

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 7412  
25 November - 18 December 1974

CalCOFI Cruise 7501  
8 January - 15 February 1975

and

CalCOFI Cruise 7503  
24 February - 28 March 1975

SIO Reference 84-10  
12 March 1984

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Sponsored by  
Marine Research Committee

SIO Reference 84-10  
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Approved for distribution:

  
W. A. Nierenberg, Director

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## INTRODUCTION

The data in this report were collected during Cruises 7412\*, 7501, and 7503 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service and the RV *Alexander Agassiz* of the Scripps Institution of Oceanography. The report preceding this one in the series was SIO Ref. 82-21 which included data for 1978.

These data were collected and processed by personnel of the Data Collection and Processing Group (DCPG\*\*), Marine Life Research Group (MLRG), and the Southwest Fisheries Center, National Marine Fisheries Service (NMFS).

## STANDARD PROCEDURES

### *In situ Salinity/Temperature/Depth Recorder (STD) Data*

Plessey Environmental Systems Model 9040 STDs were used for most stations by both the *Jordan* and the *Agassiz*. Temperature and salinity offset corrections were applied to the STD data based upon Nansen bottle data comparisons. At most stations, the maximum sampling depth was 1000 meters, bottom depth permitting. An 18-bottle Nansen cast replaced the STD cast on a few stations where the STD failed.

### *Hydrographic Cast Data*

The hydrographic casts consisted of 18 or fewer Nansen bottles cast to a maximum sampling depth of 1000 meters, bottom depth permitting. There was usually only one Nansen cast per CalCOFI line. Temperature, salinity, and oxygen were determined for all depths.

On STD lowerings, a Nansen bottle was usually placed on the wire a few meters above the STD and another bottle was lowered to a depth of 10 meters. Temperature and salinity were determined from both bottles on most stations; dissolved oxygen was occasionally determined from the 10-meter bottle. A 10-meter bottle was also taken on most net tow stations.

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

All salinity samples were analyzed at sea using inductive type salinometers. The salinity values were recorded and are reported to three decimal places, provided accepted standards were met. If there was doubt concerning the accuracy of the analytical results, the salinities are reported to two decimal points. 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).

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

## TABULATED DATA

The time reported is Greenwich Mean Time. For STD lowerings it is the "start down" time and for Nansen bottle casts it is the time of messenger release.

\* The first two digits represent the year and the second two digits the month of the cruise.

\*\* Now the Physical and Chemical Oceanographic Data Facility (PACODF).

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 were obtained by bottle casts and by the STD, and appear in three forms:

1) Data from the sample bottle casts are tabulated with the observed levels of depth on the left of a page, and standard depth values of temperature, salinity and oxygen interpolated from those observations are on the right of a page. Additional computed values are also presented.

2) Data from the STD lowerings are presented with two stations printed side by side. Temperature and salinity are tabulated at closer standard intervals than the interpolated standard depth bottle data. Additional computed values are also presented.

3) Ten-meter temperature, salinity and occasionally oxygen data from net tow 10-meter bottles and STD 10-meter check bottles appear as separate sections.

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 93.30 appears in the tabulated data as 93030. The CalCOFI station designations have been in use for over thirty years. The first part specifies a line normal to the general trend of the coast line (CalCOFI line). The second part specifies a station position relative to the coast on the CalCOFI line. On some closely-spaced special inshore stations, an additional superscript number may appear after the line number or station number to indicate a finer resolution of the non-standard station location.

The column headings are to be interpreted as follows:

Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved Oxygen	ml/L
DT	$\delta_T$ Thermosteric anomaly	cl/ton
SIGT or SIGMA T	$\sigma_t = (\rho_{s,t,0} - 1) 10^3$ where $\rho_{s,t,0}$ is the density the parcel of sea water would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dynamic meters

#### FOOTNOTES

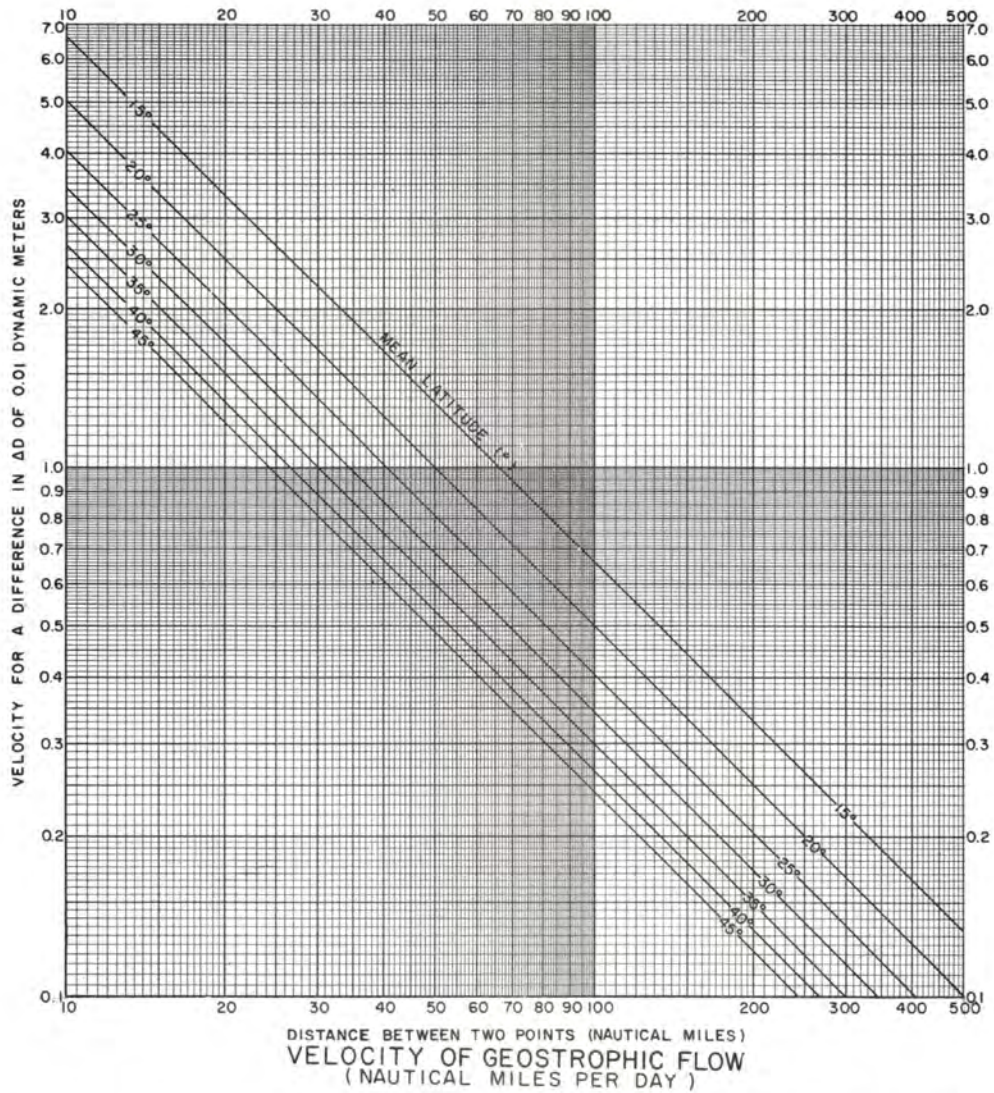
In addition to footnotes, special notations are used without footnotes because the meaning is always the same.

*P*: After depth values indicates the Nansen bottle posttripped.

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

#### LITERATURE CITED

- Anderson, G. C., compiler, 1971. "Oxygen Analysis," Marine Technician's Handbook, SIO Ref. No. 71-8, Sea Grant Pub. No. 9.
- Carpenter, J. H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. *Limnol. Oceanogr.*, 10: 141-143.
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- Matthews, D. J., 1939. Tables of the velocity of sound in pure water and seawater for use in echosounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, H. D. 282, 52 pp.
- Plessey Environmental Systems, 1974. Instruction Manual, *In situ* Salinity/Temperature/Depth Monitoring and Recording System, Model 9040.



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

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

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

## FIGURES

### Cruise 7503

1. CalCOFI Cruise 7503, 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



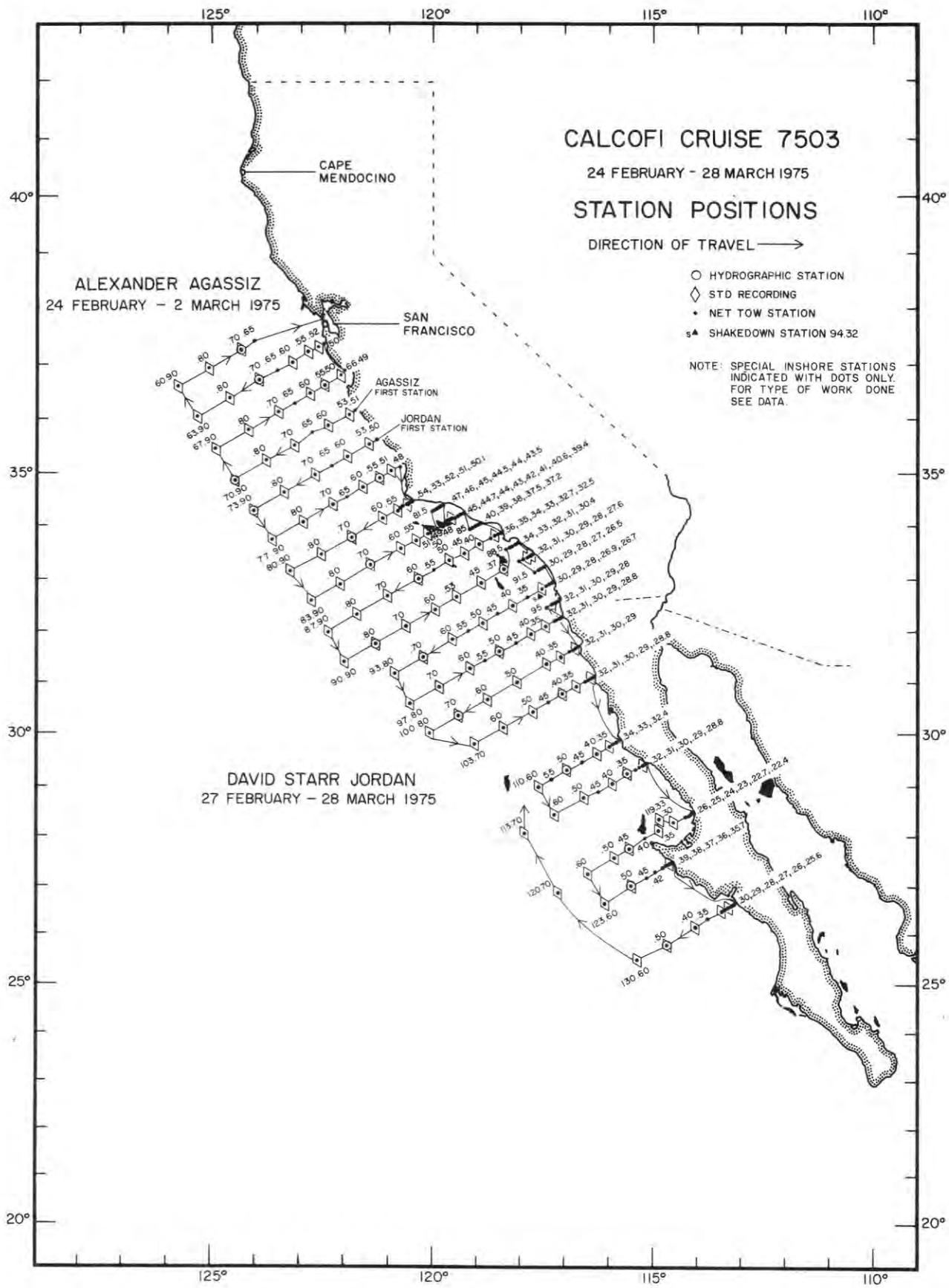


FIGURE 1

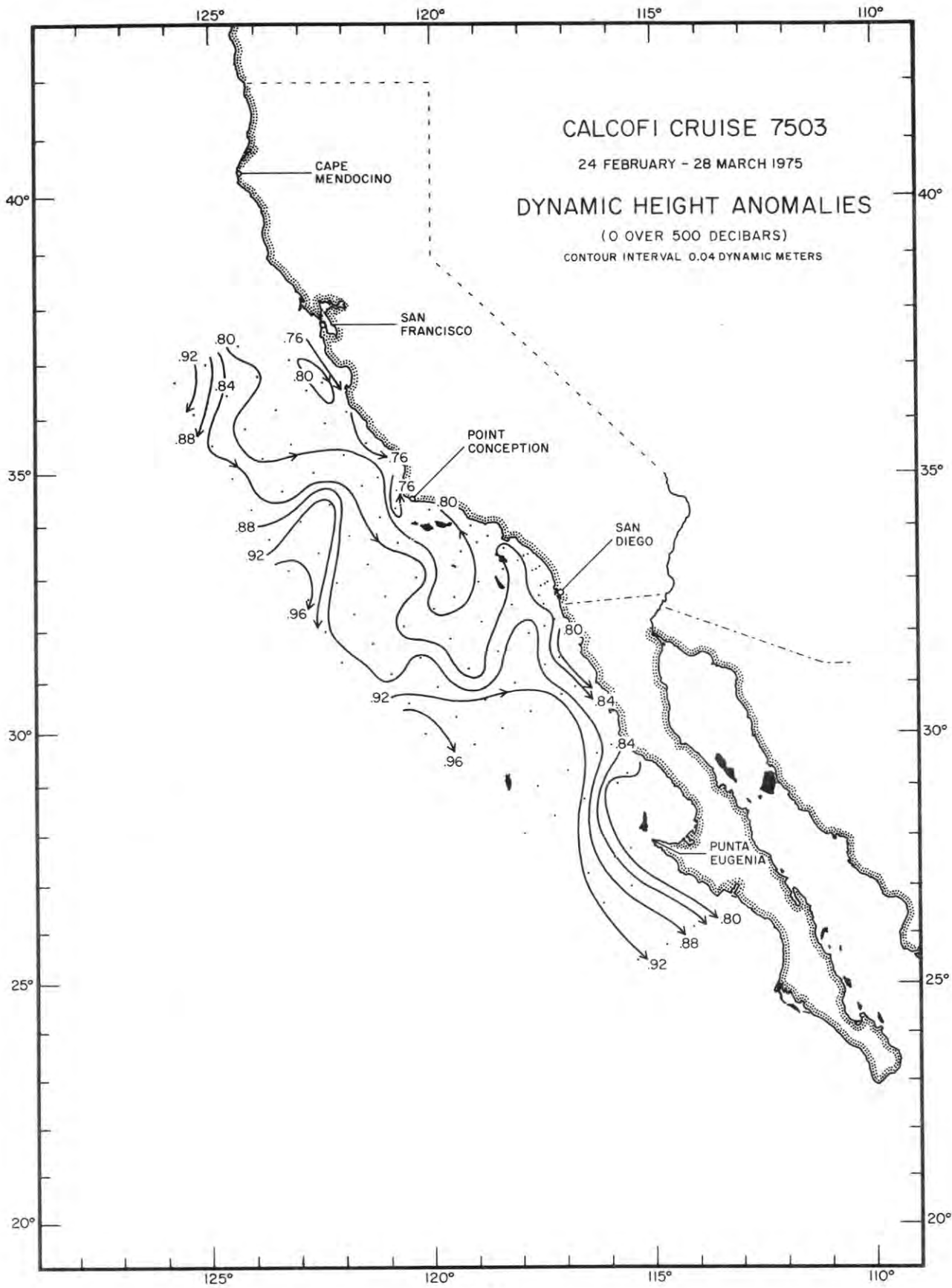


FIGURE 2

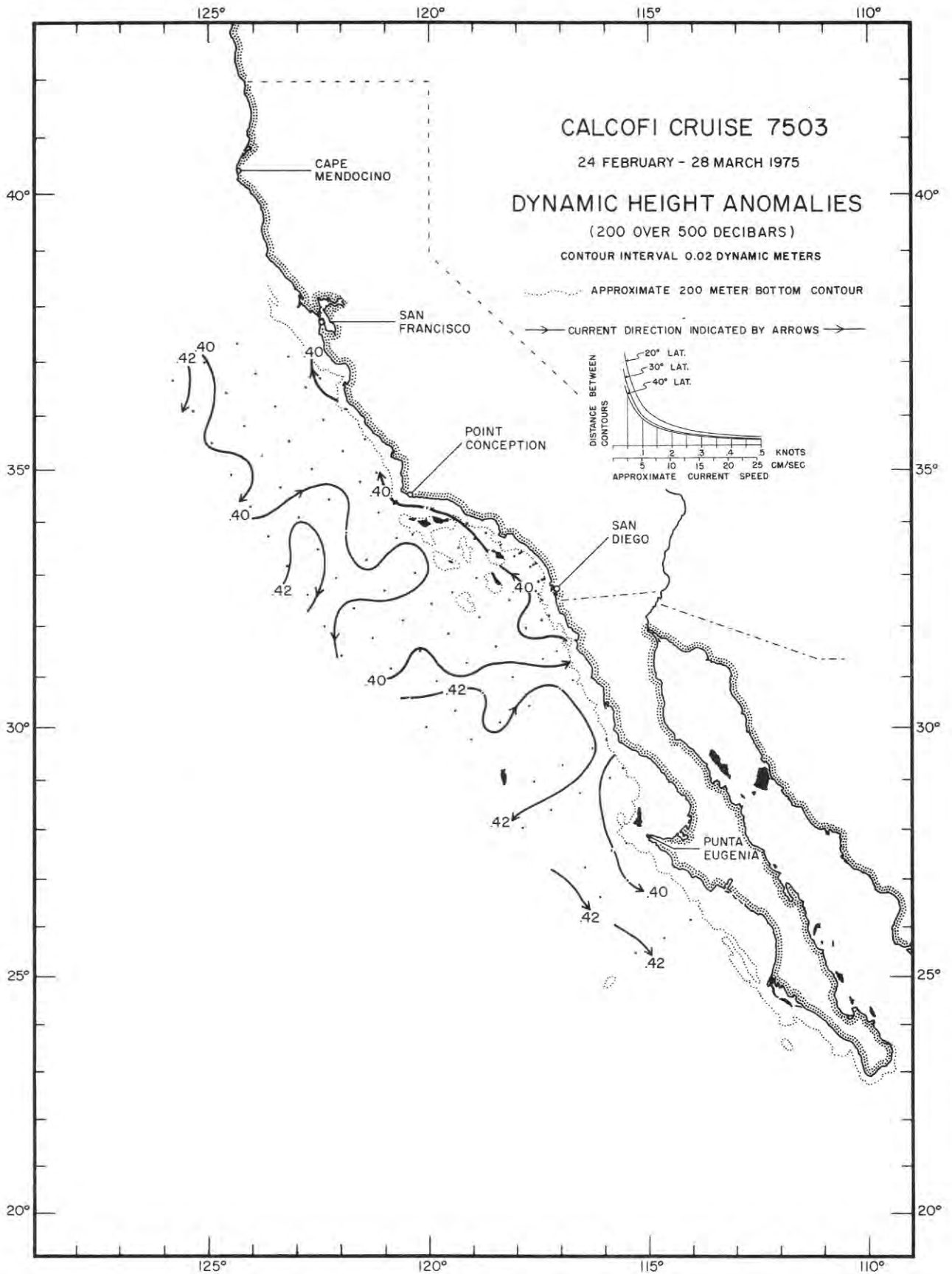


FIGURE 3

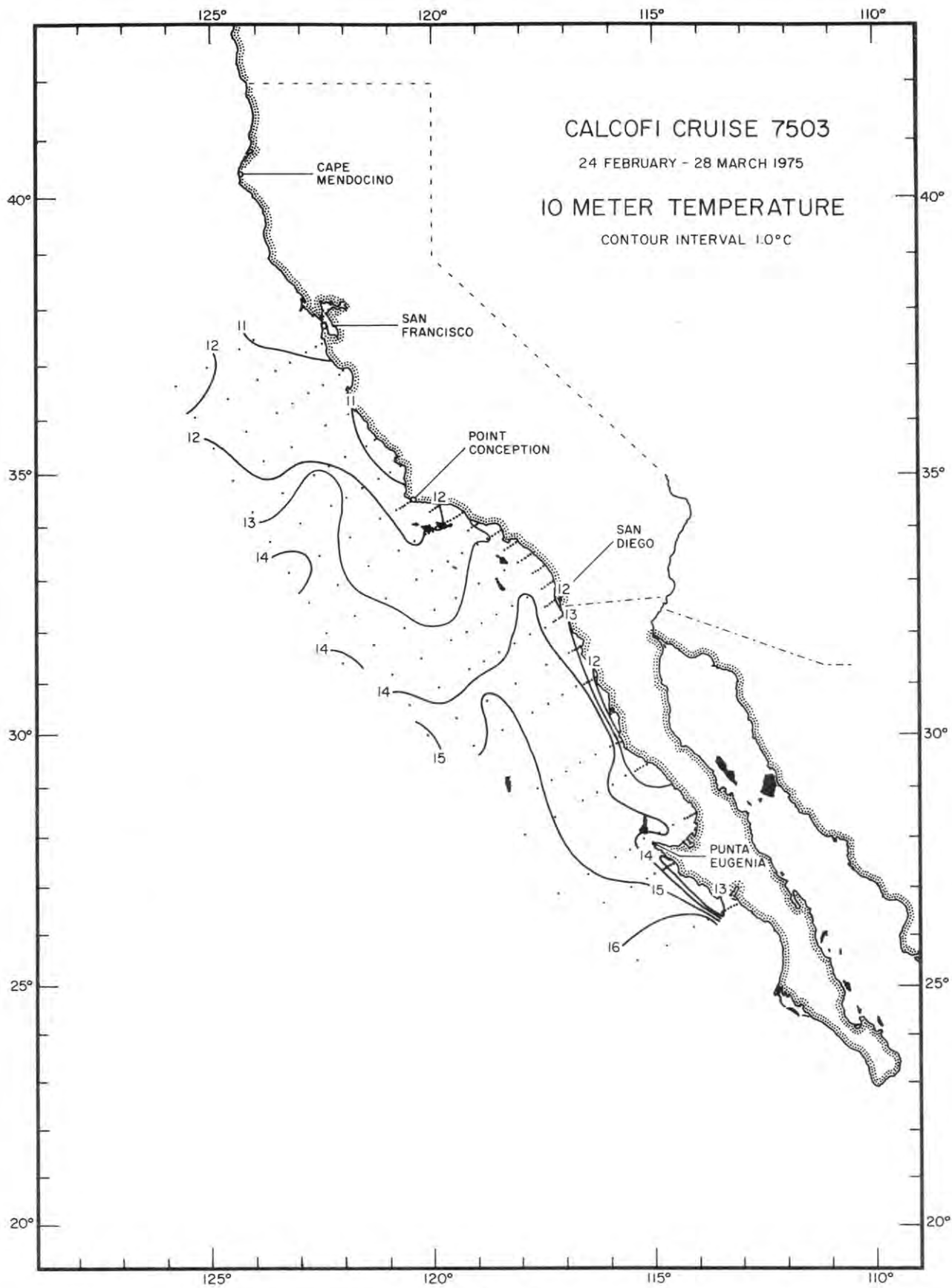


FIGURE 4

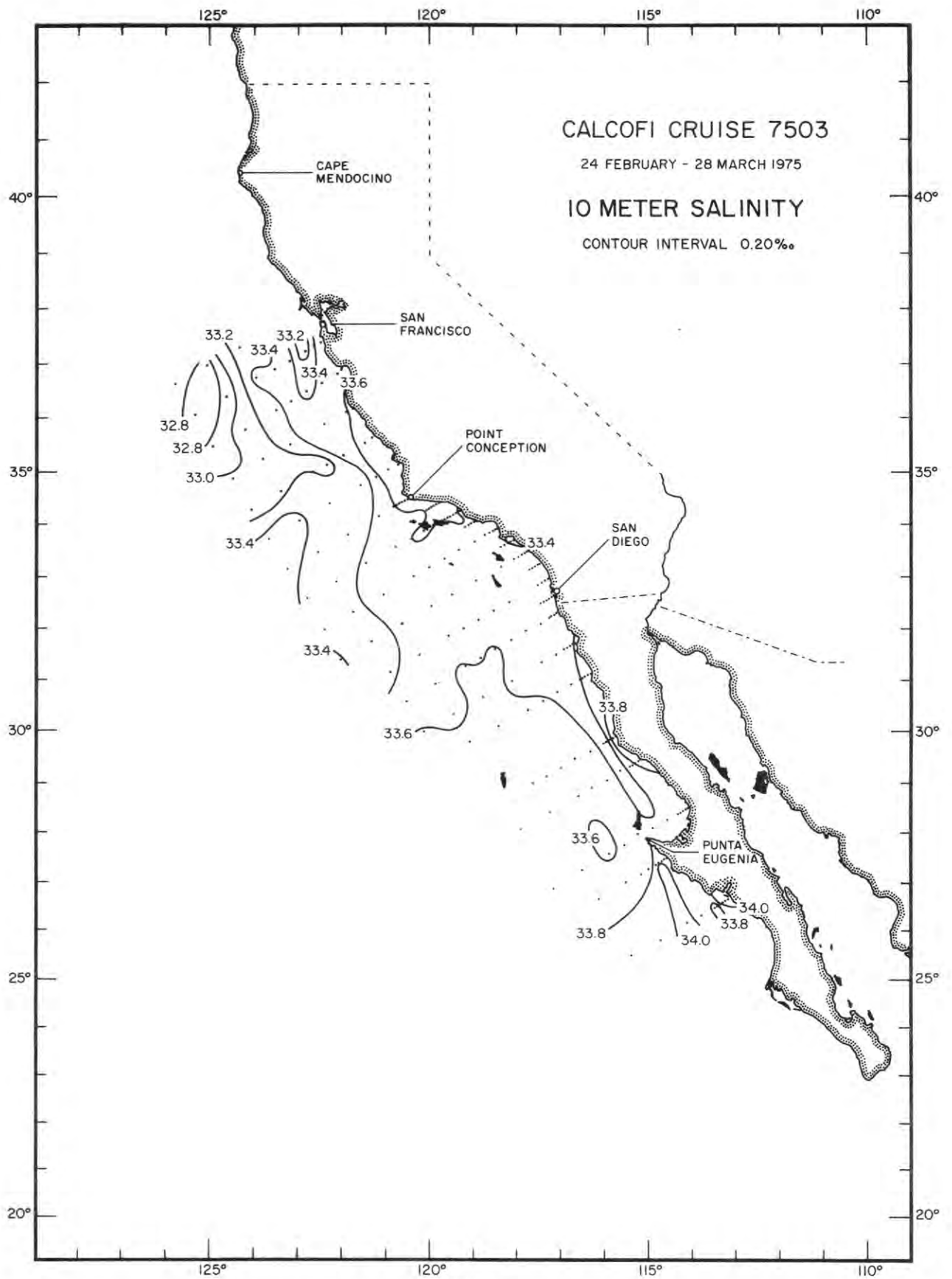


FIGURE 5

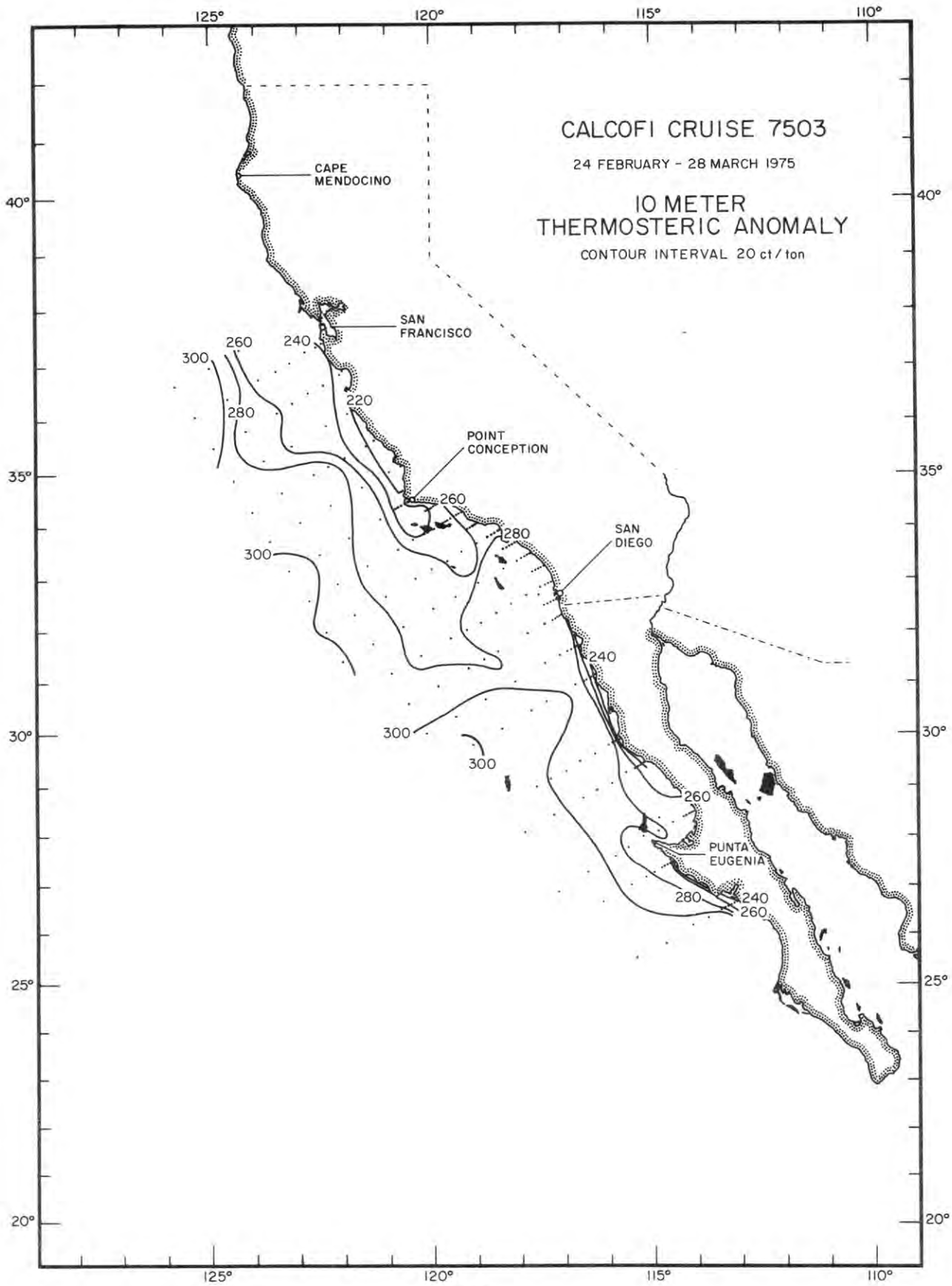


FIGURE 6

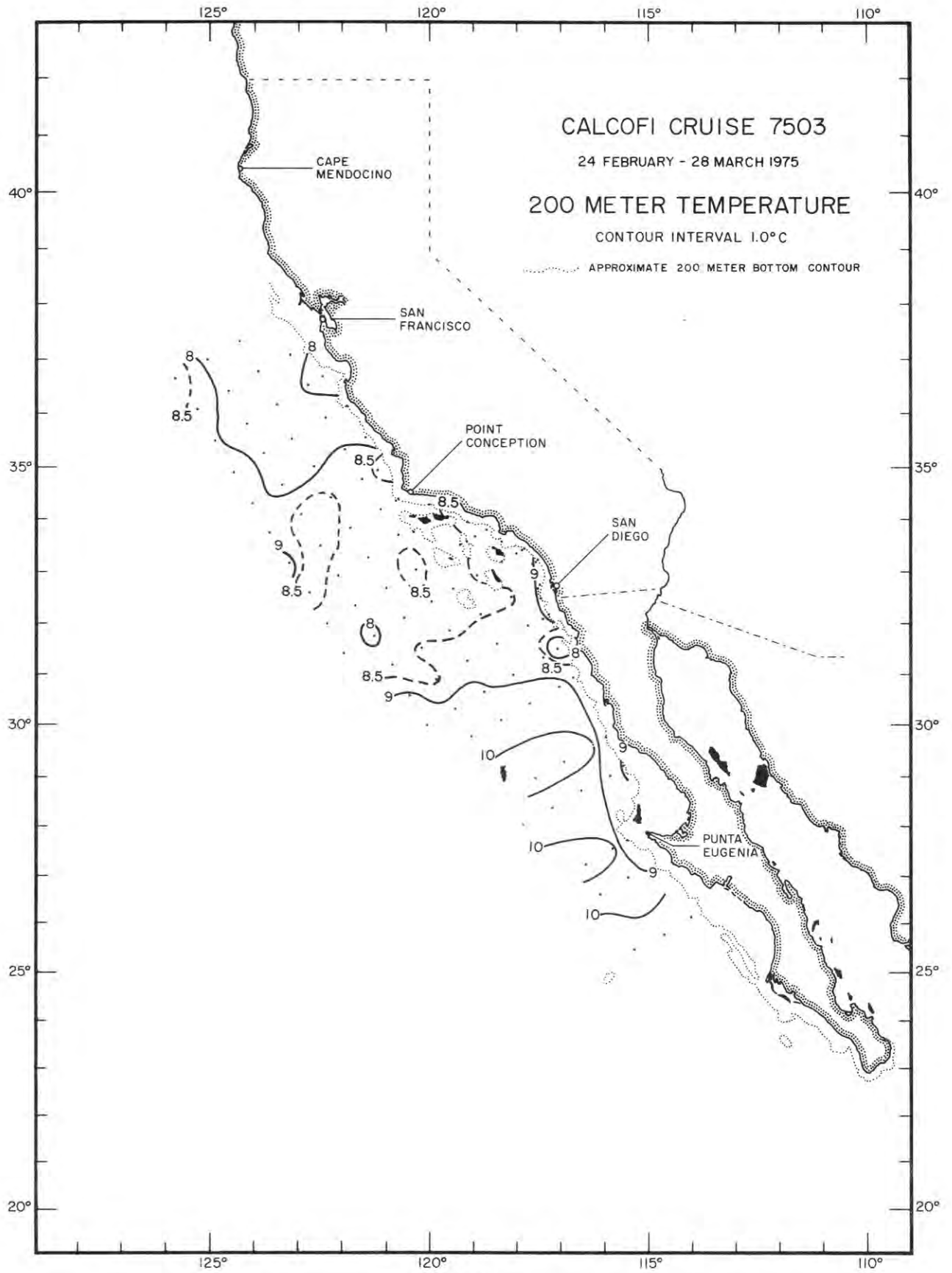


FIGURE 7

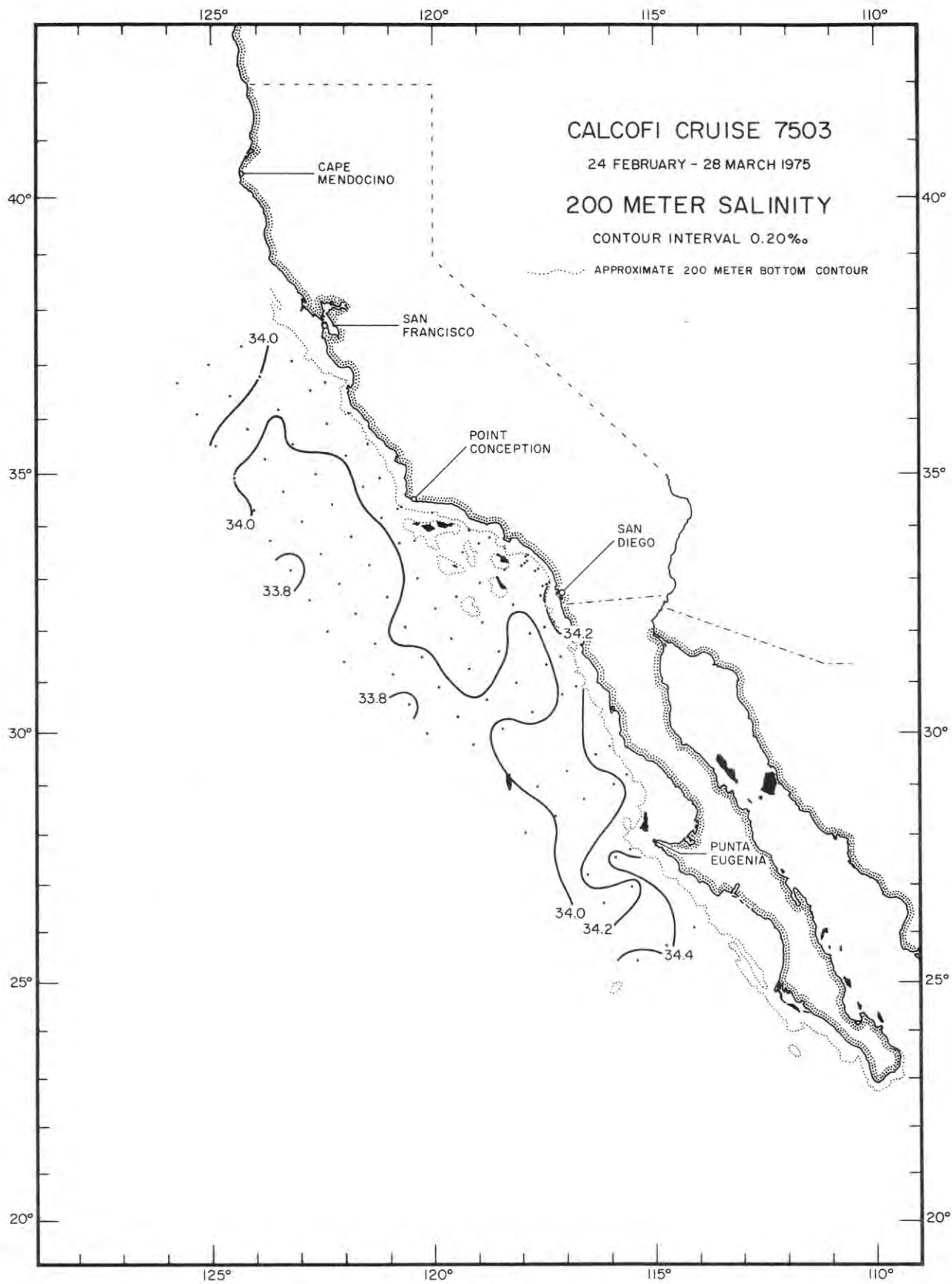


FIGURE 8



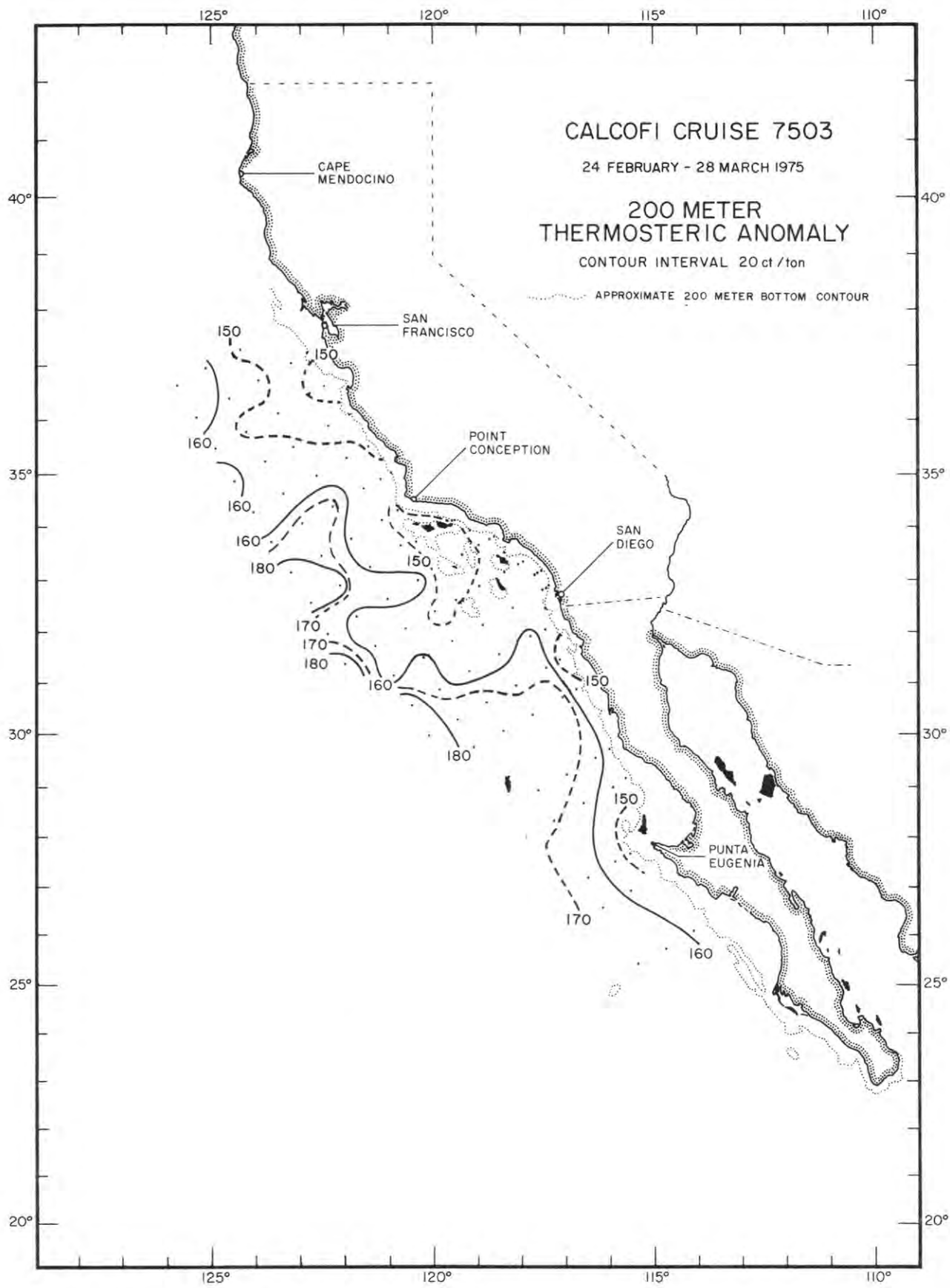


FIGURE 9

## PERSONNEL

Cruise 7503

### SHIPS' CAPTAINS

Davis, Laurence E., *RV Alexander Agassiz*  
Forster, Charles W., *RV David Starr Jordan*

### PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

#### *RV Alexander Agassiz*

Mead, Richard V. (in charge)	Marine Technician, SIO
Andrews, J.	Sea Grant Student, SDSU
Austin, R.	Sea Grant Student, SDSU
Beaupré, Marie-Claude	Sea Grant Student, SDSU
Greenbaum, Richard	Staff Research Associate, SIO
Kellogg, Durrant	Marine Technician, SIO
Kimura, Makoto	Fishery Biologist, NMFS
Patla, Susan M.	Marine Technician, SIO
Patrick, Ronald G.	Sea Grant Student, SDSU
Scheidt, V.	Sea Grant Student, SDSU
Singleton, James R.	Electronics Technician, SIO

#### *RV David Starr Jordan*

Metoyer, Jack (in charge)	Biological Technician, NMFS
Aguilera Alfaro, Roberto	Student, ECM
Davies, Edward	NUC
Endo Meguro, Roberto	Student, ECM
Fematt Hernandez, Hector	Student, ECM
Gruber, Dennis W.	Staff Research Associate, SIO
Martinez Henriguez, Xavier	Student, ECM
Patla, Susan M.	Marine Technician, SIO
Ramirez Aguilar, Isabella	Student, ECM
Snyder, Joseph	NMFS
Tsuchiya, Mizuki	Associate Research Oceanographer, SIO
Vargas Robles, Lucia	Student, ECM







67070		RV ALEXANDER AGASSIZ				CALCIFI CRUISE 7503					67080	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
36 08.0N	123 29.5W	02/28/75	0251 GMT			35 47.5N	124 11.5W	02/27/75	2141 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3540M	320	15KT	4			3918M	360	12KT	2			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	11.54	33.28	25.361	262.3	0.000	0	11.51	33.09	25.219	275.8	0.000	
10	11.47	33.27	25.366	261.8	0.026	10	11.46	33.09	25.228	275.0	0.027	
20	11.43	33.29	25.389	259.7	0.052	20	11.30	33.09	25.257	272.2	0.054	
30	11.39	33.31	25.412	257.5	0.078	30	11.16	33.23	25.391	259.5	0.081	
40	11.19	33.33	25.463	252.6	0.103	40	11.14	33.25	25.410	257.6	0.107	
50	11.22	33.43	25.535	245.7	0.128	50	10.86	33.40	25.577	241.8	0.132	
75	8.63	33.66	25.989	202.6	0.185	75	9.35	33.68	26.050	196.8	0.187	
100	8.94	33.80	26.210	181.6	0.233	100	9.03	33.82	26.211	181.5	0.235	
125	8.60	33.90	26.341	169.2	0.278	125	8.70	33.90	26.325	170.7	0.280	
150	8.42	33.98	26.431	160.6	0.319	150	8.28	33.95	26.429	160.8	0.322	
175	8.10	33.98	26.479	156.0	0.360	175	7.93	33.98	26.505	153.6	0.362	
200	7.80	34.01	26.547	149.6	0.399	200	7.68	34.06	26.604	144.2	0.400	
225	7.60	34.05	26.608	143.8	0.436	225	7.19	34.01	26.635	141.3	0.436	
250	7.39	34.07	26.653	139.5	0.473	250	6.84	34.02	26.691	136.0	0.472	
275	7.22	34.10	26.701	135.0	0.508	275	6.62	34.03	26.728	132.4	0.506	
300	6.96	34.11	26.745	130.8	0.542	300	6.39	34.06	26.782	127.3	0.540	
350	6.42	34.11	26.817	124.0	0.609	350	6.36	34.12	26.833	122.4	0.605	
400	6.16	34.17	26.898	116.3	0.671	400	6.13	34.19	26.918	114.4	0.666	
450	5.81	34.21	26.974	109.1	0.730	450	5.80	34.20	26.968	109.7	0.725	
500	5.50	34.24	27.036	103.2	0.786	500	5.27	34.20	27.032	103.6	0.781	
550	5.19	34.29	27.112	96.0	0.839	550	5.02	34.24	27.092	97.8	0.835	
600	4.95	34.29	27.140	93.3	0.890	600	4.90	34.31	27.162	91.3	0.885	
700	4.63	34.35	27.224	85.4	0.986	700	4.59	34.37	27.244	83.5	0.980	
800	4.27	34.40	27.302	77.9	1.076	800	4.27	34.40	27.302	77.9	1.068	
900	3.97	34.43	27.358	72.7	1.159	900	4.02	34.43	27.353	73.2	1.151	
1000	3.68	34.46	27.411	67.6	1.237	1000	3.73	34.46	27.406	68.1	1.230	

67090		RV ALEXANDER AGASSIZ				CALCIFI CRUISE 7503					70053	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
35 28.0N	124 55.5W	02/27/75	1607 GMT			36 06.5N	121 53.5W	02/26/75	1315 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
4308M	330	10KT	2			1110M	330	28KT	1	310 3 4		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	12.02	32.81	24.908	305.4	0.000	0	11.26	33.53	25.606	239.0	0.000	
10	12.01	32.83	24.925	303.8	0.030	10	11.26	33.53	25.606	239.0	0.023	
20	11.76	32.81	24.957	300.8	0.060	20	11.27	33.53	25.604	239.2	0.047	
30	11.42	32.81	25.019	294.9	0.090	30	11.27	33.53	25.604	239.2	0.071	
40	11.05	32.96	25.201	277.5	0.119	40	11.21	33.53	25.615	238.2	0.095	
50	10.60	33.04	25.343	264.1	0.146	50	10.54	33.61	25.796	221.0	0.118	
75	9.75	33.35	25.728	227.5	0.208	75	9.58	33.78	26.091	192.9	0.170	
100	9.33	33.56	25.960	205.4	0.262	100	8.87	33.89	26.291	173.9	0.217	
125	9.03	33.76	26.164	186.0	0.312	125	8.49	33.95	26.397	163.8	0.259	
150	8.65	33.86	26.302	172.9	0.357	150	8.42	34.02	26.462	157.6	0.300	
175	8.10	33.89	26.409	162.7	0.400	175	8.22	34.03	26.500	154.0	0.340	
200	8.06	34.01	26.509	153.2	0.440	200	7.96	34.04	26.547	149.6	0.379	
225	7.76	34.02	26.561	148.3	0.479	225	7.84	34.07	26.589	145.7	0.417	
250	7.44	34.03	26.615	143.2	0.516	250	7.51	34.08	26.644	140.4	0.453	
275	7.24	34.05	26.659	139.0	0.553	275	7.29	34.09	26.683	136.7	0.489	
300	6.95	34.05	26.699	135.2	0.588	300	7.19	34.12	26.721	133.1	0.524	
350	6.35	34.08	26.803	125.3	0.655	350	6.89	34.16	26.794	126.2	0.591	
400	6.09	34.12	26.868	119.1	0.719	400	6.52	34.19	26.867	119.2	0.655	
450	5.62	34.14	26.942	112.1	0.780	450	6.31	34.22	26.918	114.4	0.717	
500	5.40	34.19	27.008	105.8	0.837	500	6.20	34.24	26.948	111.5	0.777	
550	5.18	34.23	27.066	100.4	0.892	550	5.79	34.26	27.016	105.1	0.834	
600	4.60	34.21	27.116	95.6	0.944	600	5.50	34.29	27.075	99.5	0.889	
700	4.41	34.31	27.216	86.1	1.041	700	5.09	34.34	27.164	91.1	0.992	
800	3.96	34.35	27.295	78.6	1.131	800	4.59	34.40	27.268	81.2	1.086	
900	3.76	34.40	27.355	72.9	1.214	900	4.24	34.42	27.322	76.1	1.173	
1000	3.59	34.45	27.412	67.6	1.292	1000	3.92	34.46	27.387	69.9	1.255	









77070

RV DAVID STARR JORDAN

CALCULI CRUISE 7503

77080

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 24.0N	122 16.0W	03/ 2/75	2331 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
411M	340	12KT	1	280 6 12	
Z	T	S	SIGMA T	DT	DD
0	13.89	33.37	24.972	299.3	0.000
10	13.82	33.37	24.987	298.0	0.029
20	13.68	33.36	25.007	295.9	0.059
30	13.60	33.36	25.024	294.4	0.088
40	13.55	33.35	25.026	294.2	0.118
50	13.53	33.36	25.038	293.0	0.148
75	13.30	33.32	25.054	291.6	0.221
100	12.39	33.32	25.232	274.6	0.293
125	11.33	33.34	25.446	254.2	0.359
150	10.39	33.59	25.806	220.0	0.419
175	9.47	33.70	26.047	197.1	0.472
200	8.58	33.83	26.289	174.1	0.520
225	7.37	33.94	26.408	162.8	0.563
250	7.93	33.98	26.505	153.6	0.603
275	7.50	34.00	26.583	146.2	0.642
300	7.22	34.03	26.646	140.7	0.674
350	6.45	34.04	26.758	129.5	0.749
400	6.10	34.10	26.851	120.8	0.814
450	5.66	34.14	26.938	112.6	0.875
500	5.46	34.20	27.009	105.8	0.932
550	5.30	34.25	27.068	100.2	0.987
600	5.08	34.29	27.125	94.8	1.039
700	4.65	34.35	27.221	85.6	1.136
800	4.36	34.39	27.285	79.6	1.227
900	4.01	34.42	27.346	73.8	1.311
1000	3.78	34.46	27.401	68.6	1.391

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 04.0N	122 57.0W	03/ 2/75	1810 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
430M	330	8KT	1	270 10 10	
Z	T	S	SIGMA T	DT	DD
0	13.88	33.38	24.982	298.4	0.000
10	13.76	33.39	25.014	295.3	0.029
20	13.82	33.45	25.048	292.1	0.059
30	13.82	33.45	25.048	292.1	0.088
40	13.60	33.45	25.052	291.7	0.117
50	13.79	33.45	25.054	291.5	0.146
75	13.37	33.38	25.086	288.5	0.219
100	11.95	33.36	25.347	263.7	0.289
125	10.89	33.38	25.556	243.8	0.353
150	9.97	33.58	25.870	213.9	0.411
175	9.32	33.76	26.118	190.4	0.467
200	8.74	33.89	26.311	172.0	0.508
225	8.23	33.96	26.444	159.4	0.551
250	7.98	34.00	26.513	152.8	0.591
275	7.58	34.00	26.571	147.3	0.630
300	7.28	34.02	26.630	141.8	0.667
350	6.61	34.02	26.721	133.0	0.738
400	6.02	34.04	26.814	124.3	0.805
450	5.58	34.07	26.892	116.9	0.868
500	5.18	34.11	26.971	109.3	0.927
550	4.97	34.15	27.027	104.1	0.984
600	4.72	34.21	27.103	96.9	1.037
700	4.53	34.31	27.203	87.4	1.136
800	4.24	34.37	27.282	79.9	1.227
900	3.94	34.41	27.345	73.9	1.311
1000	3.55	34.44	27.408	67.9	1.390

77090

RV DAVID STARR JORDAN

RV ALF XANIER AGASSIZ

80051

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 43.0N	123 39.0W	03/ 2/75	1312 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
411M	320	9KT	1	320 5 7	
Z	T	S	SIGMA T	DT	DD
0	13.80	33.40	25.014	295.4	0.000
10	13.80	33.40	25.014	295.4	0.029
20	13.80	33.40	25.014	295.4	0.059
30	13.75	33.42	25.039	292.9	0.088
40	13.75	33.43	25.047	292.7	0.117
50	13.74	33.43	25.049	292.0	0.147
75	13.27	33.41	25.129	284.4	0.219
100	11.98	33.42	25.388	259.8	0.288
125	10.14	33.58	25.841	216.6	0.348
150	9.39	33.76	26.106	191.5	0.400
175	8.74	33.88	26.304	172.7	0.446
200	8.27	33.93	26.415	162.1	0.489
225	7.78	33.94	26.495	154.5	0.529
250	7.42	33.97	26.571	147.4	0.568
275	7.27	34.01	26.623	142.4	0.605
300	7.10	34.02	26.655	139.4	0.642
350	6.33	34.03	26.766	128.8	0.711
400	5.92	34.04	26.826	123.1	0.736
450	5.43	34.10	26.934	112.9	0.838
500	5.04	34.13	27.003	106.3	0.894
550	4.87	34.16	27.047	102.2	0.951
600	4.78	34.23	27.112	96.0	1.003
700	4.45	34.29	27.196	88.0	1.102
800	4.18	34.38	27.296	78.5	1.193
900	3.92	34.43	27.363	72.2	1.276
1000	3.68	34.46	27.411	67.6	1.354

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 25.5N	120 34.0W	02/25/75	2314 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
121M	320	24KT	1	320 5 7	
Z	T	S	SIGMA T	DT	DD
0	11.65	33.62	25.604	239.2	0.000
10	11.58	33.63	25.625	237.2	0.023
20	11.16	33.65	25.717	228.5	0.047
30	10.67	33.72	25.858	215.0	0.069
40	10.32	33.76	25.950	206.3	0.090
50	10.21	33.79	25.993	202.2	0.111
75	9.85	33.85	26.100	192.0	0.160
100	9.74	33.87	26.134	188.8	0.208
111	9.64	33.89	26.166	185.7	0.229

RV DAVID STARR JORDAN

80052

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 25.0N	120 36.0W	03/ 3/75	2335 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
242M	280	7KT	1	300 4 12	
Z	T	S	SIGMA T	DT	DD
0	12.20	33.63	25.508	248.3	0.000
10	11.75	33.64	25.601	239.5	0.024
20	11.59	33.64	25.631	236.7	0.048
30	11.42	33.66	25.677	232.2	0.071
40	10.99	33.68	25.771	223.3	0.094
50	10.44	33.74	25.911	210.0	0.116
75	10.00	33.82	26.052	196.6	0.167
100	9.76	33.86	26.123	189.8	0.216
125	9.50	33.91	26.205	182.0	0.263
150	9.15	33.98	26.317	171.5	0.308
175	8.94	34.01	26.374	166.1	0.351
200	8.48	34.08	26.500	154.0	0.392





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81044

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 23.0N	119 50.0W	03/ 6/75	2142 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
56M	120	9KT	2	160 4 13

Z	T	S	SIGMA T	DT	DD
0	12.08	33.54	25.267	271.2	0.000
10	12.06	33.53	25.264	271.6	0.027
20	12.57	33.58	25.399	258.7	0.053
30	12.17	33.59	25.483	250.7	0.079
40	11.92	33.62	25.554	244.0	0.104

5 5  
81044

CAICDFI CRUISE 7503

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 22.0N	119 52.0W	03/ 7/75	0048 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
78M	130	14KT	6	130 3 12

Z	T	S	SIGMA T	DT	DD
0	12.19	33.58	25.472	251.8	0.000
10	12.18	33.58	25.474	251.6	0.025
20	12.10	33.60	25.504	248.7	0.050
30	11.87	33.63	25.571	242.4	0.074
40	11.31	33.67	25.705	229.6	0.098
50	10.62	33.74	25.883	212.7	0.120

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81045

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 21.0N	119 54.0W	03/ 7/75	0214 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
371M	120	14KT	2	300 4 10

Z	T	S	SIGMA T	DT	DD
0	12.14	33.64	25.528	246.5	0.000
10	12.13	33.63	25.527	247.0	0.024
20	11.76	33.65	25.607	238.9	0.049
30	11.32	33.67	25.703	229.7	0.072
40	10.88	33.69	25.798	220.7	0.095
50	10.62	33.74	25.883	212.7	0.118
75	10.03	33.85	26.070	194.9	0.158
100	9.79	33.92	26.165	185.9	0.216
125	9.49	33.99	26.269	176.0	0.262
150	9.24	34.09	26.388	164.7	0.305
175	9.00	34.12	26.450	158.8	0.346
200	8.76	34.15	26.511	153.0	0.386
214	8.69	34.15	26.522	151.9	0.408

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81046

CAICDFI CRUISE 7503

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 19.0N	119 58.0W	03/ 7/75	0411 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
510M	130	15KT	6	

Z	T	S	SIGMA T	DT	DD
0	12.23	33.59	25.472	251.8	0.000
10	12.23	33.59	25.472	251.8	0.025
20	11.60	33.62	25.613	238.3	0.049
30	11.11	33.66	25.734	226.9	0.073
40	10.62	33.73	25.875	213.4	0.095
50	10.17	33.80	26.007	200.9	0.115
75	9.80	33.91	26.156	186.8	0.164
100	9.58	33.98	26.247	178.1	0.210
125	9.30	34.04	26.339	169.3	0.254
150	8.99	34.11	26.444	159.4	0.296
175	8.85	34.14	26.489	155.1	0.336
200	8.62	34.16	26.541	150.2	0.375
225	8.51	34.18	26.574	147.1	0.413
250	8.17	34.13	26.586	145.9	0.451
275	7.90	34.15	26.642	140.6	0.488
300	7.66	34.17	26.693	135.7	0.524
350	7.27	34.20	26.772	128.2	0.592
400	6.83	34.23	26.857	120.2	0.657
450	6.48	34.25	26.920	114.2	0.719
487	6.42	34.26	26.935	112.7	0.764

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81047

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 17.0N	120 02.5W	03/ 7/75	0605 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
569M	120	13KT	6	

Z	T	S	SIGMA T	DT	DD
0	11.97	33.64	25.560	243.4	0.000
10	11.95	33.64	25.564	243.1	0.024
20	11.85	33.64	25.582	241.3	0.048
30	11.49	33.67	25.672	232.7	0.072
40	11.32	33.70	25.727	227.5	0.095
50	10.79	33.72	25.837	217.0	0.117
75	9.86	33.81	26.068	195.1	0.169
100	9.59	33.92	26.231	179.8	0.216
125	8.19	33.98	26.310	172.1	0.261
150	8.82	34.04	26.416	162.0	0.303
175	8.56	34.09	26.495	154.5	0.344
200	8.27	34.11	26.540	150.2	0.383
225	8.18	34.13	26.585	146.0	0.421
250	7.99	34.15	26.629	141.8	0.458
275	7.79	34.17	26.674	137.5	0.494
300	7.62	34.18	26.707	134.4	0.529
350	7.16	34.21	26.796	126.0	0.597
400	6.81	34.23	26.860	119.9	0.661
450	6.48	34.25	26.920	114.2	0.723
500	6.40	34.26	26.938	112.5	0.783

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83039

CAICDFI CRUISE 7503

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 14.5N	119 19.5W	03/ 7/75	1735 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
17M	140	16KT	2	150 5 5

Z	T	S	SIGMA T	DT	DD
0	13.34	33.56	25.231	274.7	0.000
10	13.34	33.55	25.223	275.4	0.027
20	13.32	33.56	25.235	274.3	0.055

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83040

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 12.5N	119 24.0W	03/ 7/75	1630 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
57M	120	17KT	2	110 6 8

Z	T	S	SIGMA T	DT	DD
0	12.01	33.58	25.312	266.9	0.000
10	12.99	33.58	25.316	266.6	0.026
20	12.91	33.58	25.332	265.1	0.053
30	12.80	33.58	25.353	263.0	0.079

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83041

CAICDFI CRUISE 7503

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 11.5N	119 26.0W	03/07/75	1534 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
65M	120	14KT	1	120 6 4

Z	T	S	SIGMA T	DT	DD
0	12.76	33.56	25.346	263.7	0.000
10	12.74	33.56	25.350	263.4	0.026
20	12.67	33.56	25.363	262.0	0.052
30	12.27	33.56	25.441	254.7	0.078
40	11.61	33.57	25.573	242.2	0.103
50	11.15	33.62	25.695	230.5	0.127
57	10.59	33.71	25.865	214.4	0.142



Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, MESSENGER TIME GMT, BOTTOM, WIND, SPEED, WEATHER, DOMINANT WAVES. Includes sub-headers Z, T, S, Q2, P04, S103, N02, N03, DT, Z, T, S, Q2, SIGT, DT, DD.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, START TIME, BOTTOM, WIND, SPEED, WEATHER, DOMINANT WAVES. Includes sub-headers Z, T, S, SIGMA T, DT, DD for two columns.

Table with columns: LATITUDE, LONGITUDE, MO/DAY/YR, START TIME, BOTTOM, WIND, SPEED, WEATHER, DOMINANT WAVES. Includes sub-headers Z, T, S, SIGMA T, DT, DD for two columns.

85037<sup>5</sup> RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 02.0N	118 59.5W	03/ 8/75	0052 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
52M	120	12KT	5	49	
Z	T	S	SIGMA T	DT	DD
0	13.49	33.53	25.177	279.8	0.000
10	13.49	33.53	25.177	279.8	0.027
20	13.49	33.54	25.185	279.1	0.055
30	13.48	33.54	25.187	278.9	0.083

CALCIFI CRUISE 7503 85038

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 01.0N	119 02.5W	03/ 7/75	2331 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
22M	120	14KT	6	130 12 16	
Z	T	S	SIGMA T	DT	DD
0	13.34	33.54	25.215	276.2	0.000
10	13.34	33.56	25.231	274.7	0.027
20	13.32	33.57	25.242	273.6	0.055
30	13.28	33.57	25.251	272.8	0.082
40	12.63	33.60	25.402	258.4	0.109
50	12.25	33.63	25.499	249.2	0.134
75	10.84	33.73	25.836	217.1	0.193
100	10.28	33.82	26.004	201.2	0.245
125	9.90	33.91	26.139	188.4	0.295
150	9.33	34.05	26.342	169.0	0.340
175	9.18	34.11	26.413	162.3	0.382

85039 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 59.0N	119 06.5W	03/ 7/75	2132 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
667M	130	15KT	6	230 8 8	
Z	T	S	SIGMA T	DT	DD
0	13.29	33.58	25.256	272.3	0.000
10	13.30	33.58	25.254	272.5	0.027
20	13.24	33.58	25.266	271.3	0.054
30	13.06	33.57	25.295	268.6	0.081
40	12.67	33.58	25.379	260.6	0.108
50	11.21	33.62	25.685	231.5	0.132
75	10.54	33.74	25.897	211.3	0.188
100	9.95	33.89	26.115	190.6	0.239
125	9.55	34.01	26.275	175.4	0.285
150	9.37	34.06	26.343	168.9	0.329
175	9.26	34.11	26.400	163.5	0.371
200	8.94	34.16	26.491	154.9	0.412
225	8.72	34.19	26.549	149.4	0.451
250	8.42	34.21	26.611	143.5	0.489
275	8.20	34.21	26.645	140.3	0.525
300	8.04	34.22	26.676	137.3	0.561
350	7.72	34.25	26.747	130.6	0.631
400	7.14	34.24	26.822	123.5	0.699
450	6.78	34.26	26.887	117.3	0.761
500	6.45	34.28	26.947	111.6	0.827
550	6.20	34.28	26.980	108.5	0.851
600	5.82	34.32	27.060	101.0	0.937

CALCIFI CRUISE 7503 85040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 57.0N	119 10.5W	03/ 7/75	2002 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
761M	130	14KT	2	240 8-10	
Z	T	S	SIGMA T	DT	DD
0	13.02	33.61	25.333	264.9	0.000
10	13.01	33.61	25.335	264.7	0.026
20	12.98	33.61	25.341	264.2	0.052
30	12.52	33.54	25.377	260.8	0.079
40	11.56	33.61	25.613	238.3	0.104
50	11.34	33.64	25.676	232.3	0.127
75	10.63	33.74	25.899	211.2	0.183
100	9.90	33.92	26.146	187.6	0.234
125	9.61	34.02	26.273	175.4	0.280
150	9.08	34.06	26.390	164.5	0.323
175	8.94	34.12	26.460	157.9	0.364
200	8.64	34.16	26.538	150.5	0.403
213	8.55	34.17	26.560	148.4	0.423

87032<sup>5</sup> RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 55.5N	118 26.5W	03/ 8/75	0514 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
19M	100	7KT	6		
Z	T	S	SIGMA T	DT	DD
0	13.68	33.42	25.054	291.5	0.000
10	13.69	33.55	25.152	282.2	0.028
16	13.65	33.55	25.160	281.4	0.045

CALCIFI CRUISE 7503 87032<sup>f</sup>

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 54.5N	118 28.0W	03/ 8/75	0632 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
30M	110	8KT	6		
Z	T	S	SIGMA T	DT	DD
0	13.72	33.51	25.115	285.7	0.000
10	13.70	33.53	25.134	283.9	0.028
20	13.58	33.55	25.174	280.1	0.056
25	13.54	33.56	25.190	278.6	0.070

87033 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 54.0N	118 29.0W	03/ 8/75	0814 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
47M	160	4KT	6		
Z	T	S	SIGMA T	DT	DD
0	13.70	33.50	25.111	286.1	0.000
10	13.69	33.50	25.113	285.9	0.028
20	13.64	33.55	25.162	281.2	0.057
30	13.14	33.55	25.263	271.6	0.084
40	12.98	33.54	25.287	269.3	0.111

CALCIFI CRUISE 7503 87034

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 52.0N	118 33.5W	03/ 8/75	1002 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
74M	210	6KT	6		
Z	T	S	SIGMA T	DT	DD
0	13.51	33.52	25.165	280.9	0.000
10	13.51	33.52	25.165	280.9	0.028
20	13.39	33.55	25.213	276.4	0.056
30	12.91	33.51	25.278	270.2	0.083
40	12.13	33.56	25.466	252.2	0.109
50	11.45	33.60	25.625	237.2	0.134
64	10.77	33.69	25.818	218.9	0.166



87035 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 50.0N	118 37.5W	03/18/75	1137 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
462M	200	8KT	2		
Z	T	S	SIGMA T	DT	DD
0	17.87	33.54	25.309	267.3	0.000
10	17.87	33.55	25.317	266.5	0.026
20	17.96	33.57	25.507	248.4	0.052
30	11.46	33.60	25.624	237.3	0.076
40	10.99	33.62	25.724	227.8	0.100
50	10.72	33.67	25.811	219.5	0.122
75	10.26	33.78	25.976	203.8	0.175
100	9.81	33.87	26.123	189.9	0.225
125	9.41	33.97	26.267	176.2	0.271
150	9.18	34.05	26.366	166.7	0.315
175	8.96	34.10	26.441	159.7	0.357
200	8.75	34.15	26.513	152.8	0.397
225	8.70	34.18	26.544	149.9	0.435
250	8.41	34.18	26.589	145.6	0.473
275	8.12	34.20	26.649	139.9	0.510
300	7.82	34.21	26.701	135.0	0.546
350	7.45	34.22	26.763	129.1	0.615
400	7.09	34.23	26.821	123.6	0.681
430	6.99	34.24	26.843	121.5	0.720

CAITHEI CRUISE 7503 87036

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 47.0N	118 43.5W	03/ 8/75	1353 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
425M	200	5KT	2		
Z	T	S	SIGMA T	DT	DD
0	13.37	33.48	25.163	281.1	0.000
10	13.29	33.54	25.225	275.2	0.027
20	12.85	33.55	25.321	266.2	0.054
30	12.69	33.56	25.360	262.4	0.081
40	12.39	33.56	25.418	256.9	0.107
50	11.97	33.57	25.506	248.6	0.132
75	10.69	33.67	25.816	219.0	0.191
100	10.15	33.78	25.995	202.0	0.244
125	9.46	33.91	26.212	181.4	0.293
150	9.26	34.01	26.326	170.6	0.338
175	8.97	34.08	26.423	161.3	0.380
200	8.72	34.11	26.486	155.4	0.420
225	8.56	34.16	26.550	149.3	0.459
250	8.52	34.15	26.579	146.5	0.497
275	8.06	34.17	26.634	141.3	0.535
300	7.90	34.20	26.682	136.8	0.571
350	7.36	34.22	26.775	127.9	0.639
400	6.84	34.23	26.855	120.3	0.704
450	6.47	34.25	26.921	114.1	0.766
500	6.23	34.26	26.960	110.4	0.826
550	5.97	34.29	27.017	105.0	0.883
600	5.76	34.32	27.067	100.7	0.938
700	5.29	34.36	27.156	91.8	1.042
800	5.12	34.38	27.192	88.5	1.141
900	5.01	34.40	27.220	85.7	1.238

87040 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 40.0N	118 58.0W	03/08/75	1116 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
870M	210	5KT	6	270 10 12	
Z	T	S	SIGMA T	DT	DD
0	12.54	33.55	25.182	279.3	0.000
10	12.53	33.55	25.184	279.1	0.027
20	12.36	33.55	25.219	275.8	0.055
30	12.92	33.55	25.307	267.5	0.082
40	12.12	33.58	25.485	250.5	0.108
50	11.58	33.60	25.601	239.4	0.133
75	10.81	33.67	25.795	221.0	0.191
100	9.97	33.78	26.026	199.1	0.244
125	9.37	33.90	26.219	180.8	0.292
150	9.02	34.02	26.369	166.9	0.346
175	8.88	34.06	26.422	161.4	0.378
200	8.61	34.10	26.496	154.5	0.418
225	8.21	34.14	26.588	145.7	0.457
250	8.04	34.16	26.629	141.8	0.494
275	7.80	34.18	26.681	136.9	0.530
300	7.65	34.19	26.710	134.1	0.565
350	7.18	34.21	26.793	126.3	0.633
400	6.80	34.23	26.861	119.8	0.697
450	6.53	34.26	26.921	114.1	0.759
500	6.25	34.28	26.973	109.1	0.818
550	5.97	34.31	27.033	103.5	0.875
600	5.64	34.34	27.098	97.4	0.928
700	5.29	34.38	27.172	90.3	1.030
800	5.09	34.39	27.203	87.4	1.128

CAITHEI CRUISE 7503 87045

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 30.0N	119 19.0W	03/08/75	2122 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1664M	290	12KT	6	290 8 10	
Z	T	S	SIGMA T	DT	DD
0	12.50	33.58	25.412	257.4	0.000
10	12.46	33.58	25.420	256.7	0.025
20	12.40	33.59	25.439	254.9	0.051
30	12.38	33.59	25.443	254.5	0.076
40	11.18	33.63	25.698	230.3	0.101
50	10.54	33.68	25.850	215.8	0.123
75	9.49	33.81	26.129	189.3	0.174
100	9.19	33.94	26.279	175.0	0.220
125	8.89	34.03	26.397	163.8	0.263
150	8.64	34.09	26.483	155.6	0.304
175	8.46	34.10	26.519	152.3	0.343
200	8.13	34.11	26.577	146.8	0.381
225	7.94	34.14	26.621	142.5	0.418
250	7.71	34.14	26.662	138.7	0.454
275	7.57	34.16	26.698	135.2	0.490
300	7.41	34.18	26.737	131.6	0.524
350	7.03	34.22	26.822	123.5	0.591
400	6.73	34.25	26.886	117.4	0.654
450	6.51	34.27	26.931	113.1	0.716
500	6.12	34.29	26.998	106.8	0.773
550	5.87	34.32	27.053	101.6	0.828
600	5.58	34.35	27.113	95.9	0.881
700	5.33	34.37	27.159	91.5	0.983
800	4.79	34.41	27.253	82.6	1.079
900	4.42	34.44	27.318	76.4	1.167
1000	4.26	34.46	27.351	73.3	1.251



87000

R/V DAVID STARR JORDAN

LATITUDE 31 59.00 LONGITUDE 127 23.50 MO/DAY/YR 03/19/75 START TIME 2351 GMT

BOTTOM 62128 WIND 320 SPEED 11KT WEATHER 1 DOMINANT WAVES 310 8 7

Z	T	S	SIGMA T	DT	DD
1	12.67	33.32	24.979	298.7	0.000
10	12.60	33.32	24.981	298.5	0.029
20	12.47	33.31	25.012	295.6	0.059
30	12.30	33.29	25.031	293.8	0.089
40	12.18	33.27	25.118	285.4	0.118
50	12.03	33.28	25.155	281.9	0.146
75	12.10	33.45	25.388	259.7	0.214
100	10.82	33.48	25.646	235.2	0.277
125	9.81	33.60	25.912	209.9	0.333
150	9.19	33.75	26.131	189.1	0.383
175	8.71	33.85	26.285	174.5	0.430
200	8.28	33.92	26.405	163.1	0.473
225	7.90	33.97	26.501	153.0	0.513
250	7.57	33.97	26.549	149.4	0.552
275	7.24	33.98	26.604	144.2	0.590
300	6.97	34.02	26.673	137.7	0.626
350	6.62	34.09	26.775	128.0	0.695
400	6.33	34.13	26.845	121.3	0.760
450	6.06	34.15	26.908	115.3	0.822
500	5.81	34.19	26.983	108.2	0.881
550	5.58	34.24	27.062	100.7	0.936
600	5.02	34.27	27.116	95.6	0.989
700	4.71	34.34	27.207	87.0	1.087
800	4.43	34.39	27.277	80.3	1.179
900	4.04	34.43	27.350	73.4	1.264
1000	3.80	34.47	27.407	68.0	1.343

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RR030

LATITUDE 33 41.5N LONGITUDE 118 07.0W MO/DAY/YR 03/12/75 START TIME 2135 GMT

BOTTOM 198 WIND 160 SPEED 8KT WEATHER 1 DOMINANT WAVES 140 2 6

Z	T	S	SIGMA T	DT	DD
0	14.00	33.12	24.757	319.8	0.000
5	13.98	33.12	24.761	319.4	0.015
10	13.69	33.33	24.982	298.3	0.031
13	13.55	33.51	25.150	282.4	0.040

5 88021

R/V DAVID STARR JORDAN

LATITUDE 33 40.50 LONGITUDE 118 09.5W MO/DAY/YR 03/12/75 START TIME 2030 GMT

BOTTOM 298 WIND 150 SPEED 8KT WEATHER 1 DOMINANT WAVES 160 2 6

Z	T	S	SIGMA T	DT	DD
0	12.90	33.13	24.785	317.1	0.000
10	12.68	33.31	24.949	299.6	0.030
20	12.17	33.54	25.249	272.9	0.059

5 88032

LATITUDE 33 36.50 LONGITUDE 118 13.5W MO/DAY/YR 03/11/75 START TIME 1910 GMT

BOTTOM 390 WIND 360 SPEED 8KT WEATHER 2 DOMINANT WAVES 200 4 13

Z	T	S	SIGMA T	DT	DD
0	12.53	33.51	25.154	282.0	0.000
10	12.28	33.52	25.212	276.5	0.027
20	12.73	33.55	25.344	263.9	0.055
25	12.60	33.55	25.369	261.5	0.068

5 88033

R/V DAVID STARR JORDAN

LATITUDE 33 36.00 LONGITUDE 118 17.5W MO/DAY/YR 03/11/75 START TIME 1520 GMT

BOTTOM 2428 WIND 030 SPEED 8KT WEATHER 0 DOMINANT WAVES 270 8 13

Z	T	S	SIGMA T	DT	DD
0	12.48	33.51	25.164	281.1	0.000
10	12.48	33.51	25.164	281.1	0.028
20	12.40	33.51	25.166	280.7	0.056
30	12.29	33.53	25.217	276.0	0.086
40	12.03	33.57	25.360	264.3	0.111
50	12.00	33.50	25.492	260.8	0.137
75	11.05	33.81	25.705	229.2	0.197
100	10.25	33.78	25.978	205.6	0.251
125	9.84	33.91	26.165	187.4	0.301
150	9.54	34.01	26.277	175.3	0.347
175	9.19	34.09	26.404	163.2	0.390
200	8.93	34.13	26.459	157.0	0.431
210	8.87	34.15	26.494	154.6	0.457

5 88034

LATITUDE 33 24.00 LONGITUDE 118 22.0W MO/DAY/YR 03/11/75 START TIME 1525 GMT

BOTTOM 4000 WIND 310 SPEED 8KT WEATHER 1 DOMINANT WAVES 270 0 24

Z	T	S	SIGMA T	DT	DD
0	12.58	33.53	25.157	281.7	0.000
10	12.58	33.53	25.159	281.5	0.028
20	12.50	33.54	25.165	281.0	0.054
30	12.39	33.51	25.187	281.7	0.084
40	12.02	33.53	25.171	280.4	0.112
50	12.42	33.53	25.291	268.9	0.140
75	11.01	33.85	25.744	225.9	0.202
100	10.25	33.81	25.995	202.1	0.256
125	9.76	33.93	26.178	184.7	0.305
150	9.53	34.04	26.302	172.9	0.350
175	9.21	34.13	26.424	161.5	0.393
200	8.95	34.15	26.481	155.8	0.434
225	8.58	34.17	26.539	150.3	0.473
250	8.38	34.20	26.594	145.1	0.511
275	8.24	34.22	26.646	140.2	0.548
300	8.00	34.22	26.682	136.8	0.586
350	7.20	34.24	26.755	129.6	0.653
400	6.00	34.23	26.821	123.6	0.719
450	5.74	34.24	26.877	118.3	0.783
500	5.41	34.26	26.952	111.1	0.844







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91027

RV DAVID STARR JORDAN

LATITUDE 33 14.0N LONGITUDE 117 30.5W MO/DAY/YR 03/13/75 START TIME 2041 GMT

BOTTOM 56M WIND 240 SPEED 4KT WEATHER 1 DOMINANT WAVES 270 2 5

Z	T	S	SIGMA T	DT	DD
0	13.88	33.44	25.028	294.0	0.000
10	13.83	33.44	25.038	293.0	0.029
20	13.60	33.44	25.086	288.5	0.058
30	13.25	33.53	25.226	275.2	0.086
40	12.66	33.54	25.350	263.3	0.113
45	12.64	33.56	25.399	258.7	0.121

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91028

LAICOPI CRUISE 7503

LATITUDE 33 12.0N LONGITUDE 117 34.0W MO/DAY/YR 03/13/75 START TIME 1858 GMT

BOTTOM 565M WIND 250 SPEED 5KT WEATHER 2 DOMINANT WAVES 240 2 8

Z	T	S	SIGMA T	DT	DD
0	13.84	33.47	25.059	291.0	0.000
10	13.78	33.47	25.072	289.8	0.029
20	13.61	33.47	25.106	286.5	0.057
30	12.66	33.50	25.319	266.3	0.085
40	11.82	33.54	25.511	248.1	0.111
50	11.25	33.63	25.645	231.5	0.135
75	10.57	33.72	25.876	213.3	0.191
100	10.22	33.81	26.007	200.8	0.243
125	9.82	33.92	26.160	186.3	0.292
150	9.57	34.00	26.264	176.5	0.338
175	9.18	34.12	26.421	161.6	0.381
200	8.97	34.15	26.478	156.1	0.422
225	8.61	34.17	26.550	149.3	0.461
250	8.48	34.20	26.594	145.1	0.499
275	8.26	34.22	26.643	140.5	0.536
300	8.01	34.22	26.681	136.4	0.572
350	7.81	34.24	26.755	129.8	0.641
400	7.22	34.25	26.819	123.8	0.708
450	6.76	34.26	26.890	117.0	0.771
500	6.39	34.27	26.947	111.6	0.832

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91029

RV DAVID STARR JORDAN

LATITUDE 33 10.0N LONGITUDE 117 38.0W MO/DAY/YR 03/13/75 START TIME 1912 GMT

BOTTOM 756M WIND 220 SPEED 5KT WEATHER 2 DOMINANT WAVES 270 2 5

Z	T	S	SIGMA T	DT	DD
0	13.88	33.52	25.090	288.1	0.000
10	13.80	33.51	25.098	287.3	0.028
20	13.64	33.51	25.131	284.2	0.057
30	13.01	33.53	25.274	270.6	0.085
40	12.09	33.54	25.460	252.9	0.111
50	11.46	33.58	25.608	238.8	0.136
75	10.37	33.73	25.918	209.3	0.192
100	10.09	33.84	26.052	196.6	0.243
125	9.77	33.92	26.168	185.5	0.292
150	9.43	34.04	26.318	171.3	0.357
175	9.27	34.12	26.407	162.9	0.380
200	8.91	34.15	26.488	155.2	0.420
225	8.85	34.19	26.528	151.3	0.460
250	8.55	34.19	26.575	146.9	0.498
275	8.29	34.21	26.631	141.6	0.535
300	8.11	34.24	26.682	136.8	0.571
350	7.57	34.25	26.769	128.5	0.640
400	7.14	34.26	26.838	122.0	0.706
450	6.74	34.28	26.908	115.3	0.769
500	6.33	34.27	26.955	110.9	0.829
550	5.92	34.29	27.023	104.4	0.886
600	5.62	34.31	27.076	99.4	0.941
700	5.19	34.36	27.168	90.7	1.044

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91030

LAICOPI CRUISE 7503

LATITUDE 33 08.0N LONGITUDE 117 42.0W MO/DAY/YR 03/13/75 START TIME 1515 GMT

BOTTOM 833M WIND 200 SPEED 6KT WEATHER 2 DOMINANT WAVES 290 2 7

Z	T	S	SIGMA T	DT	DD
0	13.89	33.54	25.103	286.9	0.000
10	13.89	33.54	25.103	286.9	0.028
20	13.21	33.54	25.241	273.7	0.056
30	12.79	33.54	25.325	265.8	0.083
40	12.40	33.55	25.408	257.8	0.110
50	11.90	33.56	25.511	248.0	0.135
75	10.64	33.69	25.841	216.7	0.193
100	9.93	33.81	26.056	196.2	0.246
125	9.58	33.95	26.223	180.3	0.293
150	9.48	34.04	26.310	172.1	0.338
175	9.23	34.12	26.413	162.3	0.381
200	8.95	34.16	26.489	155.1	0.421
225	8.61	34.17	26.550	149.3	0.460
250	8.34	34.18	26.600	144.8	0.498
275	8.06	34.18	26.642	140.6	0.535
300	8.01	34.24	26.696	135.4	0.571
350	7.55	34.26	26.780	127.5	0.635
400	6.98	34.24	26.844	121.4	0.704
450	6.59	34.27	26.921	114.1	0.766
500	6.16	34.28	26.985	108.0	0.825
550	5.92	34.31	27.039	102.9	0.882
600	5.67	34.32	27.078	99.2	0.936
700	5.16	34.36	27.171	90.4	1.039

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93026

RV DAVID STARR JORDAN

LATITUDE 32 57.0N LONGITUDE 117 17.5W MO/DAY/YR 03/14/75 START TIME 0017 GMT

BOTTOM 34M WIND 270 SPEED 7KT WEATHER 1 DOMINANT WAVES 250 2 5

Z	T	S	SIGMA T	DT	DD
0	14.08	33.48	25.015	295.0	0.000
10	13.94	33.47	25.039	293.0	0.029
20	13.59	33.41	25.064	290.5	0.058
28	13.03	33.48	25.231	279.7	0.081

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93026

LAICOPI CRUISE 7503

LATITUDE 32 57.0N LONGITUDE 117 18.5W MO/DAY/YR 03/14/75 START TIME 0148 GMT

BOTTOM 62M WIND 260 SPEED 5KT WEATHER 1 DOMINANT WAVES 270 2 5

Z	T	S	SIGMA T	DT	DD
0	14.22	33.53	25.027	294.1	0.000
10	13.87	33.52	25.092	287.9	0.029
20	13.61	33.51	25.158	281.6	0.057
30	12.64	33.55	25.362	262.2	0.084
40	12.35	33.60	25.456	253.2	0.110
50	11.53	33.63	25.634	236.3	0.135
59	11.38	33.68	25.700	230.0	0.156

93028

RV DAVID STARR JORDAN

CALCOPH CRUISE 7503

93029

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 55.0N	117 22.0W	03/14/75	0304 GMT	595M	250	6KT				
Z	T	S	SIGMA T	DT	DD					
0	14.08	33.53	25.056	291.3	0.000					
10	14.05	33.53	25.062	290.7	0.029					
20	13.90	33.53	25.093	287.8	0.058					
30	13.21	33.53	25.234	274.4	0.086					
40	12.27	33.53	25.418	256.9	0.112					
50	11.30	33.58	25.637	236.0	0.137					
75	10.52	33.70	25.869	214.0	0.194					
100	10.12	33.83	26.039	197.8	0.246					
125	9.73	33.94	26.191	183.4	0.294					
150	9.54	34.07	26.323	170.8	0.339					
175	9.23	34.14	26.429	160.8	0.381					
200	9.04	34.18	26.491	153.0	0.422					
225	8.80	34.20	26.544	149.9	0.461					
250	8.66	34.24	26.597	146.8	0.499					
275	8.45	34.25	26.638	141.0	0.536					
300	8.22	34.25	26.673	137.7	0.572					
350	7.76	34.26	26.749	130.4	0.642					
400	7.16	34.26	26.835	123.3	0.708					
450	6.70	34.26	26.898	116.3	0.771					
500	6.22	34.28	26.977	108.8	0.830					

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 53.0N	117 26.5W	03/14/75	0500 GMT	595M	250	BKT				
Z	T	S	SIGMA T	DT	DD					
0	14.01	33.53	25.070	290.0	0.000					
10	13.69	33.52	25.129	284.4	0.028					
20	13.40	33.51	25.180	279.5	0.056					
30	12.47	33.53	25.379	260.6	0.084					
40	11.69	33.55	25.505	248.6	0.109					
50	11.66	33.59	25.597	239.8	0.134					
75	10.26	33.81	26.000	201.6	0.189					
100	9.90	33.90	26.131	189.1	0.230					
125	9.68	33.98	26.230	179.7	0.265					
150	9.57	34.09	26.367	166.7	0.329					
175	9.16	34.12	26.424	161.2	0.371					
200	8.97	34.16	26.486	155.4	0.411					
225	8.76	34.18	26.535	150.8	0.451					
250	8.71	34.21	26.566	147.8	0.489					
275	8.52	34.25	26.627	142.0	0.527					
300	8.20	34.25	26.676	137.4	0.563					
350	7.78	34.28	26.762	129.2	0.632					
400	7.35	34.27	26.816	124.0	0.699					
450	6.85	34.28	26.893	116.7	0.762					
500	6.50	34.28	26.941	112.2	0.823					

93030

RV DAVID STARR JORDAN

CALCOPH CRUISE 7503

93040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 50.0N	117 31.0W	03/14/75	0652 GMT	779M	230	10KT				
Z	T	S	SIGMA T	DT	DD					
0	13.90	33.51	25.078	289.2	0.000					
10	13.90	33.51	25.078	289.2	0.028					
20	13.72	33.50	25.107	286.5	0.057					
30	12.96	33.50	25.260	271.9	0.085					
40	11.98	33.51	25.457	253.2	0.112					
50	11.12	33.53	25.631	236.6	0.136					
75	10.48	33.71	25.884	212.6	0.193					
100	9.95	33.88	26.107	191.4	0.244					
125	9.67	33.94	26.201	182.5	0.291					
150	9.57	34.05	26.336	169.7	0.336					
175	9.22	34.13	26.422	161.4	0.378					
200	8.97	34.15	26.478	156.1	0.419					
225	8.91	34.21	26.535	150.8	0.458					
250	8.71	34.22	26.574	147.0	0.496					
275	8.52	34.24	26.619	142.8	0.534					
300	8.17	34.22	26.657	139.2	0.570					
350	7.67	34.25	26.754	129.9	0.640					
400	7.20	34.25	26.821	123.6	0.707					
450	6.84	34.26	26.879	118.1	0.770					
500	6.53	34.26	26.921	114.1	0.832					
550	6.15	34.28	26.986	107.9	0.891					
600	5.62	34.31	27.076	99.4	0.947					
700	5.07	34.37	27.190	88.7	1.049					

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 30.0N	118 11.5W	03/14/75	1315 GMT	1849M	300	14KT				
Z	T	S	SIGMA T	DT	DD					
0	13.99	33.58	25.113	285.9	0.000					
10	13.99	33.58	25.113	285.9	0.028					
20	13.99	33.58	25.113	285.9	0.057					
30	13.99	33.58	25.113	285.9	0.085					
40	13.99	33.58	25.113	285.9	0.114					
50	13.66	33.58	25.140	283.3	0.143					
75	10.96	33.52	25.652	236.6	0.208					
100	10.15	33.63	25.878	213.1	0.264					
125	9.34	33.78	26.130	189.2	0.315					
150	8.90	33.87	26.271	175.8	0.361					
175	8.70	33.97	26.380	165.4	0.405					
200	8.27	34.01	26.477	156.2	0.446					
225	8.01	34.05	26.548	149.5	0.485					
250	7.89	34.10	26.605	144.1	0.523					
275	8.10	34.22	26.667	138.2	0.559					
300	7.87	34.24	26.717	133.4	0.594					
350	7.40	34.26	26.801	125.5	0.662					
400	6.92	34.28	26.884	117.6	0.726					
450	6.41	34.28	26.952	111.1	0.786					
500	5.97	34.28	27.009	105.7	0.843					
550	5.71	34.30	27.057	101.2	0.899					
600	5.40	34.32	27.111	96.1	0.952					
700	4.99	34.37	27.199	87.8	1.051					
800	4.61	34.41	27.273	80.7	1.145					
900	4.22	34.45	27.347	73.7	1.229					
1000	4.05	34.47	27.381	70.5	1.310					







95028		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 37.0N	117 10.5W	03/17/75	1015 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
19M	100	5KT			
Z	T	S	SIGMA T	DT	DI
0	12.26	33.51	25.208	276.8	0.000
5	12.15	33.51	25.230	274.8	0.013
10	11.87	33.54	25.501	249.0	0.026
15	11.41	33.62	25.648	235.0	0.039

CALCIFI CRUISE 7503		95029			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 35.0N	117 14.5W	03/17/75	0900 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
47M	090	5KT			
Z	T	S	SIGMA T	DT	DI
0	13.43	33.52	25.182	279.4	0.000
10	13.41	33.53	25.194	278.2	0.027
20	11.72	33.56	25.545	244.8	0.054
30	11.21	33.64	25.700	230.1	0.077
34	11.00	33.67	25.761	224.2	0.087

95030		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 33.0N	117 18.5W	03/17/75	0735 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
103M	320	10KT			
Z	T	S	SIGMA T	DT	DI
0	12.63	33.54	25.157	281.8	0.000
10	12.62	33.54	25.158	281.6	0.028
20	12.61	33.54	25.161	281.4	0.056
30	12.15	33.56	25.464	252.5	0.083
40	11.67	33.65	25.624	237.3	0.107
50	10.90	33.73	25.815	219.1	0.130
75	10.58	33.77	25.913	209.8	0.184
92	10.03	33.91	26.117	190.4	0.218

CALCIFI CRUISE 7503		95031			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 31.5N	117 22.5W	03/17/75	0609 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
417M	330	10KT			
Z	T	S	SIGMA T	DT	DI
0	13.89	33.56	25.118	285.4	0.000
10	13.89	33.56	25.118	285.4	0.028
20	13.84	33.55	25.121	285.1	0.057
30	12.61	33.51	25.336	264.6	0.084
40	12.16	33.55	25.454	253.4	0.110
50	11.62	33.60	25.594	240.1	0.135
75	10.58	33.78	25.921	209.1	0.191
100	10.05	33.83	26.051	196.7	0.243
125	9.52	34.01	26.280	175.0	0.290
150	9.36	34.10	26.373	166.1	0.333
175	9.11	34.18	26.479	156.0	0.374
200	8.98	34.23	26.539	150.4	0.413
225	8.71	34.24	26.589	145.6	0.451
250	8.59	34.26	26.624	142.3	0.488
275	8.42	34.27	26.658	139.1	0.525
300	8.26	34.27	26.682	136.7	0.561
319	8.20	34.27	26.691	135.9	0.582

95032		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 29.0N	117 27.0W	03/17/75	0838 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1092M	310	12KT			
Z	T	S	SIGMA T	DT	DI
0	12.92	33.56	25.112	286.0	0.000
10	12.92	33.56	25.112	286.0	0.028
20	12.92	33.56	25.112	286.0	0.057
30	12.92	33.56	25.112	286.0	0.085
40	12.03	33.55	25.285	269.5	0.113
50	11.88	33.53	25.492	249.9	0.139
75	10.65	33.65	25.808	219.8	0.198
100	10.01	33.88	26.097	192.3	0.250
125	9.54	33.90	26.191	183.4	0.298
150	9.46	34.08	26.344	168.8	0.343
175	9.23	34.12	26.413	162.3	0.385
200	9.01	34.20	26.511	154.0	0.425
225	8.91	34.22	26.542	150.0	0.464
250	8.79	34.24	26.577	146.8	0.502
275	8.47	34.24	26.639	141.3	0.540
300	8.15	34.27	26.699	135.2	0.576
350	7.75	34.27	26.758	129.5	0.615
400	7.32	34.27	26.820	123.7	0.711
450	6.88	34.29	26.891	116.4	0.774
500	6.51	34.30	26.955	110.9	0.835
550	6.12	34.33	27.030	103.8	0.892
600	5.70	34.34	27.090	98.0	0.946
700	5.17	34.38	27.186	89.0	1.048
800	4.80	34.39	27.236	84.2	1.143
900	4.47	34.43	27.305	77.7	1.233

CALCIFI CRUISE 7503		95032			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 12.0N	117 15.8W	03/16/75	2142 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1362M	310	6KT	2	49	2
Z	T	S	SIGMA T	DT	DI
0	13.97	33.57	25.110	286.2	0.000
10	13.94	33.57	25.116	285.6	0.028
20	13.88	33.57	25.128	284.5	0.057
30	13.86	33.57	25.132	284.1	0.085
40	12.98	33.55	25.295	268.6	0.113
50	12.20	33.56	25.454	253.4	0.139
75	11.17	33.57	25.653	234.5	0.200
100	9.71	33.68	25.991	202.4	0.256
125	9.56	33.92	26.203	182.2	0.304
150	9.52	34.05	26.311	172.0	0.349
175	9.34	34.16	26.426	161.0	0.392
200	9.27	34.22	26.485	155.5	0.432
225	9.06	34.25	26.542	150.1	0.471
250	8.84	34.26	26.585	146.0	0.510
275	8.79	34.26	26.593	145.3	0.547
300	8.52	34.27	26.643	140.5	0.584
350	7.88	34.30	26.763	129.1	0.655
400	7.27	34.30	26.851	120.7	0.720
450	6.74	34.30	26.924	113.8	0.782
500	6.41	34.31	26.976	108.9	0.841
550	6.11	34.32	27.023	104.4	0.898
600	5.72	34.34	27.088	98.3	0.953
700	5.26	34.38	27.175	90.0	1.055
800	4.80	34.40	27.244	83.5	1.150
900	4.37	34.43	27.316	76.7	1.239
1000	4.04	34.47	27.382	70.4	1.322



97070 RV NAJID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
30 55.5N	119 51.0W	03/15/75	2242 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3832M	310	9KT	1	330 8 10	
Z	T	S	SIGMA T	DT	DD
0	15.60	33.49	25.124	284.8	0.000
10	15.58	33.49	25.128	284.5	0.028
20	15.55	33.49	25.134	283.4	0.056
30	15.55	33.49	25.134	283.4	0.085
40	15.55	33.50	25.142	283.1	0.113
50	15.46	33.50	25.160	281.4	0.142
75	15.15	33.51	25.230	274.8	0.212
100	12.28	33.54	25.424	256.4	0.279
125	10.28	33.53	25.779	222.6	0.339
150	9.35	33.69	26.058	196.0	0.392
175	8.81	33.85	26.269	176.0	0.439
200	8.46	33.94	26.394	164.2	0.483
225	8.20	33.98	26.465	157.4	0.524
250	7.89	33.99	26.518	152.3	0.564
275	7.46	34.02	26.604	144.2	0.602
300	7.21	34.07	26.679	137.1	0.638
350	6.83	34.13	26.778	127.6	0.707
400	6.37	34.17	26.871	118.8	0.771
450	5.96	34.22	26.963	110.1	0.831
500	5.65	34.24	27.018	104.9	0.888
550	5.40	34.28	27.079	99.1	0.942
600	5.08	34.30	27.133	94.0	0.994
700	4.76	34.38	27.233	84.5	1.091
800	4.46	34.41	27.290	79.1	1.180
900	4.13	34.45	27.357	72.8	1.264
1000	3.91	34.47	27.396	69.1	1.344

CAICUPI CRUISE 7503 97080

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
30 35.0N	120 31.0W	03/15/75	1735 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4116M	340	8KT	2	340 15 10	
Z	T	S	SIGMA T	DT	DD
0	14.18	33.51	25.019	294.8	0.000
10	14.18	33.51	25.019	294.8	0.029
20	14.18	33.51	25.019	294.8	0.059
30	14.18	33.51	25.019	294.8	0.088
40	14.18	33.51	25.019	294.8	0.118
50	13.96	33.49	25.050	291.9	0.147
75	13.61	33.44	25.083	288.7	0.220
100	12.92	33.38	25.176	280.0	0.292
125	12.13	33.41	25.352	263.2	0.360
150	11.33	33.45	25.531	246.1	0.425
175	10.00	33.49	25.795	221.0	0.484
200	9.05	33.76	26.161	186.3	0.536
225	8.06	33.87	26.308	172.3	0.582
250	8.24	33.98	26.459	158.0	0.624
275	7.78	34.00	26.542	150.0	0.664
300	7.32	34.03	26.632	141.5	0.701
350	6.70	34.09	26.764	129.0	0.771
400	6.32	34.14	26.854	120.5	0.837
450	6.07	34.19	26.926	113.7	0.898
500	5.76	34.23	26.996	107.0	0.956
550	5.54	34.28	27.063	100.7	1.011
600	5.35	34.32	27.117	95.5	1.064
700	4.92	34.37	27.207	87.0	1.183
800	4.52	34.42	27.291	79.0	1.256
900	4.14	34.45	27.356	72.9	1.334
1000	3.87	34.48	27.408	68.0	1.417

100030 RV NAJID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
31 40.5N	116 46.5W	03/19/75	0118 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4368M	320	10KT	1	280 5 5	
Z	T	S	SIGMA T	DT	DD
0	15.91	33.56	25.114	285.8	0.000
10	15.73	33.55	25.144	283.0	0.028
20	15.25	33.52	25.414	257.3	0.055
30	11.05	33.58	25.683	231.7	0.080
40	10.63	33.67	25.825	218.0	0.102
50	10.38	33.79	25.964	205.0	0.123
75	9.93	33.91	26.134	188.9	0.173
100	9.60	34.06	26.306	172.5	0.219
125	9.27	34.19	26.461	157.7	0.260
150	9.13	34.24	26.523	151.9	0.300
175	8.99	34.26	26.561	146.8	0.338
200	8.77	34.28	26.611	143.5	0.376
225	8.71	34.28	26.621	142.6	0.412
250	8.50	34.29	26.661	138.7	0.449
275	8.31	34.28	26.685	136.7	0.484
300	8.07	34.28	26.719	133.3	0.519
350	7.59	34.29	26.797	125.5	0.587
400	7.23	34.31	26.866	119.5	0.651

CAICUPI CRUISE 7503 100035

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
31 30.5N	117 07.0W	03/19/75	0520 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1295M	330	10KT			
Z	T	S	SIGMA T	DT	DD
0	13.81	33.59	25.158	281.6	0.000
10	13.60	33.59	25.160	281.4	0.028
20	13.59	33.59	25.162	281.2	0.056
30	12.90	33.49	25.264	271.5	0.084
40	11.95	33.58	25.517	247.5	0.110
50	11.70	33.63	25.694	230.6	0.136
75	10.40	33.72	25.906	210.5	0.189
100	9.83	33.88	26.127	189.5	0.240
125	9.67	34.00	26.247	178.1	0.286
150	9.15	34.07	26.387	164.8	0.330
175	8.33	34.01	26.468	157.1	0.371
200	7.94	34.04	26.550	149.3	0.410
225	8.24	34.19	26.623	142.4	0.447
250	7.98	34.20	26.670	138.0	0.483
275	8.14	34.29	26.716	133.5	0.518
300	8.04	34.29	26.731	132.1	0.553
350	7.45	34.29	26.818	123.9	0.620
400	6.91	34.31	26.909	115.2	0.687
450	6.72	34.33	26.950	111.3	0.742
500	6.33	34.34	27.010	105.6	0.800
550	6.01	34.35	27.059	101.0	0.855
600	5.74	34.37	27.109	96.3	0.908
700	5.18	34.40	27.200	87.6	1.008
800	4.76	34.42	27.265	81.5	1.101
900	4.44	34.45	27.324	75.9	1.189
1000	4.07	34.48	27.387	69.9	1.271





103050		RV DAVID STARR JORDAN				CALCIFI CRUISE 7503				103060		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
30 26.0N	117 45.0W	03/21/75	0021 GMT	30 06.0N	118 25.0W	03/20/75	1900 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2042M	330	12KT	2	320	10	5	3737M	330	10KT	2	330	6 11
Z	T	S	SIGMA T	HT	HT	HT	Z	T	S	SIGMA T	HT	HT
0	14.77	33.59	24.956	300.9	0.000	0.000	0	15.18	33.67	24.928	303.8	0.000
10	14.76	33.59	24.958	300.7	0.030	0.030	10	15.16	33.67	24.933	303.0	0.030
20	14.69	33.57	24.958	300.7	0.060	0.060	20	15.15	33.67	24.935	302.8	0.060
30	14.59	33.55	24.964	300.1	0.090	0.090	30	15.15	33.67	24.935	302.8	0.090
40	14.50	33.53	24.967	299.7	0.120	0.120	40	15.14	33.67	24.937	302.6	0.120
50	14.25	33.49	24.989	297.7	0.150	0.150	50	15.14	33.68	24.945	301.9	0.151
75	14.16	33.53	25.039	292.9	0.224	0.224	75	14.78	33.64	24.992	297.4	0.227
100	12.74	33.45	25.265	271.4	0.295	0.295	100	12.35	33.54	25.410	257.6	0.297
125	11.66	33.53	25.533	266.0	0.361	0.361	125	10.93	33.72	25.812	219.4	0.357
150	10.91	33.64	25.754	224.9	0.420	0.420	150	10.50	33.75	25.946	206.7	0.411
175	9.89	33.79	26.047	197.1	0.474	0.474	175	10.55	34.09	26.167	185.7	0.461
200	9.47	33.95	26.241	178.6	0.522	0.522	200	9.46	34.08	26.321	171.1	0.506
225	8.99	34.01	26.366	166.8	0.566	0.566	225	8.78	34.05	26.430	160.7	0.549
250	8.65	34.05	26.450	154.8	0.608	0.608	250	8.62	34.13	26.517	152.4	0.589
275	8.53	34.14	26.539	150.3	0.648	0.648	275	8.39	34.16	26.577	146.8	0.628
300	8.31	34.20	26.620	142.7	0.686	0.686	300	8.20	34.21	26.645	140.3	0.665
350	7.86	34.26	26.734	131.8	0.757	0.757	350	7.72	34.25	26.747	130.6	0.736
400	7.09	34.23	26.821	123.6	0.824	0.824	400	7.18	34.26	26.848	121.0	0.801
450	6.10	34.17	26.906	115.5	0.887	0.887	450	6.77	34.30	26.920	114.2	0.864
500	5.87	34.23	26.982	108.3	0.946	0.946	500	6.55	34.33	26.973	109.1	0.923
550	5.63	34.29	27.059	101.0	1.002	1.002	550	6.39	34.39	27.042	102.7	0.980
600	5.32	34.33	27.129	94.4	1.054	1.054	600	6.17	34.43	27.102	97.0	1.034
700	5.00	34.39	27.213	86.4	1.152	1.152	700	5.55	34.43	27.180	89.6	1.135
800	4.67	34.43	27.282	79.8	1.243	1.243	800	4.82	34.42	27.258	82.2	1.230
900	4.34	34.47	27.350	73.4	1.329	1.329	900	4.66	34.45	27.322	76.1	1.318
1000	4.07	34.48	27.387	69.9	1.409	1.409	1000	4.09	34.48	27.385	70.1	1.401

103070		RV DAVID STARR JORDAN				CALCIFI CRUISE 7503				110035		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
29 47.0N	119 04.0W	03/20/75	1355 GMT	29 46.0N	116 00.0W	03/22/75	0442 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3737M	010	11KT	2	350	10	7	1296M	340	11KT			
Z	T	S	SIGMA T	HT	HT	HT	Z	T	S	SIGMA T	HT	HT
0	14.95	33.66	24.971	299.4	0.000	0.000	0	14.32	33.58	25.044	292.5	0.000
10	14.95	33.66	24.971	299.4	0.029	0.029	10	14.33	33.58	25.042	292.7	0.029
20	14.95	33.66	24.971	299.4	0.059	0.059	20	14.33	33.58	25.042	292.7	0.058
30	14.95	33.67	24.978	298.7	0.089	0.089	30	14.32	33.58	25.044	292.5	0.087
40	14.95	33.67	24.978	298.7	0.119	0.119	40	14.17	33.56	25.060	290.9	0.117
50	14.94	33.67	24.981	298.5	0.149	0.149	50	13.71	33.53	25.133	284.0	0.146
75	14.84	33.65	24.987	297.9	0.224	0.224	75	11.61	33.49	25.548	246.6	0.212
100	12.36	33.50	25.373	261.1	0.295	0.295	100	10.37	33.62	25.833	217.4	0.270
125	11.37	33.61	25.648	235.0	0.358	0.358	125	9.82	33.77	26.043	197.5	0.323
150	11.40	33.97	25.921	209.0	0.414	0.414	150	9.23	33.94	26.273	175.7	0.370
175	10.19	33.92	26.097	192.3	0.465	0.465	175	9.03	34.05	26.391	164.5	0.413
200	8.46	33.97	26.258	177.0	0.512	0.512	200	9.76	34.30	26.468	157.1	0.454
225	8.90	34.01	26.380	165.5	0.556	0.556	225	9.62	34.35	26.528	151.3	0.494
250	8.57	34.06	26.470	156.9	0.597	0.597	250	9.18	34.33	26.585	146.0	0.533
275	8.24	34.11	26.560	148.3	0.637	0.637	275	8.67	34.26	26.611	143.5	0.570
300	8.00	34.13	26.612	143.4	0.674	0.674	300	8.51	34.32	26.643	136.7	0.606
350	7.52	34.18	26.721	133.1	0.746	0.746	350	8.42	34.42	26.775	127.4	0.676
400	6.98	34.23	26.836	122.1	0.813	0.813	400	7.83	34.39	26.841	121.7	0.741
450	6.51	34.28	26.939	112.4	0.875	0.875	450	7.19	34.37	26.917	114.5	0.804
500	6.29	34.31	26.998	107.0	0.933	0.933	500	6.79	34.38	26.980	108.5	0.863
550	5.96	34.34	27.058	101.1	0.989	0.989	550	6.51	34.38	27.018	104.4	0.921
600	5.70	34.36	27.106	96.6	1.042	1.042	600	6.18	34.39	27.064	100.1	0.976
700	5.18	34.39	27.192	88.4	1.142	1.142	700	5.48	34.41	27.172	90.3	1.080
800	4.70	34.44	27.287	79.4	1.235	1.235	800	4.94	34.43	27.252	82.7	1.175
900	4.35	34.46	27.341	74.2	1.320	1.320	900	4.50	34.45	27.317	76.5	1.264
1000	3.99	34.48	27.395	69.1	1.401	1.401	1000	4.12	34.48	27.382	70.4	1.346



110040		RV DAVID STARR JORDAN			CALCOFI CRUISE 7503					110050		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME					
29 36.5N	116 19.5W	03/22/75	0750 GMT	29 16.5N	116 59.0W	03/22/75	1336 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
2042M	330	13KT			3738M	320	11KT	1	320 # 11			
Z	T	S	SIGMA T	DT	DT	Z	T	S	SIGMA T	DT	DT	
0	14.89	33.64	24.968	299.7	0.000	0	14.80	33.63	24.980	298.5	0.000	
10	14.89	33.64	24.968	299.7	0.029	10	14.80	33.63	24.980	298.5	0.029	
20	14.90	33.64	24.966	299.9	0.060	20	14.81	33.63	24.978	298.7	0.059	
30	14.88	33.63	24.963	300.2	0.090	30	14.82	33.63	24.976	299.0	0.089	
40	14.73	33.62	24.987	297.8	0.170	40	14.82	33.63	24.976	299.0	0.119	
50	14.20	33.55	25.046	292.3	0.149	50	14.82	33.63	24.976	299.0	0.149	
75	12.90	33.43	25.218	275.9	0.221	75	14.51	33.60	25.019	294.8	0.224	
100	11.15	33.58	25.664	233.5	0.285	100	13.03	33.55	25.285	269.5	0.295	
125	10.20	33.78	25.987	202.8	0.340	125	11.59	33.72	25.693	230.8	0.358	
150	10.30	34.04	26.172	185.2	0.389	150	11.17	33.91	25.917	209.4	0.414	
175	10.15	34.13	26.268	176.1	0.435	175	10.50	34.09	26.176	184.8	0.464	
200	10.04	34.26	26.387	164.7	0.479	200	10.36	34.16	26.255	177.3	0.511	
225	9.71	34.29	26.467	157.2	0.520	225	10.04	34.25	26.380	165.4	0.555	
250	9.59	34.34	26.526	151.6	0.560	250	9.61	34.28	26.475	156.4	0.596	
275	9.54	34.36	26.549	149.3	0.599	275	9.42	34.35	26.562	148.2	0.636	
300	9.66	34.42	26.576	146.8	0.638	300	9.44	34.44	26.628	141.8	0.673	
350	9.10	34.42	26.668	138.1	0.717	350	8.04	34.29	26.731	132.1	0.745	
400	8.46	34.39	26.766	130.7	0.783	400	7.33	34.29	26.835	122.3	0.812	
450	8.01	34.42	26.837	122.0	0.850	450	7.06	34.34	26.912	115.0	0.874	
500	7.21	34.36	26.908	112.5	0.913	500	6.79	34.37	26.972	109.2	0.934	
550	6.31	34.33	27.005	106.1	0.973	550	6.52	34.40	27.032	103.5	0.991	
600	5.99	34.36	27.070	100.0	1.028	600	6.16	34.41	27.088	98.3	1.046	
700	5.39	34.40	27.175	90.0	1.131	700	5.45	34.42	27.184	89.2	1.145	
800	4.85	34.42	27.254	82.8	1.226	800	4.92	34.43	27.254	82.4	1.243	
900	4.39	34.45	27.329	75.4	1.314	900	4.41	34.46	27.335	74.8	1.330	
1000	4.02	34.48	27.392	69.4	1.396	1000	4.14	34.48	27.380	70.8	1.412	

RV DAVID STARR JORDAN				CALCOFI CRUISE 7503						110050					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
29 16.5N	116 59.0W	3/22/75	1452	3738M	320	11KT	1	320 # 11	3738M	320	11KT	1	320 # 11		
Z	T	S	D2	P04	S103	M02	M04	DT	Z	T	S	D2	SIGT	DT	DT
3	14.82	33.631	5.91					298.9	0	14.82	33.631	5.91	24.977	298.9	0.000
11	14.80	33.628	5.91					298.7	10	14.80	33.629	5.91	24.979	298.7	0.029
30	14.82	33.631	5.95					298.9	20	14.81	33.630	5.92	24.978	298.8	0.059
58	14.66	33.612	5.93					257.0	30	14.82	33.631	5.95	24.977	298.9	0.089
77	14.13	33.563						289.9	50	14.70	33.618	5.93	24.991	297.5	0.149
90	13.21	33.488	5.58					277.5	75	14.21	33.572	5.74	25.059	291.1	0.223
103	12.46	33.581	4.69					256.6	100	12.61	33.553	4.90	25.368	261.7	0.293
135	11.35	33.815	2.54					219.6	125	11.61	33.743	3.80	25.705	229.6	0.355
158	10.83	33.978	2.91					198.6	150	10.98	33.924	3.11	25.960	205.3	0.410
186	10.41	34.126	2.33					180.7	200	10.20	34.175	2.13	26.293	173.7	0.507
219	9.93	34.223	1.92					165.7	250	9.56	34.291	1.50	26.491	154.9	0.591
289	8.10	34.338	1.06					144.2	300	8.89	34.332	1.00	26.633	141.5	0.668
388	7.38	34.275	0.82					124.1	400	7.30	34.286	0.76	26.835	122.3	0.806
492	6.98	34.383	0.36					110.7	500	6.93	34.387	0.35	26.966	109.8	0.929
595	6.20	34.411	0.29					100.0	600	6.26	34.411	0.29	27.075	99.5	1.042
728	5.53	34.613	0.33					88.3	700	5.52	34.413	0.32	27.169	90.6	1.146
877	4.57	34.451	0.50					77.2	800	4.92	34.430	0.40	27.254	82.6	1.241
1041	4.03	34.484	0.68					69.2	1000	4.13	34.477	0.63	27.378	70.8	1.413

110060		RV DAVID STARR JORDAN			CALCOFI CRUISE 7503					110300		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME					
28 57.0N	117 36.5W	03/22/75	1959 GMT	29 22.0N	115 16.5W	03/23/75	2140 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
3738M	320	9KT	2	330 # 8	606M	330	12KT	0	330 # 13			
Z	T	S	SIGMA T	DT	DT	Z	T	S	SIGMA T	DT	DT	
0	15.10	33.67	24.968	301.8	0.000	0	12.51	33.65	25.464	252.5	0.000	
10	15.11	33.68	24.938	302.7	0.030	10	12.51	33.65	25.464	252.5	0.025	
20	15.08	33.66	24.942	302.1	0.060	20	12.02	33.66	25.566	242.8	0.050	
30	15.06	33.66	24.947	301.7	0.090	30	11.13	33.63	25.707	229.4	0.073	
40	15.05	33.66	24.949	301.5	0.121	40	10.77	33.70	25.825	218.1	0.096	
50	15.04	33.66	24.951	301.3	0.151	50	10.87	33.75	25.847	216.1	0.118	
75	14.79	33.62	24.975	299.1	0.228							
100	12.72	33.55	25.346	263.7	0.293							
125	11.77	33.76	25.690	231.0	0.360							
150	10.87	33.89	25.955	208.8	0.415							
175	10.94	34.15	26.144	187.8	0.465							
200	10.40	34.18	26.263	176.5	0.512							
225	9.83	34.25	26.415	162.1	0.555							
250	9.80	34.34	26.480	155.9	0.596							
275	9.15	34.27	26.543	150.0	0.636							
300	8.18	34.37	26.616	143.0	0.674							
350	8.70	34.39	26.708	134.3	0.746							
400	8.11	34.39	26.799	125.7	0.815							
450	7.52	34.40	26.894	116.7	0.879							
500	6.76	34.35	26.961	110.3	0.940							
550	6.31	34.34	27.013	104.4	0.993							
600	6.09	34.36	27.057	101.2	1.053							
700	5.50	34.41	27.170	90.5	1.157							
800	5.07	34.44	27.245	83.4	1.253							
900	4.52	34.45	27.315	76.7	1.343							
1000	4.09	34.48	27.385	70.1	1.425							

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
29 12.0N		115 38.0W		3/23/75	1712	1752	GMT	1298M	340	12KT	0	320 10 7			
Z	T	S	DT	R04	SIG3	N02	N03	DT	Z	T	S	N2	SIGT	DT	DD
1	13.52	33.598	6.05					275.4	0	13.52	33.598	6.05	25.224	275.4	0.000
10	13.50	33.597	5.99					275.1	10	13.50	33.597	5.99	25.277	275.1	0.027
27	13.46	33.598	6.00					274.2	20	13.47	33.599	5.99	25.232	274.6	0.055
56	11.15	33.633	4.40					229.5	30	13.73	33.598	5.85	25.281	269.9	0.082
74	10.92	33.670	4.08					222.9	50	11.64	33.619	4.75	25.603	239.3	0.133
88	10.61	33.727	3.87					213.5	75	10.89	33.674	4.06	25.782	222.3	0.191
102	10.30	33.800	3.66					203.0	100	10.34	33.789	3.69	25.969	204.5	0.245
131	9.82	34.016	3.01					179.2	125	9.91	33.974	3.14	26.186	183.9	0.294
154	9.54	34.082	2.72					166.8	150	9.42	34.075	2.76	26.346	168.6	0.339
183	8.96	34.139	2.36					156.8	200	9.06	34.210	1.95	26.509	153.2	0.421
216	8.21	34.278	1.55					150.3	250	8.95	34.341	1.07	26.630	141.7	0.497
292A	8.40	34.366	0.76					131.7	300	8.33	34.370	0.72	26.748	130.5	0.568
291A	7.68	34.381	0.50					120.3	400	7.59	34.381	0.48	26.869	119.1	0.698
498A	6.66	34.380	0.37					106.8	500	6.64	34.380	0.36	27.000	106.6	0.818
601A	6.05	34.382	0.35					99.1	600	6.05	34.382	0.35	27.079	99.1	0.929
735A	5.18	34.410	0.37					86.9	700	5.39	34.400	0.36	27.175	90.0	1.032
889A	4.55	34.456	0.49					76.6	800	4.88	34.429	0.41	27.258	82.2	1.127
1047A	3.95	34.491	0.66					67.9	1000	4.12	34.482	0.60	27.383	70.3	1.298

A) CAST 11.

LATITUDE		LONGITUDE		MO/DAY/YR	START TIME			BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES		
29 12.0N		115 38.0W		03/23/75	1806 GMT			1856M		330	12KT		320 10 7		
Z	T	S	SIGMA T	HT	HD	Z	T	S	SIGMA T	HT	HD				
0	13.50	33.60	25.229	279.8	0.000	0	13.09	33.63	25.335	264.8	0.000				
10	13.49	33.60	25.231	274.7	0.027	10	13.09	33.63	25.335	264.8	0.028				
20	13.49	33.60	25.231	279.7	0.055	20	12.99	33.62	25.347	263.6	0.052				
30	13.45	33.59	25.232	278.6	0.082	30	11.86	33.58	25.534	245.9	0.078				
40	12.44	33.55	25.400	258.6	0.109	40	11.10	33.57	25.666	233.3	0.102				
50	11.66	33.60	25.620	237.7	0.184	50	10.65	33.60	25.764	223.5	0.125				
75	10.61	33.73	25.877	215.3	0.190	75	9.82	33.78	26.051	198.7	0.178				
100	10.09	33.91	26.107	191.4	0.241	100	9.95	34.06	26.247	178.1	0.225				
125	9.55	34.03	26.290	173.4	0.288	125	9.06	34.13	26.350	168.3	0.269				
150	9.31	34.09	26.377	165.8	0.331	150	9.05	34.16	26.408	162.8	0.311				
175	8.99	34.13	26.459	157.9	0.372	175	9.06	34.13	26.448	159.0	0.352				
200	8.07	34.23	26.525	151.7	0.412	200	8.08	34.17	26.524	151.8	0.392				
225	9.23	34.38	26.616	143.0	0.450	225	8.10	34.19	26.552	149.1	0.431				
250	8.05	34.40	26.661	138.8	0.496	250	8.30	34.23	26.645	140.3	0.468				
275	8.60	34.37	26.708	134.3	0.522	275	8.11	34.26	26.697	135.3	0.503				
300	8.33	34.37	26.750	130.3	0.596	300	8.10	34.31	26.738	131.5	0.538				
350	7.79	34.33	26.800	125.6	0.623	350	7.88	34.37	26.818	123.9	0.605				
400	7.66	34.41	26.881	117.9	0.687	400	7.42	34.37	26.885	117.6	0.668				
450	7.32	34.41	26.930	113.2	0.748	450	6.92	34.36	26.947	111.7	0.729				
500	6.67	34.41	27.020	106.7	0.806	500	6.95	34.36	26.997	108.9	0.787				
550	6.48	34.43	27.061	100.8	0.862	550	6.24	34.37	27.046	102.3	0.843				
600	6.06	34.40	27.092	97.8	0.915	600	5.87	34.39	27.108	96.3	0.897				
700	5.51	34.44	27.192	88.4	1.017	700	5.45	34.45	27.208	86.9	0.997				
800	4.91	34.43	27.255	82.6	1.111	800	4.80	34.43	27.268	81.2	1.090				
900	4.46	34.46	27.330	75.4	1.199	900	4.47	34.45	27.320	76.2	1.177				
1000	4.05	34.48	27.389	69.7	1.281	1000	4.13	34.47	27.373	71.5	1.260				

LATITUDE		LONGITUDE		MO/DAY/YR	START TIME			BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES		
28 42.0N		116 36.0W		03/23/75	0125 GMT			3736M		310	7KT	1	250 5 10		
Z	T	S	SIGMA T	HT	HD	Z	T	S	SIGMA T	HT	HD				
0	14.68	33.61	24.991	297.6	0.000	0	15.01	33.62	24.927	303.6	0.000				
10	14.69	33.61	24.988	297.8	0.029	10	15.02	33.62	24.925	303.8	0.030				
20	14.68	33.61	24.991	297.6	0.059	20	14.95	33.62	24.940	302.4	0.060				
30	14.68	33.61	24.991	297.6	0.089	30	14.90	33.63	24.959	300.6	0.090				
40	14.65	33.61	24.997	296.9	0.119	40	14.88	33.63	24.963	300.2	0.121				
50	14.64	33.61	24.999	296.7	0.149	50	14.88	33.63	24.963	300.2	0.151				
75	14.30	33.54	25.018	295.0	0.223	75	14.10	33.54	25.054	291.0	0.225				
100	12.29	33.51	25.398	290.8	0.293	100	12.45	33.47	25.414	257.3	0.294				
125	10.90	33.68	25.787	271.8	0.353	125	11.41	33.73	25.734	226.9	0.355				
150	10.28	33.79	25.981	203.4	0.407	150	10.57	33.82	25.954	205.9	0.410				
175	9.68	33.96	26.214	181.2	0.456	175	9.53	33.90	26.126	189.6	0.461				
200	9.17	34.07	26.384	165.1	0.501	200	9.38	34.00	26.295	173.5	0.507				
225	8.92	34.12	26.463	157.6	0.542	225	8.92	34.05	26.408	162.8	0.550				
250	8.74	34.16	26.522	151.9	0.582	250	8.34	34.07	26.514	152.8	0.591				
275	8.55	34.20	26.583	146.2	0.620	275	8.08	34.09	26.568	147.6	0.629				
300	8.32	34.23	26.642	140.6	0.657	300	7.85	34.11	26.618	142.0	0.667				
350	7.84	34.28	26.753	130.0	0.728	350	7.35	34.19	26.753	130.0	0.738				
400	7.38	34.29	26.827	123.0	0.794	400	6.92	34.23	26.845	121.4	0.803				
450	7.02	34.30	26.886	117.4	0.858	450	6.51	34.26	26.923	113.9	0.865				
500	6.78	34.37	26.974	109.1	0.918	500	6.45	34.35	27.002	106.4	0.924				
550	6.21	34.36	27.042	102.7	0.975	550	6.15	34.38	27.085	100.4	0.979				
600	5.95	34.37	27.083	98.8	1.029	600	5.85	34.40	27.119	95.3	1.032				
700	5.28	34.40	27.189	88.7	1.131	700	5.30	34.41	27.194	88.2	1.132				
800	4.79	34.43	27.269	81.1	1.224	800	4.81	34.43	27.267	81.3	1.225				
900	4.33	34.46	27.344	74.0	1.311	900	4.43	34.46	27.333	75.1	1.318				
1000	4.04	34.49	27.398	68.9	1.391	1000	4.14	34.48	27.380	70.6	1.395				

113070		RV DAV ID STARR JORDAN				CALCIFI CRUISE 7503				119033		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
28 02.0N	117 55.0W	03/28/75	1020 GMT			28 19.0N	114 53.0W	03/24/75	1439 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3357M	310	5KT				110M	320	8KT	0	300	4 10	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	15.39	33.68	24.890	307.1	0.000	0	13.68	33.59	25.185	279.1	0.000	
10	15.40	33.68	24.888	307.4	0.030	10	13.66	33.59	25.189	278.7	0.027	
20	15.40	33.68	24.888	307.4	0.061	20	13.66	33.59	25.189	278.7	0.055	
30	15.40	33.68	24.888	307.4	0.092	30	13.66	33.60	25.197	277.9	0.083	
40	15.40	33.68	24.888	307.4	0.123	40	13.66	33.59	25.189	278.7	0.111	
50	15.40	33.69	24.895	308.6	0.154	50	13.60	33.59	25.201	277.5	0.139	
75	13.90	33.52	25.086	288.5	0.228	75	11.60	33.64	25.592	240.4	0.204	
100	12.14	33.57	25.473	251.6	0.296	90	11.39	33.75	25.753	225.1	0.239	
125	11.26	33.67	25.714	226.7	0.357							
150	10.33	33.79	25.972	204.2	0.412							
175	9.77	33.95	26.192	183.3	0.461							
200	9.06	33.97	26.323	170.8	0.506							
225	8.79	34.02	26.405	163.1	0.549							
250	8.50	34.07	26.489	155.1	0.590							
275	8.17	34.11	26.571	147.4	0.629							
300	8.05	34.16	26.644	140.4	0.666							
350	7.38	34.20	26.757	129.7	0.737							
400	7.10	34.27	26.851	120.7	0.802							
450	6.63	34.29	26.931	113.2	0.864							
500	6.38	34.33	26.996	107.0	0.922							
550	6.04	34.35	27.056	101.3	0.978							
600	5.71	34.36	27.105	96.7	1.031							
700	5.17	34.39	27.194	88.2	1.132							
800	4.70	34.43	27.279	80.1	1.224							
900	4.27	34.46	27.350	73.4	1.310							
1000	3.92	34.48	27.403	68.5	1.390							

120030		RV DAV ID STARR JORDAN				CALCIFI CRUISE 7503				120035		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
28 13.0N	114 34.0W	03/24/75	1210 GMT			28 03.0N	114 54.0W	03/24/75	1641 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
95M	320	8KT				80M	360	8KT	0	320	6 11	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	12.64	33.67	25.255	272.4	0.000	0	16.41	33.72	25.120	285.2	0.000	
10	12.62	33.66	25.251	272.8	0.027	10	16.66	33.71	25.114	285.6	0.028	
20	12.60	33.66	25.255	272.4	0.054	20	16.41	33.71	25.125	284.8	0.057	
30	12.60	33.66	25.271	270.8	0.081	30	16.41	33.71	25.125	284.8	0.085	
40	12.65	33.66	25.294	259.2	0.108	40	16.41	33.77	25.133	284.0	0.114	
50	12.69	33.64	25.421	256.5	0.134	50	16.41	33.72	25.133	284.0	0.142	
67	11.78	33.71	25.650	234.9	0.176	67	13.27	33.67	25.230	265.3	0.189	

RV (DAVI) STARR JORDAN		CALCIFI CRUISE 7503				120045									
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
27 43.0N	115 33.0W	3/24/75	2240 GMT			2416M	340	9KT	0	320 10 8					
Z	T	S	U2	U04	U03	U02	U03	DT	SIGT	DT	DD				
2	14.63	33.756	6.19					285.8	0	14.63	33.756	6.19	25.113	285.8	0.000
11	14.19	33.763	6.06					276.4	10	14.74	33.762	6.07	25.200	277.6	0.028
31	13.05	33.847	4.39					248.8	20	13.71	33.790	5.42	25.331	265.1	0.055
59	11.26	34.117	7.17					195.7	30	13.14	33.841	4.49	25.485	250.4	0.081
79	10.68	34.284	1.40					173.5	50	11.80	34.022	2.80	25.886	212.3	0.127
92	10.42	34.275	1.46					169.8	75	10.76	34.261	1.48	26.262	176.6	0.176
107	10.40	34.363	1.11					163.0	100	10.40	34.321	1.29	26.371	166.3	0.220
137	10.25	34.444	0.80					154.5	125	10.31	34.419	0.92	26.465	157.3	0.261
160	9.58	34.361	1.17					149.9	150	9.86	34.397	1.01	26.523	151.8	0.300
188	9.49	34.420	0.71					144.1	200	9.46	34.441	0.58	26.625	142.2	0.375
223	9.40	34.471	0.42					138.9	250	9.22	34.483	0.35	26.697	135.3	0.447
293	8.85	34.479	0.26					129.9	300	8.78	34.478	0.25	26.763	129.1	0.516
394	7.91	34.449	0.24					118.4	400	7.84	34.447	0.23	26.883	117.7	0.646
499	6.84	34.423	0.22					105.9	500	6.83	34.423	0.22	27.008	105.8	0.765
604	6.06	34.426	0.23					95.9	600	6.08	34.425	0.22	27.109	96.2	0.874
737	5.29	34.446	0.30					85.4	700	5.48	34.439	0.26	27.195	88.1	0.974
888	4.52	34.472	0.60					75.1	800	4.95	34.457	0.42	27.272	80.8	1.068
1052	3.84	34.499	0.68					66.7	1000	4.06	34.491	0.65	27.396	69.1	1.236

120045						CALCOP I CRUISE 7503											
RV DAVID STARR JORDAN						RV DAVID STARR JORDAN											
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME						
27 43.0N	115 33.0W	03/24/75	2130 GMT	27 33.0N	115 53.0W	03/25/75	0135 GMT	27 33.0N	115 53.0W	03/25/75	0135 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
2416R	340	9KT	0	320 10 R	4212N	340	8KT	0	360 R 8	4216R	340	9KT	0	360 R 8			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.55	33.75	25.126	284.7	0.000	0	14.53	33.60	25.015	285.2	0.000	0	14.53	33.60	25.015	285.2	0.000
10	14.47	33.75	25.143	283.0	0.028	10	14.47	33.58	25.012	295.5	0.028	10	14.47	33.58	25.012	295.5	0.028
20	14.06	33.75	25.229	274.8	0.056	20	14.09	33.58	25.092	287.9	0.056	20	14.09	33.58	25.092	287.9	0.056
30	13.91	33.76	25.268	271.1	0.083	30	14.04	33.63	25.141	283.2	0.087	30	14.04	33.63	25.141	283.2	0.087
40	13.13	33.79	25.450	253.8	0.110	40	14.01	33.63	25.146	282.6	0.115	40	14.01	33.63	25.146	282.6	0.115
50	11.66	33.89	25.811	219.5	0.133	50	13.97	33.61	25.140	283.3	0.144	50	13.97	33.61	25.140	283.3	0.144
75	11.02	34.22	26.185	186.0	0.184	75	12.32	33.68	25.447	254.2	0.211	75	12.32	33.68	25.447	254.2	0.211
100	10.41	34.28	26.339	169.3	0.229	100	10.67	33.79	25.922	209.0	0.270	100	10.67	33.79	25.922	209.0	0.270
125	10.39	34.40	26.436	160.1	0.271	125	10.28	34.04	26.175	184.9	0.320	125	10.28	34.04	26.175	184.9	0.320
150	10.24	34.45	26.501	153.9	0.311	150	10.04	34.14	26.291	173.9	0.365	150	10.04	34.14	26.291	173.9	0.365
175	9.66	34.36	26.530	151.7	0.350	175	9.78	34.25	26.424	161.3	0.408	175	9.78	34.25	26.424	161.3	0.408
200	9.37	34.37	26.585	145.9	0.388	200	10.34	34.43	26.468	157.1	0.449	200	10.34	34.43	26.468	157.1	0.449
225	9.45	34.47	26.650	139.8	0.425	225	9.65	34.39	26.555	148.9	0.488	225	9.65	34.39	26.555	148.9	0.488
250	9.31	34.47	26.673	137.6	0.460	250	9.55	34.46	26.626	142.1	0.526	250	9.55	34.46	26.626	142.1	0.526
275	9.14	34.48	26.708	134.3	0.496	275	9.31	34.44	26.650	139.8	0.562	275	9.31	34.44	26.650	139.8	0.562
300	8.90	34.48	26.747	130.6	0.530	300	8.83	34.43	26.719	133.2	0.598	300	8.83	34.43	26.719	133.2	0.598
350	8.56	34.47	26.793	126.3	0.598	350	8.40	34.46	26.809	124.7	0.665	350	8.40	34.46	26.809	124.7	0.665
400	7.98	34.45	26.866	119.4	0.662	400	7.96	34.45	26.868	119.1	0.730	400	7.96	34.45	26.868	119.1	0.730
450	7.40	34.44	26.942	112.1	0.724	450	7.46	34.43	26.926	113.6	0.792	450	7.46	34.43	26.926	113.6	0.792
500	6.87	34.42	27.001	106.5	0.782	500	6.82	34.40	26.992	107.4	0.851	500	6.82	34.40	26.992	107.4	0.851
550	6.49	34.43	27.060	100.9	0.838	550	6.58	34.44	27.056	101.3	0.907	550	6.58	34.44	27.056	101.3	0.907
600	6.10	34.43	27.111	96.1	0.891	600	6.19	34.43	27.099	97.2	0.960	600	6.19	34.43	27.099	97.2	0.960
700	5.51	34.44	27.192	88.4	0.992	700	5.55	34.44	27.188	88.8	1.062	700	5.55	34.44	27.188	88.8	1.062
800	4.99	34.45	27.262	81.8	1.086	800	5.01	34.46	27.268	81.2	1.156	800	5.01	34.46	27.268	81.2	1.156
900	4.46	34.47	27.337	74.6	1.173	900	4.61	34.47	27.321	76.2	1.244	900	4.61	34.47	27.321	76.2	1.244
1000	4.10	34.49	27.392	69.5	1.255	1000	4.24	34.49	27.377	70.9	1.327	1000	4.24	34.49	27.377	70.9	1.327

120060						CALCOP I CRUISE 7503											
RV DAVID STARR JORDAN						RV DAVID STARR JORDAN											
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME						
27 13.0N	116 30.5W	03/25/75	0631 GMT	26 50.4N	117 10.4W	03/28/75	0002 GMT	26 50.4N	117 10.4W	03/28/75	0002 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
5737R	340	11KT			3426R	320	9KT	2	330 R 9	3426R	340	11KT	2	330 R 9			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.10	33.63	24.915	304.7	1.000	0	15.01	33.73	24.834	312.4	0.000	0	15.10	33.63	24.915	304.7	1.000
10	15.10	33.63	24.915	304.7	0.030	10	15.01	33.73	24.834	312.4	0.031	10	15.10	33.63	24.915	304.7	0.030
20	15.08	33.63	24.920	304.3	0.060	20	15.00	33.73	24.837	312.2	0.062	20	15.08	33.63	24.920	304.3	0.060
30	15.05	33.63	24.926	303.7	0.091	30	15.09	33.73	24.839	312.0	0.093	30	15.05	33.63	24.926	303.7	0.091
40	15.03	33.63	24.930	303.3	0.121	40	15.03	33.73	24.843	311.5	0.125	40	15.03	33.63	24.930	303.3	0.121
50	14.96	33.62	24.938	302.6	0.152	50	15.07	33.73	24.843	311.5	0.156	50	14.96	33.62	24.938	302.6	0.152
75	13.77	33.56	25.143	285.0	0.225	75	15.02	33.73	24.855	310.5	0.234	75	13.77	33.56	25.143	285.0	0.225
100	12.42	33.67	25.497	249.3	0.293	100	13.56	33.55	25.178	279.7	0.308	100	12.42	33.67	25.497	249.3	0.293
125	11.45	33.89	25.850	215.8	0.351	125	11.95	33.62	25.548	244.5	0.375	125	11.45	33.89	25.850	215.8	0.351
150	10.94	33.96	25.997	201.8	0.404	150	10.82	33.76	25.863	214.6	0.433	150	10.94	33.96	25.997	201.8	0.404
175	10.81	34.23	26.230	179.7	0.453	175	10.29	33.96	26.111	191.0	0.484	175	10.81	34.23	26.230	179.7	0.453
200	10.18	34.27	26.371	166.3	0.497	200	10.35	34.21	26.295	173.5	0.531	200	10.18	34.27	26.371	166.3	0.497
225	9.79	34.30	26.461	157.8	0.539	225	9.96	34.29	26.424	161.2	0.574	225	9.79	34.30	26.461	157.8	0.539
250	9.64	34.33	26.509	153.1	0.579	250	9.69	34.33	26.501	153.9	0.615	250	9.64	34.33	26.509	153.1	0.579
275	9.26	34.37	26.603	144.3	0.618	275	9.43	34.35	26.560	148.4	0.654	275	9.26	34.37	26.603	144.3	0.618
300	9.13	34.39	26.640	140.8	0.655	300	9.21	34.38	26.619	142.7	0.692	300	9.13	34.39	26.640	140.8	0.655
350	8.76	34.42	26.722	132.9	0.726	350	8.52	34.37	26.721	133.1	0.764	350	8.76	34.42	26.722	132.9	0.726
400	8.13	34.44	26.835	122.2	0.793	400	7.78	34.34	26.809	124.7	0.832	400	8.13	34.44	26.835	122.2	0.793
450	7.46	34.43	26.826	113.6	0.856	450	7.42	34.36	26.877	118.3	0.896	450	7.46	34.43	26.826	113.6	0.856
500	7.13	34.43	26.973	109.2	0.916	500	6.93	34.36	26.945	111.8	0.957	500	7.13	34.43	26.973	109.2	0.916
550	6.56	34.42	27.043	102.6	0.973	550	6.40	34.36	27.017	105.0	1.015	550	6.56	34.42	27.043	102.6	0.973
600	6.01	34.42	27.114	95.7	1.026	600	5.99	34.37	27.078	99.3	1.070	600	6.01	34.42	27.114	95.7	1.026
700	5.31	34.42	27.201	87.6	1.126	700	5.41	34.41	27.181	89.5	1.173	700	5.31	34.42	27.201	87.6	1.126
800	4.98	34.45	27.263	81.6	1.220	800	5.00	34.45	27.261	81.9	1.268	800	4.98	34.45	27.263	81.6	1.220
900	4.45	34.46	27.331	75.3	1.307	900	4.51	34.46	27.324	75.9	1.356	900	4.45	34.46	27.331	75.3	1.307
1000	4.09	34.49	27.393	69.4	1.389	1000	4.16	34.49	27.386	70.1	1.438	1000	4.09	34.49	27.393	69.4	1.389

123057		RV DAVID STARR JORDAN				CALCOFI CRUISE 7503				123050			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
27 24.0N	114 40.0W	03/26/75	0207 GMT			26 58.0N	115 31.0W	03/25/75	1630 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
71M	300	10KT	0	300 3 7			3546M	340	10KT	2	320 9 10		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	17.82	34.04	25.705	229.6	0.000	0	15.22	33.73	24.966	299.9	0.000		
10	17.81	34.04	25.707	229.4	0.022	10	15.22	33.73	24.966	299.9	0.030		
20	17.74	34.04	25.721	228.1	0.045	20	15.22	33.73	24.966	299.9	0.060		
30	17.24	34.05	25.826	218.1	0.068	30	15.22	33.74	24.973	299.2	0.090		
40	11.72	34.12	25.978	203.6	0.089	40	15.16	33.74	24.987	297.9	0.120		
50	11.43	34.20	26.094	192.6	0.109	50	15.14	33.74	24.991	297.5	0.149		
						75	12.57	33.57	25.391	259.5	0.219		
						100	11.31	33.84	25.837	217.0	0.280		
						125	10.88	34.02	26.054	196.4	0.337		
						150	10.88	34.28	26.260	176.8	0.379		
						175	9.76	34.14	26.341	169.1	0.423		
						200	9.30	34.18	26.448	159.0	0.465		
						225	9.07	34.28	26.564	148.0	0.505		
						250	9.03	34.33	26.609	143.7	0.547		
						275	8.66	34.33	26.668	138.1	0.579		
						300	8.38	34.33	26.711	134.0	0.614		
						350	8.03	34.36	26.788	126.8	0.667		
						400	7.65	34.38	26.859	120.0	0.747		
						450	7.23	34.44	26.966	109.0	0.808		
						500	6.77	34.44	27.030	103.7	0.865		
						550	6.39	34.44	27.081	98.9	0.920		
						600	6.04	34.44	27.126	94.6	0.972		
						700	5.36	34.46	27.227	85.1	1.071		
						800	4.96	34.48	27.289	79.2	1.162		
						900	4.48	34.48	27.343	74.1	1.247		
						1000	4.16	34.49	27.386	70.1	1.329		

RV DAVID STARR JORDAN		CALCOFI CRUISE 7503				123050									
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
26 58.0N	115 31.0W	3/25/75	1737 GMT			3546M	340	10KT	2	320 9 10					
Z	T	S	DT	DT4	SIGT	DT	M13	M11	Z	T	S	DT	SIGT	DT	DD
1	15.24	33.737	5.91			299.8			0	15.24	33.737	5.91	24.967	299.8	0.000
10	15.21	33.744	5.87			298.7			10	15.21	33.744	5.87	24.978	298.7	0.029
28	15.21	33.738	5.82			299.1			20	15.21	33.741	5.84	24.976	298.9	0.059
56	14.23	33.664	5.43			286.5			30	15.17	33.735	5.81	24.977	298.8	0.089
74	12.97	33.638	4.76			261.9			50	14.54	33.682	5.56	25.075	289.5	0.148
87	11.86	33.676	4.19			238.8			75	12.87	33.640	4.71	25.384	260.1	0.218
102	11.40	33.802	3.47			221.4			100	11.43	33.783	3.56	25.770	223.4	0.278
129	11.02	34.068	2.46			195.2			125	11.04	34.027	2.60	26.079	198.8	0.332
151	10.97	34.305	1.46			176.9			150	10.97	34.296	1.48	26.252	177.6	0.380
179	9.43	34.126	2.63			164.9			200	9.25	34.187	2.29	26.461	157.7	0.465
211	9.16	34.213	1.94			156.3			250	8.84	34.292	1.31	26.608	143.8	0.543
280	8.61	34.334	0.96			137.1			300	8.45	34.349	0.81	26.713	133.8	0.615
376	7.85	34.377	0.50			123.0			400	7.61	34.393	0.40	26.875	118.5	0.747
477	6.87	34.439	0.20			109.1			500	6.68	34.442	0.20	27.044	102.4	0.865
579	6.11	34.444	0.22			95.2			600	5.96	34.446	0.22	27.140	93.3	0.971
707	5.34	34.461	0.22			84.8			700	5.37	34.460	0.22	27.224	85.3	1.068
854	4.75	34.494	0.30			75.9			800	4.94	34.483	0.25	27.293	78.8	1.159
1014	4.12	34.502	0.61			68.8			1000	4.17	34.503	0.57	27.394	69.3	1.326

123050		RV DAVID STARR JORDAN				CALCOFI CRUISE 7503				130028			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
26 58.0N	115 09.0W	03/25/75	1120 GMT			26 53.0N	113 21.0W	1/3/26/75	1447 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3919M	350	12KT	1	230 2 8			50M	300	6KT	1	230 2 8		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	15.13	33.86	24.931	303.2	0.000	0	13.75	33.92	25.424	256.2	0.000		
10	15.12	33.86	24.934	303.0	0.000	10	13.75	33.93	25.432	255.5	0.025		
20	15.07	33.86	24.945	301.9	0.000	20	13.73	33.93	25.436	255.1	0.051		
30	14.95	33.67	24.978	298.7	0.090	30	12.59	33.93	25.665	233.4	0.075		
40	14.96	33.68	24.988	297.8	0.120	40	11.76	34.02	25.897	211.3	0.097		
50	14.94	33.69	24.996	297.0	0.150	50	11.72	34.07	25.940	207.3	0.119		
75	14.62	33.66	25.042	292.7	0.224								
100	12.09	33.66	25.358	262.6	0.296								
125	11.47	33.72	25.715	228.7	0.356								
150	10.78	34.02	26.072	194.7	0.410								
175	10.58	34.16	26.223	180.3	0.458								
200	9.48	34.13	26.380	165.4	0.502								
225	9.25	34.18	26.457	156.2	0.543								
250	9.03	34.26	26.554	148.0	0.583								
275	8.55	34.24	26.614	143.2	0.621								
300	8.06	34.26	26.689	136.1	0.657								
350	8.11	34.37	26.783	127.2	0.726								
400	7.71	34.40	26.866	119.3	0.791								
450	7.23	34.39	26.927	113.5	0.852								
500	6.76	34.39	26.992	107.3	0.911								
550	6.27	34.38	27.050	101.9	0.967								
600	6.09	34.44	27.120	95.2	1.021								
700	5.34	34.43	27.205	87.2	1.120								
800	4.73	34.44	27.284	79.4	1.212								
900	4.30	34.47	27.355	73.0	1.297								
1000	4.03	34.51	27.415	67.3	1.376								

130050 RY DAY III STARR JORDAN

CALCIFI CRUISE 7503

130040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
26 29.0N	113 29.0W	03/26/75	1651 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
2415M	310	9KT	2	270 3 10

Z	T	S	SIGMA T	DT	DD
0	15.24	33.78	25.420	256.6	0.000
10	13.70	33.78	25.429	255.9	0.025
20	12.75	33.82	25.544	244.4	0.050
30	12.30	33.97	25.752	225.1	0.074
40	11.92	33.97	25.825	218.2	0.096
50	11.62	34.04	25.950	206.2	0.117
75	11.98	34.28	26.132	189.0	0.167

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
26 09.0N	114 07.0W	03/26/75	2140 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
2415M	320	9KT	0	300 4 8

Z	T	S	SIGMA T	DT	DD
0	16.79	34.05	24.855	310.5	0.000
10	16.78	34.05	24.857	310.2	0.031
20	16.70	34.03	24.860	309.9	0.062
30	16.46	33.83	24.992	297.4	0.092
40	16.39	33.68	25.106	286.5	0.121
50	14.01	33.70	25.201	277.5	0.150
75	12.52	33.74	25.570	242.4	0.215
100	11.27	33.86	25.860	214.9	0.273
125	12.21	34.42	26.118	190.3	0.324
150	11.67	34.48	26.267	176.2	0.371
175	10.87	34.44	26.382	165.2	0.414
200	10.88	34.47	26.439	159.8	0.456
225	10.31	34.48	26.512	152.9	0.496
250	9.88	34.46	26.570	147.4	0.535
275	9.46	34.47	26.650	139.8	0.572
300	9.03	34.46	26.711	134.0	0.608
325	8.44	34.45	26.796	126.0	0.646
400	7.99	34.44	26.856	120.3	0.741
450	7.41	34.44	26.941	112.2	0.803
500	6.94	34.44	27.007	105.9	0.861
550	6.64	34.45	27.056	101.3	0.917
600	6.26	34.46	27.114	95.8	0.971
700	5.65	34.46	27.191	88.5	1.071
800	5.03	34.47	27.273	80.7	1.165
900	4.72	34.48	27.317	76.6	1.253
1000	4.27	34.50	27.382	70.4	1.336

RY DAVID STARR JORDAN

CALCIFI CRUISE 7503

130050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	
25 47.0N	114 44.0W	3/27/75	0440 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
3738M	350	12KT		

Z	T	S	D2	D4	SIG	D13	D13	DT	DD
1	16.27	33.894	5.73					310.3	0
11	16.28	33.899	5.73					310.2	10
29	16.28	33.898	5.84					310.3	20
57	16.15	33.897	5.75					307.5	30
76	13.87	33.654	5.11					278.1	50
90	12.81	33.677	4.46					256.1	75
105	12.04	33.767	3.84					235.3	100
132	11.69	34.116	2.27					203.3	129
155	11.26	34.307	1.56					181.7	150
184	10.55	34.444	0.94					166.3	200
217	10.55	34.481	0.72					156.8	250
288	9.52	34.478	0.49					140.3	300
388	8.02	34.413	0.35					122.7	400
493	6.98	34.431	0.21					107.1	500
597	6.18	34.435	0.26					96.7	600
731	5.40	34.459	0.25					85.7	700
879	4.67	34.478	0.37					76.2	800
1043	4.05	34.507	0.55					67.7	1000

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
25 29.0N	115 23.5W	03/27/75	0919 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
3926M	300	9KT		

Z	T	S	SIGMA T	DT	DD
0	16.24	33.92	24.883	307.8	0.000
10	16.24	33.92	24.883	307.8	0.030
20	16.24	33.92	24.883	307.8	0.061
30	16.24	33.94	24.891	307.0	0.092
40	16.28	33.94	24.889	307.2	0.123
50	16.60	33.98	24.892	306.9	0.154
75	16.41	34.00	24.905	305.7	0.231
100	13.33	33.86	25.464	252.5	0.301
125	12.32	34.02	25.787	221.8	0.361
150	11.59	34.74	26.096	192.4	0.414
175	11.27	34.36	26.248	178.0	0.461
200	10.98	34.47	26.386	164.9	0.505
225	10.94	34.54	26.447	159.0	0.547
250	10.54	34.53	26.511	153.0	0.587
275	10.12	34.54	26.592	145.3	0.626
300	9.62	34.53	26.635	141.2	0.663
325	9.20	34.52	26.730	132.2	0.735
400	8.61	34.50	26.808	124.8	0.803
450	7.93	34.47	26.889	117.2	0.867
500	7.22	34.45	26.976	108.9	0.928
550	6.81	34.45	27.033	103.5	0.985
600	6.44	34.46	27.090	98.0	1.040
700	5.73	34.46	27.181	89.4	1.142
800	5.12	34.47	27.263	81.7	1.237
900	4.69	34.49	27.328	75.5	1.325
1000	4.30	34.51	27.386	70.0	1.407

130050

RY DAY III STARR JORDAN

CALCIFI CRUISE 7503

130060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
25 47.0N	114 44.0W	03/27/75	0330 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
3737M	350	12KT		

Z	T	S	SIGMA T	DT	DD
0	16.31	33.90	24.851	310.8	0.000
10	16.29	33.90	24.858	310.3	0.031
20	16.20	33.90	24.863	310.6	0.062
30	16.31	33.90	24.851	310.8	0.093
40	16.23	33.90	24.859	309.1	0.124
50	16.10	33.91	24.889	307.2	0.155
75	16.30	33.65	25.102	286.9	0.230
100	12.02	33.78	25.859	234.0	0.299
125	11.82	34.07	25.921	220.1	0.351
150	11.40	34.24	25.131	189.1	0.402
175	11.04	34.39	26.505	172.5	0.448
200	10.48	34.38	26.405	163.1	0.491
225	10.49	34.49	26.486	155.4	0.532
251	10.12	36.46	26.530	151.2	0.572
275	9.88	36.47	26.577	146.8	0.610
300	9.36	36.44	26.657	139.1	0.648
325	8.64	36.44	26.757	129.7	0.718
400	7.93	36.41	26.841	121.6	0.784
450	7.63	36.44	26.909	115.2	0.847
500	7.04	36.43	26.985	106.0	0.907
550	6.62	36.44	27.051	101.8	0.963
600	6.30	36.44	27.093	97.8	1.017
700	5.69	36.44	27.170	90.5	1.120
800	5.06	36.46	27.262	81.8	1.216
900	4.85	36.48	27.325	75.9	1.304
1000	4.27	36.50	27.382	70.4	1.387

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
25 29.0N	115 23.5W	03/27/75	0919 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
3926M	300	9KT		

Z	T	S	SIGMA T	DT	DD
0	16.24	33.92	24.883	307.8	0.000
10	16.24	33.92	24.883	307.8	0.030
20	16.24	33.92	24.883	307.8	0.061
30	16.24	33.94	24.891	307.0	0.092
40	16.28	33.94	24.889	307.2	0.123
50	16.60	33.98	24.892	306.9	0.154
75	16.41	34.00	24.905	305.7	0.231
100	13.33	33.86	25.464	252.5	0.301
125	12.32	34.02	25.787	221.8	0.361
150	11.59	34.74	26.096	192.4	0.414
175	11.27	34.36	26.248	178.0	0.461
200	10.98	34.47	26.386	164.9	0.505
225	10.94	34.54	26.447	159.0	0.547
250	10.54	34.53	26.511	153.0	0.587
275	10.12	34.54	26.592	145.3	0.626
300	9.62	34.53	26.635	141.2	0.663
325	9.20	34.52	26.730	132.2	0.735
400	8.61	34.50	26.808	124.8	0.803
450	7.93	34.47	26.889	117.2	0.867
500	7.22	34.45	26.976	108.9	0.928
550	6.81	34.45	27.033	103.5	0.985
600	6.44	34.46	27.090	98.0	1.040
700	5.73	34.46	27.181	89.4	1.142
800	5.12	34.47	27.263	81.7	1.237
900	4.69	34.49	27.328	75.5	1.325
1000	4.30	34.51	27.386	70.0	1.407

Z	T	10 METER S	DATA 02	BT
60.065	05/02/75	1636GMT	37 27.0°	124 01.5W
		BOTTOM 3635M	WIND 290	PKT WEATHER 1
		DOMINANT WAVES	270 9 9	
60.080	05/02/75	0806GMT	36 57.0°	125 04.0W
		BOTTOM 4264M	WIND 220	1/KT WEATHER 0
		DOMINANT WAVES	230	
60.090	05/02/75	0226GMT	36 37.0°	125 47.0W
		BOTTOM 4474M	WIND 340	1-KT WEATHER 1
		DOMINANT WAVES	350 14 10	
63.050	02/28/75	2121GMT	37 25.5°	122 28.0W
		BOTTOM 32M	WIND 280	3KT WEATHER 4
		DOMINANT WAVES	240 1 5	
63.052	02/28/75	2230GMT	37 19.0°	122 36.0W
		BOTTOM 488M	WIND 220	5KT WEATHER 4
		DOMINANT WAVES	270 1 5	
63.055	02/29/75	0014GMT	37 15.0°	122 50.0W
		BOTTOM 288M	WIND 280	3KT WEATHER 4
		DOMINANT WAVES	240 2 11	
63.060	02/29/75	0319GMT	37 02.5°	123 11.0W
		BOTTOM 2595M	WIND 160	1/KT WEATHER 4
		DOMINANT WAVES	250 6 10	
63.065	02/01/75	0609GMT	36 53.0°	123 31.0W
		BOTTOM 3409M	WIND 020	1/KT WEATHER
		DOMINANT WAVES		
63.080	02/01/75	1529GMT	36 23.0°	124 36.0W
		BOTTOM 4110M	WIND 180	2/KT WEATHER 2
		DOMINANT WAVES	270 10 8	
63.090	02/01/75	2107GMT	36 03.0°	125 20.0W
		BOTTOM 4498M	WIND 180	2/KT WEATHER 1
		DOMINANT WAVES	200 12 12	
66.049	02/28/75	1720GMT	36 53.0°	122 01.5W
		BOTTOM 52M	WIND 020	1-KT WEATHER 1
		DOMINANT WAVES		
67.050	02/28/75	1625GMT	36 49.0°	122 04.5W
		BOTTOM 99M	WIND 360	1-KT WEATHER 1
		DOMINANT WAVES	360 2 8	
67.060	02/28/75	0914GMT	36 29.0°	122 47.5W
		BOTTOM 3068M	WIND 330	1-KT WEATHER 4
		DOMINANT WAVES		
67.065	02/28/75	0611GMT	36 18.0°	123 08.5W
		BOTTOM 3353M	WIND 350	1-KT WEATHER 4
		DOMINANT WAVES		
67.070	02/28/75	0319GMT	36 08.0°	123 29.5W
		BOTTOM 3540M	WIND 320	1-KT WEATHER 4
		DOMINANT WAVES		
67.080	02/27/75	2210GMT	35 47.5°	124 11.5W
		BOTTOM 3918M	WIND 360	1/KT WEATHER 2
		DOMINANT WAVES		
67.090	02/27/75	1634GMT	35 28.0°	124 55.5W
		BOTTOM 4308M	WIND 330	1-KT WEATHER 2
		DOMINANT WAVES		
70.051	02/28/75	1155GMT	36 11.5°	121 43.5W
		BOTTOM 84M	WIND 320	1-KT WEATHER 1
		DOMINANT WAVES	310 2 4	
70.053	02/28/75	1349GMT	36 06.5°	121 53.2W
		BOTTOM 1110M	WIND 320	2/KT WEATHER 1
		DOMINANT WAVES	310 3 4	
70.060	02/26/75	1735GMT	35 53.0°	122 23.0W
		BOTTOM 3163M	WIND 340	1/KT WEATHER 1
		DOMINANT WAVES	330 5 5	
70.070	02/27/75	0009GMT	35 30.0°	123 09.0W
		BOTTOM 3918M	WIND 350	1/KT WEATHER 1
		DOMINANT WAVES	230 2 6	
70.080	02/27/75	0506GMT	35 14.0°	123 47.0W
		BOTTOM 4078M	WIND 010	1-KT WEATHER 1
		DOMINANT WAVES		

RV UZELI STARKS 6000066

CALCOPFI CRUISE 7503

Z	T	10 METER S	DATA 02	BT
73.020	02/01/75	0630GMT	35 37.0°	121 17.0W
		BOTTOM 746M	WIND 140	1-KT WEATHER
		DOMINANT WAVES		
73.053	02/01/75	0827GMT	35 31.5°	121 28.4W
		BOTTOM 7418M	WIND 180	5KT WEATHER
		DOMINANT WAVES		
73.060	02/01/75	1310GMT	35 18.0°	121 57.5W
		BOTTOM 2410M	WIND 160	5KT WEATHER 5
		DOMINANT WAVES		

RV DAVID STARR JORDAN		CALCULATED CRUISE 7503		Z	T	10 METER DATA		DT
						S	02	
73.065	02/01/75 1615GMT 35 08.0W 122 19.0W BOTTOM 3919M WIND 150 7KT WEATHER 2 DOMINANT WAVES 49			10	12.00	33.094		284.2
73.070	02/01/75 1933GMT 34 58.5W 122 39.5W BOTTOM 4111M WIND 080 6KT WEATHER 1 DOMINANT WAVES 280 6 12			10	13.26	33.295		292.6
73.080	02/02/75 0119GMT 34 38.0W 123 22.0W BOTTOM 4309M WIND 200 6KT WEATHER 1 DOMINANT WAVES 270 8 12			10	12.46	33.122		290.4
77.048	02/03/75 1551GMT 35 08.5W 120 43.5W BOTTOM 30M WIND 040 7KT WEATHER 1 DOMINANT WAVES 100 2 10			10	10.56	33.762		210.1
77.051	02/03/75 1317GMT 35 02.0W 120 56.5W BOTTOM 288M WIND 360 6KT WEATHER DOMINANT WAVES			10	10.44	33.718		211.3
77.060	02/03/75 0554GMT 34 44.0W 121 34.0W BOTTOM 981M WIND 350 16KT WEATHER DOMINANT WAVES			10	12.16	33.301		271.6
77.065	02/03/75 0250GMT 34 33.5W 121 56.0W BOTTOM 3919M WIND 350 13KT WEATHER DOMINANT WAVES			10	12.86			
77.070	02/02/75 2347GMT 34 24.0W 122 16.0W BOTTOM 4117M WIND 340 12KT WEATHER 1 DOMINANT WAVES 280 6 12			10	13.76	33.371		296.7
77.080	02/02/75 1832GMT 34 04.0W 122 57.0W BOTTOM 4309M WIND 330 6KT WEATHER 1 DOMINANT WAVES 270 10 10			10	13.80	33.412		294.5
77.090	02/02/75 1326GMT 33 43.0W 123 39.0W BOTTOM 4117M WIND 320 6KT WEATHER DOMINANT WAVES			10	13.86	33.406		296.1
80.050 <sup>1</sup>	02/03/75 2151GMT 34 28.0W 120 29.5W BOTTOM 28M WIND 050 6KT WEATHER 1 DOMINANT WAVES 240 3 10			10	11.63	33.665		235.5
80.051	02/03/75 2247GMT 34 28.0W 120 32.5W BOTTOM 108M WIND 280 6KT WEATHER 1 DOMINANT WAVES 240 4 12			10	11.74	33.662		237.7
80.051 <sup>6</sup>	02/25/75 2324GMT 34 25.5W 120 34.0W BOTTOM 127M WIND 320 20KT WEATHER 1 DOMINANT WAVES 320 5 7		RV ALEXANDER AGASSIZ	10	11.59	33.635		237.0
80.052	02/03/75 2346GMT 34 25.0W 120 36.0W BOTTOM 242M WIND 280 6KT WEATHER 1 DOMINANT WAVES 300 4 12		RV DAVID STARR JORDAN	10	11.92	33.647		242.0
80.052 <sup>1</sup>	02/25/75 2250GMT 34 24.5W 120 36.0W BOTTOM 229M WIND 320 20KT WEATHER 2 DOMINANT WAVES 320 6 8		RV ALEXANDER AGASSIZ	10	11.43	33.660		232.4
80.052 <sup>4</sup>	02/25/75 2214GMT 34 24.0W 120 37.0W BOTTOM 316M WIND 320 20KT WEATHER 1 DOMINANT WAVES 320 5 7			10	11.61	33.651		236.2
80.052 <sup>7</sup>	02/25/75 2122GMT 34 23.5W 120 39.0W BOTTOM 430M WIND 330 14KT WEATHER 2 DOMINANT WAVES 320 5 8			10	10.78	33.655		221.6
80.053	02/04/75 0058GMT 34 22.5W 120 40.0W BOTTOM 464M WIND 310 7KT WEATHER 2 DOMINANT WAVES 280 5 10		RV DAVID STARR JORDAN	10	11.64	33.663		235.8
80.053 <sup>4</sup>	02/25/75 2027GMT 34 22.5W 120 42.0W BOTTOM 532M WIND 320 14KT WEATHER 1 DOMINANT WAVES 310 5 7		RV ALEXANDER AGASSIZ	10	11.22	33.612		232.3
80.054	02/04/75 0203GMT 34 21.0W 120 44.0W BOTTOM 557M WIND 340 6KT WEATHER 1 DOMINANT WAVES 260 5 10		RV DAVID STARR JORDAN	10	11.34	33.679		229.4
80.055	02/04/75 0330GMT 34 19.0W 120 46.0W BOTTOM 768M WIND 330 7KT WEATHER DOMINANT WAVES			10	11.46	33.595		237.7
80.060	02/04/75 0650GMT 34 09.0W 121 09.0W BOTTOM 2222M WIND 300 5KT WEATHER DOMINANT WAVES			10	12.18	33.428		262.8
80.080	02/04/75 1828GMT 33 28.0W 122 32.0W BOTTOM 4116M WIND 040 4KT WEATHER 0 DOMINANT WAVES 320 3 5			10	13.82	33.364		298.4
80.090	02/04/75 2309GMT 33 09.0W 123 13.0W BOTTOM 4309M WIND 170 11KT WEATHER 2 DOMINANT WAVES 130 4 10			10	14.88	33.541		306.7



		Z	T	10 METER DATA	DT				
				S	02				
5	81.043	02/06/75	2027GMT	34 24.0°	119 47.5W	10	12.72	33.573	262.0
			BOTTOM	32M	WIND 140	11KT	WEATHER	5	
									DOMINANT WAVES 170 3 11
5	81.044	02/06/75	2158GMT	34 23.0°	119 50.0W	10	12.84	33.544	266.4
			BOTTOM	58M	WIND 120	4KT	WEATHER	2	
									DOMINANT WAVES 160 4 13
5	81.044	02/07/75	0103GMT	34 22.0°	119 52.0W	10	12.15	33.573	251.6
			BOTTOM	78M	WIND 130	14KT	WEATHER	5	
									DOMINANT WAVES 130 3 12
5	81.045	02/07/75	0230GMT	34 21.0°	119 54.0W	10	12.08	33.622	246.7
			BOTTOM	371M	WIND 120	14KT	WEATHER	2	
									DOMINANT WAVES 300 4 10
5	81.046	02/07/75	0451GMT	34 19.0°	119 58.0W	10	12.25	33.578	253.0
			BOTTOM	510M	WIND 130	14KT	WEATHER	5	
									DOMINANT WAVES
5	81.047	02/07/75	0613GMT	34 17.0°	120 02.5W	10	11.76	33.648	239.1
			BOTTOM	584M	WIND 120	13KT	WEATHER	5	
									DOMINANT WAVES
5	83.039	02/07/75	1744GMT	34 14.5°	119 19.5W	10	13.31	33.553	274.6
			BOTTOM	17M	WIND 140	14KT	WEATHER	2	
									DOMINANT WAVES 150 5 5
5	83.040	02/07/75	1637GMT	34 12.5°	119 24.0W	10	12.94	33.587	265.1
			BOTTOM	37M	WIND 120	17KT	WEATHER	2	
									DOMINANT WAVES 110 6 6
5	83.041	02/07/75	1543GMT	34 11.5°	119 26.0W	10	12.70	33.593	260.2
			BOTTOM	55M	WIND 120	14KT	WEATHER	1	
									DOMINANT WAVES 120 6 4
5	83.042	02/07/75	1427GMT	34 09.5°	119 30.0W	10		33.620	
			BOTTOM	242M	WIND 140	14KT	WEATHER	1	
									DOMINANT WAVES 140 6 5
5	83.043	02/07/75	1254GMT	34 08.0°	119 34.0W	10	12.18	33.632	247.8
			BOTTOM	251M	WIND 140	14KT	WEATHER		
									DOMINANT WAVES
5	83.044	02/07/75	1141GMT	34 05.5°	119 38.0W	10	12.04	33.645	244.3
			BOTTOM	157M	WIND 140	14KT	WEATHER		
									DOMINANT WAVES
5	83.044	02/07/75	1042GMT	34 04.0°	119 41.0W	10	11.56	33.689	232.5
			BOTTOM	88M	WIND 150	14KT	WEATHER		
									DOMINANT WAVES
5	83.045	02/07/75	0936GMT	34 03.5°	119 42.5W	10	11.62	33.690	233.5
			BOTTOM	84M	WIND 150	14KT	WEATHER		
									DOMINANT WAVES
5	83.048	02/06/75	0545GMT	33 58.0°	119 55.0W	10	12.26	33.617	250.3
			BOTTOM	108M	WIND 130	14KT	WEATHER		
									DOMINANT WAVES
5	83.049	02/06/75	0445GMT	33 55.5°	119 59.0W	10	12.48	33.603	255.4
			BOTTOM	28M	WIND 130	14KT	WEATHER		
									DOMINANT WAVES
5	83.050	02/06/75	0326GMT	33 54.0°	120 05.0W	10	12.44	33.724	245.7
			BOTTOM	26M	WIND 170	14KT	WEATHER		
									DOMINANT WAVES
5	83.051	02/06/75	0232GMT	33 52.0°	120 08.4W	10	12.01	33.635	244.5
			BOTTOM	116M	WIND 160	14KT	WEATHER	2	
									DOMINANT WAVES
5	83.055	02/05/75	2335GMT	33 44.0°	120 24.0W	10	11.64	33.596	240.8
			BOTTOM	425M	WIND 160	14KT	WEATHER	1	
									DOMINANT WAVES 140 6 12
5	83.060	02/05/75	2016GMT	33 34.0°	120 45.0W	10	12.55	33.484	265.4
			BOTTOM	1479M	WIND 150	14KT	WEATHER	1	
									DOMINANT WAVES 130 6 13
5	83.080	02/05/75	0928GMT	32 54.0°	122 07.0W	10	13.18	33.247	294.6
			BOTTOM	4309M	WIND 150	9KT	WEATHER	5	
									DOMINANT WAVES
5	83.090	02/05/75	0432GMT	32 35.0°	122 46.0W	10	13.96	33.364	301.1
			BOTTOM	3928M	WIND 150	14KT	WEATHER	5	
									DOMINANT WAVES
5	85.037	02/08/75	0145GMT	34 02.5°	118 58.5W	10	13.50	33.518	280.9
			BOTTOM	32M	WIND 100	14KT	WEATHER	5	
									DOMINANT WAVES 49
5	85.037	02/08/75	0105GMT	34 02.0°	118 59.5W	10	13.48	33.535	279.2
			BOTTOM	52M	WIND 120	14KT	WEATHER	5	
									DOMINANT WAVES 49
5	85.038	02/07/75	2341GMT	34 01.0°	119 02.5W	10	13.36	33.557	275.3
			BOTTOM	227M	WIND 120	14KT	WEATHER	5	
									DOMINANT WAVES 130 12 16
5	85.039	02/07/75	2150GMT	33 59.0°	119 08.5W	10	13.26	33.577	271.9
			BOTTOM	467M	WIND 130	14KT	WEATHER	5	
									DOMINANT WAVES 230 R 8

					Z	T	10 METER DATA	DT
							S	n2
85.040	03/07/75	2017GMT	33 57.0M	119 10.5W	10	12.98	33.605	264.5
		BOTTOM	741M	WIND 130 1KT				
				WEATHER 2				
				DOMINANT WAVES				
87.032 <sup>5</sup>	03/08/75	0520GMT	33 55.0M	118 26.5W	10	13.65	33.556	281.0
		BOTTOM	19M	WIND 100 7KT				
				WEATHER 6				
				DOMINANT WAVES				
87.033	03/08/75	0829GMT	33 54.0M	118 29.0W	10	13.68	33.527	283.7
		BOTTOM	47M	WIND 160 4KT				
				WEATHER 6				
				DOMINANT WAVES				
87.034	03/08/75	1011GMT	33 52.0M	118 33.5W	10	13.52	33.525	280.7
		BOTTOM	73M	WIND 210 4KT				
				WEATHER 6				
				DOMINANT WAVES				
87.035	03/08/75	1154GMT	33 50.0M	118 37.5W	10	12.87	33.525	268.3
		BOTTOM	482M	WIND 200 4KT				
				WEATHER 2				
				DOMINANT WAVES				
87.036	03/08/75	1406GMT	33 47.0M	118 43.5W	10	13.36	33.472	281.6
		BOTTOM	925M	WIND 200 4KT				
				WEATHER 2				
				DOMINANT WAVES				
87.040	03/08/75	1737GMT	33 40.0M	118 58.0W	10	13.54	33.543	279.8
		BOTTOM	870M	WIND 210 4KT				
				WEATHER 6				
				DOMINANT WAVES				
87.045	03/08/75	2145GMT	33 30.0M	119 19.0W	10	12.55	33.569	259.2
		BOTTOM	1664M	WIND 290 12KT				
				WEATHER 6				
				DOMINANT WAVES				
87.050	03/09/75	0055GMT	33 20.0M	119 39.5W	10	12.58	33.579	259.0
		BOTTOM	71M	WIND 290 14KT				
				WEATHER 1				
				DOMINANT WAVES				
87.055	03/09/75	0416GMT	33 10.0M	120 00.0W	10	12.60	33.451	268.8
		BOTTOM	1295M	WIND 300 14KT				
				WEATHER 2				
				DOMINANT WAVES				
87.070	03/09/75	1329GMT	32 39.5M	121 02.0W	10	12.96	33.499	272.0
		BOTTOM	4021M	WIND 220 12KT				
				WEATHER				
				DOMINANT WAVES				
87.080	03/09/75	1901GMT	32 19.0M	121 44.0W	10	13.70	33.345	297.4
		BOTTOM	4116M	WIND 320 14KT				
				WEATHER 1				
				DOMINANT WAVES				
87.090	03/10/75	0018GMT	31 59.0M	122 23.5W	10	13.68	33.309	299.7
		BOTTOM	4212M	WIND 220 14KT				
				WEATHER 1				
				DOMINANT WAVES				
88.030 <sup>6</sup>	03/12/75	2142GMT	33 41.5M	118 07.0W	10	13.72	33.288	302.0
		BOTTOM	19M	WIND 160 4KT				
				WEATHER 1				
				DOMINANT WAVES				
88.031 <sup>5</sup>	03/12/75	2028GMT	33 40.5M	118 09.5W	10	13.39	33.513	279.1
		BOTTOM	24M	WIND 150 4KT				
				WEATHER 1				
				DOMINANT WAVES				
88.032 <sup>5</sup>	03/11/75	1920GMT	33 38.5M	118 13.5W	10	13.56	33.503	283.1
		BOTTOM	39M	WIND 240 4KT				
				WEATHER 2				
				DOMINANT WAVES				
88.033 <sup>5</sup>	03/11/75	1748GMT	33 36.0M	118 17.5W	10	13.50	33.507	281.7
		BOTTOM	242M	WIND 030 4KT				
				WEATHER 6				
				DOMINANT WAVES				
88.034 <sup>5</sup>	03/11/75	1542GMT	33 34.0M	118 22.0W	10	13.60	33.530	281.9
		BOTTOM	507M	WIND 210 4KT				
				WEATHER 1				
				DOMINANT WAVES				
90.027 <sup>6</sup>	03/12/75	0051GMT	33 29.5M	117 45.5W	10	13.97	33.421	297.2
		BOTTOM	39M	WIND 240 4KT				
				WEATHER 1				
				DOMINANT WAVES				
90.028	03/12/75	0345GMT	33 28.5M	117 46.5W	10	13.72	33.489	287.3
		BOTTOM	271M	WIND 220 3KT				
				WEATHER				
				DOMINANT WAVES				
90.029	03/12/75	0604GMT	33 27.0M	117 49.5W	10	13.92	33.478	292.0
		BOTTOM	648M	WIND 240 4KT				
				WEATHER				
				DOMINANT WAVES				
90.030	03/12/75	0810GMT	33 25.0M	117 53.5W	10	13.85	33.489	289.8
		BOTTOM	648M	WIND 200 4KT				
				WEATHER				
				DOMINANT WAVES				
90.031	03/12/75	1001GMT	33 23.0M	117 57.5W	10	13.80	33.541	285.0
		BOTTOM	454M	WIND 200 4KT				
				WEATHER				
				DOMINANT WAVES				
90.032	03/12/75	1156GMT	33 20.0M	118 03.0W	10	13.88	33.562	285.1
		BOTTOM	750M	WIND 140 4KT				
				WEATHER				
				DOMINANT WAVES				
90.045	03/11/75	0618GMT	32 55.0M	118 56.0W	10	13.70	33.550	282.4
		BOTTOM	1756M	WIND 310 14KT				
				WEATHER				
				DOMINANT WAVES				
90.053	03/11/75	0150GMT	32 39.0M	119 28.5W	10	12.58	33.542	261.7
		BOTTOM	1295M	WIND 290 14KT				
				WEATHER 1				
				DOMINANT WAVES				

						Z	T	10 METER S	DATA 02	DT
90.060	02/10/75	2113GMT	32 25.0M	119 57.5W	BOTTOM 892M WIND 290 13KT WEATHER 6 DOMINANT WAVES 290 6 8	10	12.71	33.510		266.5
90.070	02/10/75	1626GMT	32 05.0M	120 38.5W	BOTTOM 3926M WIND 270 8KT WEATHER 2 DOMINANT WAVES 240 8 10	10	13.16	33.467		278.1
90.090	02/10/75	0519GMT	31 24.0M	122 01.0W	BOTTOM 3926M WIND 310 8KT WEATHER DOMINANT WAVES	10	14.22	33.404		303.4
<sup>5</sup> 91.026	02/13/75	2148GMT	33 14.5M	117 27.5W	BOTTOM 19M WIND 270 6KT WEATHER 1 DOMINANT WAVES 270 2 5	10	13.84	33.398		296.3
<sup>5</sup> 91.027	02/13/75	2050GMT	33 14.0M	117 30.5W	BOTTOM 56M WIND 240 4KT WEATHER 1 DOMINANT WAVES 250 2 5	10	13.73	33.448		290.5
<sup>5</sup> 91.028	02/13/75	1917GMT	33 12.0M	117 34.0W	BOTTOM 565M WIND 250 5KT WEATHER 2 DOMINANT WAVES 240 2 8	10	13.75	33.480		288.5
<sup>5</sup> 91.029	02/13/75	1724GMT	33 10.0M	117 38.0W	BOTTOM 796M WIND 220 4KT WEATHER 2 DOMINANT WAVES 220 2 6	10	13.82	33.523		286.7
<sup>5</sup> 91.030	02/13/75	1528GMT	33 08.0M	117 42.0W	BOTTOM 833M WIND 200 4KT WEATHER 2 DOMINANT WAVES 090 2 7	10	13.88	33.536		287.0
<sup>7</sup> 93.026	02/14/75	0021GMT	32 57.0M	117 17.5W	BOTTOM 34M WIND 270 7KT WEATHER 1 DOMINANT WAVES 250 2 5	10	13.96	33.452		294.7
<sup>9</sup> 93.026	02/14/75	0150GMT	32 57.0M	117 18.5W	BOTTOM 65M WIND 260 7KT WEATHER 1 DOMINANT WAVES 270 2 5	10	13.90	33.520		288.5
93.028	02/14/75	0319GMT	32 55.0M	117 22.0W	BOTTOM 593M WIND 250 6KT WEATHER DOMINANT WAVES	10	14.00	33.544		288.7
93.029	02/14/75	0516GMT	32 53.0M	117 26.5W	BOTTOM 593M WIND 250 6KT WEATHER DOMINANT WAVES	10	13.75	33.511		286.2
93.030	02/14/75	0710GMT	32 50.0M	117 31.0W	BOTTOM 778M WIND 230 10KT WEATHER 6 DOMINANT WAVES	10	13.94			
93.035	02/14/75	1040GMT	32 40.5M	117 51.5W	BOTTOM 630M WIND 300 14KT WEATHER DOMINANT WAVES	10	14.02	33.571		287.1
93.040	02/14/75	1330GMT	32 30.0M	118 11.5W	BOTTOM 1849M WIND 300 14KT WEATHER DOMINANT WAVES	10	13.99	33.579		286.0
93.045	02/14/75	1647GMT	32 20.0M	118 32.0W	BOTTOM 1664M WIND 300 13KT WEATHER 1 DOMINANT WAVES 310 10 7	10	13.66	33.541		287.3
93.050	02/14/75	1934GMT	32 10.0M	118 52.5W	BOTTOM 1479M WIND 300 14KT WEATHER 1 DOMINANT WAVES 300 15 10	10	13.70	33.547		282.6
93.055	02/14/75	2237GMT	32 00.0M	119 13.5W	BOTTOM 1670M WIND 220 13KT WEATHER 2 DOMINANT WAVES 310 16 12	10	13.83	33.560		284.2
93.060	02/15/75	0121GMT	31 51.0M	119 34.0W	BOTTOM 2227M WIND 230 12KT WEATHER 1 DOMINANT WAVES 320 16 13	10	13.26	33.530		275.4
93.080	02/15/75	1252GMT	31 10.0M	120 54.5W	BOTTOM 4021M WIND 240 10KT WEATHER DOMINANT WAVES	10	13.26	33.385		286.0
95.028	02/17/75	1021GMT	32 37.0M	117 10.5W	BOTTOM 19M WIND 100 8KT WEATHER DOMINANT WAVES	10	11.86	33.570		246.6
95.029	02/17/75	0915GMT	32 35.0M	117 14.5W	BOTTOM 47M WIND 090 8KT WEATHER DOMINANT WAVES	10	13.43	33.520		279.4
95.030	02/17/75	0743GMT	32 33.0M	117 18.5W	BOTTOM 103M WIND 320 10KT WEATHER DOMINANT WAVES	10	13.62	33.539		281.6
95.031	02/17/75	0626GMT	32 31.5M	117 22.5W	BOTTOM 417M WIND 330 10KT WEATHER DOMINANT WAVES	10	13.88	33.557		285.4
95.032	02/17/75	0449GMT	32 29.0M	117 27.0W	BOTTOM 1092M WIND 210 12KT WEATHER DOMINANT WAVES	10	13.90	33.560		285.6
<sup>R</sup> 97.028	02/17/75	0138GMT	32 18.0M	117 04.0W	BOTTOM 37M WIND 310 10KT WEATHER 1 DOMINANT WAVES 49 2	10	13.49	33.527		280.0

		10 METER DATA				
Z	T	S	02	DT		
97.029	03/17/75	0107GMT	32 17.5W	117 04.5W		
	BOTTOM	48M	WIND 310 1KT	WEATHER	282.2	
	Dominant Waves	49	2			
97.030	03/17/75	0020GMT	32 16.0W	117 07.0W		
	BOTTOM	56M	WIND 300 4KT	WEATHER 1	280.2	
	Dominant Waves	49	2			
97.031	03/16/75	2310GMT	32 13.0W	117 13.0W		
	BOTTOM	1202M	WIND 310 4KT	WEATHER 1	283.3	
	Dominant Waves	49	2			
97.032	03/16/75	2200GMT	32 12.0W	117 15.5W		
	BOTTOM	1387M	WIND 310 4KT	WEATHER 2	285.2	
	Dominant Waves	49	2			
97.035	03/16/75	1939GMT	32 05.5W	117 27.5W		
	BOTTOM	1202M	WIND 250 4KT	WEATHER 2	284.2	
	Dominant Waves	49	2			
97.040	03/16/75	1636GMT	31 57.0E	117 48.0W		
	BOTTOM	1572M	WIND 270 4KT	WEATHER 2	291.7	
	Dominant Waves	280	4 8			
97.045	03/16/75	1353GMT	31 46.0E	118 08.5W		
	BOTTOM	1757M	WIND 310 4KT	WEATHER 2	288.9	
	Dominant Waves	290	4 6			
97.055	03/16/75	0714GMT	31 26.0W	118 50.0W		
	BOTTOM	854M	WIND 310 7KT	WEATHER	276.3	
	Dominant Waves					
97.060	03/16/75	0411GMT	31 16.0W	119 10.0W		
	BOTTOM	3737M	WIND 320 10KT	WEATHER	281.7	
	Dominant Waves					
97.070	03/15/75	2301GMT	30 55.5W	119 51.0W		
	BOTTOM	3832M	WIND 310 4KT	WEATHER 1	284.9	
	Dominant Waves	330	8 10			
97.080	03/15/75	1757GMT	30 35.0W	120 31.0W		
	BOTTOM	4116M	WIND 340 4KT	WEATHER 2	294.2	
	Dominant Waves	340	15 10			
100.029	03/19/75	0042GMT	31 42.0E	116 43.5W		
	BOTTOM	108M	WIND 320 4KT	WEATHER 1	254.0	
	Dominant Waves	280	5 4			
100.030	03/19/75	0140GMT	31 40.5E	116 46.5W		
	BOTTOM	436M	WIND 320 4KT	WEATHER 1	279.3	
	Dominant Waves	280	5 5			
100.031	03/19/75	0257GMT	31 38.5E	116 50.5W		
	BOTTOM	93M	WIND	WEATHER	282.1	
	Dominant Waves					
100.032	03/19/75	0344GMT	31 36.5E	116 55.0W		
	BOTTOM	1202M	WIND 320 4KT	WEATHER	282.9	
	Dominant Waves					
100.035	03/19/75	0547GMT	31 30.5E	117 07.0W		
	BOTTOM	1295M	WIND 330 11KT	WEATHER	282.5	
	Dominant Waves					
100.040	03/19/75	0922GMT	31 21.5E	117 26.5W		
	BOTTOM	2222M	WIND 330 11KT	WEATHER	288.0	
	Dominant Waves					
100.050	03/19/75	1430GMT	31 00.0E	118 07.0W		
	BOTTOM	1669M	WIND 340 11KT	WEATHER 1	292.9	
	Dominant Waves	110	5 11			
100.060	03/19/75	1949GMT	30 40.5E	118 47.5W		
	BOTTOM	2980M	WIND 320 11KT	WEATHER 1	300.3	
	Dominant Waves	330	6 7			
100.080	03/20/75	0757GMT	30 00.0E	120 07.0W		
	BOTTOM	4116M	WIND 330 11KT	WEATHER	302.0	
	Dominant Waves					
103.028 <sup>R</sup>	03/21/75	1840GMT	31 07.5E	116 20.0W		
	BOTTOM	19M	WIND 320 4KT	WEATHER 0	234.1	
	Dominant Waves	300	6 8			
103.029	03/21/75	1800GMT	31 07.0E	116 21.0W		
	BOTTOM	32M	WIND 320 11KT	WEATHER 0	244.9	
	Dominant Waves	310	8 7			
103.030	03/21/75	1615GMT	31 06.0E	116 24.5W		
	BOTTOM	56M	WIND 330 4KT	WEATHER 1	247.9	
	Dominant Waves	320	5 9			
103.031	03/21/75	1507GMT	31 03.0E	116 29.0W		
	BOTTOM	93M	WIND 320 11KT	WEATHER 1	260.4	
	Dominant Waves	310	8 11			
103.032	03/21/75	1352GMT	31 01.0E	116 33.0W		
	BOTTOM	437M	WIND 310 4KT	WEATHER 1	276.6	
	Dominant Waves	320	8 10			
103.035	03/21/75	1127GMT	30 56.0E	116 45.0W		
	BOTTOM	1756M	WIND 330 13KT	WEATHER	293.6	
	Dominant Waves					

				10 METER DATA			
		Z	T	S	02	DT	
103.045	02/21/75 0333GMT 30 36.0W 117 24.0W BOTTOM 2042M WIND 330 10KT WEATHER DOMINANT WAVES 320 12 5	10	14.82	33.607		300.6	
103.050	02/21/75 0046GMT 30 26.0W 117 45.0W BOTTOM 2790M WIND 330 10KT WEATHER 2 DOMINANT WAVES 320 10 6	10	14.89	33.622		301.0	
103.060	02/20/75 1923GMT 30 06.0W 118 25.0W BOTTOM 3737M WIND 330 11KT WEATHER 2 DOMINANT WAVES 330 6 11	10	15.16	33.675		302.7	
103.070	02/20/75 1416GMT 29 47.0W 119 04.0W BOTTOM 3737M WIND 010 11KT WEATHER 2 DOMINANT WAVES 350 10 7	10	14.94	33.663		299.0	
110.032 <sup>4</sup>	02/22/75 0224GMT 29 51.5W 115 50.0W BOTTOM 41M WIND 320 11KT WEATHER 1 DOMINANT WAVES 330 8 7	10	11.97	33.828		279.6	
110.033	02/22/75 0257GMT 29 50.5W 115 51.5W BOTTOM 82M WIND 330 9KT WEATHER 1 DOMINANT WAVES	10	12.78	33.644		257.9	
110.034	02/22/75 0343GMT 29 48.0W 115 56.0W BOTTOM 742M WIND 320 11KT WEATHER 1 DOMINANT WAVES	10	13.68	33.577		280.0	
110.035	02/22/75 0505GMT 29 46.0W 116 00.0W BOTTOM 1298M WIND 340 10KT WEATHER DOMINANT WAVES	10	14.30	33.580		292.1	
110.040	02/22/75 0808GMT 29 36.5W 116 19.5W BOTTOM 2042M WIND 330 12KT WEATHER DOMINANT WAVES	10	14.90	33.642		299.7	
110.045	02/22/75 1108GMT 29 27.0W 116 40.0W BOTTOM 1856M WIND 330 14KT WEATHER DOMINANT WAVES	10	14.78	33.616		299.2	
110.055	02/22/75 1739GMT 29 06.5W 117 19.0W BOTTOM 3738M WIND 320 10KT WEATHER 2 DOMINANT WAVES 320 4 6	10	14.96	33.656		299.9	
110.060	02/22/75 2017GMT 28 57.0W 117 38.5W BOTTOM 3737M WIND 320 9KT WEATHER 2 DOMINANT WAVES 330 6 8	10	15.11	33.667		302.2	
113.028 <sup>8</sup>	02/23/75 2301GMT 29 25.0W 115 12.5W BOTTOM 19M WIND 290 11KT WEATHER 0 DOMINANT WAVES 300 6 9	10	12.62	33.824		241.7	
113.029	02/23/75 2238GMT 29 24.5W 115 13.5W BOTTOM 26M WIND 290 11KT WEATHER 0 DOMINANT WAVES 300 7 11	10	12.28	33.780		238.7	
113.030	02/23/75 2155GMT 29 22.0W 115 18.5W BOTTOM 60M WIND 330 10KT WEATHER 0 DOMINANT WAVES 330 8 13	10	12.42	33.644		251.3	
113.031	02/23/75 2105GMT 29 20.5W 115 21.5W BOTTOM 82M WIND 330 11KT WEATHER 0 DOMINANT WAVES 320 9 12	10	12.56	33.664		252.4	
113.032	02/23/75 2012GMT 29 18.5W 115 25.5W BOTTOM 104M WIND 330 10KT WEATHER 0 DOMINANT WAVES 320 10 11	10	12.88	33.619		261.6	
113.040	02/23/75 1258GMT 29 00.0W 115 56.0W BOTTOM 1856M WIND 330 12KT WEATHER DOMINANT WAVES	10	13.04	33.632		263.7	
113.045	02/23/75 1007GMT 28 52.0W 116 17.0W BOTTOM 2043M WIND 320 10KT WEATHER DOMINANT WAVES	10	14.86	33.640		299.0	
113.050	02/23/75 0659GMT 28 42.0W 116 36.0W BOTTOM 4498M WIND 330 12KT WEATHER DOMINANT WAVES	10	14.63	33.604		297.0	
113.060	02/23/75 0142GMT 28 22.0W 117 15.0W BOTTOM 3737M WIND 310 7KT WEATHER 1 DOMINANT WAVES 250 5 10	10	14.99	33.633		302.2	
113.070	02/28/75 2043GMT 28 02.0W 117 55.0W BOTTOM 3357M WIND 310 8KT WEATHER DOMINANT WAVES	10	15.40	33.687		306.8	
119.033	02/24/75 1454GMT 28 19.0W 114 53.0W BOTTOM 110M WIND 320 8KT WEATHER 0 DOMINANT WAVES 300 4 10	10	13.66	33.591		278.6	
120.022 <sup>4</sup>	02/24/75 0649GMT 28 28.0W 114 04.5W BOTTOM 17M WIND 170 8KT WEATHER DOMINANT WAVES	10	13.60	33.737		266.7	
120.022 <sup>7</sup>	02/24/75 0725GMT 28 27.5W 114 05.5W BOTTOM 21M WIND 120 8KT WEATHER DOMINANT WAVES	10	13.53	33.733		265.7	
120.023	02/24/75 0758GMT 28 27.0W 114 07.0W BOTTOM 21M WIND 320 8KT WEATHER DOMINANT WAVES	10	13.58	33.739		266.2	

					Z	T	10 METER S	DATA 02	DT
120.024	03/24/75	0842GMT	28 25.5M	114 11.0W	10	13.70	33.723		269.7
		BOTTOM	30M WIND 350	KT WEATHER					
			DOMINANT WAVES						
120.025	03/24/75	0930GMT	28 22.5M	114 15.0W	10	13.98	33.730		274.7
		BOTTOM	37M WIND 330	KT WEATHER					
			DOMINANT WAVES						
120.026	03/24/75	1017GMT	28 21.0M	114 18.5W	10	14.20	33.723		279.6
		BOTTOM	39M WIND 330	KT WEATHER					
			DOMINANT WAVES						
120.030	03/24/75	1223GMT	28 13.0M	114 34.0W	10	13.62	33.666		272.3
		BOTTOM	95M WIND 320	KT WEATHER					
			DOMINANT WAVES						
120.035	03/24/75	1650GMT	28 03.0M	114 54.0W	10	14.44	33.718		284.8
		BOTTOM	80M WIND 360	KT WEATHER U					
			DOMINANT WAVES 320 6 11						
120.040	03/24/75	1911GMT	27 56.5M	115 14.0W	10	13.53	33.699		268.2
		BOTTOM	43M WIND 310	KT WEATHER U					
			DOMINANT WAVES 320 5 10						
120.050	03/25/75	0151GMT	27 33.0M	115 53.0W	10	14.46	33.589		294.6
		BOTTOM	4212M WIND 340	KT WEATHER U					
			DOMINANT WAVES 360 8 8						
120.060	03/25/75	0656GMT	27 13.0M	116 30.5W	10	15.00	33.631		302.6
		BOTTOM	3737M WIND 340	KT WEATHER					
			DOMINANT WAVES						
120.070	03/28/75	0021GMT	26 50.0M	117 10.0W	10	15.80	33.736		311.7
		BOTTOM	3926M WIND 320	KT WEATHER Z					
			DOMINANT WAVES 330 8 9						
123.035 <sup>7</sup>	03/26/75	0336GMT	27 26.5M	114 35.0W	10	13.00	33.995		236.3
		BOTTOM	26M WIND 280	KT WEATHER					
			DOMINANT WAVES						
123.036	03/26/75	0310GMT	27 26.0M	114 36.0W	10	12.88	34.005		233.3
		BOTTOM	47M WIND 290	KT WEATHER					
			DOMINANT WAVES						
123.037	03/26/75	0217GMT	27 24.0M	114 40.0W	10	12.80	34.045		228.8
		BOTTOM	71M WIND 300	KT WEATHER U					
			DOMINANT WAVES 300 2 7						
123.038	03/26/75	0119GMT	27 22.0M	114 45.0W	10	12.46	34.085		219.6
		BOTTOM	82M WIND 310	KT WEATHER U					
			DOMINANT WAVES 310 4 7						
123.039	03/26/75	0026GMT	27 20.0M	114 48.0W	10	13.22	33.805		254.4
		BOTTOM	110M WIND 300	KT WEATHER U					
			DOMINANT WAVES 310 6 8						
123.042	03/25/75	2227GMT	27 14.0M	114 59.5W	10	14.27	33.756		278.6
		BOTTOM	2602M WIND 330	KT WEATHER 1					
			DOMINANT WAVES 310 6 8						
123.045	03/25/75	2039GMT	27 08.0M	115 10.5W	10	14.98	33.700		297.1
		BOTTOM	4309M WIND 220	KT WEATHER 1					
			DOMINANT WAVES 320 6 10						
123.060	03/25/75	1146GMT	26 38.0M	116 09.0W	10	15.08	33.666		301.7
		BOTTOM	3926M WIND 350	KT WEATHER					
			DOMINANT WAVES						
120.025 <sup>6</sup>	03/26/75	1237GMT	26 37.5M	113 11.5W	10	13.99	34.154		243.8
		BOTTOM	21M WIND 270	KT WEATHER					
			DOMINANT WAVES						
120.026	03/26/75	1310GMT	26 37.0M	113 13.0W	10	13.95	33.999		254.4
		BOTTOM	32M WIND 260	KT WEATHER					
			DOMINANT WAVES						
120.027	03/26/75	1356GMT	26 35.0M	113 17.0W	10	13.54	33.881		255.0
		BOTTOM	47M WIND 270	KT WEATHER Z					
			DOMINANT WAVES 270 2 10						
120.028	03/26/75	1451GMT	26 33.0M	113 21.0W	10	13.76	33.932		255.5
		BOTTOM	56M WIND 300	KT WEATHER 1					
			DOMINANT WAVES 250 2 8						
120.029	03/26/75	1614GMT	26 30.5M	113 26.0W	10	13.64	33.893		256.1
		BOTTOM	69M WIND 320	KT WEATHER 1					
			DOMINANT WAVES 280 3 9						
120.030	03/26/75	1700GMT	26 29.0M	113 29.0W	10	12.98	33.784		251.4
		BOTTOM	78M WIND 310	KT WEATHER Z					
			DOMINANT WAVES 270 3 10						
120.035	03/26/75	1922GMT	26 18.5M	113 48.5W	10	16.14	33.864		309.7
		BOTTOM	567M WIND 300	KT WEATHER Z					
			DOMINANT WAVES 330 2 8						
120.040	03/26/75	2200GMT	26 09.0M	114 07.0W	10	16.78	34.058		309.6
		BOTTOM	2415M WIND 320	KT WEATHER U					
			DOMINANT WAVES 300 4 8						
120.060	03/27/75	0945GMT	25 29.0M	115 23.5W	10	16.24	33.930		307.1
		BOTTOM	3926M WIND 300	KT WEATHER					
			DOMINANT WAVES						

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