16.58	33.420	-	24.42	351.9	.071
40	16.50	33.420	-	-	-	-	350.0	30	16.58	33.424	-	24.42	351.5	.106
50	14.88	33.281	-	-	-	-	325.8	50	14.88	33.281	-	24.69	325.8	.174
64	13.22	33.226	-	-	-	-	297.0	75	12.53	33.248	-	25.15	282.4	.250
79	12.32	33.266	-	-	-	-	277.3	100	10.81	33.406	-	25.59	240.5	.316
98	10.88	33.393	-	-	-	-	242.7	125	10.19	33.583	-	25.84	217.2	.374
123	10.26	33.567	-	-	-	-	219.6	150	9.45	33.765	-	26.10	192.1	.426
142	9.59	33.717	-	-	-	-	197.8	200	8.82	33.989	-	26.38	165.9	.517
172	9.22	33.874	-	-	-	-	180.4	250	8.04	34.046	-	26.54	150.4	.598
202	8.79	33.995	-	-	-	-	165.0	300	7.57	34.087	-	26.64	140.7	.673
230	8.24	34.022	-	-	-	-	154.9	400	6.65	34.176	-	26.84	122.0	.810
269	7.91	34.067	-	-	-	-	146.9	500	5.89	34.243	-	26.99	107.6	.931
329	7.24	34.103	-	-	-	-	135.1							
402	6.64	34.178	-	-	-	-	121.7							
476	6.04	34.231	-	-	-	-	110.3							
555	5.62	34.261	-	-	-	-	103.1							



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHD	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
93.80	CALCOFI CRUISE 6707							93.80							
ELLEN B. SCRIPPS, JULY 1 1967, 0839 GMT, 31 07N 120 56.5W, SOUNDING 2000 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA MODERATE.															
								0	15.41	33.26	-	24.56	338.3	0	
								10	15.41	33.27	-	24.57	337.6	.034	
								20	14.60	33.17	-	24.67	328.2	.067	
								30	13.63	33.18	-	24.88	308.2	.099	
								50	12.65	33.29	-	25.16	281.6	.158	
								75	11.83	33.39	-	25.39	259.4	.226	
								100	10.87	33.47	-	25.63	236.9	.289	
								125	9.81	33.67	-	25.97	204.7	.344	
								150	9.12	33.87	-	26.24	179.2	.393	
								200	8.48	34.04	-	26.47	157.1	.479	
								250	7.83	34.11	-	26.62	142.6	.556	
								300	7.37	34.12	-	26.70	135.6	.627	
								400	6.44	34.20	-	26.89	117.5	.759	
								500	6.02	34.29	-	27.01	105.6	.877	
								600	5.41	34.33	-	27.12	95.5	.984	

93.90 CALCOFI CRUISE 6707 93.90  
 ELLEN B. SCRIPPS, JULY 1 1967, 0347 GMT, 30 50N 121 34W, SOUNDING 2210 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MODERATE.

								0	16.51	33.37	-	24.40	353.9	0
								10	16.51	33.39	-	24.41	352.4	.035
								20	16.35	33.36	-	24.43	351.1	.071
								30	15.89	33.29	-	24.48	346.3	.106
								50	14.00	33.26	-	24.86	309.6	.171
								75	12.04	33.33	-	25.31	267.5	.244
								100	10.60	33.50	-	25.70	230.1	.307
								125	9.80	33.69	-	25.98	203.1	.361
								150	9.18	33.89	-	26.24	178.6	.410
								200	8.47	34.03	-	26.46	157.7	.495
								250	7.97	34.08	-	26.58	146.8	.573
								300	7.09	34.13	-	26.74	131.1	.645
								400	6.38	34.21	-	26.90	116.0	.774
								500	5.98	34.31	-	27.03	103.7	.890
								600	5.47	34.36	-	27.13	93.9	.995

93.100 CALCOFI CRUISE 6707 93.100  
 ELLEN B. SCRIPPS, JUNE 30 1967, 2230 GMT, 30 28.5N 122 13W, SOUNDING 2250 FM, WIND 210 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.

								0	16.64	33.37	-	24.37	356.8	0
								10	15.70	33.23	-	24.48	346.6	.035
								20	15.33	33.24	-	24.56	338.1	.069
								30	15.26	33.24	-	24.58	336.6	.103
								50	13.82	33.19	-	24.85	311.2	.168
								75	12.55	33.23	-	25.13	284.2	.243
								100	11.33	33.29	-	25.41	258.0	.311
								125	10.63	33.45	-	25.66	234.3	.373
								150	10.05	33.69	-	25.94	207.1	.429
								200	9.05	33.97	-	26.32	170.7	.526
								250	8.29	34.09	-	26.54	150.6	.608
								300	7.67	34.13	-	26.66	138.9	.683
								400	6.48	34.13	-	26.83	123.2	.819
								500	5.59	34.20	-	26.99	107.3	.940
								600	5.04	34.27	-	27.11	95.9	1.048

93.100 CALCOFI CRUISE 6707 93.100  
 ELLEN B. SCRIPPS, JUNE 30 1967, 2315 GMT, 30 28.5N 122 13W, SOUNDING 2250 FM, WIND 210 FORCE 2, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 17.

1	16.69	33.360	5.94	-	-	-	358.6	0	16.69	33.360	5.94	24.35	358.6	0
11	16.11	33.290	6.21	-	-	-	351.0	10	16.18	33.297	6.19	24.42	352.0	.036
20	15.40K	33.22 G	-	-	-	-	341.0	20	15.40	33.220	6.28	24.53	341.0	.070
29	15.29	33.217	6.32	-	-	-	338.9	30	15.28	33.217	6.32	24.56	338.7	.104
39	15.17	33.214	6.32	-	-	-	336.7	50	14.21	33.180	6.58	24.76	319.7	.170
53	13.91	33.173	6.65	-	-	-	314.2	75	12.68	33.217	6.30	25.10	287.6	.247
67	13.20	33.225	6.47	-	-	-	296.7	100	11.46	33.226	5.81	25.33	264.9	.316
90	11.79	33.200	5.96	-	-	-	272.7	125	10.70	33.446	5.02	25.64	235.8	.379
108	11.24	33.268	5.66	-	-	-	258.1	150	10.06	33.667	3.91	25.92	209.0	.436
127	10.64	33.470	4.93	-	-	-	233.0	200	8.95	33.986	3.08	26.35	168.1	.532
145	10.18	33.631	4.03	-	-	-	213.6	250	8.27	34.098	2.35	26.55	149.7	.613
173	9.53	33.812	3.56	-	-	-	189.8	300	7.66	34.149	1.72	26.68	137.3	.687
204	8.88	34.007	3.01	-	-	-	165.4	400	6.40	34.143	1.18	26.85	121.3	.822
232	8.52	34.073	2.57	-	-	-	155.2	500	5.60	34.201	.73	26.99	107.3	.942
277	7.91	34.124	2.04	-	-	-	142.7							
320	7.45	34.166	1.47	-	-	-	133.2							
409	6.29	34.139	1.15	-	-	-	120.2							
490	5.67	34.193	.77	-	-	-	108.8							
571	5.12	34.261	.50	-	-	-	97.4							

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
93.110 CALCOFI CRUISE 6707 93.110														
ELLEN B. SCRIPPS, JUNE 30 1967, 1743 GMT, 30 38N 122 54W, SOUNDING 1820 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA SLIGHT.														
0	17.58	33.39	-	24.16	376.4	0								
10	17.57	33.53	-	24.27	366.0	-.037								
20	17.58	33.62	-	24.34	359.7	.073								
30	17.57	33.64	-	24.36	358.0	.109								
50	17.32	33.67	-	24.44	350.1	.180								
75	15.95	33.61	-	24.71	324.2	.265								
100	14.23	33.49	-	24.99	297.3	.344								
125	12.90	33.45	-	25.23	274.5	.416								
150	11.65	33.62	-	25.60	239.2	.481								
200	9.46	33.85	-	26.16	185.9	.589								
250	8.57	34.01	-	26.43	160.6	.678								
300	7.65	34.04	-	26.59	145.3	.756								
400	6.39	34.09	-	26.81	125.1	.897								
500	5.81	34.19	-	26.96	110.6	1.021								
600	5.09	34.26	-	27.10	97.2	1.131								

93.120 CALCOFI CRUISE 6707 93.120														
ELLEN B. SCRIPPS, JUNE 30 1967, 1327 GMT, 29 54.5N 123 32W, SOUNDING 2050 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.														
0	17.46	33.40	-	24.20	373.0	0								
10	17.47	33.41	-	24.20	372.5	-.037								
20	17.40	33.49	-	24.28	365.0	.074								
30	17.30	33.52	-	24.33	360.6	.111								
50	15.94	33.32	-	24.49	345.2	.181								
75	15.28	33.36	-	24.67	328.3	.266								
100	13.14	33.14	-	24.95	301.8	.345								
125	11.90	33.17	-	25.21	276.8	.418								
150	11.05	33.47	-	25.60	239.9	.484								
200	9.64	33.80	-	26.10	192.4	.594								
250	8.59	33.97	-	26.40	163.9	.685								
300	7.92	34.03	-	26.55	149.8	.766								
400	6.27	34.07	-	26.81	125.1	.908								
500	5.60	34.17	-	26.97	109.7	1.031								
600	5.02	34.25	-	27.10	97.1	1.141								

93.130 CALCOFI CRUISE 6707 93.130														
ELLEN B. SCRIPPS, JUNE 30 1967, 0836 GMT, 29 29N 124 14W, SOUNDING 2275 FM, WIND 340 FORCE 2, WEATHER MISSING, SEA MODERATE.														
0	17.59	33.33	-	24.11	381.0	0								
10	16.83	33.34	-	24.30	363.2	-.037								
20	16.60	33.31	-	24.33	360.3	.073								
30	16.45	33.31	-	24.37	357.0	.109								
50	15.83	33.29	-	24.49	345.0	.180								
75	14.87	33.31	-	24.72	323.4	.264								
100	13.40	33.25	-	24.98	298.7	.342								
125	11.90	33.33	-	25.33	265.0	.413								
150	10.67	33.50	-	25.69	231.3	.476								
200	9.35	33.87	-	26.20	182.7	.581								
250	8.45	34.01	-	26.45	158.9	.669								
300	7.78	34.06	-	26.59	145.6	.747								
400	6.75	34.13	-	26.79	126.7	.889								
500	5.82	34.19	-	26.96	110.7	1.014								
600	5.20	34.26	-	27.09	98.4	1.125								

93.140 CALCOFI CRUISE 6707 93.140														
ELLEN B. SCRIPPS, JUNE 30 1967, 0307 GMT, 29 09N 124 52.5W, SOUNDING 2300 FM, WIND 290 FORCE 2, WEATHER CLOUDY, SEA MODERATE.														
0	18.73	33.63	-	24.06	385.9	0								
10	18.13	33.69	-	24.26	367.3	-.038								
20	17.93	33.73	-	24.34	359.8	.074								
30	17.85	33.75	-	24.37	356.4	.110								
50	17.80	33.86	-	24.47	347.3	.181								
75	16.43	33.70	-	24.67	328.1	.265								
100	14.60	33.54	-	24.95	301.1	.345								
125	13.13	33.39	-	25.14	283.2	.419								
150	14.20	34.04	-	25.42	256.4	.487								
200	10.30	33.74	-	25.94	207.5	.605								
250	9.39	34.03	-	26.32	171.5	.702								
300	8.10	34.04	-	26.53	151.6	.785								
400	6.66	34.09	-	26.77	128.5	.931								
500	6.07	34.17	-	26.91	115.2	1.059								
600	5.40	34.25	-	27.06	101.4	1.174								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	DXY	PHO	SIL	NIT	D*T	Z	T	S	DXY	SIG*T	D*T	DD
97.32 CALCOFI CRUISE 6707 97.32														
ELLEN B. SCRIPPS, JULY 4 1967, 1305 GMT, 32 12N 117 15.5W, SOUNDING 750 FM, WIND 170 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.														
								0	18.84	33.62	-	24.03	389.2	0
								10	17.00	33.50	-	24.38	355.3	.037
								20	13.25	33.47	-	25.18	279.6	.069
								30	11.95	33.60	-	25.53	246.0	.095
								50	10.47	33.70	-	25.88	213.2	.141
								75	10.00	33.82	-	26.05	196.7	.193
								100	9.72	33.92	-	26.18	184.8	.241
								125	9.42	33.99	-	26.28	174.9	.287
								150	9.33	34.07	-	26.36	167.6	.330
								200	9.01	34.14	-	26.46	157.5	.413
								250	8.80	34.22	-	26.56	148.4	.492
								300	8.44	34.27	-	26.65	139.4	.566
								400	7.25	34.24	-	26.81	125.0	.704
								500	6.67	34.33	-	26.96	110.7	.829
								600	5.96	34.35	-	27.07	100.4	.942

97.32 CALCOFI CRUISE 6707 97.32  
 ELLEN B. SCRIPPS, JULY 4 1967, 1351 GMT, 32 12N 117 15.5W, SOUNDING 750 FM, WIND 170 FORCE 2, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 00.

0	18.89	33.625	6.39	-	-	-	390.1	0	18.89	33.625	6.39	24.02	390.1	0
10	16.99	33.529	6.95	-	-	-	353.0	10	16.99	33.529	6.95	24.41	353.0	.037
30	12.38	33.609	9.32	-	-	-	253.2	20	14.52	33.547	8.96	24.98	299.0	.070
40	11.46	33.646	4.95	-	-	-	234.0	30	12.38	33.609	9.32	25.46	253.2	.097
50	10.74	33.677	3.91	-	-	-	219.4	50	10.74	33.677	3.91	25.81	219.4	.145
65	10.18	33.775	3.39	-	-	-	202.9	75	10.02	33.817	3.24	26.05	197.3	.197
80	9.98	33.835	3.20	-	-	-	195.2	100	9.77	33.904	3.10	26.16	186.8	.246
99	9.78	33.901	3.10	-	-	-	187.2	125	9.52	33.982	2.95	26.26	177.0	.292
124	9.52	33.978	2.97	-	-	-	177.4	150	9.42	34.070	2.41	26.34	169.1	.336
143	9.46	34.052	2.49	-	-	-	171.0	200	9.08	34.149	2.01	26.46	158.0	.419
173	9.28	34.113	2.26	-	-	-	163.6	250	8.62	34.206	1.72	26.58	146.8	.498
203	9.06	34.153	-	-	-	-	157.3	300	8.38	34.254	1.33	26.65	139.7	.572
233	8.76	34.197	1.76	-	-	-	149.5	400	7.24	34.230	.96	26.80	125.6	.710
274	8.46	34.215	1.64	-	-	-	143.8	500	6.71	34.323	.50	26.95	111.8	.836
334	8.23	34.297	.93	-	-	-	134.4							
408	7.12	34.221	.98	-	-	-	124.7							
483	6.82	34.312	.55	-	-	-	114.0							
563	6.20	34.329	.43	-	-	-	104.9							

97.35 CALCOFI CRUISE 6707 97.35  
 ELLEN B. SCRIPPS, JULY 4 1967, 1544 GMT, 32 05.5N 117 25.5W, SOUNDING 675 FM, WIND 160 FORCE 1, WEATHER OVERCAST, SEA SLIGHT.

0	17.21	33.49	-	24.33	360.7	0
10	17.03	33.50	-	24.38	356.0	.036
20	14.75	33.27	-	24.71	323.9	.070
30	12.90	33.26	-	25.09	288.5	.101
50	11.39	33.47	-	25.54	245.8	.154
75	10.25	33.74	-	25.95	206.6	.211
100	9.88	33.87	-	26.11	191.1	.261
125	9.68	33.98	-	26.23	179.7	.308
150	9.48	34.06	-	26.33	170.7	.353
200	9.09	34.18	-	26.48	155.8	.436
250	8.88	34.27	-	26.59	145.9	.514
300	8.29	34.26	-	26.67	138.0	.587
400	7.54	34.28	-	26.80	125.9	.725
500	6.80	34.32	-	26.93	113.1	.851
600	6.08	34.33	-	27.03	103.4	.967

97.40 CALCOFI CRUISE 6707 97.40  
 ELLEN B. SCRIPPS, JULY 4 1967, 1836 GMT, 31 56N 117 46W, SOUNDING 860 FM, WIND 160 FORCE 3, WEATHER OVERCAST, SEA SLIGHT.

0	17.02	33.44	-	24.33	360.1	0
10	16.00	33.45	-	24.58	337.0	.035
20	14.19	33.45	-	24.97	299.4	.067
30	12.79	33.45	-	25.25	272.4	.095
50	11.30	33.47	-	25.55	244.2	.147
75	10.35	33.73	-	25.92	209.0	.204
100	9.91	33.93	-	26.15	187.1	.254
125	9.60	34.04	-	26.29	174.0	.300
150	9.63	34.15	-	26.37	166.4	.343
200	9.17	34.25	-	26.52	151.8	.424
250	9.08	34.33	-	26.60	144.5	.501
300	8.50	34.29	-	26.66	138.8	.574
400	7.79	34.32	-	26.79	126.4	.713
500	6.80	34.31	-	26.92	113.9	.840
600	6.10	34.35	-	27.05	102.1	.956



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D+T	Z	T	S	OXY	SIG+T	D+T	DD
97.50														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JULY 5 1967, 0016 GMT, 31 35N 118 32.1W, SOUNDING 1160 FM, WIND 180 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.														
	0	17.74	33.53	-			24.23	369.9	0					
	10	17.33	33.53	-			24.33	360.5	.037					
	20	16.90	33.50	-			24.41	353.1	.072					
	30	15.50	33.39	-			24.64	330.7	.107					
	50	12.08	33.52	-			25.45	254.3	.165					
	75	10.33	33.75	-			25.94	207.2	.223					
	100	9.66	33.87	-			26.15	187.6	.273					
	125	9.43	34.00	-			26.29	174.3	.319					
	150	8.83	34.07	-			26.44	160.0	.361					
	200	8.07	34.04	-			26.53	151.2	.441					
	250	7.97	34.20	-			26.67	137.9	.515					
	300	7.46	34.21	-			26.75	130.1	.584					
	400	6.90	34.32	-			26.92	114.4	.712					
	500	6.22	34.33	-			27.02	105.1	.828					
	600	5.62	34.35	-			27.11	96.4	.936					

97.60														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JULY 5 1967, 0536 GMT, 31 15N 119 10W, SOUNDING 1950 FM, WIND 240 FORCE 3, WEATHER MISSING, SEA SLIGHT.														
	0	16.81	33.44	-			24.38	355.4	0					
	10	16.48	33.44	-			24.46	348.1	.035					
	20	16.35	33.43	-			24.48	346.0	.070					
	30	15.74	33.38	-			24.58	336.5	.104					
	50	15.26	33.39	-			24.70	325.7	.171					
	75	13.04	33.28	-			25.07	289.6	.248					
	100	11.45	33.38	-			25.45	253.4	.316					
	125	10.33	33.58	-			25.81	219.8	.376					
	150	9.62	33.79	-			26.09	192.9	.428					
	200	8.73	33.99	-			26.39	164.5	.519					
	250	8.16	34.11	-			26.57	147.2	.599					
	300	7.70	34.18	-			26.70	135.6	.672					
	400	6.56	34.22	-			26.89	117.5	.804					
	500	6.07	34.29	-			27.00	106.2	.922					
	600	5.50	34.36	-			27.13	94.3	1.030					

97.60														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JULY 5 1967, 0616 GMT, 31 15N 119 10W, SOUNDING 1950 FM, WIND 240 FORCE 3, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 03.														
1	16.82	33.430	6.03	-	-	-	356.4	0	16.82	33.430	6.03	24.37	356.4	0
11	16.50	33.422	6.05	-	-	-	349.9	10	16.53	33.424	6.05	24.43	350.5	.035
31	15.75	33.357	6.17	-	-	-	338.4	20	16.14	33.393	6.10	24.50	344.2	.070
41	15.56	33.348	6.20	-	-	-	335.0	30	15.78	33.360	6.16	24.56	338.9	.104
51	15.31	33.354	6.29	-	-	-	329.3	50	15.35	33.354	6.28	24.65	330.2	.172
66	13.77	33.283	6.49	-	-	-	303.4	75	12.54	33.230	6.49	25.13	283.9	.249
80	11.93	33.214	6.48	-	-	-	274.1	100	11.48	33.368	5.98	25.44	254.8	.317
100	11.48	33.368	5.98	-	-	-	254.8	125	10.33	33.582	5.35	25.81	219.6	.376
125	10.33	33.582	5.35	-	-	-	219.6	150	9.64	33.798	4.11	26.10	192.5	.429
145	9.75	33.765	4.22	-	-	-	196.8	200	8.75	33.994	3.12	26.39	164.5	.520
175	9.16	33.920	3.8	-	-	-	176.1	250	8.18	34.115	2.06	26.57	147.2	.599
205	8.68	34.006	2.98	-	-	-	162.5	300	7.67	34.168	1.60	26.69	136.0	.673
234	8.33	34.083	2.35	-	-	-	151.7	400	6.64	34.234	.87	26.89	117.5	.805
273	7.98	34.149	1.73	-	-	-	141.8	500	6.00	34.294	.53	27.02	105.1	.922
333	7.28	34.182	1.51	-	-	-	129.7							
407	6.58	34.239	.80	-	-	-	116.4							
481	6.11	34.281	.57	-	-	-	107.4							
561	5.67	34.340	.44	-	-	-	97.7							

97.70														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JULY 5 1967, 1134 GMT, 30 54N 119 50.5W, SOUNDING 1975 FM, WIND 270 FORCE 2, WEATHER MISSING, SEA SLIGHT.														
	0	17.07	33.37	-			24.27	366.3	0					
	10	16.99	33.37	-			24.29	364.5	.037					
	20	16.62	33.37	-			24.37	356.3	.073					
	30	15.90	33.32	-			24.50	344.3	.108					
	50	14.25	33.23	-			24.79	316.8	.174					
	75	12.87	33.22	-			25.06	290.8	.250					
	100	11.50	33.27	-			25.36	262.4	.320					
	125	10.44	33.42	-			25.67	233.4	.383					
	150	9.72	33.70	-			26.01	201.1	.438					
	200	8.57	33.98	-			26.41	162.8	.530					
	250	7.85	34.03	-			26.56	148.8	.610					
	300	7.25	34.08	-			26.68	136.9	.684					
	400	6.40	34.17	-			26.87	119.3	.817					
	500	5.94	34.24	-			26.98	108.4	.937					
	600	5.39	34.32	-			27.11	96.0	1.046					



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*<sup>T</sup> Z T S OXY SIG\*<sup>T</sup> D\*<sup>T</sup> DD

97.80

CALCOFI CRUISE 6707

97.80

ELLEN B. SCRIPPS, JULY 5 1967, 1628 GMT, 30 33.5N 120 31.5W, SOUNDING 2120 FM, WIND 270 FORCE 1, WEATHER OVERCAST, SEA SLIGHT.

0	16.69	33.31	-	24.31	362.2	0
10	16.68	33.31	-	24.31	362.0	.036
20	16.08	33.29	-	24.44	350.4	.072
30	15.80	33.31	-	24.51	342.9	.107
50	13.91	33.29	-	24.91	305.6	.172
75	11.80	33.23	-	25.27	270.6	.244
100	10.40	33.34	-	25.61	238.7	.308
125	9.83	33.53	-	25.85	215.4	.366
150	9.53	33.78	-	26.10	192.2	.417
200	8.64	34.02	-	26.43	160.9	.507
250	8.05	34.11	-	26.59	145.7	.586
300	7.13	34.09	-	26.71	134.6	.658
400	6.35	34.21	-	26.91	115.7	.788
500	5.74	34.26	-	27.02	104.6	.904
600	5.27	34.32	-	27.13	94.7	1.011

100.30

CALCOFI CRUISE 6707

100.30

ELLEN B. SCRIPPS, JULY 7 1967, 0210 GMT, 31 40.5N 116 46.5W, SOUNDING 230 FM, WIND 310 FORCE 3, WEATHER PARTLY CLOUDY, SEA SLIGHT.

0	19.00	33.59	-	23.97	395.2	0
10	17.50	33.54	-	24.30	363.7	.038
20	14.60	33.37	-	24.62	313.5	.072
30	13.30	33.39	-	25.11	286.5	.102
50	11.10	33.56	-	25.66	234.1	.154
75	10.40	33.71	-	25.90	211.3	.210
100	9.96	33.90	-	26.12	190.1	.261
125	9.63	33.97	-	26.20	182.9	.308
150	9.76	34.04	-	26.26	176.6	.354
200	9.45	34.14	-	26.39	164.3	.441
250	9.07	34.26	-	26.55	149.5	.521
300	8.55	34.27	-	26.64	141.0	.596

100.30

CALCOFI CRUISE 6707

100.30

ELLEN B. SCRIPPS, JULY 7 1967, 0241 GMT, 31 40.5N 116 46.5W, SOUNDING 230 FM, WIND 310 FORCE 3, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 23.

1	19.08	33.590	6.06	-	-	-	397.2	0	19.08	33.590	6.06	23.95	397.2	0	
10	18.14	33.561	6.30	-	-	-	376.9	.039	10	18.14	33.561	6.30	24.16	376.9	.039
27	13.47	33.395	6.39	-	-	-	289.4	.074	20	15.45	33.455	6.48	24.70	324.9	.074
40	11.78	33.454	5.08	-	-	-	253.8	.104	30	12.97	33.397	6.13	25.18	279.7	.104
53	10.97	33.611	4.00	-	-	-	228.1	.156	50	11.10	33.573	4.21	25.67	233.2	.156
66	10.52	33.707	3.54	-	-	-	213.5	.211	75	10.31	33.770	3.24	25.96	205.4	.211
79	10.24	33.797	3.11	-	-	-	202.3	.261	100	9.98	33.909	2.59	26.12	189.8	.261
97	10.00	33.898	2.65	-	-	-	190.9	.308	125	9.88	33.972	2.29	26.19	183.5	.308
118	9.92	33.958	2.33	-	-	-	185.2	.354	150	9.75	34.018	2.20	26.25	178.0	.354
145	9.76	34.007	2.23	-	-	-	179.0	.441	200	9.55	34.147	1.85	26.38	165.3	.441
177	9.70	34.083	2.02	-	-	-	172.4	.522	250	9.00	34.258	1.32	26.56	148.6	.522
209	9.47	34.172	1.78	-	-	-	162.2	.597	300	8.52	34.286	.99	26.66	139.4	.597
247	9.04	34.256	1.35	-	-	-	149.4								
290	8.58	34.280	1.03	-	-	-	140.7								
329	8.45	34.306	.96	-	-	-	136.9								

100.35

CALCOFI CRUISE 6707

100.35

ELLEN B. SCRIPPS, JULY 6 1967, 2315 GMT, 31 30.5N 117 07W, SOUNDING 690 FM, WIND 330 FORCE 3, WEATHER PARTLY CLOUDY, SEA SLIGHT.

0	18.02	33.55	-	24.18	374.9	0
10	17.22	33.55	-	24.37	356.6	.037
20	16.50	33.53	-	24.52	342.0	.072
30	15.35	33.41	-	24.69	326.1	.105
50	13.10	33.44	-	25.19	279.0	.166
75	10.70	33.43	-	25.63	237.0	.231
100	10.11	33.63	-	25.88	212.5	.287
125	9.58	33.80	-	26.11	191.5	.338
150	9.05	33.96	-	26.32	171.5	.384
200	8.43	34.02	-	26.46	157.8	.468
250	8.23	34.17	-	26.61	143.8	.546
300	7.85	34.20	-	26.69	136.2	.618
400	7.36	34.29	-	26.83	122.8	.753
500	6.39	34.29	-	26.96	110.2	.876
600	5.90	34.34	-	27.07	100.5	.989

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD									
100.40								CALCOFI CRUISE 6707								100.40							
ELLEN B. SCRIPPS, JULY 6 1967, 1959 GMT, 31 21.5N 117 26W, SOUNDING 1040 FM, WIND 300 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.																							
								0	17.73	33.50	-	24.21	371.9	0									
								10	16.95	33.45	-	24.36	357.8	.037									
								20	14.20	33.23	-	24.80	315.8	.070									
								30	13.97	33.33	-	24.92	303.9	.101									
								50	13.10	33.34	-	25.11	286.3	.160									
								75	11.50	33.51	-	25.55	244.7	.227									
								100	10.03	33.62	-	25.89	212.0	.285									
								125	9.68	33.92	-	26.18	184.2	.335									
								150	9.38	34.00	-	26.29	173.6	.380									
								200	8.71	34.10	-	26.48	156.0	.464									
								250	8.20	34.13	-	26.58	146.3	.542									
								300	7.63	34.20	-	26.72	133.1	.614									
								400	6.81	34.25	-	26.88	118.5	.745									
								500	6.20	34.30	-	27.00	107.1	.865									
								600	5.66	34.35	-	27.10	96.9	.974									

100.40 CALCOFI CRUISE 6707 100.40  
 ELLEN B. SCRIPPS, JULY 6 1967, 2044 GMT, 31 21.5N 117 26W, SOUNDING 1040 FM, WIND 300 FORCE 2, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 13.

1	17.80	33.470	5.84	-	-	-	375.7	0	17.80	33.470	5.84	24.17	375.7	0
11	17.02	33.450	5.92	-	-	-	359.4	10	17.12	33.454	5.91	24.32	361.4	.037
30	14.04	33.308	6.41	-	-	-	306.9	20	15.49	33.372	6.19	24.63	331.8	.072
39	13.96	33.347	6.29	-	-	-	302.4	30	14.04	33.308	6.41	24.89	306.9	.104
54	13.31	33.380	6.13	-	-	-	287.4	50	13.56	33.378	6.20	25.05	292.3	.164
69	11.76	33.320	5.39	-	-	-	263.3	75	11.27	33.356	5.03	25.47	252.1	.232
92	10.28	33.533	4.16	-	-	-	222.4	100	10.06	33.619	4.00	25.89	212.4	.291
111	9.89	33.738	3.79	-	-	-	201.0	125	9.77	33.877	3.13	26.13	188.8	.341
130	9.73	33.919	2.91	-	-	-	185.0	150	9.31	34.013	2.70	26.32	171.5	.387
149	9.32	34.010	2.71	-	-	-	171.9	200	8.81	34.100	2.38	26.46	157.5	.471
178	9.16	34.076	2.45	-	-	-	164.5	250	8.04	34.127	2.07	26.60	144.2	.549
211	8.61	34.106	2.36	-	-	-	154.1	300	7.61	34.190	1.38	26.72	133.5	.620
239	8.16	34.114	2.22	-	-	-	147.0	400	6.81	34.250	.79	26.88	118.5	.752
286	7.72	34.178	1.51	-	-	-	136.0	500	6.19	34.312	.51	27.01	106.1	.870
339	7.30	34.217	1.11	-	-	-	127.4	600	5.65	34.358	.38	27.11	96.1	.979
420	6.66	34.260	.71	-	-	-	115.8							
502	6.18	34.313	.51	-	-	-	105.9							
586	5.72	34.353	.39	-	-	-	97.4							

100.50 CALCOFI CRUISE 6707 100.50  
 ELLEN B. SCRIPPS, JULY 6 1967, 1425 GMT, 30 59N 118 07W, SOUNDING 875 FM, WIND CALM, WEATHER CLOUDY, SEA SLIGHT.

0	17.30	33.57	-	24.37	356.9	0
10	17.15	33.58	-	24.41	352.8	.036
20	16.83	33.56	-	24.47	347.1	.071
30	15.08	33.45	-	24.78	317.5	.104
50	12.00	33.56	-	25.49	249.9	.161
75	10.33	33.76	-	25.95	206.5	.218
100	9.50	33.89	-	26.19	183.6	.267
125	9.16	34.00	-	26.33	170.2	.312
150	8.83	34.06	-	26.43	160.7	.354
200	8.46	34.14	-	26.55	149.3	.433
250	7.98	34.20	-	26.67	138.0	.507
300	7.61	34.27	-	26.78	127.6	.576
400	6.67	34.29	-	26.93	113.7	.702
500	6.09	34.33	-	27.03	103.5	.817
600	5.55	34.36	-	27.12	94.9	.923

100.60 CALCOFI CRUISE 6707 100.60  
 ELLEN B. SCRIPPS, JULY 6 1967, 0811 GMT, 30 40.5N 118 46.5W, SOUNDING 1350 FM, WIND 310 FORCE 1, WEATHER MISSING, SEA SLIGHT.

0	16.83	33.45	-	24.39	355.1	0
10	16.28	33.44	-	24.51	343.8	.035
20	15.65	33.40	-	24.62	333.1	.069
30	14.80	33.34	-	24.76	319.8	.102
50	13.93	33.42	-	25.00	296.5	.163
75	12.20	33.42	-	25.35	263.8	.234
100	10.84	33.46	-	25.63	237.1	.297
125	10.14	33.63	-	25.88	213.0	.354
150	9.47	33.81	-	26.13	189.0	.405
200	8.99	34.11	-	26.44	159.4	.494
250	8.06	34.11	-	26.59	145.8	.572
300	7.40	34.14	-	26.71	134.5	.644
400	6.33	34.19	-	26.89	116.9	.775
500	5.83	34.28	-	27.03	104.1	.892
600	5.34	34.33	-	27.13	94.7	.998

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

INPUT							COMPUTED							INPUT							COMPUTED						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	Z	T	S	OXY	SIG*T	D*T	DD						
CALCOFI CRUISE 6707																											
100.60																					100.60						
ELLEN B. SCRIPPS, JULY 6 1967, 0856 GMT, 30 40.5N 118 46.5W, SOUNDING 1350 FM, WIND 310 FORCE 1, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 00.																											
0	16.92	33.429	5.91	-	-	-	358.7	0	16.92	33.429	5.91	24.35	358.7	0	10	16.37	33.415	5.92	24.47	347.6	.035						
10	16.37	33.415	5.92	-	-	-	347.6	10	16.37	33.415	5.92	24.47	347.6	.035	20	15.94	33.404	6.03	24.55	339.1	.070						
30	15.34	33.393	6.20	-	-	-	327.1	20	15.94	33.404	6.03	24.55	339.1	.070	30	15.34	33.393	6.20	24.68	327.1	.103						
40	14.26	33.339	6.40	-	-	-	309.0	30	15.34	33.393	6.20	24.68	327.1	.103	40	13.92	33.399	6.28	24.99	297.8	.166						
49	13.97	33.400	6.29	-	-	-	298.7	50	13.92	33.399	6.28	24.99	297.8	.166	64	13.03	33.363	6.00	-	-	-	283.3					
64	13.03	33.363	6.00	-	-	-	283.3	75	12.35	33.391	5.68	25.30	268.6	.237	79	12.10	33.406	5.54	-	-	-	263.0					
79	12.10	33.406	5.54	-	-	-	263.0	100	10.85	33.463	4.70	25.63	237.0	.301	98	10.94	33.447	4.79	-	-	-	239.7					
98	10.94	33.447	4.79	-	-	-	239.7	125	9.98	33.680	3.83	25.95	206.7	.357	123	10.04	33.669	3.86	-	-	-	208.5					
123	10.04	33.669	3.86	-	-	-	208.5	150	9.46	33.843	3.37	26.16	186.4	.407	143	9.54	33.779	3.57	-	-	-	192.4					
143	9.54	33.779	3.57	-	-	-	192.4	200	9.02	34.104	2.35	26.43	160.4	.495	172	9.29	34.032	2.72	-	-	-	169.8					
172	9.29	34.032	2.72	-	-	-	169.8	250	8.34	34.133	2.06	26.56	148.1	.574	202	9.00	34.108	2.33	-	-	-	159.7					
202	9.00	34.108	2.33	-	-	-	159.7	300	7.49	34.114	1.86	26.67	137.6	.648	231	8.68	34.142	2.10	-	-	-	152.4					
231	8.68	34.142	2.10	-	-	-	152.4	400	6.42	34.171	1.04	26.86	119.5	.782	272	7.91	34.114	2.03	-	-	-	143.4					
272	7.91	34.114	2.03	-	-	-	143.4	500	5.75	34.279	.47	27.04	103.3	.899	331	7.10	34.126	1.61	-	-	-	131.5					
331	7.10	34.126	1.61	-	-	-	131.5																				
405	6.38	34.175	1.00	-	-	-	118.6																				
480	5.86	34.263	.54	-	-	-	105.7																				
560	5.52	34.309	.42	-	-	-	98.3																				

100.70 CALCOFI CRUISE 6707 100.70

ELLEN B. SCRIPPS, JULY 6 1967, 0235 GMT, 30 20.5N 119 27W, SOUNDING 2070 FM, WIND 250 FORCE 2, WEATHER PARTLY CLOUDY, SEA SLIGHT.

0	17.94	33.49	-	24.15	377.4	0
10	17.56	33.46	-	24.22	370.9	.037
20	17.33	33.44	-	24.26	367.1	.074
30	16.55	33.34	-	24.37	357.0	.111
50	14.80	33.22	-	24.66	328.6	.179
75	13.25	33.28	-	25.03	293.6	.258
100	11.02	33.15	-	25.35	263.0	.328
125	10.25	33.50	-	25.76	224.4	.389
150	9.52	33.76	-	26.08	193.5	.442
200	8.78	33.96	-	26.36	167.4	.534
250	8.10	34.02	-	26.51	153.1	.616
300	7.36	34.04	-	26.63	141.4	.692
400	6.35	34.12	-	26.83	122.4	.829
500	5.88	34.23	-	26.98	108.5	.950
600	5.41	34.29	-	27.09	98.5	1.061

100.80 CALCOFI CRUISE 6707 100.80

ELLEN B. SCRIPPS, JULY 5 1967, 2115 GMT, 30 00N 120 06.5W, SOUNDING 2140 FM, WIND 270 FORCE 2, WEATHER CLOUDY, SEA SLIGHT.

0	17.38	33.27	-	24.12	380.6	0
10	16.60	33.28	-	24.31	362.4	.037
20	16.13	33.25	-	24.39	354.4	.073
30	15.86	33.25	-	24.45	348.6	.108
50	15.07	33.22	-	24.61	334.2	.177
75	13.11	33.18	-	24.98	298.3	.256
100	11.50	33.21	-	25.31	266.8	.327
125	10.50	33.45	-	25.68	232.2	.390
150	9.90	33.66	-	25.94	206.9	.446
200	8.76	33.95	-	26.35	167.9	.541
250	7.95	34.03	-	26.54	150.2	.623
300	7.27	34.08	-	26.68	137.2	.697
400	6.39	34.14	-	26.84	121.4	.831
500	5.82	34.23	-	26.99	107.7	.952
600	5.35	34.31	-	27.11	96.3	1.061

100.80 CALCOFI CRUISE 6707 100.80

ELLEN B. SCRIPPS, JULY 5 1967, 2156 GMT, 30 00N 120 06.5W, SOUNDING 2140 FM, WIND 270 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 06.

1	17.53	33.289	5.84	-	-	-	382.6	0	17.53	33.289	5.84	24.10	382.6	0								
11	17.10	33.281	5.85	-	-	-	373.5	10	17.15	33.282	5.85	24.18	374.5	.038								
31	16.00	33.251	6.05	-	-	-	351.5	20	16.60	33.268	5.93	24.30	363.3	.075								
41	15.60	33.237	6.11	-	-	-	344.0	30	16.05	33.253	6.04	24.41	352.5	.111								
56	14.89	33.200	6.23	-	-	-	331.9	50	15.20	33.216	6.18	24.58	337.1	.180								
71	13.90	33.165	6.30	-	-	-	314.6	75	13.66	33.153	6.28	24.85	310.8	.261								
96	12.40	33.128	6.11	-	-	-	288.9	100	12.10	33.132	6.03	25.14	283.2	.336								
115	11.09	33.201	5.62	-	-	-	260.4	125	10.73	33.327	5.25	25.54	245.0	.403								
134	10.48	33.456	4.91	-	-	-	231.4	150	9.96	33.637	4.50	25.92	209.6	.460								
154	9.84	33.677	4.42	-	-	-	204.7	200	8.83	33.953	3.66	26.35	168.8	.557								
183	9.14	33.893	3.92	-	-	-	177.8	250	8.10	34.033	2.78	26.52	152.1	.639								
218	8.56	33.987	3.37	-	-	-	162.2	300	7.30	34.090	1.93	26.68	136.8	.713								
247	8.15	34.029	2.84	-	-	-	153.1	400	6.32	34.161	1.12	26.87	119.0	.846								
296	7.35	34.088	1.97	-	-	-	137.7	500	5.68	34.235	.68	27.01	105.8	.964								
350	6.76	34.113	1.54	-	-	-	128.1	600	5.33	34.343	.47	27.14	93.6	1.071								
433	6.08	34.195	.88	-	-	-	113.5															
518	5.60	34.250	.63	-	-	-	103.7															
603	5.32	34.347	.47	-	-	-	93.2															



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
103.30							CALCOFI CRUISE 6707							103.30	
ELLEN B. SCRIPPS, JULY 8 1967, 0204 GMT, 31 06N 116 24.5W, SOUNDING 35 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.															
	0	16.19	33.46	-	24.54	340.3	0								
	10	13.61	33.23	-	24.92	304.2	.032								
	20	13.10	33.32	-	25.09	287.8	.062								
	30	11.75	33.51	-	25.50	249.1	.089								
	50	10.72	33.66	-	25.80	220.3	.136								

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
103.35							CALCOFI CRUISE 6707							103.35	
ELLEN B. SCRIPPS, JULY 8 1967, 0435 GMT, 30 56N 116 45W, SOUNDING 1010 FM, WIND 320 FORCE 2, WEATHER MISSING, SEA SLIGHT.															
	0	17.35	33.52	-	24.32	361.7	0								
	10	17.28	33.52	-	24.33	360.1	.036								
	20	16.50	33.45	-	24.46	347.8	.072								
	30	16.23	33.48	-	24.55	339.8	.106								
	50	15.50	33.47	-	24.70	324.9	.173								
	75	13.86	33.36	-	24.97	299.5	.251								
	100	11.30	33.35	-	25.46	253.0	.321								
	125	10.37	33.65	-	25.86	215.3	.380								
	150	9.78	33.83	-	26.10	192.4	.432								
	200	8.72	34.05	-	26.44	159.9	.521								
	250	8.07	34.12	-	26.59	145.2	.600								
	300	7.98	34.22	-	26.69	136.5	.672								
	400	7.00	34.26	-	26.86	120.2	.806								
	500	6.32	34.34	-	27.01	105.6	.926								
	600	5.77	34.41	-	27.14	93.7	1.033								

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
103.40							CALCOFI CRUISE 6707							103.40	
ELLEN B. SCRIPPS, JULY 8 1967, 0735 GMT, 30 46N 117 03W, SOUNDING 810 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA SLIGHT.															
	0	17.92	33.44	-	24.12	380.6	0								
	10	17.77	33.44	-	24.16	377.2	.038								
	20	16.89	33.38	-	24.32	361.6	.075								
	30	16.72	33.39	-	24.37	357.1	.111								
	50	17.17	33.68	-	24.48	346.0	.181								
	75	16.10	33.58	-	24.65	329.6	.266								
	100	13.57	33.49	-	25.13	284.3	.344								
	125	11.27	33.38	-	25.49	250.3	.411								
	150	10.10	33.66	-	25.91	210.1	.469								
	200	9.06	33.93	-	26.29	173.9	.567								
	250	8.28	34.03	-	26.49	154.9	.651								
	300	7.85	34.12	-	26.63	142.1	.728								
	400	7.07	34.23	-	26.82	123.4	.866								
	500	6.03	34.28	-	27.00	106.5	.988								
	600	5.68	34.36	-	27.11	96.4	1.096								

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
103.50							CALCOFI CRUISE 6707							103.50	
ELLEN B. SCRIPPS, JULY 8 1967, 1300 GMT, 30 23N 117 45W, SOUNDING 1210 FM, WIND 300 FORCE 2, WEATHER OVERCAST, SEA MODERATE.															
	0	18.20	33.60	-	24.17	375.5	0								
	10	18.20	33.61	-	24.18	374.8	.038								
	20	17.53	33.62	-	24.35	358.5	.074								
	30	17.52	33.69	-	24.41	353.2	.110								
	50	16.52	33.57	-	24.55	339.5	.179								
	75	14.75	33.29	-	24.73	322.5	.263								
	100	13.15	33.48	-	25.21	277.0	.338								
	125	11.29	33.63	-	25.68	232.2	.402								
	150	10.70	33.72	-	25.85	215.5	.459								
	200	9.39	33.95	-	26.25	177.4	.559								
	250	8.53	34.05	-	26.47	157.1	.645								
	300	7.75	34.06	-	26.59	145.2	.723								
	400	6.75	34.15	-	26.80	125.2	.863								
	500	6.14	34.26	-	26.97	109.3	.987								
	600	5.69	34.33	-	27.08	98.7	1.098								



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
103.60														
CALCOFI CRUISE 6707														
103.60														
ELLEN B. SCRIPPS, JULY 8 1967, 1820 GMT, 30 02N 118 23W, SOUNDING 1960 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA SLIGHT.														
								0	18.35	33.60	-	24.14	379.0	0
								10	18.34	33.60	-	24.14	378.8	.038
								20	17.84	33.54	-	24.21	371.5	.075
								30	17.70	33.63	-	24.32	361.7	.112
								50	16.60	33.52	-	24.49	344.9	.183
								75	15.75	33.48	-	24.66	329.4	.268
								100	13.00	33.35	-	25.14	283.7	.345
								125	11.65	33.57	-	25.56	242.9	.412
								150	10.54	33.76	-	25.91	209.9	.469
								200	9.33	34.00	-	26.30	172.8	.566
								250	8.51	34.07	-	26.49	155.3	.651
								300	7.78	34.10	-	26.62	142.6	.727
								400	6.84	34.21	-	26.84	121.9	.865
								500	6.03	34.24	-	26.97	109.5	.987
								600	5.53	34.34	-	27.11	96.1	1.097

103.60														
CALCOFI CRUISE 6707														
103.60														
ELLEN B. SCRIPPS, JULY 8 1967, 1905 GMT, 30 02N 118 23W, SOUNDING 1960 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 14.														
1	18.44	33.581	5.66	-	-	-	382.5	0	18.44	33.581	5.66	24.10	382.5	0
11	18.26	33.571	5.72	-	-	-	379.0	10	18.28	33.571	5.71	24.13	379.5	.038
30	17.79	33.624	5.93	-	-	-	364.2	20	18.05	33.587	5.83	24.20	372.8	.076
40	17.56	33.670	5.89	-	-	-	355.6	30	17.79	33.624	5.93	24.29	364.2	.113
54	16.69	33.523	6.02	-	-	-	346.7	50	16.94	33.567	5.98	24.45	349.0	.184
69	16.48	33.602	6.04	-	-	-	336.3	75	15.81	33.534	6.11	24.68	326.7	.269
93	13.46	33.320	6.10	-	-	-	294.7	100	12.89	33.331	5.87	25.14	283.0	.346
112	12.14	33.414	5.32	-	-	-	263.1	125	11.54	33.562	4.59	25.58	241.6	.412
131	11.32	33.631	4.29	-	-	-	232.7	150	10.70	33.743	3.92	25.87	213.8	.470
150	10.70	33.743	3.92	-	-	-	213.8	200	9.43	33.981	3.39	26.27	175.8	.569
178	9.94	33.891	3.55	-	-	-	190.5	250	8.57	34.044	3.05	26.46	158.2	.655
211	9.21	34.013	3.33	-	-	-	170.0	300	7.90	34.089	2.55	26.60	145.1	.733
239	8.74	34.036	-	-	-	-	161.2	400	6.88	34.195	1.18	26.82	123.5	.873
286	8.08	34.072	2.72	-	-	-	148.9	500	6.06	34.250	.67	26.97	109.1	.995
338	7.44	34.137	2.05	-	-	-	135.2	600	5.58	34.343	.40	27.11	96.5	1.105
421	6.72	34.210	.93	-	-	-	120.3							
503	6.04	34.252	.66	-	-	-	108.7							
587	5.62	34.328	.43	-	-	-	98.1							

103.70														
CALCOFI CRUISE 6707														
103.70														
ELLEN B. SCRIPPS, JULY 9 1967, 0015 GMT, 29 46.5N 119 03W, SOUNDING 1880 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MODERATE.														
								0	17.93	33.35	-	24.05	387.4	0
								10	17.45	33.31	-	24.13	379.3	.038
								20	17.15	33.31	-	24.20	372.5	.076
								30	16.26	33.25	-	24.36	357.2	.113
								50	15.27	33.20	-	24.55	339.8	.182
								75	13.75	33.13	-	24.82	314.2	.265
								100	12.55	33.21	-	25.12	285.6	.340
								125	10.90	33.15	-	25.37	261.0	.409
								150	9.96	33.47	-	25.79	221.9	.470
								200	9.00	33.90	-	26.28	175.2	.571
								250	8.41	34.01	-	26.46	158.3	.657
								300	7.62	34.03	-	26.59	145.6	.735
								400	6.46	34.10	-	26.80	125.2	.876
								500	5.93	34.23	-	26.97	109.1	.999
								600	5.46	34.29	-	27.08	99.1	1.110

103.80														
CALCOFI CRUISE 6707														
103.80														
ELLEN B. SCRIPPS, JULY 9 1967, 0508 GMT, 29 25N 119 43W, SOUNDING 1980 FM, WIND 350 FORCE 3, WEATHER MISSING, SEA MODERATE.														
								0	17.68	33.29	-	24.06	386.0	0
								10	17.68	33.29	-	24.06	386.0	.039
								20	16.89	33.27	-	24.23	369.6	.076
								30	16.54	33.27	-	24.32	361.9	.113
								50	15.79	33.23	-	24.46	348.5	.184
								75	14.46	33.14	-	24.68	327.6	.269
								100	12.74	33.10	-	24.99	297.2	.348
								125	11.59	33.23	-	25.31	266.9	.419
								150	10.35	33.47	-	25.72	228.2	.482
								200	9.48	33.92	-	26.22	181.0	.586
								250	8.33	33.98	-	26.44	159.3	.673
								300	7.73	34.05	-	26.59	145.7	.752
								400	6.75	34.18	-	26.83	122.9	.891
								500	6.13	34.25	-	26.97	110.0	1.014
								600	5.53	34.32	-	27.10	97.6	1.125

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
107.32							CALCOFI CRUISE 6707							107.32	
ELLEN B. SCRIPPS, JULY 10 1967, 1340 GMT, 30 26N 116 11.5W, SOUNDING 300 FM, WIND 340 FORCE 3, WEATHER OVERCAST, SEA ROUGH.															
0	16.64	33.46	-	24.44	350.2	0									
10	16.20	33.41	-	24.50	344.2	.035									
20	13.30	33.29	-	25.03	293.8	.067									
30	12.00	33.27	-	25.27	271.2	.095									
50	10.85	33.56	-	25.70	229.9	.145									
75	10.13	33.88	-	26.08	194.3	.199									
100	9.70	33.99	-	26.23	179.3	.246									
125	9.61	34.03	-	26.28	174.9	.291									
150	9.25	34.03	-	26.34	169.3	.334									
200	9.00	34.19	-	26.50	153.7	.417									
250	8.98	34.33	-	26.62	143.0	.493									
300	8.75	34.36	-	26.68	137.3	.566									
400	7.58	34.33	-	26.83	122.8	.702									

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
107.35							CALCOFI CRUISE 6707							107.35	
ELLEN B. SCRIPPS, JULY 10 1967, 1116 GMT, 30 19.5N 116 20W, SOUNDING 970 FM, WIND 330 FORCE 3, WEATHER MISSING, SEA MODERATE.															
0	17.53	33.47	-	24.24	369.5	0									
10	17.20	33.44	-	24.29	364.2	.037									
20	16.35	33.39	-	24.45	348.9	.072									
30	15.44	33.31	-	24.59	335.3	.107									
50	14.52	33.27	-	24.76	319.3	.172									
75	12.68	33.33	-	25.18	279.2	.248									
100	10.83	33.29	-	25.50	249.5	.314									
125	10.03	33.65	-	25.91	209.7	.372									
150	9.65	33.85	-	26.13	188.9	.423									
200	8.80	34.01	-	26.40	164.0	.513									
250	8.35	34.11	-	26.54	150.0	.593									
300	7.91	34.19	-	26.67	137.8	.667									
400	7.25	34.26	-	26.82	123.5	.804									
500	6.43	34.30	-	26.97	109.9	.927									
600	5.93	34.34	-	27.06	100.8	1.040									

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
107.40							CALCOFI CRUISE 6707							107.40	
ELLEN B. SCRIPPS, JULY 10 1967, 0826 GMT, 30 10N 116 40W, SOUNDING 1380 FM, WIND 330 FORCE 3, WEATHER MISSING, SEA ROUGH.															
0	18.05	33.45	-	24.09	382.9	0									
10	17.55	33.45	-	24.22	371.4	.038									
20	16.76	33.33	-	24.31	362.3	.074									
30	17.00	33.49	-	24.38	356.0	.110									
50	16.60	33.59	-	24.55	339.8	.180									
75	14.25	33.33	-	24.87	309.4	.262									
100	11.85	33.36	-	25.37	261.9	.334									
125	10.70	33.66	-	25.81	220.0	.395									
150	9.96	33.84	-	26.07	194.6	.447									
200	9.09	34.02	-	26.36	167.6	.540									
250	8.39	34.07	-	26.51	153.5	.622									
300	8.17	34.18	-	26.63	142.2	.698									
400	7.53	34.24	-	26.77	128.8	.840									
500	6.78	34.30	-	26.92	114.4	.968									
600	6.00	34.33	-	27.04	102.4	1.084									

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
107.50							CALCOFI CRUISE 6707							107.50	
ELLEN B. SCRIPPS, JULY 10 1967, 0256 GMT, 29 50N 117 22W, SOUNDING 1280 FM, WIND 320 FORCE 2, WEATHER OVERCAST, SEA ROUGH.															
0	18.04	33.43	-	24.08	384.1	0									
10	18.00	33.43	-	24.09	383.2	.038									
20	17.00	33.35	-	24.27	366.2	.076									
30	16.55	33.36	-	24.38	355.5	.112									
50	16.17	33.36	-	24.47	347.2	.183									
75	14.77	33.28	-	24.72	323.6	.267									
100	13.00	33.32	-	25.11	285.9	.344									
125	11.50	33.41	-	25.47	252.1	.412									
150	10.40	33.65	-	25.85	215.7	.471									
200	9.15	33.93	-	26.28	175.2	.570									
250	8.40	34.02	-	26.47	157.4	.655									
300	7.75	34.07	-	26.60	144.5	.733									
400	6.80	34.15	-	26.80	125.8	.874									
500	6.15	34.24	-	26.95	111.0	.999									
600	5.72	34.30	-	27.06	101.3	1.112									

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*T Z T S OXY SIG\*T D\*T DD

107.60

CALCOFI CRUISE 6707

107.60

ELLEN B. SCRIPPS, JULY 9 1967, 2047 GMT, 29 31.5N 118 01W, SOUNDING 1960 FM, WIND 340 FORCE 3, WEATHER OVERCAST,  
SEA ROUGH.

0	18.15	33.47	-	24.09	383.8	0
10	18.00	33.47	-	24.12	380.3	.038
20	17.30	33.42	-	24.25	367.9	.076
30	16.77	33.40	-	24.36	357.5	.112
50	16.10	33.43	-	24.54	340.6	.182
75	14.70	33.37	-	24.80	315.6	.265
100	13.20	33.46	-	25.18	279.4	.339
125	11.70	33.49	-	25.49	249.7	.406
150	10.38	33.66	-	25.86	214.7	.465
200	9.06	33.95	-	26.31	172.4	.564
250	8.48	34.05	-	26.48	156.3	.648
300	8.19	34.15	-	26.60	144.7	.726
400	7.38	34.24	-	26.79	126.7	.867
500	6.63	34.29	-	26.93	113.2	.994
600	5.75	34.29	-	27.04	102.4	1.109

107.60

CALCOFI CRUISE 6707

107.60

ELLEN B. SCRIPPS, JULY 9 1967, 2130 GMT, 29 31.5N 118 01W, SOUNDING 1960 FM, WIND 340 FORCE 3, WEATHER OVERCAST,  
SEA ROUGH, WIRE ANGLE 13.

1	18.28	33.478	5.83	-	-	-	386.3	0	18.28	33.478	5.83	24.06	386.3	0
11	18.08	33.471	5.70	-	-	-	382.1	10	18.11	33.472	5.71	24.10	382.8	.038
30	16.89	33.420	5.87	-	-	-	358.7	20	17.52	33.445	5.76	24.22	371.0	.076
40	16.69	33.423	5.90	-	-	-	354.0	30	16.89	33.420	5.87	24.35	358.7	.113
54	16.14	33.441	6.03	-	-	-	340.6	50	16.33	33.439	5.98	24.49	345.0	.183
69	15.18	33.384	6.25	-	-	-	324.4	75	14.72	33.383	6.21	24.81	315.0	.266
93	13.46	33.435	5.75	-	-	-	286.2	100	13.20	33.475	5.43	25.19	278.3	.341
112	12.70	33.553	4.82	-	-	-	263.2	125	11.55	33.628	4.23	25.63	236.9	.406
131	11.06	33.667	3.96	-	-	-	225.5	150	10.80	33.843	3.12	25.93	208.1	.463
150	10.80	33.843	3.12	-	-	-	208.1	200	9.05	33.960	3.53	26.32	171.4	.559
180	9.42	33.913	3.64	-	-	-	180.6	250	8.50	34.061	2.77	26.48	155.7	.643
214	8.91	33.991	3.33	-	-	-	167.1	300	8.21	34.172	1.65	26.61	143.3	.720
244	8.54	34.047	2.91	-	-	-	157.4	400	7.23	34.232	.78	26.80	125.3	.860
292	8.26	34.158	1.78	-	-	-	145.1	500	6.65	34.313	.40	26.95	111.7	.986
346	7.84	34.227	1.10	-	-	-	134.0	600	5.54	34.306	.34	27.08	98.8	1.098
429	6.92	34.235	.69	-	-	-	121.0							
512	6.56	34.319	.37	-	-	-	110.1							
595	5.62	34.310	.34	-	-	-	99.4							

107.70

CALCOFI CRUISE 6707

107.70

ELLEN B. SCRIPPS, JULY 9 1967, 1502 GMT, 29 13N 118 41W, SOUNDING 1420 FM, WIND 340 FORCE 3, WEATHER OVERCAST,  
SEA ROUGH.

0	18.35	33.44	-	24.01	390.7	0
10	18.25	33.45	-	24.05	387.6	.039
20	17.20	33.32	-	24.20	372.9	.077
30	16.80	33.28	-	24.26	366.9	.114
50	15.47	33.25	-	24.54	340.3	.185
75	13.95	33.23	-	24.85	310.8	.267
100	12.84	33.22	-	25.07	290.3	.343
125	11.06	33.61	-	25.70	229.7	.408
150	10.34	33.83	-	26.00	201.5	.463
200	9.15	33.97	-	26.31	172.3	.558
250	8.48	34.05	-	26.48	156.3	.642
300	7.80	34.08	-	26.60	144.4	.720
400	6.82	34.19	-	26.83	123.1	.859
500	6.11	34.28	-	26.99	107.5	.981
600	5.60	34.32	-	27.09	98.4	1.091

107.80

CALCOFI CRUISE 6707

107.80

ELLEN B. SCRIPPS, JULY 9 1967, 0954 GMT, 28 50N 119 19.5W, SOUNDING 1950 FM, WIND 330 FORCE 4, WEATHER MISSING,  
SEA MODERATE.

0	18.32	33.41	-	24.00	392.1	0
10	17.70	33.31	-	24.07	385.0	.039
20	16.90	33.25	-	24.22	371.3	.077
30	16.80	33.49	-	24.42	351.6	.113
50	16.31	33.49	-	24.54	340.8	.182
75	15.98	33.67	-	24.75	320.5	.266
100	15.00	33.68	-	24.97	299.0	.344
125	13.08	33.71	-	25.40	258.8	.414
150	11.30	33.73	-	25.75	225.0	.475
200	9.47	33.94	-	26.23	179.4	.578
250	8.61	33.99	-	26.41	162.7	.666
300	8.15	34.09	-	26.56	148.6	.746
400	7.05	34.19	-	26.80	126.1	.889
500	6.28	34.26	-	26.95	111.1	1.014
600	5.51	34.30	-	27.08	98.9	1.126

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
110.35								CALCOFI CRUISE 6707								110.35	
ELLEN B. SCRIPPS, JULY 11 1967, 0012 GMT, 29 47N 116 00W, SOUNDING 220 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA ROUGH.																	
								0	15.73	33.56	-	24.72	323.2	0			
								10	15.00	33.52	-	24.85	310.8	.032			
								20	12.00	33.41	-	25.38	260.9	.060			
								30	11.15	33.49	-	25.59	240.1	.085			
								50	10.68	33.59	-	25.76	224.8	.132			
								75	10.04	33.77	-	26.01	201.0	.186			
								100	9.69	33.87	-	26.14	188.0	.235			
								125	9.55	33.96	-	26.24	179.2	.281			
								150	9.35	33.99	-	26.29	173.8	.326			
								200	8.85	34.10	-	26.46	158.1	.411			
								250	8.48	34.16	-	26.56	148.2	.489			
								300	8.07	34.18	-	26.64	140.8	.564			

110.35								CALCOFI CRUISE 6707								110.35	
ELLEN B. SCRIPPS, JULY 11 1967, 0043 GMT, 29 47N 116 00W, SOUNDING 220 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 24.																	
0	15.67	33.537	7.07	-	-	-	323.6	0	15.67	33.537	7.07	24.72	323.6	0			
9	15.26	33.513	7.12	-	-	-	316.7	10	14.98	33.506	7.03	24.85	311.3	.032			
20	12.10K	-	-	-	-	-	-	20	12.10	33.461	5.93	25.40	259.0	.060			
28	11.54	33.456	4.85	-	-	-	249.4	30	11.40	33.477	4.69	25.54	245.4	.086			
41	10.83	33.604	4.00	-	-	-	226.3	50	10.81	33.642	3.69	25.77	223.2	.133			
55	10.80	33.655	3.60	-	-	-	222.0	75	10.12	33.764	3.49	25.99	202.8	.186			
69	10.22	33.736	3.59	-	-	-	206.4	100	9.77	33.823	3.54	26.09	192.8	.236			
82	10.05	33.791	3.38	-	-	-	199.6	125	9.53	33.912	3.24	26.20	182.5	.284			
101	9.76	33.825	3.55	-	-	-	192.5	150	9.32	33.959	3.20	26.27	175.7	.329			
123	9.55	33.907	3.25	-	-	-	183.1	200	8.89	34.064	2.68	26.42	161.3	.415			
150	9.32	33.959	3.20	-	-	-	175.7	250	8.42	34.145	1.97	26.56	148.4	.494			
181	8.90	33.985	3.18	-	-	-	167.4	300	8.14	34.190	1.54	26.64	141.0	.569			
214	8.88	34.122	2.28	-	-	-	156.9										
250	8.42	34.145	1.97	-	-	-	148.4										
291	8.18	34.177	1.64	-	-	-	142.6										
328	8.04	34.247	1.17	-	-	-	135.4										

110.40								CALCOFI CRUISE 6707								110.40	
ELLEN B. SCRIPPS, JULY 11 1967, 0318 GMT, 29 36.5N 116 19.5W, SOUNDING 1190 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA MODERATE.																	
								0	16.79	33.52	-	24.45	349.1	0			
								10	16.50	33.51	-	24.51	343.5	.035			
								20	15.76	33.53	-	24.69	326.0	.068			
								30	15.35	33.52	-	24.78	318.0	.100			
								50	11.35	33.60	-	25.64	235.5	.156			
								75	10.50	33.75	-	25.91	210.0	.212			
								100	9.73	33.91	-	26.17	185.7	.262			
								125	9.34	34.00	-	26.30	172.9	.307			
								150	9.02	34.03	-	26.38	165.8	.350			
								200	8.54	34.08	-	26.49	155.0	.432			
								250	8.25	34.19	-	26.62	142.6	.509			
								300	7.55	34.15	-	26.69	135.8	.580			
								400	7.23	34.26	-	26.83	123.2	.716			
								500	6.64	34.36	-	26.99	108.1	.838			
								600	5.83	34.36	-	27.09	98.1	.949			

110.40								CALCOFI CRUISE 6707								110.40	
ELLEN B. SCRIPPS, JULY 11 1967, 0400 GMT, 29 36.5N 116 19.5W, SOUNDING 1190 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 16.																	
1	17.27	33.556	6.12	-	-	-	357.3	0	17.27	33.556	6.12	24.36	357.3	0			
11	16.76	33.513	6.52	-	-	-	349.0	10	16.84	33.515	6.50	24.43	350.7	.035			
30	13.85	33.559	6.05	-	-	-	284.7	20	15.55	33.526	6.41	24.74	321.9	.069			
39	12.40	33.570	4.89	-	-	-	256.4	30	13.85	33.559	6.05	25.13	284.7	.099			
53	11.48	33.603	4.10	-	-	-	237.5	50	11.60	33.592	4.22	25.59	240.5	.152			
67	10.73	33.720	3.26	-	-	-	216.0	75	10.53	33.764	3.01	25.92	209.5	.209			
90	10.29	33.826	2.83	-	-	-	200.9	100	10.01	33.865	2.89	26.08	193.6	.260			
109	9.77	33.900	2.95	-	-	-	187.1	125	9.46	33.971	2.79	26.26	177.0	.307			
128	9.42	33.984	2.75	-	-	-	175.4	150	9.23	34.041	2.59	26.35	168.2	.350			
146	9.28	34.036	2.60	-	-	-	169.4	200	8.65	34.082	2.42	26.48	156.5	.433			
175	8.90	34.057	2.55	-	-	-	162.0	250	8.17	34.165	1.67	26.61	143.2	.510			
208	8.58	34.094	2.33	-	-	-	154.5	300	7.71	34.158	1.49	26.68	137.4	.583			
236	8.34	34.168	1.68	-	-	-	145.5	400	7.13	34.249	.83	26.83	122.7	.718			
284	7.78	34.140	1.63	-	-	-	139.7	500	6.57	34.334	.42	26.97	109.1	.841			
336	7.61	34.211	1.14	-	-	-	132.0	600	5.81	34.350	.39	27.08	98.6	.952			
418	6.98	34.257	.77	-	-	-	120.2										
501	6.56	34.335	.42	-	-	-	108.9										
585	5.94	34.348	.39	-	-	-	100.3										



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D* <sub>T</sub>	Z	T	S	OXY	SIG* <sub>T</sub>	D* <sub>T</sub>	DD			
110.50								CALCOFI CRUISE 6707								110.50	
ELLEN B. SCRIPPS, JULY 11 1967, 0905 GMT, 29 16N 116 59W, SOUNDING 880 FM, WIND 320 FORCE 4, WEATHER MISSING, SEA MODERATE.																	
								0	18.13	33.40	-	24.04	388.4	0			
								10	18.03	33.43	-	24.08	383.9	.039			
								20	17.74	33.47	-	24.19	374.3	.077			
								30	17.00	33.48	-	24.37	356.7	.113			
								50	15.85	33.48	-	24.63	331.6	.182			
								75	13.10	33.39	-	25.15	282.7	.259			
								100	11.55	33.32	-	25.39	259.6	.328			
								125	11.30	33.71	-	25.74	226.5	.389			
								150	10.24	33.87	-	26.05	196.9	.443			
								200	10.70	34.38	-	26.37	166.8	.536			
								250	10.19	34.45	-	26.51	153.2	.618			
								300	9.64	34.44	-	26.60	145.0	.696			
								400	8.55	34.44	-	26.77	128.4	.839			
								500	7.35	34.38	-	26.90	115.9	.969			
								600	6.42	34.36	-	27.01	105.3	1.088			

110.60 CALCOFI CRUISE 6707 110.60  
 ELLEN B. SCRIPPS, JULY 11 1967, 1424 GMT, 28 55.6N 117 37.5W, SOUNDING 1910 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA ROUGH.

								0	19.55	33.71	-	23.92	399.9	0
								10	19.55	33.71	-	23.92	399.9	.040
								20	19.25	33.63	-	23.93	398.4	.080
								30	18.92	33.63	-	24.02	390.4	.119
								50	13.84	33.49	-	25.07	289.6	.188
								75	11.52	33.67	-	25.67	233.3	.253
								100	10.45	33.83	-	25.98	203.3	.309
								125	9.99	33.94	-	26.15	187.6	.358
								150	9.85	34.10	-	26.30	173.6	.404
								200	9.51	34.25	-	26.47	157.1	.488
								250	8.63	34.24	-	26.60	144.4	.566
								300	8.18	34.27	-	26.69	135.6	.638
								400	7.75	34.39	-	26.85	120.6	.772
								500	6.69	34.36	-	26.98	108.7	.894
								600	6.05	34.37	-	27.07	100.0	1.006

110.60 CALCOFI CRUISE 6707 110.60  
 ELLEN B. SCRIPPS, JULY 11 1967, 1503 GMT, 28 55.5N 117 37.5W, SOUNDING 1910 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 16.

1	19.58	33.708A	5.62	-	-	-	400.8	0	19.58	33.708	5.62	23.91	400.8	0
11	19.60	33.709	5.63	-	-	-	401.2	10	19.62	33.710	5.63	23.90	401.6	.040
30	18.44	33.646	5.85	-	-	-	377.8	20	19.29	33.691	5.69	23.97	395.0	.080
39	17.08	33.578	6.13	-	-	-	351.4	30	18.44	33.646	5.85	24.15	377.8	.119
53	13.40	33.588	5.33	-	-	-	273.8	50	14.18	33.577	5.59	25.07	289.9	.186
67	11.88	33.665	3.96	-	-	-	240.0	75	11.50	33.713	3.64	25.70	229.8	.251
75	11.50K	-	-	-	-	-	-	100	10.23	33.858	3.38	26.04	197.6	.305
90	10.51	33.803	3.46	-	-	-	206.2	125	10.04	34.001	2.83	26.19	183.9	.353
109	10.13	33.907	3.29	-	-	-	192.3	150	9.82	34.118	2.17	26.31	171.8	.398
128	10.02	34.018	2.73	-	-	-	182.3	200	9.73	34.313	1.23	26.48	155.9	.482
147	9.82	34.102	2.24	-	-	-	172.9	250	8.94	34.294	1.13	26.60	145.1	.560
175	9.86	34.237	1.65	-	-	-	163.6	300	8.64	34.358	.68	26.69	135.8	.632
210	9.62	34.326	1.13	-	-	-	153.2	400	7.66	34.373	.37	26.85	120.7	.767
238	9.04	34.283	1.22	-	-	-	147.4	500	6.68	34.350	.34	26.97	109.3	.889
286	8.78	34.352	.76	-	-	-	138.3	600	6.16	34.402	.25	27.08	99.0	1.001
339	8.20	34.362	.54	-	-	-	129.1							
420	7.49	34.374	.34	-	-	-	118.3							
502	6.66	34.350	.34	-	-	-	109.1							
585	6.20	34.388A	.27	-	-	-	100.5							

A) THE SALINITY BOTTLE ORDER DIFFERS ON THE ORIGINAL DATA AND SALINITY DETERMINATION SHEETS. THEY ARE ASSUMED TO BE IN THE CORRECT ORDER.

Z I S OXY PHO SIL NIT D\*1 Z I S OXY SIG\*1 D\*1 DC  
 110.70 CALCOFI CRUISE 6707 110.70

ELLEN B. SCRIPPS, JULY 11 1967, 2004 GMT, 28 36.5N 118 18W, SOUNDING 2150 FM, WIND 300 FORCE 3, WEATHER OVERCAST,  
 SEA MODERATE.

0	18.47	33.55	-	24.07	385.5	0
10	18.40	33.59	-	24.12	380.9	.038
20	18.30	33.60	-	24.15	377.9	.076
30	17.75	33.50	-	24.21	372.3	.114
50	15.60	33.46	-	24.67	327.7	.184
75	13.40	33.48	-	25.16	281.8	.261
100	11.70	33.47	-	25.48	251.2	.328
125	10.87	33.79	-	25.88	213.2	.387
150	10.71	34.07	-	26.12	189.9	.438
200	9.83	34.21	-	26.38	165.1	.528
250	9.29	34.32	-	26.56	148.5	.609
300	8.74	34.32	-	26.65	140.1	.684
400	7.99	34.42	-	26.84	121.8	.821
500	6.95	34.37	-	26.95	111.3	.945
600	6.05	34.37	-	27.07	100.0	1.058

110.80 CALCOFI CRUISE 6707 110.80

ELLEN B. SCRIPPS, JULY 12 1967, 0040 GMT, 28 17N 118 57.5W, SOUNDING 2100 FM, WIND 330 FORCE 3, WEATHER CLOUDY,  
 SEA ROUGH.

0	18.87	33.58	-	23.99	392.8	0
10	18.65	33.55	-	24.02	389.8	.039
20	17.27	33.34	-	24.20	373.0	.077
30	17.70	33.69	-	24.36	357.3	.114
50	16.97	33.65	-	24.51	343.7	.184
75	16.15	33.67	-	24.71	324.1	.268
100	13.65	33.49	-	25.11	285.9	.345
125	13.50	33.69	-	25.30	268.3	.415
150	11.67	33.65	-	25.62	237.4	.479
200	9.92	33.88	-	26.11	191.0	.588
250	8.82	34.01	-	26.39	164.3	.679
300	8.05	34.07	-	26.56	148.7	.760
400	7.02	34.21	-	26.82	124.2	.902
500	6.31	34.26	-	26.95	111.4	1.026
600	5.63	34.33	-	27.09	98.0	1.138

110.80 CALCOFI CRUISE 6707 110.80

ELLEN B. SCRIPPS, JULY 12 1967, 0120 GMT, 28 17N 118 57.5W, SOUNDING 2100 FM, WIND 330 FORCE 3, WEATHER CLOUDY,  
 SEA ROUGH, WIRE ANGLE 10.

1	18.92	33.572	6.11	-	-	-	394.6	0	18.92	33.572	6.11	23.97	394.6	0	
11	18.84	33.566	5.86	-	-	-	393.1	.039	10	18.85	33.567	5.88	23.99	393.3	.039
20	17.35K	33.35 G	-	-	-	-	374.1	.078	20	17.35	33.350	5.88	24.19	374.1	.078
30	17.35K	33.40 G	-	-	-	-	370.5	.115	30	17.35	33.400	5.97	24.23	370.5	.115
31	17.46	33.508	5.98	-	-	-	365.1	.187	50	17.29	33.666	6.03	24.44	349.6	.187
41	17.81	33.705	5.93	-	-	-	358.8	.273	75	15.47	33.404	6.23	24.66	329.1	.273
55	16.86	33.606	6.10	-	-	-	344.4	.352	100	13.63	33.270	6.19	24.95	301.7	.352
70	16.03	33.506	6.17	-	-	-	333.5	.423	125	13.22	33.689	5.37	25.35	262.9	.423
94	13.64	33.157	6.31	-	-	-	310.1	.487	150	11.59	33.648	4.61	25.64	236.0	.487
114	13.74	33.593	5.76	-	-	-	280.1	.594	200	9.71	33.914	3.72	26.17	185.0	.594
133	12.70	33.709	5.08	-	-	-	251.7	.683	250	8.76	34.005	3.45	26.40	163.8	.683
152	11.46	33.640	4.56	-	-	-	234.4	.764	300	8.08	34.075	2.46	26.56	148.7	.764
182	10.34	33.831	3.90	-	-	-	201.4	.909	400	7.01	34.128	1.18	26.75	130.2	.909
216	9.24	33.966	3.64	-	-	-	173.9	1.036	500	6.21	34.248	.66	26.95	111.2	1.036
246	8.82	34.000	3.52	-	-	-	165.1	1.148	600	5.62	34.320	.50	27.08	98.7	1.148
295	8.14	34.068	2.54	-	-	-	150.1								
349	7.52	34.132	1.75	-	-	-	136.7								
433	6.72	34.128	.91	-	-	-	126.4								
517	6.10	34.269	.61	-	-	-	108.2								
601	5.62	34.320	.50	-	-	-	98.7								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	UXY	PHO	SIL	NIT	D*T	Z	T	S	UXY	SIG*T	D*T	DD
113.30 CALCOFI CRUISE 6707 113.30														
ELLEN B. SCRIPPS, JULY 13 1967, 0905 GMT, 29 21.5N 115 17.5W, SOUNDING 40 FM, WIND 280 FORCE 2, WEATHER LIGHT FOG, SEA SLIGHT.														
0	14.93	33.70	-	25.01	296.1	0								
10	11.45	33.67	-	25.68	232.0	.026								
20	10.95	33.79	-	25.86	214.6	.049								
30	10.86	33.79	-	25.88	213.1	.070								
50	10.34	33.89	-	26.05	197.0	.111								

Z	T	S	UXY	PHO	SIL	NIT	D*T	Z	T	S	UXY	SIG*T	D*T	DD
113.35 CALCOFI CRUISE 6707 113.35														
ELLEN B. SCRIPPS, JULY 13 1967, 0617 GMT, 29 12N 115 38W, SOUNDING 690 FM, WIND 300 FORCE 4, WEATHER MISSING, SEA MODERATE.														

0	17.32	33.41	-	24.24	369.1	0								
10	17.15	33.42	-	24.29	364.5	.037								
20	15.75	33.32	-	24.53	341.1	.072								
30	14.85	33.35	-	24.75	320.1	.105								
50	12.05	33.22	-	25.22	275.8	.165								
75	11.30	33.44	-	25.53	246.4	.231								
100	10.80	33.84	-	25.93	208.4	.288								
125	10.53	34.05	-	26.14	188.3	.338								
150	10.24	34.14	-	26.26	176.9	.384								
200	10.05	34.32	-	26.43	160.5	.471								
250	8.67	34.21	-	26.57	147.2	.550								
300	7.76	34.16	-	26.67	137.9	.624								
400	7.39	34.29	-	26.83	123.2	.760								
500	6.50	34.30	-	26.96	110.8	.884								
600	5.97	34.35	-	27.06	100.6	.997								

Z	T	S	UXY	PHO	SIL	NIT	D*T	Z	T	S	UXY	SIG*T	D*T	DD
113.40 CALCOFI CRUISE 6707 113.40														
ELLEN B. SCRIPPS, JULY 13 1967, 0349 GMT, 29 02N 115 57W, SOUNDING 1040 FM, WIND 300 FORCE 4, WEATHER MISSING, SEA MODERATE.														

0	17.95	33.49	-	24.15	377.7	0								
10	17.96	33.49	-	24.15	377.9	.038								
20	17.22	33.53	-	24.36	358.1	.075								
30	16.85	33.56	-	24.47	347.6	.110								
50	15.30	33.29	-	24.61	333.8	.178								
75	12.55	33.33	-	25.21	276.8	.255								
100	11.30	33.69	-	25.72	228.0	.319								
125	10.57	33.89	-	26.01	200.8	.373								
150	10.10	34.09	-	26.24	178.3	.421								
200	9.76	34.34	-	26.50	154.4	.506								
250	10.37	34.54	-	26.55	149.5	.584								
300	9.77	34.51	-	26.63	141.9	.660								
400	8.38	34.45	-	26.81	125.2	.800								
500	7.12	34.42	-	26.97	109.9	.926								
600	6.00	34.34	-	27.05	101.7	1.039								

Z	T	S	UXY	PHO	SIL	NIT	D*T	Z	T	S	UXY	SIG*T	D*T	DD
113.50 CALCOFI CRUISE 6707 113.50														
ELLEN B. SCRIPPS, JULY 12 1967, 2233 GMT, 28 46N 116 40W, SOUNDING 1950 FM, WIND 330 FORCE 3, WEATHER CLOUDY, SEA MODERATE.														

0	18.85	33.43	-	23.88	403.3	0								
10	18.37	33.42	-	23.99	392.6	.040								
20	17.45	33.37	-	24.18	374.9	.078								
30	17.00	33.37	-	24.29	364.8	.115								
50	15.75	33.33	-	24.54	340.4	.186								
75	13.65	33.27	-	24.94	302.0	.267								
100	12.15	33.52	-	25.43	255.5	.337								
125	10.70	33.67	-	25.81	219.2	.397								
150	10.37	34.06	-	26.18	184.9	.448								
200	10.31	34.31	-	26.38	165.5	.538								
250	10.76	34.54	-	26.48	156.0	.621								
300	10.08	34.49	-	26.56	148.4	.700								
400	9.33	34.49	-	26.69	136.5	.849								
500	8.14	34.45	-	26.84	121.7	.987								
600	6.98	34.41	-	26.98	108.8	1.111								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
113.60								CALCOFI CRUISE 6707								113.60	
ELLEN B. SCRIPPS, JULY 12 1967, 1640 GMT, 28 24N 117 19W, SOUNDING 1940 FM, WIND 340 FORCE 2, WEATHER CLOUDY, SEA MODERATE.																	
								0	19.10	33.65	-	23.99	393.3	0			
								10	18.95	33.67	-	24.04	388.2	.039			
								20	16.75	33.47	-	24.42	351.9	.076			
								30	15.75	33.39	-	24.59	336.0	.111			
								50	13.80	33.40	-	25.01	295.4	.174			
								75	11.85	33.51	-	25.48	250.9	.243			
								100	10.85	33.70	-	25.81	219.5	.302			
								125	10.63	33.98	-	26.07	195.2	.354			
								150	10.00	34.11	-	26.28	175.2	.401			
								200	8.74	34.09	-	26.47	157.2	.486			
								250	8.60	34.23	-	26.60	144.7	.564			
								300	8.25	34.28	-	26.69	135.9	.636			
								400	7.70	34.37	-	26.84	121.4	.771			
								500	6.44	34.33	-	26.99	107.8	.893			
								600	5.74	34.35	-	27.09	97.8	1.003			

113.60								CALCOFI CRUISE 6707								113.60	
ELLEN B. SCRIPPS, JULY 12 1967, 1729 GMT, 28 24N 117 19W, SOUNDING 1940 FM, WIND 340 FORCE 2, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 00.																	
0	19.22	33.670	5.62	-	-	-	394.8	0	19.22	33.670	5.62	23.97	394.8	0			
10	19.16	33.670	5.55	-	-	-	393.3	10	19.16	33.670	5.55	23.99	393.3	.039			
20	17.00K	33.48 G	-	-	-	-	356.7	20	17.00	33.480	5.82	24.37	356.7	.077			
30	15.78	33.411	6.15	-	-	-	335.1	30	15.78	33.411	6.15	24.60	335.1	.112			
40	14.94	33.437	6.25	-	-	-	315.6	50	13.38	33.383	5.88	25.09	288.5	.174			
50	13.38	33.383	5.88	-	-	-	288.5	75	11.85	33.547	4.56	25.51	248.2	.242			
65	12.66	33.544	5.04	-	-	-	263.1	100	10.84	33.789	3.49	25.88	212.8	.300			
80	11.46	33.549	4.34	-	-	-	241.1	125	10.44	34.047	2.60	26.15	187.1	.350			
100	10.84	33.789	3.49	-	-	-	212.8	150	9.87	34.118	2.41	26.31	172.5	.396			
125	10.44	34.047	2.60	-	-	-	187.1	200	8.73	34.106	1.51	26.48	155.8	.480			
145	10.04	34.125	2.32	-	-	-	174.8	250	8.76	34.277	1.41	26.61	143.6	.557			
175	9.04	34.064	2.67	-	-	-	163.6	300	8.29	34.312	1.02	26.71	134.1	.629			
204	8.72	34.120	1.31	-	-	-	154.7	400	7.54	34.374	.49	26.87	119.0	.761			
234	8.94	34.273	1.37	-	-	-	146.6	500	6.30	34.334	.38	27.01	105.8	.880			
274	8.39	34.258	1.39	-	-	-	139.6										
333	8.22	34.388	.51	-	-	-	127.4										
408	7.44	34.366	.52	-	-	-	118.2										
483	6.46	34.334	.40	-	-	-	107.8										
563	5.94	34.361	.35	-	-	-	99.4										

113.70								CALCOFI CRUISE 6707								113.70	
ELLEN B. SCRIPPS, JULY 12 1967, 1052 GMT, 28 01.5N 117 56W, SOUNDING 1605 FM, WIND 330 FORCE 3, WEATHER MISSING, SEA ROUGH.																	
								0	19.83	33.73	-	23.86	405.4	0			
								10	18.25	33.54	-	24.11	381.0	.039			
								20	16.40	33.35	-	24.41	352.9	.076			
								30	15.85	33.38	-	24.56	338.9	.111			
								50	13.85	33.42	-	25.02	294.9	.174			
								75	11.85	33.64	-	25.58	241.3	.242			
								100	10.70	33.83	-	25.94	207.4	.298			
								125	10.22	34.05	-	26.19	183.2	.348			
								150	9.80	34.11	-	26.31	172.0	.393			
								200	9.75	34.32	-	26.48	155.7	.477			
								250	9.73	34.45	-	26.59	145.7	.554			
								300	8.20	34.29	-	26.71	134.4	.627			
								400	7.03	34.30	-	26.88	117.6	.759			
								500	6.01	34.30	-	27.02	104.8	.876			
								600	5.54	34.37	-	27.13	94.0	.983			

113.80								CALCOFI CRUISE 6707								113.80	
ELLEN B. SCRIPPS, JULY 12 1967, 0548 GMT, 27 40.5N 118 35W, SOUNDING 1975 FM, WIND 340 FORCE 3, WEATHER MISSING, SEA ROUGH.																	
								0	18.98	33.56	-	23.95	396.9	0			
								10	18.98	33.56	-	23.95	396.9	.040			
								20	18.53	33.70	-	24.17	376.0	.078			
								30	17.73	33.52	-	24.23	370.4	.116			
								50	16.25	33.46	-	24.53	341.6	.187			
								75	14.75	33.49	-	24.88	307.8	.269			
								100	12.45	33.55	-	25.40	258.8	.340			
								125	11.08	33.67	-	25.75	225.7	.401			
								150	10.72	33.96	-	26.04	198.2	.455			
								200	9.81	34.13	-	26.33	170.7	.549			
								250	9.36	34.24	-	26.49	155.5	.633			
								300	9.04	34.34	-	26.62	143.1	.710			
								400	7.87	34.36	-	26.81	124.6	.851			
								500	6.27	34.27	-	26.96	110.2	.975			
								600	5.68	34.34	-	27.09	97.9	1.086			



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	STL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
117.30							CALCOFI CRUISE 6707							117.30	
ELLEN B. SCRIPPS, JULY 13 1967, 1422 GMT, 28 48N 114 56.5W, SOUNDING 55 FM, WIND 310 FORCE 2, WEATHER OVERCAST, SEA SLIGHT.															
	0	16.78	33.61	-	24.52	342.4	0								
	10	16.05	33.53	-	24.63	332.2	.034								
	20	14.60	33.49	-	24.92	304.8	.066								
	30	12.00	33.49	-	25.44	255.0	.094								
	50	10.18	33.67	-	25.90	210.7	.140								
	75	10.01	34.00	-	26.19	183.5	.190								

Z	T	S	OXY	PHO	STL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
117.35							CALCOFI CRUISE 6707							117.35	
ELLEN B. SCRIPPS, JULY 15 1967, 0235 GMT, 28 37.5N 115 16.5W, SOUNDING 120 FM, WIND 330 FORCE 4, WEATHER OVERCAST, SEA MODERATE.															
	0	16.04	33.53	-	24.63	332.0	0								
	10	15.85	33.53	-	24.67	327.9	.033								
	20	15.15	33.51	-	24.81	314.6	.065								
	30	14.67	33.52	-	24.92	304.0	.096								
	50	11.80	33.49	-	25.48	251.5	.152								
	75	10.45	33.68	-	25.87	214.3	.210								
	100	9.84	33.87	-	26.12	190.4	.262								
	125	9.66	34.00	-	26.25	177.9	.308								
	150	9.13	34.09	-	26.41	163.1	.351								
	200	9.99	34.40	-	26.51	153.6	.432								

Z	T	S	OXY	PHO	STL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
117.40							CALCOFI CRUISE 6707							117.40	
ELLEN B. SCRIPPS, JULY 15 1967, 0457 GMT, 28 27.5N 115 35W, SOUNDING 375 FM, WIND 300 FORCE 2, WEATHER MISSING, SEA MODERATE.															
	0	18.16	33.52	-	24.12	380.4	0								
	10	18.15	33.52	-	24.12	380.2	.038								
	20	17.60	33.49	-	24.23	369.6	.076								
	30	16.00	33.41	-	24.55	339.9	.111								
	50	15.15	33.41	-	24.73	321.9	.178								
	75	12.03	33.31	-	25.29	268.8	.252								
	100	11.30	33.47	-	25.55	244.2	.316								
	125	10.23	33.72	-	25.93	207.8	.374								
	150	9.63	33.93	-	26.20	182.7	.423								
	200	9.18	34.11	-	26.41	162.3	.511								
	250	9.59	34.44	-	26.60	144.3	.590								
	300	9.35	34.46	-	26.66	139.0	.663								
	400	8.84	34.45	-	26.73	132.0	.806								
	500	7.69	34.43	-	26.89	116.8	.938								
	600	6.55	34.40	-	27.03	104.0	1.057								

Z	T	S	OXY	PHO	STL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
117.50							CALCOFI CRUISE 6707							117.50	
ELLEN B. SCRIPPS, JULY 15 1967, 1030 GMT, 28 09.5N 116 18.5W, SOUNDING 2190 FM, WIND 320 FORCE 4, WEATHER MISSING, SEA ROUGH.															
	0	18.69	33.47	-	23.95	396.5	0								
	10	18.66	33.48	-	23.97	395.1	.040								
	20	17.83	33.45	-	24.15	377.8	.078								
	30	16.90	33.43	-	24.35	358.2	.115								
	50	15.73	33.47	-	24.65	329.7	.184								
	75	14.00	33.39	-	24.96	300.1	.263								
	100	11.75	33.37	-	25.39	259.4	.334								
	125	11.06	33.69	-	25.77	223.8	.395								
	150	10.19	33.87	-	26.06	196.0	.448								
	200	9.86	34.13	-	26.32	171.5	.542								
	250	10.06	34.42	-	26.51	153.3	.625								
	300	10.23	34.56	-	26.59	145.7	.703								
	400	7.84	34.36	-	26.82	124.1	.845								
	500	7.24	34.40	-	26.93	112.9	.971								
	600	6.25	34.38	-	27.05	101.7	1.086								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	DKY	PHO	SIL	NIT	D*†	Z	T	S	DKY	SIG*†	D*†	DD
117.60														
CALCOFI CRUISE 6707														
ELLEN B. SCRIPPS, JULY 15 1967, 1531 GMT, 27 52.5N 116 57.5W, SOUNDING 1915 FM, WIND 330 FORCE 3, WEATHER CLOUDY, SEA ROUGH.														
								0	19.79	33.70	-	23.85	406.6	0
								10	19.77	33.71	-	23.86	405.3	.041
								20	18.18	33.62	-	24.19	373.6	.080
								30	17.70	33.56	-	24.26	366.8	.117
								50	16.41	33.49	-	24.51	343.0	.188
								75	14.95	33.45	-	24.81	314.8	.271
								100	12.79	33.51	-	25.30	268.0	.344
								125	11.58	33.69	-	25.67	232.8	.407
								150	10.74	33.90	-	25.99	202.9	.463
								200	10.18	34.18	-	26.30	173.0	.558
								250	9.01	34.21	-	26.52	152.3	.642
								300	8.16	34.20	-	26.64	140.6	.718
								400	7.15	34.27	-	26.84	121.4	.854
								500	6.35	34.33	-	27.00	106.7	.975
								600	5.88	34.36	-	27.08	98.7	1.085

117.60 CALCOFI CRUISE 6707 117.60

ELLEN B. SCRIPPS, JULY 15 1967, 1614 GMT, 27 52.5N 116 57.5W, SOUNDING 1915 FM, WIND 330 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 06.

1	19.86	33.687	5.50	-	-	-	409.2	0	19.86	33.687	5.50	23.82	409.2	0
10	19.86K	-	-	-	-	-	-	10	19.86	33.692	5.45	23.82	408.9	.041
11	19.87	33.690	5.45	-	-	-	409.3	20	18.18	33.640	5.59	24.21	372.1	.080
20	18.18K	-	-	-	-	-	-	30	17.61	33.558	5.80	24.28	364.9	.117
31	17.55	33.548	5.83	-	-	-	364.2	50	16.30	33.450	6.04	24.51	343.5	.188
41	16.64	33.465	5.98	-	-	-	349.8	75	14.70	33.437	5.94	24.85	310.5	.270
50	16.30K	33.45 G	-	-	-	-	343.5	100	12.84	33.472	5.13	25.26	271.7	.344
55	15.72	33.418	6.05	-	-	-	333.3	125	12.03	33.670	4.32	25.57	242.4	.409
70	15.13	33.434	6.06	-	-	-	319.7	150	10.91	33.887	3.38	25.95	206.7	.465
94	13.06	33.448	5.31	-	-	-	277.6	200	10.30	34.122	2.49	26.24	179.2	.564
114	12.46	33.560	4.70	-	-	-	258.2	250	8.85	34.198	1.79	26.53	150.9	.649
134	11.65	33.764	3.99	-	-	-	228.6	300	7.99	34.194	1.48	26.66	138.7	.723
153	10.78	33.906	3.28	-	-	-	203.1	400	7.06	34.259	.74	26.85	121.0	.859
184	10.30	34.039	2.77	-	-	-	185.3	500	6.39	34.316	.44	26.98	108.3	.980
200	10.30K	-	-	-	-	-	-	600	5.77	34.361	.36	27.10	97.3	1.090
218	9.68	34.195	2.20	-	-	-	163.8							
247	8.92	34.199	1.81	-	-	-	151.8							
296	8.04	34.190	1.52	-	-	-	139.6							
351	7.52	34.248	.96	-	-	-	128.0							
435	6.76	34.270	.66	-	-	-	116.3							
519	6.28	34.327	.40	-	-	-	106.0							
604	5.74	34.362	.36	-	-	-	96.9							

116.69 CALCOFI CRUISE 6707 116.69

ELLEN B. SCRIPPS, JULY 15 1967, 2036 GMT, 27 38N 117 32W, SOUNDING 1880 FM, WIND 320 FORCE 3, WEATHER CLOUDY, SEA ROUGH. A)

0	20.00	33.69	-	23.78	412.5	0
10	19.90	33.68	-	23.80	410.7	.041
20	18.50	33.67	-	24.15	377.5	.081
30	16.50	33.51	-	24.51	343.5	.117
50	13.85	33.37	-	24.98	298.6	.181
75	11.93	33.55	-	25.50	249.4	.250
100	11.03	33.74	-	25.81	219.6	.309
125	10.25	33.97	-	26.13	189.6	.361
150	10.27	34.17	-	26.28	175.2	.407
200	10.01	34.32	-	26.44	159.8	.493
250	8.40	34.13	-	26.55	149.2	.572
300	7.76	34.22	-	26.72	133.4	.645
400	6.86	34.26	-	26.88	118.4	.777
500	6.28	34.33	-	27.01	105.8	.895
600	5.57	34.38	-	27.14	93.6	1.002

A) THE UNUSUAL NUMBER FOR THIS STATION RESULTS FROM THE CAST BEING LOWERED SO FAR FROM THE DESIRED POSITION OF STATION 117.70.

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD									
117.78								CALCOFI CRUISE 6707								117.78							
ELLEN B. SCRIPPS, JULY 16 1967, 0134 GMT, 27 12.5N 118 03W, SOUNDING 2120 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA ROUGH.																							
								0	19.79	33.69	-	23.84	407.3	0									
								10	19.75	33.69	-	23.85	406.3	.041									
								20	19.29	33.67	-	23.95	396.5	.081									
								30	17.85	33.67	-	24.31	362.3	.119									
								50	15.00	33.49	-	24.83	312.9	.187									
								75	12.32	33.52	-	25.40	258.6	.259									
								100	11.11	33.67	-	25.74	226.2	.320									
								125	10.66	33.91	-	26.01	200.8	.374									
								150	10.03	34.10	-	26.26	176.4	.421									
								200	10.01	34.36	-	26.47	156.9	.507									
								250	8.89	34.29	-	26.60	144.6	.584									
								300	8.50	34.32	-	26.68	136.6	.657									
								400	7.01	34.29	-	26.88	118.1	.790									
								500	6.19	34.35	-	27.04	103.2	.907									
								600	5.61	34.37	-	27.13	94.8	1.014									

118.39 CALCOFI CRUISE 6707 118.39  
 ELLEN B. SCRIPPS, JULY 20 1967, 1142 GMT, 28 18.5N 115 23.5W, SOUNDING 110 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA MODERATE.

								0	17.65	33.52	-	24.25	368.6	0
								10	17.30	33.50	-	24.31	362.0	.037
								20	16.80	33.49	-	24.42	351.6	.072
								30	15.45	33.38	-	24.65	330.4	.106
								50	14.30	33.35	-	24.87	309.0	.171
								75	11.60	33.43	-	25.47	252.4	.241
								100	10.43	33.73	-	25.91	210.3	.299

118.39 CALCOFI CRUISE 6707 118.39  
 ELLEN B. SCRIPPS, JULY 20 1967, 1203 GMT, 28 18.5N 115 23.5W, SOUNDING 110 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 22.

1	17.69	33.468	5.71	-	-	-	373.3	0	17.69	33.468	5.71	24.20	373.3	0
19	16.77	33.400	5.88	-	-	-	357.5	10	17.36	33.433	5.78	24.25	368.2	.037
33	15.36	33.351	6.09	-	-	-	330.6	20	16.67	33.396	5.89	24.38	355.6	.073
42	14.74	33.345	6.20	-	-	-	318.2	30	15.66	33.359	6.04	24.58	336.4	.108
56	13.38	33.307	6.05	-	-	-	294.1	50	14.00	33.321	6.17	24.91	305.2	.172
70	11.82	33.347	5.34	-	-	-	262.4	75	11.57	33.414	4.95	25.46	253.1	.243
88	11.16	33.624	3.89	-	-	-	230.4	100	10.53	33.794	3.09	25.94	207.2	.301
110	10.05	33.900	2.66	-	-	-	191.6	125	9.76	33.934	2.76	26.18	184.4	.350
129	9.72	33.944	2.83	-	-	-	183.0	150	9.34	33.991	2.72	26.30	173.5	.396
156	9.40	34.039	2.68	-	-	-	171.0							
178	10.30	34.343	1.12	-	-	-	162.9							

119.33 CALCOFI CRUISE 6707 119.33  
 ELLEN B. SCRIPPS, JULY 13 1967, 2204 GMT, 28 19N 114 52.5W, SOUNDING 60 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA SLIGHT.

								0	17.63	33.51	-	24.24	368.8	0
								10	17.52	33.55	-	24.30	363.4	.037
								20	17.00	33.59	-	24.45	348.7	.072
								30	16.35	33.51	-	24.54	340.2	.107
								50	12.51	33.26	-	25.16	281.2	.169
								75	11.85	33.66	-	25.60	239.8	.235
								100	10.10	33.99	-	26.17	185.7	.288

119.33 CALCOFI CRUISE 6707 119.33  
 ELLEN B. SCRIPPS, JULY 13 1967, 2220 GMT, 28 19N 114 52.5W, SOUNDING 60 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 17.

1A	17.64	33.505	6.05	-	-	-	369.4	0	17.64	33.505	6.05	24.24	369.4	0
11	17.55	33.505	6.03	-	-	-	367.4	10	17.58	33.505	6.02	24.25	368.0	.037
25	16.74	33.492	6.39	-	-	-	350.1	20	17.16	33.500	6.24	24.35	358.8	.073
35	15.30	33.461	6.57	-	-	-	321.3	30	16.10	33.484	6.52	24.58	336.7	.108
45	13.25	33.334	6.10	-	-	-	289.6	50	12.50	33.341	5.99	25.23	275.1	.170
50	12.50K	-	-	-	-	-	-	75	11.65	33.731	3.12	25.69	231.1	.233
59	12.42	33.430	5.57	-	-	-	267.1							
74	11.71	33.715	3.25	-	-	-	233.3							
98	10.12	33.995	.71	-	-	-	185.7							

A) ALL DEPTHS OF THIS CAST COULD BE AS MUCH AS THREE METERS GREATER DUE TO SLIPPAGE OF THE WIRE.



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD		
120.45								CALCOFI CRUISE 6707								120.45
ELLEN B. SCRIPPS, JULY 17 1967, 0037 GMT, 27 42.5N 115 33W, SOUNDING 1300 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA MODERATE.																
								0	18.23	33.55	-	24.13	379.8	0		
								10	18.22	33.59	-	24.16	376.7	.038		
								20	15.10	33.40	-	24.74	321.6	.073		
								30	12.90	33.34	-	25.15	282.6	.103		
								50	12.42	33.54	-	25.40	259.0	.157		
								75	11.07	33.93	-	25.95	206.3	.216		
								100	10.45	34.09	-	26.18	184.0	.265		
								125	10.50	34.17	-	26.24	179.0	.311		
								150	9.68	34.11	-	26.33	170.1	.356		
								200	9.25	34.22	-	26.49	155.3	.439		
								250	8.87	34.29	-	26.60	144.3	.516		
								300	8.57	34.32	-	26.67	137.6	.589		
								400	7.79	34.39	-	26.85	121.2	.724		
								500	7.40	34.44	-	26.94	112.1	.848		
								600	6.32	34.40	-	27.06	101.1	.963		

120.45 CALCOFI CRUISE 6707 120.45  
 ELLEN B. SCRIPPS, JULY 17 1967, 0118 GMT, 27 42.5N 115 33W, SOUNDING 1300 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 18.

1	18.29	33.529	5.89	-	-	-	382.8	0	18.29	33.529	5.89	24.10	382.8	0
11	18.28	33.528	5.89	-	-	-	382.6	10	18.28	33.528	5.89	24.10	382.6	.038
30	13.34	33.385	6.01	-	-	-	287.6	20	16.10	33.453	6.07	24.56	339.0	.074
39	12.34	33.424	5.34	-	-	-	266.0	30	13.34	33.385	6.01	25.10	287.6	.106
53	12.60	33.792	3.86	-	-	-	243.7	50	12.51	33.710	4.17	25.51	248.1	.160
67	11.48	33.862	2.99	-	-	-	218.4	75	11.00	33.899	2.73	25.94	207.3	.217
91	10.55	34.015	2.27	-	-	-	191.2	100	10.88	34.164	1.68	26.17	185.9	.267
110	11.13	34.279	1.32	-	-	-	181.6	125	10.01	34.106	2.57	26.27	175.6	.312
128	9.76	34.064	2.83	-	-	-	174.8	150	9.73	34.137	2.27	26.34	168.9	.356
146	9.77	34.127	2.32	-	-	-	170.3	200	9.36	34.248	1.71	26.49	154.9	.439
176	9.40	34.190	2.04	-	-	-	159.8	250	8.84	34.275	1.32	26.60	145.0	.516
208	9.35	34.263	1.61	-	-	-	153.6	300	8.53	34.308	1.04	26.67	137.8	.589
236	8.94	34.269	1.40	-	-	-	146.9	400	7.99	34.413	.45	26.84	122.3	.726
283	8.68	34.294	1.15	-	-	-	141.1	500	7.26	34.426	.42	26.95	111.3	.850
337	8.20	34.344	.81	-	-	-	130.4	600	6.17	34.401	.39	27.08	99.2	.963
418	7.94	34.429	.38	-	-	-	120.4							
501	7.25	34.426	.42	-	-	-	111.1							
585	6.35	34.406	.40	-	-	-	101.0							

120.50 CALCOFI CRUISE 6707 120.50  
 ELLEN B. SCRIPPS, JULY 16 1967, 2152 GMT, 27 36.5N 115 52.5W, SOUNDING 2160 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MODERATE.

0	17.48	33.52	-	24.29	364.7	0
10	17.10	33.51	-	24.37	356.8	.036
20	15.75	33.49	-	24.66	328.7	.070
30	13.12	33.31	-	25.08	288.9	.101
50	11.65	33.55	-	25.55	244.4	.155
75	10.43	33.93	-	26.06	195.5	.210
100	11.15	34.30	-	26.22	180.4	.258
125	10.95	34.38	-	26.32	171.0	.302
150	11.10	34.50	-	26.39	164.8	.345
200	10.22	34.44	-	26.50	154.4	.427
250	10.06	34.56	-	26.62	142.9	.504
300	9.15	34.50	-	26.72	133.0	.575
400	7.96	34.44	-	26.86	119.9	.708
500	6.95	34.42	-	26.99	107.6	.829
600	6.11	34.43	-	27.11	96.3	.939

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*T Z T S OXY SIG\*T D\*T DD  
 120.60 CALCOFI CRUISE 6707 120.60

ELLEN B. SCRIPPS, JULY 16 1967, 1547 GMT, 27 17N 116 33W, SOUNDING 1980 FM, WIND 310 FORCE 3, WEATHER CLOUDY,  
 SEA ROUGH.

0	19.30	33.65	-	23.93	398.2	0
10	19.30	33.65	-	23.93	398.2	.040
20	19.28	33.65	-	23.94	397.7	.080
30	19.25	33.71	-	23.99	392.6	.119
50	17.60	33.61	-	24.33	360.9	.195
75	15.95	33.51	-	24.63	331.5	.282
100	14.00	33.53	-	25.07	289.8	.360
125	12.70	33.61	-	25.40	259.0	.429
150	11.85	33.89	-	25.78	222.9	.491
200	10.00	34.03	-	26.22	181.1	.593
250	9.23	34.21	-	26.48	155.7	.680
300	8.28	34.19	-	26.62	143.0	.757
400	7.20	34.25	-	26.82	123.6	.896
500	6.65	34.33	-	26.96	110.5	1.020
600	6.00	34.38	-	27.08	98.7	1.132

120.60 CALCOFI CRUISE 6707 120.60

ELLEN B. SCRIPPS, JULY 16 1967, 1628 GMT, 27 17N 116 33W, SOUNDING 1980 FM, WIND 310 FORCE 3, WEATHER CLOUDY,  
 SEA ROUGH, WIRE ANGLE 16.

1	19.53	33.677	5.59	-	-	-	401.8	0	19.53	33.677	5.59	23.90	401.8	0	
11	19.52	33.676	5.57	-	-	-	401.6	.040	10	19.52	33.675	5.57	23.90	401.7	.040
20	19.48K	-	-	-	-	-	-	.080	20	19.48	33.703	5.62	23.93	398.7	.080
30	18.84	33.712	5.70	-	-	-	382.5	.119	30	18.84	33.712	5.70	24.10	382.5	.119
39	18.32	33.655	5.77	-	-	-	374.3	.194	50	17.41	33.565	5.95	24.34	359.7	.194
54	17.06	33.535	6.01	-	-	-	354.1	.281	75	15.74	33.454	6.10	24.64	331.2	.281
68	16.13	33.484	6.09	-	-	-	337.3	.360	100	14.13	33.449	5.76	24.98	298.2	.360
91	14.83	33.423	6.08	-	-	-	314.4	.430	125	12.84	33.696	4.31	25.44	255.2	.430
110	13.40	33.513	5.26	-	-	-	279.4	.491	150	11.54	33.753	3.77	25.73	227.5	.491
128	12.74	33.730	4.14	-	-	-	250.9	.595	200	10.27	34.098	2.53	26.22	180.4	.595
147	11.68	33.737	3.82	-	-	-	231.1	.681	250	9.27	34.236	1.69	26.50	154.4	.681
175	10.66	33.935	3.24	-	-	-	199.0	.758	300	8.23	34.165	1.79	26.61	144.1	.758
208	10.18	34.144	2.30	-	-	-	175.6	.897	400	7.26	34.274	.75	26.83	122.5	.897
235	9.65	34.253	1.65	-	-	-	159.1	1.021	500	6.59	34.321	.48	26.96	110.4	1.021
282	8.50	34.160	1.96	-	-	-	148.4	1.132	600	5.97	34.381	.38	27.09	98.3	1.132
334	7.84	34.202	1.34	-	-	-	135.9								
415	7.15	34.289	.66	-	-	-	120.0								
496	6.62	34.319	.49	-	-	-	110.9								
579	6.10	34.366	.39	-	-	-	100.9								

120.70 CALCOFI CRUISE 6707 120.70

ELLEN B. SCRIPPS, JULY 16 1967, 1028 GMT, 26 55N 117 10W, SOUNDING 1980 FM, WIND 320 FORCE 4, WEATHER MISSING,  
 SEA ROUGH.

0	20.47	33.86	-	23.79	412.0	0
10	20.46	33.86	-	23.79	411.7	.041
20	20.17	33.85	-	23.86	405.2	.082
30	18.45	33.65	-	24.15	377.8	.121
50	17.90	33.73	-	24.34	359.1	.195
75	16.60	33.68	-	24.62	333.3	.282
100	14.65	33.63	-	25.01	295.5	.362
125	12.50	33.65	-	25.47	252.3	.431
150	11.12	33.83	-	25.86	214.5	.490
200	10.17	34.15	-	26.28	175.0	.589
250	10.15	34.41	-	26.49	155.5	.674
300	9.73	34.49	-	26.62	142.8	.752
400	8.07	34.40	-	26.81	124.4	.892
500	7.40	34.45	-	26.95	111.4	1.017
600	5.97	34.40	-	27.10	96.8	1.129

## OBSERVED LEVELS DF DEPTH

## STANDARD LEVELS DF DEPTH

Z	T	S	QXY	PHO	SFL	NIT	D*T	Z	T	S	QXY	SIG*T	D*T	DD									
120.78								CALCOFI CRUISE 6707								120.78							
ELLEN B. SCRIPPS, JULY 16 1967, 0551 GMT, 26 37N 117 41W, SOUNDING 2100 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA ROUGH.																							
								0	20.47	33.81	-	23.75	415.6	0									
								10	20.46	33.81	-	23.75	415.4	.042									
								20	18.57	33.58	-	24.07	385.7	.082									
								30	17.70	33.55	-	24.26	367.5	.119									
								50	16.68	33.59	-	24.53	341.6	.191									
								75	15.20	33.53	-	24.82	314.2	.273									
								100	12.65	33.49	-	25.31	266.9	.346									
								125	11.18	33.69	-	25.74	225.9	.408									
								150	10.83	33.94	-	26.00	201.5	.463									
								200	10.14	34.22	-	26.34	169.4	.557									
								250	9.39	34.28	-	26.51	153.0	.640									
								300	8.83	34.34	-	26.65	140.0	.716									
								400	7.75	34.35	-	26.82	123.6	.854									
								500	6.90	34.39	-	26.97	109.2	.978									
								600	6.29	34.45	-	27.10	97.0	1.089									

Z	T	S	QXY	PHO	SFL	NIT	D*T	Z	T	S	QXY	SIG*T	D*T	DD									
120.78								CALCOFI CRUISE 6707								120.78							
ELLEN B. SCRIPPS, JULY 16 1967, 0631 GMT, 26 37N 117 41W, SOUNDING 2100 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 13.																							
1	20.54	33.805	5.50	-	-	-	417.8	0	20.54	33.805	5.50	23.73	417.8	0									
11	20.52	33.801	5.41	-	-	-	417.5	10	20.52	33.801	5.41	23.73	417.6	.042									
20	18.70K	33.60 G	-	-	-	-	387.3	20	18.70	33.600	5.53	24.05	387.3	.082									
31	17.97	33.563	5.81	-	-	-	372.8	30	18.04	33.566	5.78	24.19	374.2	.120									
40	17.20	33.548	6.03	-	-	-	356.3	50	16.57	33.515	6.05	24.50	344.6	.192									
54	16.34	33.501	6.05	-	-	-	340.6	75	15.06	33.462	5.99	24.79	316.3	.275									
69	15.35	33.460	6.03	-	-	-	322.4	100	13.11	33.549	5.01	25.27	271.1	.349									
92	14.04	33.488	5.56	-	-	-	293.7	125	11.04	33.732	3.81	25.80	220.4	.412									
112	11.76	33.654	4.18	-	-	-	238.7	150	10.83	33.954	2.99	26.01	200.5	.465									
131	10.87	33.770	3.69	-	-	-	214.7	200	10.22	34.269	1.71	26.36	167.1	.559									
152	10.82	33.974	2.91	-	-	-	198.8	250	9.31	34.303	1.39	26.54	150.0	.640									
180	10.48	34.192	1.98	-	-	-	177.0	300	8.82	34.349	.93	26.66	139.2	.715									
214	10.01	34.294	1.63	-	-	-	161.8	400	7.75	34.376	.47	26.84	121.8	.852									
243	9.40	34.297	1.45	-	-	-	151.9	500	6.93	34.426	.33	27.00	106.9	.973									
292	8.90	34.343	.99	-	-	-	140.8	600	6.24	34.450	.28	27.11	96.4	1.083									
346	8.34	34.372	.66	-	-	-	130.4																
429	7.46	34.381	.41	-	-	-	117.3																
512	6.84	34.431	.32	-	-	-	105.4																
597	6.26	34.450	.28	-	-	-	96.6																

Z	T	S	QXY	PHO	SFL	NIT	D*T	Z	T	S	QXY	SIG*T	D*T	DD									
123.37								CALCOFI CRUISE 6707								123.37							
ELLEN B. SCRIPPS, JULY 17 1967, 0958 GMT, 27 24.5N 114 40W, SOUNDING 38 FM, WIND CALM, WEATHER CLEAR, SEA SLIGHT.																							
								0	16.09	33.84	-	24.86	310.4	0									
								10	13.00	33.84	-	25.51	247.7	.028									
								20	12.15	33.94	-	25.76	224.6	.052									
								30	11.75	33.99	-	25.87	213.7	.074									
								50	11.46	34.09	-	26.00	201.3	.115									

Z	T	S	QXY	PHO	SFL	NIT	D*T	Z	T	S	QXY	SIG*T	D*T	DD									
123.42								CALCOFI CRUISE 6707								123.42							
ELLEN B. SCRIPPS, JULY 17 1967, 1222 GMT, 27 13.5N 114 59W, SOUNDING 1250 FM, WIND 340 FORCE 3, WEATHER CLOUDY, SEA MODERATE.																							
								0	16.78	33.49	-	24.43	351.1	0									
								10	16.78	33.49	-	24.43	351.1	.035									
								20	16.60	33.50	-	24.48	346.4	.070									
								30	14.75	33.39	-	24.81	315.1	.103									
								50	12.70	33.39	-	25.23	275.2	.162									
								75	11.65	33.67	-	25.64	235.6	.227									
								100	10.45	33.84	-	25.99	202.5	.282									
								125	10.73	34.14	-	26.17	185.0	.331									
								150	10.92	34.34	-	26.30	173.5	.377									
								200	10.87	34.49	-	26.42	161.6	.462									
								250	10.63	34.58	-	26.53	150.9	.543									
								300	9.98	34.56	-	26.63	141.6	.619									
								400	9.15	34.54	-	26.75	130.0	.762									
								500	7.70	34.50	-	26.95	111.8	.891									
								600	6.60	34.42	-	27.04	103.1	1.007									



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z T S OXY PHO SIL NIT D\*<sup>T</sup> Z T S OXY SIG\*<sup>T</sup> D\*<sup>T</sup> DD

123.50

CALCOFI CRUISE 6707

123.50

ELLEN B. SCRIPPS, JULY 17 1967, 1652 GMT, 26 53.5N 115 34W, SOUNDING 1750 FM, WIND 330 FORCE 4, WEATHER CLOUDY,  
SEA MODERATE.

0	18.38	33.55	-	24.09	383.4	0
10	18.35	33.56	-	24.10	381.9	.038
20	18.15	33.53	-	24.13	379.4	.076
30	17.63	33.55	-	24.27	365.9	.114
50	15.15	33.45	-	24.77	319.0	.182
75	11.85	33.54	-	25.50	248.7	.254
100	11.38	34.12	-	26.04	197.6	.310
125	11.48	34.36	-	26.21	181.7	.358
150	11.46	34.45	-	26.28	174.7	.404
200	11.22	34.56	-	26.41	162.4	.490
250	10.82	34.59	-	26.51	153.3	.571
300	10.42	34.59	-	26.58	146.6	.650
400	9.34	34.54	-	26.72	132.9	.797
500	7.71	34.48	-	26.93	113.4	.928
600	6.58	34.44	-	27.06	101.4	1.044

123.60

CALCOFI CRUISE 6707

123.60

ELLEN B. SCRIPPS, JULY 17 1967, 2101 GMT, 26 39N 116 08.5W, SOUNDING 1990 FM, WIND 330 FORCE 2, WEATHER PARTLY CLOUDY,  
SEA MODERATE.

0	19.94	33.79	-	23.88	403.8	0
10	19.71	33.77	-	23.92	399.5	.040
20	19.58	33.75	-	23.94	397.7	.080
30	18.05	33.64	-	24.24	369.1	.119
50	17.50	33.70	-	24.42	352.0	.191
75	15.00	33.40	-	24.76	319.5	.275
100	12.93	33.45	-	25.23	275.0	.350
125	11.40	33.71	-	25.72	228.2	.414
150	11.30	34.12	-	26.06	196.3	.468
200	10.84	34.41	-	26.36	167.0	.560
250	10.57	34.56	-	26.53	151.3	.642
300	9.76	34.52	-	26.64	141.0	.719
400	8.35	34.45	-	26.81	124.7	.858
500	7.50	34.47	-	26.95	111.2	.984
600	6.54	34.43	-	27.05	101.6	1.099

123.60

CALCOFI CRUISE 6707

123.60

ELLEN B. SCRIPPS, JULY 17 1967, 2147 GMT, 26 39N 116 08.5W, SOUNDING 1990 FM, WIND 330 FORCE 2, WEATHER PARTLY CLOUDY,  
SEA MODERATE, WIRE ANGLE 20.

1	19.84	33.729	5.48	-	-	-	405.7	0	19.84	33.729	5.48	23.86	405.7	0	
10	19.61	33.712	5.48	-	-	-	401.2	.040	10	19.61	33.712	5.48	23.90	401.2	.040
20	19.50K	-	-	-	-	-	-	.080	20	19.50	33.727	5.60	23.94	397.5	.080
29	18.64	33.748	5.73	-	-	-	375.1	.119	30	18.56	33.750	5.74	24.20	373.2	.119
38	18.03	33.754	5.82	-	-	-	360.3	.191	50	17.40	33.704	5.89	24.44	349.6	.191
52	17.31	33.695	5.89	-	-	-	348.1	.276	75	15.00	33.400	5.78	24.76	319.5	.276
66	16.64	33.715	5.84	-	-	-	331.6	.350	100	12.63	33.453	5.32	25.29	269.3	.350
75	15.00K	33.40 G	-	-	-	-	319.5	.412	125	11.41	33.764	3.66	25.76	224.3	.412
88	13.65	33.421	5.67	-	-	-	290.9	.466	150	11.47	34.155	1.97	26.05	196.7	.466
106	12.22	33.488	5.05	-	-	-	259.1	.559	200	10.92	34.421	.93	26.36	167.5	.559
124	11.40	33.744	3.76	-	-	-	225.7	.641	250	10.57	34.564	.46	26.53	151.0	.641
143	11.64	34.100	2.03	-	-	-	203.7	.716	300	9.76	34.538	.38	26.65	139.7	.716
169	10.92	34.234	1.76	-	-	-	181.3	.855	400	8.42	34.480	.33	26.82	123.5	.855
200	10.92	34.421	.93	-	-	-	167.5	.979	500	7.36	34.464	.28	26.97	109.8	.979
225	10.74	34.536	.61	-	-	-	156.0								
269	10.38	34.574	.41	-	-	-	147.1								
317	9.40	34.512	.36	-	-	-	135.9								
393	8.50	34.480	.34	-	-	-	124.7								
472	7.64	34.471	.28	-	-	-	113.1								
555	6.84	34.445	.29	-	-	-	104.3								

127.34

CALCOFI CRUISE 6707

127.34

ELLEN B. SCRIPPS, JULY 18 1967, 1654 GMT, 26 55N 114 07W, SOUNDING 46 FM, WIND 350 FORCE 4, WEATHER PARTLY CLOUDY,  
SEA MODERATE.

0	16.07	33.67	-	24.73	322.4	0
10	15.60	33.66	-	24.83	313.1	.032
20	13.60	33.52	-	25.15	282.7	.062
30	12.85	33.73	-	25.46	253.0	.088
50	11.90	34.03	-	25.87	213.5	.135
75	11.62	34.19	-	26.05	196.7	.187





## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

Z	T	S	DXY	PHO	SIL	NIT	D*F	Z	T	S	DXY	STG*F	D*F	DD									
130.30								CALCOFI CRUISE 6707								130.30							
ELLEN B. SCRIPPS, JULY 19 1967, 0231 GMT, 26 29N 113 29W, SOUNDING 38 FM, WIND 300 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE.																							
								0	16.86	34.01	-	24.81	315.0	0									
								10	16.50	33.99	-	24.88	308.4	.031									
								20	12.50	33.87	-	25.64	236.2	.058									
								30	12.25	34.04	-	25.82	219.1	.081									
								50	11.87	34.16	-	25.98	203.4	.124									
								75	11.89	34.24	-	26.04	197.8	.174									

130.30 CALCOFI CRUISE 6707 130.30  
 ELLEN B. SCRIPPS, JULY 19 1967, 0249 GMT, 26 29N 113 29W, SOUNDING 38 FM, WIND 300 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 21.

1	16.99	33.998	7.69	-	-	-	318.8	0	16.99	33.998	7.69	24.77	318.8	0
10	16.75	33.998	7.31	-	-	-	313.4	10	16.75	33.998	7.31	24.82	313.4	.032
19	13.34	33.909	3.19	-	-	-	249.1	20	13.16	33.917	2.94	25.54	245.0	.060
29	12.36	34.036	1.56	-	-	-	221.4	30	12.32	34.046	1.45	25.81	220.0	.083
38	12.18	34.112	.82	-	-	-	212.5	50	11.93	34.185	.64	25.99	202.7	.125
47	11.97	34.169	.69	-	-	-	204.5							
57	11.91	34.216	.49	-	-	-	200.0							

130.40 CALCOFI CRUISE 6707 130.40  
 ELLEN B. SCRIPPS, JULY 19 1967, 0746 GMT, 26 09N 114 07W, SOUNDING 1140 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA ROUGH.

0	18.86	33.66	-	24.05	386.8	0
10	18.87	33.65	-	24.04	387.8	.039
20	18.45	33.67	-	24.16	376.3	.077
30	16.46	33.44	-	24.46	347.7	.113
50	15.00	33.49	-	24.83	312.9	.180
75	13.05	33.64	-	25.35	263.3	.252
100	11.70	33.84	-	25.77	223.9	.313
125	10.72	33.93	-	26.01	200.4	.367
150	11.12	34.25	-	26.19	183.6	.416
200	10.42	34.39	-	26.42	161.4	.504
250	9.97	34.45	-	26.55	149.6	.584
300	9.63	34.53	-	26.67	138.2	.659
400	8.48	34.49	-	26.82	123.6	.797
500	7.55	34.48	-	26.95	111.2	.922
600	6.95	34.46	-	27.02	104.6	1.039

130.40 CALCOFI CRUISE 6707 130.40  
 ELLEN B. SCRIPPS, JULY 19 1967, 0835 GMT, 26 09N 114 07W, SOUNDING 1140 FM, WIND 320 FORCE 3, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 24.

1	18.82	33.651	5.72	-	-	-	386.5	0	18.82	33.651	5.72	24.06	386.5	0
10	18.81	33.650	5.71	-	-	-	386.3	10	18.81	33.650	5.71	24.06	386.3	.039
28	16.56	33.488	6.03	-	-	-	346.4	20	17.64	33.558	5.88	24.28	365.5	.076
37	16.09	33.501	6.09	-	-	-	335.2	30	16.44	33.489	6.05	24.51	343.7	.112
51	15.19	33.496	6.08	-	-	-	316.5	50	15.27	33.495	6.08	24.77	318.2	.178
64	13.71	33.612	4.94	-	-	-	278.1	75	12.84	33.679	4.29	25.42	256.5	.251
86	12.23	33.741	3.81	-	-	-	240.7	100	11.74	33.851	3.26	25.77	223.9	.311
105	11.59	33.888	3.10	-	-	-	218.4	125	10.84	34.000	2.63	26.05	197.1	.364
121	10.84	33.958	2.80	-	-	-	200.3	150	11.21	34.321	1.35	26.23	179.8	.412
138	11.02	34.161	1.97	-	-	-	188.4	200	10.70	34.406	.96	26.39	164.9	.500
163	11.35	34.452	.84	-	-	-	172.6	250	9.66	34.457	.72	26.61	144.1	.580
192	-	34.395	1.00	-	-	-	-	300	9.57	34.541	.38	26.69	136.4	.653
218	10.20	34.444	.82	-	-	-	153.8	400	8.45	34.506	.26	26.84	122.0	.789
261	9.53	34.465	.69	-	-	-	141.5	500	7.43	34.487	.23	26.98	109.0	.912
309	9.59	34.557	.31	-	-	-	135.6							
385	8.62	34.510	.27	-	-	-	124.2							
463	7.78	34.493	.24	-	-	-	113.4							
546	7.04	34.481	.22	-	-	-	104.3							

DATA AT NET TOW STATIONS										10 METERS		
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	T °C	S ‰	$\delta_T$ cl/ton
						Dir	Force					
80.70-S.a)	VI-21	1945	33°45.0'	121°50.0'	2100	340°	6	overcast	high	12.72	33.218	288
87.33-S	26	1250	33°54.0'	118°29.5'	27	calm		overcast	calm	13.49	33.537	280
87.55-S	26	0017	33°09.0'	119°59.0'	675	280°	2	overcast	moderate	13.17	33.593	269
90.66-S	28	0915	32°08.0'	120°20.0'	1975	300°	3	missing	slight	15.12	33.202	336
93.30-S	VII-2	1405	32°50.5'	117°31.0'	430	300°	1	overcast	smooth	12.98	33.435	277
93.35-S	2	1145	32°42.0'	117°52.0'	340	calm		missing	smooth	17.18	33.477	361
93.45-S	2	0550	32°21.0'	118°34.0'	775	300	2	missing	moderate	15.16	33.575	310
93.65-S	1	1811	31°40.0'	119°54.0'	2000	310°	3	overcast	moderate	16.06b)	33.439	339
97.30-S	4	1200	32°16.0'	117°07.0'	50	170°	1	missing	smooth	14.97	33.585	305
97.45-S	4	2150	31°45.0'	118°11.0'	870	200°	2	overcast	smooth	17.06	33.617	348
97.55-S	5	0308	31°26.0'	118°49.5'	1110	220°	2	overcast	smooth	14.62	33.294	320
97.65-S	5	0912	31°05.0'	119°30.0'	1880	240°	3	missing	smooth	16.58	33.417	352
100.35-S	6	2308	31°30.5'	117°07.0'	690	330°	3	partly cloudy	smooth	17.34	33.559	358
100.45-S	6	1725	31°10.0'	117°45.5'	890	060°	2	cloudy	smooth	17.29	33.507	361
100.55-S	6	1128	30°49.0'	118°27.0'	1350	330°	1	missing	smooth	16.56	-	-
100.65-S	6	0527	30°30.0'	119°07.5'	1970	280°	2	missing	slight	17.30	33.383	370
103.45-S	8	1012	30°35.0'	117°22.5'	1240	330°	3	missing	slight	17.96	33.468	380

a) No temperature or salinity data were recorded for the following stations: 80.65, 83.40, 83.65, 87.65, 93.55.

b) Alternate value, 16.51°C; 349 cl/ton.

DATA AT NET TOW STATIONS											10 METERS	
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	T °C	S ‰	$\delta_T$ cl/ton
						Dir	Force					
103.55-S	VII-8	1600	30°12.0'	118°04.0'	1375	300°	2	overcast	slight	18.46	33.593	382
103.65-S	8	2148	29°55.0'	118°44.0'	1700	320°	3	overcast	moderate	18.53	33.676	378
107.45-S	10	0548	30°00.5'	117°01.0'	1000	310°	4	missing	rough	18.05	33.445	383
107.55-S	10	0015	29°41.5'	117°41.0'	1720	320°	4	overcast	rough	17.94	33.464	389
107.65-S	9	1750	29°18.5'	118°21.0'	1500	340°	3	overcast	rough	18.26	33.576	379
110.32-S	10	1900	29°52.0'	115°47.5'	12	280°	2	overcast	moderate	11.94	33.470	255
110.45-S	11	0633	29°26.0'	116°39.0'	870	320°	3	missing	moderate	17.68	33.429	376
110.55-S	11	1155	29°05.0'	117°19.0'	865	300°	4	missing	rough	19.18	33.633	396
110.65-S	11	1745	28°45.0'	117°59.5'	1900	280°	2	overcast	moderate	19.20	33.626	397
113.45-S	13	0120	28°53.0'	116°17.0'	1050	350°	3	cloudy	moderate	18.28	33.459	388
113.55-S	12	2013	28°40.0'	117°00.0'	1930	330°	3	overcast	moderate	18.34	33.447	390
113.65-S	12	1400	28°13.0'	117°36.5'	2000	320°	3	cloudy	rough	18.66	33.642	384
116.64-S	15	1815	27°46.0'	117°13.0'	1760	330°	4	cloudy	rough	19.83	33.655	410
117.26-S	13	1645	28°56.0'	114°42.0'	38	270°	2	overcast	smooth	13.50	33.587	276
117.45-S	15	0750	28°18.0'	115°56.0'	940	310°	3	missing	moderate	18.66	33.460	396
117.55-S	15	1305	28°02.0'	116°37.0'	2330	310°	4	overcast	rough	18.72	33.450	399
120.25-S	14	1625	28°22.0'	114°15.0'	29	280°	3	overcast	moderate	15.06	33.526	312
120.30-S	14	1340	28°11.5'	114°33.5'	48	330°	4	overcast	moderate	17.08	33.528	355
120.35-S	14	1106	28°03.0'	114°54.0'	42	calm		overcast	slight	17.54	33.495	368



DATA AT NET TOW STATIONS										10 METERS		
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind		Weather	Sea	T °C	S ‰	$\delta_T$ cl/ton
						Dir	Force					
120.40-S	VII-17	0425	27°56.5'	115°14.0'	25	330°	4	missing	rough	14.62	33.613	296
120.55-S	16	1830	27°28.0'	116°15.0'	2190	330°	3	cloudy	rough	17.60	33.457	372
120.65-S	16	1315	27°06.5'	116°51.0'	2050	330°	3	cloudy	moderate	20.46	33.834	414
123.45-S	17	1425	27°07.0'	115°11.0'	2220	330°	3	cloudy	moderate	18.20	33.486	384
124.57-S	17	1940	26°40.5'	115°56.0'	1990	320°	2	partly cloudy	moderate	17.90	33.495	376
127.45-S	18	1115	26°32.0'	114°48.5'	875	330°	4	missing	rough	18.73	33.593	390
127.55-S	18	0555	26°13.0'	115°25.5'	1950	340°	5	missing	moderate	18.70	33.627	385
130.35-S	19	0540	26°19.5'	113°48.0'	145	280°	4	missing	moderate	18.40	33.636	377

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