

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6904  
2-26 April 1969

CalCOFI Cruise 6905  
5-29 May 1969

and

CalCOFI Cruise 6906  
9-28 June 1969

SIO Reference 77-22  
1 November 1977

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9-28 June 1969

Sponsored by  
Marine Research Committee

SIO Reference 77-22

Approved for distribution:

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

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## INTRODUCTION

The data in this report was collected during cruises 6904\*, 6905 and 6906 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV David Starr Jordan, of the Bureau of Commercial Fisheries (now National Marine Fisheries Service), and the RV Alexander Agassiz, of the Scripps Institution of Oceanography. The report preceeding this one in the series was SIO Ref. 76-14, which included data for January and February 1969.

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

## STANDARD PROCEDURES

### Hydrographic Cast Data

The hydrographic casts consisted of 12 to 18 bottles. At most stations the maximum sampling depth was 600 meters, bottom depth permitting. Temperature, oxygen, and nutrients were determined for all depths on each station, but samples from only five selected depths were used to determine salinity for comparison with the STD.

On STD lowerings where hydrographic casts were not made, a Nansen bottle was usually placed on the wire a few meters above the STD and another bottle was lowered to a depth of approximately 10 meters. Temperature, salinity, and nutrients were determined for most of the 10 meter samples. On the RV David Starr Jordan water samples at some stations were collected with a Niskin rosette lowered on the STD cable. Thermometers were used on the deepest Niskin sampler to record the temperature.

In general, paired protected reversing thermometers were used to determine temperatures which were recorded to hundredths of a Celsius degree. Temperatures determined using unprotected (pressure) thermometers or surface "bucket" thermometers were recorded to tenths of a degree. Sample bottles used below 100 meters were equipped with unprotected thermometers.

The salinities for the three cruises included in this report were all determined using Bissett Berman (now Plessey Environmental Systems) Model 6220 inductive salinometers. Difficulty was experienced at times with each salinometer resulting in some values being omitted from the tabulations.

The salinity values were recorded and are reported to three decimal places, provided accepted standards were met. If only one determination per sample was obtained, or there was doubt concerning the accuracy of the analytical results, the salinities are reported to two decimal places. All STD salinities are tabulated to hundredths.

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

Phosphate, silicate, nitrite and nitrate were determined using a first generation Technicon AutoAnalyzer<sup>R</sup> and methods developed at the Bureau of Commercial Fisheries based on the methodologies of Strickland (1968).

The observed data could not be evaluated using standard DCPG techniques (Klein, 1973) due to the sparsity of salinity data. Oxygen and nutrient values were plotted against depth.

#### In Situ Salinity/Temperature/Depth Recorder (STD) data

The Bissett Berman Model 9006 STD was used on both ships for lowerings on all three cruises. Both ships also used the digital data logger (DDL) Model 8114 for data recording.

The STD and data logger appeared to work well on all cruises included in this report. Comparison of sample bottle observations with the STD data from corresponding depths resulted in the following corrections to the tabulated STD data:

	Temperature °C	Salinity ‰
	0-500m	0-500m
Cruise 6904		
RV <u>Alexander Agassiz</u>	-0.02	0.01
RV <u>David Starr Jordan</u>	-0.013	-0.041
Cruise 6905		
RV <u>David Starr Jordan</u>	-0.01	-0.02
Cruise 6906		
RV <u>David Starr Jordan</u>	none	-0.028

#### TABULATED DATA

The time reported is Greenwich Mean Time. For STD lowerings it is the "start down" time and for bottle casts it is the time of messenger release. When more than one cast was lowered on a station, the messenger times for

Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables and are reported in meters. The weather and dominant waves are coded using the National Oceanographic Data Center (NODC) method.

Data for all cruises presented in this report was obtained by bottle casts and by the STD, and appear in two forms:

1. Data from the sample bottle casts is tabulated with the observed levels of depth on the left of a page, and standard depth values of temperature and oxygen interpolated from these observations on the right.
2. For each STD lowering, temperature and salinity values are read only at standard levels of depth and appear with computed values of DT and DD on the right of the page. Corrections have been applied to the temperature and salinity values as discussed previously in this report. Nutrient data from samples collected with a Niskin rosette is tabulated at observed levels of depth to the left of the STD data.

The same parameters have been tabulated in this report as in previous reports. The decimal has been omitted from the CalCOFI station number so station 90.65 appears in the tabulated data as 90065. The column headings are to be interpreted as follows:

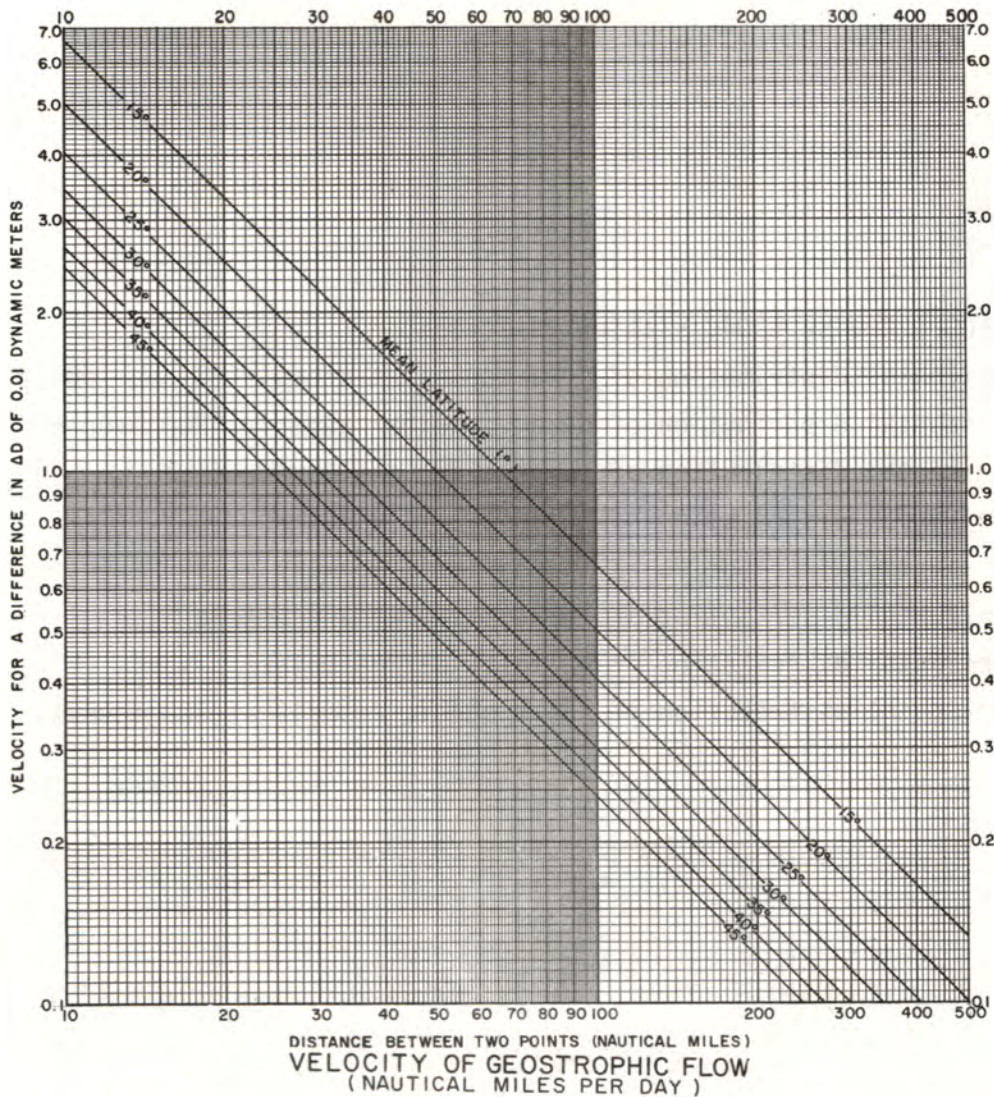
Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved oxygen	ml/L
P04	"Reactive" inorganic phosphate-phosphorous	µg at/L
Si03	"Reactive" inorganic silicate-silicon	µg at/L
N02	"Reactive" nitrite-nitrogen	µg at/L
N03	"Reactive" nitrate-nitrogen	µg at/L
DT	$\delta T$ Thermosteric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0}^{-1})^{10^3}$ where $\rho_{s,t,0}$ is the density the parcel would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dyn. meters

#### FOOTNOTES

Data which appears to be in error without obvious reason is reported, but flagged uncertain with a U. Such data was not used in the determination of values at standard depths. Footnotes are used to indicate data which has required special processing.

## REFERENCES

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- Matthews, D.J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, H.D. 282: 52pp.
- Strickland, J.D.H., and T.R. Parsons, 1968. A practical handbook of seawater analysis. Fish. Res. Board of Canada, Bull. No. 167: 311pp.
- University of Washington, 1960. Univ. of Wash. Dept. of Oceanography, Oct. 1960. Tech. Rep. UW Ref. No. 60-18.



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

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

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



FIGURES

Cruise 6905

1. CalCOFI Cruise 6905, station positions
2. Horizontal Distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

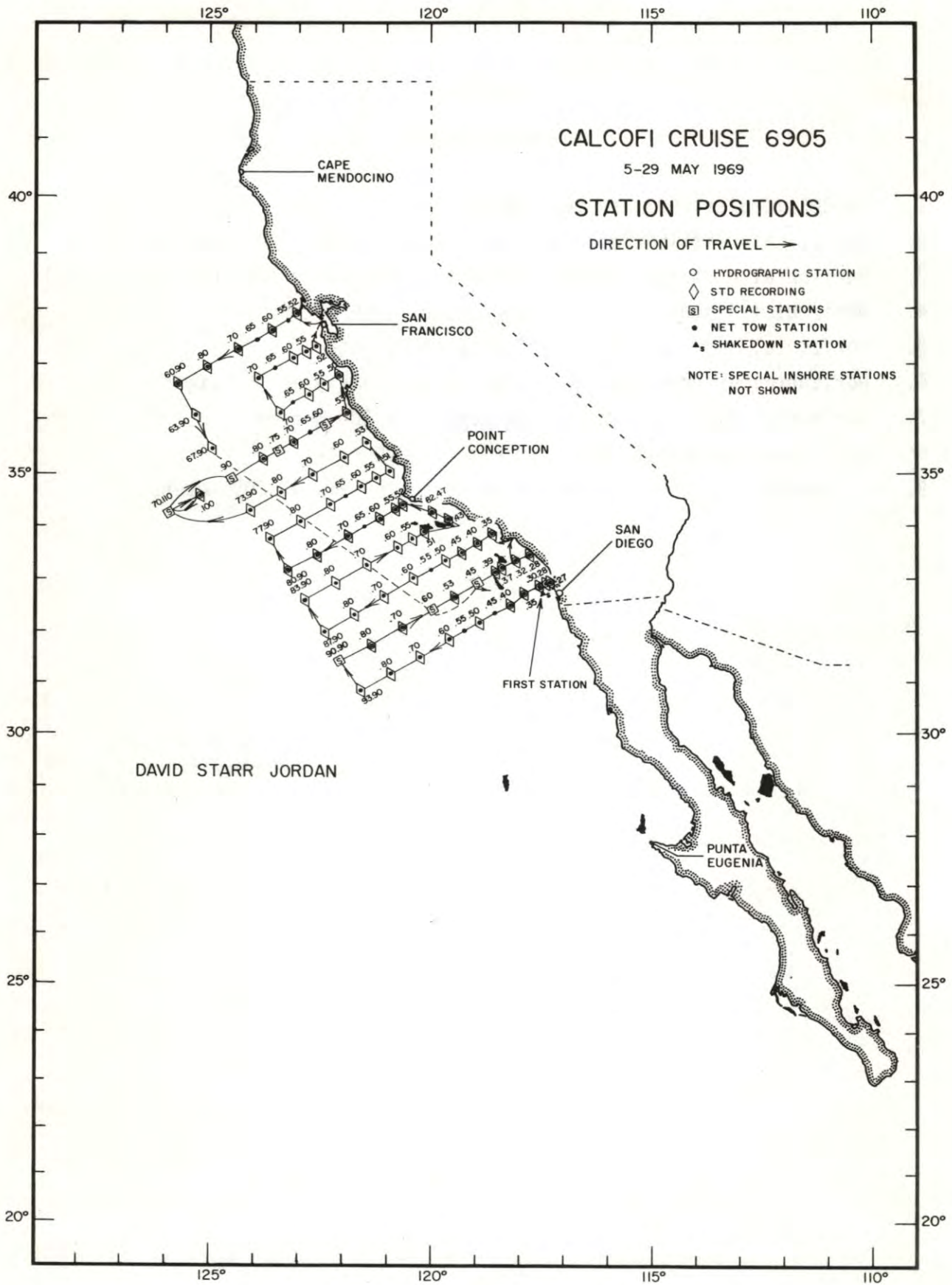


FIGURE 1

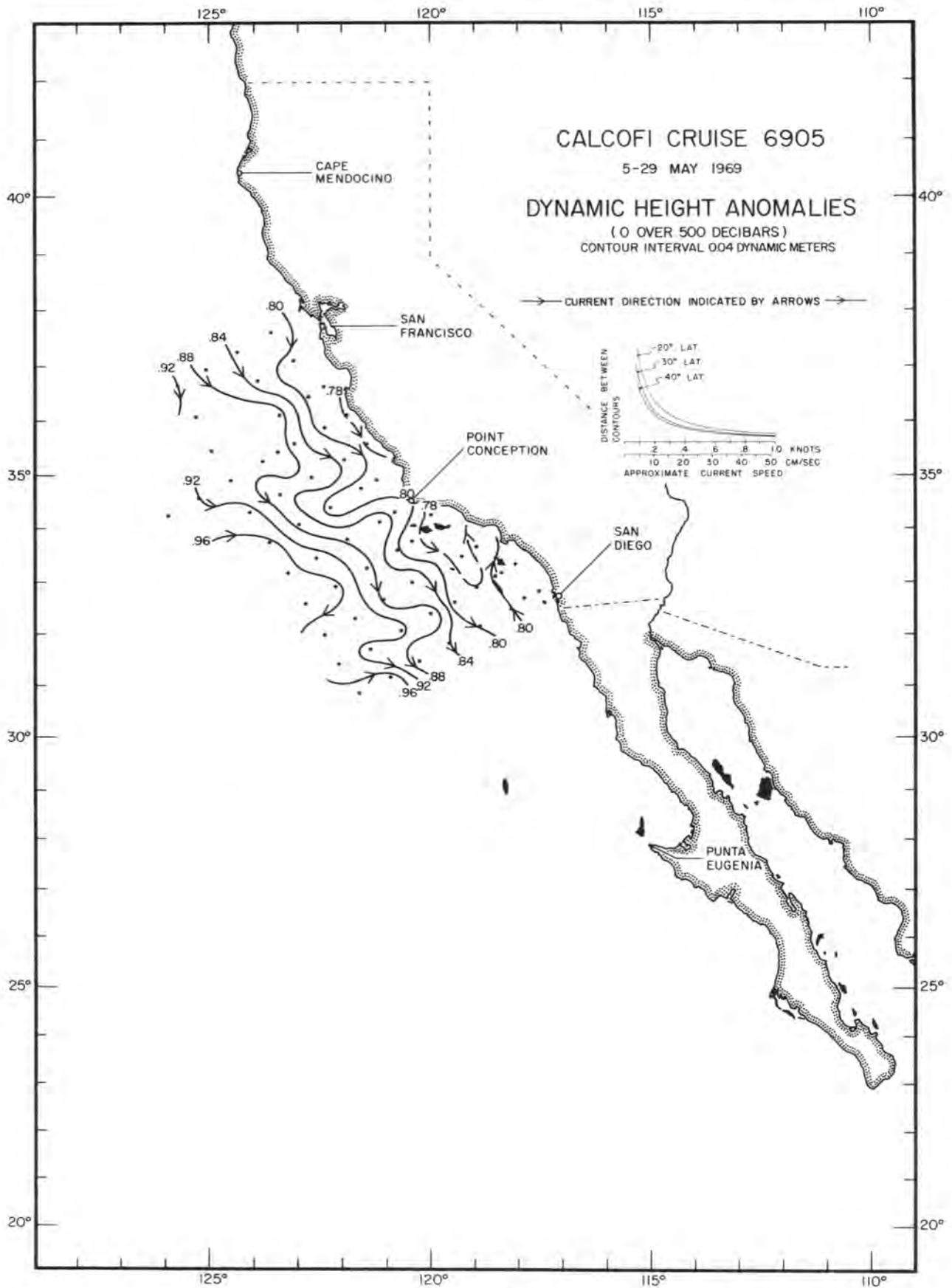


FIGURE 2

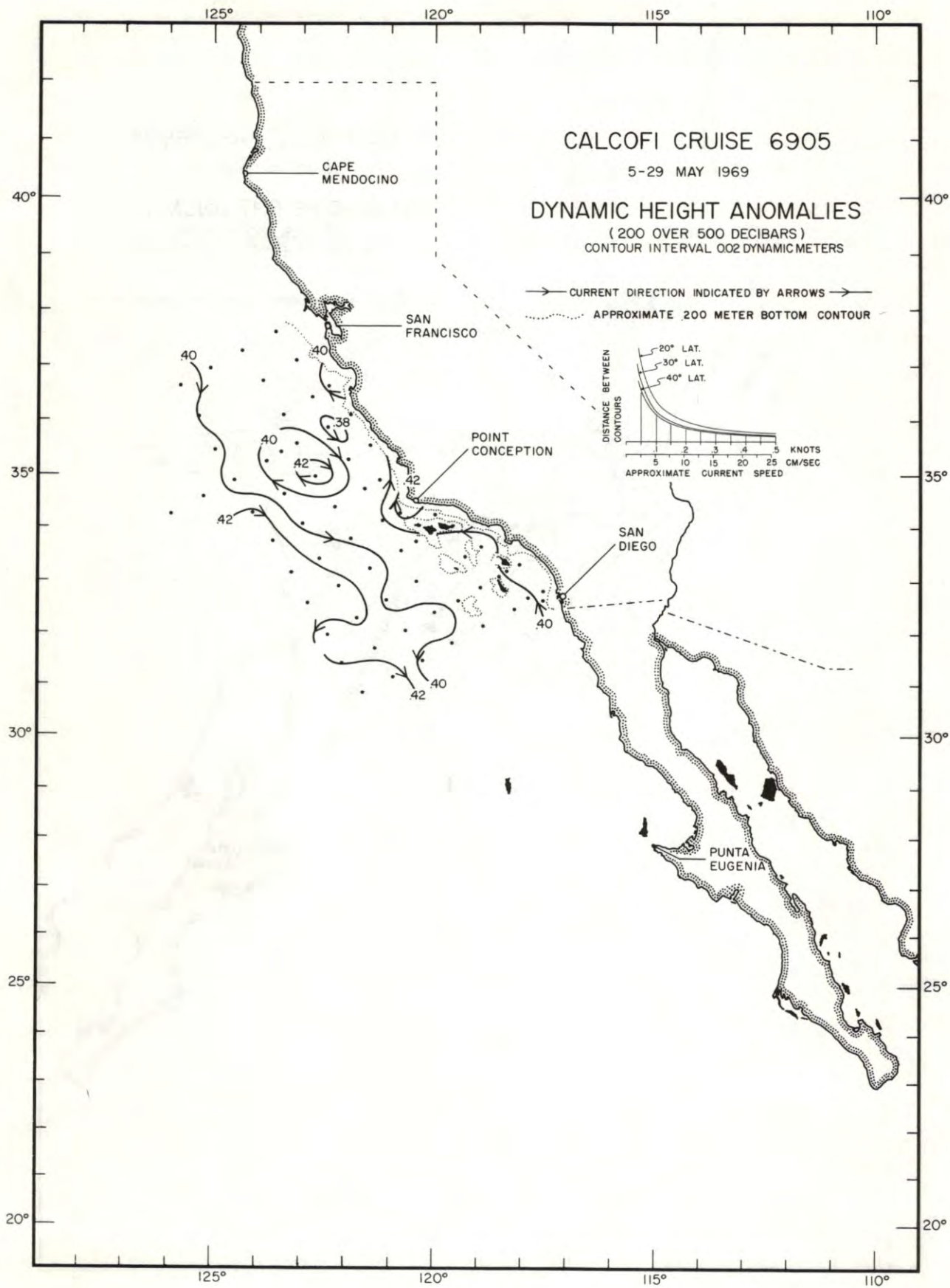


FIGURE 3

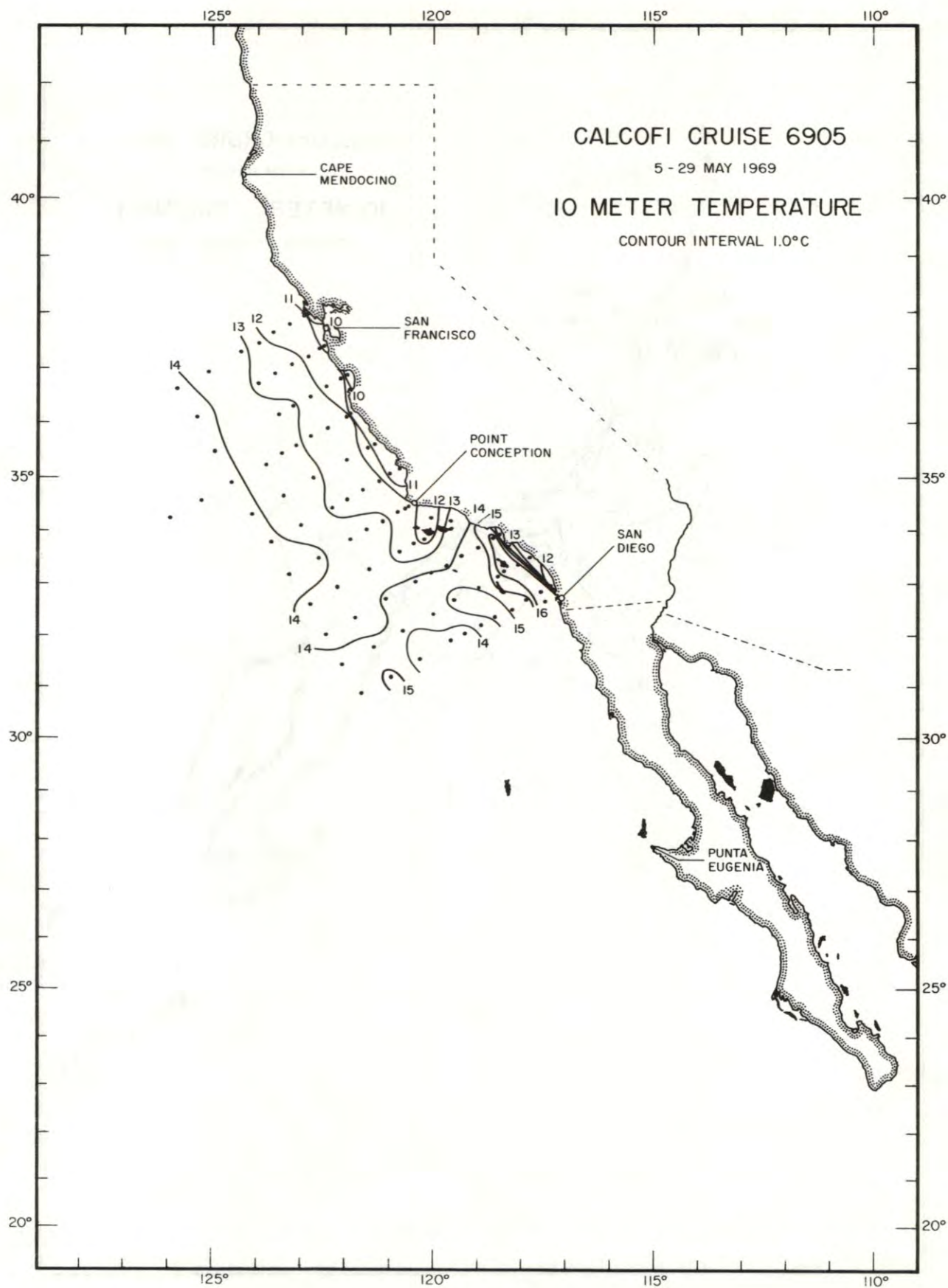


FIGURE 4

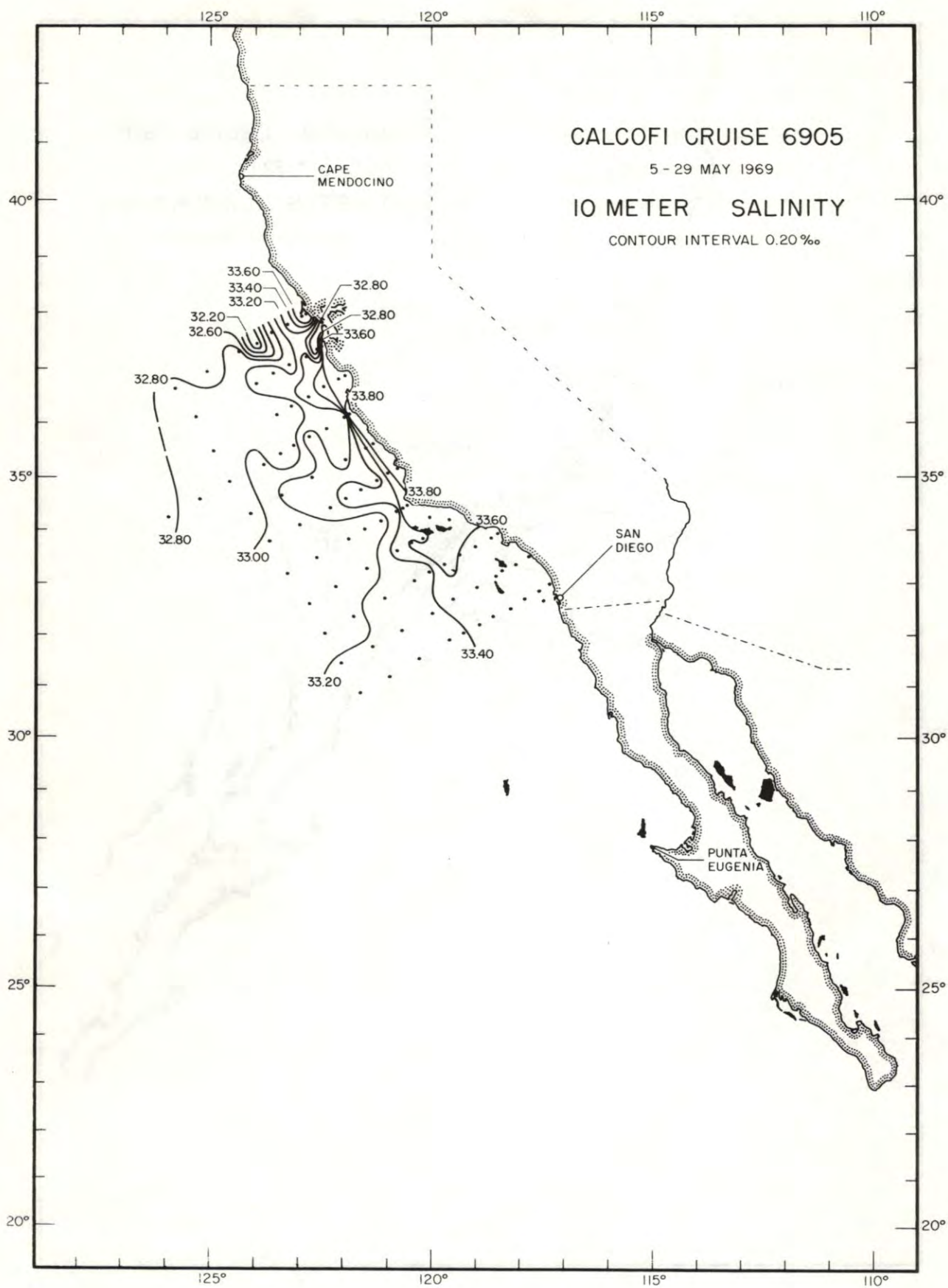


FIGURE 5

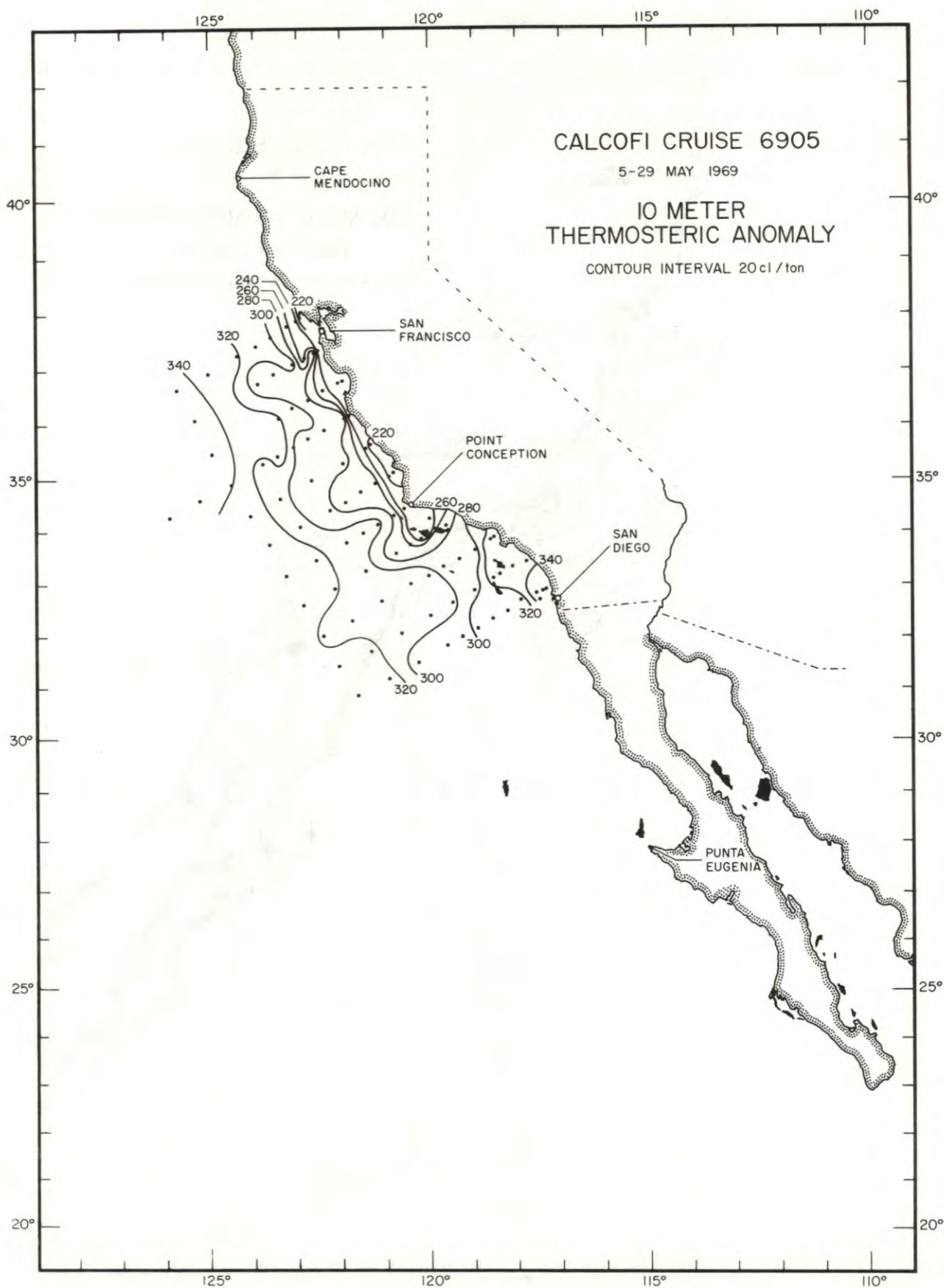


FIGURE 6

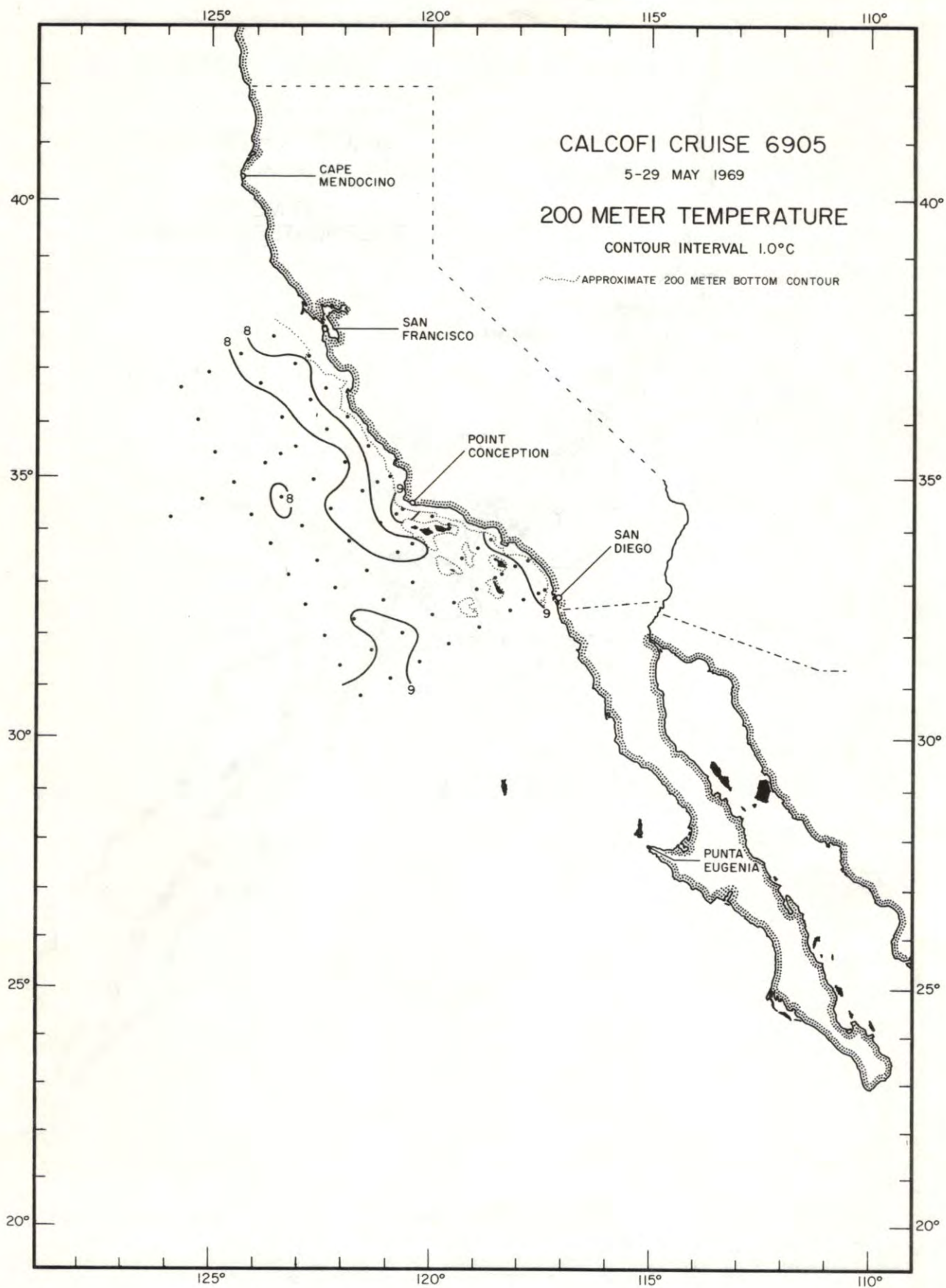


FIGURE 7



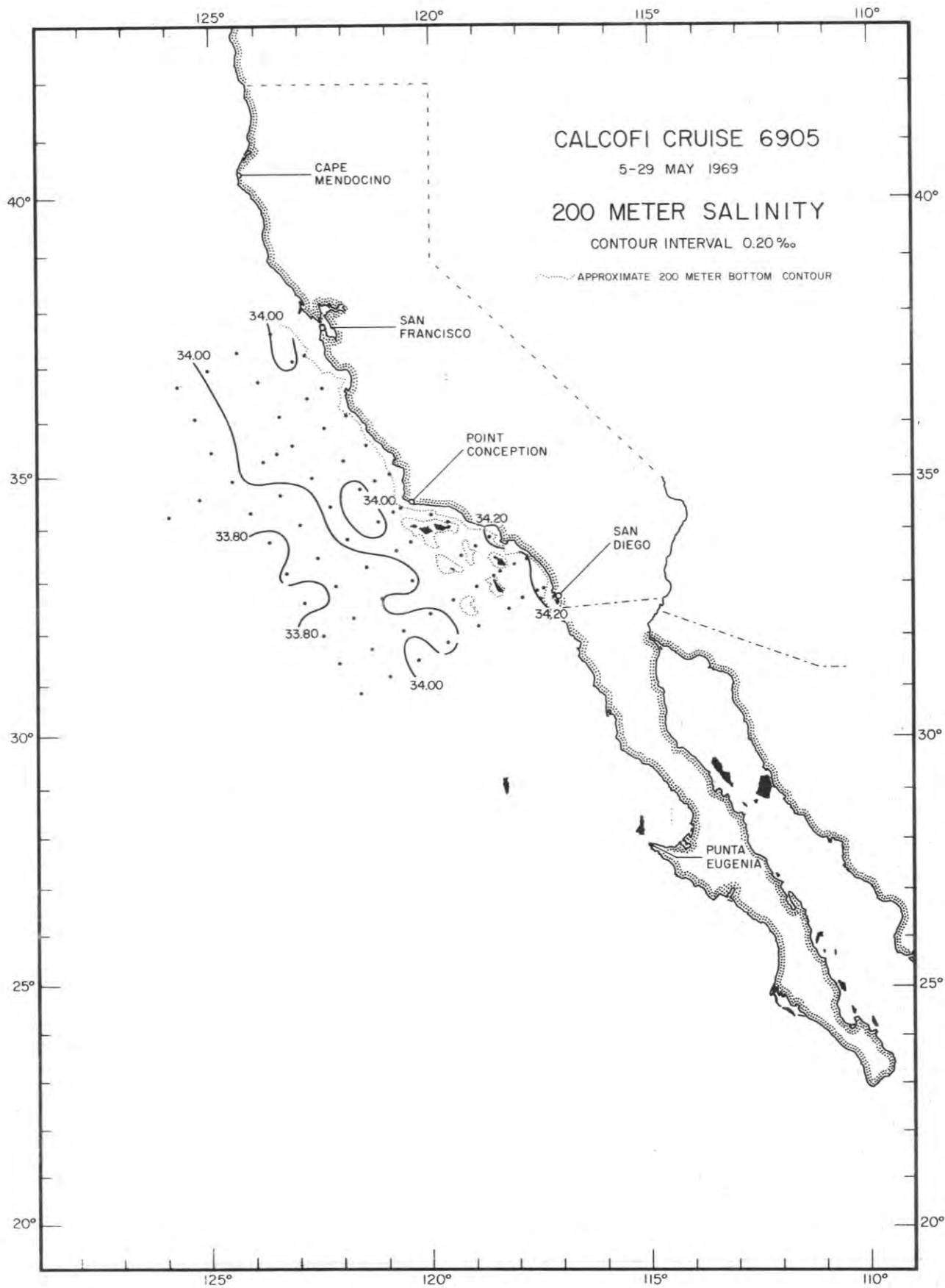


FIGURE 8

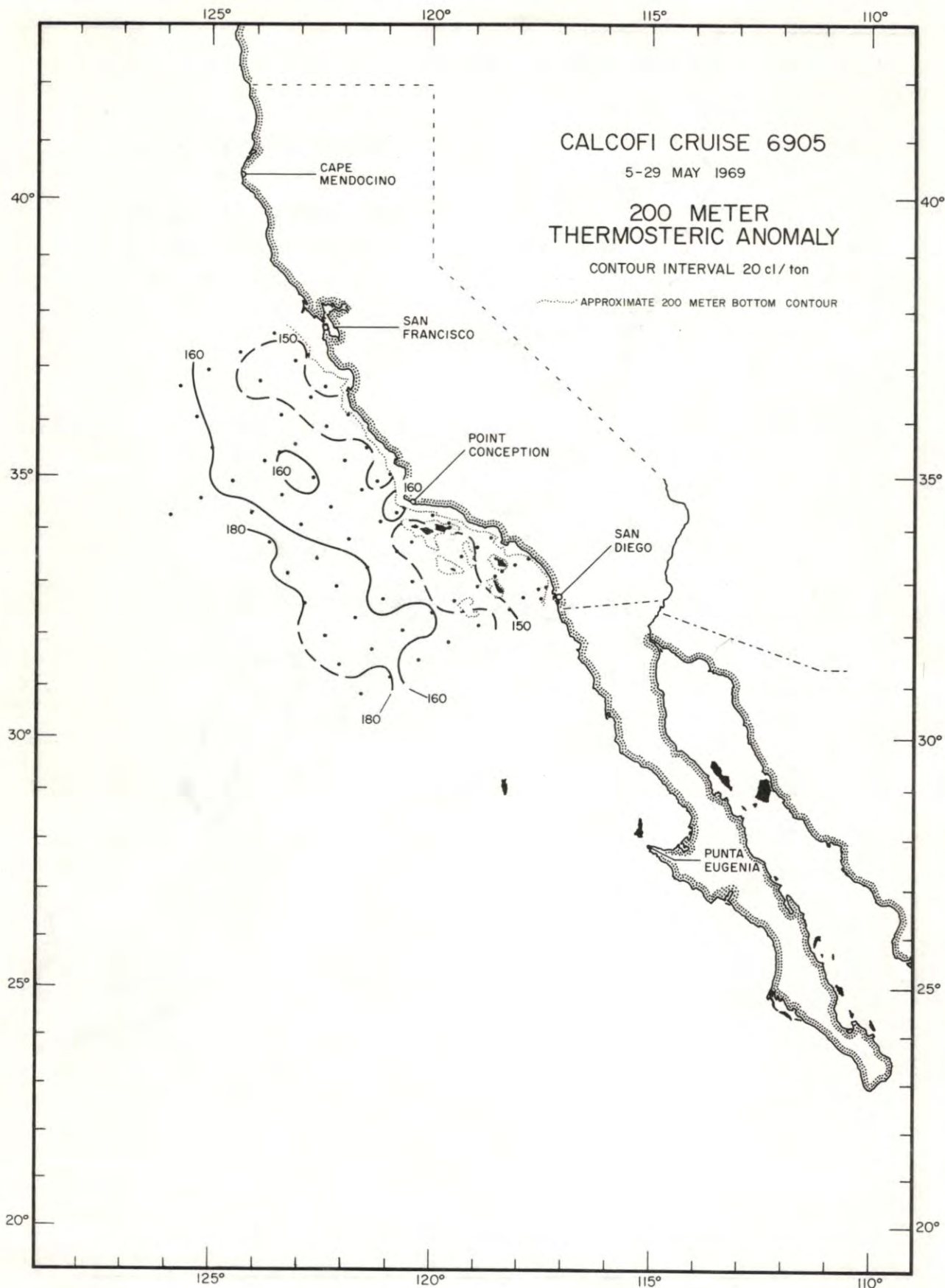


FIGURE 9

PERSONNEL  
Cruise 6905 (North)

SHIP'S CAPTAIN

Forster, Charles W. RV David Starr Jordan

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV David Starr Jordan

Smith, Paul E., Dr. (in charge)	Fishery Biologist, BCF*
Ballard, Edward N.	Marine Technician, SIO
Brown, Jack	Electronics Technician, BCF*
Burgess, Dorothy L.	Engineering Aid, STOR**
Counts, Robert C.	Fishery Biologist, BCF*
Hemingway, George T.	Marine Technician, SIO
Kalin, Mary J.	Biological Aid, BCF*
Renger, Edward H.	Laboratory Technician, STOR**
Rosendahl, Donald V.	Electronics Technician, SIO
Schmitt, James A.	Electronics Technician, SIO
Thomas, James E.	Marine Technician, SIO

\* Bureau of Commercial Fisheries  
now National Marine Fisheries Service  
Southwest Fisheries Center

\*\* Scripps Tuna Oceanography Research

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CALCOFI CRUISE 6905

60052

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 54.0N		123 01.5W		05/25/69		0712 GMT			82M	320	04KT	2	49		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	11.40	33.68		25.697	230.4	0
									10	11.31	33.68		25.714	228.8	.023
									20	10.65	33.69		25.839	216.8	.045
									30	9.24	33.83		26.186	183.9	.065
									50	8.86	33.92		25.316	171.5	.101
									75	8.63	33.93		26.360	167.4	.144

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CALCOFI CRUISE 6905

60052

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 54.0N		123 01.5W		05/25/69		0750 GMT			82M	320	04KT	2	49		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	11.30	33.665	6.82	.64	5.	.09	5.4	229.7							
9	11.26	33.669	6.80	.56	5.	.24	4.4	228.7							
26	10.65	34.103U	6.23	1.02	14.	.13	11.7								
40	9.12	33.836	4.31	1.84	30.	.35	23.9	181.7							
50	8.93	33.907	3.61	2.02	34.	.54	27.0	173.5							

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CALCOFI CRUISE 6905

60060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 37.0N		123 37.0W		05/25/69		1228 GMT			3259M		00KT	1	290 08 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	11.88	32.75		24.888	307.3	0
									10	11.56	32.75		24.947	301.7	.030
									20	11.16	32.74		25.012	295.5	.060
									30	10.63	32.92		25.245	273.4	.089
									50	10.07	33.04		25.434	255.4	.142
									75	9.65	33.40		25.784	222.1	.202
									100	9.00	33.67		26.099	192.2	.254
									125	9.00	33.81		26.208	181.8	.301
									150	8.78	33.90		26.313	171.8	.346
									200	8.28	34.00		26.469	157.1	.430
									250	7.84	34.10		26.613	143.4	.507
									300	7.22	34.12		26.717	133.5	.579
									400	6.26	34.19		26.902	116.0	.708
									500	5.67	34.27		27.039	102.9	.824

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CALCOFI CRUISE 6905

60060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 37.0N		123 37.0W		05/25/69		1314 GMT			3259M		00KT	1	290 08 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
5	11.84	32.752	6.60	.36	3.	.00	.0	306.4							
15	11.59	32.738	6.66	.33	3.	.00	.0	303.1							
35	10.55	32.841	6.20	.64		.33	4.2	277.9							
51	10.17		5.73	.92		.24	8.7								
79	9.59		4.63	1.36		.08	17.5								
108	9.05		3.97	1.61		.04	23.9								
151	8.63		3.39	2.12U		.00	28.5								
200	8.24		2.58	2.12		.00	30.2								
250	7.85		2.14												
305	7.26		1.72												
403	6.25	34.180						116.6							
503	5.70	34.255	.44					104.4							

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CALCOFI CRUISE 6905

60070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 17.0N		124 21.0W		05/25/69		1934 GMT			2503M	150	12KT	1	280 05 10		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.34	32.86		24.692	326.0	0
									10	13.15	32.85		24.722	323.2	.032
									20	12.30	32.85		24.887	307.4	.064
									30	11.77	32.85		24.986	298.0	.094
									50	10.81	32.99		25.268	271.2	.151
									75	10.19	33.34		25.647	235.1	.215
									100	9.68	33.70		26.012	200.4	.270
									125	9.16	33.82		26.191	183.5	.318
									150	8.78	33.95		26.352	168.1	.363
									200	8.06	34.01		26.509	153.2	.445
									250	7.59	34.11		26.657	139.2	.520
									300	7.01	34.10		26.731	132.2	.590
									400	5.73	34.10		26.898	116.4	.719
									500	5.34	34.15		26.985	108.1	.837

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CALCOFI CRUISE 6905

60070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 17.0N		124 21.0W		05/25/69		2015 GMT			2503M	150	12KT	1	280 05 10		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.39	32.860	6.48	.31	4.	.00	.0	327.0							
12	13.14	32.859	6.39	.33	4.	.00	.0	322.3							
32	11.80	32.882	6.68	.33	4.	.00	.0	296.2							
49	10.88		6.21	.72	10.	.32	6.1								
77	10.14		5.26	1.23	18.	.30	15.9								
105	9.33		3.33	1.74	27.	.00	24.8								
149	8.73		2.91		34.	.00	28.7								
196	7.92		2.73	2.10	39.	.08	30.3								
243	7.68		2.03												
296	7.35		1.58												
392	5.74	34.059	1.48					119.5							
495	5.59	34.211	.59					106.4							

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CALCOFI CRUISE 6905

60080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 56.5N		125 04.0W		05/26/69		0119 GMT			4303M	180	15KT	2	270 10 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	13.50	32.76											24.582	335.4	0
10	13.24	32.76											24.634	331.5	.033
20	12.80	32.76											24.721	323.2	.066
30	12.03	32.71											24.830	312.9	.098
50	11.63	32.76											24.942	302.2	.160
75	10.30	32.97											25.340	264.3	.231
100	9.69	33.47											25.832	217.6	.292
125	9.13	33.71											26.110	191.2	.343
150	8.82	33.88											26.292	173.9	.389
200	8.11	34.02											26.510	153.2	.473
250	7.06	34.00											26.645	140.3	.548
300	6.78	34.07											26.739	131.5	.618
400	6.08	34.16											26.901	116.0	.747
500	5.54	34.24											27.032	103.7	.862

DAVID STARR JORDAN

CALCOFI CRUISE 6905

60080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 56.5N		125 04.0W		05/26/69		0202 GMT			4303M	180	15KT	2	270 10 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.34	32.745	6.33	.36	3.	.00	.0	334.5							
10	12.96	32.728	6.46	.23	3.	.00	.0	328.5							
30	11.92	32.713	6.60	.28	3.	.00	.0	310.7							
49	11.55		6.61	.36	3.	.00	.0								
78	10.07		5.36	1.05	14.	.13	4.7								
108	9.41		3.84	1.51	24.	.22	20.3								
153	8.76		2.94	1.87	33.	.03	25.3								
202	8.12		2.54	2.07	40.	.11	29.3								
251	7.41		2.37												
306	6.67		1.95												
402	6.18	34.145	1.03					118.4							
502	5.46	34.222	.52					104.1							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

60090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 37.0N		125 47.0W		05/26/69		0705 GMT			4588M	190	10KT	1	190 10 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.40	32.81											24.436	350.4	0
10	14.39	32.81											24.438	350.2	.035
20	13.70	32.79											24.565	338.1	.069
30	12.41	32.73											24.773	318.3	.102
50	11.99	32.79											24.899	306.3	.165
75	10.93	32.83											25.122	285.0	.239
100	9.74	32.93											25.403	254.3	.308
125	9.48	33.36											25.780	222.4	.368
150	8.99	33.69											26.116	190.5	.421
200	8.22	33.93											26.423	161.4	.510
250	7.69	33.98											26.540	150.3	.590
300	6.93	34.00											26.663	138.6	.664
400	6.02	34.08											26.846	121.3	.799
500	5.39	34.15											26.979	108.7	.920

DAVID STARR JORDAN

CALCOFI CRUISE 6905

60090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 37.0N		125 47.0W		05/26/69	0755 GMT				4588M	190	10KT	1	190 10 08		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
1	14.34	32.799	6.11	.36	3.	.00	.0	350.0							
11	14.33	32.797	6.16	.31	2.	.00	.0	350.0							
31	12.36	32.767	6.48	.28	2.	.00	.0	314.6							
49	12.03		6.38	.31	2.	.00	.0								
78	10.67		6.36	.33	2.	.03	.1								
108	9.78		5.58	.69	8.	.00	6.5								
152	9.05		4.72	1.20	18.	.00	16.3								
202	8.18		4.13	1.54	31.	.00	22.6								
251	7.59		3.25												
306	6.86		2.54												
405	6.00 A	34.097	1.22					119.8							
508	5.32	34.156	.75					107.5							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

63052

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 19.0N		122 36.0W		05/24/69	1108 GMT				84M	110	02KT	1	03		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	12.19	32.70		24.792	316.5	0
									10	11.21	32.70		24.972	299.3	.031
									20	10.81	33.00		25.275	270.5	.059
									30	9.64	33.69		26.011	200.5	.083
									50	9.06	33.90		26.269	176.0	.121

DAVID STARR JORDAN

CALCOFI CRUISE 6905

63055

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 13.0N		122 50.0W		05/24/69	0909 GMT				297M		00KT	2	00		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	12.16	33.42		25.354	263.0	0
									10	11.23	33.32		25.449	254.0	.026
									20	10.36	33.37		25.641	235.7	.050
									30	9.72	33.62		25.944	206.9	.073
									50	9.46	33.77		26.103	191.8	.113
									75	8.89	33.93		26.320	171.2	.158
									100	8.64	33.99		26.406	163.1	.200
									125	8.53	34.00		26.430	160.7	.241
									150	8.40	34.03		26.474	156.6	.282
									200	8.17	34.07		26.540	150.3	.360
									250	7.85	34.11		26.619	142.8	.435

DAVID STARR JORDAN

CALCOFI CRUISE 6905

63060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 05.0N		123 07.0W		05/24/69	0653 GMT				2595M	310	04KT	2	310 01 06		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.02	32.98		24.848	311.2	0
									10	12.85	32.94		24.850	310.9	.031
									20	11.59	32.85		25.019	294.8	.061
									30	10.32	33.12		25.454	253.5	.089
									50	10.02	33.48		25.784	222.1	.137
									75	9.04	33.57		26.015	200.2	.190
									100	8.81	33.77		26.207	181.9	.238
									125	8.83	33.92		26.321	171.1	.283
									150	8.52	33.99		26.424	161.3	.325
									200	7.48	33.97		26.563	148.1	.404
									250	7.04	34.03		26.672	137.8	.477
									300	7.28	34.18		26.756	129.8	.546
									400	6.56	34.23		26.894	116.7	.674
									500	5.86	34.26		27.008	105.9	.792

A1 MEAN VALUE OF 5.97 AND 6.03 DEGREES

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

63070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 42.0N		123 55.0W		05/24/69		0123 GMT			3919M	240	08KT	2	300 01 06		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0									0	13.17	33.10		24.911	305.2	0
10									10	12.59	33.11		25.032	293.6	.030
20									20	12.49	33.12		25.059	291.0	.059
30									30	12.20	33.14		25.130	284.3	.088
50									50	10.18	33.36		25.664	233.5	.140
75									75	9.65	33.57		25.916	209.5	.196
100									100	9.26	33.77		26.136	188.7	.246
125									125	8.96	33.92		26.301	173.0	.292
150									150	8.65	33.96		26.381	165.4	.335
200									200	7.98	34.05		26.553	149.1	.415
250									250	7.55	34.11		26.663	138.7	.489
300									300	6.99	34.12		26.749	130.5	.558
400									400	6.20	34.18		26.902	116.0	.686
500									500	5.64	34.24		27.019	104.8	.803

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

63090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 03.0N		125 20.0W		05/26/69		1212 GMT			4499M	230	07KT	4	49		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0A									0A	14.55	32.84		24.427	351.2	0
10									10	14.29	32.82		24.466	347.5	.035
20									20	13.87	32.82		24.553	339.2	.069
30									30	13.13	32.81		24.695	325.7	.103
50									50	12.25	32.76		24.827	313.2	.167
75									75	11.24	32.81		25.052	291.7	.243
100									100	10.46	32.93		25.282	269.8	.313
125									125	9.47	33.45		25.852	215.6	.375
150									150	8.89	33.72		26.156	185.8	.425
200									200	8.20	33.92		26.418	161.9	.514
250									250	7.35	33.97		26.581	146.4	.593
300									300	6.85	34.03		26.698	135.4	.666
400									400	5.83	34.10		26.885	117.5	.797
500									500	5.56	34.24		27.029	103.9	.913

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

67050

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 48.0N		122 05.0W		05/23/69		1030 GMT			104M	310	04KT	2			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0			6.66	.51	8.	.15	4.9		0	12.35	33.65		25.496	249.5	0
10			6.51	.54	8.	.15	5.9		10	11.33	33.72		25.741	226.2	.024
30			3.77	1.77	27.	.32	23.3		20	10.41	33.82		25.982	203.3	.045
50			3.33	1.89	30.	.32	26.0		30	9.96	33.85		26.082	193.7	.065
80			2.74	2.12	34.	.27	28.7		50	9.29	33.89		26.224	180.3	.103
									75	8.90	33.94		26.326	170.6	.147

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

67055

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 39.0N		122 26.0W		05/23/69		1314 GMT			2130M	320	07KT	2	300 04 05		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0									0	11.72	33.58		25.561	243.3	0
10									10	11.71	33.58		25.563	243.2	.024
20									20	11.58	33.58		25.587	240.9	.049
30									30	11.36	33.60		25.642	235.6	.072
50									50	10.89	33.64		25.758	224.6	.119
75									75	9.91	33.73		25.997	201.8	.172
100									100	9.16	33.91		26.261	176.8	.220
125									125	8.98	33.96		26.329	170.4	.264
150									150	8.88	34.03		26.399	163.7	.306
200									200	8.40	34.07		26.505	153.6	.387
250									250	8.06	34.14		26.611	143.5	.464
300									300	7.28	34.10		26.693	135.8	.536
400									400	6.67	34.18		26.840	121.9	.670
500									500	5.90	34.26		27.003	105.4	.790

A) THIS STATION WAS OCCUPIED TWO DAYS AFTER 63.70, SEE FIGURE 1, THE STATION POSITION CHART.

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

67060

LATITUDE 36 28.0N			LONGITUDE 122 47.0W			MO/DAY/YR 05/23/69		MESSENGER TIME 1559 GMT		BOTTOM 2993M	WIND 330	SPEED 04KT	WEATHER 2	DOMINANT WAVES 330 03 07		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	12.44	33.20		25.121	285.2	0	
10									10	12.47	33.21		25.133	284.1	.028	
20									20	12.35	33.27		25.202	277.5	.057	
30									30	11.92	33.42		25.399	258.7	.083	
50									50	10.39	33.51		25.745	225.8	.132	
75									75	9.56	33.73		26.056	196.3	.185	
100									100	8.73	33.76		26.212	181.5	.233	
125									125	8.71	33.92		26.340	169.3	.277	
150									150	8.50	33.99		25.427	161.0	.319	
200									200	7.67	34.04		26.590	145.5	.397	
250									250	7.41	34.11		26.683	136.8	.470	
300									300	6.99	34.13		26.757	129.7	.518	
400									400	6.36	34.19		26.889	117.2	.667	
500									500	5.83	34.26		27.012	105.6	.784	

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

67070

LATITUDE 36 08.0N			LONGITUDE 123 25.5W			MO/DAY/YR 05/23/69		MESSENGER TIME 2057 GMT		BOTTOM 3541M	WIND 290	SPEED 01KT	WEATHER 4	DOMINANT WAVES 49 01 05		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	13.65	32.92		24.675	327.6	0	
10									10	13.31	32.90		24.728	322.5	.033	
20									20	13.28	32.90		24.734	322.0	.065	
30									30	13.27	32.91		24.744	321.0	.097	
50									50	11.76	32.93		25.050	291.9	.158	
75									75	11.44	32.98		25.147	282.6	.231	
100									100	10.68	33.27		25.508	248.4	.297	
125									125	9.54	33.63		25.981	203.4	.355	
150									150	8.99	33.84		26.233	179.4	.403	
200									200	8.20	34.02		26.496	154.5	.488	
250									250	7.48	34.07		26.641	140.7	.564	
300									300	7.01	34.10		26.731	132.2	.634	
400									400	6.31	34.17		26.880	118.1	.764	
500									500	5.73	34.24		27.008	105.9	.882	

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

67090

LATITUDE 35 28.0N			LONGITUDE 124 55.0W			MO/DAY/YR 05/26/69		MESSENGER TIME 1730 GMT		BOTTOM 4499M	WIND 220	SPEED 04KT	WEATHER 2	DOMINANT WAVES 49		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0A									0A	14.44	32.85		24.458	348.3	0	
10									10	14.06	32.85		24.537	340.7	.034	
20									20	13.65	32.85		24.621	332.7	.068	
30									30	12.94	32.80		24.725	322.9	.101	
50									50	12.66	32.81		24.787	317.0	.165	
75									75	11.60	32.76		24.948	301.6	.243	
100									100	10.53	33.10		25.402	258.4	.313	
125									125	9.12	33.43		25.893	211.8	.373	
150									150	8.81	33.75		26.192	183.4	.423	
200									200	8.37	33.98		26.439	159.9	.510	
250									250	7.86	34.07		26.586	145.9	.588	
300									300	7.63	34.14		26.675	137.5	.662	
400									400	6.51	34.16		26.845	121.3	.796	
500									500	5.43	34.17		26.990	107.7	.917	

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

70053

LATITUDE 36 06.5N			LONGITUDE 121 54.0W			MO/DAY/YR 05/23/69		MESSENGER TIME 0117 GMT		BOTTOM 1073M	WIND 320	SPEED 08KT	WEATHER 2	DOMINANT WAVES 320 03 05		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0			6.53	.41	2.	.10	1.6		0	12.39	33.12		25.078	289.2	0	
10			6.44	.51	2.	.09	2.2		10	12.33	33.11		25.082	288.9	.029	
30			5.54	1.18	14.	.41	13.6		20	12.02	33.12		25.149	282.5	.058	
50			4.14	1.51	19.	.07	19.8		30	10.47	33.42		25.661	233.8	.083	
80			3.27	1.92	29.	.19	25.3		50	9.71	33.60		25.930	208.3	.128	
110			3.00	2.02	31.	.10	26.9		75	9.41	33.88		26.197	182.9	.177	
150			2.66	2.12	35.	.08	29.0		100	9.28	33.93		26.257	177.1	.222	
250			1.71						125	8.81	33.95		26.348	168.6	.266	
300			1.26						150	8.52	34.01		26.440	159.8	.308	
400			1.15						200	8.19	34.12		26.576	146.9	.386	
500			.89						250	7.72	34.18		26.693	135.8	.459	
									300	7.46	34.22		26.762	129.3	.527	
									400	7.03	34.24		26.838	122.0	.658	
									500	5.77	34.22		26.988	107.9	.780	

A) THIS STATION WAS OCCUPIED THREE DAYS AFTER 67.70. SEE FIGURE 1, THE STATION POSITION CHART.



DAVID STARR JORDAN

CALCOFI CRUISE 6905

70060

LATITUDE			LONGITUDE			MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
		35 53.0N			122 22.5W	05/22/69		1600 GMT	2974M	120	120	2		320 04 05		
0													24.966	299.9	0	
10													24.974	299.2	.030	
20													24.989	297.7	.060	
30													25.237	274.1	.088	
50													25.684	231.6	.139	
75													25.947	206.6	.194	
100													26.224	180.3	.243	
125													26.398	163.7	.287	
150													26.475	156.5	.327	
200													26.631	141.7	.403	
250													26.702	135.0	.474	
300													26.790	126.6	.542	
400													26.924	113.9	.667	
500													27.053	101.6	.780	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70060

LATITUDE			LONGITUDE			MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
		35 53.0N			122 22.5W	05/22/69		1648 GMT	2974M	120	120	2		320 04 05		
0	12.79	33.070	6.12	.28	4.	.00	1.1	300.3								
10	12.78	33.072	6.30	.44	4.	.13	.0	299.9								
29	12.25	33.326	6.39	.36	5.	.05	6.1	271.5								
39	11.23		6.77	.77	8.	.26	9.0									
53	10.17		4.90	.87	15.	.30	16.5									
68	9.78		4.03	1.31	22.	.38	20.8									
93	8.78		4.10	1.59	24.	.19	19.5U									
112	8.41		3.94	1.41U	28.	.00	23.4									
132	8.46		2.99	1.54U	34.	.00	27.4									
152	8.35		2.57	1.89	36.	.00	29.4									
181	7.30		3.47U	2.00	39.	.00	28.1U									
216	7.50		1.94	1.89U	47.	.00	33.8									
246	7.26		1.75													
295	6.99		1.14													
349	6.49		.89													
434	5.60		.66													
518	5.44	34.275	.34					99.9								
602	5.17	34.332	.27					92.6								

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70070

LATITUDE			LONGITUDE			MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
		35 32.5N			123 05.0W	05/20/69		2240 GMT	3919M	120	16KT	2		360 07 05		
0			6.37	.41	3.	.00	.0		0	13.10	32.90		24.770	318.5	0	
10			6.33	.36	3.	.00	.0		10	13.10	32.90		24.770	318.5	.032	
30			6.44	.41	3.	.00	.0		20	13.06	32.91		24.786	317.1	.064	
50			6.08	.54	5.	.21	2.8		30	12.75	32.88		24.823	313.5	.095	
80			4.30	1.33	16.	.00	16.0		50	11.76	33.00		25.104	286.8	.155	
110			3.67	1.61	21.	.00	20.8		75	10.40	33.25		25.541	245.2	.222	
150			3.01	1.89	30.	.00	26.2		100	10.12	33.62		25.876	213.3	.280	
250			2.52						125	9.62	33.74		26.054	196.5	.342	
300			3.00U						150	9.15	33.88		26.239	178.9	.379	
400			1.54						200	8.45	34.03		26.466	157.3	.465	
500			.63						250	7.85	34.02		26.548	149.5	.544	
									300	6.85	33.98		26.658	139.1	.618	
									400	6.07	34.08		26.840	121.9	.753	
									500	5.83	34.23		26.988	107.8	.874	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70075

LATITUDE			LONGITUDE			MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
		35 23.0N			123 27.0W	05/21/69		0216 GMT	3731M	130	KT	2		340 08 05		
0									0	13.44	32.90		24.702	325.0	0	
10									10	13.44	32.90		24.702	325.0	.033	
20									20	13.44	32.90		24.702	325.0	.065	
30									30	13.44	32.90		24.702	325.0	.098	
50									50	12.38	32.84		24.864	309.6	.161	
75									75	11.65	33.10		25.202	277.5	.235	
100									100	9.44	33.26		25.709	223.2	.299	
125									125	9.66	33.73		26.039	197.9	.353	
150									150	9.24	33.87		26.217	181.0	.401	
200									200	8.63	34.03		26.438	160.0	.488	
250									250	8.14	34.10		26.568	147.7	.567	
300									300	7.60	34.12		26.663	138.6	.640	
400									400	6.69	34.17		26.829	122.9	.777	
500									500	5.84	34.22		26.979	104.7	.897	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70075

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 23.0N		123 27.0W		05/21/69	0225 GMT				3731M	330	KT	2	340 08 05			
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0	13.48	32.884	6.27	.36	3.	.00	.0	326.9								
10	13.48	32.886	6.34	.31	3.	.00	.0	326.8								
30	13.47	32.891	6.43	.31	3.	.00	.0	326.2								
39	13.23		6.32	.36	3.	.00	.0									
54	12.58		6.40	.36	3.	.00	.0									
68	11.56		6.08	.61	6.	.20	3.3									
93	10.19		4.25	1.36	17.	.00	16.6									
112	9.93		3.45	1.61	22.	.00	21.2									
132	9.47		3.26	1.77	25.	.00	23.8									
152	9.17		2.88	1.92	29.	.00	25.6									
180	8.76		2.61	1.97	34.	.00	27.7									
214	8.44		2.41	2.15	38.	.00	29.5									
243	8.19		2.25													
293	7.60		1.84													
347	7.29		1.43													
430	6.36		.95													
512	5.72	34.191	.69					109.4								
594	5.16	34.255	.35					98.3								

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 13.5N		123 47.5W		05/20/69	1625 GMT				4212M	330	20KT	2	320 12 05			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	13.40		33.03										24.811	314.7	0	
10	13.39		33.03										24.813	314.5	.031	
20	13.40		33.03										24.811	314.7	.063	
30	13.37		33.03										24.817	314.1	.094	
50	12.61		33.03										24.966	299.9	.156	
75	11.61		33.19										25.279	270.1	.228	
100	10.26		33.40										25.681	231.8	.291	
125	9.44		33.62										25.990	202.6	.346	
150	8.92		33.78										26.198	182.8	.395	
200	8.38		34.03										26.477	156.3	.481	
250	7.78		34.05										26.582	146.3	.559	
300	7.26		34.06										26.665	138.5	.632	
400	6.13		34.10										26.848	121.1	.767	
500	5.83		34.23										26.988	107.8	.887	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 13.5N		123 47.5W		05/20/69	1835 GMT				4212M	330	20KT	2	320 12 05			
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0	13.39	33.032	6.29	.36	2.	.00	.0	314.4								
10	13.39	33.043	6.29	.33	2.	.00	.0	313.6								
30	13.33	33.051	6.28	.33	2.	.00	.0	311.8								
51	11.63		6.20	.44	4.	.24	1.0									
84	10.48		5.13	1.02	12.	.15	11.1									
115	9.47		4.31	1.36	18.	.00	17.6									
160	8.78		3.69	1.64	27.	.06	23.5									
214	8.33		2.88	1.95	36.	.00	28.4									
269	7.52		2.60													
323	6.94		2.02													
429	5.83	34.157	1.16					113.3								
498	5.31	34.264	.58					99.3								

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 53.0N		124 30.0W		05/20/69	0053 GMT				4403M	350	12KT	1	340 05 05			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	14.55		32.97										24.527	341.7	0	
10	14.52		32.97										24.533	341.1	.034	
20	14.41		32.95										24.541	340.4	.068	
30	13.18		32.96										24.801	315.6	.101	
50	12.65		32.91										24.866	309.4	.164	
75	10.89		33.12										25.355	262.9	.236	
100	9.70		33.34										25.729	227.4	.297	
125	9.37		33.71										26.071	194.8	.351	
150	8.91		33.87										26.270	176.0	.398	
200	8.28		33.99										26.461	157.8	.483	
250	7.53		34.00										26.579	146.6	.561	
300	6.90		34.06										26.714	133.8	.633	
400	5.86		34.09										26.874	118.6	.764	
500	5.37		34.21										27.028	104.0	.881	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 53.0N		124 30.0W		05/20/69		0115 GMT		4403M	350	12KT	1	340 05 05			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.48	32.997	6.13	.31	3.	.00	.0	338.3							
9	14.50	33.001	6.20	.33	3.	.00	.0	338.4							
30	13.31	33.022	6.36	.33	3.	.00	.0	313.6							
38	12.66		6.34	.31	3.	.00	.0								
53	12.02		6.37	.38	3.	.00	.0								
68	10.51		6.31	.41	3.	.05	.0								
93	10.61		5.30	.82	9.	.00	7.0								
113	9.29		4.74	1.20	16.	.00	15.2								
134	9.27		3.56	1.61	24.	.00	22.2								
152	8.98		3.43	1.79	27.	.00	24.2								
181	8.54		3.03	1.89	32.	.00	26.0								
216	7.95		3.70U												
244	7.59		2.76												
293	7.01		2.24												
346	6.76		1.46												
428	5.68		1.16												
511	5.39														
595	5.05	34.320	.36					92.2							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70100

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 33.0N		125 12.0W		05/18/69		1318 GMT		4593M	240	01KT	2	240 02 07			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.08	.33	3.	.00	.0		0	14.85	32.86		24.379	355.9	0
10			6.09	.31	3.	.00	.0		10	14.62	32.88		24.443	349.7	.035
30			6.29	.41	3.	.00	.0		20	14.08	32.79		24.487	345.5	.070
50			6.29	.31	3.	.00	.0		30	13.21	32.77		24.648	330.2	.104
80			6.30	.36	3.	.13	.3		50	12.79	32.78		24.739	321.5	.169
110			5.15	.90	11.	.15	8.2		75	11.80	32.81		24.950	301.5	.248
150			3.54	1.41	26.	.00	20.2		100	10.51	33.12		25.421	256.6	.318
200			3.39	1.61	34.	.11	24.7		125	9.78	33.56		25.887	212.3	.377
250			3.27						150	9.08	33.77		26.165	186.0	.427
300			2.74						200	8.34	33.96		26.428	160.9	.516
500			.96						250	7.36	33.94		26.556	148.8	.595
									300	6.71	33.99		26.685	136.5	.668
									400	5.82	34.07		26.863	119.7	.801
									500	5.09	34.14		27.006	106.1	.919

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70110

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 13.0N		125 54.0W		05/17/69		1730 GMT		4116M	250	10KT	1	260 01 05			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.46	32.88		24.261	367.0	0
									10	14.55	32.79		24.389	354.9	.036
									20	13.45	32.77		24.600	334.7	.071
									30	13.04	32.79		24.697	325.5	.104
									50	12.59	32.80		24.793	316.4	.168
									75	12.11	32.95		25.000	296.7	.245
									100	11.89	33.06		25.126	284.6	.318
									125	10.37	33.33		25.608	238.8	.384
									150	9.82	33.57		25.888	212.2	.441
									200	8.76	33.87		26.293	173.7	.540
									250	7.75	33.96		26.516	152.6	.623
									300	7.08	33.99		26.635	141.3	.699
									400	5.75	34.02		26.832	122.6	.835
									500	5.26	34.13		26.978	108.7	.956

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70110

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 13.0N		125 54.0W		05/17/69		1622 GMT		4116M	250	10KT	1	260 01 05			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.24	32.841	5.97	.33	3.	.00	.0	365.3							
10	14.41	32.816	6.06	.28	3.	.00	.0	350.2							
29	12.97		6.37	.36	3.	.00	.0								
38	12.84	32.812	6.21	.28	2.	.00	.0	320.1							
48	12.76		6.22	.23	2.	.00	.0								
63	12.13		6.29	.31	2.	.00	.0								
78	12.37		6.20	.26	2.	.00	.0								
98	11.07		5.97	.31	3.	.02	.3								
123	10.66		5.46	.54	7.	.02	5.3								
142	9.80		5.08	.84	11.	.02	10.4								
173	9.19		4.49	1.31	20.	.02	16.7								
202	8.78		4.19	1.41	26.	.01	20.5								
232	8.42		4.46												
271	7.66		3.44												
331	6.69		2.74												
405	5.81		1.87												
479	5.32	34.056	1.31					115.0							
558	4.93	34.197	.68					100.1							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

70110

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 13.0N			125 54.0W			05/19/69		0300 GMT		4116M	360	12KT	1	360 03 05		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0A			6.06	.31	2.	.01	.0		0A	15.13	32.85		24.310	362.3	0	
10			6.08	.28	2.	.00	.0		10	14.85	32.77		24.309	362.4	.036	
30			6.26	.28	2.	.02	.0		20	13.35	32.70		24.566	338.0	.071	
50			6.22	.31	2.	.01	.0		30	12.94	32.78		24.709	324.4	.104	
80			6.18	.31	2.	.03	.0		50	12.80	32.80		24.752	320.3	.169	
110			5.81	.44	4.	.15	2.2		75	12.49	33.07		25.021	294.7	.246	
150			4.97	.84	13.	.02	12.3		100	11.96	33.02		25.082	288.8	.320	
200			4.00	1.54	28.	.00	22.8		125	10.31	33.39		25.665	233.4	.386	
250			3.77						150	9.60	33.61		25.956	205.8	.441	
300			2.96						200	8.59	33.88		26.327	170.5	.537	
400			1.87						250	7.81	33.94		26.492	154.9	.620	
500			.93						300	7.01	33.98		26.636	141.2	.697	
									400	5.76	34.02		26.831	122.7	.833	
									500	5.17	34.14		26.997	107.0	.953	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

73053

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 31.5N			121 28.5W			05/16/69		0930 GMT		741M	310	20KT	4	310 04 04		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	11.51	33.60		25.615	238.2	0	
									10	11.49	33.60		25.619	237.8	.024	
									20	11.48	33.61		25.628	236.9	.048	
									30	11.37	33.60		25.641	235.7	.071	
									50	10.24	33.61		25.848	216.0	.117	
									75	9.72	33.80		26.084	193.6	.168	
									100	9.15	33.89		26.247	178.1	.215	
									125	9.18	34.02		26.344	168.9	.259	
									150	8.87	34.05		26.416	162.0	.301	
									200	8.43	34.10		26.524	151.8	.381	
									250	7.71	34.11		26.639	140.9	.456	
									300	7.14	34.10		26.713	133.9	.527	
									400	6.53	34.19		26.866	119.3	.659	
									500	6.17	34.27		26.976	108.9	.779	
									600	5.49	34.31		27.093	97.9	.890	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

73060

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 17.5N			121 58.0W			05/16/69		1305 GMT		2410M	310	18KT	2	300-06 07		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	12.60	33.19		25.092	287.9	0	
									10	12.60	33.19		25.092	287.9	.029	
									20	12.60	33.19		25.092	287.9	.058	
									30	12.59	33.20		25.102	287.0	.086	
									50	12.33	33.29		25.221	275.6	.143	
									75	11.00	33.46		25.599	239.7	.208	
									100	9.61	33.64		25.977	203.7	.264	
									125	9.30	33.87		26.207	181.9	.312	
									150	8.93	33.94		26.321	171.1	.357	
									200	8.45	34.06		26.490	155.1	.440	
									250	8.00	34.15		26.628	142.0	.516	
									300	7.35	34.16		26.730	132.3	.587	
									400	6.66	34.20		26.857	120.2	.719	
									500	5.89	34.25		26.996	107.0	.839	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

73070

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 58.0N			122 40.0W			05/16/69		1838 GMT		4110M	330	14KT	2	340 05 04		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	13.12	33.28		25.059	291.0	0	
									10	13.11	33.28		25.061	290.8	.029	
									20	13.10	33.28		25.063	290.5	.058	
									30	13.08	33.28		25.067	290.3	.087	
									50	12.42	33.28		25.196	278.0	.144	
									75	11.24	33.38		25.494	249.7	.211	
									100	9.83	33.74		26.019	199.8	.267	
									125	9.52	33.89		26.187	183.8	.316	
									150	9.27	33.94		26.267	176.3	.362	
									200	8.92	34.03		26.393	164.3	.448	
									250	8.54	34.11		26.515	152.7	.530	
									300	8.11	34.16		26.619	142.8	.606	
									400	7.29	34.20		26.770	128.5	.747	
									500	6.38	34.24		26.925	113.7	.875	

A) THE SHIP RETURNED TO THIS STATION TO CONTINUE SPECIAL BIOLOGICAL WORK NOT COMPLETED TWO DAYS EARLIER.

DAVID STARR JORDAN

CALCOFI CRUISE 6905

73080

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 38.0N			123 22.0W			05/16/69		2313 GMT			4498M	350	14KT	2	350 05 05		
Z	T	S	OZ	PC4	SIG3	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	13.51	33.21		24.927	303.6	0		
									10	13.41	33.20		24.940	302.4	.030		
									20	12.92	33.17		25.014	295.3	.060		
									30	12.63	33.27		25.148	282.6	.089		
									50	12.25	33.33		25.267	271.2	.145		
									75	10.76	33.49		25.665	233.4	.208		
									100	10.11	33.61		25.870	213.9	.265		
									125	9.43	33.73		26.077	194.3	.316		
									150	8.74	33.87		26.296	173.4	.363		
									200	7.87	33.97		26.506	153.5	.446		
									250	7.20	33.99		26.618	142.9	.522		
									300	6.91	34.05		26.705	134.6	.593		
									400	6.26	34.16		26.878	118.2	.725		
									500	5.82	34.25		27.005	106.2	.843		
									600	5.34	34.33		27.127	94.7	.950		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

73090

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 18.5N			124 04.0W			05/17/69		0439 GMT			3075M	350	05KT	1	330 03 05		
Z	T	S	OZ	PC4	SIG3	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	14.27	32.94		24.563	338.3	0		
									10	14.24	32.95		24.577	337.0	.034		
									20	12.90	32.83		24.756	319.9	.067		
									30	12.85	32.84		24.773	318.3	.099		
									50	12.65	32.85		24.820	313.8	.162		
									75	12.39	33.08		25.047	292.2	.238		
									100	11.52	33.28		25.365	261.9	.308		
									125	10.21	33.39		25.682	231.8	.370		
									150	9.60	33.56		25.917	209.5	.426		
									200	8.67	33.86		26.299	173.2	.523		
									250	7.80	33.95		26.501	154.0	.607		
									300	7.31	34.03		26.634	141.4	.683		
									400	6.15	34.05		26.806	125.1	.821		
									500	5.29	34.12		26.967	109.8	.945		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77051

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 02.0N			120 57.0W			05/16/69		0030 GMT			279M	300	19KT	2	310 08 05		
Z	T	S	OZ	PC4	SIG3	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	10.90	33.76		25.849	215.9	0		
									10	10.87	33.76		25.855	215.4	.022		
									20	10.81	33.75		25.858	215.1	.043		
									30	10.54	33.76		25.913	209.8	.064		
									50	10.20	33.71		25.933	208.0	.106		
									75	9.64	33.84		26.128	189.4	.156		
									100	9.16	33.94		26.284	174.6	.202		
									125	9.14	34.05		26.373	166.1	.245		
									150	8.92	34.13		26.471	156.9	.286		
									200	8.56	34.19		26.574	147.1	.364		
									250	8.27	34.20		26.627	142.1	.438		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77055

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 54.5N			121 13.0W			05/15/69		2200 GMT			584M	310	22KT	1	310 07 05		
Z	T	S	OZ	PC4	SIG3	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	12.33	33.39		25.299	268.3	0		
									10	12.33	33.39		25.299	268.3	.027		
									20	12.29	33.39		25.306	267.5	.054		
									30	11.74	33.51		25.503	248.8	.080		
									50	11.13	33.59		25.676	232.3	.128		
									75	10.27	33.66		25.882	212.8	.184		
									100	9.60	33.81		26.111	191.0	.235		
									125	8.80	33.89		26.302	172.9	.291		
									150	8.56	33.95		26.387	164.9	.324		
									200	8.11	34.10		26.572	147.2	.403		
									250	7.55	34.10		26.655	139.4	.477		
									300	6.92	34.12		26.759	129.6	.546		
									400	6.48	34.23		26.904	115.7	.674		
									500	5.97	34.31		27.033	103.5	.790		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 44.0N		121 34.0W		05/15/69	L858	GMT	962M	320	14KT	2	320 05 06				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S1GT	DT	DD
									0	12.14	33.41		25.350	263.3	0
									10	12.13	33.41		25.352	263.2	.026
									20	12.07	33.41		25.363	262.1	.053
									30	11.54	33.42		25.470	252.0	.078
									50	9.80	33.47		25.813	219.3	.126
									75	9.42	33.58		25.962	205.2	.179
									100	9.21	33.82		26.183	184.2	.228
									125	8.85	33.92		26.318	171.4	.273
									150	8.74	34.02		26.413	162.3	.315
									200	7.65	33.98		26.546	149.7	.395
									250	7.18	34.05		26.668	138.2	.469
									300	6.77	34.07		26.740	131.3	.538
									400	5.77	34.12		26.909	115.3	.666
									500	5.38	34.23		27.043	102.6	.781
									600	5.14	34.34		27.158	91.7	.884

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 24.0N		122 16.0W		05/15/69	L349	GMT	4110M	320	12KT	2	360 05 07				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S1GT	DT	DD
									0	12.82A	33.29A		25.126	284.6	0
									10	12.82A	33.29A		25.126	284.6	.028
									20	12.72A	33.29A		25.146	282.8	.057
									30	12.54	33.28		25.173	280.2	.085
									50	10.40	33.44		25.689	231.2	.136
									75	9.33	33.63		26.015	200.1	.191
									100	8.96	33.81		26.215	181.2	.239
									125	8.74	33.90		26.320	171.2	.283
									150	8.49	33.95		26.397	163.8	.326
									200	7.88	34.01		26.536	150.7	.406
									250	7.58	34.10		26.650	139.8	.480
									300	7.28	34.15		26.732	132.1	.551
									400	6.62	34.25		26.902	116.0	.680
									500	5.64	34.28		27.051	101.8	.795

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 04.0N		122 57.0W		05/15/69	0923	GMT	4308M	360	19KT	2	350 06 08				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S1GT	DT	DD
									0	13.36	33.10		24.873	308.8	0
									10	13.37	33.10		24.871	309.0	.031
									20	13.08	33.05		24.890	307.2	.062
									30	12.94	33.19		25.026	294.2	.092
									50	13.04	33.29		25.083	288.8	.150
									75	11.83	33.33		25.347	263.7	.220
									100	10.87	33.43		25.599	239.7	.283
									125	9.41	33.53		25.924	208.8	.340
									150	8.97	33.80		26.205	182.1	.389
									200	8.21	33.98		26.464	157.6	.476
									250	7.25	34.00		26.619	142.8	.553
									300	6.52	34.02		26.734	131.9	.624
									400	5.95	34.12		26.886	117.5	.753
									500	5.29	34.18		27.014	105.3	.870
									600	4.82	34.25		27.124	94.9	.976

DAVID STARR JORDAN

CALCOFI CRUISE 6905

77090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 43.0N		123 39.0W		05/15/69	0501	GMT	4498M	330	12KT	2	350 05 05				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S1GT	DT	DD
									0	14.43	33.01		24.583	335.4	0
									10	14.41	33.01		24.587	336.0	.034
									20	13.91	32.96		24.653	329.7	.067
									30	13.77	33.02		24.728	322.6	.100
									50	13.44	33.00		24.779	317.7	.164
									75	13.41	33.16		24.909	305.4	.242
									100	12.65	33.19		25.082	288.8	.317
									125	11.17	33.28		25.429	255.9	.386
									150	10.09	33.41		25.718	228.4	.447
									200	8.90	33.76		26.185	184.0	.552
									250	7.86	33.92		26.469	157.1	.639
									300	7.10	33.95		26.600	144.6	.717
									400	5.93	34.04		26.826	123.2	.855
									500	5.25	34.13		26.979	108.6	.977
									600	5.06	34.27		27.112	96.0	1.085

A) THE VALUES ABOVE 30 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.

DAVID STARR JORDAN

CALCOFI CRUISE 6905

R0052

LATITUDE			LONGITUDE			MO/DAY/YR			MESSENGER TIME			BOTTOM			WIND			SPEED			WEATHER			DOMINANT WAVES		
34 24.5N			120 36.5W			05/14/69			0210 GMT			294M			300			12KT			0			300 02 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD											
0			5.44	1.10	13.	.14	10.5		0	12.19	33.73		25.588	240.7	0											
10			5.50	1.13	13.	.14	10.5		10	12.16	33.73		25.594	240.2	.024											
30			5.19	1.23	14.	.16	11.7		20	11.98	33.73		25.628	236.9	.048											
50			4.54	1.38	18.	.17	14.1		30	11.59	33.73		25.701	230.0	.071											
80			2.77	1.87	29.	.17	24.0		50	10.49	33.80		25.953	206.1	.115											
110			2.65	2.02	32.	.13	25.7		75	9.83	33.94		26.174	185.0	.164											
150			2.36	2.10	34.	.05	26.9		100	9.60	34.00		26.259	175.9	.210											
200			2.22	2.18	36.	.00	27.8		125	9.56	34.03		26.289	174.1	.254											
250			1.69						150	9.34	34.04		26.333	169.9	.298											
									200	9.09	34.12		26.436	160.2	.382											
									250	8.36	34.18		26.597	144.9	.461											

DAVID STARR JORDAN

CALCOFI CRUISE 6905

R0055

LATITUDE			LONGITUDE			MO/DAY/YR			MESSENGER TIME			BOTTOM			WIND			SPEED			WEATHER			DOMINANT WAVES		
34 19.0N			120 48.0W			05/14/69			0515 GMT			741M			290			10KT			1			310 02 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD											
0			6.19	.56	5.	.13	4.7		0	12.53	33.31		25.198	277.8	0											
10			6.05	.69	8.	.12	6.2		10	12.27	33.32		25.256	272.3	.028											
30			5.92	.84	9.	.10	7.5		20	11.78	33.55		25.526	246.6	.053											
50			5.31	1.10	14.	.13	10.8		30	11.45	33.57		25.603	239.3	.078											
80			3.17	1.77	27.	.14	21.8		50	11.29	33.63		25.678	232.1	.125											
110			2.63	1.97	31.	.12	25.8		75	10.85	33.80		25.889	212.1	.181											
150			2.32	2.10	35.		27.3		100	9.89	33.92		26.149	187.4	.231											
300			1.86						125	9.67	33.95		26.209	181.7	.278											
400			1.35						150	9.52	34.01		26.280	174.9	.323											
500			.78						200	9.18	34.09		26.398	163.8	.410											
									250	8.86	34.15		26.496	154.5	.492											
									300	8.34	34.20		26.616	143.1	.568											
									400	7.25	34.23		26.799	125.7	.709											
									500	6.40	34.27		26.946	111.8	.834											

DAVID STARR JORDAN

CALCOFI CRUISE 6905

R0060

LATITUDE			LONGITUDE			MO/DAY/YR			MESSENGER TIME			BOTTOM			WIND			SPEED			WEATHER			DOMINANT WAVES		
34 09.0N			121 09.0W			05/14/69			0815 GMT			2222M			320			10KT			2			320 02 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD											
0			6.34	.38	3.	.00	.2		0	13.49	33.14		24.877	308.4	0											
10			6.24	.33	3.	.00	.2		10	13.47	33.14		24.881	308.0	.031											
30			6.29	.44	3.	.03	.9		20	13.15	33.18		24.976	298.9	.061											
50			6.20	.49	4.	.37	1.6		30	12.75	33.26		25.117	285.5	.090											
80			6.11	.72	8.	.30	6.4		50	12.38	33.28		25.204	277.3	.147											
110			4.96	1.02	15.	.00	12.6		75	12.15	33.39		25.333	265.0	.215											
150			3.18	1.79	33.	.00	25.5		100	9.93	33.37		25.714	228.8	.277											
200			3.00	1.92	38.	.00	27.5		125	9.34	33.69		26.060	195.8	.331											
250			2.36						150	8.85	33.86		26.271	175.8	.378											
300			2.07						200	8.28	33.98		26.453	158.5	.463											
400			.96						250	7.58	34.02		26.588	145.8	.541											
500			.42						300	7.02	34.06		26.698	135.3	.614											
									400	5.92	34.15		26.914	114.9	.744											
									500	5.69	34.27		27.037	103.2	.858											

DAVID STARR JORDAN

CALCOFI CRUISE 6905

R0070

LATITUDE			LONGITUDE			MO/DAY/YR			MESSENGER TIME			BOTTOM			WIND			SPEED			WEATHER			DOMINANT WAVES		
33 48.5N			121 51.0W			05/14/69			1347 GMT			3737M			310			10KT			2			310 02 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD											
10			6.08	.36	3.	.00	.0		0	13.78	33.15		24.826	313.2	0											
30			6.19	.38	3.	.00	.0		10	13.36	33.12		24.888	307.3	.031											
50			6.16	.36	3.	.00	.0		20	13.18	33.14		24.939	302.4	.062											
80			6.06	.49	5.	.11	2.6		30	12.94	33.17		25.010	295.7	.092											
110			5.44	.82	10.	.26	8.2		50	12.81	33.19		25.051	291.8	.150											
150			4.37	1.36	25.	.00	19.2		75	12.35	33.24		25.179	279.7	.222											
200			3.03	1.67	39.	.00	27.9		100	11.11	33.30		25.455	253.4	.289											
250			2.58						125	9.44	33.56		25.943	207.0	.348											
300			2.06						150	8.83	33.78		26.212	181.5	.397											
400			1.23						200	8.11	34.01		26.502	153.9	.482											
500			.72						250	7.25	34.01		26.627	142.1	.558											
									300	6.71	34.04		26.724	132.8	.629											
									400	6.01	34.13		26.887	117.4	.759											
									500	5.61	34.21		26.999	106.7	.877											

DAVID STARR JORDAN

CALCOFI CRUISE 6905

80080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 28.5N		122 32.0W		05/14/69		1830 GMT		4021M	320	10KT	2	310 04 04			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.07						0	14.22	33.10		24.696	325.6	0
10			6.08	.33	3.	.00	.0		10	14.17	33.10		24.707	324.6	.033
30			6.10	.33	3.	.00	.0		20	13.55	33.13		24.857	310.2	.064
50			6.09	.33	3.	.00	.0		30	13.47	33.15		24.889	307.2	.095
80			6.04	.38	4.	.00	.2		50	13.20	33.16		24.951	301.3	.156
110			5.40	.72	8.	.00	7.2		75	12.82	33.18		25.041	292.7	.231
150			4.95	.90	14.	.00	12.2		100	11.03	33.20		25.392	259.4	.300
200			3.49	1.69	31.	.00	24.8		125	10.11	33.42		25.723	227.9	.362
250			3.12						150	9.46	33.56		25.940	207.3	.417
300			2.50						200	8.66	33.84		26.285	174.5	.514
400			1.41						250	7.79	33.97		26.518	152.4	.598
500			.85						300	7.33	34.04		26.639	140.9	.673
									400	6.13	34.08		26.832	122.6	.810
									500	5.57	34.18		26.981	108.5	.931

DAVID STARR JORDAN

CALCOFI CRUISE 6905

80090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 09.0N		123 13.0W		05/14/69		2335 GMT		4308M	320	10KT	2	320 02 06			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			5.97	.33	2.	.00	.0		0	14.72	33.07		24.568	337.8	0
10			6.05	.28	2.	.00	.0		10	14.61	33.09		24.606	334.1	.034
30			6.01	.26	2.	.00	.0		20	14.36	33.14		24.698	325.4	.067
50			6.01	.26	2.	.00	.0		30	14.23	33.13		24.717	323.6	.099
80			6.04	.23	3.	.00	.0		50	13.81	33.10		24.781	317.5	.163
110			5.80A	.44	4.	.12	2.1		75	13.62	33.10		24.820	313.8	.243
150			4.78A	1.00	14.	.00	13.1		100	12.38	33.12		25.080	289.0	.319
200			3.78	1.59	28.	.00	22.4		125	11.42	33.28		25.383	260.2	.388
250			3.26						150	9.72	33.46		25.819	218.8	.449
300			2.52						200	8.83	33.81		26.235	179.2	.550
400			1.48						250	8.00	33.96		26.479	156.1	.636
500			.71						300	7.30	34.01		26.620	142.7	.712
									400	6.30	34.09		26.818	123.9	.851
									500	5.55	34.17		26.975	109.0	.973

DAVID STARR JORDAN

CALCOFI CRUISE 6905

82047

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 15.0N		119 59.0W		05/13/69		2050 GMT		574M	260	12KT	1	260 01 08			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			5.87	.92	9.	.06	7.4		0	12.33	33.73		25.561	249.3	0
10			5.74	.92	9.	.07	7.8		10	11.98	33.73		25.628	236.9	.024
30			4.91	1.28	15.	.10	11.1		20	11.90	33.73		25.643	235.5	.048
50			3.00	1.87	29.	.21	21.1		30	11.35	33.76		25.768	223.6	.071
80			2.14	2.15	34.	.06	26.0		50	9.93	33.91		26.134	188.8	.112
110			1.84	2.28	37.	.21	27.8		75	9.56	34.03		26.289	174.1	.158
150			1.67	2.36	39.	.15	29.2		100	9.19	34.09		26.397	163.9	.200
200			1.44	2.51	45.	.00	30.7		125	9.08	34.11		26.430	160.8	.242
250			1.35						150	9.03	34.13		26.454	158.5	.282
300			1.07						200	8.69	34.18		26.546	149.7	.361
400			.62						250	8.19	34.18		26.623	142.4	.436
500			.34						300	7.84	34.20		26.691	136.0	.508
									400	7.10	34.23		26.820	123.7	.643
									500	6.57	34.25		26.908	115.4	.770

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83043

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 08.0N		119 34.0W		05/13/69		1805 GMT		247M	250	10KT	2	260 03 04			
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.35	.64	4.	.05	2.6		0	13.48	33.69		25.303	267.8	0
10			6.35	.59	4.	.05	2.6		10	13.45	33.69		25.309	267.2	.027
30			5.50	.90	8.	.13	5.9		20	13.26	33.69		25.348	263.5	.053
40			4.42	1.20	12.	.25	9.9		30	12.52	33.64		25.455	253.4	.079
55			3.07	1.72	22.	.17	20.0		50	11.03	33.70		25.780	222.5	.127
70			3.07	1.79	25.	.07	21.5		75	9.89	33.85		26.094	192.6	.179
85			2.91	1.84	27.	.04	22.6		100	9.59	33.95		26.222	180.5	.226
105			2.79	1.95	29.	.00	23.8		125	9.44	34.01		26.294	173.7	.271
125			2.53	2.07	32.	.02	25.0		150	9.09	34.10		26.420	161.6	.314
145			2.31	2.20	36.	.00	26.7		200	8.86	34.17		26.512	153.0	.394
175			2.01	2.30	38.	.00	27.9								
200			1.84	2.36	40.	.00	28.4								

A) THE OXYGEN SAMPLES AT 110 AND 150 METERS APPEAR TO HAVE BEEN REVERSED. THEY ARE ASSUMED TO NOW BE IN THE CORRECT ORDER.



DAVID STARR JORDAN

CALCOFI CRUISE 6905

83051

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 52.0N		120 08.5W		05/13/69		1044 GMT			121M	290	18KT	1	290 04 04		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			5.02	.92	11.	.11	8.3		0	12.53	33.65		25.461	252.8	0
30			3.24	1.84	25.	.04	20.4		10	11.22	33.67		25.722	228.0	.024
50			2.89	1.97	25.	.00	23.6		20	10.89	33.69		25.797	220.9	.047
80			2.98	2.07	32.	.00	24.5		30	10.18	33.81		26.014	200.2	.068
110			2.35	2.28	36.	.00	26.3		50	9.68	33.94		26.199	182.6	.106
									75	9.28	34.06		26.359	167.5	.150
									100	9.15	34.09		26.403	163.3	.192

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83055

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 44.0N		120 24.5W		05/13/69		0812 GMT			1073M	320	12KT	2	310 04 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	12.90	33.65		25.389	259.7	0
									10	12.90	33.65		25.389	259.7	.026
									20	12.61	33.65		25.445	254.3	.052
									30	12.38	33.65		25.490	250.1	.077
									50	11.27	33.68		25.721	228.1	.125
									75	10.02	33.69		25.948	206.5	.180
									100	8.96	33.82		26.223	180.4	.228
									125	8.69	33.90		26.327	170.5	.273
									150	8.27	33.99		26.462	157.7	.314
									200	7.81	34.06		26.586	146.0	.392
									250	7.41	34.09		26.667	138.3	.465
									300	6.94	34.12		26.756	129.8	.534
									400	6.41	34.21		26.898	116.4	.662
									500	5.94	34.25		26.990	107.6	.780

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 34.0N		120 45.0W		05/13/69		0510 GMT			1572M	310	10KT		360 04 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	12.32	33.45		25.347	263.7	0
									10	12.38	33.47		25.351	263.3	.026
									20	12.44	33.50		25.362	262.2	.053
									30	12.76	33.63		25.401	258.6	.079
									50	11.77	33.55		25.528	246.4	.129
									75	10.55	33.57		25.764	224.0	.189
									100	10.11	33.67		25.917	209.5	.243
									125	9.39	33.91		26.224	180.3	.293
									150	8.68	33.92		26.345	168.8	.337
									200	7.86	34.02		26.547	149.7	.418
									250	7.39	34.06		26.646	140.2	.492
									300	6.85	34.09		26.745	130.9	.562
									400	6.30	34.22		26.920	114.2	.690
									500	5.91	34.29		27.025	104.3	.805

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 14.5N		121 26.0W		05/13/69		0044 GMT			3832M	300	07KT	1	280 03 04		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.60A	33.13A		24.847	311.2	0
									10	13.45A	33.13A		24.878	308.3	.031
									20	13.41	33.13		24.886	307.6	.062
									30	13.39	33.13		24.890	307.2	.093
									50	13.14	33.18		24.978	298.7	.153
									75	11.67	33.14		25.229	274.9	.225
									100	10.38	33.33		25.606	239.0	.290
									125	9.55	33.51		25.886	212.4	.347
									150	9.22	33.73		26.111	191.0	.398
									200	8.54	33.94		26.382	165.3	.489
									250	7.72	34.02		26.567	147.7	.569
									300	7.16	34.08		26.694	135.7	.642
									400	6.28	34.12		26.844	121.5	.776
									500	5.65	34.22		27.002	106.5	.896
									600	5.21	34.30		27.118	95.5	1.003

A) THE VALUES ABOVE 20 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83090

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.0N			122 08.0W			05/12/69		1950 GMT			4193M	320	14KT	2	340 04 04		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD		
0									0	13.75A	33.03A		24.740	321.5	0		
10									10	13.70A	33.03A		24.750	320.5	.032		
20									20	13.65	33.03		24.760	319.5	.064		
30									30	13.62	33.03		24.766	318.9	.096		
50									50	13.39	33.03		24.813	314.5	.160		
75									75	13.27	33.08		24.875	308.5	.238		
100									100	12.42	33.09		25.049	292.0	.314		
125									125	11.01	33.29		25.465	252.4	.382		
150									150	9.79	33.46		25.807	219.9	.442		
200									200	8.75	33.83		26.263	176.6	.543		
250									250	8.10	33.98		26.480	156.0	.628		
300									300	7.52	34.04		25.612	143.5	.705		
400									400	6.27	34.07		26.806	125.1	.844		
500									500	5.44	34.16		26.980	108.5	.967		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

83090

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 34.5N			122 50.0W			05/12/69		1508 GMT			4212M	340	12KT	2	320 04 04		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD		
0									0	13.83	33.05		24.739	321.6	0		
10									10	13.83	33.05		24.739	321.6	.032		
20									20	13.83	33.05		24.739	321.6	.064		
30									30	13.80	33.05		24.745	321.0	.097		
50									50	13.50	33.04		24.798	315.9	.160		
75									75	13.33	33.04		24.832	312.6	.239		
100									100	12.50	33.09		25.034	293.4	.316		
125									125	11.53	33.21		25.309	267.3	.386		
150									150	10.00	33.35		25.687	231.4	.449		
200									200	8.88	33.75		26.181	184.4	.555		
250									250	8.02	33.94		26.461	157.8	.643		
300									300	7.50	34.00		26.583	146.2	.721		
400									400	6.51	34.10		26.798	125.8	.862		
500									500	6.09	34.25		26.971	109.4	.986		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

87035

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 50.0N			118 37.5W			05/11/69		0550 GMT			519M	140	01KT	1	99		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD		
0			6.08	.28	3.	.00	.0		0	16.56	33.60		24.565	338.1	0		
10			5.94	.26	3.	.00	.0		10	16.12	33.56		24.635	331.4	.033		
30			3.84	1.61	15.	.48	13.7		20	13.53	33.50		25.147	282.7	.064		
50			3.12	2.18U	21.	.32	18.3		30	11.27	33.57		25.636	236.2	.090		
80			3.04	1.82	26.	.00	22.7		50	10.68	33.67		25.819	218.8	.136		
110			2.52	2.00	30.	.00	25.0		75	10.01	33.87		26.090	193.1	.188		
150			2.13	2.23	34.	.05	27.0		100	9.83	33.98		26.206	182.1	.235		
200			1.56	2.43	39.	.02	29.9		125	9.67	34.08		26.310	172.1	.280		
250			1.38						150	9.60	34.13		26.361	167.3	.323		
300			1.29						200	9.42	34.24		26.476	156.4	.406		
400			.89						250	9.09	34.26		26.545	149.8	.485		
									300	8.47	34.21		26.604	144.2	.561		
									400	7.29	34.23		26.794	126.2	.702		

DAVID STARR JORDAN

CALCOFI CRUISE 6905

87040

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 40.0N			118 58.0W			05/11/69		0905 GMT			925M	150	05KT	1	99		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD		
0			5.91	.31	4.	.00	.0		0	16.97B	33.60B		24.469	347.2	0		
10			6.25	.26	3.	.00	.1		10	14.46	33.58		25.015	295.2	.032		
30			4.61	1.31	11.	.31	5.4		20	12.83	33.59		25.356	262.8	.060		
50			3.80	1.38	16.	.29	15.5		30	11.75	33.61		25.578	241.7	.085		
80			3.55	1.84	26.	.05	22.2		50	10.67	33.75		25.882	212.8	.131		
110			2.71	2.00	30.	.00	26.4		75	10.12	33.88		26.079	194.1	.182		
150			2.82	2.07	35.	.00	27.2		100	9.82	34.00		26.223	180.4	.229		
200			2.30	2.20	41.	.00	30.5		125	9.45	34.07		26.339	169.4	.274		
250			2.00						150	9.00	34.14		26.466	157.3	.315		
300			1.46						200	8.31	34.12		26.558	148.6	.393		
400			.88						250	7.92	34.17		26.656	139.3	.467		
500			.58						300	7.64	34.24		26.751	130.2	.537		
									400	6.88	34.28		26.890	117.1	.666		
									500	6.25	34.32		27.005	106.2	.784		

A) THE VALUES ABOVE 20 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.  
 B) THE DIGITAL DATA LOGGER WAS NOT USED DURING THIS LOWERING. THE TABULATED VALUES WERE DIGITIZED FROM THE ANALOG RECORDING AND THE SAME CALIBRATION CORRECTION APPLIED.

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

#7045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 30.0N		119 19.0W		05/11/69		1213 GMT			1701M	030	01KT	4	260 03 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0			6.25	.31	2.	.00	.1		0	14.70	33.61		24.987	297.9	0
10			6.28	.28	2.	.00	.3		10	14.59	33.60		25.003	296.4	.030
30			4.37	1.23	16.	.30	12.6		20	12.98	33.56		25.303	267.8	.058
50			3.00	1.77	26.	.07	20.7		30	11.46	33.63		25.647	235.1	.083
80			2.51	1.89	31.	.00	24.0		50	9.95	33.84		26.076	194.3	.126
110			2.35	2.12	34.	.00	25.4		75	9.54	33.97		26.246	178.2	.173
150			1.95	2.25	38.	.11	26.9		100	9.33	34.05		26.343	169.0	.217
200			1.69	2.43	43.	.00	28.0		125	9.15	34.09		26.403	163.3	.259
250			1.29						150	8.88	34.14		26.485	155.5	.300
300			1.04						200	8.51	34.18		26.574	147.1	.377
400			.81						250	8.13	34.23		26.671	137.9	.450
500			.35						300	7.64	34.23		26.744	131.0	.520
									400	6.96	34.25		26.855	120.4	.651
									500	6.10	34.31		27.017	105.1	.770

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

87050

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 20.0N		119 39.5W		05/11/69		1535 GMT			78M	300	06KT	2	300 04		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
									0	13.95	33.60		25.137	283.6	0
									10	13.95	33.62		25.153	282.1	.028
									20	12.11	33.56		25.472	251.8	.055
									30	11.81	33.63		25.583	241.2	.080
									50	9.70	33.79		26.079	194.0	.123

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

87060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 00.0N		120 21.5W		05/11/69		2045 GMT			892M	330	12KT	2	330 06 05		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
									0	14.05	33.28		24.870	309.0	0
									10	14.05	33.28		24.870	309.0	.031
									20	14.04	33.28		24.872	308.8	.062
									30	13.34	33.28		25.015	295.2	.092
									50	12.31	33.32		25.248	273.0	.149
									75	11.94	33.37		25.357	262.7	.216
									100	10.40	33.45		25.696	230.4	.279
									125	9.85	33.73		26.008	200.9	.333
									150	9.32	33.86		26.196	182.9	.382
									200	8.36	33.98		26.441	159.7	.469
									250	7.50	34.04		26.615	143.2	.547
									300	6.83	34.10		26.755	129.9	.617
									400	6.29	34.21		26.914	114.9	.744
									500	5.62	34.25		27.030	103.9	.860
									600	5.28	34.33		27.134	94.0	.965

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

87070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 39.5N		121 02.0W		05/12/69		0142 GMT			3926M	320	14KT	2	300 05 05		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
									0	14.19	33.29		24.849	311.1	0
									10	14.18	33.28		24.843	311.6	.031
									20	13.96	33.28		24.889	307.2	.062
									30	13.43	33.24		24.966	299.9	.093
									50	12.92	33.24		25.068	290.2	.152
									75	11.76	33.31		25.344	263.9	.221
									100	10.44	33.36		25.619	237.7	.285
									125	9.40	33.60		25.980	203.4	.340
									150	9.12	33.80		26.182	184.3	.389
									200	8.36	34.00		26.456	158.2	.477
									250	7.81	34.08		26.601	144.5	.554
									300	7.03	34.08		26.712	134.0	.626
									400	6.33	34.18		26.885	117.6	.757
									500	5.68	34.26		27.030	103.8	.874

DAVID STARR JORDAN

CALCOFI CRUISE 6905

87080

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM			WIND		SPEED		WEATHER		DOMINANT WAVES		
32 19.5N			121 43.0W			05/12/69		0615 GMT			4212M			320		15KT		2				
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD							
0									0	13.53A	33.13A		24.861	309.9	0							
10									10	13.53A	33.13A		24.861	309.9	.031							
20									20	13.36A	33.18A		24.934	302.9	.062							
30									30	13.36	33.19		24.942	302.2	.092							
50									50	13.22	33.19		24.970	299.5	.152							
75									75	12.89	33.24		25.074	289.6	.226							
100									100	11.92	33.32		25.322	266.0	.296							
125									125	10.90	33.43		25.593	240.2	.360							
150									150	10.12	33.63		25.884	212.6	.418							
200									200	9.15	33.92		26.270	175.9	.516							
250									250	8.05	33.96		26.472	156.8	.602							
300									300	7.24	34.00		26.620	142.7	.679							
400									400	6.17	34.07		26.819	123.9	.817							
500									500	5.44	34.15		26.973	109.3	.939							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM			WIND		SPEED		WEATHER		DOMINANT WAVES		
31 59.0N			122 24.0W			05/12/69		1241 GMT			4212M			330		15KT		2		330 05 04		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD							
0									0	13.57B	33.18B		24.892	307.0	0							
10									10	13.57B	33.18B		24.892	307.0	.031							
20									20	13.58B	33.20B		24.905	305.7	.061							
30									30	13.61B	33.22B		24.915	304.8	.092							
50									50	13.21B	33.24B		25.011	295.7	.152							
75									75	12.80	33.20		25.061	290.9	.226							
100									100	11.78	33.33		25.356	262.8	.296							
125									125	10.96	33.37		25.536	245.7	.360							
150									150	9.95	33.55		25.851	215.8	.418							
200									200	8.66	33.90		26.332	170.0	.516							
250									250	7.93	34.00		26.521	152.1	.599							
300									300	7.22	34.05		26.662	138.7	.674							
400									400	6.65	34.21		26.866	119.4	.808							
500									500	6.13	34.28		26.989	107.7	.928							
600									600	5.58	34.32		27.090	98.2	1.038							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90028

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM			WIND		SPEED		WEATHER		DOMINANT WAVES		
33 28.5N			117 46.5W			05/10/69		1507 GMT			445M			260		01KT		1		300 03 05		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD							
0									0	15.22	33.47		24.767	318.9	0							
10									10	12.47	33.48		25.341	264.2	.029							
30									20	11.34	33.58		25.631	236.7	.054							
50									30	10.55	33.64		25.818	218.9	.077							
80									50	10.26	33.72		25.930	208.2	.120							
110									75	9.92	33.85		26.089	193.1	.170							
150									100	9.74	33.92		26.174	185.1	.218							
200									125	9.65	33.97		26.228	179.0	.264							
250									150	9.48	34.05		26.318	171.4	.309							
300									200	9.21	34.20		26.479	156.1	.393							
400									250	8.92	34.26		26.573	147.2	.471							
									300	8.26	34.25		26.667	138.2	.544							
									400	7.22	34.22		26.796	126.0	.682							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90032

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM			WIND		SPEED		WEATHER		DOMINANT WAVES		
33 20.5N			118 03.0W			05/10/69		1135 GMT			741M			250		01KT				290 02 05		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD							
0									0	16.06	33.53		24.625	332.3	0							
10									10	16.06	33.53		24.625	332.3	.033							
30									20	15.00	33.45		24.799	315.8	.066							
50									30	13.03	33.47		25.224	275.4	.095							
80									50	10.86	33.55		25.694	230.7	.146							
110									75	10.14	33.69		25.927	208.5	.201							
150									100	9.49	33.86		26.168	185.6	.251							
200									125	9.71	34.08		26.304	172.8	.296							
250									150	9.25	34.10		26.395	164.1	.339							
300									200	8.94	34.18		26.507	153.4	.420							
400									250	8.32	34.21		26.627	142.1	.496							
500									300	7.91	34.25		26.720	133.3	.567							
									400	6.94	34.25		26.858	120.1	.700							
									500	6.34	34.27		26.954	111.0	.822							

A) THE VALUES ABOVE 30 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.  
 B) THE VALUES ABOVE 75 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.  
 C) ALTERNATE OXYGEN VALUE, 7.87.

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90037

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 11.0N		118 22.5W		05/10/69		0845 GMT				T20ZM	310	08KT	1	320 06 06		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0			6.06						0	16.98	33.56		24.436	350.4	0	
10			5.99	.31	4.	.00	.1		10	16.28	33.54		24.583	336.4	.034	
30			6.18	.33	5.	.00	.1		20	14.78	33.49		24.877	308.3	.067	
50			4.34	1.13	13.	.76	11.9		30	13.12	33.44		25.183	279.3	.096	
80			3.36	1.51	21.	.16	19.6		50	11.18	33.54		25.629	236.9	.148	
110			2.82	1.72	27.	.05	23.6		75	10.22	33.71		25.929	208.3	.204	
150			2.27	2.05	33.	.01	26.9		100	9.73	33.93		26.183	184.2	.253	
200			1.74	2.28	39.	.01	29.6		125	9.52	34.02		26.288	174.2	.299	
250			1.44						150	9.25	34.09		26.387	164.8	.342	
300			1.21						200	8.88	34.19		26.524	151.8	.423	
400			.72						250	8.63	34.25		26.610	143.6	.499	
500			.40						300	7.87	34.22		26.702	134.9	.571	
									400	6.85	34.23		26.855	120.4	.704	
									500	6.20	34.27		26.973	109.3	.825	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90039

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 07.0N		118 30.5W		05/10/69		0613 GMT				1258M	300	06KT	1	280 05 05		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
10			6.08	.31	2.	.00	.0		0	15.91	33.57		24.690	326.2	0	
30			5.37	.77	9.	.27	6.8		10	15.90	33.57		24.692	326.0	.033	
50			5.03	.90	10.	.27	7.7		20	15.52	33.55		24.762	319.3	.065	
80			3.41	1.64	23.	.05	21.5		30	12.32	33.54		25.416	257.0	.094	
110			2.91	1.87	28.	.00	24.9		50	10.74	33.61		25.761	224.3	.142	
150			2.60	2.07	33.	.30	27.3		75	9.92	33.72		25.988	202.7	.196	
250			1.82						100	9.66	33.88		26.156	186.8	.245	
300			1.54						125	9.31	34.00		26.307	172.4	.290	
400			.87						150	9.06	34.04		26.378	165.6	.333	
500			.65						200	8.54	34.11		26.515	152.7	.415	
									250	7.99	34.14		26.622	142.6	.490	
									300	7.45	34.18		26.732	132.1	.561	
									400	6.87	34.23		26.852	120.7	.693	
									500	6.18	34.28		26.983	108.3	.814	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.5N		118 55.5W		05/10/69		0202 GMT				1756M	280	08KT	1	290 06 06		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0			6.48	.18	0.	.00	.0		0	15.29A	33.58A		24.836	312.3	0	
10			6.65	.18	0.	.00	.0		10	14.17A	33.58A		25.076	289.4	.030	
30			5.54	.67	8.	.24	4.9		20	13.22A	33.58A		25.271	270.9	.058	
50			4.18	1.41	19.	.43	17.8		30	12.05A	33.60A		25.514	247.7	.084	
80			3.16	1.79	25.	.00	23.9		50	10.20A	33.74A		25.956	205.7	.130	
110			2.82	1.92	29.	.94	23.7		75	9.71A	33.87A		26.140	188.3	.179	
150			2.28	2.15	36.	.00	27.4		100	9.42A	33.96A		26.258	177.1	.225	
200			1.86	2.38	41.	.00	30.3		125	9.13A	34.07A		26.391	164.5	.269	
250			1.36						150	8.95A	34.13A		26.466	157.3	.309	
300			1.66						200	8.49	34.17		26.569	147.5	.387	
400			.88						250	8.17	34.22		26.657	139.2	.461	
500			.78						300	7.41	34.17		26.730	132.3	.531	
									400	6.70	34.25		26.891	117.0	.661	
									500	6.04	34.28		27.001	106.6	.779	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.5N		118 55.5W		05/29/69		0441 GMT				1710M	300	06KT	1	290 02 08		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	16.53	33.59		24.564	338.2	0	
10									10	15.87	33.59		24.714	323.9	.033	
20									20	15.23	33.57		24.841	311.8	.065	
30									30	13.66	33.53		25.143	283.0	.095	
50									50	10.53	33.63		25.814	219.3	.145	
75									75	9.72	33.88		26.146	187.7	.196	
100									100	9.32	34.01		26.313	171.8	.242	
125									125	9.06	34.07		26.402	163.4	.284	
150									150	8.79	34.13		26.492	154.9	.325	
200									200	8.39	34.21		26.616	143.1	.401	
250									250	8.00	34.23		26.691	136.0	.473	
300									300	7.48	34.24		26.775	128.1	.541	
400									400	6.63	34.29		26.932	113.2	.667	
500									500	6.10	34.34		27.041	102.8	.781	

A) THE VALUES ABOVE 200 METERS HAVE BEEN DIGITIZED FROM THE ANALOG RECORDING.

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.5N		118 55.5W		05/29/69		0532 GMT			1710M	300	06KT	1	290 02 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.41	33.574	5.87	.33	2.	.00	.0	336.7							
14	15.87	33.583	5.96	.28	2.	.00	.0	324.4							
33	12.48	33.623	5.30	.61	11.	.27	7.9	253.9							
42	11.05		4.33	1.33	17.	.16	15.6								
52	10.53		3.86	1.51	20.	.00	18.6								
70	9.86		3.15	1.82	25.	.00	22.8								
85	9.51		2.78	2.02	30.	.00	24.8								
106	9.26		2.51	2.28	33.	.00	27.1								
129	9.03		2.26	2.28	36.	.00	28.6								
149	8.83		2.04	2.41	39.	.00	29.6								
179	8.53		1.75	2.53	43.	.00	31.2								
209	8.49		1.54	2.61	45.	.00	31.9								
239	8.28		1.32												
278	7.71		1.18												
338	7.23		.75												
411	6.51		.52												
487	6.16	34.317	.43					105.3							
566	5.74	34.354	.30					97.5							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90043

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 39.0N		119 28.5W		05/09/69		1944 GMT			1295M	300	20KT	1	290 06 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.34	.23	2.	.00	.0		0	15.18	33.55		24.837	312.2	0
10			6.23	.23	2.	.00	.0		10	15.12	33.56		24.858	310.2	.031
30			5.88	.38	4.	.09	2.2		20	14.74	33.59		24.963	300.2	.062
50			3.50	1.51	23.	.15	20.9		30	13.38	33.62		25.269	271.0	.090
80			2.64	1.89	32.	.00	26.5		50	10.17	33.79		26.000	201.6	.138
110			2.41	2.05	35.	.00	27.9		75	9.54	33.91		26.199	182.7	.186
150			2.12	2.18	39.	.00	29.3		100	9.18	34.00		26.328	170.4	.231
200			1.54	2.30	46.	.00	32.6		125	9.06	34.03		26.371	166.4	.273
250			1.45						150	8.83	34.08		26.446	159.2	.315
300			1.15						200	8.36	34.18		26.597	144.9	.392
									250	7.89	34.16		26.652	139.7	.465
									300	7.53	34.22		26.752	130.2	.535
									400	6.81	34.25		26.876	118.4	.665
									500	6.25	34.29		26.982	108.4	.785

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 25.0N		119 57.5W		05/09/69		1513 GMT			1577M	260	10KT	1	340 05 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.03	.33	3.	.01	.0		0	14.06	33.29		24.876	308.5	0
10			6.00	.33	3.	.00	.1		10	14.06	33.29		24.876	308.5	.031
30			6.07	.36	3.	.00	.2		20	13.53	33.28		24.977	298.9	.061
50			6.02	.31	3.	.00	.2		30	13.44	33.27		24.988	297.9	.091
80			5.83	.54	6.	.23	3.0		50	13.34	33.27		25.008	295.9	.151
110			5.54	.74	9.	.31	6.7		75	12.64	33.28		25.154	282.0	.223
150			3.81	1.48	23.	.04	20.6		100	12.45	33.35		25.245	273.4	.293
200			3.00	2.02	35.	.00	27.8		125	10.40	33.41		25.665	233.4	.357
250			2.81						150	9.62	33.66		25.991	202.4	.412
300			2.17						200	8.56	33.94		26.379	165.6	.506
500			.64						250	7.78	34.01		26.551	149.3	.587
									300	7.23	34.03		26.645	140.3	.661
									400	6.47	34.16		26.851	120.8	.797
									500	5.72	34.21		26.986	108.0	.918

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 25.0N		119 57.5W		05/28/69		0350 GMT			929M	310	20KT	1	300 10 09		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	14.78	33.32		24.747	320.8	0
10									10	14.78	33.32		24.747	320.8	.032
20									20	14.79	33.32		24.745	321.0	.064
30									30	14.61	33.27		24.745	321.0	.096
50									50	12.95	33.25		25.070	290.0	.158
75									75	11.49	33.30		25.386	259.9	.227
100									100	10.39	33.56		25.784	222.1	.288
125									125	9.80	33.72		26.008	200.8	.341
150									150	9.37	33.84		26.172	185.2	.390
200									200	8.84	34.07		26.437	160.1	.478
250									250	7.92	34.06		26.569	147.5	.557
300									300	7.17	34.09		26.701	135.1	.630
400									400	6.31	34.15		26.864	119.6	.762
500									500	5.81	34.27		27.022	104.6	.880

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 25.0N		119 57.5W		05/28/69		0441 GMT				929M	310	70KT	1	300 10 09		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
1	14.77	33.308	6.01	.26	2.	.00	.0	321.4								
10	14.76	33.308	6.00	.26	2.	.00	.0	321.2								
29	14.76	33.308	6.04	.28	2.	.00	.0	321.2								
40	14.23		6.13	.26	2.	.00	.0									
53	12.92		6.17	.23	3.	.00	.0									
67	12.10		5.78	.38	4.	.00	1.6									
91	11.03		5.07	.97	11.	.00	10.4									
110	10.40		4.38	1.36	16.	.00	15.3									
129	9.91		3.84	1.59	20.	.00	19.8									
148	9.61		3.43	1.77	24.	.00	22.5									
176	8.92		3.04	2.05	31.	.00	26.1									
209	8.78		2.50	2.18	36.	.00	29.1									
238	8.13		2.66													
285	7.35		2.15													
337	6.72		1.52													
419	6.13		.94													
498	5.79	34.253	.52					105.6								
578	5.45	34.298	.41					98.3								

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 04.5N		120 38.5W		05/09/69		0903 GMT				3832M	320	14KT	1	030 06 05		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
10			5.96	.38	2.	.00	.0		0	14.18	33.30		24.859	310.1	0	
30			6.05	.33	2.	.00	.0		10	14.18	33.30		24.859	310.1	.031	
50			6.08	.33	2.	.00	.0		20	14.07	33.30		24.881	307.9	.062	
80			6.06	.44	3.	.03	.6		30	13.99	33.29		24.890	307.1	.093	
110			6.04	.49	5.	1.12	.6		50	13.53	33.30		24.992	297.4	.153	
150			5.48	.74	9.	.09	6.4		75	12.71	33.32		25.171	280.4	.226	
200			4.04	1.38	19.	.00	17.6		100	12.01	33.35		25.328	265.4	.295	
250			2.88						125	10.71	33.48		25.666	233.3	.358	
300			2.54						150	10.14	33.60		25.857	215.1	.415	
400			.91						200	9.08	33.97		26.321	171.1	.513	
500			.64						250	8.09	34.04		26.529	151.4	.596	
									300	8.10	34.21		26.660	138.9	.670	
									400	6.85	34.24		26.863	119.7	.805	
									500	6.03	34.29		27.010	105.7	.925	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 44.5N		121 19.5W		05/09/69		0323 GMT				3737M	360	06KT	1	030 02 06		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.92	.33	2.	.00	.0		0	15.16	33.27		24.626	332.3	0	
10			5.96	.31	2.	.00	.0		10	14.62	33.22		24.704	324.8	.033	
30			5.96	.28	2.	.00	.0		20	14.43	33.24		24.760	319.5	.065	
50			5.95	.26	2.	.00	.0		30	14.39	33.24		24.768	318.7	.097	
80			5.50	.61	6.	.29	4.2		50	14.36	33.25		24.782	317.4	.161	
110			4.58	1.05	15.	.01	14.2		75	12.36	33.19		25.138	283.5	.236	
150			3.52	1.64	26.	.45	22.5		100	10.53	33.33		25.581	241.4	.303	
200			3.00	1.79	35.	.04	26.8		125	9.62	33.57		25.921	209.1	.359	
250			2.44						150	9.16	33.77		26.152	187.2	.410	
300			1.81						200	8.42	33.95		26.408	162.8	.499	
400			.89						250	7.64	34.01		26.571	147.4	.578	
500			.44						300	7.17	34.07		26.685	136.6	.651	
									400	6.07	34.13		26.879	118.2	.784	
									500	5.71	34.24		27.011	105.7	.901	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

90090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 24.0N		122 01.0W		05/08/69		1519 GMT				4021M		00KT		050 03 08		
Z	T	S	O2	PO4	SI03	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	14.91	33.23		24.650	330.0	0	
									10	14.43	33.22		24.745	321.0	.033	
									20	14.33	33.22		24.766	319.0	.065	
									30	14.28	33.22		24.776	318.0	.097	
									50	14.24	33.23		24.792	316.5	.160	
									75	13.58	33.24		24.936	302.8	.238	
									100	11.60	33.25		25.327	265.5	.310	
									125	10.09	33.44		25.741	226.1	.372	
									150	9.44	33.68		26.036	198.1	.425	
									200	8.80	33.91		26.318	171.4	.519	
									250	8.14	34.00		26.490	155.1	.603	
									300	7.39	34.02		26.615	143.2	.680	
									400	6.37	34.13		26.840	121.8	.818	
									500	5.63	34.19		26.981	108.5	.939	
									600	5.20	34.28		27.104	96.8	1.048	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93020

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 24.0N		122 01.0W		05/08/69		1630 GMT			4021M		00KT		050 03 08		
Z	T	S	02	P04	S103	NC2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	14.96	33.251	5.99	.36		.00	.0	329.5							
10	14.43	33.242	6.03	.31		.00	.0	319.4							
30	14.26		6.08	.33		.00	.0								
54	14.22		6.02	.31		.00	.0								
64	14.22		6.01	.28		.00	.0								
74	13.27	33.251	6.09	.38		.00	.0	296.0							
89	11.87		5.65	.54		.13	3.2								
105	11.06		5.37	.69		.05	6.7								
130	9.76		4.30	1.20		.05	16.0								
149	9.36		3.96	1.36		.06	18.9								
174	9.09		3.25	1.64			22.4								
204	8.65		2.87	1.84	38.	.15	27.0								
233	8.27		2.64												
272	7.61		2.41												
331	6.89		1.66												
404	6.38		.94												
479	5.88	34.201	.66					110.6							
558	5.38	34.261	.36					100.3							

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93027

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 56.0N		117 19.0W		05/06/69		0245 GMT			140M	180	02KT	1	300 05 06		
Z	T	S	02	P04	S103	NC2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0			5.95	.33	4.	.00	.1		0	15.09	33.55		24.856	310.3	0
10			4.80	1.00	14.	.45	8.7		10	11.58	33.55		25.563	243.1	.028
25			3.95	1.51	19.	.25	15.6		20	10.80	33.61		25.751	225.3	.051
35			3.28	1.84	24.	.49	17.8		30	10.56	33.64		25.816	219.0	.073
45			3.14	1.95	25.	.45	17.6		50	10.24	33.75		25.957	205.7	.116
60			3.48	1.74	26.	.36	17.1		75	9.96	33.87		26.098	192.3	.166
75			2.77	1.84	29.	.19	17.6		100	9.89	33.93		26.157	186.7	.214
100			2.93	1.95	30.	.05	17.2								

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93028

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.5N		117 22.0W		05/06/69		0453 GMT			501M	140	02KT	1	300 03 06		
Z	T	S	02	P04	S103	NC2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0			5.92	.28	4.	.00	.2		0	16.48	33.56		24.552	339.3	0
10			5.94	.33	4.	.00	.2		10	16.40	33.56		24.571	337.5	.034
30			4.93	.28	5.	.00	.2		20	13.13	33.59		25.297	268.5	.064
50			3.43	.77	12.	.05	8.3		30	10.89	33.62		25.743	226.0	.089
80			2.88	1.64	25.	.00	21.6		50	10.13	33.73		25.960	205.4	.132
110			2.60	1.82	30.	.00	24.6		75	9.98	33.91		26.126	189.6	.182
150			2.48	2.00	35.	.00	27.5		100	9.84	34.03		26.243	178.5	.228
200			1.82	2.30	40.	.00	29.8		125	9.67	34.06		26.295	173.6	.273
250			1.98						150	9.53	34.11		26.357	167.7	.316
300			1.70						200	9.41	34.21		26.454	158.4	.400
									250	8.76	34.24		26.582	146.3	.478
									300	8.13	34.22		26.663	138.6	.552
									400	7.51	34.26		26.786	127.0	.690

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93030

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 50.5N		117 31.0W		05/06/69		0704 GMT			888M	240	06KT	1	340 01 06		
Z	T	S	02	P04	S103	NC2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0			5.93	.18	3.	.00	.0		0	16.68	33.55		24.498	344.4	0
10			5.80	.26	3.	.00	.0		10	16.67	33.54		24.493	344.9	.034
30			5.72	.51	9.	.00	3.7		20	13.71	33.51		25.118	285.5	.066
80			3.21	1.72	26.	.00	22.1		30	12.44	33.60		25.440	254.8	.093
110			2.26		35.	.00	26.6		50	10.64	33.62		25.787	221.8	.141
150			1.90		39.	.00	28.5		75	10.15	33.84		26.042	197.5	.194
200			1.54		42.	.00	30.4		100	10.02	34.08		26.251	177.7	.241
250			1.71						125	9.69	34.17		26.377	165.8	.285
300			1.51						150	9.54	34.21		26.433	160.5	.326
500			.97						200	9.38	34.25		26.491	155.0	.407
									250	8.91	34.24		26.559	148.6	.485
									300	8.14	34.25		26.685	136.5	.559
									400	7.69	34.29		26.783	127.2	.696
									500	6.61	34.28		26.927	113.6	.824



## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

93035

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 40.5N		117 51.5W		05/06/69	1045	GMT			639H	230	03KT	1	340 01 05		
Z	T	S	O2	P04	S103	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.12	.28	1.	.00	.0		0	14.69	33.49		24.897	306.5	0
10			6.23	.28	1.	.00	.0		10	14.68	33.49		24.899	306.3	.031
30			6.20	.33	1.	.00	.0		20	14.65	33.49		24.905	305.7	.061
50			5.55	.69	8.	.82	5.4		30	14.27	33.46		24.963	300.2	.092
80			3.96	1.46	20.	.17	19.8		50	12.12	33.44		25.377	260.8	.148
110			3.11	1.79	28.	.00	25.8		75	10.28	33.57		25.810	219.6	.208
150			2.72	2.02	35.	.20	29.4		100	9.88	33.76		26.026	199.1	.261
200			2.29	2.25	42.	.07	32.5		125	9.35	33.90		26.222	180.4	.309
250			1.75						150	9.20	34.01		26.333	170.0	.354
300			1.41						200	8.54	34.10		26.507	153.4	.436
400			.67						250	8.04	34.15		26.622	142.5	.512
500			.37						300	7.53	34.16		26.705	134.7	.584
									400	6.70	34.25		26.891	117.0	.715
									500	6.01	34.30		27.020	104.7	.832

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

93040

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 30.0N		118 11.5W		05/06/69	1351	GMT			1756H	310	02KT	2	270 06 08		
Z	T	S	O2	P04	S103	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD
0			6.03	.26	3.	.00	.1		0	15.01	33.56		24.882	307.9	0
10			5.92	.28	2.	.00	.0		10	14.97	33.57		24.898	306.4	.031
30			5.77	.36	4.	.00	.2		20	14.96	33.56		24.892	306.9	.061
50			4.71	.95	14.	.19	12.0		30	14.75	33.56		24.938	302.6	.092
80			3.12	1.66	26.	.00	24.9		50	11.18	33.58		25.660	233.9	.146
110			2.84	1.77	31.	1.63	24.8		75	10.01	33.78		26.020	199.7	.200
150			2.51	1.82	37.	.10	28.9		100	9.64	33.89		26.167	185.7	.249
200			1.80	2.38	47.	.00	35.6		125	9.21	33.98		26.308	172.4	.294
250			1.38						150	8.96	34.06		26.410	162.6	.337
300			1.09						200	8.20	34.15		26.598	144.8	.415
400			.71						250	7.67	34.17		26.692	135.9	.487
500			.34						300	7.23	34.20		26.779	127.7	.556
									400	6.53	34.25		26.914	114.9	.682
									500	6.01	34.30		27.020	104.7	.798

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

93050

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 10.0N		118 52.5W		05/06/69	2137	GMT			1479H	280	04KT	2	280 05 05		
Z	T	S	O2	P04	S103	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	14.98	33.54		24.873	308.8	0
10									10	14.73	33.53		24.919	304.4	.031
30									20	14.59	33.52		24.941	302.3	.061
50									30	13.20	33.56		25.259	272.0	.090
80									50	10.54	33.63		25.812	219.4	.139
110									75	10.16	33.75		25.971	204.4	.192
150									100	9.74	33.87		26.135	188.8	.242
200									125	9.44	33.97		26.262	176.7	.288
250									150	9.30	34.12		26.402	163.4	.331
300									200	8.57	34.14		26.534	150.9	.412
400									250	8.14	34.16		26.615	143.2	.487
500									300	7.31	34.18		26.752	130.2	.558
									400	6.44	34.24		26.918	114.5	.685
									500	5.92	34.29		27.024	104.4	.801
									600	5.50	34.34		27.115	95.7	.908

## DAVID STARR JORDAN

## CALCOFI CRUISE 6905

93060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 50.0N		119 34.0W		05/07/69	0335	GMT			2415H	320	05KT	2	200 02 06		
Z	T	S	O2	P04	S103	NC2	NC3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	13.73	33.35		24.990	297.6	0
10									10	13.43	33.37		25.067	290.3	.029
30									20	13.40	33.37		25.073	289.8	.058
50									30	13.36	33.41		25.112	286.0	.087
80									50	12.65	33.38		25.229	274.9	.144
110									75	11.10	33.40		25.534	245.8	.209
150									100	9.82	33.63		25.935	207.8	.266
200									125	9.27	33.76		26.126	189.6	.316
250									150	8.64	33.93		26.359	167.5	.362
300									200	8.06	33.99		26.494	154.7	.444
400									250	7.49	34.03		26.608	143.8	.520
500									300	6.99	34.09		26.726	132.7	.592
									400	6.71	34.25		26.889	117.2	.722
									500	6.06	34.29		27.006	106.1	.840

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 30.0N		120 14.0W		05/07/69	0818	GMT				3926M	280	04KT	2	250 03 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	13.88	33.39		24.990	297.6	0	
									10	13.68	33.38		25.024	294.4	.030	
									20	13.66	33.39		25.035	293.3	.059	
									30	13.63	33.39		25.041	292.7	.088	
									50	12.38	33.37		25.273	270.6	.145	
									75	10.78	33.51		25.677	232.3	.208	
									100	10.03	33.67		25.931	208.2	.264	
									125	9.61	33.80		26.102	191.9	.314	
									150	9.08	33.91		26.274	175.6	.361	
									200	8.68	34.11		26.493	154.8	.445	
									250	7.90	34.11		26.612	143.5	.522	
									300	7.08	34.09		26.713	133.9	.593	
									400	6.51	34.21		26.885	117.6	.724	
									500	5.87	34.28		27.022	104.6	.841	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 10.0N		120 54.5W		05/07/69	1245	GMT				3926M	300	02KT	2	250 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	15.16	33.31		24.657	329.3	0	
									10	15.06	33.31		24.679	327.3	.033	
									20	15.02	33.30		24.680	327.2	.066	
									30	15.02	33.31		24.687	326.4	.098	
									50	15.01	33.31		24.690	326.2	.164	
									75	15.00	33.32		24.699	325.3	.246	
									100	13.63	33.46		25.095	287.6	.323	
									125	11.80	33.43		25.430	255.8	.392	
									150	10.67	33.53		25.712	229.0	.453	
									200	9.07	33.83		26.213	181.4	.557	
									250	8.22	33.97		26.454	158.5	.644	
									300	7.53	34.02		26.595	145.1	.722	
									400	6.51	34.10		26.798	125.8	.863	
									500	5.79	34.20		26.969	109.6	.987	
									600	5.27	34.26		27.080	99.1	1.098	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

93090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
30 50.0N		121 34.5W		05/07/69	1730	GMT				4116M	320	07KT	2	310 05 07		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	14.81	33.23		24.671	328.0	0	
									10	14.80	33.23		24.673	327.8	.033	
									20	14.83	33.24		24.675	327.6	.066	
									30	14.93	33.27		24.676	327.5	.098	
									50	14.84	33.25		24.680	327.1	.164	
									75	14.62	33.20		24.689	326.3	.246	
									100	12.49	33.17		25.098	287.4	.323	
									125	11.38	33.42		25.499	249.2	.391	
									150	10.68	33.56		25.733	226.9	.451	
									200	9.20	33.84		26.200	182.6	.556	
									250	8.32	33.96		26.431	160.6	.643	
									300	7.61	34.04		26.599	144.7	.722	
									400	6.78	34.14		26.794	126.3	.863	
									500	5.88	34.18		26.942	112.1	.988	

DAVID STARR JORDAN

CALCOFI CRUISE 6905

94030

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 42.5N		117 27.0W		05/05/69	1915	GMT				611M		KT				
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0A	16.39	33.51		24.535	341.0	0	
									10	16.28	33.54		24.583	336.4	.034	
									20	13.16	33.52		25.237	274.2	.064	
									30	11.98	33.52		25.466	252.4	.091	
									50	10.84	33.66		25.783	222.2	.138	
									75	9.96	33.80		26.044	197.4	.191	
									100	10.07	34.06		26.227	180.0	.239	
									125	9.90	34.16		26.334	169.9	.283	
									150	9.63	34.19		26.403	163.4	.326	
									200	9.51	34.23		26.454	158.5	.408	
									250	9.10	34.24		26.528	151.4	.488	
									300	8.54	34.30		26.663	138.6	.563	
									400	7.56	34.28		26.794	126.2	.701	
									500	6.73	34.27		26.903	115.9	.829	

A) A SHAKEDOWN STATION.

## RV DAVID STARR JORDAN

## CALCOFI CRUISE 6905

## TEN METER DATA

			Z	T	S	02	PO4	SI03	NO2	NO3	DT		
60.050	05/25/69	0600GMT	37	57.5N	122 53.0W	10	9.69	33.76	1.48	13.	.34	18.9	196.2
	BOTTOM	47M			WIND 320 06KT WEATHER 2								
		DOMINANT WAVES			49								
60.055	05/25/69	1013GMT	37	47.0N	123 15.0W	10	11.36	33.22	.77	13.	.23	6.7	263.7
	BOTTOM	127M			WIND 300 08KT WEATHER 2								
		DOMINANT WAVES			49								
60.065	05/25/69	1700GMT	37	27.0N	123 58.5W	10	12.16	32.74	.36	3.	.00	.0	313.2
	BOTTOM	3635M			WIND 130 05KT WEATHER 1								
		DOMINANT WAVES			310 03								
63.050	05/24/69	1230GMT	37	23.5N	122 28.0W	10	10.54	33.77	1.10	14.	.20	12.8	209.2
	BOTTOM	24M			WIND 110 02KT WEATHER 2								
		DOMINANT WAVES			280 01 05								
63.052	05/24/69	1130GMT	37	19.0N	122 36.0W	10	11.73		.64	7.	.11	5.5	
	BOTTOM	84M			WIND 110 02KT WEATHER 1								
		DOMINANT WAVES			00								
63.055	05/24/69	0925GMT	37	13.0N	122 50.0W	10	10.99	33.31	.79	11.	.07	8.3	250.7
	BOTTOM	297M			WIND 00KT WEATHER 2								
		DOMINANT WAVES			00								
63.060	05/24/69	0711GMT	37	05.0N	123 07.0W	10	12.75	32.97	.28	5.	.00	.1	307.0
	BOTTOM	2595M			WIND 310 04KT WEATHER 2								
		DOMINANT WAVES			310 01 06								
63.065	05/24/69	0437GMT	36	54.0N	123 31.0W	10	12.52	33.23	.54	6.	.00	2.4	283.6
	BOTTOM	3540M			WIND 250 08KT WEATHER 2								
		DOMINANT WAVES			300 01 06								
63.070	05/24/69	0156GMT	36	42.0N	123 55.0W	10	12.60	33.111	.41	5.	.00	1.5	293.8
	BOTTOM	3918M			WIND 240 08KT WEATHER 2								
		DOMINANT WAVES			300 01 06								
63.090	05/26/69	1240GMT	36	03.0N	125 20.0W	10	14.45	32.82	.28	2.	.00	.0	350.8
	BOTTOM	4498M			WIND 230 07KT WEATHER 4								
		DOMINANT WAVES			49								
67.048	05/23/69	0910GMT	36	53.0N	121 56.0W	10	9.98	33.788	1.72	23.	.35	21.3	198.7
	BOTTOM	39M			WIND 080 01KT WEATHER 2								
		DOMINANT WAVES											
67.055	05/23/69	1330GMT	36	39.0N	122 26.0W	10	11.72	33.572	.51	1.	.28	6.0	244.0
	BOTTOM	2129M			WIND 320 07KT WEATHER 2								
		DOMINANT WAVES			300 04 05								
67.060	05/23/69	1617GMT	36	28.0N	122 47.0W	10	12.46	33.211	.56	4.	.10	2.9	283.9
	BOTTOM	2992M			WIND 330 04KT WEATHER 2								
		DOMINANT WAVES			330 03 07								

## RV DAVID STARR JORDAN

## CALCOFI CRUISE 6905

## TEN METER DATA

					Z	T	S	02	PO4	SI03	NO2	NO3	DT
67.065	05/23/69	1847GMT	36 18.0N	123 09.0W	10	13.02	32.971		.38	4.	.00	.2	312.0
	BOTTOM		3296M	WIND 300 06KT	WEATHER 2								
	DOMINANT WAVES		330 04 07										
67.070	05/23/69	2125GMT	36 08.0N	123 25.5W	10	13.31	32.901		.31	4.	.00	.0	322.6
	BOTTOM		3540M	WIND 290 01KT	WEATHER 4								
	DOMINANT WAVES		49 01 05										
67.090	05/26/69	1810GMT	35 28.0N	124 55.0W	10	14.04	32.84		.31	2.	.00	.0	341.2
	BOTTOM		4498M	WIND 220 04KT	WEATHER 2								
	DOMINANT WAVES		49										
70.051	05/23/69	0401GMT	36 11.5N	121 44.0W	10	10.75	33.817		1.48	22.	.26	19.4	209.2
	BOTTOM		371M	WIND 270 10KT	WEATHER 2								
	DOMINANT WAVES		270 01 03										
70.065	05/22/69	0247GMT	35 43.0N	122 45.0W	10	12.54	33.279		.49	3.	.09	2.8	280.4
	BOTTOM		1572M	WIND 340 18KT	WEATHER 2								
	DOMINANT WAVES		310 06 06										
73.050	05/16/69	0803GMT	35 37.0N	121 17.0W	10	10.42	33.842		1.28	21.	.14	16.7	201.9
	BOTTOM		97M	WIND 300 12KT	WEATHER 2								
	DOMINANT WAVES		290 04 04										
73.053	05/16/69	0948GMT	35 31.5N	121 28.5W	10	11.48	33.612		1.13	15.	.21	12.1	236.8
	BOTTOM		741M	WIND 310 20KT	WEATHER 4								
	DOMINANT WAVES		310 04 04										
73.060	05/16/69	1325GMT	35 17.5N	121 58.0W	10	12.94	33.195		.41	2.	.08	1.1	294.0
	BOTTOM		2410M	WIND 310 18KT	WEATHER 2								
	DOMINANT WAVES		300 06 07										
73.070	05/16/69	1840GMT	34 58.0N	122 40.0W	10	13.16	33.294		.33	1.	.04	.3	290.9
	BOTTOM		4110M	WIND 330 14KT	WEATHER 2								
	DOMINANT WAVES		340 05 04										
73.080	05/16/69	2331GMT	34 38.0N	123 22.0W	10		33.225		.28	1.	.00	.2	
	BOTTOM		4498M	WIND 350 14KT	WEATHER 2								
	DOMINANT WAVES		350 05 05										
73.090	05/17/69	0400GMT	34 18.5N	124 04.0W	10	14.23	32.961		.33	2.	.00	.0	336.1
	BOTTOM		3075M	WIND 350 05KT	WEATHER 1								
	DOMINANT WAVES		330 03 05										
77.048	05/16/69	0305GMT	35 08.5N	120 43.5W	10	10.91	33.858		1.13	16.	.09	11.3	208.9
	BOTTOM		32M	WIND 310 12KT	WEATHER 1								
	DOMINANT WAVES		290 04 04										
77.051	05/16/69	0045GMT	35 02.0N	120 57.0W	10	10.85	33.768		.90	12.	.56	9.8	214.5
	BOTTOM		279M	WIND 300 19KT	WEATHER 2								
	DOMINANT WAVES		310 08 05										

## RV DAVID STARR JORDAN

## CALCOFI CRUISE 6905

## TEN METER DATA

			Z	T	S	02	P04	S103	N02	N03	DT
77.055	05/15/69	2220GMT	34	54.5N	121	13.0W					
	BOTTOM	584M					WIND	310	22KT	WEATHER	1
	DOMINANT	WAVES	310	07	05						
			10	12.32	33.385		.61	7.	.00	5.5	268.5
77.060	05/15/69	1917GMT	34	44.0N	121	34.0W					
	BOTTOM	962M					WIND	320	14KT	WEATHER	2
	DOMINANT	WAVES	320	06	06						
			10	12.15	33.427		.56	5.	.11	4.9	262.4
77.065	05/15/69	1640GMT	34	34.0N	121	55.0W					
	BOTTOM	3918M					WIND	330	14KT	WEATHER	2
	DOMINANT	WAVES	310	04	04						
			10	12.51	33.481		.46	5.	.00	3.4	265.0
77.070	05/15/69	1408GMT	34	24.0N	122	16.0W					
	BOTTOM	4110M					WIND	320	12KT	WEATHER	2
	DOMINANT	WAVES	360	05	07						
			10	12.96	33.276		.33	2.	.00	.3	288.4
77.080	05/15/69	0955GMT	34	04.0N	122	57.0W					
	BOTTOM	4308M					WIND	360	19KT	WEATHER	2
	DOMINANT	WAVES	350	06	08						
			10	13.33	33.108		.28	3.	.00	.0	307.8
77.090	05/15/69	0523GMT	33	43.0N	123	39.0W					
	BOTTOM	4498M					WIND	330	12KT	WEATHER	2
	DOMINANT	WAVES	350	05	05						
			10	14.44	33.015		.28	3.	.00	.0	336.3
80.051	05/14/69	0123GMT	34	26.0N	120	32.5W					
	BOTTOM	95M					WIND	300	12KT	WEATHER	0
	DOMINANT	WAVES	300	02	04						
			10	12.26	33.772		.97	12.	.10	9.7	239.0
80.065	05/14/69	1125GMT	33	59.0N	121	30.0W					
	BOTTOM	3447M					WIND	280	10KT	WEATHER	2
	DOMINANT	WAVES	290	02	04						
			10	13.49	33.125		.33	3.	.00	.0	309.6
83.055	05/13/69	0825GMT	33	44.0N	120	24.5W					
	BOTTOM	1073M					WIND	320	12KT	WEATHER	2
	DOMINANT	WAVES	310	04	05						
			10	12.88	33.670		.67	9.	.13	6.2	257.9
83.060	05/13/69	0550GMT	33	34.0N	120	45.0W					
	BOTTOM	1572M					WIND	310	10KT	WEATHER	0
	DOMINANT	WAVES	360	04	05						
			10	12.84	33.626		.69	9.	.12	6.7	260.4
83.070	05/13/69	0103GMT	33	14.5N	121	26.0W					
	BOTTOM	3832M					WIND	300	07KT	WEATHER	1
	DOMINANT	WAVES	280	03	04						
			10	13.52	33.143		.26	3.	.00	.1	308.8
83.080	05/12/69	2005GMT	32	54.0N	122	08.0W					
	BOTTOM	4193M					WIND	320	14KT	WEATHER	1
	DOMINANT	WAVES	340	04	04						
			10	13.74	33.048		.23	3.	.00	.0	320.1
83.090	05/12/69	1540GMT	32	34.5N	122	50.0W					
	BOTTOM	4212M					WIND	340	12KT	WEATHER	2
	DOMINANT	WAVES	320	04	04						
			10	13.72	33.058		.23	2.	.00	.0	318.9

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## CALCOFI CRUISE 6905

## TEN METER DATA

					Z	T	S	02	PO4	SI03	NO2	NO3	DT
87.033	05/11/69	0454GMT	33 54.0N	118 29.5W	10	13.66	33.547		.64	5.	.10	2.8	281.9
	BOTTOM 52M WIND 180 03KT WEATHER 1 DOMINANT WAVES												
87.050	05/11/69	1545GMT	33 20.0N	119 39.5W	10	13.94	33.605		.41	2.	.00	1.6	283.1
	BOTTOM 78M WIND 300 06KT WEATHER 2 DOMINANT WAVES 300 04												
87.055	05/11/69	1819GMT	33 10.0N	120 00.0W	10	14.06	33.299		.36	2.	.00	.6	307.9
	BOTTOM 1221M WIND 310 10KT WEATHER 2 DOMINANT WAVES 280 05 04												
87.060	05/11/69	2107GMT	33 00.0N	120 21.5W	10	14.06	33.282		.31	1.	.00	.4	309.2
	BOTTOM 892M WIND 330 12KT WEATHER 2 DOMINANT WAVES 330 06 05												
87.070	05/12/69	0212GMT	32 39.5N	121 02.0W	10	14.25	33.302		.28	2.	.00	.0	311.5
	BOTTOM 3926M WIND 320 14KT WEATHER 2 DOMINANT WAVES 300 05 05												
87.080	05/12/69	0641GMT	32 19.5N	121 43.0W	10	13.51	33.135		.28	3.	.00	.0	309.2
	BOTTOM 4212M WIND 320 15KT WEATHER 2 DOMINANT WAVES												
87.090	05/12/69	1102GMT	31 59.0N	122 24.0W	10	13.62	33.165		.26	3.	.00	.0	309.1
	BOTTOM 4212M WIND 330 15KT WEATHER 2 DOMINANT WAVES 330 05 04												
93.045	05/06/69	1800GMT	32 20.0N	118 32.0W	10	15.04	33.576		.33	5.	.03	.4	307.5
	BOTTOM 1387M WIND 210 05KT WEATHER 2 DOMINANT WAVES 200 04 07												
93.050	05/06/69	2157GMT	32 10.0N	118 52.5W	10	14.72	33.550		.31	2.	.00	.0	302.8
	BOTTOM 1479M WIND 280 04KT WEATHER 2 DOMINANT WAVES 280 05 05												
93.055	05/07/69	0120GMT	32 00.0N	119 13.5W	10	13.56	33.382		.31	3.	.00	.6	292.1
	BOTTOM 1577M WIND 140 01KT WEATHER 2 DOMINANT WAVES 220 06 07												
93.060	05/07/69	0410GMT	31 50.0N	119 34.0W	10	13.46	33.388		.26	3.	.00	.4	289.7
	BOTTOM 2415M WIND 320 01KT WEATHER 2 DOMINANT WAVES 200 02 06												
93.070	05/07/69	0830GMT	31 30.0N	120 14.0W	10	13.73	33.399		.15	4.	.17	.2	294.1
	BOTTOM 3926M WIND 280 04KT WEATHER 2 DOMINANT WAVES 250 03 06												
93.080	05/07/69	1240GMT	31 10.0N	120 54.5W	10	15.08	33.321		.10	2.	.00	.0	327.0
	BOTTOM 3926M WIND 300 02KT WEATHER 2 DOMINANT WAVES 250 03 05												

RV DAVID STARR JORDAN

CALCOFI CRUISE 6905

TEN METER DATA

93.090 05/07/69 1805GMT 30 50.0N 121 34.5W  
BOTTOM 4116M WIND 320 07KT WEATHER 2  
DOMINANT WAVES 310 05 07

Z	T	S	O2	PO4	SI03	NO2	NO3	DT
10	14.78	33.231		.10	2.	.00	.0	327.4

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