UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6801
7-26 January 1968

CalCOFI Cruise 6804
23 April - 6 May 1968

and

CalCOFI Cruise 6806
31 May - 22 June 1968

SIO Reference 71-3

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Sponsored by

Marine Research Committee

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Approved for distribution:

W. A. Nierenberg

W. A. Nierenberg, Director

CONTENTS

INTRODUCTION

The data in this report were collected on Cruises 6801, 6804 and 6806 of the California Cooperative Fisheries Investigations (CalCOFI) program by the RV David Starr Jordan of the Bureau of Commercial Fisheries (now National Marine Fisheries Service) and the 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 preceeding these in the series are 6610, 6612 and Special Cruise 6611 all of which appear in SIO Ref. 69-2; and 6707 and 6712, both of which appear in SIO Ref. 69-8.

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 all 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. Data from the sample bottle casts are tabulated with the observed levels of depth on the left of a page and standard levels of depth values interpolated and computed from these observations to the right.

2. For each STD lowering, temperature and salinity values are read only at standard levels of depth and appear with the same computed values as the sample bottle data on the right of the page. Corrections may have been applied to the temperature or salinity values or to both from continuing comparison of sample bottle data and STD data collected on the same station.

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	Nitrate	µg at/L
D*T	δ_T	cl/ton
SIG*T	σ_t	g/L
DD	ΔD	dyn. m

Tabulations of the nitrite values follow the computer tabulations of other data for Cruises 6804 and 6806. No nutrient samples were collected on Cruise 6801.

STANDARD PROCEDURES

In situ Salinity/Temperature/Depth Recorder

The manufacturer of the STD claims for the temperature an accuracy of ±0.05°C on all ranges with repeatability of ±0.01°C and for the salinity an accuracy of ±0.03‰ on all ranges with repeatability of ±0.01‰. [1] 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 STD standard depth values tabulated for each cruise:

The temperature from the bottle cast and STD recording agreed very well on Cruise 6801. However, some adjusting of the salinity occurred during the early lowerings of the STD finally resulting in a correction varying from -0.01‰ at the surface to -0.05‰ at 500 meters.

Cruise 6804 required no correction to the temperature but a correction varying from ±0.00‰ at the surface to +0.03‰ at 500 meters was applied to all stations.

Cruise 6806 was the first cruise on which a digital data logger was used for data tabulation from the STD. A temperature correction varying from ±0.00°C at the surface to -0.05°C at 600 meters and a salinity correction of +0.01‰ to -0.04‰ over the same depth range were applied to these tabulations.

Hydrographic Casts

The observed data have been plotted and then evaluated using the method described by Klein. [2] This involves consideration of their variation as functions of density or depth and their relations to each other and comparison with concurrent STD observations and with previous or adjacent observations. The Nansen-bottle cast data are

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

[2] Klein, Hans T. A new technique for processing physical oceanographic data. MS.

tabulated at observed depths; the values at standard depths are computer interpolations according to a modified Rattray technique, [3] except that some property values at standard depths have been determined from consideration of the STD recording for the station. 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). To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer 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 ±0.004‰ salinity at the 95 per cent probability level, and a probable accuracy of ±0.01‰ salinity or better at the same level of probability." [4] 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.

The nutrient data for Cruises 6804 and 6806 are the first in these reports determined using the Technicon AutoAnalyzer.

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. 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.

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[3] Rattray, Maurice (1962). Interpolation errors and oceanographic sampling. Deep-Sea Res. 9: 25-37.

[4] Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

FOOTNOTES

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

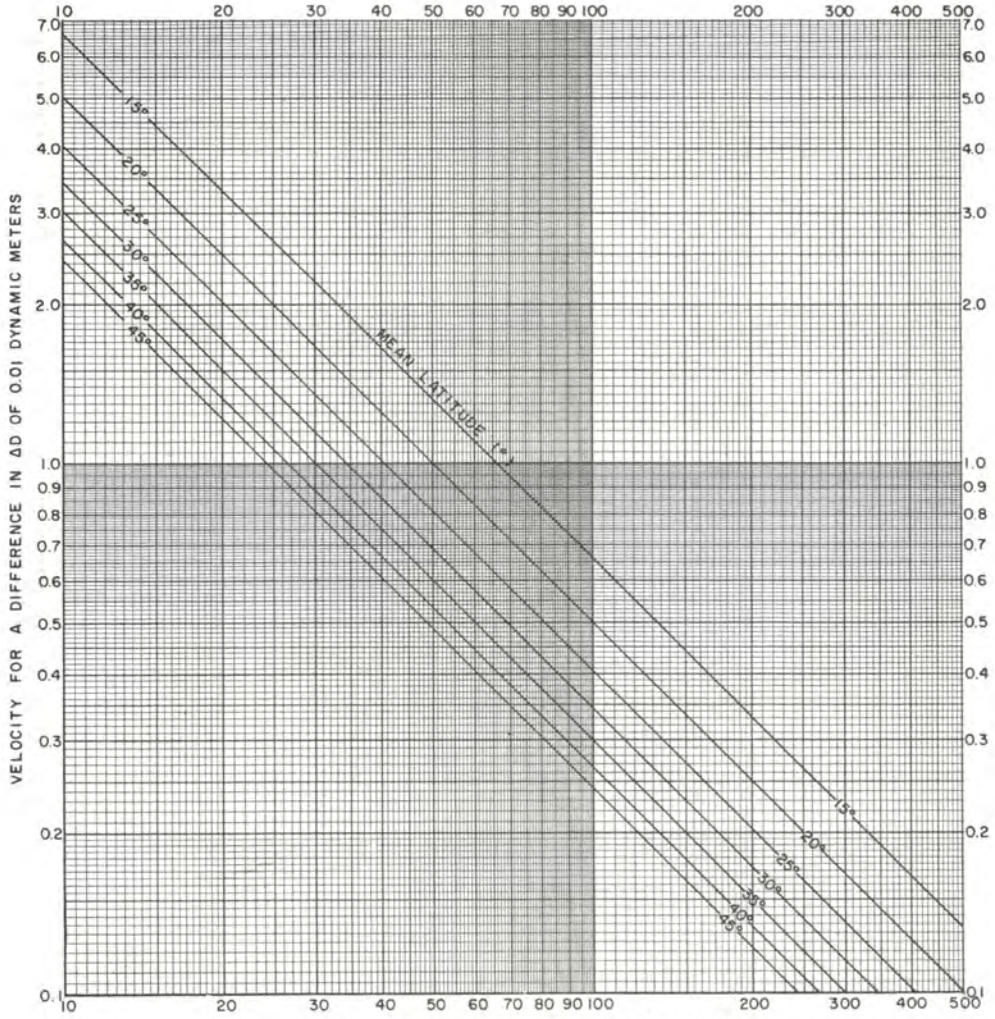
Values which are not used in interpolation because they seem to be in error without apparent reason are indicated by the following notation.

u: uncertain value

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.



VELOCITY OF GEOSTROPHIC FLOW
(NAUTICAL MILES PER DAY)

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

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

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

FIGURES
Cruise 6801

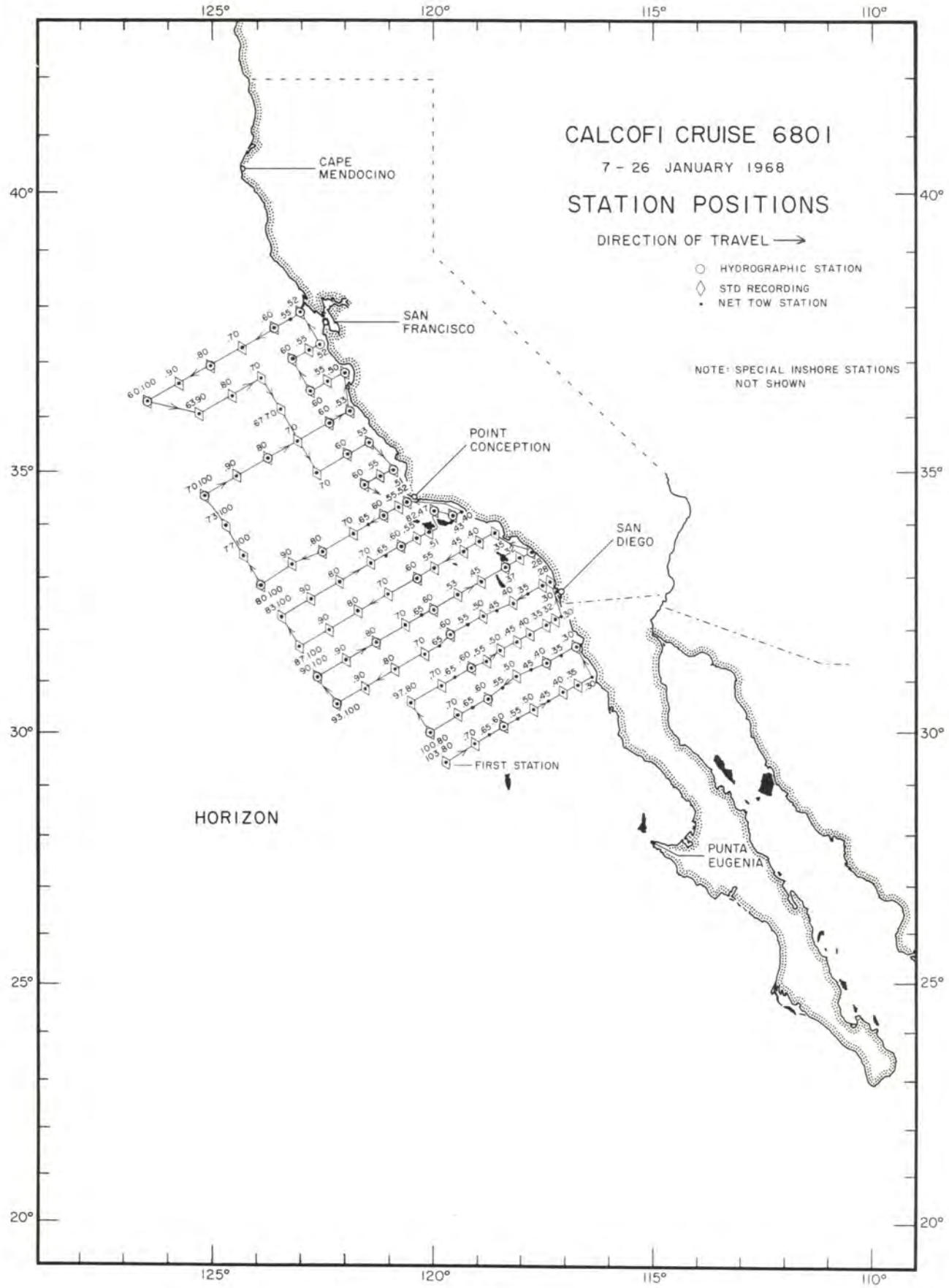

CALCOFI CRUISE 6801
7 - 26 JANUARY 1968
STATION POSITIONS
DIRECTION OF TRAVEL
HYDROGRAPHIC STATION
STD RECORDING
NET TOW STATION
NOTE: SPECIAL INSHORE STATIONS NOT SHOWN
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
FIRST STATION
HORIZON
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 1

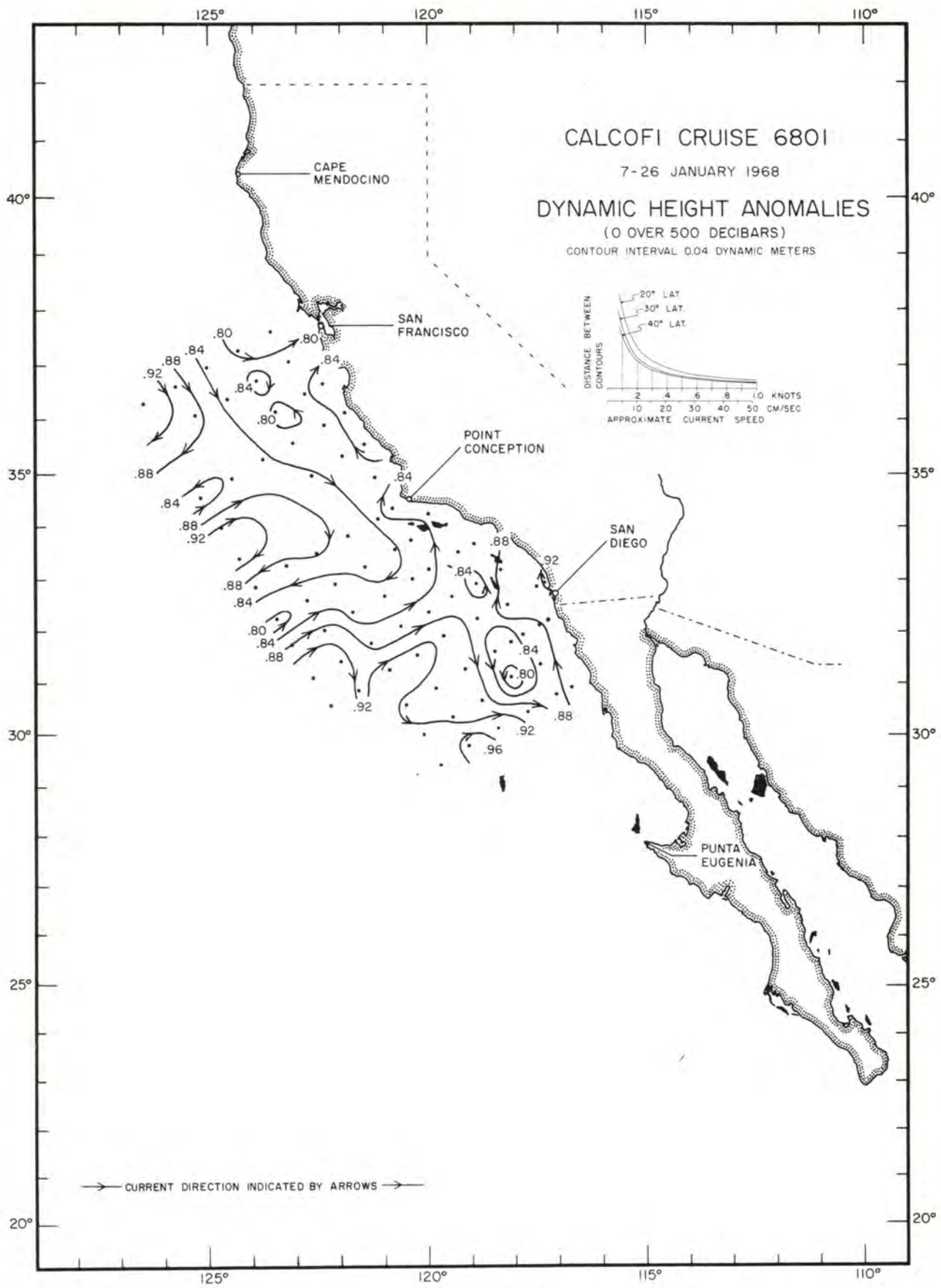

CALCOFI CRUISE 6801
7-26 JANUARY 1968
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
.2 .4 .6 .8 1.0 KNOTS
10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
CURRENT DIRECTION INDICATED BY ARROWS
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 2

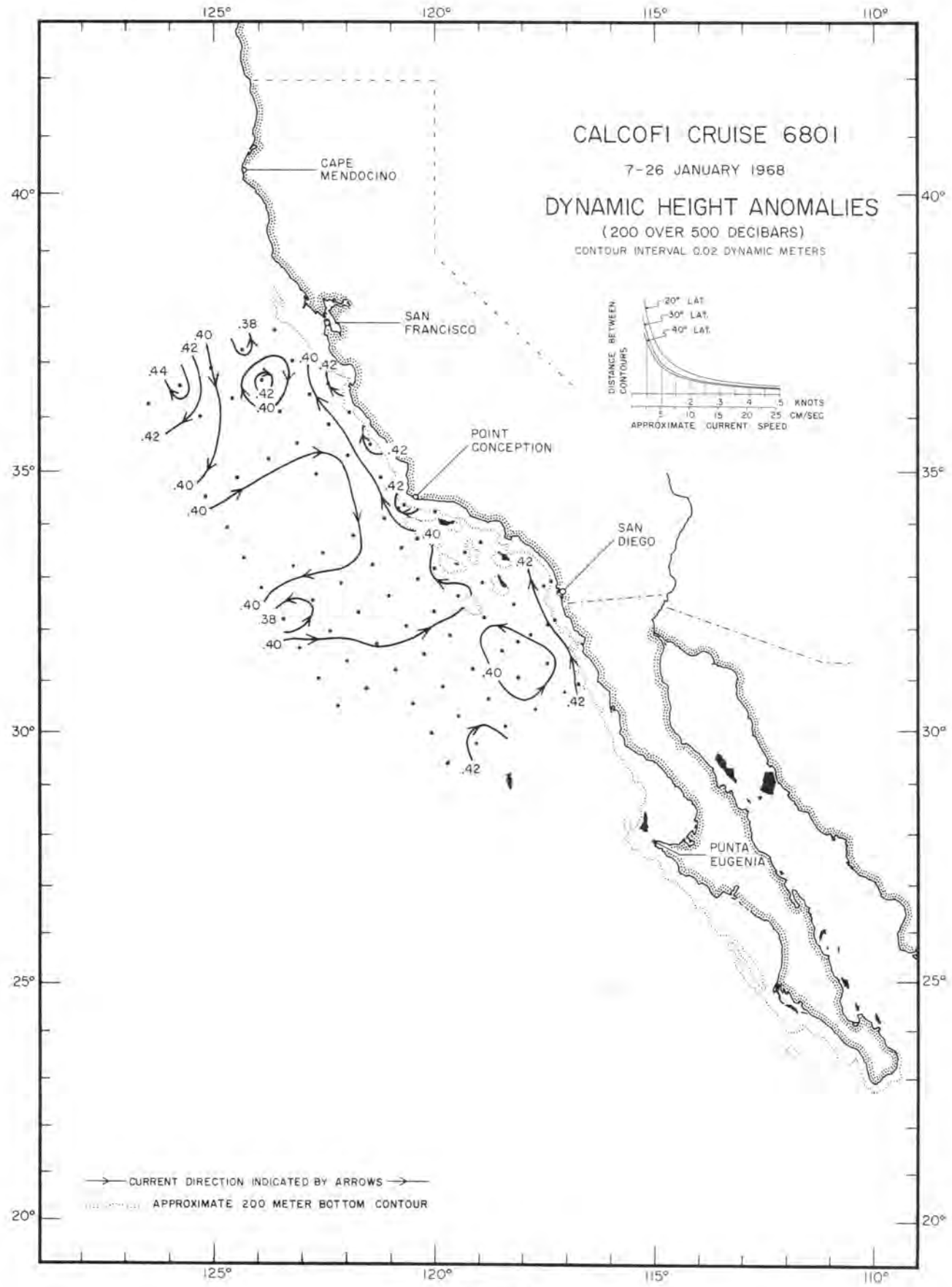

CALCOFI CRUISE 6801
7-26 JANUARY 1968
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 3

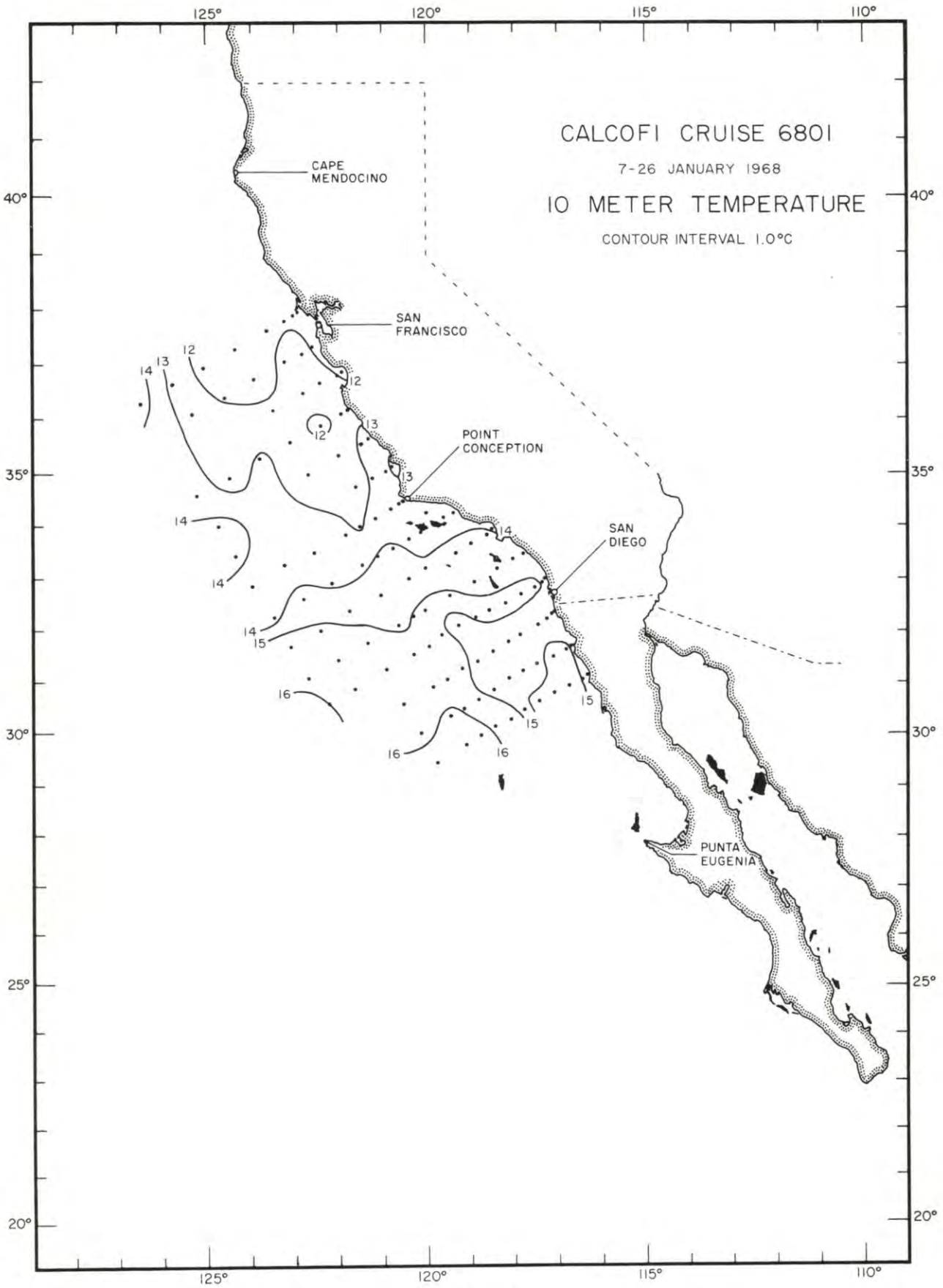

CALCOFI CRUISE 6801
7-26 JANUARY 1968
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 4

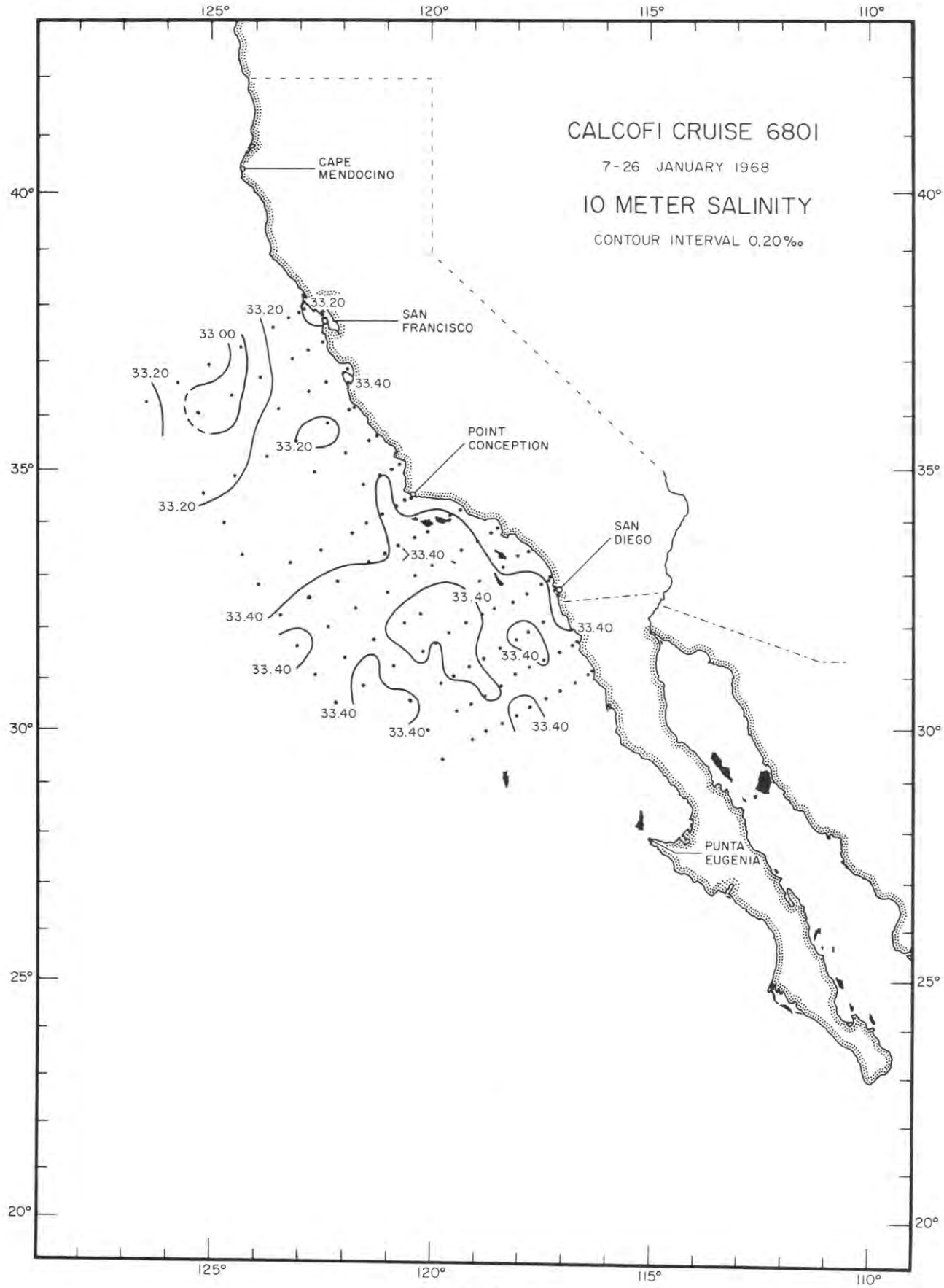

CALCOFI CRUISE 6801
7-26 JANUARY 1968
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
33.20
33.00
33.40

FIGURE 5

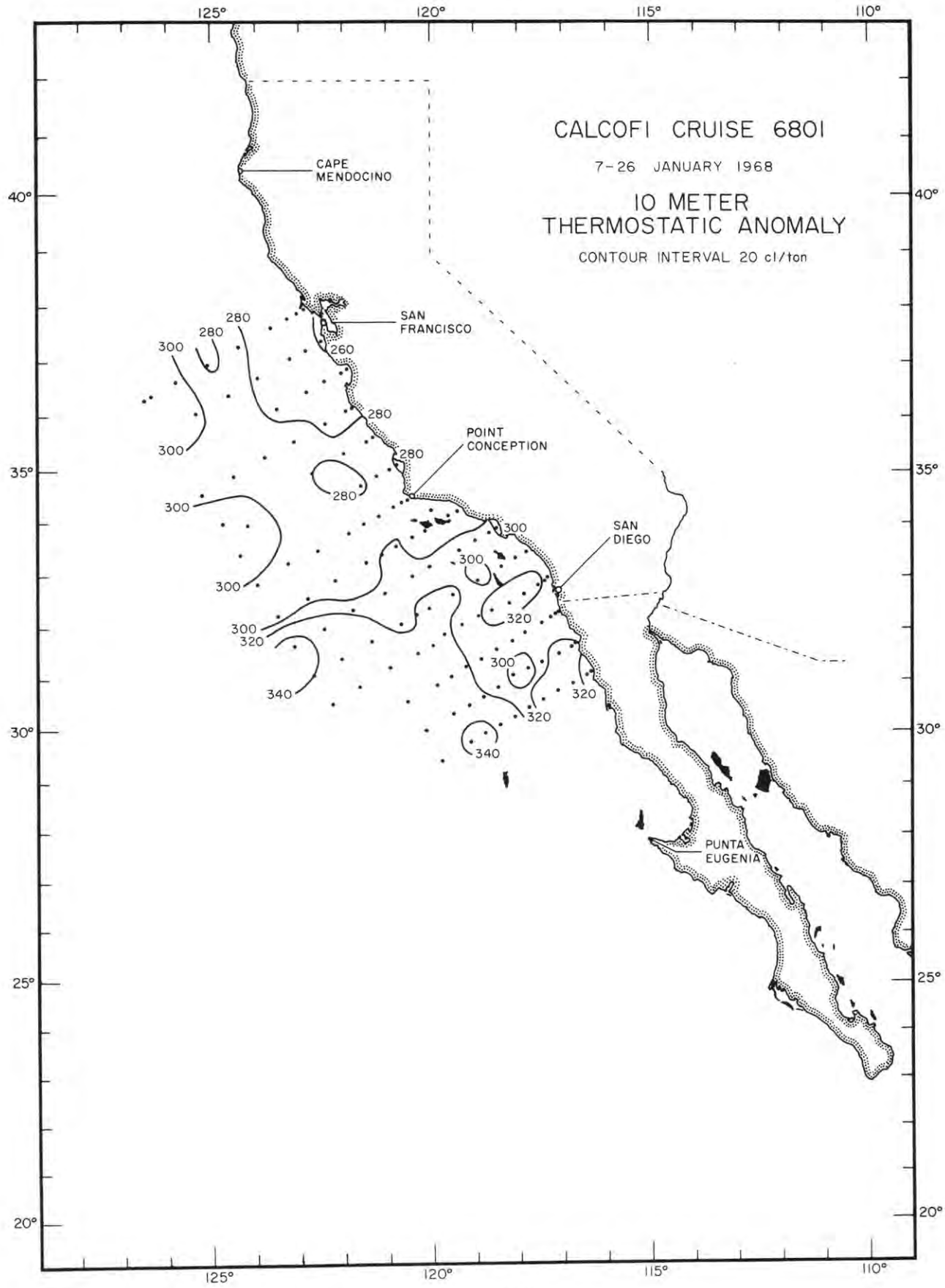

CALCOFI CRUISE 6801
7-26 JANUARY 1968
10 METER
THERMOSTATIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
260
280
300
320
340

FIGURE 6

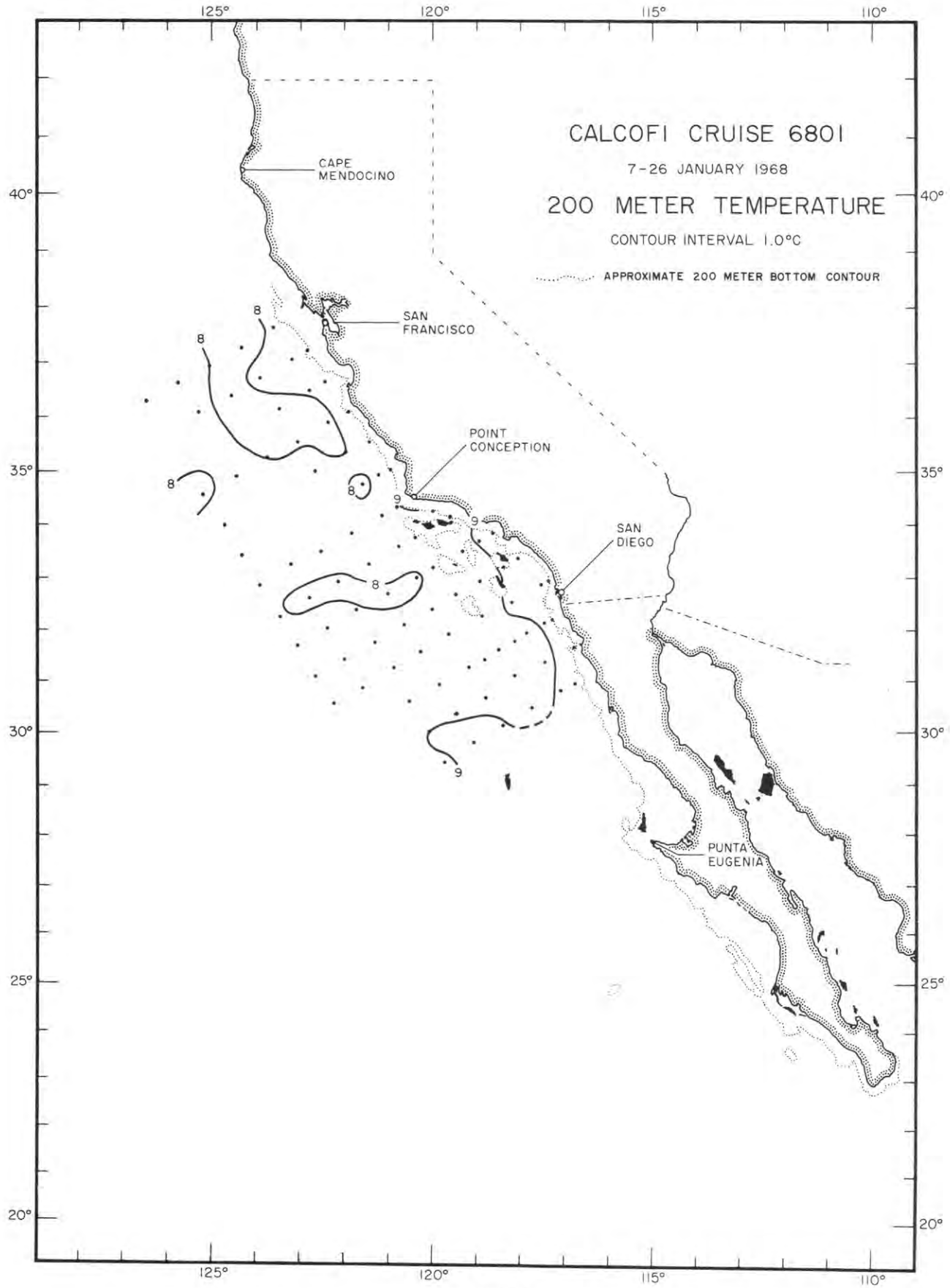

CALCOFI CRUISE 6801
7-26 JANUARY 1968
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
APPROXIMATE 200 METER BOTTOM CONTOUR
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
8
9

FIGURE 7

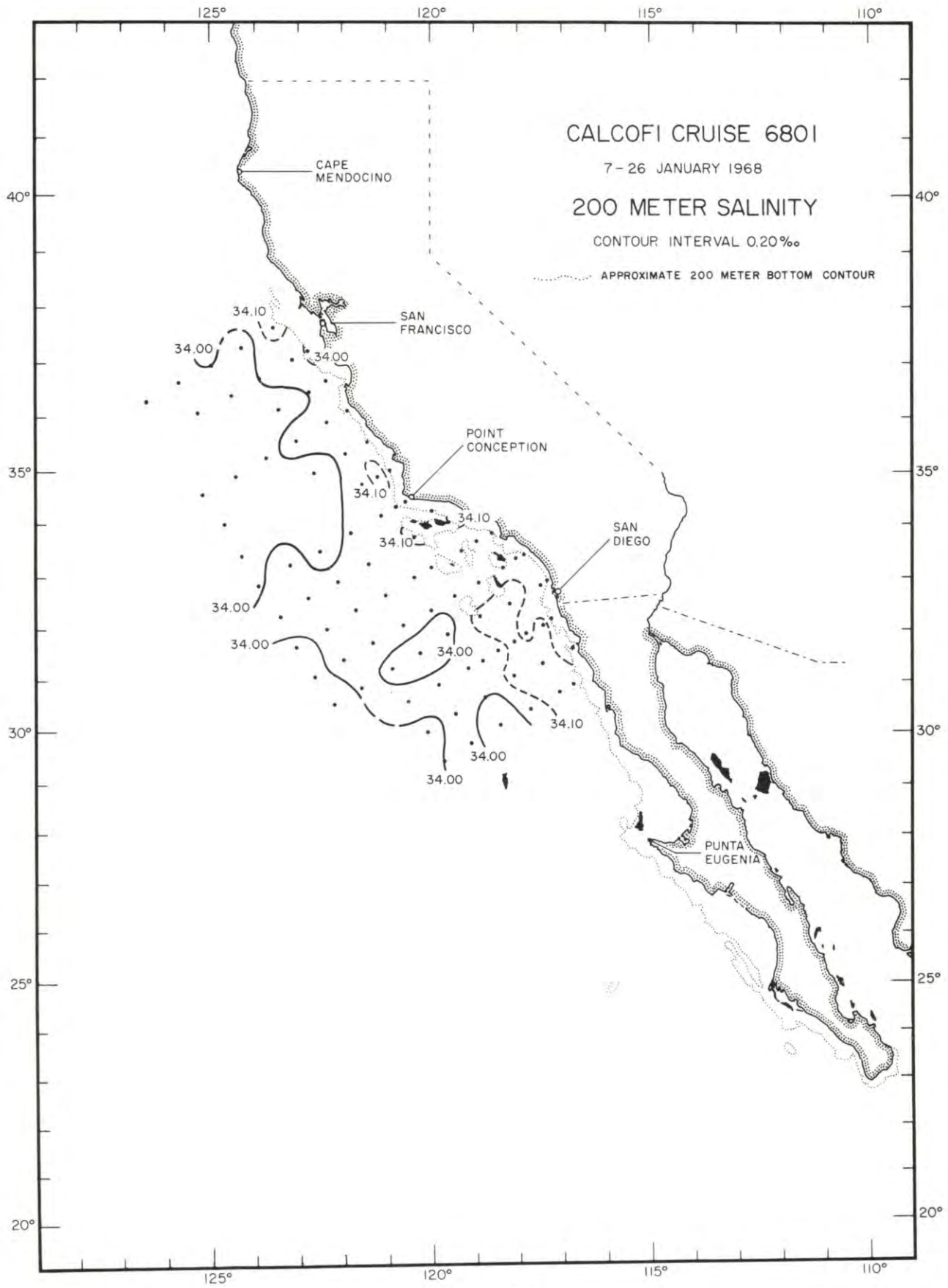

CALCOFI CRUISE 6801
7 - 26 JANUARY 1968
200 METER SALINITY
CONTOUR INTERVAL 0.20‰
APPROXIMATE 200 METER BOTTOM CONTOUR
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
34.10
34.00
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 8

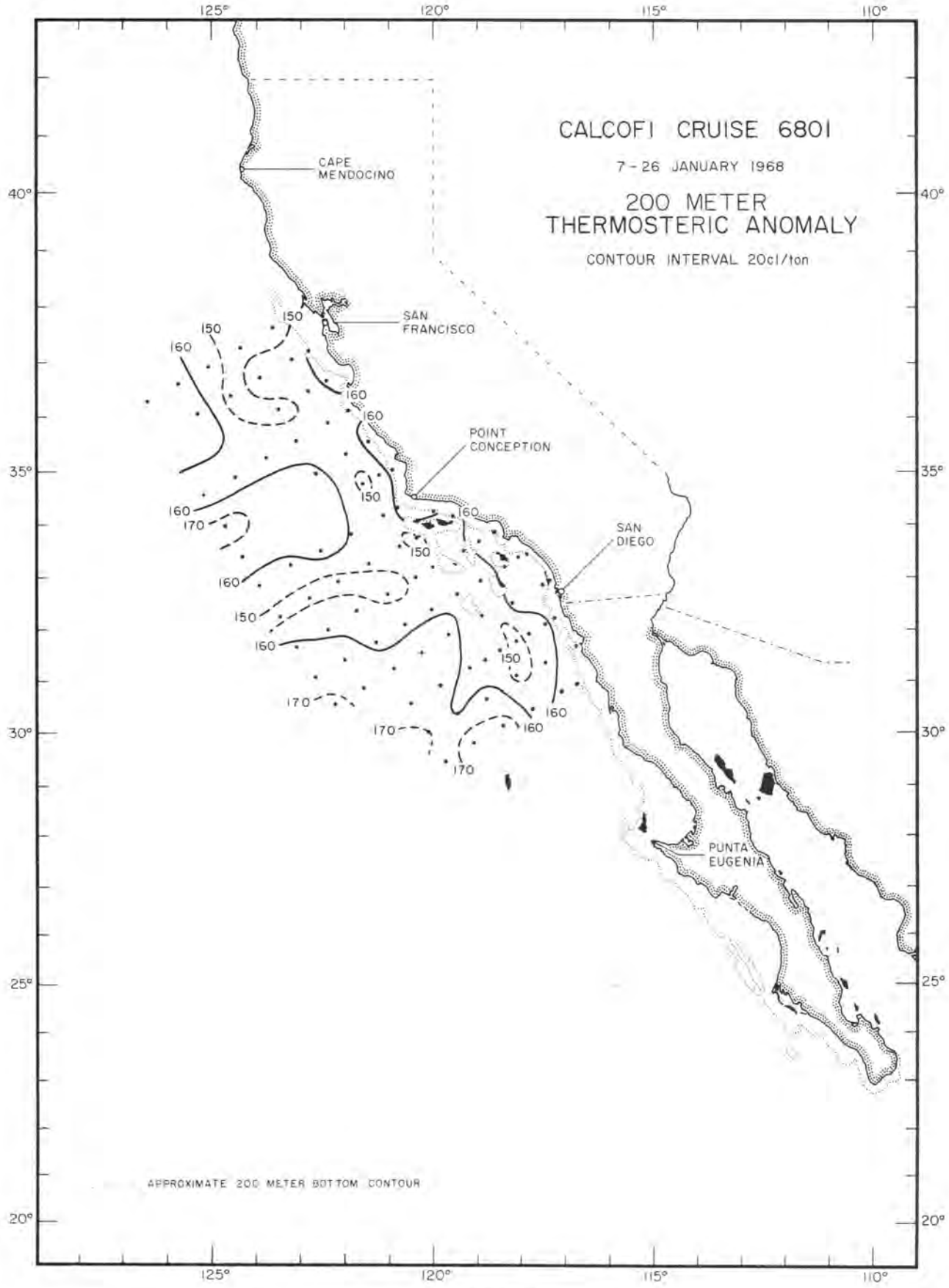

CALCOFI CRUISE 6801
7 - 26 JANUARY 1968
200 METER
THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20cl/ton
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
APPROXIMATE 200 METER BOTTOM CONTOUR
125°
120°
115°
110°
40°
35°
30°
25°
20°
150
160
170

FIGURE 9

PERSONNEL
Cruise 6801

SHIP'S CAPTAIN

Hansen, Terry, RV Horizon

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Horizon

Mead, Richard V., Principal Marine Technician (in charge)
Blaylock, Thomas A., Electronics Technician
Counts, Robert C., Fishery Biologist, Bureau of Commercial Fisheries*
Hemingway, George T., Marine Technician
**Melsheimer, Lt. Robert, United States Coast Guard
Pine, James S., Senior Marine Technician
Rosendahl, Don V., Senior Electronics Technician
***Schneider, Walter W., Marine Technician
Wells, James A., Marine Technician

*Now National Marine Fisheries Service.
**January 6 to 11, 1968.
***January 6 to 18, 1968.

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT — OUTPUT AT STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
60.52							CALCOFI CRUISE 6801						60.52	

HORIZON, JANUARY 23 1968, 2035 GMT, 37 54N 123 01.5W, SOUNDING 43 FM, WIND 300 4 KNOTS, WEATHER PARTLY CLOUDY, SEA MISSING, WIRE ANGLE 00.

1	10.84	32.422	6.71	-	-	-	313.8	0	10.84	32.422	6.71	24.82	313.8	0
11	11.58	33.161	6.31	-	-	-	271.8	10	11.53	33.111	6.35	25.23	274.7	.029
21	11.79	33.373	5.86	-	-	-	259.9	20	11.80	33.359	5.89	25.37	261.0	.056
31	10.89	33.315	5.91	-	-	-	248.6	30	10.99	33.326	5.90	25.50	249.6	.082
50	10.79	33.339	5.80	-	-	-	245.2	50	10.79	33.339	5.80	25.54	245.2	.131
75	10.57	33.425	4.59	-	-	-	235.2	75	10.57	33.425	4.59	25.65	235.2	.192

INPUT — COMPUTED — INPUT — COMPUTED

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
60.52							CALCOFI CRUISE 6801						60.52	

HORIZON, JANUARY 23 1968, 2142 GMT, 37 54N 123 01.5W, SOUNDING 40 FM, WIND 300 4 KNOTS, WEATHER PARTLY CLOUDY, SEA SMOOTH.

0	10.86	32.43	-	24.82	313.5	0
10	11.85	33.36	-	25.37	261.9	.029
20	11.70	33.38	-	25.41	257.8	.055
30	10.86	33.33	-	25.52	247.0	.080
50	10.83	33.38	-	25.57	242.8	.129

60.60							CALCOFI CRUISE 6801						60.60	

HORIZON, JANUARY 24 1968, 0010 GMT, 37 38N 123 37.5W, SOUNDING 1780 FM, WIND 040 1 KNOT, WEATHER CLEAR, SEA SMOOTH.

0	12.30	33.35	-	25.27	270.8	0
10	11.90	33.37	-	25.36	262.1	.027
20	11.87	33.37	-	25.37	261.6	.053
30	11.20	33.37	-	25.49	249.9	.078
50	9.80	33.55	-	25.87	213.5	.125
75	9.34	33.76	-	26.11	190.7	.176
100	9.01	33.88	-	26.26	176.8	.222
125	8.75	33.96	-	26.36	167.0	.266
150	8.62	34.03	-	26.44	159.9	.307
200	8.23	34.11	-	26.56	148.2	.386
250	7.75	34.14	-	26.66	139.3	.460
300	7.26	34.15	-	26.73	131.8	.530
400	6.52	34.21	-	26.88	117.8	.660
500	5.95	34.27	-	27.00	106.3	.778

INPUT — OUTPUT AT STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
60.60							CALCOFI CRUISE 6801						60.60	

HORIZON, JANUARY 24 1968, 0052 GMT, 37 38N 123 37.5W, SOUNDING 1780 FM, WIND 040 1 KNOT, WEATHER CLEAR, SEA MISSING, WIRE ANGLE 05.

0	12.84	33.337	6.39	-	-	-	281.7	0	12.84	33.337	6.39	25.16	281.7	0
10	11.97	33.342	6.42	-	-	-	265.4	10	11.97	33.342	6.42	25.33	265.4	.027
30	11.79	33.341	6.16	-	-	-	262.3	20	11.88	33.326	6.32	25.33	265.0	.054
38	10.84	33.416	5.05	-	-	-	240.3	30	11.79	33.341	6.16	25.36	262.3	.080
48	10.32	33.438	4.82	-	-	-	230.1	50	10.20	33.455	4.71	25.73	226.9	.129
63	9.55	33.588	3.95	-	-	-	206.7	75	9.43	33.668	3.66	26.03	198.5	.183
78	9.40	33.685	3.62	-	-	-	197.2	100	9.16	33.798	3.29	26.17	185.2	.231
96	9.21	33.779	3.32	-	-	-	187.3	125	8.90	33.896	3.15	26.29	174.0	.277
121	8.93	33.885	3.17	-	-	-	175.2	150	8.68	33.964	2.94	26.38	165.6	.320
141	8.78	33.936	3.04	-	-	-	169.2	200	8.31	34.071	2.24	26.52	152.3	.401
169	8.47	34.019	2.70	-	-	-	158.5	250	7.77	34.108	1.85	26.63	141.8	.476
199	8.32	34.070	2.25	-	-	-	152.5	300	7.29	34.122	1.58	26.71	134.3	.548
227	8.06	-	1.99	-	-	-	-	400	6.58	34.186	.90	26.86	120.3	.680
267	7.55	34.113	1.76	-	-	-	138.5	500	5.76	34.229	.50	27.00	107.0	.800
325	7.13	34.130	1.44	-	-	-	121.6							
397	6.60	34.184	.92	-	-	-	120.7							
471	6.02	34.222	.59	-	-	-	110.7							
549	5.26	34.232	.41	-	-	-	101.1							

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
60.70							CALCOFI CRUISE 6801						60.70	
HORIZON, JANUARY 24 1968, 0448 GMT, 37 17N 124 21W, SOUNDING 2150 FM, WIND 080 2 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	12.04	32.98	-	25.04	293.3	0
								10	11.71	32.99	-	25.10	286.7	.029
								20	11.61	32.99	-	25.12	285.0	.058
								30	11.39	33.00	-	25.17	280.4	.086
								50	10.78	33.21	-	25.44	254.6	.140
								75	9.70	33.35	-	25.74	226.7	.200
								100	8.64	33.64	-	26.13	189.1	.252
								125	8.50	33.83	-	26.30	173.0	.298
								150	8.05	33.91	-	26.43	160.6	.341
								200	7.25	33.96	-	26.59	145.9	.419
								250	6.75	34.01	-	26.69	135.6	.491
								300	6.22	34.03	-	26.78	127.5	.558
								400	5.57	34.11	-	26.92	113.8	.683
								500	5.08	34.20	-	27.05	101.6	.796
60.80							CALCOFI CRUISE 6801						60.80	
HORIZON, JANUARY 24 1968, 0848 GMT, 36 57N 125 03.5W, SOUNDING 2290 FM, WIND 300 6 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	11.62	32.93	-	25.07	289.6	0
								10	11.33	33.04	-	25.21	276.4	.028
								20	11.17	33.11	-	25.30	268.5	.056
								30	11.17	33.12	-	25.30	267.8	.082
								50	11.11	33.14	-	25.33	265.3	.136
								75	10.67	33.22	-	25.47	252.0	.201
								100	9.29	33.60	-	26.00	201.8	.258
								125	8.74	33.73	-	26.19	183.9	.307
								150	8.71	33.89	-	26.32	171.6	.352
								200	7.95	34.00	-	26.52	152.5	.434
								250	7.34	34.01	-	26.61	143.3	.510
								300	6.73	34.00	-	26.69	136.1	.582
								400	6.12	34.12	-	26.86	119.6	.715
								500	5.21	34.14	-	26.99	107.5	.834
	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
60.80							CALCOFI CRUISE 6801						60.80	
HORIZON, JANUARY 24 1968, 0932 GMT, 36 57N 125 03.5W, SOUNDING 2120 FM, WIND 300 6 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 13.														
0	11.60	32.929	6.54	-	-	-	289.3	0	11.60	32.929	6.54	25.08	289.3	0
10	11.38	33.046	6.65	-	-	-	276.9	10	11.38	33.046	6.65	25.21	276.9	.028
29	11.17	-	6.46	-	-	-	-	20	11.24	33.075	6.58	25.26	272.3	.056
38	11.13	33.104	6.41	-	-	-	268.3	30	11.16	33.095	6.45	25.28	269.6	.083
47	11.10	33.098	6.61	-	-	-	268.2	50	11.07	33.105	6.54	25.31	267.2	.137
62	10.92	33.148	6.15	-	-	-	261.5	75	10.81	33.202	6.10	25.43	255.6	.203
77	10.76	33.210	6.07	-	-	-	254.2	100	9.20	33.322	4.74	25.79	221.1	.263
95	9.36	33.264	4.99	-	-	-	227.8	125	8.91	33.630	3.89	26.08	193.8	.315
123	8.93	33.614	3.92	-	-	-	195.3	150	8.66	33.799	3.54	26.25	177.6	.362
139	8.75	33.727	3.74	-	-	-	184.3	200	8.08	33.947	3.09	26.46	158.3	.447
167	8.51	33.886	3.26	-	-	-	168.9	250	7.44	34.008	2.61	26.60	144.8	.525
196	8.13	33.937	3.14	-	-	-	159.7	300	6.55	33.987	2.47	26.70	134.8	.597
225	7.79	34.003	2.76	-	-	-	150.0	400	6.09	34.115	1.19	26.86	119.6	.729
264	7.22	34.002	2.56	-	-	-	142.3	500	5.13	34.126	.91	26.99	107.6	.848
321	6.22	33.987	2.44	-	-	-	130.7							
392	6.21	34.120	1.19	-	-	-	120.7							
465	5.34	34.106	1.06	-	-	-	111.5							
542	5.04	34.173	.66	-	-	-	103.1							

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
60.90							CALCOFI CRUISE 6801						60.90	

HORIZON, JANUARY 24 1968, 1435 GMT, 36 37N 125 47W, SOUNDING 2300 FM, WIND 310 9 KNOTS, WEATHER LIGHT FOG, SEA SMOOTH.

0	12.80	33.01	-	24.91	305.0	0
10	12.76	33.01	-	24.92	304.2	.030
20	12.67	33.00	-	24.93	303.3	.061
30	12.32	32.93	-	24.94	302.0	.091
50	12.00	32.94	-	25.01	295.6	.151
75	10.85	33.09	-	25.34	264.6	.222
100	9.76	33.62	-	25.94	207.7	.281
125	9.33	33.83	-	26.17	185.4	.331
150	9.07	33.91	-	26.27	175.5	.376
200	8.73	33.98	-	26.38	165.2	.463
250	8.46	34.01	-	26.45	159.0	.546
300	8.20	34.04	-	26.51	153.0	.627
400	7.20	34.10	-	26.70	134.8	.776
500	6.18	34.16	-	26.89	117.3	.909

60.100							CALCOFI CRUISE 6801						60.100	

HORIZON, JANUARY 24 1968, 1832 GMT, 36 17N 126 30W, SOUNDING 2450 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA MODERATE.

0	14.13	33.27	-	24.84	311.4	0
10	14.17	33.28	-	24.84	311.5	.031
20	14.17	33.28	-	24.84	311.5	.062
30	14.15	33.27	-	24.84	311.8	.094
50	14.16	33.28	-	24.85	311.3	.156
75	13.60	33.17	-	24.88	308.4	.234
100	10.15	33.12	-	25.48	250.9	.304
125	9.90	33.43	-	25.76	223.9	.364
150	9.48	33.59	-	25.96	205.5	.419
200	8.74	33.93	-	26.34	169.1	.514
250	7.94	33.95	-	26.48	156.0	.597
300	7.26	33.98	-	26.60	144.5	.675
400	6.26	34.03	-	26.78	128.0	.816
500	5.70	34.12	-	26.92	114.6	.943

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
60.100							CALCOFI CRUISE 6801						60.100	

HORIZON, JANUARY 24 1968, 1921 GMT, 36 17N 126 30W, SOUNDING 2450 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 12.

1	14.18	33.270	5.99	-	-	-	312.4	0	14.18	33.270	5.99	24.83	312.4	0
11	14.19	33.267	5.96	-	-	-	312.9	10	14.19	33.267	5.96	24.83	312.8	.031
30	14.22	33.276	5.95	-	-	-	312.8	20	14.20	33.270	5.96	24.83	312.5	.063
58	14.28	33.295	5.90	-	-	-	312.6	30	14.22	33.276	5.95	24.83	312.8	.094
67	14.28	33.293	6.08	-	-	-	312.7	50	14.27	33.291	5.87	24.83	312.6	.157
81	13.60	33.241	5.93	-	-	-	303.2	75	14.08	33.272	6.00	24.86	310.3	.235
95	10.68	33.107	6.18	-	-	-	260.5	100	10.34	33.100	6.15	25.43	255.4	.306
109	10.16	33.110	6.00	-	-	-	251.8	125	9.94	33.260	5.48	25.62	237.3	.368
133	9.89	33.359	5.20	-	-	-	229.0	150	9.61	33.528	4.92	25.89	212.1	.425
152	9.57	33.547	4.89	-	-	-	210.1	200	8.74	33.899	4.09	26.32	171.3	.523
181	8.87	33.784	3.78	-	-	-	181.8	250	8.03	33.960	3.83	26.47	156.6	.607
209	8.69	33.937	4.30	-	-	-	167.8	300	7.33	33.981	3.18	26.59	145.5	.684
238	8.23	33.956	3.94	-	-	-	159.7	400	6.19	34.025	1.95	26.78	127.5	.826
286	7.49	33.971	3.44	-	-	-	148.3	500	5.65	34.131	.94	26.93	113.2	.952
339	6.94	34.008	2.47	-	-	-	138.2	600	5.10	34.219	.55	27.07	100.4	1.065
420	5.97	34.033	1.83	-	-	-	124.3							
503	5.64	34.134	.92	-	-	-	112.8							
583	5.21	34.207	.56	-	-	-	102.5							

63.52							CALCOFI CRUISE 6801						63.52	

HORIZON, JANUARY 23 1968, 1419 GMT, 37 19N 122 36W, SOUNDING 45 FM, WIND 230 2 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 00.

1	11.52	33.403	6.15	-	-	-	253.0	0	11.52	33.403	6.15	25.46	253.0	0
11	11.57	33.400	6.21	-	-	-	254.0	10	11.57	33.400	6.21	25.45	254.0	.025
21	11.57	33.403	6.15	-	-	-	253.8	20	11.57	33.403	6.16	25.45	253.9	.051
31	11.56	33.404	6.15	-	-	-	253.6	30	11.56	33.404	6.15	25.45	253.6	.076
50	11.53	33.401	6.19	-	-	-	253.3	50	11.53	33.401	6.19	25.46	253.2	.127
75	10.89	33.513	4.55	-	-	-	234.0	75	10.89	33.513	4.55	25.66	234.0	.188

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
63.55					CALCOFI CRUISE 6801								63.55	
HORIZON, JANUARY 23 1968, 1201 GMT, 37 12N 122 50.5W, SOUNDING 185 FM, WIND 320 10 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	12.48	33.37	-	25.25	272.6	0
								10	12.20	33.38	-	25.31	266.7	.027
								20	11.69	33.43	-	25.45	253.9	.053
								30	11.52	33.44	-	25.49	250.2	.078
								50	11.13	33.51	-	25.61	238.3	.127
								75	10.84	33.55	-	25.70	230.4	.186
								100	10.64	33.58	-	25.75	224.9	.244
								125	10.16	33.63	-	25.88	213.3	.299
								150	9.63	33.77	-	26.07	194.5	.351
								200	8.47	33.99	-	26.43	160.6	.441
								250	7.94	34.08	-	26.58	146.4	.520
63.60					CALCOFI CRUISE 6801								63.60	
HORIZON, JANUARY 23 1968, 0858 GMT, 37 03N 123 12W, SOUNDING 1380 FM, WIND 090 4 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	12.36	33.33	-	25.25	273.3	0
								10	12.36	33.32	-	25.24	274.1	.027
								20	12.31	33.33	-	25.25	272.4	.055
								30	12.31	33.33	-	25.25	272.4	.082
								50	10.95	33.34	-	25.51	247.8	.134
								75	9.90	33.59	-	25.89	212.1	.192
								100	9.24	33.78	-	26.15	187.7	.242
								125	8.99	33.92	-	26.30	173.5	.288
								150	8.72	33.98	-	26.38	165.1	.331
								200	8.05	34.03	-	26.53	151.6	.412
								250	7.60	34.07	-	26.62	142.4	.487
								300	6.96	34.08	-	26.72	133.1	.558
								400	6.48	34.16	-	26.85	121.0	.690
								500	5.98	34.25	-	26.98	108.2	.811

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
63.60						CALCOFI CRUISE 6801							63.60	
HORIZON, JANUARY 23 1968, 0941 GMT, 37 03N 123 12W, SOUNDING 1300 FM, WIND 100 4 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 02.														
0	12.33	33.322	6.28	-	-	-	273.4	0	12.33	33.322	6.28	25.24	273.4	0
10	12.35	33.320	6.41	-	-	-	273.9	10	12.35	33.320	6.41	25.24	273.9	.027
30	12.28	33.315	6.33	-	-	-	273.0	20	12.32	33.313	6.40	25.24	273.9	.055
54	10.83	33.407	4.79	-	-	-	240.8	30	12.28	33.315	6.33	25.25	273.0	.082
64	10.26	33.467	4.53	-	-	-	227.0	50	11.12	33.385	5.06	25.52	247.3	.134
74	10.01	33.580	4.08	-	-	-	214.6	75	9.99	33.584	4.06	25.87	213.9	.192
89	9.66	33.631	3.85	-	-	-	205.3	100	9.39	33.724	3.72	26.08	194.1	.244
102	9.34	33.743	3.69	-	-	-	192.0	125	9.07	33.902	3.00	26.27	176.1	.291
127	9.05	33.912	2.93	-	-	-	175.0	150	8.64	33.966	2.61	26.39	164.9	.334
147	8.68	33.962	2.58	-	-	-	165.8	200	8.16	34.025	2.67	26.51	153.6	.415
171	8.41	33.989	2.90	-	-	-	159.8	250	7.56	34.065	2.28	26.63	142.2	.491
201	8.15	34.026	2.66	-	-	-	153.4	300	7.05	34.091	1.88	26.72	133.4	.562
229	7.84	34.052	2.43	-	-	-	147.0	400	6.47	34.161	1.06	26.85	120.9	.694
269	7.32	34.075	2.14	-	-	-	138.2	500	5.96	34.247	.55	26.98	108.2	.815
328	6.86	34.107	1.63	-	-	-	129.8							
401	6.47	34.162	1.05	-	-	-	120.7							
474	6.15	34.232	.64	-	-	-	111.6							
553	5.47	34.262	.47	-	-	-	101.3							

	INPUT						COMPUTED		INPUT				COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
63.70					CALCOFI CRUISE 6801								63.70	
HORIZON, JANUARY 25 1968, 1002 GMT, 36 42.5N 123 55W, SOUNDING 2065 FM, WIND 220 19 KNOTS, WEATHER MISSING, SEA ROUGH.														
								0	11.48	33.08	-	25.22	276.1	0
								10	11.48	33.09	-	25.22	275.3	.028
								20	11.39	33.08	-	25.23	274.5	.055
								30	11.35	33.16	-	25.30	267.9	.082
								50	10.70	33.33	-	25.55	244.4	.134
								75	10.02	33.77	-	26.01	200.7	.190
								100	9.74	33.84	-	26.11	191.1	.239
								125	9.51	33.88	-	26.18	184.5	.287
								150	9.25	33.94	-	26.27	176.0	.332
								200	8.85	34.00	-	26.38	165.5	.419
								250	8.29	34.04	-	26.50	154.3	.501
								300	7.70	34.10	-	26.63	141.5	.578
								400	6.58	34.10	-	26.79	126.7	.717
								500	5.78	34.16	-	26.94	112.5	.843

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
63.80							CALCOFI CRUISE 6801						63.80	

HORIZON, JANUARY 25 1968, 0535 GMT, 36 23N 124 35W, SOUNDING 2220 FM, WIND 320 23 KNOTS, WEATHER MISSING, SEA ROUGH.

					0	11.97	32.94	-	25.02	295.0	0
					10	11.97	32.95	-	25.03	294.3	.029
					20	11.55	32.99	-	25.13	283.9	.058
					30	11.35	33.02	-	25.19	278.3	.087
					50	10.73	33.06	-	25.33	264.8	.141
					75	9.54	33.43	-	25.82	218.3	.202
					100	8.88	33.74	-	26.17	185.2	.253
					125	8.57	33.87	-	26.32	171.0	.298
					150	8.19	33.92	-	26.42	161.8	.340
					200	7.37	33.94	-	26.55	149.0	.419
					250	6.82	33.97	-	26.65	139.5	.493
					300	6.29	34.01	-	26.76	129.9	.562
					400	5.68	34.11	-	26.91	115.1	.689
					500	5.22	34.18	-	27.02	104.6	.804

63.90							CALCOFI CRUISE 6801						63.90	

HORIZON, JANUARY 25 1968, 0113 GMT, 36 03N 125 20W, SOUNDING 2408 FM, WIND 120 17 KNOTS, WEATHER OVERCAST, SEA ROUGH.

					0	12.49	32.96	-	24.93	302.9	0
					10	12.48	32.96	-	24.94	302.7	.030
					20	12.46	32.96	-	24.94	302.4	.061
					30	12.46	32.96	-	24.94	302.4	.091
					50	12.42	32.95	-	24.94	302.4	.152
					75	11.79	32.98	-	25.08	288.9	.226
					100	10.10	33.10	-	25.47	251.6	.294
					125	9.54	33.41	-	25.81	219.8	.353
					150	9.04	33.71	-	26.12	189.9	.405
					200	8.34	33.91	-	26.39	164.7	.495
					250	7.77	34.00	-	26.54	149.9	.576
					300	7.15	34.05	-	26.67	137.8	.650
					400	6.06	34.07	-	26.83	122.6	.785
					500	5.27	34.10	-	26.95	111.2	.908

67.50							CALCOFI CRUISE 6801						67.50	

HORIZON, JANUARY 22 1968, 2330 GMT, 36 48N 122 05W, SOUNDING 55 FM, WIND 330 8 KNOTS, WEATHER CLEAR, SEA ROUGH.

					0	12.10	33.39	-	25.34	264.2	0
					10	12.03	33.40	-	25.36	262.2	.026
					20	11.99	33.40	-	25.37	261.5	.053
					30	11.95	33.38	-	25.36	262.2	.079
					50	11.56	33.44	-	25.48	250.9	.130
					75	11.00	33.47	-	25.61	239.1	.192
					100	10.51	33.58	-	25.78	222.7	.250

	INPUT							CTDPLT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
67.50							CALCOFI CRUISE 6801						67.50	

HORIZON, JANUARY 22 1968, 2350 GMT, 36 48N 122 05W, SOUNDING 55 FM, WIND 330 8 KNOTS, WEATHER CLEAR, SEA ROUGH, WIRE ANGLE 03.

1	12.34	33.403	6.20	-	-	-	267.6	0	12.34	33.403	6.20	25.31	267.6	0
11	12.07	33.396	6.27	-	-	-	263.2	10	12.09	33.396	6.27	25.35	263.6	.027
26	11.98	33.415	6.18	-	-	-	260.2	20	12.02	33.407	6.23	25.37	261.6	.053
35	11.85	33.412	5.82	-	-	-	258.1	30	11.93	33.413	6.01	25.39	259.5	.079
45	11.58	33.428	5.79	-	-	-	252.2	50	11.50	33.437	5.67	25.49	250.1	.130
60	11.35	33.457	5.31	-	-	-	246.0	75	11.00	33.499	4.72	25.63	236.9	.191
75	11.00	33.499	4.72	-	-	-	236.9	100	10.53	33.573	4.16	25.77	223.6	.249
99	10.55	33.570	4.17	-	-	-	224.1							

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
57.55							CALCOFI CRUISE 6801						67.55	
HORIZON, JANUARY 23 1968, 0152 GMT, 36 39.5N 122 26.5W, SOUNDING 1170 FM, WIND 320 6 KNOTS, WEATHER CLEAR, SEA ROUGH.														
								0	12.33	33.39	-	25.30	268.4	0
								10	12.33	33.39	-	25.30	268.4	.027
								20	12.31	33.39	-	25.30	268.0	.054
								30	11.97	33.36	-	25.34	264.1	.080
								50	11.53	33.46	-	25.50	248.9	.132
								75	11.00	33.49	-	25.62	237.6	.193
								100	10.69	33.54	-	25.71	228.7	.252
								125	9.38	33.70	-	26.06	195.8	.305
								150	9.13	33.88	-	26.24	178.6	.353
								200	8.74	34.01	-	26.40	163.1	.440
								250	8.34	34.05	-	26.50	154.3	.521
								300	7.84	34.12	-	26.63	142.0	.598
								400	6.71	34.16	-	26.82	123.9	.736
								500	6.16	34.24	-	26.95	111.1	.860
67.60							CALCOFI CRUISE 6801						67.60	
HORIZON, JANUARY 23 1968, 0415 GMT, 36 29N 122 49W, SOUNDING 1615 FM, WIND 330 6 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	12.64	33.31	-	25.18	279.9	0
								10	12.51	33.30	-	25.19	278.3	.028
								20	12.44	33.30	-	25.21	277.0	.056
								30	12.43	33.30	-	25.21	276.8	.083
								50	12.05	33.22	-	25.22	275.8	.139
								75	10.26	33.41	-	25.69	231.2	.203
								100	9.57	33.63	-	25.98	203.9	.257
								125	9.14	33.80	-	26.18	184.7	.307
								150	8.73	33.88	-	26.30	172.6	.352
								200	8.04	34.00	-	26.50	153.7	.435
								250	7.29	34.04	-	26.64	140.4	.510
								300	6.91	34.06	-	26.71	133.9	.581
								400	6.07	34.09	-	26.85	121.2	.714
								500	5.82	34.24	-	27.00	107.0	.833

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
67.60							CALCOFI CRUISE 6801						67.60	
HORIZON, JANUARY 23 1968, 0507 GMT, 36 29N 122 49W, SOUNDING 1615 FM, WIND 330 6 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 00.														
0	12.57	33.319	6.22	-	-	-	278.0	0	12.57	33.319	6.22	25.20	278.0	0
10	12.58	33.319	6.25	-	-	-	278.2	10	12.58	33.319	6.25	25.19	278.2	.028
30	12.43	33.312	6.21	-	-	-	275.9	20	12.54	33.316	6.24	25.20	277.7	.056
54	11.74	33.304	5.68	-	-	-	264.1	30	12.43	33.312	6.21	25.22	275.9	.083
64	10.54	33.374	4.97	-	-	-	238.5	50	11.98	33.297	5.84	25.29	268.9	.138
74	10.14	33.452	4.46	-	-	-	226.2	75	10.11	33.459	4.43	25.75	225.2	.200
89	9.78	33.564	4.04	-	-	-	212.1	100	9.49	33.677	3.68	26.02	199.2	.254
102	9.44	33.697	3.62	-	-	-	196.9	125	8.99	33.822	3.32	26.22	180.8	.302
129	8.92	33.837	3.30	-	-	-	178.6	150	8.53	33.943	3.09	26.39	165.0	.346
147	8.57	33.933	3.12	-	-	-	166.3	200	8.03	34.013	2.79	26.52	152.7	.426
171	8.28	33.987	2.91	-	-	-	158.1	250	7.34	34.071	2.04	26.66	138.8	.501
201	8.02	34.013	2.78	-	-	-	152.5	300	7.11	34.132	1.46	26.74	131.2	.571
229	7.41	34.037	2.38	-	-	-	142.3	400	6.13	34.154	1.01	26.89	117.1	.700
269	7.27	34.103	1.75	-	-	-	135.5	500	5.74	34.268	.47	27.03	104.0	.816
328	6.91	34.147	1.28	-	-	-	127.5							
402	6.11	34.155	1.00	-	-	-	116.8							
474	5.85	34.246	.55	-	-	-	106.9							
553	5.51	34.294	.44	-	-	-	99.3							

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
67.70							CALCOFI CRUISE 6801						67.70	
HORIZON, JANUARY 25 1968, 1427 GMT, 36 08N 123 29.5W, SOUNDING 1915 FM, WIND 340 17 KNOTS, WEATHER MISSING, SEA VERY ROUGH.														
								0	12.27	33.30	-	25.24	273.9	0
								10	12.27	33.30	-	25.24	273.9	.027
								20	12.20	33.30	-	25.25	272.6	.055
								30	11.80	33.29	-	25.32	266.2	.082
								50	10.15	33.40	-	25.70	230.2	.132
								75	9.34	33.67	-	26.04	197.4	.185
								100	8.87	33.85	-	26.26	176.9	.233
								125	8.51	33.93	-	26.38	165.7	.276
								150	8.23	33.96	-	26.44	159.4	.317
								200	7.49	33.99	-	26.58	146.9	.395
								250	7.10	34.02	-	26.65	139.4	.468
								300	6.72	34.07	-	26.75	130.8	.538
								400	6.23	34.19	-	26.91	115.7	.666
								500	5.41	34.20	-	27.02	105.2	.782
70.53							CALCOFI CRUISE 6801						70.53	
HORIZON, JANUARY 21 1968, 1939 GMT, 36 07N 121 54W, SOUNDING 585 FM, WIND 100 23 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH.														
								0	12.86	33.39	-	25.19	278.1	0
								10	12.85	33.39	-	25.20	278.0	.028
								20	12.84	33.39	-	25.20	277.8	.056
								30	12.82	33.38	-	25.19	278.1	.084
								50	12.45	33.35	-	25.24	273.5	.139
								75	11.44	33.41	-	25.48	251.0	.205
								100	10.25	33.65	-	25.88	213.3	.263
								125	9.58	33.79	-	26.10	192.2	.315
								150	8.89	33.89	-	26.29	174.3	.361
								200	8.22	34.02	-	26.49	154.8	.445
								250	7.87	34.07	-	26.58	146.1	.522
								300	7.51	34.10	-	26.66	138.9	.596
								400	6.64	34.16	-	26.83	123.0	.732
								500	6.11	34.23	-	26.95	111.2	.855

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
70.53							CALCOFI CRUISE 6801						70.53	
HORIZON, JANUARY 21 1968, 2032 GMT, 36 07N 121 54W, SOUNDING 585 FM, WIND 100 23 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 25.														
0	12.78	33.377	6.24	-	-	-	277.6	0	12.78	33.377	6.24	25.20	277.6	0
9	12.82	33.383	6.18	-	-	-	277.9	10	12.82	33.383	6.18	25.20	277.9	.028
31	12.78	33.380	6.15	-	-	-	277.4	20	12.82	33.382	6.16	25.20	277.5	.056
58	12.57	33.390	5.76	-	-	-	272.8	30	12.79	33.380	6.15	25.20	277.5	.083
67	12.17	33.407	5.36	-	-	-	264.2	50	12.65	33.383	5.96	25.23	274.7	.139
84	10.89	33.523	4.26	-	-	-	233.3	75	11.56	33.455	4.83	25.49	249.8	.205
97	10.45	33.608	3.90	-	-	-	219.7	100	10.38	33.627	3.82	25.84	217.0	.264
111	10.13	33.693	3.55	-	-	-	208.2	125	9.77	33.749	3.50	26.03	198.3	.316
139	9.39	33.797	3.44	-	-	-	188.8	150	9.08	33.848	3.36	26.23	180.2	.364
156	8.93	33.875	3.32	-	-	-	176.0	200	8.42	33.986	2.97	26.44	160.2	.451
183	8.66	33.941	3.23	-	-	-	167.1	250	7.75	34.080	2.27	26.61	143.7	.529
214	8.21	34.020	2.73	-	-	-	154.7	300	7.31	34.121	1.66	26.70	134.7	.601
242	7.84	34.071	2.39	-	-	-	145.6	400	6.59	34.192	.90	26.86	120.0	.733
288	7.39	34.111	1.76	-	-	-	136.5	500	6.10	34.244	.57	26.96	110.1	.854
348	7.01	34.157	1.33	-	-	-	128.0	600	5.65	34.295	.38	27.06	101.0	.967
441	6.28	34.216	.63	-	-	-	114.3							
527	6.00	34.257	.53	-	-	-	107.9							
599	5.66	34.294	.38	-	-	-	101.1							

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
70.60					CALCOFI CRUISE 6801								70.60	
HORIZON, JANUARY 21 1968, 1432 GMT, 35 53N 122 22.5W, SOUNDING 1880 FM, WIND 310 22 KNOTS, WEATHER OVERCAST, SEA ROUGH.														
								0	11.94	33.16	-	25.19	278.3	0
								10	11.93	33.16	-	25.20	278.1	.028
								20	11.80	33.15	-	25.21	276.5	.056
								30	11.66	33.23	-	25.30	268.2	.083
								50	11.00	33.28	-	25.46	253.1	.135
								75	9.80	33.54	-	25.87	214.2	.194
								100	9.33	33.79	-	26.14	188.4	.245
								125	8.83	33.85	-	26.27	176.3	.291
								150	8.58	33.96	-	26.39	164.5	.334
								200	7.97	34.02	-	26.53	151.2	.414
								250	7.49	34.06	-	26.63	141.6	.490
								300	7.38	34.15	-	26.72	133.5	.561
								400	6.56	34.20	-	26.87	119.0	.692
								500	5.96	34.26	-	26.99	107.2	.811

INPUT Z	T	S	OXY	PHO	SIL	NIT	D*T	OUTPUT AT STANDARD LEVELS OF DEPTH Z	T	S	OXY	SIG*T	D*T	DD
70.60					CALCOFI CRUISE 6801								70.60	
HORIZON, JANUARY 21 1968, 1526 GMT, 35 53N 122 22.5W, SOUNDING 1880 FM, WIND 310 21 KNOTS, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 36.														
0	11.66	33.114	6.53	-	-	-	276.7	0	11.66	33.114	6.53	25.21	276.7	0
9	11.70	33.115	6.71	-	-	-	277.3	10	11.70	33.117	6.71	25.20	277.2	.028
28	11.63	33.165	6.45	-	-	-	272.4	20	11.68	33.139	6.66	25.23	275.2	.055
36	11.58	33.314	6.12	-	-	-	260.6	30	11.62	33.206	6.37	25.29	269.2	.083
47	10.51	33.264	5.63	-	-	-	246.1	50	10.32	33.287	5.28	25.58	241.3	.134
59	9.94	33.388	4.25	-	-	-	227.7	75	9.73	33.534	4.02	25.87	213.5	.191
77	9.70	33.554	3.98	-	-	-	211.6	100	9.17	33.805	3.32	26.18	184.8	.241
93	9.33	33.764	3.33	-	-	-	190.3	125	8.73	33.850	3.16	26.31	172.0	.286
107	9.02	33.830	3.31	-	-	-	180.7	150	8.43	33.970	2.87	26.42	161.6	.329
130	8.67	33.904	3.10	-	-	-	170.0	200	7.83	34.043	2.43	26.57	147.6	.407
152	8.41	33.975	2.85	-	-	-	160.9	250	7.34	34.098	1.88	26.68	136.8	.480
182	8.06	33.995	2.78	-	-	-	154.4	300	7.20	34.173	1.13	26.76	129.3	.549
204	7.78	34.054	2.35	-	-	-	146.1	400	6.52	34.231	.61	26.90	116.2	.677
242	7.37	34.085	2.00	-	-	-	138.2	500	5.72	34.253	.48	27.02	104.9	.794
290	7.25	34.163	1.24	-	-	-	130.7							
366	6.76	34.214	.65	-	-	-	120.5							
443	6.19	34.245	.56	-	-	-	111.1							
514	5.60	34.253	.46	-	-	-	103.4							

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
70.70					CALCOFI CRUISE 6801								70.70	
HORIZON, JANUARY 21 1968, 1008 GMT, 35 33N 123 06W, SOUNDING 2050 FM, WIND 030 25 KNOTS, WEATHER MISSING, SEA VERY ROUGH.														
								0	12.60	33.19	-	25.09	288.0	0
								10	12.61	33.20	-	25.10	287.5	.029
								20	12.61	33.20	-	25.10	287.5	.058
								30	12.56	33.25	-	25.14	282.9	.086
								50	11.02	33.20	-	25.39	259.3	.141
								75	10.15	33.44	-	25.73	227.2	.202
								100	9.49	33.61	-	25.97	204.2	.256
								125	8.89	33.84	-	26.25	178.0	.304
								150	8.63	33.92	-	26.35	168.2	.348
								200	7.97	34.01	-	26.52	152.0	.430
								250	7.36	34.03	-	26.63	142.1	.505
								300	6.84	34.07	-	26.73	132.3	.576
								400	5.81	34.12	-	26.90	115.9	.705
								500	5.30	34.20	-	27.03	104.0	.820
								600	5.01	34.30	-	27.14	93.3	.925

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
70.80					CALCOFI CRUISE 6801								70.80	

HORIZON, JANUARY 21 1968, 0450 GMT, 35 14N 123 46W, SOUNDING 2415 FM, WIND 280 19 KNOTS, WEATHER MISSING, SEA VERY ROUGH.

0	13.01	33.23	-	25.04	292.7	0
10	13.02	33.23	-	25.04	292.9	.029
20	13.02	33.23	-	25.04	292.9	.059
30	13.02	33.23	-	25.04	292.9	.088
50	12.74	33.21	-	25.08	289.1	.146
75	10.32	33.22	-	25.53	246.2	.214
100	9.68	33.48	-	25.84	216.8	.272
125	9.20	33.70	-	26.09	193.0	.324
150	8.65	33.87	-	26.31	172.2	.370
200	7.94	33.99	-	26.51	153.1	.453
250	7.44	34.06	-	26.64	141.0	.528
300	7.02	34.10	-	26.73	132.4	.599
400	6.27	34.19	-	26.90	116.2	.728
500	5.76	34.24	-	27.00	106.3	.845

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
70.80						CALCOFI CRUISE 6801							70.80	

HORIZON, JANUARY 21 1968, 0541 GMT, 35 14N 123 46W, SOUNDING 2415 FM, WIND 280 19 KNOTS, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 34.

0	12.97	33.232	6.31	-	-	-	291.8	0	12.97	33.232	6.31	25.05	291.8	0
8	12.99	33.231	6.18	-	-	-	292.3	10	12.99	33.230	6.17	25.04	292.4	.029
24	12.99	33.226	6.18	-	-	-	292.6	20	13.00	33.227	6.17	25.04	292.7	.059
47	12.84	33.233	5.98	-	-	-	289.3	30	12.96	33.227	6.10	25.05	292.0	.088
55	12.79	33.260	6.11	-	-	-	286.4	50	12.82	33.244	6.04	25.09	288.2	.146
67	11.46	33.260	5.62	-	-	-	262.5	75	10.64	33.253	5.60	25.50	249.1	.214
78	10.40	33.252	5.58	-	-	-	245.2	100	9.91	33.393	4.87	25.73	226.5	.273
90	10.21	33.288	5.39	-	-	-	239.4	125	9.45	33.658	4.02	26.02	200.0	.327
110	9.62	33.518	4.32	-	-	-	213.0	150	8.80	33.844	3.48	26.27	176.4	.375
126	9.44	33.666	4.01	-	-	-	199.2	200	8.18	34.042	2.85	26.52	152.6	.459
149	8.82	33.838	3.49	-	-	-	177.1	250	7.68	34.055	2.20	26.60	144.6	.535
174	8.47	33.955	3.29	-	-	-	163.2	300	6.99	34.078	1.70	26.72	133.6	.607
197	8.21	34.042	2.89	-	-	-	153.0	400	5.98	34.119	1.08	26.88	117.9	.737
238	7.83	34.046	2.36	-	-	-	147.4	500	5.59	34.227	.54	27.01	105.3	.855
282	7.24	34.079	1.81	-	-	-	136.9							
353	6.33	34.076	1.45	-	-	-	125.4							
428	5.82	34.147	.90	-	-	-	114.0							
504	5.59	34.232	.53	-	-	-	104.9							

	INPUT						COMPUTED		INPUT				COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
70.90					CALCOFI CRUISE 6801								70.90	

HORIZON, JANUARY 21 1968, 0038 GMT, 34 55N 124 29W, SOUNDING 2170 FM, WIND 300 16 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH.

0	12.94	33.20	-	25.03	293.6	0
10	12.92	33.19	-	25.03	294.0	.029
20	12.86	33.20	-	25.05	292.1	.059
30	12.70	33.16	-	25.05	292.1	.088
50	12.51	33.22	-	25.13	284.2	.146
75	10.45	33.08	-	25.40	258.7	.214
100	9.68	33.53	-	25.88	213.1	.273
125	9.22	33.71	-	26.09	192.6	.325
150	8.92	33.88	-	26.28	175.5	.371
200	8.22	33.97	-	26.45	158.5	.456
250	7.53	34.01	-	26.59	145.9	.534
300	6.86	34.05	-	26.71	134.0	.606
400	5.99	34.11	-	26.87	118.7	.738
500	5.20	34.29	-	27.11	96.1	.851

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
70.100					CALCOFI CRUISE 6801								70.100	
HORIZON, JANUARY 20 1968, 2002 GMT, 34 33N 125 12W, SOUNDING 2450 FM, WIND 360 13 KNOTS, WEATHER CLOUDY, SEA MODERATE.														
								0	13.17	33.17	-	24.96	300.2	0
								10	13.12	33.17	-	24.97	299.2	.030
								20	13.04	33.17	-	24.99	297.7	.060
								30	12.60	33.20	-	25.10	287.3	.089
								50	11.57	33.14	-	25.25	273.2	.145
								75	9.92	33.33	-	25.68	231.7	.209
								100	9.09	33.62	-	26.04	197.3	.263
								125	8.93	33.83	-	26.23	179.3	.310
								150	8.56	33.92	-	26.36	167.1	.354
								200	7.93	33.98	-	26.50	153.7	.436
								250	7.10	34.01	-	26.65	140.2	.511
								300	6.28	33.98	-	26.73	132.0	.581
								400	5.90	34.12	-	26.89	116.9	.710
								500	5.38	34.20	-	27.02	104.9	.827

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
70.100					CALCOFI CRUISE 6801								70.100	
HORIZON, JANUARY 20 1968, 2039 GMT, 34 33N 125 12W, SOUNDING 2450 FM, WIND 360 13 KNOTS, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 18.														
0	13.15	33.174	6.23	-	-	-	259.5	0	13.15	33.174	6.23	24.97	259.5	0
9	13.13	33.174	6.31	-	-	-	259.1	10	13.11	33.175	6.31	24.98	298.7	.030
28	12.63	33.206	6.15	-	-	-	287.4	20	12.87	33.189	6.34	25.04	293.2	.060
37	12.43	33.229	6.09	-	-	-	282.0	30	12.59	33.213	6.14	25.11	286.2	.089
51	11.85	33.172	6.03	-	-	-	275.8	50	11.90	33.176	6.04	25.21	276.5	.145
66	10.74	33.242	5.30	-	-	-	251.5	75	10.24	33.284	5.01	25.59	240.1	.210
89	9.64	33.378	4.74	-	-	-	223.7	100	9.28	33.506	4.66	25.93	208.7	.266
108	9.10	33.603	4.61	-	-	-	198.7	125	9.00	33.749	4.24	26.16	186.4	.316
128	8.98	33.771	4.17	-	-	-	184.4	150	8.61	33.901	3.90	26.34	169.3	.361
147	8.65	33.889	3.98	-	-	-	170.8	200	7.89	34.013	2.88	26.54	150.6	.443
175	8.31	33.970	3.23	-	-	-	159.8	250	7.01	34.015	2.45	26.66	138.6	.517
208	7.74	34.020	2.81	-	-	-	148.0	300	6.44	34.030	2.11	26.75	130.1	.586
237	7.19	34.015	2.56	-	-	-	141.0	400	5.91	34.133	1.00	26.90	116.1	.714
285	6.61	34.018	2.29	-	-	-	133.2	500	5.43	34.200	.60	27.01	105.4	.830
337	6.08	34.070	1.62	-	-	-	122.8	600	4.81	34.265	.39	27.14	93.7	.936
419	5.85	34.150	.86	-	-	-	114.1							
501	5.42	34.201	.60	-	-	-	105.3							
583	4.92	34.254	.42	-	-	-	95.8							
73.53					CALCOFI CRUISE 6801								73.53	
HORIZON, JANUARY 26 1968, 0631 GMT, 35 32.5N 121 28.5W, SOUNDING 418 FM, WIND 120 9 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 08.														
2	13.19	33.387	6.36	-	-	-	284.6	0	13.19	33.387	6.36	25.13	284.6	0
12	13.17	33.390	6.16	-	-	-	284.0	10	13.18	33.390	6.20	25.13	284.3	.028
30	12.80	33.389	5.76	-	-	-	277.1	20	13.04	33.382	6.00	25.15	282.1	.057
40	11.58	33.445	4.69	-	-	-	250.9	30	12.80	33.385	5.76	25.21	277.1	.085
55	11.19	33.480	4.58	-	-	-	241.6	50	11.32	33.469	4.64	25.55	244.5	.137
70	10.74	33.559	4.07	-	-	-	228.1	75	10.56	33.600	3.91	25.78	222.1	.196
94	9.99	33.737	3.46	-	-	-	202.7	100	9.93	33.751	3.40	26.01	200.6	.249
114	9.87	33.769	3.32	-	-	-	198.4	125	9.82	33.787	3.29	26.06	196.2	.299
133	9.74	33.811	3.24	-	-	-	193.2	150	9.31	33.925	2.85	26.25	178.1	.347
152	9.26	33.938	2.80	-	-	-	176.3	200	8.92	34.009	2.57	26.38	166.0	.434
182	9.19	33.954	2.78	-	-	-	174.1	250	8.50	34.082	2.23	26.50	154.2	.517
215	8.69	34.055	2.38	-	-	-	159.0	300	8.00	34.125	1.87	26.61	143.8	.593
245	8.54	34.077	2.26	-	-	-	155.2	400	7.12	34.181	1.19	26.78	127.7	.735
293	8.06	34.121	1.92	-	-	-	145.0	500	6.40	34.233	.77	26.92	114.6	.863
347	7.60	34.148	1.56	-	-	-	136.6	600	5.76	34.286	.46	27.04	102.9	.979
431	6.85	34.200	1.00	-	-	-	122.7							
514	6.31	34.240	.72	-	-	-	112.9							
597	5.78	34.284	.47	-	-	-	103.2							

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
73.53							CALCOFI CRUISE 6801						73.53	
HORIZON, JANUARY 26 1968, 0646 GMT, 35 32.5N 121 28.5W, SOUNDING 418 FM, WIND 120 9 KNOTS, WEATHER MISSING, SEA VERY ROUGH.														
								0	13.22	33.40	-	25.13	284.2	0
								10	13.17	33.39	-	25.13	284.0	.028
								20	13.02	33.38	-	25.16	281.9	.057
								30	12.77	33.39	-	25.21	276.5	.085
								50	11.25	33.48	-	25.57	242.6	.137
								75	10.82	33.50	-	25.66	233.8	.197
								100	10.10	33.73	-	25.96	204.9	.252
								125	9.82	33.79	-	26.06	196.0	.303
								150	9.36	33.91	-	26.23	179.9	.350
								200	8.88	34.02	-	26.39	164.5	.438
								250	8.35	34.08	-	26.52	152.2	.519
								300	7.93	34.12	-	26.61	143.2	.596
								400	6.93	34.18	-	26.80	125.3	.735
								500	6.35	34.22	-	26.91	114.9	.862
73.60							CALCOFI CRUISE 6801						73.60	
HORIZON, JANUARY 26 1968, 0136 GMT, 35 18N 121 57.5W, SOUNDING 1620 FM, WIND 080 1 KNOT, WEATHER OVERCAST, SEA VERY ROUGH.														
								0	12.50	33.23	-	25.14	283.2	0
								10	12.50	33.23	-	25.14	283.2	.028
								20	12.25	33.19	-	25.16	281.6	.057
								30	12.24	33.22	-	25.18	279.2	.085
								50	10.97	33.22	-	25.42	257.0	.139
								75	9.66	33.56	-	25.91	210.5	.197
								100	9.41	33.70	-	26.06	196.3	.249
								125	8.88	33.80	-	26.22	180.8	.296
								150	8.52	33.90	-	26.35	168.0	.340
								200	8.00	34.02	-	26.53	151.7	.422
								250	7.39	34.05	-	26.64	141.0	.497
								300	7.05	34.08	-	26.71	134.3	.568
								400	6.23	34.15	-	26.87	118.7	.699
								500	5.62	34.23	-	27.01	105.4	.817

INPUT — OUTPUT AT STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
73.60							CALCOFI CRUISE 6801						73.60	
HORIZON, JANUARY 26 1968, 0223 GMT, 35 18N 121 57.5W, SOUNDING 1620 FM, WIND 080 1 KNOT, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 19.														
1	12.49	33.211	6.35	-	-	-	284.5	0	12.49	33.211	6.35	25.13	284.5	0
10	12.44	33.203	6.41	-	-	-	284.1	10	12.44	33.203	6.41	25.13	284.1	.028
20	12.25K	-	-	-	-	-	-	20	12.25	33.218	6.35	25.18	279.6	.057
29	12.23	33.238	6.21	-	-	-	277.7	30	12.20	33.240	6.19	25.21	277.1	.085
38	11.84	33.250	6.01	-	-	-	269.9	50	11.02	33.244	5.65	25.43	256.0	.138
52	10.87	33.248	5.56	-	-	-	253.3	75	9.80	33.509	4.11	25.84	216.5	.197
66	10.08	33.418	4.47	-	-	-	227.7	100	9.34	33.686	3.68	26.06	196.3	.249
90	9.52	33.631	3.81	-	-	-	203.1	125	8.85	33.823	3.39	26.24	178.7	.297
109	9.19	33.730	3.59	-	-	-	190.7	150	8.43	33.924	3.14	26.39	164.9	.340
128	8.79	33.840	3.35	-	-	-	176.5	200	8.04	34.013	2.69	26.52	152.7	.421
147	8.46	33.917	3.16	-	-	-	165.9	250	7.43	34.060	2.13	26.64	140.9	.497
176	8.21	33.969	2.94	-	-	-	158.4	300	6.88	34.079	1.78	26.73	132.1	.567
209	7.96	34.028	2.58	-	-	-	150.5	400	6.12	34.155	.95	26.89	116.7	.696
238	7.57	34.054	2.22	-	-	-	143.2	500	5.73	34.252	.51	27.02	105.1	.813
286	7.05	34.072	1.91	-	-	-	134.9	600	5.08	34.302	.38	27.13	93.9	.919
339	6.45	34.103	1.42	-	-	-	124.9							
423	6.05	34.182	.81	-	-	-	114.1							
506	5.70	34.256	.49	-	-	-	104.4							
590	5.16	34.299	.39	-	-	-	95.0							

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
73.70							CALCOFI CRUISE 6801						73.70	
HORIZON, JANUARY 25 1968, 2141 GMT, 34 58N 122 40W, SOUNDING 2170 FM, WIND 320 12 KNOTS, WEATHER OVERCAST, SEA VERY ROUGH.														
								0	12.50	33.27	-	25.17	280.3	0
								10	12.48	33.27	-	25.18	279.9	.028
								20	12.37	33.27	-	25.20	277.9	.056
								30	11.95	33.26	-	25.27	271.1	.083
								50	10.97	33.32	-	25.49	249.6	.136
								75	10.06	33.56	-	25.84	216.9	.194
								100	9.61	33.72	-	26.04	197.9	.247
								125	9.35	33.83	-	26.17	185.7	.295
								150	9.10	33.89	-	26.25	177.4	.341
								200	8.61	33.97	-	26.39	164.2	.428
								250	7.95	34.02	-	26.53	151.0	.509
								300	7.53	34.08	-	26.64	140.7	.584
								400	6.45	34.10	-	26.81	125.1	.722
								500	5.76	34.18	-	26.96	110.8	.846
73.100							CALCOFI CRUISE 6801						73.100	
HORIZON, JANUARY 20 1968, 1509 GMT, 33 58.5N 124 44W, SOUNDING 2430 FM, WIND 330 16 KNOTS, WEATHER CLOUDY, SEA MODERATE.														
								0	14.75	33.34	-	24.77	318.8	0
								10	14.74	33.34	-	24.77	318.6	.032
								20	14.74	33.34	-	24.77	318.6	.064
								30	14.76	33.34	-	24.77	319.0	.096
								50	12.53	32.98	-	24.94	302.2	.158
								75	11.76	33.34	-	25.37	261.8	.229
								100	11.76	33.34	-	25.37	261.8	.295
								125	10.52	33.39	-	25.63	236.9	.358
								150	9.48	33.60	-	25.97	204.8	.414
								200	8.76	33.89	-	26.31	172.3	.510
								250	8.04	33.96	-	26.47	156.7	.594
								300	7.04	33.98	-	26.63	141.6	.671
								400	6.09	34.08	-	26.84	122.2	.807
								500	4.92	34.09	-	26.99	108.1	.928
								600	4.74	34.23	-	27.12	95.6	1.036
77.51							CALCOFI CRUISE 6801						77.51	
HORIZON, JANUARY 26 1968, 1355 GMT, 35 02N 120 56W, SOUNDING 170 FM, WIND 090 2 KNOTS, WEATHER OVERCAST, SEA HIGH.														
								0	13.46	33.39	-	25.07	289.5	0
								10	13.46	33.39	-	25.07	289.5	.029
								20	13.02	33.36	-	25.14	283.4	.058
								30	12.55	33.32	-	25.20	277.5	.086
								50	11.51	33.40	-	25.46	253.0	.139
								75	10.43	33.54	-	25.76	224.4	.199
								100	10.13	33.69	-	25.93	208.4	.254
								125	9.62	33.86	-	26.15	187.7	.304
								150	9.37	33.94	-	26.25	177.9	.350
								200	8.84	34.04	-	26.41	162.4	.437
								250	8.25	34.11	-	26.56	148.5	.516

	INPUT							CLTPLT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
77.51							CALCOFI CRUISE 6801						77.51	
HORIZON, JANUARY 26 1968, 1431 GMT, 35 02N 120 56W, SOUNDING 170 FM, WIND 090 2 KNOTS, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 04.														
0	13.40	33.388	6.25	-	-	-	288.5	0	13.40	33.388	6.25	25.09	288.5	0
10	13.43	33.382	6.20	-	-	-	289.5	10	13.43	33.382	6.20	25.07	289.5	.029
30	13.10	33.365	6.00	-	-	-	284.5	20	13.33	33.374	6.12	25.09	288.2	.058
44	12.57	33.351	5.77	-	-	-	275.6	30	13.10	33.365	6.00	25.13	284.5	.087
54	11.91	33.344	5.62	-	-	-	264.2	50	12.17	33.344	5.70	25.29	268.9	.142
69	11.37	33.419	4.80	-	-	-	249.2	75	11.03	33.439	4.62	25.58	241.9	.206
84	10.56	33.470	4.42	-	-	-	231.7	100	10.36	33.568	4.02	25.79	221.2	.265
103	10.32	33.589	3.95	-	-	-	218.9	125	9.83	33.751	3.39	26.03	199.0	.318
128	9.76	33.772	3.32	-	-	-	196.4	150	9.53	33.881	2.91	26.18	184.7	.366
147	9.56	33.870	2.95	-	-	-	186.0	200	9.00	34.006	2.41	26.36	167.3	.456
181	9.21	33.966	2.58	-	-	-	173.5	250	8.40	34.103	1.94	26.53	151.2	.538
211	8.87	34.028	2.31	-	-	-	163.7							
250	8.40	34.103	1.94	-	-	-	151.2							

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
77.55							CALCOFI CRUISE 6801						77.55	

HORIZON, JANUARY 26 1968, 1628 GMT, 34 54.5N 121 13W, SOUNDING 300 FM, WIND 290 12 KNOTS, WEATHER OVERCAST, SEA HIGH.

								0	13.18	33.41	-	25.15	282.7	0
								10	13.18	33.40	-	25.14	283.4	.028
								20	13.04	33.40	-	25.17	280.8	.057
								30	12.30	33.32	-	25.25	273.0	.084
								50	11.35	33.35	-	25.45	253.9	.137
								75	10.21	33.59	-	25.84	217.1	.196
								100	9.38	33.73	-	26.08	193.6	.248
								125	9.05	33.92	-	26.29	174.4	.295
								150	8.82	33.97	-	26.36	167.3	.338
								200	8.48	34.11	-	26.52	151.9	.419
								250	8.12	34.14	-	26.60	144.4	.496
								300	7.66	34.20	-	26.72	133.5	.567
								400	6.68	34.17	-	26.83	122.8	.701
								500	6.12	34.25	-	26.97	109.8	.823

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
77.60							CALCOFI CRUISE 6801						77.60	

HORIZON, JANUARY 26 1968, 1954 GMT, 34 44.5N 121 35W, SOUNDING 510 FM, WIND 310 19 KNOTS, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 04.

1	12.63	33.289	6.25	-	-	-	281.3	0	12.63	33.289	6.25	25.16	281.3	0
11	12.66	33.285	6.27	-	-	-	282.1	10	12.66	33.285	6.27	25.15	282.1	.028
31	12.53	33.298	6.29	-	-	-	278.8	20	12.62	33.291	6.33	25.17	280.9	.056
40	12.48	33.293	6.04	-	-	-	278.2	30	12.54	33.297	6.30	25.19	279.0	.084
50	11.92	33.285	6.11	-	-	-	268.7	50	11.92	33.285	6.11	25.29	268.7	.139
65	11.32	33.319	5.51	-	-	-	255.7	75	10.53	33.332	5.30	25.58	241.4	.203
80	10.15	33.338	5.18	-	-	-	234.8	100	9.58	33.566	4.15	25.92	208.8	.260
98	9.63	33.544	4.24	-	-	-	211.2	125	9.06	33.791	3.46	26.18	184.1	.310
123	9.10	33.779	3.48	-	-	-	185.7	150	8.67	33.899	3.41	26.33	170.3	.355
143	8.74	33.876	3.37	-	-	-	173.1	200	8.14	34.014	3.00	26.50	154.2	.437
172	8.48	33.954	3.47	-	-	-	163.5	250	7.67	34.084	2.17	26.63	142.2	.513
202	8.12	34.017	2.96	-	-	-	153.6	300	7.05	34.126	1.58	26.74	130.9	.584
231	7.83	34.049	2.50	-	-	-	147.1	400	6.57	34.219	.84	26.88	117.6	.713
271	7.47	34.121	1.83	-	-	-	136.8	500	5.88	34.254	.56	27.00	106.7	.832
329	6.67	34.131	1.40	-	-	-	125.6							
402	6.56	34.222	.83	-	-	-	117.4							
476	6.02	34.243	.62	-	-	-	109.2							
555	5.63	34.285	.46	-	-	-	101.4							

	INPUT						COMPUTED		INPUT				COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
77.60							CALCOFI CRUISE 6801						77.60	

HORIZON, JANUARY 26 1968, 2045 GMT, 34 44.5N 121 35W, SOUNDING 510 FM, WIND 310 19 KNOTS, WEATHER OVERCAST, SEA HIGH.

								0	12.65	33.32	-	25.18	279.4	0
								10	12.64	33.32	-	25.18	279.2	.028
								20	12.64	33.32	-	25.18	279.2	.056
								30	12.59	33.31	-	25.19	279.0	.084
								50	11.45	33.28	-	25.38	260.8	.138
								75	10.10	33.43	-	25.73	227.1	.199
								100	9.23	33.73	-	26.11	191.3	.252
								125	8.75	33.89	-	26.31	172.2	.298
								150	8.56	33.96	-	26.39	164.2	.341
								200	7.90	34.04	-	26.56	148.8	.420
								250	7.69	34.17	-	26.69	136.2	.494
								300	6.88	34.14	-	26.78	127.6	.562
								400	6.50	34.22	-	26.89	116.8	.689

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
77.100					CALCOFI CRUISE 6801								77.100	
HORIZON, JANUARY 20 1968, 1034 GMT, 33 24.2N 124 20W, SOUNDING 2475 FM, WIND 300 16 KNOTS, WEATHER MISSING, SEA SLIGHT.														
								0	14.18	33.23	-	24.80	315.4	0
								10	14.18	33.23	-	24.80	315.4	.032
								20	14.18	33.23	-	24.80	315.4	.063
								30	14.08	33.22	-	24.82	314.1	.095
								50	13.52	33.16	-	24.89	307.6	.157
								75	12.52	33.23	-	25.14	283.6	.231
								100	11.90	33.40	-	25.39	259.9	.300
								125	9.98	33.29	-	25.64	235.6	.362
								150	9.60	33.51	-	25.88	213.3	.419
								200	8.60	33.91	-	26.35	168.5	.516
								250	7.80	33.95	-	26.50	154.1	.599
								300	7.09	34.01	-	26.65	140.0	.674
								400	6.13	34.07	-	26.82	123.4	.811
								500	5.57	34.17	-	26.97	109.3	.933
								600	5.07	34.25	-	27.09	97.7	1.043
80.52					CALCOFI CRUISE 6801								80.52	
HORIZON, JANUARY 19 1968, 0641 GMT, 34 24.5N 120 37W, SOUNDING 157 FM, WIND 310 13 KNOTS, WEATHER MISSING, SEA MODERATE.														
								0	13.48	33.39	-	25.07	289.9	0
								10	13.49	33.39	-	25.07	290.1	.029
								20	13.49	33.38	-	25.06	290.8	.058
								30	13.42	33.38	-	25.08	289.5	.087
								50	12.25	33.30	-	25.24	273.5	.144
								75	10.96	33.48	-	25.62	237.6	.208
								100	10.34	33.66	-	25.87	214.0	.265
								125	9.96	33.73	-	25.99	202.7	.318
								150	9.65	33.85	-	26.13	188.9	.367
								200	9.16	34.00	-	26.33	170.2	.459
								250	8.76	34.04	-	26.43	161.2	.544

INPUT								OUTPUT AT 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 6801								80.52	
HORIZON, JANUARY 19 1968, 0724 GMT, 34 24.5N 120 37W, SOUNDING 157 FM, WIND 310 13 KNOTS, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 08.														
1	13.53	33.373	6.07	-	-	-	292.1	0	13.53	33.373	6.07	25.05	292.1	0
11	13.56	33.369	6.12	-	-	-	293.0	10	13.56	33.369	6.12	25.04	293.0	.029
30	13.44	33.368	6.03	-	-	-	290.8	20	13.54	33.368	6.09	25.04	292.7	.059
44	13.16	33.377	5.66	-	-	-	284.8	30	13.44	33.368	6.03	25.06	290.8	.088
53	12.27	33.371	5.23	-	-	-	268.7	50	12.59	33.371	5.38	25.23	274.5	.145
68	11.18	33.454	4.40	-	-	-	243.3	75	11.00	33.474	4.27	25.61	238.8	.209
83	10.89	33.500	4.19	-	-	-	235.0	100	10.44	33.623	3.78	25.82	218.3	.267
101	10.41	33.631	3.75	-	-	-	217.3	125	9.94	33.742	3.37	26.00	201.6	.320
126	9.93	33.745	3.36	-	-	-	201.1	150	9.65	33.834	3.04	26.12	190.1	.369
145	9.73	33.808	3.13	-	-	-	193.3	200	9.20	34.028	2.28	26.35	168.7	.461
179	9.24	33.977	2.53	-	-	-	173.1	250	8.44	34.109	1.65	26.53	151.3	.543
200	9.20K	-	-	-	-	-	-							
208	8.87	34.045	2.18	-	-	-	162.5							
246	8.47	34.105	1.70	-	-	-	152.1							

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
80.55							CALCOFI CRUISE 6801						80.55	
HORIZON, JANUARY 19 1968, 0857 GMT, 34 19N 120 48W, SOUNDING 424 FM, WIND 290 13 KNOTS, WEATHER MISSING, SEA SLIGHT.														
								0	13.53	33.36	-	25.04	293.1	0
								10	13.50	33.36	-	25.04	292.5	.029
								20	13.44	33.36	-	25.06	291.4	.059
								30	13.16	33.35	-	25.10	286.7	.087
								50	12.53	33.34	-	25.22	275.7	.144
								75	10.97	33.46	-	25.60	239.3	.209
								100	10.10	33.63	-	25.89	212.3	.266
								125	9.76	33.77	-	26.05	196.5	.317
								150	9.39	33.91	-	26.22	180.4	.365
								200	8.92	34.04	-	26.40	163.6	.453
								250	8.51	34.10	-	26.51	153.0	.534
								300	8.21	34.17	-	26.61	143.5	.611
								400	7.08	34.17	-	26.78	128.0	.752
								500	6.08	34.21	-	26.94	112.3	.879
								600	5.42	34.33	-	27.12	95.6	.989
80.60							CALCOFI CRUISE 6801						80.60	
HORIZON, JANUARY 19 1968, 1123 GMT, 34 09N 121 09W, SOUNDING 1400 FM, WIND 330 5 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	13.13	33.40	-	25.15	282.5	0
								10	13.09	33.40	-	25.16	281.7	.028
								20	13.01	33.39	-	25.17	281.0	.056
								30	12.92	33.39	-	25.18	279.3	.084
								50	12.03	33.38	-	25.35	263.7	.139
								75	10.08	33.37	-	25.69	231.3	.201
								100	9.71	33.55	-	25.89	212.1	.257
								125	9.48	33.77	-	26.10	192.2	.308
								150	9.03	33.91	-	26.28	174.9	.355
								200	8.28	34.05	-	26.51	153.4	.438
								250	7.63	34.11	-	26.65	139.8	.514
								300	7.32	34.20	-	26.77	128.9	.583
								400	6.43	34.25	-	26.93	113.7	.709
								500	5.84	34.30	-	27.04	102.7	.824
								600	5.38	34.34	-	27.13	94.4	.929

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	CC
80.60							CALCOFI CRUISE 6801						80.60	
HORIZON, JANUARY 19 1968, 1211 GMT, 34 09N 121 09W, SOUNDING 1400 FM, WIND 330 5 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 03.														
0	13.07	33.396	6.14	-	-	-	281.7	0	13.07	33.396	6.14	25.16	281.7	0
10	13.08	33.396	6.29	-	-	-	281.8	10	13.08	33.396	6.29	25.16	281.8	.028
30	12.99	33.394	6.12	-	-	-	280.3	20	13.06	33.395	6.26	25.16	281.4	.056
38	12.90	33.390	5.99	-	-	-	278.9	30	12.99	33.394	6.12	25.17	280.3	.085
48	12.13	33.391	5.44	-	-	-	264.7	50	11.96	33.370	5.45	25.35	263.2	.139
63	10.93	33.252	5.55	-	-	-	254.0	75	10.20	33.337	5.04	25.64	235.6	.202
78	10.06	33.372	4.87	-	-	-	230.8	100	9.73	33.566	4.03	25.90	211.2	.258
97	9.77	33.548	4.10	-	-	-	213.1	125	9.46	33.719	3.55	26.06	195.6	.309
122	9.49	33.694	3.62	-	-	-	197.9	150	9.11	33.906	2.98	26.26	176.4	.357
141	9.26	33.848	3.18	-	-	-	183.0	200	8.31	34.028	2.48	26.49	155.5	.441
170	8.76	33.996	2.64	-	-	-	164.5	250	7.62	34.096	1.74	26.64	140.7	.517
200	8.31	34.028	2.48	-	-	-	155.5	300	7.38	34.175	1.25	26.74	131.6	.587
229	7.83	34.063	2.11	-	-	-	146.1	400	6.47	34.254	.58	26.92	113.9	.715
269	7.49	34.127	1.43	-	-	-	136.7	500	5.84	34.290	.37	27.03	103.5	.830
327	7.28	34.211	1.18	-	-	-	127.6							
400	6.47	34.254	.58	-	-	-	113.9							
473	5.98	34.277	.40	-	-	-	106.1							
552	5.63	34.320	.37	-	-	-	98.8							

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
80.70					CALCOFI CRUISE 6801								80.70	

HORIZON, JANUARY 19 1968, 1652 GMT, 33 49N 121 51W, SOUNDING 1943 FM, WIND 350 14 KNOTS, WEATHER PARTLY CLOUDY, SEA SLIGHT.

								0	13.49	33.32	-	25.01	295.3	0
								10	13.50	33.33	-	25.02	294.7	.030
								20	13.52	33.34	-	25.02	294.4	.059
								30	13.51	33.30	-	25.00	297.1	.089
								50	12.28	33.21	-	25.17	280.7	.147
								75	10.92	33.26	-	25.46	253.2	.214
								100	9.94	33.60	-	25.89	212.0	.272
								125	9.46	33.70	-	26.05	197.0	.324
								150	9.11	33.79	-	26.17	185.0	.372
								200	8.43	34.01	-	26.45	158.6	.460
								250	7.79	34.06	-	26.59	145.8	.538
								300	7.28	34.11	-	26.70	135.1	.610
								400	6.27	34.16	-	26.88	118.4	.742
								500	5.65	34.21	-	26.99	107.2	.861
								600	5.17	34.31	-	27.13	94.3	.968

80.80					CALCOFI CRUISE 6801								80.80	

HORIZON, JANUARY 19 1968, 2110 GMT, 33 28.5N 122 32W, SOUNDING 2150 FM, WIND 330 12 KNOTS, WEATHER CLOUDY, SEA MODERATE.

								0	13.28	33.27	-	25.02	294.9	0
								10	13.20	33.27	-	25.03	293.4	.029
								20	13.19	33.27	-	25.04	293.2	.059
								30	13.18	33.28	-	25.05	292.3	.088
								50	12.84	33.23	-	25.07	289.5	.147
								75	11.14	33.21	-	25.38	260.6	.216
								100	10.04	33.37	-	25.69	230.6	.277
								125	9.46	33.58	-	25.95	205.9	.333
								150	9.04	33.78	-	26.18	184.7	.382
								200	8.41	33.92	-	26.39	165.0	.471
								250	7.54	33.96	-	26.55	149.8	.552
								300	6.98	34.01	-	26.66	138.6	.626
								400	5.89	34.07	-	26.85	120.5	.760
								500	5.30	34.15	-	26.99	107.7	.880
								600	4.84	34.24	-	27.11	95.9	.988

	INPUT							CUTPLT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.80						CALCOFI CRUISE 6801							80.80	

HORIZON, JANUARY 19 1968, 2152 GMT, 33 28.5N 122 32W, SOUNDING 2150 FM, WIND 330 12 KNOTS, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 14.

1	13.30	33.269	6.18	-	-	-	295.4	0	13.30	33.269	6.18	25.01	295.4	0
11	13.28	33.271	6.17	-	-	-	294.8	10	13.28	33.271	6.17	25.02	294.9	.030
30	13.16	33.265	6.14	-	-	-	293.0	20	13.22	33.269	6.16	25.03	293.8	.059
38	13.15	33.260	6.11	-	-	-	293.2	30	13.16	33.265	6.14	25.04	293.0	.088
47	13.13	33.264	6.28	-	-	-	292.5	50	13.06	33.261	6.22	25.05	291.5	.147
61	12.63	33.247	5.92	-	-	-	284.4	75	11.75	33.250	5.95	25.30	268.3	.217
75	11.75	33.250	5.95	-	-	-	268.3	100	10.39	33.335	5.07	25.61	238.8	.281
93	10.71	33.304	5.18	-	-	-	246.4	125	9.61	33.543	4.45	25.90	211.0	.338
117	9.79	33.452	4.79	-	-	-	220.6	150	9.26	33.773	3.53	26.14	188.6	.389
136	9.43	33.669	3.95	-	-	-	198.9	200	8.32	33.943	3.39	26.42	161.9	.478
163	9.10	33.839	3.29	-	-	-	181.2	250	7.50	34.001	2.98	26.58	146.2	.557
192	8.48	33.926	3.34	-	-	-	165.5	300	6.92	34.029	2.32	26.69	136.4	.630
220	7.94	33.976	3.44	-	-	-	154.1	400	5.90	34.078	1.50	26.86	120.1	.763
258	7.40	34.005	2.82	-	-	-	144.5	500	5.27	34.163	.89	27.00	106.4	.881
315	6.76	34.036	2.17	-	-	-	133.8							
386	6.01	34.066	1.62	-	-	-	122.3							
459	5.50	34.129	1.09	-	-	-	111.6							
537	5.10	34.194	.78	-	-	-	102.2							

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
80.90							CALCOFI CRUISE 6801						80.90	

HORIZON, JANUARY 20 1968, 0137 GMT, 33 14N 123 13W, SOUNDING 2100 FM, WIND 330 12 KNOTS, WEATHER CLOUDY, SEA MODERATE.

0	13.49	33.26	-	24.97	299.7	0
10	13.42	33.26	-	24.98	298.3	.030
20	13.37	33.27	-	25.00	296.6	.060
30	13.36	33.27	-	25.00	296.4	.089
50	12.90	33.24	-	25.07	289.9	.148
75	10.56	33.22	-	25.49	250.2	.216
100	9.87	33.62	-	25.92	209.4	.274
125	9.55	33.87	-	26.17	185.8	.324
150	9.22	33.98	-	26.31	172.6	.369
200	8.83	34.09	-	26.45	158.5	.454
250	8.46	34.16	-	26.57	147.9	.533
300	8.05	34.20	-	26.66	139.0	.607
400	7.25	34.23	-	26.80	125.7	.745
500	6.38	34.29	-	26.96	110.0	.869
600	5.88	34.33	-	27.06	101.0	.982

80.100 CALCOFI CRUISE 6801 80.100

HORIZON, JANUARY 20 1968, 0534 GMT, 32 50N 123 56W, SOUNDING 2110 FM, WIND 300 9 KNOTS, WEATHER MISSING, SEA MODERATE.

0	13.73	33.34	-	24.98	298.4	0
10	13.73	33.35	-	24.99	297.7	.030
20	13.77	33.36	-	24.99	297.8	.060
30	13.76	33.36	-	24.99	297.6	.089
50	13.50	33.30	-	25.00	296.9	.149
75	11.74	33.18	-	25.25	273.3	.221
100	10.17	33.50	-	25.77	223.1	.283
125	9.38	33.75	-	26.10	192.1	.336
150	8.98	33.90	-	26.28	174.9	.382
200	8.26	33.98	-	26.46	158.3	.467
250	7.60	33.99	-	26.56	148.4	.546
300	6.90	34.03	-	26.69	136.1	.619
400	6.14	34.14	-	26.88	118.3	.751
500	5.64	34.24	-	27.02	104.9	.868
600	5.25	34.32	-	27.13	94.4	.975

INPUT								OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.100							CALCOFI CRUISE 6801						80.100	

HORIZON, JANUARY 20 1968, 0628 GMT, 32 50N 123 56W, SOUNDING 2110 FM, WIND 300 9 KNOTS, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 05.

0	13.75	33.349	6.01	-	-	-	298.2	0	13.75	33.349	6.01	24.98	298.2	0
10	13.77	33.355	6.02	-	-	-	298.1	10	13.77	33.355	6.02	24.98	298.1	.030
29	13.77	33.361	6.03	-	-	-	297.7	20	13.80	33.363	6.02	24.98	298.1	.060
53	13.13	33.269	6.08	-	-	-	292.1	30	13.75	33.357	6.03	24.99	297.6	.090
62	12.89	33.263	6.13	-	-	-	288.0	50	13.23	33.281	6.07	25.04	293.2	.149
72	12.37	33.252	5.85	-	-	-	279.2	75	12.07	33.268	5.65	25.25	272.6	.220
87	10.88	33.372	4.78	-	-	-	244.3	100	10.35	33.496	4.27	25.74	226.2	.283
101	10.32	33.506	4.24	-	-	-	225.1	125	9.40	33.678	3.91	26.04	197.7	.336
125	9.40	33.678	3.91	-	-	-	197.7	150	9.06	33.839	3.37	26.22	180.7	.384
146	9.13	33.815	3.38	-	-	-	183.4	200	8.27	33.968	3.41	26.44	159.4	.471
168	8.74	33.924	3.46	-	-	-	169.5	250	7.55	33.999	3.05	26.57	147.1	.549
198	8.30	33.967	3.41	-	-	-	159.9	300	6.96	34.034	2.37	26.69	136.5	.622
226	7.90	33.981	3.31	-	-	-	153.2	400	6.04	34.129	1.14	26.88	117.9	.754
265	7.35	34.011	2.84	-	-	-	143.4	500	5.35	34.189	.72	27.01	105.4	.872
323	6.74	34.051	2.06	-	-	-	132.4							
395	6.11	34.128	1.16	-	-	-	118.8							
468	5.44	34.151	.88	-	-	-	109.3							
546	5.44	34.272	.45	-	-	-	100.2							

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
82.47							CALCOFI CRUISE 6801						82.47	
HORIZON, JANUARY 18 1968, 0903 GMT, 34 15N 119 59W, SOUNDING 315 FM, WIND 270 2 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	14.06	33.43	-	24.98	298.3	0
								10	13.90	33.40	-	24.99	297.4	.030
								20	13.00	33.38	-	25.16	281.5	.059
								30	12.39	33.36	-	25.26	271.7	.087
								50	11.20	33.48	-	25.58	241.7	.138
								75	10.47	33.67	-	25.85	215.4	.196
								100	10.18	33.78	-	25.99	202.5	.248
								125	9.93	33.86	-	26.09	192.6	.298
								150	9.64	33.96	-	26.22	180.6	.346
								200	8.97	34.08	-	26.42	161.4	.433
								250	8.58	34.14	-	26.53	151.1	.513
								300	8.02	34.18	-	26.65	140.1	.588
								400	7.01	34.24	-	26.84	121.8	.725
								500	6.50	34.28	-	26.94	112.3	.848

INPUT								CUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
82.47							CALCOFI CRUISE 6801						82.47	
HORIZON, JANUARY 18 1968, 1005 GMT, 34 15N 119 59W, SOUNDING 310 FM, WIND 270 2 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 05.														
0	13.97	33.392	5.91	-	-	-	299.3	0	13.97	33.392	5.91	24.97	299.3	0
10	13.99	33.378	6.01	-	-	-	300.8	10	13.99	33.378	6.01	24.96	300.8	.030
30	13.41	33.378	5.73	-	-	-	289.5	20	13.89	33.375	5.97	24.98	298.9	.060
39	12.45	33.383	5.27	-	-	-	271.1	30	13.41	33.378	5.73	25.08	289.5	.090
49	11.70	33.403	4.92	-	-	-	256.1	50	11.64	33.407	4.88	25.44	254.8	.144
63	11.08	33.483	4.28	-	-	-	239.5							
83.43							CALCOFI CRUISE 6801						83.43	
HORIZON, JANUARY 18 1968, 1326 GMT, 34 09.5N 119 34.5W, SOUNDING 130 FM, WIND CALM, WEATHER MISSING, SEA MISSING, WIRE ANGLE 02.														
1	13.71	33.364	5.97	-	-	-	296.3	0	13.71	33.364	5.97	25.00	296.3	0
11	13.72	33.364	6.06	-	-	-	296.5	10	13.74	33.364	6.06	25.00	296.8	.030
31	12.59	33.335	5.35	-	-	-	277.2	20	13.28	33.347	5.79	25.08	289.2	.059
45	12.10	33.377	5.07	-	-	-	265.2	30	12.66	33.336	5.40	25.19	278.4	.087
55	11.90	33.423	5.00	-	-	-	258.2	50	12.00	33.399	5.04	25.37	261.7	.142
70	11.31	33.484	4.43	-	-	-	243.3	75	11.21	33.500	4.38	25.59	240.5	.205
85	11.04	33.537	4.31	-	-	-	234.8	100	10.59	33.631	3.83	25.80	220.2	.263
104	10.45	33.663	3.67	-	-	-	215.6	125	9.72	33.872	3.00	26.14	188.4	.314
129	9.59	33.911	2.89	-	-	-	183.4	150	9.16	34.036	2.54	26.36	167.5	.360
149	9.17	34.035	2.55	-	-	-	167.7	200	8.90	34.080	2.23	26.43	160.3	.443
177	8.96	34.064	2.33	-	-	-	162.4							
202	8.90	34.081	2.22	-	-	-	160.2							

INPUT							COMPUTED	INPUT				COMPUTED		
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
83.43							CALCOFI CRUISE 6801						83.43	
HORIZON, JANUARY 18 1968, 1348 GMT, 34 09.5N 119 34.5W, SOUNDING 130 FM, WIND CALM, WEATHER MISSING, SEA CALM.														
								0	13.83	33.41	-	25.01	295.3	0
								10	13.74	33.41	-	25.03	293.5	.029
								20	12.78	33.25	-	25.10	286.9	.059
								30	12.38	33.40	-	25.30	268.5	.086
								50	11.56	33.48	-	25.51	248.0	.138
								75	10.97	33.57	-	25.69	231.2	.198
								100	10.33	33.68	-	25.89	212.4	.254
								125	9.58	33.93	-	26.21	181.9	.304
								150	9.21	34.06	-	26.37	166.5	.348
								200	8.94	34.11	-	26.45	158.7	.431
83.51							CALCOFI CRUISE 6801						83.51	
HORIZON, JANUARY 18 1968, 0600 GMT, 33 52.5N 120 07.5W, SOUNDING 70 FM, WIND 180 2 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	13.90	33.42	-	25.01	295.9	0
								10	13.64	33.43	-	25.07	290.1	.029
								20	13.45	33.42	-	25.10	287.1	.058
								30	12.95	33.45	-	25.22	275.4	.086
								50	12.84	33.45	-	25.24	273.4	.141
								75	10.95	33.56	-	25.68	231.6	.205
								100	9.78	33.87	-	26.13	189.5	.258

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
83.55								CALCOFI CRUISE 6801					83.55	

HORIZON, JANUARY 18 1968, 0338 GMT, 33 44N 120 24.5W, SOUNDING 710 FM, WIND 270 12 KNOTS, WEATHER MISSING, SEA ROUGH.

0	13.52	33.44	-	25.10	287.0	0
10	13.52	33.44	-	25.10	287.0	.029
20	13.37	33.44	-	25.13	284.1	.057
30	13.32	33.44	-	25.14	283.2	.086
50	11.85	33.28	-	25.30	267.8	.141
75	10.36	33.60	-	25.82	218.8	.202
100	9.76	33.79	-	26.07	195.1	.254
125	9.43	33.92	-	26.22	180.3	.302
150	9.08	34.00	-	26.34	169.0	.346
200	8.62	34.16	-	26.54	150.2	.428
250	8.02	34.18	-	26.65	140.1	.502
300	7.84	34.22	-	26.71	134.5	.573
400	6.87	34.24	-	26.86	120.0	.706
500	6.17	34.31	-	27.01	106.0	.825
600	5.63	34.36	-	27.11	95.8	.933

83.60				CALCOFI CRUISE 6801		83.60

HORIZON, JANUARY 18 1968, 0035 GMT, 33 34N 120 44.5W, SOUNDING 700 FM, WIND 320 15 KNOTS, WEATHER PARTLY CLOUDY, SEA VERY ROUGH.

0	14.24	33.45	-	24.96	300.4	0
10	14.26	33.44	-	24.95	301.6	.030
20	13.86	33.41	-	25.01	295.8	.060
30	13.77	33.41	-	25.03	294.1	.090
50	13.66	33.39	-	25.03	293.4	.149
75	11.75	33.30	-	25.34	264.6	.219
100	10.42	33.50	-	25.73	227.2	.281
125	9.44	33.81	-	26.14	188.6	.333
150	8.93	33.98	-	26.35	168.2	.378
200	8.26	34.08	-	26.53	150.9	.460
250	7.53	34.09	-	26.65	140.0	.534
300	7.11	34.17	-	26.77	128.4	.604
400	6.40	34.24	-	26.92	114.0	.730
500	5.88	34.31	-	27.04	102.5	.844
600	5.35	34.39	-	27.17	90.3	.947

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
83.60								CALCOFI CRUISE 6801					83.60	

HORIZON, JANUARY 18 1968, 0124 GMT, 33 34N 120 44.5W, SOUNDING 700 FM, WIND 320 15 KNOTS, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 14.

1	14.41	33.402	5.93	-	-	-	307.4	0	14.41	33.402	5.93	24.89	307.4	0
10	14.44	33.398	5.99	-	-	-	308.3	10	14.44	33.398	5.99	24.88	308.3	.031
30	14.08	33.390	5.95	-	-	-	301.7	20	14.35	33.394	5.99	24.89	306.8	.062
38	13.69	33.372	5.91	-	-	-	295.3	30	14.08	33.390	5.95	24.95	301.7	.092
53	12.86	33.321	5.92	-	-	-	283.2	50	13.05	33.329	5.94	25.11	286.2	.151
67	11.66	33.339	5.31	-	-	-	260.1	75	11.15	33.382	4.97	25.51	248.1	.218
91	10.38	33.504	4.36	-	-	-	226.2	100	10.09	33.586	4.05	25.86	214.9	.277
110	9.78	33.670	3.77	-	-	-	204.3	125	9.54	33.741	3.57	26.07	195.3	.328
130	9.48	33.761	3.52	-	-	-	192.8	150	9.11	33.889	3.17	26.25	177.7	.376
150	9.11	33.889	3.17	-	-	-	177.7	200	8.36	34.026	2.85	26.48	156.3	.461
178	8.62	33.985	2.97	-	-	-	168.2	250	7.63	34.091	2.26	26.63	141.3	.537
212	8.22	34.042	2.77	-	-	-	158.2	300	7.15	34.133	1.61	26.74	131.7	.608
241	7.74	34.084	2.39	-	-	-	143.3	400	6.43	34.222	.80	26.90	115.7	.736
289	7.26	34.118	1.73	-	-	-	134.2	500	5.86	34.279	.50	27.02	104.6	.853
342	6.78	34.189	1.22	-	-	-	122.6	600	5.34	34.354	.36	27.15	92.9	.958
424	6.31	34.231	.68	-	-	-	113.6							
506	5.83	34.283	.49	-	-	-	103.9							
589	5.39	34.345	.37	-	-	-	94.1							

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

83.70 CALCOFI CRUISE 6801 83.70

HORIZON, JANUARY 17 1968, 1907 GMT, 33 14.8N 121 27W, SOUNDING 1935 FM, WIND 310 20 KNOTS, WEATHER PARTLY CLOUDY, SEA VERY ROUGH.

0	13.67	33.40	-	25.04	292.9	0
10	13.67	33.40	-	25.04	292.9	.029
20	13.67	33.40	-	25.04	292.9	.059
30	13.66	33.40	-	25.04	292.7	.088
50	13.55	33.39	-	25.06	291.3	.147
75	12.10	33.30	-	25.27	270.8	.217
100	10.29	33.42	-	25.69	231.0	.280
125	9.58	33.61	-	25.96	205.6	.336
150	9.14	33.91	-	26.26	176.6	.384
200	8.57	34.04	-	26.45	158.4	.469
250	7.93	34.11	-	26.61	144.0	.547
300	7.13	34.11	-	26.72	133.1	.618
400	6.77	34.25	-	26.88	118.0	.749
500	6.22	34.31	-	27.00	106.6	.868
600	5.57	34.36	-	27.12	95.1	.976

83.80 CALCOFI CRUISE 6801 83.80

HORIZON, JANUARY 17 1968, 1428 GMT, 32 54N 122 08W, SOUNDING 2300 FM, WIND 300 24 KNOTS, WEATHER PARTLY CLOUDY, SEA VERY ROUGH.

0	13.97	33.44	-	25.01	295.8	0
10	13.97	33.45	-	25.02	295.1	.030
20	13.97	33.45	-	25.02	295.1	.059
30	14.01	33.47	-	25.02	294.4	.089
50	13.67	33.38	-	25.02	294.3	.148
75	10.39	33.43	-	25.68	231.8	.214
100	9.65	33.67	-	25.99	202.2	.269
125	9.20	33.84	-	26.20	182.7	.317
150	8.75	33.95	-	26.36	167.7	.362
200	7.91	34.05	-	26.56	148.2	.442
250	7.31	34.08	-	26.67	137.7	.515
300	6.88	34.11	-	26.76	129.8	.584
400	6.10	34.21	-	26.94	112.6	.711
500	5.77	34.31	-	27.06	101.2	.823
600	5.38	34.40	-	27.18	89.9	.926

83.90 CALCOFI CRUISE 6801 83.90

HORIZON, JANUARY 17 1968, 1006 GMT, 32 35N 122 48W, SOUNDING 2400 FM, WIND 020 15 KNOTS, WEATHER MISSING, SEA MODERATE.

0	14.14	33.45	-	24.98	298.4	0
10	14.15	33.46	-	24.99	297.9	.030
20	14.16	33.46	-	24.98	298.1	.060
30	14.13	33.45	-	24.98	298.2	.090
50	12.95	33.31	-	25.12	285.7	.148
75	9.92	33.59	-	25.89	212.4	.211
100	9.26	33.80	-	26.16	186.5	.261
125	8.92	33.91	-	26.30	173.2	.307
150	8.60	34.01	-	26.43	161.1	.349
200	7.94	34.05	-	26.56	148.6	.428
250	7.18	34.05	-	26.67	138.2	.501
300	6.71	34.08	-	26.76	129.9	.571
400	6.21	34.23	-	26.94	112.4	.697
500	5.61	34.30	-	27.07	100.0	.809
600	5.02	34.36	-	27.19	88.9	.910

83.100 CALCOFI CRUISE 6801 83.100

HORIZON, JANUARY 17 1968, 0550 GMT, 32 14N 123 28W, SOUNDING 2100 FM, WIND 210 11 KNOTS, WEATHER MISSING, SEA ROUGH.

0	14.11	33.41	-	24.96	300.8	0
10	13.50	33.41	-	25.08	288.8	.029
20	13.40	33.38	-	25.08	289.1	.058
30	13.08	33.37	-	25.14	283.8	.087
50	11.54	33.27	-	25.35	263.1	.142
75	10.02	33.51	-	25.81	219.9	.203
100	9.50	33.69	-	26.03	198.4	.255
125	9.12	33.92	-	26.27	175.5	.303
150	8.73	34.00	-	26.40	163.7	.346
200	8.02	34.06	-	26.55	149.0	.426
250	7.26	34.09	-	26.69	136.3	.499
300	6.71	34.14	-	26.80	125.4	.566
400	6.07	34.25	-	26.97	109.2	.688
500	5.43	34.31	-	27.10	97.2	.797
600	4.96	34.37	-	27.20	87.5	.896

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
87.35							CALCOFI CRUISE 6801						87.35	

HORIZON, JANUARY 15 1968, 1322 GMT, 33 50N 118 37.5W, SOUNDING 178 FM, WIND 020 6 KNOTS, WEATHER MISSING, SEA SMOOTH.

0	14.13	33.38	-	24.93	303.4	0
10	14.13	33.38	-	24.93	303.4	.030
20	14.07	33.38	-	24.94	302.2	.061
30	14.03	33.37	-	24.94	302.1	.091
50	12.42	33.36	-	25.26	272.2	.149
75	11.23	33.45	-	25.55	244.5	.214
100	10.35	33.69	-	25.89	212.0	.271
125	10.07	33.84	-	26.06	196.3	.323
150	9.79	33.90	-	26.15	187.4	.371
200	9.30	34.03	-	26.33	170.1	.462
250	8.78	34.09	-	26.46	157.8	.547
300	8.28	34.17	-	26.60	144.5	.625

87.40							CALCOFI CRUISE 6801						87.40	

HORIZON, JANUARY 15 1968, 1544 GMT, 33 40N 118 58W, SOUNDING 480 FM, WIND 070 1 KNOT, WEATHER MISSING, SEA MODERATE.

0	14.37	33.40	-	24.89	306.7	0
10	14.37	33.40	-	24.89	306.7	.031
20	14.38	33.40	-	24.89	306.9	.061
30	14.33	33.40	-	24.90	305.9	.092
50	12.55	33.31	-	25.19	278.3	.151
75	10.97	33.58	-	25.70	230.4	.215
100	10.40	33.71	-	25.90	211.3	.270
125	9.87	33.86	-	26.10	191.6	.321
150	9.69	33.91	-	26.17	185.1	.369
200	9.05	34.02	-	26.36	167.0	.459
250	8.45	34.13	-	26.54	149.9	.540
300	7.96	34.20	-	26.67	137.7	.614
400	7.13	34.26	-	26.84	121.9	.750
500	6.37	34.29	-	26.97	109.9	.873
600	5.70	34.35	-	27.10	97.4	.983

87.45							CALCOFI CRUISE 6801						87.45	

HORIZON, JANUARY 15 1968, 1843 GMT, 33 29N 119 19.5W, SOUNDING 870 FM, WIND 270 15 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH.

0	14.51	33.42	-	24.88	308.1	0
10	14.50	33.42	-	24.88	307.9	.031
20	14.45	33.42	-	24.89	306.8	.062
30	14.45	33.42	-	24.89	306.8	.092
50	13.15	33.33	-	25.09	288.0	.152
75	11.08	33.49	-	25.61	238.9	.218
100	10.02	33.71	-	25.96	205.1	.274
125	9.74	33.90	-	26.16	186.6	.324
150	9.06	33.95	-	26.31	172.4	.369
200	8.63	34.08	-	26.48	156.3	.453
250	8.19	34.17	-	26.61	143.2	.530
300	7.76	34.22	-	26.72	133.4	.602
400	7.18	34.26	-	26.83	122.6	.735
500	6.45	34.28	-	26.95	111.7	.859
600	5.83	34.33	-	27.07	100.4	.972

87.55							CALCOFI CRUISE 6801						87.55	

HORIZON, JANUARY 16 1968, 0431 GMT, 33 10N 120 00W, SOUNDING 643 FM, WIND 230 21 KNOTS, WEATHER MISSING, SEA MODERATE.

0	14.17	33.41	-	24.94	302.0	0
10	14.17	33.41	-	24.94	302.0	.030
20	13.88	33.30	-	24.92	304.3	.061
30	13.15	33.32	-	25.08	288.8	.090
50	11.05	33.38	-	25.53	246.6	.144
75	10.15	33.65	-	25.89	211.7	.202
100	9.71	33.76	-	26.05	196.5	.253
125	9.35	33.87	-	26.20	182.7	.301
150	9.12	33.90	-	26.26	177.0	.347
200	8.43	34.03	-	26.47	157.1	.432
250	7.97	34.09	-	26.58	146.0	.510
300	7.69	34.16	-	26.68	136.9	.583
400	6.78	34.21	-	26.85	121.1	.717
500	6.01	34.24	-	26.97	109.3	.838
600	5.66	34.32	-	27.08	99.1	.950

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
87.60							CALCOFI CRUISE 6801						87.60	
HORIZON, JANUARY 16 1968, 0734 GMT, 32 59N 120 23.2W, SOUNDING 460 FM, WIND 330 16 KNOTS, WEATHER MISSING, SEA ROUGH.														
								0	14.43	33.42	-	24.90	306.4	0
								10	14.43	33.42	-	24.90	306.4	.031
								20	14.13	33.40	-	24.94	301.9	.061
								30	13.45	33.38	-	25.07	290.1	.091
								50	12.33	33.34	-	25.26	272.0	.147
								75	11.25	33.43	-	25.53	246.3	.212
								100	10.19	33.61	-	25.86	215.3	.271
								125	9.30	33.71	-	26.08	193.8	.322
								150	8.88	33.90	-	26.30	173.4	.369
								200	7.91	34.01	-	26.53	151.2	.451
								250	7.37	34.08	-	26.66	138.5	.526
								300	6.92	34.14	-	26.77	128.1	.594
								400	6.35	34.21	-	26.91	115.7	.721
								500	5.92	34.27	-	27.01	105.9	.838
								600	5.29	34.35	-	27.15	92.6	.944

INPUT Z	T	S	OXY	PHO	SIL	NIT	D*T	OUTPUT AT STANDARD LEVELS OF DEPTH Z	T	S	OXY	SIG*T	D*T	DD
87.60							CALCOFI CRUISE 6801						87.60	
HORIZON, JANUARY 16 1968, 0820 GMT, 32 59N 120 23W, SOUNDING 480 FM, WIND 330 16 KNOTS, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 15.														
1	14.38	33.417	5.93	-	-	-	305.7	0	14.38	33.417	5.93	24.91	305.7	0
10	14.42	33.411	5.94	-	-	-	306.9	10	14.42	33.411	5.94	24.89	306.9	.031
29	13.98	33.404	5.99	-	-	-	298.6	20	14.32	33.406	5.99	24.91	305.2	.061
38	13.30	33.403	5.85	-	-	-	285.5	30	13.91	33.404	5.98	24.99	297.3	.091
52	12.36	33.393	5.61	-	-	-	268.7	50	12.48	33.394	5.66	25.27	270.9	.148
67	11.55	33.408	4.93	-	-	-	253.1	75	11.07	33.458	4.58	25.58	241.0	.213
90	10.21	33.581	4.09	-	-	-	217.7	100	9.75	33.651	4.05	25.96	205.3	.269
110	9.41	33.723	4.00	-	-	-	194.6	125	9.19	33.854	3.56	26.21	181.5	.318
129	9.16	33.885	3.44	-	-	-	178.7	150	8.82	33.949	3.31	26.34	168.9	.362
148	8.85	33.942	3.34	-	-	-	169.8	200	7.92	34.022	2.70	26.54	150.4	.444
176	8.41	34.018	2.94	-	-	-	157.7	250	7.38	34.067	2.19	26.65	139.7	.518
209	7.75	34.025	2.62	-	-	-	147.8	300	6.94	34.135	1.39	26.77	128.7	.587
238	7.50	34.050	2.40	-	-	-	142.5	400	6.41	34.210	.81	26.90	116.4	.715
286	7.04	34.119	1.54	-	-	-	131.2	500	5.83	34.292	.42	27.04	103.2	.831
339	6.71	34.173	1.11	-	-	-	122.9	600	5.35	34.339	.49	27.13	94.2	.936
422	6.30	34.222	.73	-	-	-	114.1							
504	5.81	34.295	.41	-	-	-	102.8							
586	5.41	34.335	.45	-	-	-	95.1							

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
87.70							CALCOFI CRUISE 6801						87.70	
HORIZON, JANUARY 16 1968, 1240 GMT, 32 39.5N 121 02W, SOUNDING 2020 FM, WIND 300 17 KNOTS, WEATHER MISSING, SEA ROUGH.														
								0	14.62	33.53	-	24.94	302.2	0
								10	14.63	33.54	-	24.95	301.7	.030
								20	14.68	33.58	-	24.97	299.8	.060
								30	14.66	33.59	-	24.98	298.7	.090
								50	11.75	33.45	-	25.45	253.5	.146
								75	9.85	33.72	-	26.00	201.7	.203
								100	9.28	33.85	-	26.19	183.1	.252
								125	8.89	33.94	-	26.33	170.6	.296
								150	8.58	34.02	-	26.44	160.0	.338
								200	7.93	34.07	-	26.58	147.0	.416
								250	7.39	34.09	-	26.67	138.1	.490
								300	6.97	34.16	-	26.78	127.3	.558
								400	6.38	34.21	-	26.90	116.0	.685
								500	5.89	34.26	-	27.00	106.3	.802
								600	5.47	34.33	-	27.11	96.2	.910

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
87.80							CALCOFI CRUISE 6801						87.80	
HORIZON, JANUARY 16 1968, 1650 GMT, 32 21.5N 121 45W, SOUNDING 2175 FM, WIND 350 15 KNOTS, WEATHER PARTLY CLOUDY, SEA MODERATE.														
								0	14.16	33.41	-	24.95	301.8	0
								10	14.10	33.40	-	24.95	301.3	.030
								20	13.88	33.39	-	24.99	297.7	.060
								30	13.70	33.37	-	25.01	295.7	.090
								50	13.30	33.36	-	25.08	288.7	.149
								75	10.55	33.29	-	25.54	244.8	.216
								100	9.50	33.60	-	25.96	205.1	.272
								125	9.02	33.85	-	26.24	179.2	.321
								150	8.66	33.96	-	26.38	165.6	.365
								200	8.02	34.02	-	26.52	152.0	.445
								250	7.35	34.04	-	26.64	141.2	.521
								300	6.76	34.08	-	26.75	130.5	.591
								400	6.08	34.17	-	26.91	115.3	.718
								500	5.60	34.24	-	27.02	104.4	.834
								600	5.30	34.36	-	27.15	92.0	.939
87.90							CALCOFI CRUISE 6801						87.90	
HORIZON, JANUARY 16 1968, 2125 GMT, 31 59N 122 24W, SOUNDING 2210 FM, WIND 345 14 KNOTS, WEATHER CLEAR, SEA VERY ROUGH.														
								0	15.78	33.41	-	24.60	335.2	0
								10	15.73	33.41	-	24.61	334.1	.033
								20	15.72	33.41	-	24.61	333.9	.067
								30	15.69	33.41	-	24.62	333.3	.100
								50	15.28	33.35	-	24.66	329.0	.167
								75	12.35	33.25	-	25.19	279.0	.243
								100	10.99	33.37	-	25.53	246.3	.309
								125	9.85	33.61	-	25.91	209.8	.367
								150	9.27	33.84	-	26.19	183.7	.417
								200	8.36	34.03	-	26.48	156.1	.503
								250	7.66	34.06	-	26.61	144.0	.580
								300	7.18	34.13	-	26.73	132.3	.652
								400	6.36	34.20	-	26.90	116.5	.781
								500	5.64	34.24	-	27.02	104.9	.898
								600	5.28	34.34	-	27.14	93.3	1.003
87.100							CALCOFI CRUISE 6801						87.100	
HORIZON, JANUARY 17 1968, 0138 GMT, 31 40N 123 04W, SOUNDING 2160 FM, WIND 330 12 KNOTS, WEATHER PARTLY CLOUDY, SEA HIGH.														
								0	15.98	33.39	-	24.54	340.9	0
								10	15.98	33.39	-	24.54	340.9	.034
								20	15.92	33.39	-	24.55	339.6	.068
								30	15.93	33.40	-	24.55	339.1	.102
								50	15.18	33.26	-	24.61	333.5	.170
								75	12.30	33.19	-	25.15	282.5	.247
								100	10.90	33.37	-	25.55	244.8	.313
								125	9.91	33.59	-	25.89	212.3	.371
								150	9.29	33.81	-	26.16	186.3	.422
								200	8.44	33.97	-	26.42	161.7	.510
								250	7.67	34.05	-	26.60	144.8	.589
								300	7.21	34.08	-	26.69	136.4	.661
								400	6.47	34.20	-	26.88	117.9	.794
								500	5.88	34.27	-	27.01	105.5	.911
								600	5.25	34.32	-	27.13	94.4	1.018

OBSERVED LEVELS OF DEPTH								STANDARD LEVELS OF DEPTH						
INPUT							COMPUTED	INPUT				COMPUTED		
Z	T	S	OXY	PHO	SIL	NIT	O*T	Z	T	S	OXY	SIG*T	O*T	DD
90.28					CALCOFI CRUISE 6801								90.28	

HORIZON, JANUARY 15 1968, 0702 GMT, 33 28.5N 117 46.5W, SOUNDING 220 FM, WIND 150 1 KNOT, WEATHER MISSING, SEA CALM.

0	14.66	33.44	-	24.86	309.6	0
10	14.13	33.39	-	24.94	302.6	.031
20	13.93	33.38	-	24.97	299.4	.061
30	13.80	33.36	-	24.98	298.3	.091
50	11.85	33.38	-	25.38	260.5	.147
75	10.74	33.64	-	25.78	222.1	.207
100	10.37	33.78	-	25.96	205.6	.261
125	10.07	33.86	-	26.07	194.8	.312
150	9.73	33.92	-	26.17	185.0	.360
200	9.09	34.06	-	26.39	164.7	.449
250	8.67	34.12	-	26.50	153.9	.531
300	8.19	34.15	-	26.60	144.7	.608

INPUT								OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	O*T	Z	T	S	OXY	SIG*T	O*T	DD
90.28					CALCOFI CRUISE 6801								90.28	

HORIZON, JANUARY 15 1968, 0735 GMT, 33 28.5N 117 46.5W, SOUNDING 220 FM, WIND 150 1 KNOT, WEATHER MISSING, SEA MISSING, WIRE ANGLE 00.

0	14.58	33.410	5.92	-	-	-	310.2	0	14.58	33.410	5.92	24.86	310.2	0
10	14.18	33.378	6.10	-	-	-	304.5	10	14.18	33.378	6.10	24.92	304.5	.031
30	13.87	33.356	5.98	-	-	-	300.0	20	13.99	33.364	6.11	24.95	301.8	.061
44	12.61	33.336	5.65	-	-	-	277.5	30	13.87	33.356	5.98	24.96	300.0	.091
59	11.52	33.425	4.77	-	-	-	251.3	50	12.14	33.359	5.33	25.31	267.2	.148
73	10.79	33.591	3.97	-	-	-	226.6	75	10.75	33.602	3.93	25.75	225.1	.210
88	10.62	33.653	3.76	-	-	-	219.2	100	10.42	33.729	3.48	25.91	210.2	.265
107	10.30	33.772	3.33	-	-	-	205.1	125	10.15	33.822	3.19	26.03	199.0	.317
132	10.09	33.835	3.16	-	-	-	197.0	150	9.74	33.891	2.98	26.15	187.2	.366
160	9.53	33.924	2.88	-	-	-	181.5	200	9.13	34.038	2.55	26.36	167.0	.456
195	9.19	34.028	2.60	-	-	-	168.6	250	8.64	34.099	2.19	26.49	155.0	.538
229	8.82	34.082	2.30	-	-	-	159.0	300	8.21	34.141	1.79	26.59	145.6	.616
269	8.49	34.112	2.08	-	-	-	151.9							
313	8.10	34.155	1.65	-	-	-	143.8							
352	7.81	34.205	1.17	-	-	-	135.2							

INPUT							COMPUTED	INPUT				COMPUTED		
Z	T	S	OXY	PHO	SIL	NIT	O*T	Z	T	S	OXY	SIG*T	O*T	DD
90.32					CALCOFI CRUISE 6801								90.32	

HORIZON, JANUARY 15 1968, 0502 GMT, 33 22N 118 02.5W SOUNDING 230 FM, WIND 170 2 KNOTS, WEATHER MISSING, SEA CALM.

0	14.80	33.42	-	24.82	314.0	0
10	14.45	33.37	-	24.85	310.5	.031
20	13.84	33.27	-	24.90	305.7	.062
30	13.25	33.33	-	25.07	289.9	.092
50	12.05	33.35	-	25.32	266.2	.148
75	11.07	33.54	-	25.65	235.1	.211
100	10.43	33.74	-	25.92	209.6	.267
125	9.94	33.81	-	26.05	196.5	.318
150	9.42	34.00	-	26.29	174.2	.365
200	9.03	34.07	-	26.41	163.0	.451
250	8.59	34.12	-	26.51	152.7	.532
300	8.02	34.17	-	26.64	140.8	.608

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
90.37							CALCOFI CRUISE 6801						90.37	

HORIZON, JANUARY 15 1968, 0150 GMT, 33 11N 118 22.5W, SOUNDING 632 FM, WIND 300 1 KNOT, WEATHER CLOUDY, SEA SLIGHT.

0	14.40	33.37	-	24.87	309.5	0
10	14.26	33.38	-	24.90	306.0	.031
20	14.18	33.38	-	24.92	304.4	.061
30	14.16	33.38	-	24.92	304.0	.092
50	12.58	33.29	-	25.17	280.3	.150
75	11.23	33.45	-	25.55	244.5	.216
100	10.56	33.65	-	25.82	218.4	.275
125	9.93	33.80	-	26.05	197.0	.327
150	9.60	33.92	-	26.20	182.9	.375
200	9.08	34.09	-	26.41	162.3	.463
250	8.52	34.15	-	26.55	149.5	.543
300	7.82	34.14	-	26.65	140.2	.618
400	7.16	34.22	-	26.80	125.3	.757
500	6.47	34.28	-	26.94	111.9	.882
600	5.74	34.34	-	27.09	98.6	.995

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.37							CALCOFI CRUISE 6801						90.37	

HORIZON, JANUARY 15 1968, 0235 GMT, 33 11N 118 22.5W, SOUNDING 632 FM, WIND 300 1 KNOT, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 00.

1	14.86	33.371	5.95	-	-	-	318.8	0	14.86	33.371	5.95	24.77	318.8	0
11	14.25	33.364	6.10	-	-	-	306.9	10	14.29	33.365	6.09	24.88	307.8	.031
31	14.14	33.356	6.02	-	-	-	305.3	20	14.21	33.359	6.09	24.90	306.5	.062
40	14.04	33.356	6.00	-	-	-	303.4	30	14.15	33.356	6.03	24.91	305.5	.093
50	13.08	33.324	5.78	-	-	-	287.1	50	13.08	33.324	5.78	25.10	287.1	.152
69	11.95	33.350	5.09	-	-	-	264.5	75	11.47	33.414	4.85	25.48	251.3	.220
80	11.28	33.454	4.73	-	-	-	245.0	100	10.58	33.629	3.93	25.80	220.2	.279
98	10.64	33.613	3.98	-	-	-	222.4	125	9.99	33.804	3.45	26.04	197.7	.332
123	10.01	33.793	3.50	-	-	-	198.8	150	9.71	33.923	2.92	26.18	184.4	.381
143	9.83	33.893	3.00	-	-	-	188.6	200	9.03	34.078	2.54	26.41	162.4	.469
172	9.32	34.004	2.77	-	-	-	172.3	250	8.53	34.149	2.12	26.55	149.8	.549
201	9.02	34.080	2.53	-	-	-	162.1	300	7.95	34.162	1.75	26.64	140.4	.624
230	8.71	34.123	2.43	-	-	-	154.3	400	7.18	34.226	1.07	26.81	125.1	.762
270	8.35	34.167	1.80	-	-	-	145.7	500	6.44	34.306	.45	26.97	109.7	.887
329	7.57	34.153	1.67	-	-	-	135.8							
402	7.17	34.229	1.05	-	-	-	124.8							
476	6.63	34.290	.55	-	-	-	113.2							
554	6.00	34.333	.36	-	-	-	102.2							

	INPUT						COMPUTED		INPUT				COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.45							CALCOFI CRUISE 6801						90.45	

HORIZON, JANUARY 14 1968, 2219 GMT, 32 54N 118 55.5W, SOUNDING 912 FM, WIND 260 1 KNOT, WEATHER PARTLY CLOUDY, SEA MODERATE.

0	14.32	33.42	-	24.92	304.2	0
10	13.83	33.43	-	25.03	293.8	.030
20	13.27	33.35	-	25.08	288.8	.059
30	12.33	33.40	-	25.31	267.6	.087
50	10.96	33.50	-	25.64	236.2	.138
75	9.99	33.66	-	25.93	208.4	.193
100	9.55	33.80	-	26.11	191.0	.244
125	9.12	33.91	-	26.27	176.2	.290
150	8.80	34.00	-	26.39	164.8	.334
200	8.38	34.07	-	26.51	153.4	.415
250	7.92	34.11	-	26.61	143.9	.491
300	7.63	34.16	-	26.69	136.1	.563
400	6.96	34.25	-	26.85	120.4	.697
500	6.33	34.29	-	26.97	109.4	.818
600	5.57	34.36	-	27.12	95.1	.928

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
90.53							CALCOFI CRUISE 6801						90.53	

HORIZON, JANUARY 14 1968, 1836 GMT, 32 39N 119 28W, SOUNDING 680 FM, WIND 270 16 KNOTS, WEATHER PARTLY CLOUDY, SEA MODERATE.

0	15.27	33.39	-	24.69	325.9	0
10	15.23	33.39	-	24.70	325.0	.033
20	15.23	33.39	-	24.70	325.0	.065
30	15.02	33.36	-	24.72	322.9	.098
50	14.35	33.34	-	24.85	310.7	.161
75	10.98	33.31	-	25.48	250.5	.232
100	9.94	33.57	-	25.87	214.2	.290
125	9.54	33.75	-	26.07	194.6	.342
150	9.22	33.93	-	26.27	176.3	.389
200	8.22	34.07	-	26.53	151.1	.472
250	7.80	34.13	-	26.64	140.7	.547
300	7.52	34.21	-	26.74	130.9	.617
400	6.62	34.19	-	26.85	120.5	.748
500	5.92	34.24	-	26.98	108.2	.869
600	5.70	34.35	-	27.10	97.4	.979

90.60							CALCOFI CRUISE 6801						90.60	

HORIZON, JANUARY 14 1968, 1429 GMT, 32 22N 120 00W, SOUNDING 510 FM, WIND 300 17 KNOTS, WEATHER PARTLY CLOUDY, SEA MODERATE.

0	15.21	33.38	-	24.70	325.4	0
10	15.21	33.38	-	24.70	325.4	.033
20	14.61	33.38	-	24.83	313.0	.065
30	14.28	33.41	-	24.92	304.2	.095
50	12.06	33.16	-	25.17	280.4	.154
75	10.64	33.41	-	25.62	237.4	.219
100	9.99	33.56	-	25.85	215.8	.276
125	9.60	33.69	-	26.02	200.0	.329
150	9.28	33.83	-	26.18	184.6	.378
200	8.39	34.01	-	26.46	158.0	.465
250	7.64	34.09	-	26.63	141.5	.542
300	7.08	34.14	-	26.75	130.2	.612
400	6.23	34.15	-	26.87	118.7	.741
500	5.73	34.26	-	27.02	104.4	.859
600	5.29	34.35	-	27.15	92.6	.964

INPUT								OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.60							CALCOFI CRUISE 6801						90.60	

HORIZON, JANUARY 14 1968, 1513 GMT, 32 22N 120 00W, SOUNDING 510 FM, WIND 300 17 KNOTS, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 10.

0	15.14	33.356	6.24	-	-	-	325.7	0	15.14	33.356	6.24	24.70	325.7	0
10	15.20	33.359	6.10	-	-	-	326.7	10	15.20	33.359	6.10	24.68	326.7	.033
29	14.61	33.320	5.89	-	-	-	317.4	20	14.98	33.323	5.97	24.70	324.8	.065
37	14.20	33.397	5.88	-	-	-	303.5	30	14.57	33.331	5.89	24.80	315.8	.097
52	12.45	33.253	5.96	-	-	-	280.6	50	12.70	33.278	5.97	25.14	283.4	.157
66	11.43	33.291	5.37	-	-	-	259.6	75	11.02	33.336	5.04	25.50	249.2	.224
90	10.53	33.430	4.57	-	-	-	234.1	100	10.21	33.500	4.30	25.77	223.7	.284
109	9.97	33.561	4.09	-	-	-	215.4	125	9.73	33.642	3.84	25.96	205.4	.338
129	9.68	33.662	3.79	-	-	-	203.3	150	9.38	33.752	3.47	26.13	189.0	.388
149	9.40	33.785	3.49	-	-	-	189.8	200	8.50	34.006	2.99	26.44	159.9	.477
177	8.87	33.954	3.07	-	-	-	169.2	250	7.96	34.063	2.37	26.57	147.8	.556
210	8.37	34.016	2.94	-	-	-	157.3	300	7.23	34.125	1.60	26.72	133.3	.628
240	8.10	34.049	2.55	-	-	-	150.9	400	6.26	34.193	.91	26.90	115.9	.758
288	7.38	34.115	1.73	-	-	-	136.1	500	5.81	34.269	.50	27.02	104.7	.874
342	6.78	34.152	1.26	-	-	-	125.4	600	5.29	34.344	.40	27.14	93.1	.980
425	6.09	34.211	.79	-	-	-	112.4							
509	5.77	34.276	.48	-	-	-	103.7							
592	5.34	34.338	.41	-	-	-	94.1							

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
90.70							CALCOFI CRUISE 6801							90.70
HORIZON, JANUARY 14 1968, 0942 GMT, 32 05N 120 39W, SOUNDING 2100 FM, WIND 300 10 KNOTS, WEATHER CLEAR, SEA SMOOTH.														
								0	15.23	33.38	-	24.69	325.8	0
								10	14.70	33.38	-	24.81	314.8	.032
								20	14.22	33.33	-	24.87	308.8	.063
								30	14.03	33.41	-	24.97	299.2	.094
								50	13.87	33.42	-	25.01	295.3	.153
								75	11.03	33.39	-	25.54	245.5	.221
								100	9.83	33.55	-	25.87	213.9	.279
								125	9.37	33.78	-	26.12	189.7	.330
								150	9.08	33.89	-	26.26	177.1	.377
								200	8.35	34.04	-	26.49	155.2	.461
								250	7.67	34.09	-	26.63	141.9	.538
								300	7.19	34.12	-	26.72	133.1	.609
								400	6.33	34.19	-	26.89	116.9	.739
								500	5.79	34.25	-	27.01	105.9	.856
								600	5.28	34.33	-	27.13	94.0	.963
90.80							CALCOFI CRUISE 6801							90.80
HORIZON, JANUARY 14 1968, 0445 GMT, 31 45N 121 19W, SOUNDING 1880 FM, WIND 345 5 KNOTS, WEATHER PARTLY CLOUDY, SEA SMOOTH.														
								0	15.62	33.42	-	24.64	331.0	0
								10	15.62	33.41	-	24.63	331.8	.033
								20	15.35	33.40	-	24.68	326.8	.066
								30	14.63	33.29	-	24.75	320.0	.099
								50	13.76	33.35	-	24.98	298.3	.161
								75	11.19	33.24	-	25.39	259.3	.231
								100	10.26	33.49	-	25.75	225.3	.292
								125	9.47	33.76	-	26.09	192.7	.344
								150	9.15	33.89	-	26.25	178.2	.392
								200	8.40	34.02	-	26.47	157.4	.477
								250	7.78	34.05	-	26.58	146.4	.555
								300	7.33	34.12	-	26.70	135.0	.627
								400	6.49	34.21	-	26.89	117.4	.759
								500	5.81	34.26	-	27.01	105.4	.876
								600	5.17	34.31	-	27.13	94.3	.983

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.80							CALCOFI CRUISE 6801							90.80
HORIZON, JANUARY 14 1968, 0530 GMT, 31 45N 121 19W, SOUNDING 1880 FM, WIND 340 5 KNOTS, WEATHER PARTLY CLOUDY, SEA MISSING, WIRE ANGLE 03.														
0	15.59	33.402	5.74	-	-	-	331.7	0	15.59	33.402	5.74	24.63	331.7	0
10	15.63	33.453	5.84	-	-	-	328.8	10	15.63	33.453	5.84	24.66	328.8	.033
30	15.28	33.411	5.82	-	-	-	324.5	20	15.50	33.445	5.83	24.69	326.4	.066
39	14.48	33.365	5.90	-	-	-	311.5	30	15.28	33.411	5.82	24.71	324.5	.098
49	14.14	33.362	6.11	-	-	-	304.9	50	14.03	33.358	6.08	24.93	303.0	.161
63	12.38	33.290	5.66	-	-	-	276.6	75	11.46	33.243	5.82	25.35	263.7	.223
78	11.30	33.241	5.85	-	-	-	261.1	100	10.55	33.435	4.55	25.66	234.2	.295
97	10.67	33.404	4.66	-	-	-	238.4	125	9.68	33.681	3.88	26.00	201.9	.350
122	9.76	33.655	3.97	-	-	-	205.1	150	9.20	33.853	3.31	26.21	181.8	.399
142	9.33	33.809	3.44	-	-	-	186.9	200	8.49	33.997	2.95	26.43	160.4	.486
170	8.93	33.932	3.09	-	-	-	171.7	250	7.82	34.050	2.47	26.58	146.9	.565
200	8.49	33.997	2.95	-	-	-	160.4	300	7.28	34.108	1.72	26.70	135.3	.638
229	8.10	34.025	2.76	-	-	-	152.7	400	6.56	34.206	.88	26.87	118.6	.770
269	7.59	34.074	2.17	-	-	-	142.0	500	5.77	34.254	.50	27.01	105.3	.888
328	7.05	34.136	1.36	-	-	-	130.1							
400	6.56	34.206	.88	-	-	-	118.6							
474	5.99	34.246	.56	-	-	-	108.6							
553	5.29	34.262	.48	-	-	-	99.2							

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
90.90					CALCOFI CRUISE 6801								90.90	

HORIZON, JANUARY 14 1968, 0014 GMT, 31 24N 122 02W, SOUNDING 2100 FM, WIND 280 5 KNOTS, WEATHER PARTLY CLOUDY, SEA SLIGHT.

0	16.13	33.44	-	24.54	340.5	0
10	15.73	33.42	-	24.61	333.4	.034
20	15.62	33.42	-	24.64	331.0	.067
30	15.57	33.42	-	24.65	330.0	.100
50	15.40	33.40	-	24.67	327.9	.166
75	13.15	33.26	-	25.04	293.2	.244
100	11.18	33.34	-	25.47	251.7	.313
125	10.23	33.52	-	25.78	222.6	.373
150	9.53	33.77	-	26.09	192.9	.425
200	8.92	34.01	-	26.38	165.8	.517
250	8.33	34.12	-	26.55	148.9	.597
300	7.86	34.17	-	26.66	138.5	.672
400	7.00	34.23	-	26.83	122.4	.808
500	6.20	34.27	-	26.97	109.3	.930
600	5.58	34.30	-	27.07	99.7	1.042

90.100 CALCOFI CRUISE 6801 90.100

HORIZON, JANUARY 13 1968, 1903 GMT, 31 05N 122 38W, SOUNDING 2250 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA SMOOTH.

0	16.02	33.41	-	24.54	340.3	0
10	15.99	33.41	-	24.55	339.7	.034
20	15.93	33.40	-	24.55	339.1	.068
30	15.94	33.42	-	24.57	337.9	.102
50	15.90	33.41	-	24.57	337.7	.170
75	13.61	33.24	-	24.93	303.4	.250
100	11.97	33.31	-	25.30	267.8	.322
125	10.20	33.48	-	25.75	225.1	.384
150	9.63	33.67	-	26.00	201.9	.438
200	8.60	33.99	-	26.41	162.5	.531
250	7.92	34.02	-	26.54	150.5	.611
300	7.44	34.08	-	26.65	139.5	.686
400	6.51	34.18	-	26.86	119.9	.821
500	5.78	34.24	-	27.00	106.5	.940
600	5.32	34.33	-	27.13	94.5	1.048

	INPUT							OUTPUT AT 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 6801							90.100	

HORIZON, JANUARY 13 1968, 1948 GMT, 31 05N 122 38W SOUNDING 2250 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA MISSING, WIRE ANGLE 00.

0	16.08	33.406	5.71	-	-	-	341.9	0	16.08	33.406	5.71	24.52	341.9	0
10	15.97	33.403	5.85	-	-	-	339.8	10	15.97	33.403	5.85	24.55	339.8	.034
30	15.85	33.382	5.75	-	-	-	338.7	20	15.88	33.389	5.83	24.56	338.9	.068
39	15.89	33.398	5.72	-	-	-	338.4	30	15.85	33.382	5.75	24.56	338.7	.102
49	15.90	33.420	5.90	-	-	-	337.0	50	15.90	33.420	5.89	24.58	336.9	.170
63	15.80	33.407	5.71	-	-	-	335.8	75	14.54	33.322	5.99	24.80	315.8	.252
78	14.16	33.301	6.07	-	-	-	309.8	100	12.20	33.311	5.70	25.26	271.8	.326
98	12.38	33.307	5.77	-	-	-	275.4	125	10.43	33.422	4.69	25.67	233.2	.390
122	10.55	33.403	4.79	-	-	-	236.5	150	9.68	33.645	3.97	25.97	204.6	.445
142	9.95	33.553	4.21	-	-	-	215.6	200	8.62	33.980	3.74	26.40	163.6	.539
171	9.05	33.869	3.53	-	-	-	178.2	250	7.88	34.025	2.96	26.55	149.7	.619
200	8.62	33.980	3.74	-	-	-	163.6	300	7.28	34.073	2.13	26.67	137.9	.653
229	8.19	33.999	3.37	-	-	-	155.9	400	6.49	34.181	.89	26.86	119.6	.827
269	7.62	34.049	2.58	-	-	-	144.2	500	5.76	34.269	.40	27.03	104.2	.945
327	7.03	34.092	1.79	-	-	-	133.1							
399	6.50	34.180	.90	-	-	-	119.8							
473	5.89	34.247	.48	-	-	-	107.3							
551	5.65	34.305	.34	-	-	-	100.1							

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
93.28							CALCOFI CRUISE 6801						93.28	
HORIZON, JANUARY 12 1968, 0327 GMT, 32 54.5N 117 22W, SOUNDING 320 FM, WIND 330 4 KNOTS, WEATHER CLEAR, SEA SMOOTH.														
								0	14.98	33.45	-	24.80	315.5	0
								10	14.88	33.39	-	24.78	317.8	.032
								20	14.64	33.35	-	24.80	315.8	.063
								30	14.44	33.37	-	24.86	310.3	.095
								50	13.75	33.33	-	24.97	299.6	.156
								75	11.57	33.34	-	25.40	258.5	.226
								100	10.85	33.47	-	25.63	236.5	.288
								125	10.33	33.74	-	25.93	207.9	.345
								150	10.01	33.88	-	26.10	192.4	.395
								200	9.47	34.03	-	26.30	172.7	.488
								250	8.85	34.12	-	26.47	156.6	.573
								300	8.10	34.13	-	26.60	144.9	.651
								400	7.32	34.20	-	26.77	128.9	.793
								500	6.33	34.27	-	26.96	110.9	.920
93.30							CALCOFI CRUISE 6801						93.30	
HORIZON, JANUARY 12 1968, 0454 GMT, 32 50.5N 117 31.5W, SOUNDING 512 FM, WIND 330 7 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	15.26	33.46	-	24.75	320.5	0
								10	15.25	33.46	-	24.75	320.3	.032
								20	15.12	33.43	-	24.76	319.8	.064
								30	14.58	33.35	-	24.81	314.6	.096
								50	13.26	33.31	-	25.05	291.6	.157
								75	11.42	33.39	-	25.47	252.2	.225
								100	10.80	33.63	-	25.77	223.9	.285
								125	10.09	33.74	-	25.97	204.0	.339
								150	9.98	33.86	-	26.09	193.4	.390
								200	9.19	34.06	-	26.37	166.2	.481
								250	8.30	34.04	-	26.50	154.5	.563
								300	8.08	34.16	-	26.62	142.4	.640
								400	7.15	34.21	-	26.80	125.9	.780
								500	6.58	34.27	-	26.92	114.1	.907
								600	5.84	34.33	-	27.07	100.5	1.021
93.40							CALCOFI CRUISE 6801						93.40	
HORIZON, JANUARY 12 1968, 0944 GMT, 32 30N 118 11.5W, SOUNDING 890 FM, WIND 320 13 KNOTS, WEATHER MISSING, SEA SLIGHT.														
								0	15.41	33.46	-	24.72	323.7	0
								10	15.34	33.46	-	24.73	322.2	.032
								20	15.15	33.42	-	24.74	321.2	.065
								30	15.03	33.41	-	24.76	319.4	.097
								50	14.41	33.36	-	24.86	310.4	.160
								75	11.65	33.36	-	25.40	258.4	.231
								100	10.91	33.52	-	25.66	233.8	.293
								125	10.12	33.71	-	25.95	206.7	.349
								150	9.59	33.87	-	26.16	186.5	.399
								200	9.19	34.13	-	26.43	161.0	.487
								250	8.50	34.14	-	26.54	149.9	.567
								300	7.97	34.21	-	26.68	137.1	.641
								400	6.82	34.22	-	26.85	120.8	.776
								500	6.36	34.28	-	26.96	110.5	.898

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
93.50					CALCOFI CRUISE 6801								93.50	

HORIZON, JANUARY 12 1968, 1430 GMT, 32 14.5N 118 53W, SOUNDING 720 FM, WIND 350 12 KNOTS, WEATHER OVERCAST, SEA ROUGH.

0	15.19	33.46	-	24.76	319.1	0
10	15.19	33.46	-	24.76	319.1	.032
20	14.75	33.41	-	24.82	313.7	.064
30	14.42	33.33	-	24.83	312.8	.095
50	13.25	33.30	-	25.05	292.1	.156
75	10.89	33.46	-	25.62	237.9	.222
100	10.37	33.64	-	25.85	216.0	.280
125	9.81	33.87	-	26.12	189.9	.331
150	9.19	33.97	-	26.30	172.9	.377
200	8.74	34.15	-	26.51	152.7	.460
250	8.13	34.11	-	26.58	146.8	.537
300	7.47	34.14	-	26.70	135.4	.610
400	6.77	34.23	-	26.87	119.5	.742
500	6.22	34.29	-	26.99	108.1	.863
600	5.66	34.35	-	27.10	96.9	.972

93.60					CALCOFI CRUISE 6801								93.60	

HORIZON, JANUARY 12 1968, 1928 GMT, 31 54N 119 38.5W, SOUNDING 1818 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA MODERATE.

0	15.32	33.38	-	24.67	327.6	0
10	15.27	33.38	-	24.69	326.6	.033
20	15.27	33.38	-	24.69	326.6	.065
30	15.26	33.38	-	24.69	326.4	.098
50	15.22	33.38	-	24.70	325.6	.164
75	12.01	33.23	-	25.23	274.4	.239
100	10.86	33.34	-	25.53	246.3	.305
125	9.92	33.57	-	25.87	213.9	.363
150	9.37	33.77	-	26.12	190.5	.414
200	8.41	33.93	-	26.39	164.2	.504
250	7.79	34.02	-	26.56	148.7	.584
300	7.36	34.07	-	26.66	139.1	.658
400	6.55	34.17	-	26.85	121.1	.794
500	6.02	34.25	-	26.98	108.6	.915
600	5.46	34.32	-	27.10	96.8	1.025

INPUT								OUTPUT AT 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 6801								93.60	

HORIZON, JANUARY 12 1968, 2025 GMT, 31 54N 119 38.5W SOUNDING 1818 FM, WIND 300 6 KNOTS, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 10.

0	15.37	33.373	5.77	-	-	-	329.2	0	15.37	33.373	5.77	24.66	329.2	0
10	15.26	33.373	5.83	-	-	-	326.9	10	15.26	33.373	5.83	24.68	326.9	.033
30	15.22	33.371	5.80	-	-	-	326.2	20	15.24	33.372	5.83	24.69	326.5	.066
53	15.21	33.377	5.78	-	-	-	325.6	30	15.22	33.371	5.80	24.69	326.2	.098
63	14.87	33.344	5.98	-	-	-	321.0	50	15.21	33.379	5.76	24.70	325.4	.164
72	12.60	33.275	5.75	-	-	-	281.8	75	12.27	33.273	5.67	25.22	275.9	.239
87	11.67	33.306	5.34	-	-	-	262.7	100	10.86	33.357	5.00	25.54	245.0	.305
100	10.86	33.357	5.00	-	-	-	245.0	125	9.95	33.561	4.20	25.86	215.0	.363
125	9.95	33.561	4.20	-	-	-	215.0	150	9.46	33.725	3.74	26.07	195.2	.415
144	9.63	33.683	3.78	-	-	-	200.9	200	8.54	33.949	3.43	26.39	164.6	.506
167	8.98	33.835	3.71	-	-	-	179.7	250	7.95	34.023	2.80	26.54	150.8	.587
196	8.58	33.938	3.48	-	-	-	166.1	300	7.41	34.075	2.06	26.65	139.4	.662
225	8.28	34.004	3.10	-	-	-	156.8	400	6.54		1.10			
264	7.77	34.036	2.63	-	-	-	147.3	500	5.97		.48			
321	7.22	34.101	1.74	-	-	-	135.0							
393	6.58	-	1.18	-	-	-	-							
465	6.16	-	.60	-	-	-	-							
543	5.74	-	.48	-	-	-	-							

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
93.70							CALCOFI CRUISE 6801						93.70	
HORIZON, JANUARY 13 1968, 0049 GMT, 31 31N 120 14W, SOUNDING 2040 FM, WIND 015 3 KNOTS, WEATHER CLOUDY, SEA MODERATE.														
								0	15.65	33.39	-	24.61	333.9	0
								10	15.46	33.39	-	24.65	329.9	.033
								20	15.44	33.39	-	24.66	329.4	.066
								30	15.43	33.39	-	24.66	329.2	.099
								50	15.42	33.39	-	24.66	329.0	.165
								75	12.65	33.23	-	25.11	286.0	.243
								100	11.08	33.38	-	25.52	247.1	.310
								125	10.26	33.54	-	25.79	221.6	.369
								150	9.55	33.68	-	26.02	199.9	.422
								200	8.66	33.97	-	26.39	164.9	.515
								250	8.09	34.06	-	26.54	150.0	.596
								300	7.46	34.10	-	26.67	138.3	.670
								400	6.50	34.15	-	26.84	122.0	.805
								500	5.74	34.22	-	26.99	107.6	.926
								600	5.37	34.31	-	27.11	96.5	1.035
93.80							CALCOFI CRUISE 6801						93.80	
HORIZON, JANUARY 13 1968, 0500 GMT, 31 13N 120 54W, SOUNDING 2100 FM, WIND 300 5 KNOTS, WEATHER MISSING, SEA ROUGH.														
								0	15.76	33.43	-	24.62	333.3	0
								10	15.72	33.42	-	24.62	333.2	.033
								20	15.65	33.42	-	24.63	331.7	.067
								30	15.63	33.42	-	24.64	331.3	.100
								50	15.48	33.39	-	24.65	330.3	.166
								75	12.77	33.19	-	25.06	291.2	.244
								100	11.31	33.31	-	25.43	256.2	.313
								125	10.29	33.43	-	25.70	230.2	.375
								150	9.57	33.65	-	25.99	202.5	.429
								200	8.86	33.98	-	26.36	167.1	.523
								250	8.25	34.04	-	26.50	153.7	.606
								300	7.66	34.11	-	26.65	140.2	.682
								400	6.84	34.19	-	26.82	123.3	.819
								500	6.05	34.24	-	26.97	109.7	.942
								600	5.62	34.31	-	27.08	99.4	1.053
93.90							CALCOFI CRUISE 6801						93.90	
HORIZON, JANUARY 13 1968, 0931 GMT, 30 50N 121 34.5W, SOUNDING 2170 FM, WIND 020 2 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	15.48	33.38	-	24.64	331.0	0
								10	15.48	33.38	-	24.64	331.0	.033
								20	15.43	33.38	-	24.65	330.0	.066
								30	15.38	33.38	-	24.66	328.9	.099
								50	15.18	33.36	-	24.69	326.2	.165
								75	12.50	33.27	-	25.17	280.3	.241
								100	10.78	33.37	-	25.57	242.7	.307
								125	9.84	33.60	-	25.91	210.4	.364
								150	9.43	33.78	-	26.12	190.6	.415
								200	8.75	34.01	-	26.40	163.3	.505
								250	8.05	34.08	-	26.57	147.9	.585
								300	7.55	34.13	-	26.68	137.2	.659
								400	6.80	34.20	-	26.84	122.1	.794
								500	6.10	34.26	-	26.98	108.9	.915
								600	5.36	34.33	-	27.12	94.9	1.024

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED .SIG*T	D*T	DD
93.100							CALCOFI CRUISE 6801						93.100	
HORIZON, JANUARY 13 1968, 1345 GMT, 30 33N 122 13W, SOUNDING 2230 FM, WIND 160 1 KNOT, WEATHER CLOUDY, SEA SLIGHT.														
								0	16.00	33.43	-	24.56	338.4	0
								10	16.00	33.43	-	24.56	338.4	.034
								20	15.68	33.35	-	24.57	337.4	.068
								30	15.49	33.34	-	24.61	334.1	.101
								50	14.81	33.32	-	24.74	321.5	.167
								75	13.25	33.30	-	25.05	292.1	.244
								100	11.66	33.31	-	25.36	262.3	.314
								125	10.61	33.34	-	25.57	242.1	.378
								150	9.82	33.61	-	25.92	209.3	.435
								200	8.90	33.92	-	26.31	172.2	.532
								250	8.21	34.08	-	26.54	150.2	.615
								300	7.18	34.03	-	26.65	139.7	.689
								400	6.24	34.12	-	26.85	121.0	.825
								500	5.64	34.22	-	27.00	106.4	.944
								600	5.16	34.31	-	27.13	94.2	1.051

INPUT Z	T	S	OXY	PHO	SIL	NIT	D*T	OUTPUT AT STANDARD LEVELS OF DEPTH Z	T	S	OXY	SIG*T	D*T	DD
93.100							CALCOFI CRUISE 6801						93.100	
HORIZON, JANUARY 13 1968, 1437 GMT, 30 33N 122 13W, SOUNDING 2230 FM, WIND 160 1 KNOT, WEATHER MISSING, SEA MISSING, WIRE ANGLE 00.														
1	15.96	33.428	5.67	-	-	-	337.7	0	15.96	33.428	5.67	24.57	337.7	0
11	15.99	33.413	5.79	-	-	-	339.5	10	15.99	33.415	5.78	24.55	339.4	.034
31	15.60	33.356	5.77	-	-	-	335.3	20	15.84	33.388	5.80	24.57	338.0	.068
39	15.51	33.342	5.76	-	-	-	334.4	30	15.62	33.359	5.78	24.59	335.6	.102
49	15.37	33.350	5.94	-	-	-	330.9	50	15.34	33.349	5.94	24.65	330.4	.168
64	14.73	33.320	5.87	-	-	-	319.9	75	13.99	33.308	6.00	24.90	305.8	.248
79	13.69	33.306	6.04	-	-	-	300.2	100	12.24	33.325	5.61	25.26	271.6	.321
98	12.37	33.323	5.69	-	-	-	274.0	125	10.86	33.392	4.64	25.57	242.5	.386
123	10.96	33.383	4.67	-	-	-	244.8	150	9.92	33.566	4.17	25.87	214.2	.444
142	10.14	33.493	4.44	-	-	-	223.1	200	9.06	33.890	3.28	26.26	176.8	.543
171	9.52	33.756	3.48	-	-	-	193.8	250	8.24	34.062	2.42	26.52	151.9	.627
201	9.04	33.893	3.27	-	-	-	176.3	300	7.20	34.080	2.12	26.69	136.3	.702
229	8.47	34.012	2.67	-	-	-	159.0	400	6.28		1.31			
269	8.00	34.083	2.27	-	-	-	147.0	500	5.60		.58			
300	7.20K	34.08 K	-	-	-	-	136.3							
327	6.97	34.070	2.01	-	-	-	134.0							
400	6.28	-	1.31	-	-	-	-							
474	5.75	-	.71	-	-	-	-							
552	5.37	-	.44	-	-	-	-							

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
97.32							CALCOFI CRUISE 6801						97.32	
HORIZON, JANUARY 11 1968, 1239 GMT, 32 12N 117 15.2W, SOUNDING 340 FM, WIND 320 4 KNOTS, WEATHER MISSING, SEA SMOOTH.														
								0	14.49	33.39	-	24.86	309.9	0
								10	14.50	33.39	-	24.86	310.1	.031
								20	14.48	33.38	-	24.86	310.4	.062
								30	13.77	33.29	-	24.93	302.9	.093
								50	12.75	33.31	-	25.15	282.0	.151
								75	11.69	33.49	-	25.50	249.5	.218
								100	11.23	33.69	-	25.74	226.8	.278
								125	10.71	33.74	-	25.87	214.2	.334
								150	10.24	33.91	-	26.08	193.9	.386
								200	9.16	34.06	-	26.38	165.7	.477
								250	8.43	34.06	-	26.49	154.9	.560
								300	8.44	34.24	-	26.63	141.6	.636
								400	7.41	34.27	-	26.81	124.9	.776
								500	6.39	34.28	-	26.96	110.9	.900

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
97.35							CALCOFI CRUISE 6801						97.35	

HORIZON, JANUARY 11 1968, 1047 GMT, 32 05.5N 117 27.5W, SOUNDING 667 FM, WIND 180 8 KNOTS, WEATHER MISSING, SEA SMOOTH.

0	14.72	33.43	-	24.84	311.6	0
10	14.72	33.44	-	24.85	310.9	.031
20	14.72	33.44	-	24.85	310.9	.062
30	14.19	33.35	-	24.89	306.8	.093
50	12.41	33.30	-	25.21	276.4	.152
75	11.07	33.51	-	25.62	237.3	.216
100	10.42	33.63	-	25.83	217.6	.274
125	10.26	33.89	-	26.06	195.7	.326
150	9.83	34.05	-	26.26	176.9	.373
200	9.17	34.15	-	26.45	159.2	.459
250	8.42	34.10	-	26.52	151.7	.539
300	8.14	34.20	-	26.65	140.3	.614
400	7.12	34.22	-	26.81	124.8	.752
500	6.50	34.25	-	26.92	114.5	.879
600	5.62	34.35	-	27.11	96.4	.992

97.40							CALCOFI CRUISE 6801						97.40	

HORIZON, JANUARY 11 1968, 0810 GMT, 31 54.5N 117 50W, SOUNDING 500 FM, WIND 280 7 KNOTS, WEATHER CLEAR, SEA SMOOTH.

0	14.28	33.38	-	24.90	306.4	0
10	14.15	33.36	-	24.91	305.2	.031
20	14.03	33.38	-	24.95	301.4	.061
30	13.99	33.39	-	24.97	299.9	.091
50	12.56	33.31	-	25.19	278.5	.149
75	10.68	33.48	-	25.67	232.9	.213
100	10.19	33.64	-	25.88	213.1	.270
125	9.72	33.84	-	26.11	190.7	.321
150	9.33	33.94	-	26.26	177.2	.367
200	8.57	34.08	-	26.49	155.4	.452
250	7.91	34.11	-	26.61	143.7	.529
300	7.81	34.19	-	26.69	136.4	.601
400	6.78	34.23	-	26.86	119.6	.735
500	6.06	34.28	-	27.00	106.9	.854
600	5.60	34.33	-	27.09	97.7	.964

97.45							CALCOFI CRUISE 6801						97.45	

HORIZON, JANUARY 11 1968, 0540 GMT, 31 46N 118 08.5W, SOUNDING 750 FM, WIND 305 5 KNOTS, WEATHER CLEAR, SEA SMOOTH.

0	14.14	33.40	-	24.94	307.1	0
10	14.07	33.38	-	24.94	307.2	.030
20	13.91	33.36	-	24.96	300.5	.060
30	13.66	33.35	-	25.00	296.3	.090
50	11.71	33.33	-	25.37	261.7	.146
75	10.59	33.57	-	25.76	224.8	.207
100	9.86	33.83	-	26.08	193.7	.260
125	9.38	33.95	-	26.26	177.3	.307
150	8.99	34.03	-	26.38	165.4	.351
200	8.38	34.14	-	26.56	148.2	.431
250	8.26	34.23	-	26.65	139.8	.505
300	7.59	34.19	-	26.72	133.3	.575
400	6.67	34.24	-	26.89	117.4	.706
500	6.08	34.29	-	27.00	106.4	.824
600	5.51	34.35	-	27.12	95.1	.932

97.50							CALCOFI CRUISE 6801						97.50	

HORIZON, JANUARY 11 1968, 0247 GMT, 31 36N 118 30.5W, SOUNDING 1350 FM, WIND 010 3 KNOTS, WEATHER PARTLY CLOUDY, SEA SMOOTH.

0	14.84	33.45	-	24.83	312.6	0
10	14.78	33.45	-	24.85	311.4	.031
20	14.55	33.40	-	24.86	310.3	.062
30	12.71	33.19	-	25.07	290.1	.092
50	11.11	33.44	-	25.56	243.1	.146
75	10.25	33.78	-	25.98	203.7	.202
100	9.72	33.89	-	26.15	187.0	.251
125	9.27	33.99	-	26.31	172.6	.297
150	8.90	34.01	-	26.38	165.5	.340
200	8.53	34.09	-	26.50	154.1	.421
250	7.97	34.14	-	26.62	142.3	.497
300	7.44	34.21	-	26.76	129.8	.568
400	6.58	34.24	-	26.90	116.3	.696
500	5.98	34.29	-	27.02	105.2	.813
600	5.49	34.35	-	27.12	94.9	.920

OBSERVED LEVELS OF DEPTH — INPUT

Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T
97.55			CALCOFI CRUISE 6801				97.55

HORIZON, JANUARY 11 1968, 0020 GMT, 31 23.2N 118 50W, SOUNDING 480 FM, WIND 230 6 KNOTS, WEATHER PARTLY CLOUDY, SEA SMOOTH.

STANDARD LEVELS OF DEPTH — INPUT / COMPUTED

Z	T	S	OXY	SIG*T	D*T	DD
0	14.88	33.43	-	24.81	314.9	0
10	14.67	33.43	-	24.85	310.6	.031
20	14.62	33.43	-	24.86	309.6	.062
30	13.50	33.27	-	24.97	299.1	.093
50	11.90	33.30	-	25.31	267.2	.150
75	10.25	33.39	-	25.67	232.5	.212
100	9.50	33.72	-	26.06	196.2	.266
125	9.20	33.92	-	26.26	176.7	.314
150	8.97	34.02	-	26.38	165.8	.357
200	8.32	34.08	-	26.52	151.8	.438
250	7.77	34.12	-	26.64	141.0	.513
300	7.32	34.15	-	26.73	132.6	.584

Z	T	S	OXY	SIG*T	D*T	DD
97.60			CALCOFI CRUISE 6801			97.60

HORIZON, JANUARY 10 1968, 2048 GMT, 31 15.5N 119 10W, SOUNDING 1967 FM, WIND 020 4 KNOTS, WEATHER CLOUDY, SEA SMOOTH.

0	15.23	33.37	-	24.69	326.5	0
10	15.17	33.37	-	24.70	325.3	.033
20	15.17	33.37	-	24.70	325.3	.065
30	15.17	33.37	-	24.70	325.3	.098
50	14.20	33.36	-	24.90	306.2	.161
75	12.45	33.27	-	25.18	279.4	.235
100	10.68	33.39	-	25.60	239.6	.300
125	9.69	33.58	-	25.92	209.5	.357
150	9.38	33.86	-	26.19	183.9	.407
200	8.67	34.07	-	26.46	157.6	.494
250	8.12	34.11	-	26.58	146.7	.572
300	7.58	34.16	-	26.70	135.4	.645
400	6.87	34.21	-	26.84	122.2	.779
500	6.20	34.27	-	26.97	109.3	.901
600	5.48	34.32	-	27.10	97.0	1.011

INPUT — OUTPUT AT STANDARD LEVELS OF DEPTH

Z	T	S	OXY	PHO	SIL	NIT	D*T
97.60			CALCOFI CRUISE 6801				97.60

HORIZON, JANUARY 10 1968, 2136 GMT, 31 15.5N 119 10W, SOUNDING 1967 FM, WIND 020 4 KNOTS, WEATHER CLOUDY, SEA CALM, WIRE ANGLE 15.

Z	T	S	OXY	PHO	SIL	NIT	D*T
0	15.18	33.36 A	5.77	-	-	-	326.2
10	15.18	33.37	5.91	-	-	-	325.5
29	15.14	33.36	5.80	-	-	-	325.4
37	15.13	33.37	5.80	-	-	-	324.4
47	14.36	33.36	6.09	-	-	-	309.4
61	13.90	33.35	5.89	-	-	-	301.0
75	12.82	33.32	5.75	-	-	-	282.5
93	11.45	33.31	5.24	-	-	-	258.6
116	10.13	33.47	4.52	-	-	-	224.7
135	9.56	33.68	3.80	-	-	-	200.1
162	9.34	33.88	3.13	-	-	-	181.8
190	8.87	34.02	2.67	-	-	-	164.3
217	8.51	34.06	2.45	-	-	-	156.0
256	8.08	34.11	2.05	-	-	-	146.1
312	7.53	34.17 A	1.54	-	-	-	134.0
383	7.07	-	1.07	-	-	-	-
455	6.37	-	.74	-	-	-	-
533	5.74	-	.49	-	-	-	-

Z	T	S	OXY	SIG*T	D*T	DD
0	15.18	33.360	5.77	24.69	326.2	0
10	15.18	33.370	5.91	24.70	325.5	.033
20	15.16	33.364	5.87	24.70	325.5	.065
30	15.14	33.361	5.79	24.70	325.2	.098
50	14.26	33.359	6.07	24.89	307.5	.161
75	12.82	33.320	5.75	25.15	282.5	.235
100	10.99	33.343	5.03	25.51	248.2	.302
125	9.81	33.569	4.17	25.89	212.2	.360
150	9.41	33.802	3.39	26.14	188.7	.411
200	8.73	34.041	2.58	26.43	160.7	.500
250	8.14	34.103	2.11	26.57	147.5	.579
300	7.64	34.158	1.64	26.69	136.3	.653
400	6.89		.98			
500	5.99		.58			

A) AN ERROR IN THE STANDARD DIAL SETTING OF THE SALINOMETER IS BELIEVED TO HAVE RESULTED IN LOW SALINITY VALUES FOR THIS STATION. THESE LISTED VALUES INCORPORATE A CORRECTION OF +0.15.

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
97.70					CALCOFI CRUISE 6801								97.70	

HORIZON, JANUARY 10 1968, 1540 GMT, 30 54.2N 119 50W, SOUNDING 2050 FM, WIND 250 6 KNOTS, WEATHER OVERCAST, SEA SMOOTH.

0	15.54	33.45	-	24.68	327.2	0
10	15.54	33.45	-	24.68	327.2	.033
20	15.32	33.42	-	24.71	324.7	.065
30	15.14	33.38	-	24.71	323.9	.098
50	14.17	33.30	-	24.86	310.0	.161
75	12.34	33.31	-	25.23	274.4	.235
100	10.88	33.44	-	25.60	239.2	.300
125	10.22	33.57	-	25.82	218.7	.357
150	9.73	33.75	-	26.04	197.6	.410
200	8.94	34.01	-	26.37	166.1	.503
250	7.97	34.06	-	26.56	148.3	.583
300	7.35	34.06	-	26.65	139.8	.658
400	6.85	34.22	-	26.85	121.2	.794
500	6.25	34.28	-	26.97	109.2	.915
600	5.69	34.36	-	27.11	96.5	1.025

97.80					CALCOFI CRUISE 6801								97.80	

HORIZON, JANUARY 10 1968, 1107 GMT, 30 35N 120 31W, SOUNDING 1720 FM, WIND 230 1 KNOT, WEATHER MISSING, SEA CALM.

0	15.87	33.44	-	24.60	334.9	0
10	15.69	33.39	-	24.60	334.7	.033
20	15.56	33.38	-	24.62	332.7	.067
30	15.55	33.38	-	24.62	332.5	.100
50	13.59	33.26	-	24.95	301.6	.164
75	12.06	33.28	-	25.26	271.6	.236
100	10.97	33.41	-	25.56	243.0	.301
125	10.03	33.65	-	25.91	209.7	.358
150	9.32	33.83	-	26.17	185.2	.408
200	8.68	34.05	-	26.45	159.3	.496
250	7.92	34.06	-	26.57	147.6	.574
300	7.45	34.08	-	26.65	139.6	.648
400	6.17	34.12	-	26.86	120.2	.783
500	6.08	34.31	-	27.02	104.9	.902
600	5.49	34.37	-	27.14	93.4	1.008

100.10					CALCOFI CRUISE 6801								100.10	

HORIZON, JANUARY 9 1968, 0250 GMT, 31 40.5N 116 46.5W, SOUNDING 216 FM, WIND 240 1 KNOT, WEATHER MISSING, SEA SLIGHT.

0	15.37	33.45	-	24.72	323.6	0
10	15.28	33.44	-	24.73	322.4	.032
20	15.27	33.45	-	24.74	321.5	.065
30	14.60	33.37	-	24.82	313.5	.096
50	12.68	33.38	-	25.22	275.5	.155
75	11.87	33.45	-	25.43	255.7	.222
100	11.31	33.61	-	25.66	234.0	.284
125	10.79	33.71	-	25.83	217.8	.341
150	10.37	33.83	-	26.00	201.9	.394
200	9.67	34.05	-	26.29	174.4	.490
250	9.24	34.18	-	26.46	158.1	.575
300	8.57	34.24	-	26.61	143.5	.653

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
100.10					CALCOFI CRUISE 6801								100.10	

HORIZON, JANUARY 9 1968, 0320 GMT, 31 40.5N 116 46.5W, SOUNDING 216 FM, WIND 240 1 KNOT, WEATHER MISSING, SEA MISSING, WIRE ANGLE 10.

0	15.34	33.453	5.79	-	-	-	322.7	0	15.34	33.453	5.79	24.73	322.7	0
10	15.27	33.441	5.90	-	-	-	322.1	10	15.27	33.441	5.90	24.73	322.1	.032
20	15.24K	33.44 K	-	-	-	-	321.6	20	15.24	33.440	6.06	24.74	321.6	.064
29	14.55	33.405	6.04	-	-	-	310.0	30	14.48	33.395	6.00	24.87	308.9	.096
38	13.88	33.364	5.64	-	-	-	299.6	50	12.96	33.380	5.27	25.17	280.8	.155
48	13.09	33.374	5.35	-	-	-	283.6	75	11.55	33.473	4.62	25.43	255.4	.223
63	12.31	33.429	4.73	-	-	-	265.1	100	11.26	33.618	4.16	25.67	232.6	.284
77	11.90	33.482	4.60	-	-	-	253.8	125	10.90	33.695	3.60	25.80	220.7	.341
96	11.33	33.605	4.28	-	-	-	234.8	150	10.50	33.806	3.21	25.96	205.8	.395
116	11.04	33.661	3.78	-	-	-	225.6	200	9.79	34.028	2.64	26.25	177.8	.493
136	10.72	33.741	3.41	-	-	-	214.3	250	9.25	34.161	2.12	26.44	159.7	.580
164	10.28	33.873	3.04	-	-	-	197.3	300	8.59	34.240	1.60	26.61	143.5	.658
194	9.80	34.008	2.70	-	-	-	180.5							
222	9.53	34.091	2.41	-	-	-	169.2							
262	9.13	34.185	2.00	-	-	-	156.0							
300	8.59K	-	-	-	-	-	-							
315	8.55	34.252	1.44	-	-	-	142.3							

OBSERVED LEVELS OF DEPTH

	INPUT						COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	
100.40					CALCOFI CRUISE 6801			100.40

HORIZON, JANUARY 9 1968, 0833 GMT, 31 20.5N 117 27W, SOUNDING 1050 FM, WIND CALM, WEATHER MISSING, SEA SLIGHT.

STANDARD LEVELS OF DEPTH

	INPUT				COMPUTED	
Z	T	S	OXY	SIG*T	D*T	DD
0	14.77	33.38	-	24.79	316.3	0
10	14.73	33.38	-	24.80	315.5	.032
20	14.60	33.35	-	24.81	315.0	.063
30	13.34	33.26	-	25.00	296.8	.094
50	11.72	33.31	-	25.35	263.3	.150
75	10.92	33.40	-	25.57	242.9	.214
100	10.13	33.59	-	25.85	215.8	.271
125	9.62	33.77	-	26.08	194.3	.323
150	9.33	33.95	-	26.26	176.5	.370
200	8.66	34.13	-	26.51	153.0	.454
250	8.17	34.18	-	26.63	142.2	.530
300	7.78	34.22	-	26.71	133.7	.601
400	6.76	34.25	-	26.88	117.8	.733
500	6.11	34.28	-	26.99	107.5	.852
600	5.54	34.33	-	27.10	97.0	.961

	INPUT						OUTPUT AT STANDARD LEVELS OF DEPTH	
Z	T	S	OXY	PHO	SIL	NIT	D*T	
100.40					CALCOFI CRUISE 6801			100.40

HORIZON, JANUARY 9 1968, 0932 GMT, 31 20.5N 117 27W, SOUNDING 1050 FM, WIND CALM, WEATHER MISSING, SEA MISSING, WIRE ANGLE 03.

0	14.73	33.382	5.93	-	-	-	315.3	0	14.73	33.382	5.93	24.80	315.3	0
10	14.76	33.389	6.04	-	-	-	315.7	10	14.76	33.385	6.04	24.80	315.7	.032
30	14.48	33.362	5.99	-	-	-	311.7	20	14.66	33.377	6.03	24.82	314.2	.063
38	13.67	33.210	6.02	-	-	-	299.5	30	14.48	33.362	5.99	24.84	311.7	.094
48	12.54	33.291	5.93	-	-	-	279.5	50	12.35	33.291	5.87	25.22	276.1	.153
63	11.42	33.312	5.37	-	-	-	257.9	75	10.98	33.353	5.01	25.52	247.4	.219
77	10.93	33.362	4.96	-	-	-	245.9	100	10.32	33.513	4.49	25.76	224.5	.279
96	10.43	33.482	4.59	-	-	-	228.7	125	9.69	33.721	3.86	26.03	199.0	.332
121	9.77	33.687	3.95	-	-	-	202.9	150	9.29	33.931	3.17	26.26	177.3	.380
141	9.40	33.853	3.47	-	-	-	184.8	200	8.61	34.100	2.37	26.50	154.5	.464
170	9.07	34.068	2.58	-	-	-	163.8	250	8.22	34.188	1.66	26.62	142.3	.541
199	8.62	34.098	2.39	-	-	-	154.8	300	7.76	34.228	1.14	26.73	132.1	.612
228	8.45	34.166	1.90	-	-	-	147.3	400	6.72	34.265	.66	26.90	116.2	.741
267	8.03	34.199	1.50	-	-	-	138.8	500	6.00	34.305	.38	27.03	104.2	.858
326	7.55	34.265	.90	-	-	-	127.2							
398	6.73	34.264	.67	-	-	-	116.4							
471	6.20	34.292	.44	-	-	-	107.7							
550	5.65	34.331	.33	-	-	-	98.2							

	INPUT						COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	
100.50					CALCOFI CRUISE 6801			100.50

HORIZON, JANUARY 9 1968, 1407 GMT, 31 05N 118 07.5W, SOUNDING 900 FM, WIND 290 1 KNOT, WEATHER MISSING, SEA MODERATE.

	INPUT			COMPUTED	
Z	T	S	OXY	SIG*T	D*T	DD
0	14.24	33.47	-	24.98	299.0	0
10	14.24	33.47	-	24.98	299.0	.030
20	13.73	33.40	-	25.03	294.0	.060
30	12.41	33.21	-	25.14	283.1	.089
50	10.47	33.51	-	25.73	227.2	.140
75	9.64	33.76	-	26.07	195.4	.193
100	9.31	33.86	-	26.20	182.9	.241
125	8.99	33.94	-	26.31	172.1	.285
150	8.78	33.99	-	26.38	165.2	.328
200	8.12	34.11	-	26.58	146.7	.408
250	7.67	34.14	-	26.67	138.1	.481
300	7.16	34.16	-	26.76	129.8	.550
400	6.58	34.28	-	26.93	113.3	.677
500	5.87	34.31	-	27.05	102.4	.791
600	5.39	34.36	-	27.14	93.0	.895

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
100.60							CALCOFI CRUISE 6801						100.60	

HORIZON, JANUARY 9 1968, 1914 GMT, 30 39N 118 47W, SOUNDING 1650 FM, WIND 010 1 KNOT, WEATHER OVERCAST, SEA MODERATE.

0	15.28	33.39	-	24.69	326.1	0
10	15.16	33.38	-	24.71	324.3	.033
20	14.95	33.39	-	24.76	319.2	.065
30	14.90	33.39	-	24.77	318.2	.097
50	14.48	33.33	-	24.82	314.0	.160
75	12.27	33.28	-	25.22	275.4	.234
100	10.94	33.34	-	25.52	247.6	.300
125	9.81	33.55	-	25.87	213.6	.358
150	9.17	33.79	-	26.16	185.9	.409
200	8.55	34.00	-	26.43	161.1	.497
250	8.09	34.05	-	26.54	150.7	.577
300	7.50	34.11	-	26.67	138.1	.652
400	6.40	34.15	-	26.85	120.8	.786
500	6.21	34.31	-	27.00	106.5	.906
600	5.68	34.34	-	27.09	97.9	1.015

	INPUT							OUTPUT AT STANDARD LEVELS OF DEPTH						
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
100.60							CALCOFI CRUISE 6801						100.60	

HORIZON, JANUARY 9 1968, 2007 GMT, 30 39N 118 47W, SOUNDING 1600 FM, WIND MISSING, WEATHER MISSING, SEA MISSING, WIRE ANGLE 05.

0	15.41	33.409	5.81	-	-	-	327.4	0	15.41	33.409	5.81	24.68	327.4	0
10	15.21	33.387	5.79	-	-	-	324.8	10	15.21	33.387	5.79	24.70	324.8	.033
29	14.97	33.405	5.87	-	-	-	318.5	20	15.06	33.395	5.84	24.74	321.2	.065
38	14.90	33.392	5.82	-	-	-	318.1	30	14.96	33.403	5.86	24.77	318.5	.097
47	14.80	33.412	6.05	-	-	-	314.5	50	14.66	33.400	6.05	24.83	312.5	.160
62	13.81	33.330	5.91	-	-	-	300.7	75	12.60	33.281	5.81	25.16	281.4	.235
76	12.51	33.279	5.80	-	-	-	279.8	100	10.97	33.378	5.02	25.54	245.4	.301
95	11.23	33.348	5.19	-	-	-	252.0	125	9.95	33.568	4.27	25.86	214.5	.359
119	10.17	33.518	4.43	-	-	-	221.8	150	9.28	33.784	3.74	26.14	188.0	.410
139	9.52	33.688	3.95	-	-	-	198.9	200	8.55	34.015	3.60	26.44	159.5	.499
167	9.00	33.909	3.55	-	-	-	174.5	250	7.94	34.114	2.16	26.61	143.5	.577
196	8.67	34.005	3.72	-	-	-	162.5	300	7.40	34.167	1.65	26.73	132.4	.648
200	8.55K	-	-	-	-	-	-	400	6.47	34.225	1.05	26.90	116.0	.778
224	8.44	34.068	2.72	-	-	-	154.4	500	6.31	34.365	.46	27.02	103.6	.854
263	7.67	34.132	1.98	-	-	-	138.7							
321	7.30	34.179	1.55	-	-	-	130.2							
393	6.45	34.205	1.14	-	-	-	117.3							
466	6.45	34.356	.47	-	-	-	106.0							
544	6.00	34.376	.45	-	-	-	99.0							

	INPUT						COMPUTED		INPUT				COMPUTED	
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
100.70							CALCOFI CRUISE 6801						100.70	

HORIZON, JANUARY 10 1968, 0109 GMT, 30 20.5N 119 27.5W, SOUNDING 2200 FM, WIND 270 1 KNOT, WEATHER OVERCAST, SEA MODERATE.

0	16.19	33.58	-	24.63	331.6	0
10	16.14	33.58	-	24.64	330.5	.033
20	16.13	33.59	-	24.65	329.6	.066
30	16.13	33.59	-	24.65	329.6	.099
50	16.13	33.59	-	24.65	329.6	.165
75	13.25	33.39	-	25.12	285.5	.243
100	11.30	33.49	-	25.57	242.7	.309
125	10.38	33.72	-	25.91	210.2	.366
150	9.62	33.88	-	26.16	186.2	.417
200	8.56	34.02	-	26.44	159.7	.505
250	7.98	34.05	-	26.55	149.2	.584
300	7.25	34.07	-	26.67	137.7	.658
400	6.23	34.13	-	26.86	120.2	.792
500	5.91	34.27	-	27.01	105.8	.911
600	5.51	34.36	-	27.13	94.4	1.018

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
100.80							CALCOFI CRUISE 6801						100.80	

HORIZON, JANUARY 10 1968, 0530 GMT, 30 00N 120 04.5W, SOUNDING 2125 FM, WIND 250 1 KNOT, WEATHER MISSING, SEA CALM.

0	15.83	33.41	-	24.58	336.2	0
10	15.78	33.41	-	24.60	335.2	.034
20	15.77	33.41	-	24.60	335.0	.067
30	15.77	33.41	-	24.60	335.0	.101
50	15.66	33.40	-	24.61	333.4	.168
75	13.13	33.21	-	25.00	296.5	.247
100	12.32	33.34	-	25.26	271.9	.318
125	10.98	33.40	-	25.55	243.9	.384
150	9.74	33.66	-	25.97	204.4	.440
200	9.00	33.97	-	26.33	170.0	.536
250	8.43	34.05	-	26.48	155.6	.619
300	7.72	34.10	-	26.63	141.8	.696
400	6.76	34.20	-	26.84	121.6	.833
500	6.25	34.29	-	26.98	108.4	.954
600	5.60	34.35	-	27.11	96.2	1.064

INPUT Z	T	S	OXY	PHO	SIL	NIT	D*T	OUTPUT AT STANDARD LEVELS OF DEPTH Z	T	S	OXY	SIG*T	D*T	DD
100.80							CALCOFI CRUISE 6801						100.80	

HORIZON, JANUARY 10 1968, 0622 GMT, 30 00N 120 04.5W, SOUNDING 2125 FM, WIND 250 1 KNOT, WEATHER MISSING, SEA CALM, WIRE ANGLE 05.

0	15.80	33.414	5.72	-	-	-	335.3	0	15.80	33.414	5.72	24.59	335.3	0
10	15.81	33.409	5.83	-	-	-	335.9	10	15.81	33.409	5.83	24.59	335.9	.034
30	15.76	33.406	5.73	-	-	-	335.0	20	15.79	33.407	5.80	24.59	335.6	.067
53	15.72	33.400	5.71	-	-	-	334.6	30	15.76	33.406	5.73	24.60	335.0	.101
63	15.35	33.375	5.96	-	-	-	328.6	50	15.72	33.403	5.69	24.60	334.5	.168
73	14.45	33.332	5.93	-	-	-	313.3	75	14.17	33.318	5.92	24.87	308.8	.249
88	12.62	33.268	5.81	-	-	-	282.7	100	12.46	33.353	5.57	25.24	273.4	.322
102	12.42	33.371	5.52	-	-	-	271.4	125	11.25	33.408	5.07	25.51	247.9	.388
126	11.19	33.412	5.05	-	-	-	246.6	150	9.95	33.630	4.27	25.91	210.0	.446
146	10.06	33.604	4.38	-	-	-	213.6	200	8.99	33.966	3.22	26.33	170.1	.543
170	9.62	33.746	3.77	-	-	-	196.1	250	8.43	34.078	2.62	26.51	153.5	.626
200	8.99	33.966	3.22	-	-	-	170.1	300	7.46	34.124	2.04	26.69	136.5	.700
229	8.45	34.043	2.92	-	-	-	156.4	400	6.71	34.220	.93	26.87	119.5	.834
250	8.43K	-	-	-	-	-	-	500	6.16	34.330	.35	27.03	104.3	.952
268	7.90	34.099	2.36	-	-	-	144.4							
326	7.30	34.140	1.81	-	-	-	133.1							
399	6.72	34.219	.94	-	-	-	119.6							
472	6.30	34.303	.45	-	-	-	108.1							
550	5.92	34.371	.28	-	-	-	98.4							

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
103.35							CALCOFI CRUISE 6801						103.35	

HORIZON, JANUARY 8 1968, 1805 GMT, 30 56N 116 45W, SOUNDING 1030 FM, WIND 000 2 KNOTS, WEATHER PARTLY CLOUDY, SEA SMOOTH.

0	15.56	33.45	-	24.68	327.6	0
10	15.56	33.45	-	24.68	327.6	.033
20	15.55	33.45	-	24.68	327.4	.066
30	15.51	33.44	-	24.68	327.3	.098
50	13.04	33.28	-	25.07	289.6	.160
75	12.09	33.41	-	25.36	262.5	.230
100	11.23	33.61	-	25.67	232.7	.292
125	10.56	33.79	-	25.93	208.0	.348
150	9.99	33.96	-	26.16	186.2	.398
200	9.49	34.14	-	26.39	164.9	.487
250	9.32	34.30	-	26.54	150.4	.568
300	8.87	34.33	-	26.63	141.3	.644
400	7.38	34.23	-	26.78	127.5	.784
500	6.21	34.25	-	26.95	110.9	.910
600	5.62	34.32	-	27.08	98.7	1.022

OBSERVED LEVELS OF DEPTH — STANDARD LEVELS OF DEPTH

INPUT Z	T	S	OXY	PHO	SIL	NIT	COMPUTED D*T	INPUT Z	T	S	OXY	COMPUTED SIG*T	D*T	DD
103.40							CALCOFI CRUISE 6801						103.40	
HORIZON, JANUARY 8 1968, 1507 GMT, 30 47N 117 05W, SOUNDING 850 FM, WIND 350 2 KNOTS, WEATHER PARTLY CLOUDY, SEA SLIGHT.														
								0	15.46	33.48	-	24.72	323.3	0
								10	15.45	33.48	-	24.72	323.1	.032
								20	14.65	33.32	-	24.77	318.2	.064
								30	14.18	33.33	-	24.88	308.0	.096
								50	12.48	33.39	-	25.27	271.1	.154
								75	11.14	33.65	-	25.72	228.2	.217
								100	10.52	33.82	-	25.96	205.2	.271
								125	10.19	33.98	-	26.14	187.9	.321
								150	9.86	34.05	-	26.25	177.4	.367
								200	9.29	34.12	-	26.40	163.3	.454
								250	8.87	34.27	-	26.59	145.8	.534
								300	8.49	34.33	-	26.69	135.7	.607
								400	6.79	34.21	-	26.85	121.2	.741
								500	6.28	34.30	-	26.99	108.1	.862
								600	5.64	34.33	-	27.09	98.1	.972
103.50							CALCOFI CRUISE 6801						103.50	
HORIZON, JANUARY 8 1968, 0952 GMT, 30 27.5N 117 44.5W, SOUNDING 1140 FM, WIND 310 15 KNOTS, WEATHER MISSING, SEA MODERATE.														
								0	14.83	33.38	-	24.78	317.5	0
								10	14.83	33.38	-	24.78	317.5	.032
								20	14.83	33.38	-	24.78	317.5	.064
								30	14.83	33.38	-	24.78	317.5	.095
								50	14.22	33.31	-	24.86	310.3	.158
								75	12.20	33.22	-	25.19	278.5	.232
								100	10.68	33.15	-	25.41	257.3	.300
								125	9.89	33.60	-	25.90	211.2	.359
								150	9.45	33.81	-	26.14	188.7	.410
								200	8.60	34.03	-	26.44	159.6	.498
								250	7.96	34.06	-	26.56	148.1	.577
								300	7.88	34.17	-	26.66	138.8	.651
								400	6.76	34.25	-	26.88	117.8	.785
								500	6.12	34.28	-	26.99	107.6	.904
								600	5.68	34.33	-	27.09	98.6	1.014
103.60							CALCOFI CRUISE 6801						103.60	
HORIZON, JANUARY 8 1968, 0334 GMT, 30 07N 118 24.5W, SOUNDING 1770 FM, WIND 310 14 KNOTS, WEATHER MISSING, SEA MODERATE.														
								0	15.84	33.45	-	24.61	333.5	0
								10	15.84	33.45	-	24.61	333.5	.033
								20	15.83	33.45	-	24.62	333.3	.067
								30	15.82	33.45	-	24.62	333.1	.100
								50	15.28	33.33	-	24.64	330.5	.167
								75	13.62	33.36	-	25.02	294.8	.245
								100	12.30	33.25	-	25.19	278.1	.317
								125	10.80	33.38	-	25.57	242.3	.383
								150	9.89	33.65	-	25.94	207.5	.440
								200	9.10	33.95	-	26.30	173.0	.537
								250	8.17	34.02	-	26.50	154.1	.621
								300	7.41	34.06	-	26.64	140.6	.697
								400	6.24	34.09	-	26.83	123.3	.834
								500	5.51	34.17	-	26.98	108.6	.955
								600	5.01	34.26	-	27.11	96.3	1.064

INPUT Z	T	S	OXY	PHO	SIL	NIT	D*T	OUTPUT AT STANDARD LEVELS OF DEPTH Z	T	S	OXY	SIG*T	D*T	CC
103.60							CALCOFI CRUISE 6801						103.60	
HORIZON, JANUARY 8 1968, 0422 GMT, 30 07N 118 24W, SOUNDING 1770 FM, WIND 320 14 KNOTS, WEATHER CLEAR, SEA MISSING, WIRE ANGLE 25.														
0	15.75	33.470	5.74	-	-	-	330.2	0	15.75	33.470	5.74	24.65	330.2	0
9	15.78	33.470	5.75	-	-	-	330.8	10	15.78	33.470	5.75	24.64	330.8	.033
27	15.75	33.460	5.73	-	-	-	330.9	20	15.77	33.466	5.74	24.64	330.9	.066
35	15.73	33.450	5.75	-	-	-	331.2	30	15.75	33.457	5.74	24.64	331.0	.099
49	15.60	33.430	6.02	-	-	-	329.9	50	15.55	33.425	6.01	24.66	329.1	.166
62	14.76	33.360	5.87	-	-	-	317.5	75	14.00	33.349	5.81	24.93	303.1	.245
84	13.51	33.340	5.78	-	-	-	294.2	100	12.69	33.310	5.67	25.17	280.8	.319
101	12.63	33.310	5.66	-	-	-	279.8	125	10.80	33.437	4.99	25.62	238.1	.384
118	11.13	33.390	5.30	-	-	-	247.2	150	10.02	33.615	4.06	25.89	212.1	.441
135	10.47	-	4.52	-	-	-	-	200	9.21	33.912	3.41	26.25	177.5	.540
160	9.78	33.690	3.84	-	-	-	202.8	250	8.28	34.054	3.03	26.51	153.1	.625
190	9.31	33.860	3.52	-	-	-	182.9	300	7.51	34.069	2.38	26.64	141.2	.701
215	9.05	33.980	3.25	-	-	-	170.0	400	6.28	34.102	1.44	26.83	122.9	.838
257	8.11	34.060	2.98	-	-	-	150.3	500	5.53	34.192	.70	26.99	107.2	.959
305	7.45	34.070	2.30	-	-	-	140.4							
381	6.46	34.090	1.66	-	-	-	126.0							
459	5.80	34.150	.92	-	-	-	113.5							
540	5.32	34.240	.59	-	-	-	101.2							

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
103.70							CALCOFI CRUISE 6801						103.70	
HORIZON, JANUARY 7 1968, 2222 GMT, 29 46.5N 119 04W, SOUNDING 1882 FM, WIND 330 12 KNOTS, WEATHER PARTLY CLOUDY, SEA MODERATE.														
								0	16.58	33.54	-	24.51	343.0	0
								10	16.55	33.54	-	24.52	342.4	.034
								20	16.53	33.54	-	24.52	341.9	.069
								30	16.53	33.53	-	24.52	342.7	.103
								50	16.52	33.54	-	24.53	341.7	.172
								75	15.53	33.44	-	24.67	327.7	.256
								100	12.54	33.38	-	25.25	272.9	.331
								125	11.10	33.54	-	25.64	235.6	.396
								150	10.50	33.70	-	25.87	213.7	.452
								200	9.58	34.02	-	26.28	175.2	.551
								250	8.93	34.16	-	26.49	154.8	.636
								300	8.23	34.18	-	26.62	143.0	.713
								400	7.28	34.28	-	26.83	122.4	.852
								500	6.45	34.33	-	26.99	107.9	.974
								600	5.70	34.34	-	27.09	98.1	1.084
103.80							CALCOFI CRUISE 6801						103.80	
HORIZON, JANUARY 7 1968, 1720 GMT, 29 23.5N 119 43.5W, SOUNDING 2017 FM, WIND 280 8 KNOTS, WEATHER CLOUDY, SEA MODERATE.														
								0	16.30	33.55	-	24.59	336.2	0
								10	16.30	33.55	-	24.59	336.2	.034
								20	16.30	33.55	-	24.59	336.2	.067
								30	16.30	33.55	-	24.59	336.2	.101
								50	16.30	33.55	-	24.59	336.2	.168
								75	14.15	33.39	-	24.93	303.0	.249
								100	12.82	33.43	-	25.23	274.5	.322
								125	10.92	33.54	-	25.67	232.5	.386
								150	10.05	33.78	-	26.01	200.4	.440
								200	8.92	34.00	-	26.37	166.5	.534
								250	8.17	34.07	-	26.54	150.4	.615
								300	7.53	34.10	-	26.66	139.2	.690
								400	6.45	34.17	-	26.86	119.9	.825
								500	5.84	34.26	-	27.01	105.7	.943
								600	5.08	34.30	-	27.13	94.1	1.050

DATA AT NET TOW STATIONS

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	δ_T cl/ton
60.50-H	I-23	1908	37°57.5'	122°53.5'	24	140°	1	cloudy	smooth	10	11.02	33.063	6.33				270
60.55-H	23	2210	37°47.0'	123°15.0'	50	300°	3	partly cloudy	smooth	10	11.98	33.379	6.39				263
60.70-H	24	0514	37°17.0'	124°21.0'	2150	080°	2	missing	smooth	10	11.66	32.969	6.54				287
60.90-H	24	1444	36°37.0'	125°47.0'	2325	310°	9	fog	smooth	10	12.77	32.995	6.26				306
63.50-H	23	1530	37°23.5'	122°28.0'	15	330°	1	cloudy	smooth	10	11.58	33.362	6.07				257
63.55-H	23	1210	37°12.0'	122°50.5'	185	320°	10	missing	smooth	10	12.42	33.368	5.99				272
63.70-H	25	1028	36°42.5'	123°55.0'	2065	220°	19	missing	rough	10	11.46	33.088	6.51				275
63.80-H	25	0545	36°23.0'	124°35.0'	2220	320°	23	missing	rough	10	11.96	32.936	6.45				295
63.90-H	25	0130	36°03.0'	125°20.0'	2408	120°	17	overcast	rough	10	12.43	32.953	6.28				302
67.48-H	22	2235	36°53.0'	121°56.0'	22	220°	1	clear	moderate	10	11.92	33.378	6.11				262
67.55-H	23	0155	36°39.5'	122°26.5'	1170	320°	6	clear	rough	10	12.31	33.386	6.11				268
67.70-H	25	1430	36°08.0'	123°29.5'	1915	340°	17	missing	very rough	10	12.26	33.303	6.30				274
70.51-H	21	2220	36°11.5'	121°44.0'	53	320°	4	cloudy	moderate	10	12.32	33.395	5.86				268
70.70-H	21	1032	35°33.0'	123°06.0'	2050	030°	25	missing	very rough	10	12.58	33.196	6.27				287
70.90-H	21	0045	34°55.0'	124°29.0'	2170	320°	16	partly cloudy	rough	10	12.87	33.199	6.28				292
73.50-H	26	0823	35°37.0'	121°17.0'	56	320°	1	missing	moderate	10	13.22	33.379	6.36				286
73.70-H	25	2151	34°58.0'	122°40.0'	2170	320°	12	overcast	very rough	10	12.48	33.271	6.28				280
73.100-H	20	1515	33°58.5'	124°44.0'	2430	330°	16	cloudy	moderate	10	14.70	33.318	5.84				319
77.48-H	26	0830	35°08.5'	120°43.5'	16	320°	9	missing	smooth	10	12.79	33.387	6.55				277

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DATA AT NET TOW STATIONS

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	δT cl/ton
77.55-H	I-26	1652	34°54.5'	121°13.0'	300	290°	12	overcast	high	10	13.10	33.382	-				283
77.100-H	20	1054	33°24.0'	124°20.0'	2475	300°	16	missing	slight	10	14.17	33.224	5.90				316
80.51-H	19	0600	34°26.5'	120°32.5'	55	270°	7	missing	moderate	10	13.32	33.368	6.04				288
80.55-H	19	0914	34°19.0'	120°48.0'	424	290°	13	missing	slight	10	13.47	33.353	6.09				292
80.65-H	19	1445	33°59.5'	121°30.5'	1820	300°	7	clear	rough	10	12.98	33.367	6.09				282
80.70-H	19	1726	33°49.0'	121°51.0'	1943	350°	14	partly cloudy	slight	10	13.48	33.316	5.99				295
80.90-H	20	0145	33°14.0'	123°13.0'	2100	330°	12	cloudy	moderate	10	13.39	33.257	6.11				298
83.40-H	18	1510	34°14.0'	119°22.0'	25	350°	11	partly cloudy	rough	10	13.72	33.360	5.98				297
83.51-H	18	0610	33°52.0'	120°07.5'	70	180°	2	missing	smooth	10	13.60	33.381	5.89				293
83.55-H	18	0350	33°44.0'	120°24.5'	710	270°	12	missing	rough	10	13.48	33.391	5.91				290
83.65-H	17	2215	33°24.0'	121°06.0'	1900	270°	21	partly cloudy	very rough	10	14.20	33.392	6.03				304
83.70-H	17	1935	33°15.0'	121°27.0'	1935	310°	20	partly cloudy	very rough	10	13.65	33.356	6.03				296
83.80-H	17	1440	32°54.0'	122°08.0'	2300	300°	24	partly cloudy	very rough	10	13.96	33.408	6.22				298
83.90-H	17	1033	32°35.0'	122°48.0'	2400	020°	15	missing	moderate	10	14.18	33.406	5.98				302
83.100-H	17	0620	32°14.0'	123°28.0'	2100	210°	11	missing	rough	10	13.98	33.333	6.38				304
87.33-H	15	1225	33°54.0'	118°29.5'	30	140°	5	missing	smooth	10	13.80	33.350	6.09				299
87.35-H	15	1335	33°50.0'	118°37.5'	178	020°	6	missing	smooth	10	14.14	33.362	5.99				305
87.40-H	15	1614	33°40.0'	118°58.0'	480	070°	1	missing	moderate	10	14.35	33.385	5.88				307
87.45-H	15	1853	33°29.0'	119°19.5'	870	270°	15	partly cloudy	rough	10	14.51	33.404	6.00				309

DATA AT NET TOW STATIONS																	
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	δ_T cl/ton
87.55-H	I-16	0503	33°10.0'	120°00.0'	643	230°	21	missing	moderate	10	14.10	33.386	6.03				302
87.70-H	16	1250	32°39.5'	121°02.0'	2020	300°	17	missing	rough	10	14.60	33.521	5.91				302
87.80-H	16	1720	32°21.5'	121°45.0'	2175	350°	15	partly cloudy	very rough	10	14.10	33.385	5.99				302
87.90-H	16	2145	31°59.0'	122°24.0'	2210	340°	14	clear	very rough	10	15.74	33.397	5.72				335
87.100-H	17	0145	31°40.0'	123°04.0'	2160	330°	12	partly cloudy	high	10	15.93	33.379	5.72				341
90.32-H	15	0520	33°22.0'	118°02.5'	230	170°	2	missing	calm	10	14.56	33.426	6.03				309
90.45-H	14	2230	32°54.0'	118°55.5'	912	300°	1	partly cloudy	moderate	10	14.06	33.430	6.10				298
90.53-H	14	1904	32°39.0'	119°28.0'	680	270°	16	partly cloudy	moderate	10	15.25	33.382	5.81				326
90.65-H	14	1220	32°17.0'	120°17.5'	2085	320°	19	clear	slight	10	15.22	33.382	5.84				325
90.70-H	14	1003	32°05.0'	120°39.0'	2100	300°	10	clear	smooth	10	14.64	33.388	5.92				313
90.90-H	14	0040	31°24.0'	122°02.0'	2100	280°	5	partly cloudy	slight	10	15.76	33.402	5.84				335
93.27-H	12	0225	32°56.0'	117°19.0'	15	330°	4	clear	smooth	10	14.53	33.368	-				312
93.28-H	12	0240	32°54.5'	117°22.0'	320	330°	4	clear	smooth	10	14.88	33.428	5.95				315
93.30-H	12	0520	32°50.5'	117°31.5'	512	330°	7	missing	smooth	10	15.24	33.457	5.89				320
93.35-H	12	0733	32°40.5'	117°51.5'	320	080°	12	missing	slight	10	15.48	33.454	5.83				326
93.40-H	12	1004	32°30.0'	118°11.5'	890	320°	13	missing	slight	10	15.28	33.458	5.82				321
93.45-H	12	1215	32°21.5'	118°33.0'	960	310°	9	missing	slight	10	15.34	33.440	5.86				324
93.50-H	12	1500	32°14.5'	118°53.0'	720	350°	12	overcast	rough	10	15.14	33.456	5.82				318
93.55-H	12	1710	32°05.0'	119°15.0'	960	020°	6	overcast	rough	10	14.42	33.383	5.96				309

DATA AT NET TOW STATIONS

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	δT cl/ton
93.65-H	I-12	2245	31°40.0'	119°53.5'	2230	150°	1	cloudy	very rough	10	15.44	33.409	5.81				328
93.70-H	13	0045	31°31.0'	120°14.0'	2040	020°	3	cloudy	moderate	10	15.44	33.418	5.79				327
93.80-H	13	0520	31°13.0'	120°54.0'	2100	300°	5	missing	rough	10	15.70	33.376	5.75				336
93.90-H	13	0958	30°50.0'	121°34.5'	2170	020°	2	missing	smooth	10	15.46	33.371	5.77				331
97.29-H	11	1430	32°17.5'	117°04.5'	25	020°	5	clear	smooth	10	14.44	33.380	-				310
97.30-H	11	1405	32°16.0'	117°07.0'	33	310°	4	clear	smooth	10	14.40	33.396	-				308
97.32-H	11	1250	32°12.0'	117°15.0'	340	320°	4	missing	smooth	10	14.48	33.397	5.98				309
97.35-H	11	1116	32°05.5'	117°27.5'	667	180°	8	missing	smooth	10	14.70	33.428	5.95				311
97.40-H	11	0830	31°54.5'	117°50.0'	500	280°	7	clear	smooth	10	14.17	33.376	6.09				304
97.45-H	11	0555	31°46.0'	118°08.5'	750	300°	5	clear	smooth	10	14.16	33.400	6.01				302
97.50-H	11	0255	31°36.0'	118°30.5'	135	010°	3	partly cloudy	smooth	10	14.78	33.459	5.93				311
97.55-H	11	0020	31°23.0'	118°50.0'	480	230°	6	partly cloudy	smooth	10	14.66	33.426	5.95				311
97.65-H	10	1825	31°04.0'	119°31.0'	1900	250°	6	missing	smooth	10	15.08	33.380	5.88				323
97.70-H	10	1610	30°54.0'	119°50.0'	2050	250°	6	missing	smooth	10	15.50	33.444	5.77				327
97.80-H	10	1140	30°35.0'	120°31.0'	1720	230°	1	missing	calm	10	15.77	33.424	5.73				334
100.29-H	9	0215	31°42.0'	116°43.5'	48	330°	1	missing	slight	10	14.69	33.420	5.22				312
100.35-H	9	0420	31°31.0'	117°07.5'	1300	220°	1	missing	slight	10	15.46	33.503	5.90				322
100.45-H	9	1155	31°14.0'	117°48.0'	900	280°	4	missing	slight	10	14.02	33.500	5.97				292
100.50-H	9	1435	31°05.0'	118°07.5'	900	290°	1	missing	moderate	10	14.20	33.474	6.07				298

DATA AT NET TOW STATIONS

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	δ_T cl/ton
100.55-H	I-9	1659	30°52.0'	118°27.0'	1430	320°	1	cloudy	slight	10	14.24	33.403	5.99				304
100.65-H	9	2255	30°30.0'	119°07.5'	1930	290°	6	overcast	moderate	10	15.88	33.487	5.76				332
100.70-H	10	0130	30°20.5'	119°27.5'	2200	270°	1	overcast	moderate	10	16.14	33.567	5.73				331
103.29-H	8	2150	31°07.0'	116°21.0'	15	180°	1	partly cloudy	slight	10	14.35	33.419	5.97				305
103.30-H	8	2055	31°06.0'	116°24.5'	30	330°	2	clear	slight	10	14.98	33.465	5.89				314
103.35-H	8	1830	30°56.0'	116°45.0'	1030	360°	2	fog	smooth	10	15.52	33.466	5.60				326
103.40-H	8	1532	30°47.0'	117°05.0'	850	350°	2	partly cloudy	slight	10	15.44	33.48	5.82				323
103.45-H	8	1315	30°37.5'	117°25.0'	1400	310°	10	missing	moderate	10	15.50	33.42	5.81				328
103.50-H	8	1025	30°27.0'	117°45.0'	1140	310°	15	missing	moderate	10	14.82	33.64	5.97				298
103.55-H	8	0732	30°16.5'	118°05.0'	1325	310°	14	partly cloudy	moderate	10	15.33	33.39	5.52				327
103.65-H	8	0116	29°58.0'	118°45.0'	1800	320°	12	partly cloudy	rough	10	16.79	33.57	5.59				346
103.70-H	7	2256	29°46.5'	119°04.0'	1882	330°	12	partly cloudy	moderate	10	16.53	34.30	5.70				286
103.80-H	7	1800	29°24.0'	119°43.0'	2017	280°	8	cloudy	moderate	10	16.28	-	5.61				-

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