

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8402-3
7 February - 30 March 1984

SIO Reference 84-23
20 August 1984

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Approved for distribution:


W. A. Nierenberg, Director

CONTENTS

Introduction	3
Literature Cited	6
Cruise 8402-3	
List of Figures	9
Personnel	20
Tabulated Hydrographic Cast Data	21
10 Meter Data	106
Tabulated Primary Productivity Cast Data	127
Tabulated Macrozooplankton Data	141
Distribution List	146

INTRODUCTION

The data in this report were collected during Cruise 8402-3* of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service and the RV *New Horizon* of the Scripps Institution of Oceanography. In addition to routine station sampling, six 24-hour stations were occupied to make several Nansen casts and net tows in order to assess within-station hydrographic, chemical and biological variability. Primary productivity casts were taken daily near local noontime.

The *Jordan* occupied a closely-spaced station pattern (Fig. 1) in order to estimate the spawning biomass of northern anchovy stock from egg and larval counts.

The data were collected and processed by personnel of the Physical and Chemical Oceanographic Data Facility (PACODF), Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), and the Instituto Nacional de Pesca (INP). Many volunteers also assisted in the collection of data at sea.

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts consisted of 20 or fewer Nansen bottles lowered to a maximum sampling depth of 600 meters, bottom depth permitting. Temperature, salinity, oxygen and nutrients were determined for all depths sampled. Chlorophyll-*a* and phaeopigments were usually determined from the top 12 depths.

Paired protected reversing thermometers were used to determine temperatures which are recorded to hundredths of a degree Celsius. Sampling bottles used below a depth of 100 meters were equipped with unprotected thermometers for determination of the depth of sampling.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. The sub-standard water was prepared from filtered seawater collected in 30-liter Niskin bottles from a depth of 400 m, gently evaporated to increase the salinity to near 35‰. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater batch P-90. The salinity values are reported to three decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971).

Silicate, phosphate, nitrate and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965). Subsamples (65 or 140 ml) were drawn from the Nansen bottles and filtered onto GF/C filters. The filters were placed in scintillation vials containing 10 ml of 90% acetone and the pigments were extracted in the dark in a refrigerator for a period between one and four days. The samples were then brought to room temperature and the fluorescence of the sample was determined before and after acidification with a Turner 111 fluorometer. The potential biases in this technique are discussed in Venrick and Hayward (1984).

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relations to each other, and comparisons with adjacent observations.

Primary Productivity Casts

Primary production was estimated from ¹⁴C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the

* The first two digits represent the year and the last digits the months of the cruise.

Secchi depth). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Triplicate subsamples were drawn from each depth into 125 ml polycarbonate incubation bottles which were inoculated with 10 μ ci of ^{14}C as NaHCO_3 . Two light and one dark (control) bottle were then incubated approximately from local apparent noon to civil twilight in sea water cooled incubators with neutral density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample, which was then allowed to sit without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to S.I.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 m to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of the pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (> 5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

Conductivity/Temperature/Depth/Oxygen Recorder (CTDO) Data

CTDO data were collected on some lines occupied by the *David Starr Jordan*, as shown by the station position map (Fig. 1). The CTDO data are not included in this report.

TABULATED DATA

The tabulated data in this report have substantial changes in both content and appearance from data tabulations that have appeared in earlier CalCOFI data reports. The changes were noted in the 8401 cruise data report (SIO Ref. 84-18) and are repeated below:

1. Observed data and interpolated standard level data have been interspersed and are presented together in depth sequence.

2. Salinities have been calculated from the algorithms for the Practical Salinity Scale, 1978 (PSS78) as recommended by the Joint Panel on Oceanographic Tables and Standards (Lewis, 1980; UNESCO, 1981). Between 34 and 36 salinity, the differences between the new PSS78 and old UNESCO66 salinity scales are .001 or less. At practical salinity = 30, the new salinity is .005 higher than the old salinity scale. Parts per thousand or the symbol ‰ is not used for PSS78 salinities, so the new practical salinities are 1000 times larger than salinities based on previous scales.

3. Potential temperature has been added to the tabulation. The difference between *in situ* temperature and potential temperature is only .05° at 500 m, so potential temperature is not important for the shallow casts presented in this report. However, potential temperature is of interest for deeper casts that are typically taken on expeditions and occasionally on CalCOFI cruises, so it will be reported routinely. Potential temperature is calculated from the expressions given by Fofonoff (1977), based upon Bryden's (1973) results.

4. Density related parameters are calculated from the International Equation of State of Seawater 1980 (EOS80) algorithms published by Millero, Chen, Bradshaw and Schleicher (1980) and UNESCO (1981). Sigma-theta in this report is about .03 lower than the sigma-t that appeared in earlier reports. EOS80 is in terms of true density, while the older equations were in terms of specific gravity, treated as if they were density. That accounts for most of the difference between new and old equation of state densities. The newer experimental measurements on the density of seawater also show small differences that are variable over the temperature-salinity range of seawater. Sigma-theta is calculated from potential temperature instead of *in situ* temperature. The differences in sigmas would have been

somewhat greater if *in situ* temperatures had been used to calculate sigma in the present data report.

Dynamic heights in this report are within one dynamic millimeter of the values calculated in previous CalCOFI reports. The different equations of state have little effect on the dynamic height calculation in the top 600 meters.

Specific volume anomaly (with pressure terms) is given in this data report. Previously, thermobaric anomaly (without pressure terms) was reported, although the dynamic heights were calculated from specific volume anomaly.

5. Pressure has been added to the data listing. Although depth remains as the primary key to the data for historical reasons and to facilitate comparisons with past cruises, pressure is required for the EOS80 density calculations.

6. Percent oxygen saturation has been added. The values are calculated from the equations of Weiss (1970) and UNESCO (1973). The solubility of oxygen varies primarily with temperature and secondarily with salinity. For convenience, an oxygen saturation is also given for levels where temperature or salinity is missing. Those values are based upon interpolated temperature or salinity and should be used with caution.

7. Chlorophyll-*a* and phaeopigments have been incorporated with the hydrographic and chemical data instead of being reported separately.

8. Heading information has been expanded to include more of the weather observations; most of the observations have been de-coded and are self-explanatory. Weather conditions are coded using WMO code 4501. Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables.

9. CalCOFI line and station numbers are separated by a few blank spaces in order to leave room for finer resolution of line and station numbers when appropriate. Most CalCOFI cruises occupy stations on cardinal lines and on ordinal lines with 1/3 and 2/3 spacing between cardinal lines. For example, the desired lines between lines 90 and 100 are lines 93-1/3 and 96-2/3. As in previous reports, ordinal line numbers have been rounded to the nearest whole number (lines 93 and 97, respectively, in the previous example). Additional lines and more closely spaced stations are occupied on some cruises, then it is useful to list some line and station numbers to the nearest 0.1. Eber and Hewitt (1979) give conversion algorithms for conversion of latitude and longitude to CalCOFI station number. A few inshore stations have been listed to one decimal place in this report. It is not practical or desirable to list *all* stations to one decimal place because stations that occurred more than ± 0.2 n.m. along the station direction or ± 0.6 n.m. along the line direction from the desired position would require a different CalCOFI station number. For example, some of the repeat casts taken on the 24-hour stations would have different station numbers if listed to 0.1, although all casts were done within a very small area.

Primary Productivity Casts

The tabulated data include: sample depths, the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, nutrients (when measured), chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

FOOTNOTES

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

ISL: After depth values indicates interpolated or extrapolated standard level.

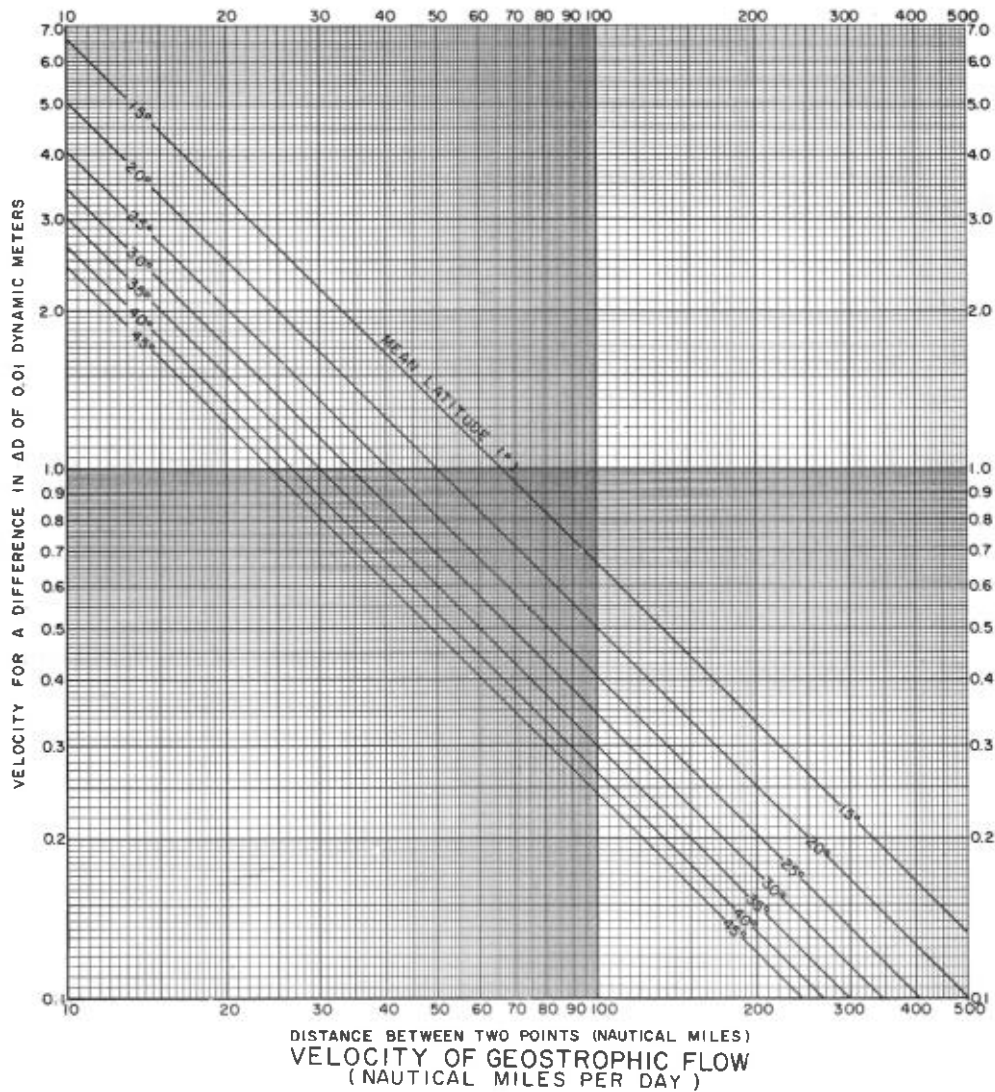
P: After depth values indicates the Nansen bottle posttripped.

U: Uncertain value. Values which are not used in interpolation because they seem to be in error without apparent reason.

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

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

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

FIGURES

Cruise 8402-3

1. CalCOFI Cruise 8402-3, station positions.
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar).
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar).
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters.
6. Horizontal distribution of sigma-theta at 10 meters.
7. Horizontal distribution of chlorophyll-*a* at 10 meters.
8. Horizontal distribution of temperature at 200 meters.
9. Horizontal distribution of salinity at 200 meters.
10. Horizontal distribution of sigma-theta at 200 meters.

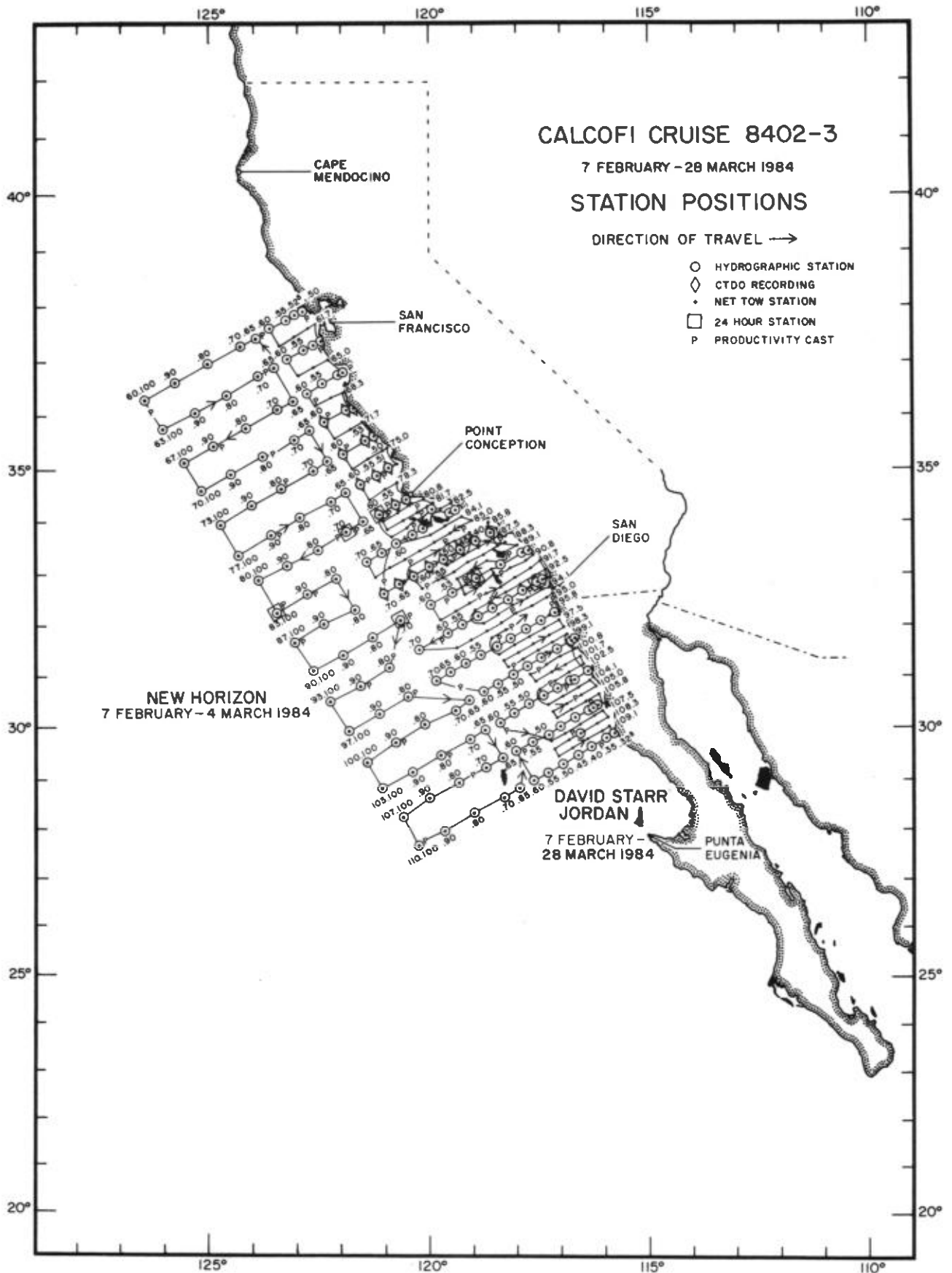


FIGURE 1

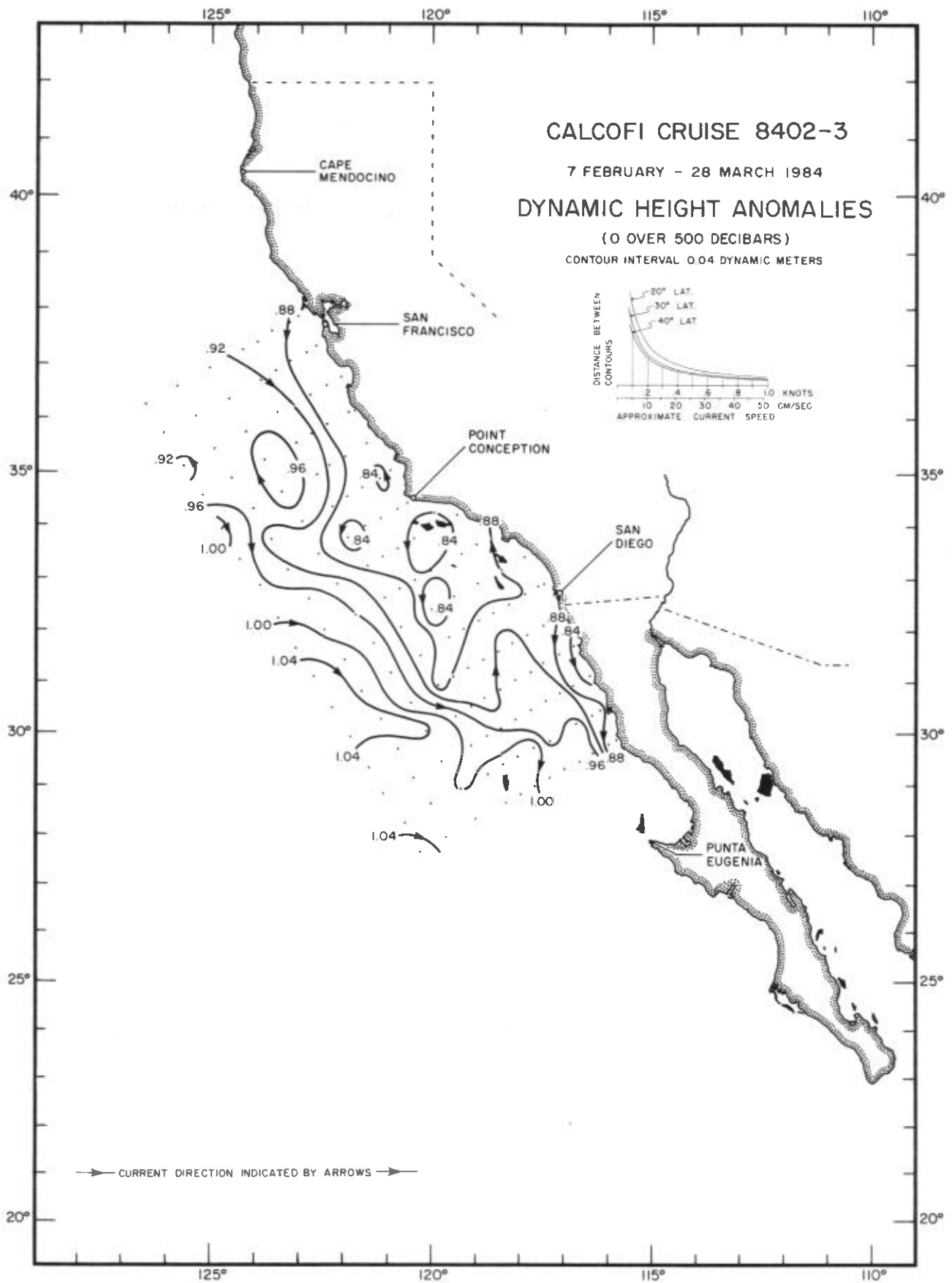


FIGURE 2

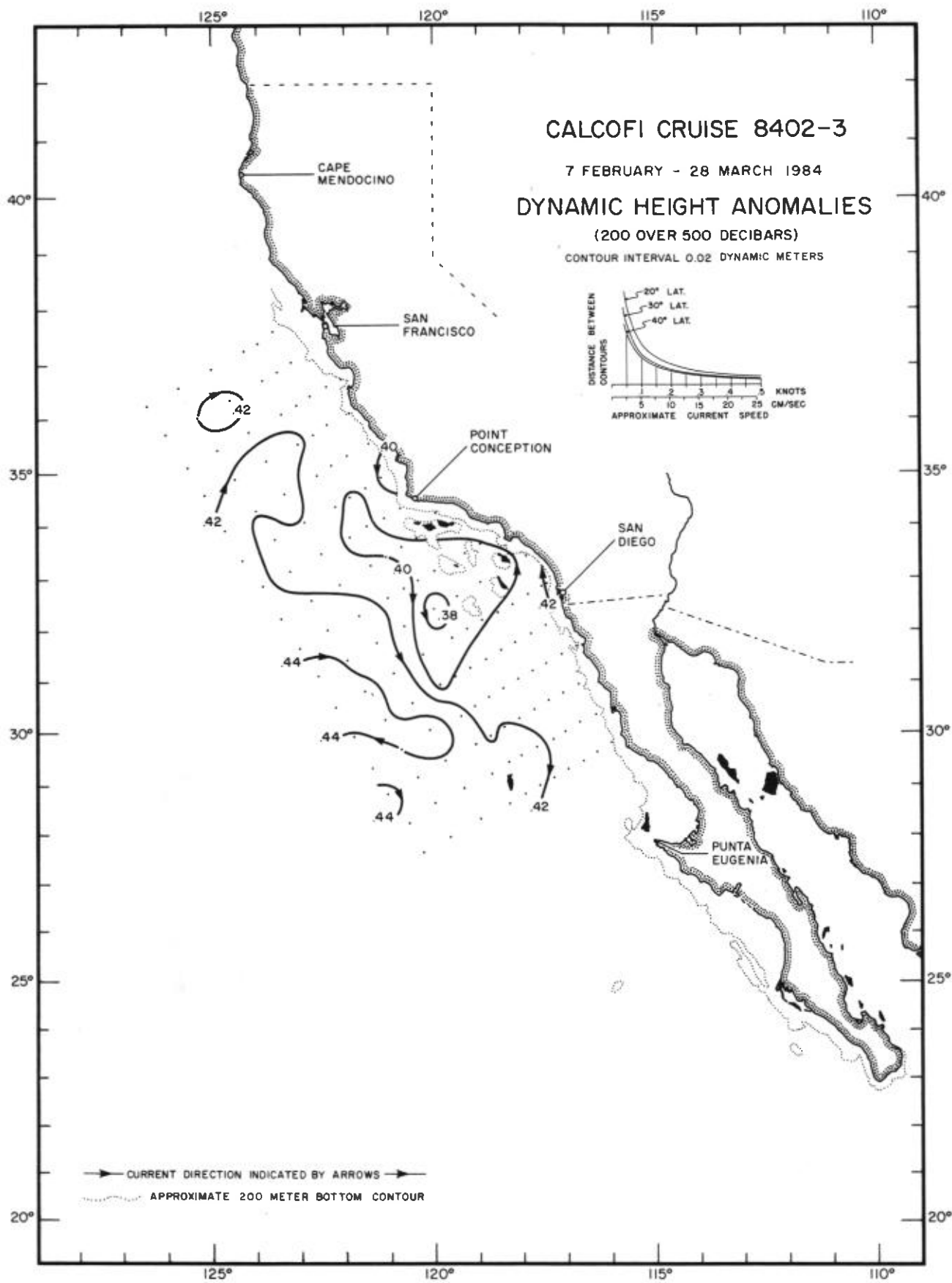


FIGURE 3

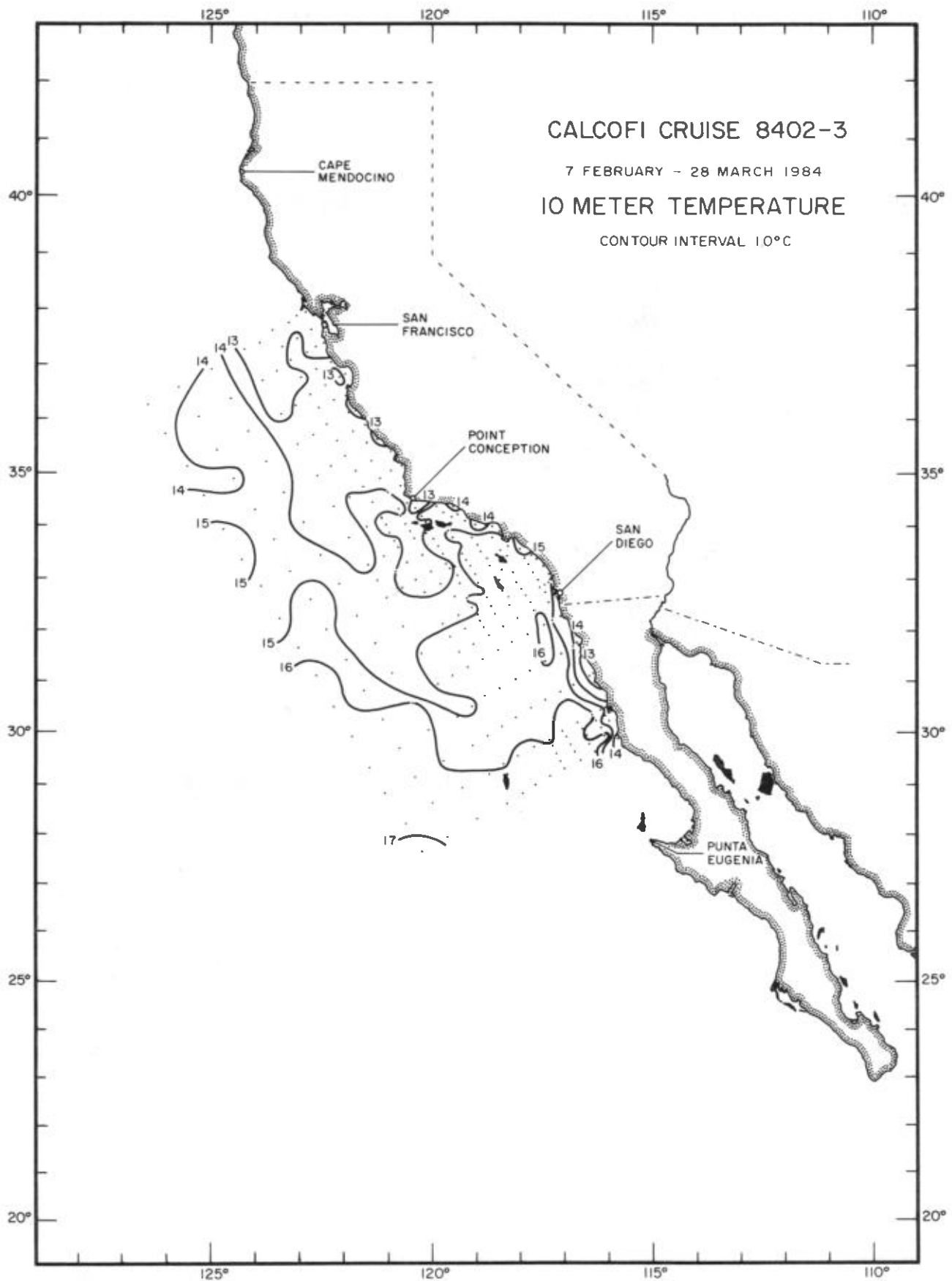


FIGURE 4

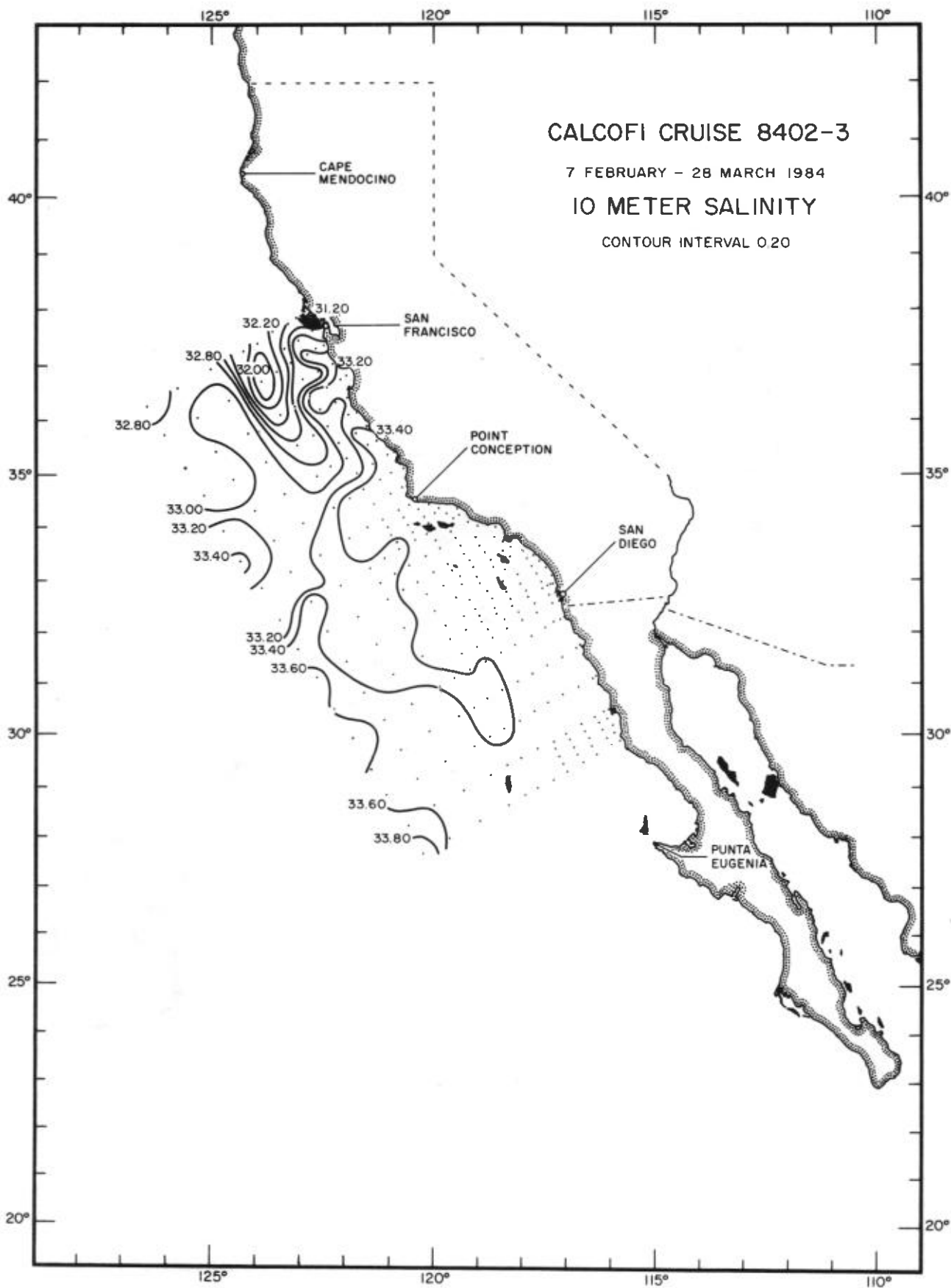


FIGURE 5

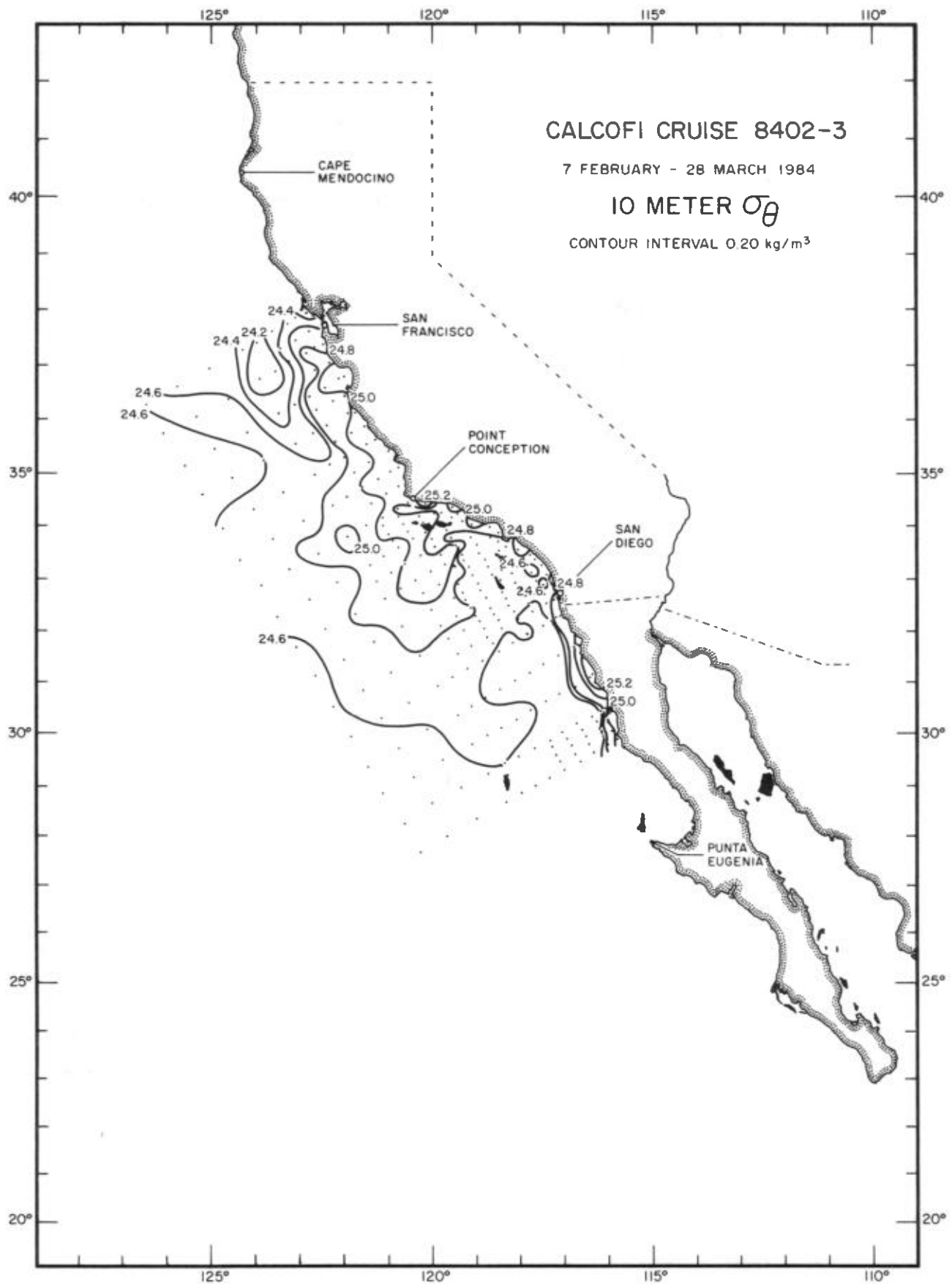


FIGURE 6

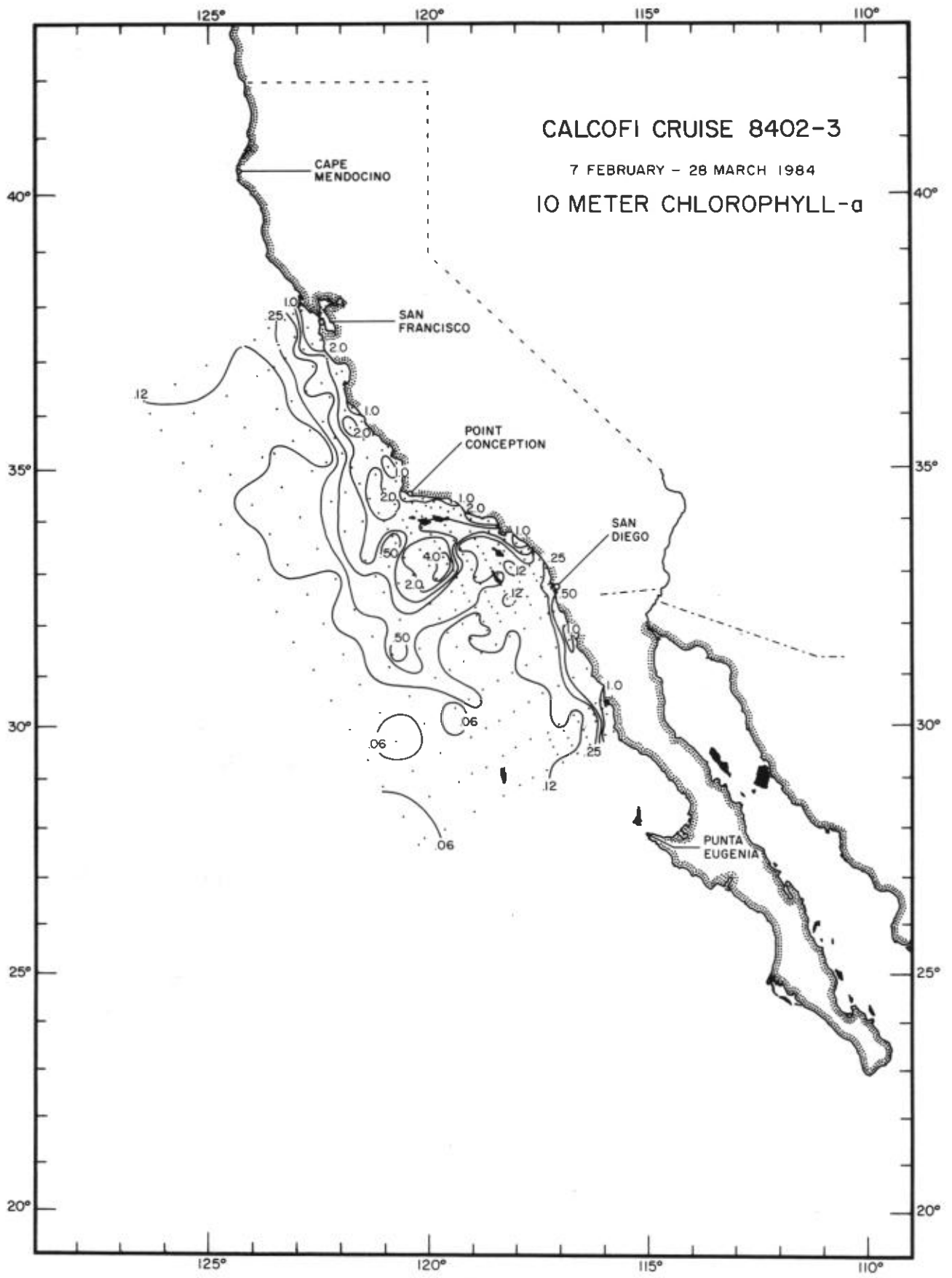


FIGURE 7

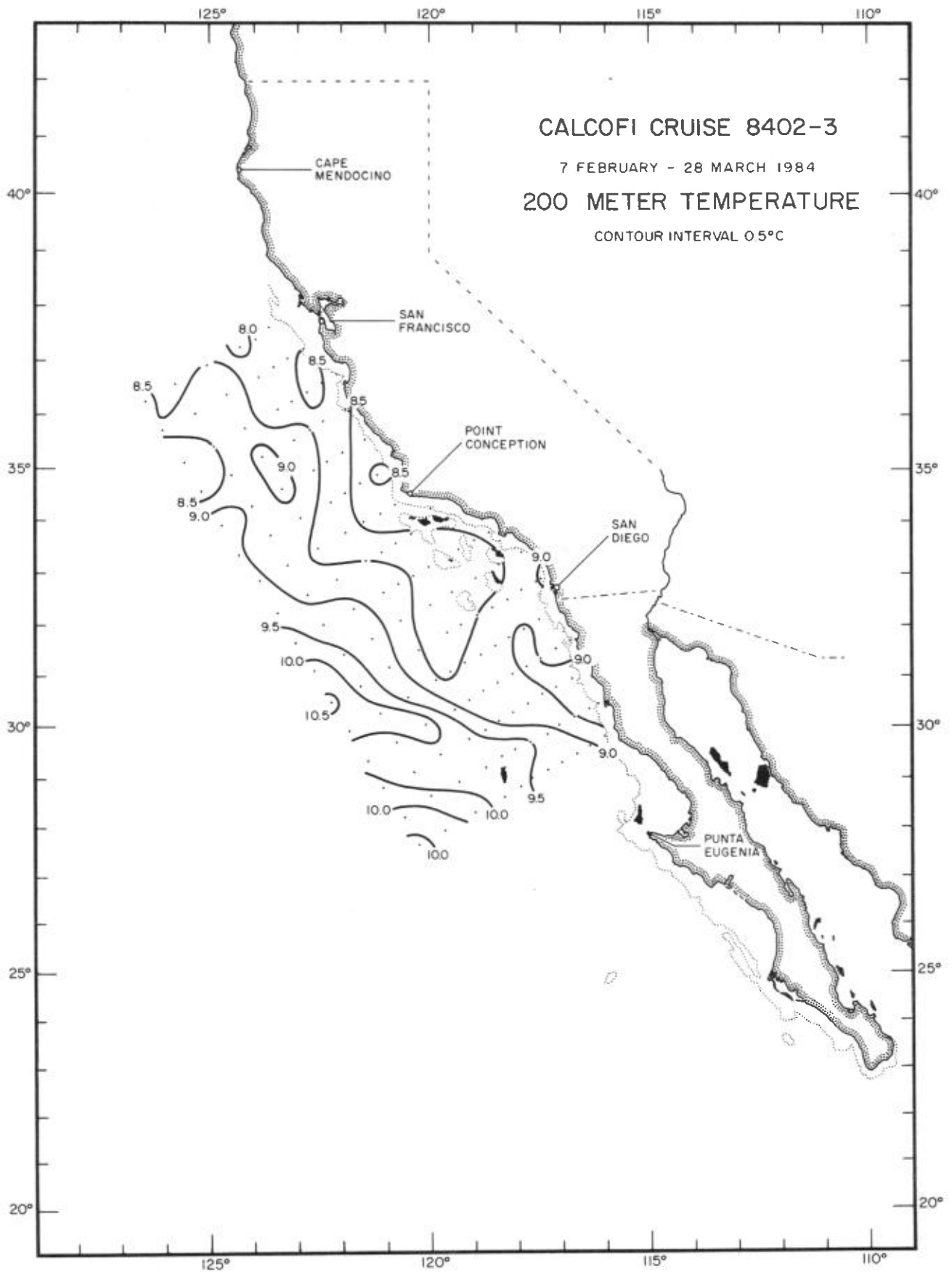


FIGURE B

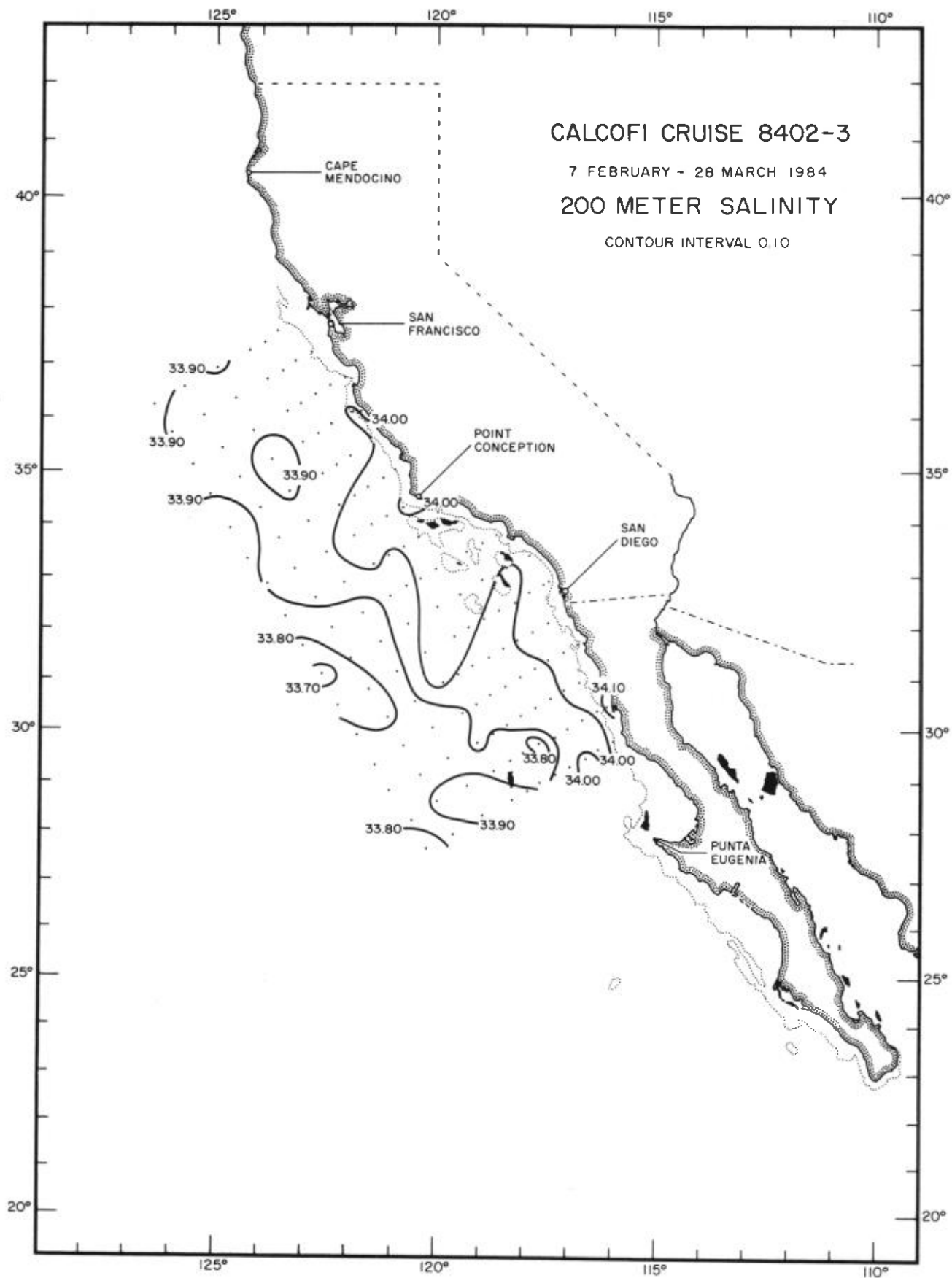


FIGURE 9

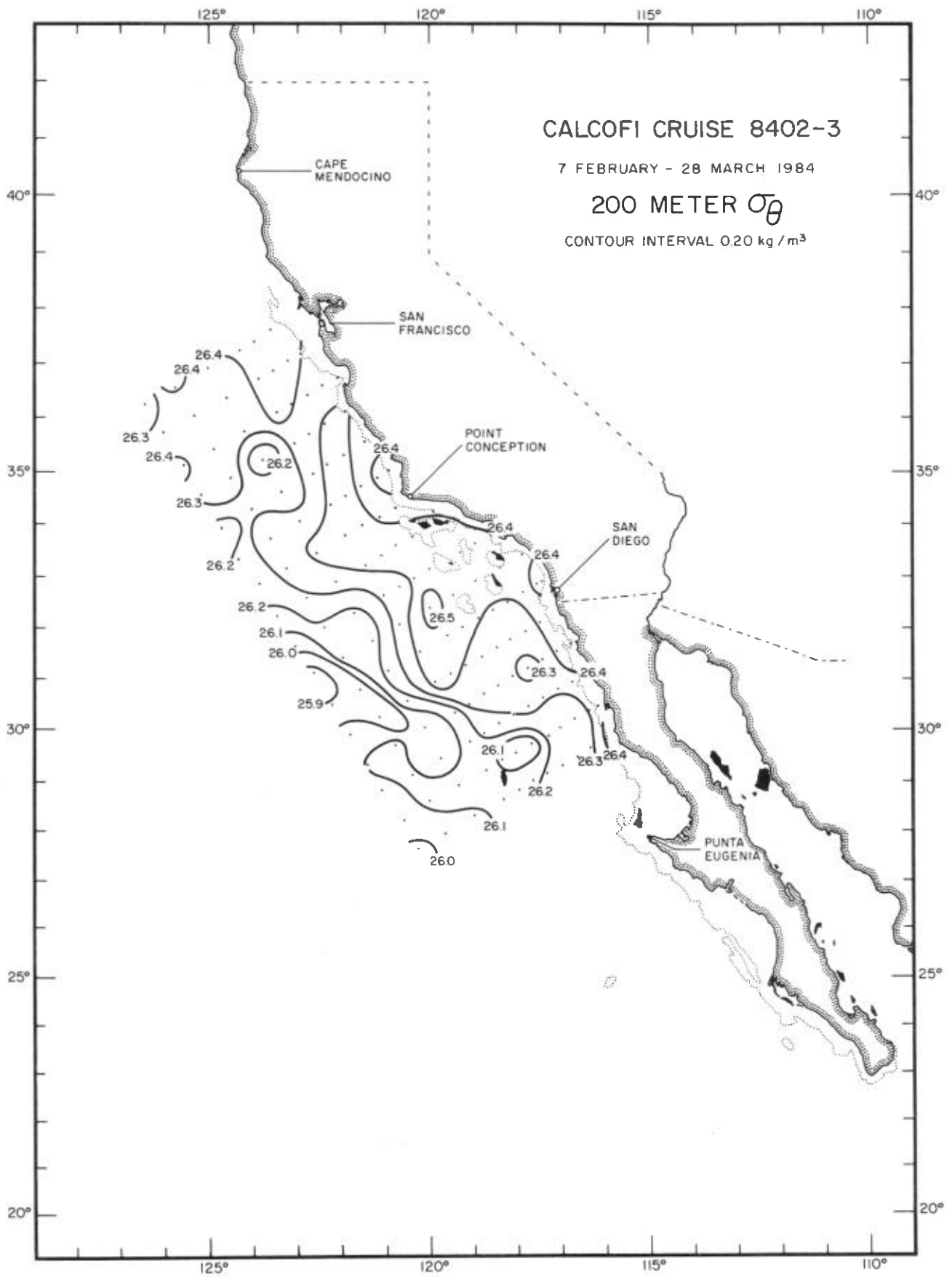


FIGURE 10

PERSONNEL

Cruise 8402-3

SHIPS' CAPTAINS

Desjardins, Thomas J., *RV New Horizon*
Roll, Milton, *RV David Starr Jordan*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV New Horizon

Bryan, Walter R. (in charge)	Marine Technician, SIO
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Bryan, Mark A.	Volunteer
Calderon, Louis E.	Grad Student, CICESE
Cummings, Sherry L.	Staff Research Associate, SIO
Escobar, Jorge	Grad Student, CICESE
Granados, Luisa	Investigador Titular, INP
León, Cuahtéunoc	Grad Student, CICESE
Luna, Juan Andrés Figueroa	Investigador Titular, INP
Masten, Douglas M.	Marine Technician, SIO
Metoyer, Jack D.	Biological Technician, NMFS
Potter, Donna J.	Docent, Sea World, Inc.
Schmitt, James A.	Electronics Technician, SIO

RV David Starr Jordan

Flerx, William C. (in charge)	Fishery Biologist, NMFS
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Ambrose, David A.	Fishery Biologist, NMFS
Anderson, George C.	Staff Research Associate, SIO
Beaupre, Marie-Claude	Staff Research Associate, SIO
Bos, David L.	Staff Research Associate, SIO
Brong, Deborah J.	Volunteer
Butler, John L.	Fishery Biologist, NMFS
Carillo, Gabriel	Grad Student, CICESE
Charter, Richard L.	Computer Specialist, NMFS
Dotson, Ronald C.	Fishery Biologist, NMFS
Espinola, Beatriz	Hydrobiologist, INP
Gorospe, Victorio A.	Biological Aide, NMFS
Hester, Arthur W.	Staff Research Associate, SIO
Iacometti, Susan	Computer Programmer, NMFS
Kemper, Cecelia A.	Staff Research Associate, SIO
Kokes, Chuck	Biological Technician, NMFS
Lynn, Eric A.	Biological Technician, NMFS
Meyer, Cindy H.	Computer Programmer, NMFS
Miller, Mark D.	Volunteer
Muus, David A.	Staff Research Associate, SIO
Nelson, James R.	Graduate Research Associate, SIO
Stevens, Elizabeth G.	Fishery Biologist, NMFS
White, Martha M.	Graduate Research Associate, SIO

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
37 56.8 N	122 52.0 W	02/09/84	2008 GWT	49 M	240	14 KT	220 04 08	2	1017.9 MB	14.0 C	17.9 C	R/R	R/R	CU		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	12.78	12.88	31.036	23.348	457.3	.000	7.16	117.6	6.7	.27	.0	.02	6.58	.00	0
1	10	13.00	13.00	32.394	24.376	354.4	.040	6.54	108.6	2.7	.28	.0	.02	2.22	.31	10
1	20 ISL	12.80	12.90	32.995	24.879	306.8	.073	5.21	86.3							20
1	21	12.77	12.77	33.021	24.906	304.3	.076	5.10	84.6	8.7	.74	5.5	.22	.87	.59	21
1	30 ISL	12.54	12.54	33.187	25.118	284.4	.103	4.84	79.6							30
1	31	12.29	12.29	33.194	25.132	282.9	.105	4.82	79.2	11.3	.88	8.2	.21	.59	.48	31
1	41	11.63	11.62	33.359	25.385	259.2	.132	3.85	62.5	23.3	1.34	12.8	.23	.62	1.99	41

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
37 51.8 N	123 03.8 W	02/09/84	2228 GWT	90 M	280	16 KT	270 07 08	1	1016.9 MB	12.7 C	10.4 C	7/P	7/P	CU		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0 ISL	13.09	13.09	31.994	24.048	397.9	.000	6.83	113.3							0
1	2	13.09	13.09	31.994	24.048	385.5	.008	6.83	113.3	1.5	.24	.0	.01	2.24	.22	2
1	10 ISL	12.88	12.87	32.484	24.470	345.5	.037	6.46	107.1							10
1	12	12.83	12.83	32.574	24.548	338.2	.044	6.37	105.5	5.2	.36	.2	.06	.63	.29	12
1	20 ISL	12.73	12.72	32.809	24.751	319.0	.070	5.96	98.7							20
1	22	12.69	12.69	32.853	24.792	315.2	.076	5.85	96.8	6.9	.57	7.6	.23	.64	.40	22
1	30	12.36	12.36	33.111	25.055	290.3	.100	5.26	86.6	8.6	.76	6.2	.21	.50	.41	30
1	42	11.61	11.61	33.240	25.259	271.2	.134	4.69	76.3	12.5	1.00	10.4	.19	.35	.40	42
1	50 ISL	11.77	11.77	33.370	25.465	251.7	.155	4.27	68.8							50
1	51	11.23	11.22	33.390	25.483	250.1	.157	4.24	68.2	16.4	1.20	13.8	.07	.23	.38	51
1	64	10.97	10.96	33.452	25.578	241.3	.189	4.05	64.8	18.3	1.29	15.3	.04	.22	.30	64
1	75 ISL	10.75	10.74	33.498	25.653	234.5	.216	3.89	62.0							75
1	77	10.72	10.71	33.504	25.662	233.5	.220	3.87	61.6	19.6	1.36	17.0	.04	.18	.29	77

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
37 46.8 N	123 14.7 W	02/10/84	0124 GWT	125 M	290	15 KT	270 08 07	2	1017.3 MB	11.2 C	8.4 C	R/R	R/R	CU		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	12.58	12.58	32.476	24.521	340.4	.300	6.42	105.7	5.3	.34	.1	.00	.45	.21	0
1	10 ISL	12.58	12.58	32.476	24.521	340.4	.334	6.42	105.8							10
1	11	12.58	12.58	32.477	24.521	340.7	.037	6.47	106.5	5.3	.34	.1	.00	.44	.24	11
1	20 ISL	12.59	12.58	32.832	24.795	314.7	.067	6.08	100.3							20
1	21	12.61	12.61	32.877	24.826	311.9	.070	6.03	99.6	5.9	.49	1.4	.13	1.17	.37	21
1	30 ISL	12.21	12.20	32.880	24.905	302.6	.098	5.70	93.4							30
1	31	12.17	12.16	32.906	24.935	301.9	.100	5.67	92.8	7.7	.67	4.4	.24	.66	.34	31
1	40	12.15	12.14	33.149	25.126	283.8	.127	5.21	85.4	10.2	.88	8.0	.10	.43	.33	40
1	50 ISL	11.83	11.82	33.287	25.292	268.2	.155	4.76	77.5							50
1	52	11.75	11.74	33.304	25.320	265.6	.159	4.69	76.3	11.8	1.03	10.6	.03	.25	.31	52
1	62	11.21	11.20	33.445	25.530	245.8	.185	4.34	69.8	14.4	1.21	14.1	.01	.16	.19	62
1	73	10.66	10.65	33.447	25.628	236.7	.211	4.29	68.2	15.5	1.29	15.4	.01	.13	.22	73
1	75 ISL	10.58	10.57	33.465	25.655	234.2	.217	4.22	67.0							76
1	89	10.30	10.29	33.579	25.794	221.2	.248	3.79	59.8	20.3	1.50	18.6	.00	.06	.16	89
1	100 ISL	10.16	10.14	33.628	25.857	215.5	.273	3.59	56.5							101
1	104	10.13	10.11	33.636	25.868	214.5	.282	3.55	55.8	23.5	1.61	20.4	.04	.07	.20	105

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 63 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 52.6 N	123 33.4 W	02/11/84	2114 GMT		150	04 KT	260 09 10	1	1023.7 MB	13.7 C	10.9 C		7/8	SC	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRESS
#	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	12.96	12.96	32.071	24.133	376.4	.000	6.33	104.8							0
1	12.96	12.96	32.071	24.133	377.4	.004	6.33	104.8	4.0	.37	.2	.00	.14	.07	1
10 ISL	12.96	12.95	32.071	24.135	377.3	.038	6.33	104.8							10
11	12.91	12.91	32.073	24.145	376.5	.041	6.35	105.0	4.0	.37	.2	.00	.12	.06	11
20 ISL	12.98	12.98	32.311	24.315	360.5	.075	6.31	104.6							20
24	13.03	13.03	32.488	24.442	348.6	.096	6.27	104.2	3.1	.42	.2	.00	.20	.11	24
30 ISL	13.01	13.00	32.539	24.487	344.5	.110	6.26	104.0							30
41	13.00	12.99	32.643	24.570	336.8	.147	6.21	103.3	2.3	.46	.2	.00	.24	.13	41
50 ISL	12.90	12.89	32.694	24.629	331.4	.177	6.13	101.8							50
56	12.77	12.74	32.733	24.684	326.3	.196	6.02	99.7	3.1	.55	.9	.25	.34	.30	56
66	12.39	12.38	32.870	24.864	309.4	.228	5.58	91.7	4.3	.70	3.4	.16	.30	.21	66
75 ISL	10.93	10.92	33.103	25.314	266.7	.255	5.10	81.4							76
74	10.82	10.81	33.121	25.347	263.5	.256	5.07	80.7	9.3	1.07	10.0	.03	.08	.10	76
91	10.38	10.37	33.389	25.632	236.7	.294	4.38	69.2	15.0	1.39	15.9	.02	.07	.11	91
100 ISL	10.07	10.05	33.487	25.762	224.4	.315	4.07	63.9							101
105	9.88	9.87	33.535	25.831	218.0	.328	3.91	61.1	19.4	1.61	20.1	.02	.07	.10	106
120	9.43	9.42	33.698	26.031	199.2	.359	3.41	52.8	24.6	1.83	23.8	.01	.05	.08	121
125 ISL	9.35	9.33	33.723	26.066	196.0	.368	3.27	50.6							126
145	9.02	9.01	33.793	26.172	186.2	.406	3.24	49.8	27.9	1.92	25.5	.01	.04	.08	146
150 ISL	8.93	8.91	33.816	26.206	183.2	.415	3.19	48.9							151
165	8.64	8.62	33.883	26.303	174.1	.442	3.05	46.5	31.1	1.97	26.6	.01	.02	.04	166
185	8.40	8.38	33.940	26.385	166.7	.476	3.02	45.8	33.8	2.01	27.6	.01			186
200 ISL	8.26	8.24	33.964	26.425	163.1	.501	2.90	43.8							202
206	8.20	8.18	33.970	26.438	161.9	.510	2.84	42.9	36.2	2.14	29.0	.01			207
236	7.83	7.81	34.003	26.519	154.6	.557	2.67	40.0	40.0	2.22	30.3	.01			237
250 ISL	7.65	7.63	34.016	26.555	151.3	.579	2.60	38.7							252
275	7.35	7.32	34.034	26.613	146.1	.617	2.43	36.0	46.5	2.35	31.9	.01			277
300 ISL	7.07	7.05	34.052	26.666	141.4	.653	2.11	31.1							303
336	6.71	6.68	34.075	26.734	135.2	.702	1.67	23.6	57.4	2.64	36.2	.01			338
400 ISL	6.15	6.12	34.113	26.837	126.0	.786	1.11	16.0							403
411	6.06	6.02	34.118	26.853	124.5	.800	1.05	15.1	69.2	2.91	39.8	.00			414
488	5.40	5.36	34.149	26.959	114.8	.891	.70	9.9	80.8	3.05	42.2	.00			491
500 ISL	5.32	5.28	34.156	26.974	113.5	.906	.66	9.3							504
565	5.09	5.04	34.199	27.036	108.1	.977	.48	6.7	88.8	3.17	43.6	.00			569

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 63 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 44.0 N	123 54.4 W	02/11/84	1703 GMT	3862 M	290	07 KT	330 09 11	1	1023.9 MB	12.9 C	9.7 C		7/8	CI	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRESS
#	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	12.80	12.80	31.867	24.006	382.7	.000	6.42	105.8							0
1	12.80	12.80	31.867	24.006	389.5	.004	6.42	105.8	4.2	.30	.1	.00	.12	.08	1
10 ISL	12.80	12.80	31.886	24.020	388.4	.039	6.42	105.8							10
12	12.82	12.82	31.960	24.074	383.2	.046	6.41	105.7	4.3	.31	.1	.00	.12	.08	12
20 ISL	12.95	12.95	32.304	24.316	360.4	.076	6.32	104.7							20
27	13.05	13.04	32.601	24.527	340.5	.100	6.22	103.5	2.6	.41	.1	.00	.14	.10	27
30 ISL	13.03	13.03	32.651	24.569	335.5	.111	6.18	102.9							30
42	12.94	12.93	32.664	24.597	334.2	.151	6.07	100.8	3.3	.47	.2	.20	.33	.22	42
50 ISL	13.00	12.99	32.715	24.625	331.8	.178	6.05	100.6							50
58	13.06	13.06	32.768	24.654	329.3	.203	6.02	100.3	3.1	.48	.3	.27	.36	.26	58
68	11.84	11.83	32.949	25.029	293.7	.234	5.57	90.5	5.2	.75	4.8	.07	.17	.18	68
75 ISL	11.20	11.19	33.015	25.197	277.8	.255	5.39	86.5							76
78	11.02	11.01	33.033	25.243	273.5	.263	5.34	85.3	7.9	.91	7.9	.03	.12	.14	78
94	10.49	10.48	33.186	25.455	253.5	.305	4.87	77.0	11.9	1.48	12.3	.02	.06	.10	94
100 ISL	10.24	10.23	33.276	25.568	243.0	.320	4.70	74.0							101
108	9.93	9.91	33.300	25.710	229.6	.341	4.49	70.2	16.0	1.38	16.3	.02	.03	.09	109
124	9.52	9.50	33.510	25.871	214.5	.376	4.11	63.7	20.1	1.57	19.6	.01	.03	.07	125
125 ISL	9.50	9.49	33.514	25.877	213.9	.377	4.11	63.7							126
149	8.92	8.91	33.678	26.098	193.3	.427	3.97	60.8	23.9	1.67	21.9	.02	.03	.05	150
150 ISL	8.91	8.89	33.686	26.106	192.6	.428	3.95	60.4							151
170	8.66	8.65	33.862	26.283	176.1	.465	3.26	49.7	30.1	1.93	26.1	.01	.01	.04	171
191	8.43	8.41	33.940	26.380	167.1	.501	2.95	44.8	33.8	2.06	27.8	.02			192
200 ISL	8.30	8.28	33.962	26.418	163.8	.516	2.95	44.6							202
212	8.12	8.10	33.982	26.460	160.0	.535	2.95	44.5	36.2	2.07	28.4	.01			213
243	7.70	7.67	33.998	26.535	153.2	.583	2.93	43.7	40.6	2.15	29.4	.01			244
250 ISL	7.60	7.57	34.001	26.552	151.6	.594	2.87	42.7							252
284	7.16	7.13	34.014	26.625	145.0	.645	2.51	37.0	47.7	2.30	32.2	.00			286
300 ISL	6.96	6.93	34.016	26.654	142.4	.668	2.39	35.1							303
346	6.47	6.44	34.027	26.727	135.8	.732	2.03	29.4	57.5	2.53	35.6	.00			348
400 ISL	6.19	6.16	34.079	26.805	129.0	.803	1.35	19.5							403
424	6.09	6.05	34.104	26.838	126.1	.834	1.07	15.4	68.6	2.84	39.5	.00			427
500 ISL	5.50	5.46	34.147	26.946	116.3	.926	.72	10.2							504
503	5.47	5.43	34.149	26.951	115.9	.930	.71	10.1	80.6	3.03	42.0	.00			507
582	5.00	4.96	34.188	27.037	108.1	1.018	.56	7.8	90.7	3.11	43.5	.01			586

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 22.6 N	124 37.0 W	02/11/84	1111 GMT	4125 M	280	12 KT			1024.8 MB	12.5 C	9.2 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PMAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	14.36	14.36	33.070	24.621	330.8	.000	5.95	102.1							0
1	14.36	14.36	33.070	24.621	330.9	.003	5.95	102.1	2.3	.37	.2	.00	.10	.07	1
10 ISL	14.39	14.39	33.070	24.615	331.8	.033	5.96	102.3							10
12	14.39	14.39	33.068	24.613	331.9	.040			2.3	.37	.2	.00	.11	.06	12
20 ISL	14.40	14.40	33.073	24.616	331.9	.066	5.96	102.2							20
27	14.40	14.40	33.077	24.619	331.8	.089	5.97	102.5	2.2	.37	.2	.00	.13	.09	27
30 ISL	14.41	14.40	33.078	24.619	331.9	.100	5.96	102.4							30
43	14.42	14.42	33.079	24.617	332.5	.142	5.94	102.0	2.1	.37	.2	.00	.14	.10	43
50 ISL	14.41	14.41	33.078	24.618	332.5	.166	5.95	102.2							50
58	14.40	14.39	33.078	24.621	332.5	.192	5.96	102.3	2.1	.37	.2	.00	.15	.09	58
62	14.39	14.38	33.081	24.625	332.4	.225	5.93	101.7	2.2	.37	.2	.01	.14	.11	62
75 ISL	14.23	14.21	33.082	24.661	330.0	.249	5.85	100.0							76
79	14.03	14.01	33.084	24.704	325.1	.261	5.79	98.6	2.4	.44	1.0	.08	.11	.11	79
94	11.87	11.86	33.152	25.181	279.9	.306	5.40	87.9	6.1	.76	6.0	.01	.06	.08	94
100 ISL	11.38	11.37	33.231	25.332	265.6	.324	5.00	80.6							101
102	10.98	10.97	33.340	25.489	250.8	.346	4.52	72.3	10.2	1.03	10.8	.01	.03	.05	109
124	10.55	10.53	33.482	25.676	233.3	.384	4.48	71.1	14.1	1.25	14.7	.00	.02	.02	125
125 ISL	10.53	10.52	33.484	25.680	232.9	.385	4.47	70.8							126
150	9.82	9.80	33.577	25.875	214.8	.442	3.89	60.7	20.2	1.59	20.1	.00	.00	.02	151
170	9.72	9.70	33.729	26.091	194.5	.483	3.63	56.0	24.3	1.73	22.9	.00	.01	.01	171
191	8.88	8.86	33.871	26.256	179.1	.527	3.68	56.4	26.9	1.77	23.6	.01			192
200 ISL	8.73	8.71	33.910	26.311	174.1	.538	3.74	57.1							202
212	8.53	8.51	33.943	26.367	168.9	.558	3.83	58.2	29.0	1.79	23.8	.01			213
243	8.09	8.07	33.977	26.461	160.4	.608	3.97	59.8	31.5	1.74	24.3	.01			244
250 ISL	7.97	7.95	33.981	26.482	158.5	.620	3.91	54.7							252
283	7.45	7.42	33.992	26.566	150.7	.672	3.42	50.7	40.0	2.00	27.6	.00			285
300 ISL	7.24	7.21	34.002	26.604	147.3	.697	3.13	46.2							303
346	6.72	6.69	34.026	26.694	139.1	.762	2.34	34.1	52.9	2.41	33.5	.00			348
400 ISL	6.10	6.06	34.039	26.786	130.7	.835	1.74	25.1							403
424	5.84	5.80	34.044	26.822	127.3	.867	1.55	22.1	67.6	2.77	38.5	.00			427
500 ISL	5.21	5.17	34.078	26.924	118.0	.960	1.10	15.5							504
503	5.20	5.16	34.080	26.928	117.7	.963	1.09	15.3	79.4	2.92	41.2	.00			506
580	4.96	4.92	34.161	27.020	109.6	1.050	.64	9.0	88.8	3.07	43.0	.00			584

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 63 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 07.6 N	125 20.5 W	02/11/84	0511 GMT		317	12 KT	300 09 09	1	1025.8 MB	12.5 C	9.0 C		6/8	CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PMAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	14.43	14.43	33.087	24.619	331.0	.000	5.94	102.0							0
1	14.43	14.43	33.087	24.619	331.1	.003	5.94	102.0	1.7	.39	.1	.00	.11	.06	1
10 ISL	14.45	14.44	33.087	24.617	331.5	.033	6.03	103.5							10
11	14.45	14.44	33.087	24.617	331.6	.036	6.03	103.6	1.7	.39	.0	.00	.11	.06	11
20 ISL	14.44	14.44	33.086	24.617	331.9	.066	6.01	103.3							20
26	14.44	14.44	33.085	24.616	332.0	.086	5.99	102.9	1.7	.39	.0	.00	.11	.07	26
30 ISL	14.44	14.44	33.085	24.617	332.1	.099	5.99	102.8							30
42	14.43	14.42	33.082	24.618	332.3	.139	5.98	102.7	1.7	.38	.1	.00	.11	.08	42
50 ISL	14.41	14.41	33.080	24.619	332.4	.166	5.97	102.5							50
57	14.40	14.39	33.079	24.621	332.5	.188	5.97	102.5	1.6	.38	.1	.00	.13	.08	57
67	14.40	14.39	33.082	24.625	332.4	.221	5.98	102.6	1.6	.39	.1	.00	.14	.09	67
75 ISL	14.39	14.38	33.082	24.627	332.3	.249	5.97	102.4							76
78	14.35	14.34	33.083	24.635	331.7	.258	5.94	101.8	1.6	.40	.1	.02	.14	.11	78
93	12.89	12.88	33.336	25.129	285.0	.304	5.68	94.6	3.6	.56	2.7	.03	.09	.18	93
100 ISL	12.11	12.10	33.326	25.271	271.5	.325	5.47	89.7							101
107	11.39	11.38	33.303	25.386	260.6	.344	5.22	84.2	6.8	.87	7.8	.01	.04	.06	108
122	10.44	10.43	33.433	25.656	235.1	.381	4.58	72.4	12.7	1.24	14.3	.01	.01	.06	123
125 ISL	10.33	10.32	33.457	25.694	231.5	.387	4.50	71.0							126
142	9.61	9.59	33.652	25.967	205.9	.438	3.95	61.4	19.8	1.57	20.1	.00	.01	.02	149
150 ISL	9.56	9.54	33.663	25.985	204.3	.442	3.91	60.8							151
168	9.07	9.05	33.766	26.145	189.3	.478	3.64	56.0	24.8	1.75	23.2	.00	.00	.02	169
189	8.83	8.81	33.895	26.283	176.5	.516	3.57	54.6	27.0	1.79	24.1	.00			190
200 ISL	8.70	8.68	33.938	26.337	171.6	.535	3.37	51.5							202
210	8.57	8.55	33.964	26.378	167.9	.552	3.20	48.7	30.9	1.97	26.1	.01			211
240	8.05	8.02	33.988	26.476	158.9	.600	1.28	49.3	33.8	1.88	26.0	.01			241
250 ISL	7.89	7.87	33.994	26.504	156.3	.617	3.26	48.8							252
281	7.46	7.43	34.009	26.578	149.6	.665	3.07	45.6	41.2	2.10	29.2	.00			283
300 ISL	7.23	7.20	34.014	26.615	146.3	.692	2.88	42.5							303
343	6.72	6.69	34.019	26.688	139.7	.753	2.37	34.6	51.9	2.40	33.4	.00			345
400 ISL	6.08	6.04	34.025	26.777	131.5	.831	1.84	26.5							403
420	5.89	5.85	34.034	26.808	128.7	.857	1.64	23.7	65.4	2.67	37.9	.00			423
498	5.51	5.47	34.147	26.945	116.4	.952	.79	11.2	78.7	3.01	41.7	.00			501
500 ISL	5.49	5.45	34.149	26.948	116.1	.955	.60	8.5							504
575	5.09	5.05	34.176	27.017	110.1	1.040	.59	8.3	87.8	3.11	43.0	.00			579

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPFD, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Includes data for depth (0 to 576 ISL) with various parameters like temp, salinity, sigma, etc.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Includes data for depth (0 to 79 ISL).

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Includes data for depth (0 to 363 ISL).

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
36 16.6 N	123 08.1 W	02/12/84	0258 GMT		170	07 KT	330 08 10	5	1021.9 MB	12.7 C	10.3 C	7/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	DRY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	13.58	13.57	32.701	24.499	342.9	.000	6.13	103.2							0
1	13.58	13.57	32.701	24.499	342.6	.003	6.13	103.2	2.7	.37	.2	.00	.10	.05	1
10 ISL	13.38	13.38	32.700	24.537	339.6	.034	6.27	105.2							10
12	13.36	13.36	32.697	24.539	339.0	.041	6.29	105.4	2.4	.38	.2	.00	.13	.05	12
20 ISL	13.36	13.36	32.718	24.555	337.7	.068	6.29	105.4							20
27	13.36	13.36	32.741	24.573	336.2	.091	6.28	105.3	2.4	.37	.2	.00	.12	.06	27
30 ISL	13.38	13.38	32.769	24.591	334.6	.102	6.25	104.9							30
42	13.45	13.45	32.878	24.661	328.2	.141	6.15	103.4	2.4	.39	.2	.01	.14	.09	42
50 ISL	13.43	13.42	32.904	24.686	326.1	.168	6.14	103.2							50
58	13.40	13.39	32.929	24.712	323.8	.193	6.13	103.0	2.9	.42	.2	.07	.32	.13	58
73	12.23	12.22	32.971	24.972	299.2	.239	5.58	97.5	5.1	.69	4.3	.12	.15	.14	73
75 ISL	11.96	11.95	32.992	25.040	292.8	.246	5.49	89.5							76
83	11.10	11.09	33.078	25.263	271.6	.268	5.20	83.3	8.4	.93	4.5	.04	.11	.09	83
99	10.35	10.33	33.310	25.576	242.1	.308	4.61	72.7	14.0	1.24	14.0	.01	.10	.09	99
100 ISL	10.30	10.29	33.323	25.594	240.5	.312	4.57	72.1							101
113	9.90	9.88	33.471	25.779	223.2	.355	4.14	65.3	18.5	1.47	18.1	.01	.04	.05	119
125 ISL	9.73	9.71	33.545	25.865	215.2	.369	4.00	62.3							126
139	9.37	9.35	33.698	26.043	198.5	.399	3.63	56.2	23.5	1.69	22.4	.01	.03	.05	140
150 ISL	9.13	9.11	33.768	26.137	189.7	.420	3.44	53.0							151
160	8.91	8.89	33.819	26.210	182.9	.438	3.30	50.6	28.2	1.90	25.2	.00	.03	.04	161
180	8.54	8.52	33.912	26.341	170.8	.474	3.03	46.1	32.2	2.00	27.0	.00	.02	.04	181
200 ISL	8.33	8.31	33.948	26.402	165.3	.507	3.07	46.4							202
201	8.32	8.30	33.949	26.404	165.1	.509	3.07	46.5	33.9	2.00	27.5	.01			202
222	8.04	8.01	33.986	26.476	158.6	.542	2.90	43.6	37.1	2.09	28.9	.00			223
250 ISL	7.70	7.68	34.010	26.544	152.5	.586	2.82	42.1							252
257	7.63	7.60	34.014	26.558	151.2	.598	2.79	41.6	41.2	2.17	30.2	.01			259
300 ISL	7.25	7.22	34.050	26.640	143.9	.660	2.20	32.5							303
309	7.17	7.14	34.056	26.656	142.4	.673	2.05	30.2	49.7	2.44	33.6	.01			311
367	6.47	6.44	34.084	26.772	131.8	.752	1.45	21.0	60.5	2.68	37.1	.00			369
400 ISL	6.15	6.11	34.089	26.819	127.7	.796	1.25	18.0							403
454	5.73	5.69	34.101	26.841	122.0	.863	1.01	14.4	73.1	2.90	40.5	.00			457
500 ISL	5.45	5.40	34.138	26.945	116.4	.918	.76	10.8							504
543	5.25	5.20	34.178	27.000	111.4	.967	.56	7.9	84.9	3.11	42.5	.00			547
600 ISL	5.06	5.01	34.224	27.059	106.4	1.029	.40	5.7							605
631	5.00	4.95	34.248	27.085	104.2	1.062	.36	5.0	93.4	3.20	43.6	.00			636

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
36 06.8 N	123 29.2 W	02/12/84	0640 GMT	3597 M	170	11 KT	330 08 09	2	1021.7 MB	13.8 C	11.9 C	2/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	DRY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	12.95	12.95	32.335	24.339	354.3	.000	6.22	103.1							0
1	12.95	12.95	32.335	24.339	357.7	.004	6.22	103.1	3.5	.38	.1	.00	.08	.05	1
10 ISL	12.88	12.87	32.339	24.358	357.2	.036	6.29	104.2							10
12	12.87	12.87	32.360	24.375	354.6	.043	6.30	104.3	3.5	.39	.1	.00	.10	.05	12
20 ISL	12.87	12.87	32.524	24.501	342.8	.371	6.27	103.9							20
27	12.88	12.88	32.663	24.607	332.9	.094	6.23	103.4	3.1	.44	.1	.00	.17	.16	27
30 ISL	12.89	12.89	32.667	24.608	332.9	.104	6.23	103.4							30
42	12.90	12.89	32.671	24.611	332.9	.144	6.23	103.4	2.7	.44	.1	.00	.20	.16	42
50 ISL	12.86	12.86	32.670	24.617	332.6	.171	6.20	102.9							50
57	12.83	12.82	32.668	24.623	332.1	.193	6.17	102.2	3.2	.47	.0	.14	.43	.24	57
68	12.77	12.76	32.686	24.648	330.0	.230	6.10	101.0	3.3	.49	.4	.23	.36	.21	68
75 ISL	12.04	12.03	32.748	24.836	312.2	.253	5.75	93.8							76
78	11.73	11.72	32.784	24.920	304.2	.261	5.61	90.9	6.1	.75	4.6	.04	.15	.15	78
93	10.86	10.85	33.102	25.325	265.9	.304	5.18	82.5	9.4	.99	9.2	.02	.08	.08	93
100 ISL	10.53	10.52	33.258	25.503	249.1	.323	4.79	75.9							101
107	10.27	10.26	33.395	25.656	234.8	.341	4.39	69.2	16.0	1.38	16.2	.01	.05	.08	108
122	9.91	9.89	33.549	25.837	217.8	.375	3.88	60.7	20.2	1.61	20.0	.01	.03	.06	123
125 ISL	9.84	9.82	33.570	25.865	215.2	.380	3.81	59.6							126
148	9.25	9.24	33.721	26.079	195.2	.428	3.37	52.0	26.1	1.83	23.8	.01	.01	.04	149
150 ISL	9.22	9.21	33.732	26.093	194.0	.431	3.34	51.6							151
164	8.93	8.91	33.832	26.219	182.3	.466	3.12	47.9	29.9	1.96	25.9	.01	.01	.03	169
189	8.47	8.45	33.933	26.369	168.3	.502	2.95	44.8	35.9	2.06	27.6	.01			190
200 ISL	8.28	8.26	33.960	26.419	163.6	.520	2.97	44.9							202
209	8.14	8.12	33.974	26.450	160.8	.535	2.99	45.1	36.6	2.06	28.0	.01			210
240	7.75	7.72	34.003	26.532	153.4	.583	2.83	42.3	40.8	2.15	29.6	.00			241
250 ISL	7.63	7.60	34.009	26.554	151.4	.599	2.83	42.1							252
280	7.29	7.27	34.021	26.611	146.4	.644	2.80	41.4	45.6	2.20	30.5	.00			282
300 ISL	7.08	7.05	34.022	26.641	143.7	.673	2.67	39.3							303
342	6.67	6.64	34.025	26.700	138.5	.732	2.25	32.8	54.4	2.46	33.9	.01			344
400 ISL	6.17	6.14	34.067	26.798	129.6	.810	1.46	21.0							403
419	6.04	6.01	34.085	26.829	126.9	.833	1.22	17.5	68.0	2.81	34.9	.00			421
496	5.69	5.65	34.162	26.934	117.6	.928	.70	10.0	77.7	3.01	41.1	.00			499
500 ISL	5.67	5.63	34.166	26.940	117.1	.933	.68	9.7							504
572	5.27	5.23	34.214	27.029	109.1	1.014	.46	6.5	87.6	3.13	42.6	.00			576

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
35 06.6 N		125 35.9 W		02/13/84	0010 6MT		250	09 KT	290 09 10	1	1020.2 MB	15.4 C	14.7 C	7/8		SC
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SD03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		TMETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	14.16	14.16	32.905	24.536	339.0	.000	6.00	102.4	2.6	.40	.0	.00	.10	.05	0
1	10	13.91	13.90	32.885	24.573	335.7	.034	6.11	103.7	2.5	.41	.0	.00	.10	.05	10
1	20	13.91	13.90	32.893	24.579	335.4	.067	6.10	103.4							20
1	26	13.91	13.90	32.902	24.587	334.8	.087	6.07	103.0	2.5	.40	.0	.00	.12	.04	26
1	30	13.89	13.88	32.899	24.589	334.8	.101	6.07	103.0							30
1	41	13.83	13.83	32.895	24.597	334.3	.137	6.08	103.0	2.5	.41	.0	.00	.23	.10	41
1	50	13.84	13.84	32.913	24.609	333.5	.168	6.06	102.7							50
1	56	13.86	13.85	32.937	24.624	332.2	.187	6.03	102.5	2.7	.40	.0	.01	.29	.13	56
1	66	13.43	13.42	32.963	24.731	322.1	.219	5.78	97.2	3.6	.51	1.6	.11	.18	.14	66
1	75	11.84	11.83	33.136	25.174	280.0	.247	5.17	84.1							76
1	76	11.72	11.71	33.151	25.208	276.8	.249	5.12	83.1	8.4	.91	8.5	.02	.09	.10	76
1	91	10.84	10.83	33.312	25.492	259.3	.288	4.69	74.8	12.3	1.15	12.8	.01	.04	.08	91
1	100	10.51	10.49	33.381	25.604	239.5	.311	4.44	70.4							101
1	106	10.34	10.33	33.416	25.660	234.3	.325	4.31	68.0	16.1	1.37	16.5	.00	.03	.05	106
1	120	9.81	9.80	33.523	25.833	218.1	.358	3.97	62.0	19.4	1.55	19.4	.00	.01	.02	121
1	125	9.68	9.66	33.561	25.885	213.2	.368	3.86	60.1							126
1	144	9.21	9.19	33.713	26.080	195.0	.407	3.46	53.3	25.5	1.78	23.6	.00	.00	.02	145
1	150	9.11	9.09	33.747	26.123	191.0	.419	3.39	52.1							151
1	163	8.89	8.87	33.816	26.211	182.8	.443	3.22	49.3	28.8	1.87	25.4	.00	.00	.02	164
1	183	8.50	8.48	33.924	26.357	169.3	.478	2.79	42.4	34.3	2.08	28.2	.00			184
1	200	8.31	8.29	33.955	26.410	164.5	.506	2.79	42.2							202
1	202	8.29	8.27	33.956	26.414	164.1	.510	2.77	41.9	35.6	2.10	28.7	.00			203
1	230	7.82	7.79	34.013	26.529	153.5	.554	2.58	38.6	41.2	2.20	30.6	.01			231
1	250	7.58	7.56	34.017	26.566	149.9	.585	2.56	38.1							252
2	279	7.31	7.28	34.019	26.607	146.7	.628	2.52	37.3	46.3	2.30	32.2	.00			281
2	300	7.10	7.07	34.031	26.646	143.3	.658	2.30	33.9							303
2	341	6.67	6.64	34.057	26.725	136.1	.715	1.79	26.1	57.4	2.60	36.1	.00			343
2	400	5.90	5.86	34.073	26.837	125.7	.797	1.26	18.1							403
2	418	5.68	5.65	34.080	26.870	122.7	.815	1.15	16.4	72.4	2.88	40.7	.00			421
2	496	5.26	5.22	34.152	26.978	113.0	.906	1.01	14.2	83.3	3.06	42.7	.00			499
2	500	5.24	5.20	34.156	26.983	112.5	.911	.99	14.0							504
2	574	4.86	4.82	34.205	27.066	105.1	.992	.52	7.3	93.3	3.16	44.2	.00			578

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
36 10.9 N		121 43.6 W		02/13/84	0900 6MT	342 M	080	03 KT			1022.0 MB	12.3 C	12.1 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SD03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		TMETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	13.23	13.23	33.270	25.008	295.0	.000	5.93	99.5							0
1	1	13.23	13.23	33.270	25.008	294.1	.003	5.93	99.5	4.8	.50	1.9	.11	.92	.19	1
1	10	12.99	12.99	33.301	25.080	287.5	.029	5.80	96.8							10
1	11	12.98	12.97	33.304	25.085	287.0	.032	5.78	96.5	5.8	.62	3.6	.15	.86	.27	11
1	20	12.89	12.89	33.324	25.117	284.1	.058	5.55	92.5							20
1	22	12.87	12.87	33.330	25.126	283.3	.063	5.49	91.4	6.5	.72	5.1	.17	.51	.33	22
1	30	12.58	12.58	33.382	25.223	274.3	.086	5.10	84.4							30
1	32	12.50	12.50	33.394	25.248	272.1	.091	5.01	82.8	8.0	.84	7.8	.09	.29	.22	32
1	42	12.15	12.14	33.419	25.335	263.9	.117	4.78	78.4	9.4	.96	9.6	.05	.16	.18	42
1	50	11.95	11.94	33.480	25.420	256.0	.139	4.51	73.7							50
1	52	11.90	11.90	33.493	25.439	254.4	.143	4.45	72.7	12.2	1.09	11.7	.05	.12	.15	52
1	61	11.59	11.58	33.524	25.522	246.7	.166	4.25	69.0	13.4	1.21	13.3	.04	.09	.17	61
1	72	11.31	11.30	33.568	25.606	238.9	.192	4.04	65.2	14.9	1.30	14.8	.03	.10	.12	72
1	75	11.26	11.25	33.573	25.621	237.5	.200	4.00	64.4							76
1	87	11.04	11.03	33.603	25.683	231.9	.227	3.85	61.8	16.6	1.40	16.5	.03	.07	.12	87
1	100	10.45	10.44	33.679	25.846	216.6	.257	3.56	56.4							101
1	131	10.38	10.37	33.687	25.865	214.8	.261	3.55	55.9	21.2	1.52	19.5	.03	.05	.10	102
1	125	9.83	9.82	33.789	26.022	200.3	.310	3.25	50.8	24.7	1.66	22.2	.00	.02	.07	126
1	146	9.44	9.42	33.854	26.153	188.3	.351	2.93	45.5	28.8	1.82	24.5	.00	.00	.07	147
1	150	9.37	9.36	33.865	26.173	186.4	.358	2.88	44.7							151
1	181	8.89	8.87	33.936	26.306	174.2	.414	2.60	39.9	34.5	1.99	27.1	.01			182
1	200	8.72	8.70	33.969	26.359	169.6	.446	2.51	38.4							202
1	215	8.59	8.56	33.991	26.396	166.2	.471	2.45	37.3	37.1	2.08	28.7	.00			216
1	250	7.97	7.94	34.039	26.528	154.1	.528	2.16	32.4							252
1	257	7.80	7.77	34.048	26.560	151.1	.539	2.08	31.1	45.7	2.28	31.7	.00			259

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Rows include depth measurements from 0 to 559 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Rows include depth measurements from 0 to 556 meters.

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WFT	CLOUD	AMT	TYPE	
35 01.3 N	120 55.2 W	02/15/84	1350 GNT	243 M	320	15 KT	320 03 12		1022.0 MB	13.8 C	11.3 C				
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	ST03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	13.63	13.63	33.497	25.102	285.0	.000	5.75	97.4							0
1 1	13.63	13.63	33.497	25.102	285.1	.003	5.75	97.4	4.5	.49	2.2	.12	1.55	.12	1
1 10 ISL	13.64	13.63	33.496	25.101	285.5	.029	5.89	99.7							10
1 11	13.64	13.63	33.495	25.100	285.5	.031	5.89	99.8	4.5	.50	2.2	.12	.85	.18	11
1 20 ISL	13.64	13.64	33.496	25.100	285.8	.057	5.83	98.8							20
1 21	13.64	13.64	33.496	25.101	285.8	.060	5.82	98.6	4.4	.50	2.2	.12	1.46	.28	21
1 30 ISL	13.64	13.64	33.495	25.099	286.2	.086	5.76	97.6							30
1 32	13.64	13.64	33.495	25.099	286.2	.091	5.75	97.4	4.4	.50	2.2	.12	1.32	.49	32
1 42	13.63	13.63	33.495	25.102	286.3	.119	5.75	97.4	4.2	.50	2.2	.13	1.36	.56	42
1 50 ISL	13.62	13.61	33.491	25.101	286.2	.143	5.74	97.2							50
1 52	13.57	13.56	33.490	25.111	285.7	.148	5.68	96.1	4.4	.53	2.7	.15	1.05	.52	52
1 63	12.63	12.62	33.495	25.302	267.7	.178	4.82	80.0	8.8	.85	8.5	.22	.32	.48	63
1 73	11.65	11.85	33.547	25.490	250.0	.204	4.21	68.7	12.8	1.11	13.2	.10	.14	.24	73
1 75 ISL	11.63	11.62	33.572	25.551	244.2	.210	4.07	66.1							76
1 88	10.58	10.57	33.709	25.846	216.4	.239	3.45	54.8	20.4	1.50	19.6	.22	.04	.19	88
1 100 ISL	10.27	10.26	33.756	25.936	208.0	.265	3.37	53.1							101
1 108	10.21	10.19	33.769	25.958	206.1	.283	3.24	51.1	23.5	1.64	21.9	.04	.04	.14	109
1 125 ISL	9.75	9.73	33.846	26.096	193.3	.316	2.96	46.3							126
1 128	9.66	9.65	33.861	26.122	190.8	.322	2.91	45.4	27.9	1.81	24.5	.04	.03	.16	129
1 148	9.36	9.34	33.905	26.207	183.2	.359	2.79	43.2	30.3	1.91	26.0	.04	.02	.11	149
1 150 ISL	9.33	9.31	33.909	26.215	182.4	.362	2.77	42.9							151
1 177	8.87	8.85	33.975	26.339	171.0	.410	2.49	38.2	35.7	2.07	27.9	.03			178
1 200 ISL	8.49	8.47	34.028	26.440	161.8	.448	2.29	34.8							202
1 205	8.42	8.39	34.039	26.460	159.9	.456	2.25	34.1	40.3	2.20	29.6	.01			206

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WFT	CLOUD	AMT	TYPE	
34 53.3 N	121 11.9 W	02/15/84	1826 GNT	369 M	300	09 KT	290 02 09	1	1023.0 MB	15.5 C	10.1 C				
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	ST03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	13.90	13.90	33.480	25.033	291.6	.000	6.08	103.6							0
1 1	13.90	13.90	33.480	25.033	291.6	.003	6.08	103.6	2.3	.37	.0	.01	2.56	.32	1
1 10 ISL	13.88	13.88	33.478	25.036	291.6	.029	6.27	106.8							10
1 11	13.88	13.88	33.478	25.036	291.6	.032	6.28	106.9	2.0	.36	.0	.01	2.44	.59	11
1 20	13.86	13.86	33.479	25.042	291.4	.058	6.20	105.5	1.9	.55	.0	.01	2.52	.56	20
1 30 ISL	13.86	13.86	33.479	25.042	291.4	.087	6.02	102.4							30
1 31	13.85	13.85	33.478	25.043	291.6	.090	5.99	101.9	2.1	.36	.0	.01	2.59	.62	31
1 41	13.18	13.17	33.456	25.164	280.3	.118	5.28	88.6	6.4	.64	4.5	.18	.75	.47	41
1 50 ISL	12.48	12.47	33.489	25.327	265.0	.143	4.67	77.2							50
1 52	12.32	12.32	33.500	25.365	261.4	.148	4.56	75.2	10.4	.96	9.8	.10	.30	.45	52
1 61	11.58	11.37	33.576	25.601	239.1	.171	4.00	64.6	15.4	1.24	14.7	.02	.17	.22	61
1 72	10.79	10.79	33.654	25.766	223.6	.196	3.62	57.8	18.9	1.41	17.9	.01	.06	.19	72
1 75 ISL	10.65	10.64	33.675	25.807	219.7	.203	3.54	56.3							76
1 87	10.30	10.29	33.731	25.913	209.9	.228	3.35	52.9	21.9	1.58	20.5	.00	.05	.11	87
1 100 ISL	10.13	10.12	33.757	25.962	205.5	.256	3.27	51.6							101
1 101	10.12	10.11	33.759	25.965	205.3	.259	3.27	51.5	23.8	1.65	21.4	.00	.05	.10	102
1 125 ISL	9.85	9.84	33.811	26.052	197.5	.306	3.09	48.4							126
1 126	9.83	9.82	33.814	26.057	197.0	.309	3.08	48.2	26.1	1.73	23.0	.00	.03	.11	127
1 146	9.38	9.36	33.897	26.197	184.1	.347	2.82	41.7	29.4	1.88	25.3	.01	.01	.08	147
1 150 ISL	9.30	9.29	33.900	26.218	182.1	.354	2.79	43.2							151
1 177	8.81	8.79	33.974	26.348	170.2	.401	2.66	40.7	34.0	1.99	27.6	.00			178
1 200 ISL	8.40	8.38	34.015	26.443	161.4	.440	2.57	38.9							202
1 207	8.25	8.26	34.025	26.469	159.0	.450	2.53	38.3	38.9	2.10	29.4	.00			208
1 237	7.75	7.72	34.063	26.579	148.9	.496	2.20	32.9	45.6	2.26	31.8	.00			238
1 250 ISL	7.61	7.59	34.072	26.605	146.5	.516	2.08	31.1							252
1 276	7.41	7.38	34.085	26.646	143.1	.554	1.87	27.7	50.6	2.42	33.2	.00			278
1 300 ISL	7.17	7.14	34.104	26.694	138.8	.588	1.63	24.0							302
1 336	6.81	6.78	34.132	26.765	132.4	.636	1.28	18.7	61.0	2.66	36.7	.00			338
1 390	6.35	6.32	34.160	26.848	124.9	.706	.93	13.5	68.6	2.82	39.1	.00			393
1 400 ISL	6.29	6.25	34.164	26.860	123.9	.718	.89	12.9							403
1 450	6.00	5.96	34.187	26.916	119.1	.779	.72	10.3	76.1	2.94	40.4	.00			453
1 500 ISL	5.73	5.68	34.220	26.976	113.8	.837	.55	7.9							504
1 510	5.67	5.63	34.228	26.989	112.7	.849	.52	7.4	83.4	3.03	41.5	.00			514

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
34 53.9 N	121 16.0 W	02/08/84	2035 GRT	499 M	320	10 KT	320 07 08	1	1017.9 MB	15.0 C	13.0 C	6/8	AS			
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	14.00	14.00													0
1	1	14.00	14.00													1
	10 ISL	13.94	13.94											1.18	.66	10
1	11	13.94	13.94													11
	20 ISL	13.94	13.94											1.40	.58	20
1	21	13.95	13.95													21
	30 ISL	13.94	13.94											1.94	.59	30
1	31	13.83	13.82													31
	41	12.70	12.70											2.27	1.06	41
1	50 ISL	12.50	12.49											.66	.42	50
	51	12.49	12.49													51
1	62	11.82	11.81											.48	.28	62
	71	11.44	11.44											.18	.18	71
1	75 ISL	11.29	11.28											.10	.17	75
	91	10.61	10.61													91
1	100 ISL	10.36	10.35											.04	.10	100
	111	10.09	10.09													111
1	125 ISL	9.84	9.83											.02	.06	125
	132	9.74	9.73													132
1	150 ISL	9.57	9.56											.02	.05	150
	152	9.56	9.55													152
1	173	9.18	9.17													173
	193	8.88	8.87													193
1	200 ISL	8.78	8.76											.02	.05	200
	213	8.53	8.52													213
1	234	7.97	7.96													234
	250 ISL	7.72	7.71													250
1	255	7.66	7.65													255
	277	7.43	7.42													277
1	298	7.35	7.33													298
	300 ISL	7.33	7.32													300
1	318	7.16	7.15													318

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WFT	CLOUD	AMT	TYPE		
34 43.3 N	121 32.9 W	02/15/84	2133 GRT	929 M	260	08 KT	260 02 03		1022.0 MB	13.5 C	12.6 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	14.03	14.03	33.387	24.935	301.0	.000	6.18	105.5	1.5	.37	.0	.00	.90	.17	0
1	10	13.76	13.76	33.401	25.001	294.9	.030	6.33	107.5	1.1	.38	.0	.00	1.04	.29	10
	20 ISL	13.75	13.75	33.402	25.005	294.7	.059	6.23	105.8							20
1	25	13.72	13.71	33.403	25.013	294.3	.074	6.16	104.5	1.0	.32	.0	.00	1.38	.34	25
	30 ISL	13.73	13.73	33.408	25.015	294.2	.089	6.13	104.0							30
1	40	13.74	13.73	33.414	25.018	294.2	.118	6.12	103.8	1.0	.32	.0	.00	1.36	.38	40
	50 ISL	13.60	13.59	33.419	25.050	291.5	.167	5.81	98.2							50
1	55	13.31	13.30	33.424	25.112	285.6	.161	5.54	93.2	4.0	.55	2.9	.17	.76	.42	55
	66	12.10	12.09	33.480	25.393	259.1	.191	4.50	73.8	10.9	.99	10.6	.07	.30	.42	66
1	74	11.54	11.53	33.496	25.509	248.1	.211	4.27	69.2	12.8	1.16	13.4	.03	.19	.28	74
	75 ISL	11.49	11.48	33.504	25.524	246.7	.214	4.23	68.5							75
1	91	11.08	11.06	33.632	25.699	230.4	.252	3.78	60.7	17.0	1.33	16.9	.02	.10	.18	91
	100 ISL	10.52	10.51	33.700	25.851	216.1	.273	3.51	55.7							100
1	104	10.26	10.25	33.731	25.920	209.6	.282	3.39	53.5	21.6	1.59	20.9	.02	.05	.19	104
	119	9.89	9.88	33.824	26.055	197.1	.312	3.12	48.9	25.5	1.72	23.0	.01	.03	.14	119
1	125 ISL	9.79	9.78	33.848	26.090	193.8	.323	3.04	47.5							125
	145	9.50	9.49	33.911	26.188	184.9	.362	2.81	43.7	29.4	1.87	25.1	.01	.01	.11	145
1	150 ISL	9.43	9.42	33.924	26.209	183.0	.371	2.77	42.9							150
	165	9.21	9.19	33.958	26.272	177.3	.398	2.65	40.9	31.3	1.95	26.3	.01	.00	.10	165
1	184	8.95	8.93	33.998	26.344	170.7	.431	2.51	38.6	34.3	2.01	27.7	.01			184
	200 ISL	8.75	8.73	34.024	26.397	166.0	.458	2.43	37.1							200
1	203	8.72	8.69	34.028	26.406	165.2	.462	2.41	36.8	36.1	2.07	28.6	.00			203
	232	8.32	8.29	34.083	26.510	155.6	.508	2.10	31.8	40.9	2.21	30.6	.00			232
1	250 ISL	8.07	8.05	34.105	26.565	150.7	.537	1.97	29.6							250
	271	7.77	7.75	34.118	26.619	145.8	.568	1.85	27.7	46.8	2.37	32.6	.00			271
1	300 ISL	7.26	7.23	34.103	26.681	140.1	.609	1.74	25.8							300
	331	6.76	6.73	34.085	26.736	135.0	.652	1.62	23.7	57.2	2.53	36.0	.00			331
1	400 ISL	6.42	6.38	34.147	26.829	127.0	.742	1.04	15.1							400
	404	6.41	6.37	34.152	26.835	126.5	.748	1.00	14.5	66.8	2.79	38.5	.00			404
1	480	5.85	5.81	34.217	26.957	115.4	.839	.58	8.3	77.8	2.98	41.3	.00			480
	500 ISL	5.75	5.70	34.231	26.982	113.3	.862	.51	7.3							500
1	555	5.54	5.49	34.257	27.029	109.3	.925	.43	6.1	84.6	3.04	42.2	.00			555

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 03.6 N	122 56.7 W	02/16/84	0058 GNT		250	12 KT	290 08 10	2	1019.8 MB	15.1 C	14.8 C		R/8	ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C	THETA	THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	14.02	14.02	33.020	24.654	327.8	.000	6.11	104.0	2.6	.41	.0	.00	.12	.05	0
1 10	13.87	13.87	33.025	24.689	324.7	.032	6.06	102.9	2.6	.40	.0	.00	.12	.08	10
1 20 ISL	13.86	13.86	33.023	24.690	324.7	.065	6.08	103.1							20
1 25	13.84	13.84	33.022	24.693	324.8	.081	6.09	103.3	2.6	.40	.0	.00	.14	.08	25
1 30 ISL	13.84	13.84	33.023	24.693	325.0	.098	6.08	103.2							30
1 40	13.85	13.84	33.023	24.693	325.1	.130	6.08	103.1	2.6	.41	.0	.00	.16	.08	40
1 50 ISL	13.55	13.54	33.027	24.757	319.3	.162	6.14	103.2							50
1 55	13.40	13.39	33.034	24.793	316.0	.177	6.15	103.4	3.5	.42	.0	.04	.38	.31	55
1 70	13.27	13.26	33.096	24.867	309.3	.224	5.89	98.8	3.9	.50	1.1	.24	.29	.21	70
1 75 ISL	12.98	12.97	33.153	24.969	299.8	.240	5.68	94.8							76
1 80	12.69	12.68	33.211	25.070	290.2	.254	5.47	90.7	5.4	.67	4.1	.07	.14	.16	80
1 94	12.03	12.02	33.378	25.327	266.0	.293	4.76	77.9	9.4	.98	9.5	.02	.05	.09	94
1 100 ISL	11.61	11.60	33.435	25.447	254.7	.309	4.53	73.4							100
1 113	10.77	10.76	33.522	25.668	233.9	.342	4.17	66.5	15.7	1.35	16.1	.00	.02	.05	114
1 125 ISL	10.32	10.31	33.574	25.787	222.7	.369	4.01	63.3							126
1 133	10.08	10.07	33.615	25.860	215.9	.387	3.89	61.1	19.8	1.53	19.4	.02	.01	.04	134
1 150 ISL	9.70	9.68	33.759	26.037	199.4	.422	3.38	52.8							151
1 153	9.64	9.62	33.788	26.069	196.4	.428	3.28	51.1	25.0	1.78	23.2	.01	.01	.04	154
1 172	9.39	9.37	33.910	26.206	183.7	.464	2.86	44.3	29.5	1.96	25.6	.00	.00	.03	173
1 192	8.80	8.78	33.941	26.324	172.7	.499	2.98	45.6	31.7	1.99	26.7	.00			193
1 200 ISL	8.69	8.67	33.957	26.353	170.1	.513	2.95	45.0							202
1 212	8.58	8.56	33.978	26.387	167.0	.533	2.88	43.9	33.6	2.05	27.6	.00			213
1 247	8.09	8.07	34.010	26.486	158.0	.589	2.90	43.7	37.4	2.11	28.6	.01			248
1 250 ISL	8.06	8.03	34.014	26.495	157.3	.595	2.87	43.2							252
1 296	7.58	7.55	34.055	26.597	148.2	.665	2.35	35.0	45.3	2.32	31.6	.01			298
1 300 ISL	7.54	7.51	34.057	26.604	147.5	.671	2.31	34.4							302
1 352	6.96	6.93	34.078	26.703	138.7	.745	1.84	27.0	54.5	2.56	34.7	.01			354
1 400 ISL	6.39	6.36	34.101	26.797	130.0	.810	1.37	19.8							403
1 435	6.02	5.98	34.123	26.863	123.9	.854	1.06	15.2	70.3	2.90	39.7	.00			438
1 500 ISL	5.55	5.51	34.180	26.966	114.5	.932	.68	9.7							504
1 520	5.44	5.39	34.199	26.995	111.9	.955	.60	8.5	82.8	3.10	42.3	.00			524
1 600 ISL	5.04	4.99	34.266	27.095	103.0	1.040	.41	5.8							605
1 605	5.02	4.97	34.270	27.100	102.5	1.045	.41	5.8	94.2	3.21	43.9	.00			609

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 77 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 44.1 N	123 37.9 W	02/15/84	1853 GNT		270	14 KT	280 08 12	2	1022.8 MB	17.0 C	15.0 C		R/8	SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C	THETA	THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0 ISL	14.17	14.17	33.185	24.750	318.6	.000	6.14	105.0							0
1 1	14.17	14.17	33.185	24.750	318.6	.003	6.14	105.0	2.8	.39	.0	.00	.12	.06	1
1 10 ISL	14.13	14.13	33.183	24.757	318.2	.032	6.12	104.6							10
1 12	14.13	14.12	33.183	24.758	318.2	.038	6.12	104.5	2.8	.39	.0	.00	.13	.07	12
1 20 ISL	14.10	14.10	33.185	24.765	317.7	.064	6.11	104.4							20
1 27	14.07	14.07	33.186	24.772	317.2	.086	6.11	104.2	2.8	.39	.0	.00	.14	.09	27
1 30 ISL	13.99	13.99	33.187	24.789	315.8	.095	6.10	103.9							30
1 42	13.63	13.62	33.216	24.887	308.7	.132	6.10	103.1	3.6	.43	.0	.01	.52	.36	42
1 50 ISL	13.46	13.45	33.292	24.981	298.0	.157	5.76	97.0							50
1 58	13.17	13.17	33.374	25.101	286.7	.180	5.30	88.8	6.5	.73	5.1	.08	.30	.29	58
1 73	11.85	11.84	33.497	25.452	253.5	.220	4.33	70.6	12.5	1.17	12.5	.03	.08	.15	73
1 75 ISL	11.71	11.70	33.495	25.477	251.3	.226	4.35	70.3							76
1 84	11.27	11.26	33.475	25.542	245.2	.247	4.36	70.2	13.4	1.25	13.8	.03	.07	.10	84
1 99	10.45	10.44	33.510	25.714	229.1	.282	4.17	66.0	16.2	1.43	16.8	.03	.03	.08	99
1 100 ISL	10.42	10.40	33.522	25.730	227.6	.286	4.13	65.3							101
1 119	10.08	10.06	33.696	25.924	209.5	.328	3.54	55.6	21.4	1.69	21.2	.02	.01	.06	120
1 125 ISL	9.94	9.93	33.723	25.968	205.5	.340	3.48	54.5							126
1 139	9.58	9.57	33.777	26.070	196.1	.369	3.36	52.3	24.7	1.79	23.1	.01	.01	.03	140
1 150 ISL	9.35	9.34	33.834	26.152	188.4	.389	3.18	49.2							151
1 160	9.16	9.15	33.887	26.224	181.7	.408	3.01	46.4	29.4	1.94	25.8	.01	.01	.03	161
1 180	8.88	8.86	33.952	26.320	172.9	.443	2.82	43.2	31.8	2.04	27.2	.01	.00	.03	181
1 200 ISL	8.63	8.61	33.995	26.392	166.3	.477	2.73	41.6							202
1 201	8.62	8.60	33.996	26.395	166.1	.479	2.73	41.6	34.5	2.12	28.1	.01			202
1 222	8.30	8.28	34.012	26.457	160.5	.513	2.78	42.1	36.5	2.12	28.6	.01			223
1 250 ISL	7.89	7.86	34.033	26.535	153.4	.557	2.66	39.8							252
1 258	7.78	7.76	34.037	26.554	151.6	.568	2.60	38.9	41.7	2.22	30.5	.00			259
1 300 ISL	7.27	7.24	34.053	26.640	144.0	.631	2.24	33.1							302
1 309	7.17	7.14	34.056	26.656	142.5	.644	2.14	31.8	49.9	2.44	33.7	.00			311
1 367	6.52	6.49	34.094	26.774	131.8	.723	1.42	20.6	60.7	2.75	37.7	.00			369
1 400 ISL	6.20	6.17	34.112	26.830	126.7	.766	1.16	16.7							403
1 454	5.77	5.74	34.144	26.909	119.5	.833	.87	12.4	75.0	2.98	41.4	.00			457
1 500 ISL	5.51	5.47	34.181	26.972	113.9	.886	.66	9.4							504
1 542	5.31	5.26	34.216	27.023	109.3	.934	.52	7.3	85.6	3.12	43.3	.00			546
1 500 ISL	5.05	5.00	34.255	27.084	104.0	.995	.39	5.5							605
1 631	4.93	4.88	34.273	27.113	101.4	1.027	.36	5.0							636

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Rows include depth measurements from 0 to 620 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Rows include depth measurements from 0 to 500 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Rows include depth measurements from 0 to 21 meters.

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 10.7 N	119 30.5 W	02/20/84	0841 GMT	110 M	330	09 KT	300 02 11		1023.4 MB	14.7 C	13.0 C				
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEOD	PRESS
M	DEG C	DEG C	THETA	UM/L			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	14.42	14.42	33.510	24.949	299.7	.000	5.95	102.4	3.4	.41	.6	.01	1.36	.65	0
1 10 ISL	14.23	14.22	33.510	24.990	296.0	.030	5.91	101.4							10
1 11	14.22	14.21	33.510	24.992	295.8	.033	5.91	101.3	3.7	.45	1.1	.04	1.71	.62	11
1 20	14.18	14.18	33.511	25.000	295.4	.059	5.90	101.1	3.8	.45	1.1	.05	1.58	.71	20
1 29	14.04	14.04	33.514	25.032	292.6	.085	5.77	98.6	4.1	.49	1.8	.05	1.06	.92	29
1 30 ISL	13.98	13.97	33.515	25.046	291.2	.099	5.69	97.1							30
1 41	13.05	13.05	33.526	25.242	272.8	.119	4.84	81.0	8.2	.84	7.5	.16	.32	.21	41
1 50 ISL	11.90	11.89	33.521	25.461	252.2	.143	4.39	71.8							50
1 51	11.82	11.81	33.521	25.477	250.7	.145	4.37	71.5	10.6	1.08	12.1	.02	.11	.16	51
1 61	11.60	11.59	33.532	25.525	246.3	.170	4.30	69.8	11.1	1.14	12.9	.01	.11	.15	61
1 72	11.15	11.14	33.581	25.646	235.1	.196	4.08	65.6	13.2	1.27	15.1	.01	.07	.08	72
1 75 ISL	11.07	11.06	33.604	25.678	232.0	.204	4.00	64.3							76
1 82	10.87	10.86	33.655	25.754	225.0	.219	3.83	61.2	16.0	1.38	17.4	.00	.05	.07	82
1 97	10.24	10.23	33.730	25.930	208.4	.241	3.49	55.1	19.7	1.58	20.7	.00	.01	.06	92

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 52.6 N	120 08.0 W	02/20/84	1407 GMT	97 M	110	19 KT	290 03 08		1022.4 MB	17.0 C	13.9 C				
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEOD	PRESS
M	DEG C	DEG C	THETA	UM/L			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	14.15	14.15	33.502	24.999	294.9	.000	5.64	96.6	3.5	.48	2.3	.03	.87	.33	0
1 10	14.13	14.13	33.502	25.003	294.8	.029	5.79	99.1	3.5	.50	2.4	.03	.92	.35	10
1 20	14.02	14.02	33.505	25.030	292.5	.059	5.62	96.0	4.2	.54	2.9	.03	.91	.35	20
1 30	13.81	13.80	33.513	25.079	288.1	.087	5.49	93.3	4.7	.58	3.6	.05	.87	.34	30
1 40	13.60	13.60	33.516	25.124	284.1	.116	5.40	91.4	5.6	.62	4.4	.07	.87	.34	40
1 50	13.45	13.44	33.516	25.156	281.3	.144	5.29	89.3	6.0	.68	5.1	.11	.75	.33	50
1 60	12.64	12.63	33.547	25.341	264.0	.171	4.83	80.2	9.3	.91	9.1	.11	.44	.32	60
1 75	11.29	11.28	33.637	25.663	233.5	.208	4.05	65.4	14.9	1.27	15.4	.02	.15	.15	75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 44.6 N	120 24.5 W	02/20/84	1742 GMT	1082 M	090	13 KT	290 03 09		1023.4 MB	18.0 C	13.1 C		1/8	CS	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEOD	PRESS
M	DEG C	DEG C	THETA	UM/L			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	13.40	13.40	33.494	25.146	280.9	.000	5.83	98.3	3.6	.46	2.0		1.04	.33	0
1 10 ISL	13.40	13.40	33.492	25.146	281.2	.029	5.84	98.4							10
1 11	13.40	13.40	33.492	25.146	281.2	.031	5.94	100.1	3.7	.50	2.6		1.48	.35	11
1 20	13.40	13.40	33.493	25.147	281.4	.056	5.80	97.8	4.3	.54	3.5		1.14	.60	20
1 30	13.40	13.39	33.499	25.153	281.1	.084	5.66	95.4	4.7	.56	3.5		.95	.70	30
1 40	13.38	13.38	33.499	25.156	281.1	.112	5.61	94.5	5.0	.59	4.0		.94	.42	40
1 50 ISL	12.76	12.75	33.511	25.290	268.6	.140	5.07	84.2							50
1 51	12.69	12.68	33.513	25.304	267.2	.142	5.01	83.2	8.1	.84	8.1		.44	.41	51
1 60	11.78	11.77	33.544	25.501	248.6	.165	4.32	70.4	11.3	1.10	12.7		.24	.21	60
1 71	10.89	10.88	33.623	25.725	227.5	.191	3.86	61.7	15.9	1.33	16.9		.08	.19	71
1 75 ISL	10.64	10.63	33.656	25.795	220.8	.201	3.72	59.2							76
1 85	10.22	10.21	33.727	25.923	208.9	.221	3.47	54.7	20.7	1.54	20.6		.04	.11	85
1 100 ISL	9.85	9.84	33.813	26.052	196.9	.253	3.10	48.5							101
1 101	9.83	9.82	33.820	26.061	196.1	.256	3.07	48.0	24.1	1.70	22.9		.01	.09	102
1 120	9.56	9.54	33.883	26.156	187.4	.292	2.99	46.5	26.7	1.81	24.3		.01	.09	121
1 125 ISL	9.46	9.45	33.902	26.187	184.6	.300	2.93	45.5							126
1 146	9.02	9.00	33.979	26.319	172.4	.338	2.64	40.6	31.4	1.96	26.9		.00	.06	147
1 150 ISL	8.96	8.94	33.990	26.337	170.7	.345	2.60	39.9							151
1 175	8.63	8.61	34.040	26.427	162.5	.387	2.40	36.6	35.4	2.06	28.7				176
1 200 ISL	8.41	8.39	34.050	26.469	158.9	.427	2.32	35.2							202
1 205	8.37	8.35	34.050	26.476	158.4	.434	2.31	35.0	38.2	2.12	29.6				206
1 236	8.08	8.06	34.077	26.541	152.6	.482	2.17	31.9	41.5	2.22	30.7				237
1 250 ISL	7.97	7.94	34.094	26.572	150.0	.504	1.98	29.8							252
1 276	7.77	7.74	34.125	26.625	145.3	.543	1.72	25.7	47.6	2.40	32.6				278
1 300 ISL	7.59	7.56	34.145	26.666	141.7	.577	1.55	23.1							302
1 337	7.26	7.23	34.163	26.728	136.2	.628	1.33	19.7	55.3	2.55	34.9				339
1 400 ISL	6.33	6.29	34.165	26.856	124.1	.710	.91	13.2							403
1 411	6.16	6.13	34.166	26.877	122.3	.724	.84	12.1	69.9	2.83	39.0				414
1 486	5.77	5.73	34.226	26.975	113.7	.912	.52	7.4	79.5	2.98	40.8				489
1 500 ISL	5.69	5.65	34.235	26.992	112.2	.828	.48	6.8							504
1 560	5.32	5.27	34.261	27.058	106.3	.894	.39	5.5	88.5	3.08	42.4				564

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 83 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 34.7 N	120 45.3 W	02/20/84	2251 GMT	1295 M	350	09 KT	330 04 06	1	1022.4 MB	16.4 C	13.4 C			CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THTETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	14.38	14.38	33.546	24.851	311.9	.000	6.01	103.3							0
1	14.38	14.38	33.346	24.851	311.0	.003	6.01	103.3	.9	.33	.1	.01	.46	.18	1
1	14.08	14.08	33.349	24.895	305.1	.031	6.05	103.3	.9	.33	.0	.00	.47	.18	10
1	14.03	14.03	33.349	24.907	304.2	.061	6.07	103.6	.8	.33	.0	.00	.47	.23	20
1	14.01	14.01	33.347	24.909	304.2	.091	6.04	103.0	.7	.33	.0	.00	.53	.29	30
1	13.93	13.92	33.344	24.925	303.1	.122	5.93	101.0	.8	.36	.3	.01	.66	.27	40
1	13.94	13.83	33.343	24.942	301.7	.152	5.98	99.9	1.0	.39	.6	.02	.73	.29	50
1	13.73	13.72	33.343	24.965	299.8	.181	5.79	98.2	1.4	.41	1.1	.03	.98	.32	60
1	12.08	12.07	33.397	25.332	265.0	.212	4.79	78.5	7.2	.88	8.9	.04	.23	.20	71
75 ISL	11.75	11.74	33.423	25.414	257.3	.224	4.57	74.4							76
86	11.29	11.28	33.486	25.548	244.8	.250	4.25	68.5	11.3	1.16	13.7	.01	.08	.13	86
100 ISL	10.76	10.75	33.562	25.701	230.4	.284	3.99	63.6							101
101	10.74	10.73	33.565	25.706	229.9	.286	3.98	63.4	14.3	1.33	16.7	.01	.04	.07	101
1	10.00	9.98	33.673	25.919	210.0	.329	3.67	57.6	19.0	1.55	20.4	.00	.01	.05	121
125 ISL	9.83	9.82	33.705	25.972	205.1	.339	3.58	56.0							126
1	9.21	9.19	33.848	26.186	185.0	.380	3.18	49.1	25.9	1.78	24.4	.00	.09	.03	147
150 ISL	9.15	9.14	33.869	26.211	182.7	.387	3.11	47.9							151
1	8.84	8.82	33.979	26.347	170.2	.433	2.69	41.2	31.6	1.98	27.2	.00			177
200 ISL	8.27	8.25	34.026	26.472	158.6	.473	2.60	39.3							202
1	8.13	8.11	34.036	26.500	156.0	.482	2.56	38.6		2.10	29.2	.00			207
235	7.82	7.79	34.113	26.608	146.2	.525	1.82	27.3	45.5	2.37	32.5	.00			236
250 ISL	7.70	7.67	34.133	26.641	143.5	.548	1.64	24.5							252
1	7.54	7.51	34.148	26.677	140.2	.579	1.48	22.0	50.6	2.53	33.8	.00			274
300 ISL	7.28	7.25	34.169	26.730	135.5	.617	1.14	16.9							302
1	6.98	6.95	34.188	26.786	130.5	.657	.82	12.1	59.4	2.70	36.4	.00			332
400 ISL	6.46	6.42	34.227	26.888	121.5	.745	.81	11.8							403
1	6.43	6.40	34.229	26.895	121.0	.751	.73	10.6	68.9	2.89	38.6	.00			407
1	6.04	5.99	34.245	26.957	115.7	.840	.56	8.0	2.98	40.3	.00				483
500 ISL	5.94	5.89	34.253	26.976	114.0	.863	.52	7.5							504
1	5.67	5.62	34.286	27.036	108.9	.928	.43	6.1	84.3	3.07	41.6	.00			562

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 83 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 24.7 N	121 05.9 W	02/24/84	1152 GMT	3540 M	340	22 KT	330 06 08		1020.7 MB	13.3 C	12.7 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THTETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	14.02	14.02	33.303	24.872	306.9	.000	5.93	101.1							0
1	14.02	14.02	33.303	24.872	307.2	.003	5.93	101.1	1.5	.36	.0	.00	.45	.18	1
1	14.05	14.04	33.303	24.867	307.7	.031	5.95	101.6							10
1	14.05	14.05	33.303	24.867	307.8	.037	6.05	103.2	1.6	.35	.0	.00	.45	.20	20
1	14.05	14.05	33.303	24.867	308.0	.062	5.97	101.9							21
1	14.05	14.04	33.303	24.867	309.1	.092	5.96	101.7	1.6	.34	.0	.00	.51	.25	21
1	14.05	14.04	33.302	24.867	309.3	.098	5.96	101.7	1.6	.35	.0	.00	.45	.19	32
1	13.97	13.97	33.312	24.891	306.4	.129	5.89	100.3	1.8	.37	.3	.02	.43	.24	42
50 ISL	13.37	13.36	33.372	25.060	290.4	.153	5.47	92.0							50
1	13.30	13.29	33.378	25.079	288.7	.155	5.42	91.1	3.8	.59	3.2	.07	.37	.28	51
1	12.48	12.47	33.396	25.255	272.1	.186	5.04	83.3	6.0	.76	6.6	.02	.27	.19	62
1	12.09	12.09	33.426	25.351	263.2	.210	4.73	77.5	8.3	.92	9.3	.02	.18	.22	71
1	11.85	11.84	33.436	25.405	258.2	.221	4.67	76.1							76
1	11.26	11.25	33.466	25.537	245.7	.248	4.57	73.6	10.5	1.05	12.1	.01	.07	.10	86
100 ISL	10.72	10.71	33.545	25.695	231.0	.282	4.27	68.0							101
1	10.67	10.66	33.554	25.711	229.5	.286	4.23	67.3	13.9	1.24	15.4	.01	.03	.05	102
1	9.94	9.92	33.695	25.946	207.4	.329	3.59	56.3		1.56	23.7	.00	.01	.03	122
125 ISL	9.86	9.84	33.717	25.977	204.6	.337	3.51	54.9							126
1	9.45	9.43	33.828	26.131	190.3	.379	3.14	48.7	25.8	1.79	24.0	.00	.02	.04	147
1	9.36	9.34	33.848	26.161	187.5	.386	3.08	47.7							151
1	8.74	8.72	33.955	26.344	170.5	.432	2.81	42.9	32.1	1.96	27.1	.00			177
200 ISL	8.33	8.31	33.984	26.430	162.7	.472	2.88	43.6							202
1	8.24	8.22	33.986	26.445	161.2	.482	2.91	44.0	35.3	1.99	27.9	.00			207
1	7.69	7.67	34.021	26.553	151.3	.530	2.80	41.8		2.09	29.4	.00			238
250 ISL	7.53	7.50	34.029	26.584	148.5	.550	2.68	39.8							252
1	7.26	7.24	34.041	26.631	144.3	.585	2.38	35.2	47.6	2.25	31.6	.00			276
300 ISL	6.94	6.91	34.060	26.691	138.9	.622	1.96	28.8							302
1	6.56	6.53	34.088	26.763	132.3	.661	1.43	20.8	60.4	2.60	36.4	.00			336
400 ISL	6.25	6.21	34.141	26.847	125.1	.753	.98	14.2							403
1	6.22	6.19	34.148	26.856	124.3	.763	.95	13.7	68.4	2.81	38.5	.00			411
1	5.89	5.85	34.239	26.970	114.3	.853	.50	7.2	78.6	3.02	40.5	.00			487
500 ISL	5.82	5.78	34.254	26.992	112.4	.872	.39	5.6							504
1	5.55	5.50	34.295	27.057	106.7	.937	.36	5.1	87.0	3.08	41.8	.00			564

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Includes depth data for ISL and TSL profiles.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Includes depth data for ISL and TSL profiles.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE, CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA THETA, SWA, DYN HT, OXYGEN ML/L, OXY PCT, ST03 UM/L, P04 UM/L, N03 UM/L, N02 UM/L, CHL-A UG/L, PHAEO UG/L, PRESS D.BAR. Data rows include depth measurements from 0 to 555 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE, CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA THETA, SWA, DYN HT, OXYGEN ML/L, OXY PCT, ST03 UM/L, P04 UM/L, N03 UM/L, N02 UM/L, CHL-A UG/L, PHAEO UG/L, PRESS D.BAR. Data rows include depth measurements from 0 to 572 meters.

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
32 50.3 N	117 32.0 W	03/08/84	1616 GRT	870 M	040	05 KT	510 02 12	1	1022.0 MB	16.2 C	14.5 C		4/R	CS		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	15.84	15.84	33.486	24.621	330.9	.000	5.91	104.7	4.4	.28	.1	.00	.16	.04	0
1	10	15.66	15.66	33.474	24.652	328.2	.033	5.93	104.7	4.2	.28	.1	.00	.17	.05	10
1	20	15.29	15.28	33.450	24.716	322.4	.065	5.99	104.9	4.9	.31	.0	.00	.22	.07	20
1	30	14.70	14.70	33.440	24.836	311.3	.097	5.85	101.2	5.9	.37	.4	.02	.81	.21	30
1	40	14.50	14.49	33.437	24.878	307.6	.128	5.80	100.0	8.6	.42	.7	.04	1.08	.29	40
1	50 ISL	13.89	13.88	33.412	24.985	297.7	.158	5.53	94.1							50
1	52	13.71	13.70	33.410	25.021	294.3	.164	5.45	92.4	9.7	.54	2.5	.08	.92	.31	52
1	61	12.20	12.19	33.457	25.355	262.6	.189	4.82	79.2	14.2	.90	8.9	.11	.50	.30	61
1	71	11.63	11.62	33.523	25.514	247.6	.214	4.52	73.4	16.3	1.04	11.7	.03	.19	.15	71
1	75 ISL	11.43	11.42	33.542	25.565	242.9	.225	4.43	71.7							76
1	86	11.02	11.01	33.599	25.675	232.6	.250	4.21	67.5	19.7	1.22	15.1	.02	.08	.09	86
1	100 ISL	10.60	10.59	33.704	25.840	217.2	.282	3.68	58.6							101
1	102	10.56	10.55	33.716	25.856	215.7	.285	3.63	57.7	24.5	1.50	19.1	.01	.03	.07	102
1	120	10.26	10.25				.325	3.32	52.4	27.8	1.68	21.6	.01	.02	.06	121
1	125 ISL	10.18	10.16	33.805	25.991	203.3	.335	3.26	51.5							126
1	146	9.81	9.79	33.883	26.115	192.0	.377	3.08	48.2				.01	.06		147
1	150 ISL	9.72	9.71	33.894	26.138	189.9	.384	3.05	47.6							151
1	175	9.19	9.17	33.951	26.269	177.7	.430	2.86	44.1	35.0	1.93	25.7	.02			176
1	200 ISL	9.00	8.98	33.996	26.336	171.8	.473	2.77	42.6							202
1	205	8.97	8.95	34.004	26.347	170.9	.482	2.75	42.2	37.5	1.99	24.9	.01			206
1	235	8.52	8.50	34.057	26.458	160.7	.531	2.45	37.3	42.3	2.13	28.8	.00			236
1	250 ISL	8.36	8.33	34.077	26.500	156.9	.555	2.32	35.1							252
1	274	8.11	8.08	34.102	26.557	151.9	.593	2.12	32.0	45.2	2.27	30.9	.00			276
1	300 ISL	7.76	7.73	34.114	26.618	146.4	.631	1.91	28.6							302
1	334	7.30	7.27	34.123	26.690	139.8	.680	1.64	24.3	54.3	2.52	34.2	.00			336
1	400 ISL	6.60	6.63	34.166	26.812	128.8	.769	1.08	15.8							403
1	408	6.60	6.56	34.171	26.825	127.6	.779	1.02	14.9	65.5	2.79	37.9	.00			411
1	483	6.17	6.13	34.219	26.919	119.5	.871	.67	9.7	72.4	2.96	39.9	.00			486
1	500 ISL	6.09	6.04	34.231	26.939	117.7	.892	.61	8.8							504
1	558	5.84	5.79	34.275	27.006	111.9	.958	.46	6.6	78.5	3.08	41.3	.00			562

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
32 40.7 N	117 52.4 W	03/08/84	1955 GRT	602 M	310	09 KT	290 02 14	1	1022.7 MB	17.1 C	14.3 C		3/R	ST		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.19	16.19	33.478	24.534	340.7	.000	5.84	104.2							0
1	2	16.19	16.19	33.478	24.534	339.2	.007	5.84	104.2							2
1	10	15.88	15.87	33.469	24.600	333.2	.034	6.05	107.2		.30	.0	.00	.13	.01	10
1	20	15.35	15.35	33.419	24.678	326.1	.066	6.02	105.6		.29	.0	.00	.15	.02	20
1	30 ISL	15.25	15.25	33.408	24.691	326.0	.099	5.92	103.6		.32	.0	.00	.16	.02	30
1	31	15.24	15.23	33.407	24.694	324.9	.102	5.91	103.4	7.1	.32	.0	.00	.17	.05	31
1	40	14.45	14.45	33.364	24.830	312.1	.131	5.90	101.5	6.7	.36	.0	.00	.36	.18	40
1	50	13.33	13.33	33.378	25.072	289.3	.161	5.41	91.0	8.8	.52	1.7	.10	.97	.25	50
1	61	12.82	12.81	33.455	25.234	274.2	.191	5.00	83.2	10.5	.81	5.4	.25	.92	.72	61
1	72	12.18	12.17	33.480	25.377	260.8	.221	4.59	75.4	12.9	.99	9.0	.21	.60	.51	72
1	75 ISL	12.04	12.03	33.492	25.413	257.4	.229	4.53	74.1							76
1	86	11.60	11.59	33.537	25.529	246.5	.256	4.37	70.9	15.3	1.09	11.6	.06	.25	.20	86
1	100 ISL	10.83	10.82	33.612	25.778	227.9	.290	4.06	64.9							101
1	101	10.80	10.79	33.615	25.735	227.2	.291	4.05	64.6	19.2	1.31	15.5	.03	.10	.13	101
1	119	10.26	10.24	33.743	25.950	209.1	.333	3.57	56.4	23.9	1.56	19.9	.00	.02	.05	120
1	125 ISL	10.12	10.10	33.786	25.987	203.6	.344	3.41	53.7							126
1	144	9.70	9.68	33.923	26.165	187.1	.382	2.94	45.9	30.7	1.83	24.3	.00	.01	.05	145
1	150 ISL	9.60	9.59	33.948	26.200	183.9	.392	2.86	44.5							151
1	174	9.26	9.24	34.020	26.313	173.6	.435	2.62	40.5	35.5	2.00	24.9	.00			175
1	200 ISL	8.86	8.84	34.083	26.426	163.2	.479	2.36	36.1							202
1	205	8.79	8.77	34.093	26.444	161.6	.487	2.31	35.4	40.2	2.13	29.1	.01			206
1	235	8.53	8.50	34.130	26.515	155.4	.534	2.05	31.2	43.3	2.25	30.6	.00			236
1	250 ISL	8.34	8.31	34.137	26.549	152.3	.558	1.97	29.8							252
1	272	8.03	8.00	34.141	26.599	147.9	.591	1.85	27.8	48.5	2.38	32.3	.00			274
1	300 ISL	7.62	7.60	34.151	26.666	141.7	.631	1.61	24.0							302
1	333	7.15	7.12	34.165	26.745	134.5	.677	1.30	19.2	59.9	2.64	36.5	.01			335
1	400 ISL	6.40	6.37	34.206	26.879	122.3	.763	.86	12.4							403
1	405	6.36	6.32	34.209	26.887	121.5	.770	.83	12.0	72.7	2.91	40.3	.00			408
1	481	6.04	6.00	34.241	26.953	116.1	.859	.60	8.6	79.2	3.02	41.7	.00			484

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Rows include depth measurements from 0 to 557 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND, SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD, AMT, TYPE. Rows include depth measurements from 0 to 559 meters.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Includes data for CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA T, SVA, DYN HT, OXYGEN, OXY PCT, SI03, P04, N03, N02, CHL-A, PHAED, PRESS.

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Includes data for CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA T, SVA, DYN HT, OXYGEN, OXY PCT, SI03, P04, N03, N02, CHL-A, PHAED, PRESS.

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED, WAVES, WEATHER, BAROMETER, DRY, WET, CLOUD AMT, TYPE. Includes data for CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA T, SVA, DYN HT, OXYGEN, OXY PCT, SI03, P04, N03, N02, CHL-A, PHAED, PRESS.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED WAVES WEATHER, BAROMETER, DRY WET CLOUD AMT TYPE, and detailed depth measurements (CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA, SVA, DYN HT, OXYGEN, OXY PCT, ST03, P04, N03, N02, CHL-A, PMAEO, PRESS).

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER, BOTTOM, WIND SPEED WAVES WEATHER, BAROMETER, DRY WET CLOUD AMT TYPE, and detailed depth measurements (CAST DEPTH, TEMP, POT TEMP, SALINITY, SIGMA, SVA, DYN HT, OXYGEN, OXY PCT, ST03, P04, N03, N02, CHL-A, PMAEO, PRESS).

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 15.5 N	119 10.6 W	03/15/84	0612 GMT	3550 M	310	09 KT	290 02 05	1	1019.3 MB	18.7 C	16.9 C	5/8	CS			
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THTA			UM/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	15.37	15.37	33.404	24.663	327.3	.000	5.92	103.8							0
1	1	15.37	15.37	33.404	24.663	327.3	.003	5.92	103.8	2.5	.35	.1	.00	.12	.02	1
	10 ISL	15.23	15.22	33.407	24.696	324.0	.033	5.93	104.0							10
1	11	15.21	15.21	33.407	24.700	323.7	.036	6.03	105.4	2.4	.32	.1	.00	.12	.02	11
	20 ISL	15.06	15.06	33.411	24.736	320.5	.065	5.93	103.4							20
1	21	15.05	15.04	33.412	24.739	320.3	.068	5.92	103.2	2.4	.32	.1	.00	.16	.01	21
	30 ISL	15.05	15.04	33.415	24.742	320.3	.097	5.92	103.2							30
1	31	15.04	15.03	33.416	24.744	320.1	.100	5.92	103.1	2.4	.33	.0	.00	.15	.02	31
	41	15.01	15.01	33.409	24.745	320.3	.132	5.93	103.3	2.3	.31	.0	.00	.17	.03	41
	50 ISL	14.38	14.37	33.396	24.870	308.6	.160	5.96	102.4							50
1	51	14.32	14.32	33.396	24.882	307.5	.163	5.96	102.3	2.4	.34	.0	.00	.22	.09	51
	61	14.19	14.18	33.431	24.937	302.5	.193	5.87	100.5	2.7	.35	.1	.02	.58	.18	61
1	71	13.41	13.40	33.385	25.064	290.7	.223	5.45	91.8	4.0	.53	2.4	.10	.38	.19	71
	75 ISL	13.07	13.06	33.384	25.130	285.0	.235	5.29	88.4							76
	86	12.28	12.27	33.383	25.283	270.0	.265	4.93	81.1	7.7	.79	7.5	.02	.13	.14	86
	100 ISL	11.38	11.37	33.480	25.526	247.2	.302	4.54	73.4							101
1	101	11.35	11.34	33.484	25.535	244.3	.303	4.53	73.1	11.3	1.05	11.9	.01	.05	.07	101
	120	10.38	10.36	33.624	25.816	219.9	.349	3.87	61.2	17.6	1.43	18.0	.01	.01	.03	121
	125 ISL	10.19	10.18	33.663	25.879	214.0	.359	3.71	58.5							126
1	145	9.51	9.49	33.821	26.116	191.7	.400	3.13	48.6	25.6	1.79	23.8	.01	.00	.03	146
	150 ISL	9.41	9.39	33.843	26.150	188.6	.409	3.07	47.6							151
	176	8.01	8.99	33.925	26.278	176.8	.457	2.90	44.6	30.0	1.90	26.0	.01			177
	200 ISL	8.68	8.66	33.984	26.377	167.7	.498	2.75	42.0							202
1	206	8.60	8.58	33.996	26.398	165.9	.508	2.71	41.3	34.1	2.07	27.8	.00			207
	235	8.23	8.20	34.047	26.496	157.0	.555	2.43	36.7	39.0	2.19	29.4	.00			236
	250 ISL	8.05	8.02	34.064	26.536	153.4	.578	2.29	34.5							252
1	274	7.76	7.74	34.085	26.594	148.1	.615	2.07	31.0	44.8	2.33	31.7	.00			276
	300 ISL	7.43	7.40	34.108	26.661	142.1	.652	1.77	28.2							302
1	334	6.98	6.95	34.133	26.743	134.5	.699	1.37	20.1	57.1	2.63	35.8	.00			336
	400 ISL	6.25	6.21	34.158	26.861	123.8	.785	.91	13.2							403
	408	6.17	6.13	34.161	26.873	122.7	.795	.87	12.5	70.7	2.87	39.3	.00			411
	483	5.71	5.67	34.221	26.979	113.3	.883	.57	8.1	81.3	3.05	41.4	.00			486
	500 ISL	5.62	5.58	34.236	27.001	111.3	.902	.51	7.3							504
1	556	5.37	5.32	34.285	27.071	105.1	.963	.35	5.0	90.4	3.20	42.9	.00			560

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 05.4 W	119 30.6 W	03/15/84	1045 GMT	3406 M	320	10 KT		1	1019.3 MB	15.8 C	14.1 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THTA			UM/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	15.55	15.55	33.401	24.620	331.2	.000	5.85	103.0							0
1	1	15.55	15.55	33.401	24.620	331.0	.003	5.85	103.0	3.0	.30	.1	.00	.09	.01	1
	10 ISL	15.55	15.55	33.398	24.618	331.0	.033	5.97	105.1							10
1	11	15.53	15.53	33.398	24.621	331.2	.036	5.94	105.2	2.8	.29	.0	.00	.09	.01	11
	20 ISL	15.23	15.23	33.393	24.685	325.4	.066	5.98	104.6							20
1	26	14.92	14.92	33.386	24.747	319.6	.085	5.98	103.9	2.5	.32	.0	.00	.14	.02	26
	30 ISL	14.60	14.60	33.357	24.801	314.6	.094	5.94	102.6							30
1	41	13.85	13.84	33.342	24.939	301.7	.131	5.82	98.9	3.6	.38	.4	.02	1.09	.19	41
	50 ISL	13.75	13.75	33.399	25.003	295.9	.159	5.75	97.6							50
1	56	13.70	13.69	33.434	25.042	292.4	.176	5.66	96.0	3.7	.45	1.2	.19	.52	.22	56
	66	13.13	13.12	33.415	25.143	283.0	.204	5.29	88.6	5.4	.59	4.0	.24	.23	.19	66
	75 ISL	12.10	12.18	33.417	25.326	265.7	.230	4.88	80.2							76
1	77	12.02	12.01	33.420	25.362	262.3	.234	4.81	78.7	9.6	.86	8.9	.03	.13	.12	77
	93	11.04	11.03	33.478	25.585	241.3	.274	4.43	71.0	13.4	1.07	13.0	.02	.04	.06	93
	100 ISL	10.85	10.84	33.503	25.639	236.4	.292	4.29	68.5							101
1	107	10.71	10.70	33.533	25.688	231.8	.307	4.17	66.4	15.2	1.22	15.5	.01	.03	.08	107
	121	10.04	10.03	33.675	25.913	210.6	.340	3.81	59.8	20.4	1.46	19.5	.00	.01	.03	122
	125 ISL	9.92	9.90	33.701	25.954	206.7	.348	3.73	58.4							126
1	146	9.36	9.35	33.811	26.132	190.2	.390	3.35	51.9	25.8	1.73	23.4	.00	.00	.02	147
	150 ISL	9.31	9.29	33.822	26.150	188.5	.397	3.31	51.2							151
	167	9.06	9.04	33.870	26.227	181.5	.429	3.18	48.9	28.6	1.80	24.8	.00	.00	.02	168
	185	8.67	8.65	33.941	26.344	170.6	.460	3.08	47.0	32.1	1.86	26.2	.00			186
	200 ISL	8.47	8.45	33.979	26.405	165.1	.485	2.90	45.5							202
1	206	8.40	8.38	33.990	26.424	163.4	.495	2.95	44.7	35.0	1.92	27.2	.00			207
	236	7.96	7.94	34.038	26.528	153.9	.542	2.59	38.9	40.7	2.11	29.4	.00			237
	250 ISL	7.83	7.81	34.055	26.560	151.0	.564	2.40	35.9							252
1	273	7.65	7.63	34.077	26.604	147.7	.599	2.09	31.2	46.7	2.29	32.0	.00			275
	300 ISL	7.38	7.35	34.097	26.659	142.2	.637	1.78	26.4							302
1	333	7.02	6.99	34.110	26.727	136.1	.683	1.44	21.2	56.6	2.51	35.3	.00			335
	400 ISL	6.41	6.37	34.165	26.845	125.5	.771	.93	13.5							403
	407	6.35	6.31	34.170	26.857	124.4	.780	.89	12.9	69.3	2.83	38.6	.00			410
	481	5.85	5.81	34.233	26.971	114.2	.868	.52	7.4	81.0	3.01	41.2	.00			484
	500 ISL	5.73	5.69	34.248	26.997	111.8	.889	.46	6.6							504
1	557	5.40	5.35	34.283	27.066	105.7	.952	.37	5.2	91.5	3.10	42.7	.00			561

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETEP	DRY	WET	CLOUD	AMT	TYPE		
30 55.7 N	119 50.8 W	03/15/84	1512 GMT	3550 M	340 11 KT	300 06 08	1	1021.3 MB	15.5 C	14.2 C	4/8	CU			
CASST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PD4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THTFA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.15	15.15	33.410	24.714	322.2	.000	5.91	103.2							0
1	15.15	15.15	33.410	24.714	322.0	.003	5.91	103.2	2.5	.32	.2	.00	.12	.02	1
1	15.04	15.04	33.400	24.731	320.7	.032	5.95	103.7	2.4	.32	.1	.00	.14	.02	10
1	14.90	14.90	33.388	24.752	319.0	.064	5.97	103.7	2.0	.32	.1	.00	.17	.02	20
1	14.90	14.89	33.387	24.753	319.0	.096	5.95	103.4							30
1	14.82	14.82	33.380	24.763	318.3	.099	5.95	103.2	1.9	.31	.2	.00	.19	.06	31
1	14.21	14.20	33.435	24.936	302.0	.127	6.00	102.8	1.9	.34	.2	.00	.34	.12	40
1	13.85	13.84	33.443	25.018	294.5	.156	5.87	99.8	2.5	.40	.7	.08	1.03	.22	50
1	13.73	13.72	33.458	25.054	291.3	.185	5.75	97.6	3.3	.45	1.2	.12	.35	.26	60
1	12.79	12.78	33.417	25.211	276.6	.217	5.20	86.5	6.1	.66	5.3	.27	.15	.23	71
1	12.38	12.37	33.425	25.296	269.7	.228	5.02	82.7							76
1	11.54	11.53	33.428	25.456	253.4	.253	4.62	74.8	10.6	.98	11.1	.03	.11	.11	85
1	10.76	10.75	33.563	25.707	230.3	.287	3.97	63.3	16.3	1.32	16.4	.02	.04	.10	99
1	10.71	10.69	33.575	25.720	228.6	.290	3.92	62.5							101
1	10.14	10.12	33.712	25.926	209.3	.333	3.47	54.6	21.5	1.57	20.6	.01	.02	.08	120
1	9.96	9.95	33.745	25.981	204.2	.345	3.37	52.8							124
1	9.42	9.40	33.844	26.149	188.6	.382	3.08	47.8	27.3	1.80	24.1	.01	.00	.06	145
1	9.30	9.29	33.870	26.183	184.9	.393	3.01	46.6							151
1	8.94	8.92	33.953	26.312	173.5	.433	2.79	42.8	31.7	1.95	26.7	.01			173
1	8.52	8.50	34.014	26.424	163.3	.480	2.61	39.7							202
1	8.48	8.46	34.018	26.434	162.4	.484	2.59	39.4	36.7	2.09	28.5	.00			204
1	8.21	8.18	34.066	26.513	155.3	.530	2.28	34.4	40.3	2.22	29.9	.00			233
1	7.91	7.89	34.076	26.565	150.6	.558	2.16	32.4							252
1	7.55	7.53	34.081	26.621	145.4	.588	2.04	30.4	47.5	2.37	32.1	.00			272
1	7.10	7.08	34.098	26.698	138.3	.630	1.84	27.2							302
1	6.73	6.72	34.181	26.866	123.3	.670	1.62	25.7	57.8	2.59	35.7	.00			332
1	6.72	6.72	34.181	26.866	123.3	.670	1.62	25.7							403
1	6.21	6.17	34.163	26.870	123.0	.765	.86	12.4	70.8	2.89	39.2	.00			406
1	5.79	5.75	34.231	26.977	113.5	.850	.51	7.3	81.0	3.08	41.4	.00			479
1	5.67	5.62	34.252	27.009	110.6	.977	.43	6.2							504
1	5.45	5.41	34.294	27.068	105.4	.929	.34	4.8	90.3	3.19	42.5	.00			552

RV NEW HORIZON

CALCOFI CRUISE R402-3

STATION 97 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 35.6 N	120 29.5 W	02/27/84	2000 GMT	3909 M	180 10 KT	180 03 08	1	1019.3 MB	17.6 C	14.3 C	6/8	AC			
CASST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PD4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THTFA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.06	16.06	33.548	24.618	331.3	.000	5.70	101.5							0
1	16.06	16.06	33.548	24.618	331.2	.003	5.70	101.5	2.6	.39	.3	.00	.05	.03	1
1	16.02	16.02	33.550	24.628	330.5	.033	5.72	101.7							10
1	16.02	16.02	33.552	24.631	330.3	.040	5.72	101.7	2.6	.39	.2	.00	.06	.04	12
1	16.02	16.02	33.571	24.645	329.2	.066	5.72	101.8							20
1	16.03	16.02	33.586	24.656	328.4	.089	5.73	101.9					.06	.05	27
1	16.05	16.04	33.591	24.656	328.6	.099	5.70	101.4							30
1	16.05	16.05	33.597	24.659	328.6	.138	5.69	101.3	2.6	.36	.2	.00	.08	.04	42
1	15.44	15.43	33.477	24.704	324.5	.164	5.78	101.5							50
1	14.87	14.86	33.378	24.752	320.1	.186	5.86	101.7	2.6	.40	.2	.00	.15	.10	57
1	14.46	14.45	33.348	24.817	314.2	.218	5.92	101.9	2.6	.43	.2	.00	.18	.12	67
1	14.37	14.36	33.348	24.836	312.5	.244	5.92	101.7							76
1	14.36	14.35	33.352	24.841	312.2	.252	5.92	101.7	2.6	.43	.3	.00	.22	.12	78
1	14.17	14.16	33.382	24.904	306.6	.298	5.92	101.3	2.6	.43	.3	.00	.35	.29	93
1	14.13	14.11	33.390	24.921	305.3	.321	5.89	100.8							101
1	14.08	14.06	33.397	24.936	304.0	.344	5.87	100.3	2.6	.45	.3	.02	.34	.28	108
1	12.52	12.52	33.428	25.273	272.0	.387	5.10	84.3	6.6	.78	5.7	.02	.08	.13	123
1	12.33	12.32	33.434	25.314	268.2	.394	5.00	82.4							126
1	11.04	11.02	33.531	25.628	238.5	.453	4.37	70.1	13.2	1.25	13.7	.00	.03	.05	149
1	10.96	10.94	33.544	25.653	236.2	.457	4.36	69.7							151
1	10.22	10.20	33.702	25.906	212.4	.498	4.18	65.9	17.8	1.42	17.2	.00	.01	.02	169
1	9.68	9.66	33.832	26.098	194.4	.540	3.50	54.6	24.0	1.75	22.0	.00			190
1	9.42	9.40	33.896	26.191	185.8	.561	3.27	50.7							202
1	9.21	9.19	33.940	26.259	179.4	.577	3.14	48.5	28.6	1.92	24.4	.00			210
1	8.43	8.40	33.986	26.418	164.6	.630	3.10	47.0	33.7	2.00	26.7	.00			241
1	8.27	8.24	33.996	26.449	161.7	.647	3.09	46.7							252
1	7.92	7.89	34.017	26.518	155.5	.697	2.98	44.7	38.6	2.12	28.1	.00			283
1	7.72	7.69	34.030	26.557	152.1	.725	2.78	41.5							302
1	7.30	7.27	34.065	26.645	144.2	.789	2.17	32.1	48.3	2.43	32.6	.00			345
1	6.78	6.75	34.138	26.774	132.5	.868	1.32	19.3							403
1	6.61	6.57	34.163	26.818	128.5	.895	1.05	15.3	63.5	2.86	37.8	.00			423
1	5.95	5.91	34.207	26.939	117.6	.991	.63	9.0	74.8	3.02	40.6	.00			502
1	5.95	5.90	34.209	26.940	117.5	.992	.63	9.0							504
1	5.44	5.39	34.262	27.044	108.0	1.072	.38	5.4	85.2	3.14	42.6	.01			580

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 41.2 N	116 46.6 W	03/17/84	0351 GMT	411 M	350	12 KT	300 05 06	0	1019.3 MB	16.7 C	14.3 C		0/8			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	14.72	14.72	33.501	24.877	306.6	.000	5.98	103.6							0
1	1	14.72	14.72	33.501	24.877	306.5	.003	5.98	103.6	5.0	.42	1.0	.04	1.43	.21	1
1	10 ISL	14.68	14.68	33.518	24.899	302.4	.030	5.97	103.3							10
1	12	14.49	14.49	33.519	24.941	300.7	.036	5.91	101.9	6.0	.53	2.7	.08	1.04	.33	12
1	20 ISL	13.95	13.95	33.512	25.049	290.7	.080	5.62	95.9							20
1	22	13.80	13.79	33.511	25.080	287.8	.066	5.52	93.8	7.0	.63	4.3	.12	1.07	.32	22
1	30 ISL	13.09	13.09	33.522	25.231	273.6	.088	4.87	81.6							30
1	31	13.01	13.01	33.524	25.248	272.0	.091	4.80	80.3	10.0	.85	7.6	.21	1.04	.27	31
1	42	12.08	12.07	33.567	25.465	251.8	.119	4.24	69.5	13.1	1.08	11.8	.06	.29	.21	42
1	50 ISL	11.61	11.61	33.616	25.588	240.1	.140	4.00	65.0							50
1	51	11.58	11.57	33.620	25.597	239.2	.141	3.98	64.6	15.6	1.25	14.3	.01	.14	.14	51
1	62	11.29	11.28	33.668	25.688	230.8	.167	3.66	59.1	19.1	1.35	16.1	.00	.08	.15	62
1	72	10.99	10.98	33.717	25.781	222.2	.190	3.58	57.4	20.6	1.45	17.7	.00	.05	.17	72
1	75 ISL	10.91	10.90	33.732	25.807	219.8	.197	3.54	56.6							75
1	87	10.68	10.67	33.777	25.882	212.9	.222	3.36	53.5	22.6	1.57	19.6	.00	.04	.09	87
1	100 ISL	10.48	10.46	33.816	25.948	206.9	.250	3.16	50.2							101
1	101	10.45	10.44	33.820	25.956	206.3	.253	3.14	49.8	24.2	1.66	20.8	.00	.05	.08	102
1	125 ISL	9.95	9.93	33.912	26.115	191.6	.300	2.73	42.8							126
1	146	9.50	9.48	33.991	26.251	179.0	.339	2.40	37.3	31.2	1.93	25.4	.00	.01	.05	147
1	150 ISL	9.44	9.43	33.999	26.266	177.6	.346	2.36	36.6							151
1	174	9.14	9.12	34.037	26.345	170.5	.388	2.19	33.8	34.8	2.07	27.0	.00			175
1	200 ISL	8.87	8.85	34.067	26.412	164.5	.431	2.22	34.1							202
1	204	8.83	8.81	34.071	26.422	163.7	.438	2.23	34.2	37.3	2.16	28.3	.00			205
1	232	8.51	8.49	34.093	26.488	157.9	.483	2.14	32.6	40.3	2.23	29.5	.00			233
1	250 ISL	8.26	8.23	34.117	26.546	152.5	.511	2.01	30.5							252
1	269	7.99	7.96	34.140	26.604	147.2	.539			45.9	2.37	31.9	.00			270
1	300 ISL	7.61	7.58	34.155	26.672	141.2	.584	1.40	20.6							302
1	319	7.41	7.40				.611			31.3	1.94	25.0	.00			322
1	379	6.99	6.95	34.190	26.779	131.9	.691			55.5	2.72	36.1	.00			381

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 51.2 N	117 06.9 W	03/16/84	2211 GMT	1259 M	330	18 KT	300 05 06	1	1020.7 MB	16.8 C	14.2 C		6/8			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	15.95	15.95	33.478	24.588	334.0	.000	5.88	104.4	2.3	.32	.2	.00	.17	.03	0
1	10 ISL	15.95	15.95	33.478	24.589	334.0	.033	6.09	104.7							10
1	11	15.93	15.93	33.475	24.592	333.9	.037	6.09	104.1	2.4	.30	.1	.00	.15	.04	11
1	20 ISL	15.91	15.91	33.463	24.587	333.6	.067	5.95	105.5							20
1	21	15.72	15.71	33.460	24.620	330.8	.070	5.93	104.8	2.5	.32	.1	.00	.19	.05	21
1	30 ISL	14.70	14.70	33.433	24.807	314.0	.099	5.85	101.5							30
1	31	14.58	14.58	33.400	24.830	311.9	.102	5.84	100.8	3.2	.32	.0	.00	.24	.12	31
1	40	13.63	13.63	33.454	25.070	289.2	.129	5.51	93.3	5.0	.56	2.5	.17	.71	.41	40
1	50 ISL	13.12	13.11	33.469	25.186	278.5	.159	5.29	88.7							50
1	51	13.09	13.08	33.470	25.192	277.9	.160	5.27	88.2	7.6	.73	5.4	.34	.73	.40	51
1	61	12.50	12.49	33.512	25.341	264.0	.187	4.63	76.6	10.7	.93	9.1	.32	.46	.30	61
1	71	11.85	11.84	33.550	25.494	249.5	.212	4.32	70.5	13.6	1.06	12.1	.10	.16	.32	71
1	75 ISL	11.53	11.52	33.584	25.579	241.5	.223	4.16	67.4							76
1	87	10.79	10.78	33.682	25.788	221.8	.250	3.76	60.0	18.1	1.39	17.8	.02	.06	.13	87
1	100 ISL	10.45	10.44	33.754	25.905	211.0	.279	3.50	55.5							101
1	102	10.42	10.41	33.760	25.914	210.2	.282	3.48	55.1	20.8	1.56	20.1	.01	.02	.06	102
1	121	10.02	10.00	33.833	26.041	198.5	.323	3.24	50.9	23.5	1.75	22.4	.01	.01	.07	122
1	125 ISL	9.94	9.93	33.848	26.065	196.3	.330	3.19	50.0							126
1	146	9.53	9.51	33.932	26.199	183.9	.370	2.91	45.3	27.0	1.87	24.7	.01			147
1	150 ISL	9.47	9.45	33.944	26.218	182.1	.377	2.88	44.7							151
1	176	9.09	9.07	34.006	26.329	172.0	.423	2.71	41.7	30.8	2.00	26.6	.00			177
1	200 ISL	8.76	8.74	34.047	26.414	164.4	.463	2.50	38.3							202
1	207	8.68	8.65	34.056	26.433	162.6	.475	2.45	37.4	34.8	2.10	28.2	.01			208
1	236	8.42	8.40	34.080	26.492	157.5	.521	2.37	35.2	37.5	2.17	29.2	.00			237
1	250 ISL	8.23	8.20	34.093	26.531	153.9	.543	2.20	33.3							252
1	275	7.99	7.96	34.115	26.599	147.8	.581	1.97	29.6	44.3	2.38	31.7	.00			277
1	300 ISL	7.73	7.70	34.125	26.631	145.1	.617	1.82	27.3							302
1	334	7.56	7.53	34.145	26.671	141.8	.666	1.60	23.8	49.8	2.52	33.6	.00			336
1	400 ISL	6.98	6.94	34.261	26.845	125.9	.754	.77	11.4							403
1	402	6.99	6.95	34.276	26.870	123.7	.765	.67	9.8	65.1	2.90	37.8	.00			411
1	482	5.94	5.90	34.317	27.026	109.1	.850	.36	5.2	81.6	3.11	41.3	.00			485
1	500 ISL	5.72	5.68	34.325	27.060	107.0	.870	.33	4.7							504
1	557	5.65	5.60	34.346	27.085	104.1	.930	.32	4.6	88.1	3.21	42.4	.00			561

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
30 20.0 N	119 26.1 W	02/28/84	075R GMT	3805 M	320	12 KT		1	1017.8 MB	15.7 C	13.6 C		1/R		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.76	15.76	33.470	24.625	330.4	.000	5.75	101.7							0
1	15.76	15.76	33.470	24.625	330.5	.003	5.75	101.7	2.6	.34	.1	.00	.06	.03	1
10 ISL	15.76	15.76	33.469	24.624	331.0	.033	5.76	101.8							10
12	15.77	15.76	33.468	24.623	331.0	.040	5.76	101.9	2.6	.35	.1	.00	.05	.04	12
20 ISL	15.74	15.74	33.467	24.629	330.8	.066	5.78	102.2							20
27	15.70	15.70	33.462	24.634	330.5	.089	5.80	102.4	2.5	.35	.1	.00	.06	.05	27
30 ISL	15.67	15.66	33.454	24.635	330.5	.099	5.80	102.3							30
42	15.54	15.53	33.422	24.639	330.4	.138	5.78	101.7	2.6	.35	.1	.00	.07	.05	42
50 ISL	15.48	15.47	33.418	24.650	330.0	.165	5.79	101.7							50
57	15.45	15.44	33.414	24.653	329.6	.186	5.79	101.7	2.5	.35	.1	.00	.11	.04	57
62	15.46	15.45	33.427	24.662	329.1	.224	5.77	101.4	2.7	.36	.0	.00	.13	.05	62
75 ISL	15.57	15.56	33.461	24.663	329.2	.248	5.75	101.4							76
78	15.59	15.58	33.462	24.661	329.5	.257	5.75	101.3	2.7	.36	.0	.00	.12	.05	78
93	14.78	14.76	33.393	24.785	318.0	.305	5.75	99.6	3.5	.41	.3	.05	.16	.15	93
100 ISL	14.24	14.23	33.460	24.950	302.5	.328	5.50	94.4							101
108	13.67	13.66	33.539	25.130	295.5	.350	5.20	88.2	5.4	.63	3.7	.05	.10	.13	108
123	12.59	12.58	33.555	25.357	264.0	.394	4.77	79.1	8.3	.89	8.0	.03	.07	.10	124
125 ISL	12.50	12.48	33.561	25.380	261.9	.398	4.75	78.6							126
148	11.18	11.16	33.654	25.699	231.8	.455	4.67	73.6	12.8	1.12	12.3	.01	.02	.05	149
150 ISL	11.10	11.08	33.657	25.716	230.2	.459	4.55	73.2							151
169	10.27	10.25	33.704	25.897	215.2	.502	4.26	67.2	17.5	1.35	16.6	.01	.01	.03	170
190	9.54	9.52	33.808	26.102	194.0	.544	3.59	55.8	24.4	1.72	22.0	.00			191
200 ISL	9.27	9.25	33.850	26.178	186.9	.563	3.34	51.6							202
210	9.04	9.02	33.886	26.244	180.8	.581	3.15	48.4	29.6	1.83	25.2	.00			211
241	8.46	8.43	33.971	26.401	166.2	.635	3.11	47.2	33.5	1.92	26.6	.00			242
250 ISL	8.29	8.26	33.985	26.438	162.8	.650	3.10	46.9							252
282	7.73	7.70	34.021	26.549	152.6	.701	2.95	44.1	41.0	2.04	28.8	.00			284
304 ISL	7.50	7.47	34.040	26.597	148.2	.728	2.66	39.3							302
345	7.02	6.99	34.084	26.699	138.9	.797	1.79	26.3	54.2	2.48	34.7	.00			347
400 ISL	6.53	6.50	34.134	26.805	129.1	.866	1.18	17.2							403
421	6.36	6.33	34.153	26.842	126.0	.893	1.02	14.8	67.1	2.80	38.6	.00			424
500	5.79	5.75	34.214	26.964	115.0	.988	.58	8.3	77.9	3.00	41.3	.00			503
579	5.59	5.53	34.303	27.061	106.7	1.076	.38	5.4	85.1	3.10	42.4	.00			583

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
30 02.5 N	120 07.5 W	02/28/84	1339 GMT	3754 M	330	11 KT		1	1017.2 MB	15.3 C	15.2 C		1/R		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.03	16.03	33.521	24.605	332.3	.000	5.75	102.3							0
1	16.03	16.03	33.521	24.605	332.5	.003	5.75	102.3	2.5	.33	.2	.00	.07	.04	1
10 ISL	16.05	16.05	33.519	24.598	333.3	.033	5.89	104.8							10
12	16.05	16.05	33.519	24.598	333.4	.040	5.90	105.0	2.4	.34	.2	.00	.06	.03	12
20 ISL	16.04	16.04	33.519	24.600	333.4	.067	5.84	103.9							20
27	16.03	16.03	33.519	24.604	333.4	.090	5.75	102.3	2.5	.33	.2	.00			27
30 ISL	16.03	16.03	33.518	24.603	333.5	.100	5.73	101.9							30
42	16.04	16.03	33.515	24.600	334.2	.139	5.70	101.4	2.5	.32	.2	.00	.07	.03	42
50 ISL	16.03	16.02	33.515	24.601	334.3	.167	5.71	101.6							50
57	16.03	16.02	33.515	24.603	334.4	.189	5.72	101.7	2.4	.32	.2	.00	.08	.04	57
67	16.01	16.00	33.519	24.610	334.0	.223	5.69	101.1	2.5	.33	.2	.00	.09	.05	67
75 ISL	16.01	16.00	33.519	24.609	334.4	.250	5.73	101.9							76
77	16.01	16.00	33.519	24.609	334.5	.256	5.74	102.0	2.5	.32	.2	.00	.09	.05	77
93	16.01	16.00	33.515	24.607	335.1	.309	5.71	101.5	2.7	.32	.2	.00	.10	.05	93
100 ISL	15.71	15.69	33.482	24.651	331.2	.334	5.68	100.4							101
109	15.24	15.22	33.463	24.739	322.9	.359	5.66	99.0	7.1	.38	.3	.05	.21	.19	108
122	14.01	13.99	33.579	25.091	299.6	.404	5.37	91.7	4.3	.50	2.1	.07	.12	.16	123
125 ISL	13.79	13.77	33.569	25.150	285.1	.412	5.29	89.9							126
147	12.03	12.02	33.568	25.475	253.4	.472	4.53	74.2	10.8	1.03	10.5	.02	.06	.07	148
150 ISL	11.91	11.89	33.574	25.504	250.6	.478	4.47	73.1							151
168	11.23	11.21	33.644	25.683	233.9	.523	4.11	66.2	15.2	1.30	14.9	.00	.03	.04	169
188	10.68	10.65	33.770	25.879	215.5	.567	3.56	56.7	20.3	1.58	19.3	.00			189
200 ISL	10.25	10.22	33.842	26.010	203.3	.592	3.29	51.9							202
209	9.93	9.90	33.888	26.101	194.7	.610	3.13	49.1	25.7	1.81	22.9	.00			210
239	9.26	9.23	33.960	26.267	179.2	.666	3.03	46.8	29.6	1.91	24.8	.00			240
250 ISL	9.07	9.04	33.994	26.325	174.0	.686	2.91	44.7							252
280	8.64	8.61	34.077	26.456	161.9	.735	2.50	38.1	36.9	2.15	27.9	.00			281
300 ISL	8.38	8.35	34.113	26.525	155.6	.768	2.24	34.0							302
340	7.91	7.87	34.153	26.627	146.3	.828	1.78	26.7	47.4	2.48	32.1	.00			342
400 ISL	7.21	7.16	34.174	26.744	135.8	.915	1.30	19.1							403
417	7.04	7.00	34.176	26.770	133.4	.935	1.19	17.5	59.4	2.76	36.3	.00			419
493	6.42	6.38	34.218	26.887	122.9	1.033	.75	10.9	69.2	2.95	39.1	.00			496
500 ISL	6.36	6.32	34.222	26.897	122.0	1.041	.72	10.5							504
570	5.82	5.77	34.254	26.992	113.3	1.124	.57	8.2	80.2	3.09	41.5	.00			574

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 40.4 N	120 47.9 W	02/28/84	1950 GMT	3948 M	340	10 KT	310 05 09	1	1017.1 MB	16.4 C	13.2 C	3/4		CU		
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CNL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.41	16.41	33.529	24.524	340.6	.000	5.69	102.0							0
1	1	16.41	16.41	33.529	24.524	340.1	.003	5.70	102.0	2.5	.34	.3	.00	.05	.02	1
1	10 ISL	16.24	16.24	33.525	24.561	336.9	.034	5.70	101.7							10
1	12	16.21	16.21	33.525	24.568	336.5	.040	5.70	101.7	2.6	.34	.3	.00	.05	.03	12
1	20 ISL	16.20	16.20	33.524	24.568	336.5	.068	5.71	101.9							20
1	27	16.19	16.18	33.523	24.571	336.5	.091	5.72	102.0	2.5	.34	.3	.00	.05	.03	27
1	30 ISL	16.19	16.19	33.523	24.570	336.7	.101	5.72	102.0							30
1	42	16.19	16.19	33.522	24.569	337.1	.141	5.70	101.7	2.5	.34	.3	.00	.06	.02	42
1	50 ISL	16.18	16.17	33.521	24.573	337.0	.169	5.72	102.0							50
1	57	16.16	16.15	33.520	24.576	336.9	.191	5.73	102.1	2.4	.33	.3	.00	.07	.03	57
1	68	16.15	16.14	33.524	24.583	335.7	.228	5.70	101.6	2.7	.33	.3	.00	.07	.03	68
1	75 ISL	16.13	16.12	33.522	24.585	336.8	.253	5.69	101.4							75
1	78	16.13	16.12	33.521	24.585	336.8	.262	5.69	101.4	2.9	.33	.3	.00	.09	.04	78
1	93	16.13	16.12	33.521	24.585	337.3	.312	5.71	101.7	2.9	.33	.3	.00	.12	.04	93
1	100 ISL	15.55	15.54	33.526	24.718	324.7	.337	5.65	99.5							101
1	108	14.80	14.79	33.531	24.886	308.8	.361	5.54	96.1	4.0	.45	.7	.04	.23	.10	108
1	124	13.51	13.50	33.508	25.138	285.1	.409	5.17	87.3	5.6	.68	3.8	.04	.10	.20	124
1	125 ISL	13.39	13.38	33.510	25.164	282.7	.412	5.12	86.4							126
1	148	11.74	11.72	33.584	25.542	246.9	.474	4.40	71.6	12.0	1.19	12.3	.02	.04	.06	149
1	150 ISL	11.65	11.63	33.592	25.565	244.8	.478	4.36	70.8							151
1	169	10.79	10.77	33.705	25.809	221.8	.523	3.88	61.9	17.3	1.47	17.1	.02	.01	.02	170
1	184	10.17	10.15	33.849	26.029	201.2	.565	3.41	53.7	23.6	1.75	21.6	.00			190
1	200 ISL	9.92	9.90	33.891	26.104	194.2	.586	3.23	50.7							202
1	210	9.72	9.70	33.921	26.160	189.0	.606	3.09	48.2	26.8	1.85	23.8	.00			211
1	241	9.09	9.06	34.042	26.358	170.6	.661	2.67	41.1	33.1	2.06	26.6	.00			242
1	250 ISL	8.63	8.60	34.055	26.394	167.3	.677	2.61	40.1							252
1	282	8.45	8.42	34.073	26.483	159.2	.728	2.44	37.1	38.2	2.19	28.4	.00			283
1	300 ISL	8.23	8.20	34.098	26.536	154.5	.757	2.22	33.5							302
1	343	7.77	7.74	34.140	26.644	144.6	.822	1.66	24.8	48.2	2.51	32.7	.00			345
1	400 ISL	7.07	7.03	34.161	26.754	134.7	.901	1.24	18.3							403
1	420	6.84	6.80	34.162	26.786	131.7	.927	1.13	16.5	60.6	2.78	37.1	.00			422
1	493	6.26	6.22	34.229	26.916	120.0	1.026	.83	9.1	71.1	3.00	39.8	.00			501
1	500 ISL	6.25	6.20	34.231	26.919	119.8	1.028	.82	9.0							504
1	575	5.71	5.66	34.285	27.029	109.8	1.115	.63	5.3	82.0	3.11	41.9	.01			579

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 100 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 18.0 N	121 26.3 W	02/29/84	0122 GMT	3957 M	310	13 KT	320 08 14	1	1016.5 MB	16.1 C	12.8 C	7/8		SC		
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CNL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.55	16.55	33.589	24.537	339.9	.000	5.70	102.5							0
1	1	16.55	16.55	33.589	24.537	338.9	.003	5.70	102.5	2.5	.29	.3	.00	.06	.03	1
1	10 ISL	16.55	16.55	33.581	24.531	339.1	.034	5.69	102.3							10
1	12	16.55	16.55	33.579	24.531	339.8	.041	5.69	102.3	2.5	.30	.3	.00	.06	.02	12
1	20 ISL	16.47	16.47	33.572	24.542	339.0	.068	5.68	101.9							20
1	26	16.42	16.41	33.567	24.552	336.3	.088	5.67	101.6	2.4	.29	.3	.00	.06	.03	26
1	30 ISL	16.41	16.40	33.564	24.553	338.4	.102	5.67	101.7							30
1	41	16.40	16.40	33.561	24.552	338.8	.136	5.68	101.8	2.4	.30	.3	.00	.06	.02	41
1	50 ISL	16.37	16.36	33.557	24.555	338.6	.169	5.68	101.7							50
1	56	16.35	16.34	33.556	24.561	338.4	.189	5.68	101.7	2.4	.30	.3	.00	.07	.04	56
1	66	16.21	16.20	33.553	24.567	339.1	.223	5.67	101.4	2.5	.29	.3	.00	.09	.03	66
1	75 ISL	16.31	16.30	33.553	24.567	338.4	.254	5.74	102.6							76
1	76	16.31	16.30	33.552	24.567	338.5	.256	5.74	102.6	2.5	.31	.3	.00	.09	.05	76
1	91	16.31	16.29	33.551	24.568	338.9	.307	5.68	101.6	2.5	.32	.3	.00	.13	.04	91
1	100 ISL	15.47	15.45	33.550	24.755	321.6	.338	5.65	99.3							101
1	106	14.90	14.88	33.547	24.678	309.6	.356	5.61	97.5	3.3	.37	.3	.04	.24	.19	106
1	121	14.12	14.10	33.595	25.081	290.5	.400	5.37	91.9	4.3	.49	2.2	.05	.15	.19	121
1	125 ISL	13.76	13.74	33.586	25.148	284.2	.413	5.26	89.4							126
1	145	12.11	12.09	33.557	25.452	255.5	.468	4.68	77.0	9.8	.93	9.5	.01	.09	.09	146
1	150 ISL	11.83	11.81	33.571	25.515	249.6	.480	4.55	74.2							151
1	165	11.06	11.04	33.645	25.714	230.7	.517	4.08	65.5	15.5	1.29	15.3	.01	.03	.04	166
1	185	10.26	10.24	33.783	25.961	207.5	.560	3.55	56.1	21.5	1.61	20.2	.00			186
1	200 ISL	9.64	9.66	33.848	26.110	193.5	.590	3.36	52.5							202
1	205	9.50	9.48	33.866	26.154	189.4	.600	3.32	51.6	26.5	1.76	23.3	.00			206
1	235	8.77	8.75	33.934	26.363	169.8	.653	2.97	45.4	32.5	1.94	26.1	.00			236
1	250 ISL	8.60	8.57	34.032	26.477	164.0	.678	2.75	42.0							252
1	275	8.40	8.37	34.088	25.503	157.2	.718	2.40	36.4	39.6	2.17	29.1	.00			276
1	300 ISL	8.01	7.96	34.110	25.578	150.3	.757	2.11	31.7							302
1	335	7.48	7.45	34.122	26.664	142.4	.808	1.75	26.0	50.2	2.45	33.3	.00			337
1	400 ISL	7.01	6.98	34.191	26.785	131.7	.897	1.08	15.8							403
1	412	6.96	6.92	34.204	26.802	130.2	.912	.97	14.2	61.2	2.77	36.7	.00			414
1	488	6.57	6.52	34.287	26.922	119.7	1.008	.50	7.3	69.8	2.96	39.0	.00			491
1	500 ISL	6.50	6.46	34.296	26.938	119.3	1.022	.45	6.6							504
1	564	6.11	6.06	34.326	27.013	111.7	1.096	.32	4.6	77.9	3.10	40.9	.00			568

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 103 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 06.9 N	116 24.5 W	03/17/84	1314 GMT	60 M	320	17 KT	300 05 07	1	1019.3 MB	14.1 C	12.3 C	4/8		CT		
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CNL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	12.97	12.96	33.545	25.273	268.7	.000	5.04	84.2							0
1	1	12.97	12.96	33.545	25.273	268.8	.003	5.04	84.2	4.3	.94	8.8	.26	.82	.28	1
1	10 ISL	12.97	12.97	33.546	25.272	269.1	.027	5.09	85.1							10
1	11	12.98	12.97	33.546	25.272	269.1	.029	5.09	85.1	4.5	.93	8.7	.26	.75	.33	11
1	20 ISL	12.97	12.97	33.546	25.273	269.1	.054	5.09	85.0							20
1	21	12.97	12.96	33.545	25.274	269.3	.056	5.05	84.4	4.7	.94	8.8	.25	.91	.31	21
1	30 ISL	12.95	12.													

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 56.8 N	116 44.7 W	03/17/84	1740 GMT	1710 M	330	19 KT	330 06 06	1	1021.0 MB	17.0 C	14.6 C	1/3	AS		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		TMETHA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	14.83	14.83	33.440	24.806	311.2	.000	5.82	101.0							0
1 2	14.83	14.83	33.440	24.806	313.3	-.006	5.82	101.0	2.8	.37	.6	.00	.48	.11	2
1 10 ISL	14.81	14.81	33.440	24.811	312.9	-.331	5.82	100.9							10
1 12	14.74	14.74	33.440	24.827	311.6	-.037	5.81	100.6	3.2	.39	.7	.00	.57	.14	12
1 20 ISL	14.51	14.51	33.447	24.881	306.8	-.062	5.73	98.9							20
1 24	14.35	14.35	33.454	24.920	303.1	-.074	5.67	97.5	4.5	.48	1.8	.05	.78	.19	24
1 30 ISL	14.01	14.01	33.480	25.011	294.6	-.092	5.51	94.1							30
1 33	13.87	13.86	33.493	25.052	290.9	-.101	5.44	92.6	5.4	.61	3.8	.14	.94	.33	33
1 43	13.76	13.75	33.509	25.086	287.8	-.130	5.37	91.2	6.4	.66	4.5	.15	1.00	.55	43
1 50 ISL	13.08	13.07	33.539	25.224	275.0	-.150	4.98	83.4							50
1 52	12.87	12.86	33.508	25.265	271.0	-.155	4.86	81.0	7.8	.82	7.4	.20	.42	.31	52
1 62	11.78	11.77	33.572	25.524	246.5	-.180	4.30	70.1	11.3	1.08	12.0	.05	.14	.16	62
1 71	11.28	11.27	33.654	25.679	231.9	-.204	3.85	62.1	14.9	1.31	15.3	.03	.02	.07	72
1 75 ISL	11.14	11.13	33.674	25.721	228.0	-.212	3.77	60.6							76
1 86	10.75	10.74	33.722	25.826	218.2	-.235	3.61	57.6	17.6	1.46	18.2	.03	.01	.06	86
1 100 ISL	10.40	10.38	33.759	25.918	209.6	-.266	3.47	55.0							101
1 102	10.36	10.35	33.763	25.927	209.7	-.269	3.46	54.8	19.8	1.56	20.1	.02	.01	.04	102
1 119	9.65	9.64	33.869	26.080	194.7	-.306	3.11	48.8	24.0	1.73	22.5	.02	.01	.06	120
1 124 ISL	9.66	9.65	33.897	26.100	193.0	-.316	2.98	46.8							126
1 145	10.06	10.06	33.979	26.145	189.2	-.355	2.57	40.5	27.0	1.90	24.2	.02			146
1 150 ISL	10.05	10.13	33.997	26.164	187.5	-.364	2.50	39.4							151
1 174	9.75	9.73	34.067	26.265	179.3	-.408	2.30	36.0	30.5	2.05	26.0	.01			175
1 200 ISL	9.26	9.23	34.090	26.361	169.6	-.453	2.35	36.4							202
1 207	9.22	9.20	34.081	26.368	169.0	-.456	2.36	36.5	32.7	2.08	27.2	.00			203
1 231	8.60	8.78	34.114	26.460	160.6	-.504	2.19	33.5	36.6	2.19	28.7	.00			232
1 250 ISL	8.64	8.61	34.154	26.517	155.6	-.534	1.94	29.5							252
1 270	8.51	8.48	34.196	26.571	150.8	-.568	1.64	25.0	43.0	2.39	31.0	.00			272
1 300 ISL	8.24	8.21	34.227	26.635	145.1	-.609	1.35	20.4							302
1 329	7.96	7.93	34.243	26.690	140.2	-.651	1.13	17.0	51.3	2.60	33.3	.00			331
1 400 ISL	7.24	7.20	34.272	26.817	128.9	-.746	.72	10.6							403
1 402	7.23	7.19	34.272	26.819	128.7	-.748	.71	10.5	63.5	2.83	36.1	.00			404
1 475	6.59	6.55	34.310	26.937	118.2	-.839	.42	6.1	76.3	2.99	38.5	.00			478
1 500 ISL	6.41	6.36	34.320	26.969	115.3	-.868	.35	5.1							504
1 550	6.08	6.03	34.335	27.023	110.5	-.925	.32	4.6	87.0	3.09	40.5	.00			554

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 46.9 N	117 04.7 W	03/17/84	2233 GMT	1880 M	320	20 KT	320 05 06	1	1019.3 MB	17.8 C	16.0 C	3/8	CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		TMETHA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.94	15.94	33.466	24.581	335.2	.000	5.85	103.8							0
1 1	15.94	15.94	33.466	24.581	334.7	-.003	5.85	103.8	2.4	.27	.0	.01	.15	.06	1
1 10 ISL	15.95	15.95	33.466	24.587	334.8	-.033	5.85	103.8							10
1 11	15.95	15.95	33.466	24.580	335.1	-.037	5.85	103.8	2.4	.28	.0	.01	.15	.04	11
1 20 ISL	15.87	15.87	33.465	24.598	333.7	-.067	5.87	104.0							20
1 21	15.86	15.86	33.465	24.600	333.5	-.070	5.87	104.0	2.5	.28	.0	.00	.16	.06	21
1 30 ISL	15.83	15.82	33.465	24.608	333.4	-.100	5.84	103.5							30
1 32	15.82	15.82	33.465	24.609	333.0	-.107	5.83	103.2	2.4	.29	.0	.00	.17	.08	32
1 41	15.82	15.81	33.464	24.610	333.2	-.136	5.84	103.4	2.2	.28	.0	.00	.19	.09	41
1 50 ISL	15.81	15.80	33.464	24.613	333.0	-.167	5.84	103.3							50
1 52	15.75	15.74	33.465	24.625	332.1	-.173	5.83	103.1	2.4	.29	.0	.00	.22	.11	52
1 62	14.63	14.62	33.432	24.847	311.2	-.205	5.67	98.0	3.2	.39	.1	.07	.53	.23	62
1 72	13.77	13.76	33.441	25.032	293.7	-.235	5.27	89.5	4.7	.54	2.4	.17	.33	.42	72
1 75 ISL	13.58	13.57	33.450	25.079	289.4	-.245	5.18	87.5							76
1 89	12.89	12.88	33.498	25.255	273.0	-.283	4.86	81.0	7.3	.76	7.0	.08	.12	.22	89
1 100 ISL	12.14	12.13	33.547	25.437	255.8	-.313	4.61	75.7							101
1 103	11.98	11.97	33.557	25.475	252.2	-.320	4.56	74.6	10.7	.97	10.9	.02	.08	.16	103
1 122	11.31	11.30	33.599	25.631	237.7	-.368	4.33	69.9	13.0	1.13	13.4	.02	.05	.10	123
1 125 ISL	11.20	11.19	33.611	25.661	235.0	-.374	4.26	68.7							126
1 147	10.30	10.28	33.743	25.924	210.3	-.424	3.63	57.3	20.0	1.49	19.5	.01	.01	.04	148
1 150 ISL	10.22	10.20	33.760	25.949	207.9	-.430	3.57	56.3							151
1 177	9.64	9.62	33.913	26.167	187.6	-.483	3.07	47.9	26.6	1.77	23.9	.00			178
1 200 ISL	9.19	9.17	34.006	26.315	174.1	-.525	2.74	42.2							202
1 208	9.06	9.04	34.032	26.354	170.3	-.538	2.63	40.5	32.2	1.95	26.7	.00			209
1 237	8.80	8.78	34.111	26.458	161.0	-.586	2.23	34.2	36.6	2.13	28.8	.00			238
1 250 ISL	8.55	8.53	34.113	26.498	157.0	-.607	2.16	32.9							252
1 276	7.99	7.97	34.114	26.583	149.4	-.648	2.05	30.8	43.4	2.27	31.3	.00			278
1 300 ISL	7.57	7.54	34.126	26.655	142.8	-.682	1.78	26.5							302
1 338	7.04	7.01	34.160	26.756	133.4	-.734	1.28	18.8	57.2	2.62	36.2	.00			340
1 400 ISL	6.73	6.70	34.247	26.868	123.7	-.814	.71	10.4							403
1 412	6.70	6.66	34.264	26.885	122.2	-.829	.63	9.2	66.9	2.91	38.7	.01			415
1 492	6.17	6.13	34.301	26.984	113.4	-.923	.44	6.3	77.1	3.01	40.5	.01			495
1 500 ISL	6.13	6.08	34.305	26.993	112.7	-.932	.43	6.1							504
1 570	5.83	5.78	34.332	27.053	107.7	-.1009	.34	4.9	85.3	3.11	41.8	.01			574

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD AMT		TYPE
30 36.9 N		117 24.7 W		03/18/84	0315 GMT	2250 M	320	21 KT	320 07 05	1	1019.0 MB		15.6 C	13.5 C	1/5		CU
CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SiO ₂ UM/L	P04 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR	
	0 ISL	15.83	15.82	33.439	24.586	333.8	.000	5.83	103.2							0	
1	2	15.83	15.82	33.439	24.588	334.1	.007	5.83	103.2	2.9	.31	.1	.00	.09	.02	2	
	10 ISL	15.85	15.85	33.438	24.583	334.9	.033	5.92	104.9							10	
1	13	15.85	15.85	33.438	24.581	335.1	.043	5.94	105.2	2.4	.31	.1	.00	.09	.02	13	
	20 ISL	15.85	15.85	33.438	24.581	335.4	.067	5.92	104.9							20	
1	27	15.85	15.85	33.438	24.582	335.5	.090	5.88	104.1	2.5	.30	.1	.00	.10	.02	27	
	30 ISL	15.83	15.82	33.437	24.587	335.4	.100	5.86	103.7							30	
1	44	15.82	15.81	33.437	24.569	335.3	.147	5.80	102.7	2.4	.30	.1	.00	.10	.02	44	
	50 ISL	15.42	15.42	33.410	24.656	329.1	.167	5.87	102.8							50	
1	58	14.82	14.61	33.375	24.761	319.2	.193	5.94	103.0	2.3	.32	.1	.00	.16	.04	58	
1	68	14.17	14.16	33.354	24.883	307.9	.224	5.82	99.6	2.5	.37	.1	.00	.55	.15	68	
	75 ISL	14.04	14.03	33.460	24.992	297.7	.246	5.69	97.2							75	
1	85	13.82	13.81	33.601	25.146	263.3	.274	5.46	92.9	4.5	.45	2.4	.05	.27	.11	85	
1	99	12.56	12.55	33.549	25.358	263.3	.312	5.00	82.8	7.2	.71	6.7	.02	.11	.09	99	
	100 ISL	12.43	12.41	33.542	25.379	261.4	.316	4.95	81.7							101	
1	116	11.02	11.00	33.521	25.624	238.2	.362	4.32	69.2	13.3	1.15	14.1	.01	.04	.07	119	
	125 ISL	10.85	10.83	33.573	25.695	231.6	.377	4.15	66.3							126	
1	140	10.58	10.57	33.712	25.849	217.2	.412	3.85	61.2	17.9	1.38	17.5	.01	.03	.04	141	
	150 ISL	10.18	10.16	33.752	25.951	207.7	.432	3.72	58.7							151	
1	159	9.81	9.80				.450	3.64	56.9	22.0	1.56	21.1	.01	.01	.02	160	
1	180	9.44	9.42	33.854	26.154	189.9	.491	3.54	54.9	24.7	1.66	22.5	.00	.01	.02	181	
	200 ISL	8.89	8.87	33.934	26.304	174.8	.528	3.34	51.3							202	
1	201	8.87	8.84	33.938	26.311	174.1	.529	3.33	51.0	29.6	1.81	24.8	.00			202	
1	222	8.41	8.38	34.022	26.449	161.3	.564	2.89	43.8	35.6	1.96	27.5	.00			223	
	250 ISL	8.01	7.98	34.067	26.544	152.7	.608	2.52	37.9							252	
1	257	7.93	7.91	34.671	26.558	151.4	.619	2.45	36.8	42.2	2.23	30.4	.00			258	
	300 ISL	7.70	7.27	34.111	26.681	140.1	.682	1.80	26.7							302	
1	307	7.21	7.18	34.116	26.698	138.5	.692	1.70	25.1	52.9	2.50	34.3	.00			309	
1	364	6.75	6.72	34.159	26.795	129.9	.768	1.26	18.4	60.1	2.66	36.5	.00			366	
	400 ISL	6.51	6.48	34.192	26.853	124.9	.814	.89	12.9							403	
1	449	6.23	6.19	34.237	26.927	118.3	.874	.46	6.6	74.0	2.99	39.8	.01			452	
	500 ISL	5.92	5.88	34.283	27.002	111.6	.932	.43	6.1							504	
1	535	5.72	5.68	34.312	27.050	107.3	.971	.38	5.4	86.0	3.14	42.1	.01			539	
	600 ISL	5.40	5.35	34.353	27.122	101.0	1.038	.35	4.6							605	
1	622	5.30	5.25	34.363	27.141	99.7	1.060	.31	4.4	96.7	3.21	43.4	.00			626	

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD AMT		TYPE
30 26.9 N		117 44.7 W		03/18/84	0759 GMT	2610 M	350	20 KT	300 08 05	0	1020.3 MB		15.3 C	13.3 C	0/5		
CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SiO ₂ UM/L	P04 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR	
	0 ISL	15.61	15.61	33.407	24.611	331.8	.000	5.82	102.6							0	
1	1	15.61	15.61				.003	5.82	102.6	2.5	.29	.0	.00	.08	.02	1	
	10 ISL	15.61	15.62	33.407	24.610	332.3	.033	5.87	103.5							10	
1	11	15.62	15.62	33.407	24.609	332.3	.036	5.88	103.6	2.4	.29	.0	.00	.07	.02	11	
	20 ISL	15.62	15.62	33.409	24.610	332.5	.066	5.87	103.4							20	
1	27	15.63	15.62	33.410	24.611	332.7	.089	5.85	103.1	2.3	.29	.0	.00	.08	.02	27	
	30 ISL	15.58	15.59	33.403	24.615	332.6	.100	5.84	102.8							30	
1	43	15.57	15.56	33.401	24.617	332.6	.142	5.81	102.3	2.3	.29	.0	.00	.08	.02	43	
	50 ISL	15.31	15.30	33.378	24.657	329.0	.166	5.85	102.3							50	
1	58	14.95	14.94	33.357	24.719	323.3	.191	5.88	102.2	2.3	.30	.0	.00	.13	.03	58	
1	69	14.48	14.47	33.364	24.825	313.4	.226	5.83	100.4	2.4	.35	.0	.00	.20	.11	69	
	75 ISL	14.06	14.05	33.344	24.903	308.2	.246	5.72	97.6							76	
1	79	13.80	13.79	33.340	24.949	301.9	.257	5.64	95.8	3.4	.43	.8	.11	.49	.13	79	
1	95	13.09	13.07	33.340	25.093	288.4	.304	5.31	88.8	4.8	.56	3.6	.04	.78	.13	95	
	100 ISL	12.74	12.73	33.356	25.174	280.9	.319	5.17	85.9							101	
1	109	12.16	12.15	33.392	25.313	267.7	.343	4.94	81.1	6.5	.79	7.4	.03	.13	.13	109	
1	125	11.17	11.15	33.486	25.570	243.5	.386	4.45	71.5	11.8	1.09	12.7	.01	.05	.07	126	
	150 ISL	10.11	10.09	33.658	25.890	213.5	.442	3.77	59.3							151	
1	156	9.87	9.85	33.710	25.970	205.8	.455	3.60	56.3	21.0	1.56	20.8	.00	.01	.03	157	
1	170	9.27	9.25	33.850	26.178	186.2	.483	3.19	49.3	26.4	1.78	24.3	.00	.00	.03	171	
1	191	8.79	8.77	33.935	26.321	172.9	.520	3.20	48.9	30.0	1.84	25.4	.00			192	
	200 ISL	8.63	8.61	33.954	26.361	169.4	.535	3.28	50.0							202	
1	211	8.47	8.45	33.973	26.401	165.7	.554	3.33	50.6	31.5	1.84	25.6	.00			212	
1	242	8.02	8.00	34.049	26.528	154.0	.603	2.67	40.2	39.2	2.10	29.1	.00			243	
	250 ISL	7.79	7.86	34.058	26.554	151.6	.615	2.56	38.3							252	
1	283	7.41	7.38	34.084	26.644	143.4	.665	2.15	31.9	47.1	2.33	32.3	.00			285	
	300 ISL	7.31	7.28	34.115	26.683	139.9	.688	1.85	27.4							302	
1	343	7.09	7.05	34.187	26.771	132.1	.747	1.14	16.8	58.0	2.71	35.9	.00			345	
	400 ISL	6.35	6.32	34.175	26.860	124.0	.820	.82	11.9							403	
1	419	6.11	6.07	34.169	26.887	121.4	.844	.78	11.2	71.7	2.93	39.7	.00			422	
1	497	5.80	5.76	34.275	27.010	110.6	.933	.40	5.7	82.4	3.12	41.5	.00			500	
	500 ISL	5.78	5.74	34.276	27.014	110.2	.937	.33	4.8							504	
1	573	5.39	5.34	34.307	27.086	104.0	1.015	.33	4.7	92.3	3.18	43.2	.00			577	

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
30 16.9 N	118 04.7 W	03/18/84	1225 GMT	2050 M	320	20 KT	300 07 06	0	1019.3 MB	15.2 C	12.8 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	ORV	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.42	15.42	33.425	24.667	326.5	.000	5.84	102.5							0
1 2	15.42	15.42	33.425	24.667	326.5	.007	5.84	102.5	2.5	.32	.0	.00	.11	.07	2
1 10 ISL	15.41	15.40	33.425	24.670	326.5	.033	5.86	102.9							10
1 12	15.40	15.40	33.425	24.671	326.5	.039	5.96	104.6	2.2	.33	.0	.00	.09	.07	20
1 20 ISL	15.40	15.40	33.426	24.672	326.7	.065	5.85	102.7							12
1 22	15.40	15.40	33.426	24.672	326.7	.077	5.82	102.2	2.3	.32	.0	.00	.12	.02	22
1 30 ISL	15.40	15.40	33.426	24.673	326.7	.098	5.83	102.2							30
1 37	15.38	15.38	33.426	24.677	326.6	.104	5.85	102.6	2.2	.32	.0	.00	.12	.02	32
1 43	15.20	15.19	33.426	24.717	323.0	.140	5.89	103.0	2.0	.34	.0	.00	.14	.02	43
1 50 ISL	14.67	14.66	33.424	24.831	312.6	.162	5.91	102.7							50
1 54	14.06	14.05	33.423	24.959	300.3	.189	5.93	101.3	1.6	.33	.0	.00	.32	.12	54
1 6A	13.98	13.97	33.432	24.982	298.4	.216	5.87	100.1	2.6	.34	.0	.00	.79	.23	66
1 75 ISL	13.73	13.72	33.416	25.021	294.9	.238	5.68	96.3							76
1 78	13.61	13.60	33.409	25.041	293.1	.246	5.59	94.6	3.9	.44	1.5	.16	.49	.29	78
1 95	12.55	12.54	33.401	25.246	273.9	.294	5.05	85.6	7.0	.69	6.1	.04	.11	.11	95
1 100 ISL	12.22	12.21	33.404	25.311	267.8	.308	4.91	80.7							101
1 114	11.43	11.42	33.437	25.484	251.5	.346	4.57	73.9	11.5	.96	11.0	.03	.07	.07	115
1 125 ISL	10.98	10.97	33.492	25.608	239.9	.372	4.34	69.5							126
1 135	10.58	10.57	33.563	25.733	228.1	.396	4.13	65.6	16.3	1.25	15.9	.03	.02	.04	136
1 150 ISL	10.00	9.98	33.696	25.936	209.9	.428	3.87	60.8							151
1 161	9.60	9.58	33.793	26.079	195.6	.451	3.69	57.4	23.2	1.51	20.7	.02	.01	.02	162
1 191	9.02	9.00	33.885	26.245	180.2	.507	3.18	48.9	29.4	1.78	24.8	.02			192
1 200 ISL	8.86	8.84	33.918	26.296	175.5	.523	3.10	47.6							202
1 222	8.49	8.47	33.987	26.408	165.2	.560	2.98	45.3	34.8	1.91	27.0	.02			223
1 257 ISL	8.05	8.03	34.024	26.504	156.5	.605	2.82	42.5							252
1 259	7.93	7.90	34.030	26.526	154.4	.618	2.76	41.4	40.8	2.05	29.0	.02			260
1 300 ISL	7.41	7.38	34.064	26.629	145.0	.680	2.23	33.0							302
1 310	7.28	7.25	34.071	26.653	142.9	.695	2.07	30.6	50.0	2.33	32.8	.02			312
1 368	6.45	6.42	34.116	26.800	129.2	.773	1.29	18.7	63.3	2.69	37.6	.02			370
1 400 ISL	6.29	6.25	34.160	26.857	124.2	.814	.97	14.0							403
1 453	6.15	6.11	34.232	26.937	117.8	.879	.59	8.5	73.8	2.95	40.1	.02			456
1 500 ISL	5.85	5.81	34.270	27.000	111.7	.932	.43	6.1							504
1 540	5.59	5.54	34.295	27.053	106.9	.977	.36	5.1	85.0	3.11	42.3	.02			544
1 600 ISL	5.32	5.27	34.330	27.113	101.7	1.039	.34	4.8							605
1 628	5.23	5.18	34.363	27.134	99.9	1.067	.30	4.2	94.0	3.19	43.3	.01			632

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ART	TYPE	
30 06.3 N	118 24.9 W	03/18/84	1707 GMT	3360 M	330	13 KT	320 07 07	0	1021.0 MB	16.1 C	13.5 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	ORV	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0	15.38	15.38	33.381	24.643	328.8	.000	5.86	102.8	2.4	.30	.0	.00	.12	.01	0
1 10 ISL	15.33	15.33	33.381	24.653	328.2	.033	6.01	105.3							10
1 11	15.33	15.33	33.380	24.653	328.2	.036	6.01	105.3	2.2	.31	.0	.00			11
1 20 ISL	15.33	15.32	33.381	24.654	328.3	.066	5.91	103.6							20
1 21	15.33	15.32	33.381	24.655	328.3	.069	5.90	103.4	2.0	.31	.0	.00	.11	.01	21
1 30 ISL	15.32	15.32	33.381	24.656	328.3	.099	5.89	103.2							30
1 32	15.31	15.31	33.381	24.658	328.3	.105	5.86	102.6	2.1	.30	.0	.00	.11	.01	32
1 42	14.58	14.57	33.346	24.790	316.0	.137	5.97	103.0	2.2	.32	.0	.00	.20	.02	42
1 50 ISL	14.29	14.28	33.346	24.851	310.7	.162	5.94	101.9							50
1 52	14.26	14.25	33.346	24.858	309.8	.169	5.93	101.6	2.4	.34	.0	.00	.26	.11	52
1 62	14.12	14.11	33.407	24.934	302.9	.198	5.91	101.1	1.6	.35	.0	.00	.67	.16	62
1 72	13.96	13.95	33.454	25.005	296.4	.228	5.80	98.9	2.3	.40	.2	.05	.35	.17	72
1 75 ISL	13.92	13.91	33.453	25.012	295.3	.238	5.78	98.4							76
1 87	13.69	13.68	33.453	25.059	291.6	.272	5.66	95.9	3.3	.48	1.1	.22	.16	.12	87
1 100 ISL	13.08	13.07	33.421	25.157	282.6	.310	5.29	88.5							101
1 102	12.99	12.98	33.418	25.172	281.1	.315	5.24	87.5	5.4	.63	4.6	.13	.10	.11	102
1 122	11.64	11.63	33.573	25.551	245.4	.370	4.65	75.6	10.3	.95	10.5	.01	.05	.05	123
1 125 ISL	11.50	11.48	33.576	25.560	242.7	.376	4.57	74.0							126
1 147	10.44	10.42	33.590	25.780	223.9	.428	3.95	62.5	17.5	1.36	17.4	.00	.02	.03	148
1 150 ISL	10.35	10.33	33.606	25.808	221.3	.434	3.90	61.7							151
1 177	9.59	9.57	33.797	26.081	195.7	.491	3.55	55.2	24.4	1.62	21.8	.00			178
1 200 ISL	8.99	8.97	33.906	26.267	178.3	.533	3.25	49.9							202
1 207	8.83	8.81	33.911	26.312	174.2	.546	3.17	48.5	30.8	1.81	25.0	.01			208
1 236	8.46	8.44	33.980	26.407	165.5	.595	3.02	45.9	34.5	1.94	26.7	.00			237
1 250 ISL	8.25	8.23	33.997	26.453	161.4	.618	2.97	44.4							252
1 277	7.86	7.84	34.023	26.531	154.2	.660	2.82	42.3	40.6	2.07	28.8	.00			278
1 300 ISL	7.58	7.55	34.046	26.591	148.8	.695	2.51	37.3							302
1 335	7.16	7.15	34.075	26.670	141.6	.746	1.97	29.1	52.6	2.42	33.3	.01			337
1 400 ISL	6.40	6.37	34.111	26.804	129.3	.834	1.26	18.3							403
1 410	6.32	6.28	34.119	26.821	127.7	.847	1.17	16.9	66.7	2.78	37.9	.01			412
1 484	6.33	6.29	34.282	26.948	116.9	.938	.50	7.2	74.3	3.02	39.6	.01			487
1 500 ISL	6.26	6.22	34.301	26.973	114.7	.956	.36	5.2							504
1 560	5.74	5.69	34.319	27.053	107.4	1.023	.32	4.6	84.5	3.15	41.5	.01			564

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 57.1 N	118 44.6 W	03/01/84	0558 GMT		310	16 KT	320 06 09	1	1017.8 MB	14.7 C	12.2 C		3/3			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PTS5
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	15.18	15.18	33.413	24.709	322.5	.000	5.82	101.7							0
1	1	15.18	15.18	33.413	24.709	322.5	.003	5.82	101.7	2.7	.36	.3	.00	.07	.03	1
1	10 ISL	15.21	15.21	33.390	24.686	325.0	.032	5.92	103.5							10
1	12	15.21	15.21	33.387	24.683	325.3	.039	5.93	103.7	2.7	.35	.2	.00	.09	.03	12
1	20 ISL	15.21	15.20	33.387	24.686	325.3	.065	5.89	102.9							20
1	27	15.20	15.19	33.387	24.688	325.3	.087	5.84	102.1	2.6	.34	.2	.00	.08	.04	27
1	30 ISL	15.09	15.09	33.375	24.701	324.2	.097	5.85	102.0							30
1	42	14.59	14.66	33.328	24.752	319.6	.136	5.90	102.0	2.8	.37	.2	.00	.15	.0A	42
1	50 ISL	14.66	14.65	33.326	24.757	319.4	.162	5.69	101.7							50
1	57	14.63	14.62	33.322	24.761	319.2	.183	5.87	101.4	2.7	.37	.2	.01	.22	.11	57
1	73	14.63	14.62	33.333	24.770	318.8	.234	5.87	101.4	3.0	.37	.2	.01	.19	.13	73
1	75 ISL	14.58	14.58	33.323	24.769	319.0	.241	5.87	101.3							76
1	83	14.58	14.57	33.322	24.771	319.0	.266	5.87	101.3	3.0	.37	.3	.01	.18	.11	83
1	98	14.13	14.12	33.352	24.875	309.5	.313	5.73	99.9	3.3	.45	.6	.12	.18	.15	98
1	100 ISL	14.07	14.06	33.369	24.945	305.7	.320	5.67	96.9							101
1	119	13.41	13.41	33.653	25.269	372.5	.374	5.19	87.6	5.4	.60	4.1	.03	.09	.10	119
1	125 ISL	12.99	12.98	33.640	25.345	263.6	.391	5.09	85.2							126
1	138	11.96	11.96	33.634	25.537	247.2	.425	4.86	79.6	9.0	.84	8.6	.02	.04	.05	139
1	150 ISL	11.07	11.05	33.624	25.695	235.4	.453	4.49	72.0							151
1	159	10.42	10.41	33.611	25.799	222.4	.474	4.15	65.7	16.6	1.35	16.3	.01	.01	.02	160
1	179	9.66	9.62	33.776	26.059	197.8	.516	3.50	54.5	24.1	1.71	21.9	.01	.00	.07	180
1	200	9.14	9.12	33.853	26.201	186.6	.556	3.21	49.5	28.1	1.86	24.4	.01			201
1	220	8.78	8.76	33.947	26.332	172.5	.592	2.96	45.3	32.0	1.99	26.2	.01			221
1	250 ISL	8.39	8.36	34.042	26.468	160.0	.642	2.73	41.4							252
1	257	8.32	8.29	34.059	26.491	157.9	.652	2.67	40.4	37.8	2.13	28.0	.01			258
1	300 ISL	8.06	8.03	34.182	26.627	145.7	.718	1.67	25.1							300
1	307	8.02	7.99	34.198	26.646	144.0	.729	1.49	22.4	47.8	2.51	32.1	.00			309
1	365	7.32	7.28	34.220	26.765	133.3	.808	1.02	15.1	57.1	2.73	35.1	.00			367
1	400 ISL	6.98	6.94	34.234	26.824	128.0	.854	.81	11.9							403
1	451	6.52	6.48	34.255	26.902	121.0	.918	.58	8.4	70.3	2.96	38.7	.00			454
1	500 ISL	6.06	6.01	34.273	26.976	114.1	.975	.43	6.2							504
1	541	5.72	5.67	34.290	27.033	109.0	1.020	.35	5.0	82.7	3.11	41.3	.00			544
1	600 ISL	5.41	5.36	34.323	27.097	103.3	1.084	.33	4.6							605
1	629	5.37	5.27	34.341	27.122	101.2	1.113	.28	4.0	90.5	3.19	42.7	.00			633

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 103 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 46.4 N	119 04.8 W	03/01/84	0150 GMT	3503 M	340	16 KT	330 05 09	1	1015.7 MB	15.1 C	13.9 C		7/8	SC		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	15.60	15.60	33.422	24.624	331.4	.000	5.76	101.5							0
1	1	15.60	15.61	33.422	24.624	330.6	.003	5.76	101.5	2.6	.34	.2	.00	.07	.03	1
1	10 ISL	15.61	15.61	33.422	24.624	330.8	.033	5.80	102.1							10
1	12	15.62	15.62	33.422	24.620	331.4	.040	5.80	102.3	2.6	.36	.2	.00	.06	.03	12
1	20 ISL	15.54	15.53	33.414	24.633	330.4	.066	5.80	102.0							20
1	27	15.46	15.45	33.407	24.646	329.4	.089	5.79	101.7	2.6	.36	.2	.00	.08	.02	27
1	30 ISL	15.47	15.46	33.410	24.646	329.4	.099	5.78	101.6							30
1	42	15.47	15.46	33.413	24.648	329.6	.138	5.79	101.6	2.6	.36	.2	.00	.08	.03	42
1	50 ISL	15.37	15.36	33.400	24.660	328.6	.165	5.81	101.8							50
1	57	15.24	15.23	33.382	24.676	327.4	.187	5.83	102.0	2.5	.36	.2	.00	.11	.09	57
1	67	14.97	14.96	33.346	24.706	324.8	.220	5.85	101.7	2.6	.37	.2	.00	.13	.07	67
1	75 ISL	14.82	14.80	33.331	24.729	322.8	.246	5.85	101.7							76
1	77	14.78	14.77	33.329	24.735	322.3	.252	5.86	101.5	2.6	.37	.2	.00	.18	.12	77
1	92	14.15	14.13	33.296	24.845	312.1	.299	5.73	98.0	5.3	.46	.3	.08	.29	.25	92
1	100 ISL	14.02	14.01	33.463	24.998	297.9	.325	5.58	95.2							101
1	104	13.80	13.78	33.606	25.155	283.1	.347	5.37	91.3	4.4	.51	7.5	.03	.09	.19	108
1	122	12.30	12.28	33.559	25.418	258.2	.387	4.73	77.9	8.2	.63	7.8	.01	.05	.06	123
1	125 ISL	12.15	12.14	33.596	25.473	255.9	.394	4.70	77.1							126
1	147	11.59	11.57	33.600	25.619	239.5	.449	4.43	71.6	12.7	1.11	12.3	.01	.03	.04	148
1	150 ISL	11.31	11.29	33.622	25.650	236.6	.455	4.32	69.7							151
1	163	10.79	10.77	33.774	25.862	216.7	.497	3.57	57.0	19.5	1.51	18.5	.00	.01	.01	169
1	188	10.22	10.19	33.847	25.919	202.1	.533	3.34	52.7	23.2	1.66	20.8	.00			189
1	200 ISL	9.87	9.85	33.925	26.139	190.8	.562	3.08	48.3							202
1	209	9.62	9.60	33.985	26.227	182.6	.578	2.88	44.9	28.9	1.88	24.3	.00			210
1	239	9.08	8.98	34.085	26.406	166.1	.630	2.48	38.1	34.8	2.05	27.0	.00			240
1	250 ISL	8.89	8.87	34.110	26.443	162.6	.649	2.34	35.9							252
1	280	8.66	8.63	34.153	26.513	156.4	.696	2.01	30.7	40.2	2.24	29.0	.00			291
1	300 ISL	8.37	8.34	34.163	26.567	151.6	.727	1.84	28.0							302
1	342	7.73	7.70	34.169	26.666	142.6	.789	1.56	23.3	50.0	2.46	32.6	.00			344
1	400 ISL	7.15	7.11	34.186	26.764	133.8	.869	1.15	17.0							403
1	418	7.01	6.97	34.195	26.790	131.5	.893	1.03	15.1	60.6	2.69	36.3	.00			420
1	496	6.38	6.34	34.259	26.924	119.4	.991	.55	8.0	71.8	2.91	39.1	.00			499
1	500 ISL	6.35	6.31	34.262	26.931	118.8	.996	.53	7.7							504
1	572	5.87	5.82	34.316	27.035	109.4	1.078	.33	4.7	81.3	3.04	41.1	.00			576

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		BOTTON		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AMT		TYPE	
29 27.1 N		119 47.2 W		02/29/84		1957 GMT		3685 M		360 14 KT		320 08 12		1		1019.1 MB		16.7 C		14.9 C		5/3		SC	
CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	ORT PCT	SI03 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAE0 UG/L	PRESS D.BAR									
1	0 ISL	15.95	15.95	33.452	24.577	335.1	.000	5.76	102.2							0									
1	1	15.95	15.95	33.462	24.577	335.1	.003	5.76	102.2	3.0	.31	.0	.00	.07	.04	1									
1	1J ISL	15.94	15.94	33.461	24.580	335.1	.034	5.90	104.7							10									
1	12	15.93	15.93	33.461	24.580	335.1	.040	5.91	104.9	2.9	.31	.0	.00	.07	.05	12									
1	20 ISL	15.92	15.92	33.461	24.584	335.1	.067	5.85	103.8							20									
1	27	15.91	15.91	33.461	24.586	335.1	.090	5.77	102.3	2.9	.31	.0	.00	.07	.04	27									
1	30 ISL	15.91	15.91	33.461	24.586	335.2	.101	5.74	101.8							30									
1	42	15.92	15.91	33.461	24.586	335.5	.140	5.73	101.6	2.9	.31	.0	.00	.09	.04	42									
1	50 ISL	15.89	15.89	33.459	24.589	335.5	.168	5.76	102.0							50									
1	57	15.87	15.86	33.454	24.591	335.5	.190	5.78	102.4	2.9	.30	.0	.00	.11	.05	57									
1	68	15.82	15.81	33.450	24.599	335.0	.227	5.77	102.1	2.8	.30	.0	.00	.12	.04	68									
1	75 ISL	15.52	15.81	33.450	24.600	335.1	.251	5.80	102.7							76									
1	79	15.81	15.80	33.450	24.601	335.2	.260	5.81	102.8	2.8	.30	.0	.00	.13	.09	78									
1	93	15.09	15.08	33.398	24.721	324.2	.310	5.74	100.1	3.1	.35	.0	.01	.22	.20	93									
1	100 ISL	14.68	14.66	33.416	24.824	314.5	.333	5.66	97.8							101									
1	108	14.24	14.22	33.447	24.941	305.5	.357	5.53	94.8	3.9	.44	1.2	.10	.18	.21	108									
1	123	13.34	13.32	33.502	25.168	282.2	.403	5.08	85.5	5.9	.62	4.7	.03	.09	.18	124									
1	125 ISL	13.27	13.25	33.506	25.187	280.4	.408	5.06	85.0							126									
1	148	12.16	12.14	33.579	25.459	256.9	.470	4.65	76.4	9.7	.91	9.7	.01	.05	.07	149									
1	150 ISL	12.08	12.06	33.586	25.480	253.0	.474	4.59	75.2							151									
1	169	11.16	11.14	33.674	25.719	230.4	.521	3.87	62.3	16.2	1.32	16.1	.01	.01	.03	170									
1	184	10.30	10.27	33.775	25.949	208.8	.564	3.61	57.0	21.0	1.53	19.9	.01			190									
1	200 ISL	9.77	9.75	33.805	26.061	198.2	.587	3.71	58.0							202									
1	210	9.34	9.31	33.830	26.152	189.5	.606	3.82	59.1	24.6	1.69	21.8	.01			211									
1	240	8.74	8.71	33.944	26.337	172.4	.660	4.50	53.5	30.1	1.80	24.1	.01			241									
1	250 ISL	8.61	8.59	33.982	26.366	167.9	.677	3.26	49.7							252									
1	261	8.36	8.33	34.082	26.504	157.2	.727	2.46	37.3	39.0	2.17	28.8	.00			262									
1	300 ISL	8.20	8.17	34.125	26.562	152.0	.757	2.07	31.3							302									
1	342	7.87	7.84	34.198	26.660	143.2	.819	1.42	21.3	49.3	2.55	32.9	.00			344									
1	400 ISL	7.34	7.30	34.261	26.779	132.5	.899	.87	12.9							403									
1	419	7.16	7.12	34.269	26.811	129.7	.923	.77	11.4	61.4	2.84	36.7	.00			421									
1	496	6.42	6.37	34.243	26.907	121.1	1.020	.62	9.0	68.8	2.93	38.6	.00			499									
1	500 ISL	6.38	6.33	34.244	26.913	120.6	1.025	.61	8.8							504									
1	573	5.69	5.64	34.271	27.022	110.4	1.110	.40	5.7	83.2	3.11	41.6	.00			577									

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		BOTTON		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AMT		TYPE	
29 06.9 N		120 22.9 W		02/29/84		1329 GMT		3937 M		350 23 KT		340 06 09		1		1017.6 MB		15.2 C		12.8 C		1/1			
CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	ORT PCT	SI03 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAE0 UG/L	PRESS D.BAR									
1	0 ISL	16.50	16.50	33.578	24.542	338.3	.000	5.69	102.7							0									
1	2	16.50	16.50	33.578	24.542	338.5	.007	5.69	102.2	2.3	.34	.0	.00	.07	.04	2									
1	10 ISL	16.50	16.50	33.572	24.537	339.2	.034	5.67	101.9							10									
1	13	16.50	16.50	33.571	24.536	339.4	.044	5.67	101.8	2.3	.34	.0	.00	.07	.04	13									
1	20 ISL	16.50	16.50	33.571	24.536	339.6	.068	5.67	101.8							20									
1	28	16.50	16.50	33.572	24.537	339.8	.095	5.67	101.6	2.3	.34	.0	.00	.07	.05	28									
1	30 ISL	16.50	16.49	33.570	24.537	339.9	.102	5.67	101.7							30									
1	43	16.50	16.49	33.567	24.535	340.5	.145	5.65	101.4	2.3	.35	.0	.00	.07	.04	43									
1	50 ISL	16.48	16.47	33.564	24.538	340.5	.170	5.66	101.5							50									
1	58	16.45	16.44	33.560	24.541	340.4	.196	5.66	101.5	2.3	.35	.0	.00	.11	.04	58									
1	73	16.42	16.41	33.560	24.547	340.3	.247	5.66	101.5	2.3	.36	.0	.00	.12	.04	73									
1	75 ISL	16.43	16.41	33.562	24.548	340.5	.255	5.79	104.0							76									
1	83	16.43	16.41	33.562	24.549	340.5	.261	5.84	104.7	2.4	.36	.0	.00	.13	.04	83									
1	98	15.36	15.35	33.517	24.710	325.4	.331	5.80	102.2	2.9	.42	.0	.00	.21	.21	98									
1	100 ISL	15.33	15.32	33.519	24.755	321.2	.339	5.71	100.2							101									
1	114	13.47	13.46	33.492	25.134	285.3	.395	5.02	84.7	6.5	.80	5.2	.03	.13	.23	119									
1	125 ISL	12.94	12.97	33.517	25.250	274.4	.413	4.99	83.3							126									
1	138	12.12	12.10	33.578	25.467	253.9	.448	4.95	81.2	8.6	.92	8.2	.01	.05	.08	139									
1	150 ISL	11.39	11.37	33.615	25.630	238.5	.477	4.65	75.2							151									
1	158	10.94	10.92	33.640	25.731	229.0	.496	4.40	70.4	14.4	1.29	14.4	.01	.02	.05	159									
1	178	10.23	10.21	33.714	25.912	212.0	.540	4.01	63.9	18.9	1.51	18.2	.00	.01	.02	179									
1	199	9.60	9.58	33.813	26.096	194.8	.583	3.73	58.0	23.7	1.74	21.6	.00			200									
1	200 ISL	9.57	9.55	33.820	26.106	193.8	.584	3.71	57.7							202									
1	219	9.02	8.99	33.955	26.301	175.5	.619	3.33	51.2	30.0	1.83	24.8	.01			220									
1	250 ISL	8.67	8.65	34.035	26.418	164.9	.672	2.91	44.4							252									
1	255	8.65	8.62	34.038	26.425	164.3	.680	2.86	43.6	34.8	2.01	26.9	.00			256									
1	300 ISL	8.10	8.07	34.088	26.548	153.2	.752	2.37	35.7							302									
1	305	8.02	7.99	34.091	26.561	152.0	.760	2.31	34.8	42.4	2.24	30.2	.00			307									
1	362	7.21	7.18	34.136	26.714	137.9	.842	1.56	23.0	54.2	2.59	34.6	.00			364									
1	400 ISL	6.78	6.75	34.168	26.798	130.2	.893	1.16	17.0							403									
1	449	6.35	6.30	34.209	26.889	122.0	.955	.79	11.4	69.8	2.89	38.9	.00			452									
1	500 ISL	6.01	5.96	34.250	26.965	115.2	1.015	.62	8.8							504									
1	537	5.82	5.78	34.278	27.010	111.1	1.057	.55	7.9	79.6	3.06	41.0	.00			540									
1	600 ISL	5.56	5.51	34.325	27.080	105.2	1.125	.40	5.7							605									
1	627	5.49	5.43	34.343	27.104	103.1	1.153	.35	5.0	87.3	3.17	42.5	.00			631									

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
26 47.6 N	121 04.1 W	02/29/84	0727 GMT	4264 M	330	14 KT	320 06 09	1	1019.3 MB	15.3 C	12.7 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI05	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THTA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	16.34	16.34	33.543	24.551	337.6	.000	5.71	102.2							0
1	1	16.34	16.34	33.543	24.551	337.6	.003	5.71	102.2	3.0	.37	.2	.00	.06	.02	1
	10 ISL	16.34	16.34	33.543	24.551	338.0	.034	5.71	102.2							10
1	12	16.35	16.35	33.545	24.549	338.1	.040	5.70	102.0	2.9	.37	.2	.00	.06	.03	12
	20 ISL	16.34	16.33	33.542	24.551	338.1	.068	5.78	103.4							20
1	27	16.32	16.31	33.538	24.553	338.2	.091	5.83	104.3	2.9	.37	.2	.00	.06	.03	27
	30 ISL	16.31	16.30	33.537	24.554	338.2	.101	5.80	103.7							30
1	42	16.28	16.28	33.535	24.559	338.1	.141	5.67	101.3	2.9	.37	.2	.00	.06	.03	42
	50 ISL	16.27	16.26	33.535	24.562	338.1	.169	5.69	101.6							50
1	57	16.27	16.26	33.536	24.564	338.1	.192	5.71	102.0	2.7	.36	.2	.00	.08	.04	57
	57	16.27	16.26	33.537	24.565	338.3	.226	5.66	101.1	2.9	.36	.2	.01	.10	.06	67
	75 ISL	16.26	16.24	33.537	24.568	338.3	.254	5.66	101.1							76
1	77	16.25	16.24	33.535	24.568	338.4	.259	5.67	101.3	3.0	.37	.2	.01	.12	.05	77
1	93	16.12	16.11	33.538	24.600	335.9	.313	5.65	100.6	2.9	.36	.2	.01	.14	.12	93
	100 ISL	15.42	15.40	33.559	24.773	319.5	.337	5.60	98.4							101
1	106	14.62	14.61	33.587	24.968	301.0	.361	5.53	95.6	3.9	.45	.7	.08	.19	.25	108
1	123	13.59	13.57	33.602	25.134	285.5	.405	5.31	90.5	4.8	.57	2.8	.03	.12	.17	123
	125 ISL	13.70	13.68	33.598	25.170	282.2	.412	5.26	89.2							126
1	148	11.90	11.88	33.583	25.511	249.9	.474	4.69	76.6	10.4	.99	9.9	.01	.05	.06	149
	150 ISL	11.89	11.76	33.588	25.534	247.8	.478	4.65	75.7							151
1	168	10.91	10.89	33.658	25.750	227.4	.521	4.13	66.1	15.8	1.33	15.3	.01	.02	.03	169
1	189	10.55	10.53	33.772	25.902	213.3	.567	3.59	56.9	20.5	1.60	19.3	.01			190
	200 ISL	10.31	10.29	33.860	26.013	202.9	.590	3.26	51.5							202
1	209	10.10	10.08	33.932	26.104	194.3	.608	3.01	47.4	25.4	1.86	22.8	.01			210
	240	9.49	9.46	34.054	26.303	176.0	.665	2.60	40.4	31.1	2.05	25.6	.00			241
	250 ISL	9.34	9.31	34.082	26.350	171.7	.682	2.48	38.4							252
1	281	8.93	8.90	34.140	26.460	161.6	.733	2.14	32.9	37.8	2.27	26.4	.00			282
	300 ISL	8.66	8.63	34.162	26.521	156.1	.764	1.94	29.7							302
1	343	8.07	8.03	34.195	26.637	145.5	.829	1.53	23.1	47.7	2.56	32.0	.00			345
	400 ISL	7.42	7.36	34.244	26.771	133.4	.909	.96	14.3							403
1	420	7.21	7.17	34.258	26.811	129.7	.934	.79	11.7	60.3	2.88	36.2	.00			422
1	499	6.39	6.35	34.288	26.946	117.4	1.033	.45	6.5	72.4	3.06	39.2	.00			502
	500 ISL	6.36	6.34	34.268	26.948	117.3	1.034	.35	5.1							504
1	577	5.76	5.71	34.309	27.044	108.5	1.121	.35	5.0	82.6	3.16	41.6	.00			581

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 20.5 N	116 21.1 W	03/22/84	1721 GMT	799 M	330	06 KT	290 06 08	2	1014.2 MB	17.0 C	14.4 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI05	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THTA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	16.15	16.14	33.477	24.544	338.1	.300	5.88	104.8							0
1	1	16.15	16.14	33.477	24.544	338.2	.003	5.88	104.8	2.5	.34	.2	.00	.27	.05	1
	10 ISL	16.12	16.12	33.477	24.550	338.2	.034	5.99	106.6							10
1	11	16.12	16.12	33.474	24.546	338.1	.037	5.99	106.7	2.1	.33	.2	.00	.21	.11	11
	20 ISL	16.11	16.11	33.474	24.550	338.0	.068	5.94	105.8							20
1	21	16.05	16.04	33.471	24.563	337.1	.071	5.93	105.5	2.0	.32	.1	.00	.22	.10	21
	30 ISL	15.41	15.40	33.438	24.680	326.1	.101	5.87	103.0							30
1	32	15.25	15.25	33.427	24.707	323.7	.107	5.86	102.5	1.8	.34	.1	.00	.36	.18	32
	41	14.70	14.69	33.338	24.758	319.0	.136	5.91	102.2	2.0	.35	.1	.00	.14	.03	41
1	50	14.50	14.50	33.368	24.823	313.1	.164	5.82	100.3	2.9	.35	.1	.00	.24	.09	50
	63	14.01	14.00	33.447	24.988	297.7	.204	5.50	95.8	2.8	.46	1.1	.00	.45	.39	63
1	72	13.53	13.52	33.494	25.123	285.1	.230	5.28	89.2	3.9	.57	3.0	.03	.35	.19	72
	75 ISL	13.32	13.31	33.496	25.166	281.1	.239	5.16	86.9							76
1	87	12.56	12.54	33.497	25.318	266.7	.271	4.73	79.2	7.2	.85	7.9	.03	.16	.11	87
	100 ISL	11.72	11.71	33.564	25.529	247.0	.305	4.62	75.2							101
1	102	11.63	11.61	33.573	25.554	244.6	.309	4.60	74.7	9.4	1.02	11.1	.03	.08	.07	102
1	121	10.50	10.48	33.686	25.844	217.3	.355	3.90	61.9	16.5	1.41	17.7	.03	.02	.03	122
	125 ISL	10.40	10.39	33.705	25.875	214.4	.363	3.81	60.4							126
1	146	10.06	10.05	33.806	26.012	201.7	.407	3.41	53.6	21.1	1.67	21.1	.04	.00	.02	147
	150 ISL	9.99	9.97	33.820	26.036	199.6	.414	3.37	52.9							151
1	176	9.54	9.52	33.924	26.192	185.1	.465	3.02	47.0	25.7	1.90	24.5	.04			177
	200 ISL	9.49	9.47	34.080	26.322	173.3	.507	2.31	35.9							202
1	206	9.46	9.45	34.116	26.353	170.5	.518	2.14	33.3	31.8	2.18	27.7	.03			207
1	239	8.69	8.67	34.160	26.513	155.7	.571	1.86	28.4	38.2	2.45	30.1	.05			240
	250 ISL	8.52	8.50	34.176	26.552	152.2	.589	1.75	26.6							252
1	276	8.20	8.17	34.208	26.626	145.4	.628	1.49	22.5	45.1	2.56	32.5	.04			278
	300 ISL	7.88	7.85	34.226	26.688	139.9	.661	1.27	19.1							302
1	337	7.43	7.40	34.245	26.769	132.5	.717	.98	14.6	56.9	2.82	36.0	.03			339
	400 ISL	6.36	6.32	34.280	26.883	124.3	.793	.66	9.6							403
1	405	6.40	6.36	34.285	26.875	123.3	.805	.62	9.1	67.1	3.00	38.5	.03			412
1	484	6.49	6.44	34.336	26.971	114.9	.893	.41	6.0	77.1	3.12	40.3	.02			487
	500 ISL	6.38	6.33	34.343	26.991	113.1	.912	.38	5.5							504
1	556	5.92	5.87	34.357	27.061	106.8	.976	.31	4.4	90.2	3.21	42.3	.02			562

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETR	DRY	WET	CLOUD	AMT	TYPE
30 11.5 N		116 41.6 W		03/22/84	1253 GMT	262U M	310	11 KT	290 05 08	1	1013.2 MB	15.8 C	13.9 C	7/8		SC
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.11	16.11	33.461	24.540	338.3	.000	5.73	102.0							0
1	2	16.11	16.11	33.461	24.540	338.6	.007	5.73	102.0	2.6	.51	.1	.00	.11	.01	2
1	10	16.13	16.13	33.461	24.535	339.4	.034	5.86	104.4	2.0	.30	.1	.00	.12	.00	10
1	20 ISL	16.13	16.13	33.461	24.535	339.4	.068	5.84	103.8							20
1	30	16.12	16.12	33.458	24.536	339.6	.071			2.0	.31	.0	.00	.11	.01	21
1	30 ISL	15.92	15.91	33.437	24.566	337.1	.102	5.77	102.3							30
1	31	15.90	15.89	33.435	24.569	336.8	.105	5.76	102.1	1.9	.30	.0	.00	.11	.01	31
1	41	15.83	15.82	33.432	24.583	335.8	.138	5.80	102.7	1.8	.28	.0	.00	.14	.01	41
1	50 ISL	15.74	15.74	33.424	24.596	334.8	.169	5.80	102.5							50
1	51	15.73	15.73	33.423	24.598	334.7	.172	5.80	102.5	2.1	.30	.0	.00	.18	.03	51
1	62	15.42	15.41	33.391	24.643	330.7	.208	5.81	102.0	2.0	.31	.0	.00	.20	.07	62
1	72	14.77	14.76	33.371	24.769	318.9	.240	5.78	100.1	2.3	.34	.0	.00	.25	.12	72
1	75 ISL	14.51	14.50	33.397	24.844	311.8	.251	5.68	97.9							76
1	87	13.67	13.65	33.509	25.107	287.0	.286	5.28	89.5	4.4	.51	2.6	.04	.29	.19	87
1	100 ISL	13.09	13.08	33.512	25.225	274.3	.323	5.06	84.8							101
1	102	13.63	13.01	33.535	25.256	273.1	.327	5.04	84.3	6.1	.67	5.0	.02	.19	.13	102
1	120	11.85	11.84	33.575	25.513	249.0	.377	4.63	75.6	9.7	.94	9.7	.00	.10	.07	121
1	125 ISL	11.58	11.57	33.589	25.574	243.2	.388	4.51	73.3							126
1	145	10.53	10.51	33.664	25.823	219.9	.435	4.03	64.0	16.5	1.52	16.4	.00	.03	.02	146
1	150 ISL	10.36	10.34	33.683	25.867	215.7	.445	3.96	62.6							151
1	176	9.60	9.58	33.791	26.078	196.0	.499	3.65	56.8	23.1	1.59	21.1	.00			177
1	200 ISL	9.00	8.98	33.898	26.250	179.1	.544	3.34	51.4							202
1	207	8.86	8.83	33.926	26.303	174.9	.556	3.25	49.8	29.5	1.81	24.7	.00			208
1	237	8.53	8.51	34.008	26.418	164.5	.607	2.81	42.7	34.6	1.99	27.2	.01			238
1	250 ISL	8.38	8.35	34.039	26.467	160.1	.628	2.60	39.4							252
1	277	8.06	8.03	34.091	26.555	152.1	.669	2.20	33.1	42.8	2.26	30.5	.01			278
1	300 ISL	7.79	7.76	34.116	26.615	146.6	.705	1.93	28.9							302
1	336	7.38	7.35	34.141	26.694	139.5	.756	1.58	23.4	53.0	2.53	34.1	.01			338
1	400 ISL	6.73	6.69	34.202	26.832	127.0	.841	.93	15.6							403
1	411	6.64	6.60	34.211	26.852	125.2	.855	.84	12.2	68.3	2.85	38.1	.01			413
1	485	6.14	6.10	34.264	26.959	115.7	.944	.50	7.2	80.3	3.04	40.3	.01			488
1	500 ISL	6.06	6.02	34.275	26.978	114.0	.962	.45	6.5							504
1	558	5.79	5.74	34.319	27.047	108.0	1.026	.34	4.9	90.6	3.12	41.7	.01			562

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 107 45

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETR	DRY	WET	CLOUD	AMT	TYPE
30 01.2 N		117 01.5 W		03/22/84	0813 GMT	158U M	330	17 KT	300 06 08	1	1013.2 MB	16.4 C	14.1 C	5/8		SC
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	16.15	16.15	33.447	24.521	340.4	.000	5.76	102.6	2.5	.32	.1	.00	.12	.02	0
1	10	16.11	16.11	33.448	24.530	339.9	.034	5.79	103.1	2.2	.32	.1	.00	.13	.02	10
1	19	15.93	15.93	33.446	24.570	336.4	.064	5.84	103.6	2.3	.31	.1	.00	.15	.02	19
1	20 ISL	15.91	15.91	33.446	24.575	336.0	.068	5.84	103.5							20
1	30	15.91	15.90	33.449	24.578	335.9	.101	5.80	102.8	2.3	.29	.1	.00	.19	.02	30
1	39	15.89	15.88	33.452	24.584	335.6	.131	5.77	102.3	2.2	.29	.0	.00	.19	.05	39
1	49	15.73	15.72	33.429	24.603	334.1	.164	5.80	102.5	2.0	.31	.0	.00	.21	.07	49
1	50 ISL	15.69	15.68	33.423	24.607	333.8	.168	5.80	102.4							50
1	58	15.39	15.38	33.385	24.646	330.3	.194	5.82	102.1	1.8	.31	.0	.00	.23	.07	58
1	68	14.84	14.83	33.346	24.735	322.0	.227	5.83	101.1	2.1	.33	.0	.00	.22	.11	68
1	75 ISL	14.60	14.59	33.365	24.801	315.9	.250	5.76	99.4							76
1	83	14.40	14.39	33.402	24.872	309.4	.274	5.65	97.2	2.7	.38	.2	.05	.35	.35	83
1	97	13.96	13.94	33.449	25.001	297.4	.316	5.44	92.7	3.8	.47	1.3	.09	.27	.26	97
1	100 ISL	13.78	13.77	33.460	25.046	293.2	.326	5.38	91.3							101
1	116	12.81	12.80	33.512	25.281	271.2	.370	5.04	83.9	6.7	.68	5.2	.03	.16	.12	116
1	125 ISL	12.16	12.15	33.547	25.434	256.7	.395	4.77	78.4							126
1	136	11.28	11.26	33.603	25.641	237.1	.428	4.40	71.0	12.0	1.07	12.2	.01	.05	.06	139
1	150 ISL	10.68	10.67	33.653	25.786	223.5	.455	4.16	66.3							151
1	164	9.92	9.90	33.739	25.984	204.8	.494	3.82	59.9	20.1	1.47	19.3	.00			169
1	196	9.02	9.00	33.911	26.266	178.4	.547	3.20	49.2	28.4	1.81	24.6	.00			197
1	200 ISL	8.96	8.94	33.924	26.286	176.5	.554	3.16	48.5							202
1	225	8.66	8.63	33.979	26.376	168.3	.597	2.96	45.1	32.5	1.94	26.5	.00			226
1	250 ISL	8.27	8.25	34.028	26.474	159.4	.638	2.68	40.5							252
1	264	8.06	8.03	34.050	26.523	154.9	.660	2.51	37.8	40.0	2.16	29.7	.01			265
1	300 ISL	7.55	7.52	34.085	26.626	145.5	.714	2.04	30.3							302
1	322	7.27	7.24	34.099	26.676	140.9	.746	1.76	26.0	51.7	2.47	33.9	.01			324
1	396	6.61	6.57	34.155	26.811	128.8	.845	1.08	15.7	64.8	2.78	37.9	.01			398
1	400 ISL	6.58	6.55	34.159	26.817	128.2	.851	1.05	15.3							403
1	470	6.22	6.17	34.214	26.910	120.2	.938	.69	10.0	75.4	2.95	40.0	.01			473
1	500 ISL	6.03	5.98	34.241	26.955	116.1	.973	.56	8.1							504
1	546	5.70	5.65	34.285	27.031	109.1	1.025	.39	5.6	90.9	3.12	42.2	.01			550

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	POTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
29 50.8 N		117 19.4 W		03/22/84	0422 GMT	2230 M	320	15 KT	300 06 08	2	1013.5 MB	15.9 C	14.5 C	8/8	SC	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	15.91	15.91	33.443	24.570	335.7	.000	5.80	102.9	2.8	.33	.2	.00	.11	.01	0
	10 ISL	15.91	15.91	33.443	24.570	335.7	.034	6.01	106.5							10
1	11	15.92	15.92	33.443	24.569	336.2	.037	6.01	106.6	2.5	.32	.1	.00	.12	.00	11
	20 ISL	15.69	15.68	33.429	24.611	332.4	.067	5.88	103.7							20
1	21	15.66	15.66	33.427	24.615	332.0	.070	5.86	103.4	2.2	.32	.1	.00	.13	.02	21
	30 ISL	15.50	15.49	33.399	24.631	330.9	.100	5.90	103.8							30
1	31	15.47	15.47	33.396	24.634	330.7	.103	5.91	103.9	2.4	.34	.1	.00	.17	.00	31
1	42	14.88	14.87	33.362	24.738	321.0	.139	5.94	103.1	2.1	.34	.1	.00	.20	.02	42
	50 ISL	14.49	14.49	33.340	24.803	315.0	.165	6.00	103.2							50
1	52	14.43	14.42	33.337	24.815	313.9	.170	6.01	103.4	2.0	.36	.1	.00	.30	.10	52
1	62	14.28	14.27	33.333	24.844	311.4	.202	5.92	101.5	2.0	.37	.1	.00	.52	.25	62
1	73	14.25	14.24	33.363	24.872	309.0	.236	5.90	101.1	2.5	.40	.1	.00	.68	.28	73
	75 ISL	14.25	14.23	33.381	24.888	307.7	.243	5.86	100.4							76
1	86	14.24	14.23	33.542	25.013	296.1	.261	5.55	95.2	3.1	.39	.8	.10	.27	.24	86
	100 ISL	13.53	13.52	33.547	25.164	280.2	.316	5.26	89.0							101
1	103	13.33	13.32	33.571	25.223	276.4	.324	5.20	87.6	5.1	.56	3.8	.04	.15	.12	103
1	122	11.57	11.55	33.575	25.567	245.9	.375	4.61	74.9	10.5	.96	10.5	.02	.06	.05	123
	125 ISL	11.44	11.43	33.612	25.618	241.8	.381	4.56	73.8							126
	150 ISL	10.57	10.55	33.608	25.772	224.8	.440	4.12	65.5							151
1	152	10.52	10.50	33.615	25.785	223.6	.445	4.09	64.9	15.9	1.30	16.2	.01	.01	.04	153
1	177	9.66	9.64	33.819	26.090	194.9	.497	3.63	56.6	22.8	1.56	21.2	.01			178
	200 ISL	9.13	9.10	33.923	26.259	179.2	.540	3.31	51.1							202
1	206	9.02	8.99	33.941	26.290	176.3	.550	3.24	49.8	28.8	1.85	24.6	.01			207
1	237	8.57	8.55	34.024	26.425	164.0	.603	2.86	43.6							238
	250 ISL	8.39	8.37	34.047	26.470	159.8	.624	2.70	41.0							252
1	276	8.04	8.01	34.078	26.548	152.7	.664	2.39	36.0	41.1	2.16	29.9	.01			277
	300 ISL	7.67	7.64	34.190	26.620	145.1	.701	2.05	30.5							302
1	334	7.18	7.15	34.123	26.708	138.0	.749	1.60	23.6							336
	400 ISL	6.52	6.49	34.162	26.828	127.2	.836	1.10	16.1							405
1	408	6.47	6.43	34.167	26.839	126.1	.846	1.06	15.4	68.6	2.80	38.5	.01			410
1	482	6.09	6.04	34.276	26.975	114.1	.935	.50	7.2	81.7	3.02	40.6	.01			485
	500 ISL	6.02	5.97	34.297	27.000	111.9	.956	.39	5.6							504
1	556	5.85	5.80	34.344	27.060	106.9	1.017	.35	5.0	91.2	3.12	42.0	.00			560

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	POTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
29 41.5 N		117 41.4 W		03/22/84	0012 GMT	3170 M	320	17 KT	290 06 08	2	1013.2 MB	17.8 C	15.7 C	8/8	SC	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	16.19	16.19	33.463	24.524	340.1	.000	5.80	103.4	2.8	.31	.2	.00	.10	.00	0
	10 ISL	16.14	16.14	33.463	24.535	340.0	.034	6.04	107.6							10
1	11	16.13	16.13	33.461	24.536	339.3	.037	6.05	107.9	2.4	.30	.2	.00	.10	.00	11
	20 ISL	16.02	16.01	33.471	24.567	336.4	.068	5.99	106.5							20
1	26	15.94	15.94	33.476	24.591	334.5	.088	5.90	104.7	2.5	.29	.1	.00	.12	.03	26
	30 ISL	15.92	15.91	33.475	24.596	334.2	.101	5.86	104.0							30
1	40	15.86	15.85	33.464	24.600	334.1	.134	5.80	102.8	2.5	.28	.1	.00	.14	.00	40
	50 ISL	15.76	15.76	33.452	24.614	333.2	.168	5.81	102.8							50
1	56	15.65	15.65	33.439	24.627	332.3	.187	5.83	102.8	2.3	.30	.1	.00	.20	.00	56
1	65	15.33	15.32	33.396	24.667	328.5	.217	5.90	103.4	2.3	.31	.1	.00	.18	.06	65
1	75	14.99	14.96	33.351	24.706	325.0	.249	5.96	103.7	2.4	.31	.1	.00	.24	.08	75
1	91	14.65	14.63	33.361	24.782	317.6	.301	5.87	101.8	2.3	.34	.1	.00	.43	.12	91
	100 ISL	14.46	14.44	33.361	24.829	314.2	.330	5.90	101.7							101
1	105	14.37	14.36	33.361	24.847	312.4	.345	5.92	101.7	2.2	.34	.1	.00	.35	.17	105
1	120	14.14	14.13	33.431	24.949	303.1	.391	5.67	97.0	2.8	.40	.5	.19	.23	.14	120
	125 ISL	13.75	13.74	33.451	25.045	294.0	.407	5.52	93.6							126
1	145	12.01	11.99	33.519	25.441	256.5	.463	4.86	79.6	8.2	.81	7.9	.03	.06	.05	146
	150 ISL	11.71	11.69	33.527	25.504	250.6	.475	4.71	76.6							151
1	165	10.85	10.83	33.564	25.688	233.2	.512	4.26	66.0	14.0	1.24	14.4	.03	.02	.03	166
1	185	9.98	9.96	33.693	25.939	209.5	.556	3.86	60.5	19.4	1.49	19.2	.02			186
	200 ISL	9.47	9.44	33.785	26.096	194.7	.586	3.48	53.9							202
1	205	9.33	9.31	33.816	26.143	190.4	.595	3.35	51.4	25.2	1.72	23.2	.01			206
1	236	9.05	9.02	34.014	26.343	171.9	.651	2.91	44.8	30.7	1.93	25.8	.01			237
	250 ISL	8.80	8.77	34.065	26.423	164.5	.675	2.66	40.7							252
1	275	8.29	8.27	34.114	26.539	153.7	.714	2.24	33.9	40.1	2.21	29.6	.01			276
	300 ISL	7.79	7.76	34.111	26.611	146.5	.752	2.01	30.1							302
1	333	7.26	7.22	34.109	26.696	140.1	.800	1.78	26.3	52.0	2.48	33.8	.01			335
	400 ISL	7.01	6.97	34.206	26.797	130.5	.890	1.01	14.9							403
1	408	7.00	6.96	34.218	26.808	129.6	.900	.93	13.7	62.4	2.81	37.2	.02			410
1	483	6.31	6.26	34.254	26.930	118.6	.994	.59	8.4	76.5	3.01	39.9	.02			486
	500 ISL	6.18	6.13	34.267	26.957	116.2	1.014	.52	7.5							504
1	558	5.81	5.76	34.322	27.047	108.0	1.079	.36	5.1	90.6	3.15	42.0	.02			562

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 31.5 N	118 01.3 W	03/21/84	2017 GMT	3550 M	350	19 KT	310 04 04	2	1016.3 MB	16.5 C	15.0 C	8/8		SC		
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVI	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C	‰	THETA	‰	M	ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	16.14	16.14	33.469	24.539	338.8	.000	5.77	102.9							0
1	1	16.14	16.14	33.469	24.539	338.7	.003	5.77	102.8	2.2	.31	.1	.01	.03	.01	1
1	10 ISL	16.14	16.14	33.469	24.540	338.7	.034	5.88	104.8							10
1	11	16.13	16.13	33.468	24.542	338.8	.037	5.89	104.9	1.8	.31	.0	.01	.07	.03	11
1	20 ISL	15.36	15.86	33.452	24.590	334.5	.068	5.89	104.9							20
1	21	15.83	15.83	33.451	24.595	334.0	.071	5.92	104.8	2.1	.30	.0	.00	.09	.02	21
1	30	15.78	15.77	33.437	24.598	334.0	.101	5.85	103.1	1.9	.30	.0	.00	.11	.03	30
1	41	15.69	15.69	33.435	24.615	332.7	.137	5.87	103.6	1.9	.31	.0	.00	.15	.04	41
1	50 ISL	15.63	15.62	33.427	24.624	332.1	.168	5.84	103.0							50
1	51	15.62	15.61	33.426	24.625	332.1	.170	5.84	102.9	1.9	.32	.0	.00	.16	.05	51
1	61	15.50	15.49	33.414	24.644	330.7	.203	5.94	104.4	1.9	.35	.0	.00	.18	.06	61
1	71	15.33	15.32	33.404	24.672	328.2	.236	5.69	99.7	1.9	.35	.0	.00	.20	.07	71
1	75 ISL	15.29	15.27	33.402	24.681	327.4	.250	5.70	99.7							76
1	86	15.11	15.10	33.395	24.715	324.5	.265			1.9	.37	.0	.00	.22	.10	86
1	100 ISL	14.54	14.52	33.368	24.817	315.1	.331	5.89	99.7							101
1	101	14.51	14.50	33.367	24.822	314.7	.333	5.90	101.7	1.9	.39	.0	.01	.40	.15	101
1	120	14.03	14.01	33.424	24.967	301.3	.391	5.68	96.9	2.5	.46	.8	.22	.13	.11	120
1	125 ISL	13.86	13.84	33.452	25.025	295.9	.407	5.58	95.0							126
1	144	13.04	13.02	33.541	25.260	274.0	.462	5.19	96.7	5.0	.67	4.6	.05	.09	.09	145
1	150 ISL	12.65	12.63	33.561	25.351	267.1	.478	5.06	84.0							151
1	173	11.06	11.03	33.566	25.653	236.7	.536	4.46	71.5	12.5	1.18	13.2	.00			174
1	200 ISL	9.98	9.95	33.840	26.055	198.9	.594	3.45	54.2							202
1	202	9.92	9.89	33.863	26.063	196.2	.599	3.38	53.0	23.7	1.93	21.7	.00			203
1	232	9.23	9.21	34.016	26.315	174.5	.654	2.85	44.0	31.1	2.04	25.6	.00			233
1	250 ISL	8.96	8.94	34.058	26.392	167.6	.685	2.67	41.0							252
1	271	8.70	8.67	34.082	26.452	162.1	.719	2.51	38.3	35.9	2.17	27.8	.00			272
1	300 ISL	8.20	8.17	34.111	26.550	153.1	.765	2.20	33.2							302
1	328	7.75	7.71	34.134	26.636	145.1	.807	1.87	28.0	47.7	2.46	32.1	.00			330
1	400 ISL	7.02	6.99	34.217	26.804	129.9	.906	.99	14.5							403
1	402	7.01	6.97	34.219	26.807	129.6	.908	.97	14.3	61.9	2.97	36.4	.00			404
1	478	6.29	6.25	34.247	26.927	118.8	1.003	.62	9.0	74.6	3.07	39.3	.00			481
1	500 ISL	6.14	6.10	34.263	26.958	116.0	1.029	.54	7.8							504
1	553	5.91	5.86	34.314	27.028	109.9	1.089	.39	5.6	84.8	3.18	41.1	.00			557

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 22.0 N	118 20.9 W	03/01/84	1142 GMT	3216 M	320	21 KT	310 05 10	1	1017.8 MB	14.7 C	12.6 C	7/8				
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVI	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	M	DEG C	DEG C	‰	THETA	‰	M	ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	15.81	15.81	33.455	24.603	332.6	.000	5.80	102.7							0
1	1	15.81	15.81	33.455	24.603	332.6	.003	5.80	102.7	2.5	.33	.2	.00	.08	.03	1
1	10 ISL	15.82	15.82	33.452	24.600	333.2	.033	5.88	104.0							10
1	11	15.82	15.82	33.452	24.599	333.2	.036	5.88	104.1	2.4	.33	.2	.00	.07	.03	11
1	20 ISL	15.81	15.81	33.453	24.602	333.3	.067	5.86	103.8							20
1	27	15.81	15.81	33.454	24.603	333.4	.090	5.84	103.4	2.4	.33	.2	.00	.08	.02	27
1	30 ISL	15.84	15.83	33.456	24.599	333.7	.100	5.82	103.1							30
1	42	15.84	15.84	33.456	24.598	334.4	.140	5.76	102.0	2.4	.33	.2	.00	.09	.04	42
1	50 ISL	15.75	15.75	33.448	24.611	333.4	.167	5.76	101.8							50
1	57	15.66	15.65	33.435	24.624	332.4	.189	5.76	101.6	2.4	.33	.2	.00	.11	.04	57
1	73	15.45	15.44	33.399	24.643	331.1	.242	5.78	101.5	2.5	.33	.2	.00	.09	.06	73
1	75 ISL	15.36	15.35	33.383	24.650	330.4	.250	5.80	101.4							76
1	83	14.99	14.97	33.340	24.699	325.9	.275	5.83	101.4	2.6	.34	.2	.00	.13	.09	83
1	98	14.17	14.16	33.419	24.933	304.0	.322	5.54	94.8	4.1	.48	1.5	.07	.25	.22	98
1	100 ISL	14.06	14.05	33.434	24.968	300.7	.329	5.50	93.9							101
1	119	13.17	13.15	33.547	25.238	275.4	.383	5.20	87.2	5.8	.62	4.4	.03	.11	.15	119
1	125 ISL	12.81	12.79	33.586	25.339	265.9	.400	5.10	84.9							126
1	138	12.04	12.02	33.646	25.534	247.5	.435	4.85	79.5	9.0	.85	8.6	.02	.05	.06	139
1	150 ISL	11.33	11.31	33.649	25.664	234.9	.462	4.56	73.7							151
1	158	10.86	10.86	33.651	25.750	227.1	.482	4.35	69.6	14.6	1.23	14.4	.02	.02	.04	159
1	179	10.26	10.24	33.736	25.925	210.8	.527	3.91	61.7	19.4	1.50	18.5	.01	.00	.01	180
1	199	9.85	9.83	33.809	26.052	199.1	.568	3.59	56.2	23.1	1.65	21.2	.01			200
1	200 ISL	9.82	9.80	33.914	26.060	199.3	.570	3.57	55.9							202
1	220	9.27	9.25	33.932	26.243	181.2	.608	3.23	49.9	28.1	1.84	23.9	.01			221
1	250 ISL	8.86	8.84	34.068	26.414	165.3	.660	2.65	40.6							252
1	256	8.82	8.79	34.087	26.437	163.3	.669	2.54	38.9	35.2	2.13	27.3	.01			257
1	300 ISL	8.32	8.29	34.157	26.569	151.4	.739	1.97	29.8							302
1	304	8.25	8.22	34.161	26.582	150.2	.749	1.90	28.7	43.1	2.36	30.3	.00			308
1	363	7.61	7.57	34.220	26.724	137.3	.830	1.19	17.7	53.6	2.69	34.0	.00			365
1	400 ISL	7.11	7.07	34.226	26.799	130.4	.879	.94	13.8							403
1	450	6.49	6.45	34.229	26.885	122.5	.943	.73	10.6	69.0	2.94	38.4	.00			453
1	500 ISL	6.12	6.08	34.263	26.960	115.8	1.002	.54	7.7							504
1	538	5.93	5.98	34.293	27.010	111.4	1.045	.43	6.2	77.8	3.07	40.4	.00			541
1	600 ISL	5.65	5.60	34.339	27.081	105.2	1.113	.33	4.7							605
1	625	5.57	5.51	34.357	27.105	103.1	1.138	.32	4.6	87.1	3.17	42.2	.00			629

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
29 11.2 N		118 41.8 W		03/01/84	1559 GMT		330	18 KT	310 06 10	1	1018.8 MB	14.6 C	12.1 C	7/3		SC
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRESS
#	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.09	16.09	33.504	24.578	335.0	.000	5.73	102.0							0
1	1	16.09	16.09	33.504	24.578	335.0	.003	5.73	102.0	2.5	.31	.2	.00	.07	.05	1
1	10 ISL	16.10	16.10	33.504	24.576	335.5	.034	5.77	102.7							10
1	11	16.10	16.10	33.504	24.576	335.5	.037	5.77	102.7	2.5	.32	.2	.00	.07	.03	11
1	20 ISL	16.09	16.09	33.503	24.577	335.7	.067	5.75	102.3							20
1	26	16.09	16.09	33.502	24.577	335.9	.087	5.72	101.8	2.5	.31	.2	.00	.07	.03	26
1	30 ISL	16.10	16.09	33.513	24.583	335.4	.101	5.71	101.7							30
1	41	16.11	16.11	33.545	24.605	333.7	.137	5.70	101.5	2.5	.31	.2	.00	.08	.04	41
1	50 ISL	16.11	16.10	33.566	24.623	332.3	.167	5.70	101.6							50
1	56	16.09	16.08	33.569	24.629	331.9	.187	5.71	101.7	2.5	.31	.3	.00	.08	.04	56
1	71	15.90	15.89	33.477	24.599	335.2	.236	5.73	101.6	2.4	.32	.3	.00	.10	.04	71
1	75 ISL	15.89	15.88	33.471	24.599	335.3	.251	5.73	101.6							76
1	81	15.95	15.88	33.470	24.600	335.4	.270	5.73	101.6	2.4	.32	.3	.00	.11	.05	81
1	97	14.66	14.64	33.430	24.840	312.9	.322	5.66	97.8	3.3	.41	.3	.04	.29	.28	97
1	100 ISL	14.47	14.45	33.437	24.885	308.7	.332	5.60	96.4							101
1	117	13.63	13.61	33.495	25.105	288.1	.381	5.21	88.2	5.2	.60	3.8	.03	.13	.18	117
1	125 ISL	13.10	13.08	33.526	25.235	275.2	.405	5.04	84.4							126
1	136	12.40	12.38	33.572	25.409	259.5	.436	4.83	79.7	8.0	.83	7.5	.02	.08	.09	137
1	150 ISL	11.73	11.71	33.626	25.576	245.7	.470	4.69	76.3							151
1	156	11.42	11.40	33.653	25.654	236.3	.485	4.58	74.1	11.8	1.04	11.9	.01	.03	.04	157
1	176	10.17	10.15	33.762	25.959	207.4	.529	5.72	58.6	20.3	1.56	19.6	.01	.00	.02	177
1	196	9.79	9.77	33.876	26.114	193.1	.569	3.33	52.1	24.8	1.75	22.4	.00			197
1	200 ISL	9.68	9.66	33.887	26.141	190.6	.577	3.33	51.9							202
1	217	9.17	9.15	33.923	26.251	180.3	.608	3.35	51.4	27.8	1.81	24.0	.00			218
1	250 ISL	8.44	8.42	33.999	26.425	164.1	.665	5.07	46.6							252
1	252	8.41	8.39	34.002	26.432	163.4	.668	3.05	46.3	34.3	1.99	26.9	.00			253
1	300 ISL	7.87	7.84	34.070	26.568	151.2	.744	2.44	36.6							302
1	307	7.85	7.82	34.072	26.572	150.8	.747	2.41	36.1	42.5	2.28	30.6	.00			304
1	359	7.19	7.15	34.114	26.700	139.2	.829	1.66	24.5	53.0	2.56	34.5	.00			361
1	400 ISL	6.75	6.72	34.115	26.760	134.0	.885	1.23	18.0							403
1	444	6.34	6.30	34.115	26.815	128.8	.944	.87	12.6	67.9	2.90	38.9	.00			447
1	500 ISL	5.92	5.87	34.196	26.934	118.0	1.012	.59	8.4							504
1	533	5.72	5.68	34.251	27.001	111.8	1.050	.49	7.0	80.4	3.10	41.8	.00			536
1	600 ISL	5.46	5.41	34.316	27.086	104.4	1.123	.47	6.6							605
1	620	5.41	5.36	34.329	27.101	103.2	1.143	.39	5.5	88.3	3.19	43.0	.00			624

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
28 51.9 N		119 19.6 W		03/01/84	2209 GMT		340	15 KT	350 05 06	1	1017.2 MB	16.2 C	13.1 C	6/8		SC
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRESS
#	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.21	16.21	33.525	24.566	336.7	.000	5.70	101.7							0
1	1	16.21	16.21	33.525	24.566	336.2	.003	5.70	101.7	2.5	.28	.2	.00	.07	.04	1
1	10 ISL	16.21	16.21	33.519	24.563	336.3	.034	5.76	102.8							10
1	12	16.20	16.20	33.518	24.563	336.7	.040	5.77	103.0	2.5	.29	.2	.00	.08	.04	12
1	20 ISL	16.14	16.14	33.512	24.572	336.1	.067	5.78	103.1							20
1	26	16.10	16.10	33.508	24.579	335.7	.087	5.80	103.3	2.4	.28	.2	.00	.09	.05	26
1	30 ISL	16.10	16.10	33.507	24.578	335.9	.101	5.78	102.9							30
1	41	16.10	16.09	33.534	24.576	336.4	.137	5.71	101.7	2.5	.28	.2	.00	.11	.04	41
1	50 ISL	16.06	16.06	33.502	24.583	336.0	.168	5.71	101.7							50
1	56	16.03	16.02	33.500	24.590	335.6	.188	5.72	101.7	2.4	.28	.2	.00	.12	.04	56
1	66	15.98	15.97	33.494	24.598	335.2	.221	5.70	101.2	2.6	.28	.2	.00	.11	.04	66
1	75 ISL	15.98	15.96	33.498	24.602	335.1	.252	5.70	101.2							76
1	76	15.97	15.96	33.498	24.603	335.0	.254	5.71	101.4	2.5	.28	.2	.00	.12	.09	76
1	92	14.67	14.65	33.437	24.844	312.3	.306	5.56	96.1	3.4	.41	.6	.06	.30	.32	92
1	100 ISL	14.34	14.33	33.509	24.967	300.8	.332	5.43	93.4							101
1	106	14.14	14.13	33.561	25.050	293.1	.348	5.34	91.4	4.3	.50	2.4	.04	.14	.17	106
1	121	13.11	13.09	33.586	25.280	271.5	.390	5.09	85.3	5.4	.58	4.2	.02	.08	.10	121
1	125 ISL	12.79	12.78	33.600	25.353	265.6	.402	4.99	83.1							126
1	145	11.49	11.47	33.603	25.604	240.9	.454	4.47	72.4	12.0	1.05	12.0	.02	.03	.06	146
1	150 ISL	11.23	11.21	33.619	25.663	235.3	.465	4.36	70.2							151
1	165	10.55	10.53	33.701	25.848	217.9	.500	3.94	62.6	17.7	1.37	17.3	.02	.01	.02	166
1	185	10.14	10.12	33.861	26.058	198.3	.541	3.19	50.3	24.0	1.70	21.9	.02			186
1	200 ISL	9.65	9.63	33.946	26.192	185.8	.569	3.00	46.7							202
1	205	9.48	9.46	33.960	26.230	182.1	.579	2.97	46.1	28.5	1.84	24.2	.01			206
1	236	8.98	8.96	34.026	26.362	170.0	.633	2.74	42.1	32.4	1.98	26.3	.00			237
1	250 ISL	8.73	8.71	34.042	26.414	165.3	.657	2.67	40.9							252
1	276	8.30	8.27	34.061	26.496	157.8	.698	2.53	38.3	37.9	2.11	28.4	.00			277
1	300 ISL	7.97	7.94	34.088	26.566	151.4	.736	2.24	33.7							302
1	336	7.56	7.52	34.127	26.658	143.1	.789	1.75	26.1	49.8	2.45	33.1	.00			338
1	400 ISL	6.95	6.91	34.195	26.797	130.6	.876	1.00	14.7							403
1	412	6.86	6.82	34.205	26.818	128.6	.891	.89	13.0	62.9	2.79	37.4	.00			414
1	489	6.25	6.21	34.253	26.936	118.0	.987	.53	7.7	72.6	2.98	39.8	.00			492
1	500 ISL	6.18	6.13	34.259	26.951	116.7	1.000	.50	7.1							504
1	565	5.76	5.71	34.291	27.029	109.8	1.074	.37	5.3	81.8	3.10	41.7	.01			569

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
28 35.0 N	119 59.6 W	03/02/84	0506 GMT	3880 M	340	15 KT	340 05 08	1	1017.1 MB	16.2 C	12.6 C		2/5		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OKY	S103	P04	N03	N02	CHL-A	PHAED	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.62	16.62	33.591	24.523	340.1	.000	5.78	104.0							0
1 1	16.62	16.62	33.591	24.523	340.2	.003	5.78	104.0	2.9	.31	.1	.00	.08	.03	1
1 10 ISL	16.64	16.64	33.589	24.518	341.0	.034	5.86	105.4							10
1 12	16.64	16.64	33.589	24.517	341.1	.041	5.87	105.7	2.9	.32	.1	.00	.08	.03	12
1 20 ISL	16.63	16.63	33.590	24.520	341.1	.068	5.92	106.7							20
1 27	16.62	16.62	33.590	24.522	341.1	.092	5.94	106.9	2.8	.32	.1	.00	.08	.04	27
1 30 ISL	16.63	16.62	33.590	24.521	341.5	.102	5.91	106.4							30
1 42	16.65	16.64	33.590	24.518	342.1	.145	5.80	104.4	2.9	.31	.1	.00	.08	.04	42
1 50 ISL	16.64	16.63	33.590	24.519	342.2	.171	5.81	104.6							50
1 57	16.65	16.62	33.588	24.521	342.3	.194	5.83	104.9	2.8	.32	.1	.00	.13	.03	57
1 67	16.61	16.60	33.589	24.527	342.0	.228	5.80	104.4	2.8	.32	.1	.00	.11	.04	67
1 75 ISL	16.60	16.59	33.588	24.527	342.3	.256	5.78	104.3							76
1 77	16.60	16.59	33.587	24.527	342.3	.262	5.78	104.3	2.9	.32	.1	.00	.12	.04	77
1 92	16.57	16.55	33.583	24.532	342.3	.313	5.86	105.3	3.0	.32	.2	.00	.15	.10	92
1 100 ISL	15.75	15.71	33.566	24.711	325.5	.341	5.81	102.6							101
1 107	14.97	14.95	33.561	24.875	309.9	.362	5.73	99.8	3.3	.37	.4	.02	.26	.36	107
1 122	14.06	14.04	33.569	25.088	259.9	.407	5.50	94.0	4.9	.52	2.6	.06	.18	.23	122
1 125 ISL	13.76	13.74	33.615	25.170	284.1	.417	5.35	91.0							126
1 147	11.94	11.92	33.619	25.532	247.8	.476	4.29	70.2	12.7	1.17	13.0	.01	.05	.08	148
1 150 ISL	11.81	11.79	33.635	25.569	244.4	.483	4.20	68.4							151
1 167	11.12	11.10	33.746	25.782	226.4	.523	3.69	59.3	18.2	1.49	17.9	.00	.01	.02	168
1 187	10.40	10.38	33.849	25.989	205.0	.566	3.35	53.1	22.9	1.69	21.1	.00			188
1 200 ISL	10.03	10.00	33.926	26.114	193.4	.592	3.22	50.6							202
1 208	9.82	9.80	33.972	26.184	186.8	.607	3.15	49.3	27.5	1.88	23.8	.00			209
1 238	9.16	9.14	34.069	26.368	169.7	.660	2.77	42.8	32.9	2.02	26.2	.00			239
1 250 ISL	8.96	8.94	34.100	26.424	164.5	.680	2.58	39.7							252
1 280	8.57	8.54	34.156	26.530	154.8	.727	2.16	32.9	40.6	2.30	29.4	.00			281
1 300 ISL	8.33	8.30	34.173	26.580	150.3	.759	2.00	30.3							302
1 339	7.93	7.90	34.192	26.655	143.7	.816	1.75	26.3	48.2	2.53	32.2	.00			341
1 400 ISL	7.39	7.35	34.259	26.786	131.9	.900	1.07	15.8							403
1 417	7.25	7.21	34.276	26.820	128.9	.922	.89	13.2	60.0	2.82	36.0	.00			419
1 494	6.54	6.50	34.307	26.941	118.0	1.017	.57	8.3	70.0	2.99	38.9	.00			497
1 500 ISL	6.50	6.45	34.309	26.949	117.3	1.024	.51	7.5							504
1 571	6.01	5.96	34.325	27.025	110.5	1.106	.51	7.3	79.1	3.10	40.9	.00			575

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 107 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
28 10.7 N	120 35.6 W	03/02/84	1020 GMT		350	13 KT	340 05 08	1	1017.3 MB	15.8 C	13.8 C		1/8		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OKY	S103	P04	N03	N02	CHL-A	PHAED	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.82	16.82	33.649	24.521	340.3	.000	5.69	102.9							0
1 1	16.82	16.82	33.649	24.521	340.4	.003	5.69	102.9	2.7	.30	.3	.00	.04	.02	1
1 10 ISL	16.82	16.82	33.645	24.519	340.9	.034	5.64	102.0							10
1 11	16.81	16.81	33.644	24.519	341.0	.037	5.64	101.9	2.8	.30	.3	.00	.04	.02	11
1 20 ISL	16.81	16.80	33.643	24.520	341.2	.065	5.65	102.1							20
1 27	16.80	16.80	33.642	24.521	341.3	.092	5.66	102.3	2.7	.30	.2	.00	.05	.02	27
1 30 ISL	16.81	16.80	33.641	24.520	341.6	.102	5.65	102.1							30
1 42	16.81	16.80	33.634	24.514	342.4	.145	5.62	101.5	2.7	.30	.2	.00	.04	.02	42
1 50 ISL	16.79	16.78	33.629	24.516	342.6	.171	5.62	101.6							50
1 58	16.76	16.75	33.622	24.516	342.6	.197	5.63	101.6	2.7	.30	.2	.00	.05	.03	58
1 73	16.71	16.69	33.620	24.528	342.1	.249	5.62	101.3	2.7	.30	.2	.00	.07	.03	73
1 75 ISL	16.70	16.69	33.619	24.529	342.2	.256	5.62	101.3							76
1 85	16.69	16.67	33.615	24.529	342.4	.283	5.62	101.5	2.7	.30	.2	.00	.08	.03	83
1 99	16.64	16.63	33.674	24.539	341.9	.337	5.64	101.5	2.7	.30	.2	.00	.11	.05	99
1 100 ISL	16.48	16.47	33.605	24.569	339.1	.342	5.63	101.0							101
1 119	13.97	13.95	33.515	25.050	293.4	.401	5.29	90.2	4.6	.54	2.6	.04	.16	.20	119
1 125 ISL	13.46	13.44	33.532	25.167	283.6	.419	5.08	85.7							126
1 139	12.60	12.58	33.539	25.344	265.7	.459	4.60	76.3	9.1	.93	8.9	.02	.08	.11	140
1 150 ISL	11.95	11.93	33.578	25.499	251.1	.486	4.39	71.8							151
1 159	11.41	11.39	33.618	25.630	238.7	.509	4.25	68.7	13.7	1.21	13.9	.02	.03	.04	160
1 180	10.39	10.37	33.707	25.880	215.1	.556	3.98	63.0	18.3	1.44	18.1	.02	.01	.02	181
1 200	9.77	9.75	33.825	26.076	196.7	.597	3.59	56.1	24.1	1.64	21.4	.00			201
1 221	9.35	9.33	33.921	26.221	183.2	.637	3.33	51.6	27.8	1.77	23.6	.00			222
1 250 ISL	8.82	8.79	34.021	26.385	168.1	.688	3.01	46.0							252
1 257	8.70	8.68	34.019	26.417	165.1	.699	2.93	44.8	33.5	1.97	26.5	.00			258
1 300 ISL	8.13	8.10	34.114	26.563	151.8	.768	2.31	34.9							302
1 308	8.03	8.00	34.122	26.584	149.8	.780	2.19	33.0	43.3	2.26	30.4	.00			310
1 365	7.37	7.34	34.171	26.719	137.6	.862	1.49	22.1	53.7	2.59	34.4	.00			367
1 400 ISL	7.04	7.00	34.210	26.796	130.7	.909	1.11	16.4							403
1 452	6.63	6.58	34.264	26.896	121.7	.975	.66	9.6	66.7	2.93	37.9	.00			455
1 500 ISL	6.29	6.24	34.289	26.960	115.9	1.031	.41	5.9							504
1 541	6.04	6.02				1.078									545
1 600 ISL	5.73	5.68	34.352	27.065	106.8	1.143	.60	8.6							605
1 630	5.61	5.56	34.345	27.091	104.6	1.174	.32	4.6	85.1	3.15	42.5	.00			634

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 110 32.4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 52.2 N	115 49.2 W	03/20/84	1636 GMT	47 M	290	08 KT	290 05 06	1	1012.9 MB	16.3 C	14.2 C		1/8	CT	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OKY	S103	P04	N03	N02	CHL-A	PHAED	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.03	15.03	33.516	24.822	315.1	.000	6.09	106.2							0
1 1	15.03	15.03	33.516	24.822	311.8	.003	6.09	106.2	0.0	.35	.0	.00	1.71	.23	1
1 10 ISL	13.40	13.40	33.533	25.097	285.9	.030	5.59	95.0							10
1 11	13.69	13.68	33.536	25.122	283.5	.033	5.52	93.6	2.7	.67	4.4	.24	1.64	.65	11
1 20 ISL	12.82	12.82	33.564	25.317	265.1	.058	4.74	79.0							20
1 21	12.76	12.75	33.567	25.332	263.7	.060	4.67	77.7	5.5	.93	8.8	.25	.64	.35	21
1 30 ISL	12.52	12.52	33.621	25.419	255.7	.084	4.32	71.6							30
1 31	12.51	12.51	33.626	25.425	255.2	.086	4.30	71.2	8.7	1.12					

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETR	DRY	WET	CLOUD	AMT	TYPE	
29 47.1 N	115 59.7 W	03/20/84	1904 GMT	960 M	300	09 KT	290 D5 D6	1	1013.2 MB	17.7 C	16.0 C		1/8	CI	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.46	15.46	33.514	24.726	324.4	.000	6.23	109.5							0
1	15.46	15.46	33.514	24.726	320.9	.003	6.23	109.5	2.5	.42	.4	.00			1
10 ISL	14.22	14.22	33.513	24.993	296.2	.031	5.87	100.6							10
11	14.13	14.13	33.508	25.008	294.3	.034	5.82	99.6	3.1	.56	2.9	.10	1.66	.81	11
24 ISL	13.63	13.63	33.522	25.123	283.7	.060	5.32	90.2							20
26	13.61	13.61	33.524	25.128	283.2	.063	5.28	89.4	4.6	.76	5.9	.27	.77	.54	21
30 ISL	13.53	13.53	33.526	25.146	281.7	.088	5.15	87.1							30
33	13.53	13.53	33.526	25.146	281.7	.091	5.15	87.1	5.2	.79	6.4	.30	.80	.43	31
41	13.25	13.25	33.533	25.208	276.1	.118	4.98	83.7	5.6	.85	7.5	.31	.56	.42	41
50 ISL	12.42	12.41	33.552	25.391	258.9	.143	4.39	72.6							50
53	12.34	12.34	33.560	25.407	257.4	.145	4.34	71.6	7.9	1.01	10.9	.09	.02	.03	51
61	11.56	11.95	33.590	25.504	248.4	.170	4.00	65.5	9.2	1.13	12.6	.05	.25	.19	61
71	11.56	11.56	33.623	25.603	239.2	.194	4.00	64.9	11.2	1.21	14.6	.04	.12	.19	71
75 ISL	11.36	11.35	33.642	25.656	234.2	.205	3.93	63.4							76
85	10.93	10.92	33.683	25.765	224.0	.227	3.75	59.7	14.5	1.37	17.5	.03	.11	.12	85
100	10.60	10.59	33.725	25.855	215.8	.259	3.59	57.1	16.5	1.51	19.2	.02	.05	.06	100
119	10.39	10.37	33.815	25.964	205.8	.301	3.29	52.1	19.0	1.64	21.2	.02	.03	.06	120
125 ISL	10.19	10.17	33.836	26.015	201.1	.313	3.23	51.0							126
144	9.47	9.45	33.904	26.188	184.9	.350	3.06	47.5	24.4	1.80	24.3	.02	.02	.04	145
150 ISL	9.37	9.36	33.924	26.218	182.1	.360	3.01	46.7							151
171	7.13	9.11	34.005	26.322	172.7	.403	2.76	42.6	28.7	1.95	26.3	.04			175
204 ISL	6.78	8.76	34.093	26.446	161.3	.446	2.53	35.6							202
204	8.73	8.71	34.105	26.463	159.8	.453	2.26	34.6	35.0	2.16	28.7	.01			205
234	8.53	8.51	34.159	26.537	153.3	.499	1.89	28.8	38.8	2.27	29.7	.01			235
250 ISL	8.47	8.44	34.188	26.570	150.4	.524	1.68	25.5							252
272	8.36	8.33	34.223	26.615	146.6	.557	1.41	21.4	43.5	2.47	31.9	.01			274
300 ISL	8.07	8.04	34.243	26.674	141.3	.597	1.17	17.7							302
332	7.66	7.65	34.256	26.741	135.2	.641	.97	14.5	52.0	2.71	34.4	.01			334
400 ISL	7.06	7.04	34.286	26.851	125.5	.730	.70	10.3							403
408	7.03	6.99	34.289	26.860	124.7	.739	.68	10.0	61.7	2.88	37.0	.00			409
481	6.47	6.42	34.314	26.956	116.3	.828	.44	6.4	70.2	3.02	39.5	.00			484
500 ISL	6.35	6.30	34.323	26.979	114.2	.850	.40	5.8							504
553	6.05	6.00	34.357	27.044	108.5	.911	.32	4.6	77.2	3.14	40.5	.00			559

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETR	DRY	WET	CLOUD	AMT	TYPE	
29 37.2 N	116 19.7 W	03/20/84	2546 GMT	2497 M	300	12 KT	310 D5 D7	1	1011.5 MB	18.6 C	16.7 C		1/8	CU	
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0	16.68	16.68	33.464	24.411	350.9	.000	5.79	104.3	0.0	.28	.2	.04	.11	.01	0
10 ISL	16.37	16.36	33.462	24.483	344.3	.035	5.80	104.4							10
11	16.35	16.34	33.462	24.487	343.9	.038	5.92	105.9	0.0	.28	.0	.00	.13	.01	11
20 ISL	16.24	16.24	33.464	24.514	341.8	.069	5.81	103.8							20
21	16.24	16.23	33.464	24.515	341.7	.072	5.80	103.5	0.0	.27	.0	.00	.15	.01	21
30 ISL	16.21	16.21	33.464	24.520	341.7	.103	5.77	102.9							30
31	16.21	16.21	33.464	24.521	341.4	.106	5.77	102.9	0.0	.27	.0	.00	.15	.01	31
41	16.17	16.16	33.464	24.530	340.9	.140	5.77	102.9	0.0	.27	.0	.00	.18	.01	41
50 ISL	16.13	16.12	33.463	24.540	340.2	.171	5.77	102.8							50
51	16.12	16.11	33.463	24.541	340.1	.174	5.77	102.8	0.0	.27	.0	.00	.18	.05	51
61	16.02	16.01	33.457	24.559	338.8	.208	5.80	103.1	0.0	.27	.0	.00	.22	.07	61
72	15.59	15.58	33.431	24.637	331.6	.245	5.77	101.6	.3	.30	.0	.00	.31	.12	72
75 ISL	15.31	15.30	33.418	24.668	326.8	.255	5.75	100.6							76
87	14.23	14.22	33.396	24.904	306.5	.292	5.58	95.6	.9	.40	.7	.02	.63	.30	87
100 ISL	13.38	13.37	33.466	25.132	285.0	.332	5.21	87.7							101
102	13.29	13.27	33.476	25.158	282.5	.336	5.16	86.8	3.4	.61	4.3	.03	.30	.25	102
122	11.74	11.73	33.551	25.516	248.8	.392	4.71	76.7	8.3	.92	10.5	.01	.09	.08	123
125 ISL	11.58	11.57	33.566	25.557	244.9	.398	4.61	74.8							126
146	10.43	10.42	33.703	25.868	215.5	.447	3.73	59.1	17.5	1.46	18.8	.01	.02	.03	147
150 ISL	10.27	10.27	33.727	25.912	211.4	.455	3.64	57.4							151
176	9.51	9.49	33.875	26.159	188.3	.507	3.18	49.4	24.9	1.75	23.6	.01			177
200 ISL	9.07	9.05	33.959	26.294	175.8	.551	2.93	45.1							202
206	8.99	8.96	33.974	26.321	173.6	.561	2.88	44.3	30.2	1.92	26.1	.01			207
235	8.51	8.48	34.030	26.439	162.5	.610	2.68	40.8	34.4	2.04	28.0	.01			236
250 ISL	8.36	8.34	34.065	26.489	158.0	.634	2.48	37.6							252
275	8.17	8.14	34.116	26.559	151.8	.672	2.11	31.9	40.8	2.27	30.5	.01			276
300 ISL	7.89	7.86	34.147	26.625	145.8	.710	1.78	26.8							302
333	7.50	7.47	34.172	26.701	138.9	.757	1.42	21.1	50.7	2.61	33.9	.00			335
400 ISL	6.78	6.74	34.198	26.822	128.0	.846	.94	13.8							403
407	6.72	6.68	34.200	26.832	127.0	.855	.91	13.3	62.6	2.84	37.3	.00			409
482	6.24	6.20	34.274	26.954	116.3	.946	.55	7.9	72.4	3.04	39.5	.00			485
500 ISL	6.14	6.09	34.289	26.979	114.0	.967	.49	7.1							504
558	5.81	5.77	34.330	27.053	107.5	1.032	.37	5.3	80.5	3.15	41.1	.00			562

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 27.2 N	116 39.5 W	03/21/84	0329 GMT	793 M	310	10 KT	280 05 06	0	1012.0 MB	17.5 C	16.2 C		0/8			
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	16.82	16.82	33.516	24.419	350.1	.000	5.75	103.9	.4	.28	.2	.00	.14	.02	0
	10 ISL	16.82	16.82	33.519	24.422	350.1	.035	5.92	107.0							10
1	11	16.80	16.80	33.519	24.426	349.8	.038	5.93	107.1	.1	.26	.0	.00	.15	.01	11
	20 ISL	16.66	16.66	33.522	24.460	346.9	.070	5.87	105.8							20
1	26	16.57	16.57	33.523	24.483	344.6	.090	5.81	104.4	0.0	.25	.0	.00	.16	.02	26
	30 ISL	16.54	16.54	33.523	24.489	344.2	.104	5.82	104.5							30
1	40	16.51	16.50	33.521	24.497	344.0	.138	5.82	104.5	.2	.26	.0	.00	.17	.05	40
	50 ISL	16.49	16.48	33.520	24.501	343.8	.173	5.77	103.5							50
1	55	16.45	16.44	33.518	24.508	343.5	.190	5.75	103.1	.2	.24	.0	.00	.24	.05	55
	67	16.05	16.04	33.465	24.560	338.8	.230	5.81	103.3	.2	.27	.0	.00	.29	.08	67
1	75 ISL	15.14	15.13	33.397	24.708	324.8	.258	5.81	101.4							76
	77	14.94	14.93	33.385	24.743	321.6	.263	5.79	100.6	.7	.32	.0	.00	.49	.22	77
1	91	14.03	14.01	33.387	24.938	303.2	.307	5.56	94.9	1.6	.42	.8	.05	.59	.45	91
	100 ISL	13.53	13.51	33.426	25.071	290.8	.335	5.37	90.7							101
1	106	13.20	13.18	33.456	25.161	282.3	.351	5.23	87.8	3.5	.59	4.2	.04	.25	.22	106
	122	11.76	11.75	33.549	25.510	249.3	.393	4.68	76.2	8.1	.93	10.4	.01	.08	.08	122
1	125 ISL	11.53	11.51	33.564	25.565	244.1	.402	4.58	74.2							126
	146	10.43	10.41	33.655	25.831	219.0	.451	4.03	63.8	15.5	1.34	17.4	.01	.05	.03	147
1	150 ISL	10.28	10.26	33.671	25.871	215.3	.459	3.96	62.5							151
	166	9.72	9.70	33.766	26.039	199.5	.493	3.62	56.5	20.8	1.63	21.5	.01	.04	.02	167
1	186	9.26	9.24	33.944	26.254	179.4	.530	3.03	46.8	27.0	1.85	25.1	.01			187
	200 ISL	9.34	9.32	34.012	26.293	176.0	.553	2.74	42.5							202
1	206	9.40	9.37	34.031	26.300	173.5	.566	2.65	41.1	28.5	2.03	26.0	.00			207
	236	8.97	8.97	34.093	26.413	165.3	.616	2.41	37.1	32.8	2.13	27.7	.01			237
1	250 ISL	8.82	8.79	34.138	26.476	159.4	.639	2.13	32.6							252
	276	8.49	8.46	34.211	26.585	149.5	.679	1.60	24.3	41.1	2.44	31.1	.00			277
1	300 ISL	8.14	8.10	34.215	26.642	143.8	.715	1.38	20.9							302
	336	7.65	7.62	34.217	26.715	137.8	.766	1.20	17.9	50.1	2.66	34.2	.00			338
1	400 ISL	7.17	7.15	34.278	26.829	127.7	.850	.70	10.4							403
	411	7.13	7.09	34.288	26.845	126.2	.864	.63	9.3	59.7	2.94	37.0	.01			413
1	485	6.60	6.56	34.321	26.944	117.7	.954	.44	6.4	68.2	3.07	39.2	.00			488
	500 ISL	6.46	6.41	34.325	26.967	115.6	.972	.41	6.0							504
1	559	5.75	5.70	34.338	27.067	106.1	1.035	.34	4.9	81.2	3.18	41.7	.01			563

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 17.4 N	116 59.3 W	03/21/84	0708 GMT	2980 M	330	08 KT	300 03 06	0	1013.5 MB	17.2 C	15.9 C		0/8			
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0 ISL	16.76	16.76	33.504	24.424	350.0	.000	5.70	102.8							0
	1	16.76	16.76	33.504	24.424	349.7	.003	5.70	102.8	2.7	.30	.2	.00	.11	.01	1
1	10 ISL	16.76	16.75	33.502	24.423	349.7	.035	5.85	105.6							10
	12	16.75	16.75	33.501	24.424	350.0	.042	5.87	105.9	2.4	.28	.1	.00	.14	.02	12
1	20 ISL	16.60	16.60	33.495	24.454	347.4	.070	5.93	104.9							20
	27	16.46	16.46	33.491	24.484	344.8	.094	5.79	103.8	2.2	.28	.1	.00	.11	.02	27
1	30 ISL	16.42	16.42	33.489	24.491	344.2	.104	5.78	103.5							30
	42	16.33	16.33	33.481	24.506	343.2	.145	5.74	102.7	2.3	.27	.1	.00	.15	.02	42
1	50 ISL	16.32	16.31	33.480	24.509	343.2	.173	5.74	102.5							50
	57	16.31	16.30	33.478	24.510	343.2	.196	5.73	102.4	2.5	.27	.1	.00	.21	.01	57
1	66	15.81	15.80	33.437	24.592	335.7	.227	5.78	102.3	2.5	.30	.1	.00	.24	.07	66
	75 ISL	15.66	15.65	33.426	24.617	333.6	.258	5.78	102.0							76
1	77	15.63	15.62	33.425	24.624	333.0	.264	5.78	101.9	2.3	.29	.1	.00	.29	.08	77
	93	14.31	14.30	33.411	24.898	307.2	.315	5.53	94.0	3.1	.41	.5	.04	.61	.42	93
1	100 ISL	13.65	13.64	33.422	25.044	293.5	.337	5.35	90.5							101
	106	13.19	13.18	33.440	25.150	283.4	.353	5.20	87.2	5.1	.59	4.1	.03	.17	.24	106
1	121	12.47	12.45	33.533	25.363	263.4	.394	4.88	80.7	7.2	.75	7.4	.02	.10	.12	121
	125 ISL	12.23	12.21	33.543	25.418	258.2	.405	4.80	79.0							126
1	145	11.15	11.13	33.598	25.660	235.4	.456	4.42	71.1	12.4	1.06	13.0	.01	.04	.05	146
	150 ISL	10.91	10.89	33.620	25.720	229.8	.466	4.29	68.7							151
1	165	10.17	10.15	33.708	25.918	211.1	.500	3.85	60.6	19.1	1.43	18.7	.01	.04	.00	166
	185	9.38	9.36	33.858	26.167	187.6	.540	3.30	51.1	26.4	1.73	23.4	.00			186
1	200 ISL	9.05	9.03	33.924	26.271	178.0	.567	3.11	47.9							202
	205	8.96	8.95	33.940	26.296	175.7	.576	3.07	47.2	50.1	1.85	25.4	.00			206
1	235	8.58	8.55	34.021	26.422	166.2	.626	2.71	41.3	34.9	2.01	27.6	.00			236
	250 ISL	8.39	8.37	34.047	26.471	159.7	.651	2.56	38.8							252
1	274	8.11	8.09	34.078	26.537	153.7	.688	2.32	35.0	40.9	2.19	29.8	.01			275
	300 ISL	7.79	7.76	34.112	26.612	146.9	.728	1.97	29.4							302
1	334	7.42	7.39	34.154	26.698	139.1	.776	1.50	22.3	52.4	2.53	33.9	.00			336
	400 ISL	7.08	7.04	34.243	26.817	128.7	.865	.84	12.4							403
1	410	7.04	7.00	34.254	26.831	127.6	.877	.77	11.3	62.3	2.84	36.5	.01			412
	484	6.51	6.46	34.269	26.931	118.7	.968	.48	7.0	72.6	2.99	38.6	.01			487
1	500 ISL	6.38	6.33	34.298	26.956	115.5	.987	.43	6.3							504
	559	5.85	5.81	34.337	27.053	107.5	1.054	.30	4.3	86.4	3.14	41.0	.01			563

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	ROTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 07.2 N	117 19.0 W	03/21/84	1041 GMT	3360 M	330	13 KT		4	1013.5 MB	15.3 C	14.3 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OKY	STO3	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	16.66	16.66	33.491	24.437	348.0	.000	5.70	102.6							0
1	1	16.66	16.66	33.491	24.437	348.4	.003	5.70	102.6	2.4	.30	.2	.00	.12	.01	1
1	10	16.66	16.66	33.491	24.437	348.5	.035	5.80	104.5							10
1	12	16.67	16.66	33.492	24.437	348.9	.042	5.81	104.6	2.1	.28	.1	.00	.12	.02	12
1	20 ISL	16.59	16.59	33.491	24.453	347.5	.070	5.80	104.3							20
1	22	16.57	16.56	33.490	24.459	347.0	.076	5.77	103.7	2.2	.29	.1	.00	.12	.01	22
1	30 ISL	16.43	16.42	33.488	24.489	344.4	.104	5.72	102.4							30
1	31	16.42	16.41	33.488	24.492	344.2	.107	5.71	102.3	2.1	.27	.1	.00	.11	.02	31
1	42	16.39	16.38	33.488	24.499	343.8	.145	5.72	102.4	2.0	.27	.1	.00	.12	.02	42
1	50 ISL	16.36	16.35	33.487	24.506	343.5	.173	5.74	102.6							50
1	52	16.35	16.34	33.487	24.508	343.4	.179	5.74	102.7	2.0	.28	.1	.00	.15	.02	52
1	67	16.30	16.29	33.490	24.522	342.3	.213	5.77	103.1	2.0	.28	.1	.00	.19	.02	67
1	73	16.28	16.27	33.485	24.522	342.6	.251	5.71	102.0	2.2	.29	.1	.00	.21	.03	73
1	75 ISL	16.16	16.15	33.473	24.540	341.0	.259	5.70	101.6							76
1	88	15.21	15.20	33.410	24.704	325.6	.301	5.70	99.6	2.3	.34	.1	.00	.30	.18	88
1	100 ISL	14.14	14.12	33.411	24.935	303.9	.340	5.43	92.9							101
1	103	13.91	13.89	33.418	24.987	298.9	.348	5.36	91.2	3.6	.47	1.6	.03	.43	.29	103
1	123	12.48	12.47	33.505	25.340	265.6	.404	4.86	80.4	7.4	.79	7.5	.01	.08	.16	123
1	125 ISL	12.31	12.29	33.515	25.381	261.8	.410	4.80	79.1							126
1	147	10.89	10.87	33.622	25.726	229.2	.465	4.24	67.8	14.2	1.18	14.6	.00	.02	.04	148
1	150 ISL	10.74	10.72	33.640	25.767	225.3	.471	4.16	66.4							151
1	177	9.50	9.49	33.839	26.131	190.9	.528	3.43	53.3	24.3	1.66	22.3	.00			178
1	200 ISL	9.10	9.08	33.954	26.267	176.5	.570	3.03	46.7							202
1	207	9.02	9.00	33.979	26.319	173.6	.592	2.94	45.2	30.4	1.90	25.5	.00			208
1	238	8.44	8.41	34.046	26.465	160.3	.633	2.58	39.2	36.4	2.08	28.3	.00			239
1	250 ISL	8.27	8.24	34.077	26.514	155.6	.653	2.37	35.8							252
1	275	7.97	7.94	34.132	26.602	147.6	.690	1.93	29.0	44.8	2.39	31.3	.00			276
1	300 ISL	7.61	7.58	34.147	26.666	141.7	.727	1.65	24.7							302
1	334	7.18	7.15	34.155	26.733	135.7	.774	1.37	20.2	55.9	2.64	34.7	.01			336
1	400 ISL	6.78	6.74	34.247	26.861	124.3	.860	.72	10.5							403
1	409	6.74	6.71	34.259	26.875	123.0	.870	.65	9.5	67.5	2.91	37.7	.01			411
1	484	6.27	6.23	34.299	26.970	114.8	.960	.44	6.4	77.4	3.07	39.7	.01			487
1	500 ISL	6.17	6.13	34.307	26.989	113.2	.978	.40	5.8							504
1	556	5.84	5.79	34.333	27.053	107.5	1.044	.30	4.3	85.9	3.17	41.1	.01			563

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	ROTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
28 57.2 N	117 38.7 W	03/21/84	1422 GMT	3550 M	330	16 KT	310 04 05	1	1014.2 MB	15.2 C	13.7 C		7/3	C5		
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OKY	STO3	P04	N03	N02	CHL-A	PHAEO	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	16.49	16.49	33.508	24.490	343.3	.000	5.71	102.5	2.1	.26	.1	.00	.09	.02	0
1	9	16.49	16.49	33.505	24.487	343.9	.031	5.69	102.1	1.9	.26	.0	.00	.08	.07	9
1	10	16.48	16.46	33.505	24.489	344.2	.034	5.70	102.2							10
1	19	16.48	16.48	33.503	24.488	344.2	.065	5.75	103.2	1.9	.29	.0	.00	.08	.02	19
1	20 ISL	16.47	16.46	33.502	24.490	343.9	.069	5.75	103.1							20
1	29	16.35	16.35	33.502	24.517	341.8	.099	5.70	102.0	1.7	.26	.0	.00	.08	.02	29
1	30 ISL	16.35	16.35	33.502	24.518	341.7	.103	5.71	102.1							30
1	39	16.33	16.32	33.505	24.525	341.2	.133	5.71	102.1	1.7	.28	.0	.00	.10	.02	39
1	49	16.27	16.26	33.501	24.537	340.5	.167	5.73	102.4	1.8	.27	.0	.00	.10	.02	49
1	50 ISL	16.26	16.25	33.501	24.538	340.4	.171	5.73	102.3							50
1	60	16.22	16.21	33.498	24.547	339.9	.205	5.73	102.2	1.6	.25	.0	.00	.13	.05	60
1	70	16.15	16.14	33.468	24.555	339.5	.238	5.72	101.9	1.8	.26	.0	.00	.14	.05	70
1	75 ISL	15.02	15.01	33.488	24.583	336.9	.256	5.72	101.6							76
1	85	15.64	15.63	33.479	24.663	327.5	.288	5.70	100.5	2.1	.30	.0	.00	.29	.28	85
1	100	14.66	14.64	33.419	24.832	313.8	.336	5.65	97.7	2.4	.35	.1	.02	.54	.33	100
1	119	13.21	13.20				.394									120
1	125 ISL	12.75	12.74	33.504	25.287	270.8	.411	5.06	84.2							126
1	144	11.43	11.41	33.572	25.590	247.2	.460	4.57	72.8	11.3	.98	11.8	.01	.05	.06	145
1	150 ISL	11.18	11.16	33.591	25.650	236.6	.474	4.39	70.7							151
1	175	10.32	10.30	33.656	25.876	215.4	.531	3.96	62.6	18.1	1.35	18.0	.00			176
1	200 ISL	9.44	9.42	33.831	26.136	190.9	.581	3.53	54.7							202
1	205	9.28	9.26	33.860	26.185	186.3	.591	3.44	53.2	25.8	1.65	23.2	.00			206
1	234	8.64	8.61	33.978	26.379	168.3	.647	2.92	44.5	53.1	1.92	26.6	.00			235
1	250 ISL	8.61	8.58	34.062	26.450	161.9	.668	2.52	38.4							252
1	275	8.59	8.56	34.161	26.530	154.7	.707	1.93	29.4	40.7	2.25	29.9	.00			276
1	300 ISL	8.28	8.25	34.196	26.604	148.3	.746	1.60	24.3							302
1	334	7.76	7.73	34.199	26.685	140.6	.795	1.34	20.1	51.2	2.55	33.6	.00			336
1	400 ISL	6.96	6.92	34.205	26.803	127.9	.864	.97	14.2							403
1	403	6.88	6.84	34.206	26.815	128.8	.894	.93	13.6	62.9	2.78	37.1	.01			410
1	483	6.32	6.27	34.291	26.958	116.0	.986	.43	6.2	76.4	2.99	39.6	.01			486
1	500 ISL	6.22	6.17	34.306	26.983	113.8	1.006	.32	4.6							504
1	557	5.94	5.89	34.341	27.046	108.3	1.069	.29	4.2	85.0	3.13	41.1	.01			561

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
28 47.6 N	117 58.2 W	03/03/84	1712 GMT	3549 M	340	18 KT	350 06 10	2	1015.3 MB	15.4 C	13.5 C		R/B	SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.10	16.10	33.496	24.568	335.9	.000	5.72	101.9							0
1	16.10	16.10	33.496	24.568	336.0	.003	5.72	101.9	2.7	.30	.3	.00	.11	.05	1
10 ISL	16.13	16.13	33.494	24.562	336.8	.034	5.70	101.6							10
12	16.13	16.13	33.494	24.562	336.9	.040	5.70	101.5	2.7	.31	.3	.00	.12	.05	12
20 ISL	16.11	16.11	33.493	24.565	336.8	.067	5.70	101.6							20
27	16.10	16.09	33.492	24.568	336.9	.091	5.71	101.7	2.7	.30	.3	.00	.12	.06	27
30 ISL	16.10	16.10	33.494	24.568	336.9	.101	5.70	101.6							30
42	16.14	16.14	33.502	24.566	337.5	.141	5.69	101.4	2.7	.30	.3	.00	.13	.07	42
50 ISL	16.14	16.13	33.502	24.568	337.5	.169	5.72	101.8							50
57	16.13	16.12	33.513	24.570	337.5	.191	5.73	102.1	2.7	.30	.3	.00	.14	.09	57
64	16.12	16.11	33.503	24.573	337.6	.228	5.68	101.7	2.7	.30	.3	.00	.14	.08	64
75 ISL	16.11	16.10	33.503	24.574	337.6	.253	5.68	101.2							75
78	16.11	16.10	33.504	24.575	337.6	.262	5.68	101.1	2.7	.30	.3	.00	.16	.09	78
93	16.10	16.09	33.507	24.581	337.6	.312	5.67	100.9	2.7	.30	.3	.00	.17	.11	93
100 ISL	15.15	15.14	33.484	24.775	319.3	-.337	5.54	96.7							100
102	14.04	14.02	33.477	25.006	297.3	-.360	5.36	91.5	4.5	.51	2.1	.07	.22	.24	102
124	12.92	12.90	33.536	25.280	271.5	-.405	5.01	83.6	6.9	.73	5.9	.02	.11	.16	124
125 ISL	12.78	12.77	33.540	25.308	269.8	-.409	4.96	82.5							125
146	11.01	10.99	33.629	25.710	230.6	-.468	4.11	65.9	15.4	1.28	15.4	.01	.03	.05	146
150 ISL	10.95	10.93	33.641	25.729	229.9	-.471	4.05	64.9							150
170	10.51	10.49	33.796	25.927	210.5	-.516	3.44	54.6	20.9	1.58	20.1	.00	.01	.02	170
191	10.16	10.14	33.907	26.075	195.8	-.558	3.07	48.4	25.0	1.77	22.8	.00			191
200 ISL	9.91	9.89	33.970	26.167	188.3	-.576	2.88	45.1							200
211	9.61	9.59	34.042	26.273	178.3	-.596	2.65	41.3	30.3	1.97	25.7	.00			211
242	9.23	9.20	34.111	26.390	167.7	-.649	2.34	36.2	34.7	2.12	27.6	.03			242
250 ISL	9.12	9.09	34.128	26.422	164.8	-.663	2.23	34.5							250
283	8.68	8.65	34.187	26.536	154.3	-.715	1.82	27.8	41.3	2.35	30.1	.00			283
300 ISL	8.49	8.46	34.204	26.579	150.5	-.741	1.67	25.4							300
345	8.04	8.00	34.229	26.668	142.6	-.807	1.35	20.3	49.3	2.60	33.0	.01			345
400 ISL	7.41	7.37	34.267	26.790	131.6	-.883	.91	13.5							400
423	7.18	7.14	34.283	26.835	127.4	-.912	.75	11.1	61.8	2.87	37.0	.00			423
500	6.71	6.66	34.345	26.949	117.5	-.966	.43	6.3	69.5	3.04	38.9	.00			500
576	6.14	6.08	34.378	27.051	108.4	-1.095	.30	4.3	78.4	3.14	41.1	.00			576

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 110 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
28 36.4 N	118 19.0 W	03/03/84	1211 GMT		340	19 KT	350 06 10	1	1014.9 MB	15.5 C	13.8 C		S/R		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	16.06	16.06	33.464	24.555	337.1	.000	5.75	102.3							0
1	16.06	16.06	33.464	24.555	337.2	.003	5.75	102.3	2.9	.29	.3	.00	.10	.04	1
10 ISL	16.07	16.07	33.463	24.551	337.8	.034	5.76	102.5							10
12	16.07	16.07	33.463	24.551	337.9	.040	5.76	102.5	3.0	.29	.2	.00	.10	.05	12
20 ISL	16.07	16.07	33.461	24.550	338.2	.068	5.76	102.4							20
27	16.07	16.06	33.461	24.551	338.4	.091	5.75	102.3	2.9	.29	.2	.00	.11	.04	27
30 ISL	16.06	16.05	33.457	24.550	338.6	.101	5.75	102.2							30
42	16.06	16.05	33.456	24.550	339.0	.142	5.74	102.1	2.9	.29	.2	.00	.12	.04	42
50 ISL	15.99	15.98	33.447	24.558	338.4	.169	5.75	102.1							50
57	15.92	15.91	33.439	24.567	337.8	.192	5.76	102.2	2.8	.29	.2	.00	.15	.09	57
72	15.84	15.82	33.431	24.581	336.9	.243	5.74	101.6	3.0	.30	.2	.00	.18	.11	72
75 ISL	15.80	15.79	33.428	24.587	336.5	.254	5.74	101.5							75
82	15.78	15.77	33.428	24.591	336.3	.276	5.74	101.5	3.0	.33	.2	.00	.21	.15	82
98	14.56	14.54	33.410	24.846	312.3	-.328	5.59	96.4	3.8	.43	.6	.08	.32	.41	98
100 ISL	14.40	14.38	33.420	24.887	308.3	-.335	5.54	95.3							100
118	13.32	13.30	33.499	25.171	281.7	-.387	5.12	86.1	6.0	.66	4.7	.04	.13	.21	118
125 ISL	12.86	12.84	33.503	25.264	273.0	-.408	5.01	83.5							125
137	12.10	12.08	33.520	25.425	257.8	-.441	4.75	77.9	9.6	.94	9.1	.02	.06	.14	137
150 ISL	11.25	11.23	33.622	25.661	235.5	-.472	4.16	67.1							150
157	10.83	10.81	33.697	25.796	222.8	-.488	3.80	60.7	17.8	1.44	17.4	.01	.02	.04	157
177	10.39	10.37	33.856	26.020	201.8	-.531	3.24	51.3	23.1	1.71	21.4	.02	.00	.03	177
198	9.87	9.85	33.980	26.181	186.8	-.571	2.94	46.1	27.5	1.86	23.5	.01			198
200 ISL	9.84	9.82	33.989	26.194	185.7	-.575	2.91	45.6							200
218	9.56	9.54	34.061	26.296	176.2	-.607	2.62	40.8	31.2	2.00	25.6	.02			218
250 ISL	9.23	9.20	34.174	26.440	163.2	-.662	2.07	32.1							250
253	9.20	9.17	34.181	26.449	162.3	-.666	2.03	31.4	36.7	2.25	28.0	.00			253
300 ISL	8.71	8.69	34.244	26.577	150.9	-.740	1.52	23.2							300
303	8.67	8.64	34.245	26.584	150.3	-.745	1.49	22.9	43.2	2.48	30.8	.00			303
359	7.95	7.91	34.263	26.708	139.0	-.826	1.11	16.7	51.9	2.70	33.3	.06			359
400 ISL	7.40	7.36	34.261	26.787	131.9	-.881	.90	13.4							400
444	6.87	6.83	34.260	26.860	125.2	-.938	.73	10.7	64.8	2.92	37.3	.00			444
500 ISL	6.44	6.40	34.287	26.938	118.2	-1.006	.56	8.2							500
531	6.25	6.21	34.305	26.978	114.7	-1.042	.49	7.1	73.8	3.07	39.6	.00			531
600 ISL	5.79	5.74	34.345	27.068	106.6	-1.118	.35	5.0							600
616	5.68	5.63	34.354	27.088	104.7	-1.135	.32	4.6	84.7	3.17	41.7	.01			616

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES			WEATHER	BAROMETER			DPY	WET	CLOUD	AMT	TYPE
27 37.9 N		120 14.8 W		03/02/84	1699	6MT		36F	21 KT	350	06	09	†	1019.0	MM	17.0	C	14.5	C	3/8	SC
CASI	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	DRY	ST03	PD4	NO3	NO2	CHL-A	PHAEO	PRESS					
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D, BAR					
	0 ISL	17.70	17.70	33.955	24.530	339.5	.000	5.62	103.5							0					
1	1	17.70	17.71	33.955	24.530	339.6	.003	5.62	103.5	2.5	.29	.2	.00	.05	.03	1					
	10 ISL	17.73	17.72	33.936	24.525	340.3	.034	5.59	103.0							10					
1	12	17.73	17.72	33.936	24.526	340.4	.041	5.58	102.8	2.5	.30	.2	.00	.05	.03	12					
	20 ISL	17.70	17.70	33.935	24.531	340.2	.068	5.54	102.0							20					
†	27	17.68	17.68	33.934	24.535	340.0	.092	5.50	101.3	2.5	.29	.2	.00	.05	.04	27					
	30 ISL	17.69	17.68	33.934	24.533	340.3	.102	5.48	101.0							30					
1	42	17.72	17.71	33.933	24.526	341.4	.142	5.48	101.0	2.5	.30	.2	.00	.05	.04	42					
	50 ISL	17.72	17.71	33.935	24.528	341.5	.170	5.49	101.2							50					
†	56	17.72	17.71	33.936	24.529	341.7	.197	5.50	101.3	2.5	.29	.2	.00	.06	.04	56					
†	68	17.74	17.73	33.947	24.532	341.7	.231	5.48	101.0	2.5	.29	.2	.00	.06	.03	68					
	75 ISL	17.80	17.79	33.979	24.543	341.0	.256	5.51	101.6							76					
1	78	17.82	17.81	33.990	24.547	340.7	.265	5.52	101.9	2.4	.29	.2	.00	.07	.04	78					
1	93	17.79	17.78	33.990	24.554	340.5	.316	5.59	103.2	2.4	.29	.2	.00	.08	.05	93					
	100 ISL	17.72	17.70	33.977	24.563	340.0	.341	5.56	102.5							101					
1	106	17.64	17.62	33.964	24.571	339.4	.367	5.54	101.9	2.4	.29	.2	.00	.12	.08	108					
1	123			33.834			.417	5.35	95.0	3.5	.44	.8	.08	.19	.18	124					
	125 ISL	15.87	15.85	33.817	24.874	306.2	.423	5.32	94.4							126					
1	146	13.03	13.01	33.649	25.346	265.9	.490	4.93	82.5	7.7	.79	6.9	.02	.08	.10	149					
	150 ISL	12.97	12.90	33.642	25.362	264.4	.494	4.92	82.1							151					
1	169	11.62	11.80	33.599	25.539	247.8	.543	4.71	76.8	10.6	.99	10.4	.01	.04	.07	170					
1	189	10.49	10.47	33.701	25.858	217.5	.590	4.20	66.6	17.1	1.33	16.4	.00			190					
	200 ISL	10.12	10.29	33.764	25.972	206.8	.613	3.95	62.1							201					
1	218	9.86	9.84	33.821	26.059	198.6	.633	3.74	58.5	22.4	1.62	20.6	.00			211					
1	240	8.91	8.49	33.980	26.538	172.4	.688	3.30	50.6	30.2	1.88	24.9	.00			241					
	250 ISL	8.73	8.71	34.006	26.386	167.9	.705	3.20	48.9							252					
1	282	8.36	8.33	34.053	26.480	159.4	.757	2.90	44.0	32.8	2.08	28.0	.00			283					
	300 ISL	8.14	8.11	34.094	26.538	154.2	.786	2.59	39.1							302					
1	343	7.67	7.63	34.146	26.657	143.4	.850	1.86	27.8	49.2	2.48	32.8	.00			345					
	400 ISL	7.07	7.03	34.195	26.780	132.2	.929	1.32	19.4							403					
1	420	6.91	6.87	34.212	26.816	129.0	.954	1.17	17.2							422					
1	493	6.70	6.66	34.337	26.943	118.0	1.051	.46	6.7	69.7	3.06	39.1	.00			501					
	500 ISL	6.69	6.64	34.334	26.943	117.7	1.053	.39	5.7							504					
1	575	5.95	5.90	34.334	27.040	109.9	1.139	.39	5.6	79.9	3.17	41.4	.00			579					

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
37 37.2 N	122 44.6 W	02/10/84	1624 GMT	51 M	340	13 KT	280 07 09	1	1022.7 MB	10.8 C	8.1 C	1/8	SC		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.92	32.724	24.647	328.7	.033	6.15	102.2	4.0	.44	.5	.09	2.70	.48	10

STATION 61.7 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
37 29.3 N	123 02.0 W	02/10/84	1325 GMT	520 M	350	17 KT	300 06 08	1	1021.3 MB	11.0 C	8.3 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.08	32.886	24.741	319.7	.032	6.21	103.6	4.3	.36	.0	.03	.39	.15	10

STATION 61.7 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
37 19.2 N	123 23.7 W	02/10/84	1006 GMT	2040 M	330	15 KT		1	1021.3 MB	11.2 C	8.3 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.94	32.434	24.418	350.4	.035	6.30	104.5	5.8	.34	.0	.02	.25	.12	10

STATION 65.0 50.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
37 03.7 N	122 17.9 W	02/11/84	1425 GMT	37 M	360	11 KT	290 03 09	1	1024.0 MB	8.3 C	7.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.03	33.206	24.998	295.2	.030	5.91	98.7	4.8	.58	2.5	.12	1.00	.48	10

STATION 65.0 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 54.9 N	122 37.5 W	02/11/84	1139 GMT	1570 M	360	09 KT		1	1024.0 MB	12.1 C	8.9 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.08	32.750	24.635	329.7	.033	6.22	103.7	3.0	.35	.1	.00	.35	.16	10

STATION 65.0 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 44.9 N	122 59.0 W	02/11/84	0823 GMT	2970 M	350	11 KT		1	1024.7 MB	11.9 C	8.2 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.61	32.778	24.749	319.0	.032	6.27	103.5	3.0	.33	.1	.00	.49	.20	10

STATION 68.3 51.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 27.6 N	121 58.3 W	02/13/84	0051 GMT	108 M	310	05 KT	260 04 08	2	1022.4 MB	13.5 C	12.8 C	8/8	ST		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.37	33.259	24.971	297.8	.030	6.25	105.1	3.9	.41	.3	.03	1.70	.35	10

STATION 68.3 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
36 20.6 N	122 13.1 W	02/12/84	2247 GMT	980 M	170	03 KT	260 03 06	2	1022.7 MB	13.8 C	13.5 C	8/8	ST		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVR	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.54	33.154	24.856	308.8	.031	6.16	103.9	2.5	.37	.0	.00	.46	.11	10

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STATION 68.3 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
36 10.6 N	122 34.5 W	02/12/84	1935 GMT	3160 M	D10 08 KT	290 03 10	2	1024.0 MB	15.3 C	14.4 C	8/8	ST			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.50	13.50	33.278	24.960	298.8	.030	6.20	104.6	2.4	.34	.1	.01			10

STATION 71.7 51.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 53.2 N	121 31.2 W	02/14/84	0428 GMT	298 M	330 24 KT	280 04 08		1019.6 MB	15.6 C	11.7 C					
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.41	13.41	33.395	25.069	288.5	.029	5.97	100.6	5.5	.52	1.9	.11	1.79	.96	10

STATION 71.7 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 45.4 N	121 48.1 W	02/14/84	0102 GMT	1047 M	320 12 KT	280 03 08	2	1019.0 MB	13.8 C	12.7 C	8/8	ST			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.65	13.65	33.427	25.045	290.8	.029	6.32	107.1	4.0	.49	.6	.05	3.44	.35	10

STATION 71.7 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 35.3 N	122 09.4 W	02/13/84	2215 GMT	2250 M	250 12 KT	220 04	2	1018.6 MB	14.3 C	13.8 C	8/8	ST			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.60	13.60	33.145	24.837	310.6	.031	6.20	104.7	3.0	.43	.1	.00	.48	.07	10

STATION 75.0 48.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 24.0 N	120 56.7 W	02/15/84	0825 GMT	73 M	070 10 KT	290 03 05	0	1022.4 MB	13.2 C	9.5 C					
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.75	13.75	33.473	25.060	289.4	.029	5.91	100.3	3.7	.46	1.0	.08	1.34	.55	10

STATION 75.0 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 21.0 N	121 03.0 W	02/15/84	0633 GMT	216 M	350 10 KT	340 04 05	0	1022.4 MB	13.3 C	11.0 C		CI			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10			33.481				6.01		3.2	.39	.1	.02	1.26	.61	10

STATION 75.0 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 11.0 N	121 24.2 W	02/15/84	0241 GMT	704 M	350 11 KT	330 06 08	0	1022.0 MB	12.0 C	9.9 C	0/8				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.76	13.76	33.386	24.991	296.0	.030	6.12	103.9	1.9	.35	.0	.00	1.42	.23	10

STATION 75.0 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
35 01.0 N	121 45.3 W	02/14/84	2306 GMT	2000 M	340 18 KT	290 07 08	0	1023.0 MB	14.0 C	10.9 C	0/8				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.36	13.36	33.148	24.887	305.8	.031	6.19	104.0	3.9	.42	.0	.01	1.10	.19	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 76.7 48.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
35 07.3 N	120 42.4 W	02/15/84	1052 GMT	31 M	260	03 KT		0	1021.7 MB	13.0 C	9.7 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.52	33.491	25.121	283.6	.028	5.77	97.5	4.8	.59	2.2	.13	1.33	.53	10

STATION 78.3 51.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 44.7 N	120 43.6 W	02/16/84	1127 GMT	68 M	300	13 KT	290 02 06		1021.7 MB	15.0 C	13.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.72	33.491	25.080	287.5	.029	5.87	99.6	3.3	.45	.1	.08	1.68	.85	10

STATION 78.3 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 36.7 N	121 00.4 W	02/16/84	0821 GMT	631 M	320	09 KT	270 01 05		1021.7 MB	14.8 C	13.9 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.05	33.501	25.020	293.2	.029	6.14	104.9	.8	.38	.0	.00	1.88	.61	10

STATION 78.3 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 26.7 N	121 21.2 W	02/16/84	0237 GMT	2040 M	300	11 KT	270 02 05		1021.7 MB	14.7 C	14.2 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.28	33.490	24.963	298.6	.030	6.00	103.0	4.6	.41	.0	.04	2.15	.51	10

STATION 80.8 47.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 27.1 N	120 08.5 W	02/19/84	2330 GMT	49 M	110	08 KT	240 02 10	1	1019.0 MB	17.2 C	12.5 C		1/B	CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.77	33.514	25.288	267.6	.027	5.11	85.0	6.2	.84	7.5	.10	.64	.23	10

STATION 80.8 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 20.7 N	120 21.6 W	02/18/84	0920 GMT	277 M	310	22 KT	290 04 06	1	1020.0 MB	13.5 C	11.1 C		1/B	CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.89	33.525	25.273	269.1	.027	5.34	89.1	7.1	.90	7.5	.12	1.32	.15	10

STATION 80.8 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 10.6 N	120 42.4 W	02/19/84	0426 GMT	713 M	340	22 KT	300 06 06		1021.7 MB	13.2 C	11.5 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.91	33.504	25.051	290.3	.029	5.71	97.3	3.6	.58	2.8	.09	1.23	.45	10

STATION 80.8 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 00.6 N	121 03.1 W	02/19/84	0753 GMT	1070 M	350	21 KT	330 10 07		1022.0 MB	13.6 C	12.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.62	33.507	25.113	284.3	.028	5.75	97.4	3.9	.62	3.3	.09	1.99	.53	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 81.7 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 21.5 N	119 54.5 W	02/18/84	2103 GMT	305 M	210	05 KT	280 02 10	1	1020.3 MB	17.2 C	12.1 C	1/8		CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	14.50	14.50	33.493	24.919	302.8	.030	5.83	100.5	1.9	.41	.8	.03	1.13	.43	10

STATION 81.7 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 11.2 N	120 15.1 W	02/18/84	1803 GMT	481 M	340	20 KT	340 03 10	1	1022.0 MB	14.4 C	9.8 C	1/8		CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	14.08	14.08	33.514	25.023	292.9	.029	5.86	100.2	2.7	.44	1.2	.02	1.64	.65	10

STATION 81.7 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 01.3 N	120 36.0 W	02/18/84	1442 GMT	740 M	340	24 KT	320 05 14	1	1021.0 MB	13.1 C	9.7 C	2/8		CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	13.90	13.90	33.511	25.058	289.5	.029	5.67	96.6	3.5	.51	2.4	.04	1.23	.45	10

STATION 81.7 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 51.3 N	120 56.8 W	02/18/84	1130 GMT	2690 M	350	19 KT		1	1022.7 MB	12.8 C	10.0 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	13.61	13.61	33.508	25.115	284.1	.028	5.78	97.9	4.0	.56	2.9	.08	1.88	.44	10

STATION 82.5 40.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 22.0 N	119 29.9 W	02/19/84	0136 GMT	20 M	290	09 KT	230 02 11	1	1022.0 MB	16.1 C	11.2 C	1/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	13.26	13.26	33.475	25.161	279.8	.028	5.27	88.6	5.1	.84	6.2	.14	.91	.41	10

STATION 82.5 44.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 15.0 N	119 44.5 W	02/19/84	2332 GMT	185 M	290	09 KT	270 02 07	1	1022.0 MB	17.1 C	13.0 C	1/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	14.78	14.78	33.496	24.861	308.3	.031	6.02	104.4	1.7	.38	.3	.02	1.53	.30	10

STATION 82.5 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 05.0 N	120 09.4 W	02/19/84	1730 GMT	37 M	130	04 KT	300 02 10	1	1022.0 MB	15.3 C	12.7 C	1/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	13.79	13.79	33.526	25.092	286.3	.029	5.85	99.4	3.5	.50	2.0	.03	2.30	.22	10

STATION 82.5 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 53.0 N	120 30.3 W	02/19/84	1422 GMT	1410 M	340	18 KT	300 05 08	0	1020.0 MB	13.6 C	10.0 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
1 10	13.13	13.13	33.538	25.236	272.7	.027	5.46	91.6	5.8	.70	5.6	.06	1.16	.38	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 43.0 N	120 51.0 W	02/19/84	1057 GMT	1156 M	340	22 KT	330 04 05		1021.3 MB	13.7 C	11.6 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.02	14.02	33.347	24.907	303.9	.030	5.99	102.2	.4	.38	.2	.00	.46	.20	10

STATION 84.1 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 06.4 N	119 16.6 W	02/22/84	1457 GMT	55 M	030	13 KT	290 03 09	1	1014.2 MB	12.9 C	9.0 C		1/6	SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.59	14.59	33.501	24.906	304.1	.030	5.93	102.4	2.6	.59	.1	.02	1.61	.42	10

STATION 84.1 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 56.4 N	119 37.3 W	02/22/84	1217 GMT	481 M	040	08 KT		1	1013.5 MB	13.9 C	11.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.96	14.96	33.479	24.809	313.2	.031	5.88	102.3	2.2	.36	.0	.00	.86	.31	10

STATION 84.1 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 46.4 N	119 58.1 W	02/22/84	0923 GMT	203 M	330	23 KT	250 07 10	1	1014.2 MB	13.0 C	11.2 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.72	14.72	33.503	24.879	306.6	.031	5.98	103.6	2.1	.33	.1	.00	1.62	.40	10

STATION 85.0 38.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
34 00.9 N	119 02.0 W	02/22/84	1642 GMT	126 M	070	16 KT	260 02 06	1	1014.6 MB	15.0 C	9.1 C		1/8	SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.75	13.75	33.497	25.078	287.6	.029	5.67	96.3	5.0	.64	2.3	.11	2.21	.37	10

STATION 85.0 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 47.0 N	119 31.1 W	02/22/84	2203 GMT	1850 M	320	13 KT	290 03 07	0	1014.6 MB	15.8 C	12.4 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.15	15.15	33.471	24.762	317.8	.032	5.97	104.3	1.4	.36	.0	.01	.85	.11	10

STATION 85.0 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 37.0 N	119 51.8 W	02/23/84	1136 GMT	277 M	320	08 KT	290 04 10	0	1015.9 MB	14.1 C	11.0 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.75	14.75	33.492	24.865	308.0	.031	5.92	102.6	.8	.34	.1	.01	2.02	.16	10

STATION 85.0 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 27.1 N	120 12.5 W	02/23/84	1521 GMT	1200 M	340	12 KT	300 06 11	0	1018.3 MB	14.2 C	12.0 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.94	13.94	33.505	25.046	290.7	.029	5.80	98.9	2.5	.47	1.7	.02	2.99	.18	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 17.0 N	120 33.1 W	02/23/84	1912 GMT	1200 M	350 14 KT	290 06 10	0	1020.0 MB	15.0 C	12.5 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.26	13.86	33.493	25.053	290.1	.029	5.96	101.4	3.3	.49	1.3	.05	2.65	.47	10

STATION 85.0 65.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 07.0 N	120 53.7 W	02/24/84	2329 GMT	2040 M	330 16 KT	320 06 10	0	1019.3 MB	15.0 C	11.6 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.00	14.00	33.370	24.929	301.9	.030	6.00	102.3	1.6	.38	.2	.01	.89	.19	10

STATION 85.0 70.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
32 57.0 N	121 14.3 W	02/24/84	0347 GMT	3730 M	340 22 KT	340 06 10	0	1020.3 MB	13.1 C	11.7 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.10	14.10	33.305	24.858	308.6	.031	6.00	102.5	1.6	.37	.0	.01	.38	.09	10

STATION 85.8 34.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
34 00.7 N	118 39.8 W	02/27/84	0028 GMT	40 M	260 14 KT	290 02 07	1	1019.6 MB	16.6 C	12.3 C		5/8	AS		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.39	14.39	33.481	24.933	301.5	.030	6.02	103.6	1.4	.42	.3	.06	3.66	.23	10

STATION 85.8 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 48.7 N	119 04.7 W	02/26/84	0005 GMT	861 M	260 07 KT	260 03 06	0	1016.6 MB	16.9 C	13.0 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.25	15.25	33.474	24.742	319.6	.032	5.84	102.2	2.0	.38	.1	.02	.63	.20	10

STATION 85.8 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 38.7 N	119 25.4 W	02/25/84	2057 GMT	1700 M	320 13 KT	290 05 08	1	1018.6 MB	15.2 C	13.3 C		6/8	CS		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.00	14.00	33.517	25.042	291.1	.029	6.25	106.7	0.0	.39	.2	.01	1.49	.34	10

STATION 85.8 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 28.6 N	119 46.2 W	02/25/84	1720 GMT	115 M	330 26 KT	300 08 06	1	1019.3 MB	12.9 C	9.6 C		5/8	AS		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.02	14.02	33.515	25.036	291.6	.029	5.90	100.8	.9	.39	.9	.03	2.46	.22	10

STATION 86.7 33.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
33 53.4 N	118 29.4 W	02/27/84	0822 GMT	64 M	020 07 KT	290 01 05	1	1020.7 MB	15.2 C	12.5 C					
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.80	14.80	33.481	24.845	309.8	.031	5.96	103.4	3.0	.44	.4	.04	1.69	.71	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 87.5 33.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 44.1 N	118 25.9 W	02/26/84	2020 GRT	240 M	340	06 KT	260 02 07	1	1021.0 MB	17.9 C	11.3 C	8/8		AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.03	33.464	24.782	315.8	.032	5.94	103.5	1.4	.42	.0	.03	1.36	.30	10

STATION 87.5 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 31.1 N	118 52.9 W	02/26/84	1636 GRT	1029 M	060	09 KT	260 02 07	1	1020.0 MB	17.0 C	14.9 C	5/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.40	33.443	24.686	325.0	.033	5.86	102.9	1.5	.31	.0	.03	.17	.05	10

STATION 87.5 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 21.2 N	119 13.6 W	02/26/84	1346 GRT	1090 M	030	08 KT	290 02 06	1	1019.3 MB	15.5 C	14.3 C			AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.14	33.481	24.772	316.8	.032	5.90	103.1	1.9	.37	.1	.03	.42	.16	10

STATION 87.5 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 11.1 N	119 34.2 W	02/26/84	1017 GRT	441 M	350	12 KT		1	1019.6 MB	14.0 C	15.0 C	5/8		AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	13.62	33.513	25.117	283.9	.028	5.99	101.5	.9	.55	.8	.04	5.37	.55	10

STATION 88.3 33.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 36.7 N	118 18.4 W	02/27/84	1610 GRT	500 M	040	07 KT	270 01 06	1	1021.0 MB	17.8 C	11.2 C	6/8		AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.14	33.473	24.765	317.4	.032	5.88	102.7	3.0	.37	.2	.00	.61	.14	10

STATION 88.3 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 32.7 N	118 26.6 W	02/27/84	1503 GRT	658 M	070	08 KT	280 01 09	1	1021.3 MB	16.5 C	10.5 C	6/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.49	33.468	24.685	325.1	.033	5.86	103.1	3.0	.34	.3	.00	.14	.07	10

STATION 88.3 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 22.7 N	116 47.3 W	02/28/84	0929 GRT	1290 M	290	09 KT			1018.3 MB	15.7 C	12.9 C			AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.85	33.480	24.614	331.9	.033	5.84	103.5	2.8	.36	.2	.02	.13	.03	10

STATION 88.3 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 12.7 N	119 08.0 W	02/28/84	1205 GRT	1200 M	300	10 KT			1017.6 MB	15.3 C	12.2 C			AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.05	33.444	24.763	317.7	.032	5.89	102.7	2.9	.35	.2	.00	.27	.05	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 88.3 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 02.7 N	119 28.6 W	02/28/84	1443 GMT	740 M	310	10 KT	290 03 14	1	1017.6 MB	13.8 C	12.5 C	3/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	14.44	14.44	33.466	24.911	303.6	.030	5.98	103.0	4.0	.41	.4	.02	1.05	.23	10

STATION 88.3 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 52.7 N	119 49.1 W	02/28/84	1747 GMT	1110 M	310	12 KT	300 03 14	1	1018.3 MB	15.1 C	13.6 C	3/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	13.78	13.78	33.511	25.083	287.2	.029	6.57	111.6	.4	.36	.2	.00	4.01	.19	10

STATION 88.3 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 42.7 N	120 09.6 W	03/01/84	2046 GMT	720 M	310	11 KT		1	1018.0 MB	15.5 C	13.8 C	4/8		CI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	13.96	13.96	33.500	25.037	291.5	.029	6.46	110.2	.3	.36	.1	.02	2.62	.31	10

STATION 89.1 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 34.4 N	118 00.4 W	03/01/84	1640 GMT	55 M	100	06 KT	330 02 07	1	1020.3 MB	15.0 C	12.9 C	7/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	14.65	14.65	33.470	24.869	307.6	.031	6.21	107.4	1.6	.35	.0	.02	1.33	.42	10

STATION 89.1 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 24.4 N	118 21.1 W	03/01/84	1915 GMT	91 M	080	08 KT		1	1019.6 MB	17.1 C	13.9 C	6/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	15.78	15.78	33.481	24.630	330.3	.033	5.81	102.8	2.9	.32	.0	.00	.13	.05	10

STATION 89.1 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 14.4 N	118 41.8 W	03/01/84	2316 GMT	1180 M	320	07 KT	230 03 09	1	1017.6 MB	16.1 C	15.1 C	3/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	15.46	15.46	33.435	24.666	326.9	.033	5.87	103.2	2.7	.31	.0	.00	.14	.02	10

STATION 89.1 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 04.4 N	119 02.5 W	03/02/84	0337 GMT		330	10 KT	280 02 10		1017.6 MB	15.8 C	14.7 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	15.03	15.03	33.438	24.762	317.7	.032	5.96	103.8	2.8	.34	.0	.01	.28	.06	10

STATION 89.1 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 54.4 N	119 22.8 W	03/02/84	0800 GMT	203 M	310	15 KT			1017.6 MB	14.4 C	13.8 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	14.91	14.91	33.445	24.794	314.7	.031	5.99	104.1	2.6	.34	.0	.01	.35	.07	10

RV DAVID STARR JORDAN

CALCOFF CRUISE 8402-3

STATION 90.0 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 05.1 N	118 35.6 W	03/03/84	1520 GMT	780 M	090	06 KT	280 04 07	2	1015.9 MB	14.9 C	13.0 C	8/8		S1	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.29	15.29	33.441	24.708	322.9	.032	5.89	103.2	3.3	.32	.2	.01	.16	.07	10

STATION 90.0 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 45.0 N	119 16.5 W	03/04/84	1759 GMT	304 M	180	05 KT	280 04 09	1	1015.9 MB	15.0 C	13.6 C	7/8		S1	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.03	15.03	33.438	24.762	317.7	.032	5.96	103.8	2.7	.35	.0	.01	.36	.03	10

STATION 90.8 27.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 21.8 N	117 38.6 W	03/03/84	0133 GMT	73 M	290	07 KT	280 01 06	0	1015.2 MB	17.4 C	14.4 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.84	15.84	33.466	24.605	332.7	.033	5.92	104.8	3.3	.31	.1	.00	.17	.04	10

STATION 90.8 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 16.8 N	117 48.9 W	03/03/84	0006 GMT	639 M	270	07 KT	260 01 06	0	1015.2 MB	17.8 C	14.7 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.85	15.85	33.465	24.602	333.0	.033	5.89	104.3					.43	.07	10

STATION 90.8 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 06.8 N	118 09.5 W	03/02/84	2130 GMT	1039 M	260	04 KT	280 01 04	0	1016.3 MB	17.0 C	14.3 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.55	15.55	33.441	24.651	328.3	.033	5.85	103.0	2.5	.31	.0	.01	.09	.05	10

STATION 90.8 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 56.8 N	118 30.0 W	03/02/84	1836 GMT	69 M	060	02 KT		0	1018.0 MB	15.8 C	13.2 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.11	15.11	33.441	24.747	319.1	.032	5.90	103.0	2.7	.42	.0	.00	.39	.09	10

STATION 90.8 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 46.9 N	118 50.6 W	03/02/84	1403 GMT	1340 M	310	04 KT	270 02 05	2	1017.3 MB	14.3 C	12.9 C	8/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	14.98	14.98	33.462	24.792	314.9	.031	5.94	103.4	2.6	.34	.0	.00	.35	.08	10

STATION 90.8 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 36.8 N	119 11.1 W	03/02/84	1108 GMT	205 M	320	14 KT			1016.6 MB	14.3 C	13.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
1 10	15.00	15.00	33.440	24.771	316.9	.032	5.87	102.2	2.7	.33	.0	.00	.26	.07	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 13.4 N	117 30.4 W	03/06/84	0822 GMT	176 M	090	06 KT	310 01 07		1019.6 MB	13.8 C	10.7 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.66	33.475	24.653	328.2	.033	5.99	105.7	1.8	.13	.0	.00	.19	.03	10

STATION 91.7 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 07.3 N	117 42.8 W	03/06/84	0601 GMT	795 M	330	12 KT	310 02 08		1019.0 MB	16.0 C	13.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.92	33.454	24.578	333.3	.034	5.81	103.1	2.8	.13	.0	.01	.16	.02	10

STATION 91.7 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 57.4 N	118 03.3 W	03/06/84	0124 GMT	916 M	330	09 KT	310 01 06	0	1018.3 MB	16.1 C	11.7 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.40	33.442	24.685	325.1	.033	5.91	103.7	2.8	.11	.0	.00	.13	.05	10

STATION 91.7 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 47.4 N	118 23.8 W	03/05/84	2245 GMT	73 M	060	03 KT	090 02 07	0	1019.0 MB	19.8 C	11.9 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.25	33.449	24.723	321.5	.032	5.96	104.0	2.7	.09	.0	.01	.17	.04	10

STATION 91.7 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 37.4 N	118 44.3 W	03/05/84	2005 GMT	971 M	090	10 KT	090 04 05	0	1020.7 MB	19.6 C	13.6 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.00	33.428	24.761	317.8	.032	5.90	102.7	3.0	.38	.0	.02	.18	.05	10

STATION 91.7 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 27.4 N	119 04.8 W	03/05/84	1718 GMT	96 M	100	12 KT	070 04 05	0	1020.0 MB	16.5 C	13.9 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.95	33.470	24.805	313.7	.031	5.92	103.0	3.4	.35	.0	.00	.41	.08	10

STATION 91.7 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 17.5 N	119 25.1 W	03/05/84	1410 GMT	1480 M	100	11 KT	080 04 05	0	1018.6 MB	14.6 C	12.9 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.77	33.424	24.808	313.4	.031	5.96	103.3	3.2	.37	.0	.00	.26	.08	10

STATION 91.7 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 07.4 N	119 45.6 W	03/05/84	1136 GMT	1290 M	090	12 KT			1018.9 MB	14.1 C	12.6 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.73	33.427	24.819	312.3	.031	5.88	101.8	3.2	.39	.1	.00	.30	.07	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
33 06.1 N	117 22.9 W	03/06/84	1208 GMT	287 M	030	06 KT			1019.0 MB	13.0 C	8.0 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.75	15.75	33.476	24.633	330.0	.033	5.94	105.0	2.6	.13	.0	.00	.31	.07	10

STATION 92.5 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 59.1 N	117 37.3 W	03/06/84	1206 GMT	890 M	020	06 KT			1018.0 MB	15.0 C	10.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.66	15.66	33.452	24.635	329.9	.033	5.85	103.2	2.6	.12	.0	.00	.15	.04	10

STATION 92.5 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 49.0 N	117 57.8 W	03/06/84	1435 GMT	610 M	020	05 KT	360 D2 05	0	1019.3 MB	15.1 C	11.5 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.78	15.78	33.462	24.616	331.7	.033	5.88	104.0	2.7	.13	.0	.00	.18	.05	10

STATION 92.5 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 39.1 N	118 18.2 W	03/06/84	1707 GMT	1290 M	270	06 KT	270 D1 05	1	1019.3 MB	16.1 C	12.7 C		3/8	CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.53	15.53	33.433	24.649	328.5	.033	5.82	102.4	2.6	.12	.0	.00	.14	.04	10

STATION 92.5 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 29.1 N	118 38.8 W	03/06/84	2031 GMT	760 M	300	05 KT	340 D3 07	1	1019.3 MB	16.1 C	12.7 C		3/8	CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.67	15.67	33.469	24.646	328.8	.033	5.81	102.6	3.2	.34	.1	.02	.18	.05	10

STATION 92.5 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 19.1 N	118 59.2 W	03/06/84	2318 GMT	740 M	300	08 KT	300 D1 10	1	1019.0 MB	16.8 C	14.7 C		4/8	CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.38	15.38	33.420	24.672	326.3	.033	5.94	104.2	2.8	.32	.1	.00	.15	.04	10

STATION 93.3 26.7

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 57.4 N	117 18.2 W	03/07/84	1737 GMT	59 M	270	03 KT	290 D1 13	1	1020.3 MB	15.1 C	11.1 C		7/8	S1	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.97	14.97	33.472	24.802	314.0	.031	6.06	105.5	1.9	.35	.1	.01	.38	.06	10

STATION 93.3 28.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 54.8 N	117 23.7 W	03/08/84	0956 GMT	610 M	320	04 KT			1021.3 MB	14.1 C	13.1 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.71	15.71	33.472	24.639	329.5	.033	5.96	105.3	6.0	.34	.3	.00	.23	.05	10

LATITUDE 32 46.4 N LONGITUDE 117 18.1 W MO/DAY/YR 03/07/84 MESSENGER 1616 GMT BOTTOM 55 M WIND SPEED 110 06 KT WAVES 300 01 14 WEATHER 2 BAROMETER 1020.0 MB DRY 13.9 C WET 10.9 C CLOUD AMT 8/8 TYPE ST
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.03 15.03 33.469 24.786 315.5 .032 6.34 110.5 1.9 .34 .0 .01 .42 .02 10

STATION 94.1 30.0

LATITUDE 32 42.6 N LONGITUDE 117 26.5 W MO/DAY/YR 03/07/84 MESSENGER 1517 GMT BOTTOM 54.7 M WIND SPEED 010 07 KT WAVES 340 01 07 WEATHER 1 BAROMETER 1019.3 MB DRY 15.5 C WET 11.9 C CLOUD AMT 8/8 TYPE ST
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.19 15.19 33.460 24.745 319.4 .032 6.17 107.9 2.2 .32 .1 .00 .38 .06 10

STATION 94.1 35.0

LATITUDE 32 32.2 N LONGITUDE 117 46.8 W MO/DAY/YR 03/07/84 MESSENGER 1234 GMT BOTTOM 1210 M WIND SPEED 350 07 KT WAVES WEATHER BAROMETER 1018.6 MB DRY 16.0 C WET 14.8 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.84 15.84 33.462 24.602 333.0 .033 5.92 104.8 2.9 .30 .1 .00 .15 .03 10

STATION 94.1 40.0

LATITUDE 32 22.5 N LONGITUDE 118 07.3 W MO/DAY/YR 03/07/84 MESSENGER 0953 GMT BOTTOM 1760 M WIND SPEED 350 07 KT WAVES WEATHER BAROMETER 1018.6 MB DRY 16.1 C WET 13.2 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.73 15.73 33.442 24.611 332.1 .033 5.87 103.7 2.9 .34 .0 .00 .13 .03 10

STATION 94.1 45.0

LATITUDE 32 12.6 N LONGITUDE 118 27.7 W MO/DAY/YR 03/07/84 MESSENGER 0555 GMT BOTTOM 1480 M WIND SPEED 320 12 KT WAVES 320 01 10 WEATHER BAROMETER 1018.6 MB DRY 15.3 C WET 13.1 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.79 15.79 33.456 24.609 332.4 .033 5.86 103.7 2.9 .33 .1 .00 .16 .04 10

STATION 94.1 50.0

LATITUDE 32 02.5 N LONGITUDE 118 48.1 W MO/DAY/YR 03/07/84 MESSENGER 0128 GMT BOTTOM 1290 M WIND SPEED 320 15 KT WAVES 320 01 10 WEATHER BAROMETER 1018.6 MB DRY 15.9 C WET 12.5 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.41 15.41 33.429 24.672 326.3 .033 5.89 103.4 3.0 .33 .1 .00 .13 .02 10

STATION 95.0 28.0

LATITUDE 32 37.2 N LONGITUDE 117 12.2 W MO/DAY/YR 03/11/84 MESSENGER 0638 GMT BOTTOM 24 M WIND SPEED 090 10 KT WAVES 250 02 12 WEATHER BAROMETER 1017.3 MB DRY 15.1 C WET 13.7 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 14.35 14.35 33.474 24.936 301.2 .030 5.84 100.4 10

STATION 95.0 30.0

LATITUDE 32 33.2 N LONGITUDE 117 20.3 W MO/DAY/YR 03/11/84 MESSENGER 0047 GMT BOTTOM 101 M WIND SPEED 280 11 KT WAVES 260 03 08 WEATHER BAROMETER 1017.3 MB DRY 17.8 C WET 16.7 C CLOUD AMT TYPE
 CAST DEPTH M TEMP DEG C POT TEMP DEG C SALINITY SIGMA THETA SVA DYN HT OXYGEN ML/L OXY PCT SI03 UM/L P04 UM/L NO3 UM/L NO2 UM/L CHL-A UG/L PHAEO UG/L PRESS D.BAR
 1 10 15.46 15.46 33.482 24.702 323.5 .032 6.06 106.5 .25 .04 10

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STATION 95.0 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 23.1 N	117 40.8 W	03/10/84	2209 GMT	1460 M	330	06 KT	290 03 06	1	1018.3 MB	18.2 C	16.1 C	2/8		CS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.98	33.463	24.571	335.9	.034	5.89	104.6	4.1	.32	.2	.01	.13	.02	10

STATION 95.0 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 13.1 N	118 07.3 W	03/10/84	1908 GMT	602 M	330	11 KT	310 05 09	1	1021.0 MB	16.5 C	15.5 C	7/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.80	33.439	24.594	333.8	.033	5.82	103.0	3.5	.31	.1	.00	.13	.01	10

STATION 95.0 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 03.1 N	118 21.6 W	03/10/84	1630 GMT	790 M	310	12 KT	310 06 08	2	1020.7 MB	16.0 C	14.5 C	8/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.79	33.456	24.609	332.4	.033	5.83	103.1	3.7	.32	.1	.00	.14	.02	10

STATION 95.0 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 53.2 N	118 41.8 W	03/10/84	1350 GMT	1410 M	320	20 KT	310 06 06	2	1020.0 MB	15.1 C	14.0 C	8/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.51	33.417	24.641	329.3	.033	5.86	103.1	3.9	.37	.2	.00	.11	.02	10

STATION 95.0 55.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 43.1 N	119 02.1 W	03/10/84	1059 GMT	1850 M	330	18 KT			1020.7 MB	14.8 C	13.7 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.28	33.474	24.736	320.3	.032	5.88	103.0	3.9	.35	.1	.00	.14	.02	10

STATION 95.0 60.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 33.0 N	119 22.4 W	03/10/84	0745 GMT	3350 M	330	18 KT	330 05 06		1022.7 MB	14.9 C	13.8 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.39	33.464	24.704	323.3	.032	5.85	102.7					.12	.02	10

STATION 95.8 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 58.7 N	118 07.9 W	03/28/84	1930 GMT	1510 M	060	08 KT	290 04 05	0	1017.3 MB	18.4 C	16.0 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.07	33.457	24.545	338.4	.034	5.84	103.9	2.4	.31		.01	.15	.10	10

STATION 95.8 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 44.8 N	118 36.3 W	03/28/84	1510 GMT	1860 M	030	10 KT	280 05 05	1	1015.9 MB	17.8 C	15.7 C	1/8		ST	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.89	33.451	24.582	334.9	.033	5.80	102.8	2.1	.33	.0	.01	.14	.09	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 96.7 29.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 17.4 N	117 04.8 W	03/13/84	2203 GMT	50 M	320	10 KT	280 03 04	2	1017.6 MB	19.2 C	15.7 C	8/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	14.45	14.45	33.512	24.943	300.5	.030	6.15	106.0	3.1	.42	.1	.00	.65	.41	10

STATION 96.7 32.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 11.4 N	117 17.0 W	03/14/84	0136 GMT	1390 M	310	10 KT	280 02 04	2	1017.3 MB	16.5 C	14.4 C	8/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.09	16.09	33.485	24.563	336.7	.034	5.92	105.4	3.3	.31	.0	.00	.14	.02	10

STATION 97.5 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
32 07.1 N	117 03.4 W	03/27/84	2301 GMT	106 M	300	09 KT	270 06 06	0	1013.2 MB	19.3 C	16.7 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.36	16.36	33.490	24.505	342.2	.034	5.91	105.8	2.2	.37	.0	.00	.21	.09	10

STATION 97.5 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 57.1 N	117 23.8 W	03/28/84	0148 GMT	1410 M	340	11 KT	280 06 06	1	1013.2 MB	17.4 C	15.9 C		1/8	SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.80	16.80	33.477	24.393	352.9	.035	5.85	105.6	2.0	.29	.0	.00	.13	.02	10

STATION 97.5 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 47.1 N	117 44.0 W	03/28/84	0602 GMT	1853 M	360	13 KT	350 06 06	0	1014.6 MB	17.1 C	14.8 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.51	16.51	33.481	24.463	346.2	.035	5.80	104.1	1.2	.31	.0	.00	.15	.03	10

STATION 97.5 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 37.1 N	118 04.3 W	03/28/84	0955 GMT	1664 M	360	09 KT		0	1014.9 MB	16.4 C	14.7 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.03	16.03	33.454	24.553	337.7	.034	5.79	102.9	1.6	.32	.0	.01	.15	.02	10

STATION 97.5 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 27.1 N	118 24.6 W	03/28/84	1251 GMT	2570 M	340	10 KT		0	1014.9 MB	16.2 C	14.6 C		0/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.07	16.07	33.457	24.546	338.3	.034	5.83	103.7	1.6	.31	.1	.01	.10	.26	10

STATION 98.3 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 58.8 N	116 58.1 W	03/27/84	1010 GMT	621 M	310	05 KT	300 06 06	2	1009.8 MB	15.6 C	14.1 C		8/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
1 10	16.41	16.41	33.494	24.497	343.0	.034	5.90	105.7	2.4	.34	.0	.00	.29	.07	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 98.3 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 48.8 N	117 18.4 W	03/27/84	0710 GMT	1454 M	310	14 KT	300 08 06	2	1010.8 MB	15.3 C	13.9 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.62	16.61	33.505	24.458	346.7	.035	5.79	104.2	2.8	.31	.0	.00	.15	.07	10

STATION 98.3 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 38.7 N	117 18.4 W	03/27/84	0421 GMT	1520 M	310	20 KT	310 08 06	2	1011.2 MB	15.9 C	14.6 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.65	16.65	33.496	24.445	348.1	.035	5.79	104.2	2.0	.32	.0	.00	.16	.04	10

STATION 98.3 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 28.8 N	117 58.8 W	03/27/84	0125 GMT	1300 M	320	17 KT	300 06 06	2	1011.5 MB	16.3 C	14.8 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.43	16.43	33.477	24.479	344.7	.034	5.82	104.3	2.2	.31	.0	.00	.18	.02	10

STATION 98.3 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 18.8 N	118 19.0 W	03/27/84	2228 GMT	1860 M	320	15 KT	300 04 06	2	1012.2 MB	16.0 C	15.0 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.76	16.16	33.471	24.536	339.3	.034	5.80	103.4	2.2	.59	.0	.00	.19	.04	10

STATION 99.1 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 50.5 N	118 52.7 W	03/26/84	0917 GMT	550 M	160	08 KT	300 03 05	2	1012.9 MB	16.0 C	13.4 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.55	16.55	33.494	24.465	346.1	.035	5.85	105.1	3.2	.36	.1	.00	.16	.06	10

STATION 99.1 34.9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 40.5 N	117 12.5 W	03/26/84	1220 GMT	2159 M	270	10 KT	300 03 05	2	1012.5 MB	16.3 C	13.5 C	8/8		CU		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.29	16.29	33.485	24.517	341.1	.034	5.89	105.3	2.5	.34	.0	.00	.13	.02	10

STATION 99.1 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 30.5 N	117 33.2 W	03/26/84	1519 GMT	1695 M	270	08 KT	290 05 05	2	1012.9 MB	16.7 C	13.5 C	8/8		SC		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.28	16.28	33.493	24.526	340.3	.034	5.76	102.9	2.6	.32	.0	.00	.15	.03	10

STATION 99.1 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
31 20.4 N	117 53.4 W	03/26/84	1801 GMT	1891 M	270	08 KT	290 06 06	2	1013.9 MB	16.9 C	14.3 C	8/8		SC		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
1	10	16.18	16.18	33.467	24.528	340.0	.034	5.76	102.7	2.6	.31	.1	.00	.16	.06	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 99.1 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 10.5 N	118 13.5 W	03/26/84	2117 GMT	1411 M	320	13 KT	320 06 06	1	1012.5 MB	17.3 C	16.2 C	6/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.16	16.16	33.449	24.519	340.9	.034	5.80	103.4	2.4	.40	.0	.00	.17	.00	10

STATION 100.8 50.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 31.8 N	116 43.3 W	03/25/84	0202 GMT	58 M	360	02 KT	300 02 05	2	1012.9 MB	16.1 C	15.3 C	B/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.66	14.66	33.488	24.881	306.5	.051	5.92	102.4	5.7	.56	1.3	.06	1.15	.05	10

STATION 100.8 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 22.8 N	117 01.4 W	03/25/84	2321 GMT	2321 M	310	08 KT	300 04 05	1	1012.9 MB	17.3 C	15.0 C	7/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.38	16.38	33.490	24.500	342.7	.034	5.82	104.2	3.1	.55	.2	.00	.15	.02	10

STATION 100.8 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 12.8 N	117 21.6 W	03/25/84	2053 GMT	2140 M	310	10 KT	300 05 06	1	1014.6 MB	16.9 C	13.8 C	7/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.53	16.53	33.480	24.459	346.6	.035	5.75	103.2	2.1	.31	.1	.00	.16	.02	10

STATION 100.8 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 02.7 N	117 41.9 W	03/25/84	1753 GMT	1265 M	310	11 KT	300 04 06	2	1014.9 MB	16.8 C	12.8 C	8/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.05	16.05	33.425	24.527	340.2	.034	5.78	102.8	2.0	.34	.1	.01	.11	.00	10

STATION 101.7 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 23.5 N	116 35.2 W	03/25/84	0704 GMT	27 M	320	12 KT	310 02 05	0	1014.6 MB	15.9 C	13.9 C	0/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.89	13.89	33.547	25.087	286.7	.029	5.90	100.5	6.7	.66	3.6	.13	2.40	.36	10

STATION 101.7 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 13.5 N	116 55.4 W	03/25/84	1049 GMT	1328 M	320	10 KT	310 04 06	2	1013.2 MB	15.8 C	13.4 C	B/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.42	16.42	33.489	24.491	343.6	.034	5.75	103.0	2.0	.31	.1	.00	.13	.02	10

STATION 101.7 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 03.5 N	117 15.5 W	03/25/84	1330 GMT	2120 M	320	12 KT	310 04 06	2	1013.5 MB	14.8 C	12.2 C	8/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.35	16.35	33.475	24.497	343.0	.034	5.78	103.4	2.1	.31	.1	.00	.16	.01	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 101.7 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 53.5 N	117 35.8 W	03/25/84	1623 GMT	1775 M	320	10 KT	300 04 05	2	1014.9 MB	15.1 C	12.4 C	8/8		SC	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.12	33.412	24.500	342.7	.034	5.77	102.7	2.0	.33	.1	.01	.08	.02	10

STATION 102.5 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 15.2 N	116 29.9 W	03/25/84	0217 GMT	58 M	310	14 KT	310 02 05	0	1013.9 MB			0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.20	33.511	24.781	316.0	.032	6.30	110.2	4.8	.42	.3	.02	2.78	.38	10

STATION 102.5 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 05.2 N	116 50.0 W	03/24/84	2326 GMT	1553 M	310	15 KT	310 04 03	1	1012.5 MB	18.7 C	16.5 C	6/8		SI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.38	33.476	24.491	343.5	.034	5.83	104.4	2.2	.34	.1	.00			10

STATION 102.5 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 55.2 N	117 10.1 W	03/24/84	2012 GMT	2060 M	310	13 KT	300 04 06	1	1016.3 MB	18.2 C	17.5 C	5/8		SI	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.44	33.482	24.481	344.5	.034	5.73	102.7	2.4	.32	.1	.00	.13	.01	10

STATION 102.5 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 45.3 N	117 30.1 W	03/24/84	1711 GMT	1950 M	300	08 KT	280 04 06	1	1016.6 MB	18.2 C	16.4 C	2/8		CU	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.22	33.469	24.520	340.8	.034	5.77	103.0	1.9	.32	.1	.00	.11	.03	10

STATION 103.3 29.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 08.9 N	116 20.5 W	03/17/84	1135 GMT	26 M	120	04 KT	270 05 08	1	1019.3 MB	11.8 C	10.8 C	2/8		AS	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	12.67	33.542	25.328	263.8	.026	4.82	80.1	4.5	1.00	9.1	.20	.65	.39	10

STATION 104.1 30.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 57.5 N	116 21.2 W	03/24/84	0559 GMT	38 M	200	03 KT	280 01 06	0	1016.3 MB	16.5 C	15.0 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.90	33.506	24.844	309.9	.031	6.12	106.4	4.6	.62	.3	.02	1.09	.27	10

STATION 104.1 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 48.5 N	116 39.5 W	03/24/84	1004 GMT	2023 M	340	07 KT	320 03 06	0	1015.9 MB	16.4 C	15.2 C	0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.26	33.484	24.523	340.5	.034	5.81	103.8	2.4	.33	.2	.00	.12	.01	10

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STATION 104.1 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 38.4 N	116 59.3 W	03/24/84	1242 GMT	1608 M	310	08 KT	300 03 06	1	1015.2 MB	16.3 C	15.0 C	1/8			
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.41	16.41	33.491	24.494	343.3	.034	5.75	103.0	2.5	.32	.2	.01	.10	.01	10

STATION 104.1 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 28.4 N	117 19.4 W	03/24/84	1509 GMT	2330 M	330	10 KT	320 04 06	1	1015.6 MB	17.4 C	15.8 C	2/8		CU	
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.76	15.76	33.410	24.580	335.1	.034	5.87	103.8	2.3	.34	.3	.01	.12	.01	10

STATION 105.0 30.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 49.2 N	116 13.2 W	03/23/84	2318 GMT	26 M	310	10 KT	270 06 06	1	1016.3 MB	17.9 C	16.9 C	1/8		CI	
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	13.67	13.67	33.550	25.136	282.1	.028	5.84	99.0	8.6	.69	4.6	.15	.67	.33	10

STATION 105.0 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 39.2 W	116 33.2 W	03/23/84	2038 GMT	1237 M	290	08 KT	290 06 06	0	1018.0 MB	17.8 C	16.0 C	0/8			
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.75	14.75	33.475	24.852	309.2	.031	6.11	105.9	3.8	.38	.1	.01	1.09	.39	10

STATION 105.0 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 29.4 N	116 53.3 W	03/23/84	1757 GMT	1580 M	080	03 KT	300 05 06	0	1017.6 MB	17.2 C	15.8 C	0/8			
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	16.30	16.30	33.485	24.516	341.2	.034	5.75	102.8	2.0	.31	.1	.00	.11	.02	10

STATION 105.0 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 19.2 N	117 13.2 W	03/23/84	1457 GMT	2890 M	050	06 KT	300 05 06	1	1016.3 MB	15.4 C	14.1 C	1/8		ST	
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.68	15.68	33.418	24.605	332.7	.033	5.84	103.1	1.8	.33	.1	.00	.12	.01	10

STATION 105.8 30.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 39.9 N	116 09.8 W	03/23/84	0054 GMT	36 M	290	05 KT	300 06 10	0	1013.9 MB	17.9 C	16.0 C	0/8			
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	14.43	14.43	33.515	24.951	299.8	.030	6.36	109.5	5.8	.47	.4	.04	2.59	.54	10

STATION 105.8 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 30.9 N	116 27.8 W	03/23/84	0710 GMT	1256 M	330	06 KT	320 05 10	0	1014.9 MB	17.0 C	15.0 C	0/8			
CAS1 DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 10	15.89	15.89	33.482	24.605	332.7	.033	5.98	106.0	2.8	.45	.1	.01	.35	.06	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 20.9 N	116 47.8 W	03/23/84	1053 GMT	2576 M	330	05 KT	300 05 08	1	1015.2 MB	15.2 C	13.9 C		6/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	16.24	16.23	33.474	24.522	340.6	.034	5.75	102.6	1.8	.33	.1	.01	.11	.02	10

STATION 105.8 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 10.9 N	117 07.8 W	03/23/84	1340 GMT	1510 M	330	06 KT	290 05 06	1	1015.9 MB	15.2 C	13.7 C		1/3	51		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	16.26	16.26	33.495	24.532	339.7	.034	5.75	102.7	1.5	.31	.1	.00	.11	.01	10

STATION 106.7 31.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 29.5 N	116 05.8 W	03/22/84	2250 GMT	24 M	300	09 KT	300 06 10	0	1013.9 MB	18.8 C	16.7 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	14.82	14.82	33.508	24.861	308.3	.031	6.24	108.3	5.0	.40	.3	.02	1.97	.37	10

STATION 107.5 31.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 20.2 N	116 02.5 W	03/19/84	1312 GMT	93 M	D90	04 KT	280 03 06	0	1013.2 MB	14.1 C	12.8 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	14.01	14.00	33.512	25.037	291.6	.029	5.60	95.6	7.4	.66	3.8	.14	1.12	.33	10

STATION 107.5 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 13.2 N	116 16.5 W	03/19/84	1053 GMT	1699 M	330	08 KT		0	1014.2 MB	15.8 C	14.2 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	15.99	15.99	33.481	24.583	334.8	.033	5.79	102.9	2.7	.31	.0	.00	.13	.04	10

STATION 107.5 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 03.0 N	116 36.2 W	03/19/84	0803 GMT	3360 M	330	08 KT	320 05 06	0	1016.9 MB	17.0 C	14.9 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	16.01	16.01	33.450	24.554	337.6	.034	5.80	103.1	2.5	.30	.0	.00	.11	.02	10

STATION 107.5 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 53.1 N	116 56.2 W	03/19/84	0526 GMT	1670 M	340	08 KT	320 05 06	0	1017.6 MB	16.8 C	15.1 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	16.15	16.15	33.456	24.528	340.0	.034	5.78	103.0	2.6	.30	.0	.00	.11	.02	10

STATION 107.5 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
29 43.2 N	117 16.2 W	03/19/84	0233 GMT	2860 M	340	09 KT	320 06 05	0	1016.9 MB	16.8 C	14.9 C		0/8			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	10	16.31	16.31	33.476	24.505	342.2	.034	5.82	104.1	2.7	.28	.1	.01	.10	.02	10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 10.8 N	115 59.2 W	03/19/84	1422 GMT	91 M	040	06 KT	290 03 06	0	1014.9 MB	14.0 C	12.2 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.06	33.502	25.018	293.4	.029	5.71	97.6	6.2	.54	2.3	.11	1.43	.36	10

STATION 108.3 35.1

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 04.9 N	116 11.6 W	03/19/84	1609 GMT	1891 M	040	11 KT	290 04 06	0	1015.2 MB	16.8 C	15.1 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.85	33.461	24.598	333.3	.033	5.85	103.6	2.9	.34	.0	.00	.13	.02	10

STATION 108.3 39.8

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 55.3 N	116 30.5 W	03/19/84	1839 GMT	1839 M	230	04 KT	300 05 08	0	1016.6 MB	18.0 C	15.6 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	15.98	33.456	24.565	336.5	.034	5.79	102.8	2.5	.30	.0	.00	.17	.04	10

STATION 108.3 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 44.9 N	116 50.9 W	03/19/84	2214 GMT	2214 M	300	08 KT	300 06 08	0	1013.9 MB	18.1 C	17.0 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.25	33.456	24.505	342.2	.034	5.80	103.6	2.1	.34	.0	.00	.08	.02	10

STATION 108.3 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 34.8 N	117 10.6 W	03/20/84	0100 GMT	2373 M	310	14 KT	300 08 06	0	1012.9 MB	17.2 C	15.9 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.46	33.466	24.464	346.1	.035	5.78	103.6	0.0	.29	.1	.00	.08	.02	10

STATION 109.1 32.2

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
30 02.2 N	115 54.7 W	03/20/84	1636 GMT	77 M	090	02 KT	280 05 06	0	1013.2 MB	14.5 C	13.4 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	14.47	33.526	24.950	299.8	.030	6.05	104.3	.8	.46	.7	.03			10

STATION 109.1 35.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 56.6 N	116 05.8 W	03/20/84	1320 GMT	657 M	010	06 KT	290 04 06	4	1012.2 MB	13.5 C	13.0 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.04	33.450	24.548	338.1	.034	5.80	103.1	0.0	.33	.0	.00			10

STATION 109.1 40.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 46.6 N	116 25.7 W	03/20/84	1025 GMT	2666 M	330	08 KT	300 06 06	0	1012.5 MB	16.2 C	15.0 C			D/B	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SWA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.25	33.473	24.518	349.0	.034	5.83	104.1	0.0	.32	.0	.00	.13	.02	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 109.1 45.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 36.3 N	116 45.6 W	03/20/84	0620 GMT	674 M	100	06 KT	300 05 06	0	1013.9 MB	16.8 C	15.4 C			0/8	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.13	33.461	24.536	339.3	.034	5.70	103.0	0.0	.33	.0	.00	.09	.01	10

STATION 109.1 50.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 26.6 N	117 05.3 W	03/20/84	0216 GMT	2653 M	320	12 KT	300 08 06	0	1012.9 MB	17.3 C	15.9 C			0/8	
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	10	16.36	33.465	24.486	344.1	.034	5.79	103.6	0.0	.34	.1	.00	.09	.02	10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 60 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
37°56.8'N	122°52.9'W	02/09/84	1952 GMT	10 m	1218 - 1740 PST	1224 PST	1810 PST	1806.5 mg C/m2			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PHEAO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	209.5	216.9	213.2	0.55					7.55	0.00
8	33	90.1	100.9	95.5	0.37					4.16	0.74
11	21	32.6	32.8	32.7	0.28					1.81	0.80
15	11	20.1	23.7	21.9	0.22					1.44	0.50
27	1.8	5.1	5.6	5.4	0.18					0.76	0.48
41	0.23	1.5	1.3	1.4	0.24					0.61	2.20

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 60 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
37°25.5'N	124°00.2'W	02/09/84	2008 GMT	23 m	1241 - 1803 PST	1234 PST	1816 PST	215.7 mg C/m2			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PHEAO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	2.6	2.5	2.5	0.18					0.15	0.08
18	33	4.1	3.5	3.8	0.12					0.26	0.13
24	21	5.6	5.2	5.4	0.15					0.54	0.36
35	11	4.8	4.3	4.6	0.14					0.31	0.31
63	1.8	0.36	0.36	0.36	0.10					0.10	0.18
96	0.23	0.06	0.05	0.06	0.08					0.04	0.11

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 61 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°03.3'N	126°20.1'W	02/10/84	2013 GMT	26 m	1244 - 1825 PST	1239 PST	1825 PST	144.5 mg C/m2			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PHEAO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.75	0.70	0.72	0.13	1.4	0.41	0.1	0.00	0.11	0.06
20	33	2.4	2.1	2.2	0.12	1.3	0.42	0.1	0.00	0.11	0.07
27	21	1.7	1.8	1.7	0.13	1.2	0.41	0.1	0.00	0.11	0.06
39	11	2.2	2.3	2.2	0.16	1.1	0.41	0.1	0.00	0.12	0.06
70	1.8	1.2	1.2	1.2	0.10	1.8	0.46	0.4	0.13	0.18	0.17
109	0.23	0.12	0.10	0.11	0.08	6.8	0.86	7.5	0.02	0.06	0.10

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 63 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
37°22.6'N	122°28.4'W	02/10/84	1956 GMT	10 m	1223 - 1743 PST	1224 PST	1809 PST	1613.0 mg C/m2			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PHEAO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	81.4	62.3	71.9	0.26					3.59	0.98
5	33	73.3	70.9	72.1	0.25					4.01	0.77
9	21	72.1	91.9	82.0	0.40					4.44	0.88
13	11	74.5	70.9	72.7	0.39					3.73	0.96
25	1.8	14.3	-	14.3	0.17					2.66	0.82
39	0.23	1.8	2.1	1.9	0.22					1.79	3.41

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 63 66

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
36°51.2'N	123°39.4'W	02/11/84	2006 GMT	27 m	1235 - 1815 PST	1228 PST	1815 PST	195.2 mg C/m2			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PHEAO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	2.6	2.5	2.5	0.18	4.0	0.32	0.2	0.00	0.12	0.06
21	33	3.3	2.7	3.0	0.13	3.1	0.41	0.2	0.00	0.13	0.08
28	21	2.0	3.0	2.5	0.14	2.2	0.46	0.2	0.00	0.16	0.10
41	11	4.0	3.5	3.7	0.12	2.1	0.46	0.2	0.00	0.19	0.12
73	1.8	0.43	0.52	0.48	0.09	7.2	0.92	7.6	0.04	0.10	0.12
113	0.23	0.07	0.06	0.07	0.08	19.1	1.59	19.5	0.07	0.04	0.09

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 67 49

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
36°43.2'N	121°59.1'W	02/11/84	1955 GMT	15 m	1222 - 1743 PST	1222 PST	1808 PST	1114.8 mg C/m2			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	42.4	42.0	42.2	0.23					1.20	0.64
11	33	40.3	34.7	37.5	0.19					1.13	0.72
16	21	36.3	35.4	35.9	0.24					1.57	0.63
22	11	28.2	28.4	28.3	0.22					1.57	0.51
39	1.8	2.9	2.5	2.7	0.11					0.56	0.66
62	0.23	0.37	0.64	0.50	0.13					0.30	0.43

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 67 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
35°27.5'N	124°56.1'W	02/12/84	2000 GMT	25 m	1234 - 1828 PST	1234 PST	1828 PST	207.5 mg C/m2			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.0	2.1	2.0	0.17					-	-
19	33	1.7	2.2	2.0	0.18					0.12	0.08
26	21	3.2	3.4	3.3	0.17					0.12	0.08
38	11	3.0	3.0	3.0	0.20					0.14	0.09
67	1.8	2.0	2.0	2.0	0.13					0.27	0.14
105	0.23	0.14	0.14	0.14	0.08					0.06	0.08

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 68.3 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
36°10.6'N	122°34.5'W	02/12/84	1948 GMT	17 m	1220 - 1746 PST	1220 PST	1814 PST	974.0 mg C/m2			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	21.7	21.5	21.6	0.18	3.0	0.35	0.0	0.01	0.77	0.23
26	33	22.2	20.8	21.5	0.20	2.5	0.33	0.0	0.00	0.85	0.22
46	21	12.0	12.0	12.0	0.18	4.9	0.52	2.3	0.13	0.79	0.48
53	11	3.6	3.6	3.6	0.12	7.8	0.77	7.1	0.10	0.28	0.49
58	1.8	1.8	1.5	1.6	0.13	8.8	0.84	8.2	0.06	0.24	0.41
70	0.23	0.26	0.22	0.24	0.10	11.0	1.05	12.0	0.02	0.09	0.23

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 70 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
35°52.9'N	122°21.8'W	02/13/84	2000 GMT	21 m	1221 - 1748 PST	1221 PST	1813 PST	415.1 mg C/m2			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	6.5	6.8	6.7	0.16					0.25	0.09
16	33	6.4	6.5	6.5	0.17					0.37	0.11
21	21	7.7	7.7	7.7	0.18					0.45	0.25
30	11	12.5	12.5	12.5	0.16					0.98	0.29
54	1.8	1.1	1.2	1.2	0.11					0.25	0.32
83	0.23	0.07	0.08	0.08	0.08					0.04	0.11

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 70 77

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
35°17.6'N	123°33.8	02/13/84	2008 GMT	23 m	1240 - 1820 PST	1236 PST	1820 PST	158.4 mg C/m2			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.9	2.2	2.6	0.14	2.4	0.39	0.2	0.00	0.14	0.06
18	33	3.1	3.1	3.1	0.15	2.4	0.39	0.2	0.00	0.12	0.06
24	21	3.0	2.9	3.0	0.17	2.3	0.39	0.2	0.00	0.12	0.04
35	11	2.0	1.9	2.0	0.15	2.2	0.39	0.2	0.00	0.12	0.05
63	1.8	0.97	0.94	0.95	0.13	2.3	0.39	0.2	0.00	0.14	0.04
96	0.23	0.24	0.27	0.26	0.09	3.1	0.44	1.0	0.12	0.12	0.10

RV DAVID STARR JORDAN

CALCOPI CRUISE 8402-3

STATION 73 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
35°18.5'N	121°57.8'W	02/14/84	1957 GMT	15 m	1216 - 1742 PST	1216 PST	1813 PST	320.0 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PRAEO ug/l
1	100	4.8	-	4.8	0.16					0.31	0.08
12	33	8.9	8.8	8.9	0.18					0.33	0.10
16	21	7.6	8.2	7.9	0.17					0.98	0.22
22	11	7.6	7.5	7.6	0.16					0.37	0.19
40	1.8	3.9	4.5	4.2	0.15					0.42	0.22
62	0.23	0.47	0.49	0.48	0.11					0.23	0.29

RV NEW HORIZON

CALCOPI CRUISE 8402-3

STATION 73 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°38.8'N	123°22.3'W	02/14/84	1936 GMT	24 m	1239 - 1824 PST	1239 PST	1823 PST	266.1 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PRAEO ug/l
0	100	0.65	0.59	0.62	0.17					0.12	0.08
18	33	3.1	3.1	3.1	0.17					0.14	0.10
25	21	3.5	3.7	3.6	0.18					0.16	0.10
37	11	5.7	4.4	5.1	0.19					0.18	0.11
65	1.8	2.5	2.5	2.5	0.12					0.18	0.12
101	0.23	0.29	0.32	0.31	0.11					0.07	0.10

RV DAVID STARR JORDAN

CALCOPI CRUISE 8402-3

STATION 77 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°53.3'N	121°11.9'W	02/15/84	1947 GMT	10 m	1217 - 1748 PST	1217 PST	1817 PST	1081.6 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PRAEO ug/l
1	100	41.4	39.9	40.7	0.27					2.70	0.17
8	33	35.7	35.8	35.7	0.29					2.58	0.48
11	21	39.5	39.1	39.3	0.32					2.85	0.38
15	11	37.7	61.3	49.5	0.32					2.73	0.64
27	1.8	12.9	14.6	13.8	0.21					2.72	0.66
41	0.23	0.80	1.3	1.0	0.18					1.70	0.61

RV NEW HORIZON

CALCOPI CRUISE 8402-3

STATION 77 56

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°53.4'N	121°16.0'W	02/08/84	2002 GMT	10 m	1238 - 1757 PST	1219 PST	1807 PST	805.5 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PRAEO ug/l
0	100	31.7	15.8	23.7	0.32	0.1	0.36	0.0	0.00	1.54	0.79
7	33	30.8	31.4	31.1	0.35	0.1	0.36	0.0	0.00	1.68	0.62
10	21	30.6	30.0	30.3	0.37	0.1	0.36	0.0	0.00	1.74	0.61
15	11	26.8	28.4	27.6	0.37	0.0	0.36	0.0	0.00	1.95	0.64
27	1.8	13.4	15.0	14.2	0.43	0.0	0.39	0.1	0.01	2.37	0.85
42	0.23	2.4	2.8	2.6	0.34	0.0	0.41	0.1	0.00	2.66	0.66

RV NEW HORIZON

CALCOPI CRUISE 8402-3

STATION 77 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
33°44.0'N	123°38.4'W	02/15/84	1931 GMT	22 m	1228 - 1823 PST	1229 PST	1821 PST	245.5 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PRAEO ug/l
0	100	1.9	2.0	2.0	0.18					0.11	0.04
17	33	3.4	3.4	3.4	0.18					0.12	0.06
23	21	4.2	4.4	4.3	0.18					0.13	0.05
34	11	5.6	4.1	4.9	0.19					0.20	0.11
61	1.8	2.0	1.9	2.0	0.13					0.22	0.17
92	0.23	0.11	0.11	0.11	0.09					0.05	0.11

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 80 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°19.0"N	120°48.0"W	02/16/84	1937 GMT	9 m	1212 - 1745 PST	1212 PST	1819 PST	1056.7 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	35.0	-	35.0	0.34					2.64	0.39
8	33	59.7	54.6	57.2	0.36					2.56	0.51
10	21	55.4	57.6	56.5	0.34					2.68	0.41
14	11	47.0	46.7	46.9	0.32					2.72	0.40
24	1.8	16.6	2.9	9.8	0.53					2.62	0.43
37	0.23	3.6	2.6	3.1	0.45					2.65	0.40

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°09.0"N	121°09.0"W	02/21/84	1946 GMT	9 m	1220 - 1750 PST	1224 PST	1823 PST	1021.7 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	27.4	25.1	26.2	0.33					2.38	0.49
8	33	55.8	57.3	56.5	0.36					2.50	0.44
10	21	52.0	49.6	50.8	0.37					2.35	0.48
13	11	44.8	46.7	45.7	0.47					2.74	0.31
24	1.8	17.7	13.9	15.8	0.53					2.90	0.55
37	0.23	1.4	2.5	2.0	0.38					2.38	0.73

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
33°49.0"N	121°50.1"W	02/17/84	1943 GMT	11 m	1216 - 1820 PST	1217 PST	1820 PST	694.7 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	3.7	2.4	3.1	0.29					1.09	0.60
8	33	23.6	22.6	23.1	0.24					0.79	0.80
12	21	26.0	27.9	27.0	0.30					-	-
17	11	24.4	21.5	23.0	0.31					0.95	0.77
30	1.8	12.0	13.4	12.7	0.30					1.15	0.64
47	0.23	2.5	3.3	2.9	0.44					0.32	1.61

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 80 71

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°48.8"N	121°54.7"W	02/16/84	1955 GMT	10 m	1225 - 1818 PST	1221 PST	1816 PST	321.2 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	4.5	4.0	4.3	0.38	1.1	0.36	0.2	0.00	0.58	0.34
7	33	13.4	12.9	13.1	0.30	1.1	0.34	0.2	0.00	0.66	0.34
10	21	14.2	14.2	14.2	0.28	1.1	0.36	0.2	0.00	0.65	0.34
15	11	13.1	9.6	11.4	0.34	1.0	0.33	0.2	0.00	0.67	0.39
27	1.8	5.2	3.7	5.7	0.31	1.0	0.35	0.2	0.00	0.64	0.35
42	0.23	1.7	1.6	1.7	0.54	1.1	0.37	0.3	0.01	0.86	0.40

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 81.7 47

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34°17.3"N	120°02.5"W	02/18/84	1945 GMT	9 m	1214 - 1747 PST	1214 PST	1816 PST	1134.0 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	63.9	64.4	64.2	0.33					1.94	0.42
7	33	65.9	67.4	66.7	0.33					2.47	0.48
9	21	60.0	63.5	61.7	0.33					1.74	0.49
13	11	54.3	52.6	53.5	0.33					2.47	0.44
24	1.8	1.5	1.7	1.6	0.14					0.19	0.18
37	0.23	0.47	0.66	0.56	0.10					0.13	0.16

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 82 46

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
34°16.2'N	119°56.2'W	02/19/84	2005 GMT	7 m	1216 - 1745 PST	1216 PST	1817 PST	1301.1 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	120.9	91.7	106.3	0.45					3.43	0.34
6	33	78.3	78.5	78.4	0.45					3.28	0.37
8	21	75.9	76.6	76.3	0.47					3.25	0.50
11		62.9	67.3	65.0	0.39					3.37	0.56
19	1.8	11.4	11.7	11.6	0.22					1.05	0.84
29	0.23	0.40	-	0.40	0.10					0.18	0.20

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 83 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
33°44.6'N	120°24.5'W	02/20/84	1913 GMT	14 m	1214 - 1747 PST	1214 PST	1820 PST	1213.9 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	31.3	34.5	32.9	0.21						0.98
10	33	38.3	37.5	37.9	0.26						1.38
14	21	36.9	34.8	35.9	0.30						1.18
20	11	35.9	33.6	34.7	0.22						1.25
38	1.8	9.2	10.2	9.7	0.39						1.06
58	0.23	0.43	0.34	0.39	0.35						0.25

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 83 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
32°36.1'N	122°48.3'W	02/19/84	1949 GMT	25 m	1223 - 1824 PST	1225 PST	1821 PST	139.1 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.66	0.55	0.60	0.14					0.07	0.04
19	33	1.4	1.5	1.5	0.16					0.07	0.05
26	21	1.5	1.6	1.6	0.14					0.07	0.04
38	11	1.7	1.7	1.7	0.15					0.07	0.04
67	1.8	1.0	0.94	0.97	0.13					0.08	0.04
105	0.23	1.5	1.6	1.6	0.09					0.24	0.23

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 83 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
32°19.7'N	123°25.5'W	02/18/84	1940 GMT	24 m	1232 - 1828 PST	1228 PST	1828 PST	187.0 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.22	0.25	0.23	0.16					0.12	0.07
18	33	2.1	1.9	2.0	0.16					0.12	0.07
25	21	2.4	2.0	2.2	0.17					0.11	0.06
37	11	2.4	2.1	2.2	0.16					0.11	0.06
66	1.8	2.8	2.5	2.7	0.14					0.29	0.14
101	0.23	0.41	0.45	0.43	0.11					0.11	0.16

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 85 42

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
33°52.9'N	119°18.6'W	02/22/84	1942 GMT	17 m	1212 - 1748 PST	1212 PST	1816 PST	1126.4 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	28.5	30.1	29.3	0.21	2.6	0.43	0.3	0.04	1.08	0.20
12	33	32.7	33.5	33.1	0.25	2.8	0.43	0.3	0.04	1.09	0.28
17	21	27.1	27.8	27.5	0.19	2.9	0.43	0.3	0.05	1.05	0.36
24	11	24.1	23.0	23.6	0.23	3.0	0.45	0.5	0.06	1.03	0.32
45	1.8	7.1	-	7.1	0.13	3.0	0.49	0.9	0.10	0.79	0.28
70	0.23	0.88	1.2	1.0	0.15	4.9	0.64	3.2	0.11	0.46	0.37

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 85 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT			INTEGRATED VALUE	
33°17.0'N	120°33.1'W	02/23/84	1933 GMT	10 m	1214 - 1751 PST	1215 PST	1822 PST			1673.7 mg C/m ²	
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	8103	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	55.5	57.9	56.7	0.29	3.3	0.45	1.3	0.04	2.78	0.35
7	33	74.3	74.0	74.2	0.46	3.3	0.44	1.3	0.04	2.83	0.41
10	21	70.4	69.7	70.1	0.48	3.2	0.45	1.3	0.04	2.71	0.50
14	11	58.4	63.7	61.1	0.50	3.2	0.45	1.3	0.04	2.76	0.43
26	1.8	24.1	24.5	24.3	0.27	3.2	0.46	1.4	0.04	2.82	0.33
41	0.23	5.2	5.9	5.6	0.22	3.1	0.46	1.3	0.05	2.90	0.45

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 85.8 47

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT			INTEGRATED VALUE	
33°34.6'N	119°33.7'W	02/25/84	1942 GMT	8 m	1211 - 1753 PST	1212 PST	1819 PST			1914.7 mg C/m ²	
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	8103	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	65.5	51.1	58.3	0.31	1.2	0.44	1.4	0.03	3.65	0.32
7	33	105.5	112.9	109.2	0.38	1.2	0.43	1.3	0.04	3.73	0.33
9	21	118.1	105.2	111.7	0.35	1.0	0.45	1.5	0.04	3.72	0.44
12	11	95.4	85.4	90.4	0.35	1.0	0.43	1.3	0.04	3.88	0.25
21	1.8	37.3	37.1	37.2	0.27	1.0	0.44	1.4	0.04	3.86	0.48
33	0.23	6.2	4.5	5.4	0.23	1.4	0.45	1.6	0.04	3.70	0.53

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 86.1 68.6

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT			INTEGRATED VALUE	
32°48.5'N	121°00.8'W	02/24/84	1957 GMT	17 m	1215 - 1755 PST	1215 PST	1826 PST			315.3 mg C/m ²	
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	8103	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	1.3	1.3	1.3	0.15	1.9	0.31	0.1	0.00	0.38	0.08
13	33	7.3	7.5	7.4	0.16	1.9	0.34	0.1	0.00	0.37	0.10
17	21	8.0	8.1	8.1	0.16	1.9	0.33	0.1	0.00	0.37	0.08
24	11	7.9	7.9	7.9	0.16	1.9	0.34	0.1	0.00	0.37	0.08
44	1.8	3.7	-	3.7	0.15	1.9	0.33	0.0	0.00	0.38	0.10
69	0.23	0.77	0.75	0.76	0.10	4.7	0.60	4.7	0.02	0.26	0.18

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 87 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT			INTEGRATED VALUE	
33°29.4'N	119°19.1'W	02/29/84	1957 GMT	21 m	1210 - 1753 PST	1210 PST	1820 PST			631.6 mg C/m ²	
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	8103	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	5.7	6.1	5.9	0.13					0.20	0.07
15	33	7.4	6.7	7.1	0.16					0.22	0.07
22	21	6.7	6.3	6.5	0.16					0.21	0.09
30	11	7.1	6.8	7.0	0.17					0.30	0.10
56	1.8	12.1	12.0	12.1	0.16					1.50	0.73
86	0.23	0.24	0.20	0.22	0.08					0.20	0.23

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 87 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT			INTEGRATED VALUE	
31°41.5'N	123°01.9'W	02/20/84	1938 GMT	31 m	1228 - 1825 PST	1226 PST	1825 PST			207.7 mg C/m ²	
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	8103	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.46	0.54	0.50	0.14					0.08	0.05
23	33	2.3	2.2	2.2	0.17					0.09	0.04
33	21	2.7	2.7	2.7	0.14					0.09	0.05
47	11	2.4	2.3	2.4	0.17					0.09	0.05
84	1.8	1.6	1.6	1.6	0.13					0.11	0.05
131	0.23	0.25	0.06	0.16	0.10					0.07	0.09

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 87.5 34

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°43.1'N	118°28.1'W	02/26/84	1943 GMT	13 m	1206 - 1749 PST	1207 PST	1815 PST	2195.7 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	51.7	56.4	54.1	0.24	1.3	0.39	0.0	0.04	1.27	0.36
9	33	57.7	59.8	58.7	0.30	1.1	0.38	0.0	0.03	1.41	0.50
13	21	103.7	101.7	102.7	0.55	2.1	0.43	0.5	0.08	2.80	0.45
20	11	80.1	78.6	79.4	0.45	2.5	0.46	1.1	0.10	2.93	0.37
34	1.8	10.4	9.4	9.9	0.62	4.8	0.72	4.2	0.22	1.38	0.76
54	0.23	0.08	0.67	0.38	0.52	8.2	0.96	9.2	0.09	0.25	0.22

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 88.3 58

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°46.7'N	120°01.4'W	02/28/84	1934 GMT	10 m	1211 - 1756 PST	1213 PST	1824 PST	772.1 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	0.35	0.35	0.35	0.24	0.5	0.36	0.3	0.02	2.74	0.60
7	33	33.3	34.8	34.0	0.24	0.5	0.37	0.2	0.02	1.64	0.68
11	21	44.1	45.5	44.8	0.35	0.5	0.36	0.2	0.01	1.58	0.52
15	11	36.9	38.5	37.7	0.38	0.5	0.36	0.1	0.01	1.40	0.58
27	1.8	10.0	8.1	9.1	0.34	0.5	0.35	0.0	0.00	1.49	0.40
41	0.23	0.28	0.18	0.23	0.28	0.3	0.34	0.1	0.00	1.28	0.52

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 89.1 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°24.4'N	118°21.1'W	03/01/84	1930 GMT	21 m	1208 - 1755 PST	1208 PST	1818 PST	

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	3.2	3.1	3.2	0.14	3.4	0.29	0.1	0.00	0.13	0.03
14	33	5.1	5.1	5.1	0.15	3.4	0.32	0.1	0.00	0.13	0.04
21						3.3	0.31	0.0	0.00	0.15	0.02
30						3.2	0.29	0.0	0.00	0.22	0.16
52						4.1	0.37	0.3	0.03	0.59	0.21
82						11.9	1.01	11.0	0.06	0.18	0.19

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 90 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°55.1'N	118°56.1'W	03/03/84	1940 GMT	26 m	1206 - 1752 PST	1206 PST	1822 PST	353.4 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	3.7	3.9	3.8	0.13					0.15	0.05
19	33	4.3	4.3	4.3	0.19					0.15	0.04
27	21	5.1	5.5	5.3	0.17					0.22	0.05
37	11	6.9		6.9	0.16					0.31	0.09
68	1.8	2.0	1.9	2.0	0.10					0.34	0.25
106	0.23	0.07	0.06	0.07	0.07					0.03	0.07

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°39.1'N	119°28.3'W	03/04/84	1934 GMT	21 m	1209 - 1758 PST	1209 PST	1826 PST	444.3 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m3	mgC/m3	mgC/m3	mgC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	7.9	7.5	7.7	0.14					0.25	0.07
16	33	8.1	8.3	8.2	0.20					0.31	0.21
22	21	8.7	7.5	8.1	0.18					0.39	0.16
31	11	8.8	9.3	9.1	0.10					0.43	0.21
56	1.8	2.6	2.7	2.7	0.14					0.33	0.29
86	0.23	0.18	0.21	0.20	0.10					0.11	0.14

RV NEW HORIZON			CALCOFI CRUISE 8402-3							STATION 90 70	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°05.2'N	120°38.4'W	02/21/84	1931 GMT	16 m	1216 - 1818 PST	1216 PST	1813 PST	530.6 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PRAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	5.1	5.0	5.1	0.09					0.31	0.17
13	33	8.2	8.4	8.3	0.20					0.31	0.21
17	21	9.9	9.4	9.6	0.23					0.33	0.18
24	11	10.5	10.2	10.4	0.28					0.39	0.25
44	1.8	9.6	10.0	9.8	0.26					0.61	0.51
67	0.23	2.0	2.0	2.0	0.26					0.81	0.41

RV DAVID STARR JORDAN			CALCOFI CRUISE 8402-3							STATION 90.8 39	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°58.8'N	118°25.9'W	03/02/84	1924 GMT	32 m	1204 - 1750 PST	1204 PST	1621 PST	394.6 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PRAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	2.0	2.2	2.1	0.10	2.9	0.34	0.0	0.00	0.12	0.03
24	33	6.5	5.7	6.1	0.16	3.0	0.33	0.0	0.00	0.18	0.06
33	21	5.8	5.3	5.6	0.15	3.0	0.34	0.0	0.00	0.24	0.05
47	11	7.2	7.7	7.5	0.12	3.1	0.38	0.2	0.01	0.35	0.11
84	1.8	0.31	0.34	0.33	0.08	14.5	1.22	14.3	0.01	0.08	0.11
130	0.23	0.05	0.06	0.06	0.07	27.3	1.75	23.4	0.00	0.00	0.03

RV DAVID STARR JORDAN			CALCOFI CRUISE 8402-3							STATION 91.7 46	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°35.4'N	118°48.4'W	03/05/84	1927 GMT	23 m	1205 - 1755 PST	1205 PST	1823 PST	638.1 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PRAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
2	100	2.1	2.0	2.0	0.12	3.4	0.34	0.1	0.00	0.18	0.02
19	33	11.1	10.8	11.0	0.17	2.5	0.34	0.1	0.00	0.32	0.08
24	21	16.9	14.7	15.8	0.16	2.3	0.34	0.0	0.00	0.60	0.15
35	11	15.4	15.4	15.4	0.14	3.2	0.36	0.1	0.02	0.67	0.15
62	1.8	2.5	2.5	2.5	0.08	12.3	1.06	11.0	0.14	0.30	0.20
95	0.23	0.11	0.14	0.13	0.09	21.8	1.59	20.2	0.02	0.04	0.09

RV NEW HORIZON			CALCOFI CRUISE 8402-3							STATION 92 77	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
31°25.4'N	120°50.6'W	02/22/84	1933 GMT	13 m	1234 - 1826 PST	1219 PST	1822 PST	439.6 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PRAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.36	0.76	0.56	0.21	2.1	0.39	0.2	0.00	0.60	0.28
9	33	12.4	12.3	12.4	0.21	2.1	0.37	0.2	0.00	0.55	0.33
14	21	13.5	13.0	13.3	0.24	2.1	0.38	0.2	0.00	0.54	0.27
20	11	12.8	12.5	12.7	0.27	2.0	0.38	0.2	0.00	0.56	0.33
36	1.8	6.9	7.5	7.2	0.27	2.0	0.40	0.2	0.00	0.54	0.33
55	0.23	1.1	1.3	1.2	0.28	1.8	0.40	0.2	0.00	0.61	0.31

RV DAVID STARR JORDAN			CALCOFI CRUISE 8402-3							STATION 92.5 44	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°31.1'N	118°34.8'W	03/06/84	1942 GMT	34 m	1204 - 1754 PST	1205 PST	1822 PST	328.8 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	S103	PO4	NO3	NO2	CHL	PRAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	2.1	2.1	2.1	0.15	2.6	0.31	0.0	0.00	0.17	0.04
25	33	4.8	4.8	4.8	0.21	2.6	0.30	0.0	0.00	0.23	0.04
35	21	4.4	5.2	4.8	0.20	2.4	0.30	0.0	0.00	0.25	0.05
50	11	5.1	-	5.1	0.18	2.4	0.30	0.0	0.00	0.29	0.08
90	1.8	0.39	0.41	0.40	0.08	11.5	1.06	11.9	0.02	0.12	0.12
139	0.23	0.03	0.02	0.02	0.08	24.6	1.73	22.7	0.01	0.01	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°50.8'N	117°32.0'W	03/07/84	1938 GMT	22 m	1158 - 1752 PST	1200 PST	1820 PST	713.3 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	6.3	6.3	6.3	0.15					0.19	0.03
16	33	11.2	10.7	11.0	0.23					0.25	0.04
22	21	10.6	12.0	11.3	0.24					0.35	0.06
33	11	17.0	15.9	16.5	0.26					0.71	0.16
58	1.8	5.1	5.1	5.1	0.16					0.67	0.40
90	0.23	0.12	0.33	0.22	0.08					0.10	0.23

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 93 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°40.7'N	117°52.4'W	03/08/84	1927 GMT	29 m	1200 - 1753 PST	1201 PST	1821 PST	473.4 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	4.1	4.1	4.1	0.12					0.14	0.02
22	33	4.3	4.4	4.4	0.2					0.18	0.03
30	21	4.3	4.4	4.4	0.17					0.17	0.06
42	11	9.3	8.7	9.0	0.14					0.52	0.16
77	1.8	2.7	2.9	2.8	0.11					0.42	0.37
118	0.23	0.03	0.01	0.02	0.09					0.02	0.09

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 93 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
31°50.7'N	119°34.3'W	03/09/84	1925 GMT	25 m	1201 - 1740 PST	1211 PST	1829 PST	346.4 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	3.3	3.1	3.2	0.12					0.11	0.01
18	33	3.9	4.0	4.0	0.21					0.12	0.02
26	21	3.3	3.1	3.2	0.2					0.12	0.03
37	11	3.7	3.8	3.7	0.19					0.16	0.04
66	1.8	4.7	4.7	4.7	0.13					0.55	0.32
102	0.23	0.48	0.50	0.49	0.09					0.18	0.26

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 93 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
30°49.2'N	121°35.3'W	02/26/84	1929 GMT	25 m	1224 - 1829 PST	1219 PST	1829 PST	146.4 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.23	0.36	0.30	0.12					0.10	0.04
19	33	1.7	1.8	1.7	0.29					0.10	0.04
26	21	2.3	2.2	2.2	0.14					0.10	0.05
38	11	2.4	2.2	2.3	0.14					0.10	0.05
68	1.8	1.3	1.3	1.3	0.12					0.11	0.05
105	0.23	0.39	0.54	0.47	0.13					0.13	0.07

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 95 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°13.1'N	118°01.3'W	03/10/84	1925 GMT	33 m	1200 - 1756 PST	1200 PST	1825 PST	320.4 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	1.5	1.5	1.5	0.11	3.7	0.29	0.2	0.01	0.12	0.01
25	33	4.0	3.9	4.0	0.14	3.6	0.29	0.1	0.00	0.13	0.03
34	21	3.5	3.9	3.7	0.13	3.6	0.29	0.1	0.00	0.16	0.04
47	11	3.7	4.3	4.0	0.14	3.5	0.29	0.1	0.00	0.22	0.08
87	1.8	2.0	2.1	2.0	0.09	6.3	0.61	3.8	0.11	0.33	0.16
135	0.23	0.03	0.00	0.01	0.09	21.6	1.50	20.2	0.01	0.02	0.04

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 95.3 28.4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°33.2'N	117°11.8'W	03/13/84	2016 GMT	11 m	1223 - 1820 PST	1221 PST	1823 PST	788.8 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SI03 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	29.1	28.7	28.9	0.37	3.9	0.41	0.4	0.00	1.02	0.25
14	33	33.1	38.3	35.7	0.36	4.3	0.52	1.0	0.04	1.22	0.32
30	21	7.0	6.5	6.8	0.24	9.7	1.01	6.9	0.33	0.57	1.00

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 95.8 43

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
31°58.7'N	118°07.9'W	03/28/84	1930 GMT	25 m	1157 - 1813 PST	1157 PST	1813 PST	330.3 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SI03 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.2	2.1	2.2	0.13	1.5	0.27	0.1	0.01	0.12	0.03
18	33	3.5	3.6	3.6	0.13	1.1	0.31	0.1	0.00	0.14	0.04
25	21	4.7	4.3	4.5	0.13	1.4	0.31	0.1	0.00	0.15	0.08
36	11	4.8	4.7	4.8	0.11	1.6	0.31	0.1	0.01	0.23	0.11
65	1.8	3.8	4.0	3.9	0.11	3.1	0.55	2.7	0.19	0.47	0.31
101	0.23	0.17	0.15	0.16	0.09	14.6	1.19	14.1	0.20	0.06	0.12

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 96.9 26.9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
32°15.2'N	117°02.7'W	03/27/84	1941 GMT	14 m	1200 - 1812 PST	1158 PST	1812 PST	350.5 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SI03 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	5.3	5.6	5.5	0.30	3.0	0.30	0.1	0.00	0.21	0.07
10	33	7.7	8.6	8.2	0.27	2.7	0.31	0.1	0.00	0.26	0.04
14	21	8.1	8.8	8.5	0.31	2.9	0.30	0.1	0.00	0.28	0.05
20	11	11.4	10.7	11.1	0.34	3.1	0.32	0.0	0.00	0.66	0.15
37	1.8	5.1	4.9	5.0	0.16	8.8	0.83	7.1	0.56	0.50	0.53
57	0.23	0.35	0.23	0.29	0.16	13.1	1.18	12.5	0.53	0.26	0.31

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 97 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
31°36.5'N	118°29.0'W	03/14/84	2002 GMT	21 m	1211 - 1805 PST	1204 PST	1829 PST	217.2 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SI03 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	3.2	3.0	3.1	0.16					0.15	0.02
17	33	5.3	3.6	4.5	0.17					0.18	0.01
21	21	4.0	3.8	3.9	0.18					0.18	0.02
30	11	3.5	3.4	3.5	0.17					0.13	0.10
55	1.8	1.7	2.1	1.9	0.16					0.31	0.01
86	0.23	0.42	0.29	0.36	0.10					0.29	0.23

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 97 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
30°35.6'N	120°29.6'W	02/27/84	1916 GMT	38 m	1217 - 1818 PST	1215 PST	1818 PST	471.9 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	SI03 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.15	0.33	0.24	0.11					0.06	0.03
28	33	1.1	1.1	1.1	0.18					0.07	0.03
41	21	2.2	1.7	2.0	0.15					0.08	0.05
58	11	5.2	4.7	5.0	0.14					0.17	0.12
103	1.8	5.2	5.0	5.1	0.15					0.36	0.30
160	0.23	0.03	0.03	0.03	0.08					0.02	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 98.4 65.1

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°47.1'N	119°19.0'W	03/15/84	1944 GMT	24 m	1201 - 1810 PST	1201 PST	1833 PST	254.8 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHEAO
m	%	ugC/m3	ugC/m3	ugC/m3	ugC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	0.95	1.1	1.0	0.14	2.7	0.32	0.1	0.00	0.09	0.02
18	33	2.7	2.0	2.4	0.16	2.6	0.32	0.0	0.00	0.15	0.03
25	21	3.8	3.6	3.7	0.18	2.6	0.32	0.0	0.00	0.18	0.03
36	11	3.8	3.5	3.7	0.17	2.6	0.32	0.0	0.00	0.21	0.06
64	1.8	3.4	3.6	3.5	0.09	2.4	0.37	0.2	0.04	0.55	0.19
98	0.23	0.16	0.13	0.15	0.14	7.5	0.74	7.0	0.05	0.10	0.13

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 99.1 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°14.3'N	118°05.3'W	03/26/84	1957 GMT	19 m	1213 - 1800 PST	1213 PST	1834 PST	185.9 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHEAO
m	%	ugC/m3	ugC/m3	ugC/m3	ugC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	5.5	4.0	4.8	0.15	2.4	0.26	0.0	0.03	0.12	0.10
14	33	4.1	4.2	4.2	0.17	1.9	0.26	0.0	0.00	0.17	0.05
19	21	4.9	5.0	5.0	0.17	1.9	0.27	0.0	0.00	0.18	0.06
27	11	3.1	2.9	3.0	0.18	1.9	0.27	0.0	0.00	0.18	0.07
50	1.8	1.2	1.2	1.2	0.14	2.0	0.28	0.0	0.00	0.20	0.16
77	0.23	0.31	0.19	0.25	0.10	6.3	0.68	5.6	0.17	0.16	0.24

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 100 39

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°23.4'N	117°23.4'W	03/16/84	1936 GMT	22 m	1158 - 1800 PST	1158 PST	1826 PST	295.4 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHEAO
m	%	ugC/m3	ugC/m3	ugC/m3	ugC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	1.7	1.9	1.8	0.15	2.7	0.32	0.1	0.00	0.12	0.04
16	33	4.8	4.9	4.9	0.20	3.0	0.28	0.0	0.00	0.16	0.03
22	21	4.3	5.1	4.7	0.18	2.7	0.28	0.0	0.00	0.13	0.05
32	11	3.9	3.8	3.9	0.17	2.6	0.28	0.0	0.00	0.14	0.10
58	1.8	4.0	3.9	4.0	0.14	4.5	0.50	1.7	0.18	0.62	0.30
89	0.23	0.30	0.38	0.34	0.10	10.1	0.92	9.8	0.02	0.11	0.17

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 100 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°40.8'N	120°48.0'W	02/28/84	1915 GMT	42 m	1220 - 1829 PST	1220 PST	1828 PST	237.4 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHEAO
m	%	ugC/m3	ugC/m3	ugC/m3	ugC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.66	0.66	0.66	0.14					0.05	0.03
31	33	1.2	1.2	1.2	0.16					0.05	0.05
45	21	1.6	1.7	1.7	0.17					0.07	0.03
63	11	1.7	1.6	1.7	0.16					0.08	0.05
114	1.8	2.1	2.0	2.0	0.11					0.21	0.26
177	0.23	0.01	0.02	0.01	0.07					0.01	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 100.8 42

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°08.8'N	117°29.8'W	03/25/84	1941 GMT	20 m	1158 - 1813 PST	1156 PST	1832 PST	163.8 mg C/m2

DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHEAO
m	%	ugC/m3	ugC/m3	ugC/m3	ugC/m3	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	3.9	3.7	3.8	0.14	2.1	0.28	0.1	0.00	0.16	0.01
14	33	3.5	3.6	3.5	0.16	2.0	0.29	0.1	0.00	0.15	0.03
20	21	3.5	2.5	3.0	0.20	2.0	0.29	0.0	0.00	0.12	0.03
29	11	2.0	2.5	2.2	0.23	2.0	0.29	0.0	0.00	0.16	0.03
52	1.8	1.6	1.5	1.6	0.17	1.7	0.30	0.0	0.00	0.18	0.07
81	0.23	0.26	0.14	0.20	0.15	5.3	0.68	5.1	0.15	0.25	0.20

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 102.5 41

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
30°52.9'N	117°13.8'W	03/24/84	1931 GMT	22 m	1159 - 1808 PST	1154 PST	1829 PST	204.9 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	3.0	3.6	3.3	0.13	1.7	0.49	0.1	0.00	0.12	0.02
17	33	2.0	2.5	2.2	0.21	2.1	0.33	0.1	0.00	0.13	0.02
23	21	3.6	2.7	3.2	0.24	1.9	0.31	0.1	0.00	0.13	0.04
33	11	2.8	2.7	2.7	0.31	2.1	0.31	0.1	0.00	0.16	0.05
59	1.8	2.6	2.5	2.5	0.15	2.2	0.32	0.1	0.00	0.28	0.10
90	0.23	0.42	0.29	0.36	0.12	5.0	0.49	4.7	0.09	0.23	0.19

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 103 36

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
30°54.8'N	116°48.7'W	03/17/84	1946 GMT	16 m	1203 - 1815 PST	1155 PST	1825 PST	834.1 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	9.8	3.3	6.6	0.17					0.57	0.16
13	33	19.1	19.2	19.2	0.23					0.89	0.33
17	21	26.2	30.7	28.5	0.25					1.12	0.23
24	11	24.2	24.6	24.4	0.28					0.87	0.36
43	1.8	7.6	6.9	7.3	0.18					0.25	0.21
66	0.23	0.65	0.58	0.61	0.10						

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 103 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
29°27.1'N	119°45.9'W	02/29/84	1922 GMT	29 m	1214 - 1819 PST	1211 PST	1818 PST	224.3 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.64	0.59	0.61	0.15					0.08	0.04
22	33	2.3	2.2	2.2	0.15					0.08	0.04
30	21	2.4	2.4	2.4	0.15					0.08	0.04
44	11	2.4	2.1	2.2	0.14					0.09	0.03
79	1.8	2.3	2.3	2.3	0.13					0.15	0.09
121	0.23	0.84	0.66	0.75	0.08					0.12	0.17

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 104.2 59.9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
29°58.2'N	118°18.2'W	03/18/84	1948 GMT	27 m	1204 - 1805 PST	1201 PST	1825 PST	164.1 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.79	0.95	0.87	0.07	2.1	0.35	0.0	0.00	0.08	0.01
20	33	1.7	2.2	2.0	0.15	2.1	0.30	0.0	0.00	0.10	0.01
27	21	2.2	2.1	2.2	0.16	2.1	0.29	0.1	0.00	0.10	0.02
39	11	1.9	-	1.9	0.16	2.0	0.28	0.1	0.00	0.11	0.02
71	1.8	1.6	1.5	1.6	0.14	2.1	0.32	0.0	0.01	0.22	0.07
109	0.23	0.44	0.57	0.51	0.10	2.9	0.36	0.7	0.10	0.31	0.24

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 105 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAM	CIVIL TWILIGHT	INTEGRATED VALUE			
30°35.4'N	116°41.1'W	03/23/84	1922 GMT	14 m	1152 - 1802 PST	1152 PST	1827 PST	823.9 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mgC/m ³	mgC/m ³	mgC/m ³	mgC/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
1	100	12.8	15.9	14.4	0.20	2.7	0.35	0.1	0.01	0.34	0.02
11	33	14.4	11.4	12.9	0.30	2.7	0.33	0.1	0.01	0.33	0.05
15	21	15.0	13.1	14.1	0.34	2.6	0.32	0.1	0.01	0.44	0.11
21	11	14.2	15.0	14.6	0.40	2.9	0.33	0.1	0.00	0.68	0.16
38	1.8	23.3	20.2	21.7	0.28	4.7	0.49	1.3	0.14	1.88	0.34
58	0.23	0.79	0.67	0.73	0.22	7.9	0.84	7.3	0.21	0.52	0.33

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 107 34

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
30°23.5'N	116°17.8'W	03/22/84	1924 GMT	16 m	1150 - 1804 PST	1153 PST	1825 PST	434.7 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	S103 um/l	P04 um/l	N03 um/l	N02 um/l	CHL ug/l	PRAEO ug/l
0	100	5.9	5.5	5.7	0.25	3.1	0.34	0.1	0.00	0.32	0.13
12	33	15.0	12.1	13.6	0.30	2.8	0.34	0.1	0.00	0.49	0.14
16	21	12.2	13.3	12.8	0.31	2.6	0.33	0.1	0.00	0.46	0.20
23	11	7.6	6.9	7.3	0.26	2.6	0.33	0.1	0.00	0.45	0.13
42	1.8	5.9	-	5.9	0.14	2.4	0.39	0.1	0.00	0.58	0.22
65	0.23	0.24	0.20	0.22	0.12	5.2	0.64	4.6	0.03	0.28	0.14

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 107 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
29°31.5'N	118°01.3'W	03/21/84	1943 GMT	26 m	1201 - 1805 PST	1201 PST	1825 PST	158.1 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	S103 um/l	P04 um/l	N03 um/l	N02 um/l	CHL ug/l	PRAEO ug/l
1	100	2.1	2.2	2.2	0.13					0.07	0.02
20	33	2.2	2.1	2.2	0.08					0.09	0.02
27	21	2.3	2.3	2.3	0.21					0.11	0.01
38	11	2.3	2.4	2.4	0.23					0.16	0.01
69	1.8	0.91	0.95	0.93	0.25					0.15	0.11
106	0.23	0.22	0.18	0.20	0.11					0.23	0.12

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 107 75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
29°03.0'N	119°00.9'W	03/01/84	1933 GMT	24 m	1212 - 1823 PST	1208 PST	1822 PST	209.3 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	S103 um/l	P04 um/l	N03 um/l	N02 um/l	CHL ug/l	PRAEO ug/l
0	100	1.2	1.1	1.2	0.15	2.5	0.30	0.2	0.00	0.08	0.04
18	33	3.1	3.0	3.0	0.16	2.5	0.31	0.2	0.00	0.09	0.04
25	21	3.3	3.2	3.2	0.15	2.5	0.31	0.2	0.00	0.09	0.04
37	11	2.7	2.4	2.6	0.19	2.5	0.31	0.2	0.00	0.12	0.04
66	1.8	1.8	2.1	1.9	0.14	2.6	0.35	0.2	0.00	0.18	0.11
101	0.23	0.96	0.93	0.94	0.10	4.4	0.55	2.4	0.06	0.20	0.18

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 108.3 41

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
29°53.2'N	116°35.4'W	03/19/84	1966 GMT	39 m	1206 - 1803 PST	1155 PST	1819 PST	242.4 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	S103 um/l	P04 um/l	N03 um/l	N02 um/l	CHL ug/l	PRAEO ug/l
1	100	0.47	0.68	0.57	0.09	2.0	0.29	0.0	0.00	0.08	0.02
29	33	1.8	1.8	1.8	0.21	2.1	0.29	0.0	0.00	0.12	0.01
41	21	2.1	2.5	2.3	0.21	2.0	0.27	0.0	0.00	0.13	0.02
57	11	2.7	2.3	2.5	0.22	2.2	0.30	0.0	0.00	0.19	0.02
103	1.8	1.6	1.7	1.7	0.09	4.1	0.48	2.3	0.08	0.25	0.20
159	0.23	0.05	0.04	0.05	0.07	18.0	1.36	17.5	0.01	0.02	0.04

RV DAVID STARR JORDAN

CALCOFI CRUISE 8402-3

STATION 110 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
29°47.1'N	115°59.7'W	03/19/84	1926 GMT	5 m	1152 - 1800 PST	1149 PST	1817 PST	932.1 mg C/m ²			
DEPTH m	LIGHT %	UPTAKE 1 mgC/m ³	UPTAKE 2 mgC/m ³	MEAN mgC/m ³	DARK mgC/m ³	S103 um/l	P04 um/l	N03 um/l	N02 um/l	CHL ug/l	PRAEO ug/l
1	100	66.6	63.5	65.1	0.43					1.65	0.44
5	33	86.7	82.8	84.8	0.54					1.78	0.60
6	21	85.2	80.5	82.9	0.66					2.19	0.53
8	11	62.1	-	62.1	0.50					1.92	0.58
14	1.8	23.0	22.6	22.8	0.43					1.48	0.83
21	0.23	1.2	1.0	1.1	0.24					0.90	0.56

RV NEW HORIZON

CALCOFI CRUISE 8402-3

STATION 110 98

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAB	CIVIL TWILIGHT	INTEGRATED VALUE			
27°43.5'N	120°08.1'W	03/02/84	1932 GMT	36 m	1217 - 1822 PST	1212 PST	1822 PST	154.9 mg C/m ²			
DEPTH	LIGHT	UPTAKE 1	UPTAKE 2	MEAN	DARK	SI03	PO4	NO3	NO2	CHL	PHAEO
m	%	mg C/m ³	mg C/m ³	mg C/m ³	mg C/m ³	um/l	um/l	um/l	um/l	ug/l	ug/l
0	100	0.37	0.38	0.38	0.14	2.5	0.30	0.2	0.00	0.05	0.03
27	33	1.3	1.4	1.3	0.19	2.4	0.30	0.2	0.00	0.05	0.03
39	21	1.9	1.8	1.8	0.15	2.4	0.30	0.2	0.00	0.06	0.04
54	11	1.7	1.4	1.6	0.16	2.5	0.29	0.2	0.00	0.06	0.03
97	1.8	0.94	0.87	0.90	0.12	2.5	0.29	0.2	0.00	0.07	0.04
152	0.23	0.34	0.36	0.35	0.08	7.2	0.78	6.7	0.02	0.09	0.09

MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

CalCOFI Cruise 8402-3

Ship	Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
					Start	End			Total (cm ³)	Small (cm ³)
JD	60	50	37 56.8N 122 52.9W	2/9	2055	2100	91	43	221	221
"	60	52.5	37 51.8N 123 03.8W	2/9	2310	2319	168	86	131	131
"	60	55	37 46.8N 123 14.7W	2/10	0245	0257	228	122	110	110
"	60	60	37 36.8N 123 36.5W	2/10	0725	0747	441	213	132	120
NH	60	65	37 26.0N 123 59.9W	2/9	1835	1857	482	201	98	98
"	60	70	37 16.5N 124 20.5W	2/9	2320	2342	456	195	55	55
"	60	80	36 55.6N 125 05.1W	2/10	0544	0606	473	202	57	47
"	60	90	36 37.0N 125 48.9W	2/10	1130	1152	470	202	170	138
"	60	100	36 16.3N 126 29.1W	2/10	1730	1752	470	208	32	32
JD	63	50	37 22.6N 122 28.4W	2/10	1921	1925	61	29	164	164
"	63	52	37 18.6N 122 37.1W	2/10	2140	2149	169	86	319	319
"	63	55	37 12.6N 122 50.1W	2/11	0025	0048	425	215	176	176
"	63	60	37 02.6N 123 11.7W	2/11	0555	0617	426	206	150	132
NH	63	65	36 52.5N 123 33.3W	2/11	2135	2157	436	208	112	112
"	63	70	36 44.4N 123 54.3W	2/11	1735	1757	461	193	119	119
"	63	80	36 22.6N 124 37.5W	2/11	1140	1202	430	202	84	84
"	63	90	36 02.6N 125 20.5W	2/11	0540	0602	465	201	75	75
"	63	100	35 43.5N 126 04.4W	2/10	2340	0002	446	215	146	56
JD	67	49	36 49.2N 121 59.1W	2/11	2055	2117	401	205	115	115
"	67	50	36 46.9N 122 03.8W	2/11	2255	2317	387	210	253	253
"	67	55	36 37.2N 122 24.9W	2/12	1150	1212	411	214	477	477
"	67	60	36 27.1N 122 46.4W	2/12	1700	1722	406	213	268	268
NH	67	65	36 16.5N 123 08.4W	2/12	0325	0347	474	171	146	146
"	67	70	36 06.1N 123 28.9W	2/12	0710	0732	415	196	169	169
"	67	80	35 46.4N 124 11.8W	2/12	1300	1322	449	198	22	22
"	67	90	35 25.9N 124 55.8W	2/12	1845	1907	441	204	184	57
"	67	100	35 06.1N 125 36.2W	2/13	0035	0057	439	193	157	112
JD	70	51	36 10.9N 121 43.6W	2/13	0937	0959	397	213	91	91
"	70	53	36 06.9N 121 52.1W	2/13	1256	1317	385	212	540	241
"	70	60	35 52.9N 122 21.8W	2/13	1920	1942	402	213	134	134
NH	70	65	35 42.8N 122 44.0W	2/14	0350	0412	490	186	51	51
"	70	70	35 32.1N 123 05.0W	2/13	2345	0007	467	190	167	167
"	70	80	35 11.7N 123 47.6W	2/13	1730	1752	460	206	17	17
"	70	90	34 52.9N 124 31.7W	2/13	1145	1207	430	196	398	386
"	70	100	34 33.9N 125 10.5W	2/13	0627	0649	432	193	431	431
JD	73	50	35 38.6N 121 15.2W	2/14	0938	0942	78	28	358	358
"	73	53	35 32.6N 121 28.1W	2/14	1315	1337	437	211	121	121
"	73	60	35 18.5N 121 57.8W	2/14	2000	2022	421	215	57	57
NH	73	65	35 09.0N 122 19.8W	2/14	0930	0952	428	212	49	49
"	73	70	34 59.0N 122 40.3W	2/14	1335	1357	504	189	50	50
"	73	80	34 39.2N 123 23.2W	2/14	1945	2007	446	209	56	56
"	73	90	34 19.2N 124 02.6W	2/15	0105	0127	430	212	163	163
"	73	100	33 56.2N 124 45.4W	2/15	0659	0721	487	185	35	35
JD	77	48	35 07.3N 120 42.4W	2/15	1125	1128	60	21	302	302
"	77	51	35 01.3N 120 55.2W	2/15	1453	1515	403	215	144	144
"	77	55	34 53.3N 121 11.9W	2/15	1907	1929	406	216	111	111
"	77	60	34 43.3N 121 32.9W	2/16	0010	0032	407	216	260	260
NH	77	65	34 32.7N 121 55.6W	2/16	1105	1127	418	202	600	589
"	77	70	34 22.4N 122 16.1W	2/16	0710	0732	469	189	392	277
"	77	80	34 03.4N 122 57.4W	2/16	0122	0144	466	184	150	150
"	77	90	33 43.9N 123 39.0W	2/15	1940	2002	437	208	192	192
"	77	100	33 20.8N 124 21.9W	2/15	1325	1347	470	187	64	64

MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

CalCOFI Cruise 8402-3

Ship	Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
					Start	End			Total (cm ³)	Small (cm ³)
JD	80	51	34 27.0N 120 31.3W	2/16	1440	1447	127	55	435	435
"	80	55	34 19.0N 120 48.0W	2/16	1853	1915	415	215	48	48
"	80	60	34 09.0N 121 09.0W	2/21	0615	0637	412	212	177	177
"	"	"	"	2/21	0645	0707	405	205	249	160
"	"	"	"	2/21	0715	0736	394	201	150	150
"	"	"	"	2/21	1405	1426	389	208	131	131
"	"	"	"	2/21	1430	1451	396	205	149	149
"	"	"	"	2/21	1500	1521	389	180	116	116
"	"	"	"	2/21	2010	2034	442	197	70	70
"	"	"	"	2/21	2043	2105	432	230	83	83
"	"	"	"	2/21	2115	2137	426	188	68	68
"	"	"	"	2/21	2145	2207	418	197	55	55
"	"	"	"	2/22	0155	0216	307	205	147	147
NH	80	65	33 59.4N 121 30.3W	2/16	1640	1702	441	196	57	57
"	80	70	33 48.8N 121 54.7W	2/16	2005	2027	428	205	98	98
"	"	"	33 49.1N 121 55.4W	2/16	2030	2052	452	163	73	73
"	"	"	33 49.5N 121 55.9W	2/16	2055	2117	452	155	93	93
"	"	"	33 48.6N 121 49.2W	2/17	0205	0226	500	141	144	144
"	"	"	33 48.7N 121 49.8W	2/17	0235	0256	487	136	129	129
"	"	"	33 48.9N 121 50.3W	2/17	0300	0321	504	122	121	121
"	"	"	33 49.0N 121 52.1W	2/17	0715	0737	514	132	109	109
"	"	"	33 48.7N 121 50.5W	2/17	1415	1437	516	117	78	78
"	"	"	33 49.3N 121 51.4W	2/17	1450	1512	528	117	110	87
"	"	"	33 49.9N 121 52.2W	2/17	1520	1542	516	112	89	89
"	80	80	33 30.0N 122 33.5W	2/18	0040	0102	476	175	204	204
"	80	90	33 10.0N 123 14.9W	2/18	0638	0700	440	197	150	150
"	80	100	32 49.6N 123 55.6W	2/18	1245	1307	454	179	101	101
JD	82	46	34 16.1N 119 56.2W	2/19	2125	2147	391	218	64	64
"	83	40.6	34 13.5N 119 24.7W	2/20	0715	0718	52	22	95	95
"	83	42	34 10.7N 119 30.5W	2/20	0910	0922	218	113	60	60
"	83	51	33 52.6N 120 08.0W	2/20	1446	1451	84	42	96	96
"	83	55	33 44.6N 120 24.5W	2/20	1825	1847	400	215	53	53
"	83	60	33 34.7N 120 45.3W	2/20	2330	2352	401	214	548	548
"	83	65	33 24.7N 121 05.9W	2/24	1230	1251	396	216	131	131
"	83	70	33 14.7N 121 26.5W	2/24	0805	0828	424	215	215	215
NH	83	80	32 55.2N 122 08.0W	2/20	0230	0253	395	216	58	58
"	83	90	32 37.1N 122 48.3W	2/19	2055	2117	422	201	24	24
"	83	100	32 20.9N 123 25.7W	2/18	2002	2024	438	194	59	37
"	"	"	32 21.5N 123 25.7W	2/18	2027	2043	444	181	50	50
"	"	"	32 22.2N 123 25.6W	2/18	2052	2114	415	168	39	39
"	"	"	32 15.2N 123 29.5W	2/19	0205	0226	418	141	43	43
"	"	"	32 15.7N 123 29.6W	2/19	0233	0254	395	141	41	41
"	"	"	32 16.2N 123 29.6W	2/19	0300	0321	409	145	39	39
"	"	"	32 14.8N 123 28.6W	2/19	0705	0727	424	193	45	45
"	"	"	32 15.5N 123 29.0W	2/19	0731	0754	427	208	61	61
"	"	"	32 16.2N 123 29.0W	2/19	0800	0821	391	176	51	51
"	"	"	32 15.3N 123 28.7W	2/19	1405	1426	443	136	77	77
"	"	"	32 16.2N 123 28.7W	2/19	1435	1457	439	150	50	50
"	"	"	32 16.8N 123 28.7W	2/19	1505	1526	425	150	52	52
JD	87	33	33 53.4N 118 29.4W	2/27	0845	0850	83	43	204	204
"	87	35	33 49.4N 118 37.7W	2/27	1155	1216	377	212	64	64
"	87	40	33 39.4N 118 58.5W	3/1	0120	0142	400	212	63	63

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

CalCOFI Cruise 8402-3

Ship	Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
					Start	End			Total (cm ³)	Small (cm ³)
"	87	45	33 29.4N 119 19.1W	2/29	1920	1942	398	210	25	25
"	87	50	33 19.4N 119 39.8W	2/29	1335	1342	130	56	146	146
"	87	55	33 09.4N 120 00.3W	2/29	0835	0857	382	217	154	154
"	87	60	32 59.4N 120 21.0W	2/29	0120	0142	386	213	507	295
"	87	65	32 49.3N 120 41.5W	2/25	0540	0602	444	216	140	140
"	87	70	32 39.4N 121 02.0W	2/24	2330	2352	416	215	17	17
NH	87	80	32 19.8N 121 43.0W	2/20	0752	0813	392	215	406	339
"	87	90	32 00.4N 122 24.5W	2/20	1325	1347	468	194	32	32
"	87	100	31 40.5N 123 02.4W	2/20	1850	1913	439	208	18	18
JD	90	28	33 29.0N 117 46.2W	3/3	0340	0346	118	56	161	161
"	90	30	33 25.0N 117 54.3W	3/3	0710	0732	409	207	103	103
"	90	37	33 11.2N 118 23.4W	3/3	1304	1326	390	212	31	31
"	90	45	32 55.1N 118 56.1W	3/3	2022	2044	390	210	36	36
"	"	"	"	3/3	2053	2114	398	201	45	45
"	"	"	"	3/3	2125	2146	376	236	37	37
"	"	"	"	3/4	0205	0226	378	208	45	45
"	"	"	"	3/4	0240	0301	380	189	42	42
"	"	"	"	3/4	0310	0332	386	201	54	54
"	"	"	"	3/4	0725	0747	396	201	51	51
"	"	"	"	3/4	0750	0811	387	190	57	57
"	"	"	"	3/4	0825	0846	377	201	58	58
"	"	"	"	3/4	1404	1426	401	191	32	32
"	"	"	"	3/4	1432	1453	382	193	68	68
"	"	"	"	3/4	1500	1521	379	198	45	45
"	90	53	32 39.1N 119 28.9W	3/4	2053	2115	396	214	63	63
"	90	60	32 25.1N 119 57.6W	3/5	0230	0252	389	210	275	185
NH	90	70	32 05.8N 120 38.8W	2/21	2005	2027	434	215	124	124
"	"	"	32 06.2N 120 39.9W	2/21	2030	2052	411	226	146	146
"	"	"	32 06.5N 120 39.9W	2/21	2055	2117	436	208	138	138
"	"	"	32 04.4N 120 39.9W	2/22	0210	0232	555	112	342	309
"	"	"	32 04.4N 120 40.0W	2/22	0235	0258	487	163	345	279
"	"	"	32 04.3N 120 41.4W	2/22	0303	0329	600	150	330	260
"	"	"	32 03.6N 120 38.1W	2/22	0705	0727	501	172	138	138
"	"	"	32 03.6N 120 39.1W	2/22	0732	0755	462	185	229	152
"	"	"	32 03.7N 120 39.4W	2/22	0800	0822	421	205	112	112
"	"	"	32 04.5N 120 40.2W	2/22	1405	1429	491	172	65	65
"	"	"	32 04.7N 120 41.2W	2/22	1440	1503	509	185	47	47
"	"	"	32 04.7N 120 41.9W	2/22	1515	1539	531	150	72	72
"	90	80	31 44.9N 121 19.5W	2/21	1220	1243	415	207	80	80
"	90	90	31 25.1N 121 59.4W	2/21	0656	0719	428	205	30	30
"	90	100	31 06.3N 122 39.8W	2/21	0050	0112	427	212	19	19
JD	93	26.7	32 57.4N 117 18.2W	3/7	1800	1805	99	48	222	222
"	93	28	32 54.8N 117 23.7W	3/8	1020	1042	359	212	70	70
"	93	29	32 52.8N 117 27.8W	3/8	1208	1231	380	206	66	66
"	93	30	32 50.8N 117 32.0W	3/7	2011	2033	376	211	112	112
"	"	"	"	3/7	2042	2103	366	198	115	115
"	"	"	"	3/7	2115	2136	387	185	75	75
"	"	"	"	3/8	0150	0212	390	198	103	103
"	"	"	"	3/8	0220	0241	380	193	105	105
"	"	"	"	3/8	0250	0311	383	189	91	91
"	"	"	"	3/8	0710	0731	371	195	70	70
"	"	"	"	3/8	0740	0801	372	198	91	91

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

CalCOFI Cruise 8402-3

Ship	Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
					Start	End			Total (cm ³)	Small (cm ³)
"	"	"	"	3/8	0810	0831	373	197	97	97
"	"	"	"	3/8	1430	1451	378	189	66	66
"	"	"	"	3/8	1500	1521	390	191	51	51
"	93	35	32 40.7N 117 52.4W	3/8	2115	2136	362	211	22	22
"	93	40	32 30.8N 118 12.8W	3/9	0140	0202	382	212	26	26
"	93	45	32 20.8N 118 33.3W	3/9	0820	0842	359	211	61	61
"	93	50	32 10.8N 118 33.6W	3/9	1230	1251	372	206	290	290
"	93	55	32 00.8N 119 14.0W	3/9	1617	1639	394	213	117	117
"	93	60	31 50.7N 119 34.3W	3/9	2105	2127	397	211	154	154
"	93	70	31 30.8N 120 14.9W	3/10	0230	0252	409	209	379	379
NH	93	80	31 11.3N 120 56.6W	2/26	1435	1500	279	220	294	294
"	93	90	30 49.5N 121 35.1W	2/26	2035	2057	421	218	21	21
"	93	100	30 30.0N 122 14.9W	2/27	0155	0220	507	194	18	18
JD	97	29	32 17.4N 117 04.8W	3/13	2255	2301	99	49	171	171
"	97	30	32 15.4N 117 08.8W	3/14	0015	0022	120	55	535	535
"	97	32	32 11.4N 117 17.0W	3/14	0223	0245	399	212	40	40
"	97	35	32 05.5N 117 29.2W	3/14	0705	0727	411	208	44	44
"	97	40	31 55.4N 117 49.5W	3/14	1125	1147	388	211	95	95
"	97	45	31 45.4N 118 09.8W	3/14	1555	1617	384	209	21	21
"	97	50	31 36.5N 118 29.0W	3/14	2005	2027	402	210	20	20
"	97	55	31 25.4N 118 50.3W	3/15	0055	0117	422	214	26	26
"	97	60	31 15.5N 119 10.6W	3/15	0700	0722	430	208	58	58
"	97	65	31 05.4N 119 30.6W	3/15	1140	1202	390	213	64	64
"	97	70	30 55.7N 119 50.8W	3/15	1605	1627	417	211	125	125
NH	97	80	30 35.7N 120 29.0W	2/27	2030	2056	484	211	29	29
"	97	90	30 15.4N 121 08.4W	2/27	1430	1456	518	185	27	27
"	97	100	29 56.5N 121 49.5W	2/27	0755	0817	435	209	44	44
JD	100	29.2	31 42.5N 116 43.4W	3/17	0720	0726	120	57	308	308
"	100	30	31 41.2N 116 46.6W	3/17	0525	0547	406	212	91	91
"	100	35	31 31.2N 117 06.9W	3/16	2330	2352	389	212	59	59
"	100	40	31 21.4N 117 27.3W	3/16	1824	1846	385	212	23	23
"	100	45	31 11.2N 117 47.2W	3/16	1348	1410	424	208	31	31
"	100	50	31 01.0N 118 07.3W	3/16	0850	0912	417	211	29	29
"	100	55	31 51.1N 118 27.5W	3/16	0405	0427	416	212	43	43
"	100	60	30 41.2N 118 47.5W	3/15	2340	0002	407	213	49	49
NH	100	65	30 30.7N 119 06.4W	2/28	0428	0452	437	212	151	151
"	100	70	30 20.1N 119 26.1W	2/28	0825	0847	405	208	44	44
"	100	80	30 02.5N 120 07.3W	2/28	1410	1432	466	193	13	13
"	100	90	29 40.6N 120 48.1W	2/28	2018	2041	441	204	16	16
"	100	100	29 21.9N 121 26.2W	2/29	0145	0210	515	192	14	14
JD	103	29	31 08.9N 116 20.5W	3/17	1218	1221	55	21	182	182
"	103	30	31 06.9N 116 24.5W	3/17	1400	1407	126	56	494	494
"	103	35	30 56.8N 116 44.7W	3/17	1832	1854	405	207	25	25
"	103	40	30 46.9N 117 04.7W	3/17	2320	2342	409	215	24	24
"	103	45	30 36.9N 117 24.7W	3/18	0410	0432	395	211	25	25
"	103	50	30 26.9N 117 44.7W	3/18	0850	0912	454	209	22	22
"	103	55	30 16.9N 118 04.7W	3/18	1325	1347	437	206	133	133
"	103	60	30 06.3N 118 24.9W	3/18	1800	1822	419	213	43	43
NH	103	65	29 57.0N 118 45.2W	3/1	0625	0649	395	206	63	63
"	103	70	29 46.6N 119 05.5W	3/1	0213	0239	460	206	30	30
"	103	80	29 27.7N 119 49.0W	2/29	2020	2042	447	213	9	9
"	103	90	29 07.2N 120 23.1W	2/29	1400	1425	474	211	13	13

MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

CalCOFI Cruise 8402-3

Ship	Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
					Start	End			Total (cm ³)	Small (cm ³)
"	103	100	28 47.3N 121 04.5W	2/29	0750	0812	397	220	25	25
JD	107	31	30 29.5N 116 05.8W	3/22	2323	2325	32	13	252	252
"	107	32	30 27.5N 116 09.8W	3/22	2135	2157	436	207	117	117
"	107	35	30 20.5N 116 21.1W	3/22	1810	1832	391	206	41	41
"	107	40	30 11.5N 116 41.6W	3/22	1345	1407	411	211	32	32
"	107	45	30 01.2N 117 01.5W	3/22	0857	0921	483	211	37	37
"	107	50	29 50.8N 117 19.4W	3/22	0510	0532	386	213	57	57
"	107	55	29 41.5N 117 41.4W	3/22	0100	0122	389	216	33	33
"	107	60	29 31.5N 118 01.3W	3/21	2105	2126	392	213	20	20
NH	107	65	29 22.4N 118 21.3W	3/1	1210	1236	473	201	30	30
"	107	70	29 11.5N 118 41.8W	3/1	1628	1653	472	208	13	13
"	107	80	28 51.8N 119 21.1W	3/1	2232	2255	451	212	13	13
"	107	90	28 33.9N 119 59.4W	3/2	0355	0420	493	203	24	24
"	107	100	28 11.3N 120 35.4W	3/2	1055	1117	410	206	20	20
JD	110	32.4	29 52.2N 115 49.2W	3/20	1717	1723	100	49	503	503
"	110	35	29 47.1N 115 59.7W	3/20	2006	2028	405	211	62	62
"	110	40	29 37.2N 116 19.7W	3/21	0035	0057	403	210	37	37
"	110	45	29 27.2N 116 39.5W	3/21	0415	0437	391	212	41	41
"	110	50	29 17.4N 116 59.3W	3/21	0755	0817	408	211	42	42
"	110	55	29 07.2N 117 19.0W	3/21	1130	1152	430	215	47	47
"	110	60	28 57.2N 117 38.7W	3/21	1515	1537	416	210	17	17
NH	110	65	28 47.8N 117 58.2W	3/3	1735	1760	446	214	9	9
"	110	70	28 37.0N 118 19.7W	3/3	1240	1305	504	206	14	14
"	110	80	28 16.5N 118 59.6W	3/3	0600	0625	491	206	33	33
"	110	90	27 56.8N 119 41.3W	3/2	2345	0009	479	193	8	8
"	110	100	27 38.0N 120 14.8W	3/2	1645	1711	463	215	11	11

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